

APRIL 1959 SIX DOLLARS A YEAR — ONE DOLLAR A COPY

House & Home



PACIFIC STYLE is making news from coast to coast

You don't have to travel to find "the retirement market"
A veteran architect shows you his cost-cutting details
Roundup of new ideas for today's new apartments

care-free
work-free
floor beauty



Flor-Ever Inlaid Vinyl in the Gold Picnic Pattern (#2815)

Kitchen by St. Charles

*“Be sure the
builder uses*

FLOOR-EVER[®]
Inlaid Vinyl

*I just love
my floor.”*

Flor-Ever Inlaid Vinyl with cushioned back, by the yard for above grade installation and in tiles for above and on grade. For exact specifications and samples, write Congoleum-Nairn Inc., Kearny, N. J.

What one homemaker says to another carries a lot of weight. It can make . . . or break . . . a sale.

Satisfied home owners have been recommending Congoleum-Nairn fine floors to their friends and neighbors for generations . . . longer than any other smooth surface floor covering.

Wanting to let their friends in on a good thing, housewives are enthusiastically recommending Flor-Ever Inlaid Vinyl for its great style, for the ease of cleaning (s-w-i-sh with a damp mop does it), high degree of stain resistance to household cleaners, acids, alkalis, and common accidents, and the long life of Flor-Ever's beauty (being *inlaid*, the pattern and color won't wear off in use).

Flor-Ever Inlaid Vinyl, and other fine floors by Congoleum-Nairn, increase the livability of your homes. The more livable, the more salable. Let Congoleum-Nairn fine floors help you sell your homes faster.

Fast selling homes feature



Congoleum-Nairn
FINE FLOORS

© 1959, CONGOLEUM-NAIRN INC., KEARNY, N. J.

THE MOST COMPLETE LINE OF FLOOR COVERINGS FOR HOME, BUSINESS, INSTITUTIONS. SATISFACTION GUARANTEED OR MONEY BACK.

Featured in Homes of all Leading Builders



Nutone

INTERCOM-RADIO

Speak to strangers without opening door



Keeps an ear on child in nursery or playroom



Each room can originate calls to any other



A Step Saver for Busy Homemakers..



Talk to any room without wasting time



A bedside companion for sick-room



Talk to your family inside or outside

*See
Next
Page*

A "Sound" Investment that pays dividends in Faster Home Sales!

NuTone

INTERCOM & RADIO SYSTEMS

EASIEST TO INSTALL

EASIEST TO OPERATE



MODEL 2016



MODEL 2012

AM and FM DeLuxe

Beautiful Copper Anodized or Stainless Brushed Chrome master control panel — seven tubes plus Silicon Rectifier. The only AM-FM home radio shielded to meet FCC specifications. For AM and FM broadcasts, 8 station selector switches. Set includes Master Control, 3 inside remotes, 1 outside remote, plus all wire and antenna. Complete — only \$179.50 list.

SEND FOR FREE DELUXE CATALOGS IN BINDER

Standard AM

Never before a luxurious intercom-radio like this at such low cost. Copper Enamel or Aluminum Enamel master control. Six tubes, 8 station selector switches — also phono-jack connection. AM Broadcast range 540 to 1650 KC. Set includes Master control, 3 inside remotes, 1 outside remote, plus all wire and antenna. Complete — only \$129.50 list.

Write NuTone, Inc., Dept. HH-4, Cincinnati 27, Ohio

8 Reasons Why NuTone Intercom & Radio is Your Best Buy..

1

FULL TIME INTERCOM
Radio or Recorded Music never kills Intercom reception.

2

CHOICE OF AM and FM
For static-free reception DeLuxe Systems have FM and AM Radio

3

VARIABLE ROTARY CONTROLS
Gives infinite volume settings instead of only 2 or 3 levels.

4

\$500,000.00 GUARANTEE BOND . .
NuTone backs its Intercom-Radio with this unusual factory policy.

5

SIMPLE SETTING AT MASTER
No back and forth walking to distant rooms to adjust speakers.

6

AUTOMATIC ACOUSTIC LEVEL
Intercom always heard above Radio or Recorded Music.

7

NINE PRIMARY STATIONS
If more stations are desired speaker circuits can be doubled.

8

FINEST INTERCOM FIDELITY
Voices easy to recognize without distortion. No annoying hum.

Universal...the quality built-in now in gas or electric!



New styling...new versatility...famous for quality for nearly 4 generations

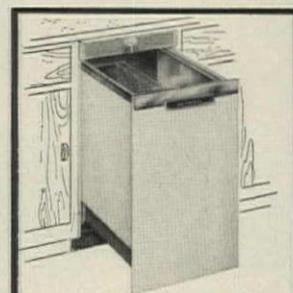
New Universal built-in gas ranges—only Universal offers such a wide choice of customized arrangements . . . 14 new two-burner, four-burner and griddle surface cooking units; five new oven-broiler units. Famous “air-conditioned” oven, smokeproof broiling, “obedient burner” top cooking.

New Universal built-in electric ranges—versatile surface cooking units can be installed for either front or rear control location. Hinged, flip-up “Quick-heat” element design permits easy, fast cleaning of spill-overs. Each element has exclusive “on” indicator. Choose from two double oven, two single oven models.



Now gas and electric units are interchangeable!

Gas and electric ovens and surface cooking units are fully interchangeable . . . all are drop-in units that fit standard cabinets. Available in your choice of five beautiful decorator colors: canary yellow, petal pink, turquoise green or copper-tone porcelain and satin-finished chrome.



Universal Built-in Automatic Dishwashers

Exclusive “Jet-Torque” washing action, stainless steel construction, full-capacity compact design. Washes service for eight, yet requires only 18” of cabinet space. Decorator colors.

Advertised in leading national magazines

UNIVERSAL

BUILT-IN GAS AND ELECTRIC RANGES

See your Cribben & Sexton representative or contact Cribben & Sexton Company,
700 N. Sacramento Blvd., Chicago 12, Illinois. Phone VAn Buren 6-4600

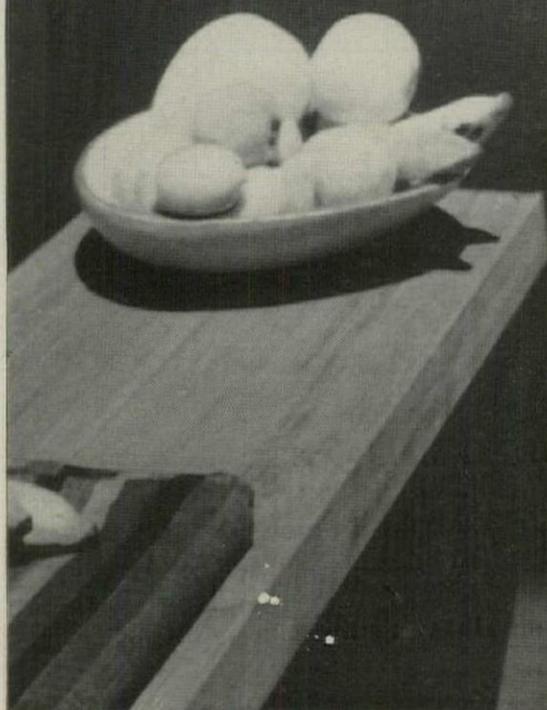
*All the wonderful warmth of wood
is best expressed in redwood.*

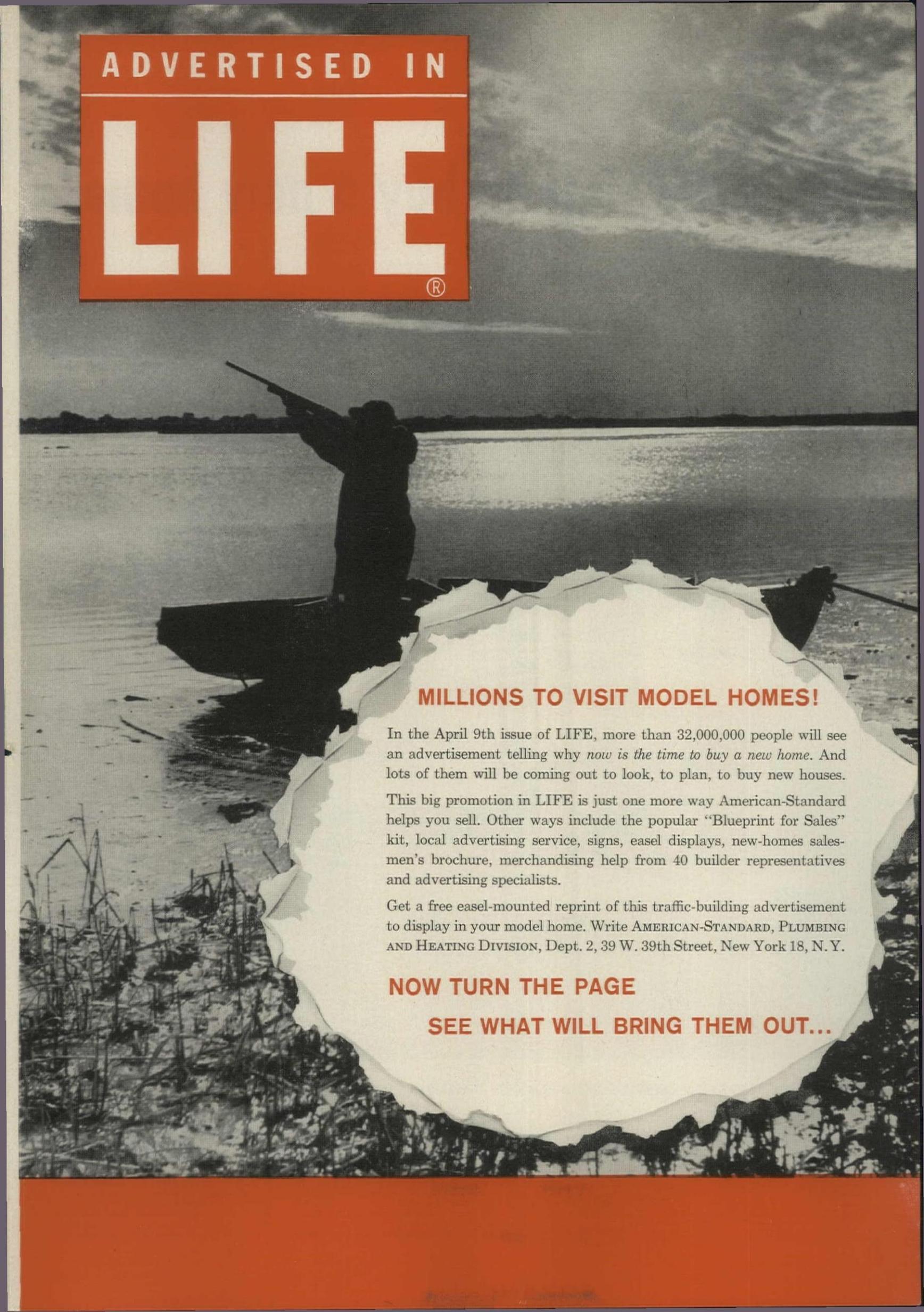


CALIFORNIA REDWOOD SIDING

brings the beauty of interior paneling out of doors. Redwood's natural preservatives assure resistance to time and weather, and the "Certified Kiln Dried" grade mark assures minimum shrinkage and warping.

CALIFORNIA REDWOOD ASSOCIATION
576 SACRAMENTO STREET • SAN FRANCISCO 11





ADVERTISED IN

LIFE®

MILLIONS TO VISIT MODEL HOMES!

In the April 9th issue of LIFE, more than 32,000,000 people will see an advertisement telling why *now is the time to buy a new home*. And lots of them will be coming out to look, to plan, to buy new houses.

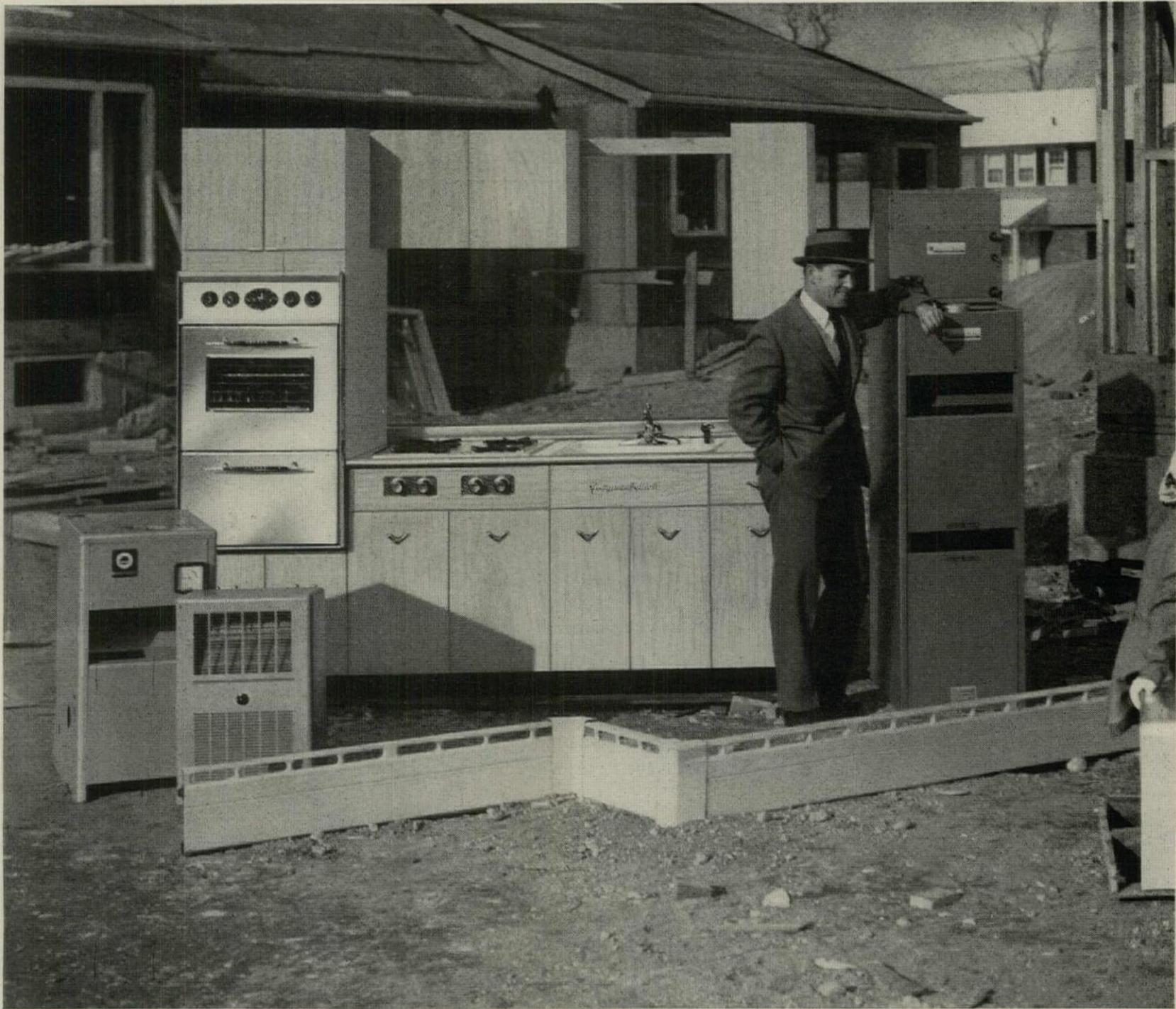
This big promotion in LIFE is just one more way American-Standard helps you sell. Other ways include the popular "Blueprint for Sales" kit, local advertising service, signs, easel displays, new-homes salesmen's brochure, merchandising help from 40 builder representatives and advertising specialists.

Get a free easel-mounted reprint of this traffic-building advertisement to display in your model home. Write AMERICAN-STANDARD, PLUMBING AND HEATING DIVISION, Dept. 2, 39 W. 39th Street, New York 18, N. Y.

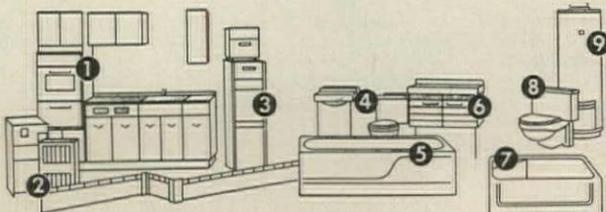
NOW TURN THE PAGE

SEE WHAT WILL BRING THEM OUT...

Now is the time to buy a new home!



MANY OF TODAY'S NEW HOMES FEATURE AMERICAN-STANDARD PRODUCTS—YOUNGSTOWN KITCHENS, YEAR-ROUND AIR CONDITIONING, PLUMBING, HEATING



1. Youngstown built-in wall ovens and table-top surface ranges take the work out of cooking, allow the most modern kitchen arrangements. Youngstown Kitchens now come in four wood styles—Fruitwood, Honeywood, Autumn Birch and Sandalwood.

2. American-Standard cast iron boilers are efficient, compact. They can be used with individually controlled Remotaire units (you can add cooling later)—or trim baseboard heating (creates a wall of warmth between you and winter).

3. The American-Standard winter air condi-

tioner gives you warm-air heating at its best. Companion summer air conditioning (small unit on top of furnace) fits right into ductwork, can be installed when the house is built, or later. Keeps the whole house fresh, clean and cool—with just the right humidity—all summer.

4. American-Standard lavatories and toilets come in wide selection of styles, colors and sizes . . . have smooth, wipe-clean surfaces.

5. New Contour tub has unique design that offers easier cleaning, added safety, two handy ledges for shelf or seat. It comes in six fashion-blended

TODAY'S WONDERFUL NEW HOMES ARE BETTER PLANNED, BETTER BUILT AND BETTER EQUIPPED

If you're thinking about buying a new home, consider this: *the longer you wait, the more you're likely to pay.* According to the leading housing authorities, the long-term price trend is *up*, and home values right now—in 1959—are better than they're apt to be at any time in the foreseeable future.

And if you haven't seen any of the homes being built right now, you're really missing something. *Above all else, they make living so much easier and happier.*

Take the kitchens, for instance. They're *engineered* now—to save you time and work. And they're lovelier than ever, when they're done in the rich warm tones of the new wood styles by Youngstown Kitchens. Cabinets and built-in appliances have the smart wood look you like—and are easier to care for, too. *Wonderful kitchens!*

Great things have been happening to bathrooms, too. Many of them come with beautiful new American-Standard fixtures—lavatories and tubs that give you more comfort and convenience than ever before; toilets that are efficient, dependable. Fixtures built to *last*.

Dad's shower won't suddenly turn cold—and Mom won't run out of hot water halfway through the wash, either—with an American-Standard water heater in the house. These heaters are performance-rated—you get all the hot water you'll *ever* need.

And many new homes have central, year-round air conditioning—so *you* can control the weather indoors. American-Standard makes *every* type of heating and air conditioning system for *every* type of home in *every* climate.

Yes, today's new homes are marvelous buys. Why not drive out to inspect one of the model homes near you this very weekend?



PHOTOGRAPH TAKEN AT SWEET HOLLOW HOMES, HUNTINGTON, L. I., NEW YORK

colors—and white—in durable cast iron.

6. New Gracelyn cabinet-lavatory has one-piece, easy-to-clean china bowl and counter top . . . plenty of storage space below.

7. For second bathroom—the compact Restal tub. Measures only 38" x 39", has corner seat and low sides—ideal for bathing children.

8. New idea! American-Standard wall-hung toilet is completely off floor. Makes cleaning under and around easier. Durable Church seat and cover snap off for thorough cleaning.

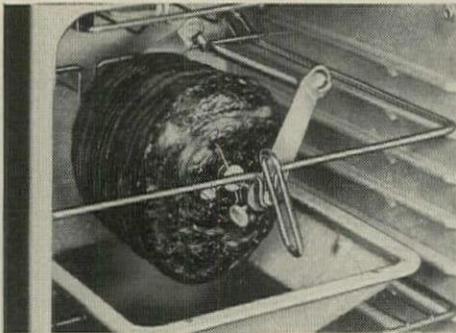
9. Your family won't run out of hot water with an American-Standard water heater. It gives up to 25% more hot water than other heaters of same size. Gas or electric.

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

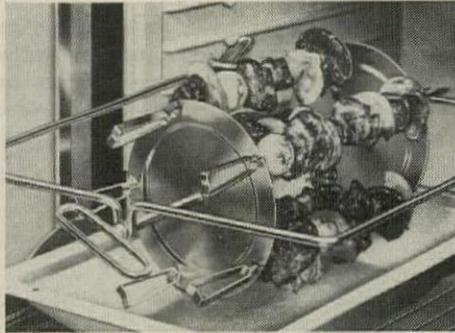
For more information about any of the American-Standard products shown above, just circle the pictures of the products you're interested in and send to us. American-Standard, 40 West 40th Street, New York 18, N. Y.



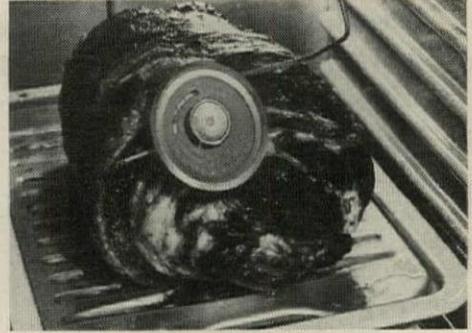
AMERICAN-Standard



New exclusive Roto-Baste* automatically scoops up meat juices and spreads them evenly over meat.



New exclusive Ka-Bob* rotisserie cooks 5 skewers of delicious shish-kabobs on all sides... automatically.



Built-in automatic Meat Probe assures perfect roasting; turns oven off when meat is done.

THESE EXTRAS IN THE NEW RCA WHIRLPOOL built-in ranges add extra "woman appeal" to your homes!

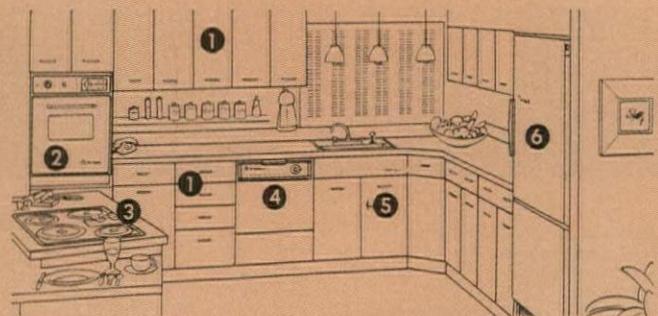
Here's the newest, finest cooking center you can offer...it has more capacity with giant-size 24" oven...it has more automatic convenience features women want!

More and more successful builders are telling us that the new RCA WHIRLPOOL built-in appliances step up the selling pace of their homes. For example, Tom and Ed Bevilacqua in San Leandro, California sold 157 homes in just 25 days... Alan E. Brockbank in Salt Lake City sold 84 homes in only 90 days! One of

the big reasons more women prefer RCA WHIRLPOOL kitchens is the all-new built-in ranges that provide all the *extras* shown above plus many more... and these built-ins fit any kitchen arrangement. You, too, can add the sales power of RCA WHIRLPOOL appliances to your homes. Simply mail the coupon today.

Electric models available with 24" and 17" ovens... gas models available with 17" ovens. Choice of decorator colors.

Everything for modern kitchens with

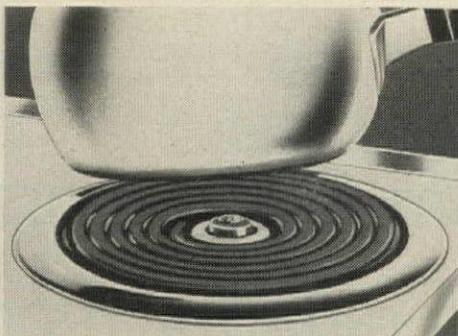


(1) "Select-A-Door"* wall and base cabinets (2) Built-in gas or electric ovens (3) Built-in gas or electric cooking tops (4) Dishwashers (5) Disposers (6) Gas or electric refrigerator-freezers... plus automatic washers, gas or electric dryers, gas or electric washer-dryers, air conditioners, combination range-sink tops.

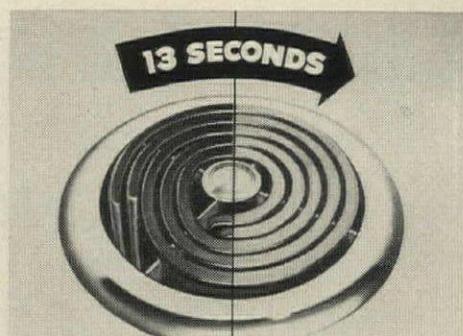
*Tmks.



Built-in "griddle in the middle" is perfect for greaseless grilling; has infinite-heat control.



Thermostatically-controlled unit makes all pots and pans automatic. Food won't burn or boil over.



Imagine, you can dial and get the exact heat you want in less than 13 seconds . . . including red-hot!



one brand name Whirlpool

The complete RCA WHIRLPOOL line includes built-in and free-standing appliances in gas and electric models plus standard wall, base and specialty cabinets. Each product is engineered for easy, fast economical installation. All are available from one supplier who is ready to give you expert planning assistance, merchandising aid and fast delivery. And you'll install products with one brand name nationally known for quality performance and wanted for dependable, trouble-free service . . . RCA WHIRLPOOL!

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

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

Mail coupon today for full details!

Contract Sales Division
Whirlpool Corporation, St. Joseph, Michigan

Please send me complete information on the new
 RCA WHIRLPOOL ranges RCA WHIRLPOOL kitchens

Name _____ Title _____

Firm Name _____

Firm Address _____

City _____ Zone _____ State _____

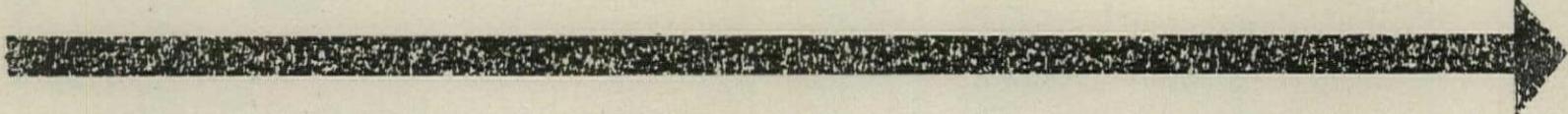
HH-4

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

New! And from Celotex, first name in
sound conditioning for modern homes!



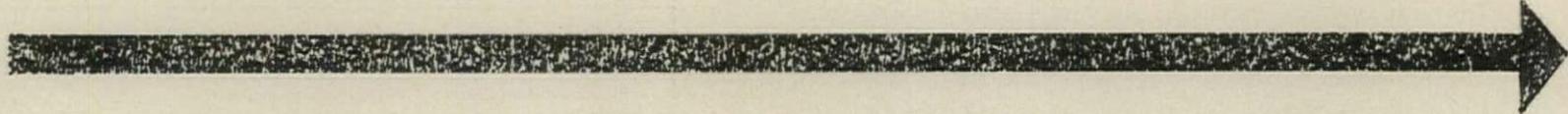
Voted by American women the industry's
most beautiful ... by 2 to 1 majority!



Nationally advertised in LIFE, Better
Homes & Gardens, LIVING, and others!



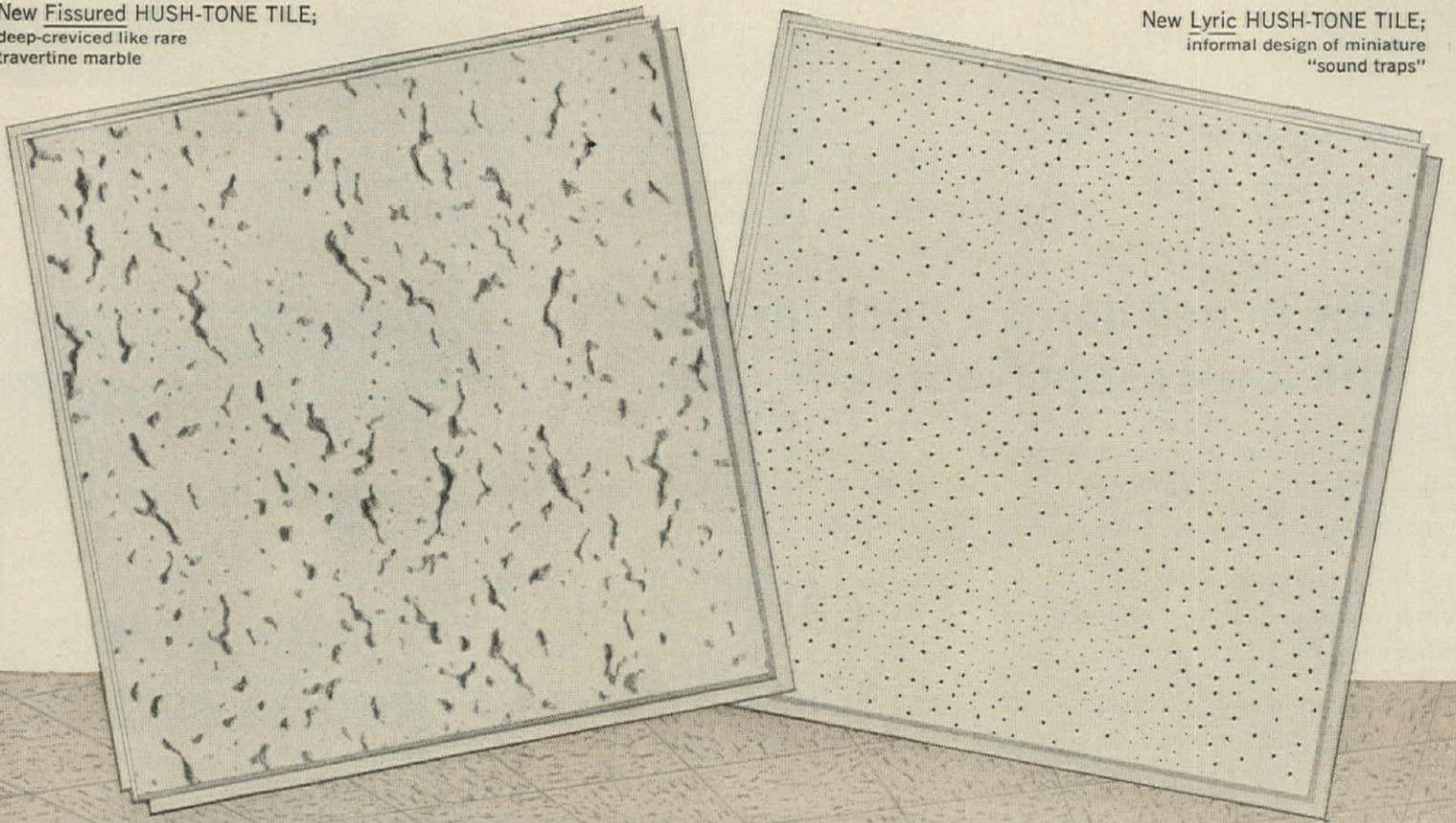
Leading builders say, "Hush-Tone* Tile
says quality built ... helps sell homes!"



See these beautiful quieting "Ceilings
by Celotex" ... at your dealer's now!

New Fissured HUSH-TONE TILE;
deep-creviced like rare
travertine marble

New Lyric HUSH-TONE TILE;
informal design of miniature
"sound traps"



One of the beautiful rooms featured in Celotex National Advertising Campaign: Interior by Marion Heuer, American Institute of Designers

APPROVED
BY
AMERICA'S LEADING
BUILDERS!

ENDORSED
BY
AMERICA'S LEADING
DECORATORS!

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

THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

FASTER WAY TO BETTER LAWNS FOR DISPLAY HOMES

How to nail down a thick lawn quick with low-cost polyethylene film:

Whether you are a landscape architect, or a builder who does his own landscaping, there's exciting news for you in recent tests by The Better Lawn and Turf Institute. (Based on a development reported by Spencer Chemical Company* in 1956.)

These test results point the way to a thick stand of Bluegrass just a few weeks after planting . . . or if you lay new sod you can expect it to be established in about a week.

The secret is an easy application of the same low-cost polyethylene film builders have been using for years as a moisture barrier in construction work. Here's the complete story:

In a recent test made by The Better Lawn and Turf Institute, Dr. Robert W. Schery, Director of The Lawn Institute, planted Kentucky Bluegrass seed in two greenhouse "flats." The two flats were watered, then one flat was immediately covered with a thin sheet of clear polyethylene film.

At the end of the test period—about three weeks—the flat covered with polyethylene had a thick growth of grass up to two inches tall. The uncovered flat showed only a scraggly stand of grass less than an inch tall.

The Lawn Institute further reports that results were the same, whether the grass was grown in a warm, sunny location or a cool shaded area, and with or without weed seeds mixed in.

Springtime selling tool

Using this new, proved technique for growing grass faster, you can have a model home surrounded by a thick stand of Bluegrass, just three weeks after seeding if weather is warm. To put the plan to work for yourself this spring, just follow these simple directions:

1. Prepare your seedbed in the usual way, then . . .
2. Soak it with a fine spray, and . . .
3. Cover with clear polyethylene film.

Stake down the film, either with four-inch roofing nails or U-shaped "wickets" made of coat hanger wire.

That's all there is to it!

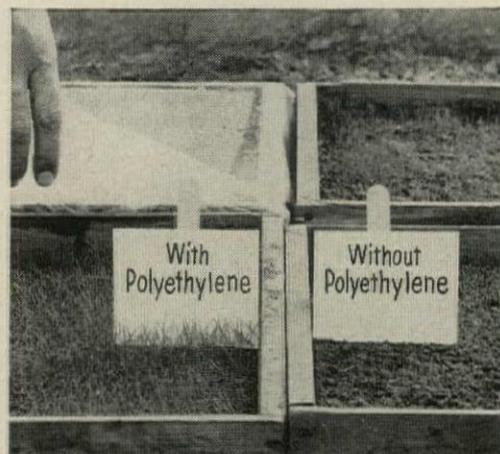
Because polyethylene is so strong, nails or wickets driven through the film one inch from the edge won't tear beyond the holes, under ordinary stress.

The polyethylene film will keep spring rains from washing away the seed and prevent birds from having a picnic with the newly-seeded lawn.

More important is the fact that with adequate pre-watering, the seedlings will water themselves! As moisture evaporates from the earth, it condenses on the underside of the film, then "rains" back down onto the grass. Yet, even though water can't get out, air and sunlight can get through the film.

● Deep-rooted sod in 1 week

Proof of the way polyethylene film helps sod take hold is seen in the results obtained at the Los Angeles, California, Coliseum. Their



With polyethylene film, 2-inch tall Bluegrass from seed in just 3 weeks! (See story at left.)



For model homes: A lush, thick lawn in a fraction of the time by nailing down sheets of polyethylene film to cover seed or sod. Actually makes lawn "self-watering!"

problem: Converting a baseball diamond to a football field in one week!

By covering the sod with polyethylene film (as explained in the numbered sequence above) they were able to have the field ready in plenty of time for the first game.

If you would like additional information on polyethylene for use in building better lawns, faster, or other time-and-money-saving uses of polyethylene in home construction, tear off and mail the coupon at right.

SPENCER CHEMICAL COMPANY

"America's Growing Name in Chemicals"

563 Dwight Bldg., Kansas City, Mo. Manufacturers of "Poly-Eth" Polyethylene • Spencer Nylon • Ammonia (Commercial, Refrigeration and Metal Treating Grades) • Aqua Ammonia • 83% Ammonium Nitrate Solution • Methanol • Formaldehyde • FREZALL (Spencer Dry Ice) • Liquid CO₂ • Cylinder Ammonia • Nitric Acid • "Mr. N" Ammonium Nitrate Fertilizer • SPENSOL GREEN and URA-GREEN (Spencer Nitrogen Solutions) • SPEN-AMM (Spencer Anhydrous Ammonia).

*Spencer Chemical Company manufactures "Poly-Eth" Polyethylene, from which polyethylene film is made. "Poly-Eth" is a registered trademark of Spencer Chemical Company.

FACTS FREE

Check the items in which you are interested. Then mail this coupon with your address to Spencer Chemical Company, 563 Dwight Bldg., Kansas City 5, Mo.

- "How To Grow Grass With Polyethylene."
 Lawn Institute Bulletin
 "New Uses For Polyethylene In Construction."



We put



90

Years of Flawless Perfection.....

into **PALCO**®

Architectural Quality REDWOOD

The *flawless perfection* of premium quality PALCO Architectural REDWOOD reflects the unmatched experience accumulated from over 90 years continuous and advanced development of manufacturing methods, facilities, and skilled workmanship employed at Pacific Lumber Mills. *Where quality counts—it's PALCO REDWOOD.*

Better buy PALCO—there's no better buy than the best.

903



Your dependable supply source: Capacity: 155 million board feet. Inventory: 100 million board feet — self-perpetuating timber reserves.

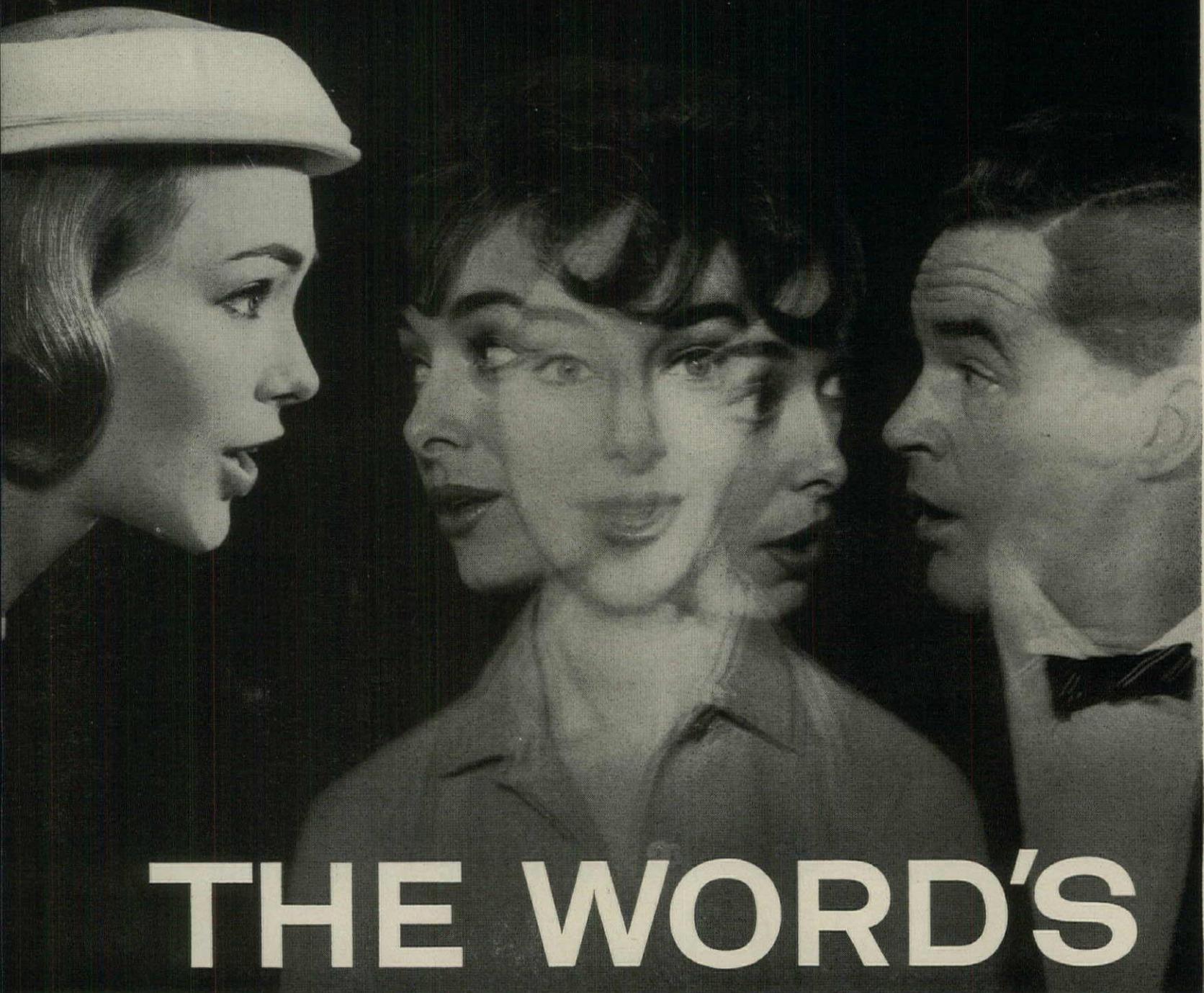
THE PACIFIC LUMBER COMPANY

Mills at Scotia, Eureka, and Elk, California

100 BUSH ST., SAN FRANCISCO 4 • 35 E. WACKER DRIVE, CHICAGO 1
2185 HUNTINGTON DRIVE, SAN MARINO 9, CALIF.



MEMBER OF CALIFORNIA REDWOOD ASSOCIATION



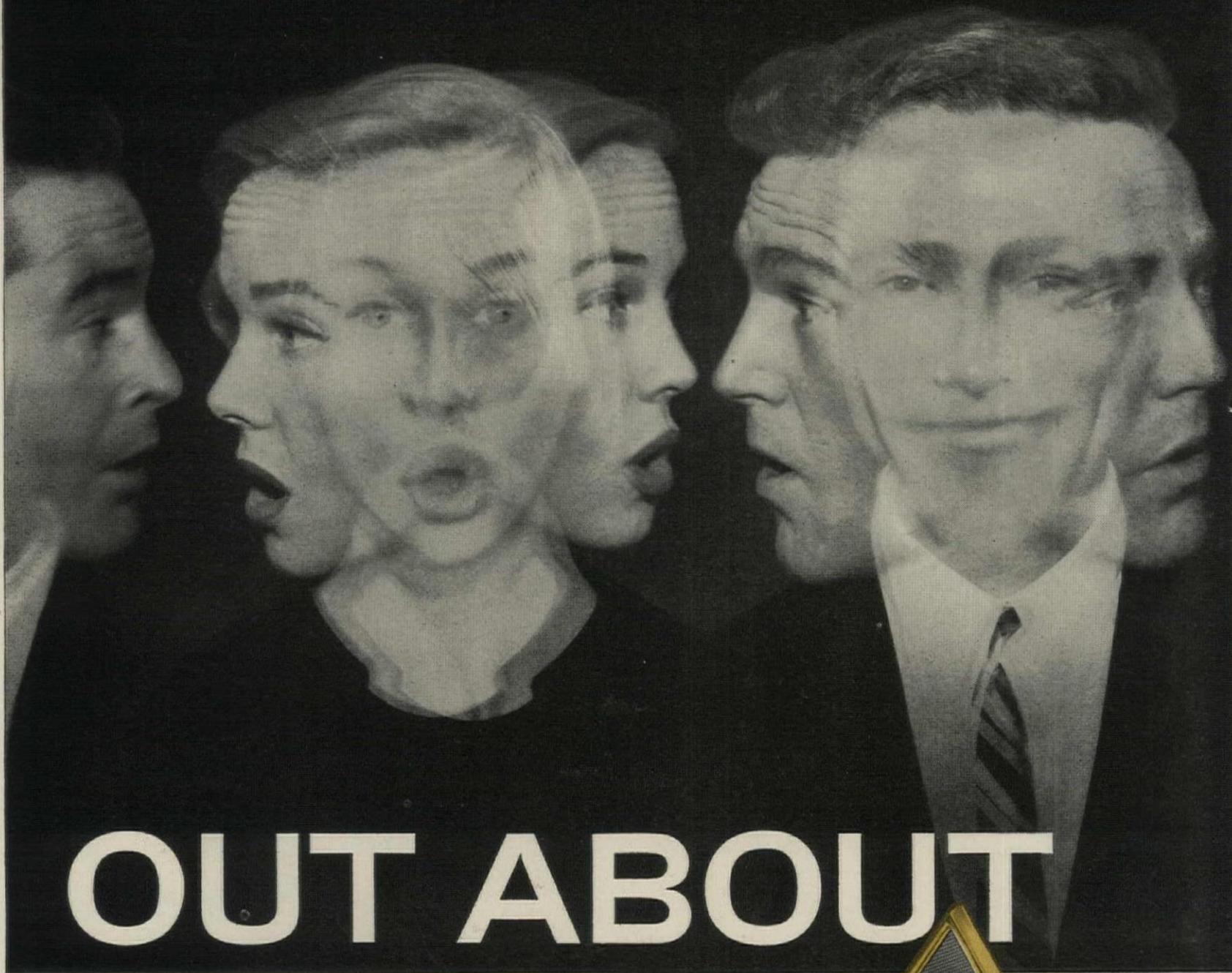
THE WORD'S

SARGENT'S LUCKY KEY

"Sales Tested" in '58. Now—a proven sales builder for '59!

The Lucky Key Contest provides solid, continuing traffic! Creates a list of active prospects and an invaluable record of consumer reaction to new-home features. This is the kind of help that sells homes!

ALL FREE FROM SARGENT!—a bright new package of "1959 Lucky Key" merchandising material, Westinghouse prize radios for local awards, and a \$500 National Cash Award.



OUT ABOUT

CONTEST!



For complete details on the new 1959 Sargent Lucky Key Contest, or on Sargent's complete line of residential hardware, call your Sargent Distributor, or write Sargent & Company, New Haven 9, Conn.

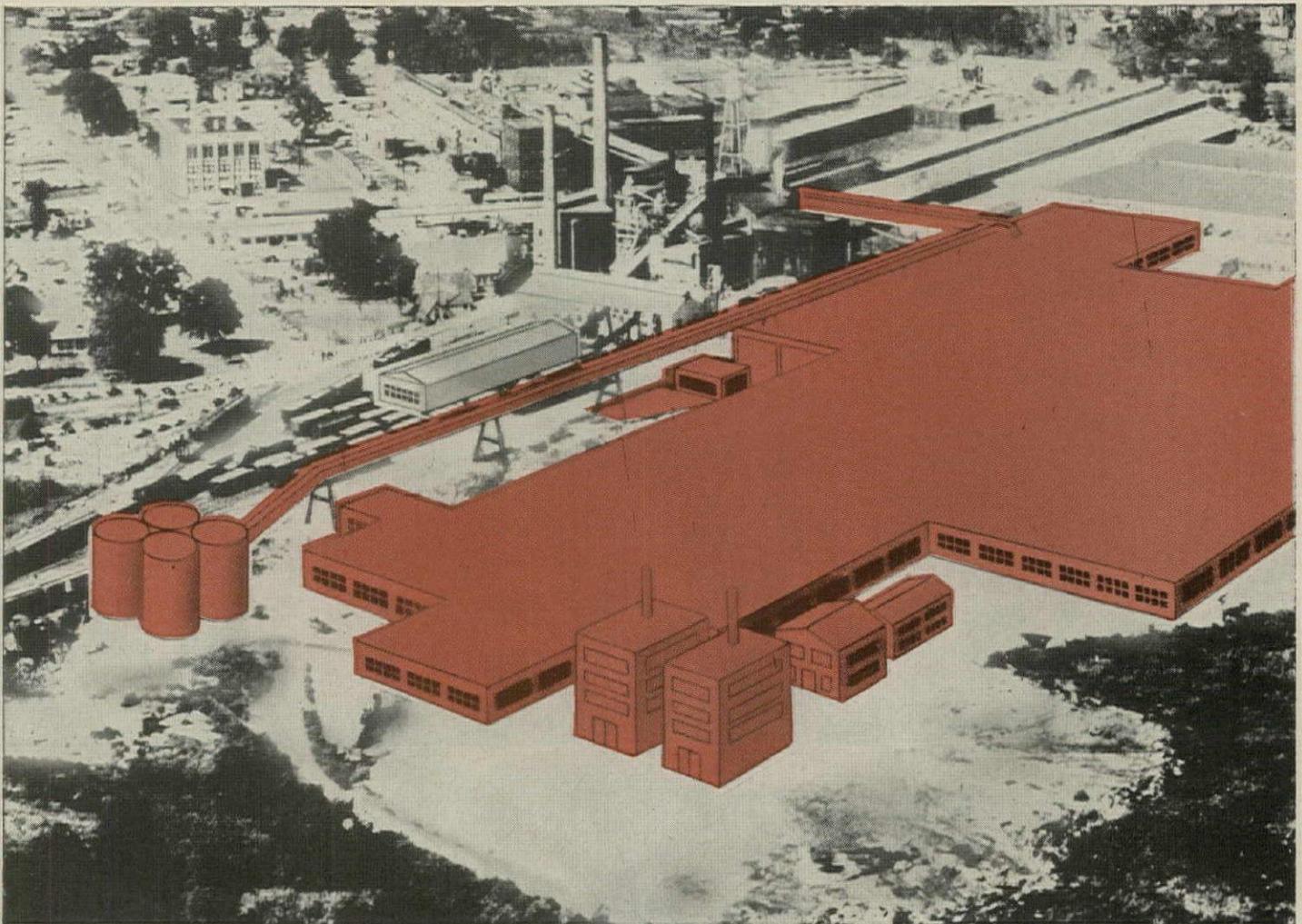


Illustrated: exciting new patterned metal insert design, AlignaLock and SentryLock.

SARGENT

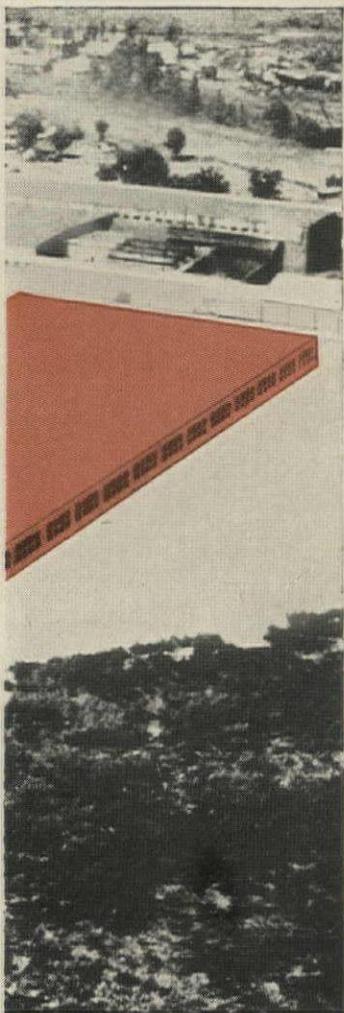
coming...

profit making **Masonite**



Shown (in color) are the new manufacturing additions to the Masonite plant at Laurel, Mississippi, which include new production lines, a new 26-boxcar loading dock, new research laboratories, new power plant, new office buildings and a revolutionary new raw-materials handling system.

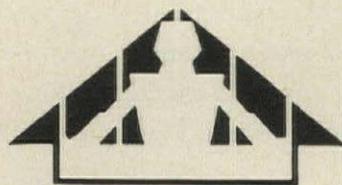
1/4 billion feet more building products for you!



MASONITE'S NEW UNIT VII WILL BRING YOU PLENTIFUL SUPPLIES OF SHADOWVENT[®], MISTY WALNUT, PANELGROOVE[®] AND ALL OTHER INTERIOR AND EXTERIOR MASONITE[®] PANELS THAT HELP YOU BUILD MORE SALEABLE VALUE INTO YOUR HOMES.

Good news for builders! Masonite's huge new Unit VII is nearly completed. With the latest developments in automation, production flexibility and fast straight-line operation, it will help us give you faster service, higher quality and better availability on all Masonite panels. And with our expanded research facilities, we will be able to offer you even more exciting new products to enhance the sales appeal of your new homes. Masonite Corporation, Dept. HH-4, Box 777, Chicago 90, Ill.

MASONITE



CORPORATION

©Masonite Corporation—manufacturer of quality panel products.



Light for Living

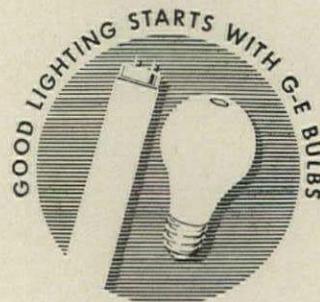


NOBODY CAN AFFORD lighting like this. As a builder you should consider that the average couple sees and compares from 15 to 40 homes before buying. And this means your homes must compete *and win* if they're to sell.

LIGHT FOR LIVING can often close more sales than wall-to-wall carpeting. Dramatic, but surprisingly low-priced, Light for Living can sweep a hesitant husband or an undecided bride right off their feet and close a sale. To help builders plan Light for Living into their model homes, there are a number of excellent books and brochures on the subject.



FOR MORE INFORMATION, send for your copy of General Electric's "Light For Living Facts For Home Builders & Modernizers". Contains practical tips on building more value into homes with lighted valances, cornices, wall brackets, and many other phases of *Light for Living*. Send \$1.00 to General Electric Co., Large Lamp Dept. 49X, Nela Park, Cleveland 12, Ohio.



BUY G-E AND SEE

Progress Is Our Most Important Product

GENERAL  ELECTRIC

NATIONAL[®] Food-Waste DISPOSER *More Quality . . . More Performance!*

For the Production Builder

COMPETITIVELY PRICED Model 124A "Budget Beauty"



Ruggedly designed for long trouble-free operation, the "Budget Beauty" is simple to install and priced for the thrifty buyer.

- Continuous feed—1/3 H.P. Hi-Torque motor.
- Fool-proof sink connection cradled in a neoprene "Whisper-Ring."
- Full-size capacity and shredding elements.
- Sparkling stainless steel cover
- Drain spout and dishwasher inlet rotate 360° independently.

For the Custom Builder

DELUXE DESIGN Model 744A "Citation"



National Disposer quality that can't be matched in convenience and grinding ability. For the discriminating buyer who demands the best.

- Patented, chrome, one-piece "Cover-Control" . . . seals, drains and operates the Disposer.
- Exclusive "Power-Surge" Reversing . . . most effective method for releasing a jam.
- "All-in-one" factory sealed Power-Pak contains motor and shredding elements.
- Drain spout and dishwasher inlet rotate 360° independently.

Builders can take pride in kitchens that include a National Food Waste Disposer. National offers the kind of service, convenience and sanitation that today's housewife demands.



NEWEST and HOTTEST in kitchen built-in's...

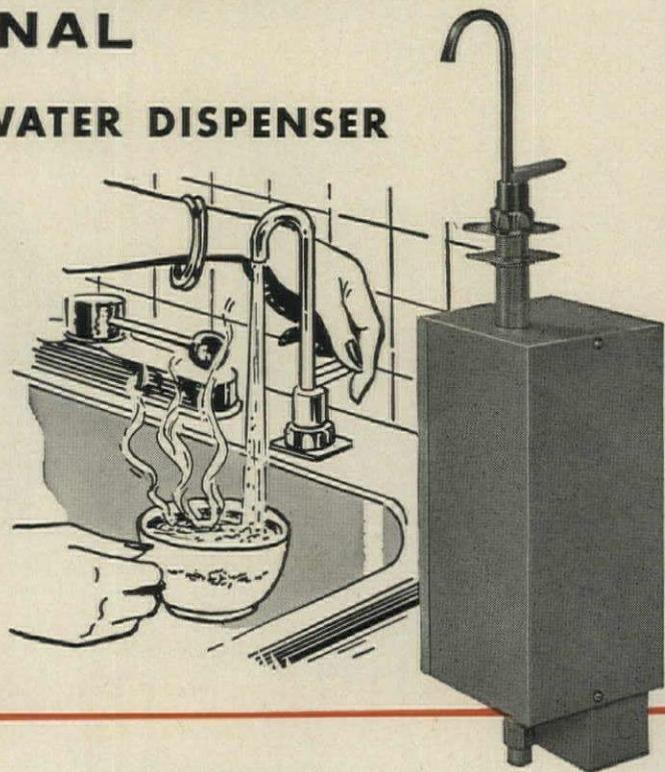
NATIONAL

"INSTANT-HOT" WATER DISPENSER

Delivers instant "teakettle hot" water (190°-200° F) in absolute pressure-free safety.

- instant coffee, tea or hot chocolate
- soups or bouillon
- jello and desserts
- head start for cooking (frozen foods, etc.)
- heating formula or prepared foods

Mounted on the sink ledge or counter top, the National "Instant-Hot" gives your homeowner an automatic built-in teakettle, safely dispensing hot water free from objectionable chlorine or carbonic taste.



2081-A

For further information about National Disposers and "Instant-Hot" write:



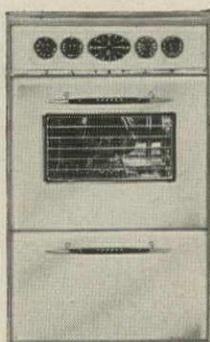
PLUMBING EQUIPMENT DIVISION

National Rubber Machinery Co.

47 W. Exchange St.

Akron, Ohio

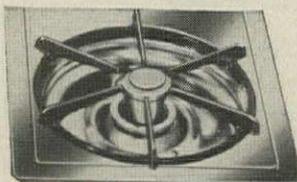
*She loves to
bake a lot but her
oven's too crowded.*



For her:
**Tappan's King-Size
Double Oven**

that permits bak-
ing and broiling
at the same
time. And
it's chrome-
lined.

*She feels left out of
things when she's stuck
in the kitchen cooking.*



For her:
**Tappan's Automatic
Set 'n Forget Top
Burner**

ends constant
pot-watching,
prevents
burning
and boil-
overs.

*She likes to be
on-the-go... helping
out in community
affairs, women's clubs.*



For her:
**Tappan's
Fully-Automatic
Oven**

bakes pies, cakes,
meals without
her being any-
where near-
by. Starts,
turns off
auto-
mati-
cal-
ly.



She saw it in **WOMAN'S DAY**



She saw it in **LADIES' HOME JOURNAL**



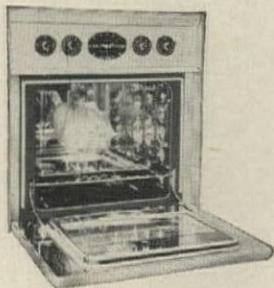
She saw it in **READER'S DIGEST**

Please 'em all with **TAPPAN**

Women have very personal reasons for their cooking preferences. But with Tappan you can please every woman's whim! Gas or electric! Single oven or double! Any arrangement of burners or surface units! Copperloy, Lusterloy or pastel color finishes!

And Tappan gas and electric surface units and built-in ovens are completely interchangeable

She often wished she could cook outside all year 'round.



For her:
Tappan's Built-In Rotisserie

lets her barbecue chicken and roasts right in her own kitchen.

She loves to make big, week-end breakfasts.



For her:
Tappan's Griddle-in-the-middle

lets her whip up big batches of pancakes, bacon and eggs.



She saw it in FARM JOURNAL



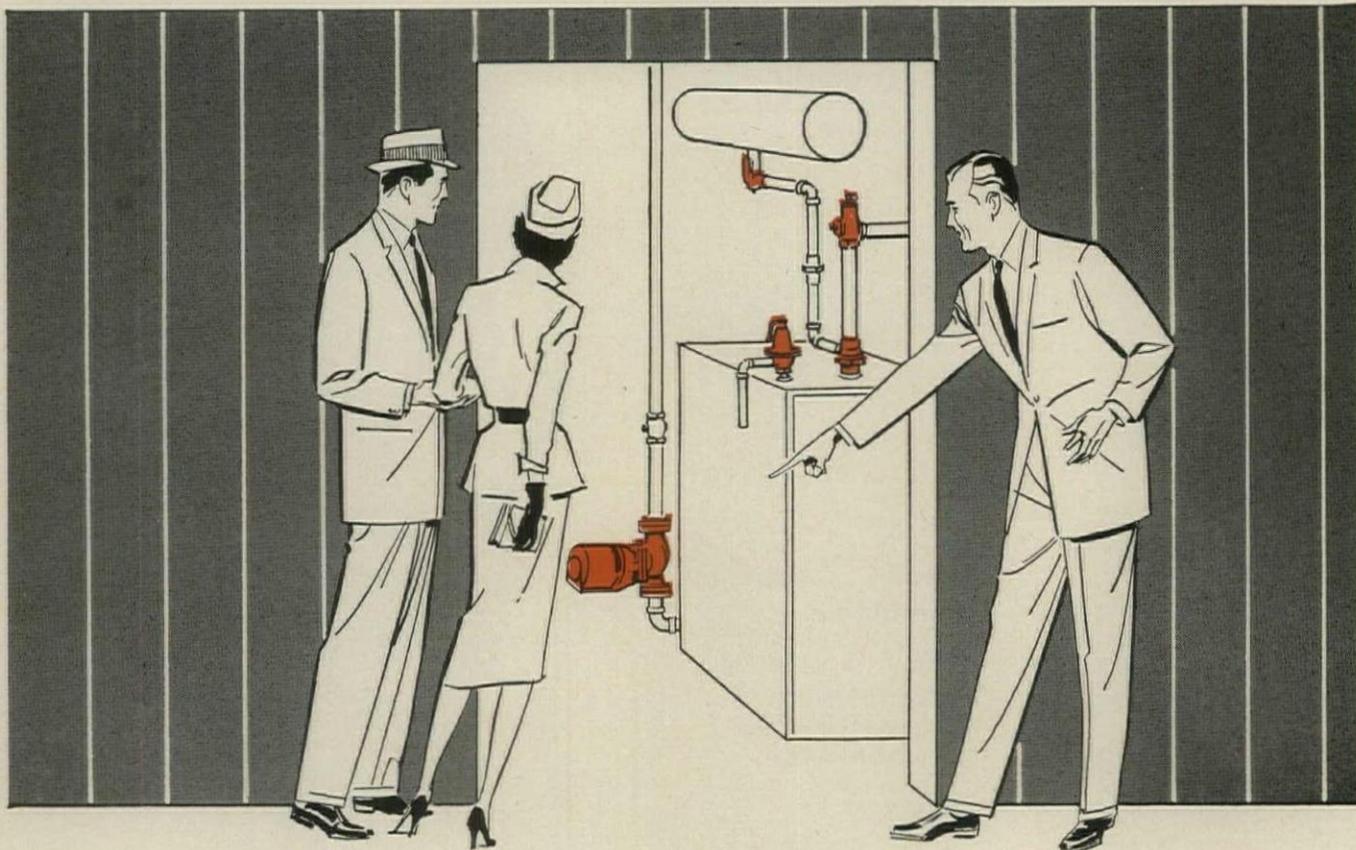
She saw it in BETTER HOMES & GARDENS



today's biggest Built-in-Line

in the same size cut-out! Only with Tappan can your kitchens be as flexible as a home buyer's mind. Only with Tappan can you interchange gas and electric units WITHOUT extra carpentry, WITHOUT refitting problems of any kind.

For complete details on built-ins, write the Tappan Company, Box HH-49, Mansfield, Ohio.



YOUR **CLINCHING SALES POINT** CAN BE IN THE BASEMENT (OR UTILITY ROOM)



B&G BOOSTER
...key unit of the
B&G Hydro-Flo System

The B&G Booster and other auxiliary *Hydro-Flo* equipment can be installed on any hot water boiler. This *silent, vibrationless* electric pump circulates hot water through the heating system—accurately controlled to keep indoor temperature constantly at the comfort level. Nearly 3,000,000 Boosters have been installed to date.

A "hydronic" B&G *Hydro-Flo* Heating System puts any home in a class by itself...*adds a genuine quality touch*...assures the buyer that he is getting more value for his money. In thousands of installations, this *forced hot water heating system* has proved a sales clincher!

The B&G *Hydro-Flo* System endows a home with all the essentials of good heating...the right *quality* of heat...the right *location* of heat sources...*accurate control* of heat...operating *economy*...and *long life* of equipment.

It's *cleaner* heat—doesn't soil walls and draperies. It's *quiet* heat—no fan hum. If desired, the same boiler that heats the house can be equipped to furnish year 'round hot faucet water.

The *Hydro-Flo* System can be easily zoned—a particularly important advantage in heating split-level homes.

Send for booklet giving the complete story of the B&G *Hydro-Flo* System.



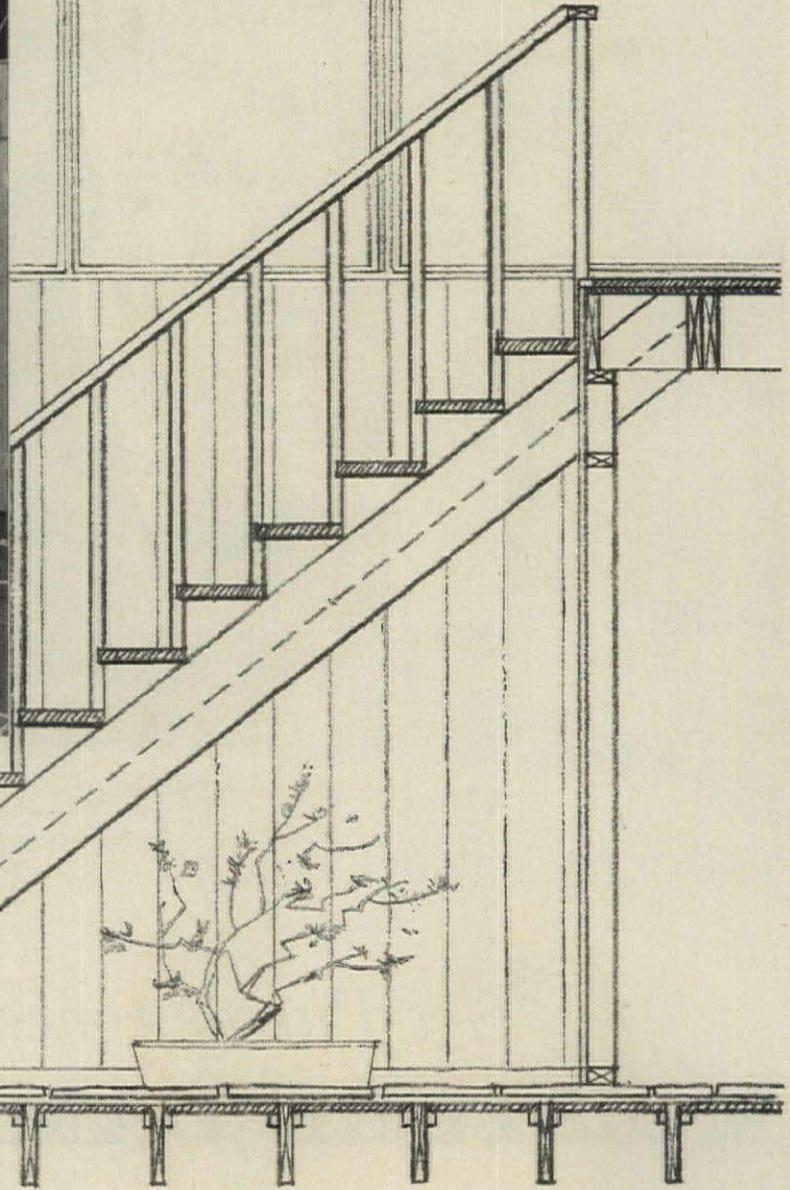
Reg. U. S. Pat. Off.

Hydro-Flo SYSTEM

BELL & GOSSETT C O M P A N Y

Dept. FR-10 Morton Grove, Illinois

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



only WOOD's versatility gives your homes

MORE of the features MOST buyers want

What other building material can *add* so much to a home, in so many ways? Use wood for unusual stairways like this one . . . for warm exterior siding and interior paneling, for favored kitchen cabinets and storage walls, for distinctive doors and snug windows, for naturally beautiful floors. In any part of any house, built of *wood* means built to *sell*!

However you use wood, inside or out, its versatility is a selling tool that lets you build better homes in any price range. Whatever the price, size or style . . . wherever the locale or site . . . you will sell more houses and make *more dollars per house* when you build with wood. It's the material that lets you offer today's best building buy!

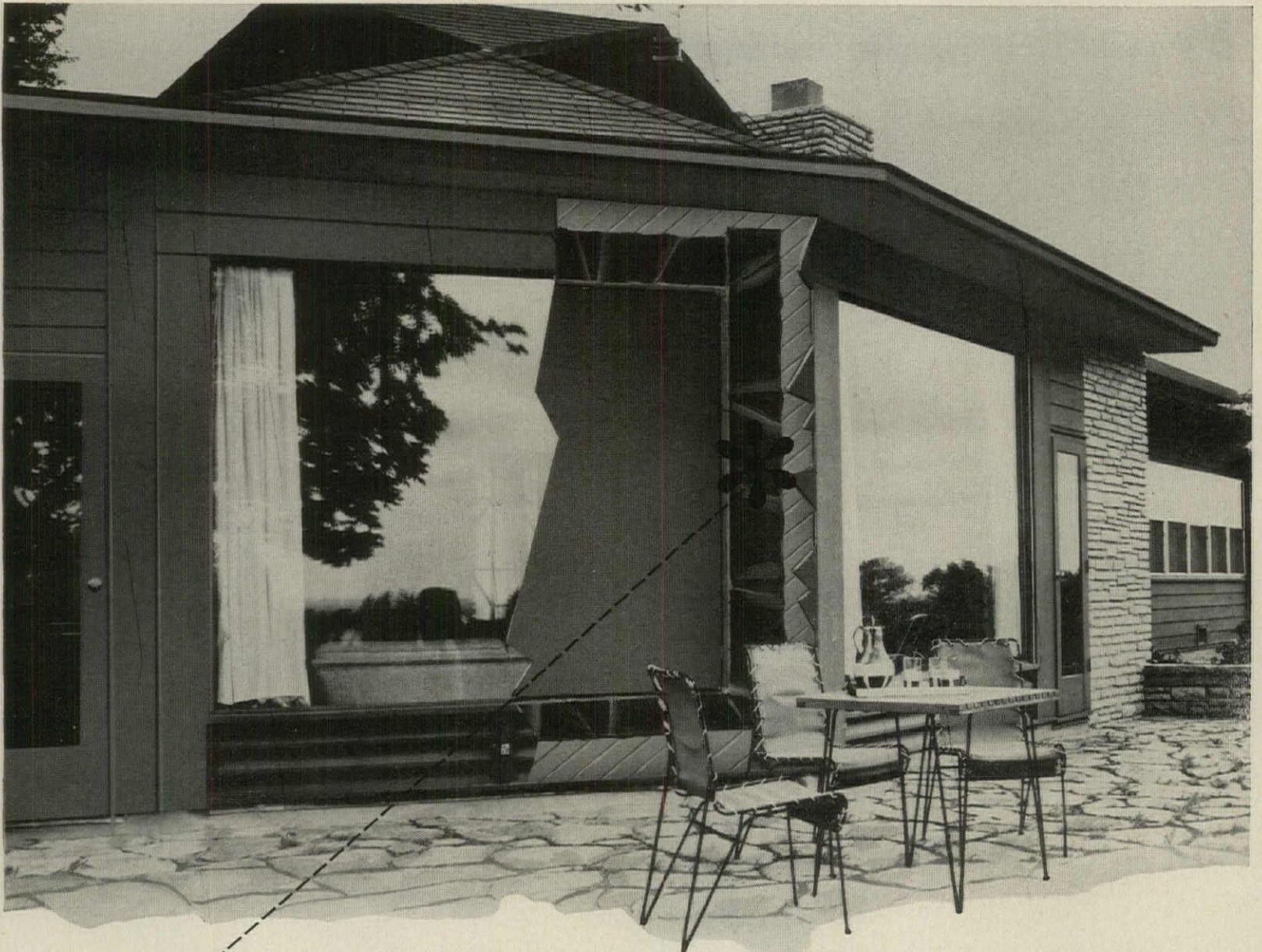
For new information on better homes of wood, write to:
 NATIONAL LUMBER MANUFACTURERS ASSOCIATION
 Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.

nlma

Live, Work, Build Better with

wood

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**Ger-Pak as concealed flashing licks*

MOISTURE DAMAGE PROBLEMS!

Prevent recurring damage from water-vapor seepage and penetration by using low-cost GER-PAK Virgin Polyethylene Film for flashing! Meets F.H.A. requirements.

Installed around windows, door heads, and frames, GER-PAK Flashing Film curbs paint blistering, plaster cracking, frame rotting—all the headaches of unchecked moisture penetration. And GER-PAK Film helps homes keep that "just built" new look a long, long time.

This is the same famous GER-PAK Polyethylene Film specified by leading architects the country over and used by builders everywhere for unmatched water-vapor protection under concrete slabs and in sidewalls, as well as for superior dust sealing between floors. Ideal, too, for

closing-in unfinished doors and windows, as painting drop cloths, and protective coverings.

GER-PAK is lightweight, easy to handle, inexpensive. Comes in widths from 10-inch for flashing all the way up to 40-foot. Available in CLEAR, BLACK and special opaque WHITE. Ask your dealer today.



DESIGNED TO MEET FHA REQUIREMENTS

—CLIP AND MAIL NOW FOR FREE SAMPLES!

Gering Products, Inc., Kenilworth, N. J.

Please send me without obligation:

HH-4

FREE GER-PAK® and Miracle Tape samples and brochure.

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Company

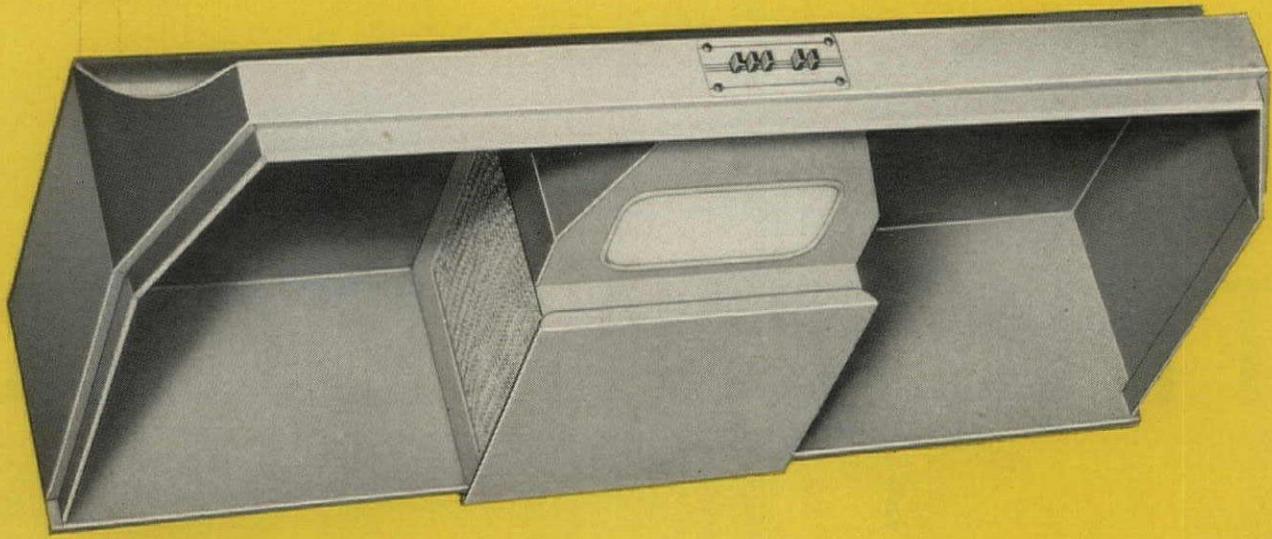
Address

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



Virgin Polyethylene Film

Gering Products, Inc., Kenilworth, N. J.



**Installs in half the time
of ordinary range hoods**

NEW *Broan*

Dual Blower Hood

a fully integrated package

There is more of everything for everybody in this NEW Broan Hood. The housewife gets a better performing installation — the extra power of a dual blower. The contractor gets more to "sell" — at a better price. For example, the hood and blower are factory prewired and are put in place as a single unit. Many contractors report their installation time is only half of

their former experience. That difference can mean many more successful jobs for you.

Get the full facts on this BEST ENGINEERED hood today. See your distributor, or write for full information.

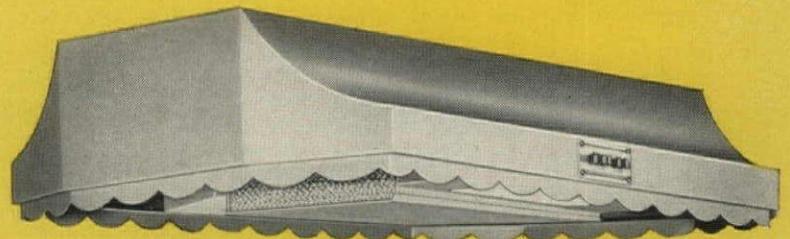
***Broan* MANUFACTURING COMPANY, INC.**

924 West State St., Hartford, Wisconsin | Near Milwaukee

Specialists in Quality Ventilating Equipment for More than 25 Years.

Additional Features—

- Vertical or horizontal discharge directly into 3¼" x 10" standard duct.
- Built-in spring-loaded backdraft damper.
- Blower removable without tools. Two lifetime aluminum filters.
- Brilliant illumination — ribbed crystal lens.
- Seamless welded construction — no grease-catching trim strips or rivets.
- Saves cabinet space — self contained.
- "Contour-corner" design — out of the way of cabinet doors.
- Modern or colonial styling, five widths, stainless steel or colors.



Dual-Blower Island Hood

The Broan Island Hood is completely self contained, offers fast, economical installation plus dual-blower power. Combines all the engineering advances and features of the regular Dual-Blower Hood. Choice of styles, widths, finishes.

The BIG name in Bilt-ins

THERMADOR

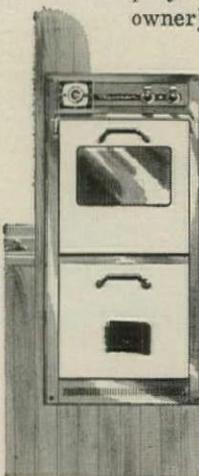


THERMADOR Bilt-In Oven features: largest usable oven space . . . models with Easy-View Window. Choice of 9 models in Lifetime Stainless Steel and 9 in any one of 5 decorator colors.

THERMADOR Bilt-In Cooking Top features: Speed-Matic element red hot in 15 seconds . . . Therma-Matic element fully automatic. Griddle and deep-well models available. Choice of 12 Cooking Tops in Lifetime Stainless Steel and 7 models in any one of 5 beautiful colors.

...originator of the Bilt-In Range!

When today's home buyer is *pre-sold* on brand reputation of kitchen appliances, the house is half sold. And today's buyers recognize the quality of THERMADOR Bilt-In Electric Appliances . . . ovens, cooking tops and refrigerator-freezers. Besides, THERMADOR Bilt-Ins take 45 minutes less time to install (ask any electrical contractor); require least service (ask your serviceman); and the matchless brand reputation of THERMADOR adds quality appeal to every home, budget project or finest custom-built (ask any Thermador owner).



NOW AVAILABLE! THERMADOR Bi-Level Bilt-In ELECTRIC OVEN

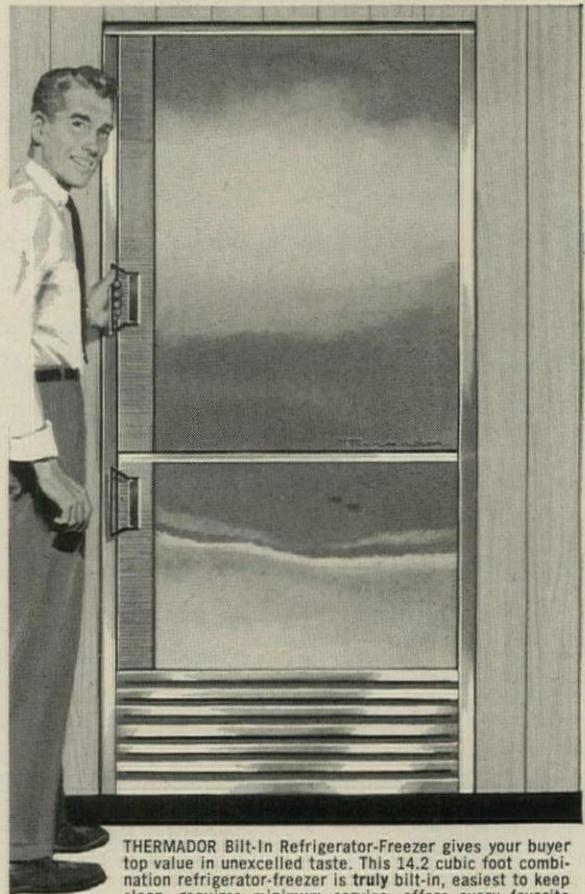
More usable oven space than ever before! Gives perfect baking and broiling in either oven at the same time. Compact, easy-to-install, modern beauty.

 THERMADOR Electrical Manufacturing Co.
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5119 District Boulevard, Dept. 158 • Los Angeles 22, Calif

Please send illustrated literature on:
"Bilt-In" Ranges "Bilt-In" Refrigerator-Freezers

architect builder electrical contractor
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Name _____
Address _____
City _____ County _____ State _____



THERMADOR Bilt-In Refrigerator-Freezer gives your buyer top value in unexcelled taste. This 14.2 cubic foot combination refrigerator-freezer is truly bilt-in, easiest to keep clean, requires minimum service, offers every favorite feature. In Lifetime Stainless Steel or 5 decorator colors.

Quality-Packed
NEW

THUNDERBIRD

by Inland Homes



Designed to sell for
\$8150 plus lot

The new Thunderbird opens up a whale of a big market for you — families that are hungry for a roomy, quality house with a small price tag.

Look at these quality features of the Thunderbird.

-  12 Colonial, Contemporary, French Provincial and Ranch designs. All architect-designed.
-  Over 1000 sq. ft. with big living room, extra large kitchen, dining space, and 3 bedrooms.
-  2" x 4" construction throughout.
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Mr. Builder —
We cordially invite you
to use a Thunderbird Model
Home in your subdivision
at no cost to you during
the 1959 building season.
Write, wire or phone
for complete information!
Inland Homes Corporation

-  Prehung flush doors throughout.
-  Wood kitchen cabinets.
-  Complies with FHA'S new MPS.

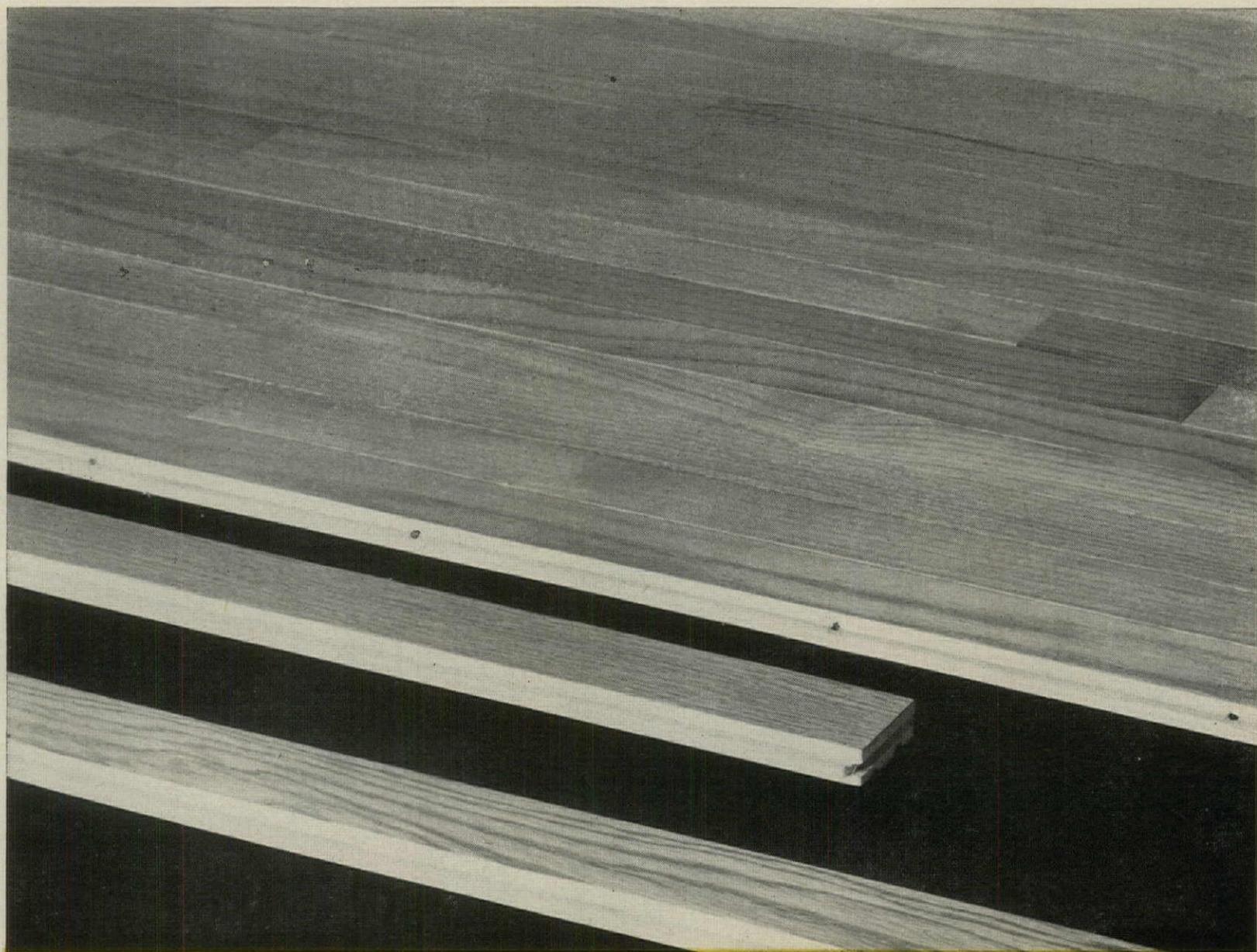
Get started TODAY. For details on the Thunderbird and Model Home Plan, visit, write, or phone P. R. Thompson, Vice Pres., Sales—phone PProspect 3-7550, Piqua, Ohio.

INLAND HOMES



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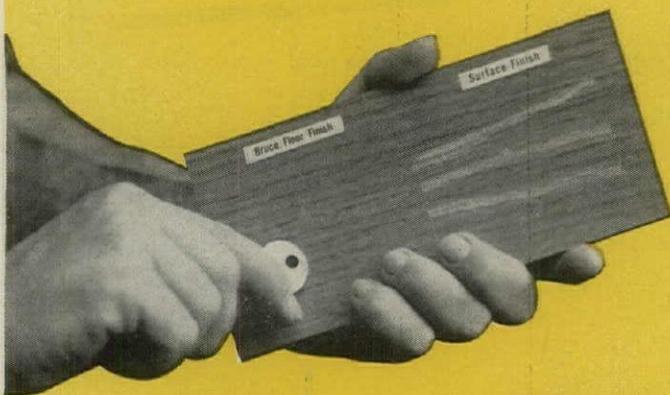
Manufacturer of America's Finest Homes



Builders have used Bruce PRefinished

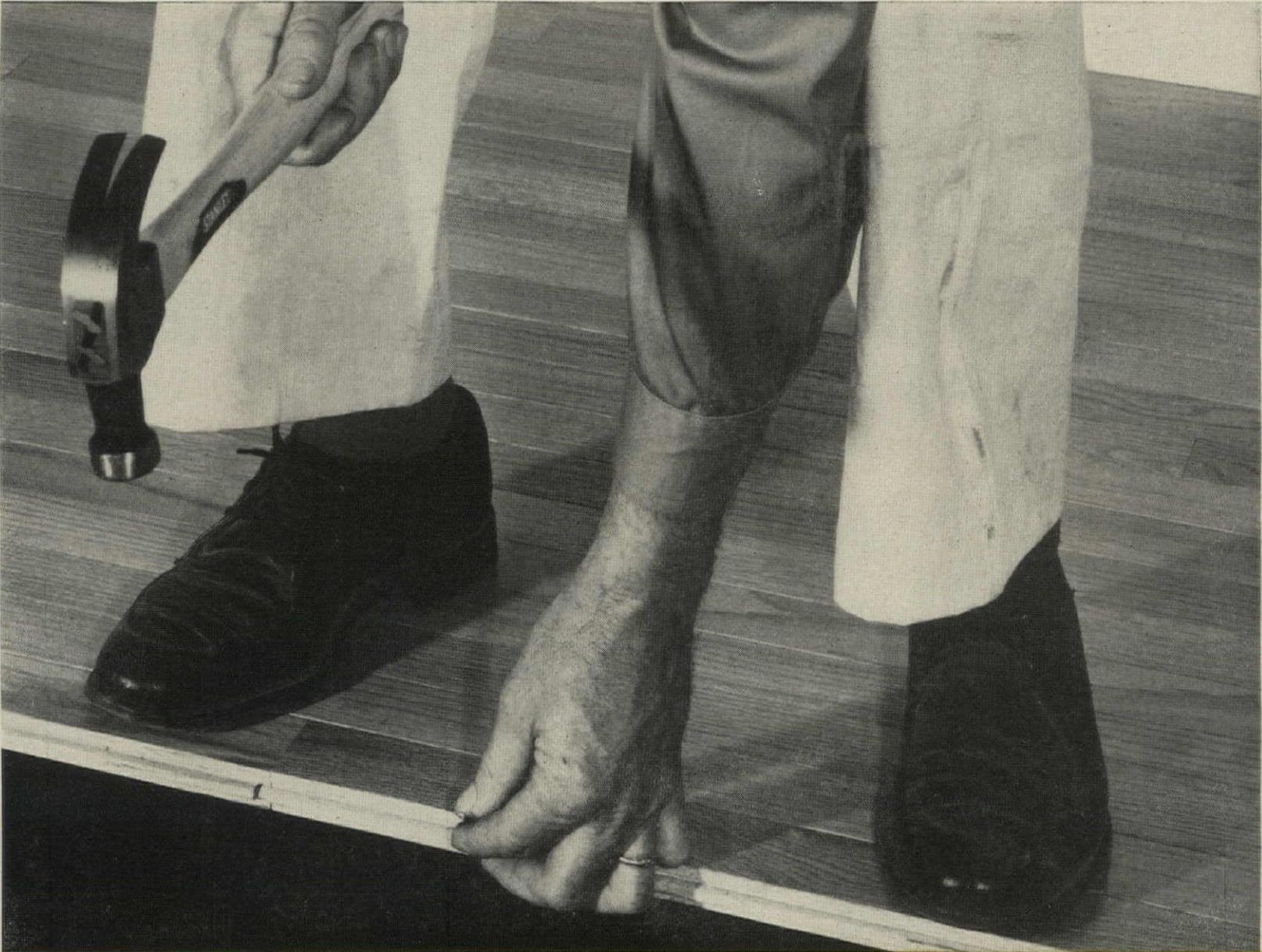
BRUCE GIVES FLOORS MOST BEAUTIFUL FINISH EVER...

SCRATCH TEST PROVES ITS DURABILITY



With specially designed machines, Bruce uses these steps to give hardwood flooring the finest finish ever developed: (1) flooring is sanded to satin smoothness; (2) finish is pressure applied and rubbed in for thorough, uniform penetration; (3) finish is dried and set by infra-red lights, then buffed for toughness and flexibility; (4) wax is applied and machine polished to a beautiful sheen. Because it's baked into the wood, this finish won't scratch, chip or wear away like ordinary surface finishes, as proved by the famous Scratch Test (see left). It brings out the full, natural beauty of the wood and keeps floors new-looking for a lifetime with minimum care.

Bruce PREFINISHED



Floors in over half a million homes

SAVES TIME AND LABOR...GIVES YOU OTHER ADVANTAGES

- Eliminates sanding and finishing... saves 3 to 5 working days per house
- No interruption of other work while waiting for finishes to dry
- Easy to lay... just like any strip flooring
- Nationally advertised in leading magazines
- Famous Bruce name assures immediate buyer acceptance

MAIL
and we'll tell you more



E. L. BRUCE CO., Memphis, Tenn.
World's largest maker of hardwood floors

HARDWOOD FLOORS

E. L. BRUCE CO.
1770 Thomas St., Memphis 1, Tenn.

Send complete information on Bruce PREfinished Floors to:

Name _____

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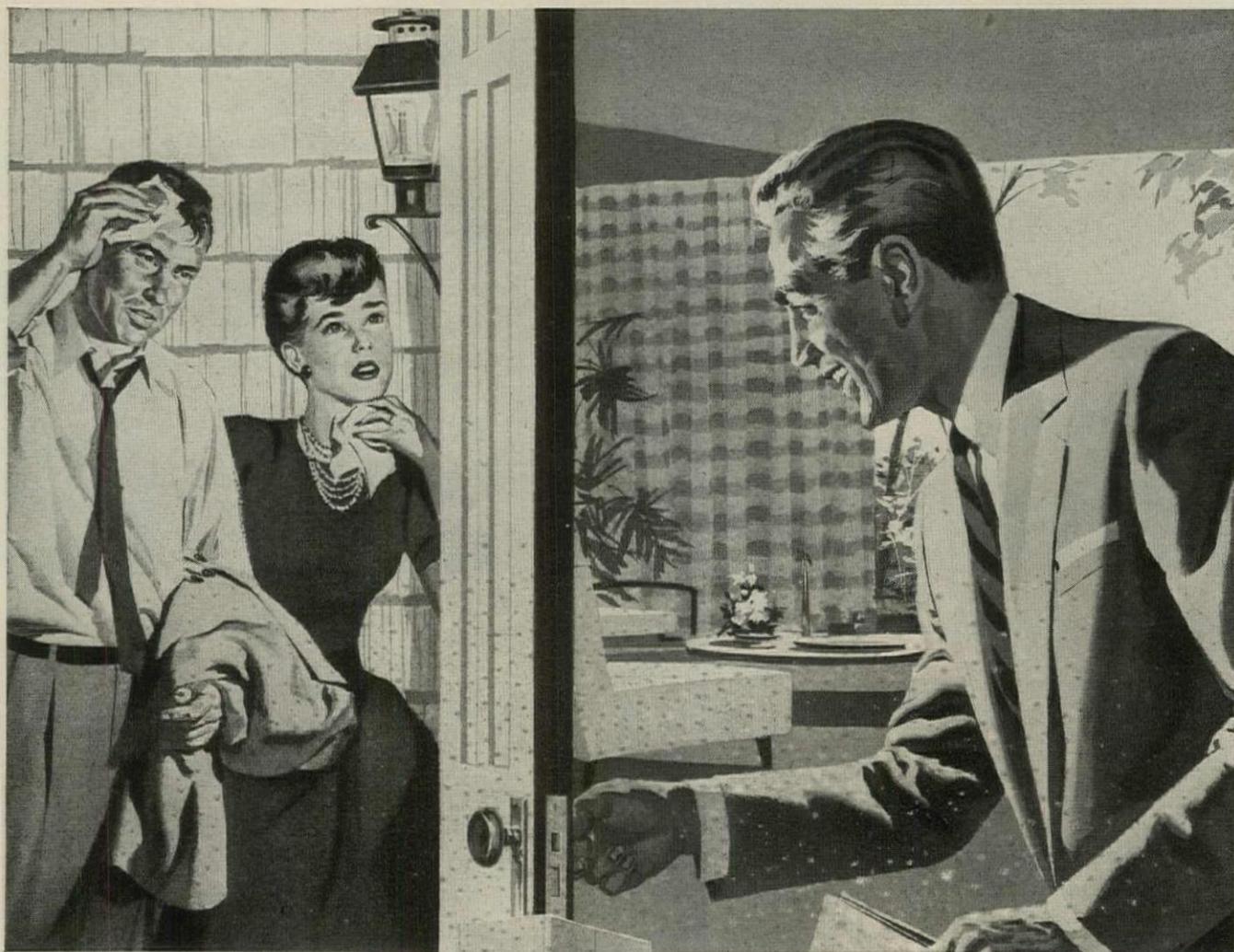
SOLD

— almost on sight—
the house that's

Cooled in Summer... Warmed in Winter

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

All Year® Gas Air-Conditioner!



Advantages for the Buyer:

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

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

AMERICAN GAS ASSOCIATION

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

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

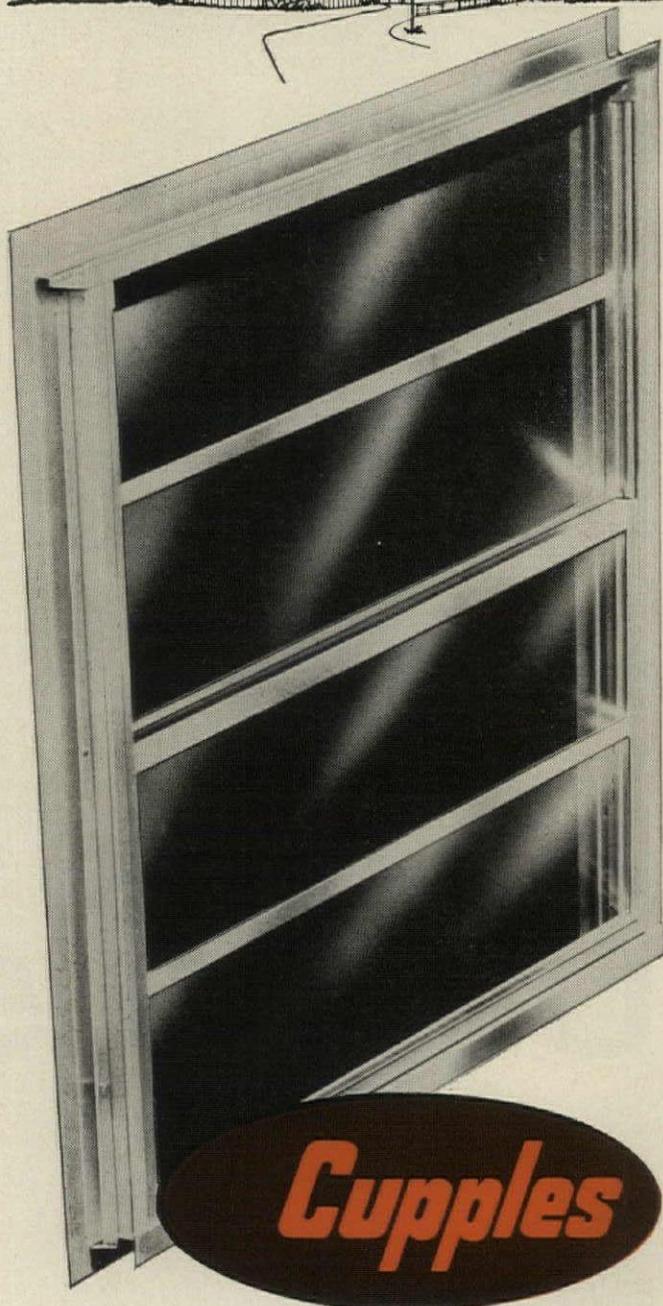
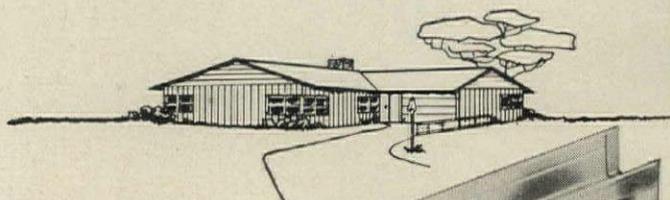
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ADD SALES APPEAL
TO YOUR HOMES

ALUMINUM WINDOWS

Cupples

Single-Hung

WITH INTEGRAL FIN TRIM



Made to high standards of design and construction, Cupples Single-Hung Windows meet with quick acceptance everywhere. They're adaptable, easy to install, economical.

With Cupples Single-Hung Aluminum Windows in your homes you make selling easier, please your customers and add to your profits. Why not investigate today?

Cupples, one of the nation's foremost aluminum fabricators, also manufactures a complete line of double-hung, case slide and horizontal sliding windows. Every Cupples window is backed by our unqualified guarantee. *You must be satisfied. Your customers must be satisfied.*

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One carpenter installs window in minutes . . . snugly, permanently. No fitting, no adjusting. Fin trim is integral. Completely assembled.

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Perfect for new homes, remodeled older homes, light commercial buildings. Endorsed by architects and builders.

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Available in all popular sizes and styles, including picture windows.

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EXCLUSIVE FLASHING FEATURE!

No other gutter has its own flashing that fits right under the first row of shingles. Eliminates the need for a drip edge. Saves time, money and extra labor!

INSTALL UP TO 5



No other gutter or downspout system today offers you all the advantages demonstrated above: Nothing else matches a Fiberglas Permadrain system for speed and ease of installation, handsome good looks and lasting service. Permadrain actually installs up to five times faster than conventional materials. The simple lines blend with any archi-

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You get all necessary parts: gutters, downspouts, miters, elbows, outlets, end stops, couplers and

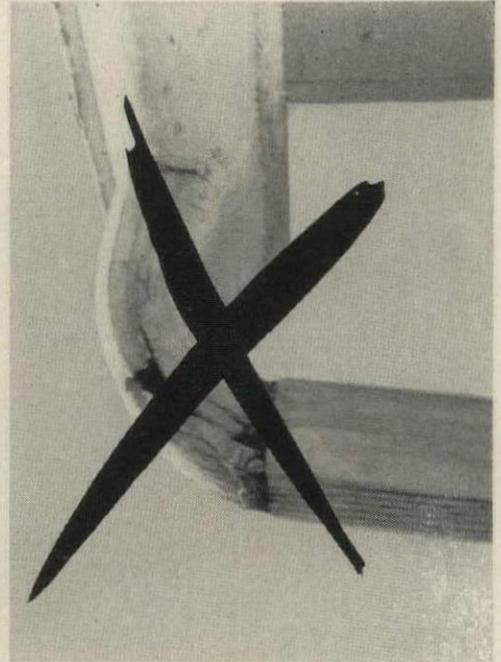
GUTTERS AND DOWNSPOUTS!



EXCEPTIONAL STRENGTH! Gutter will actually support the weight of a 200-lb. man standing right in the trough! Can't be crushed or dented by ladders.



LIGHT WEIGHT! One man can carry and install an entire system without additional help! Handling problems become simple and easy without unwieldy materials or parts.



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WON'T LEAK OR BACK UP! Joints of gutter are permanently resin bonded and corners are formed in one piece. Self-unloading lower lip and molded apron prevent back up, eliminate costly drip edging!



CAN'T CLOG! Downspout snaps out for easy cleaning! Permadrain won't bulge or split-freeze from ice formation. Foolproof against clogging problems.



EASY TO INSTALL! Can be finished the day it's started! No complicated accessories or time-consuming joining or fastening. Nails directly to the sheathing!

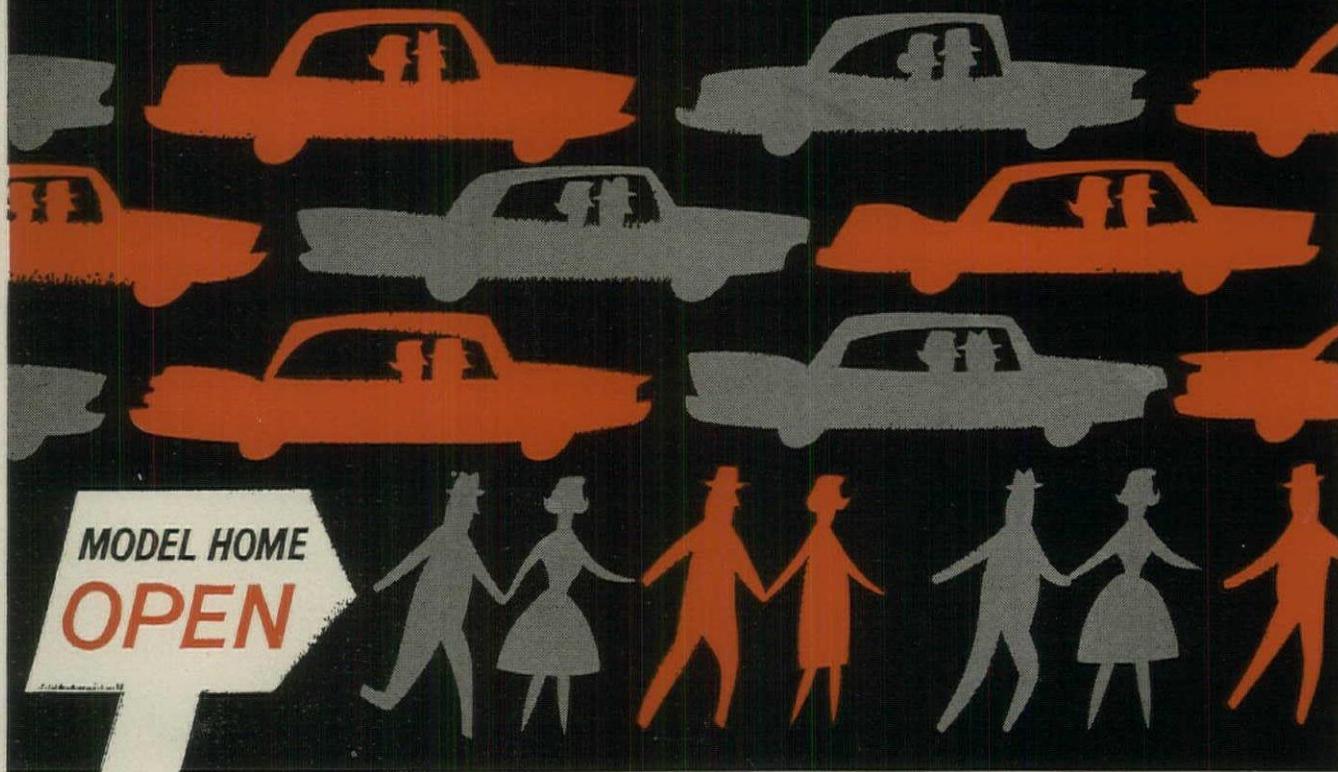
TIMES FASTER!

bonding kit with adhesive. Each has soft white color permanently molded in. No painting is necessary unless a special color is desirable. Call your local Fiberglas representative, listed in the yellow pages of your phone book, or write for *free technical booklet*. Owens-Corning Fiberglas Corp. Dept. 67-K, 598 Madison Ave., New York 22, N.Y.

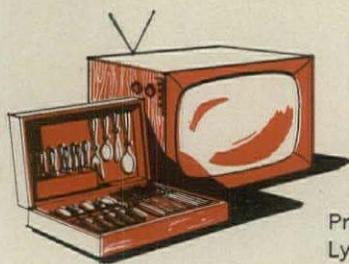


*T.M. (Reg. U.S. Pat. Off.) O.C.F. Corp.

LINE 'EM UP!



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



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

*T.M. AND PATENTS APPLIED FOR



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

World's largest fabricator
of Chrome-nickel stainless

**LYON STAINLESS PRODUCTS
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13881 W. Chicago Boulevard, Detroit 28, Michigan



Lyoncraft

AUTOMOBILE WHEEL COVERS • PRESTIGE TABLEWARE • KITCHEN SINKS • HOUSEWARES

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Detroit 28, Michigan
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Set the stage for a sale with this elegant vinyl tile

Home buyers are instantly impressed with the classic beauty and modern convenience of new B. F. Goodrich "Corinthian" All Vinyl tile. Translucent "Corinthian" looks and lasts like fine marble. The clear-through non-directional veining simply can't wear away. Your choice of "Corinthian" will reflect an atmosphere of elegance and luxury to the homes you build and sell.

Stains, oils, greases and detergents can't

harm it (it will outlast the building), and damp mopping retains its brilliance. Though it looks like marble, "Corinthian" tile is amazingly resilient and quiet underfoot.

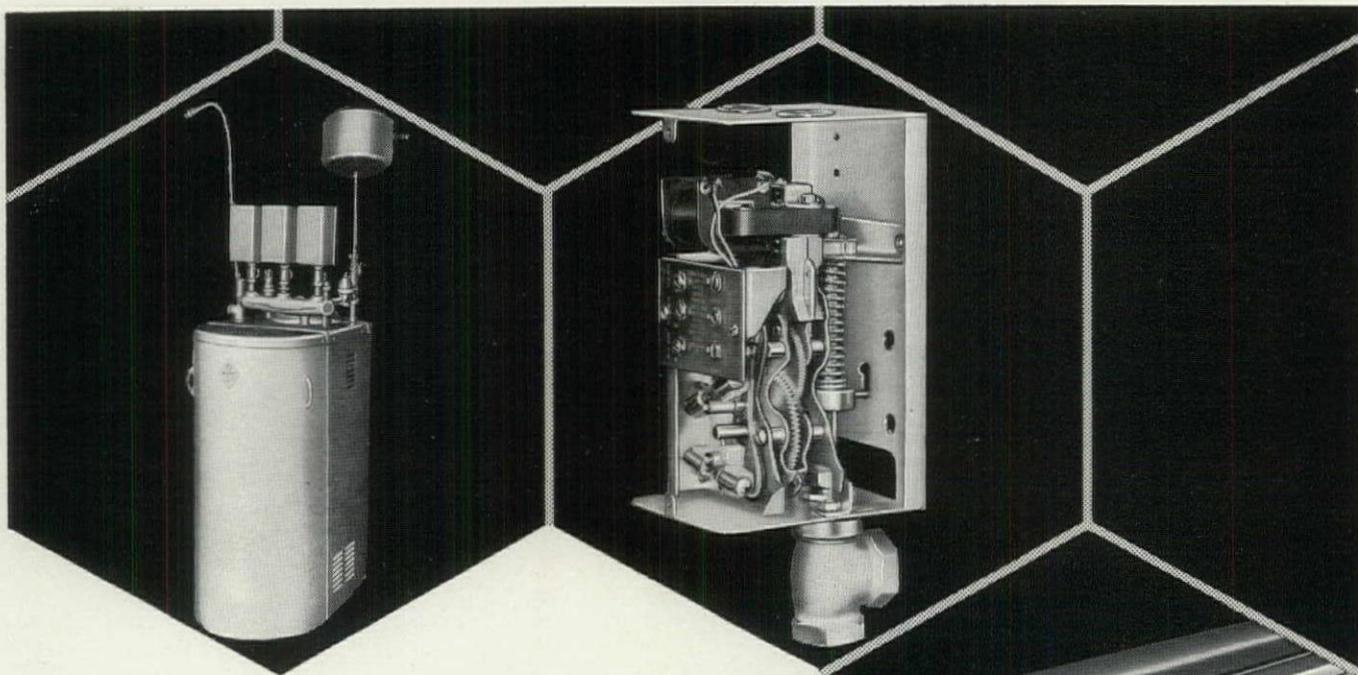
Use on or above grade. Nine classic colors, 1/8" thickness, in tiles 9" x 9", 12" x 12", and 36" x 36". For more complete details, see Sweet's or write the B. F. Goodrich Company, Flooring Products, Watertown 72, Mass., Dept. HH-4.



"CORINTHIAN"
Koroseal[®]

VINYL FLOOR TILE

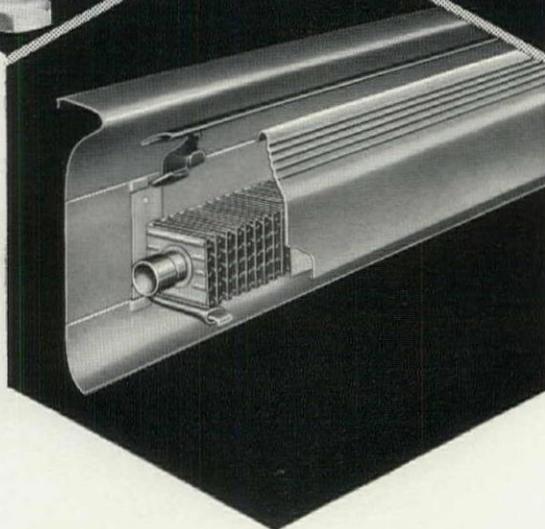
B.F. Goodrich flooring products



designed for each other!

ONLY EDWARDS

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



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

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

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

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

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

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

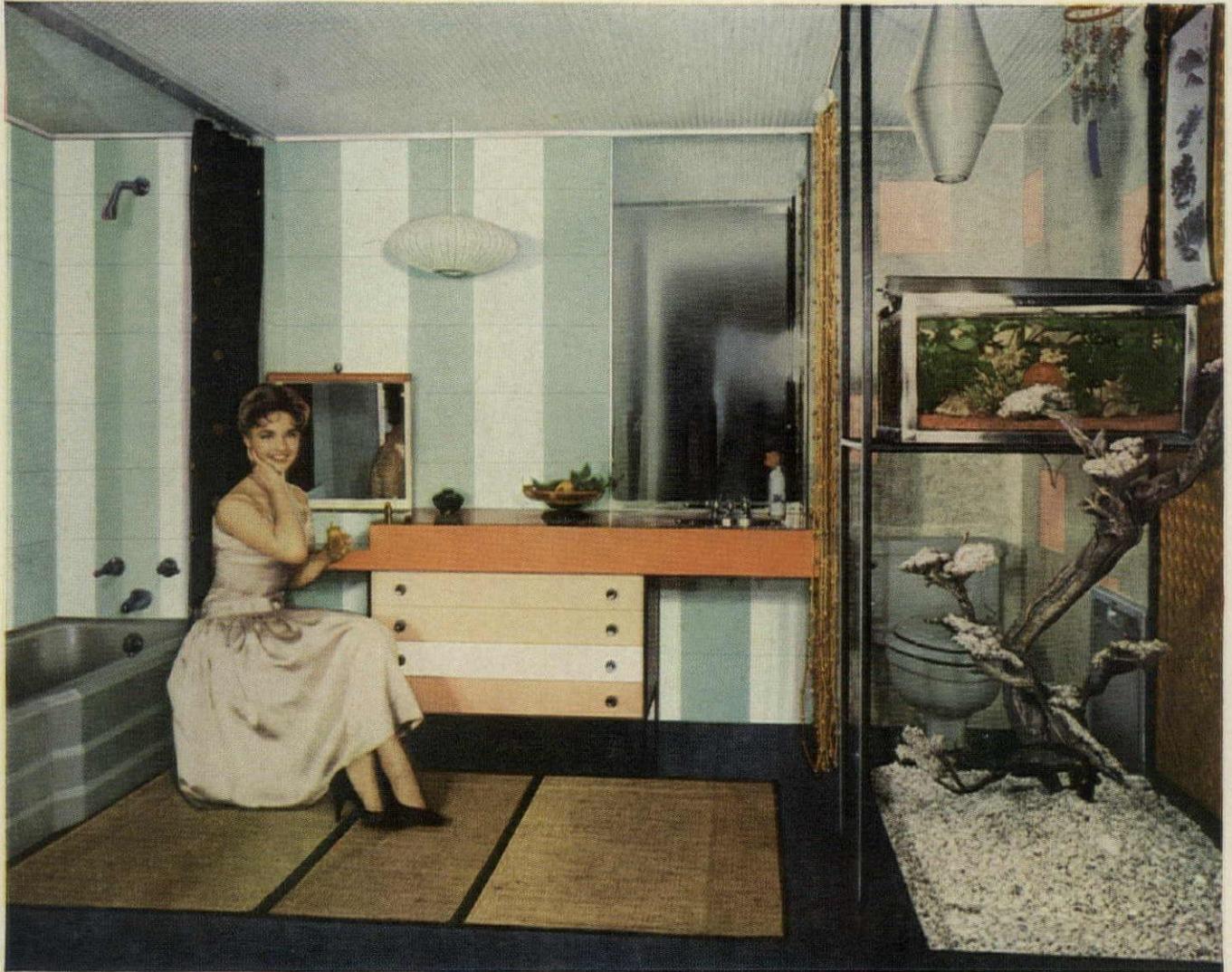


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EDWARDS ENGINEERING CORP.

309 Alexander Avenue, Pompton Plains, New Jersey

Member of BHC: Better Heating-Cooling Council



The Hit of the Show
 at NAHB was
 NEW 10" x 10"
FORMICA[®]
 WALL
 TILE

This brand new product has already won a strong place for itself in American bathrooms and the hearts of home buyers. Installed floor to ceiling in test model homes, prospects actually preferred it 4 to 1 over more costly traditional bathroom materials.

Full color national advertising will soon announce Formica Wall Tile to assure your customers that this is a top quality product with all the color, beauty and long carefree life of regular Formica laminated plastic.

These light, compact, easy to store and handle tiles can be installed floor to ceiling in the average bathroom in one working day by a single workman.

Send for literature with complete information, installation instructions, colors available and suggested designs. (Form 887-A)

Write **FORMICA CORPORATION**

4613 Spring Grove Ave., Cincinnati 32, Ohio

- | | |
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| <input type="checkbox"/> <i>Enduring Beauty</i> | <input type="checkbox"/> <i>High Loan Appraisal</i> |
| <input type="checkbox"/> <i>Pre-tested</i> | <input type="checkbox"/> <i>Fast, Neat Installation</i> |
| <input type="checkbox"/> <i>Low Installed Price</i> | <input type="checkbox"/> <i>Use floor to ceiling</i> |
| <input type="checkbox"/> <i>Exciting Colors</i> | <input type="checkbox"/> <i>Familiar Formica Quality</i> |



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A message of special interest to:

the 1 builder in 2 thinking about AIR CONDITIONING

(as standard or optional extra equipment)



Borg-Warner's ALFOL Insulation helps you save on initial tonnage . . . cut operating costs

Air conditioning usually costs less in homes insulated with ALFOL . . . and the chart above shows why. *Nothing* can seal out summer heat like a multi-layer aluminum foil blanket!

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ALFOL's acknowledged summer superiority reduces operating costs, too. Your customers get the most economical cooling possible. And ALFOL also gives them exceptional *winter* efficiency . . . plus the finest in year-round moisture protection.

If you are thinking about air conditioning, it will pay you to investigate ALFOL. Start by sending now for FREE brochure, "How to INSULATE your way to Lower Cost Air Conditioning."

U. S. BUREAU OF STANDARDS SUMMER EFFICIENCY FINDINGS

Published by the National Bureau of Standards, Report BMS-52 rates 5 insulation materials as follows in their "order of decreasing effectiveness in protecting ceilings against summer heat":

- 1 Two layers of aluminum foil (both sides of each layer reflecting)
- 2 Full thick (3-5/8") rock wool
- 3 One layer of aluminum foil (both sides reflecting)
- 4 Full thick (3-5/8") glass wool
- 5 2" of rock wool or 2" of wood-fibre blanket

ALFOL gives you
as many as
3
foil layers!

Shown:
Type 44F



Please send
FREE ALFOL Brochure:
"How to Insulate
your way to
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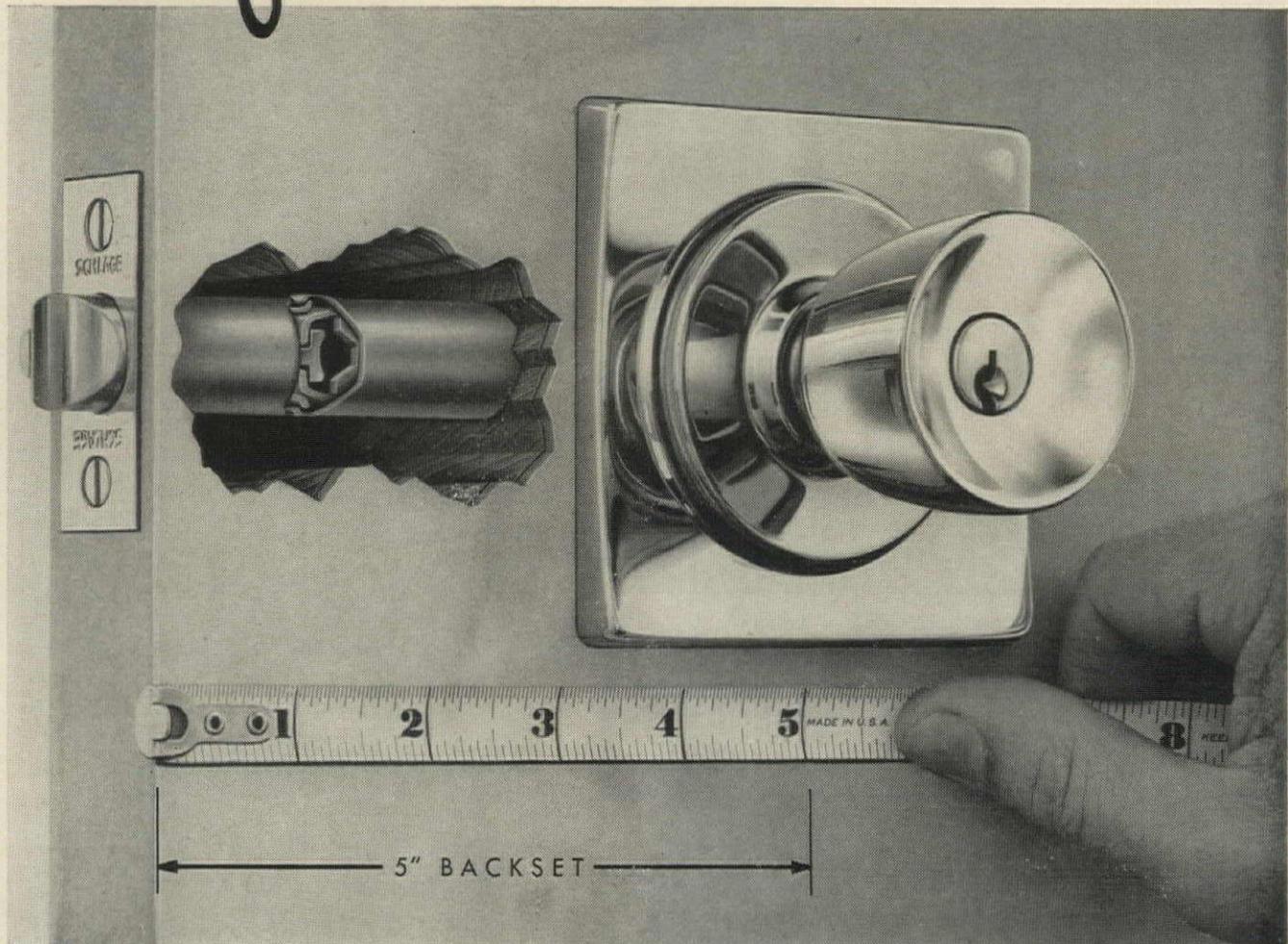
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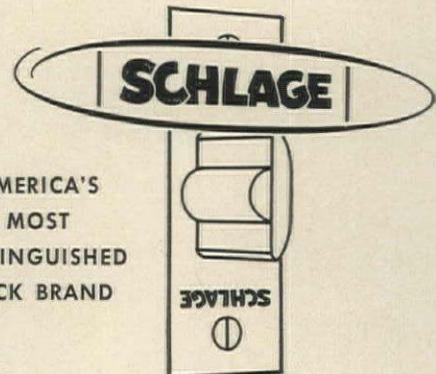
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quality builder



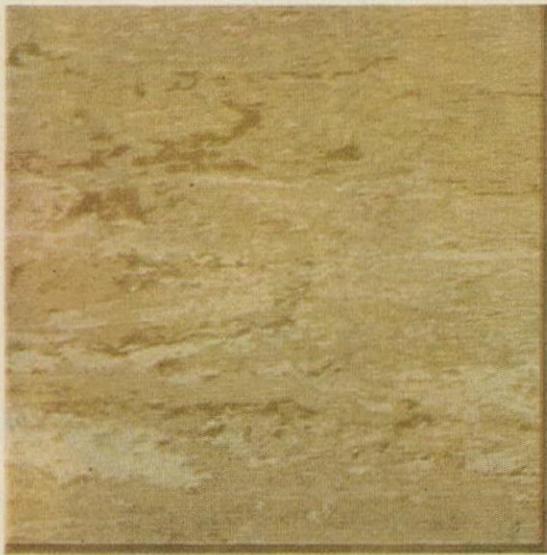
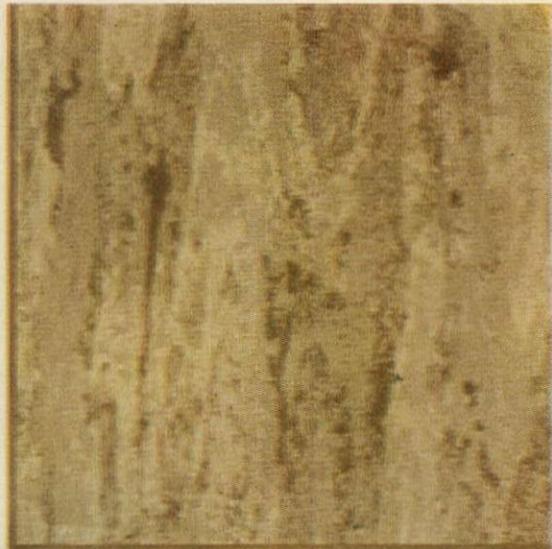
Design illustrated: Regent
escutcheon with Tulip knob

SCHLAGE beauty locks add grace and distinction to any entranceway. Put the Schlage mark on your homes. Make an important impression on prospects with the 5-inch backset feature; simple as a standard installation. Decorate your doors with handsome, eye-catching Schlage escutcheons.

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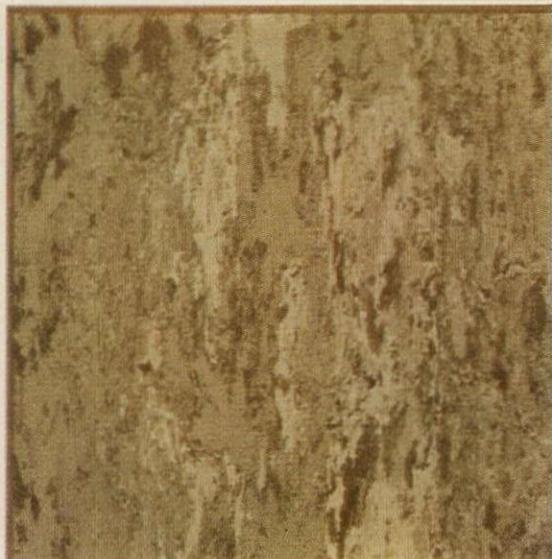
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For use where you want the warm look of natural wood, but are prohibited by budget limitations or installation or maintenance problems. For color selection, call your Kentile Representative for samples, or consult Sweet's File.

SPECIFICATIONS—
Size: 9" x 9";
Thickness: $\frac{1}{8}$ "; Colors: Maple and
Cherry, each packed in random shades.



Roundup:

Will this be the best housing year since 1950?

Yes, if builders carry out their present plans, says HOUSE & HOME's sister magazine, FORTUNE. This forecast is based on a mid-February survey of 325 builders in 35 cities. Their plans, the magazine says, "indicate 1,350,000 starts (private non-farm) this year." And it adds its opinion that starts "may well approach the builders' forecast" because no mortgage money pinch is in sight and buyer interest is on the rise. FORTUNE predicts a postwar record of 250,000 apartments.

If the forecast proves right, housing is in for a boom year nearly equal to its all-time peak. Private nonfarm starts reached 1,352,200 in 1950; second best year up to now was 1955, when they totaled 1,309,500, according to BLS.

Buyer interest is underlined by the Federal Reserve Board, too. It says 25% more families intend to buy homes this year than did so in 1958. They were 9.3% of interviewees, against 7.5% in '58, and nearly as many as the post-war high of 9.4% in '55 and '56.

More & more diversification promises better housing

More signs are emerging of a speedup in the pace of the long-awaited revolution in housing. Not only are big, mobile builders more and more invading new markets where profit margins look fatter, but more and more separate building professionals are invading each others' spheres of business. More builders are forming mortgage companies and/or builder supply firms. More and more mortgage bankers are taking a position in the market and thus (to a limited degree) becoming underwriters. Lumber dealers, squeezed by loss of their once-lucrative business selling pieces of materials to the new house market, are diversifying into homebuilding. This trend is notable in Canada (see p 80) but it also shows up in the US, through Lu-Re-Co.

Out of these cross currents looms a big hope for the US consumer of housing: as bigger organizations do more of the things involved in house building under single management, housing is showing the first faint signs of cracking the shell of localism which has long hobbled its technology, multiplied its costs.

Zimmerman plumps for more open-end mortgage lending

New FHA Commissioner Julian H. Zimmerman plans to push open-end mortgages. It's just as important for FHA to help keep the nation's existing housing in good shape as it is to help build new homes, he insists. Open-end financing can be a major factor in urban renewal, says FHA's energetic new boss, because it makes it easy for homeowners to reborrow paid-in equity to fixup their homes.

New look coming for urban renewal?

Code enforcement seems to be gaining new and much wider acceptance as a major weapon (perhaps the major weapon) for fighting neighborhood decline and its end product: slums. A few years ago, many a public housing and renewal official poo-pooed code enforcement. Not now.

One major indication of this was the two-day conference on code enforcement & renewal just sponsored by the Natl Assn of Housing & Redevelopment Officials. It was the first time such a national meeting has been held. It drew some 125 top drawer local, state and federal officials to Washington. HHF Administrator Norman Mason laid it on the line: "Unless these codes [building, housing, health, zoning] are enforced to the hilt we are in danger of firing our urban renewal dollars into the air to no effective purpose." He called lax enforcement in many cities "close to a national disgrace."

Banker protests lenders' added cost under CAP

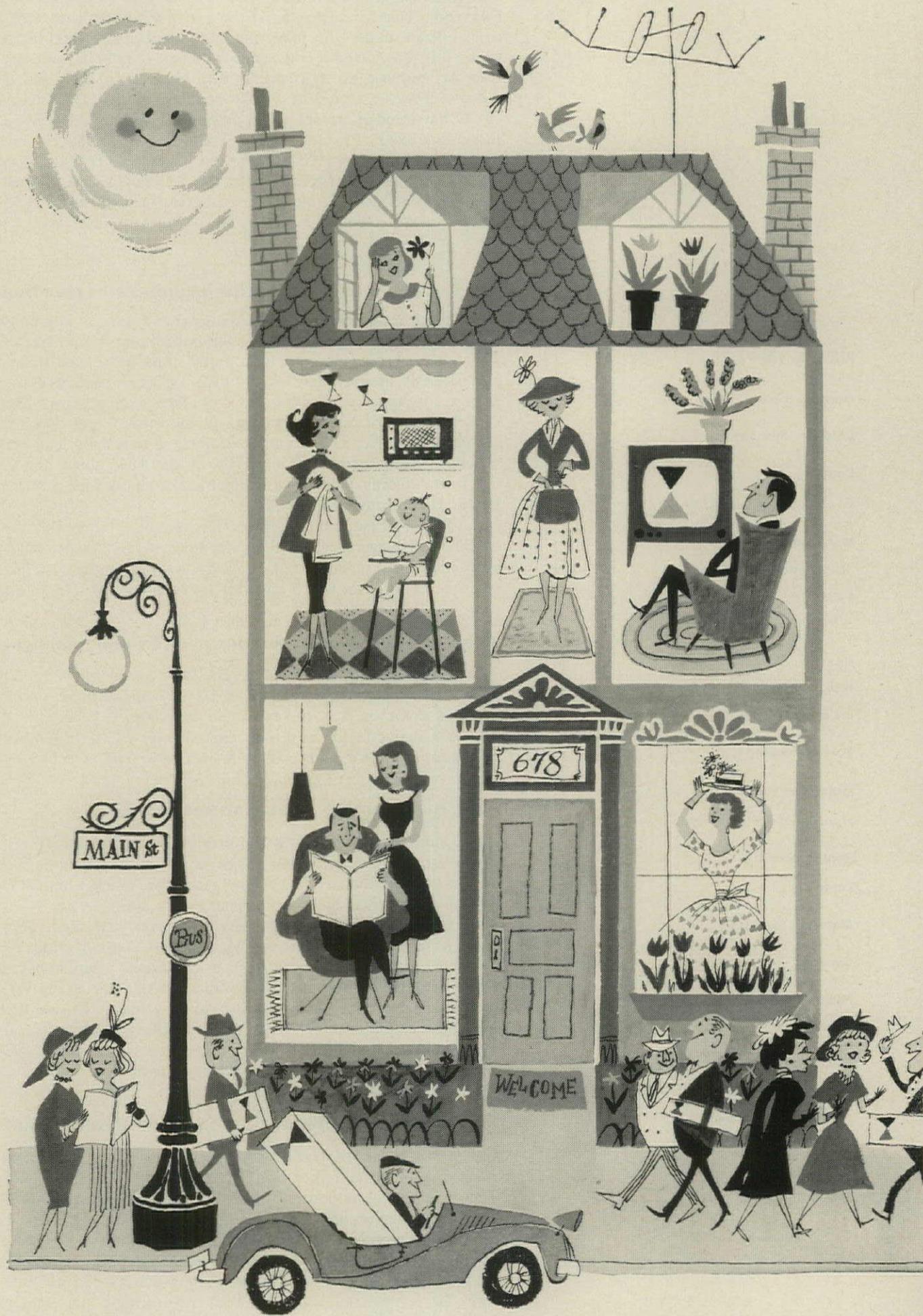
Commercial bankers have been warned that they will lose more savings business to savings & loans if they don't start making more home mortgages (see p 51). The warning lecture comes from a commercial banker who does make home loans, and who originates and sells FHAs and VAs to eastern investors: V. R. Steffensen, senior vice president of the First Security Bank of Utah in Salt Lake City.

Mortgage lender Steffensen also had some biting criticism to make about FHA's Certified Agency Program—a program which has drawn little but praise heretofore. He complained that it substantially increases the expense of a lender who uses it since he must do much of the paper work ordinarily done by FHA. Even though Steffensen expects he may use CAP himself in order to match competitors in processing time, he added: "It seems to me we've been asleep at the switch . . . to allow and even encourage FHA to slough off this responsibility on our shoulders."

NEWS continued on p 42

NEWS INDEX

Housing policy	42
Closeup: Sen Joe Clark.....	43
Codes	47
N. Y. code group fights for life..	47
Mortgage Market	50
Mortgage briefs	50
Banks and home loans	51
What future for mortgage bankers?	57
Housing market	60
What else homebuyers buy	61
Local markets	65
Public housing	68
Urban renewal	69
Human side of urban renewal	69
Rental housing	72
Zoning	74
Materials & prices	74
Canada	80
People	83
Edwards resigns at FHA.....	83
Statistics & indexes	
Mortgage quotes	54
Housing starts	60
FHA, VA applications	60
BLS materials prices	76
Boeckh housing costs	76



Alcoa's Big New Spring "Saturation" Drive Set To Deliver Thousands of Prospects

Dealers Selling Products of Alcoa Aluminum to Build Sales on Alcoa's Radio, TV and Magazine Campaign. There are extra sales and profits for you in Alcoa's big '59 "saturation" promotion. Alcoa is telling an audience of 67,000,000 about the many Care-free benefits of windows, doors, screens, awnings, sliding glass doors, insulation, hardware and other building products of Alcoa® Aluminum.

This year, Alcoa's support program is designed to tell your customers *everywhere* that—"You Can Live With Aluminum!" Network radio, national advertising, network television and store displays will carry the story to virtually every prospect in the country—not once, but many times throughout the year.

NBC—NETWORK RADIO **MONITOR**

Beginning March 28, Alcoa launches a schedule of 80 five-minute vignettes on *Monitor*—the top-rated NBC radio program that reaches an estimated total audience of over 16,000,000 every week end. The theme of the vignettes is: Better Homes for a Better America. These vignettes consist of interviews with important spokesmen in the building industry and related fields. One minute and 20 seconds of each vignette will be devoted to the Alcoa commercial message. Ten vignettes are scheduled every week end for *eight consecutive weeks*.

NATIONAL ADVERTISING

Four-color ads in *House & Garden* and *Sunset* will reach over 1,000,000 customers every month during your biggest selling season.

NETWORK TELEVISION

Both of Alcoa's national network shows, the popular *Alcoa Theatre* and the new dramatic show, *Alcoa Presents*, will have many commercials during the year, constantly reminding your customers of the Care-free benefits they can expect with building products of Alcoa Aluminum. An audience of over 50,000,000 will be watching these shows from coast to coast over the more than 200 stations affiliated with both NBC-TV and ABC-TV.

FREE DEALER DISPLAY

An attractive, four-color display for your store immediately identifies you with Alcoa's big '59 promotion . . . attracts customers . . . acts as a reminder to sales people. Order yours today. Write to Aluminum Company of America, 1882-D Alcoa Bldg., Pittsburgh 19, Pa.

HOW TO TIE IN FOR MAXIMUM IMPACT

Contact your nearest NBC radio station and ask about purchasing adjacent spots in your marketing area. You'll be tying in with a major radio program and appealing to customers right while they are thinking about home building or modernization.

Call your nearest NBC and ABC television stations for information on buying spots before or after "Alcoa Theatre" or "Alcoa Presents."

Ask your aluminum supplier about a FREE mobile display for your store. Hang it where customers and sales people can see it.

Display Care-free building products of Alcoa Aluminum. Make sure the Alcoa tag is shown prominently.



Backstage with the struggle over the 1959 housing bill

You can't enjoy the program unless you know what the game is. Here, in six easy lessons . . .

The 1959 Housing Act drama unrolled in Washington with all the suspense of a 13-reel cliffhanger. The cast might be a little confusing at times, but the plot was clear: would FHA, the fair heroine, succumb to insurance anemia? Could the housing bill with its vital cargo of authorization be steered safely through the stormy political waters of Capitol Hill to her rescue? Or would the stowaway spending measures weigh it down to founder on the rock of a Presidential veto? And what would happen to VA, already gasping its last?

Like most cliffhangers, the story went on far too long. More than two months after Congress took up housing with noisy avowals of quick action, there was still no housing law. Reason: Democratic strategists, facing a budget-conscious Administration, tied their own expensive housing programs to the vital FHA and VA programs in hopes of fending off a veto, gaining support to override one if it came. But they bogged down over how much they could spend without overplaying their hand, then hit snags among their own conservative wing. Finally, they concluded that the worse FHA's plight seemed, the better the changes for their omnibus bill. So they settled down to wait a while.

Action sequence

It was a strange contrast to the abrupt action that began the legislative year. Rep Albert Rains (D, Ala) led off with a blockbuster \$3 billion-plus housing bill in the House. Then Sen John Sparkman (D, Ala) took the lead, flashed through four days of banking committee hearings, emerged with a measure filled with help for urban renewal, public housing, college housing, and VA

HHFA OPPOSES BIAS LAW

HHFA has gone on record against using FHA as a club to enforce integration in private housing. In a statement to a House judiciary subcommittee, HHFA Administrator Norman Mason says that present government antibias policy and programs to back up local legislation against discrimination are doing a good enough job.

Mason's statement was read to the subcommittee by HHFA General Counsel Lyman Brownfield. At issue was a civil rights bill introduced by Rep John D. Dingell (D, Mich). One section would deny FHA insurance to any builder who would not sign a certificate under oath, and file it with FHA, promising no racial discrimination. The bill would also require similar certification from all subsequent owners as long as the FHA insurance remains in effect. But it has no enforcement provisions.

Affirming that his own and government philosophy is that "there shall be no discrimination by reason of race, color, religion or national origin," Mason added: "The worth of any philosophy, however, lies in how it is implemented.

"With the effective program we now have, and its future potential under present law, you will appreciate that my position must be that I do not urge the enactment (of the section)."

direct loans—plus moneymakers for the housing industry (*Mar. News*). Amid administration cries that it was too expensive and yelps of big-city spokesmen like Sen Joseph Clark (D, Pa) that it wasn't expensive enough (see next page), the bill was rushed to the Senate floor.

It passed, 60-28 just nine days after the hearings ended. But the canny leadership, pulling back at the last moment, pared \$375 million from it to make a \$3.5 billion measure that Majority Leader Lyndon Johnson (D, Tex) said would dent the budget only \$35 million.

Could it survive a veto? Not if Ike could corral the 13 Republicans who helped pass it the first time.

In the House, Rep Rains' housing subcommittee by now had sliced \$850 million (including \$500 million for FNMA special assistance program 10) from his bill. Result: a measure with "no impact" on the budget—but which open-ended public housing at 35,000 units a year to a potential maximum of around 280,000. Unmentioned was that a VA rate hike to 4¼% plus \$300,000 for direct loans, were in another measure by Rep Olin Teague (D, Tex), already passed and sent to the Senate (which ignored it because VA provisions were included in the Senate housing bill).

But antispenders were unmollified by Democrats' concern for the '59 budget. They cried inflation at the future spending scheduled in both bills (e.g. Senate's \$2.1 billion over six years for urban renewal; House's 1.5 billion over three years).

Ambush ahead?

Among them: crusty Rep Howard Smith (D, Va), diehard conservative and chairman of the House rules committee where he could (and had) bottled up bills he did not like. What would he do this year?

In mid February as the Rains bill came before the full House banking committee, its author fell ill, delaying work on it.

Just then, word leaked out that for the first time, FHA agreements to insure were biting off unallocated authorizations. By March 1, the program would be in serious trouble.

By month's end, the Rains bill was sent, virtually unchanged, to the rules committee. But Chairman Smith, busy with other matters, was in no hurry to consider it.

Now began a war of nerves, each side trying to unnerve or undermine the other. Eight of the 11 Republicans on the House

banking committee denounced the Rains bill as "budget-busting." Though avoiding the word, the Eisenhower team continued to plant the idea that a veto was far from unlikely. HHFA Administrator Norman Mason enlivened the game with a special press conference to denounce Rains' bill as "one of the most costly housing proposals ever put before Congress." Ultimate cost, said Mason, would be \$5.8 billion, not the \$2.1 claimed by its backers. They were not including public housing as a cost, he said. He spoke almost wistfully of the Administration's long-dead \$1.65 billion bill.

Gunsmoke

Back in the rules committee, the bill was shoved aside for Hawaiian statehood. Word leaked out that FHA's authorizations might last until mid-April.

Some of housing's leaders began to get edgy at the delay. NAHB observed in its Washington Newsletter that for all the talk of spending, even the high-priced Rains bill could cost no more than \$112.5 million in fiscal '59. Trapped by its long-standing war on public housing, NAHB could not lobby publicly for a bill which would rescue public housing from apparent death. So some top officers busied themselves prodding mayors to bombard Congress with urban renewal appeals. Result: a joint letter from the US Conference of Mayors and the American Municipal Assn to every House member, in support of the bill.

Rep Rains, rising to Mason's remarks, fired a charge that the Administration had "created a propaganda fog of half-truths . . . designed to confuse the American people both as to the content and the true cost of the bill." Rallying his forces, Rains caucused 100 new House Democrats for a briefing on the bill. Reacted Rep John Bradema (D, Ind): all the fuss about spending was "the phoniest baloney." To 475 sympathetic listeners at a public housing banquet, Rains confided his opinion that the GOP was nothing but "sons of budget-balancers."

But Rules Chairman Smith was mum about the future of the bill. Ho-hummed Rules' Minority leader Leo Allen (R, Ill): "I just don't know when we're going to get around to housing."

At FHA, the report got around that authorizations might hold out until the end of April. But then the program would be kaput.

Easter recess loomed. Republicans welcomed it, hopeful that 10 days at home would persuade their colleagues that voters don't want inflationary spending bills. But the Democrats, following a new strategy, indicated they welcomed it too. Reason: more heat on FHA. For the same reason, though suddenly Rains' bill could get a rule anytime, it would not be brought out until after Easter sometime. No hurry.

Texas cavalry

But to others there seemed reason to hurry, and talk began about reviving the Teague bill, tacking on some emergency FHA authorizations, and passing it as an emergency measure, before Easter.

Can the Teague Bill ride to the rescue? Or can Johnson, Sparkman & Co stop it at the crossroads? What will happen to the omnibus bill? Will it be vetoed? Can it ride over a veto? Will FHA get emergency help, or will it swoon while Congress bickers? Watch for the next installment, next month.

CLOSE-UP:

Sen Joe Clark: new champion of government in housing

By John Senning

"A liberal is one who believes in utilizing the full force of government for the advancement of social, political and economic justice at the municipal, state, national and international levels."—Sen Joseph S. Clark (D, Pa).

You should know Joe Clark.

You and thousands of others in the housing industry probably recognize him vaguely as the senior senator from Pennsylvania, the onetime reform mayor of Philadelphia (1952-55).

What you may not realize is that the very "liberal" Joseph S. (for Sill) Clark is emerging as the chief spokesman on housing legislation—particularly urban housing—for the Senate's "liberal" fringe.

As his own definition of a liberal suggests, Clark is working diligently—and effectively—to put "the full force of government" into housing.

More for slums, less for corn

Clark exemplifies a new type of US senator—the urbane, urban legislator. His interests are not farm supports but city supports, not subsidies for corn but more money for urban renewal, not public power but public housing, not help for the American Indian but aid for the American slum dweller.

Clark makes a point of his dedication to the praiseworthy dream expressed in the Housing Act of 1949: "a decent home and suitable living environment for every American family." But his dream is tied to a federal spending program which critics on both sides of the Senate aisle and beyond consider a fiscal nightmare. It would, they cry, plunge the federal government up to its neck in welfare-housing programs which could only grow bigger and costlier every year.

Clark, a brilliant attorney who graduated with honors from Harvard, realizes the principle and the cost involved. He shrugs off criticism of government intervention and its high cost as not nearly so objectionable as slum and squalor.

In a speech two years ago, he told why: "Housing is far too important to be left to the housing industry and the banks without making sure that their interests do coincide in each particular aspect with the interests of the consumers of housing. . . . Let it not be argued that the issue is government intervention vs no intervention. We have crossed that bridge. The housing economy is not going to be left alone. It is going to be influenced and guided. . . . If we mean what we say about a decent home for every American family, then obviously those who cannot pay for such housing have to be subsidized."

Recipe: more money

When the Senate banking committee voted out Sen John Sparkman's housing bill in February, Clark was hardly less critical of it than the Administration—but for the opposite reason.

The Administration wanted less money for urban renewal. Clark wanted more. He had introduced his own bill asking \$600 million a year in renewal aid for 10 years plus 135,000 public housing units. Sparkman's bill provided only \$350 million a year for six

years plus 51,000 public housing units. (The Administration had asked only \$250 million for three years, \$200 million for each of the three succeeding years and no public housing.)

Clark lost a fight on a floor amendment for \$450 million a year for four years. Without losing a minute, he then proposed a second amendment requiring URA to use up future authority at a rate of \$150 million a year more when applications run over \$350 million. The GOP's housing leader, bumbling Sen Homer Capehart (R, Ind), nodded agreement. The maneuver was voted through before the Senate had time to consider the effect of its handiwork. The real effect is to set up a four-year program of \$500 million a year—closer to Clark's original proposal than it is to either Sparkman's or the Administration's.

Comments one of his longtime Philadelphia critics: "The only trouble, as in everything else Joe does, he just wants to throw away the bank book and build, build, build and spend, spend, spend."

But another critic adds: "The Democrats have nearly all the brains in the Senate on housing matters. Clark is smart, too smart."

TIME: Nelson Morris



HOUSING POLICY MAKER CLARK

" . . . too important to be left to the industry."

Spender or not, it has taken Clark only two years in Congress to make a reputation as one of the Senate's most knowledgeable men on urban problems. Majority Leader Lyndon Johnson has praised Clark's "great leadership" in the field—the first tip-off that Johnson would support Clark's proposed new commission on metropolitan problems. Clark, himself, is likely to be first chairman.

His interest in metropolitan area problems leads Clark to put housing problems in perspective as just one of a host of metropolitan troubles. He wants the commission to study transportation, water, health & welfare, education, recreation, crime, juvenile delinquency and planning.

Sale by study?

And he is careful *not* to advocate immediate massive federal aid in this field. Instead he suggests: "It may be that ways and means can be found to give state and local governments the financial and governmental powers they need to deal with these critical areas

of public service. It may be that a fourth layer of government [metropolitan government] is needed. . . ." And he insists, "if federal activities must be expanded . . . let them be rational and co-ordinated."

Clark's leaning toward the city is one reason for his only nominal interest in FHA's single-family, sales-type house programs. He told *HOUSE & HOME*: "It seems to me we are doing everything we can and should to help builders build housing for the upper middle income group. But we are falling flat on our faces before that level. That is where we have to do something." And he added: "I realize the cost of housing is the main problem and I have no easy answer."

When an FHA official, testifying on the housing bill, noted that builders in some southern cities are offering new homes priced below \$7,000, Clark retorted: "There are some of us who are a little bit worried as to whether they are building the slums of the future in those projects. I hope not."

The senator has asserted often that FHA serves only the "relatively well-to-do."* He has consistently opposed higher FHA mortgage ceilings while asking bigger public housing outlays.

It is this type of thinking which prompts one of his close Philadelphia friends to comment: "There are people who believe Joe Clark did a magnificent job as mayor but who do not feel he belongs in Washington. They feel he does not have a basic understanding of our economic processes. They feel that in his terribly sincere desire to improve conditions in our cities, he has become more radical than they thought he would be."

A hit in Philadelphia

Joe Clark was swept in as mayor of Philadelphia, after serving a term as city controller, in 1951. He was the first Democrat to win the post since 1884. With his good friend Richardson Dilworth, as district attorney, he cleaned up a corrupt city administration and started to do something about urban renewal.

Clark made renewal a major activity. He enlisted business and civic support, made good appointments to planning boards (ignoring politics). He and Dilworth educated the people by radio and TV talks. Clark's interest earned him a spot on *ACTION*'s board of directors—which he still holds.

During Clark's four-year term Philadelphia got a housing code, one of the strictest in the US. The city's workable program was drafted, outlining a series of breathtaking urban renewal plans—including the \$127 million Eastwick project, which covers 2,506 acres, calls for 11,000 new dwelling units.

Clark, the contradiction

Joe Clark, now 57, was born in Philadelphia, son of a well-to-do and socially prominent attorney. After getting his BA, he took a law degree at Pennsylvania, entered a firm of corporation lawyers and, in time, became a very successful trial attorney.

He became a Democrat in 1928 (with his mother) to support Al Smith. He also worked actively for repeal—even took a minister on

continued on p 47

*Median income of buyers of new single-family houses through FHA in 1957 was \$6,632 with 18.1% having incomes below \$5,000. Median family income in US urban areas in 1957 was \$5,359.

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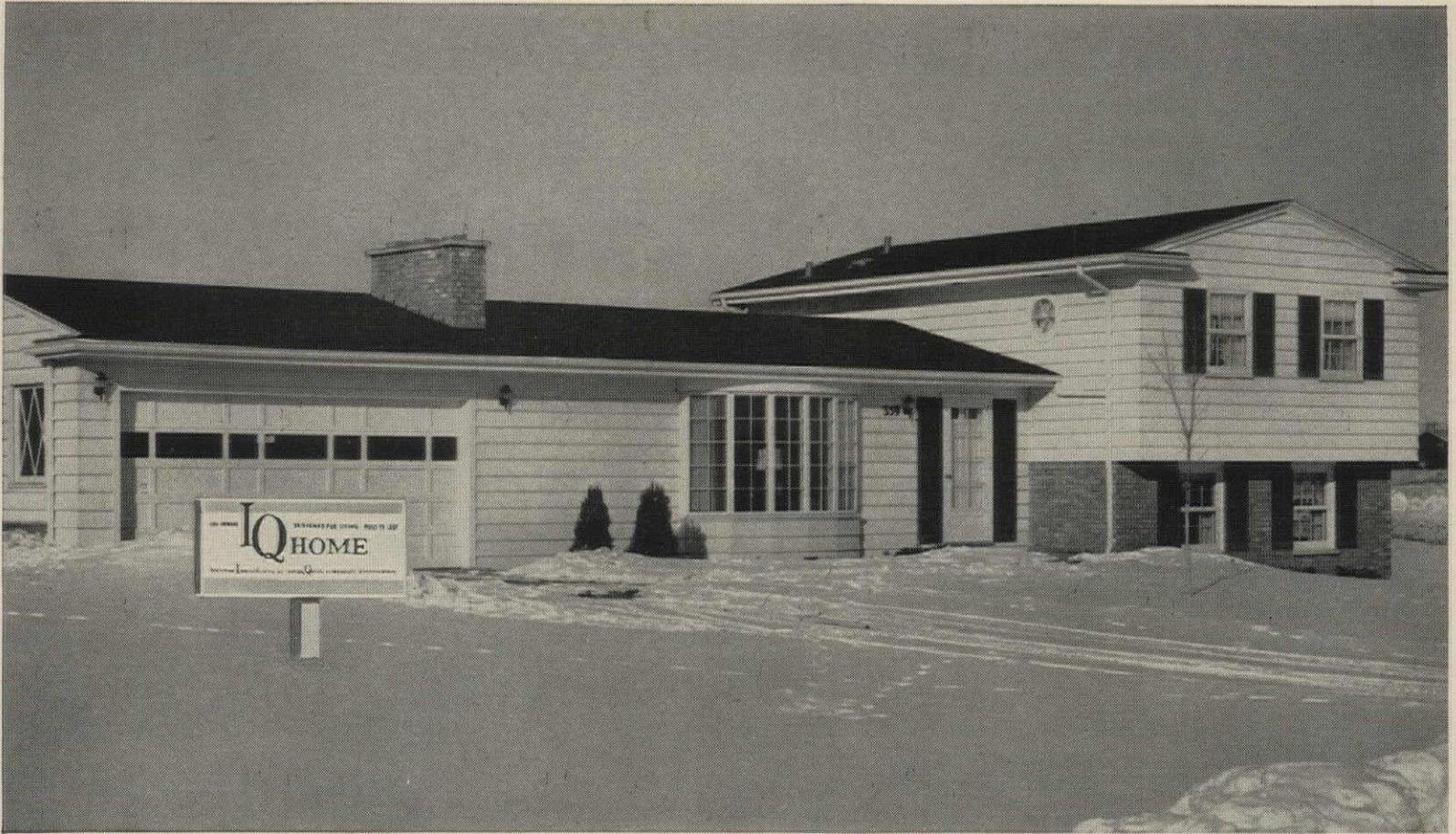
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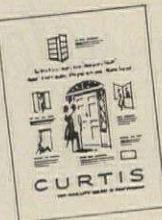
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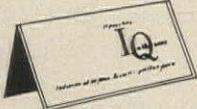
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IDEA BOOKLET
sketches and ideas for builders to use in staging a unique, new model-home promotion.



SALESMEN'S SALES CLINCHER
a display folder giving facts and figures proving that it pays to buy a quality home, based on a realtor survey.



POINT-OF-SALE DISPLAYS
national ad display easel... window stickers... signs to identify your model homes... plus literature, ad mats, radio and TV scripts, publicity and other localized sales helps.

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NY State's model commission faces death by budgetary strangulation

a well-publicized tour of eight speakeasies just to prove that prohibition was ineffective. He ran for city council in 1934 and lost. During service with the Air Force in World War 2 he vowed to make a career in public service. He managed Dilworth's unsuccessful bid for mayor in 1947, then won the controller's job himself in 1949.

He was elected to the Senate in the improbable year of 1956. Though Eisenhower carried Pennsylvania in a landslide, Clark defeated incumbent Sen James Duff by 17,400 votes—confirming nearly everyone's belief that he is one of the best Democratic vote getters in Pennsylvania's history.

Clark is financially independent. His late mother's estate includes an oil-producing salt dome in Louisiana. He and his wife (he has two grown children) own a small row house in Georgetown. But they take the train up to Philadelphia to spend most weekends at their home in Chestnut Hill.

Liberal mantle

Fittingly, Clark inherited the suite of offices vacated by another "liberal" Democrat, Herbert Lehman (D, N.Y.) when he retired at the end of the 84th Congress. From this pale-green, high-ceilinged office, behind a slightly battered modern walnut desk, Clark has composed much of the prose which has endeared him to labor and the ADA, aroused dismay in banking circles and the housing agencies.

The 5'9" senator, slim at 159 lbs (tennis helps) with curly graying hair, relaxes easily in his office, has his secretary sit in the same office for quick dictation as he props his feet on his desk. At committee hearings his manner changes back to trial lawyer. As he quizzes witnesses, his intensesness is reflected by the nervous twitch of his eyebrows. He often uses a question to plead his viewpoint, frequently disarming a hostile witness by prefacing it with some such disclaimer as: "You might not agree with me, but . . ."

Clark is no doctrinaire liberal. He seemed deeply impressed by witnesses who testified at this year's committee hearings that "we have to have some greater flexibility in mortgage interest rates or we are going to continue to ride the [FHA-VA] roller coaster."

A few days later he remarked to a newsman: "What's the point of having a ceiling [in interest rates] if you get no money under it for the mortgages?" He is given much of the credit for getting the VA interest rate boost in the Senate housing bill.

Clark supports subsidized privately owned housing as well as publicly owned. He once explained: "If we thus shift a large segment of our public housing load into the private-enterprise framework, I think we would be able to rally far more support for our efforts . . ."

He supports racial integration but opposes as a practical matter putting an integration order into the Housing Act. This would, he knows, cost public housing its essential Southern support and so scuttle the program. "I believe the same aim can be accomplished by administrative action and I would support it strongly."

And though Clark is devoting much of his effort toward helping cities, he concedes with a rare hint of hopelessness: "I don't know whether the American city has a future or not. The problem of the city is the most enormous and pressing one we face domestically insofar as the difficulty of its solution is concerned. The experts are baffled by it all and so am I. But we must keep trying."

In 1949, New York's legislature took a far-reaching step toward bringing order out of the wasteful chaos of conflicting local building codes. It created the New York Building Code Commission to write a state building code—not a conventional specification code that rapidly grows obsolete but a performance code setting forth only the standards to be met.

Two years and \$420,000 later, the commission promulgated the first part—for one and two family dwellings. Code experts agreed it was a high mark of code writing excellence. Not only did the commission hold the house building code down to 51 attractively printed pages (written in language a layman could understand, set in type big enough to be read without a magnifying glass and bound in bright yellow covers). It also began issuing a constantly revised loose leaf manual to explain to building inspectors what materials and methods met the code's sensible standards. Since, the commission has issued a multi-family dwelling code and a comprehensive code.

In keeping with the home rule theory that lets localities everywhere maintain building regulations just enough different from their neighbors to make building more costly for everyone, New York cities and towns were free to adopt the code or not. At last count, 289 of the state's 1,567 towns and villages had adopted it. One big inducement, especially for towns too small to afford the expense of keeping their own code up to date, is that the state code can be adopted by a cheap and simple resolution referring to it. The expense of legal printing—which might run into thousands of dollars—is eliminated. Largest city to adopt the code up to now

Fiber sewer pipe makers fight ban in Milwaukee

Five makers of bituminous fiber pipe have gone to court to fight a Milwaukee regulation requiring extra heavy cast-iron for lateral sewer lines.

The rule was imposed by the Milwaukee Sewerage Commissions, on recommendation of their chief engineer. The common council voted to seek an injunction against the rule, but Socialist Mayor Frank P. Zeidler vetoed this idea.

Fiber pipe, originally used as a raceway for underground electric conduit, has been used for sewer pipe some 14 years. It is a wood derivative, formed and vacuum-impregnated with pitch. Its cost is about one-quarter of heavy cast-iron pipe. Fiber pipe makers admit to some failures, but blame them on bad installation—usually laying the pipe with rocks under a joint so the pipe must be a girder as well as a conduit.

The Milwaukee ban was proposed in December 1957 by Chief Engineer Raymond D. Leary. During heavy rains, ground water has sometimes infiltrated the sanitary sewer system and swamped the disposal plant. Then bypass valves must be opened, dumping raw sewage into Lake Michigan, which Milwaukee drinks. Leary argued that cast-iron

is Binghamton (pop. 80,764). But Syracuse, Troy and Rome were giving it serious thought.

In expert circles, the code is widely hailed as one of the nation's foremost. The technical staff for updating it is probably the best. One indication: no city that adopted the state code has gone back to a local code later.

Yet last month, the life of the state commission hung by a thread. Republican legislators, balking at Gov Nelson Rockefeller's tax boost plans, suddenly cut its budget from \$423,500 to \$48,000. That would be just enough for the commission to wind up its affairs and go out of existence. Chairman Austin Erwin of the state Senate finance committee insisted: "The agency was created as a temporary commission. There was no indication that its life was to be continued beyond the time required to complete the state building code."

Code commission staffers, on the other hand, blamed jealous empire builders in the state Labor Dept for cutting their throats.

Builders, prefabbers and other industry groups hastily bombarded Albany with pleas to keep the commission from dying by voting it a supplemental appropriation. Cried Builder Frank A. Clauson of the Long Island Home Builders Institute: "The communities it serves in many cases are not staffed by technically experienced building department people and those communities rely on and need the continued guidance of the code commission."

Late in March the Governor's office announced it would sponsor a bill to save the work of the commission, but not the commission itself. All work would be transferred to the State Housing Commissioner's office.

pipe was less vulnerable to invasion by tree roots and to other failures than terra cotta pipe, and that these failures accounted for the intake of ground water.

Builders protested that the rule would add \$200 to \$300 to the cost of a city lot. The village manager of posh River Hills, which has five-acre zoning, said the extra tab would go as high as \$900 per site.

In their suit, the fiber pipe makers contend that the commission's rule is an invalid effort to prohibit a useful and suitable sewer pipe material. Moreover, they argue that a cast-iron-only rule conflicts with a controlling provision of the state plumbing code. The plaintiffs: Line Material Industries, The Brown Co, Orangeburg Mfg Co, Kyova Fibre Pipe Co, Tallman Conduit.

As the trial began last month, Dr. Adelbert Diefendorf, dean of engineering at College of Pacific, testified he has soaked fiber pipe in lye, detergents and acids for up to 110 days with no loss of resistance to crushing. Fiber pipe men said they would introduce evidence later that the pipe will withstand 23,000 lbs in a sand bearing crush test. Another professor testified acid local soils cause severe corrosion of castiron pipe.

Waiting in the wings, if the fiber pipe suit fails, are 11 makers of clay sewer pipe who have readied a suit of their own.

NEWS continued on p 50

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research facilities at Hood River, Oregon—Hines Allwood Allweather Siding greatly increases structural strength of wall. Exterior glue between plies. No snaking or buckling between nailing points. Tempered hardboard surface resists abrasions and hammer marks. Can't split, sliver or check. Takes less paint, holds it better. Pentachlorophenol water-repellent preservative protects all sides and edges against insects and decay, prevents wicking. Sold nationally in protective package. Send now for free samples.



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Loan demand offsets rising rates, FHAs, VAs stay on price plateau

Prices of FHA and VA mortgages have achieved a remarkable stability. Some experts now dare hope this will continue the rest of the year.

For the fourth month in a row, there has been virtually no change in discounts across the nation. A few cities reported slight signs of tightening in March, but others reported easing. Among the 16 cities HOUSE & HOME surveys, none experienced a substantial shift and few expect one soon.



Why so little change in a market notable lately for its ups and downs? Most mortgage men say one reason is the delay in Congress on a new housing bill boosting VA interest from 4¾ to 5¼%. Lenders and builders alike seem to be marking time to see 1) how much more homebuilding the higher interest rate will mean and 2) how much more mortgage money

builders will want because of it.

Biggest reason for stable prices (despite a general rise in US interest rates) is competition among investors of all kinds for mortgages which, by other year's standards, seem overpriced.

All major types of lenders—life companies, savings banks, S&Ls and even commercial banks—are playing important roles in this intriguing mortgage drama, but in contrasting ways in various parts of the US.

S&Ls get much of the credit for buoying up the market—even when they aren't lending FHA or VA.

In Chicago, for example, Mortgage Banker Maurice Pollak complains: "We've got a firm market but few takers among the builders. They don't want FHA money at 96. They'd rather do business with the S&Ls on a conventional basis." In Los Angeles, S&Ls are offering builders a better price for FHAs and VAs than out-of-state investors.

In San Francisco, commercial banks are showing more and more interest in the FHA market. Cries one mortgage man: "The Bank of America and other commercial banks are running away with everything. More and more of them are sending not one, but two men, to all the local builder meetings looking for business."

Cumulative effect of this competition is to force insurance companies and the savings banks to shore up their prices if they want to stay competitive.

Savings banks especially are still hungry for FHAs and VAs.

They are under heavy pressure to buy securities with high yields because they are paying high interest rates on savings (3¼% in New York City). So they continue to buy mortgages which yield 5¼% (after servicing) even though they can buy government bonds yielding more than 4%. This 4% return not long ago would have prompted them to spurn mortgages yielding 5¼%.

As S&Ls and commercial banks are sharpening competition for mortgage bankers in the West and Midwest several savings banks are doing the same thing for mortgage men south of New York as far as Richmond. They're buying and servicing FHAs and VAs direct in Philadelphia and Washington.

Adding to the competition, big Philadelphia commercial banks interested in making lucrative construction loans to builders, are originating more loans. They sell them to the mutuals at par on a direct servicing basis. The mortgage banker's best price is 99 for minimum down FHAs.

Whether mortgage yields—and prices—will stay level all year hinges heavily on the government's money policy.

The Federal Reserve boosted the rediscount rate in March to 3%. This caused some surprise in financial circles in view of the Treasury's tremendous financing problems. But it also reflects the Fed's concern with nipping inflation. A boost in the prime rate is likely to follow.

Mortgage Broker Tom Coogan, a consistent critic of the Fed's ways & means of inflation fighting, comments: "A complete round robin each nullifying the other and leaving us in the same comparative position at higher cost to everyone."

The Treasury is expected to try another long-term issue this spring if Congress raises the maximum interest rate for government bonds to 4½%, as the President has requested. Its last effort in January flopped. A big federal deficit would force it to go to the market for even more. And any big success with a big long-term issue would tighten the whole lending market, with reverberations for mortgages.

On the pleasant side, the government bond prices, like mortgage prices, have stabilized. This is a favorable indicator for tomorrow's mortgage market.

MORTGAGE BRIEFS

Battle on servicing fees

Pressure by New York savings banks to cut servicing fees paid mortgage bankers has apparently eased.

At least three banks are still seeking lower charges on existing portfolio as well as new production. But at least among larger, well established mortgage companies they are finding solid resistance.

Most hopeful sign for the servicers was the decision of the Bowery, largest of the savings banks, *not* to ask for a lower rate—a decision reached after several months of study.

Cries one mortgage man happily: "I think we've got the thing under control now."

Savings banks, always under pressure to get higher yields because of the rate they pay on savings (3¼%), began taking a fresh look at servicing fees a year ago. At the time they were buying heavily out of Fanny May portfolio. New mortgage companies, interested in building up their servicing accounts, offered to service for less—usually ¼%. The banks, of course, had the right to shift to a new servicer for the loans bought from FNMA.

Facing threatened loss of servicing, most originators agreed to cut their fee to meet the new competition. Says one: "Practically everyone had to make concessions last year to keep their portfolios from being raided. They had to protect the investment they already had in these loans. There is a substantial expense connected with originating a loan."

Maurice Pollak, executive vice president of Draper & Kramer in Chicago, agrees: "I have 45 people in my organization. If I wanted to quit now I could service our loans with six people. But it would be a dead portfolio. I have to have an organization to get new business. We could make a fortune at ½% if we just closed off all new business."

Mortgages for lumbermen

Lumber dealers in five states are finding their own solutions to getting FHA and VA mortgage money into non-metropolitan areas.

Dealers in Texas, Ohio and Indiana have mortgage companies. Dealers in New Jersey are starting one. And dealers in Oklahoma have come into the Texas company.

The Texas company, Lumbermen's Investment Corp, is the oldest and far the largest. It has 900 dealers participating in Texas (about 70% of the state's total) plus 265 in Oklahoma. They have paid in \$500,000 capital stock. In four years, LIC has arranged \$22 million in loans—including \$17 million FHA and VA home mortgages. (FHAs outnumber VAs 4-to-1). The rest are fixup loans.

LIC operates out of Austin with a staff of 15. Most of its participating dealers are in towns of 10,000 and under all over the state—up to 750 mi away.

The firm operates much as any mortgage banking firm with two exceptions:

1. Most of its mortgages go to Fanny May. Its loans are so scattered few other investors show much interest. Most are spot loans on single houses built by lumber dealers on owners' lots. But LIC President W.S. Drake Jr, who is president of Calcasieu Lumber Co in Austin, thinks eventually LIC's loans will be accepted by other investors. "Our record on delinquencies with FNMA is now the best

in the state. And nearly all our loans are better than minimum down payment," he explains.

2. On delinquencies, LIC gets the help—free—of the lumber dealer who produced the loan. It also has two collection men working out of Austin. Texas lumber dealers predict FHA's Certified Agency Program, already in effect around Lubbock, will step up their mortgage volume when it becomes nationwide.

LIC has done well enough to pay a 3% dividend this year—its first.

Capehart rate boosted

Interest rate on Sec 803 military housing (Capehart) mortgages has been boosted from 4¼ to 4½% by FHA. This is the maximum allowed by Congress.

Though Capeharts carry both a Defense Dept guarantee and FHA insurance, making them gilt edged investments, contractors have had trouble finding buyers in recent months.

Blow to mortgage market?

A bill to boost insurance company income taxes 70% is coming under fire from mortgage bankers.

MBA General Counsel Sam Neel warns the proposed tax bite would probably discourage life companies from investing in home mortgages, prompt them to switch to tax-exempt bonds (eg public housing).

Writing to the Senate finance committee which is considering the House-passed tax measure, Neel warns: "The final result may be to the detriment of the economic expansion of the country."

Life companies themselves are no less agitated. President Louis W. Dawson of Mutual Life Insurance Co of New York calls the boost "an unheard of tax increase on an individual industry."

Mutual savings banks and S&Ls, next in line for tax revision, are also forecasting repercussions in mortgage lending if they are hit this hard. Dr Grover Ensley, executive vice president of the Natl Assn of Mutual Savings Banks, fears the House may be as tough on the mutual thrift institutions.

Speaking to an S&L management conference in California he said: "Any ill-conceived increase in taxes imposed on thrift institutions would hinder their ability to promote savings and to provide adequate reserves for future growth. The result would be a reduction in real savings available to finance housing and industrial expansion."

LA exchange wins appeal

Los Angeles' embattled Trust Deed and Mortgage Exchange can operate under present management while a Securities & Exchange Commission suit to close it is pending.

The US Court of Appeals in LA has overruled District Judge Thurmond Clarke who ordered the exchange into receivership last November.

The four-year-old LA exchange has five branch offices from Oakland to San Diego, deals largely in second trust deeds (mortgages are rare in California), offers investors a 10% return. Last summer, SEC accused the firm of fraudulently misrepresenting its offerings, selling unregistered securities and of being insolvent.

President David Farrell, still confident, says: "There is no question that in five to ten years we will be one of the biggest new businesses in the world."

Commercial banks will step up home loan activity, says ABA mortgage man

Commercial banks are being told they must put more money into mortgages or lose more of the nation's savings to savings & loans.

American Bankers Assn has quietly stepped up its campaign to get more banks interested in home mortgages. Results so far: "The feeling is that commercial bankers will, in the next few years, increase their holdings of all types of residential mortgages," says Dr Kurt Flexner, head of ABA's new mortgage finance section.

Separation of the mortgage section from the savings & mortgage division is just one step in ABA's effort to put more oomph behind its mortgage program (see below).

Commercial banks had only 29% of their time deposits in residential mortgages at the end of 1958. It was about evenly divided between conventional and government insured and guaranteed loans.

Details compared to S&L and savings bank holdings:

INSTITUTION SAVINGS	RESIDENTIAL MORTGAGES	
	Amount (in millions)	% of savings
Comm. banks . . . \$63,300	\$18,610	29%
Sav. banks . . . \$33,800	\$20,943	61%
S&Ls \$46,853	\$45,007	96%

Flexner makes it clear that commercial banks as a whole will never put as big a ratio of savings in mortgages as S&Ls and



FLEXNER

savings banks. "There is no necessary relationship between the amount of savings and the proportion in mortgages," he insists. "It is an individual community problem as to how much any bank may want to invest in mortgages. The needs in each community vary."

But it is clear that many a banking leader believes banks have hurt their competitive position by not making more home mortgages than they have.

Louis Lundborg, president of the ABA's savings & mortgage divisions and a vice president of the Bank of America, sums up: "We believe that private financial institutions can do the job of giving the American people good housing. Ultimately, however, that can be done only if the banks look upon the mortgage as a legitimate and desirable investment."

"I realize that a large part of the mortgage market still lacks the uniformity and national marketability of other types of investments. This, however, is not an argument for staying out of the mortgage business; it is indeed a challenge to the bankers to do a better job."

ABA has split up the staff supervision of its savings & mortgage division between Flexner, 43, and Rudolph R. Fichtel, 43. Flexner will be director of mortgage finance. Fichtel has been named deputy manager of ABA and secretary of the savings & mortgage division. The division remains one constitutionally but will be two operationally.

The two men are dividing the work formerly handled by the late J. Raymond Dunkerley who died last November (*Dec, News*).

Banks' 'opportunistic lending policy' loses trade to S&Ls, banker warns

Louis Lundborg's plea was mild compared to the lecture given bankers at the ABA savings & mortgage division meeting in New York last month by V. R. Steffensen, senior vice president of the First Security Bank of Utah, Salt Lake City. Cried he:

"Banks employing an aggressive mortgage policy have been proved to be the leading banks in their communities. There is no better way of getting a bank's name before the citizens of an area than to show them that it is a real community builder.



STEFFENSEN

"We must recognize that banks are paying a heavy penalty in the field of competition for their traditional right to a greater range of investment opportunities. The savings & loan group has no such selectivity . . .

"Unless the banks of the country . . . adopt a more liberal attitude and really enter the

savings and mortgage business in a big way, they can look to even further encroachment in their field by the savings & loan group. Because of the wide latitude banks have for investments, there is a great tendency whenever money starts to get tight, as it has twice in the past 16 or 17 months, to shift from mortgages into consumer credit, municipals, or some other type of investment and sharply curtail the intake of mortgage loans . . . This opportunistic type of lending policy is harmful to banks and causes the public to lose confidence in them.

"It gives people the feeling that we are just a little too profit conscious and not sufficiently interested in helping our customers through good times and bad. It is also very difficult to hold on to good builder customers if we start 'walking the other way' whenever money starts to tighten.

"Believe me, the vacillating real estate lending policies of banks are a principal reason for the success of our competitors, the savings & loan group, which never seem to run out of mortgage money."

Steffensen also urged that the legal limit

continued on p 54

NOW! CERTIFIED PROOF—FORD TRUCKS COST LESS...

'59 Ford Trucks Win — average 25.2%



'59 Ford pickups running one of the Economy Showdown courses set up by the research engineers. Like all the new '59 pickups tested, these are regular stock models with a standard six-cylinder engine, 3-speed transmission and standard rear axle ratio.

- **Biggest comparison tests of truck gas mileage ever conducted by an independent research firm!**
- **Pickup models of all six makes tested in all kinds of driving!**
- **Both new and used trucks tested—534 units all told!**

The difference between the right truck and the wrong truck can cost you *hundreds of gallons of gas* the first year alone!

A pretty startling figure? It's just one of many findings from the most far-reaching tests of truck fuel economy ever made.

These tests dug out the actual facts on gas mileage the only way they could be gotten—every truck pitted against its brother in an Economy Showdown.

To keep the tests fair and impartial, Ford Motor Company went to America's leading independent automotive testing firm. The project was outlined, the funds provided, and the Economy Showdown became solely the research organization's baby.

FIRST TESTS—NEW '59 TRUCKS

Standard six-cylinder models of the six leading half-ton pickups first were put through exhaustive road trials. All '59 trucks—Ford and competitive—were bought from dealers, just as you would buy them. After at least 600 miles break-in, all were brought up to manufacturer's recommended specifications.

The trucks were then tested at constant speeds of 30, 45 and 60 miles an hour. Next came stop-and-go tests, ranging from moderate city traffic to normal retail delivery operation. Acceleration rates were carefully timed in each gear to insure accurate results for all makes. Here are the results—certified by America's foremost independent automotive research organization.

All tests
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*NAME AVAILABLE ON REQUEST.

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Economy Showdown USA *better gas mileage!*

CERTIFIED SHOWDOWN RESULTS

The '59 Ford Sixes, in every test, averaged more miles per gallon than every other make!

Combining all tests, the '59 Fords led the average of all other '59 pickups by 25.2%.

To put it another way, for every 1,000 miles driven, the '59 Fords gave an extra 252 miles *gas free*.

For the typical truck owner driving 10,000 miles annually, this would amount to a saving of 129 gallons of gas the first year alone.

WHAT'S THE SECRET?

How can a '59 Ford Six make four gallons do the work of five in other trucks?

First, of all pickup Sixes, only Ford has modern Short Stroke design. This new type of engine is basically far more efficient than the long-stroke Sixes of other pickups—most of which were born before World War II!

Second, to this modern engine Ford has added a new economy carburetor. By metering fuel more precisely in both low- and high-speed ranges, Ford's new carburetor boosts gas mileage in every type of driving. And it's *standard at no extra cost*.

WHAT SPEED GIVES BEST ECONOMY?

Economy Showdown tests reveal that, with any make truck, actual miles-per-gallon depend upon the kind of driving you do. In normal retail delivery operation, for example, gas mileage drops to less than half that obtained at a steady 30 miles per hour.

High speeds are hard on economy, too. At 60 mph, it takes 16 gallons to go the same distance that 10 gallons will take you at 30 mph.

You can't always tailor your driving to get absolutely maximum economy, of course. But of this you *can* be sure. No matter where or how you drive, no other leading truck will give you the gas savings of Ford's modern combination: Short Stroke Six plus new economy carburetor. Economy Showdown USA proved it!

Your Ford Dealer now has the full report of Economy Showdown USA. Why not call him today and get the whole story firsthand?

HOW NEW '59 SIXES RATE IN GAS MILEAGE

'59 FORD SIXES GIVE	25.2% more miles per gallon than Make "C"	31.1% more miles per gallon than Make "I"	9.6% more miles per gallon than Make "G"	42.6% more miles per gallon than Make "D"	22.0% more miles per gallon than Make "S"	25.2% more miles per gallon than the average of all makes
IN ONE YEAR (10,000 miles) FORD SAVES	129 gallons of gas	160 gallons of gas	49 gallons of gas	219 gallons of gas	113 gallons of gas	129 gallons of gas

HOW GAS MILEAGE DROPS FOR OLDER TRUCKS

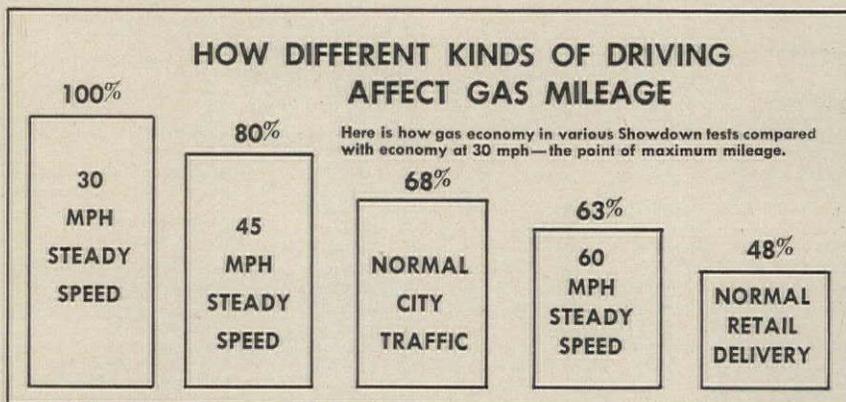
Everybody knows that gas mileage falls off as a truck gets older. But how fast, how far? 499 pickups were tested. In these tests, the '59 Fords were tested without break-in.

As you can see, gas economy tends to drop sharply somewhere between the second and fourth years . . . levels off after six years. Had the new '59 Fords been broken in (as all 1959 trucks were in the tests above), they would have achieved a much greater advantage.

'59 FORD GAS MILEAGE BETTER BY

25.6%	27.5%	24.6%	15.2%
9- to 11-year old trucks	6- to 8-year old trucks	3- to 5-year old trucks	1- and 2-year old trucks

HOW DIFFERENT KINDS OF DRIVING AFFECT GAS MILEAGE



Go FORD-WARD for savings
FORD TRUCKS COST LESS

LESS TO OWN . . . LESS TO RUN . . . LAST LONGER, TOO!

on conventional loans by national banks be raised from 66 to a 75% loan-to-value ratio to let them compete with S&Ls. But he admitted he is still leery of any loan as high as 90%—which New York savings banks and all federally-insured S&Ls now can make conventionally.

More banks should get into mortgage servicing, said Steffenson. His own originates loans and sells them to eastern banks, in effect performing a mortgage banker's function, he noted.

Speaking of eastern savings bankers, Steffenson commented: "I wonder if enough of them have weighed the advantages of having responsible banking institutions perform the functions of origination and servicing.

"... One of the principal advantages of a selling program is that it tends to even out the flow of funds... This is extremely important in the conduct of a mortgage operation. You simply cannot hold on to builder customers unless you are continuously in the market for loans. If you are restricted by the investment limitations of your own portfolio your lending is apt to come to an abrupt halt just when you don't want it to."

S&L lending up 50%

Savings & loan mortgage lending in February was up 50% from February of 1958, the US S&L League reports.

Based on a survey of a pilot group of 453 institutions, the league found that mortgage lending volume exceeded \$1 billion for the tenth month in a row.

Savings in February set a record net gain despite a high level of withdrawals. Details:

MONEY FLOW	FEB	JAN	JAN-FEB
	(% change from same months '58)		
Gross savings	+17%	+10%	+12%
Withdrawals	+23%	+13%	+16%
Net savings	+3%	-4%	-1%
Mtg loans made....	+50%	+46%	+48%

Agreements still okay

National banks can continue to accept agreements to insure on the same basis as firm commitments. US Comptroller of Currency Ray M. Gidney has extended his recognition of the agreements for another 90 days. Thus banks can continue to make construction

loans just as they would with commitments. FHA started substituting agreements to insure for commitments last October to conserve its dwindling insurance authority.

Discounts ease, FHA says

FHA's own check of mortgage discounts shows they dipped 0.1% in February. The average March price was 97.4 on a 25-year 5 1/4% mortgage with 10% down payment vs 97.3 in the three previous months.

Smaller discounts were reported in three of the six FHA zones. Two were unchanged; one reported discounts higher. The tabulation is based on reports from FHA insuring offices, not on actual transactions.

ZONE	AVERAGE RANGE		AVERAGE
	March 1	Feb 1	
Northeast	99.4	98-par	99
Mid Atlantic	98.6	97-par	98.4
Southeast	96.9	95-98	96.9
North Central	96.9	96-99	97
Southwest	97.3	96-98	97.2
West	97	96-97.5	97
US	97.4	95-par	97.3

NEWS continued on p 57

MORTGAGE MARKET QUOTATIONS—new construction only

(Sale by originating mortgagee, who retains servicing.) As reported to HOUSE & HOME the week ending March 13, '59

FHA 5 1/4s (Sec 203) (b)

VA 4 3/4s

FNMA prices		Minimum Down*		10% or more down		City	30 year no to 2% down		25 year 5% down		20-25 year 10% down or more		Conventional Interest Rates	
Spec Asst	Scdry Mkt	30 year	20-25 year	20-25 year	20-25 year		Immed	Fut	Immed	Fut	Immed	Fut		
VA#	FHA#	Immed	Fut	Immed	Fut	Immed	Fut	Immed	Fut	Immed	Fut	Immed	Fut	
96	97	97	97	97 1/2	97 1/2	Atlanta	a	a	a	a	a	a	a	5 1/4-6
96	98	par-101#	par-101#	par-101#	par-101#	Boston local	99-101	99-101	99-101	99-101	99-101	99-101	99-101	4 3/4-5 1/2
—	—	96-97	96-97	96-97	96-97	Boston out-of-st	92-93	92-93	92-93	92-93	a	a	a	—
96	97	96-98	96-98	96-98	96-98	Chicago	a	a	a	a	a	a	a	5 1/2-5 3/4
96	97	97-99	96-97	97-99	96-97	Cleveland	94-95 ^b	92-94 ^b	a	a	a	a	a	5 1/2-5 3/4
96	96 1/2	96-97 1/2	96-97 1/2	97-98	97-98	Denver	91-93	91-93	92 1/2-93 1/2 ^b	92-93 1/2 ^b	94 ^c	a	a	5 1/2-6
96	96 1/2	96-97	96 1/2-97	96 1/2-97 1/2	97-97 1/2	Detroit	92-92 1/2	92	a	a	92 1/2-93 1/2	92 1/2	a	5 1/2-6
96	97	96-96 1/2	96-96 1/2 ^b	96-96 1/2	96-96 1/2 ^b	Houston	92-92 1/2	92-92 1/2	92-92 1/2	92-92 1/2	92 1/2-93	92 1/2-93	a	5 1/4-5 3/4
96	97	96-97	96-97	96-97	96-97	Jacksonville	92-92 1/2	92-92 1/2 ^b	a	a	a	a	a	5 1/2-6
96	96 1/2	95 1/2-96 1/2	95 1/2-96 1/2 ^b	95 1/2-96 1/2	95 1/2-96 1/2 ^b	Los Angeles	91 1/2-92 1/2	91 1/2-92 1/2	a	a	a	a	a	5 3/4-6.6
96	97 1/2	99	98 1/2	99	98 1/2	Newark	96	95	96 1/2	95 1/2	98	97	a	5 1/2-5 3/4
96	98	99	99	99	99	New York	97 ^f	97 ^f	97 ^f	97 ^f	97 ^f	97 ^f	a	5 1/2-5 3/4
96	96 1/2	97	96 ⁱ	97	96 ⁱ	Okla City	92-92 1/2 ^h	a	92-92 1/2	a	92-92 1/2	a	a	5 3/4
96	97 1/2	98 1/2-par	98 1/2-par	98 1/2-par	98 1/2-par	Philadelphia	a	a	a	a	a	a	a	5 1/2
96	96 1/2	96	96	96	a	San Fran	92 ^b	92 ^b	a	a	a	a	a	5 3/4-6
96	97	94 1/2-97	94-97	95-98	94 1/2-97 1/2	St Louis	d	d	a	a	a	a	a	5 1/4-6
96	97 1/2	98 1/2	98	98 1/2	98	Wash, DC	93 1/2	93	96	94 1/2	96	94 1/2	a	5 3/4

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

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

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

Footnotes: a—no activity, b—very limited market, c—very limited demand, d—some offering at 91-92, e—lenders offering 90 with no takers, f—includes construction loans, g—some 5% and some 5 1/4%, h—no merchandise, j—just over 3 mos and limited amounts, w—FNMA pays 98 for FHA 5 1/4% mortgages of \$13,500 or less after 3/4 point purchasing and marketing fee and 3/4 commitment fee, x—FNMA pays 1/2 point more for loans with 10% down or more, y—FNMA net price after 1/2 point purchase and marketing fee, plus 2% stock purchase figured at sale for 50¢ on the \$1, z—price after 3/4 point purchasing and marketing fee, plus 3/4 point commitment fee; applies only to VA mortgages of \$13,500 or less.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 5 1/4s

VA 4 3/4s

FHA 5 1/4 spot loans

Immediates: 95 1/2-96 1/2
Futures: 95 1/2-96 1/2

Immediates: 91-92
Futures: 90 1/2-92

(On homes of varying age and condition)
Immediates only: 93 1/2-95

Prices for out-of-state loans, as reported the week ending March 20 by Thomas P. Coogan, president, Housing Securities Inc.

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

FNMA STOCK

	Month's		Month's	
	Feb 12	March 17	low	high
Bid	59 3/4	66	59 3/4	66
Asked	61 3/4	68	61 3/4	68

Quotations supplied by C. F. Childs & Co.

Fast growth period over, mortgage bankers warned

Mortgage bankers have ridden the FHA-VA postwar housing boom from obscurity to prosperity. Next stop: stability.

The days of fast growth which saw assets increase tenfold in 10 years are over. So says Economist Saul Klamman, author of a fact-packed pamphlet, "The Postwar Rise of Mortgage Companies." The report is part of Klamman's still unpublished bigger study of the postwar mortgage market for the Natl Bureau of Economics.

It is the first to take a long look at how the mortgage banking business has grown—and how closely it is tied to the rise of FHA and VA home loans. Some Klamman kernels:

- Mortgage banking has been profitable by any standard. Return on investment ranged between 11 and 22%, averaged 15% in booming 1955.
- Nearly half of the known 854 mortgage companies in business in 1954 were incorporated after World War 2.
- Their assets increased from \$160 million in 1945 to \$1.8 billion in 1955. Their income skyrocketed from somewhere between \$68 and \$83 million in 1951 to between \$200 and \$265 million in 1955.

The road ahead

"The mortgage company must grow now on its own merits," he predicts. "I believe they will have to have mortgages ready for immediate delivery anytime anyone wants them."

Klamman, a former Federal Reserve Board staffer who is now economist for the Natl Assn of Mutual Savings Banks, believes some firms may eventually operate nationally while smaller ones are absorbed or fail. "If cancellations of promised deliveries and lags in deliveries get worse, maybe the small mortgage man is not going to flourish," he says. Investors won't want to do business with him.

Growth of big firms, on the other hand, should be stimulated by the fact that mortgage bankers, unhampered by regulations such as confront banks and S&Ls, are free to cross state lines and open new offices.

Klamman hopes more mortgage companies will develop the conventional end of their business more. But he cautions: "As long as the government does not get out of housing, mortgage bankers have too comfortable and profitable a deal doing what they're doing."

Neither would he be surprised, he adds, if more and more mortgage companies expand their real estate activities, becoming hard to distinguish from realtors who originate mortgage loans.

Wedded to FHA and VA

Klamman's study is based on reports from 93 mortgage companies (funneled through MBA so he never knew their identity) plus never-before-tapped FHA data on approved mortgages.

Median age of all mortgage companies who are approved FHA mortgagees is only nine years, he found—a tip-off on how the business is wedded to FHA and VA. The years 1945-49 were the biggest:

1954 assets (in millions of dollars)						
INCORPORATED	ALL	UNDER 1	1-2	2-5	5-10	OVER 10
1950-54	23%	28%	16%	12%	5%	8%
1945-49	29	32	31	19	23	25
1940-44	9	9	8	10	15	8
1935-39	15	14	15	15	26	33
1930-34	5	2	10	12	15	17
Before						
1930	18	16	20	32	17	8

All but 8% of the biggest companies were founded after 1930. These few big companies have showed by far the greatest expansion in total assets in the postwar years. Only 6% of them held 38% of all assets in 1954. The breakdown by sizes:

ASSETS (in millions)	PER CENT	DISTRIBUTION OF COMPANIES		
		1946	1950	1954
Under 1	83%	71%	65%	
1-2	9	15	17	
2-5	8	11	12	
5-10	—	2	5	
Over 10	—	1	1	

For all the firms mortgage loans accounted for from ⅓ to ¾ of all assets.

Rising importance

Mortgage bankers share of home mortgage servicing has increased steadily as more and more investors put their money into out-of-state FHAAs and VAs:

	RATIO OF MORTGAGE SERVICING TO OUTSTANDING MORTGAGE DEBT		
	1951	1953	1954
Total home loans	12.7%	18.6%	22.2%
US underwritten	26.1	38.4	44.5

Geographically mortgage banking is concentrated in the Pacific, central Midwest and Southwest—with over half the assets and 40% of all firms. California and Texas alone had 1/7 of all mortgage companies in 1954 and a quarter of assets.

The firms are tied strongly to homebuilding not only through FHA and VA but by their conventional business as well—90% of their conventional closings were on 1- to 4-family dwellings in 1954.

The life insurance companies have always been the mortgage bankers' chief customers for loans. But Klamman found evidence that this dominance is shrinking. Proportion of companies selling exclusively to life companies dropped from more than ¼ in 1953 to about 1/6 in 1955.

Few companies in 1955 were closing loans on their own responsibility. Klamman's study shows 90% had never done it and the other 10% did it on only a few loans.

(Since compiling the statistics, however, Klamman has found more and more of the larger firms willing to close on their own—or at least with the protection of a standby commitment.)

George DeFranceaux starts nation's first small business investment firm

First to organize a small business investment corp under SBA's new program to stimulate the flow of long-term capital funds for small businesses (*Jan, News*) is Washington's red-haired, barrel-chested Mortgage Banker George DeFranceaux, president of Frederick W. Berens Inc.



DeFRANCEAUX

DeFranceaux' Allied Small Business Investment Co opened its doors (but not its coffers, pending final licensing by SBA) in mid-March. He says SBICs are a smart sideline for mortgage bankers: "It's somewhere between a mortgage house and a bank. It helps us diversify, and in a field we're acquainted with—credit—through conventional financing."

SBICs can be a "significant" source of much-wanted land development money for builders, he figures.

Under a law passed last year, SBICs can be formed with \$300,000 capitalization, of which SBA may supply \$150,000 in return for debentures of the company. In addition, the companies may borrow another \$150,000 from SBA at 5% to increase their working capital. They may make direct loans to small businesses, or buy convertible debentures, with the idea of turning them in later for stock. Incentive for the latter is given in a 100% corporate income tax exemption for SBICs on income from stock. Interest from direct loans is not tax-free.

It was this provision, plus the long-term feature (loans must be made for a minimum of five years, up to 20 years) that made many builders at Chicago doubt usefulness of the SBIC program to them, except in financing community facilities like sewer and water. But DeFranceaux sees it helping builders with land development this way: a builder borrows funds for land development for the minimum five-year term, but ties the loan to the security so that as lots are sold, he pays off the pro-rata share of the loan—thus holding the money only as long as he needs it. (The law does not bar prepayment of loans, and although SBA frowns on it, indications are that Washington will not object to a reasonable amount of such activity.)

DeFranceaux says he will balance his portfolio evenly between direct loans and debentures—in spite of the tax incentive that some thought might cut off direct loans in the program entirely.

Allied, now awaiting final licensing by SBA, is taking \$100,000 in capital help, borrowing the maximum \$150,000 from SBA to get started. Eventually, DeFranceaux hopes to have \$5 million in capital. "We've already got a stack of inquiries from potential borrowers—including developers—and another from potential investors," he says. The firm hopes to earn 8% to 12% on its investments, get into all kinds of businesses.

DeFranceaux also sees another plus in SBICs for mortgage men: he expects Allied will generate some business for his mortgage house as small firms seek refinancing of their obligations to qualify for an SBIC loan.

NEWS continued on p 60

Answers to a growing problem: water

HOW PARK FOREST GOT ITS WATER SUPPLY

by Morris Glassman, Chief Engineer
Park Forest Homes, Inc., Park Forest, Ill.

"In planning Park Forest, a community to be primarily of homes and to have an ultimate population of 35,000, one of the first problems that faced the developer back in 1946 was water supply.

"What is now Park Forest was then just farm land, economically far removed from any existing reliable source. Right from the start, it was apparent that our own water supply and distribution system would have to be developed.

"This was accomplished by drilling six wells 300 to 350 feet in depth, with capacities varying from 500 to 1500 gallons a minute—and every gallon is treated: softened . . . filtered . . . sterilized . . . and even fluoridated. The water is delivered through more than 60 miles of cast iron pipe, in diameters of 6 to 16 inches.

"Today Park Forest has a population of

30,000, and the entire system has been taken over by the Village of Park Forest. The developer continues to add to the distribution system in contiguous areas being newly developed, and upon completion, turns the mains over to the village.

"If you're about to face a water problem of your own—be assured on these points:

"First, if you install cast iron pipe, as we did at Park Forest, you can expect very little grief. The occasional troubles we've experienced have not been the fault of the pipe. They were normal operating experiences.

"Another thing, you can count on very real help from consulting engineers and water utility operators. They know your problem.

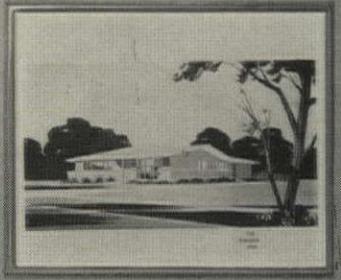
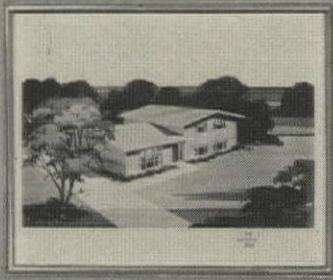
"The reliability of cast iron pipe is unquestioned."



CAST IRON PIPE

THE MARK OF THE 100-YEAR PIPE

Write for your free copy of the recent builder survey, with comments on the water problem by large-project developers. Write to Cast Iron Pipe Research Association, Thos. F. Wolfe, Managing Director, 3440 Prudential Plaza, Chicago 1, Ill.



Colean warns that political tinkerers will make housing a wholly federal ward

If federal housing policy continues on its postwar course, "homebuilding will become as dependent on government support and protection as agriculture, and the government will have created for itself and the tax-paying public an incubus that may make its farm operations* seem mild."

This prophecy comes from Economist Miles L. Colean, FAIA. He has issued similar warnings before, but never in such strong terms: "In the guise of stabilizing the mortgage market, of promoting continuity in building activity, and of helping the home buyer—all laudable enough objectives—the government through FHA and VA has produced the most unstable element in the whole US economy."

Colean, onetime (1937-40) assistant FHA commissioner for technical standards, notes that during the last decade combined FHA and VA starts have varied as much as 46% up and 40% down in a single year. For VA alone (the most volatile segment of housing), the range is from 96% up to 53% down. Conventionally-financed starts, on the other hand, have been "one of the most stable elements in the US economy." Since 1948, their "most extreme fluctuations" have been a 28% rise in 1950 in the face of a threatened wartime shutdown and a drop of 8% the next year. Otherwise, their range has been no more than 10% up and 7% down.

No other item in the entire US economy shows such wild swings as FHA and VA starts, Colean says. Among others, "two of the most unstable" elements are autos and steel. The biggest drop in car output in the last ten years was a 35% sag between 1951 and 1952. That year, FHA-VA starts plunged 40%. In 1955-57, auto output shrank 23%, but FHA-VA starts plummeted 53%. Steel ingot production has gone up 33% and down 24% at its unsteadiest.

Why such instability in housing? Answers

*Farm price supports now cost US taxpayers about \$7 or \$8 billion a year. Current cash outlays for housing and urban renewal, amount to only \$1.02 billion.

Economist Colean: "Legislative and administrative actions." Specifically:

1. Interest rates are controlled by Congress or the Administration instead of the market.
2. Mortgage terms are changed frequently.
3. Treasury funds to buy mortgages direct are irregularly pumped into the mortgage market.
4. Congress keeps an "arbitrary" ceiling on FHA operations, requiring frequent extensions. (Politicians do so to hold FHA hostage for the controversial public housing program, which many conservatives would like to junk—see p 68.)
5. Congress imposes rigid restrictions on how much of its profits FHA can spend—restrictions which keep FHA from hiring enough able executives, especially in technical posts.
6. Changes in housing laws are timed for political impact or legislative convenience instead of market needs.

All this, Colean argued in a talk to the American Bankers Assn's savings & mortgage division, "breeds a subtle poison in the free enterprise system." He warns:

"What we are creating—what, in fact, to a large extent we have already created—is a

situation in which business decisions are made less on the basis of market considerations than they are on the supposed effects of actual or anticipated government decisions. Builders build what Congress guesses they ought to build rather than what they themselves decide the market demands—as they have been building under-\$13,500 houses because that is what Fanny May would buy under its special assistance operation."

Colean holds no hope that housing will fare better soon. He warns: "Because governmental decisions are based upon estimates of political advantage or on subjective concepts of what ought to be rather than upon the hard facts of what the market demands, the instability . . . will certainly increase."

Too-easy terms boost cost of homes, S&L chief warns

Costs of housing will keep spiraling up out-of-control as long as the industry keeps sidestepping the problem by nudging Congress to keep easing terms. In time, this may bring bureaucratic control of "starts, prices and profits."

This warning comes from President C. R. (Bob) Mitchell of the US Savings & Loan League. Says he: "As long as houses can be built and sold under the approach of solving the costs by lowering down payments and lengthening maturities to 30, 35 or 40 years, there will be a minimum of research and effort directed at greater efficiency and lower costs by either builders or suppliers . . ."

"Basically, what we need is a revolutionary breakthrough in housing costs, and we can't get this without more research. And we can't get the kind of volume of research we need so long as the federal government's major interest in housing is to liberalize or subsidize mortgage credit."

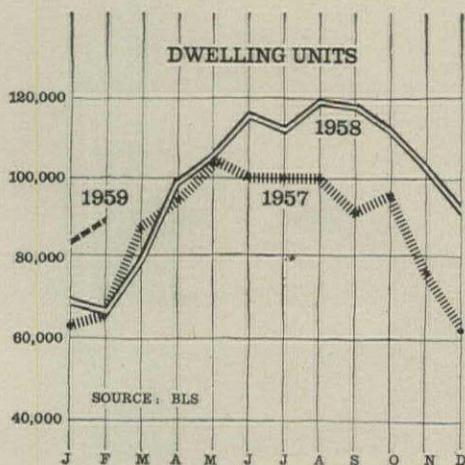
Pundits say inflation already perils housing

Is inflation the private housing industry's major enemy?

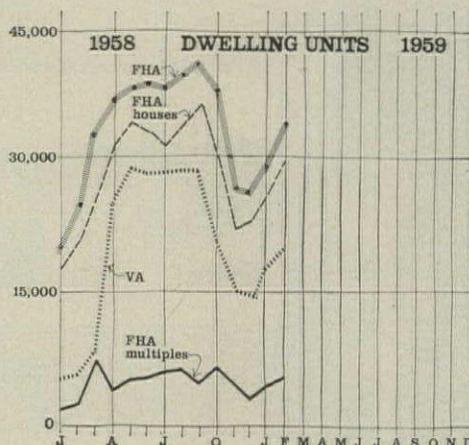
Some of the industry's most thoughtful pundits agree that inflation would wreck the industry—and some of them see signs that it is already beginning to do so. Items:

- Long-term lenders (mortgage lenders among them) have boosted interest rates about 1/2% to discount future inflation, says Economist-Treasurer Walter E. Hoadley Jr. of Armstrong Cork Co. In just a year, he contends, professional investors have shown "a profound change in attitude toward inflation," leading them to spurn fixed income securities—like bonds and mortgages—and buy stocks. The "actual size" of the housing market of '60's "will be influenced substantially by the degree of inflation, which will discourage home purchasers by driving up land prices, raising building costs, increasing interest charges and discouraging saving by both borrowers and lenders. More people may seek refuge from inflation in housing investments, but an increasing supply of homes as well as structure- and neighborhood-obsolence will make this more hazardous than is generally realized."

- "Housing may well price itself out of the market" if housing leaders ignore the effects of inflation, warns Dr Kurt F. Flexner, *continued on p 80*

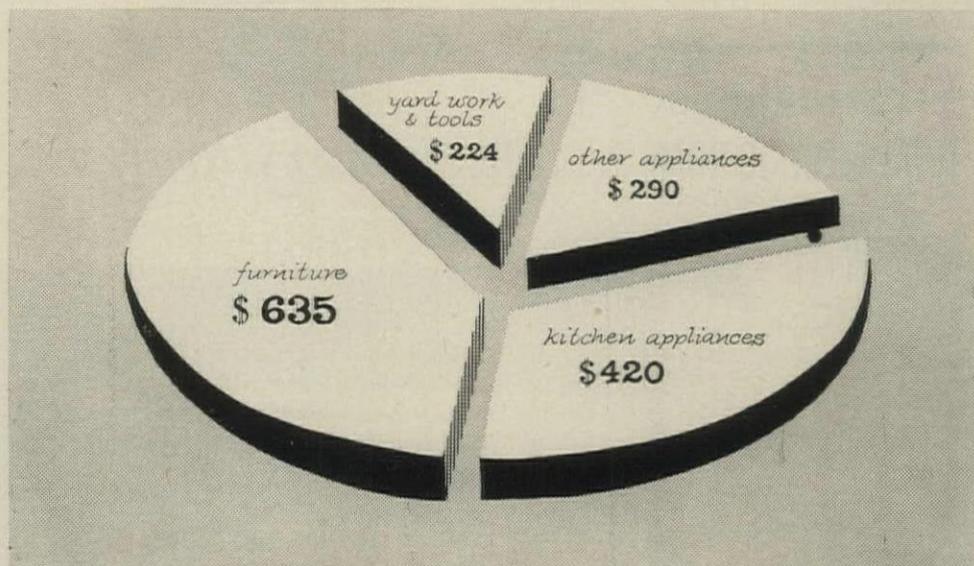


HOUSING STARTS made a seasonal jump to 89,000 (87,900 private and 1,100 public) in February—up 3,000 from January. Though private starts were up 5.5% from January, the seasonally adjusted annual rate slipped to 1.32 million. This is a dip of 2.2% from the 1.35 million of January and is the second consecutive month of decline after starts hit a December pace of 1.43 million-a-year. But February's rate was still 44.3% better than the 915,000 of February a year ago, when housing hit its recession bottom.



FHA APPLICATIONS on new units showed a steep seasonal climb in February to 34,584—up 20.2% from January and up 48% from February 1958. Project applications of 5,097 were up 57.7% from January and up 95.8% from February 1958. Applications on new homes soared to 29,487, up 15.5% from January but 42.9% above January 1958. All new applications are up 42.1% for the year. VA appraisal requests on new units were up 16.9% to 20,967 in February, a gain of 295.5% from February 1958.

FIRST YEAR SPENDING of the 218 families in the Houston study—\$1,569—was divided this way. Facts were gathered in personal interviews by a team of 10 led by Dr Paul Rigby, head of the University of Houston's Bureau of Business & Economic Research. The survey was made in late February. Of the 218 families interviewed, 70% moved into their homes in 1956, 10% in 1955 and 20% in 1957.



How much homebuyers spend for equipment

Homebuyers are apparently spending more than ever for furniture, appliances and other items they want when they move into a new home.

A new study shows the average amount spent in the first year to furnish and equip a new home in Houston is \$1,569.

The study gives new support to a similar survey made by HOUSE & HOME's predecessor, THE MAGAZINE OF BUILDING, in 1950 in Levittown, Long Island. It showed that Levittowners spent \$1,073 in the first year—excluding autos. (With cars included, average spending in the first year was \$1,432—a figure so often quoted in the housing industry in the last 10 years that its origin is often forgotten.)

Even allowing for the 9% drop in the value of the dollar from 1950 through 1956 when the purchases were made, the Houston homebuyers still spent considerably more. (Inflation made \$1,073 in 1950 dollars equal to \$1,169 in 1956.)

The new study by the University of Houston was requested by local builders. The HBA picked the sample—218 homes built by eight local builders and priced from \$10,000 to over \$20,000. Main findings:

Totals	Value of House		
	\$10,000-14,999	\$15,000-19,999	\$20,000 and up
No. of interviews	95	61	62
Average outlay per family	\$1,244	\$1,004	\$2,621
Items purchased	660	385	374
Average cost per item	\$177	\$167	\$436
Average number items bought per home	7	6	6

Furniture and furnishings were by far most common purchases. Some 68% of buyers plunked down an average of \$183 on drapes and curtains alone. Biggest single outlay in the survey was for carpet—averaging \$518. This figure is pulled up by the \$1,085 average paid by persons in the homes over \$20,000. But even the families in the homes priced below \$14,999 spent an average of \$190.

An oddity which researchers cannot explain is that families in cheaper homes spent more on equipment than buyers of \$15,000 to \$19,999 houses. They spent more on items like stoves, washers, air-conditioners, televi-

sion, phonographs, carpet, furniture (except for the dining room and den), dishes, lawn mower, fence, shrubs and patios.

The trend towards more built-ins and landscaping shows up strongly. For example, only 21.6% of the 218 families bought new stoves in the first year. But 37.6% already had them as built-in equipment.

Built-ins were heavily concentrated in homes priced above \$20,000. Built-in stoves went into 80.6%, dishwashers into 93%. In homes priced from \$10,000 to \$14,999, only 9.5% had built-in stoves, only 4.2% dishwashers. Patios were more evenly spread. The findings on built-ins:

PERCENTAGE OF HOUSES WITH BUILT-INS & LANDSCAPING

Item	Total	Value of House		
		\$10,000-14,999	\$15,000-19,999	\$20,000 and up
Stoves	37.6%	9.5%	37.7%	80.6%
Dishwashers	32.1	4.2	13.1	93.5
Air-conditioners	23.4	0	1.6	80.6
Fences	5	7.4	3.3	3.2
Patio	41.7	32.6	39.3	58.1
Refrigerators	3.2	0	0	11.3
Washers	0.9	0	0	3.2
Dryers	0.9	0	0	3.2

Of homes from \$20,000-up, 80.6% had
continued on p 65

WHO BUYS AND WHAT THEY PAY

This table shows the percentage of homeowners in each category who bought specific items the first year in their new home and the average price paid:

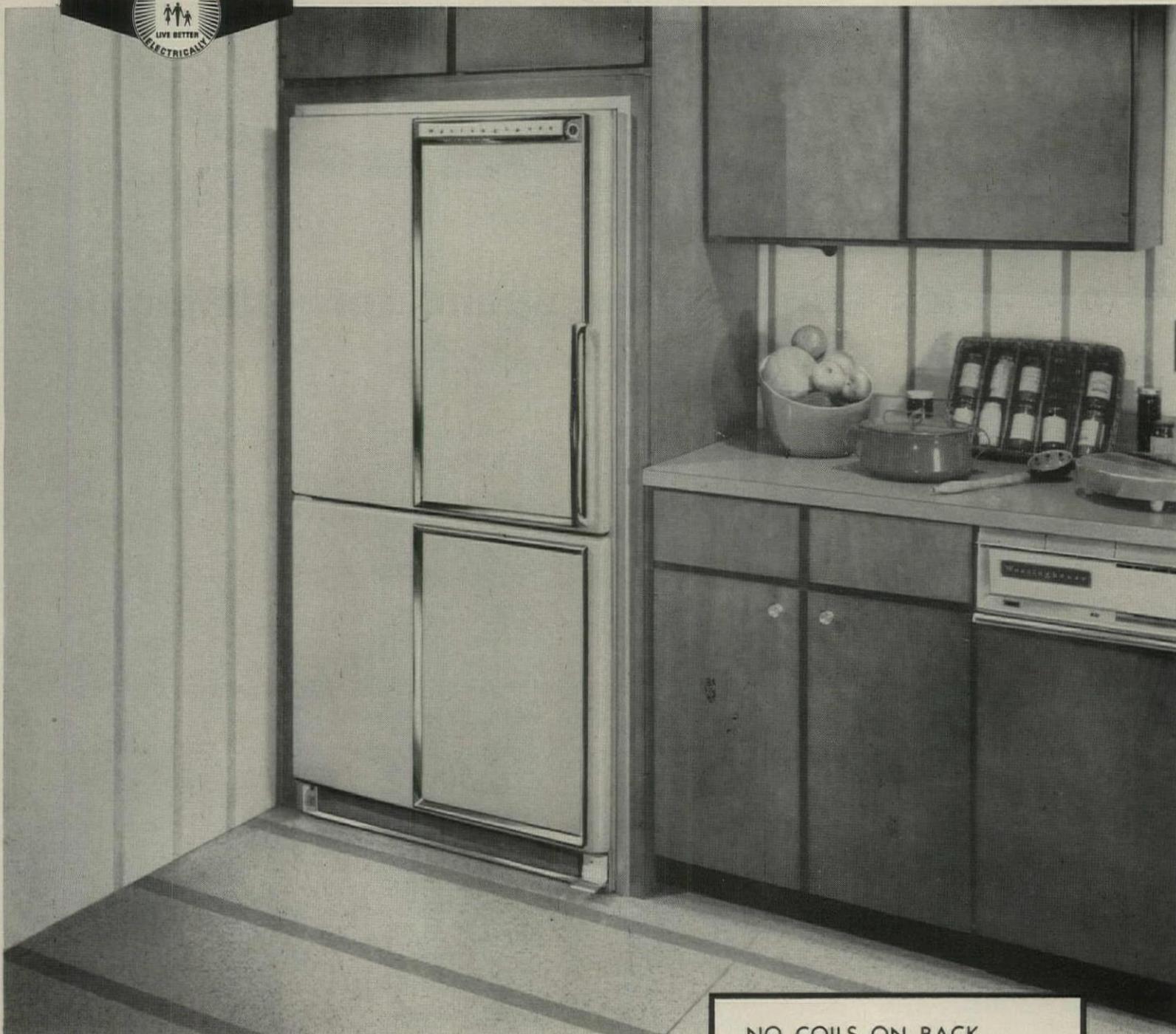
ITEM	TOTAL % who average bought price	VALUE OF HOUSE					
		\$10,000-14,999 % who average bought price		\$15,000-19,999 % who average bought price		\$20,000 and up % who average bought price	
<i>Kitchen appliances</i>							
Refrigerator	25.7 \$358	35.8 \$332	26.2 \$337	11.3 \$558			
Stove*	21.6 237	34.7 239	19.7 208	3.2 300			
Washer	32.6 223	34.7 216	32.8 210	29 250			
Dryer	16.5 184	11.6 160	9.8 167	30.6 203			
Dishwasher*	2.3 195	1.1 150	6.6 200	0 —			
<i>Other appliances</i>							
Air-conditioner*	25.2 \$467	29.5 \$421	34.4 \$350	9.7 \$867			
Television	19.3 230	18.9 244	21.3 223	17.7 214			
Phonograph	8.7 132	10.5 90	3.3 50	11.3 217			
<i>Furnishings and furniture</i>							
Carpet	48.6 \$518	41.1 \$190	45.9 \$186	62.9 \$1,085			
Drapes/curtains	67.9 183	67.4 72	68.9 105	67.7 432			
Living room	45.9 339	48.4 217	49.2 173	38.7 780			
Bedroom	48.6 297	52.6 240	47.5 133	43.5 579			
Dining room	7.3 169	13.7 150	4.9 250	0 —			
Den	44.5 236	42.1 92	47.5 116	45.2 566			
Dishes/silver	33 69	32.6 76	39.3 50	27.4 85			
<i>Yardwork and tools</i>							
Lawn mower	41.7 \$ 67	46.3 \$ 60	41 \$ 55	35.5 \$ 93			
Fence*	45.9 219	54.7 207	27.9 197	50 257			
Shrubs	61 152	54.7 104	59 78	72.6 266			
Patio*	3.7 138	5.3 90	0 —	4.8 217			
Lawn chairs	39.4 62	38.9 53	45.9 57	33.9 83			

* Purchases of these items were fewer because many of the homes already had them as built-ins, included in the original price of the house (see table above).

Westinghouse

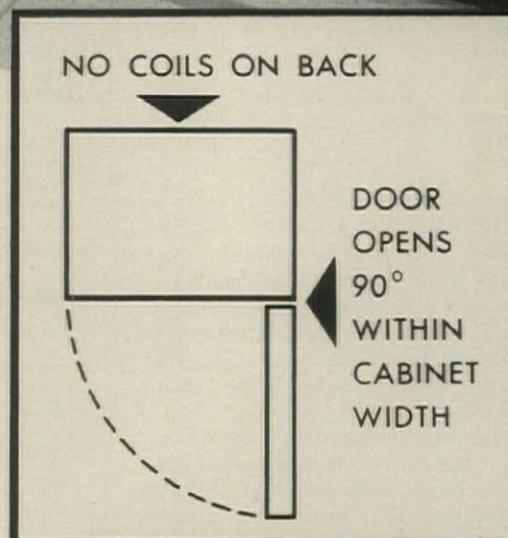
TOTAL ELECTRIC HOME...where everything is done electrically!

HEATING · COOLING · APPLIANCES



Heirloom Maple Wood Cabinets by Westinghouse

INSTALLATION IS EASIER THAN EVER. Two new vertical built-in refrigerator-freezers (Models DCM-14 shown above, and TDM-13) have no coils on back. Entire operating mechanism is mounted in bottom of cabinet behind grille. Concealed hinge permits 90 degree door opening within cabinet width. No extra space is needed for door swing . . . either model can be installed flush in a kitchen corner. To build-in, merely make the cutout, slide cabinet into place and install accessory trim kit.



WESTINGHOUSE HAS THE WIDEST SELECTION OF BUILT-IN REFRIGERATORS AVAILABLE!



STOP HOME BUYERS IN THEIR TRACKS. You can do it with the beautiful interior . . . the specialized storage convenience of this big 14 cu. ft. built-in Frost Free Refrigerator (Model DCM-14 shown opposite, closed). It has the exclusive Westinghouse Meat Keeper[®] that keeps meat store-fresh for 7 days without freezing. Separate 161 lb. home freezer is located at bottom. Color availability includes cabinet in Mint Aqua, Frosting Pink, Lemon Yellow, Sugar White, and Coppertan. Also Brushed Chrome and Coppertex doors. Choose 'N Change Door Panels come in 5 colors plus 2 wood grains. *Also available:* Model TDM-13, built-in model with separate top-mounted freezer.



HORIZONTAL MODEL BUILDS-IN OR STACKS. This deluxe 13.1 cu. ft. refrigerator-freezer can be built-in at any desired work level using accessory grille and trim kit. Fully-finished brushed aluminum exterior also permits stacking on a counter. New and exclusive "Thermo Struct" construction provides greater strength, longer life. Has Westinghouse Cold Injector system that keeps all foods fresh longer. Available with Mint Aqua, Frosting Pink, Lemon Yellow, Sugar White, Coppertan, Coppertex and Brushed Chrome doors.



SEVEN OTHER MODELS CAN BE BUILT-IN. Westinghouse also offers a choice of free-standing refrigerators, from a deluxe 16 cu. ft. model to a 5 cu. ft. undercounter version, that can also be built-in. Shown at left is a representative model, DM-11, built-in with accessory grille and trim kit. This refrigerator has an 11.4 cu. ft. capacity with 75 lbs. of frozen storage.

NOW, FOR THE FIRST TIME, YOU CAN PUT A BUILT-IN REFRIGERATOR IN ANY PRICE HOME YOU BUILD.

For details, contact your Westinghouse distributor or write Westinghouse Electric Corporation, Contract Sales Dept., Mansfield, Ohio.



YOU CAN BE SURE...IF IT'S **Westinghouse**



For quiet rooms and beautiful ceilings, Johns-Manville KLEFTONE is the choice of Mrs. America®, the Nation's No. 1 homemaker



Johns-Manville presents **KLEFTONE** Panels

—the new ceiling with 100,000 noise traps in deep-fissured texture

NEW J-M Kleftone acoustical ceiling panels have a sculptured fissured pattern and tiny perforations that absorb up to 75% of the room noise that strikes them.

Kleftone panels have the classic beauty of Travertine stone. They add high style and decorative beauty that will give your homes a smart, modern look.

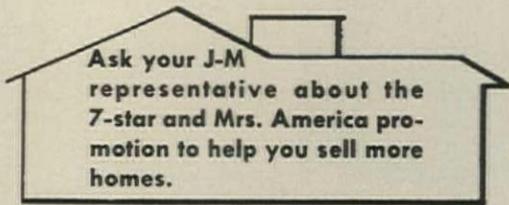
In addition to providing a ceiling of fresh and distinctive appearance

at low cost, Kleftone panels quiet unwanted noise. Today more and more home buyers are interested in acoustically treated homes.

Kleftone ceilings, available in 12" x 12" and 12" x 24" panels, are pre-decorated in a white flame-resistant finish. They are quickly and easily applied. The famous Johns-Manville lightning joint conceals all fastenings.

You'll find homes easier to sell with J-M Kleftone ceilings. We'll be

glad to send you complete information. Write: Johns-Manville, Box 111, New York 16, N. Y.



JOHNS-MANVILLE



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LOCAL MARKETS:

Detroit looks for slow year

built-in air-conditioning. For all houses, the total was only 23.4% with built-in cooling. Another 25.2% bought units. That means nearly half the Houston homes acquired some type of air-conditioning almost at once. The breakdown by type of units:

PRICE CLASS	% WITH CENTRAL UNIT	% WITH WINDOW UNIT
\$10,000-14,999	5.3%	24.2%
\$15,000-19,999	3.3	31.1
\$20,000 and up	75.8	8.1
Total*	24.8	21.6

*Several reports did not specify the type unit.

MARKET BRIEFS

FHA backlog again

FHA is having backlog troubles again.

Applications are flowing in at record levels, jamming up offices which have only been back on a current basis since November.

The applications rate is already two months ahead of its 1958 pace. On March 6, totals were on a par with those of May 9 last year. They are pouring in at a 16,000 per week rate vs the 10,000 to 11,000 last year.

Already, 33 offices have a backlog of three weeks or more—meaning it takes 15 or more working days to process an application. Ten days is considered normal. Three of the biggest jams are in Columbus, Ohio, Houston and Birmingham—each with a backlog of six weeks or more.

More biggest builders

Add a few more names to the list of the nation's biggest homebuilders.

Since HOUSE & HOME published its first list (Feb, News), several more builders have come forward with 1958 starts figures. Among them: International Basic Economy Corp of Puerto Rico and Fort Lauderdale Fla, 1,500; Orrin Thompson of Minneapolis, 1,350; John Hall of Phoenix, 1,260; Elbel Construction Co of Kansas City, 1,150; Towne Realty Co of Milwaukee, about 1,100; Ralph Staggs of Phoenix, 900.

The list of builders who say they started 1,000 or more private units in 1958 now comprises:

The Mackle Co Miami	2,504
John Long, Phoenix	2,500
Centex Construction Co, Dallas	2,261
IBEC, Puerto Rico, Ft Lauderdale	1,500
Heftrler Construction Co, Miami	1,400
Orrin Thompson, Minneapolis	1,350
Bollenbacher & Kelton, San Diego	1,276
John Hall, Phoenix	1,260
Dale Bellamah, Albuquerque	1,259
Bill Levitt, Levittown, N. J.	1,100†
Elbel Construction Co, Kansas City	1,100
Tietz Construction Co, Los Angeles	1,100
Town Realty Co, Milwaukee	1,100
Volk-McLain, San Diego	1,006
R. A. Watt, Los Angeles	1,000 or more*

* Watt does not disclose his starts.
† Estimate.

How to stop urban sprawl

Little Flagstaff, Ariz (pop 14,000) is now the biggest city in the state—area-wise—with a big city approach to its community facilities problems, present and future.

Flagstaff has annexed a breathtaking 55¾ sq mi in the last year bringing its size to 58¾ sq mi vs the 52.53 of Phoenix. Most of the annexed land is uninhabited forest.

Flagstaff wants to prevent hodgepodge development on its perimeter, there are no zoning or building regulations.

Detroit: Glumly surveying swollen jobless rolls and a financial crisis in the state government, builders and lenders are finding it harder than ever to be optimistic about sales.

Fanny May special assistance gave homebuilders a good second half last year, offsetting a bad first half and putting starts—22,498—at about the '57 level. But, says Builder-Mortgage Banker Irving Rose, "the building industry borrowed its prosperity from the future . . . We are not hopeful for 1959. We look for a total of about 18,000 single-home starts, the lowest level in Detroit since pre-war years." Special assistance and good buys lured many buyers who might otherwise have waited, he says. Now special assistance commitments are beginning to wash out—and apartment vacancies are up. Plumbing and heating contractors put their forces on a three-day 24-hour week to spread the work. Pay remained \$4.07½ an hour.

Others are not—publicly at least—as pessimistic. Most call sales "spotty though good," but agree the market is distinctly slower in both new and used homes.

Sales are most brisk in the \$15-\$25,000 bracket, against prior years when the \$13-\$15,000 class has shown greatest volume. Brightening the picture is the fact that mortgage money is adequate to meet the demand and land development, which has lagged behind construction, looks overdue for a burst of activity.

Behind all this loom some hard facts: despite a 12% recovery in the auto industry, unemployment in the city is up 3,000 to a total of 194,000, and welfare demands are at a post-war high. The state, with its bread-and-butter sales tax down \$43 million because of the recession, is due to go broke in late April. Gov G. Mennen Williams and legislators can't seem to get together on how to meet the crisis.

Few analysts look to the increasingly automated and decentralized auto industry to ease unemployment. Most agree that the solution is to attract more diversified industry. But experts wonder how many companies will settle in Michigan, with the state eyeing all sources of revenue to refill its depleted purse.

Wichita: Builders will probably up their production from 3,142 last year to 3,500 this year, according to the semi-annual building survey of the Wichita association.

The survey, which predicted 3,009 houses for '58, bases its forecast on builder plans to start 1,873 houses in the first six months. Of these, 60% will be FHA-financed. There is a trend toward more starts in the \$12-\$15,000 bracket, with corresponding reductions in both lower and higher brackets.

The survey shows builders uniformly more optimistic about materials, mortgage, land and labor costs than those surveyed nationally by NAHB, but they still expect costs to rise. Exception: only 26% expect mortgage money to be tighter; 46% expect the same conditions; a whopping 28% (against 1% nationally) expect easier money.

Tucson: Two New Yorkers have joined local builder Bob Lusk in an ambitious plan for a new city in the desert—20 mi east of Tucson.

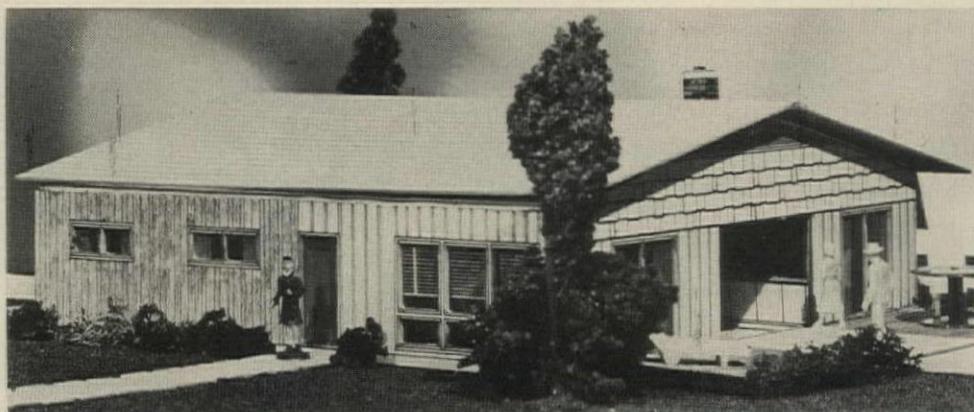
Lusk, Real Estate Lawyer Joseph Timan, and Developer Irving Geist have purchased and leased from the government a 20 sq mi area at the foot of the Rincon mountains where they hope to build at city for 60,000 persons called Cielo del Lago. (Tucson, itself, has 250,000 in the met area.)

RCA has already signed a lease on a 12,000 sq ft electronics laboratory to employ about 100 persons. It will be completed in August.

Lusk, who builds prefabs in Indiana as well as conventionally in Tucson, expects to offer homes from \$8,000 to \$50,000.

New Orleans: Dallas Millionaire Toddie Lee Wynne has purchased 32,000 acres of uninhabited swampland that is the only undeveloped area lying within the limits of the city and parish (county). The tract amounts to almost exactly one quarter of the city's area. Price: between \$30 and \$40 million.

His plan: form a development organization, prepare the land for building sites. Like most of the rest of the city before it, it needs only drainage. Wynne, 61, who got his start in East Texas oil, has recently been active in real estate across the country.



MOST-VISITED MODEL in the world will doubtless be this split-center "typical American workers' home" which is expected to draw more than 3 million Russian visitors at the American National Exhibition in Moscow this summer. An all-too-typical tract house (3 bedrooms, bath-and-a-half, frame & drywall, with a banana-split exterior combining redwood, yellow plywood, wood & asphalt shingles, \$11-12,000 on your lot),

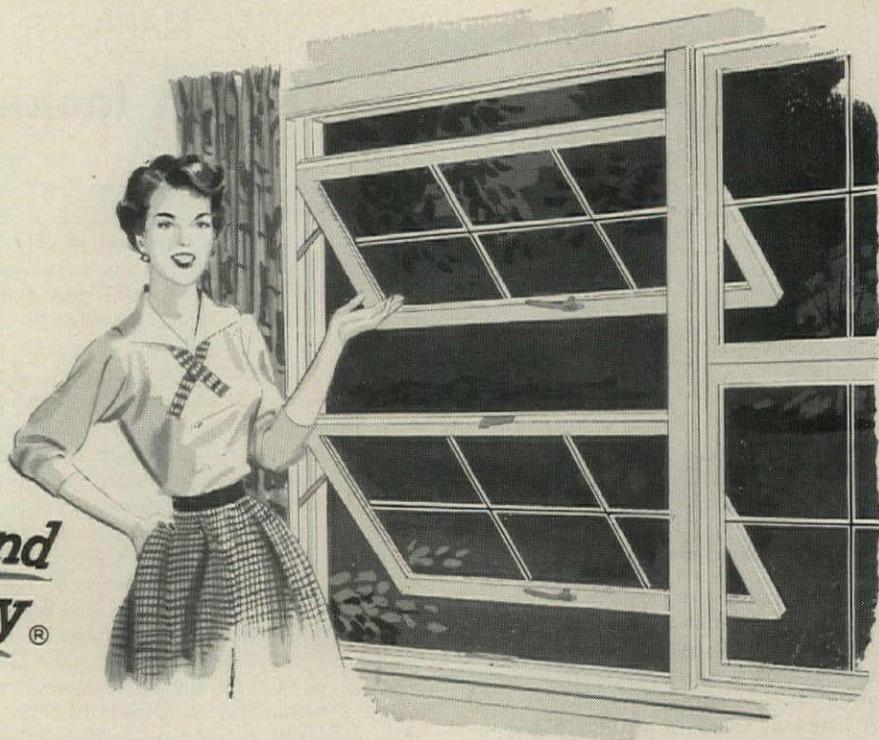
it was especially designed by Architect Stanley Klein to show what Americans earning \$100-a-week can buy, and split to accommodate the expected horde of visitors. Builders, All-State Properties Inc, Floral Park, LI (who are standing all costs) have tagged it the "splitnik", may build some on their tracts (LI, Louisville, Broward County, Fla).

NEWS continued on p 68

Malta *Town and Country*[®]

WOOD UNITS

give **U.S.S.** homes extra value, more window convenience



THE newest new homes in America are being built with Malta "Town and Country" wood units. It is the basic window in United States Steel Homes — selected because the versatile new design is a step ahead of competition in adaptability, value and buyer appeal.

U.S. Steel Homes builders find the Malta "Town and Country" wood unit ideal for solving almost every window problem. The thin, trim lines, awning-type sash, sans clumsy center partition rail bring modern charm and beauty to external styling, light and airy living to every room inside the house.

Single units combine easily into doubles and triples for distinctive, low-cost window effects. And economies created through faster, easier installation — minimum finish work time and costs — multiply into important savings you can pass along to the buyer.

For more "Town and Country" details, see your local Malta dealer or write directly to the factory.



The **ANDOVER** is one of three new U. S. Steel Homes in the 1959 product line which features Malta "Town and Country" windows. This steel-frame, three bedroom, Colonial design is available as shown or in a reverse plan with or without basement.



The **BEACON**, designed for the nation's low-cost housing needs, is a three bedroom, ranch style home. First introduced last July, this Steelstyle design is the "biggest looking smaller home" in the market today.



The **BRADFORD** is the Steelstyle home designed for the narrow lot. It features three large bedrooms, an eight-foot window wall, covered porch, and the kitchen is at the front of the house.

Member Ponderosa Pine
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THE MALTA MANUFACTURING CO.

Malta, Ohio



"We sold 19  homes on opening day!"

*says Tom Quinn, United States Steel Homes builder,
Cincinnati, Ohio*



NOT ONLY THAT," adds Mr. Quinn, "but we sold 27 more in the next 10 days. Our gross sales in the first two weeks totalled more than half a million dollars!" The new section of Cincinnati's Northbrook subdivision, numbering more than 60 homes, was completely sold out at the end of the third week. Public acceptance was so great that a new section was started to accommodate 15 advance orders.

Why do U. S. Steel homes sell fast and steadily? *Because they're built tight and priced right.* Steel construction eliminates warping and sagging; pre-assembled components make for faster erections, enabling builders to pass on savings to customers. These homes are loaded with living comforts, too . . . with storage space galore, with more room for family relaxation, with quality features usually found only in higher priced homes!

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Wants more spending



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Wants more facts



PUBLIC HOUSER SERVAITES
Wants 'expanding horizons'

PUBLIC HOUSING:

'Not only way' to house low-income families, Mason warns

Has HHH Administrator Norman Mason a new scheme up his sleeve as a substitute for public housing?

He dropped some hints of it last month at the 28th annual meeting in Washington of the National Housing Conference, public housing's No. 1 lobby group. Said he: "The present public housing program isn't the only answer to the problem of low-income housing—any more than the bulldozing approach to slum clearance is the only answer to restoring our cities."

More than 475,000 federally-aided public housing units will be occupied by some 2 million people by June 1960, Mason reminded his hostile audience of public housing professionals. Another 110,000 units will be on the way, for a total of 585,000 units. And turnover produces 100,000 vacancies a year.

Almost alone among New Deal social reforms, public housing has remained "continuously controversial for two decades," the new US housing boss noted. Why? He quoted Catherine Bauer Wurster: "Life in the usual public housing project is just not the way most American families want to live. Nor does it reflect our accepted values as to the way people should live."

Argued Mason: "The question facing us is not: are we *for* or *against* public housing; it is, how best in our present society, at this present time, can we achieve the end in view. Public housing is not an end in itself; it is a means to an end—better living and better cities in which to live.

"It is the end that concerns me, and no single pat answer will suffice . . . Possibly we shall have to tread new paths before we approach a practical solution."

Just what "new paths" Mason has in mind remains a secret. All the administrator (who, while he was FHA boss, loved to brag about "living in a goldfish bowl") will say is that Assistant HHH Administrator Henry O. Talle is studying the problem for him.

Greener pastures

NHC leaders seemed inclined to shrug off Mason's pronouncement as insignificant. Most of them seem to agree with Executive Vice President Frank X. Servaites, who told conference-goers that six months of hard work on Capitol Hill had helped to produce the "victory of life for public housing over the Administration decree of death." Servaites, who came to NHC last year after ten years as regional public housing director for Puerto

Rico, added that NHC's "second major achievement is the break-through for local autonomy that NHC has long realized is the only hope for survival" of public housing.

Survival of NHC, he disclosed, is "deeply indebted" to the AFL-CIO. Last year labor contributed \$12,615 of the conference's \$77,000 budget. Forecast Servaites: "Housing for the neglected should remain our prime interest but the compass is moving to include more and more territory in the fields of urban and suburban planning and developing metropolitan expansion, population explosion and suburban sprawl. They are all related to slum elimination and the shelter needs of families of low income. These expanding horizons must form a greater part of NHC's legislative programs because they seem to hold the promise for the future."

Delegates politely applauded a telegram from President Eisenhower warning: "Along with continued federal encouragement and support there must be vigorous community leadership in meeting the needs of urban growth and higher living standards." They endorsed this idea with a resolution, but also urged adoption of the controversial Senate bill to tap the federal treasury for 50-year loans at 3½% to cope with local community facilities problems.

Neglected roots

Why is public housing so controversial? The Rev Timothy L. McDonnell, SJ, of San Francisco, argued the big reason is that "major problems" were "left unsolved" when public housing was created in 1937. The No. 1 problem, he said, is "whether the federal government has any right to participate in public low-rent housing for the low income group." In persuading key Congressional committees to approve the original public housing law, proponents argued only obliquely. They contended that "if all the wage earners of the land had steady employment at decent wages, America would have no serious housing problem." And they argued that because recent Supreme Court rejection of the NRA had cut the ground out from under government efforts to boost wages, the state had "a right" to provide cheaper housing for underpaid workers.

Contended Father McDonnell: "The housing problem is not merely a problem of wages." It involves such items as "inflated real estate prices, unrealistic building codes, inefficient construction and labor practices,

excessively high real property taxes. In thousands of pages of testifying, these basic problems have not been discussed."

The rest of the two-day meeting fell into the customary mold. AFL-CIO President George Meany, natty as a banker in a gray suit with a gray necktie, droned through a formal speech under TV's bright lights, demanded "expenditure of far more federal money than ever before for slum clearance and public housing." He asked for "at least 2 million housing units a year for ten years," including more cheap new homes for middle income families.

Sen Edmund S. Muskie (D, Me.) captivated conferees with his story-telling charm, disavowed credentials as a housing expert ("all I have had is a short cram course, on the Senate housing subcommittee"), made it clear public housers can count on him to back their programs for bigger spending.

HIGH COST OF SPENDING

Tightening money will cause a sharp rise in the cost of borrowing money to finance urban renewal and public housing projects, predicts John N. Mitchell, Wall St. lawyer and expert on tax exempt bond financing. As a result, the federal government must face increased outlays for annual contributions to subsidize public housing. And fewer units of it will be built, at higher costs.

Mitchell urged local urban renewal authorities to "eliminate borrowing directly" from the government to get local slum clearance programs started because "under all circumstances you'll pay more for your money than if you borrow from private investors." Before localities can do this, he cautioned, "you've got to put your legal house in order." Investors shy away from redevelopment bonds of communities which have pending litigation, he explained. "Litigation has cost urban renewal in some areas hundreds of thousands of dollars," he said.

Public housing authorities are neglecting to switch from temporary to permanent tax exempt financing when projects reach construction stage, Mitchell complained. As a result, the float of outstanding temporary notes has now reached a record \$942 million—a point so high there is "not enough money left to produce justifiable bids."

Mitchell called on URA and PHA to abandon their policies of holding sales of their tax-exempt securities on separate days each month. "They are competing with themselves," he charged. He predicted if this practice continues, "the money market will be holding back and gunning for the bargains that will develop."

URBAN RENEWAL:

Recipe for boosting fixup: more one-stop remodelers, says HIC

Home Improvement Council, the home fix-up promotion group that took over from Operation Home Improvement, is off on a new tack.

For three years and about \$700,000, OHI and HIC have thumped various promotional drums. Now, HIC backers (chiefly a small group of major materials producers plus Sears-Roebuck) have decided the big need is to create a responsible one-stop remodeling industry.

One-stop remodeling has been talked up for years as the way to crack the consumer's resistance to house fix-up. Now, he is 1) forced to deal with a plethora of tradesmen and craftsmen, acting almost as his own general contractor, and 2) never quite sure he will get his money's worth in craftsmanship and comfort.

Example on Long Island

But up to now, only a handful of people have done much more than talk about creating an industry to replace the gaggle of specialists. One of the handful is a rotund little man with a German accent named Herbert Richheimer. In 1954, with a capital of \$67, he became a one-stop remodeler in Levittown, L.I., the very kind of place where, so the old theory went, little remodeling could be sold at all. But his business thrived. Last year, he built \$2 million worth of bedrooms, baths, playrooms, kitchens, sea walls and servants' wings all across Long Island.

This month, Richheimer will become perhaps the first "mobile remodeler" in the nation when he opens a branch in Levittown, Pa. Testing that market, he sent one salesman into the Philadelphia suburb, was astounded when the man wrote \$90,000 worth of orders in a single week. HIC spokesmen predict Richheimer will gross \$1 million in Levittown, Pa. this year.

HIC will now set out to create more Richheimers—one at a time if necessary. As HIC sees it, a modernizer like Richheimer can evolve from any of the industry's elements—lumber dealers, plumbing contractors, various kinds of home improvement specialists, builders, kitchen dealers—or even from completely outside the industry (four years ago Richheimer was an air freight salesman with no building experience).

Boost for competition

One curious thing about HIC's new direction is that nobody is more enthusiastic about creating more competition in one-stop remodeling than the pioneer one-stop remodelers themselves. Sears Roebuck, whose general merchandising manager, Fred C. Hecht, is HIC chairman, has boomed its sale of building materials by creating home improvement centers in Sears' 730 stores across the nation. In many, customers can get everything from a small paint brush to financing for a new wing on their house. But Hecht and Sears, like most other one-stop remodelers, figure they would all be better off with a little more competition. Why? It would focus more attention on their new kind of operation. Richheimer himself is contributing some of his time and know-how to HIC's effort, notably how to estimate remodeling costs. A major

hazard in big remodeling jobs has always been the contractor's uncertainty about what he may find behind the wallpaper and plaster. By operating in Levittown where he could easily equip himself with a blueprint of every house, Richheimer has dodged most of this uncertainty—uncertainty which elsewhere means higher markup. HIC may circulate some of Richheimer's estimating data (which fills 40 fat volumes) among its members.

Emphasis of the new drive will be entirely toward "big ticket" (\$1,000-and-up) modernization—items like new bathrooms, kitchens, finished attics and basements, new rooms and wings. HIC has lost interest in maintenance and repair. And its spokesmen say current experience of active dealers indicates at least half of the "big ticket" market now lies in postwar homes.

HIC will shift gears with a modest staff and budget—probably few more than its present four persons in New York and outlays of about \$100,000 a year. "Heavy investment by a small group of major producers has now overcome the substantial 1958 deficit and put the council in the position where less than \$50,000 is needed to round out the 1959 budget," reports HIC.



BEFORE: small rooms, old aura



AFTER: a modern salt box

Model fixup home to spur remodeling gets a tryout

Can model homes give modernization the same kind of boost they give new-house sales?

Fairfield (Conn.) Lumber Co., in cooperation with LIFE magazine, is giving the idea a try. For \$18,000, the lumber company bought a 29-year-old, two-story frame house, badly run down but in a good neighborhood. Realty men figured the house would bring \$27,000 if renovated. LIFE, extending its brand-name promotion tieup, persuaded manufacturers to provide materials at cost, delay billing six to eight months. Subcontractors, viewing the extra business an upsurge in remodeling might bring, agreed to work at cost. So Fairfield Lumber got \$9,000 worth of remodeling for \$7,000. It put the other \$2,000 into advertising.

Besides advertising for visitors, Fairfield invited realty agents to bring in clients who are pondering buying an existing home—to

What rehabilitation can do (and can't do) to uplift people as well as houses

THE HUMAN SIDE OF URBAN RENEWAL. By Martin Millsbaugh and Gurney Breckenfeld. Edited by Miles Colean. Fight-Blight Inc, 32 South St., Baltimore 2, Md. 233 pp. \$3.50

By Jeanne Lowe

Can you take the slum out of people by face-lifting their homes and neighborhood?

Two skilled reporters on urban renewal who investigated at first hand what happened to the residents of six early and widely-publicized rehabilitation areas have come up with an answer that amounts to: "Yes, under certain conditions." Their objective findings, in this highly-readable, pioneering study, shed new light on the propaganda-muddied controversy between fixup enthusiasts and bulldozer fanciers as to the best way to fight urban blight.

Assigned to explore attitude changes produced by neighborhood rehabilitation, the authors dug into a cross-section of programs ranging from Baltimore's rapidly-changing prestige neighborhood, Mount Royal, to the built-that-way slums of New Orleans. The result is not only a description of changing

continued on p 72

Miss Lowe, onetime TIME Researcher and former ACTION staffer, is a free-lance writer who specializes in urban renewal.

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**ILLUSTRATES EXTRA BENEFITS
THROUGH MODERN USES OF WOOD**

Builders will gain much by reviewing the new Blue Book at the yards of their Weyerhaeuser 4-Square Lumber Dealers. This book illustrates and describes the full line of modern Weyerhaeuser 4-Square Lumber and other building products.

Here you will see a broad range of lumber items . . . boards and dimension, end-matched sheathing, finish, attractive siding patterns, beautiful panelings, mouldings, timbers and plywood—avail-

able in a variety of species and grades.

You will also find illustrated material on many new wood specialties that will help you put extra excitement and selling appeal into your building projects.

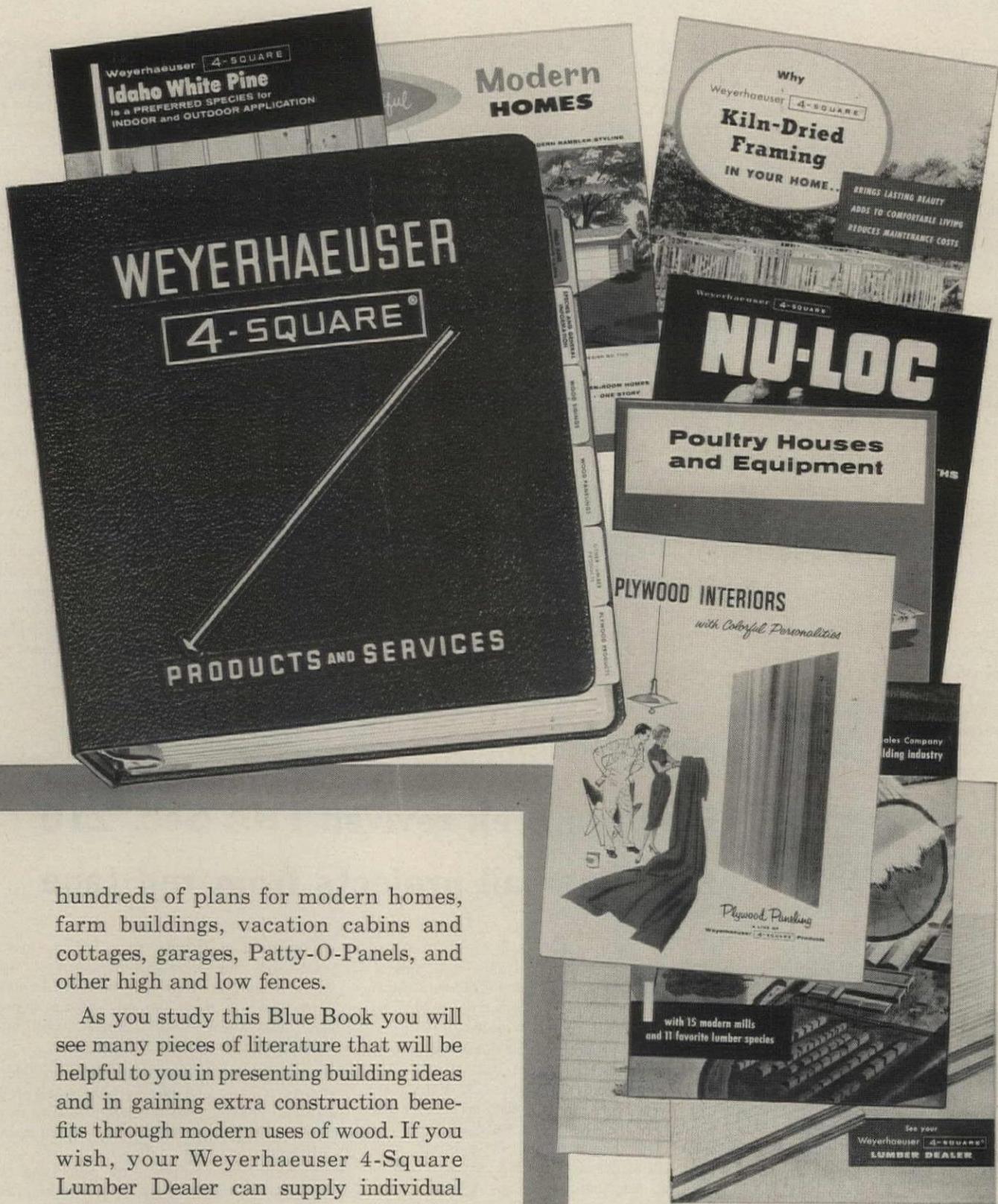
There is a line of Nu-Loc products, a new method of manufacturing lumber in preferred lengths and widths . . . as well as Nu-Wall and Loc-Wall paneling, treated water-repellent siding, Lock-Deck and packaged stair treads.

The building design section features

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hundreds of plans for modern homes, farm buildings, vacation cabins and cottages, garages, Patty-O-Panels, and other high and low fences.

As you study this Blue Book you will see many pieces of literature that will be helpful to you in presenting building ideas and in gaining extra construction benefits through modern uses of wood. If you wish, your Weyerhaeuser 4-Square Lumber Dealer can supply individual pieces of this literature for your use.

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LUMBER AND BUILDING PRODUCTS

Where rehabilitation works, a broad spectrum of other things go with it

continued from p 69

attitudes in a variety of rehabilitation programs. It is also an analysis of their relationship to the successes and failures of those programs. The bulk of research was done in 1955, before application of the broad-gauge renewal approach of the 1954 Housing Act. But journalists Breckenfeld and Millspaugh have included later events where they were significant, and their earlier findings are still pertinent.

The co-authors of this report, which was financed by the Fund for Adult Education, are well versed in the complexities of renewal. Martin Millspaugh's distinguished coverage of the emerging Baltimore program as a city hall reporter for the *Sun* brought him appointment as assistant commissioner for program planning of the Urban Renewal Administration last year. Ex-newspaperman Gurney Breckenfeld has written and edited thousands of analytical words on local and national urban renewal progress over the past seven years as *HOUSE & HOME* news editor. Miles Colean, who edited their joint product, is a nationally recognized housing economist who developed some of our basic thinking on urban renewal.

How attitudes changed

While the terms of their assignment required the authors to search out changes wrought in people by rehabilitation, their laboratory was, they admit, ill-equipped to reveal the whole answer. Their accounts note many heartening changes—ranging from new pride and self-respect for people who had indoor plumbing for the first time in their lives, to new sociability for lifelong neighbors whose living rooms were at last fit for company, and a sense of self-reliance in men and women who had learned how to deal with elementary housing problems. And, most promising for the long haul, they note distinct changes in the attitudes and aspirations of the children.

But the temporary and limited nature of the changes in general, they concluded, underscores the futility of using law enforcement alone to upgrade neighborhoods which house the lowest socio-economic slice of urban society and are in the mainstream of the relentless flow of low-income rural minority families to big cities.

The authors make their most valuable contribution in pointing out what else is needed to rehabilitate both slum dwellings and dwellers.

Their detailed documentation of the Pilot Area experiment in Baltimore highlights the running theme of the book, and perhaps its most important lesson: "the interdependency of housing with every other aspect of urban life."

Why one effort clicked

Significantly, the most successful rehabilitation drive reported—Chicago's Back of the Yards—took place in a deteriorated community uniquely removed from ethnic change and held together by strong religious ties. Further, this housing improvement program was only launched after a muscular community organization had been in existence for 16 years and tackled a host of non-housing problems which beset its blue-collar population. The nearest thing to failure was New Orleans' effort to impose rehabilitation from

city hall. There, tenants' appreciation for better living conditions was dampened by skyrocketing rents for fixed-up units; moreover, the city's failure to provide parallel public improvements led to disillusionment.

In their last chapter, on "The Lessons Learned," the authors—although frankly convinced that a workable renewal program must lean heavily on rehabilitation for success—expose the soft underbelly of rehabilitation. "Nowhere," they say, "did a city or neighborhood remove the causes of blight."

Why? The answers are sobering considerations—and constructive guides—to any city, neighborhood group or property owner planning to spend time and money on rehabilitation efforts:

- *Slums are still very profitable.* Our present system of property tax laws and assessing practices gives landlord "a built-in incentive to perpetuate the slums." Even in Baltimore, with its housing court, stiff fines and public exposure, regeneration of slum landlords were still rare enough to be newsworthy.

- *A low level of education, income and aspirations, plus the host of social problems which they face, hinder most slum dwellers.* "A general upgrading in the educational level is necessary before any but the most elementary attitude changes can be expected." This was notable in Coconut Grove, Fla. where physical improvements were largely

the result of the 16-hour-a-day efforts of one crusading civic leader, and had little effect on the bulk of residents "too far sunk in ignorance, stupidity, poverty and lack of education."

- *Limited urban housing available for Negroes means an inevitable "tip" point for integrated neighborhoods.* In Hyde Park-Kenwood, success practically hinged on a crusade for inter-racial living in a middle-income community. But a continuous flood of Negro migrants into the area's already overcrowded housing has cast grave doubts on the promise of the new publicly-aided urban renewal program. Mount Royal's success may well be based on an overt middle-class covenant between white and Negro leaders to limit the number of non-white families buying into the neighborhood.

- *The upward push of potential neighborhood leaders takes them out of sliding neighborhoods.* "Every family rehabilitated out of the slum is replaced by a family of newcomers whose education in urban living must be started from scratch."

By vividly documenting what rehabilitation can and cannot accomplish in changing both people and buildings. "The Human Side of Urban Renewal" argues convincingly for a many-pronged approach to renewal, ranging from education and social work to code enforcement and actual rebuilding.

RENTAL HOUSING:

Builders seek revived FHA Sec. 210 to free small projects from red tape

FHA's main rental housing program, Sec 207, is so beset with red tape and federal controls that builders and FHA rental staff men agree a simpler program is needed to encourage small rental projects.

They are proposing that Congress revive the long defunct FHA Sec 210. It is similar to 207, but avoids 207's iron-clad FHA control over rents and profits because FHA would not be the sole owner of preferred stock. The theory behind these looser controls is that the risk to FHA is much less in insuring, say, ten projects for \$200,000 each than in insuring a single big project for \$2 million. So far, proposals to revive Sec 210 have not cleared the Budget Bureau for presentation to Congress.

A rental housing conference at the Natl Housing Center in Washington, where the need for Sec 210 was discussed, also heard these complaints about FHA rental operations:

- A new requirement, imposed last fall, that builders take out a surety bond to guarantee completion of rental projects will nudge builders out of 207 and 220, predicts Builder George Rabinor of Long Island. Philadelphia's Harry Madway says the \$550,000 cash deposit requirement for \$7 million surety on a 220 project "almost sank the job."

- FHA's insistence that rental operators pile

up replacement reserves for 12 years to replace parts that wear out like refrigerators, stoves, heating, is excessive. Builders complain FHA won't let them tap this money to prevent foreclosure if the project runs into vacancy troubles.

- Impact of taxation, says Lawyer Herb Colton, is more and more driving rental property into conventional financing because rigid FHA controls prevent investors from using customary tax relief methods.

"I hear little complaint on processing [of 207s] now, except for the time it takes," reports Colton, who is one of the nation's foremost authorities on FHA rental building. The FHA charter, tightened up so much after the 1954 windfall scandals builders considered it useless, has gradually been relaxed until it is now "largely in good shape," he says. And room count rules, ridiculous as they are (see p 237), are so well understood by most large operators that they present little problem. "It's the operating features—the rigidities—that pinch," he explains.

Asst FHA Commissioner Beverley Mason defends today's rental programs as a "comfortable middle ground" between "extremes" in the past: 1) lax controls which led to much mediocre design in FHA rental projects and 2) controls so strict almost nobody used FHA.

NEWS continued on p 74

A SUCCESSFUL man once said, "Give me people who are discontent with things as they are. These are the ones who forge ahead by reaching out for tomorrow."

At National Gypsum Company we try to be such people. First by looking hard at our products and services. Then by asking, "How can it be done better?"

This is *planned* discontent. It is born of an honest belief that men with their eyes to the future can always stay—a step ahead of tomorrow.

The following pages show what we mean.



a step ahead of tomorrow

ZONING:

Trend of court decisions indicates big-lot ordinances legal in 33 states

Are builders doomed to lose their legal struggles against suburbs that freeze out moderate-priced homes by adopting big-lot zoning ordinances?

Or will pressures of the nation's exploding population lead state legislatures or metropolitan authorities to prohibit localities from imposing such restrictions?

Two Villanova professors argue these points in a book just issued by Villanova's Communities Research Institute Project,* a study group set up with a \$13,000 grant from Philadelphia homebuilders. The philosophical probing grew out of the celebrated Easttown zoning case (*June '58, News*) in which the Pennsylvania Supreme Court, reversing itself, held 4-3 that it should not substitute its judgment for that of local authorities, thus upheld a one-acre lot restriction that balked a builder's plans.

Rule of habit?

Attorney D. Barry Gibbons, assistant director of the Communities Research Institute Project, comments that the Pennsylvania court is simply following the lead of most state appellate courts in the US.

A search of legal records shows, he says, that courts in only six states seem inclined to overrule minimum lot zoning while those in at least 33 more tend to sustain them. His findings:

- The specific problem of minimum lot area control has been considered by appellate courts in 12 states. In 11 the challenged regulations have been upheld: California, Connecticut, Florida, Maryland, Massachusetts, Illinois, Missouri, Nebraska, New Jersey, New York and Texas.

*ZONING FOR MINIMUM LOT AREA. Communities Research Institute Project, School of Law, Villanova, Pa. 76 pp. \$3.50.

- Only Michigan has consistently sustained attacks on minimum lot zoning. The basis of judgment has been reasonableness of the ordinance. The landowner must prove only that the ordinance has an unreasonable effect on his property—not that its whole purpose is unreasonable. The state of Washington seems to have adopted a similar view but there have been too few cases to draw a firm conclusion.

- Twenty-two other states whose courts have shown a liberal attitude like the 11 pacesetters can be expected to affirm minimum lot zoning. They are: Alabama, Arizona, Arkansas, Colorado, Delaware, Iowa, Kansas, Kentucky, Louisiana, Maine, Minnesota, Mississippi, North Dakota, Ohio, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Wisconsin and West Virginia.

- Courts of four states—notably states not subject to population pressures—have shown a conservative attitude toward private property. These four—Georgia, Oklahoma, South Dakota and Wyoming—dislike any restrictions on property.

- Courts in Montana, New Mexico, Vermont, North Carolina, Nevada, New Hampshire, Idaho and Indiana have reported no pertinent cases. Their future course is in doubt.

Concludes Gibbons: the trend toward a more liberal interpretation of zoning power is accompanied by an increased reluctance by the courts to pass upon legislative wisdom

of the ordinance. Most courts . . . look only to see whether the person attacking the ordinance can show it to be arbitrary or unreasonable as to its classification and purpose."

On the other hand . . .

Professor John G. Stephenson III is convinced suburbs will not long have the right to limit space standards within their own borders and thus indirectly create overcrowding elsewhere in the metropolitan area.

Pressure is sure to build up for a change either by a reversal of the court's decision in cases like Easttown or by a political decision transferring zoning to a wider authority to make decisions crossing municipal lines, says Stephenson.

Acre zoning is still open to legal question in Pennsylvania despite the Easttown case he contends, "The court has simply said that this is a question which should be resolved in the first place by the General Assembly, which should also determine whether individual municipalities are competent to deal with zoning problems which now transcend county lines."

Zoning procedures, he suggests, should be limited to barring intrusions of uses which are public nuisances. The logical answer for persons who want to set aesthetic standards for an area is to do it privately. ". . . if the members of a suburban community desire, one-, two- or even 10-acre minimum lots, they may enforce their desire through the cooperative acquisition of land and the control of its use through leasing or restrictive covenants," he says.

The Easttown case involved a suit of the Bilbar Construction Co, challenging the acre zoning minimum of Easttown twp, a fashionable Main Line community. Bilbar wanted a 50-acre tract it owned on the outermost edge of the township zoned for half-acres but was refused.

The lower court supported the ordinance. But the state Supreme Court reversed this decision in July 1957, by a 7-0 vote only to reverse itself on rehearing in May, '58.

MATERIALS & PRICES:

Lumber, roofing lead new price surge

Prices of building materials and products ran true to form for inflated times:

- Lumber continued a sharp and steady rise. Green fir dimension (std & better) reached its highest level in three years. This key grade went up \$2.76 in one two-week period alone, for a \$14.32 rise in the past 12 months to \$70 mbf.

- Asphalt roofing prices jumped 8% east of the Rockies for major producers. This wiped out a price cut in February 1958, put prices back at about 1957 levels.

- Copper from custom smelters (who refine for mines that do not have their own smelting facilities) went up from 31 to 31½¢/lb, with major producers and fabricators expected to show parallel increases. This may boost the price of copper tubing.

- Carpet prices began climbing, touched off

by a 3½% increase across the board by James Lees & Sons, one of the biggest producers. Alexander Smith followed (running lines, 3%, contract prices, 2.5%) as did Bigelow (selected tufted grades, 4.8%; most woven carpets and all contract grades, 2.4%).

- A lonely exception: Chrysler Airtemp cut prices on its '59 line by varying amounts.

Freight car shortage looms

Pacific Northwest shippers are afraid that the "granddaddy of all boxcar shortages" is shaping up for this summer. Double-door cars are already in short supply, two months before the normal shortage season starts. Main reason, cry Western railroads, is that Eastern lines keep incoming Western cars (worth \$10,000) to use at the cheap \$2.75-a-day rate instead of repairing or replacing their own broken-down rolling stock. Result:

a little extra lift to already climbing lumber and plywood prices.

Distribution costs probed

Has efficiency in marketing and distribution kept pace with increases in production efficiency?

The Producers Council, afraid the answer is no, has set up a distribution study committee to look into the matter. Robert W. Lear of American Standard is chairman. Two members of the faculty at the Wharton School of Finance & Commerce have been retained to analyze the facts.

Burying the wooden hatchet

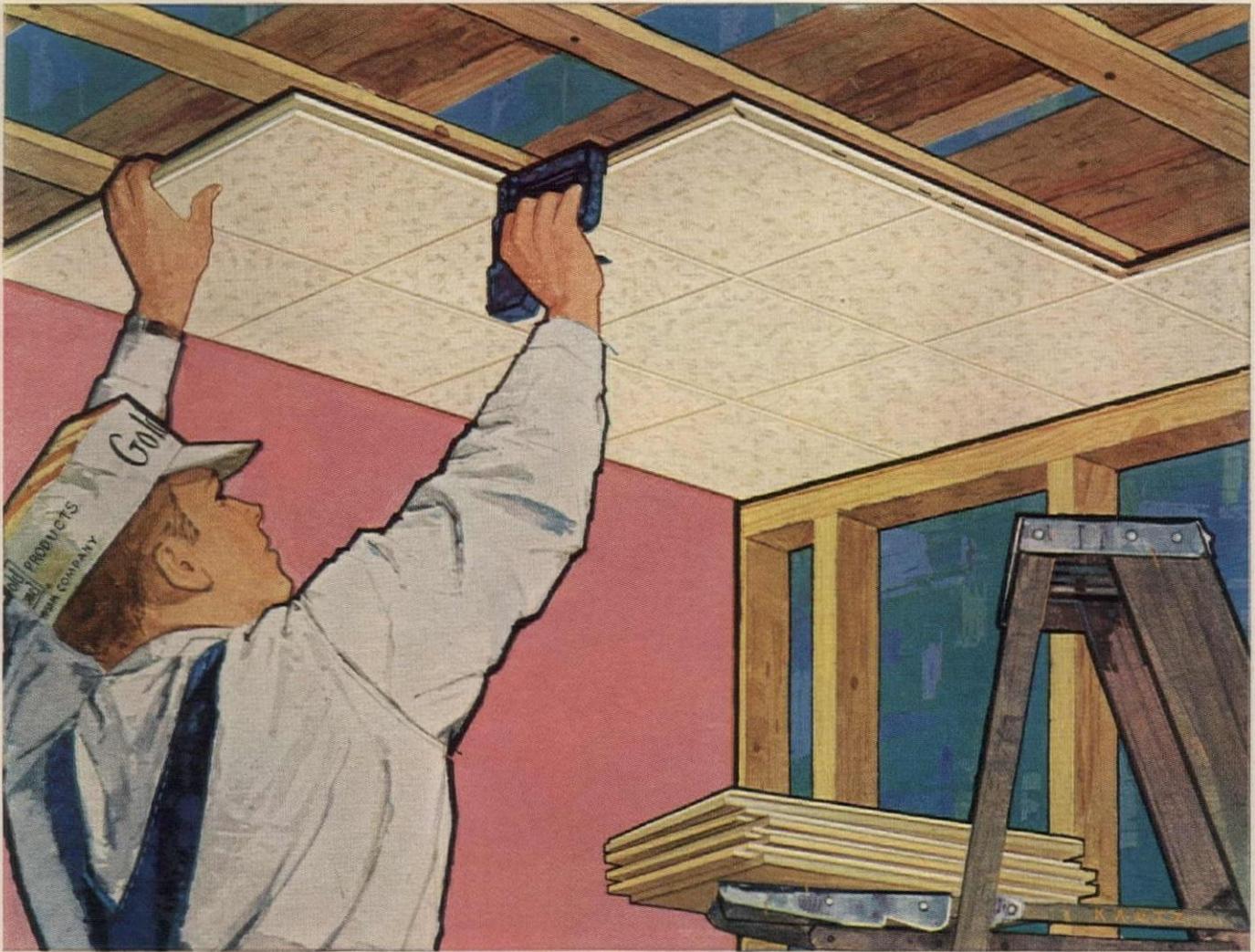
Venturing deep into Southern Pine territory, a Western Fir man called for an end to the feud between lumber's two big regions, NLMA President Robert M. Ingram, head of an Aberdeen, Wash. firm, told the Alabama

continued on p 76

Beautiful new SILENTEX absorbs up to 80% of noise!

New exclusive Gold Bond Silentex is the best-looking ceiling tile in the low-price field. Its beautiful texture is brushed, not cut or impressed, for a softer, more pleasing effect. You'll find it will help you sell new homes and remodeling jobs faster. New $\frac{3}{8}$ " Silentex is an acoustical as well as decorative tile. Twenty-five percent thicker than ordinary tiles, it absorbs up to 80% of all noise striking it. Ideal for remodeling children's rooms and game rooms. Like other Gold Bond Decor Tiles, Silentex has tongue-and-groove edges, and goes up easily with either staples or Gold Bond Ceiling Tile Adhesive. For complete information on Silentex, and the full line of Gold Bond® Decor Tiles, write Dept. HH-493.

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a step **ahead** of tomorrow

How inflation menaces private home building

continued from p 60

mortgage finance director of the American Bankers Assn. Inflation "encourages land speculation," he notes, with the result that "real estate values in many areas have risen much faster than can be justified by actual economic development. Housing costs thereby are kept unnecessarily high . . . Perhaps the solution lies in taxation. Henry George thought so . . . If private enterprise fails to meet the growing demand for housing in the '60's, more direct government intervention becomes inevitable. If housing costs continue to rise, the outcome will be the same."

• "We are drifting into a situation in which we shall have no mortgage market at all," cries President Walter C. Nelson of the Mortgage Bankers Assn. "Inflationary forces are already at work in financial markets, if not in the economy generally. We are dealing in a situation where a strong conviction has as much influence as a fact. Low interest rates can be bought at too high a price. The price is too high if low interest rates are the result of substituting bank credit for true savings. We have seen what that could produce in inflated building costs, lax lending practices and ultimately, narrowed markets."

• The nation will either achieve the economic growth it seeks without inflation or it will not achieve growth at all, prophesies Raymond J. Saulnier, chairman of the White House Council of Economic Advisors. Reason: economic growth now depends mainly on how much capital is accumulated to pour into plant expansion. High growth depends on a high level of savings. And a high level of savings requires "a high degree of confidence in the stability of the value of money."

Did Toronto developers win battle, lose war?

Homebuilding in Toronto Twp has been halted and the freeze may be extended to other areas—as a paradoxical result of successful lobbying by developers.

Developers have been insisting that major services in new developments—sewage disposal, water works and main roads—should be financed on an area basis with tax revenue. They protested when a bill was introduced in the Ontario legislature to legalize agreements between towns and developers for the latter to provide all services. The bill was sponsored by local officials because legality of such agreements is under challenge in court.

Builders and developers had enough influence to get the bill killed. So Toronto Twp Reeve Mary Fix promptly ordered all homebuilding halted. And Chairman Fred Gardiner of Toronto's Metro threatened to declare any plans builders submit "premature" for lack of adequate facilities.

Fumed Gardiner: "They've won a pyrrhic victory. They've won the war but they've cut their own throats."

No cut in insurance fee

Canada's cautious attitude towards mortgage finance* shows up again in Ottawa's decision not to cut the 2% insurance premium on NHA loans—even though there have been

*Other examples: maximum NHA loan is \$12,800; minimum down payment is 10%, and that only on homes costing up to \$8,000; there is no NHA financing of used homes.

only ten foreclosure claims in four years, and at no net loss to the insurance fund.

Industry pressure for a cut has been growing since the Senate banking committee last summer asked Central Mortgage & Housing Corp to study the question. Now Works Minister Howard Green has announced: "Until there has been further experience, it would be unwise to make any change."

Even now, Canadian homebuyers pay less than US buyers who use FHA. Canadians pay a flat 2% insurance fee at closing. It is added to the mortgage.

The premium is paid into a mortgage insurance fund which reached \$5.7 million at the end of 1958. But ever-cautious Minister Green points out: "There are over \$3 billion of potential risks against this amount."

Dealers become builders

Retail lumber dealers are moving into homebuilding in a big way across Canada.

They find it's the only way to bolster slumping materials sales. Builders are bypassing them, often with the connivance of the same wholesalers who supply the dealers.

• Ontario Retail Lumber Dealers Assn polled its members, found 45% do some kind of construction (including fix-up, farm and industrial building), 25% have full-time building crews or a separate construction department, 22% build homes.

• Soo Mill & Lumber Co of Sault Ste Marie, which got into homebuilding via prefab garages five years ago, last year sold 260 new homes—all as prefab packages.

• Ball Planning Mill of Barrie, Ont started with the Precision Built prefab system four years ago. In 1958, the company sold 50 homes. Materials sales have risen 30%.

G. E. Kidder-Smith



Threat to a lonely but historic old house sets off a world-wide protest

Since World War II, the boxy, reinforced concrete villa pictured above, "Les Heures Claires" has stood lonely and uninhabited, quietly decaying near the town of Poissy, 18 mi from Paris. Sacked by the Germans in World War II, and since stripped of its radiators and doorframes, its windows broken and ironwork rusting, the structure has been used variously as a hay barn and produce storehouse.

Accordingly, when Poissy, which has grown from 13,000 to 23,000 since 1950, cast about for a new school site, city fathers passed over neighboring farms, appropriated the villa and 18 surrounding acres. But when news seeped out that the villa would be demolished, protests poured in from architects around the world. Reason: for all its dilapidation, the villa is a prized landmark of modern

architecture. An early (1928) work of world-famed Le Corbusier, it ranks with Chicago's Robie House, a 1909 Frank Lloyd Wright creation that last year faced (and was saved from) a similar fate. Like Robie House, "Les Heures Claires" is a pioneering work in which the architect, given a free hand, established ideas that profoundly influenced later designers. Among them: gently inclined ramp to second floor and roof, contrasting colors on opposing walls, glass for both windows and walls, living and dining rooms merged into one huge room.

Since the war, both the cost (about \$80,000) of restoring the villa and the danger that, if restored, it would be requisitioned for housing by booming Poissy, have discouraged owner Roger Savoye from repairing it. But when the city started expropriation proceed-

ings, France's Cercle L'Etudes Architecturales protested, first to the government's director of architecture, then direct to Minister of Culture Andre Malraux. Said a spokesman: "Whether one likes it or not, the Villa Savoye is a part of our national patrimony . . . if it were a small chateau of the 18th Century, they wouldn't destroy it. Yet there are hundreds of chateaux, and only one Villa Savoye."

Minister Malraux, inundated by letters and telegrams from America urging action, finally called for a full report on the villa, said there would be no immediate demolition, indicated the structure would almost certainly be spared. But it cannot be declared a historic monument. Under French law, crusty old Corbu, who is very much alive, must be dead before his work can be so honored.

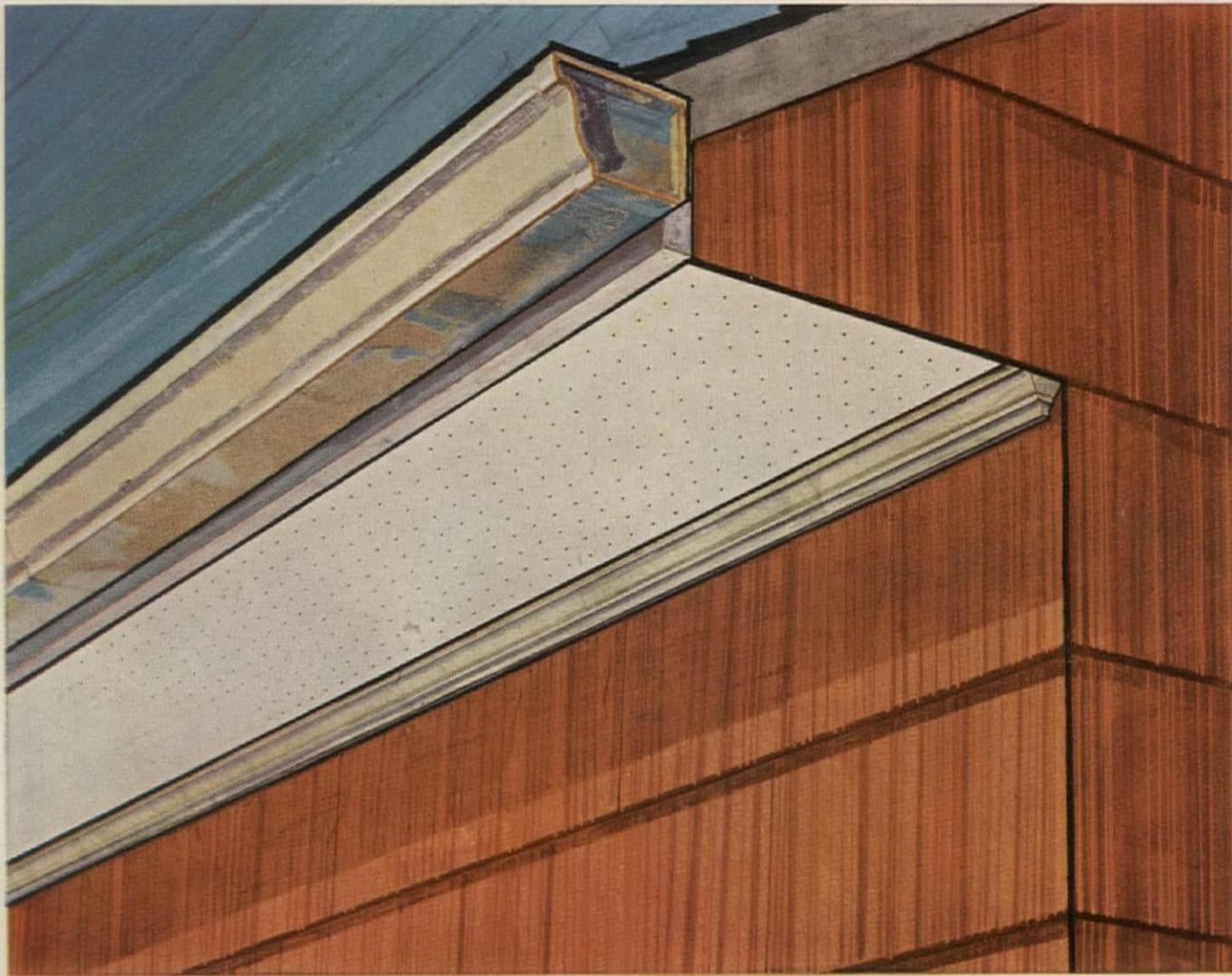
NEWS continued on p 83

New perforated soffit gives built-in ventilation

Gold Bond's great new perforated soffit material ventilates and keeps bugs out *without* using wire mesh. The tiny holes (approximately $3/32$ " diameter on $1/2$ " centers) are equivalent to FHA 8-mesh screen opening requirements.

Gold Bond Asbestos-Cement is the perfect soffit material. It won't burn or rot, and it's Permanized to reduce warping and shrinkage. Uniform white, it never *needs* painting, but comes pre-primed if you wish to paint. Available in 24" x 48" soffit sizes. See your Gold Bond salesman today for complete details about Gold Bond® Perforated Asbestos Soffits. Or write Dept. HH-494.

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"Telephone planning helped us sell over 2500 homes!"

—says **Robert C. Gordon, Ashdon Corporation,**
San Diego, California

"Planning for the future telephone needs of our home buyers has always made good sense to us," says Bob Gordon. "In fact, we've offered concealed telephone wiring in every one of the more than 2500 homes we've built since 1949.

"It makes sense to prospects, too. They like the idea of telephone wiring neatly concealed inside the walls. And they like having outlets throughout the house, so they can expand their phone service as they need to. No doubt about it—it's a built-in 'extra' that really helps us sell our homes."

Mr. Gordon's corporation is currently building Coronado Estates, a community of 85 beautiful homes in the \$24,000 to \$45,000 price range located on the Silver Strand peninsula offshore from San Diego. Each home is telephone planned, and this fact is featured prominently in the builder's local advertising.

Your local Telephone Business Office will gladly help you with telephone planning for your homes. For details on home telephone installations, see Sweet's Light Construction File, 8i/Be. For commercial installations, Sweet's Architectural File, 32a/Be.

BELL TELEPHONE SYSTEM



This is one of the Coronado Estates homes, being built by Ashdon Corporation in the San Diego area.



PEOPLE:

Edwards quits as asst FHA chief

Wendell O. Edwards, FHA's assistant commissioner for operations since August 1957, is stepping down to a post as director of FHA's Puerto Rico office. He succeeds Harold Lockheimer who resigned as of April 3.

Before FHA made the switch, Edwards had submitted his resignation, said he would become a private housing consultant. When the Puerto Rico post opened, he changed his mind.

The wiry, balding and bespectacled former home builder thus clears the decks for new H&H staff FHA Commissioner Julian Zimmerman to appoint a man of his own choice to oversee the agency's 75 farflung field offices.



EDWARDS

One of the few top FHA men with home building experience — he built for 15 years in Detroit—Edwards came to Washington from FHA's Detroit office (he was director since '53) in 1957 to fill a vacancy when Cyrus Sweet was promoted to deputy commissioner replacing Charles E. Sigety (Oct '57, News). In his 20 months on the job, Edwards was repeatedly plagued by too many applications, too little help to process them fast enough, thanks to Congress' penny-pinching.

In changing jobs, Edwards takes only a slight cut in pay. He moves from the bottom of Civil Service grade 17 (\$15,373 a year) to the top of grade 14 (\$12,555). With a 17% override FHA allows in most offshore jobs, he comes out about even at \$14,689.

Another chief lawyer for FHA: Graham McGowan of Indiana

The revolving-door post of FHA general counsel has its sixth incumbent under the Eisenhower administration. Graham W. McGowan, 39, succeeds Lyman Brownfield, 45, who was snatched away after only a month on the job to become HHFA general counsel (Mar, News).

McGowan, a Vermonter by birth but a Hoosier by choice, graduated from Notre Dame in '42, got his law degree there in '46, and after spending two years in the Army Air Corps as a pilot, went back to Northern Indiana as US attorney. From '55 to '57 he lectured in criminal law at Notre Dame. For the past two years he has been special assistant to former Commerce Secretary Sinclair Weeks. He is married, with four children, was sponsored for his new job by Sen Homer Capehart (R, Ind).

STATE OFFICIALS: California's new real estate commissioner is Realtor Wynne A. Savage, 56, of San Bernardino, named by Gov Edmund G. Brown to replace Fred W. Griesinger an appointee of ex-Gov Goodwin Knight, in the \$15,000-a-year post of watchman over the nation's biggest subdividing and homebuilding state. He heads a 185-man staff with offices in six major cities, a budget of \$1.4 million in fiscal '59-'60. Savage licenses and regulates the state's 60,000 real estate salesmen, 59,000 real estate or business opportunity brokers. He also oversees the activ-

ities, fees and charges of mortgage brokers, regulates and licenses persons or firms in the sales and brokerage of minerals, oil and gas or sale and lease of subdivided land.

From 1921 to 1936 Savage worked for the giant Bank of America. Since then, he has had his own real estate business in San Bernardino.

New hat being donned by Joseph P. McMurray, 47, NY state housing commissioner in the Harriman administration and one time executive director of the New York City housing authority: presidency of the city's new two-year Queensborough Community College, at \$16,000 a year.

After a nationwide talent hunt to find a new executive director, Sacramento's Redevelopment Agency discovered their man right in their own back yard: Jerome F. Lipp, the agency's chief land agent. He replaces Robert B. Bradford, who resigned the \$13,500-a-year post to become California's state director of public works. Lipp takes charge of shepherding the West Coast's first urban redevelopment, a \$10.4 million undertaking which includes a tower and garden-apartment project by Roger Stevens and James Scheuer, with a prizewinning design by Wurster, Bernardi & Emmons, Edward L. Barnes, and DeMars & Reay.

Walter Gropius named winner of annual AIA gold medal

Named winner of the 1959 AIA Gold Medal for distinguished service to architecture: sad-faced, much-honored* Walter Gropius, 75, Harvard University professor emeritus and one of the recognized masters of modern architecture.

Berlin-born, Gropius began building a distinguished career as teacher-practitioner when he became the first director (1918-28) of Germany's famed Bauhaus school, where he assembled a profoundly influential group of architects and artists devoted to "solving the creative problems of industrialization." He fled the Nazis in 1934, came to the US three years later and in 1938 became chairman of the department of architecture in Harvard's graduate school of design.



GROPIUS

An early advocate of prefabrication, he nevertheless urged builders to "let the human element be dominant," deplored "dull multiplication of a house type *ad infinitum*," called on architects to recapture their medieval role of "master builders," urged students to broaden their view beyond the building to the landscape and the town.

In '46, Gropius joined with a group of other architects in the "Architects' Collaborative." Since his retirement in '52, has worked

*Including the "Nobel prize of architecture"—the biennial Sao Paulo prize—('53), and the Royal Gold Medal of RIBA ('56); 10 honorary degrees.

as senior partner with his associates there on a variety of projects (among them: US Embassy in Athens; Baghdad University). He is a member of the team designing New York City's 50-story Grand Central City skyscraper.

Nate Manilow takes helm of Natl Housing Center

Nate Manilow, 61, builder of Chicago's famed Park Forest and other big projects and onetime ('54) NAHB first vice president, has been elected chairman of NAHB's National Housing Center. A year ago, Manilow and Associate Philip M.

Klutznik dissolved American Community Builders, the firm which built Park Forest, and Manilow has since spent much time, on doctors' orders, in Florida, where he has Miami building interests. It was ill health that stopped Manilow's accession to the NAHB presidency in 1955, when he was hospitalized for surgery through NAHB convention. Elected co-chairman with Manilow was Builder-Mortgage Broker Thomas P. Coogan, 60, past ('50) NAHB president and former ('56) housing center chairman. Richard D. Hudson, 58, of Montclair, N.J., was elected vice chairman. He is a past chairman of NAHB's research institute.

First move by Chairman Manilow: announcement of a pilot "School of Landscape Design" for home owners; a two-evening program at the housing center which NAHB chapters are invited to imitate in their localities.

BUILDERS: Willard Woodrow of Los Angeles, whose coast-to-coast operations have produced more than 27,000 homes, is winner of the 17th annual "Brand Name Retailer-of-the-year" award in the home builders category. Sponsored by Brand Names Foundation Inc, the award recognizes excellence in using nationally advertised brand names to promote sales. Runners-up: Brock Construction Co, San Diego; Fox & Jacobs Construction Co, Dallas; Fox-Built Homes Inc, Plymouth Meeting, Pa; George Washington Homes Inc, Burlington, Conn. They receive certificates of distinction.

MANUFACTURERS: Following the boss, Sid W. Jagger, 36, URA's assistant commissioner for operations, goes to Reynolds Aluminum Service Corp as executive assistant to ex-HHF Administrator Albert M. Cole, who took over as executive vice president of the Reynolds Metals subsidiary in January.

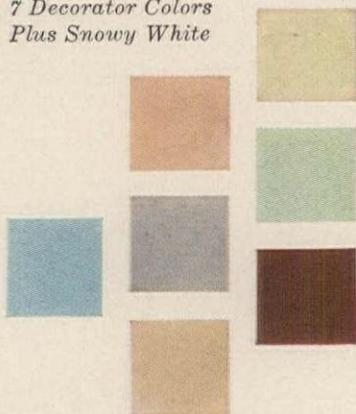
PLANNERS: Walter H. Blucher, 58, one of the nation's top planning experts and former (1934-53) executive director of the American Society of Planning Officials, has resigned as ASPO consultant to become executive director of Southeastern Michigan Metropolitan Study Corp in Detroit. The organization, founded with a Ford Foundation grant, will concentrate finding on government forms most suitable for dealing with metropolitan area problems. Harland Bartholomew, 69, retires

continued on p 90



*Introducing the all-new ELLIS . . . by Eljer . . .
 “right” for the big residential market*

*7 Decorator Colors
 Plus Snowy White*



The *Ellis* is proof that quality reaches from end to end in the Eljer line. While modestly priced, this washdown toilet features improved flushing action and the eye appeal of Dave Chapman's striking new design, including new flat bolt covers to eliminate dirt-trapping projections. And for easy, labor-saving installation, there are but two bolt holes, scientifically balanced for stable mounting.

Letters

continued from p 94

More on trade-in and trade-up

It is refreshing to read your editorial (H&H, Jan). We have, of course, talked about this for many years, but mighty little has been done. It is this kind of editorial that will get results.

At long last some ardent supporters of public housing are realizing that the public housing we have in this country is foreign to our standards. The most negative way to treat low-income families is to put them in barracks with the stigma of substandard housing.

With adequate financing of the trade-in house, these people can acquire decent housing in neighborhoods of their selection. This will stimulate redevelopment and, at the same time, produce a base of continued employment and industrial production that a thriving building industry assures. If all business interests come to understand their stake in this program, it will be given equitable treatment. Your recommendations certainly show the way.

DAVID D. BOHANNON, *realtor*
San Mateo.

The subject of trade-in homes is much more realistic than the average mortgage lender can now conceive. A lender, especially a savings and loan association, can increase its income by setting up a department to handle trade-in financing.

FRANK E. SCHLEGEL, *president*
Norfolk Federal Savings & Loan Assn
Norfolk, Va.

I think your suggestions, particularly those to encourage quality design, should be adopted.

EDWIN B. MORRIS, JR., AIA
asst to the AIA exec director

I heartily agree with your position.

Trade-in financing would be a great help to the industry here and to home-owning families, too. We have watched families move up the ladder in housing as their incomes grew in the past decade. We know this trend could and would be accelerated if there were reasonable trade-in financing such as you described. We are supporting federal legislation to develop such a program, and appreciate the efforts of HOUSE & HOME in this direction.

ELLSWORTH A. MOE, *executive secretary*
Tucson HBA

New look at wood

Your article on Wood (H&H, Oct '58) is so excellent that we wish to use it in a course on wood technology and design. Material of this newness is hard to find.

MARVIN F. POYZER, *EdD,*
assoc prof & head
Department of industrial arts
University of North Dakota
Grand Forks, N.D.

Studies in better planning

I enjoyed your article (H&H, Feb) concerning better planning through architect-builder cooperation. You are absolutely right, and your plans are very good.

THOMAS W. MCCALL
Insurance
Camp Hill, Pa.

Your criticism of various builder plans helps lenders avoid pitfalls in lending on ill-arranged houses.

SID A. LOWERY, JR., *sec-treas*
Brownfield (Tex.) Savings & Loan Assn



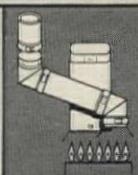
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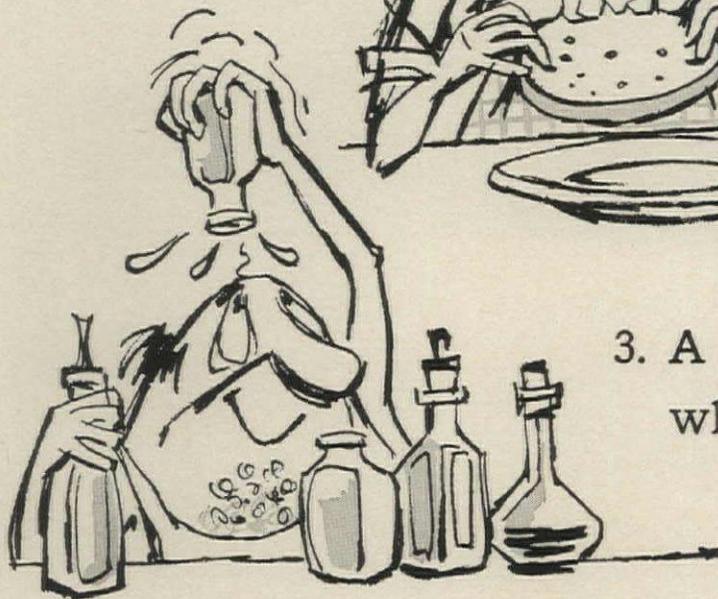


Damp'er (dămp'ēr)

1. One who spreads gloom ...



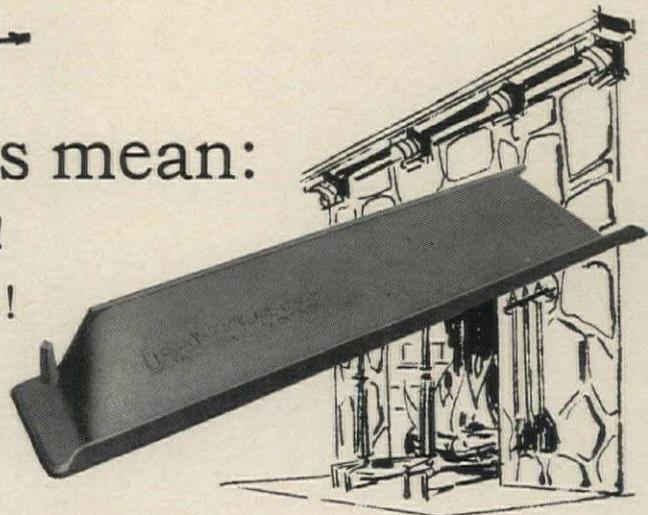
2. An Australian flat cake ...



3. A person who dampens ...

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1. Successful fireplaces!
2. Happy home owners!
3. Easier sales!



Yes, Donley is the word for dampers ... quality dampers designed for easier installation, more profit and fewer call-backs. Donley fireplaces have real sales appeal for 8 out of 10 home buyers because they are pre-sold through national advertising. Your customers already know Donley's reputation for convenient smoke-free fireplaces. So, the next time you buy dampers, ask your dealer for a Donley Damper!

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WESTERN PINE ASSOCIATION, Yeon Building, Portland 4, Oregon.

This advertisement appears in
American Home, March
Better Homes & Gardens, April
Living for Young Homemakers, April

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A new book tells you how.

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Western Pine Association, Dept. D

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APRIL 1959

House & Home

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STORY OF THE MONTH

108 *Pacific style is making news from coast to coast*

DESIGN

114 *Two houses in the Japanese tradition*
129 *Plan garden apartments for people, not just for tenants*
140 *An architect tells why he designs the way he does*

NEW HOUSES

157 *Three NAHB award houses by top-flight architects*

MARKETS

122 *Today's big retirement market is right on your own doorstep*
126 *Here are ABCs of rental and co-op housing*

BUILDER STORY

152 *Modern management methods pay off for a 14-house builder*

TECHNOLOGY

142 *21 cost-cutting details you can use*
150 *New research shows three big savings from adequate insulation*

NEW WAYS TO BUILD BETTER

165 *Showcase*
183 *Technology: a revolutionary experiment in framing houses*
187 *What the leaders are doing*
204 *New tools for big on-site jobs*
218 *Other new products*
238 *Reviews of new technical literature*

NEWS

42 *HHFA takes formal stand against compulsory racial integration*
43 *Closeup: Sen Joe Clark, liberals' new housing spokesman*
50 *Mortgage market marks time as lenders await VA rate boost*
39 *Index to other News reports*

DEPARTMENTS

94 *Letters to the editor*
246 *Advertising index*



COVER:
Pacifica in St. Louis.
Burton Duenke, builder.
Photo by Hutchinson.



THIS DISPLAY HOUSE introduced Pacific style to the St Louis area, attracted great attention. Builder: Burton Duenke.

The Pacific Style

is making news from coast to coast

Houses like the ones shown on these pages are drawing interest—and drawing crowds—everywhere.

From California, Builder Austin Sturtevant (of Newport Beach) reports: "Pacific style is big news out here. People like it and are ready to buy it. I'm dropping my Colonial design this year and replacing it with Pacific-style houses" [for an example, see *p 112*].

From the Midwest, Gerry Mefferd (of Modular Homes, St Louis) reports: "Pacific style is very definitely a design trend. It may be a while catching on in this area, but it is coming. And it is already a big attention-getter" [as you'll see on the next page].

From the East, Realtor Eugene DiPaola (Bergen County, N.J.) reports: "I'll do over a million dollars of business this quarter, and over half will be Pacific style. No question about it, we're going to see a lot more of these houses. I've talked with builders and I know they are going to build them in several developments in this part of the country."

Experts predict that you will see a lot more Pacific-style houses everywhere

"I think Pacific style has a terrific future," says Architect Hank York, who designs for builders all over the country. "People like it because it is a fresh blend of modern and traditional design. I like it because it can be a happy blend of good design and sensible construction. It promotes open planning and good indoor-outdoor relationships. And using 4'x8' components you get a Pacific look naturally."

"Pacific style is sure to spread everywhere in the country," says Dave Slipher, president of Webb & Knapp Communities (which builds now in Texas and Louisiana, but has nationwide interests). "This is part of the usual pattern in residential design—a new trend starts in California, and in a few years you see it everywhere. Pacific style will show up mostly in details; but some of these—like the overhanging roof, sliding screens, and use of natural materials—are good and will stay around long after Pacific style is forgotten."

For full details on a Pacific style house that draws crowds, turn the page

R. A. Smith



"Pacifica" on Long Island

Gelberg-Victor



"Cantonese" in Miami



"Pacific Style" in Palo Alto

Ernest Braun



"Pacifica" in San Diego

R. A. Smith

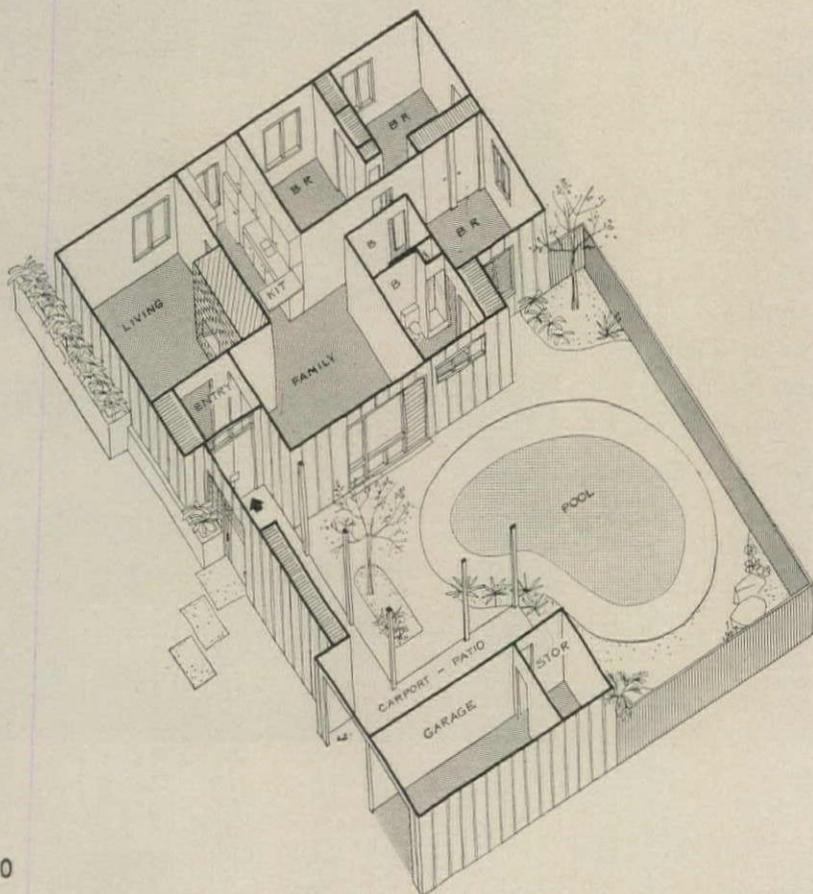


"Exotica" in New Jersey



PRIVATE COURT can be reached from "front door" (left) in covered walkway or from family room. Siding is rough-sawn Western red cedar.

Over 10,000 people came to see this Pacific-style house



That is the report from St Louis Builder Burton Duenke.

Even before it was finished, people were flocking out to see it. And one family bought it—before it was finished.

Duenke wasn't entirely happy about selling it, because he saw how powerful a magnet the house had become, wanted to capitalize on the crowds to sell other houses in his development.

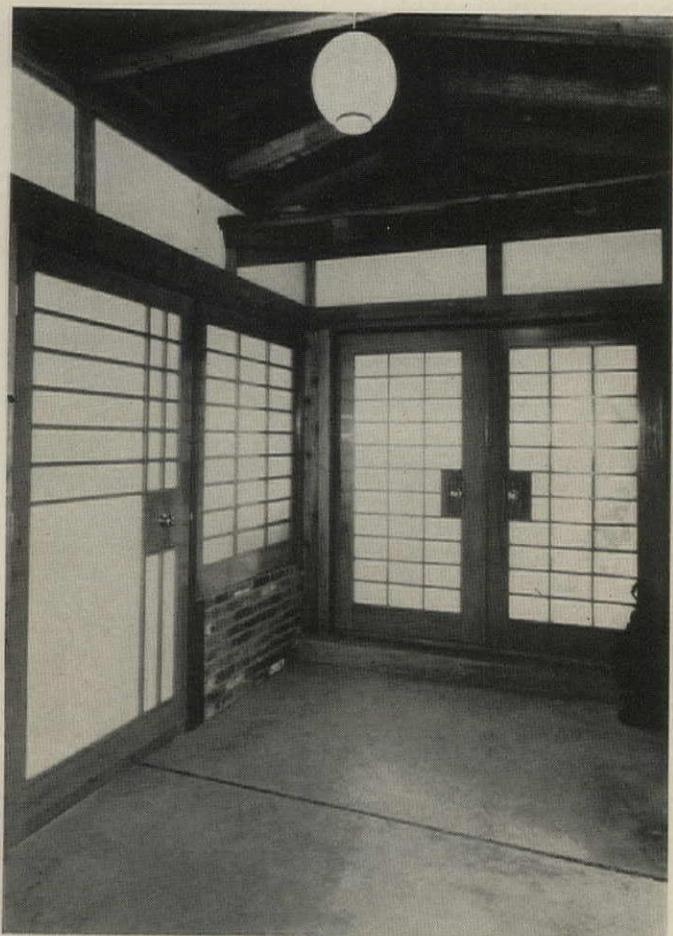
What caught the eye of the lookers? From the outside: the strong Pacific flavor of the roof, the rustic materials, and the detailing. Inside: the private court which is formed by the long and windowless front wall, the main part of the house, and the garage (see plan at left). A frequent comment: "It is like stepping into another world."

Builder Duenke plans to prefabricate the house, sell it through dealers of his Modular Homes organization.

Price was \$39,500, including swimming pool (\$2,500) and landscaping.

It is shown in color on the previous page and the cover.

CUTAWAY (left) shows how windowless front wall 78' long connects garage and house, encloses the private court and swimming pool. Carport half of garage can be used as a porch.



ENTRY is under walkway roof. Door to street is at left, double doors lead into house. Doors are wood, with white plastic glazing.



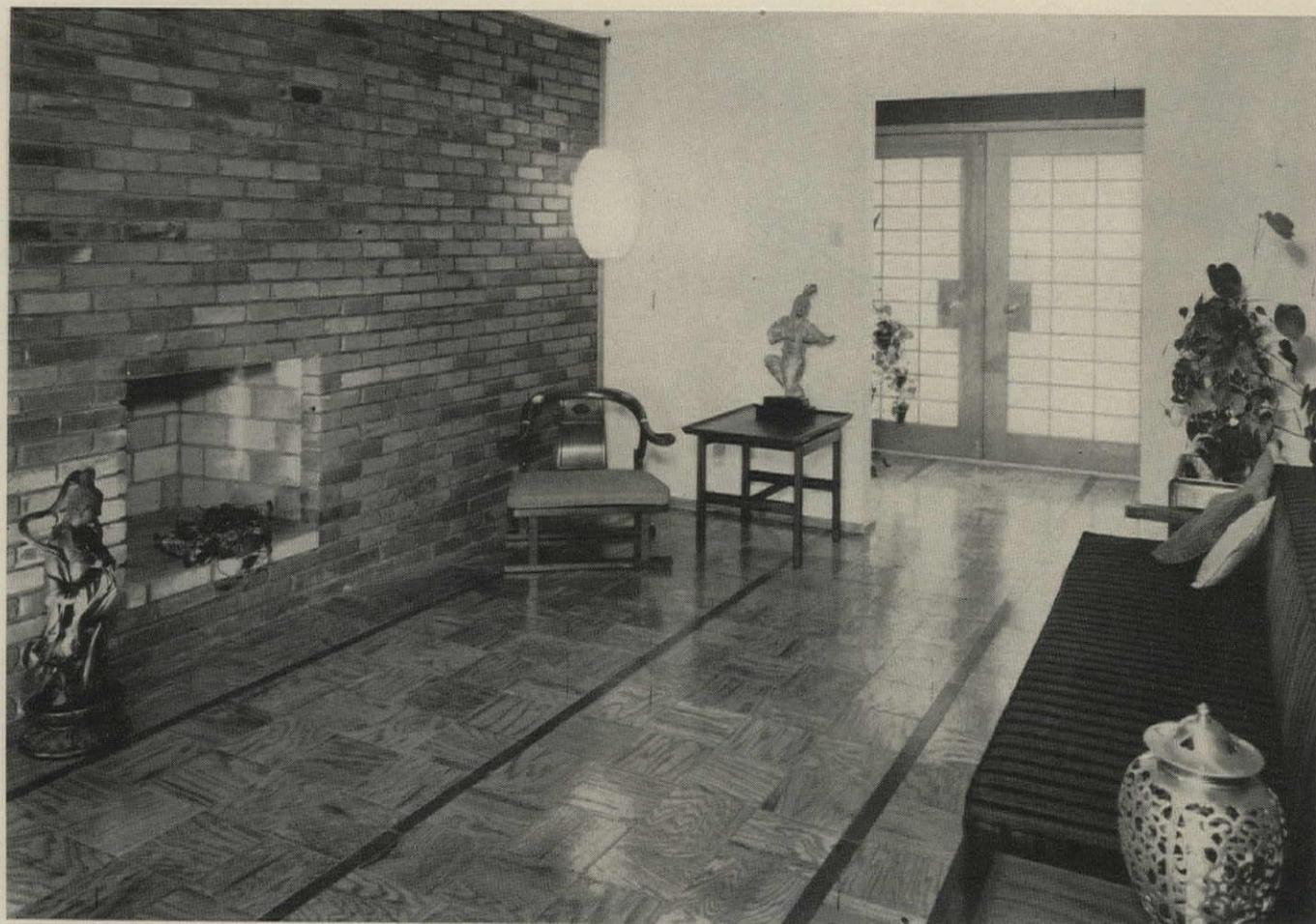
FAMILY ROOM opens on private court (note pool and privacy fence in background). Through door at left is huge (9'x11') master bath.

BUILDER: *Burton W. Duenke*
 DESIGNER: *Robert Kriekhaus*
 LOCATION: *St Louis Co, Mo.*



KITCHEN, off family room, features a built-in barbeque backed against living-room fireplace.

Photos: Hutchinson Photographers



LIVING ROOM is 16'x21', makes extensive use of natural materials. Dark wood strip set into parquet floor echoes Japanese mat arrangement.

To see a fast-selling Pacific-style house, turn the page



FROM STREET, this California house gets a strong Pacific flavor from its roof. Entrance is set back under deep overhang.

This Pacific-style model sold out before one house was built

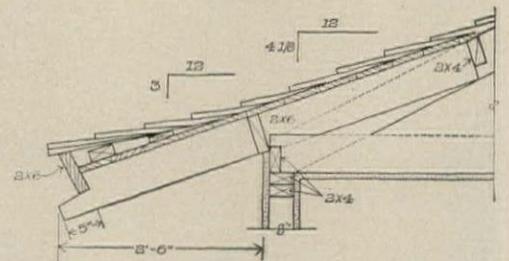
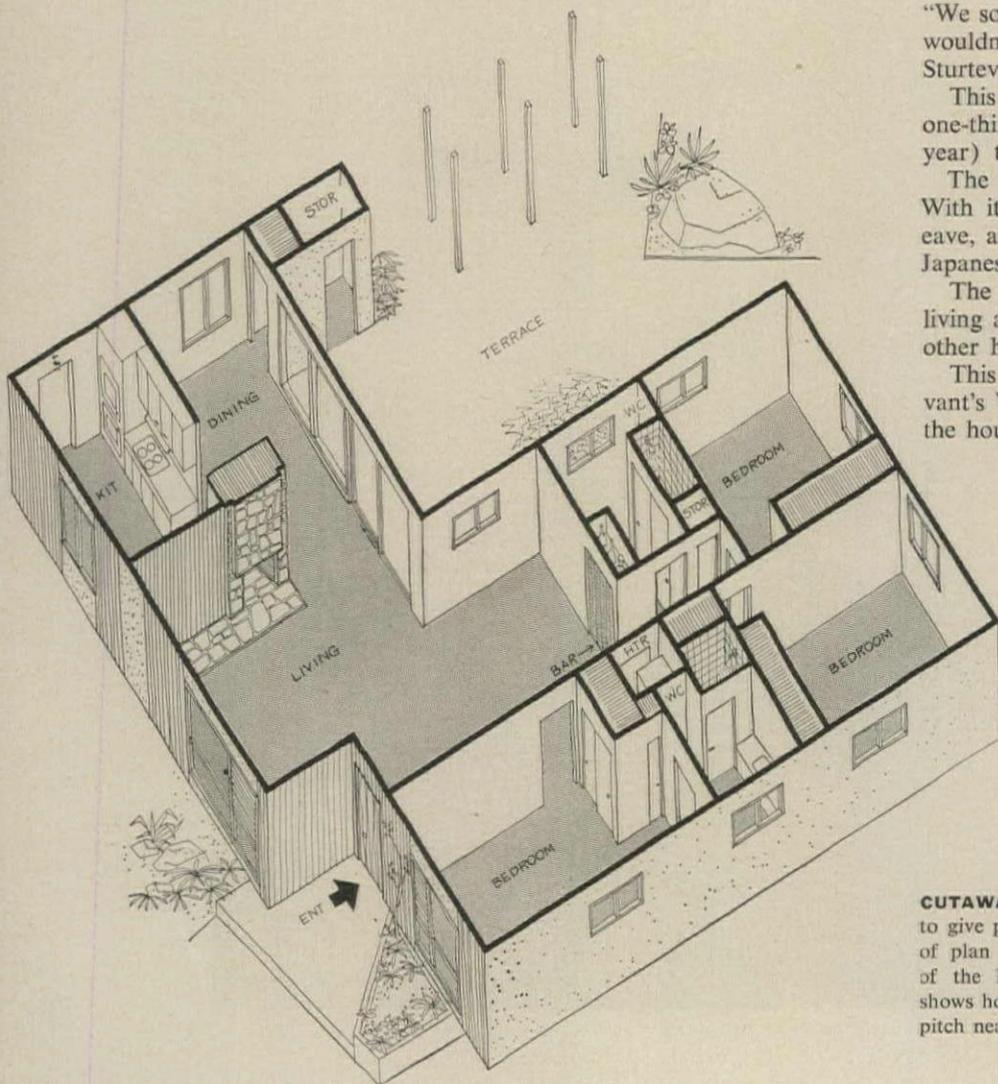
"We sold the first group of 30 houses from drawings—people wouldn't wait for us to get them up," reports Builder Austin Sturtevant of Newport Beach, Calif.

This model has sold so well that Sturtevant has turned over one-third of his production (which runs about 150 houses a year) to this and other Pacific-style models.

The strongest Pacific element in the design is the roof. With its small gable at the ridge, change of pitch near the eave, and exposed lookouts, it is an adaptation of the classic Japanese *Irimoya* roof.

The L-shaped plan (see below) includes 1,660 sq ft of living area. It is the same plan as Sturtevant uses for several other house styles, including a colonial model.

This house sells for \$25,450 on a 75'x110' lot in Sturtevant's Westcliff development. He also has a larger version of the house which sells for \$34,500 on a larger lot.



CUTAWAY shows how L-shaped plan works to give privacy to rear patio. Unusual feature of plan is the "family alcove" in the center of the house. Roof detail (directly above) shows how lookout is added to give change of pitch near eave.



ENTRANCE gets an Oriental touch from its easy-to-keep quarry-tile floor. In background is "family alcove."



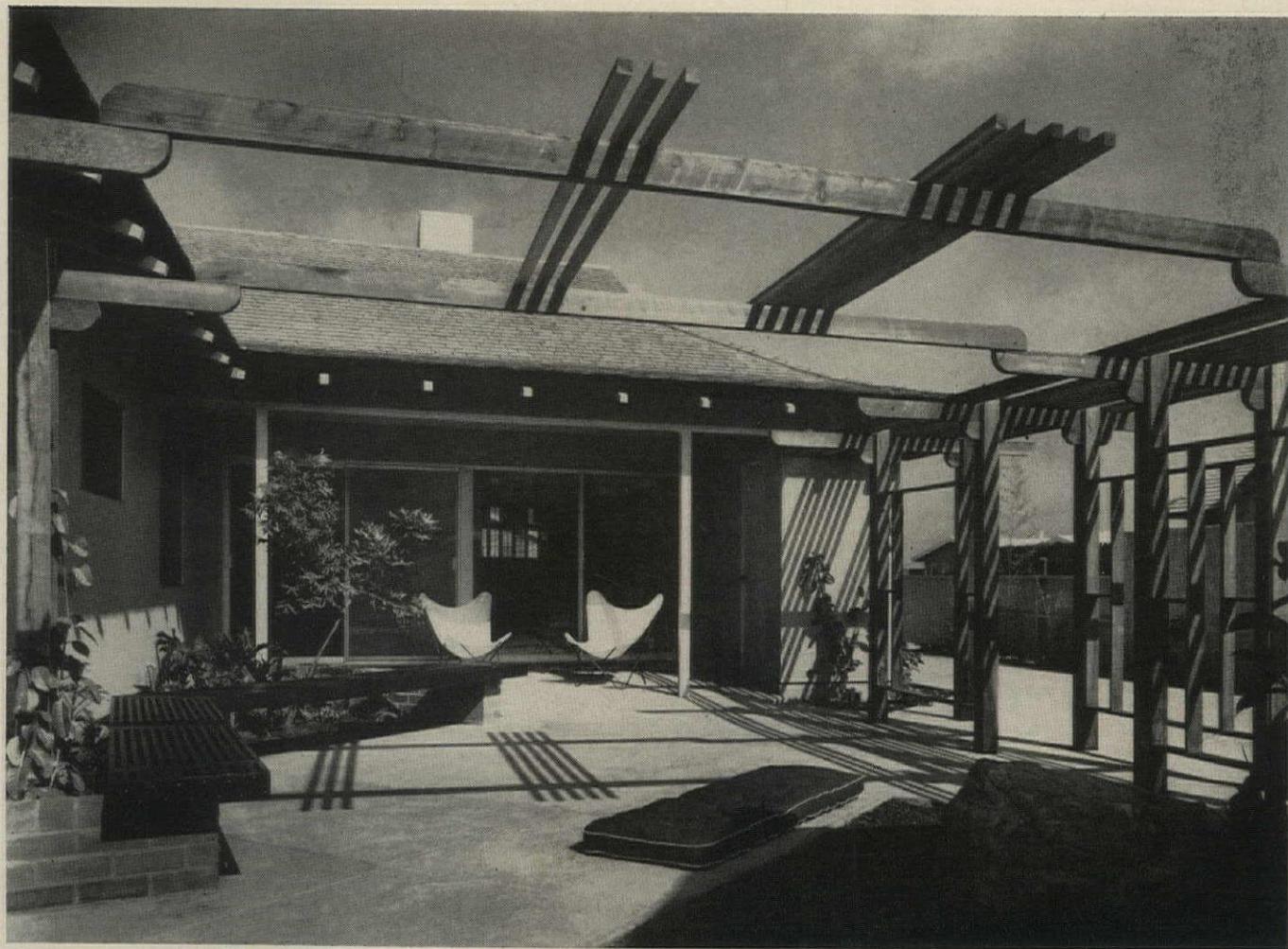
LIVING ROOM shares view of patio with dining area beyond. Kitchen is behind fireplace and paneled wall at left.

BUILDER: *Austin Sturtevant*
 ARCHITECTS: *Renfro & George, AIA*
 LOCATION: *Newport Beach, Calif.*
 PRICE: *\$25,450*

Photos: Virginia McIntire



KITCHEN opens to dining room. Quarry-tile counter tops are featured.



PATIO at rear corner of house has Oriental flavor in trelliswork, which acts both as sunshade and privacy screen.

/END

Today's popular Pacific style is based on details borrowed from the Japanese

BUT

the most important—and most borrowable—
thing about Japanese houses like this
is their basic idea, not their design detail

The test of a Japanese house is its effect upon the people who live in it, rather than the impression it creates on the outside world. This is because the Japanese, traditionally, look upon a man's house as one of the major influences on his life: change the house and you change the man.

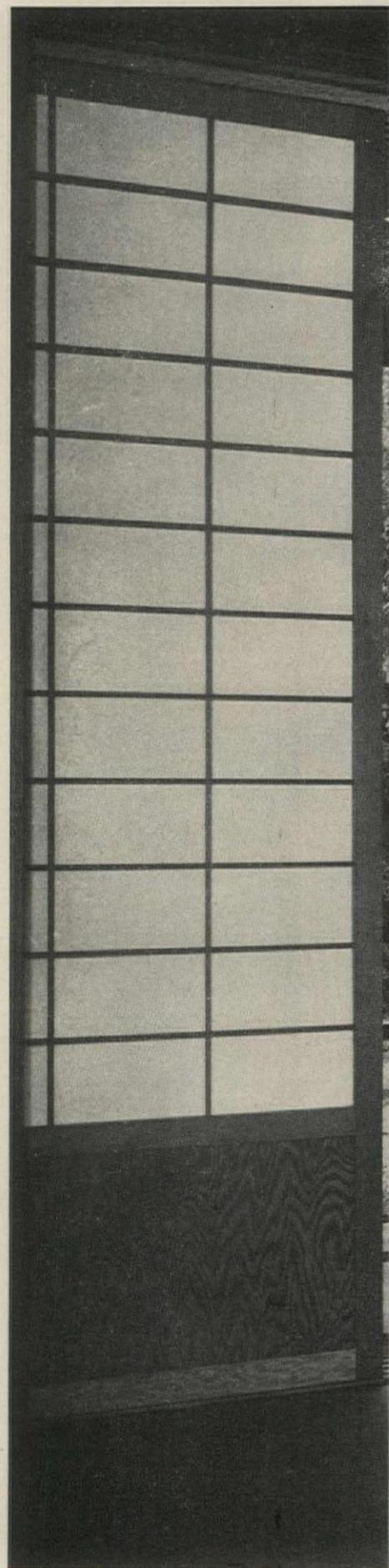
For most Westerners, the great lesson is to recognize how important a house is to a way of life, to recognize that a house affects the lives of the people who live in it *even more* than it reflects their taste and status.

If we borrow more than this one basic idea from the Japanese house, we must accept at least part of the Japanese attitude toward living that goes with it—or our borrowed house will be a fake. This acceptance is not as difficult as it sounds, for there is much in the Japanese point of view that many Westerners can call their own: love of nature and the outdoors, appreciation of simplicity, enjoyment of pattern and texture, and scorn of pretense and sham.

Here are two houses that illustrate sound borrowing from the Japanese:

The house shown on this spread and the next two pages was designed by an American architect and built in Hawaii. It is essentially Japanese.

A second house, designed by an American architect in less complete acceptance of the Japanese idiom, is presented on *p 118*.





To see more of this house, turn the page



HOUSE WRAPS AROUND GARDEN, so garden becomes part of every room when sliding panels are drawn aside.

This house is in the true Japanese idiom



It not only looks like a traditional Japanese house; it is meant to be lived in much as the Japanese live in their houses.

The house, located in Hawaii, was designed by Architect George Wimberly for an American who has lived in Japan—and knows and respects Japanese architecture and the Japanese way of living. Japanese ideas are expressed throughout, even to the entryway (photo, left) where the owner and guests remove their shoes before stepping onto the polished wood floor and *tatami* mats.

The house is carefully planned in relation to the garden, so the beauty of the outdoors can be enjoyed in every room just by sliding aside shoji screens.

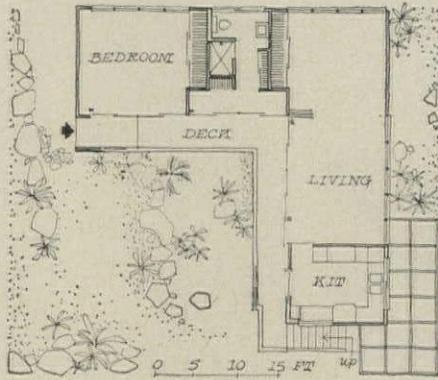
There is no applied ornament to distract from the beauty of the cedar used on the walls and ceiling.

The plan opens into one large area, yet separate rooms can be closed off with shojis for privacy.

Main concessions to an American way of living are the modern kitchen and bath, and a higher ceiling.

ENTRY, in Japanese tradition, is sunken and paved with stone. Shoes stacked here express owner's attitude towards his house.

ARCHITECTS: Wimberly & Cook, AIA
LOCATION: Honolulu



PLAN shows how *toko*, or hall, connects every part of house, can become part of living area when shojis are pushed back.



L-SHAPED HOUSE stands on posts that lift it above its sloping site. Use of posts is characteristically Japanese. Grey mineral roll roofing is nailed over batten strips, which give pattern and interest to the low-pitched roof.

LIVING ROOM can be opened wide or divided with shojis (on tie beam, center) to provide guest sleeping area.



continued



GARDEN COURT off living room (at right in photo) is landscaped in Japanese tradition. Garden room that links two elements of house is at rear.

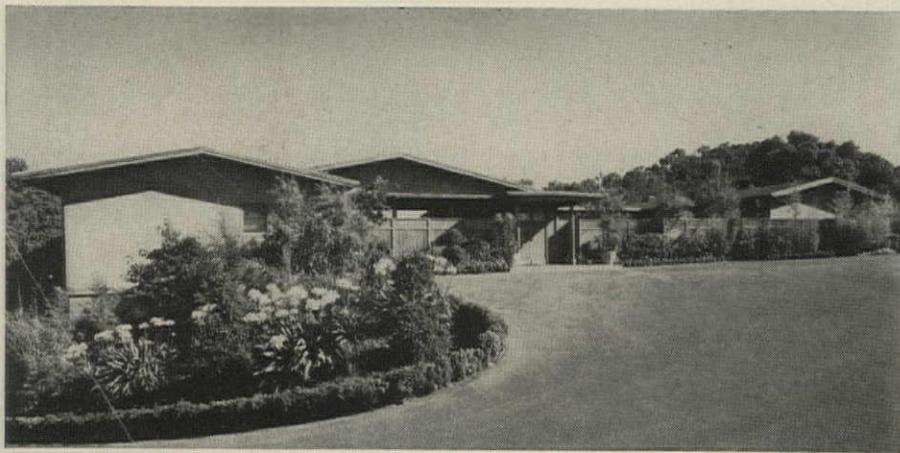
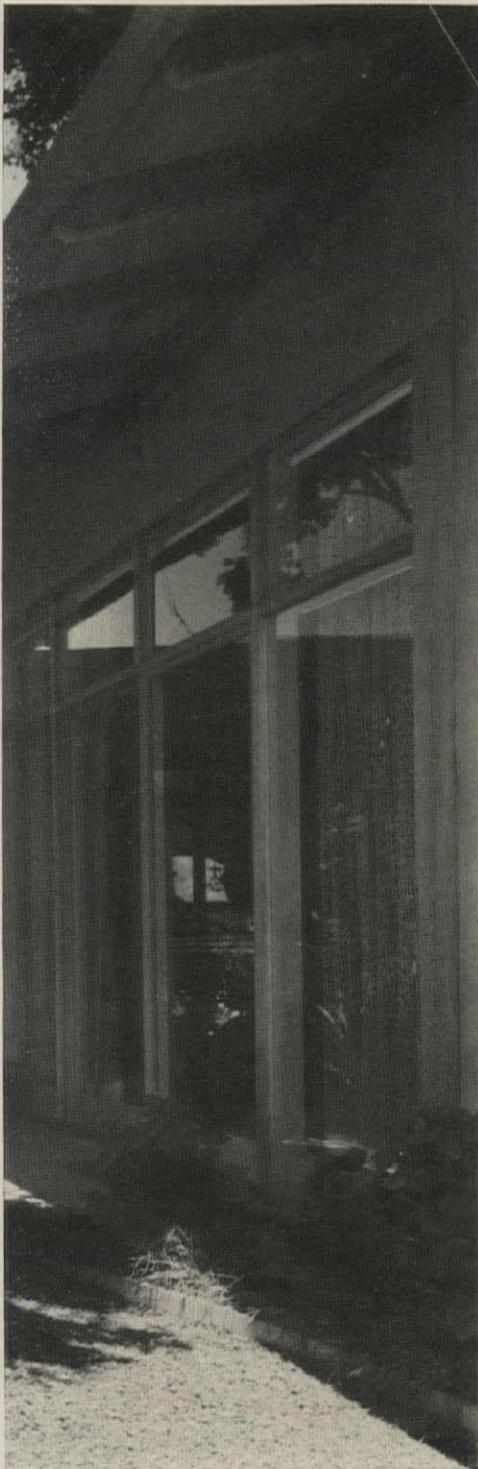
This house shows Japanese ideas in a Western setting

Three thousand miles farther from Japan than the house presented on the previous page, this California house shows how the Japanese tradition can be brought to the American mainland and to the American way of living.

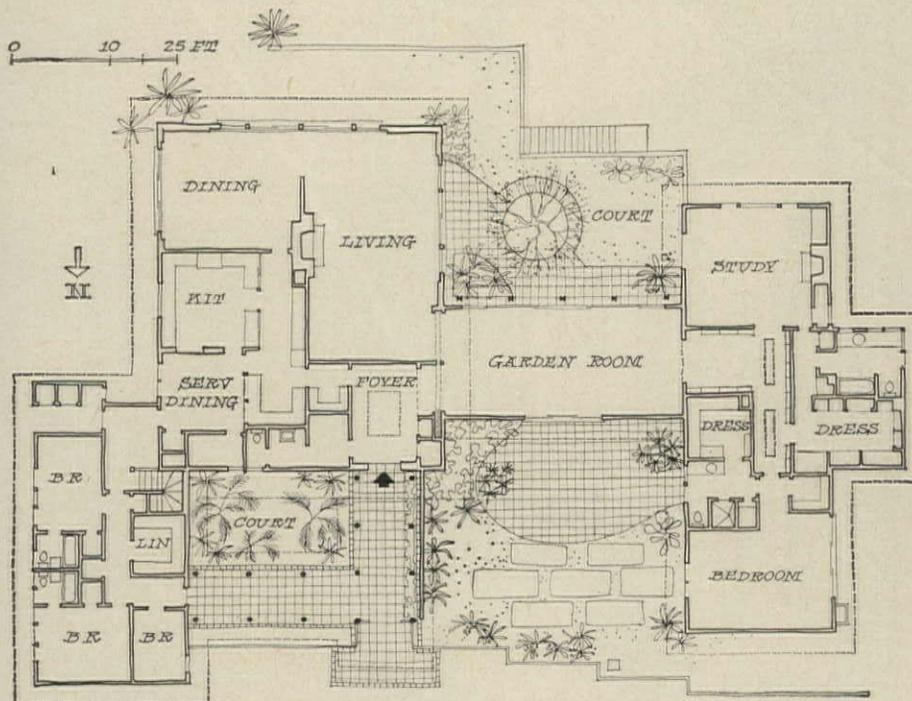
There is the same relationship of indoor and outdoor space as in the Hawaiian house; but this is such a large house (over 5,000 sq ft) that three separate courts are needed to give every major room a landscaped view.

There is the same attention to human scale; but the scale is adapted to US standards. For example, though a strong line of trim runs through every room to suggest the lower Japanese scale, ceiling heights are at the 8' US standard.

There is the same abundant use of natural materials; but Western products like brick, stucco and plate glass are also used.

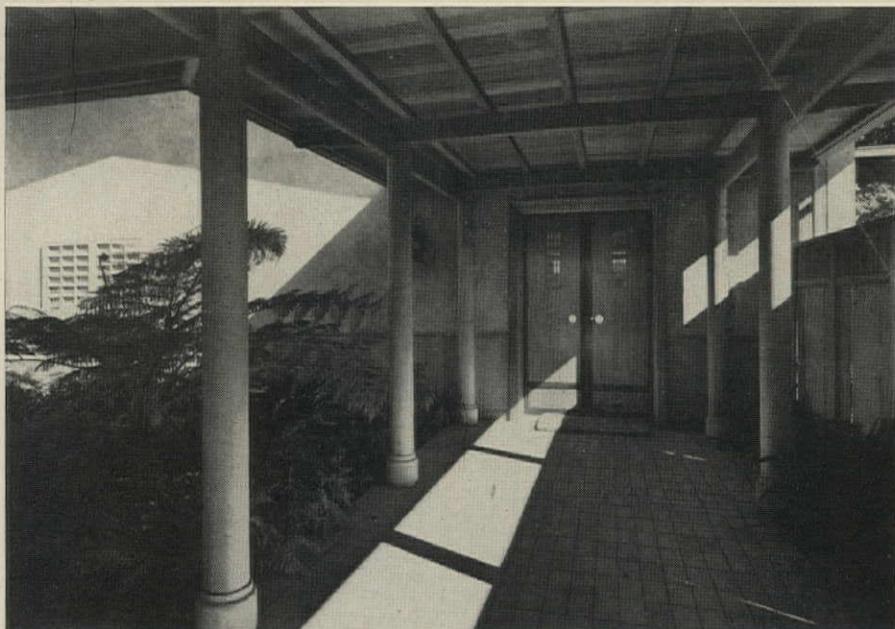


FRONT OF HOUSE is an unpretentious composition of gently sloping roofs and privacy fences in the spirit of Japan. Garage at left is detached from the house proper.



EXTENDED PLAN shows the two basic units of the house connected by the garden room. Each of the three courts has a distinctly different character.

Photos: Roger Sturtevant



MAIN ENTRANCE DOORS are approached under cover of protective roof. Wood columns and stone bases are typical Japanese details. Fence, right, gives privacy to court off master bedroom.

ARCHITECT: *Gardner Dailey, FAIA*
 LOCATION: *Hillsborough, Calif.*

continued



GARDEN ROOM is open to two courts (left and out of photo to right), has tile-paved floor that extends into the outdoors. This garden room links daytime and nighttime areas of the house.

DETAILS (seen here from court off living room) are characteristically Japanese. Trellis over doors lowers the scale of the house.





VIEW OF THIS COURT is shared by garden room (from which this picture was taken) and master bedroom at far left. Fence at far end of court screens entrance court.

LIBRARY (below) is actually oversized bedroom hall. The area is skylit to make book titles legible, avoid dark alley-way appearance of most corridors.

Photos: Roger Sturtevant



/END



Older couples make up part of the market for Joe Eichler's Greenmeadow subdivision near Palo Alto, Calif.

Today's big retirement market is right on your own doorstep

"So build for it in your own community," says NAHB's president Carl Mitnick. "Don't make the mistake of thinking this big market is someplace else."

Every year 1,187,000 people reach retirement age and, reports *Changing Times*, the Kiplinger Magazine, a study shows that "in the course of a year, only one oldster out of 200 moved from his home town."

"Most retired people have strong home ties," says Builder Mitnick, ". . . they want to be near enough for family get-togethers, weddings and birthdays, for visits to friends."

Builder Irvin Blietz of Chicago agrees. Buyers of his attached "studio houses" come "from older, bigger houses in the same neighborhood." He reports: "My houses are a success because of neighborhood ties, because they require less maintenance than a big, old house."

"Don't make the mistake of thinking of the retirement market as a market for the infirm"

"I think of my market as the retired Navy commander or the businessman who has put the last child through college. Now, these people—from 55 on up—have a chance to take life a little easier and to pursue the hobbies they never had time for before."

Builders like Mitnick and Blietz have discovered two important points:

POINT 1: Retirement housing should be part and parcel of a normal community or neighborhood.

POINT 2: Retirement housing calls for one- and two-bedroom units. "The same one- and two-bedroom unit that 80%-85% of all renters want," says Tom Coogan, president of Housing Securities Inc in New York City.

The one- and two-bedroom unit is not limited just to *rental* housing. Many builders across the country are building one- and two-bedroom units for *sale*. They are meeting this market as Carl Mitnick does with single-family houses and as Irvin Blietz does with attached-studio houses. They are also building town and row houses, duplexes, triplexes, and co-ops. In fact, there are almost as many ways to build one- and two-bedroom units as there are kinds of people who want them.

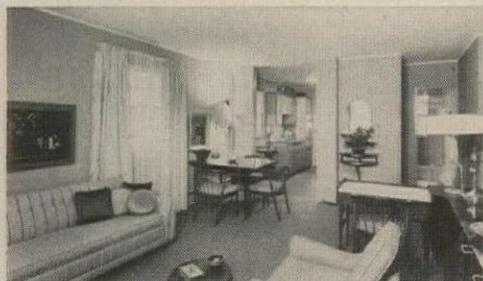
For one- and two-bedroom units are not only the choice of retired people. They are also in big demand by young marrieds, single persons, mobile groups, ex-exurbanites, and pure-and-simple pleasure-lovers who don't want to take on the maintenance and service jobs a larger house demands.

For some examples of how builders are meeting the demands of all these buyers and renters who want one- and two-bedroom units, turn the page.



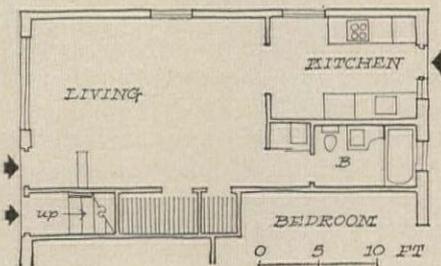
SMALL SINGLE-FAMILY HOUSES scattered throughout a project of larger houses is Carl Mitnick's formula for the retirement market. His two-bedroom houses at North Cape May, N.J. made a big hit with retirement couples, also scored with

buyers who wanted a "resort house" near the ocean. Houses sell for \$8,695, can be purchased under FHA's amended Section 203, which now allows 3% down payment to be made by friends, relatives, or a corporation for a buyer 60 years old or more.



Felix Gilbert

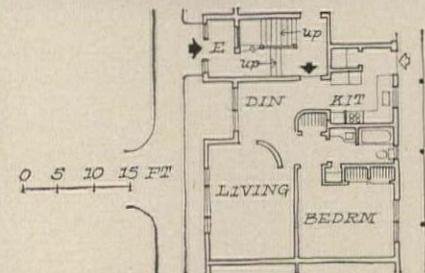
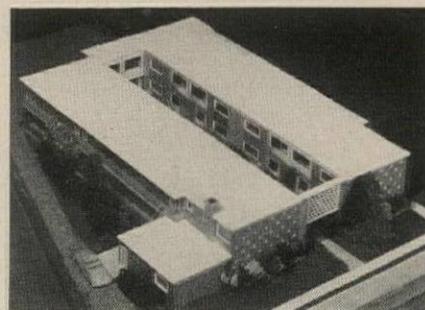
TWO-ROOM APARTMENTS mixed in with single family houses attract retirement couples, commuters, young marrieds, and mobile white collar workers, the Chanin Organization reports. Apartments



like the one above in the company's Long Island development rent for \$100 per month; three-room apartments are \$135 per month. Chanin plans about 540 units, ranging from two rooms up to six rooms.



GARDEN APARTMENTS, about 15 miles from downtown Washington, DC, give renters country atmosphere and city conveniences. Architects Collins, Kronstadt & Assoc, who designed building, specialize in apartment projects. Builder-owner T. Calvin Owens uses conventional financing, will rent two-bedroom units for about \$100 per month.



TWO-STORY CO-OP is Builder John O'Neill's method of capturing retirement market in Irvington, N.J. Although 15-unit four-room apartments won't be ready until late spring, O'Neill already has 90 applications. Units will sell for \$14,000; monthly maintenance charge, about \$60. Note rounded living, dining room corners on plan. Architect: Daniel A. Hopper, Jr.

Here are some of the ways builders are meeting



SINGLE-FAMILY HOUSES in Orange Gardens development, Kissimmee, Fla., began as project just for retirement couples, proved so popular with other potential buyers that now one family in five in project has children. Houses are filled with easy-

upkeep materials, lots of storage space, safety rails in tubs and showers—features as popular with young buyers as with older ones. Two-bedroom house costs \$8,050 plus lot. Developer, Dr George Beauchamp; builder, K. C. Moore, Jr.



SUBURBAN APARTMENTS in Builder Sheldon Solow's project outside New York City all have big kitchens like the one above. "Make the kitchen in a rental unit as appealing as the kitchen in a house and you attract a lot of people who thought they wanted to buy," Solow says. He built the apartments on a waterfront tract for people who wanted to live there without the worries of year-round maintenance. Architect: Samuel Paul.

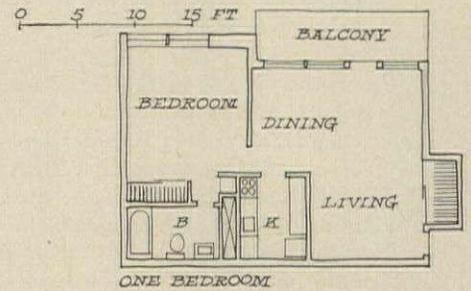
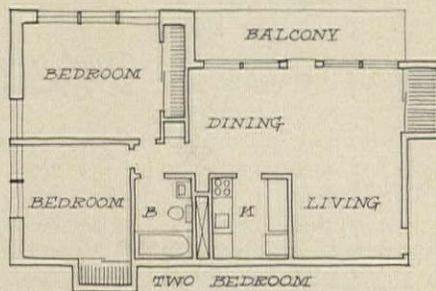


STUDIO GARDEN HOUSE has its own private outdoor terrace. It's a sure-fire feature, Irvin Blietz reports. "All we did was combine the conveniences of apartment living with the outdoor pleasures of a house and garden," says Blietz, "and people flocked to buy." In just eight weeks Blietz sold 22 of these \$22,750 two-bedroom houses in Chicago, mostly in all-cash sales. "My buyers came mostly from big, expensive houses, couldn't find any smaller houses in this area except those built for the GI market." Blietz' higher-income buyers like the luxury features he puts in kitchens and baths, the wood paneling and special lighting he uses. Three other extras also have big appeal: Blietz provides for snow removal, lawn care, and landscaping of the garden terraces.



CAMPUS-LIKE APARTMENTS set into the middle of a single-family project (and far from any university) are August Urbanek's way of catering to the demand for one- and two-bedroom units. Urbanek rents to retirement couples 55 and over, many

of whom have children and grandchildren in the area. "My renters like to be around children during the day, enjoy the privacy their apartment gives them at night," says Urbanek. He financed his apartments through a local S&L.



BALCONY APARTMENTS in Carl Freeman's Americana apartment communities in the Washington, DC area are all arranged to take advantage of wooded views and landscaped malls. Freeman rents his one- and two-bedroom units to Washington of-

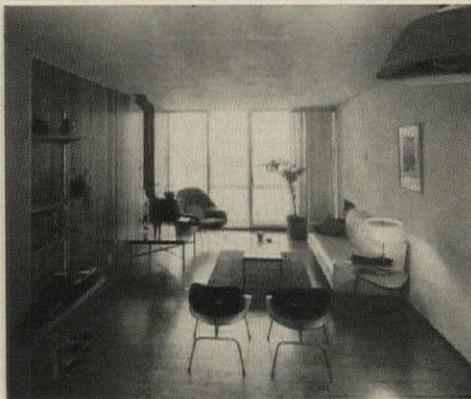
fice workers and government employees who have raised families, now want smaller quarters. Plans are designed to cut down on hallways, put "saved" space into bedrooms. Freeman plans 500 new units in Alexandria, uses conventional financing.

today's demand for one- and two-bedroom units



Photos: Acme

8-PLEX APARTMENT HOUSE "nips at people's imaginations" says Builder Thomas K. Welch who built the one seen here in Portland, Ore. "By putting many of the same features and space amenities in apartments as I use to put in houses, I thought



I could tap a bigger share of the market," says Welch. He did. Many of his renters are paying "\$10 or \$15 more per month than they intended" just to get the fine features shown in the living room and dining room above. Project seen here was financed



by local businessman after Welch picked up land on 30-day option. Rentals says Welch are "fantastic investments if people only realized it. Too many investors are hard guys to promote, yet we can show local investors a 25% return."

So...

So . . . remember retirement couples are only part of the market for one- and two-bedroom units . . .

And here are ABCs on how you can exploit this big market

One way you can meet this market is with the kind of housing all homebuilders understand: *for-sale houses*. Not just single-family houses, but row houses and town houses as well.

You can also meet this market with two other kinds of housing that many homebuilders are now looking into:

Rental housing, including small units like duplexes and triplexes, garden apartments and other walk-up units, high-rise apartments; and . . .

Co-op projects, which can range in size and type from single-family houses to high-rise apartments.

Which would be the best (and most profitable) way for you to serve this market in your area?

To help you consider the possibilities for rental and co-op housing in your own community, HOUSE & HOME—below and on succeeding pages—reviews the basic factors that you should take into account before making any decision.

The first and most important thing you need is the right land

Once you own the right land, you have the basic equity you need for a venture into rental or co-op housing.

Finding the right land for this kind of housing is critically important because, almost always, people who want one- and two-bedroom housing have well-defined ideas about *where* they want to live.

Most of this market—and particularly the retirement couples—want to live “close in”—close to conveniences and the community center. This principle does not apply just around urban centers; it applies equally if you are mixing in some multi-family building with a large development of single-family houses. For example, in a big development, the apartments should be next to the shopping center so they will not only be “close in” but will serve as a buffer between commercial and single-family areas.

Finding the right land is almost always difficult because close-in land is getting scarce. And when it is available “. . . it is hardly ever cheap. If it were, it wouldn't be good land,” says ACTION's research economist, Louis Winnick whose new *Rental Housing: Opportunities for Private Investment**, is already recognized as authoritative.

It may be worth your while to pay more for the right site, since bargain sites never turn out to be bargains. “A 20% saving on site cost will reduce the final cost of the project by 4% or less,” says Winnick, “but if the saving is achieved

by compromising on location, the consequences for net operating income (and resale value) can be quite severe.”

But more good land for rental and co-op housing is becoming available all the time because. . . .

Urban renewal is opening up close-in land at reasonable prices

Says Tom Coogan, president of Housing Securities Inc: “The current swing towards urban renewal is opening up close-in land at written-down prices that make it desirable and easy for builders to acquire.”

Item: In February, builders who attended the Congress on Urban Renewal (sponsored by URA and NAHB) were shown maps, full specifications, and prices on redevelopment land in many smaller centers like Des Moines; Hamilton, Ohio; York, Pa.; and Huntsville, Ala. (see News).

Item: “In the relatively near future, large acreage tracts in prime locations will be available to redevelopers in nearly 100 more cities than last year,” reports URA Commissioner Richard L. Steiner.

Item: The pending housing bill would make even more land available, by making more federal money available to support redevelopment in cities and towns rationed by dwindling UR funds (see H&H, Oct '58, p 53).

The second most important thing you need is mortgage money

“You need the same two things to get mortgage money for one- and two-bedroom projects as you need for any kind of housing: the right land and the right plan,” says mortgage broker Irving Wharton, vice president, J. Halperin & Co Inc.

Sydney Rogers of the Urban Servicing Co in New York City agrees. “Unjustifiably high costs of land and a bad plan can ruin your chances for a loan. These items are all-important in financing a project of one- and two-bedroom units.” Here are five good pointers:

1. “Design for the lender's requirements,” says Stanley Berman, a vice president of Webb & Knapp. “The execution of the plan and the materials that go into the project must all be figured with the lender in mind. In the case of FHA-insured loans, that means getting an architect who knows the ins-and-outs of designing to FHA specifications.”

2. “Know who the lenders are and what the lenders like,” says Builder August Urbanek of Milwaukee. “I do a lot of conventional financing through local S&L's. You have to find out who each lender is and what he likes before you make a move.” And remember, don't look for a big loan except from a big lender because lenders won't put many of their loanable eggs in one basket.

3. “Know what lenders look for. Conventional lenders, look for three main things,” says Louis Winnick. They want: good yield, good will, good long-term investment. While builders often complain about conservative lenders not advancing more than 2/3 of the actual value of the property, “efficient builders who are able to keep costs below appraised values can get a loan-to-value ratio of 80% to 85%,” he adds.

4. Be sure to plan your rental project for specific income groups. Among other advantages, it will save you time in

**Rental Housing: Opportunities for Private Investment* (295 pp)—Louis Winnick—McGraw-Hill Book Co (\$8.50).

knowing who to approach for the mortgage money. "Keep in mind that you can't build luxury apartments and finance them under FHA," cautions Irving Wharton.

5. "Find out your best sources for conventional loans," says

Builder Carl Freeman, "then show those lenders the best plan you can come up with." Insurance companies are currently the big source of conventional loans for apartment projects.

Rental housing has many attractions for builders and investors

One out of every five housing units started last year was a rental unit, and observers like Herb Colton, NAHB's general counsel, look for a continuing "gradual increase" in new building for the rental market.

Colton attributes the increase in rental housing largely to the lack of buildable land for single-family houses. Other experts agree that in some areas, like Nassau County on Long Island, N.Y. the land situation is causing many builders to switch to rental projects rather than start new for-sale developments out beyond today's commuting range.

Higher land cost is another important factor in the trend to rental housing

Louis Winnick points out, "Where the cost of undeveloped land is more than a few cents per sq ft, the detached house becomes an economic impossibility," and rental housing projects go in. Tom Coogan adds, "I think we will see row houses developing on 16' or 20' lots. The ability to make land pay off by putting more density on it is one of the big attractions of rental housing."

Builders and investors can also be stimulated by the desire of many families who have raised their children to return closer-in to cities. These families have outgrown their original reasons for buying a house and moving to the country. Now they want the comfort and convenience of close-in living which rental housing can offer.

Underbuilding of rental housing since the days of FHA 608

has created a backlog of demand from the "natural" renters who prefer to rent rather than buy, some economists believe. This group is sizable. "Perhaps as many as one out of every five home buyers . . . would have preferred to rent," says Louis Winnick. More good, new rental housing could attract great numbers of these "natural" renters to garden apartments, row houses, and high-rise projects.

Healthy profit possibilities are a big lure to builders and investors

Some builders, like Tom Welch of Portland, Ore., report attractive profits on conventionally financed rental projects. (For an example of Welch's projects, see p 125). Welch likes to work with local businessmen in financing and building rental units on a 50/50 split.

Some FHA programs also offer attractions to investors. Although actual rate of return on book equity differs from area to area and from project to project, here are some points to keep in mind if you're thinking of building under an FHA program: rents are set to provide enough gross income (allowing for a 7% vacancy loss) to cover operating costs, debt service charges, taxes, etc and still yield 11%-12% on book equity. With full occupancy, your return on book equity can rise to about 20%. Says Louis Winnick, "If cash equity is about 50% of book equity, the rate of return on cash investment can range from nearly 24% to nearly 40%."

Rental housing projects can be any size—from two to 2,000 units

How big a rental project makes sense for you depends on your resources and on the size of the market in your community.

Last year about 37% of all rental housing starts were two-to-four-family projects. Duplex and similar apartment houses have long been popular with smaller investors, especially in small-to-middle-sized communities. Two-family and triplex apartments appeal to retired couples as a combination home-and-income producing investment. For example, see p 132.

But big investors—both individual and institutional—seldom consider a project of less than 50 units. The cost of management per unit is too high. "You can't afford to let maintenance charges get out of proportion to income," says Irving Wharton. "So figure out how many units you'll need to build to keep a proper balance. In the Long Island area,

we figure the minimum development should be about 65 units. Anything under that becomes too costly for most builders who want a long-term investment."

Land cost is a big factor in determining the size of your project. "Get the fullest and best possible use from your land," says Tom Coogan. "If your land is expensive, you must get a reasonable density to make it pay off. In some areas, this may mean up to 25 families to the acre. In other areas, it may mean about four."

Land cost is also the deciding factor in determining whether to build walk-up or high-rise apartments. "If your land cost is over \$1,000 a unit, forget garden apartments," says Dave Slipper, president of Webb & Knapp Communities Inc. "About \$600 to \$700 per unit is very close to the limit that is practicable for anything except high-rise buildings."



Roy Stevens

COOGAN
"We are a nation of leisure-minded people. That is why so many of us like to live in apartments and let someone else do the worrying."



WHARTON
"A number of builders have switched from single-family houses to rentals because they're tired of trying to find customers where none exist."



Leonard Schugar

WINNICK
"It is easier to demonstrate a need for more private rental housing than to find assurance that a significantly larger volume will be forthcoming."



Ben Martin

MITNICK
"I plan to work hard for an honest rental program on FHA Sections 207, 221, and 229 for the elderly. My Cape May tract got me interested in this."

Rental housing can be a long-term investment or a "quick turnover"

How you look at it depends on how much of your own equity is in the project and how much sense it makes to leave it there.

Some builders, like James Scheuer of City & Suburban Homes in New York City, are "investor-sponsors" who create a long-term investment. They have a big enough organization to handle the management problems of giant rental projects and they have the capital to tackle the risks and responsibilities that even the best rental project entails.

Still other builders, like Tom Welch, of Portland, Ore., prefer to get their equity out of small four-to-eight unit apartment houses as fast as possible in order to get going on still another project. This way they pyramid their capital.

This may help you decide whether to leave your equity in or take your profit out:

"If your operating capital is involved, long-term investment is not for you," says Tom Coogan. Reason? "You can't afford to have any part of operating funds tied up. Instead, use land as equity, try to almost mortgage out on the building so that your only investment is the land itself. Then, sell to an investor." (This is the method used by about 75% of the builders H&H interviewed.)

"Can you ride out economic storms?" asks Sydney Rogers. "You can stop building single-family houses if economic conditions are bad, but owning a rental property is a long-term project. If conditions are bad enough, you may have to lower rents and face zero returns until things get better."

"How long will it take the rental project to pay back your cash equity?" asks Louis Winnick. Most equity investors today want a 15%-20% annual return on their money. "Think in terms of cash pay-out periods," Winnick advises, "the number of years it will take to return your equity. The shorter the period, the more desirable the investment."

Don't overlook the tax angle in making up your mind. Most experts agree that if your equity is no more than one-third of the total investment in a rental project, you have little to fear on the corporate tax front.

That's because the 1954 Internal Revenue Code set up two formulas that allow large depreciation deductions in the first years of an investment, smaller deductions in later years. This greatly increases the amount of your potential cash take-outs and makes it virtually possible for you to recover your equity in a short period of time.

These two fast write-off formulas are: 1) the declining balance method, and 2) the sum-of-the-years' digits.

Under the declining balance formula, you are allowed to depreciate at up to twice the allowable straight-line rate (5% annual depreciation, for example, instead of 2.5%). Its advantages: a quick means of getting your equity out of a project through depreciation. Computing by this method, however, does leave a small undepreciated balance at the end of the building's life.

The sum-of-the-years'-digits method is based on a fraction and means just what it says. If your project has a useful life of 25 years, you simply add all the numbers from one through 25 to get the denominator—325. The numerator (if your project is brand new) is 25—the full, useful life of the building. To figure first year depreciation, you take 25/325ths of the building's cost. Next year figure depreciation at 24/325ths of the building's cost. Its advantages: sum-of-the-years'-digits method does not allow such fast initial write-off as declining balance does, but deductions are higher after the first few years and no undepreciated balance is left.

"For capital gains, you need a qualified tax expert," says Irving Wharton. "Although there are projects which lend themselves to sale of stock rather than assets and open up the way to capital gains, each case is usually special."

Here is what you need to know about FHA loans for rental units

You can build rental housing under FHA 207 or 220 programs (and also the specialized 221). From start to finish, you will be under FHA controls. Cash investments, rents, and even management decisions are all regulated by FHA.

"Indeed," says Louis Winnick, "FHA's [rental housing] controls extend beyond those of the typical public service commission since the agency also supervises the design and construction of real estate improvements, sets the maximum rate of interest on debt capital, and even participates as a preferred stockholder in each corporation, with a legal right to unseat the directors of record on its own determination of a breach of contract."

But . . . FHA has one strong drawing card: big mortgages.

To you an FHA mortgage can mean the difference between putting up 33 $\frac{1}{3}$ % of the value of a project (as you may be required to do with a conventional loan) and putting up

10%. And you may even be able to shave that 10%.

For instance: under FHA Section 207 (see details, below), you are permitted a mortgage up to 90% of valuation. As one builder puts it: "You're required to certify your costs at job completion. When that is done the mortgage must still be a 90% mortgage, but included in the cost certification is the builder's fee, which can be 7% to 8%. Assuming it is 7%, this gives me 97% of the valuation and requires from me only 3% equity."

The small equity requirement plays a big part in attracting smaller investors to the rental housing field. Says lawyer Herb Colton, "The builder of, say, 50 to 100 houses a year can now get into rental housing with, say, 24 to 40 units."

A special and important advantage you can gain by financing under FHA 220 is that you can sell your loan to FNMA at par under special assistance which offsets any extra red tape.



Photos: Leonard Schugar



COLTON
"I look for a continuing gradual increase in new building for the rental market because there's a lack of buildable land for single-family houses."
SCHEUER
"There is no quick buck in building federally-assisted rental housing, but neither is there a need for windfall profits to induce builders to the field."



CENKER
"In our own projects, we find many people decided to rent because their children are grown and the three-bedroom house became just too big."



H&H staff

SLIPHER
"There are pockets of land all over the country that lend themselves to town houses. Single-family builders would do well to investigate this land."



TENDING HER GARDEN, apartment renter enjoys outdoors like home owner. For more on this apartment see *p 130*.

Planning a garden apartment? Design it for people – not tenants

This means: plan for real people and for real family living, not just for impersonal shelter.

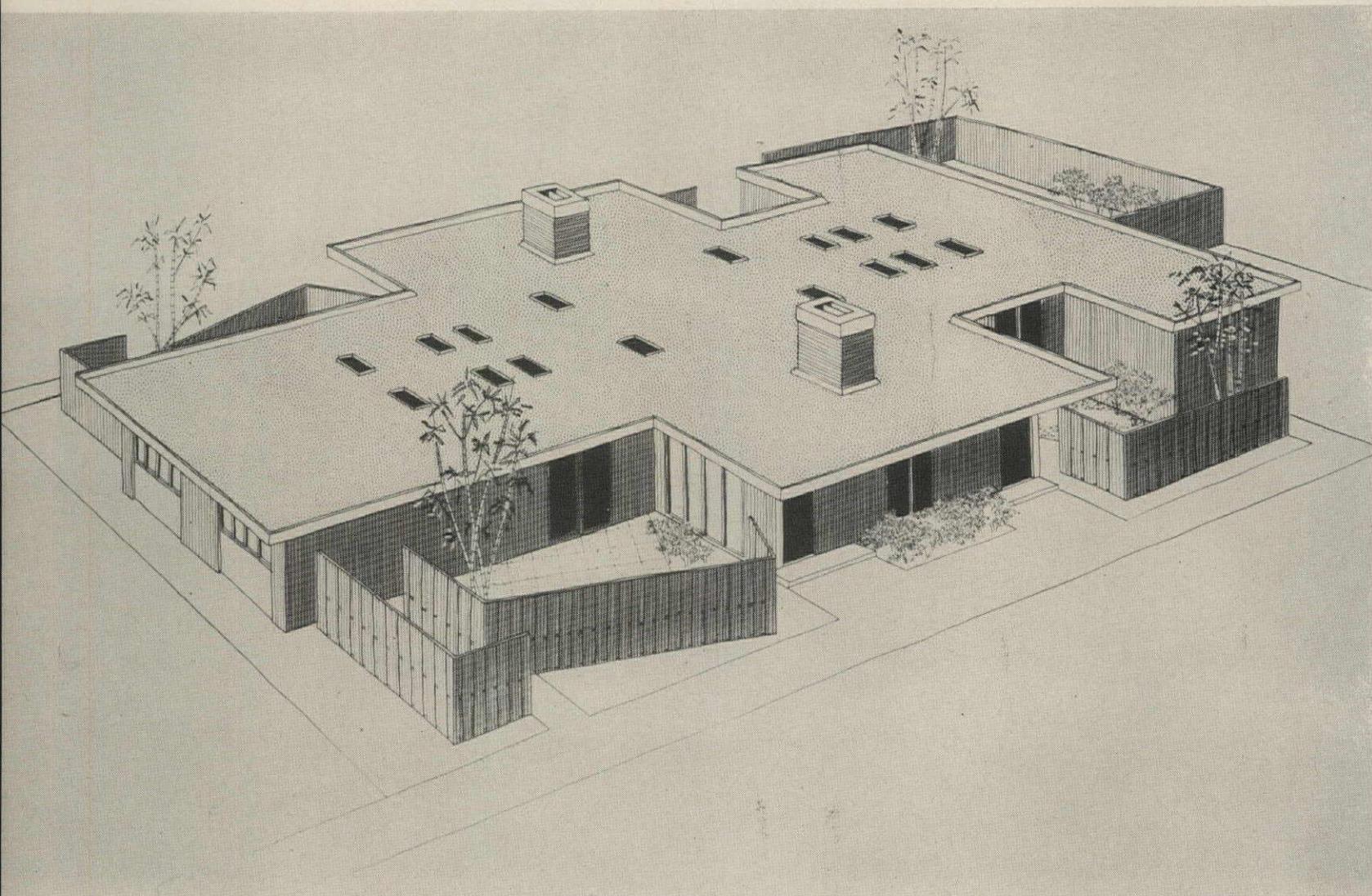
Today's renters want a lot of the same things people want in a home of their own—tangible things like indoor-outdoor living, intangible things like a sense of individuality. So . . .

Today's good garden apartments have private entrances, private courts or terraces, well-equipped kitchens, and even fireplaces.

Today's good garden apartments are relatively small in scale—there are fewer apartments per building, fewer buildings per development; and even big developments are divided into small neighborhoods.

Today's good garden apartments take advantage of their sites—of trees and views and irregular terrain.

To see four of today's good apartments, turn the page.



IRREGULAR SHAPE of four-unit apartment building permits four secluded courts for private outdoor living. Skylights are for baths, kitchens.

These one-story units please people because



EACH PRIVATE COURT opens off indoor living area through sliding glass doors. Courts are paved, landscaped, screened from street.

Each apartment in this four-unit building is well separated from the others—both indoors and out.

Outdoors, each apartment has its own entrance and its own enclosed court. Besides offering a private spot for outdoor living, the courts encourage gardening by the tenants, so the owner has to spend less for grounds upkeep.

Indoors, baths, kitchens, closets, and utility cores are grouped along the main dividing walls to form buffers between apartments. And within each apartment, active and quiet areas are well separated because the bedrooms are at the farthest point from the living and dining rooms.

Architect Jon Kemp based his approach to garden apartments on the idea that "a person living in a well designed building could not be prided out. And while people might be slow to buy a well designed house, they would take a chance on a month's rent for an apartment."

Proof he was right: this apartment building hasn't had a vacancy in the two years since it was built—and its rents (\$87 for one-bedroom units, \$111 for two bedrooms) are 25% higher than those of other apartments of the same size in the same area.

Cost of the building: \$35,000 with land.

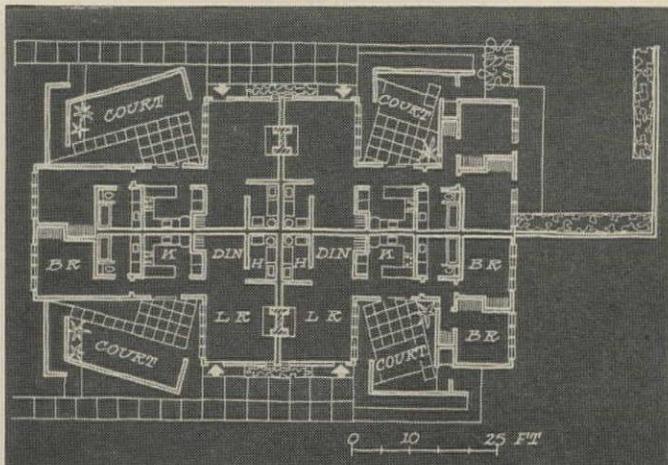
ARCHITECT: *Jon Kemp*
 BUILDER: *Thomas K. Welch*
 LANDSCAPE ARCHITECT: *Elizabeth Ames Davis*
 LOCATION: *Beaverton, Ore.*



FLAT ROOF permits building's irregular shape, also gives it an intimate scale by keeping the silhouette low. Building uses only 35% of lot.

they are planned for all-around privacy

Photos: Julius Shulman



PLAN shows how two walls that separate four apartments form axis of building. Within apartments, bedrooms are isolated from living areas.

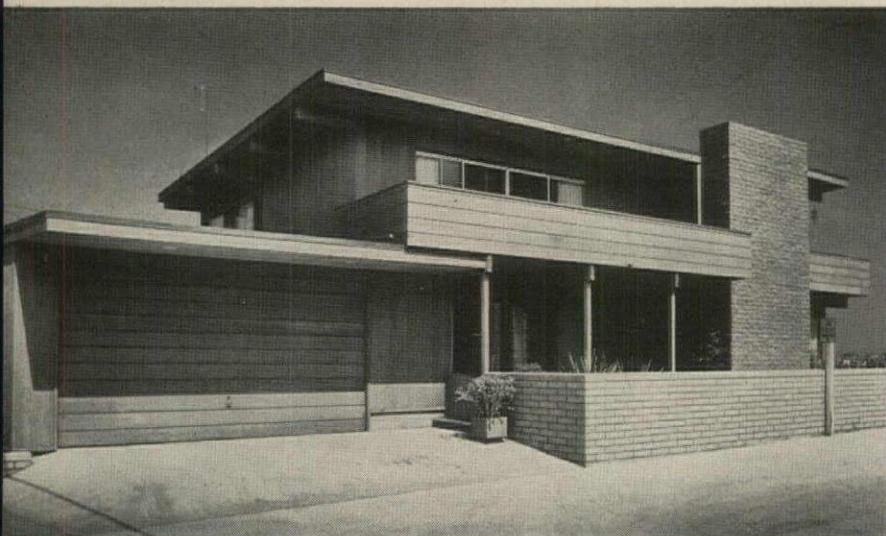


EACH LIVING ROOM has brick fireplace. Only opening on street side is high, narrow window. Glass wall (opposite page) faces court.



BEACHSIDE of house has ground-floor terrace, reached through sliding glass doors from living area and shaded by overhang of deck above.

This three-unit apartment pleases people



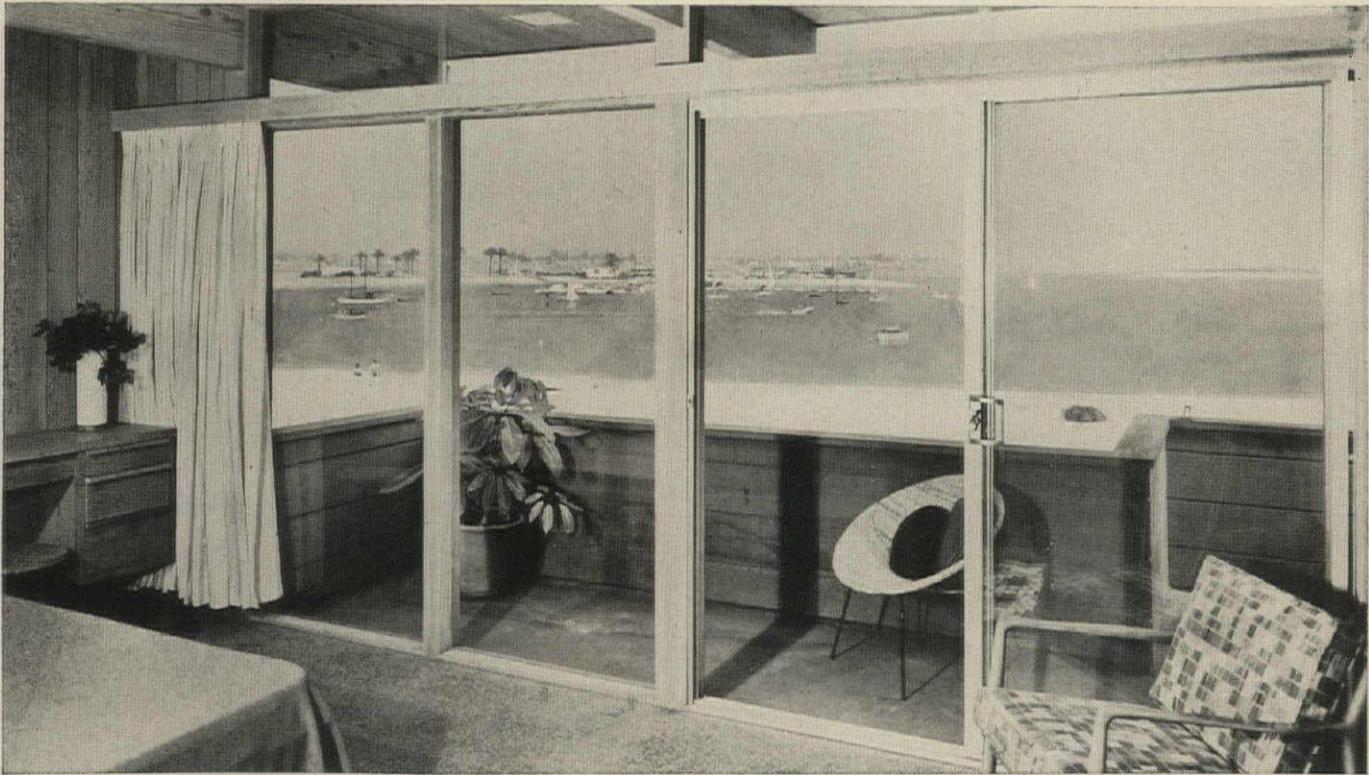
STREETSIDE has entry court, center, sheltered by second-floor deck.

And because it looks so much like a house, it fits right into a neighborhood of single-family homes.

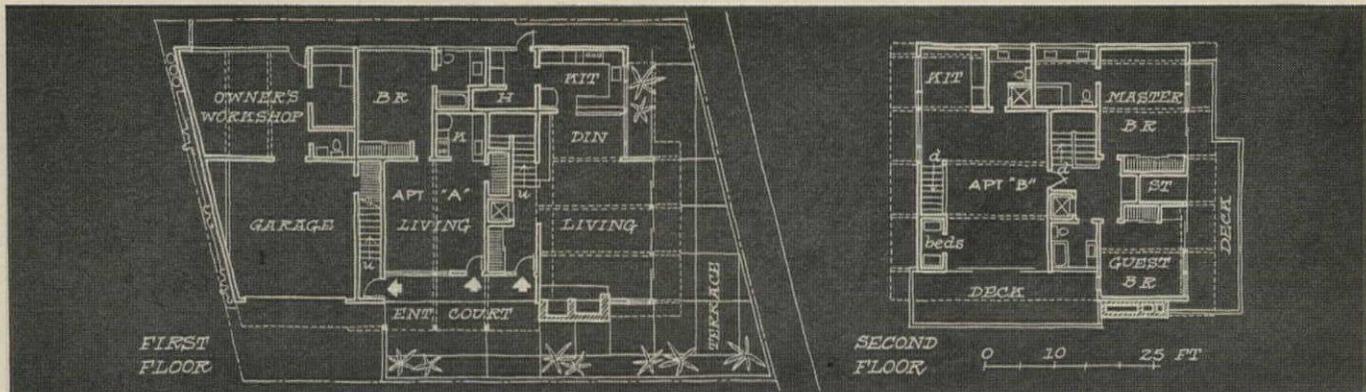
The building gets its house-like character from its relatively small size, its redwood siding, and its decks and terraces. It was designed as a source of income for its owner-occupants, whose own quarters are a two-bedroom duplex apartment (see interior photos). The other two units are one-bedroom, one-floor apartments (see plan).

Ease of maintenance—a prime requirement of good apartment design—was a big factor in the choice of materials. One example: the vertical, rough-sawn redwood siding. Others: random-width redwood interior walls, terrazzo flooring, redwood ceilings on the first floor (second-floor ceilings are plaster). Hot-water radiant heating is set in the first-floor slab and the second-floor ceiling.

The building is on a 55'x82' beach-front lot and cost \$48,000.



OWNER'S BEDROOM gets view of bay through window wall, which opens one whole side of room to deck. Ceiling beams are exposed.



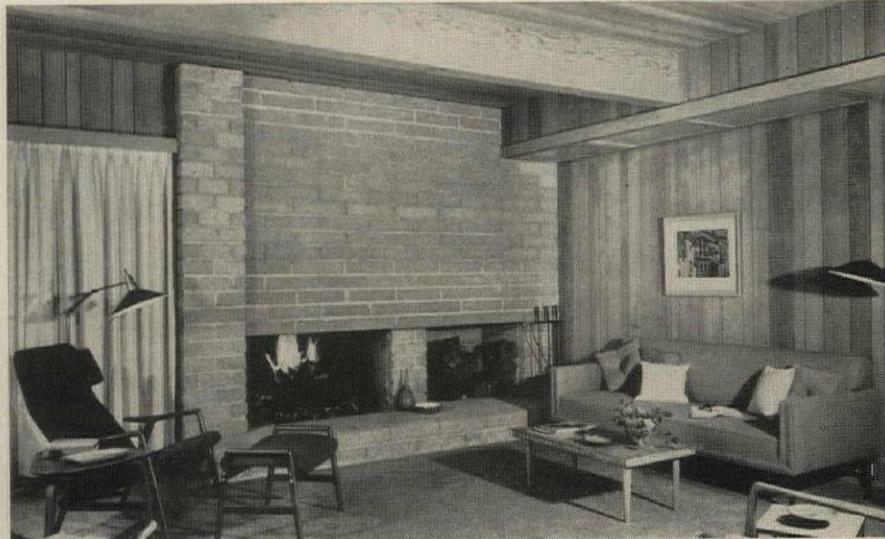
PLAN explains relationship of owner's duplex, right, to rental units, left. Baths and utilities serve as sound buffers between apartments.

who like its one-family look

Photos: Douglas Simmonds

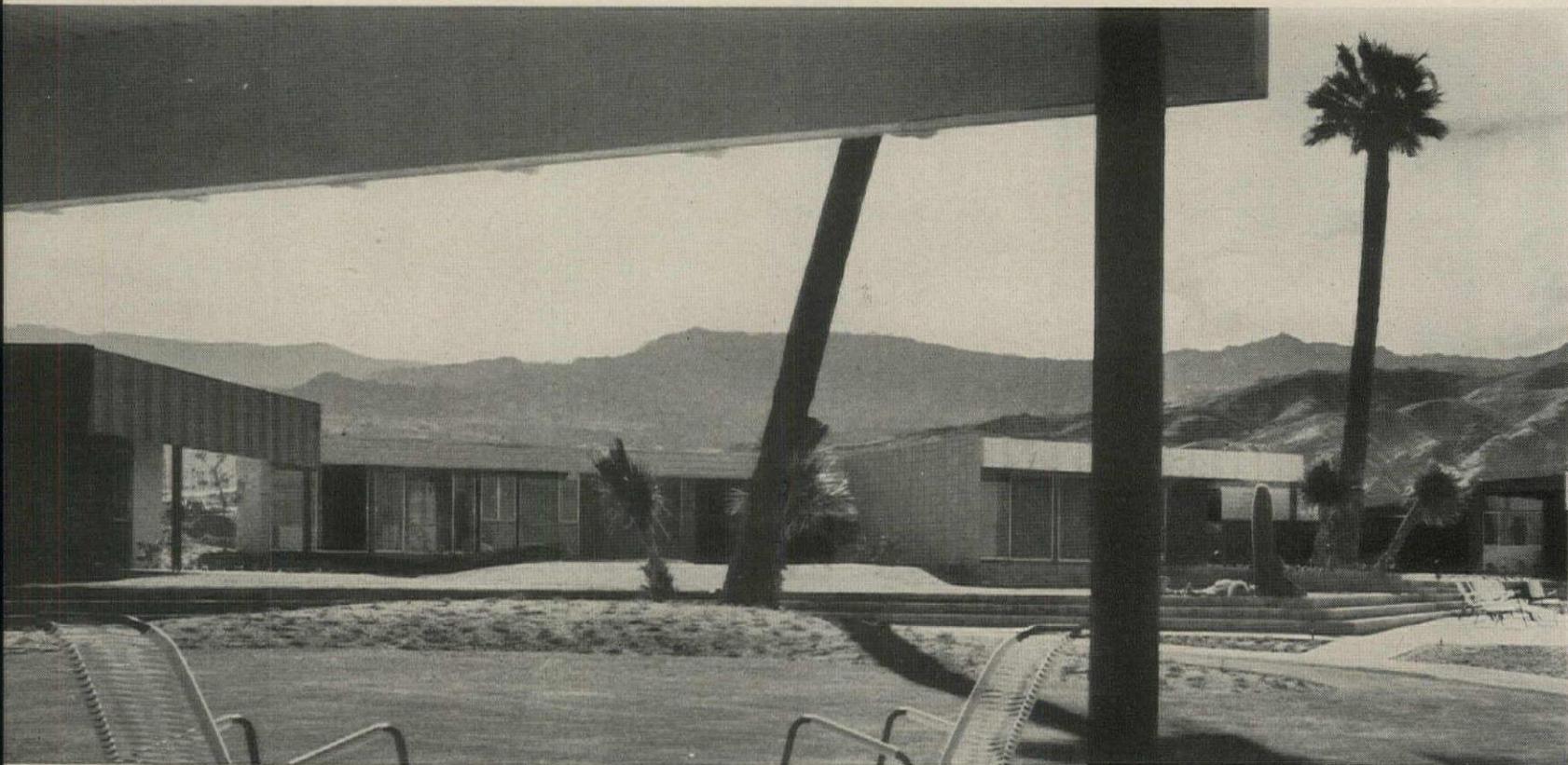


OWNER'S DINING AREA is separated from kitchen by serving counter.



OWNER'S LIVING ROOM has large, concrete-block fireplace.

continued



EACH NEIGHBORHOOD in big desert development gets visual variety because low, house-size apartment buildings are set informally on site.

This big development pleases people with its

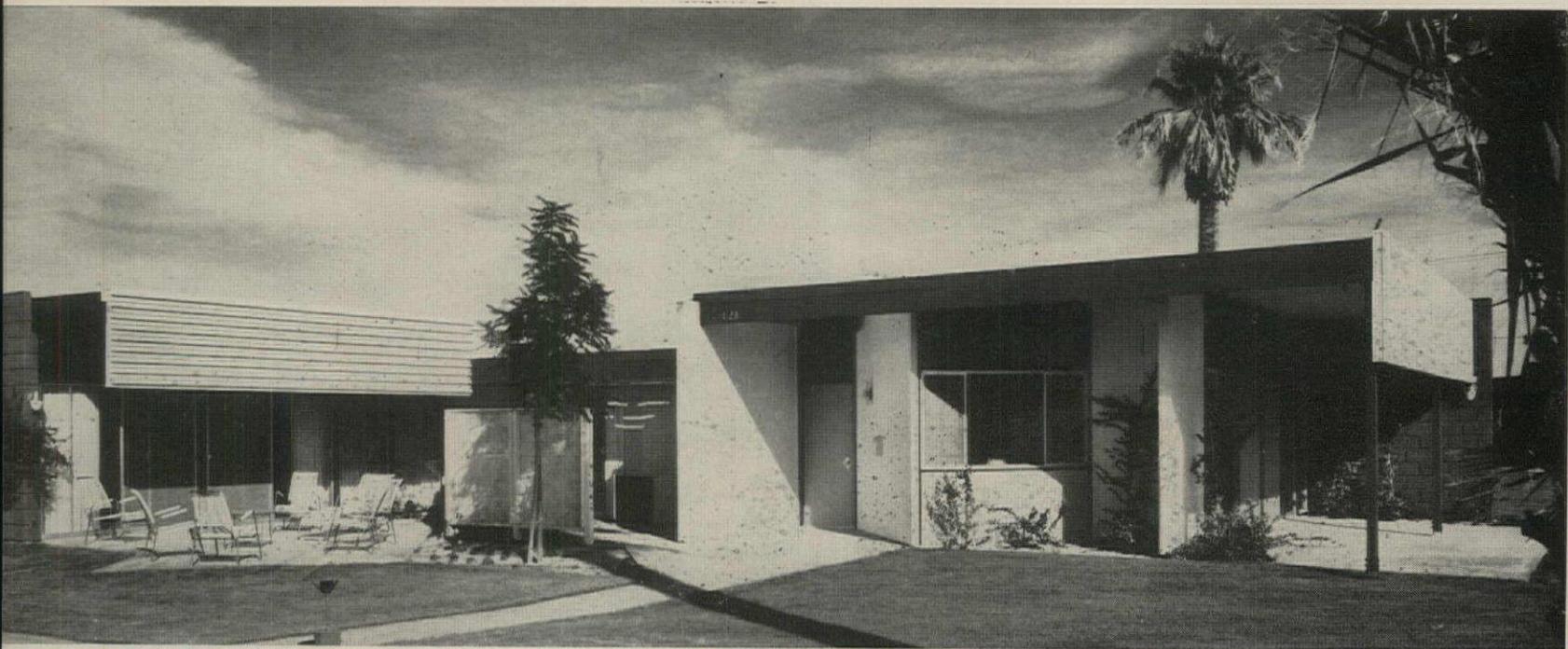
When finished, this project will have more than 400 apartments, will cover 72 acres, and will cost almost \$10-million.

But despite its size, it is not likely to overwhelm people because:

1. It is divided into neighborhood clusters (see site plan, above right) of no more than 24 apartments. Each cluster is laid out around community facilities—a swimming pool

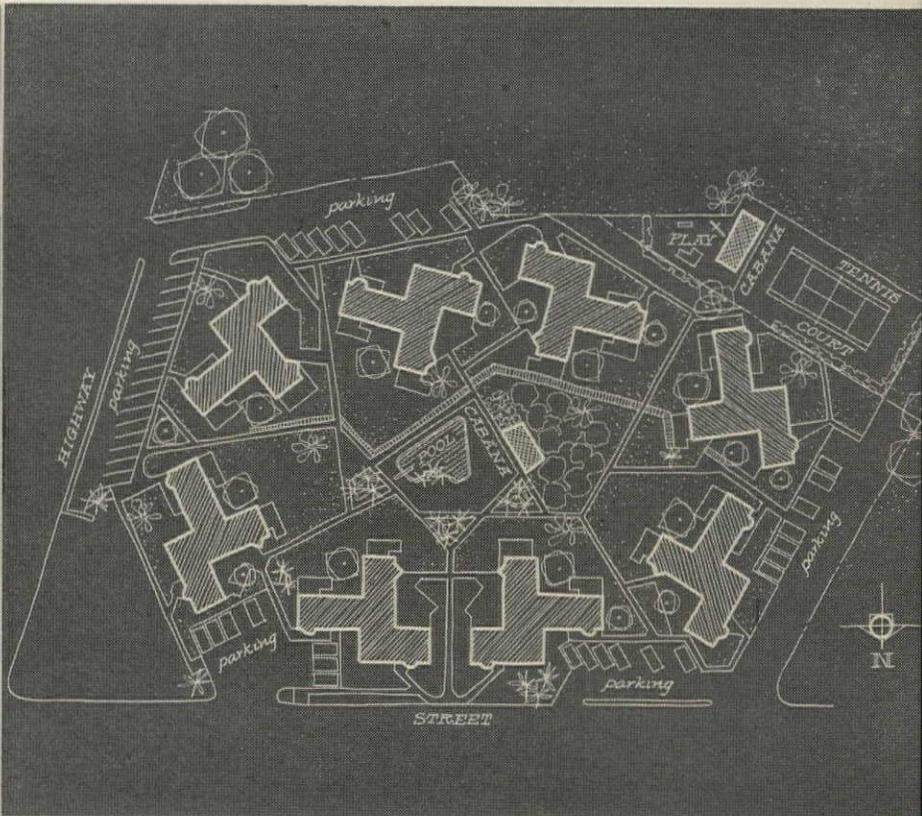
surrounded by a terrace, a “ramada” (pavilion) with a kitchen and barbecue. (Also planned for the development as a whole: six tennis courts, 17 putting greens, six children’s play areas, a cocktail lounge and restaurant.)

2. Its neighborhood clusters are divided into eight buildings of three apartments each (see plan below). The single-story buildings (cost: \$55,000) are no larger than many



EACH BUILDING is made up of three apartments. Earlap overhangs, a trademark of Architects Palmer & Krisel, fend off rays of low sun.

ARCHITECTS: Palmer & Krisel
 DEVELOPER: George M. Holstein & Sons
 LOCATION: Palm Springs, Calif.



Buildings are arranged around central open space, have views toward swimming pool or mountains.

Photos: Julius Shulman

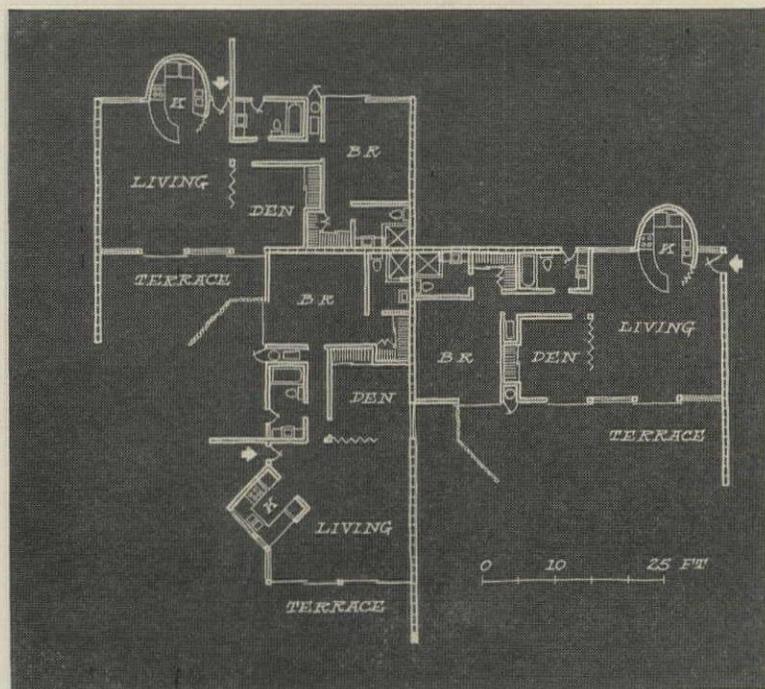
neighborhood clusters

one-family houses. They were designed to work well together, but each could stand alone.

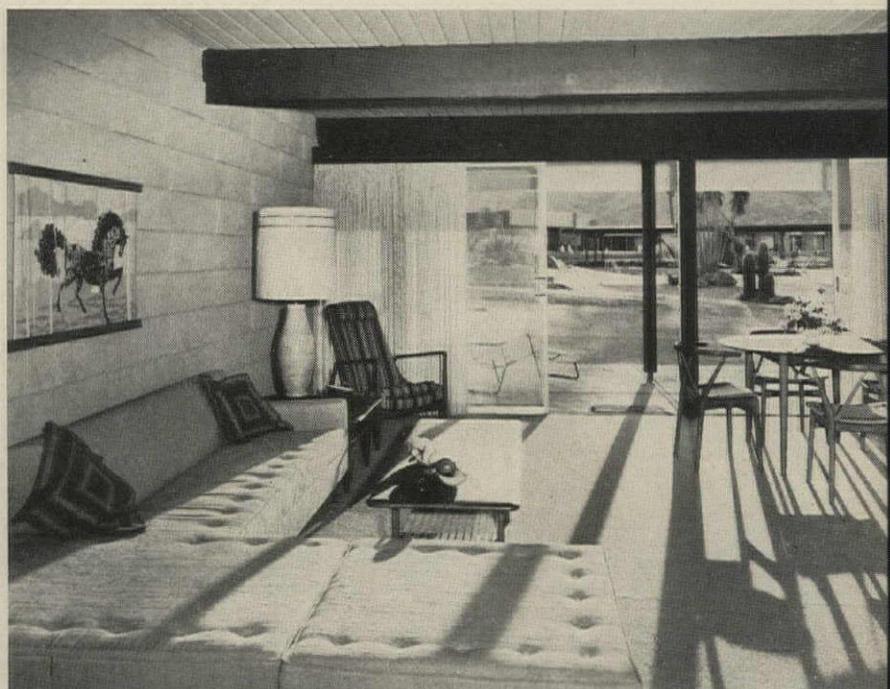
The apartments—all luxury units (with a den, terrace, and two baths)—are cooperatives. They sell for \$21,500. Buyers pay 50% down, and the balance by the month. Monthly charges are \$150 until the balance is paid off, then \$50 to cover maintenance and maid service.



COMPACT KITCHEN, open to living area, has full equipment, including built-in oven.

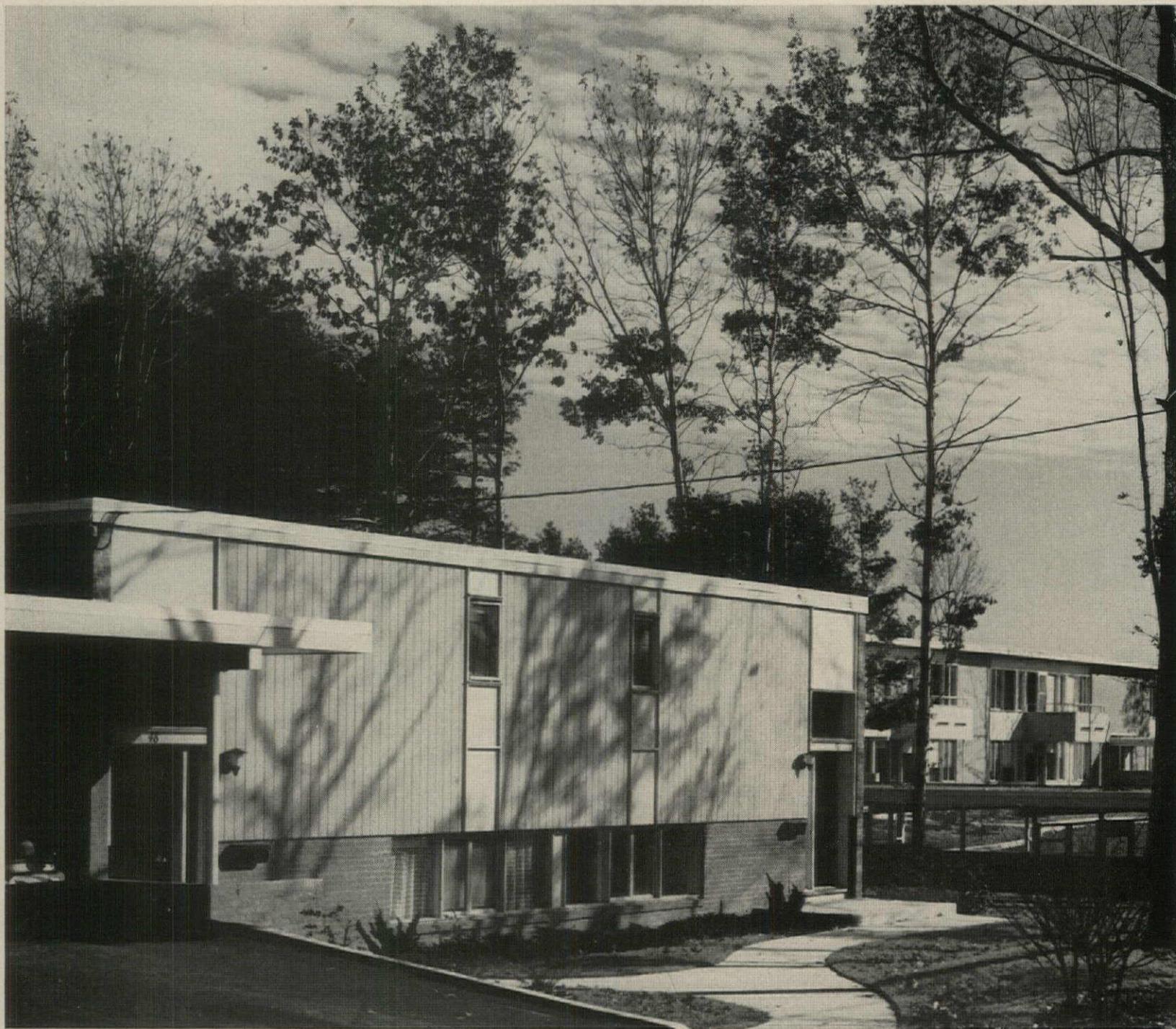


EACH APARTMENT is in separate wing, has its own private entrance.



LIVING ROOM of each apartment opens to paved, roofed terrace.

continued



SMALL-SCALED BUILDINGS (left: duplexes with split-level entries), curving walks, many fine trees help give project park-like quality.

This 74-unit project pleases people because



WELL SEPARATED BUILDINGS cover only 8% of site.

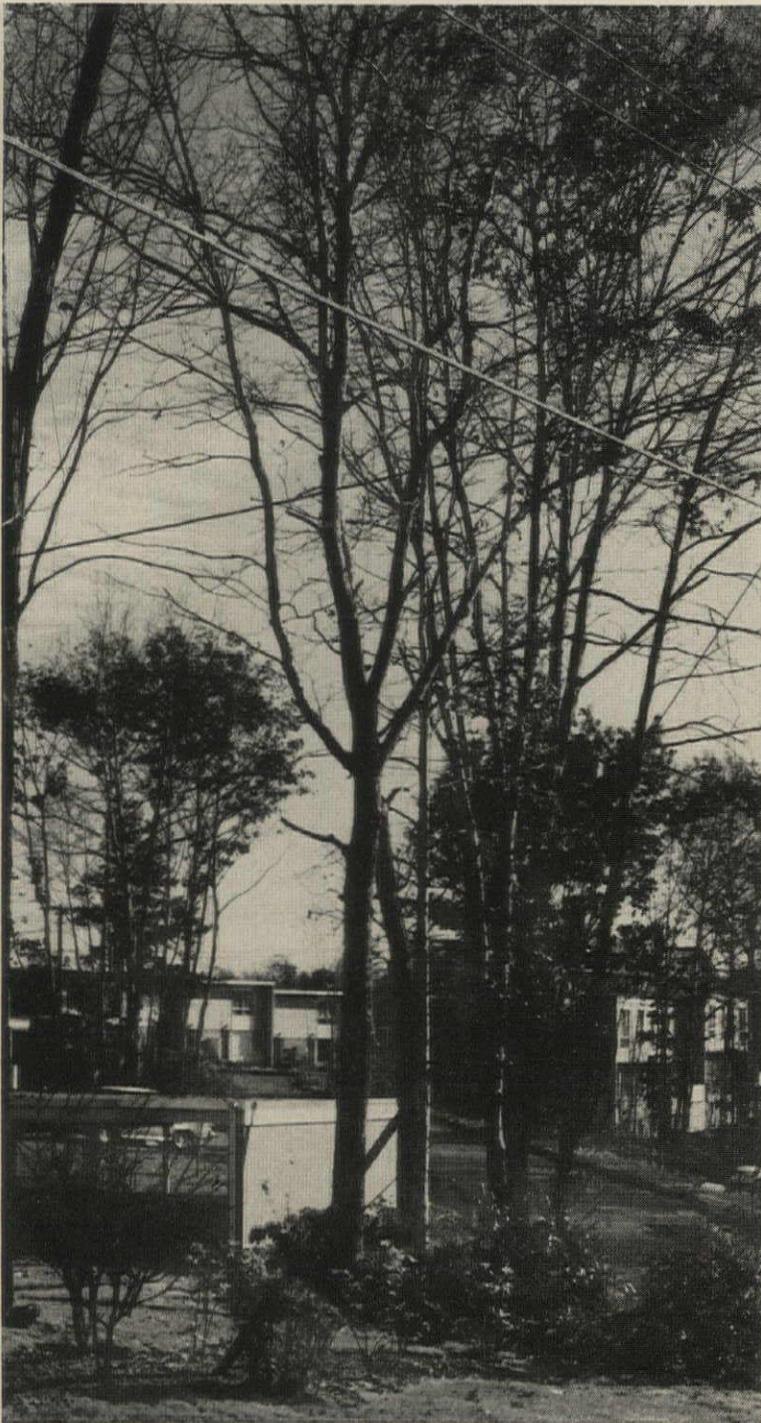
Natural contours were preserved. Plenty of trees were saved. And the buildings themselves were designed and planned to fit the terrain.

The nine buildings are varied in appearance and planned and sited to take advantage of views—most of the apartments have terraces or balconies overlooking lakes and hillsides.

Renters have a choice of five basic plans: two duplexes, a studio apartment, a one-bedroom unit, and a three-bedroom unit (you will see plans and photos of one duplex and the studio apartment on the following spread).

Cost of the project, including land development, was \$1.4 million, about \$20,000 per apartment.

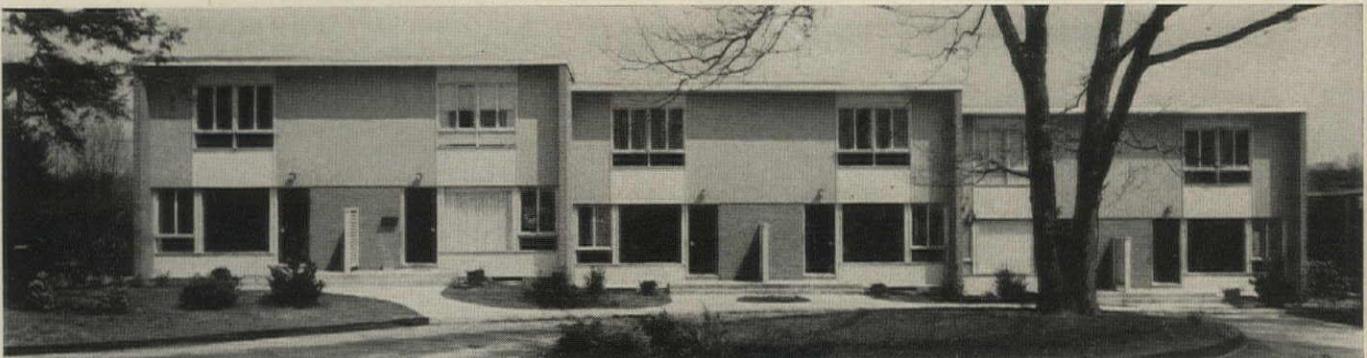
ARCHITECTS: *Peierlen & Tilney*
 DEVELOPER & BUILDER: *Veggo F. Larsen*
 SITE DEVELOPMENT: *Carl Stelling Assoc*
 LOCATION: *New Haven Conn.*



Varied land plan (right) puts apartment buildings among trees on high ground that overlooks lake and three ponds.

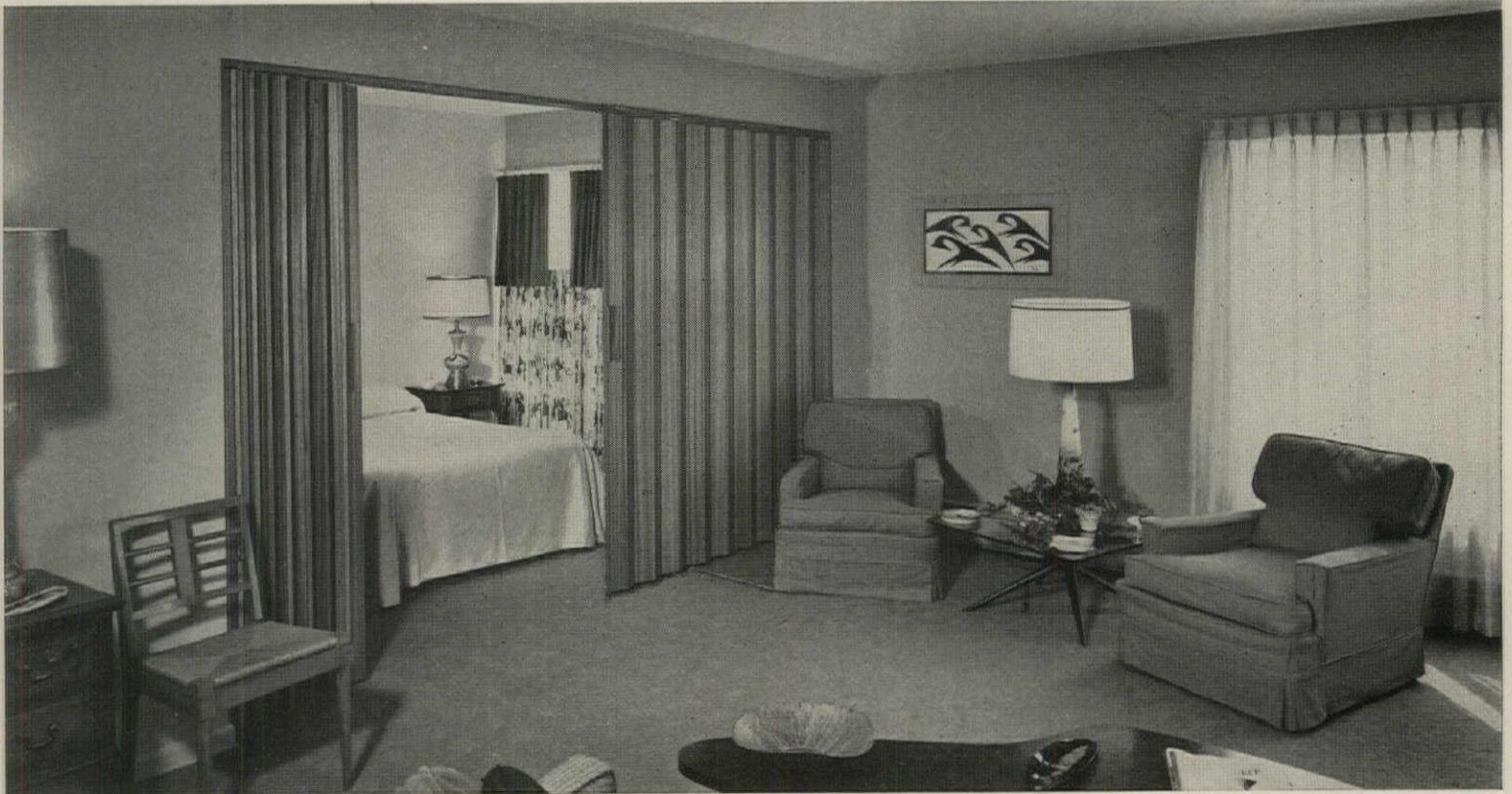
it capitalizes on a rolling, wooded site

Photos: Robert Stahman



ROOF LINE OF BUILDING steps down to reflect drop in grade. Each of three units shown here houses two duplex apartments.

continued



SLEEPING ALCOVE of studio apartment is small (8'x12') but seems larger because it can be opened to living room with folding doors.

This "one-room" pleases people who live alone

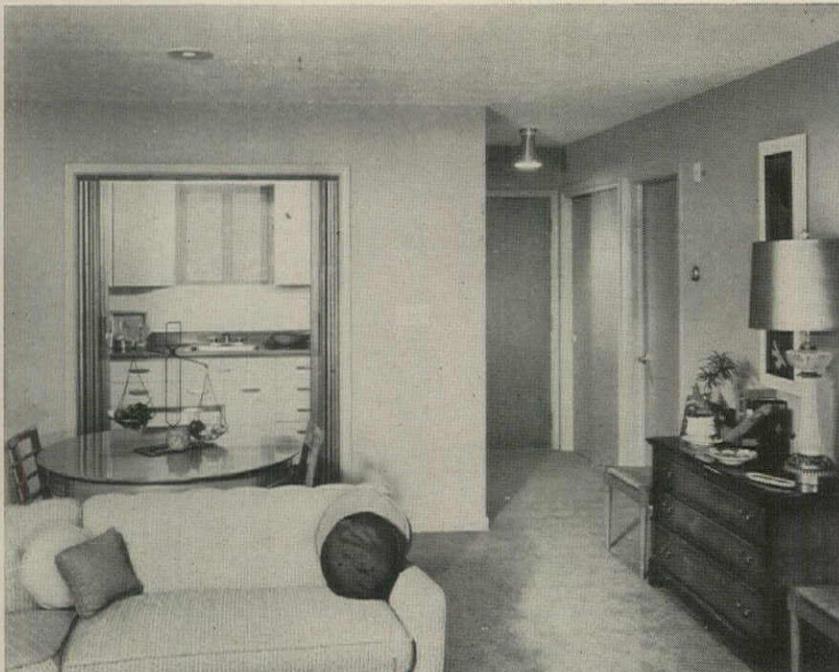
Here is an apartment that combines the openness of a studio-type unit with the privacy of a one-bedroom unit. Reason: its sleeping alcove (behind folding doors above) can be shut off from or left open to the living area.

There are six of these suites (the kind often preferred by single people and childless couples) and 12 conven-

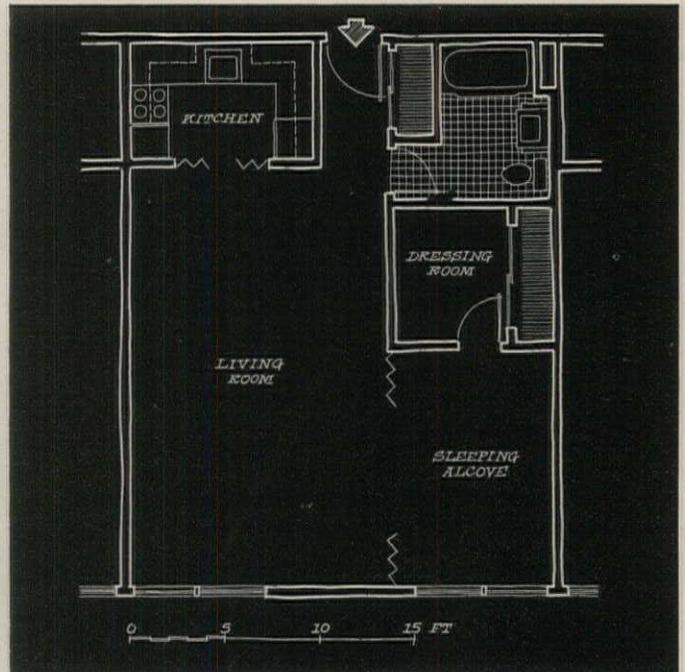
tional one-bedroom units in the New Haven garden apartments shown on the previous spread.

"But if we ever build more apartments, we'll divide the ratio evenly," says Manager Ed Larsen, whose firm built the project. "The people who live in these studio-type apartments think they're terrific."

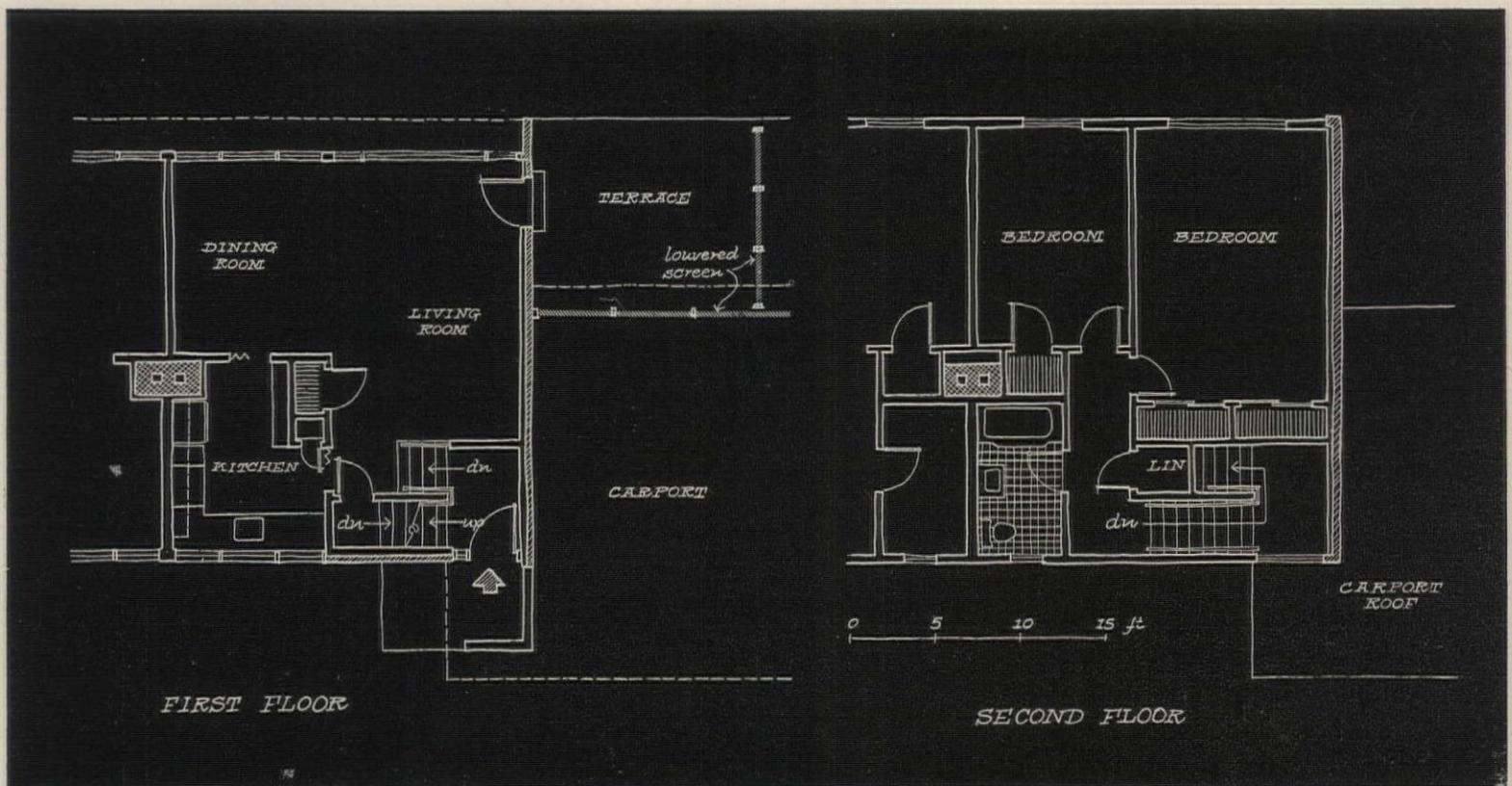
Photos: Joseph Molitor



LIVING-DINING AREA opens to compact kitchen, which, like sleeping alcove (top of page), has folding doors for separation.



EFFICIENT PLAN has 6'x7' dressing room as a valuable private area in otherwise quiet open apartment. Dressing room has 7' closet.



TWO-STORY APARTMENT (one of two units in building shown on p 136) has split-level entry, full basement. Carports separate buildings.

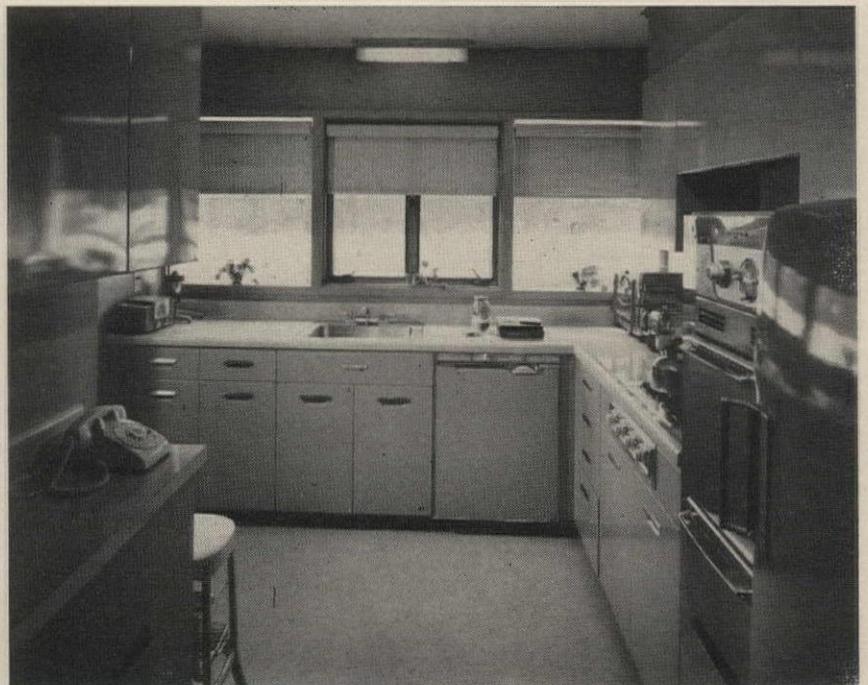
...and this duplex appeals to small families

It appeals to families mainly because: 1) its living and sleeping areas are well separated—on two different levels; 2) its split-level entry sets up an efficient traffic pattern—people can go directly to the bedrooms or kitchen without crossing the living room; 3) its kitchen (below) is well equipped and has plenty of work space.

This duplex (see exterior, p 136) makes good use of its land because it is set into a steep slope. On the upper level are two bedrooms and a bath. On the lower level are the kitchen, dining room, and living room, which opens to a terrace at the rear of the building. There are two of these duplexes in each building.

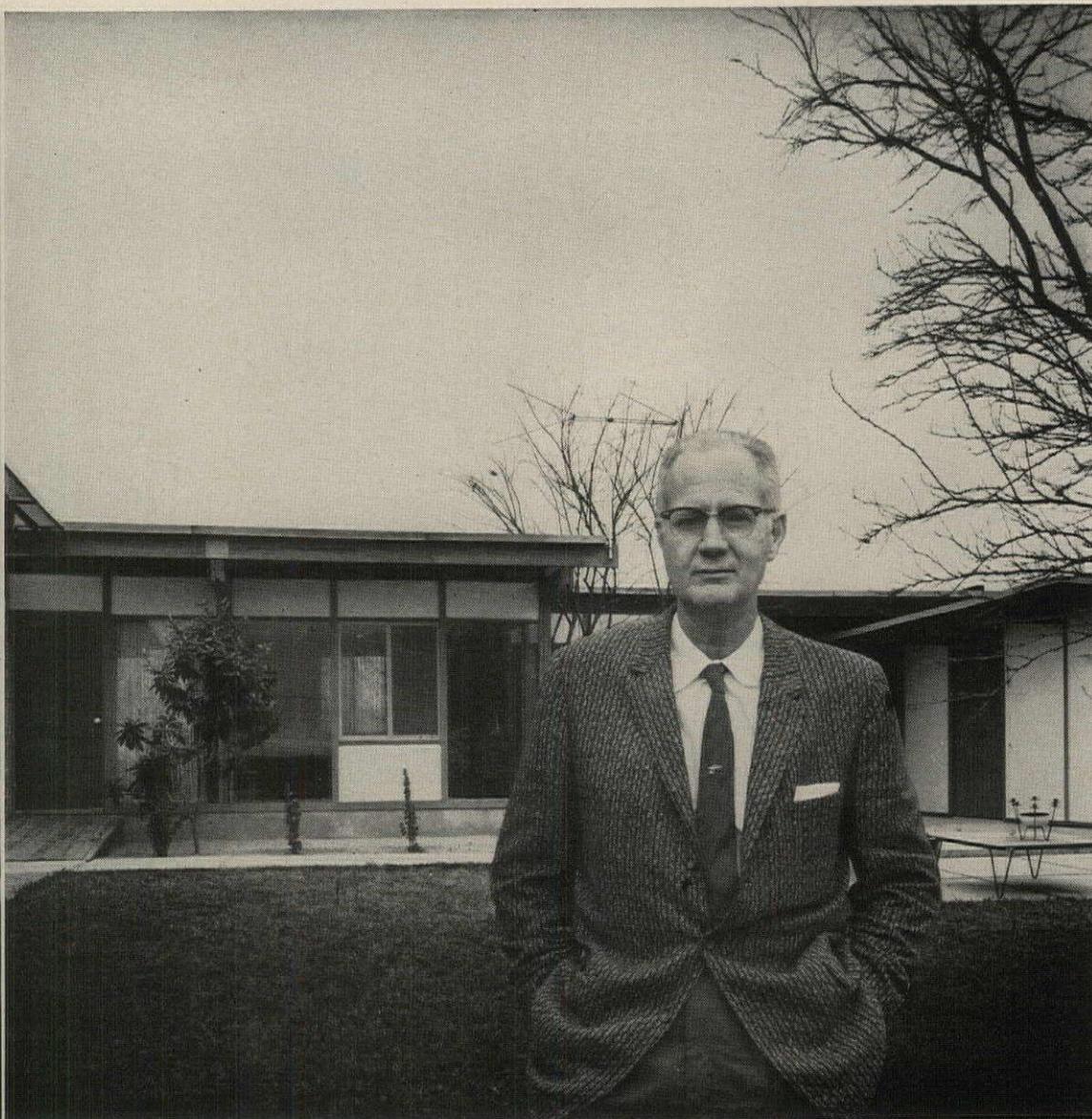


ENTRANCE STAIRWAY lands at rear of living room and door of kitchen. Basement door is next to kitchen door. At right is closet.



KITCHEN is on uphill side of lower level, so windows are at grade. Equipment includes garbage disposer, dishwasher, built-in oven. /END

One man who is always ready to talk architecture is Milton Ryan, AIA. Listeners find him articulate, thoughtful—and always provocative. Besides talking architecture, he has been practicing it in San Antonio since 1938. His work, especially in the residential and church field, has won wide recognition, including Texas AIA awards for five consecutive years. Says Harwell Hamilton Harris, former Dean of Architecture at the University of Texas: "I saw Ryan's houses when I first visited San Antonio. His work is all of a piece. It is not self-conscious, not exhibitionist, not stylistic. He gets his effects without tricks, and without resorting to unusual materials or uses." Details from Ryan's work are shown on p 142—and below, in his own words, is a sample of his architectural thinking. . . .



I think too many of today's houses are built the wrong way

They are the products of a slam-bang process in which the last man on the job—the painter—has to cover up all the misfits, hammer marks, and sloppy work that has gone on before.

Look at the stud wall in many houses. It is made up of studs 16" oc, with loosely fitted headers around openings, which the workmen know will be covered up. This frame is covered by sheets of gypsum. The joints of the gypsum are then covered up with tape. The tape is covered up with sizing. The sizing is covered up with paint.

Then what happens? The lumber shrinks and the foundation settles. The walls begin to twist and the joints begin to crack and the nails begin to pop. So out comes the putty and the paint brush to patch up walls that were born tired.

Where does the fault lie? Not with the workman—this is not a question of workmanship. Not with the materials—this is not a question of quality. Not with the building method—this is not a question of conventional vs component vs prefab building.

The fault lies in an out-dated philosophy of design.

Houses would be better if we dropped the cover-up

I mean that in the design sense, as well as the physical building sense.

We cover up a lack of imagination in design by copying obsolete design styles from the past.

We cover up mundane design by disguising it:

1. *We use a wild variety of materials on exterior walls.* Most subdivisions look like vast test laboratories for all the new materials and finishes. But there is seldom any need for more than two materials on exterior walls. And one material is generally better.

2. *We apply ornament.* Most "ornament" tends to date a structure and distract from the unity of the materials. There is no reason why every piece of material in a house cannot be installed so that it enhances the beauty of the structure—and that—to my mind, is true ornamentation.

3. *We hide behind false fronts.* Too many houses are like signboards—they look fine from the street, but stark and bare from the sides and rear.

But if our design were good enough in the first place, we would not have to cover up.

We should return to simple, undisguised use of materials

Straightforward use of materials would give us a fresh design approach (actually it is a very old design approach that seems fresh in these cliché-ridden days).

Straightforward use of materials would make building easier and simpler, and therefore less expensive—which is all-important these high-cost days.

For example:

We should let materials influence design. Design to a 4' module to fit the multiple of materials that now come in 4'x8' sheets. Why not use deep joists (2x12s, for example)? Deep, narrow pieces of wood are much stronger (weight for weight) than more conventional sizes.

We should use materials as simply as possible: 1) because they almost always look better that way, and 2) because they are almost always cheaper to install that way.

We should leave the structure exposed, so that it acts as ornament. This has the added advantage of eliminating "rough work"—almost every piece of material that goes into one of my houses, for example, shows in the finished product. This usually saves money and always affects the thinking of the workmen—they know no one will be "covering up" their work.

We should show off natural materials. Indoors, I use SPIB #1 dense yellow pine. I pay about \$20 extra for it, because it has a natural beauty. Instead of covering it up with paint, I bring out and enhance its beauty by using stains.

Outdoors, I use redwood. Sometimes I treat it with a bleaching oil, but in most cases I use nothing since redwood weathers beautifully here.

We should use native materials. I use brick for walls and pavement, clay tile for flooring, and glass tile for back splashes because these materials are native to this area, and so are relatively inexpensive. Most areas have their own local materials that are readily available at low cost—but too few people take advantage of them.

We should not disguise composite materials. When you use a sheet of gypsum board (or cement asbestos or hardboard or plywood) in a house, don't try to make it seem as though the whole wall is plastered or paneled. Run a strip or frame around each sheet of gypsum—it will hold it to the wall and act as ornament. Butt plywood sheets together—plywood has a clean edge that butts neatly against the next panel or the floor or the ceiling. A base or casing covering these joints is a costly extra that we apply mostly out of habit. /END

Architect Ryan's houses (he now designs about ten a year) are a direct reflection of the thinking he has outlined above. You'll see that as, on the next eight pages, he shows you many of his cost-cutting details—ED.

Photos: Dewey G. Mears



COVERED PATIO in Ryan house is sheltered beneath reinforced plastic roof supported by rafters.



LIVING-DINING ROOM of house opens to patio (see above) through 20' long sliding glass door.



DOUBLE 2x10's form beam supporting exposed joists in the living room of a \$21,000 Ryan house.

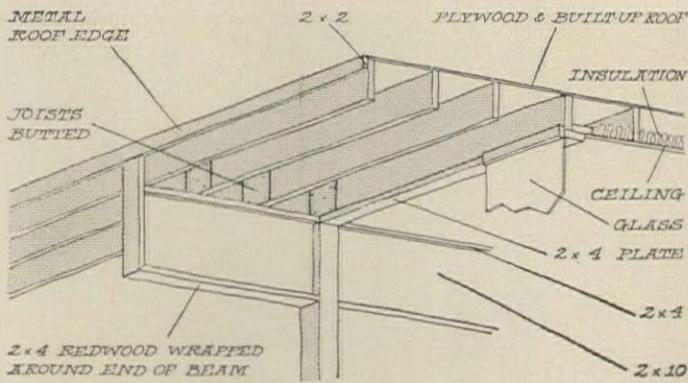


A veteran architect shows you 21 cost-cutting details

Architect Milton Ryan uses these standard details much the way a builder would use standard building components: as standard solutions for a wide variety of everyday, recurring problems.

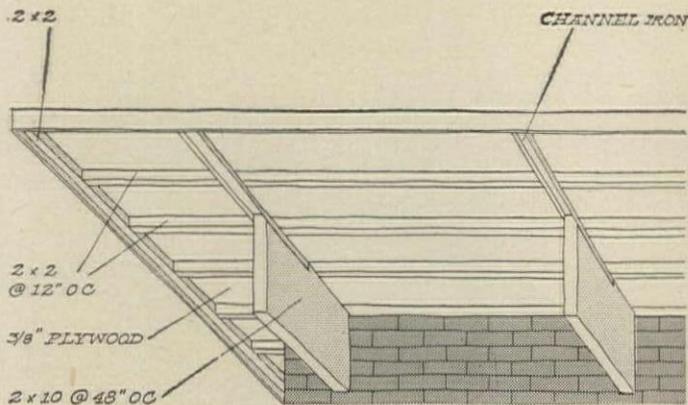
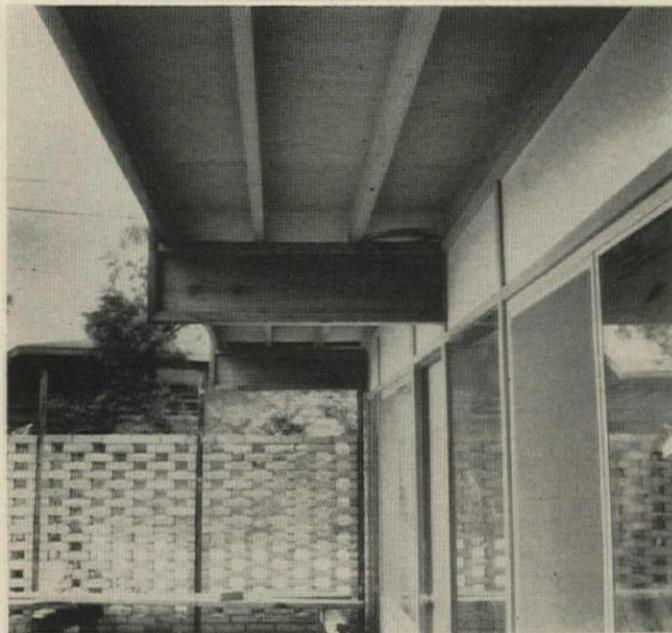
These details reflect this San Antonio architect's philosophy of design, as told in his own words on the previous two pages.

In the photo above, Ryan is pointing to a free-standing post made of three 2x4s, which supports a deep double joist that he often uses in his houses. The two outside 2x4s support the joist members, the center 2x4 acts as a spacer. Starting on the opposite page, you will find 21 equally intriguing details.



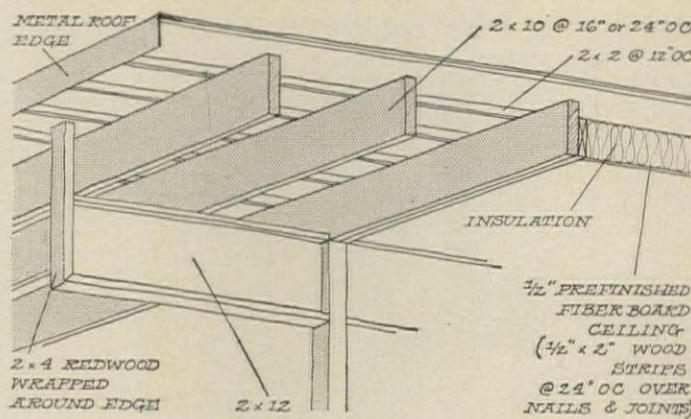
1 How to get a wide overhang for less money

"I sometimes use a deep beam to support joists. The deep, thin beams use less board footage of lumber than conventional beams of equal load-bearing capacity. I wrap 2x4s around the end and edges of the beams to: 1) help keep the beam straight, 2) tie down the joist at the edge of the roof, 3) cover and protect the end of the beam, and 4) give the beam a more substantial appearance. This I-beam look can be carried inside the house."



2 How to get an overhang for practically nothing

"To get an overhang parallel to the joists, I sometimes use 2x2s 12" oc running across the 2x10 joists (which are 48" oc). By using the 2x2 sub-joists, I can space my joists wider and use thinner (3/8") plywood. The lumber cost I save here pays for the overhang."



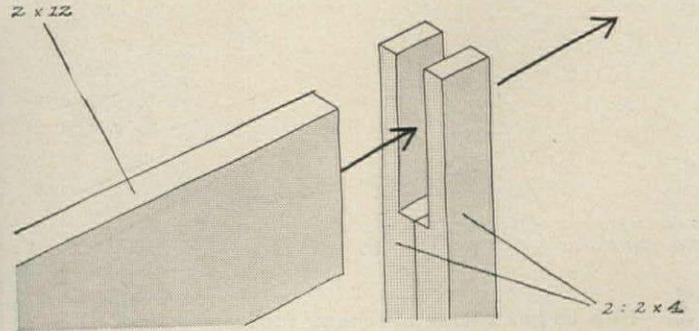
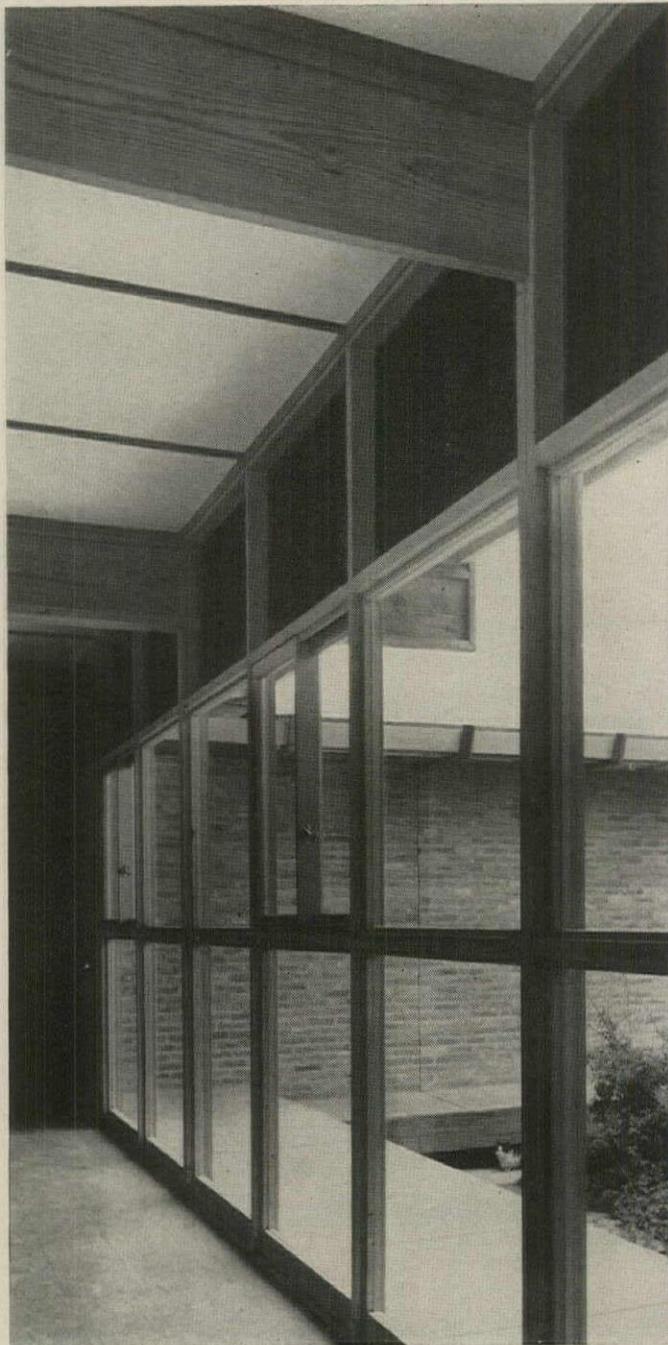
3 How to get a decorative overhang at low cost

"When the budget allows me to use a lighter, more decorative overhang, I combine the two systems shown above. Although extra labor (putting on the 2x2 sub-joists) makes this system more expensive, I still get what I think is a luxury touch with less lumber than is used conventionally. The 2x2 sub-joists extend past the outermost joist to protect it from the weather."



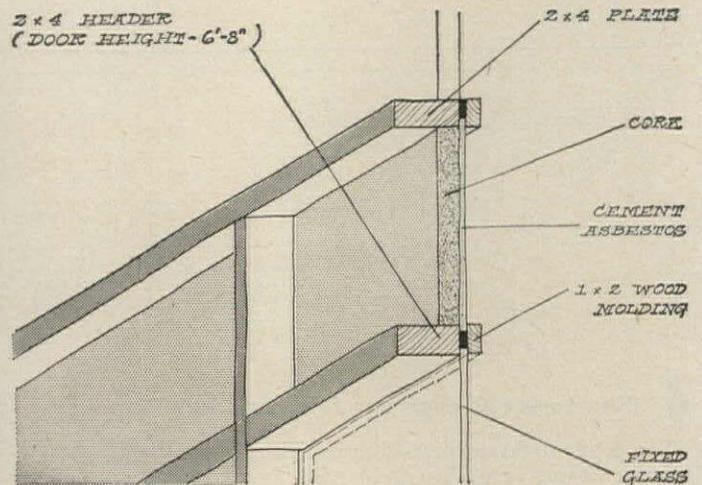
To see six cost-cutting wall details, turn the page

“Don’t disguise composite materials”



4 Doubled 2x4 makes handsome, low-cost post

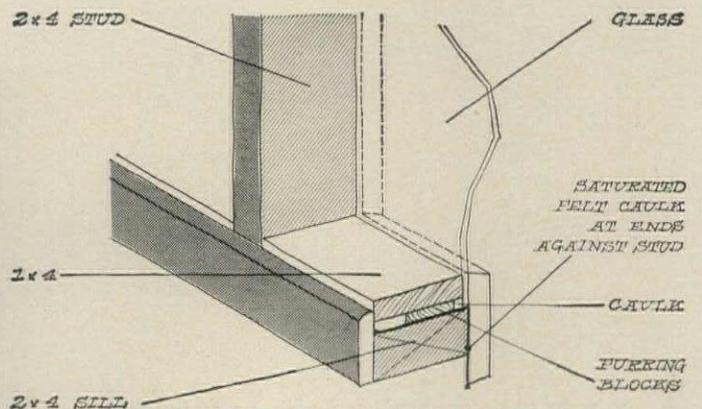
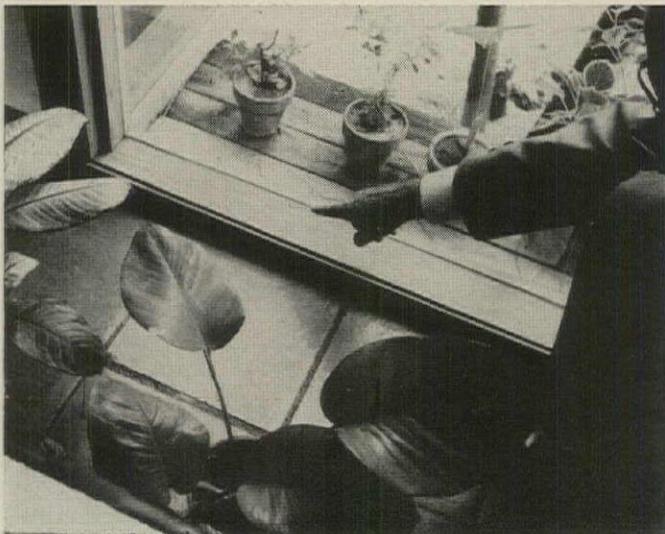
“I use two #1 yellow-pine 2x4s to support the deep, thin, roof beams. This is cheaper than using a 4x6; and by notching the 2x4s before joining them, I can get the effect of mortising the roof beam into the post, which looks better than resting the beam on top of the post. Posts are exposed on the inside, finished with stain. A redwood batten covers the outside of the column. Window muntins and mullions, and top plate, are single 2x4s.”



5 Cork as interior face gives triple service

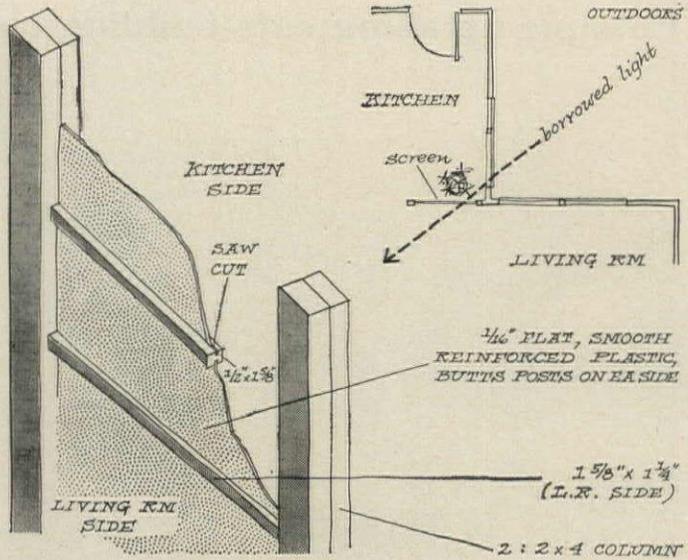
“I nail raw cork directly to the structural 2x4s. Because it needs no finishing, installation is the final job. The cork acts as insulation and as a sound absorber, and makes a pleasant textural contrast with smooth planes of glass and wood.”

H&H staff



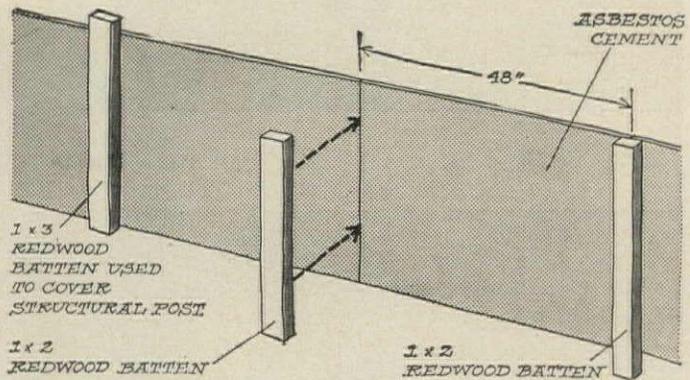
6 Here is a non-leak subsill for fixed glass walls

“Leaking at the sill below fixed glass is one of the commonest call-back problems. This detail prevents this complaint. It is designed to lead away any moisture that does seep in, by providing what amounts to a full-length weep hole.”



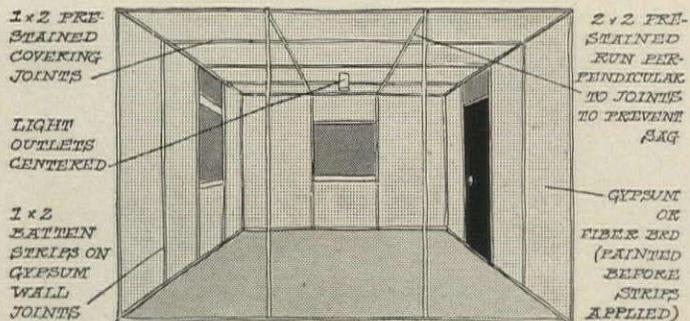
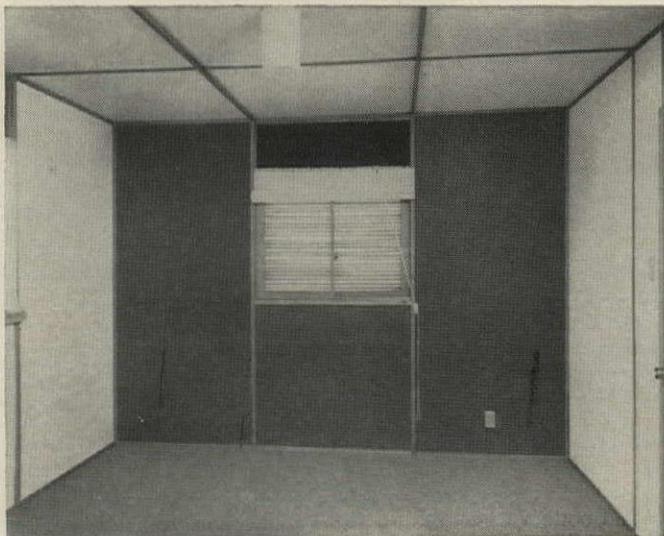
7 This plastic wall lets rooms "borrow" light

"Here it is used between the living room [foreground] and what would otherwise be an open kitchen [see plan in drawing]. It closes off the kitchen, but lets both rooms borrow light from each other. The reinforced plastic lights are simply stacked in grooved muntins, and butt against posts. The plastic is inexpensive, installation is fast and simple, and the effect is pleasant."



8 Siding can be put up in big, easily installed sheets

"I use cement asbestos sheets held to the wall with redwood battens, which also serve to cover the joint of the doubled 2x4 posts. The cement asbestos sheets can be painted, and the battens stained, before they are put up."



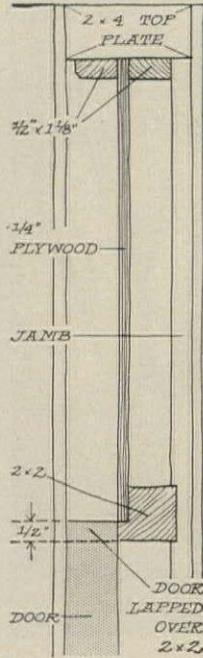
9 This is a cheaper way to apply wallboard

"I use battens, instead of tape and cement, to cover the joints. I like the panel effect. But more important, cracking problems are over: the house can move without damaging the walls. I nail gypsum only at the edges, so the battens cover the nail holes. On ceilings I use 2x2 battens on 4' centers to prevent sagging. With this system you can also use prefinished fiberboard."

To see five cost-cutting door details, turn the page

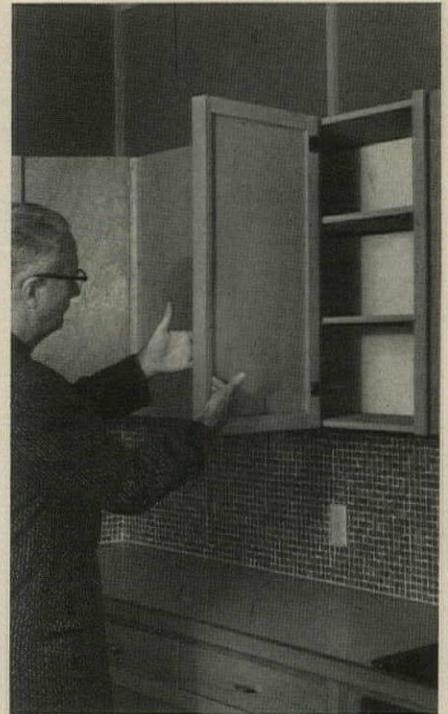
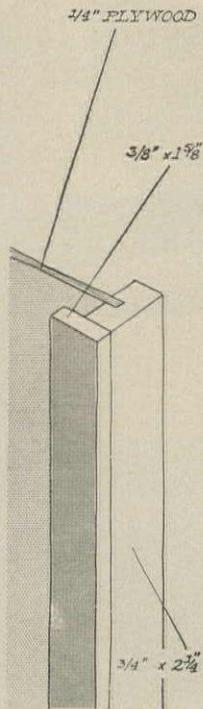
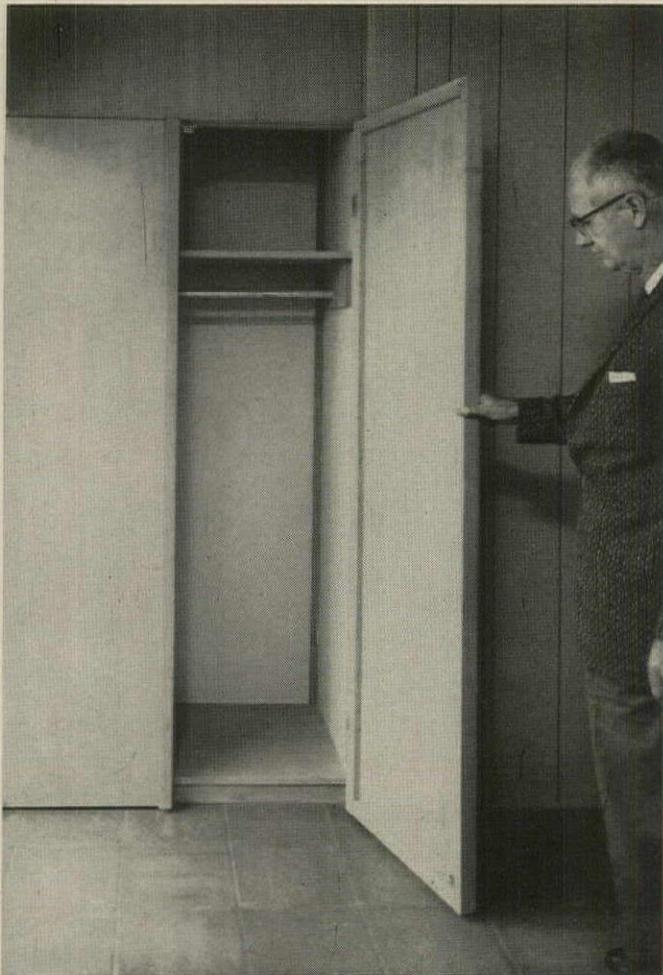
"Simple detailing cuts building costs"

Dewey G. Mears



10 Plywood panels over doors eliminate binding

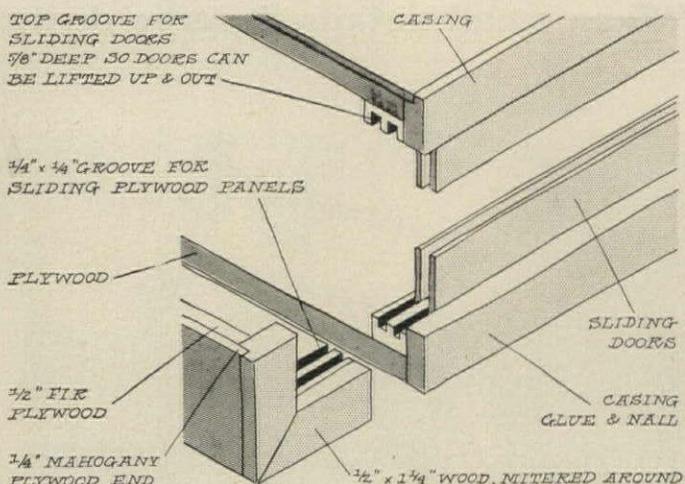
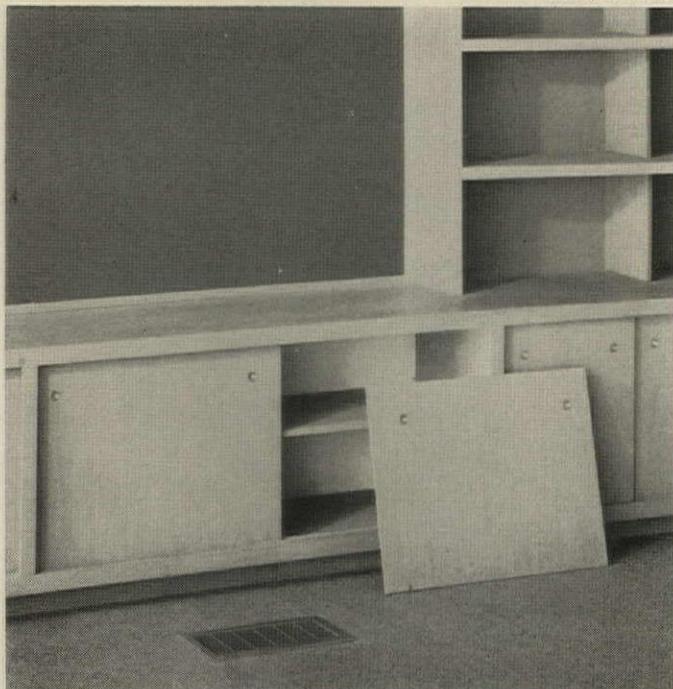
"I eliminated the problem of doors binding against heads by eliminating heads. Instead of building a stud wall over the door, I use a sheet of matching 1/4" plywood, with a rabbeted 2x2 transom bar that the door closes *against*. Extra benefit: doors need not be fitted at the top."



11 These doors are 1/4" plywood—but won't warp

"For wardrobe-closet and kitchen-cabinet doors, I use thin (1/4") plywood, stiffened by 1x2s on the inside. One full-length piece of trim on the front door acts as a door pull. The doors have no flimsy look, and the door pull casts an interesting shadow line from sidelight. On tall doors, I use magnetic catches top and bottom to help prevent twisting."

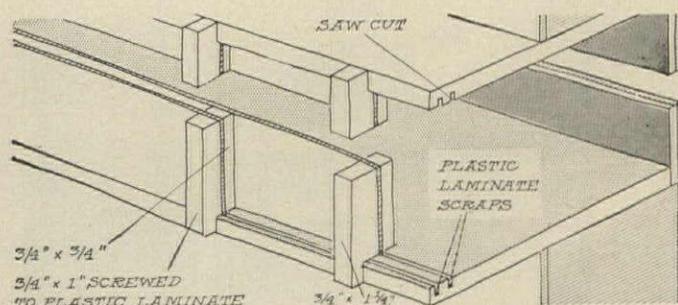
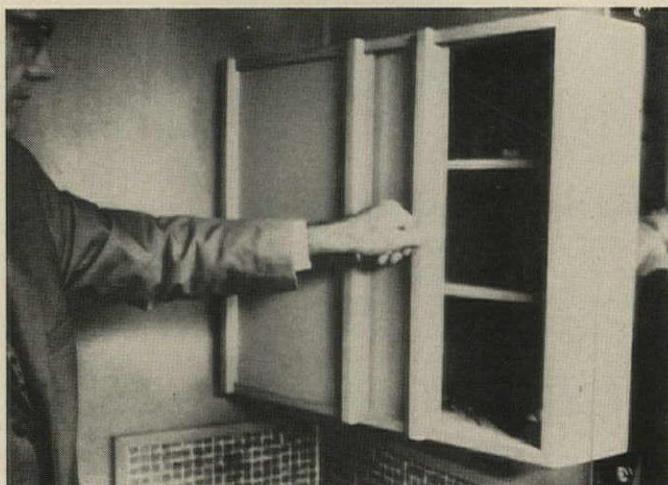
Dewey G. Mears



12 These custom cabinets are made of plywood

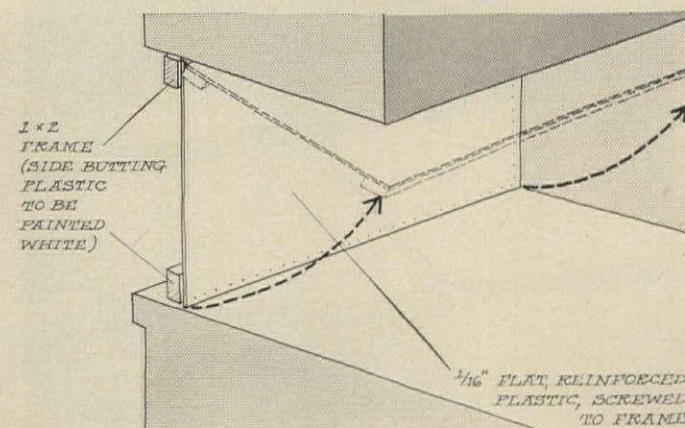
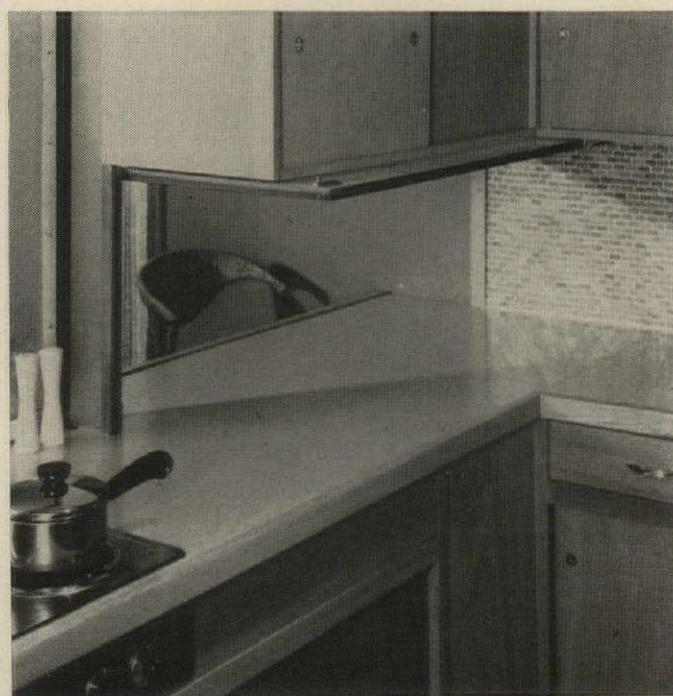
"I laminate 1/4" mahogany plywood to 1/2" fir plywood to build the top and ends of sliding-door cabinets like these for living rooms. Doors are 1/4" mahogany plywood, slide in grooved tracks nailed to the top and bottom cabinet pieces. Top grooves are extra deep so doors can be lifted and pulled out to clean."

H&H staff



13 This cabinet uses scrap from plastic counter-top

"Left-over pieces of plastic-laminate counter-top are used for the sliding doors in this medicine cabinet. The doors are stiffened by trim which also acts as a pull. They slide in saw-cut grooves in the 5/8" plywood top and bottom pieces of the cabinet. Tiny scraps of plastic laminate are used at bottom of grooves."



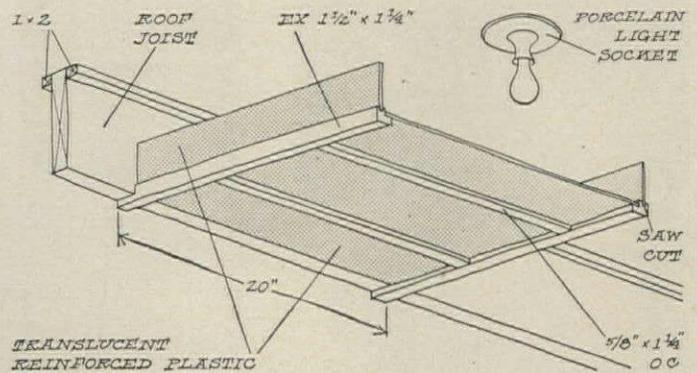
14 Reinforced-plastic door closes pass-through

"Instead of running a solid stud wall up behind kitchen cabinets, and then cutting a hole through it for a pass-through to the dining room, I simply use a top-hinged reinforced plastic door below the cabinets, let the cabinets serve as wall. A magnetic catch holds the door in the open position when the pass-through is in use. When it is dropped down, it shuts out the view of the kitchen from the dining table."

To see seven more smart details, turn the page

“Even small details deserve design attention”

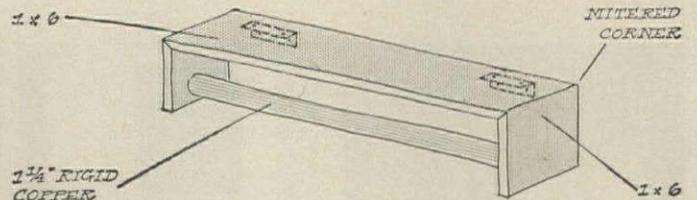
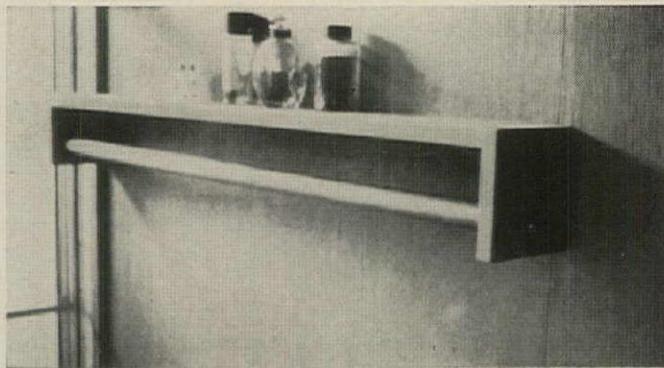
Dewey G. Mears



15 This site-built light fixture “matches” the room

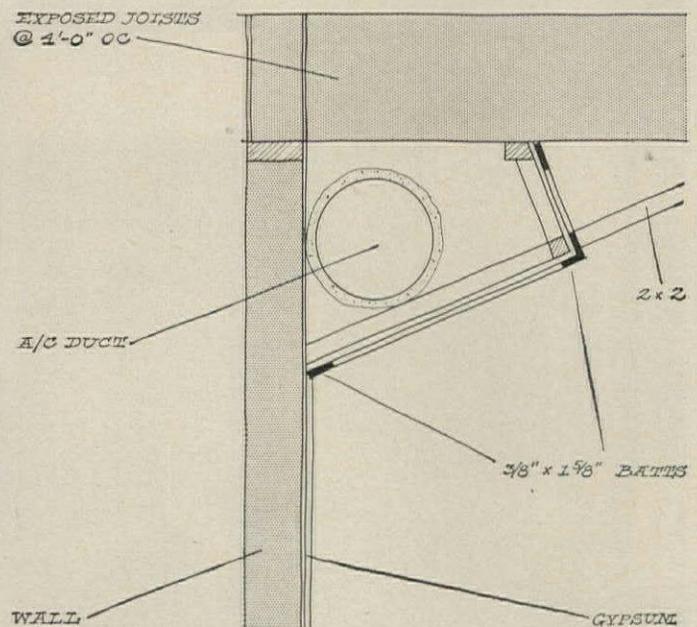
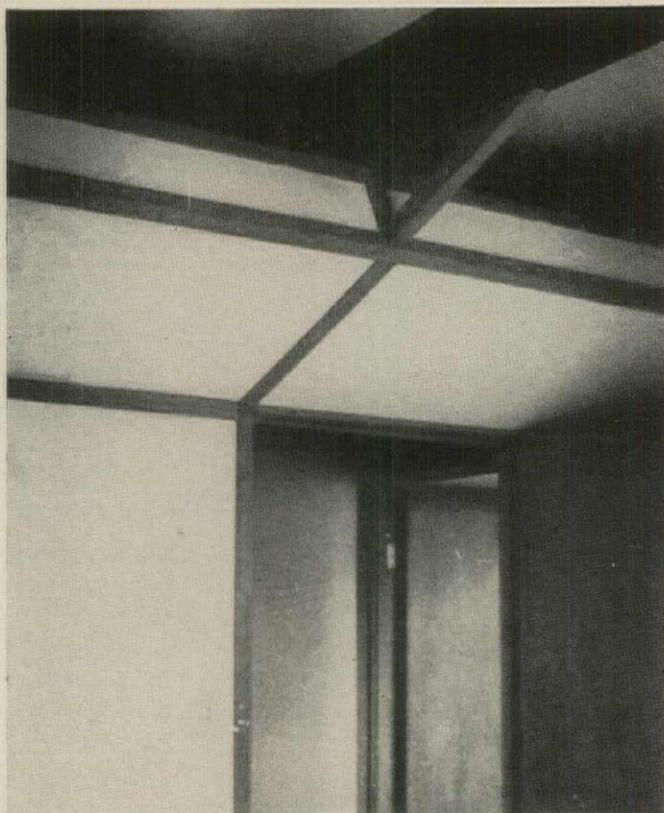
“I use plastic framed in wood—which follows the pattern of gypsum framed with battens—for the few ceiling lights in my houses. My main idea is to avoid introducing an extra material—but I also save money. I use an inexpensive porcelain socket for the bulb.”

Photos: H&H staff



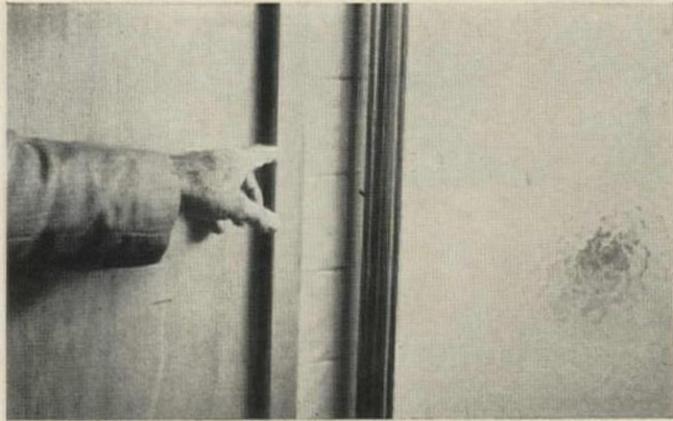
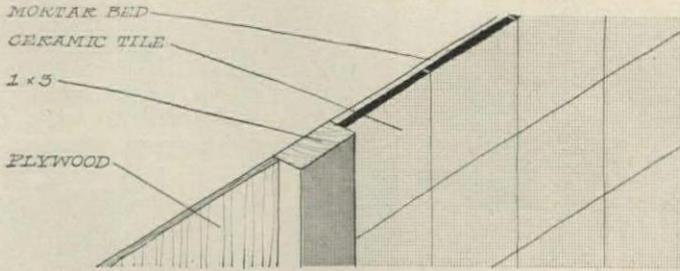
16 Here is a combination bath-bar and shelf

“The bathroom is one place where things should be handy to reach. I put this combination unit just outside the shower, so everything needed—from a bath towel to bath powder—is within reach. Again, to blend materials, I use redwood for the shelf and a copper pipe (which is similar in color) for the bar.”



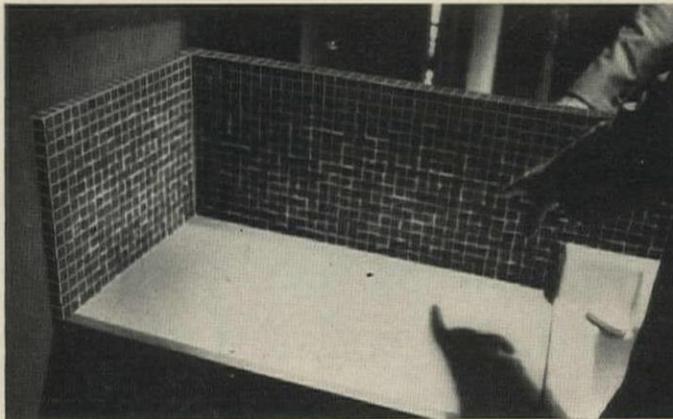
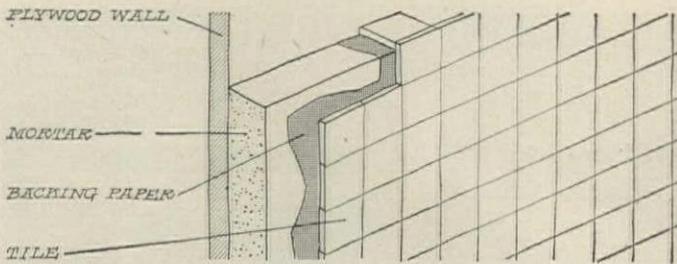
17 How to fit cooling ducts under a flat roof

“When I can’t put air-conditioning ducts into a dropped-ceiling hallway, or if ducts must run perpendicular to exposed ceiling joists, I put slanted furring around the duct. With some more thought, I’m sure the space above the furring could be used for storage or as a place to mount indirect lighting.”



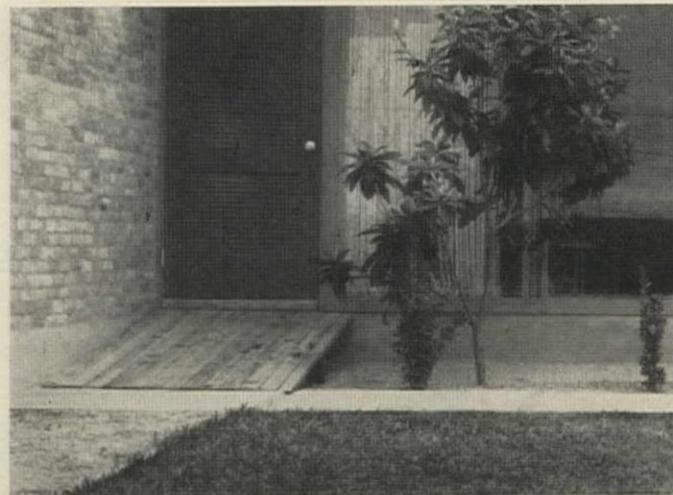
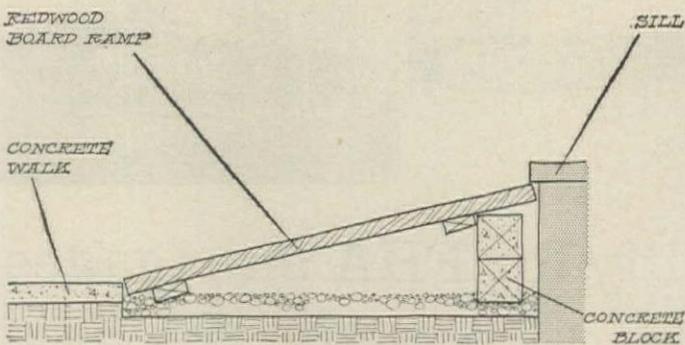
18 I use wood surrounds around ceramic tile

"I use a wood strip as a stop for the tile in my baths and shower enclosures. This hides the mortar bed, carries out the 'framing' idea I use many other places in the house."



19 I eliminate the border around mosaic tile

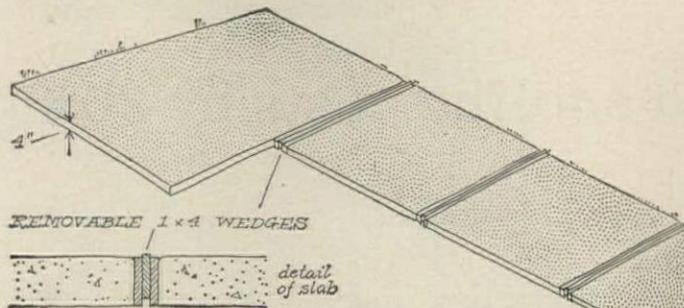
"For my mosaic-tile backsplashes, I return the 1" tiles to the wall to hide the top edge of the mortar bed. I once used a wood surround, but now I've even eliminated that as unnecessary."



Dewey G. Mears

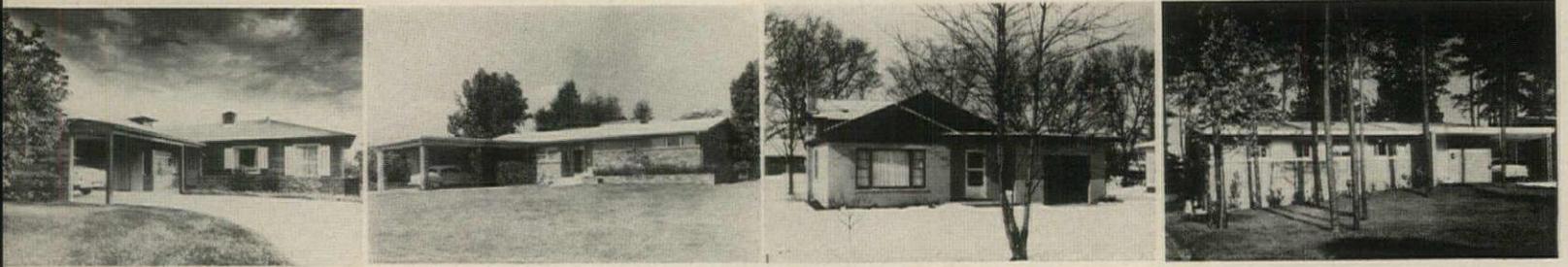
20 Ramps can be substituted for stairs to cut costs

"A ramp is often cheaper than stairs and can be used when space is not at a premium. Grade should not exceed 1' to a 10' run. Ramps are useful to roll things outside for outdoor living."

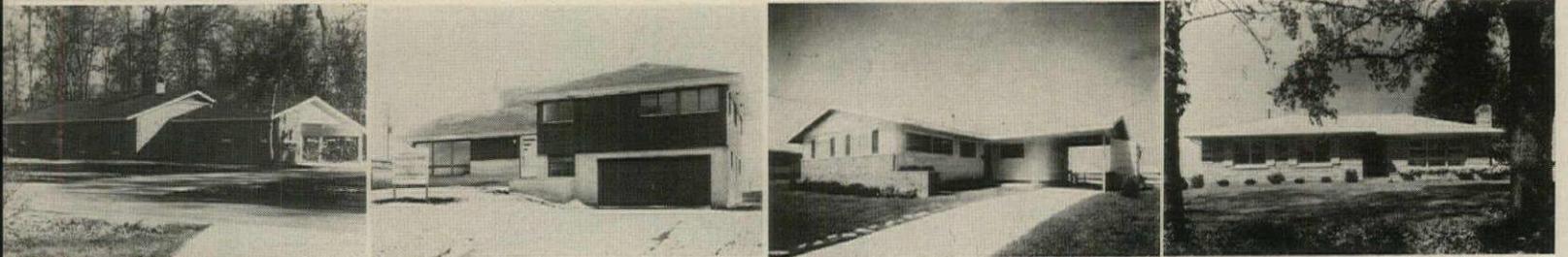


21 Here is one way to get a terrace at less cost

"I get concrete terraces and walks strong enough to withstand unstable soil by pouring separate blocks. When forms are stripped, we fill the joints with pea gravel or turf to match the yard." /END



New research based on 70 air-conditioned houses like these shows that **IF** you insulate, shade and vent **ADEQUATELY**



1. You actually reduce your total building cost



2. You let more prospects qualify for FHA mortgages



3. You cut owners' heating and cooling costs by 30%



THE FINDINGS :

1. Nationwide, the 70 houses, built in 49 cities in all climate zones, cost on the average \$20 less than they would have cost if they had merely met FHA minimum insulation requirements. Their builders had a *net saving* of \$20 even after paying the "extra" costs of full insulation, window shading, and better attic ventilation. Reason: The builders more than recovered their extra costs because they could use smaller, less expensive heating and air-conditioning units.
2. Buyers needed less take-home pay to qualify for FHA mortgages because the improved insulation cut their monthly housing costs. The research data show that in one FHA district a \$3 monthly reduction in heating expense alone can reduce the buyer's income requirement \$25 a month.
3. Annual operating costs were reduced 30% for the average buyer of these test houses. Savings to the buyers ranged from 20% to 50% of what they would have paid had their houses been built according to FHA minimum standards. These percentages apply to heating and cooling costs separately or figured together. And they apply in every climate zone.

Here is how the study was made

Owens-Corning Fiberglas Corp budgeted \$250,000 for this "low-Cost Comfort" research program to help prove that heating and cooling costs can be cut sharply by proper insulation and proper engineering.

The program will extend over two years and eventually cover 150 houses chosen for the study. The 70 test houses covered in this report are the first for which data are available for a full year. All figures are based on actual metered costs for year-round heating and cooling.

The houses are all regular models built by professional builders. Of the group, 21 are in the North, 30 in the central zone, and 19 in the South (see map p 168 for location of each test house). They vary in size from 900 sq ft to 2,600 sq ft of living area, include one-, two- and split-level plans, and range from traditional to contemporary design (see photos, opposite). Most are in developments.

Only three changes were made in any of the houses. The most important change was the addition of enough insulation to exceed—by two or three times—minimum FHA insulation standards (see column at right). Also: shading devices were installed on some windows, and attic venting was improved in some of the houses.

The houses were sold and occupied as usual. The only stipulation was that buyers permit their heating and cooling bills to be sub-metered, studied, and

the results publicized for two years.

Owens-Corning was spurred to make the study by its technical consultant, Tyler S. Rogers. At a HOUSE & HOME Heating Round Table (H&H, Jan '55) Rogers heard the late Robert K. Thulman, engineering consultant, inventor and ex-HHFA official, say: "Any 1,000 sq ft house can be so insulated and so constructed that the cost of heating and cooling should not be more than \$10 a month."

Rogers took Thulman's statement as a challenge, went on to encourage his company to set up its nation-wide research project.

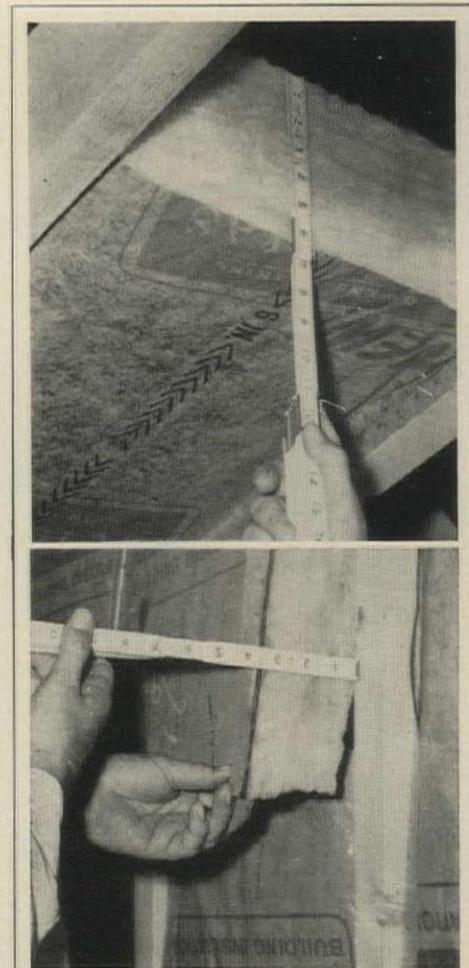
The research now shows that houses can be heated and cooled for *less* than was predicted at the Round Table, except in the North, where the cost is only a trifle higher. Results for the 70 test houses and for each region are reported in detail on p 168.

Other findings reported:

It pays builders to insulate, shade and vent adequately even in the North where air conditioning is not yet widely installed (p 168).

Builders can now predict the heating and cooling costs of any *adequately* insulated, vented, and shaded house, using these data (p 170).

Buyers of the 70 test homes are overwhelmingly satisfied with their operating costs, and report several intangible *benefits* (p 170).



REQUIRED INSULATION in every Owens-Corning test house was: 1) 3" foil-wrapped batts or 6" bulk insulation over ceilings (photo top of page); 2) 3" batts in outside walls (photo above); 3) 2" to 3" for floors—like the 2" perimeter insulation for crawl-space walls shown below.

The measure of effectiveness of insulation is the U-factor—that is the relative amount of heat that can be transferred to the inside or outside in a given amount of time. The lower the U factor the better. The standard for the test houses was a U factor of .05 in ceilings .07 in walls and .07—.10 for floors, depending on type of house and climate zone.

Many elements can be combined to reduce the heating and cooling load, as well as give a U factor as low as that achieved in the test houses. Among them: 1) wool batts of glass, mineral or cellulose fiber; 2) multiple-layer aluminum foil or foil-wrapped batts; 3) insulating sheathing boards; 4) venting the insulated space to take off condensation; 5) weatherstripping; 6) double glazing; 7) overhangs; 8) light exterior colors; 9) vapor barriers; 10) orientation or screening against wind or sun.



continued on p 168

This is Builder Ed Bennett.

Robert Phillips



He tells . . .

“How you can make modern management ideas pay off—even at 14 houses a year”

“If you want to succeed as a builder, think of yourself primarily as a manager—not as a doer.”

That is the nub of Ed Bennett's business philosophy. “You should be a planner, a decision-maker, a coordinator, a communicator,” he says. “Let the doers—either inside or outside your organization—handle the details and the specialized jobs.”

Bennett, a former management analyst for the State Department and the Bureau of Budget, is succeeding as a builder.

His houses—in Bethesda, Md.—sell well. Potomac Overlook, his last completed development, sold out six months before he finished the last house.

His business is growing fast. Six years ago he started building with \$6,666 capital (profit from the sale of his own home). This year he figures his volume will reach \$600,000. He built two houses in 1953, six a year from '54 through '56, eight in '57, and 14 last year. This year

he expects to build 20 (price range: \$34,900 to \$37,800).

His houses are winning awards. In the last three years 10 Bennett-built models have been cited by NAHB and AIA judges for their design and planning. And his Potomac Overlook subdivision won a 1958 NAHB neighborhood development award. (For his three newest prize winners, see p 157-163.)

Why should the builder think of himself primarily as a manager?

Because, says Bennett, it takes an able manager to run a business as complex as homebuilding: “The task of planning a built-for-sale product and acquiring and developing land is prodigious. It is fraught with details—and, if you get bogged down in these details, you're a dead duck. Instead of running your job, you'll find your job running you. To run your job, you'll be wise to follow some basic rules for managing a building business.”

Rule No. 1:

“Manage your own time—the most valuable time you use”

“The secret of business success is the ability to make the greatest number of right decisions in the least time,” says Bennett. “To reach right decisions, you need enough time to think—to sift the facts, reflect on their meaning, and consider alternatives.”

So Bennett sets aside what he calls “quiet time” to plan his operation and make important decisions. And during this quiet time, he makes sure his secretary protects him from interruptions—phone calls, salesmen, casual visitors, etc.

“If you want to manage your own time, find out first what you’re doing with it,” says Bennett

At one point—when he felt his job was beginning to get on top of him—he decided to analyze one of his typi-

cal work weeks. Among other things, he found he was spending:

Too much time on the job—seven days and 75 hours (“six 10-hour days is a maximum for healthy managers”).

Too much time (40%) doing work he was paying others to do—supervising men, selling houses, picking up materials (“the builder who hauls materials himself is foolish because he is doing \$2 to \$4 an hour labor when his time is worth \$7 to \$30”).

Too much time (25%) on the telephone—talking with subcontractors, suppliers, buyers, etc.

Too little time (10%) on “the most important function of a manager”—planning and decision making.

So what did he do to use his time more profitably? For the answer, see Rules 2, 3, and 4 below.

Rule No. 2:

“Delegate responsibility to the people who work for you”

“When you delegate responsibility you free yourself of time-consuming details,” says Bennett, “and you make your people more productive by giving them a greater sense of their own importance.”

He delegates the supervision of his site operations to his field superintendent. Of course, he makes periodic checkups, but he leaves the day-to-day running of the job to the superintendent.

He delegates routine administrative details to his office

“staff”—a woman who doubles as his secretary and administrative assistant.

And he is thinking of delegating some of his fact gathering and preliminary planning to a business-school graduate whom he hopes to hire as an executive assistant.

Does all this delegation of responsibility demand a large payroll? Not in Bennett’s case. His payroll is relatively small—four carpenters and three utility men in addition to his secretary and field super.

Rule No. 3:

“Get help from experts on specialized jobs”

“Most builders—particularly those whose volume is not large—think they can’t afford to hire professional talent,” says Bennett. “They think it’s too expensive. Actually, it isn’t. Even though I don’t have enough capital to expand as fast as I’d like, I still can afford the services of specialists.”

Bennett hires experts in eight different fields. Their total cost: slightly more than 5% of the sales price of his houses.

He hires a firm of top architects (see p 157) to design his houses and draw up his land plans. Cost: 2% of sales price.

He hires a civil engineer to survey his land and stake out his houses. Cost: 1% of sales price.

He hires a construction engineer to plan his heating

and air conditioning; check out his plumbing, wiring, and framing details; and prepare land development estimates. Cost: ¼% of sales price.

He hires a landscape architect to prepare planting schemes. Cost: 1/10% of sales price.

He hires an interior designer to select interior colors and furnishings of his exhibit houses and coordinate color schemes for his buyers. Cost: 1/5% of sales price.

He hires an advertising agency to prepare his ad copy and brochures. Cost: ¼% of sales price.

He hires a sales representative to sell his houses. Cost: 1% of sales price.

He hires a certified public accountant to keep his accounting records, advise him on financial planning, and prepare cost analyses. Cost: ½% of sales price.

Rule No. 4:

“Get your orders down on paper—don’t just talk them”

“This takes time at first,” says Bennett, “but in the long run, it saves time by avoiding confusion.” Here, he adds, is why:

“When you put orders on paper, you are forced to think

them through more thoroughly than when you talk them.

“When you put orders on paper, people are less likely to forget them.

“When you put orders on paper, there is less margin

continued

for error—less chance of misunderstandings about details like sizes, colors, shapes, addresses, quantities, costs, etc.”

Does this mean he handles everything by memo and letter instead of by phone? No.

**He writes complicated orders,
phones simple requests**

In general, he follows this guide: he writes or dictates what has to be written, lets the people who work for him—his field super, for instance—handle what can be spoken.

His written communications leave little room for misunderstanding.

For example: take his invitations to bid on subcontract-

ing (he uses 30 subs). He uses a two-part form. The first part outlines the job in general terms. The second part spells out the specifications in detail. The subcontractor simply fills in the second part with estimated unit prices, then returns it to Bennett.

Result: “We expedite bids, set uniform standards of quality, and give everybody the same basis for bidding (no wrong assumptions).”

Sums up Bennett: “Homebuilding is a diverse and diffuse industry—made up, as it is, of subcontractors, suppliers, professional, and semi-professional people. Perhaps nowhere is there a greater need for clear and accurate communication.”

H&H Staff



BEFORE DEVELOPMENT hillside land is heavily wooded. Bennett clears most underbrush and spindly trees, saves most big trees.

Robert C. Lautman



AFTER DEVELOPMENT hillside land and big trees form fine setting for houses in Bennett's award-winning Potomac Overlook community.

Rule No. 5:

“Find out what it will cost to develop the land before you buy it”

“Land,” Bennett points out, “only has value in relation to development and construction costs.” So he follows an orderly, seven-step procedure before making an offer on raw land. Result:

1. “I avoid paying too much for land—too many builders go broke that way.”
2. “I am less likely to pass up land because, at first glance, it seems too costly to develop.”
3. “Sellers (who usually have no notion of development costs) are more apt to agree to a realistic price when I back up my offer with a realistic appraisal based on facts and figures.”

Here are Bennett's seven-steps:

1. Study your local housing market to determine the best

areas to consider next for residential development.

2. Study local ordinances, zoning, tax structures, restrictions, and special covenants.
3. Get basic engineering data from maps, local planning boards, and the county engineer. Items: topography, soil quality, drainage, water-table depth, slope easements, and sewer, water, gas, and electric lines.
4. Do a preliminary land plan based on maps like those from the US Geological Survey. With 10' gradients, you can figure the number of lots and length of streets.
5. Check the available community facilities—schools, churches, shopping, transportation, etc.
6. Make a preliminary estimate of development costs and finished-lot values.

7. Figure the maximum value of the raw land based on the data you have gathered.

Bennett buys rough land (hilly, wooded), then turns it to his advantage

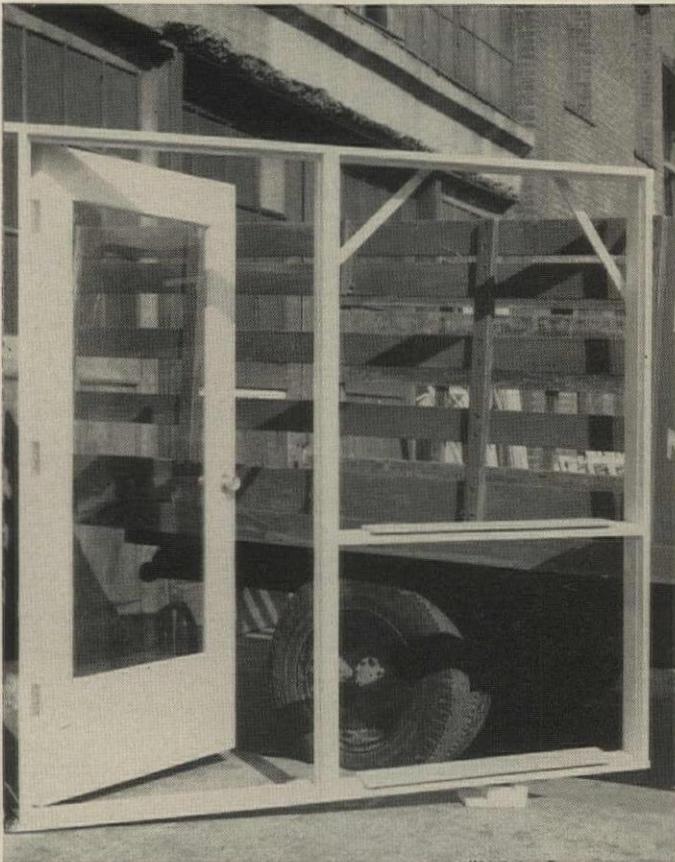
Reason: "For custom-type builders, rough land is often a good bet. Their volume is low, their unit profit must be high. So they can afford to put extra time and money into developing the land."

Example: his prize-winning Potomac Overlook development. He bought land that other builders ignored as too costly to develop. Then he made the most of it by: 1) putting his houses on hillsides at different levels; 2) using

hillside designs that offered the cost advantage of two stories under one roof; 3) giving each house a view of the Potomac River by careful trimming of branches and limited clearing of trees ("this alone added \$1,000 to the value of each lot") 4) saving other trees and natural cover.

Adds one of his architects: "The difference between an average subdivision and an outstanding one is the way the land is planned. We try to create an identity in the development by designing the houses to fit their sites and by laying out the roads with cul-de-sacs so that the development turns in on itself. And we try to keep the land as natural as possible by leaving ground cover, bushes and trees."

James R. Dunlop



DOOR-AND-WINDOW COMPONENT for Bennett houses was built to architect's specifications by Lamar & Wallace, local millwork company.

Del Ankers



ROOF TRUSS, made by a local lumber company, helps Bennett meet 61-day building schedule although he builds many custom-type houses.

Rule No. 6:

"Be a component builder—not a stick-by-stick builder"

"By switching from stick-by-stick building to component building, I saved at least \$2,000 a house in direct and indirect costs," says Bennett.

By buying pre-assembled components:

He saves expensive on-site labor: "A \$3-an-hour carpenter really costs almost double that amount after you add in overhead, indirect costs, 30% to 40% non-productive time, and unrealized profit on the next unit of work."

He saves on-site supervision: "The fewer parts and pieces a foreman has to keep track of, the more efficient he can be."

He saves time: "So I can get by with construction financing over a shorter period. Some builders pay as

much as 30% annual interest for construction money because they stretch their building schedule too far—a good average is 13%."

He improves quality: "For example, the mill that builds our stairways does a far better job than we could do at the site. What's more, they do it at a lower price than we would have to pay just for the stairway material."

Bennett uses these components (some standard and some made to his specs): trusses, stairways and stair rails, exterior door and window bucks, ready-hung interior doors, bi-fold closet doors, kitchen cabinets, bath vanities, and pre-cast shower floors.

He'd like to use more—say, inside and outside wall panels. But, he says, "Our lumber dealers are not yet

continued

competitive enough to make panels for a relatively small builder like me."

Bennett also has his houses designed on a module (2' or 4') to minimize cutting of plywood (for sheathing, roofs, and subfloors) at the site. And he saves \$150 a house by making one "pour" of his footings and slab.

Rule No. 7:

"Use your cost and profit data to plan ahead"

"If you dig into the facts and figures in your accounting system, you can often find the answers to some of your future problems," says Bennett.

He uses his accounting system to:

1. *Control future costs:* "We compare actual with estimated costs, spot work that is out of line, and take corrective steps."
2. *Get future financing:* "I often use bar charts—prepared by my accountant—to show lenders we rate a greater line of credit because of our past sales and earnings record."
3. *Save on future financing:* "A check of our records revealed we were paying an annual interest rate of 19% (conventional interest plus fringe charges) on construction loans. So now during periods of quick turnover we sometimes get unsecured loans from private or banking sources at commercial rates instead of individual loans on each house."
4. *Set realistic future prices:* "Our records give us up-to-the-minute cost figures. On the basis of these figures, it is reasonably easy to arrive at the right prices for our houses."

Rule No. 8:

"Fit your merchandising to your market"

"We use a low-key sales approach," says Bennett, "because we think this is the approach that works best with the kind of people who buy our houses."

When Bennett made an analysis of 26 of his buyers, he found that:

Most of them (96%) are college graduates.

Most of them (72%) are professionals—lawyers, psychiatrists, chemists, and others who have done graduate work.

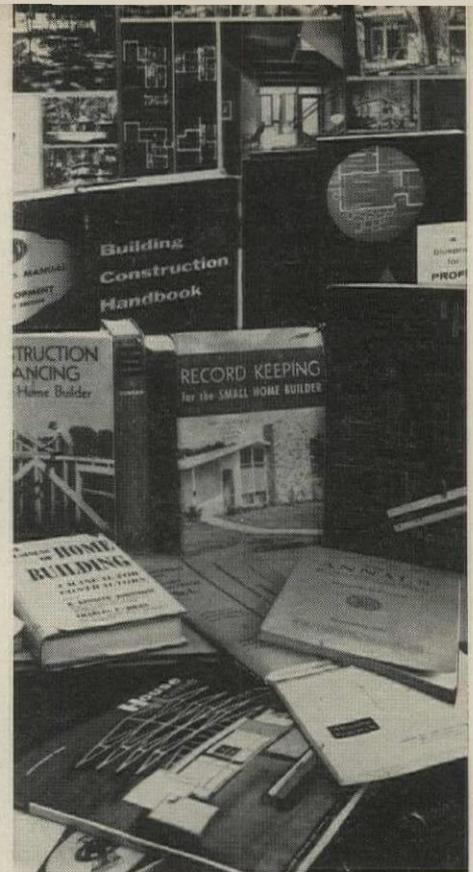
Most of them are in the upper income brackets. The range: \$9,500 to over \$20,000. The median: almost \$12,000.

Here is how he keys his merchandising to his kind of buyers:

His newspaper ads are dignified—stress expert design and attractive surroundings.

His sales brochures stress quality without shouting about it. They are inexpensively produced in black-and-white offset, get most of their visual impact from the use of handsome photographs—not renderings. The brochures build confidence with background information on Bennett and his architects, his construction engineer, and other experts—plus specifications on the materials and equipment in his houses.

His exhibit model is furnished carefully (but not expensively) with contemporary furniture that ties in with the contemporary design of the house. /END



Here is a list of recommended reading for builder-managers

Builder Bennett recommends these books and other publications because, he says, they help him manage his business. If you can't get copies at a local library or book store, write directly to the publishers.

A Blueprint for Profit—a study of the problems of business management among residential builders, US Gypsum Co, 300 West Adams Street, Chicago.

Building Construction Handbook, Frederick S. Merritt, McGraw-Hill Publishing Co, 330 West 42d Street, New York City.

Construction Financing for the Home Builder, HHFA, Washington 25, DC.

Dwelling House Construction, Albert Deitz, D. Van Nostrand Co Inc, 120 Alexander St, Princeton, N.J.

Home Builders Manual for Land Development, 1958 edition, NAHB, 1625 L Street, Washington, D.C.

Housebuilding in Transition, Sherman J. Maisel, University of California Press, Berkeley, Calif.

How to Design to Build Better for Less, HOUSE & HOME, Sept '58, 9 Rockefeller Plaza, New York City.

How to Estimate for the Building Trades, American Technical Society, Times Tower Building, New York City.

How to Make and Save Money, Vol I & II, Construction Dept, NAHB, 1625 L Street, Washington, D.C.

Papers on the Science of Administration, edited by Gulick & Urwick, Institute of Public Administration, 684 Park Avenue, New York City.

The President's Guide, Prentice-Hall, Englewood Cliffs, N.J.

Technical Studies, 1946-59, Small Homes Research Council, University of Illinois, Urbana, Ill.

Record Keeping for the Small Home Builder, HHFA, Washington 25, DC.

What People Want when they Buy a Home, Edward Paxton, HHFA, Washington 25, DC.



Robert C. Lauffman

AT FLINT HILL. Builder Bennett's new development, houses are designed and sited to make the most of wooded, hilly terrain.

What happens when a smart builder gets together with a team of top architects?

Every house is a prize winner

There are three models at Builder Ed Bennett's Flint Hill development in Bethesda, Md.—and all three are winners of this year's NAHB design awards.

All three are contemporary houses, skillfully sited on difficult hillside lots and designed by top Architects Keys, Lethbridge & Condon (Washington, DC). All three are two-level houses with both levels opening to grade. All three are in the upper price bracket (\$34,900 to \$37,800).

And all three were praised by the NAHB judges—two architects and a builder—for: 1) the simplicity of their exterior lines ("very crisp and straightforward"); 2) the "warmth" of their materials; 3) the good use of their lower levels for extra low-cost living space.

Bennett hands his architects a lot of credit:

"I know good design helps me sell"

It makes sense for a merchant builder to work with an architect, he says. Each is an expert in his own way—the architect in design and planning; the builder in cost-cutting, new production methods, and knowledge of the market. Put the two together, and you are bound to come up with a better, more saleable product.

Bennett—a custom-type builder (14 houses last year) with a number of big ideas (see p 152)—has worked with Keys, Lethbridge & Condon since he started building in 1953.

Bennett has developed a close working relationship with his architects

His aim: to make sure they understand all his problems. When he tackled his Flint Hill project, he gave the architects a 14-page memo outlining his thinking on every phase of his operation. Items: site planning, financing, space and layout requirements, minimum room sizes, and even an appraisal of

buyers (their incomes, occupations, ages, family sizes, etc).

Does this tie the architects' hands? "Far from it," says Architect Don Lethbridge. "This kind of information is essential to us. The more we know about the builder's problems, the less effort we waste on hit-or-miss design."

Bennett pays architects' fees averaging 2% of the sales price of his houses

He pays a \$2,500 fee for each prototype model, \$50 to \$100 for each duplicate of the prototype, \$40 to \$75 a house for site planning, depending on the difficulty of the site. If buyers want major variations of the prototypes (50% to 80% do), the architects' fee is 2½ times the drafting cost (as much as \$1,000 a house).

Comments Architect Lethbridge: "very generous fees for this type of work. But, for us, a builder-house project becomes really profitable when the volume is large—say, several hundred houses."

The mortgage lender, too, was an important influence on Bennett's new models

The lender (Prudential Insurance Co) influenced basic decisions like the choice of exterior materials and roof types.

"Of course, our designs were limited by what the lender would accept," says Lethbridge. "just as we were limited by cost and what the market would buy.

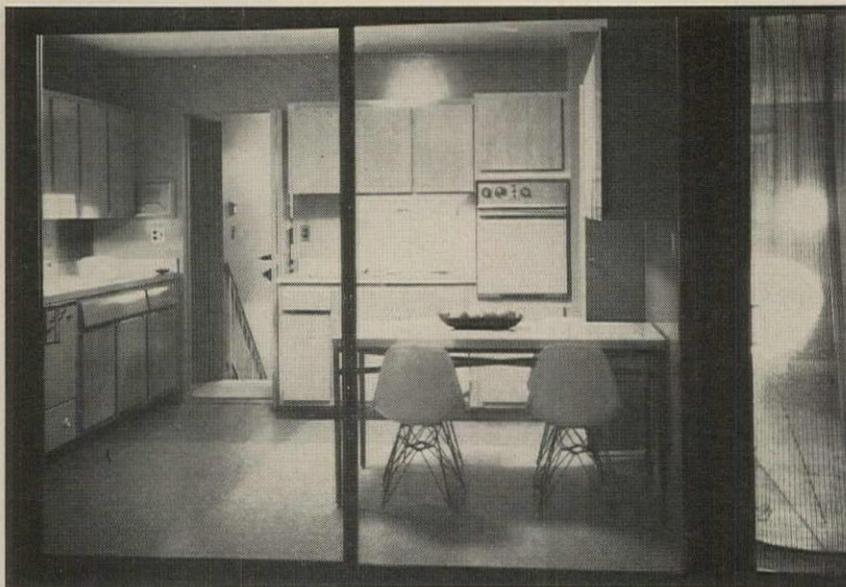
"These limits are the chief reason why builder-house design should be judged by commercial standards—not the same thing at all as work for a private client. Judged by commercial standards, we believe that Bennett's new models are excellent.

For a look at the three prize winners, turn the page

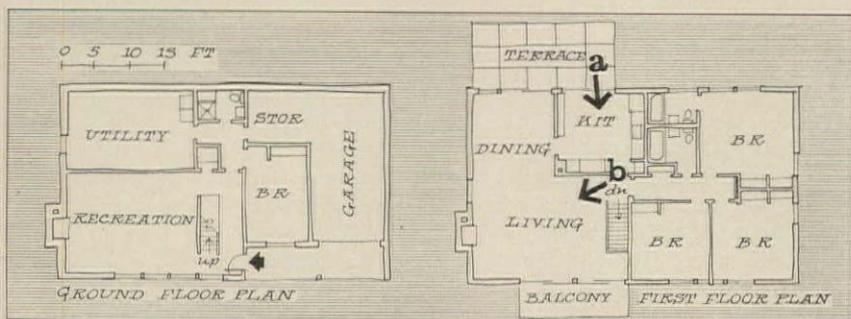


BENNETT'S "OVERLOOK" MODEL was designed for an uphill site. Front entry, left of garage, is sheltered by cantilevered upper level.

This prize winner is Bennett's best-seller



KITCHEN (a) opens to rear terrace through sliding-glass doors. Stairs, through door at left rear, lead down to lower level entry.



SIMPLE RECTANGULAR PLAN helped hold down building costs. NAHB judges liked living-room balcony, said storage off garage is "excellent".

It is also his largest and least expensive new model—2,274 sq ft of finished living area for \$34,900 on a half-acre wooded lot.

Like Bennett's two other award winners, this model is a hillside house with living and sleeping areas on the upper level. Unlike the others, it has a lower-level entry. The upper level offers indoor-outdoor living on two sides—a front balcony (above) off the living room and a rear terrace off the kitchen (left) and dining area.



LIVING ROOM (b), seen from top of stairs, gets its major interest from plywood paneling and used-brick fireplace.

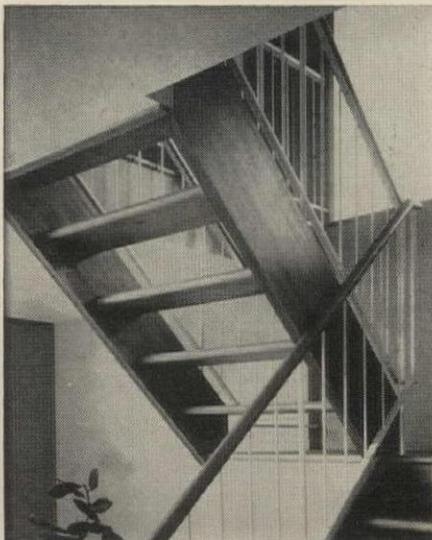


BENNETT'S "HILLSIDE" MODEL (here on crest of knoll) was designed for downhill sites. Glass panels, left of entry, let light into stairwell.

This prize winner is a new idea for hillsides

It is a new idea because it has a T-shaped plan. The base of the T, the living room (right), opens on to a balcony and juts out over a lower-level terrace at the rear of the house.

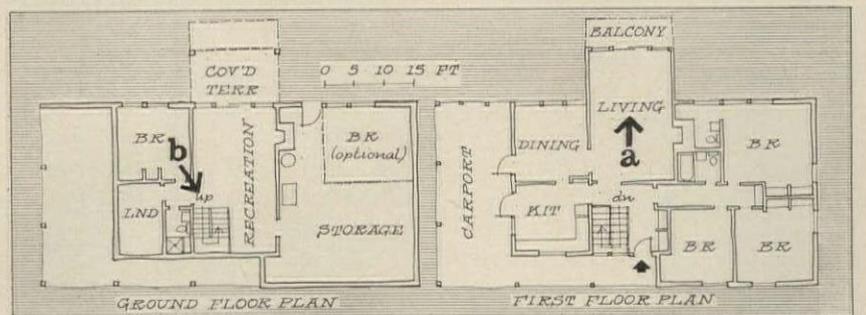
The lower-level recreation room, opening to the terrace through sliding-glass doors, also gets natural light from the front of the house. Reason: two door-high panels, next to the front door and at the head of the open stairwell (below), let daylight into the lower level. The house has 1,960 sq ft of living space, sells for \$36,900.



OPEN STAIRCASE (b), seen from lower-level recreation room, has no risers, gets light through glass panels at upper right.



LIVING ROOM (a) opens onto rear balcony and gets view of woods beyond through all-glass end wall and glass gable end.



T-SHAPED PLAN works around living room and entrance hall, has separate dining room and front kitchen opening to carport.

continued



BENNETT'S "WOODSIDE" MODEL, like his "Hillside", was planned for downhill sites (lower level opens to grade at rear). Said NAHB judges:

This prize winner mixes new and old appeals



FIREPLACE (a) is focal point of living room. Raised hearth is used brick like that in the exterior walls. Paneling is grooved plywood.

And because it mixes contemporary and traditional features, it is the kind of house that much of today's home-buying market wants.

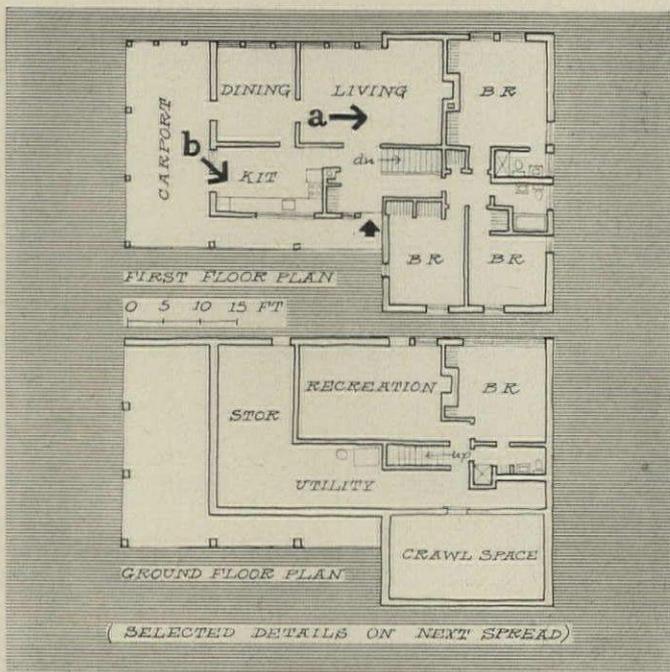
Its old appeals: 1) a relatively high-pitched roof (almost 5-in-12); 2) a front porch; 3) warm materials (cedar shingles, used brick); 4) a separate dining room; 5) a generous central entry hall.

Its new appeals: 1) deep overhangs; 2) some exterior panelization; 3) window walls across the rear; 4) an open stairwell between the two levels; 5) a front kitchen; 6) indoor-outdoor living (off the lower-level recreation room and in the carport, which doubles as a porch).

The house has 2,189 sq ft of finished living space and is priced at \$37,800.



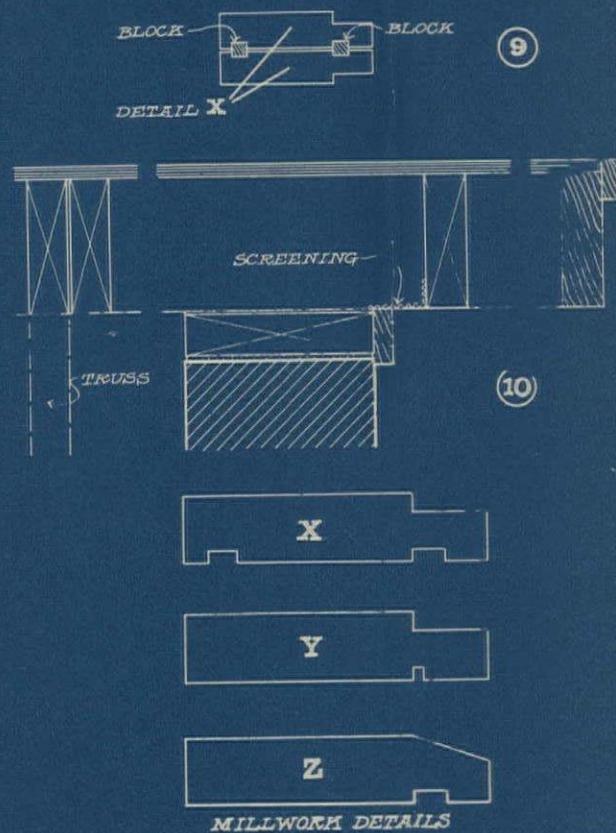
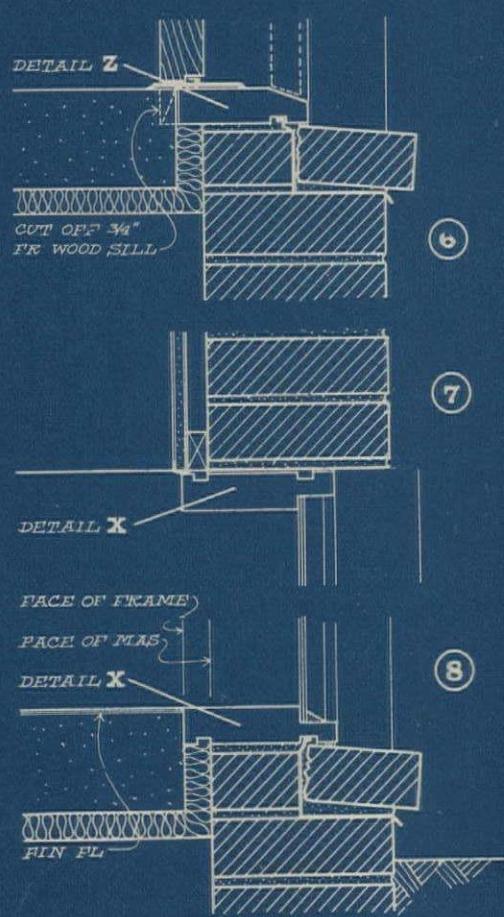
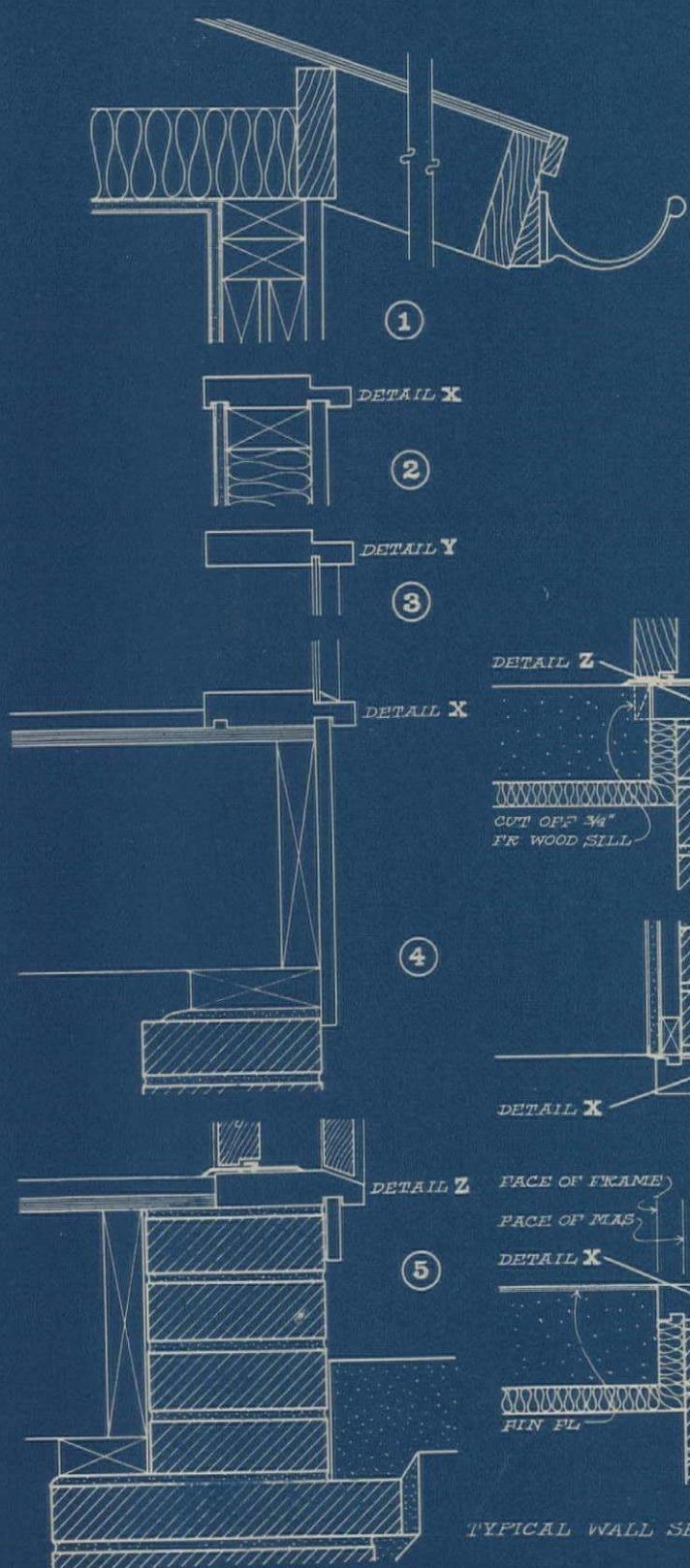
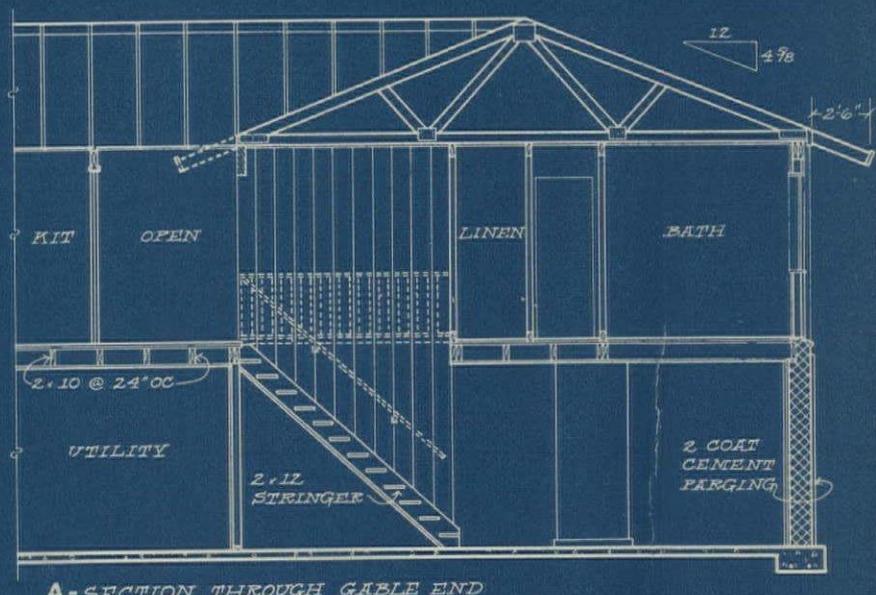
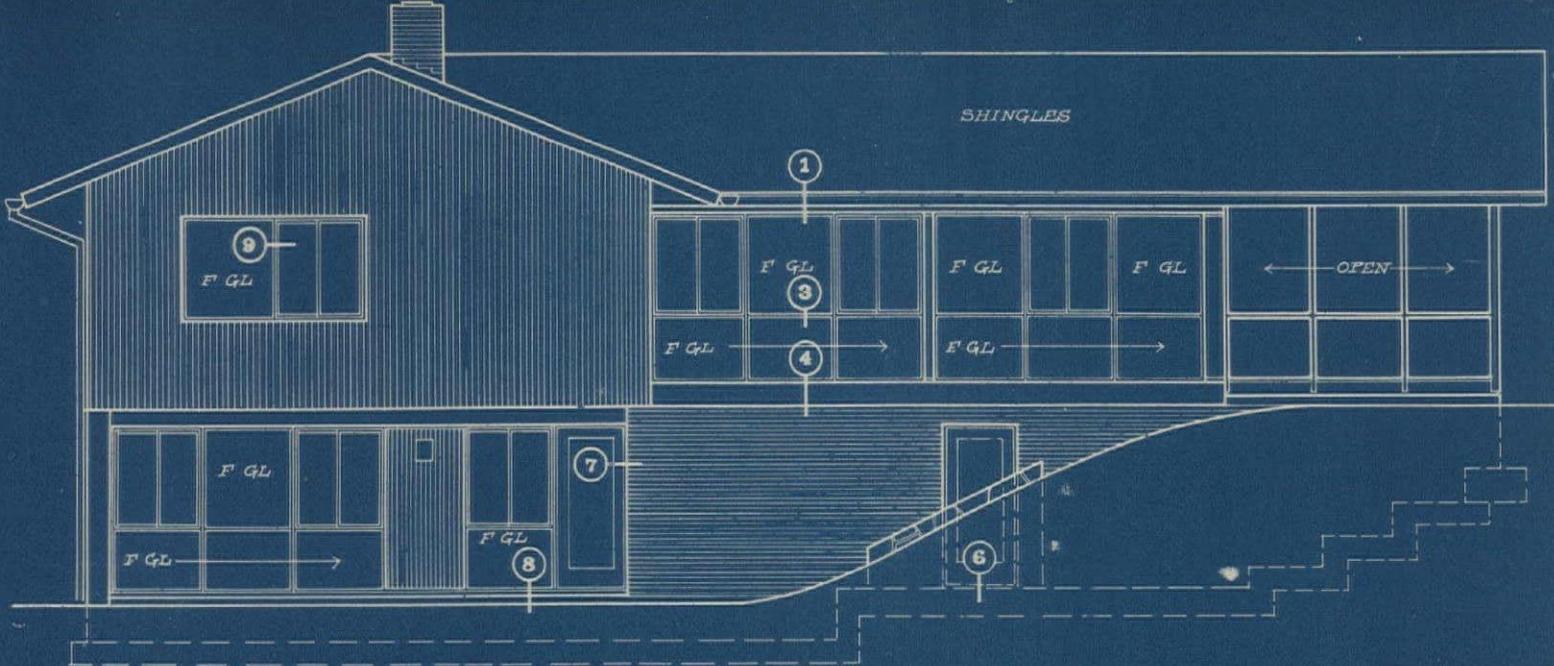
"It takes advantage of topography to provide more space at less expense on lower level." Kitchen, left, and rear dining room open to carport.



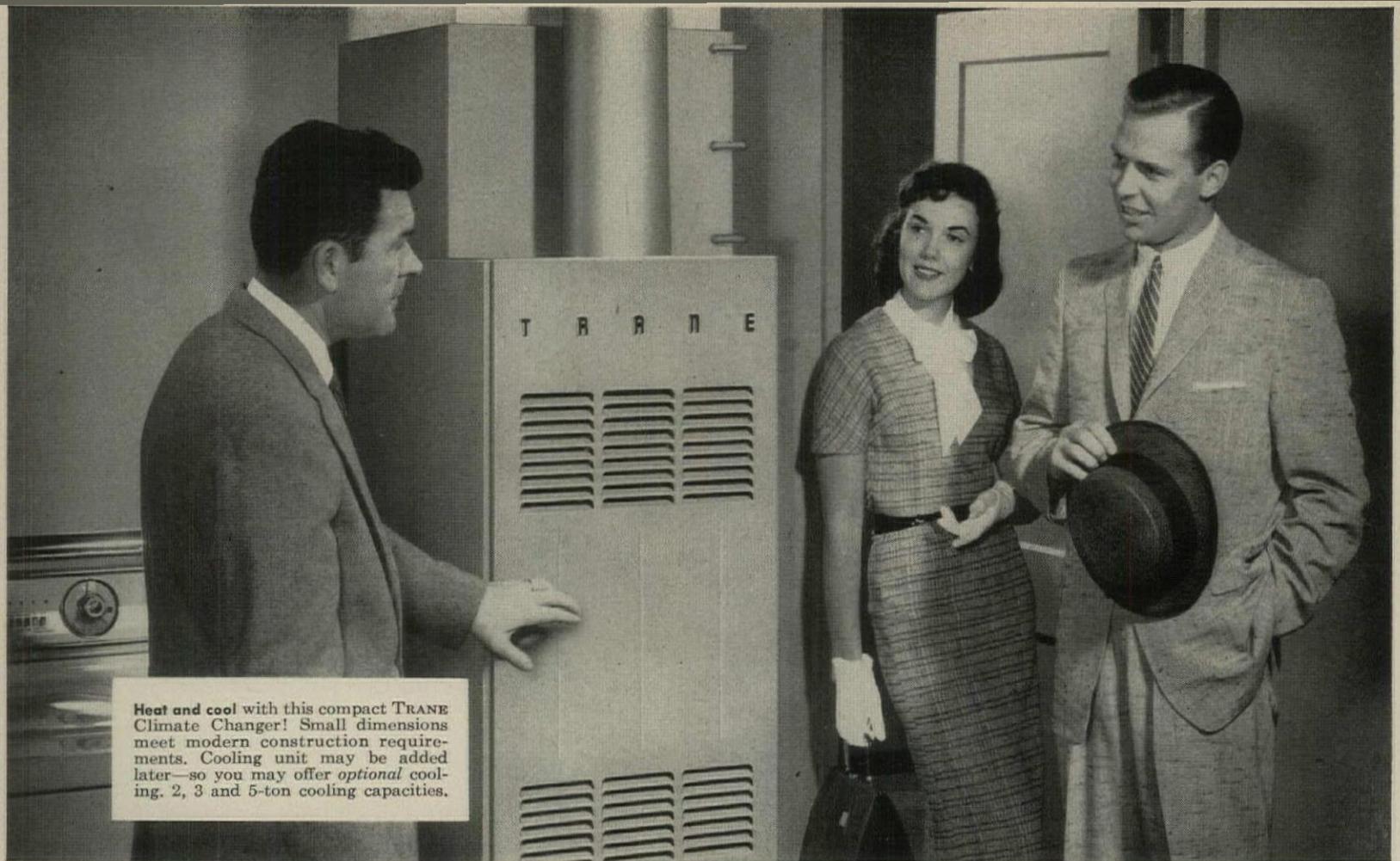
L-SHAPED PLAN puts living area in one arm of L, bedrooms in other. Hall leading to bedrooms, gets spacious feeling from open stairwell.

KITCHEN-DINING SPACE (b) is next to window facing into carport. Since carport is deep, car can be parked out of sight (see photo above).

Turn the page for selected details



SELECTED DETAILS FROM HOUSE FOR BENNETT CONSTRUCTION ARCHITECTS: KEYES, LETHBRIDGE & CONDON



Heat and cool with this compact TRANE Climate Changer! Small dimensions meet modern construction requirements. Cooling unit may be added later—so you may offer *optional* cooling. 2, 3 and 5-ton cooling capacities.

Sell your homes faster this spring with versatile Trane Air Conditioning

Offer heating and cooling—or optional cooling—with these new, thrifty Trane Climate Changer units

The homes you build for sale this year can be "upgraded"—made more attractive to buyers—if you install TRANE Climate Changer units. Yet, you need not price yourself out of the market—because these TRANE heating or heating-cooling units are competitively priced, simple to install.

With TRANE Climate Changers, you offer your prospective buyers *exactly what they want*: you may install just the heating unit when you build, offer cooling as an optional feature. And with TRANE, you may choose either forced warm air or hot water heat; there's a matched TRANE cooling unit to go with either. And every TRANE Furnace has been designed to go with cooling. The cooling unit may be added when you sell the home or it may be added later . . . easily, economically.

And TRANE offers you a complete range of capacities, with gas or oil-fired models for any size, any type of home.

Designed and built by a leader in air conditioning, TRANE Climate Changers are built in a new, modern plant designed exclusively for manufacturing residential air conditioning equipment. And every TRANE installation is

handled by a qualified engineering contractor. The name TRANE on the heating-cooling system you install will help uphold your reputation as a quality builder.

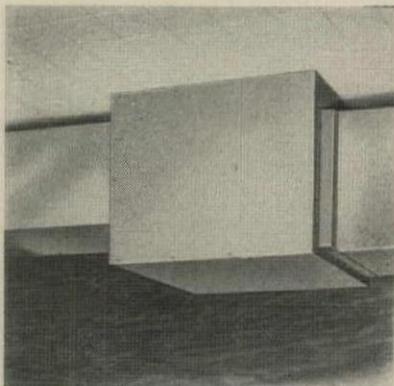
Want More Facts? Call your nearby TRANE Sales Office, or write TRANE, La Crosse, Wisconsin.

For any air condition, turn to

TRANE

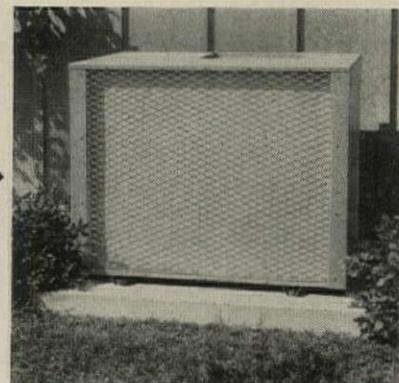
MANUFACTURING ENGINEERS OF AIR CONDITIONING, HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT

THE TRANE COMPANY, LA CROSSE, WIS. • SCRANTON MFG. DIV., SCRANTON, PA. CLARKSVILLE MFG. DIV., CLARKSVILLE, TENN. • TRANE COMPANY OF CANADA, LIMITED, TORONTO 87 U. S. AND 19 CANADIAN OFFICES



◀ **Cooling that matches any heating system!** This Climate Changer fan-coil unit tucks away in attic, utility room, basement or behind partition. Takes only 5 sq. ft! Perfect for use with TRANE Baseboard and similar types of heating systems.

▶ **Needs no water!** This compressor and condenser unit is used with the TRANE Climate Changers described above. Air-cooled, it eliminates water supply and disposal problems. Installed outside the home or building.



Be sure to see **NEW WAYS TO BUILD BETTER**

A monthly report on home building ideas, products, and techniques

Starting here

New products



Dow roof insulation, called Roofmate, is Styrofoam plank wrapped in laminated kraft paper. Boards are 2'x4', and may be 1", 1¼", 1½", or 2" thick. Light weight, high compressive strength,

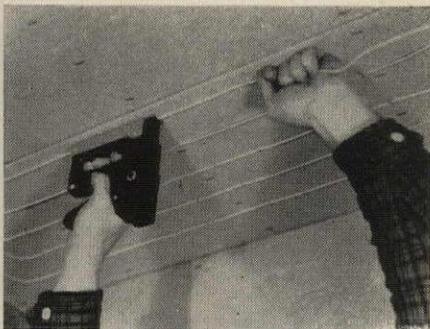
high insulating value, low permeability and easy installation are features. Cost: "competitive."

Dow Chemical, Midland, Mich.
For details check No. 2 on coupon, p 244



Carefree paneling, Poly-Clad Plywall, has a baked finish that is impervious to almost every household solvent and stain. It is lifetime guaranteed against defects, delamination, fading. It comes in twelve finishes. Cost: 42¢ a sq ft.

Plywall Products, Fort Wayne, Ind.
For details check No. 3 on coupon, p 244



Radiant-heat tacker from Bostitch makes for fast, easy hanging of radiant-heat cable or low-voltage wire. Special 7/16" long staples have shaped crowns. Driver is ground out to fit. Eastern price: \$14.25.

Bostitch, East Greenwich, R.I.
For details check No. 4 on coupon, p 244

And on the following pages

Technology

New try at rigid-frame construction . . .
Lay a slab on "impossible" soil . . .
See page 183

What the leaders are doing

\$40 makes a drip-dry closet . . .
54 holes and 939 houses . . .
John Long shows 1959 models . . .
Trailers double as warehouse . . .
Roofless house lures big crowds . . .
See page 187

Publications

How to build a lightweight dome . . .
A new way to wall a tub . . .
Catalogs of locks, lighting fixtures,
heating units, doors, windows, etc . . .
See page 238

More New products

New tools for big on-site jobs . . .
New color and form in tile . . .
New extra-durable wall panel . . .
New appliances, new doors, new
windows, new wall and floor coverings . . .
See page 204

Only **JOHNS-MANVILLE FIBER GLASS** home insulation gives you all these benefits

1. **"Reinforced Double-Fold Tabs"**

A new and exclusive feature that permits a tighter vapor seal. Tabs extend around the corner and onto the face of the framing member. When a plaster base (or dry wall) is added, the barrier against moisture travel becomes even tighter. The result is a better vapor barrier, better insulation performance.

2. **Longer, finer, more resilient fibers**

They create more dead air space for high thermal insulating efficiency. Fibers won't mat, settle or pack down. The blanket retains its full thickness, fits snugly against studs and joists, greatly reduces the passage of heat, saving heating and cooling dollars.

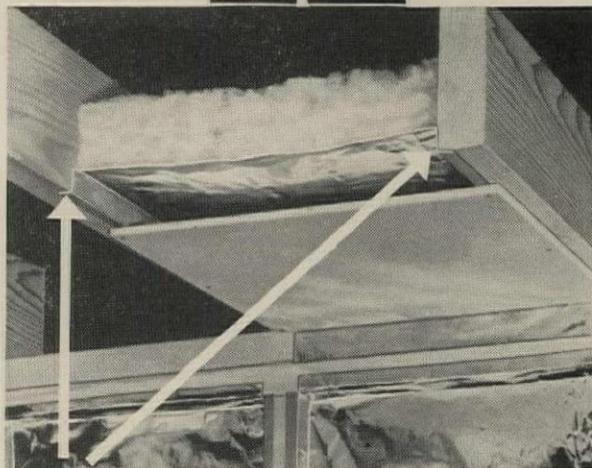
3. **Aluminum foil facing on one side**

This enables the insulation to "breathe" toward the outside . . . while the facing reflects radiant heat and acts as a vapor barrier. The foil extends into the tab area to provide a continuous vapor barrier.

4. **Saves labor cost**

One man can easily handle the lightweight rolls and insulate an average home in a matter of hours. "Reinforced Double-Fold Tabs" have stronger holding power, can be installed faster with greater accuracy. No special tools or skills required. It is pleasant to handle.

For additional information and name of nearest distributor, write: **Johns-Manville, Box 111, New York 16, N. Y.** In Canada, **Port Credit, Ontario.**



New, exclusive "Reinforced Double-Fold Tabs"



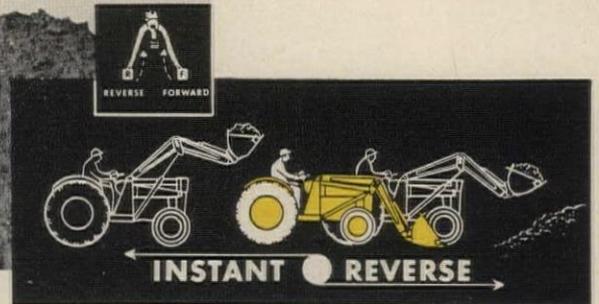
Double-thick tabs have greater staple holding power

JOHNS-MANVILLE



Ask your J-M representative about the 7-star and Mrs. America promotion to help you sell more homes.

M-F ANNOUNCES— the Most Important Development in Utility Tractors



the New **WORK BULL 204** has Instant Reversing and Torque Converter

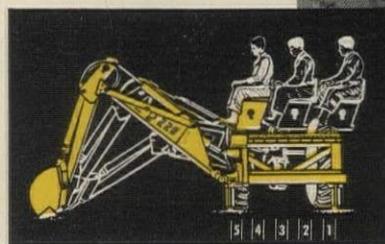
Imagine — a powerful utility rig that changes direction instantly with a mere touch of your toe. That's the All New Work Bull 204 from Massey-Ferguson — leaders in light industrial equipment. Never have more new features and advancements been built into a utility tractor. Experience a new ease of operation with the field-proven, three-point pedal control that lets you move forward, reverse, or accelerate the engine. Leaves hands free to operate power-matched

Davis Loader or control tractor. A torque converter maintains the correct power-to-load ratio for maximum power — four equal speeds forward or reverse — individually operated left and right brakes — full-time power steering — a powerful, high-torque 40-hp engine. All of these features and many more put the 204 in a class of its own. If you want the ultimate in utility tractors the All New M-F Work Bull 204 will be your choice.

the New **POWERFUL Davis 220 Backhoe** with Hydra Slide Positioning

**—GET READY TO FLUSH DIG
IN LESS THAN FIVE MINUTES**

The All New Davis 220 Backhoe with amazing Hydra-Slide positioning is the most advanced backhoe you can buy. Hydra-Slide makes it possible to position the 220 Backhoe for flush digging in less than 5 minutes. To move the boom merely loosen four set-screws — slide the digging assembly and seat to the desired location — and re-tighten screws. You'll notice that the operator moves across with the boom and also revolves with it — places you over your work and lets you see what you are doing in any position. An increased operating pressure of 2,150 psi with a new high-pressure hydraulic system provides the new Davis 220 with more brawn and stamina than any other backhoe. Has 14,000 pounds of breakaway power. Write for name of nearest dealer and see these terrific equipment values soon.

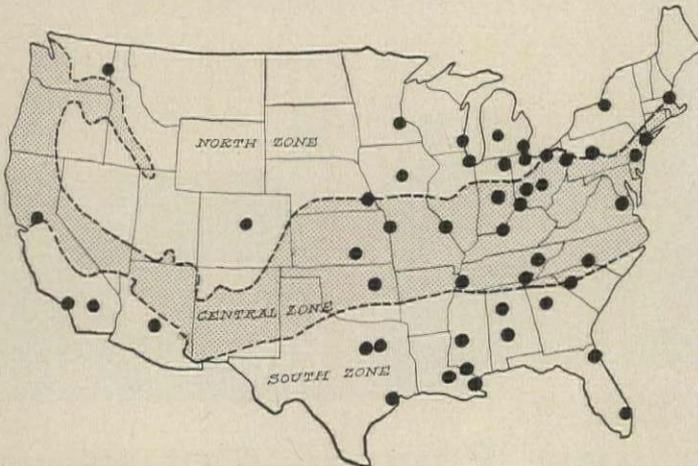


MASSEY-FERGUSON INDUSTRIAL DIVISION
1009 SOUTH WEST STREET • WICHITA 13N, KANSAS

	Added construction cost for extra insulation, shading, and venting	Reduced cost of smaller heating and cooling equipment	Net extra construction cost to builder	Net saving to builder
North	\$ 168	\$ 154	\$ 14	
Central	235	264		\$ 29
South	225	257		32
Average nationwide (70 houses, avg 1,463 sq ft) ..	\$ 216	\$ 236		\$ 20

Here is how the builders saved by spending more for insulation

This table from Owens-Corning's research report (see p 151) shows that the cost of all the added insulation, shading, and venting was less than the money saved by installing smaller, less costly heating and cooling equipment.



THREE CLIMATE ZONES extend irregularly across the country. Of Owens-Corning's 70 test houses, 21 are in the northern zone, 30 in the central zone, and 19 in the southern zone.

The 70 builders spent anywhere from \$50 to \$250 more per house than they would have spent to meet FHA minimum requirements for insulation. Most of this amount went for insulation, and the extra money spent depended mostly on the size of the houses. These "off-the-shelf" models ranged from 900 sq ft to 2,600 sq ft of living area.

Each house had at least 6" of insulation or 3" foil-wrapped batts over ceilings, 3" in walls, 3" under floors of crawl-space houses, or 2" around slab perimeters.*

About three of four houses required shading devices over one or more vulnerable windows. Larger vents were installed in a few houses that had either inadequate or no attic or soffit vents. In most houses, however, customary venting required by FHA was satisfactory.

Nationwide, the builders ended up with an average net saving of \$20 per house. In the central zone, builders saved \$29 on the average, and southern builders saved \$32. Only in the North did builders fail to recover their insulation costs fully, but even there they only spent \$14 extra on the average. And now, under FHA's new MPS rules, builders can get full appraisal credit for such extra expenses.

*FHA minimum standards usually call for only 1½" of ceiling insulation, and from 1½" down to no insulation for walls and floors. These rules vary depending on FHA office and the climate zone—but on an average the test houses have two to three times the usual amount of insulation.

	1 Average house size (sq ft)	2 Winter heating	3 Summer cooling	4 Annual total heating & cooling costs	5 Annual cost per sq ft of floor area	6 Annual saving*
North	1,417	\$ 171	\$ 24	\$ 207	14.6¢	20%
Central	1,473	138	44	182	12.3	26
South	1,500	54	71	125	8.4	50
National Average	1,463	\$ 124	\$ 49	\$ 174	11.9¢	30%

*Compared with estimated costs for FHA minimum construction.

Here is how operating costs were slashed for buyers

Owens-Corning's figures show that adequately insulated houses can be heated and cooled year round for about 12¢ a sq ft or less (col 5). This means that owners of the 70 test houses paid 30% less in operating costs than they would have paid if their houses had merely met FHA insulation requirements (col 6).

Operating costs averaged only 9.2¢ per sq ft in the South, 11.1¢ in the central zone, and 12.6¢ in the North. The figures are actual metered costs, including electrical power for operating air blowers summer and winter, as well as winter fuel cost and summer cooling electricity. Blowers account for about 5%-10% of total operating cost. (It should be noted that the 70 houses are located in 49 cities where average utility rates are above the national average.)

Cooling savings vary from an average of \$9 a summer for

northern houses to \$21 per house in the central zone and a whopping \$101 for the average 1,500 sq ft southern house.

Heating savings in winter averaged \$54 a house in the North, \$44 a house in the central zone, and \$23 in the South. Savings ranged from 20%-50% in all zones, summer or winter. (Dollar savings in the North are enough to pay back the extra cost for full insulation in two to three years, not counting the savings on smaller heating equipment installed.)

Most owners are pleased with the operating results, Owens-Corning reports. Only 5% are displeased with their cooling costs (half of these blaming high utility rates). Only 8% say their heating costs are as high as in their last houses.

Ninety-two per cent of owners say they think the extra insulation and air conditioning decidedly increases the market value of their houses.

continued on p 170

HERE'S MORE PROOF... SPECIFY CHASE® COPPER PLUMBING AND SAVE ON THE HOUSES YOU BUILD

COPPER COSTS LESS!

Based on current prices, here's what the plumbing for a typical 7 room, 1 1/2 bath ranch type house costs (material and labor)—figured with copper tube vs. ordinary rustable pipe:

Galvanized Water Lines cost	\$147.91
Cast Iron Drainage Lines cost	495.78
Total Cost With Rustable Pipe	\$643.69
Copper Water Tube Lines cost	\$133.13
Copper Drainage Lines cost	427.06
Total Cost With Quality Copper	\$560.19

COPPER SAVES THIS BUILDER \$83.50

COPPER SAVES TIME!

Total installation time with rustable pipe . . . 59 hrs.
Total installation time using copper 40 hrs.

WITH COPPER

- . . . fewer time-consuming joints to be made
- . . . cutting is easier when needed, using ordinary hacksaw
- . . . no thread cutting required
- . . . no pipe-wrench labor . . . just simple trouble-free solder joints
- . . . one man easily handles up to 20' lengths of copper tube drainage lines
- . . . fittings and tube go together with leak-proof, pressure tight solder joints

YOU SAVE TIME ALL THE WAY!

Get all the facts Now about how Chase copper tube plumbing saves time—saves money—gives you better quality in every home you build. And get your FREE copy of the Chase book for builders *plus* a sample of the *Now's the Time to Buy a House* book that works for you! Just write your name and address on the margin of this page, and mail it to Chase Brass & Copper Co., Dept. HH-4, Waterbury 20, Connecticut.

Chase



BRASS & COPPER CO.
WATERBURY 20, CONN.

Subsidiary of **Kennecott Copper Corporation**

LOOK WHAT CHASE HAS TO HELP YOU BUILD...AND SELL!



FREE! Illustrated 24-page book that gives you details about the savings you can make with Chase copper plumbing.



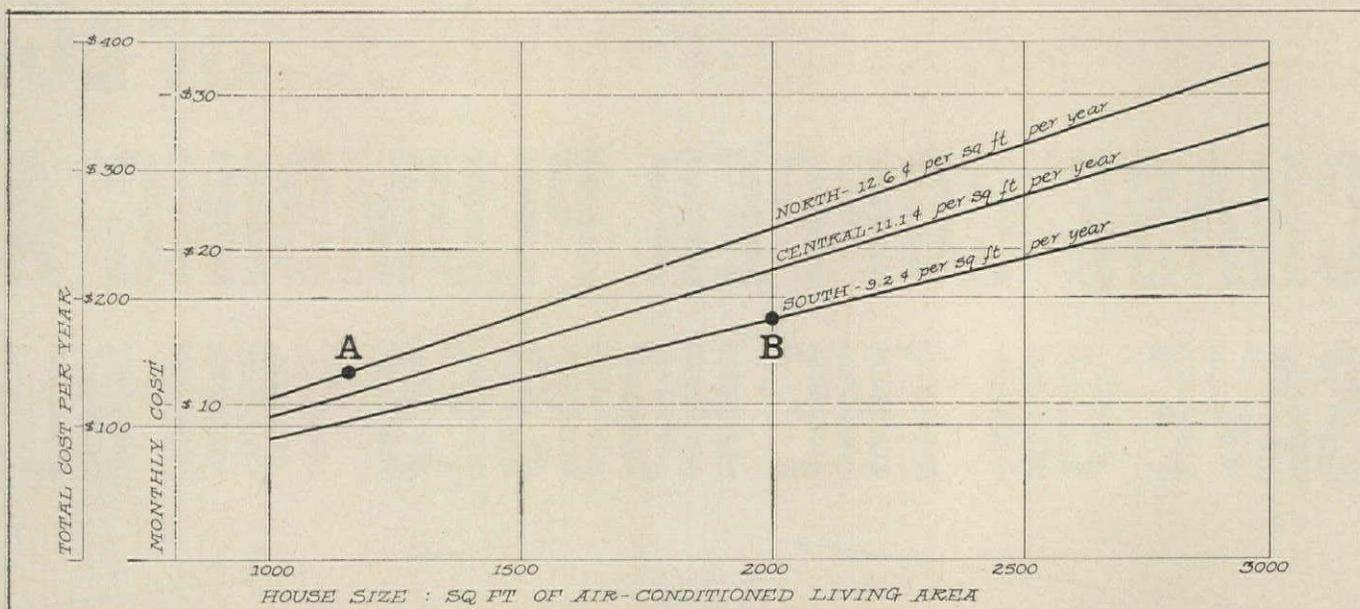
THIS BOOK—imprinted—gives your prospects reasons why now is the time to buy a house. It's a welcome sales tool you'll want to use.



DISPLAYS for your model home to help you feature the quality you build into the homes you sell. Ask for details.

THE NATION'S HEADQUARTERS FOR ALUMINUM • BRASS • BRONZE • COPPER • STAINLESS STEEL

Atlanta Baltimore Boston Charlotte Chicago Cincinnati Cleveland Dallas Denver Detroit Grand Rapids Houston Indianapolis Kansas City, Mo. Los Angeles Milwaukee Minneapolis Newark New Orleans New York (Maspeth, L. I.) Philadelphia Pittsburgh Providence Rochester St. Louis San Francisco Seattle Waterbury



Here is how you can estimate heating and cooling costs

The chart above, based on Owens-Corning's research data (see p 151), tells you how to estimate heating and cooling costs for any house you build *provided* it has full insulation, shaded windows and properly ventilated attics.

To use the chart, simply determine your own climate zone (by reference to the map on p 168) and find the cost figure on the proper line over the size house you build. Two examples are illustrated in the chart. Case "A" shows that a 1,150 sq ft house in the North can be air conditioned year-round for \$145, or a little over \$12 a month. Case "B" is

for a 2,000 sq ft house in the South, which can be heated and cooled for an average of \$184 a year or \$15.33 a month.

Owens-Corning engineers stress, however, that these costs "apply to fully insulated houses with proper shading and ventilation." The cost figures are based on average national rates of 8¢ per Therm for fuel and 2¢ per Kwh for electricity. With higher or lower rates, your predicted operating costs should be adjusted accordingly. Costs also apply for typical summer and winter temperatures. Figures do not apply to electric heat or for heat pumps.

Here is how full insulation helps more buyers qualify

"We spend now \$150 more for extra insulation in all our houses," says a Midwestern builder, "but it makes our buyers eligible for a \$1,000 higher mortgage."

That comment sums up an important—but little-known—benefit of extra insulation: Extra insulation means a lower monthly housing cost for the buyer, thus he needs less take-home pay to qualify for the FHA mortgage. In many FHA jurisdictions, \$5 to \$10 is shaved off required take-home pay for every \$1 of reduced monthly house expense.

For example, assume a builder puts full insulation in the walls and ceiling of his houses. Say that as a result, heating savings alone (not including air-conditioning) cut the buyer's monthly operating expense \$3; from, say, \$100 to \$97. According to the FHA monthly housing expense chart for Providence, R.I., required take-home pay would drop from \$380 to \$355, or \$25 a month. Similar figures should apply

in other FHA districts. This considerably broadens your base of qualified buyers.

The figures given in this case are, of course, hypothetical. Actual practice varies from one FHA office to another. And FHA officials point out that each case is decided according to its own merits. Nevertheless "full" insulation, like any other factor which lowers monthly expenses, opens the door for buyers to get larger mortgages with less take-home pay. It is clearly a major potential aid in selling houses.

Important note: When a builder applies for extra appraisal credit for "full" insulation the facts should be clearly noted on FHA's 2005 "Description of Materials" (point 26, top of page 4) and special attention should be called to the fact that you are using more than minimum required amounts. Underline your information in red, or circle it to make sure it does not go unnoticed when the application is processed.

Here are four "intangible" benefits buyers like

Regardless of geographical location, buyers agree on these benefits. (All four can be used to merchandise well-insulated air-conditioned houses.)

1. Greater comfort, summer and winter. This is the one thing owners like most. Eighty-five per cent say they have fewer drafts and cold spots than in their previous homes. Three-quarters specifically mention year-round comfort.

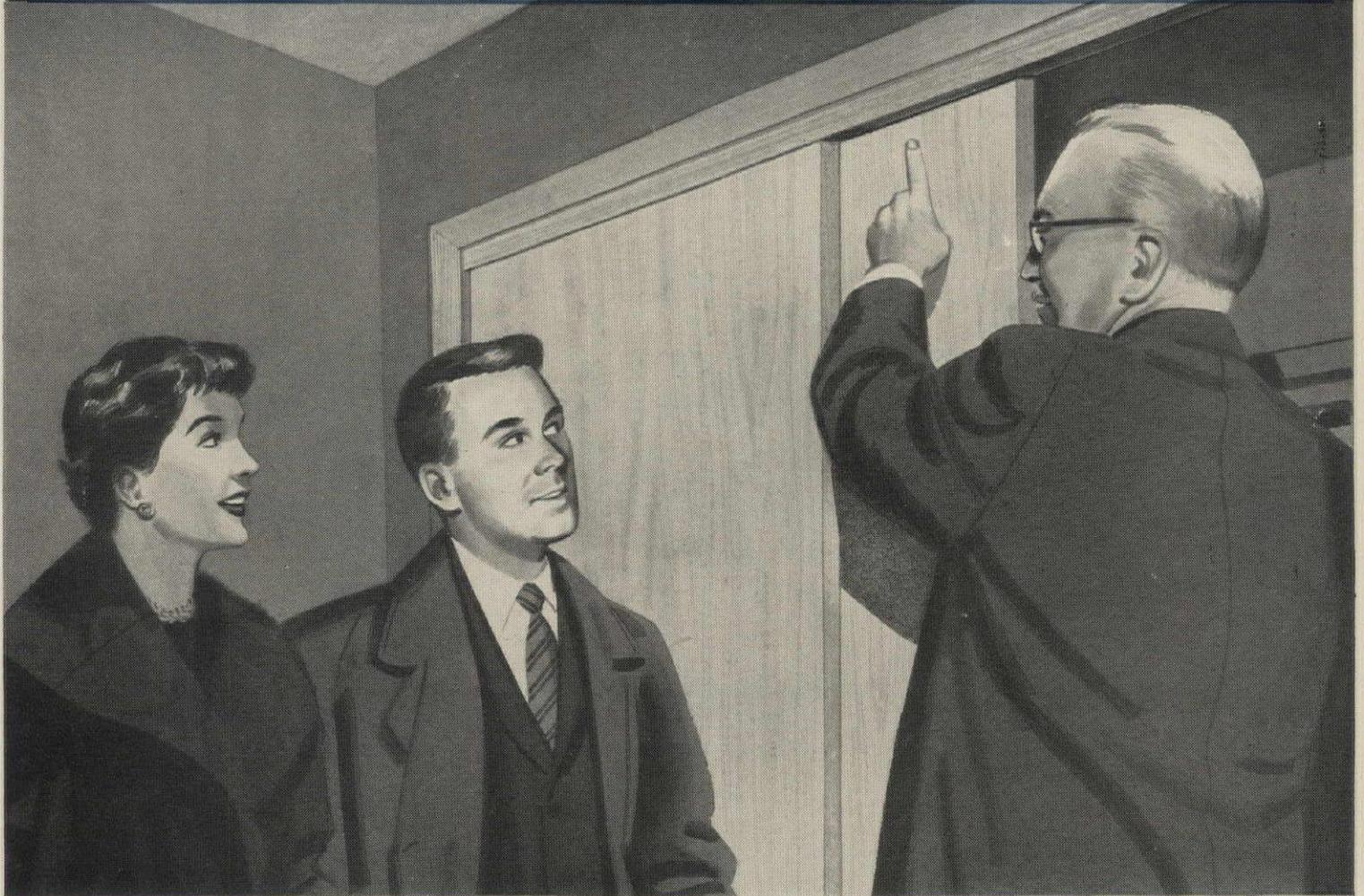
2. Fewer health problems. Nine of ten say they get a good night's sleep all summer long. Eight of ten say they eat

better. Nearly all those with allergies report less discomfort caused by dust and pollen.

3. Easier housekeeping. Nine of ten of the housewives say cooking is less of a chore in hot weather. Three-fourths mention easier housekeeping.

4. Quieter living. Nine of ten say they are less bothered by outside noises from traffic, playing children, and storms—a sales point few house salesmen use. But three of ten complained about noisy air-conditioning systems. This was about the only complaint voiced in the study. /END

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



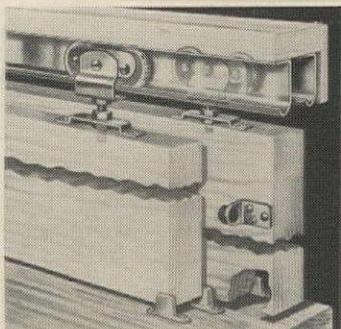
With quality you can
demonstrate to
**Sell More
Home Buyers**

Today's home buyer is looking "behind closed doors" for assurance that your house is well constructed. He's looking for those little extras that spell "quality." That's why so many prominent builders *insist* on hardware by "National of Sterling." It helps build customer confidence and satisfaction... reduces service call backs.

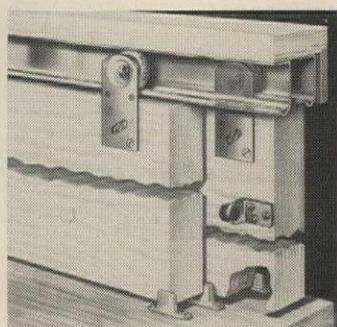
WRITE FOR FREE CATALOG TODAY

NATIONAL MANUFACTURING CO.

1904 First Ave., Sterling, Illinois



No. 185 Two Wheel Hanger



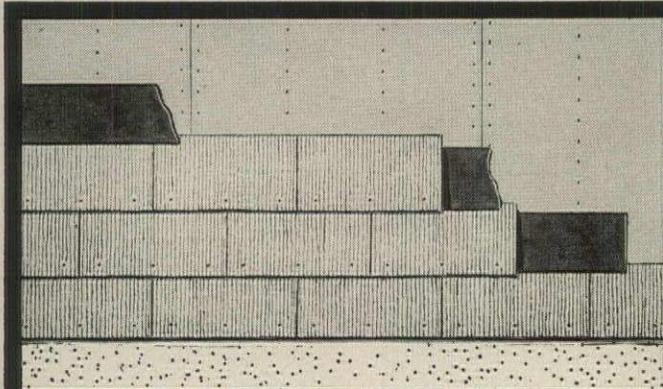
No. 182 Single Wheel Hanger



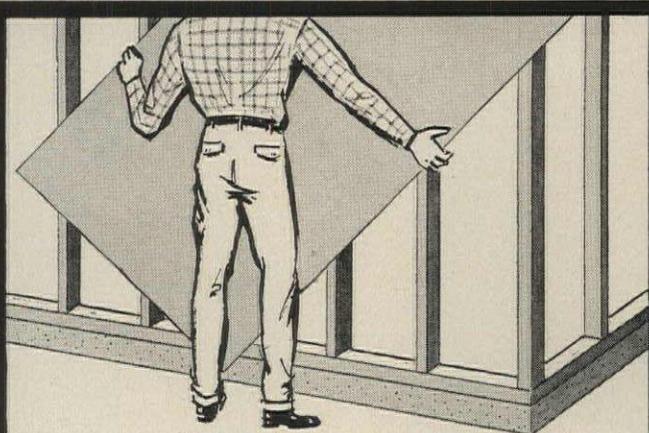
BARRETT

RIGIDWALL[†] SHEATHING

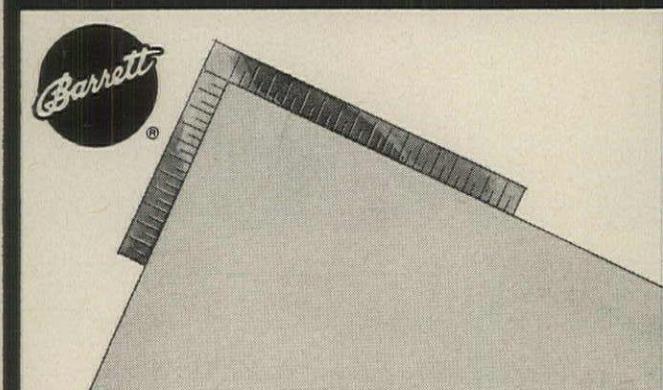
holds nails 47% better than FHA requires for direct nailing!



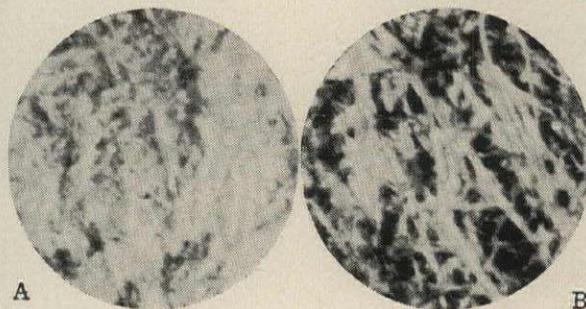
1 **NAIL SHINGLES TO SHEATHING!**
Nail siding shingles direct to RIGIDWALL Sheathing. It exceeds FHA requirements by far, and handles as easily, goes up as fast as plywood. Yet RIGIDWALL is generally more economical than plywood and contributes extra insulating value.



2 **NO CORNER BRACING NEEDED!**
Racking tests prove that RIGIDWALL is 23% stronger, on the average, than required by FHA for application without corner bracing. Wet strength is 44% above requirements. This extra strength means better workmanship and stronger finished construction.



3 **MORE UNIFORM...MORE RIGID!**
RIGIDWALL Sheathing is precision-cut to exact dimensions. Its extra rigidity results in fewer ruined boards from smashed corners and edges. It scores clean...breaks even, thus saving time on every start.



4 **MADE BY THE CHEM-FI PROCESS!**
This is the unique Barrett process that brings the fiber strength of natural wood to insulating board. Microphotograph A is ordinary board, with fine powder-like particles throughout. Microphotograph B is Barrett RIGIDWALL, with long reinforcing fibers for extra strength!

The greatest improvement in insulating sheathing since its introduction. For samples and full information, call your Barrett representative or write us direct.

[†] T.M. of Allied Chemical Corp.

BARRETT DIVISION

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

Allied
Chemical



Builders add sales appeal,
reduce construction costs
for quality homes with

Insulation of Care-free Alcoa Aluminum

Aluminum's dual benefits. With nine out of every ten houses being built incorporating insulation, the big question now is: "*How shall I insulate?*"

When aluminum-clad insulation of Alcoa® Aluminum is properly applied, home builders receive two unequalled benefits: Extra sales appeal from lower fuel bills for heating, air conditioning or both; and actual dollar savings from installation of smaller, less expensive furnaces and air-conditioning units.

Both these advantages stem from the amazing ability of aluminum-clad insulation to bounce back furnace heat in winter or solar heat in summer, while at the same time serving as a positive barrier against harmful moisture vapor.

The trend toward greater use of aluminum-clad insulation and other quality building products of Alcoa Aluminum reflects an unmistakable desire of homeowners for efficient, maintenance-free homes. More and more, buyers are *looking* for Care-free living with aluminum.

Turn the page and see
why Care-free aluminum-clad
insulation converts
lookers into buyers

ALUMINUM COMPANY OF AMERICA, PITTSBURGH 19, PA.

High reflectivity for high efficiency

Aluminum-surfaced insulating materials do a more efficient job of retarding heat flow than other materials.

Aluminum foil turns back over 95 per cent of the infrared radiant "heat" waves that strike it. Insulation coated with flaked aluminum pigment has a reflectivity of about 80 per cent for infrared radiation. Other insulating materials have a reflectivity of only 10 to 20 per cent. This makes aluminum-clad materials ideal for keeping homes warm in winter, cool in summer.

Low first cost, plus added economies

Aluminum-clad insulation is surprisingly low in cost, and additional savings, soon realized, more than repay the original investment.

For example, a 1,200-sq-ft house, properly engineered and fully insulated with aluminum-clad insulation, can be heated and air conditioned for as little as \$12 per month.*

Savings in construction costs are common with aluminum-clad insulation. Because of its high efficiency, smaller and less expensive furnace units, ducts and registers or pipes and radiators can be installed. Air-conditioning units can also be smaller

and still provide adequate cooling. For a house properly insulated with aluminum-clad insulation, a two-ton unit can often be installed instead of a more bulky, more expensive unit, making it possible to cut the total cost of home construction.

It all adds up to homes with the added appeal of year-round comfort—at a price everyone can afford.

*Average cost over a year's time.

Complete moisture protection

Aluminum is impermeable to moisture, making it a highly effective vapor barrier.

This is an important feature for air-conditioned homes, since the unit not only has to remove heat from the interior atmosphere, but moisture as well. Since approximately 1,000 Btu of cooling capacity are required to remove every pound of water in the air, it obviously pays to keep moisture to a minimum.

No deterioration

Builders have found that aluminum used in insulation does not deteriorate with long use under severe conditions. They have found it low in cost. Since aluminum is impermeable to moisture, they found that aluminum foil forms a natural and highly effective vapor barrier. It prevents penetration of the moisture that is in the air of every room into cold wall spaces where it may condense and cause rotting timbers and blistered paint.

Aluminum-clad insulation...for the year-round comfort and maximum economy that help sell homes faster

Fast, easy installation

Aluminum-clad insulation can be installed easily and quickly. No technical or specialized training of man power is called for.

Important facts you should know about aluminum-clad insulation

Two research projects sponsored by Alcoa, one at the National Bureau of Standards and the other conducted by Pennsylvania State University, established the value of aluminum surfaces in combination with other types of insulating products.* The following data were also established:

Produced by dependable manufacturers in a variety of forms and sizes for every application, new construction and remodeling

Aluminum-clad insulation performs best in a ventilated attic.

Aluminum-clad insulation performs its greatest service in summer in ventilated attics, either flat or gable roof, when heat is flowing downward.

Aluminum-clad insulation also serves a significant function in winter when heat is flowing upward.

In walls, aluminum-clad insulation performs the same service in summer and winter, serving as a barrier that retards heat flow inward and outward.

Aluminum-clad insulating materials must be properly installed to be effective.

The right amount of insulation is essential for maximum heatproofing performance.

*By utilizing the findings of these two tests, Alcoa engineers also arrived at the following conclusion: A newly built average-sized house (1,200 sq ft) can be heated and air conditioned throughout the year for as low as \$12 per month.

Where to insulate

Attics and Ceilings—Twenty-five per cent of winter heat loss and thirty per cent of summer heat gain is through the roof. The top-floor ceiling should be insulated unless the attic is to be used as a living area. In this case, only knee walls and header ceiling should be insulated. Space between insulation and peak of roof should be ventilated.

Dormers—Insulate all exposed wall and ceiling sections of all space around the window.

Side Walls—Insulate all outside walls. Be sure the vapor barrier faces inside the house.

Heated Areas Adjacent to Unheated Areas—Insulation should separate heated areas from those which are not heated in winter, such as garages, sun porches and storage rooms.

Floors Over Unheated Areas—Insulate overhanging floors and floors over open porches, entrances and unexcavated areas.

Slab-type Floors—Reduce heat loss at the edge of slab-type floors with perimeter insulation.

Slabs for Radiant Heating—Where radiant heating coils are embedded, insulation is essential under the edges of the slab, as well as for the perimeter.

Five basic types of aluminum-clad insulation

Paper surfaced with a reflective coating of flaked aluminum pigment.

Aluminum foil in blanket form which provides multiple reflective air spaces.

Aluminum foil laminated to one surface of insulating board or plaster-board.

Fibrous insulation, faced or enclosed with aluminum foil, or paper coated with flaked aluminum pigment, or a combination of both.

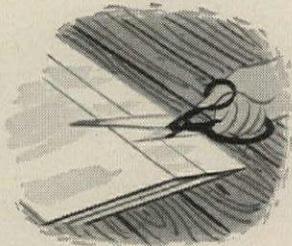
Aluminum foil sheet with foil surface backed by paper.

Consult your dealer for counsel on the type best suited to your needs.

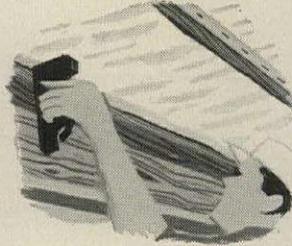
ALUMINUM COMPANY OF AMERICA, PITTSBURGH 19, PA.

How to apply Aluminum-clad insulation

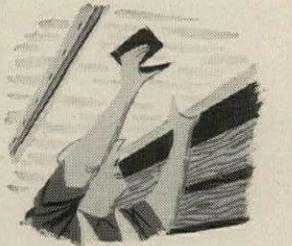
AIR-SPACE BLANKETS



Measure length of material required, allowing 3 or 4 in. for end flange. Cut or tear.



Fasten flange of blanket along inside ceiling joist with staples not more than 6 in. apart to form an air space $\frac{3}{4}$ in. or more between gypsum board and vapor barrier.



Draw the blanket to its full width. Air spaces form automatically.



Staple flange to inside surface of next ceiling joist.

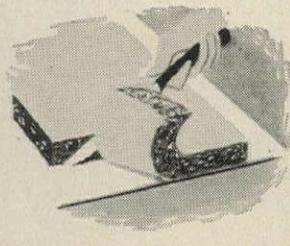


Fold ends of blanket and fasten to sill plates on either side, sealing the insulation. Fold the flanges over the face of the studs to close the edges. Final seal is made when gypsum board is applied.

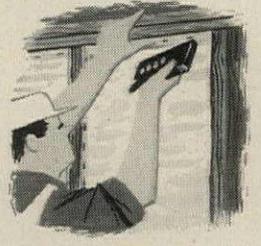


Follow same procedure for wall insulation, except that air space between gypsum board and foil vapor barrier should not be more than $\frac{3}{4}$ in. Top and bottom of blanket are usually secured first.

FIBROUS BLANKETS



Measure length of material. Allow 3 or 4 in. for end flanges. Cut with insulation laid on a flat surface. Foil flanges can be formed by cutting away fibrous material.



Press blanket firmly into stud space and fasten to the sill plate with staples to form a $\frac{3}{4}$ -in. air space between the gypsum board and vapor barrier.



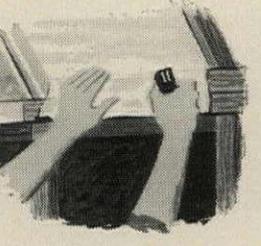
Draw blanket downward and fasten to stud plate.



Attach blanket to side of studs by staples not more than 6 in. apart to form a $\frac{3}{4}$ -in. air space between vapor barrier and gypsum board.



Fold flanges over the face of the studs to close the edges. Final seal is made when gypsum board is applied.



Install ceiling insulation using same technique, except that air space is $1\frac{1}{2}$ in. or more depending on the width of the flange. The greater the air space in the ceiling, the greater the insulation effectiveness. In walls, this space must not exceed $\frac{3}{4}$ in. For ceiling insulation, the sides are normally secured before the ends.

The Alcoa Care-free tag helps you move more homes

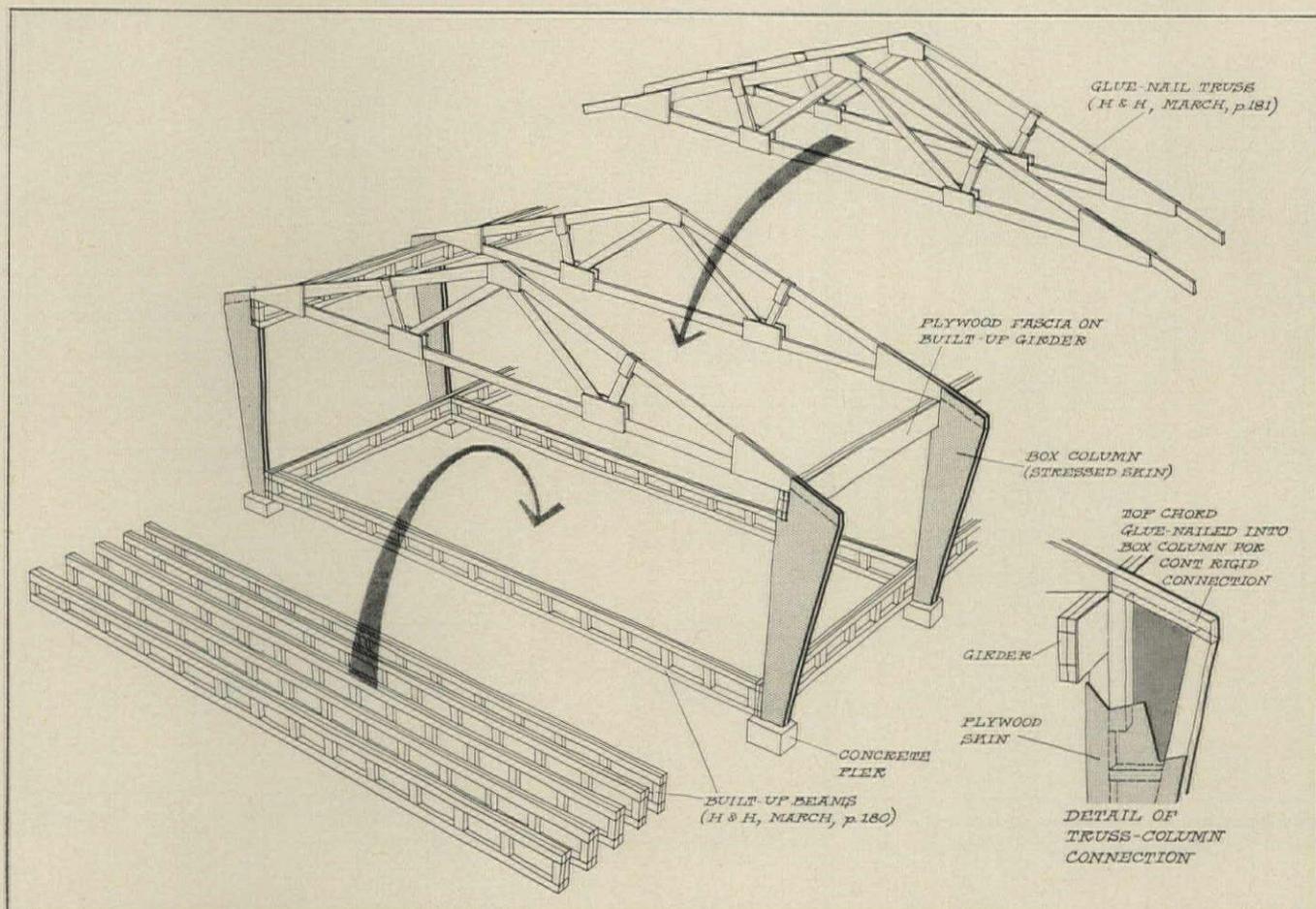
When you use aluminum-clad insulation of Alcoa Aluminum, you gain the mighty selling power of the Alcoa Care-free tag. Promoted on two network television programs, radio, national magazines and local newspapers, it identifies quality building products of Alcoa Aluminum, immediately says lighter, brighter living.

Join the trend to aluminum for Care-free homes. Alcoa, the nation's first pro-

ducer of aluminum foil, invites you to share in its facilities and more than 30 years' experience developing better products for American homes.

For the names of manufacturers who make quality aluminum-clad insulation of Alcoa Aluminum, call your nearest Alcoa sales office or write: Aluminum Company of America, 1882-D Alcoa Building, Pittsburgh 19, Pa.





IN NEW FRAMING SYSTEM, built-up floor beams frame into two built-up main beams along sides of house which span from pier to pier.

Built-up girders and top chord of every third truss key into big box columns. Girder acts as continuous header, carries other trusses.

Here is a revolutionary experiment in framing houses

In the new system diagrammed above, parts key together more like an airplane frame than a conventional house frame.

The design ties together floor, walls, and roof so they work as a continuous, rigid, nail-glued frame encircling the living space of the house. (In conventional framing, one element is simply set on top of another—walls on floor, and roof on walls—with no solid structural bond.)

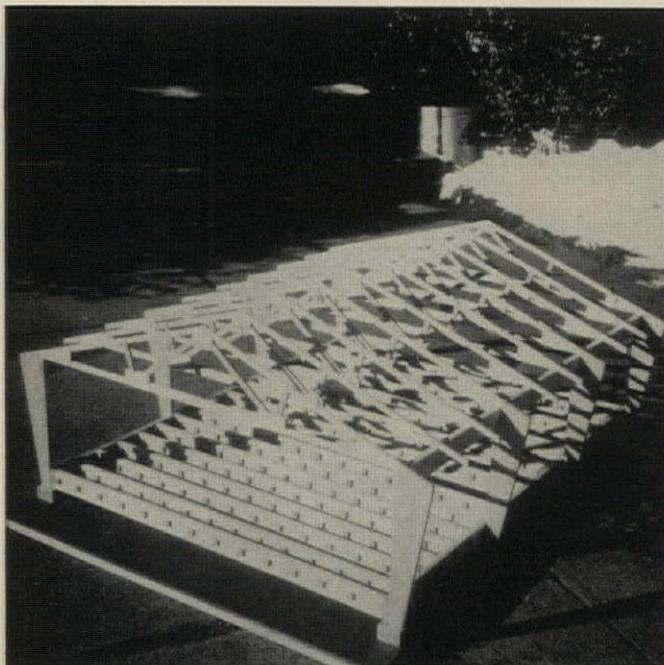
So far built only in scale model (see left), this experimental design by Michigan State's Byron "Rip" Radcliffe should withstand tornadoes and earthquakes. The rigid nail-glued connections between roof trusses and the big box columns prevent racking or leaning in the across-house direction; "keyed-in" girders and wall panels prevent any distortion longitudinally. Since the total mass of the house is tied together, no wind could lift it from its foundations. And the structural floor of the house, reinforced by plywood sub-flooring, is a rigid deck strong enough to carry the house intact through almost any natural upheaval.

Besides the design's strength, it offers three cost savings:

1) Conventional foundations are eliminated—simple piers support the house. Says Architect and Construction Expert Jim Lendrum, "This could save up to \$400 a house."

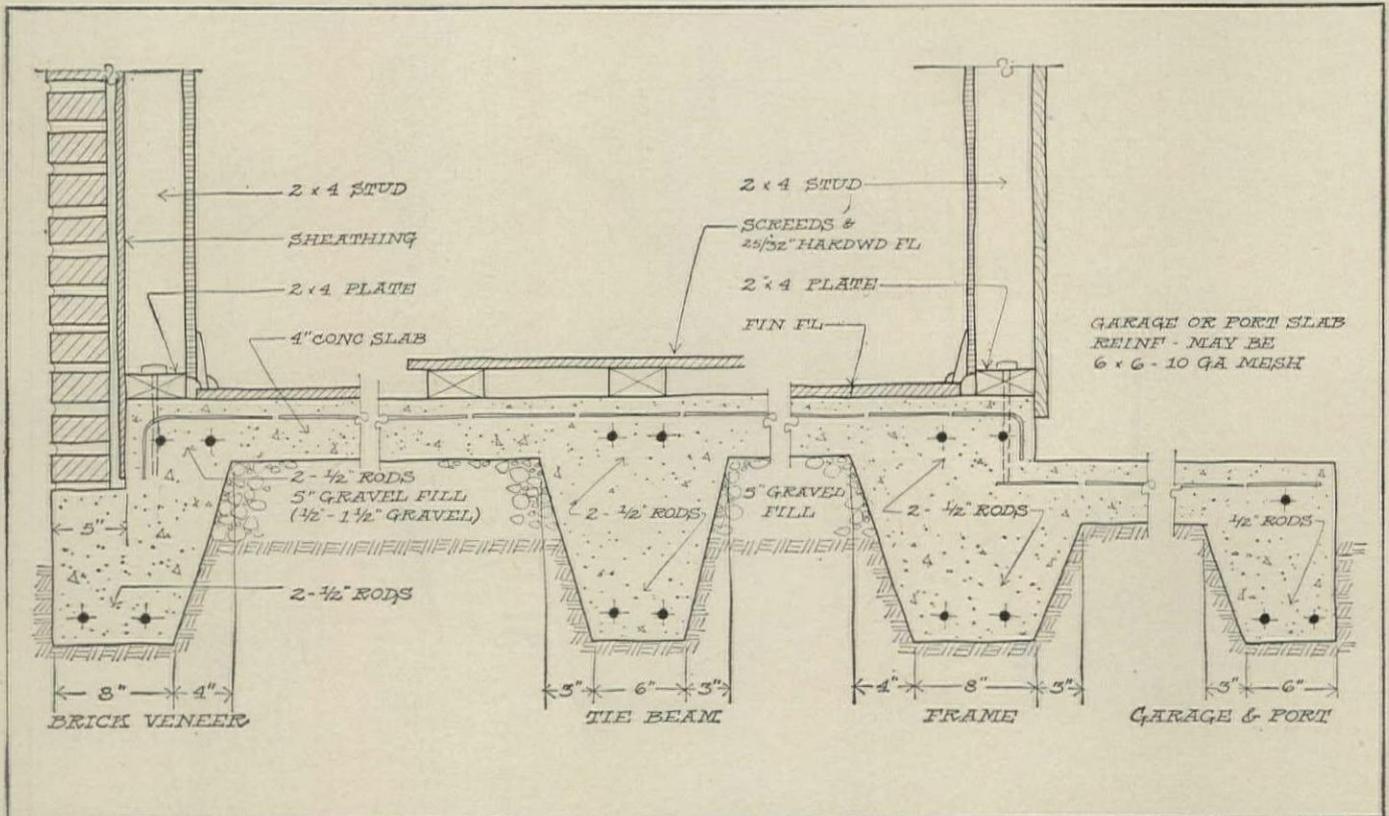
2) Very wide non-load-bearing wall panels could be used. Says Lendrum: "Exterior wall costs could be cut as much as 30¢ a sq ft because no intermediate structural members are needed." Any of several curtain-wall systems could be used.

3.) The floor system could be prefabricated. "This could cut floor costs up to 20¢ a sq ft," Lendrum figures.



SCALE MODEL suggests that full-scale house could look like conventional house except for haunch shape of box columns. This shape is necessary to provide rigid (rather than simple "hinged") connection between columns and trusses. Sizes of dimension lumber and plywood in built-up beams and columns would depend upon size of house (ie, spans).

continued on p 184



CROSS-SECTION of slab shows position of four 1/2" rods in each perimeter and intermediate beam. The slab has a heavy waffle form,

with deep integral stiffeners running in both directions. Design was developed for non-freezing areas.

Here's an extra-strong slab for "impossible" soils

It is designed to carry a house as a ship carries its passengers. On soils that shrink, swell, and heave with the seasons, this slab can ride out the uneven ground pressures without cracking.

It is now being used—with local FHA approval—in the Ft Worth area, which has highly unstable soil conditions. There, ordinary slabs often fail after one season. It replaces an over-designed, overly expensive slab that had been evolved over the years. Two years ago, Ft Worth builders had had enough—and went to work with Consulting Engineer Donald Kirk and the local FHA office to develop a cheaper slab.

The new slab saves \$340 a house, according to local FHA data. It costs \$724 in place for a 1,000 sq ft house with garage and planter. The old slab cost \$1,063. This saving comes

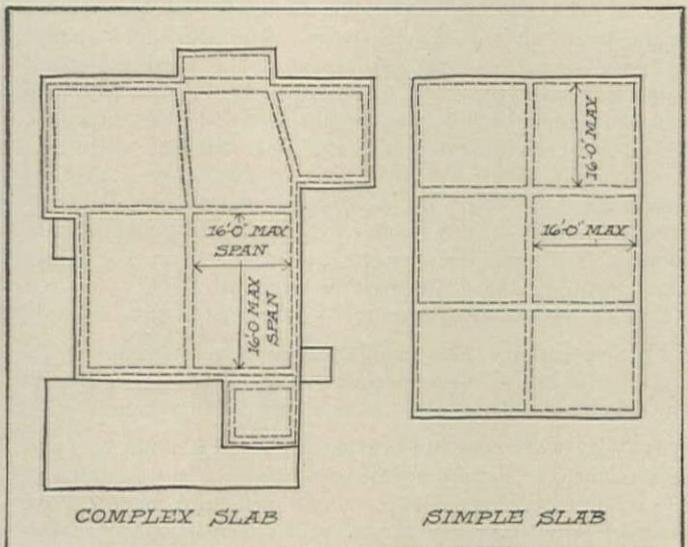
mostly from 1) trimming slab thickness from 5" to 4", 2) reducing reinforcing front 3/4" to 1/2" rods, and 3) eliminating stirrups in perimeter and intermediate beams under the slab. Washington approval for the new slab is pending.

Here's the material and in-place price take-off for the new slab:

Foundation: 12"x12" perimeter beam with four 1/2" rods, 136' at 78¢, \$106; 9"x12" carport beam with three 1/2" rods, 68' at 64¢, \$44; 9"x12" porch beam with three 1/2" rods, 10' at 64¢, \$6; 9"x12" intermediate beam with four 1/2" rods, 87' at 62¢, \$54; 9"x12" planter with four 1/2" rods, 18' at 62¢, \$11. Slab: 4" slab under living area, with 3/8" rods 18" oc, including forms, finish, waterproofing admixture, and fill, 999 sq ft at 36¢, \$360; 4" slab under carport and porch, with 3/8" rods 18" oc, bw finish, 475 sq ft at 30¢, \$143. Total: \$724.



BEFORE POUR, reinforcing is positioned above the 5" gravel subgrade by wooden blocking which is removed as concrete is being puddled.



TYPICAL SLAB LAYOUTS show maximum spans between beams under slab. Ft Worth builders pour carport, planters, slab at one time./END

*the latest
pitch
in roof
design*

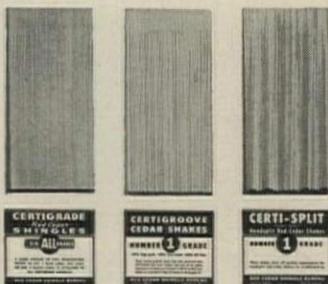
HANDSPLIT RED CEDAR SHAKES

The pitched roof is back. Back in fashion.

Back in force. No gentle slope either . . .
but a really dramatic pitch.

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handsplit cedar shakes. Dramatic pitches
require dramatic materials of obvious
quality. And nothing says quality so
quickly, *so emphatically*, as handsplit cedar.

Heavily-textured, natural through and
through, shakes of handsplit red cedar are
becoming the focal point in more and more
new home designs. Because Certi-Split
shakes pass the two vital tests for quality:
they speed the sale of the house, *today*,
and lengthen its service, *tomorrow*.



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FOR ADDED PROFITS

The New Peerless Basic Design is shown at right. Many other appealing exterior selections are available.

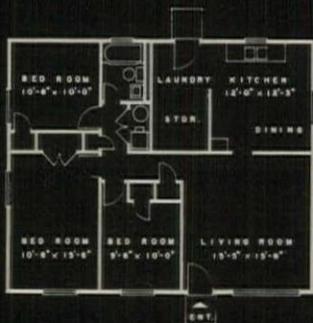


Models with Carport or Garage.

Here's why

Richmond Homes Peerless design has proven to be the most popular and the most profitable in the entire Richmond Home line. More large builders, who are cost conscious, choose this design, which accounts for its being 37 per cent ahead of all our other homes. Actual records show 8 out of 10 builders who have built 25 or more homes have used the Peerless design. There is a reason.

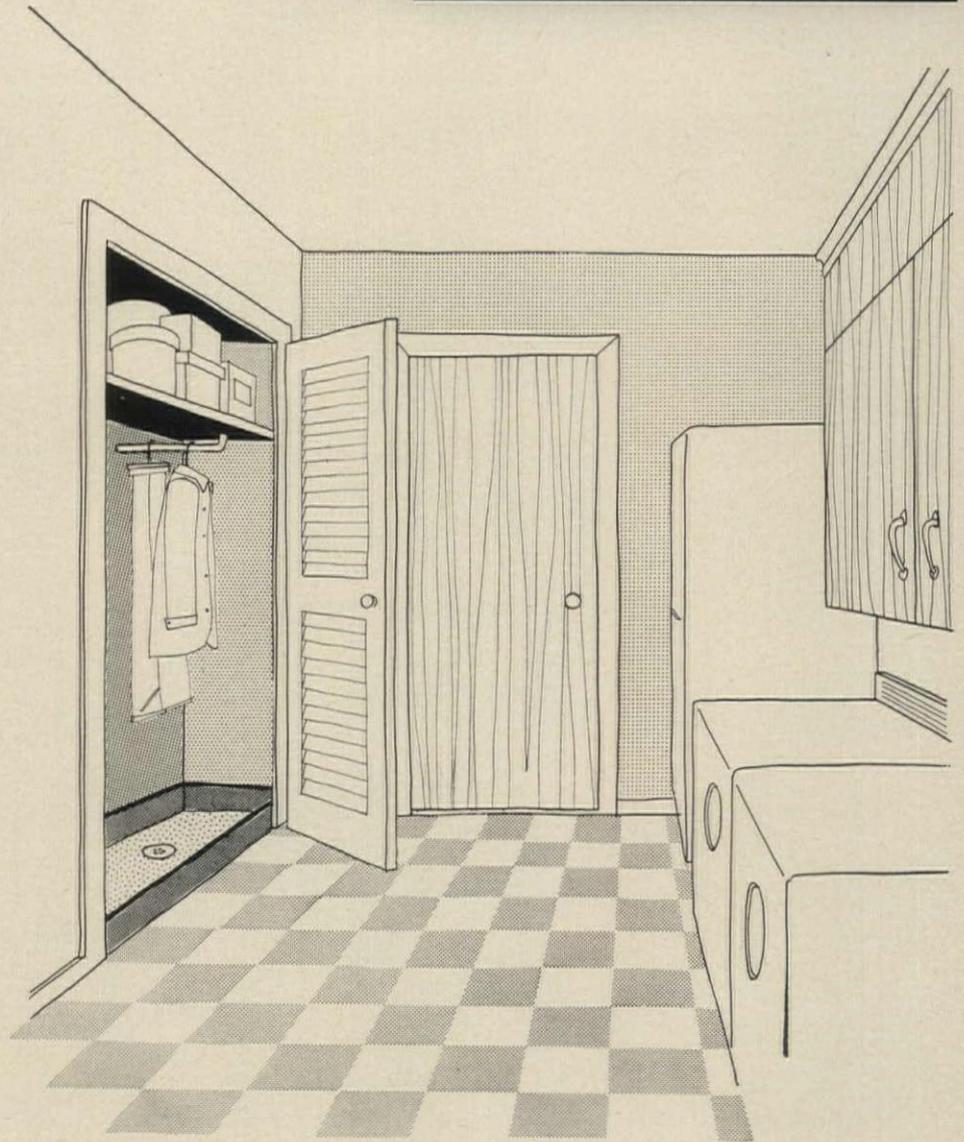
Now . . . With the New Peerless Design there are even better reasons . . . and . . . an attractive plan, for Model Home, Construction and Permanent Financing . . . plus other builder services . . . the Peerless can be your best seller too . . . Let us Prove It.



Richmond Homes · inc.

RICHMOND, INDIANA

WRITE RICHMOND HOMES, DEPARTMENT HH159 FOR COMPLETE DETAILS



How about a drip-dry closet like this for all the new wash-and-wear clothes?

What the leaders are doing

*Dallas may have the record
for country club living..... 188*

See John Long's 1959 models... 192

*A Tulsa builder makes a hit
with some special features..... 197*

*You might try building
a model without a roof..... 200*

Trailers make a fine warehouse... 200

*Baltimoreans pick a contemporary
as their mid-winter favorite..... 202*

Leland Lee's nine cost-cutters... 202

This little closet may be one of home-building's most useful new ideas.

It is the brain child of Builder Morton Saipe, who built it in a \$50,000 house in Wilton, Conn. Total cost of the 2½' wide, 2' deep closet was only \$40, Saipe says, and it could easily be included in any new house. It has a copper pan floor, a 2" center drain connected with kitchen plumbing, and a chrome clothes pole. Its plaster walls have a plastic waterproof surface. A louvered door provides ventilation.

Today almost every US family needs a place for drip-drying

Just about every family today owns some wash-and-wear garments. These clothes, first introduced in 1952, are skyrocketing in sales. DuPont expects that 20% to 25% of all men's suits sold this year will be wash-and-wear. It estimates last year's total volume of men's, women's, and children's wash-

and-wear clothes came "to a whopping \$1.4 billion."

Although some of these clothes can be dried in two-cycle dryers without wrinkling, clothing makers say optimum equipment for handling drip-dry laundry is a place to hang it wet, and a dryer.

The revolution in clothes buying points to changes inside houses:

It means builders might well provide handy closets like this one for drip-drying near the washer.

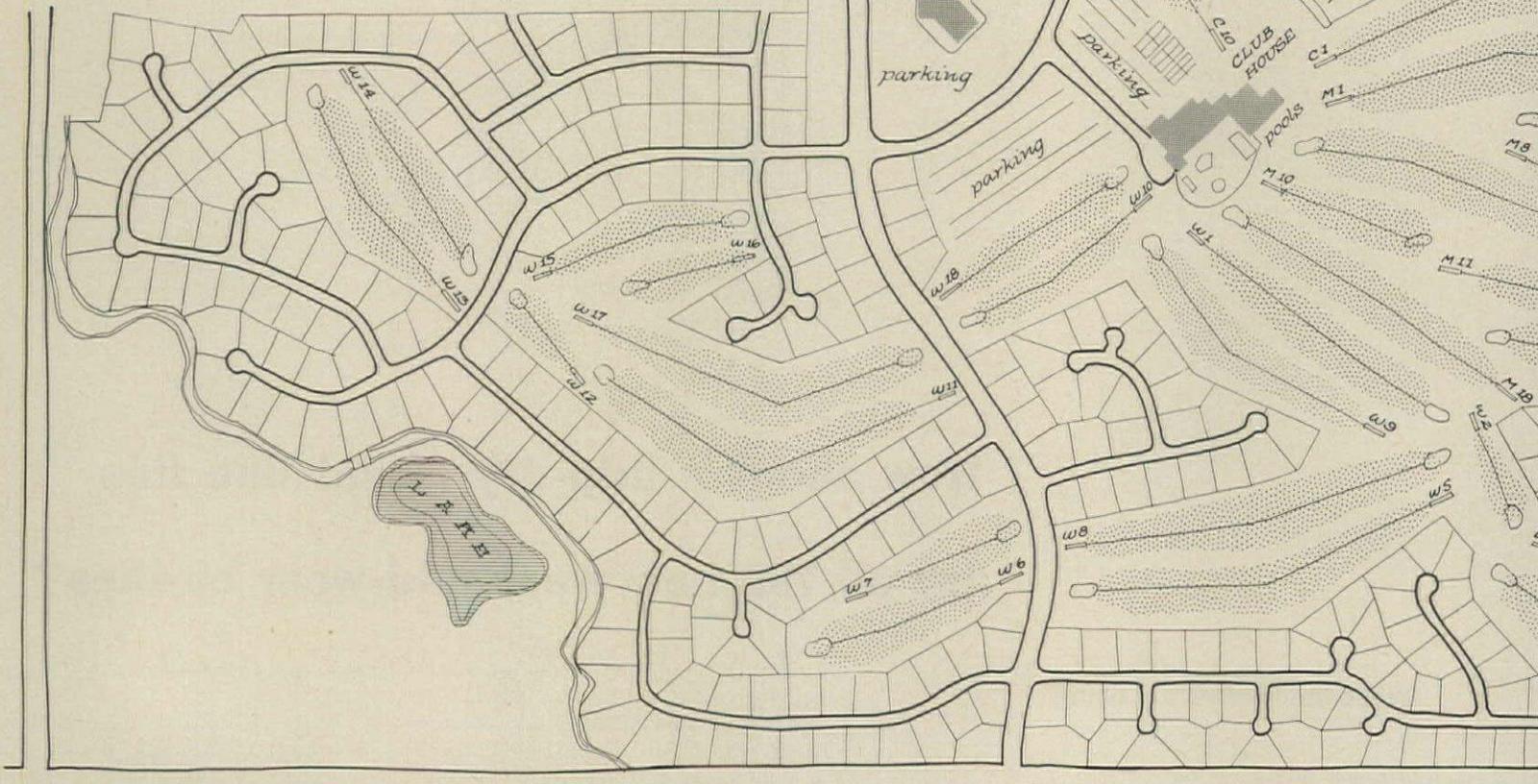
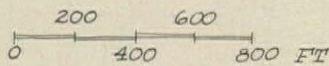
It means more and more families will also want dryers. So vented space for these dryers is an absolute necessity.

It means people will soon demand much more closet space to hang clothes. Drip lingerie, shirts, skirts, blouses, suits, sweaters, and all kinds of garments will more and more be hung in closets rather than stored in dresser drawers (where they become wrinkled from pressure when stacked up).

starts on p 187

*BROOKHAVEN
COUNTRY CLUB & ESTATES
FARMERS BRANCH,
DALLAS, TEXAS*

*LAND PLANNING:
THEODORE G. ROBINSON*



Where but in Texas would you ever find a country club community like this?

This Dallas golf course does not have the traditional 19th hole. It has a 55th hole instead.

It is the largest country club and residential development in the US. The country club is almost finished and has three 18-hole courses—a women's course, a men's course and a 7,000-yard championship course. The first houses planned on the 939 platted lots

will be Parade of Homes models to open next summer.

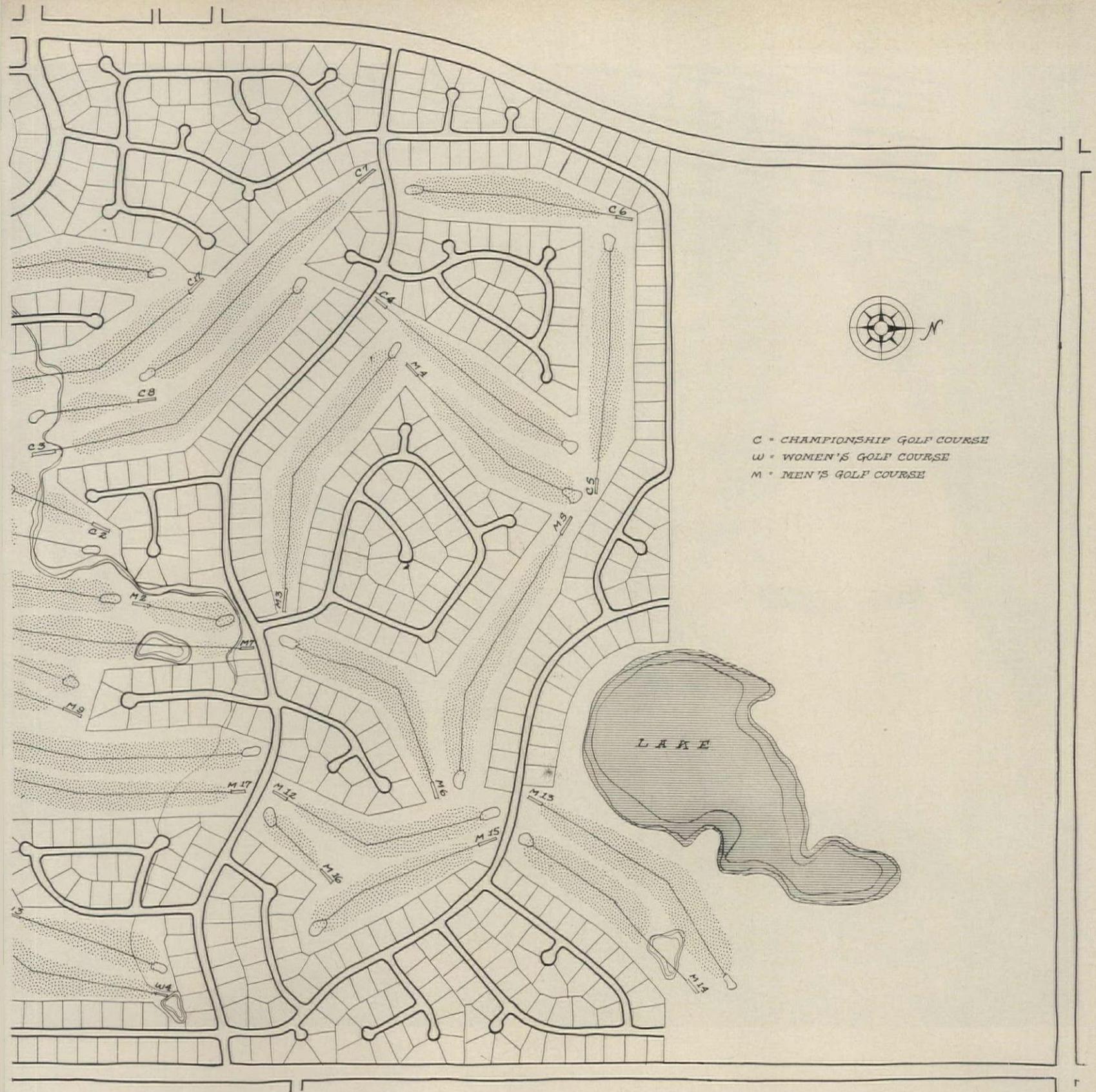
More than half the houses will be adjacent to the greens and fairways. Land Planner Theodore Robinson of Rolling Hills, Calif. designed the 1,000-acre tract to get the greatest number of houses next to the courses. (But he did not do it by the expedient of narrow lots. These are all 100' or wider,

and, happily, more nearly square than narrow rectangles.)

W.R. Hawn's Brookhaven Development Co owns the residential and shopping area. Various builders will put up houses priced from about \$30,000 to \$40,000. (The golf club is an entirely separate operation.) Hawn has also built big housing tracts in La Joya, Calif. and elsewhere in the West.

Brookhaven is one of several planned by Country Clubs Inc

The 340-acre country club is owned and operated by Country Clubs Inc, headed by Robert Dedman and James



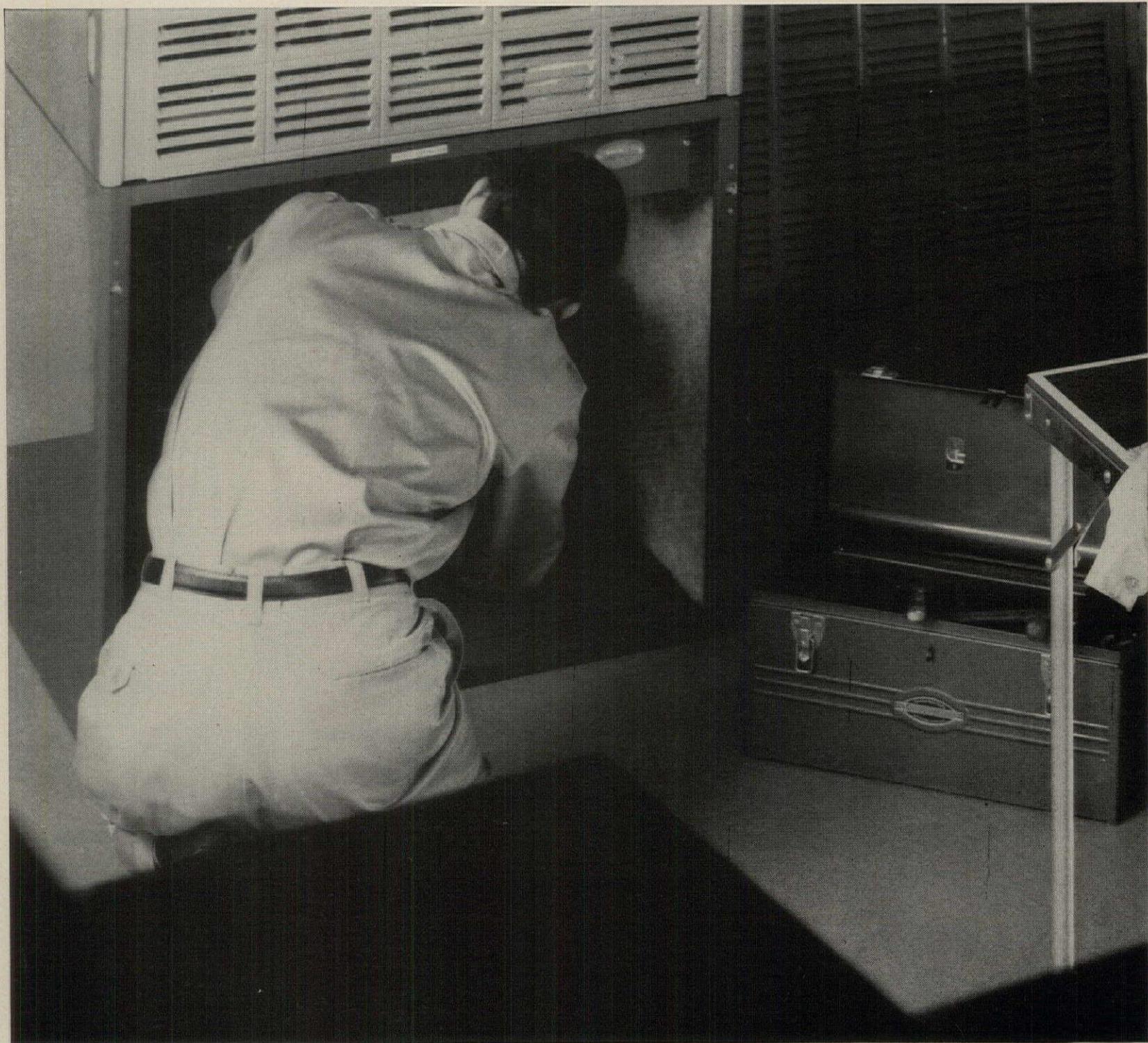
R. Thompson of Dallas. They have three similar projects under way elsewhere—as joint partners with Centex Construction Co in San Antonio, as club owner in a swank development 70 miles north of Dallas, and as club owner in a big Los Angeles venture with Builder Herbert Heftler.

Says Dedman: "These communities are ideal for pleasant family living. We are specialists who can run country clubs successfully without having to charge the kind of membership fees that only the rich can afford."

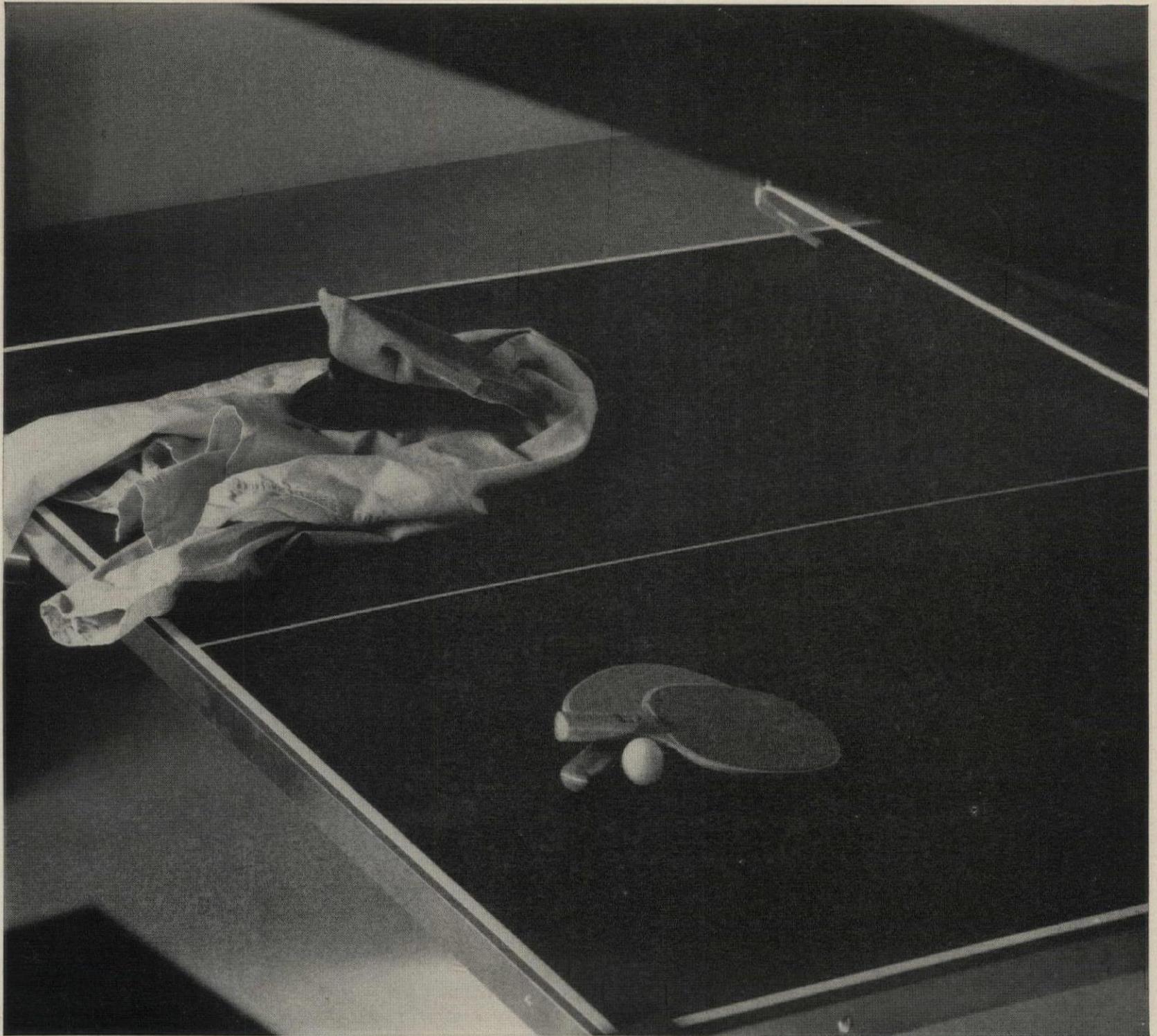
The Brookhaven clubhouse at right was designed by Dallas Architect Harwood K. Smith.



continued on p 192



HERE'S HOW
LENNOX QUALITY
PAYS OFF FOR YOU



Lennox dealers follow up each installation with a meticulous adjustment program to assure accurate, trouble-free operation.

The responsibility of your local Lennox Comfort Craftsman does not end with the sale of your homes. After buyers move in, he returns to test the actual performance of the heating and air conditioning units he has installed. He makes whatever adjustments are necessary, handles whatever servicing is required—to assure 100% trouble-free operation. Buyers are kept happier; you're not bothered by annoying complaints and call-backs.

Lennox quality works for you in other ways, too! For example: Your local Lennox Comfort Craftsman (who's engineer-trained) deals directly with a nearby

factory. He's always on the job at the right time with the right equipment. He offers the world's largest line of heating and air conditioning equipment plus the selling power of the Lennox name: most widely known, most widely advertised, most widely preferred of all makes in home heating and air conditioning.

Get facts on the Lennox merchandising program, which includes professionally planned advertising materials, in-home displays, personalized builder brochures and billboards. For sample merchandising aids, write Lennox, Marshalltown, Iowa.

LENNOX

*...world leader in indoor comfort
for homes, business, schools*



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BIG CROWDS OF BUYERS have been going out to Builder John Long's new parade of models in Phoenix since mid-February, and sales have averaged about 100 a week. Here prospects line up waiting to enter through Long's big sales office and display area.

60% of John Long's '59 sales are Storybook houses



BEST SELLER with 24½% of sales is this 1,100 sq ft model. It sells for \$8,995 stripped and up to \$9,195 with the frills added.



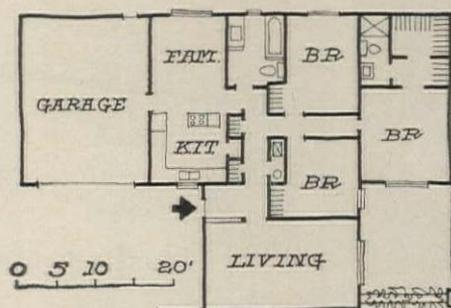
18% OF SALES are accounted for by this 1,400 sq ft model that sells for \$10,995 without adornments and up to \$11,345 as shown.



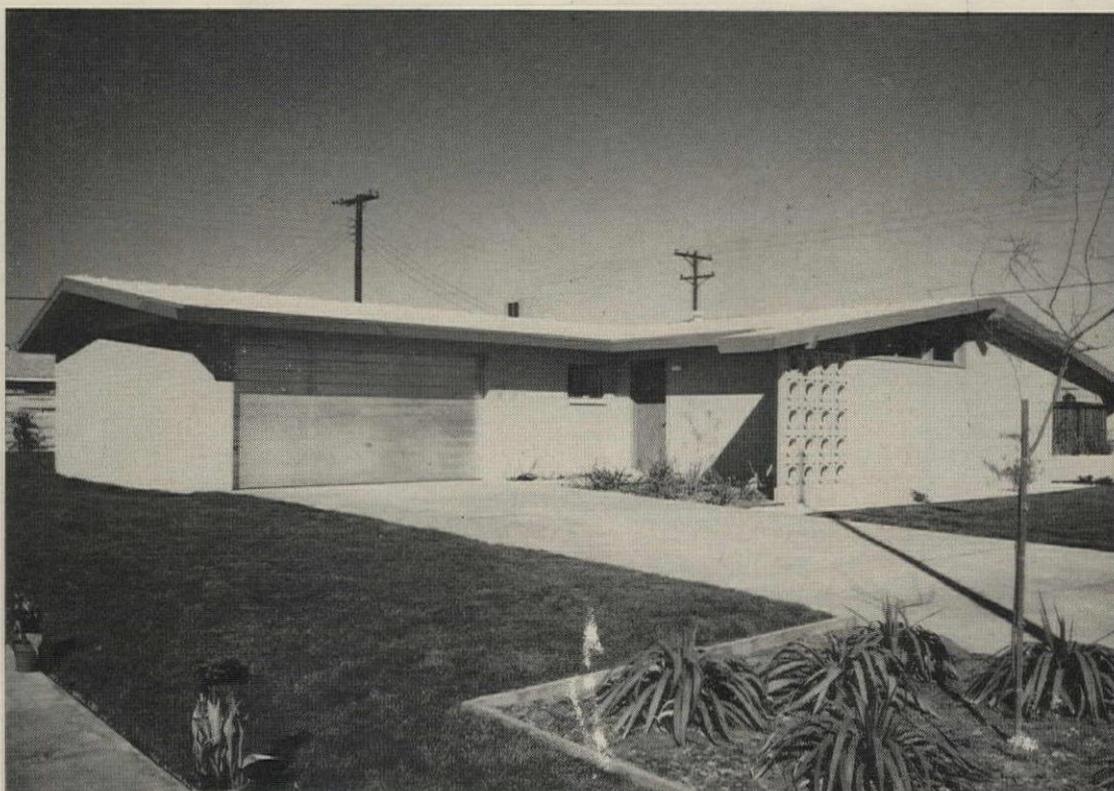
12% OF SALES are for this 1,913 sq ft model, priced as low as \$13,995, but at \$15,240 with shake roof, big garage, and air conditioning.



9% OF SALES are accounted for by this 1,590 sq ft model priced at \$11,495 basically, but at \$11,695 with the Storybook extras.



TIED FOR SECOND with 18% of sales is this contemporary model. It has 1,512 sq ft of living area, sells for \$12,650 up to \$12,995 as shown with two-car garage. Features include: two indoor-outdoor living areas, one off family room at rear and the other off living room and bedrooms at one side; a dressing room for master bedroom; acoustic tile and mahogany paneling in the entry.



... but this contemporary is also a big seller

Says John Long: "Storybook design hit Phoenix about eight months ago."

Demand was so strong last Fall that he ripped the fronts off two models and remade them into Storybook houses.

By last month Phoenix builders were building Storybook houses "all over the Valley." One competitor of Long was offering 12 versions in one tract.

So when Long opened his '59 line in mid-February with four of his seven production models in Storybook garb, he was reflecting the market, and his sales have been in about the same proportion—six of ten buyers pick Storybook models.

But Long has not abandoned contemporary and conventional design. In fact, the contemporary shown above, one of the

best he has ever introduced, is tied for second in popularity.

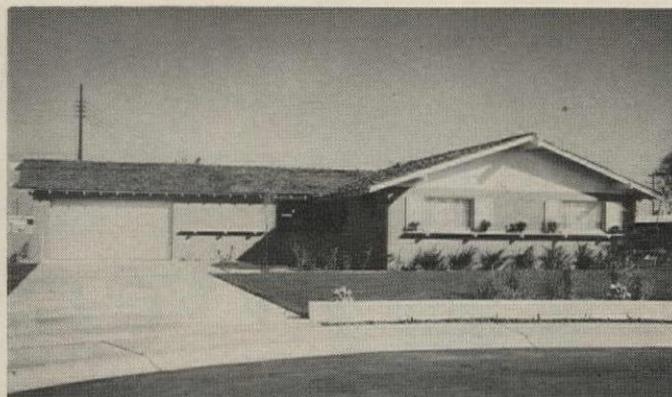
Why the Storybook houses are so popular is almost as inexplicable as their appearance. Best evidence that Phoenix buyers like it is that everyone who buys one of Long's four Storybook models pays \$100 to \$150 extra for all the gimmicks if he can possibly afford them.

Storybook design has had its ups and downs

Since its introduction in California about five years ago, this pastiche design has had varied popularity. Around Los Angeles it is at last waning. It failed to catch on in Dallas. On the other hand, it has just popped up in Albuquerque, where Builder Dale Belemah reports such success with two models that he is adding several more, in wider price ranges.



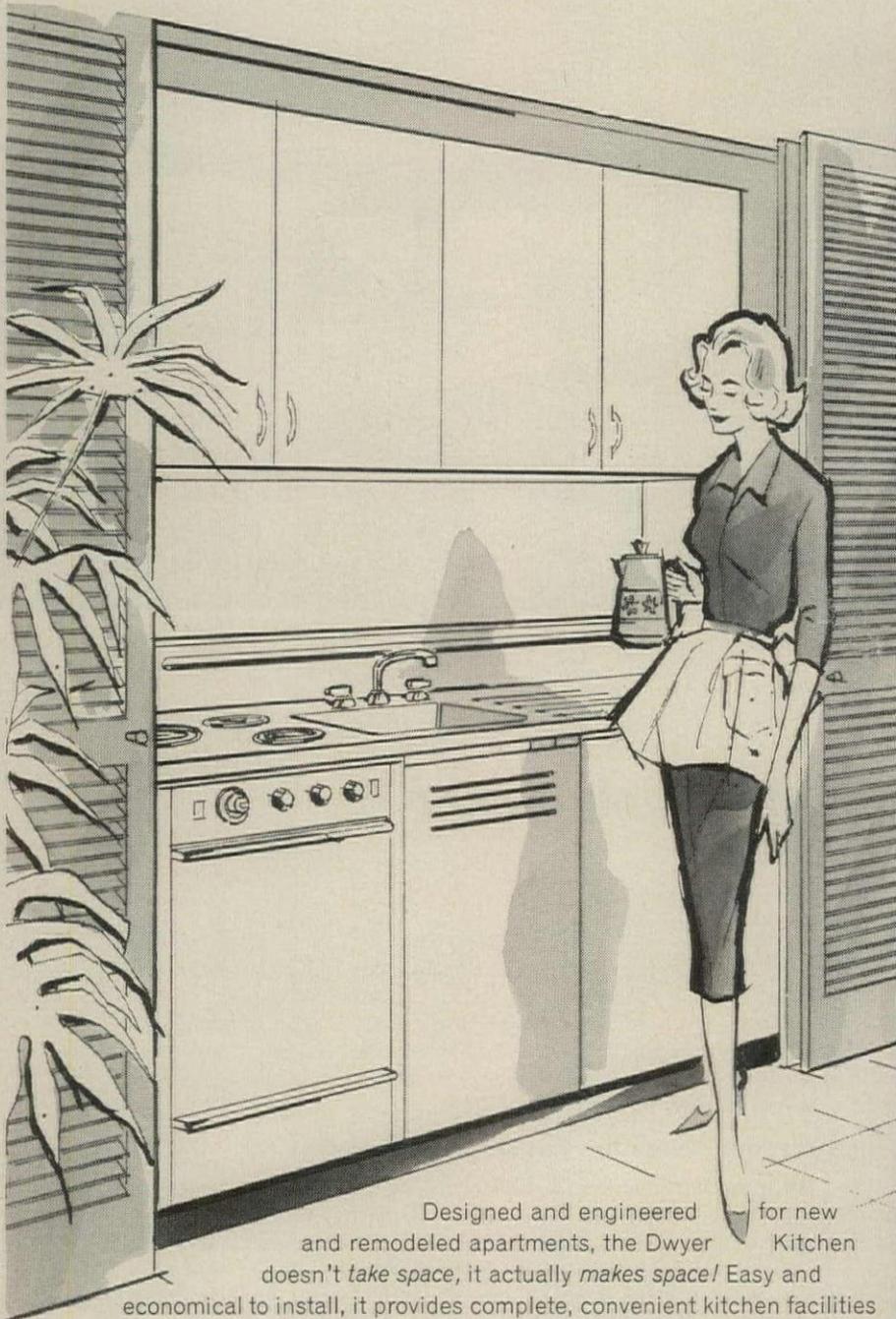
12½% OF SALES are for this 1,338 sq ft, conventionally designed model priced at \$10,650 as shown with a one-car garage.



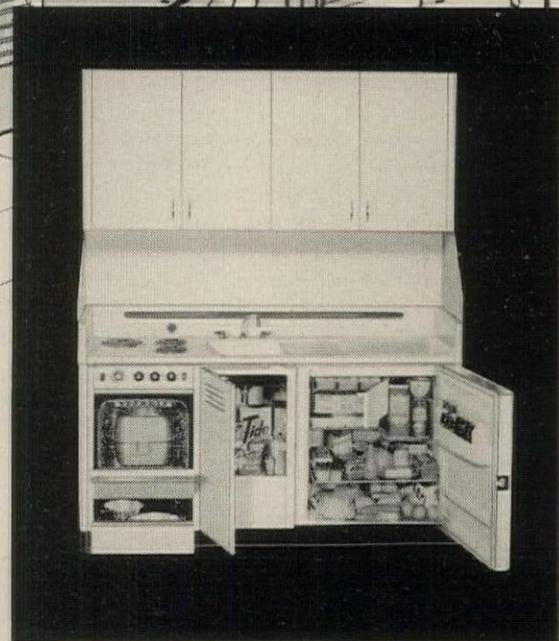
7% OF SALES are for this conventional model, held over from '58. It has 1,770 sq ft of living area, sells from \$13,650 to \$15,040.

continued on p 197

SPACE MAKER!



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



COMPACT KITCHENS

by **D**wyer

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Dwyer Products Corporation
Dept. J-1502, Michigan City, Indiana
Gentlemen: Please send me complete information on Dwyer Kitchens.

NAME _____

COMPANY NAME _____

ADDRESS _____

CITY, STATE _____

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

starts on p 187



INDOOR BARBECUE (above) in the family room is adjacent to the fireplace wall.



CARD TABLE STORAGE (above) with room for folding chairs is in hall opposite entry.

WIDE FRONT ENTRY (left) with folding doors heightens feeling of spaciousness.

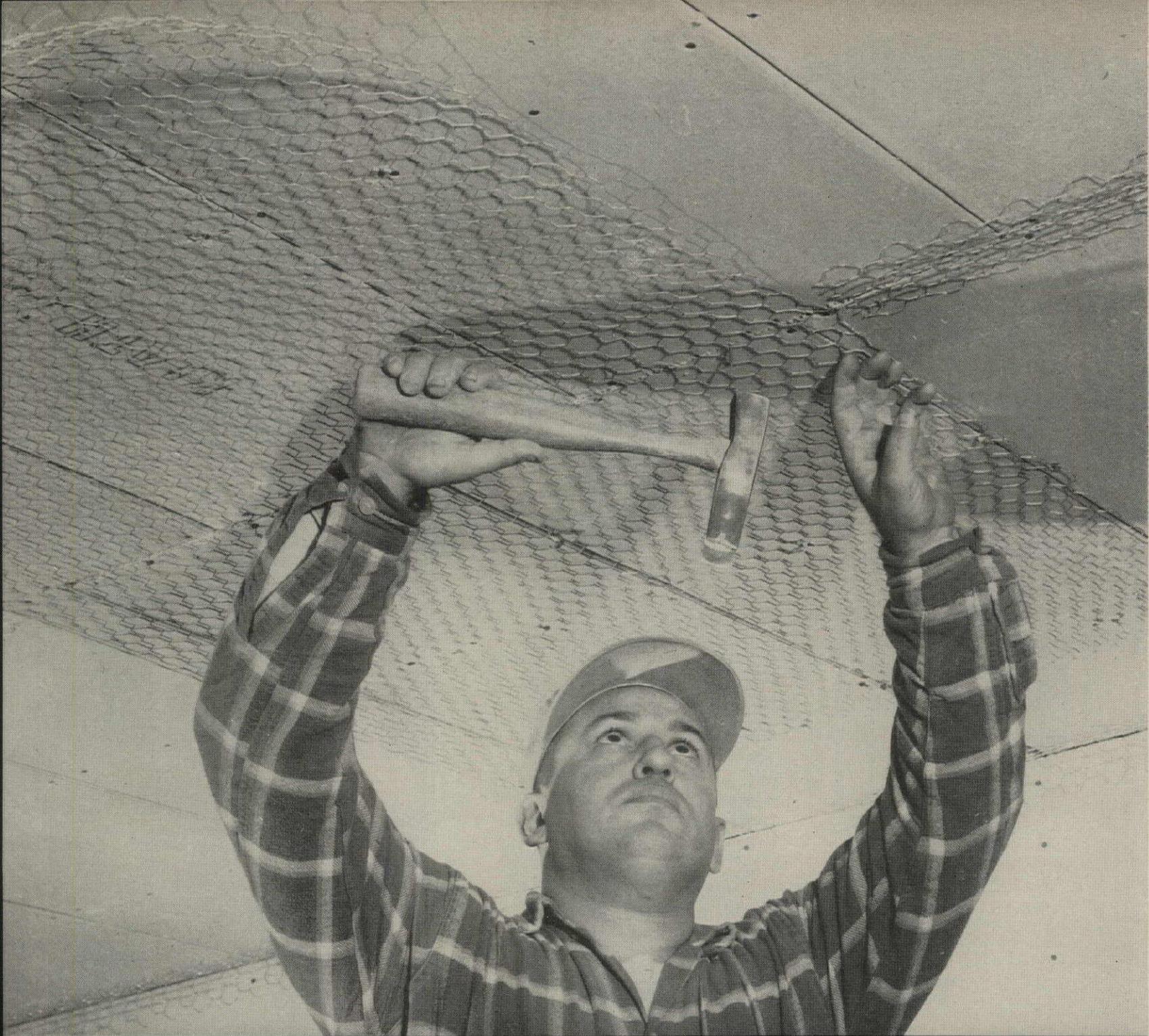
This big inviting doorway shows the way to a house full of ideas

Builders Ed Wallace and Cecil Weisz proved to themselves last fall that buyers like nothing better than a lot of fresh ideas in a house. They loaded their parade model with features like those shown above. Others included a wall-hung toilet, a workbench in the garage, a private patio for the master bedroom (as well as another off the family room), plenty of bookshelves and other built-ins, plus appliances and air conditioning. They sold eight houses at once, at \$31,000 each. That is half their average annual sale.



THREE-BEDROOM RANCH has two baths, 1,990 sq ft of living area. Behind front picket fence is a lighted pond.

continued on p 200



**NOW...
YOUR ANSWER TO
CEILING CRACKS**

THE EBY SYSTEM OF LATHING. Instead of staggering end joints of gypsum lath, longitudinal joints are staggered. Keycorner lath is applied to the continuous joints at 4 ft. intervals. Then, through the center of the room, one strip of 1" x 20 ga. Keymesh, 36" wide, is applied. This adds extra reinforcement where it's needed and assures full thickness of plaster.



"I guarantee NO PLASTER CRACKS in ceilings lathed with KEYMESH and KEYCORNER"

PROMISES WILLIAM E. EBY, CHICAGO LATHING CONTRACTOR

Everybody wants crack-free ceilings. That's why Bill Eby's guarantee is so important to you. "Believe me, I wouldn't make such a guarantee unless I'm sure," emphasizes Eby. "This lathing system will give you crack-free ceilings every time. And anybody can use this system. It's no Eby patent.

"I searched for years for a better lathing system. I tested and rejected any number of systems and reinforcements," Eby points out. "Now after three years of using this new lathing system with Keymesh and Keycorner, I know I'm right.

"Here's another fact that may surprise you. Builders

are switching back to lath and plaster for one big reason—savings. New application systems and modern colored plaster add up to a low-cost buy. You save the costs of paint and painting. Above this, lower maintenance costs and increased fire safety make lath and plaster a top value.

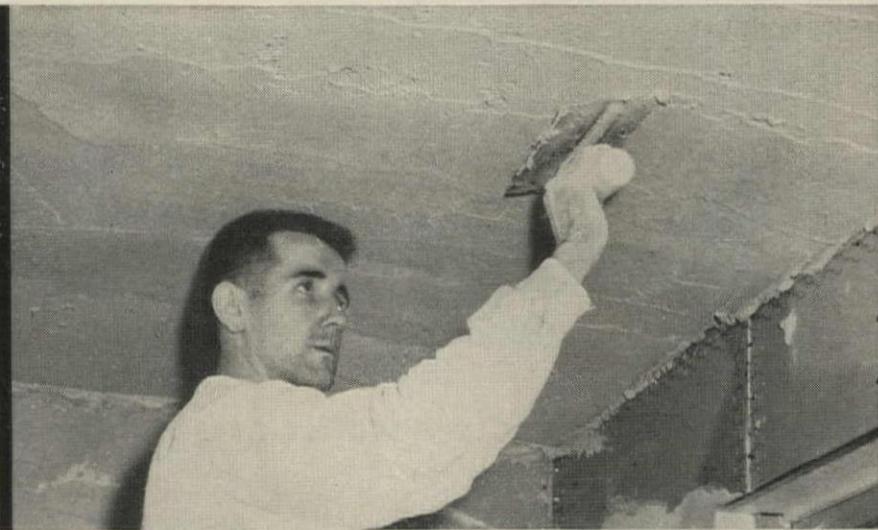
"Absolutely no ceiling cracks with this lathing system. You get added life from plaster. Upkeep costs are slashed. Yet Keymesh and Keycorner let me hold costs in line."

* * *

It will pay you to learn all the facts about the Eby system of lathing with Keymesh and Keycorner and why he can make this guarantee of a crack-free ceiling.



Eby (left) inspects application of Keycorner, used to reinforce joints. Keycorner is also used at all wall and corner junctures.

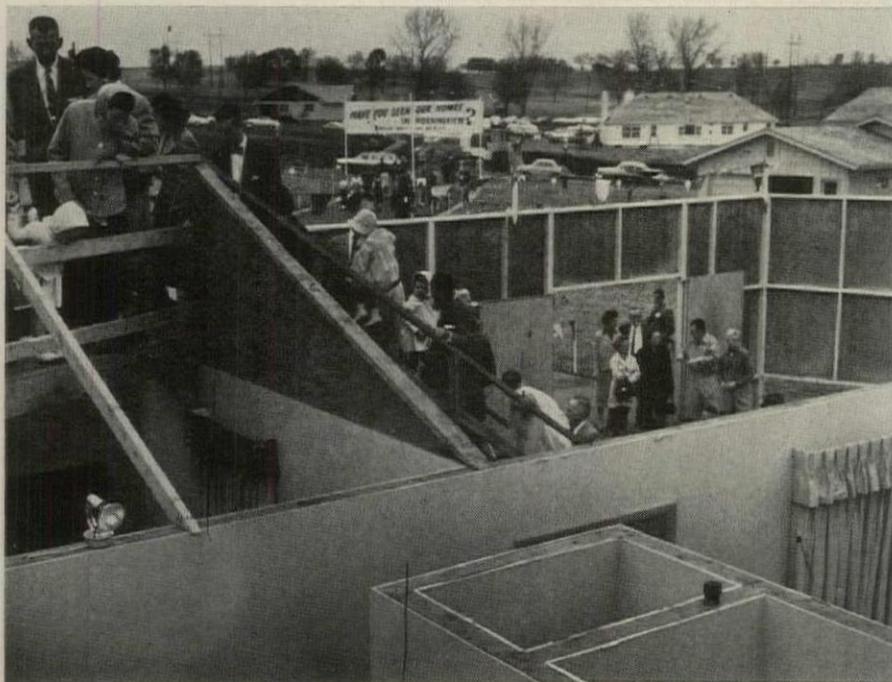


Plaster is applied over reinforced ceiling. The open mesh of both Keymesh and Keycorner assures imbedment in plaster. The open mesh also insures full bond of plaster with gypsum lath.

KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

Keywall • Keymesh • Keycorner • Keybead • Nails • Welded Wire Fabric



BIRD'S-EYE VIEW of a dressing area . . .



. . . and a living area from above.

**This model house without a roof cost \$1,700 more to build—
and drew over 60,000**

Building a house without a roof is one way to get publicity. Helped by \$12,000 worth of advertising, this model drew over 15,000 visitors on opening day, Nov 16, and the curious—including many buyers—kept coming by the hundreds or thousands daily until Builder Fred Olsen literally raised the roof at the end of December.

Chief construction problem was creating a roof that could be lifted safely by cranes and would fit precisely into

slots at the top of the bearing walls. This required extreme care in workmanship plus engineering the steel trusses to flex correctly when lifted.

Rain proved no problem. To keep the interior dry in wet weather, a canvas on rollers held by brackets below the plate line at the rear of the house was spread, roof like, over the top. It kept the house tight as a drum even during one 75-mph wind that blew down signs on the property.



**This lineup of trailers works as a builder's warehouse—
for seven reasons**

A dozen secondhand truck trailers make an ideal "warehouse" for building materials used by Gerholz Homes in Flint, Mich. Here is why Gerholz uses them and why several other Flint builders have adopted the idea:

1. They are cheap. Second-hand trailers cost only \$300 to \$400 each.
2. They are mobile. Local haulers

will move them from one building site to another for only \$4 an hour.

3. They are good dry storage space.
4. They are the right height to receive materials delivered by truck.
5. They are a striking advertisement when hauled together across town.
6. They can double as field offices.
7. They eliminate pilferage.

continued on p 202



HERE'S WHERE PELLA DOORS GET THEIR "LIVE ACTION"

See that spring hinge? It's made of special alloy steel. Concealed within the wood panels, springs like this give PELLA WOOD FOLDING DOORS their famous "live action." They're one of the reasons even the largest PELLA door units operate with so little effort and nest so compactly.

Patented PELLA steel spring hinging controls even spacing of the panel folds. It is designed and tested to maintain its original tension over many years of hard service.

As another measure of long-lasting durability,

PELLA WOOD FOLDING DOORS feature solid wood "Lamicor" construction, which prevents warping. Available in any width and in heights up to 12' 1", PELLA DOORS arrive factory-assembled, complete with all hardware to save installation time.

Let the "live action" and honest beauty of PELLA WOOD FOLDING DOORS show prospects that you have added a genuine Mark of Quality to the homes you build and sell. For nearest PELLA distributor, see the classified telephone directory . . . or mail coupon.



6 FINE WOOD VENEERS

American Walnut
White Ash
Philippine Mahogany
Birch
Oak
Pine

MAIL COUPON TODAY

ROLSCREEN COMPANY, Dept. KB-23, Pella, Iowa
 Please send free literature on PELLA WOOD FOLDING DOORS.

NAME _____
 FIRM _____
 ADDRESS _____
 CITY _____ ZONE _____ STATE _____

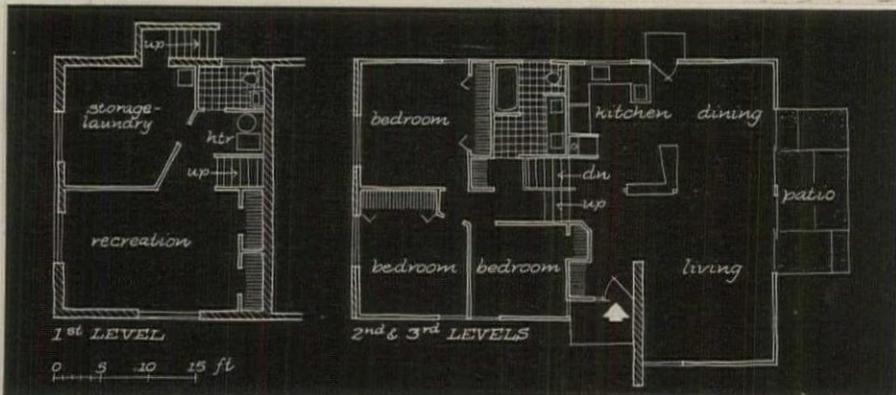


267 air-conditioned houses like this

sold in three weeks

Baltimore buyers jumped at the chance in cold December to buy Old Crown Construction Co's contemporaries.

They liked Architect Tom Jewell's designs. Sold on a ground-rent plan, the houses were offered at \$11,990 to \$13,990 plus ground rent. For this, buyers get not only air conditioning but a built-in range and oven, a refrigerator, dishwasher, garbage disposer, clothes washer and dryer.



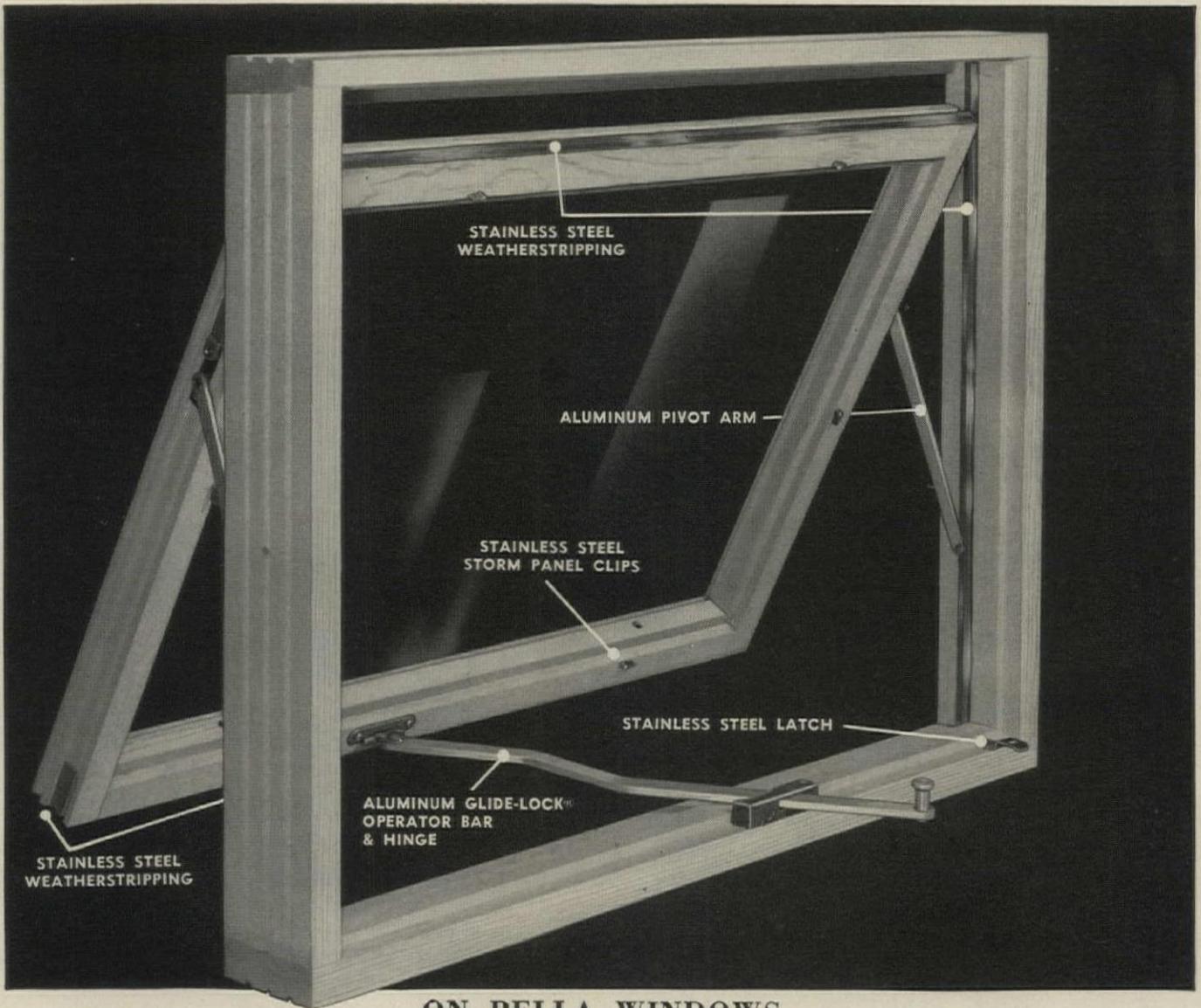
SPLIT LEVEL PLAN of \$13,990 model provides indoor-outdoor living on main level.



LIVING-DINING AREA has sliding doors to terrace, sloping ceiling, cabinet room dividers.

Leland Lee explains nine cost-cutting ideas

1. "Age the house. After ceiling joists are in place, hit the top plate every 4' with a 6-lb sledge. This helps settle the framing, eliminate sheetrock cracks later.
2. "Use 3' rear doors instead of 2'8" doors. They cost us only 30¢ more. The 3' door provides more elbow room when someone enters with groceries, and by standardizing outside doors you eliminate another item of inventory.
3. "Don't use a half-window in the rear door. It costs \$9 more, counting a \$5 venetian blind. Tell buyers a window makes a burglar's job easier.
4. "The best outside planter under the windows is simply a 2x12 laid flat, with holes for pots cut out every 16". These are colorful and cheaper than conventional flower boxes which ordinarily rot within a year or two.
5. "A kitchen medicine cabinet is one of the cheapest luxuries you can offer. Our buyers love it. This lets them keep their medicines safely in the room where most families keep half their medicines anyway. We put a \$9 mirror on our wall cabinet, so it doubles as a makeup bar for the housewife.
6. "For washer-dryer space, put a door in front so it becomes a closet. This lets you use open shelves, much less costly than the two \$30 cabinets you would be required to use under FHA if the space were left open.
7. "A 4' wide kitchen pantry is much cheaper than comparable cabinets. We make ours 8' high and 12" deep, to get 32 sq ft of shelves. It is faced with a \$15 door. We show women how to keep canned goods two or three deep in such a way they can always see what they need to buy. We call it a 'Perpetual Inventory Pantry.' They seem to prefer it to miscellaneous, more costly cabinets.
8. "Use home workshop hobbyists to make your closet shelves and various trim items. We have one man—one of our homebuyers—who does the work in his spare time and who comes in and installs it himself (usually at night when he doesn't get in the way of other crafts). We buy the lumber for him, pay him \$50 a house. He loves making the extra money and we like it because it saves \$50 a house, and solves one of our most annoying inventory problems. Also, this has helped us cut our trim carpentry time from 15 to five days per house.
9. "If you use an indoor planter, you can get one in a 5 & 10 store for less than \$2. These are 8"x40"x8" sheet containers with a lip. A builder in Dallas would pay \$30 for a 12"x30" metal container made to order." /END



ON PELLA WINDOWS

ALL HARDWARE IS ALUMINUM OR STAINLESS STEEL

Successful builders are using this quality feature of PELLA M-P and TWINLITE WINDOWS to help them sell homes. They point out that PELLA hardware is carefully fashioned from durable metals that assure years of good looks and smooth, trouble-free operation.

Prospects are encouraged to see how easily a PELLA sash can be opened . . .

how it holds securely in 10 positions . . . how it tilts to almost 90° for easy cleaning of outside glass from the inside.

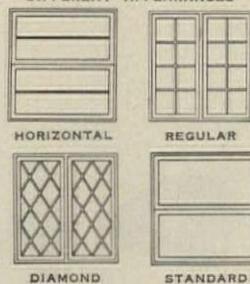
Convenient, quality-built PELLA WINDOWS provide a sales story that is *real news* to many a prospect. Put it to work for you. On your next jobs, call in the PELLA distributor. Consult your classified telephone directory . . . or mail coupon.



REMOVABLE MUNTIN BARS

Removable muntin bars *snap in, snap out* for easy cleaning. Available for all PELLA WINDOWS.

ONE WINDOW . . . FOUR DIFFERENT APPEARANCES



SEND COUPON TODAY

• ROLSCREEN COMPANY, Dept. KB-22, Pella, Iowa •
 • Please send me literature on PELLA M-P and •
 • TWINLITE WINDOWS. •

• NAME _____ •
 • FIRM NAME _____ •
 • ADDRESS _____ •
 • CITY & ZONE _____ STATE _____ •

New tools for the big on-site jobs

Light construction equipment makers are offering more and better machines to help you grade a site, load a truck, raise a roof, dig a trench, or do almost any other on-site job. The 64 tools reviewed on these six pages have more power and more versatility than last year's models. Structural members—usually box beams—are stronger. Hydraulic systems take heavier loads and take them more smoothly. Loader and hoe buckets hold more,

dig deeper, lift higher. More shift systems change speed or direction on-the-go without clutching. Many operator seats are closer to the job to get better visibility. Weights are shifted forward or back to give better traction; profiles are lowered to give better stability; ground clearances are raised. Prices? Up a little. A small tractor-loader-backhoe rig will cost about \$5000; a one yard loader, about \$7000; a posthole auger, about \$250.



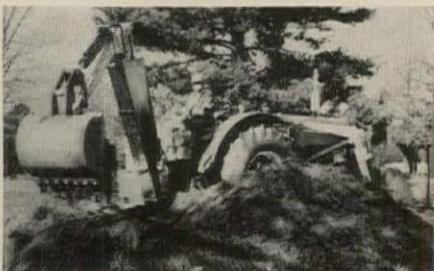
Drott TD-15 Skid-Shovel



340 Utility tractor with Wagner 140 loader



130 low-bed trailer, Pippin loader and backhoe



660 tractor with backhoe and loader

I-H group makes tools for every job

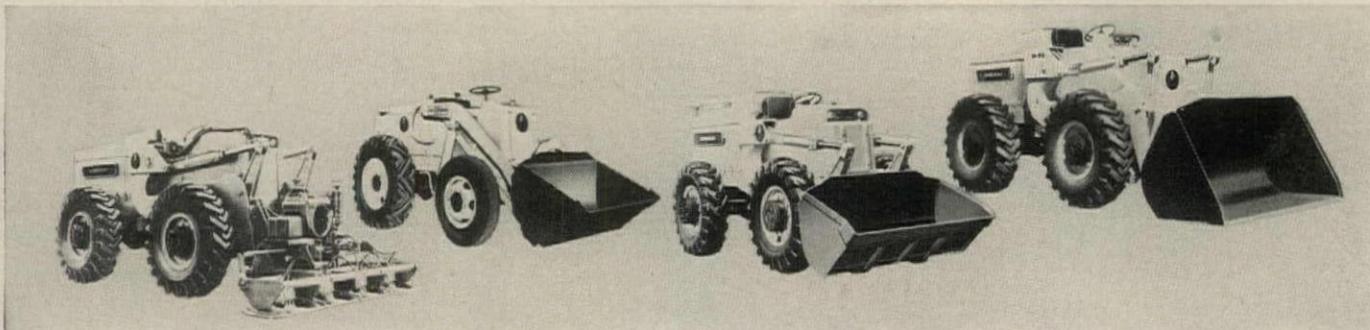
International's big 660 and medium-sized 340 utility tractors bring to seven the units just introduced. Also new, four diesel power units of 65 to 121 hp and a low-bed trailer to carry equipment to the job. From associated companies come improved attachments like the Pippin and Wagner backhoes and loaders and Drott loaders and skid-shovels. I-H equipment can be gasoline, diesel, or Lp-gas powered from 12 hp up.

International Harvester, Chicago.

Frank G. Hough Co., an I-H subsidiary, has four new versions of the Payloader. The H-30R is a 66.5-hp rear-wheel drive model to handle buckets of 2/3 to 2 cu yds, loads to 3000 lb. The H-70 and H-90 are bigger four-wheel drive units with 7000-lb and 9000-lb capacities, gasoline or diesel engines of 105 hp up, and full power shifting, steering, braking, etc. Also new, a four-pad vibratory compactor 10' wide.

Frank G. Hough Co, Libertyville, Ill.

For details check the following numbers on the coupon, page 244: I-H, No. 5; Pippin, No. 6; Wagner, No. 7; Drott, No. 8; Hough, No. 9.



Hough vibratory compactor

H-30R Payloader

H-70 Payloader

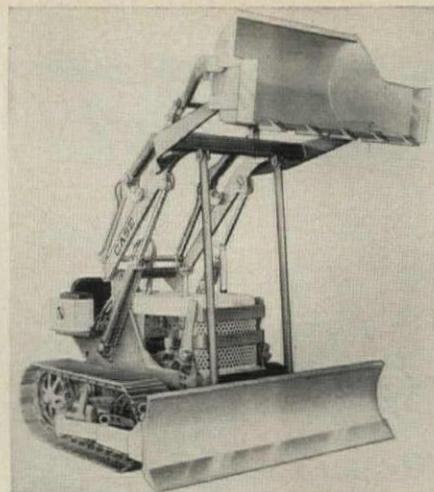
H-90 Payloader



Case 420 loader



W5 Terraloader



310 loader-dozer rig

Case has new tracked, wheeled power

A new utility crawler for trenching, loading, bulldozing, etc., is Case's 42-hp Model 310 (as the 310B it is available with wheels). This unit can be fitted with nine backhoe buckets 14" to 38" wide, loader buckets of 11 to 21 cu ft, a 6' tilt blade, or 6' rotary brush. Bigger units include the 47-hp Model 420 industrial wheeled loader with torque converter, shuttle transmission, power steering, and self-leveling bucket; the W-5 and W-9 wheeled Terraload'rs that lift up to 5500 lb, roll over the road at 21 mph; and the Model 1000 Terratrak shovel to lift 18,700 lb, tow a load or push a dozer or brush rake with 25,000 lb force.

J.I. Case, Racine, Wis.

For details check No. 10 on coupon, p 244



420 backhoe

M-F shows its new industrial line

The Massey-Ferguson Industrial Div has just brought out seven new light-construction tools. There are three new Work Bulls: the 204, a 40-hp utility tractor; the 406, a $\frac{3}{4}$ cu yd tractor-loader; a new 1001 self-leveling 1 cu yd tractor-loader. All have no-shift instant reversing for toe-tip control of speed and direction, torque converters, better visibility. Three new Davis loaders cover the utility loader range: the 99 economy loader, the new beefed-up 101 and 102 fast operating loaders. A new Davis 220 backhoe gives 14,000 lb breakaway, 2150 psi operating pressure, 50% faster dumping, and its new Hydra-Slide can take any of five positions in less than five minutes. Fork lifts, trenchers, posthole augers, leaf and road sweepers, and a combination scarifier-scraper-backfill blade are also available.

Massey-Ferguson, Wichita.

For details check No. 11 on coupon, p 244



1001 multi-purpose loader



204 with scarifier-scraper, Davis loader



406 with $\frac{3}{4}$ cu yd loader



Davis 220 backhoe with Hydraslide

continued on p 206

New products

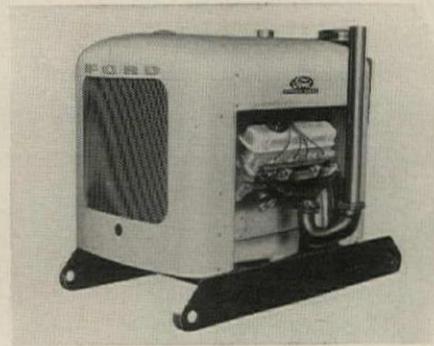
start on p 204



641 diesel tractor



Dearborn earthcavator



New industrial power unit



New Ford backhoe unit

Ford builds up its industrial line

Eighteen items have been added to the original tractor and loader announced in H&H, Nov '58. Now come a 144 cu in. diesel tractor; a 330 cu in. diesel and 401, 477, and 534 cu in. gasoline power units; new 10', 12', and 14' backhoes with capacities of 2 to 6 cu ft; new 6' and 7' dozer blades with optional angle adjuster; a rear-mounted scoop; new Dearborn 65" scrapers, 65" and 72" landscapers, and 65", 72", and 80" earthcavators that rotate to three positions to grade, scarify, or backfill. Also new, a one-hand control planetary transmission with ten forward and two reverse speeds for instant speed and direction changes in motion.

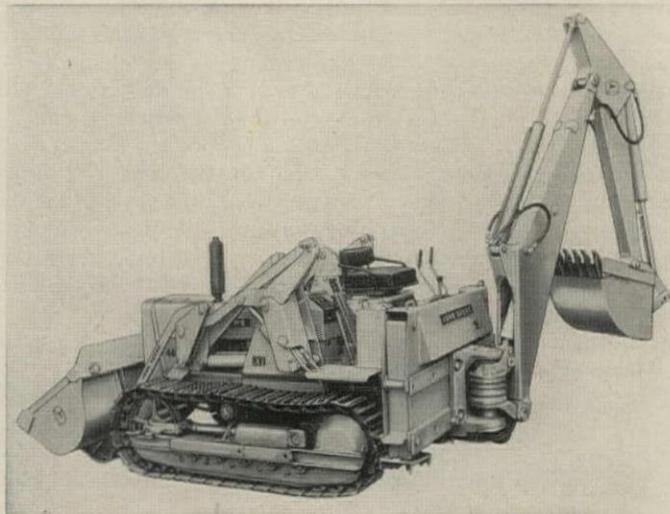
Ford Tractor & Implement Div, Birmingham, Mich.
For details check No. 12 on coupon, p 244

Deere's 440 shows new versatility

Two new diesel utilities are being produced by John Deere Industrial Div. The 440 crawler and wheel models are now powered by a GM 2-cycle engine rated at 33¼ hp at 1850 rpm and a torque of 108 lb-ft at 800 rpm, as well as by 2-cycle gasoline engines. The new units have improved transmissions, increased strength, higher working speeds. They power a full line of loaders, backhoes, bulldozers, etc. among them the new John Deere 51 five-position backhoe. This bucket works as deep as 13½', dumps to 11'9" heights, swings through a 180° arc. The utility loader can mount a crane in place of the bucket as shown below to raise components or materials.

Deere & Co, Moline, Ill.

For details check No. 13 on coupon, p 244



831 crawler-loader



440 tractor with crane boom



440 with high-lift bucket



440 with dozer blade

continued on p 208

Land Development...

a big problem and getting bigger!

BY MID 1960 the population of the U. S. is expected to reach 200,000,000. Experts predict that 1,500,000 homes a year will be needed by 1970 to house new family units. This is good news for home builders and building supply manufacturers *if* they can solve the many problems confronting the housing industry. One of the major problems (and perhaps the most difficult) is land development. Land problems aren't going to get better — they're going to get worse. Crowded out of cities and even established suburban areas, builders will have to turn to undeveloped, low-cost raw land for their sites. Instead of building homes, the builder will have to develop entire communities and provide all essential facilities. How this can be done without imposing unbearable tax burdens, without sacrificing important esthetic considerations, and without ignoring vital amenities for community living is a problem that concerns everyone in the housing industry — builder, architect, contractor and manufacturer alike.

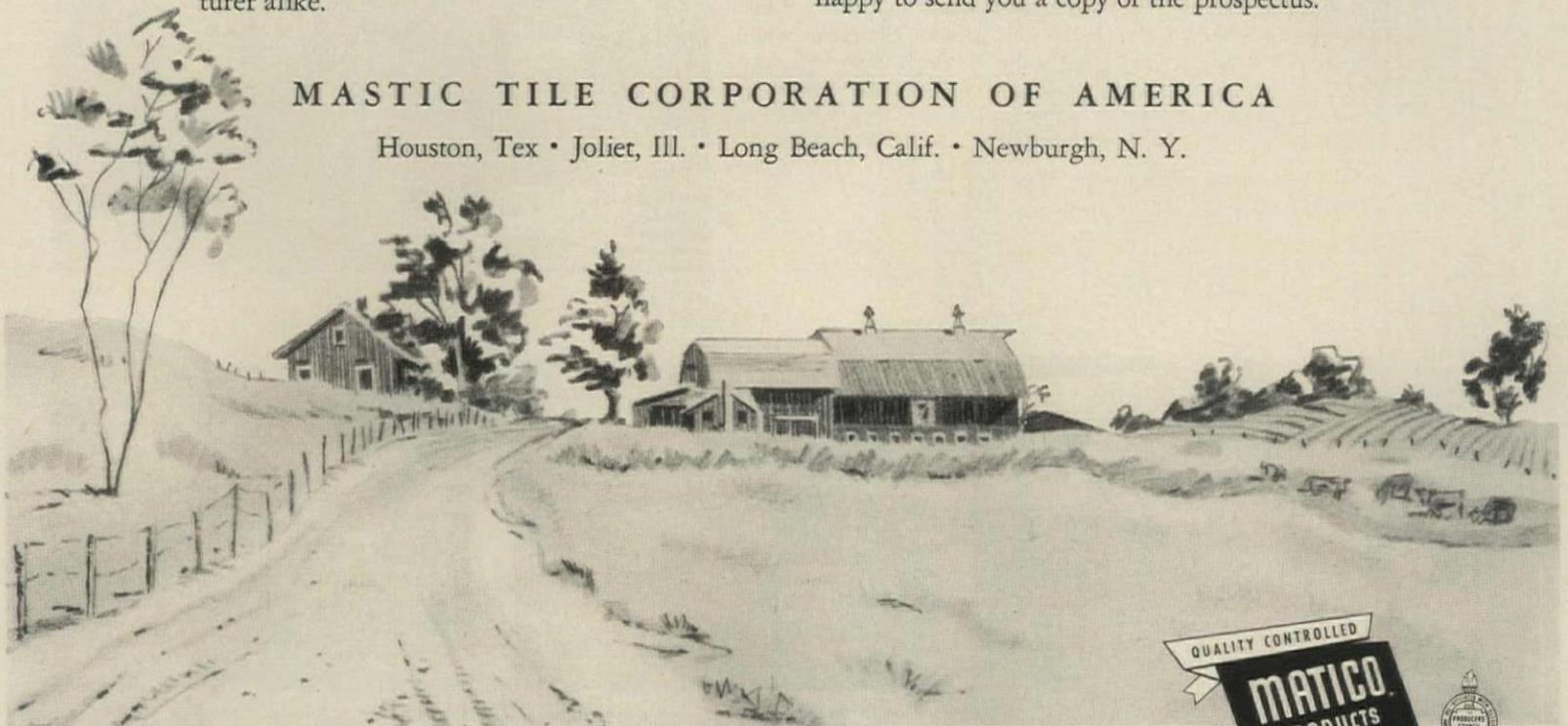
To stimulate the architect to contribute his talent and training to the large-scale development of homes — a field in which the architect has not been significantly active in recent years — Mastic Tile Corporation of America is sponsoring a \$25,000 Annual Design Competition. This is not a competition for the "prettiest" house. It is a competition that requires recognition of the many economic, sociological and esthetic problems which the operative builder has been facing for years.

It is hoped that through the medium of this competition a closer collaboration of the builder and architect will be achieved and that the result will be an enlightened cooperative effort of all segments of the housing industry to provide a solution to one of the great human needs — a place to live and rear a family.

If you would like details about this challenging competition write Department 14-4, P. O. Box 128, Vails Gate, N. Y. and we will be happy to send you a copy of the prospectus.

MASTIC TILE CORPORATION OF AMERICA

Houston, Tex • Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.



Vinyl Tile • Rubber Tile • Asphalt Tile • Vinyl-Asbestos Tile • Plastic Wall Tile



New products

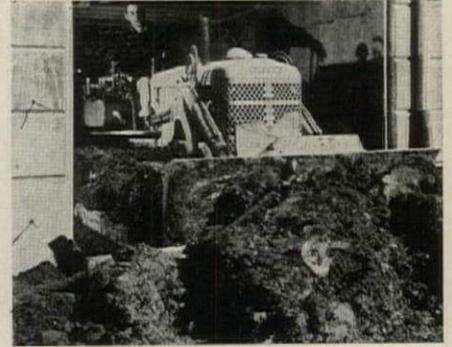
start on p 204



880 tractor with 1-yd bucket



880 with 80 Hydrotrencher



OC-12 crawler in close quarters



OC-46 loader

Oliver units work in close quarters

New Oliver tractors for industrial use come tracked or wheeled, gasoline or diesel powered, in 30 to 110 hp models. New crawlers with "Spot Turn" clutch can turn in a length and half (above right). New wheeled models have quick-reversing torque converter for shuttle operations. New attachments include Model 80 Hydro-Trencher—a ½ yd backhoe that digs and loads to 12' in 180° swing—Hydro-Jet trencher for OC-46 crawler, No. 70 trencher for middle-duty wheeled tractors. Also new are four loaders with capacities of 12 cu ft to 1½ cu yd. Full line also includes loader-backhoe rigs, dozer and backfill blades, scarifiers, scrapers, winches, hoists, loader forks, etc.

Oliver Corp, Chicago.

For details check No. 14 on coupon, p 244

New A-C units handle all utility jobs

Allis-Chalmers has two new wheeled utility tractors in its D line, the 35-hp D14 and 54-hp D17. Stock engines are gasoline but the D17 can also be powered with diesel or Lp-gas. Both units have grouped controls and power steering to reduce fatigue, power transmissions for quick shifts on-the-go. Both have adjustable tread spacing on front and rear wheels. Both are designed to give maximum ground clearance while keeping a low profile and good stability. Both units will take backhoes, loaders, scrapers, posthole augers, and other attachments made by a wide range of equipment suppliers as well as A-C attachments.

Allis-Chalmers, Milwaukee, Wis.

For details check No. 15 on coupon p 244



D-14 with loader and backhoe



... with posthole auger



... with scraper

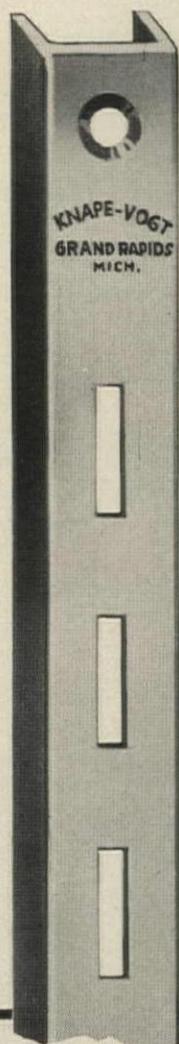


... with backfill blade

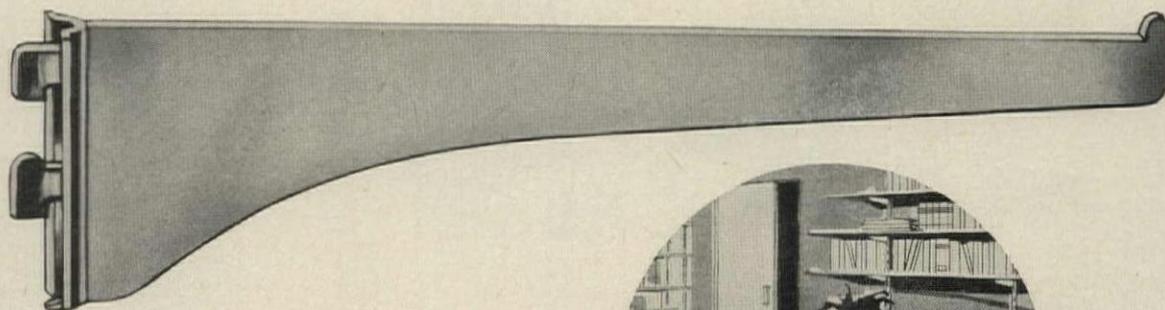
continued on p 210

KV shelf hardware gives you more of just what you're looking for!

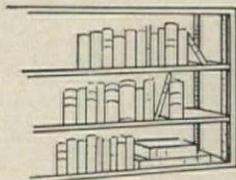
★ *Top Quality* ★ *Easy Installation* ★ *Trouble-free Performance*
...and the best known line in the business!



Easily installed, easily adjusted K-V shelf hardware provides attractive, low-cost decorative effects or storage facilities wherever they are needed. May be used for both open wall or built-in shelving. K-V adjustable hardware lasts the lifetime of the home, always keeps shelves straight, strong and sag-free. Ask your K-V representative for the complete story.



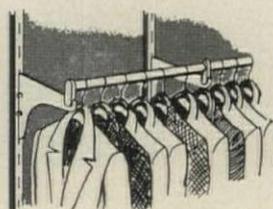
FOR OPEN WALL SHELVES
No. 80 Standard
 18" to 144" lengths
No. 180 Bracket
 4" to 20" lengths
 Satin anochrome or brass finishes.



FOR BUILT-IN SHELVES
 Can be mounted flush or on surface. Standards have 1/2" adjustment slots numbered for quick, easy alignment.



No. 255 Standard
 24" to 144" lengths
 Nickel, bright zinc plate or bronze finish
No. 256 Support
 Steel, 3/4" long, 1/2" wide.
 Nickel, zinc or bronze finish



FOR EXTRA-HEAVY DUTY
 Ideal for hardware, paint or grocery store display or storage or for hangrod installations. For home use, too.



No. 87 Standard
 36" to 144" lengths
 Satin anochrome finish
No. 187 Bracket
 12" to 24" lengths
 Satin anochrome finish

Ask your jobber or K-V sales representative about the popular packed units of K-V 80-180 standards and brackets and K-V 233-239 standards and supports.

KNAPE & VOGT MANUFACTURING COMPANY Grand Rapids, Michigan

Manufacturers of drawer slides, sliding and folding door hardware, closet and kitchen fixtures and Handy Hooks for perforated board





D8 with brush rake



D7 with dozer blade



No. 14 motor grader



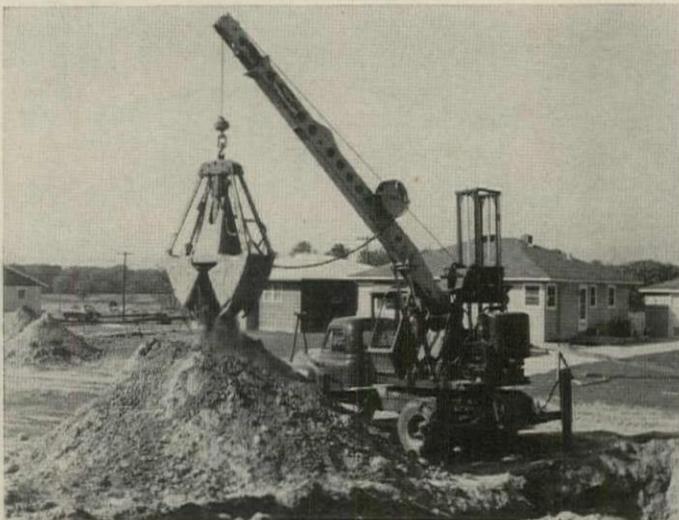
933 Traxcavator

Caterpillar has four new lightheavies

Caterpillar's new 933F Traxcavator is an all-round earth-moving tool for the housing industry. New 52-hp Series F has an engine 350-lb lighter and 9" shorter and a stronger, more rigid power train. Reverse speed has been boosted from 3.04 to 3.67 mph. Shovel capacity is up from 1 to 1½ cu yd. New D7 and D8 turbocharged heavy-duty crawlers with flywheel horsepowers of 140 and 225 have also been added to the line as has No. 14 motor grader, rated at 150 hp for general road work. The new grader has a 12' blade 27" high, moves forward at speeds of 2.6 mph in first to 21.6 mph in sixth.

Caterpillar Tractor Co, Peoria, Ill.

For details check No. 16 on coupon, p 244



Hydrocrane with clamshell



Hydrohoe

Bucyrus-Erie cranes do big lifting jobs

Truck or crawler mounted cranes and hoes from Bucyrus-Erie are sized to handle big land development and construction jobs. The H-5 Hydrohoe has ½ cu yd capacity with 24", 36", 48", and 60" reversible dippers, can reach out 27' or down 18', with full 360° swing. The H-3 Hydrocrane can work at radiuses of 10' to 39', heights to 45', can be used

with a ¾ cu yd clamshell or larger handling buckets. Capacity without boom inserts ranges from 2900 lb with a 27' boom to 10,000 lb with a 10' boom, will more than cover most light construction lifting jobs.

Bucyrus-Erie Co, South Milwaukee.

For details check No. 17 on coupon, p 244

continued on p 212

Culinary Sales-Clincher!

ROPER



BUILT-IN GAS OVEN-BROILER with ROTISSERIE

Count on Roper to convince your prospects! Versatile new built-in oven offers a motorized rotisserie with exclusive "Thermo-Spit" thermometer . . . gives correct inside temperature of meats and poultry . . . tells when foods are rare, medium or well done.

Other Sales-Appealing Features

Roper provides additional cooking advantages with larger capacity . . . removable oven rack guides . . . "air cushion" door seals . . . and full length broiler with "Serv-Hot" grill. Roper is easy to sell . . . easy to install.

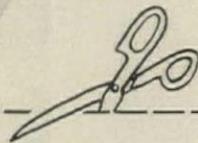


HUDEE RIM
fits flush
and tight!

ROPER

HELPS YOU SELL...
ON PLAYHOUSE 90
CBS-TV

WRITE
TODAY



The Finest in Top Burner Units, Too EIGHT MODELS TO CHOOSE FROM

No matter what your requirements, Roper can fill them exactly . . . and profitably. Two burners . . . four burners . . . four burners with griddle or fifth burner. New Tem-Trol automatic heat control with "Flame-Set". Roper has what you need to attract more live prospects. Feature the highly-respected Roper name . . . sell recognized Roper quality.

GEO. D. ROPER SALES CORP.
a subsidiary of Geo. D. Roper Corporation
Kankakee, Illinois

Geo. D. Roper Sales Corp., Kankakee, Ill.
Send complete information on Roper Built-In Gas Ranges

Firm Name _____

Individual _____

Address _____

City _____ State _____

I am a _____
(Type of business)

My building material supplier is _____
(Name)

(Address) (City) (State)

HH259



Sherman Products' new Napco four-wheel drive unit (left) adapts conventional tractors to work on difficult terrain. Power added to front wheels cuts digging into soft sand, side slipping on slick surfaces, backwheel spinning with front loads. Panther backhoe (right) has a compact 25-hp hydraulic system operating at 2000 psi, exerts digging force of



almost 20,000 lb. When swinging, drive elements are under tension and under positive control. In Ford installations the Panther has an electric-fan-cooled heat exchanger to keep unit working under extreme conditions.

Sherman Products, Royal Oak, Mich.
For details check No. 18 on coupon, p 244

Here are six new tools from attachment suppliers



Ottawa Model LX backhoe fits many makes of trucks and tractors, digs to 12½' depths in any position on a 190° arc. Patented ejector bucket speeds work in muck, quick on-and-off mountings make for economical use of equipment. A front-end loader works off the same hydraulic system.

Ottawa Steel Div, Ottawa, Kans.
For details check No. 19 on coupon, p 244



Hyster has a new hydraulic backhoe for use on Caterpillar D4 tractors or 955 Traxcavators. The unit will dig down 13', load to height of 9'7½". Full-power swing works through 240° arc. Buckets hold ½ cu yd, come in 13", 21", and 29" widths. Back stay struts oscillate with tracks.

Hyster Co, Portland, Ore.
For details check No. 20 on coupon, p 244



Shawnee 88 backhoe is a new high-speed digging tool. Two single-acting cylinders give uninterrupted 188° swing, keep chain under tension to prevent slop and compensate for wear. Bucket cylinder is hidden in the 88's bucket boom so it will not be damaged and cause job delays.

Shawnee Mfg Co, Topeka, Kans.
For details check No. 21 on coupon, p 244



Ranger fork trucks to handle 4000 to 6000 lb loads have been introduced by Clark's Industrial Truck Div. Big wheels, oscillating axles, two and four wheel drive get the unit around rough building sites at speeds to 23 mph. Bi-angular steering turns Ranger in a 163" radius.

Clark Equipment Co, Battle Creek, Mich.
For details check No. 22 on coupon, p 244

continued on p 215

New products

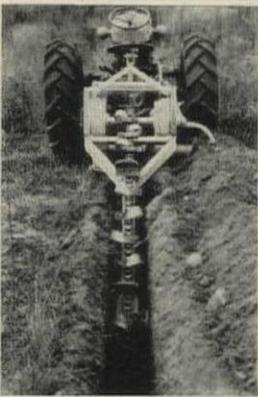
start on p 204



Charles M-3 Ditch Witch is made with optional digging teeth to cut 3", 4", 6", or 8" wide trenches. Its three-piece telescoping boom may be 2', 3', 4', or 5' long. Its three-piece chain has heat-treated teeth with Studite cutting edges, cuts to 2', 3', or 4' depths. Chain has spring tension adjustment to eliminate stalling. Power is supplied by 9.2-hp Wisconsin engine with Borg-Warner clutch reduction unit.

Charles Machine, Perry, Okla.

For details check No. 23 on p 244



Deltec's Laster trencher will fit any wheeled tractor that has a live power take-off and ASAE three-point hitch. An "incher" device controls tractor speed. Adjustable high-carbon steel cutters will cut trenches 6" to 14" wide 4' deep at up to 500' per hour. Soil is carried to the right of cut by screw-type conveyor. A boom extension is available for deep trenching. Weight: about 700 lb.

Deltec, Inc., Youngstown, Ohio.

For details check No. 24 on p 244



Arps M-A Trench-Devil is a medium-sized, self-propelled tool that will cut trenches 2¾", 3½", 4", 6", or 8" wide, up to 54" deep, and up to 1200' per hour. Hydraulic drive lets you change speed or direction on the go. Hydraulic boom raises and lowers chain. Reversible rubber belt conveyor can dump dirt left or right of trench. The M-A can travel over the road on its own power at 2¾ mph.

Arps Corp., New Holstein, Wis.

For details check No. 25 on p 244



Auburn trencher is designed to work with Massey-Ferguson tractors. Variable hydraulic drive adjusts tractor speed to ground conditions. Unit will take trenching chains 6", 8", 10", 12", or 14" wide and booms up to 6' long. Hydraulic boom operates in 190° arc to control depth or backfilling under sidewalks, streets, etc. Auger-type conveyor spills dirt equally to each side. Special Pent-A-Bits are available for digging in rock, shale, or frozen ground.

Auburn Machine Works, Auburn, Neb.

For details check No. 26 on coupon, p 244

other New Products on p 218



BRICK... is a magic merchandising material that can help you sell!

Smart home buyers... like smart home builders understand the proven values in beautiful brick!

The Surveys prove it... Buyers want BRICK HOMES, 2 to 1 over a second choice! They want BRICK's sturdy construction, fire safety, freedom from maintenance, rich texture and color, and all season security.

Brick is more than a mere construction material. It can also be a powerful selling material so why not let it work for you.

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"MERCHANDISING MAGIC WITH BRICK"*

Tells how you can sell houses FASTER!

Your brick supplier has some excellent merchandising ideas and materials that will help make your homes more saleable. Call him today and ask for a copy of the new booklet, "Merchandising Magic with Brick"

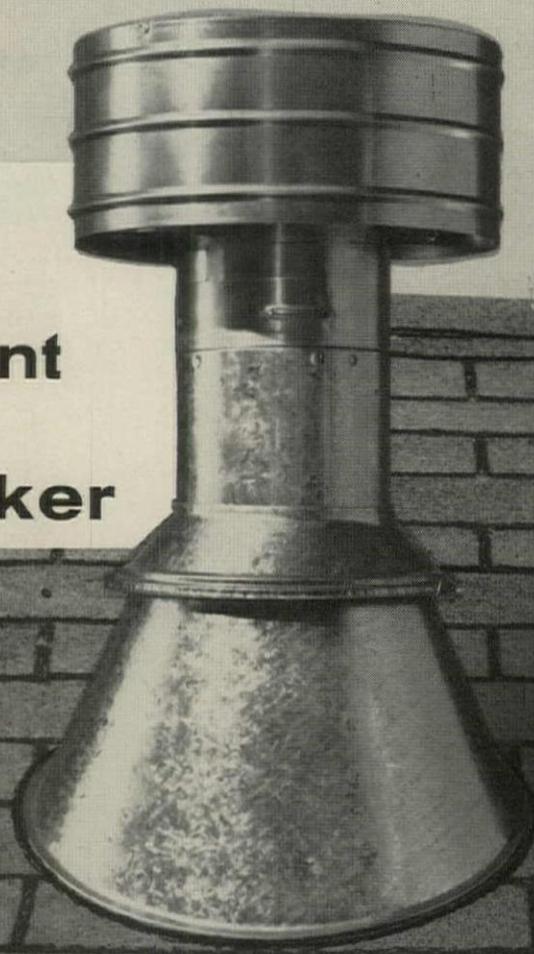
*Winner of Exceptional Merit Award—1958 Ideas for Homebuilders Contest.



Structural Clay Products Institute

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

**New
Metal
Gas Vent
by
Van-Packer**



Distinctive appearance, rigid strength and easy installation

Let's look at performance. The Van-Packer is a double-walled, air-insulated gas vent. Its active air movement has no blockage at joints. This free air passage results in safety and good draft. It's also gas tight at the joints.

Let's look at durability. The Van-Packer vent is designed to last. Its outer wall is durable 28-gauge galvanized steel. The inside wall is .016 inch aluminum for superior strength and performance.

Let's look at assembly. It's easy to assemble and requires no tools, just push-snap twist. Joints are smooth, too. No sharp edges or corners to cut fingers or tear gloves.

Van-Packer gas vent pipes and fittings meet all gas venting situations, building and code requirements. The round vent pipes are sized from 3 to 20 inches in diameter and the oval vent pipes are in 4 and 5 inch sizes. UL listed for Type B and Type BW service.

Only Van-Packer, world's largest manufacturer of flues, offers you Metal or Masonry Gas Vents, All-Fuel Masonry Chimneys and Prefabricated Refractory Smoke Stacks.

Write for Gas Vent Catalog MGS-34-19.

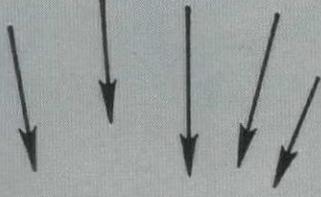


28 gauge galvanized steel outer wall and .016 inch aluminum inner wall.

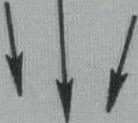


Round pipe just push-snap-twist to assemble. No tools are needed.

VAN-PACKER
 Division of **FLINTKOTE** America's Broadest Line of Building Products
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An Association of Western Pine Producers and Woodwork Manufacturers

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705-9.2 Wood Windows

- a. Windows shall comply with the following:
 - (1) Standard Stock Ponderosa Pine Windows, Sash and Screens—C.S. 163.
 - (2) Standard Stock Double-hung Wood Window Units—C.S. 190.
 - (3) Standard Stock Ponderosa Pine Insulating-Glass Windows and Sash—C.S. 193.
 - (4) Standard Stock Wood Awning Window Units and Projected Awning and Stationary Sash Units—C.S. 204.
 - (5) Standard Stock Wood Casement Window Units—C.S. 205.
- b. Wood frames for windows shall comply with C.S. 208.



THIS MODERN BATH contrasts a black pullman lavatory with various shades in the brown family.

Here's big product news from the tile industry

Mosaic Tile is reshaping its entire line to make good design and good construction easier for everyone. Main points in the plan:

1. A new palette of 139 colors in nine color families which are all harmonious within themselves and with each other, has been developed. These "Harmonitones" will cover all of Mosaic's ten kinds of floor and wall tile. They will be specified by a simple number system to show color family,

color value, and texture, should make it easy for a customer as well as a designer to plan multi-color tile areas.

2. All ceramic mosaics are now being made on a 1" module: single tiles are 1" square, 1"x2", or 2" square. This change should eliminate much of the cutting and fitting necessary with fractional sizes. (Some 3/4" and 1 9/16" tile will still be stocked.)

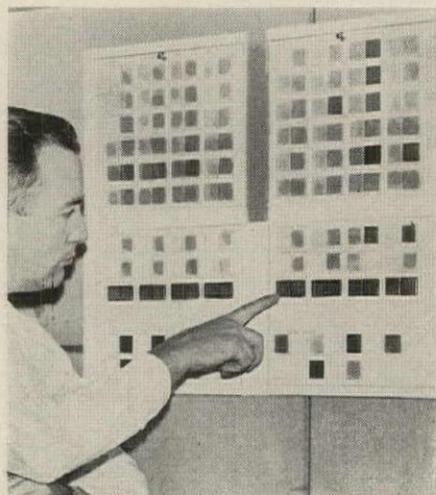
3. New textures—a faience and an abrasion-resistant glaze—have been ad-

ded to the company's line of mosaics.

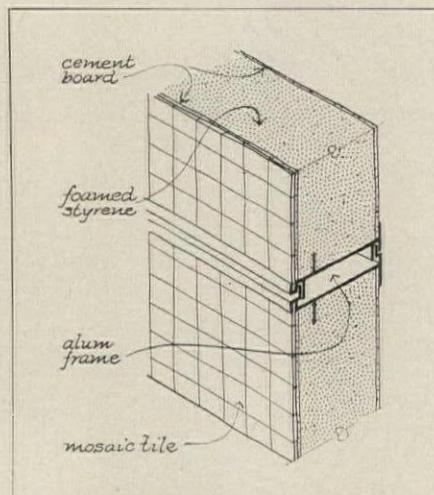
4. More tile products will come with the new Swif-Way backing (H&H, Jan).

5. The new mosaics (and Byzantine shapes) will be assembled into various sizes and types of wall panels by Marietta Concrete Corp and Maul Macotta. For the present these will be available only in the north central and northeastern states.

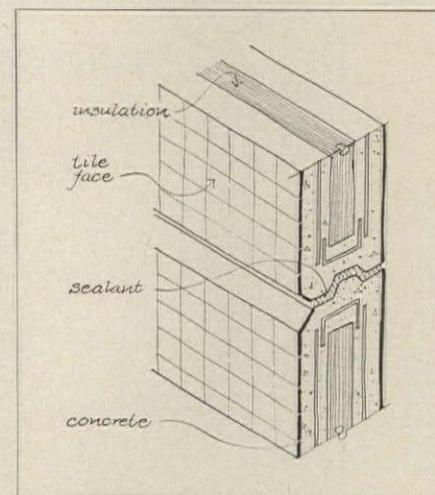
Mosaic Tile Co., Zanesville, Ohio.
For details check No. 27 on coupon, p 244



FOLD-OUT PALETTE showing new Harmonitone colors, textures, and specification system will be available to architects, designers.



MAUL MACOTTA PANELS combine ceramic tiles with sandwiches of asbestos cement and insulation in an interlocking aluminum frame.



MARIETTA PANELS use Mosaic ceramics to face concrete-encased foamed plastic or foamed or fiber glass. Joint is mastic-sealed t&g.

continued on p 220

new
GEORGIA - PACIFIC
FACTORY-SEALED
REDWOOD SIDING

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

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



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

Weatherproof Packaging

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

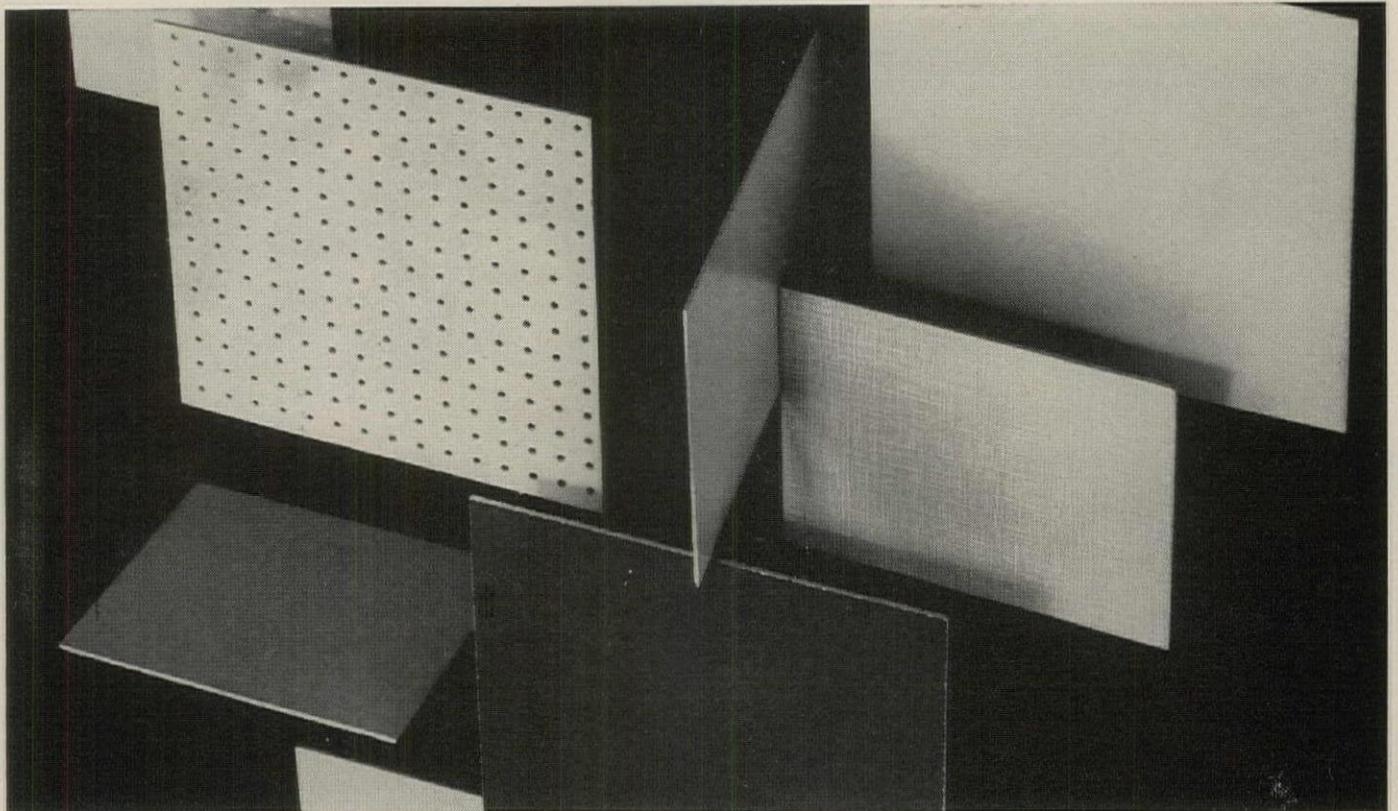
Georgia-Pacific, Dept. HH459, Equitable Bldg., Portland, Ore.
Please send me complete information and nearest source
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City _____ Zone _____ State _____



VARIETY OF FINISHES available in Glasweld includes the ceiling panel (left) with 3/16" holes 13/16" oc, the linen-weave interior panel (right), as well as ceramic-like colored finishes on four different thicknesses. Heavier sheets can be ordered finished on both sides.

US Plywood introduces Glasweld

Do you need a colorful, durable, and fireproof material for interior or exterior use—for bathrooms and kitchens, for sandwich panels, for soffits, fascias, spandrels, wainscots, ceilings, or a wide variety of other uses—and at a cost of less than 50¢ a sq ft? This may be your answer.

US Plywood's new Glasweld sheets are steam-cured, asbestos-reinforced panels with a permanent enameled surface. They are very strong: will take 3200 psi in tension, 7000 psi in flex, up to 8750 psi in compression. They have a steel-hard surface. They are completely fireproof, weatherproof, warp and

rot free, and resistant to abrasion and chemical attack.

The material comes 1/8", 3/16", 1/4", and 5/16" thick in standard 4'x8' sheets (4'x10' in 1/8"). There are ten stock colors and four patterns—linen, spatter, marble, and stipple—but custom colors are available on order. Perforated 1/8" sheet is also available for acoustic ceiling use. There are extruded aluminum moldings for 1/4" Glasweld.

Glasweld has been made in Belgium and used in Europe for five years in homes and commercial buildings.

US Plywood, New York City.
For details check No. 28 on coupon, p 244



NAILING is possible with 1/8" Glasweld right up to the extreme edge of the sheet.



SCORING AND BREAKING Glasweld is easy but may leave a slightly roughened edge.



SAWING must be done with an abrasive wheel. Hard sheet would dull a steel blade.



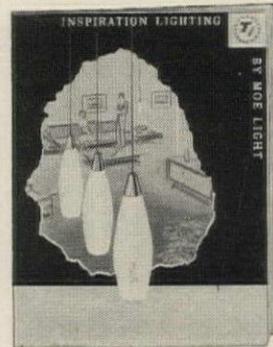
ORDINARY TWIST DRILL cuts clean holes in Glasweld as easily as it would in plywood.

continued on p 222

MOE Light® adds the woman's touch that sells homes easier, faster!

Transform empty rooms into rooms warmly glowing with feminine appeal—rooms that put your prospects in a buying mood. Let MOE Light show you how to perform decorating miracles with "Certified Inspiration-Lighting"...how to make your naked empty homes into beautiful showplaces loaded with selling appeal to man and wife, both night and day, for just a few dollars a room.

Send today for MOE Light's new free book of "Lighting to Sell" ideas. 52 pages in full color. Latest lighting effects, indoors and outdoors. Hundreds of high style MOE Light fixtures. Easy guide to fixture selection for every room.



FREE "LIGHTING TO SELL HOMES" NEW IDEA BOOK

1959 MOE Light full-color
lighting guide and catalog

Illustration shows M-1579 Sleek
new "Spiralite" sculptured
polished brass pull-down.

Special to May 31, \$29.95 retail.
Regular price, \$34.95 retail.

Shown mounted on M-1499 six-foot
brass ceiling track, \$12.95 retail.



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Rush new free 1959 MOE Light Catalog and Lighting Guide,
showing how to light homes for faster, easier sales.

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- Will not crack, peel or blister
- Easy to apply and maintain. No brush marks
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- Penetrate deeply, actually dyeing the wood fibers
- Enhance the beauty of the grain
- Can be painted or stained over later if desired

Samuel Cabot

SAMUEL CABOT INC.
430 Oliver Bldg., Boston 10, Mass.

Please send color card on Cabot's Stains

New products

start on p 204



Tappan 400 is now built-in. This version gets two eye-level ovens, broiler, four burner tops, and double-blower fan into 40" of wall space (vent duct adjusts to stud space). Controls are safely above ovens; one 2600-w and three 1500-w burners are hidden under countertop when not in use. Fluorescent tube beneath ovens lights countertop. Retail price: \$695.

Tappan Co, Mansfield, Ohio.

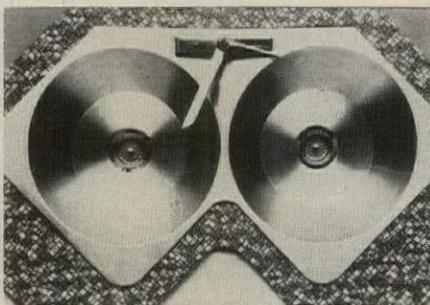
For details check No. 29 on coupon, p 244



New Geneva kitchens have an etched crackle finish designed to give a look of warmth to steel cabinets. The new finish is claimed to be chip, scratch, and mar proof. It comes in a wide variety of colors. Sound-deadening material in door and drawer fronts, nylon drawer rollers, and plastisol-coated shelves help make these kitchens especially quiet.

Geneva Modern Kitchens, Geneva, Ill.

For details check No. 30 on coupon, p 244



Self-cleaning stainless sink has tapered bowls which set up a swirling cleaning action when the water is drained. The unit comes with side-by-side bowls for 48" cabinets or corner arrangement above to fit 36" and 42" L-shaped cabinets. A perforated stainless-steel vegetable bowl fits either model. Both models are undercoated. Retail price: \$67-\$70.

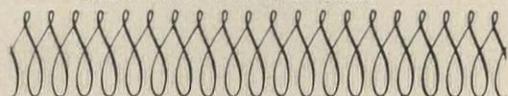
Aeronca Mfg, Middletown, Ohio.

For details check No. 31 on coupon, p 244

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continued on p 224

Why the Coleman Bond is good as gold when you sell a house

There's a basic difference when you build and sell a house with Coleman Heating and Air Conditioning in it.

And the buyer knows it. The difference is something he can see and feel. He can actually pick it up in his hands. The difference is the Coleman Bond.

By arrangement with one of America's foremost insurance underwriters*, every Coleman home heating or air conditioning unit is backed by a \$500 bonded warranty. When you install the Coleman Blend-Air heating system, a \$1,000 bond guarantees the home owner's comfort.

*What will
these bonds do for you?*

These bonds strengthen your reputation as a builder of quality homes.

They help you sell. They persuade your prospect that he's getting the best buy for his family's health and comfort. They give him "bonded" assurance that Coleman stands solidly behind all of its products.

Why not get the most authoritative, most dramatic guarantee in the industry to back your heating and air conditioning? Use the Coleman Bond in *your* selling as other builders have! It's yours with every Coleman air conditioning unit, furnace, Blend-Air heating system, floor furnace, space heater, wall heater and water heater.



*The Coleman Company, Inc.
Wichita 1, Kansas*

*The Travelers Indemnity Co., Hartford, Connecticut

America's only bonded line of home heating and air conditioning

New!

Home Color Styling Service for Builders and Contractors



As part of Certain-teed's dynamic new "Color-Tuned Roofing Systems" program, the services of Beatrice West, nationally known color consultant to the building trade, will be available to Certain-teed's builder and contractor customers . . . at no cost!

Based on a study of all factors involved, Miss West will develop a color-styling plan for each home that includes roofing, siding, trim and accent colors. The service saves time and labor by virtually eliminating all problems relating to color design.

The proper use of color in addition to helping you sell homes will prevent "Development Decadence" years after the last plot is sold. Color will make yours a pleasant community in which to live.

For further information send coupon below.

Certain-teed®



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Ardmore, Pennsylvania

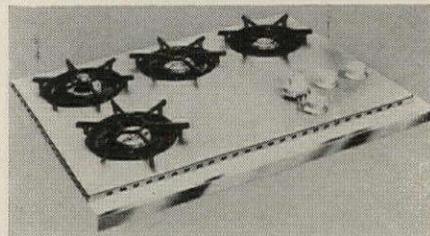
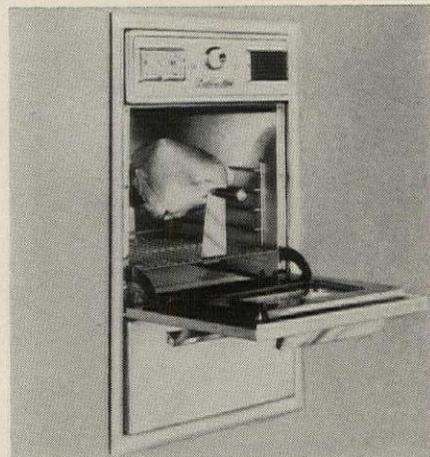
Please send information about your Color Styling service by Beatrice West.

Name.....Title.....
Company.....
Street.....
City.....State.....

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New products

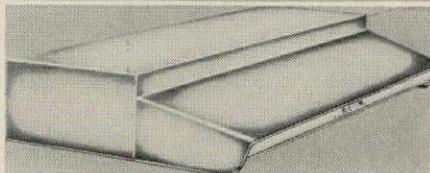
start on p 204



New Debon-Aire built-ins by Stiglitz include ovens and burner tops in interchangeable gas and electric models. Ovens are fiberglass insulated, chrome lined, have chrome racks, automatic clock and timer, and window doors. Cooking tops take only 3" depth, come in two or four-burner models. Imperial deluxe model has a built-in griddle.

Stiglitz Corp. Louisville.

For details check No. 32 on coupon, p 244



Built-in gas oven is new in the Modern Maid line. Deluxe double oven is 18" wide to fit standard 24" cabinet, has no exposed vent. Unit is interchangeable with Modern Maid electric oven (H&H, Mar), has similar features: Roastender, triple rotisserie, chrome door linings.

For details check No. 33 on coupon, p 244

New range hood comes in coppertone porcelain or brushed chrome, is self-contained so it does not take cabinet space. Fan is 10" turbo impeller; light is in grease-proof housing. Sizes: 30", 36", 42".

Tennessee Stove Works, Chattanooga.

For details check No. 34 on coupon, p 244

continued on p 226

HOUSE & HOME

Quick
to
install

fast selling

AllianceWare

bathroom fixtures...



make complete bathroom installation
faster, easier, more profitable than ever!

He's so right! He knows he's selling and working with quality products... AllianceWare porcelain-on-steel bathtubs plus complementing porcelain-on-steel and vitreous china lavatories and water closets. And because AllianceWare tubs are so simple to install, complete quality bathrooms are ready for use in jig time!

There's an AllianceWare bathtub for every requirement

<p>DADDY-LONGLEGS The man who rides tall in the tub needs leg room... AllianceWare design means more bathing area, thanks to deeper, straighter draw.</p>	<p>BROTHER-IN-LAW Squeeze in an extra bathroom for the guest who came to dinner and stayed. AllianceWare double apron tub permits two baths in the space of one!</p>	<p>M-M-M-MOMMY! No one deserves AllianceWare more than she... so permanently smooth and beautiful... easy to clean, acid and stain resistant.</p>	<p>BARE-A-TONE Save that note!—bank note that is! The pocket-book choir always sings praises of AllianceWare's low, low prices.</p>	<p>DEAD-END KIDS Saturday night used to be fight night until their own 42" long tub put them into the splash of things... good for Rover, too!</p>	<p>GRANDMA BRITTLE A lady can fall down and break her har-rumpty-rumpty unless she's stepping into an AllianceWare tub with slip-proof bottom.</p>

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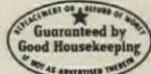
now!
see your
plans in
a new light!



the trend today is let in the sun . . .

and builders, contractors, architects everywhere are translating their plans into translucent with Barclite fiberglass panels for partitions, dropped ceilings, siding, roofing, glazing, carports, patios . . . for homes, farms, industry. Pound for pound stronger than most metals — yet so lightweight that installation costs are cut to a fraction. Low budget building gets a big boost with Barclite. Available in 14 colors plus new Designer's Group, smooth or crinkle finish, flat or corrugated. Always look for the Barclite label on every panel, it is your guarantee of genuine Barclite quality. Write today for free literature and samples of this amazing product.

BARCLITE



Barclite Corporation of America* Dept. HH4, Barclay Building, New York 51, N. Y.
*affiliate of Barclay Manufacturing Company, Inc.

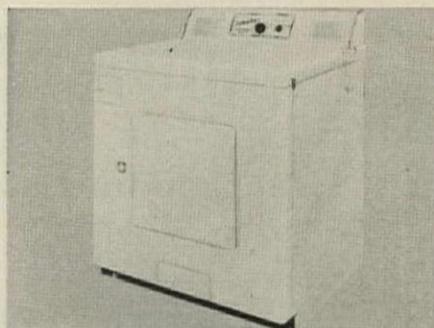
New products

start on p 204



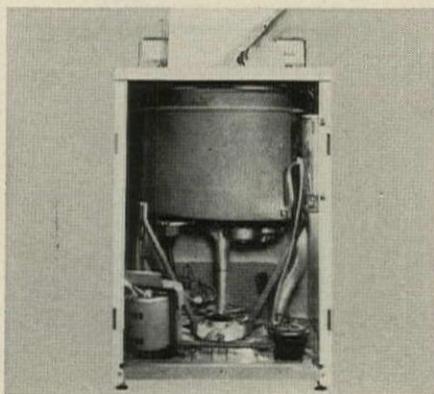
New Waste King dishwashers are free-standing, undercounter, or Convert-Table (above) models. All have quieter operation, more efficient drying, bigger capacity, better racking, a new polyvinyl tank and door lining. Deluxe units have two prewash cycles to preinse sticky dishes or crusted pots. All come with easy-to-change front panels, in many colors. Waste King Corp, Los Angeles.

For details check No. 35 on coupon, p 244



Automatic gas dryer is a new product for Suburban Appliance Co, maker of Novent and Dynavent wall heaters. The new dryer operates on a low-heat, high-volume principle. A new drum design gives maximum air flow. The unit has 2-hour timer, automatic ignition, 18-lb capacity. Size is 31"x26"x36" (41" to top of back-splash). Retail price: "well below" \$200. Suburban Appliance, Whippany, N.J.

For details check No. 36 on coupon, p 244



Timed bleach injection is a new feature in 1959 Maytag washers. A measured amount of bleach is poured into an opening at the top of the washer, runs down a tube into a dilution reservoir which fills with water as the tub fills. As the washing begins the diluted bleach is drawn into the inner tub at a controlled rate to insure good but safe bleaching.

Maytag Co, Newton, Iowa.

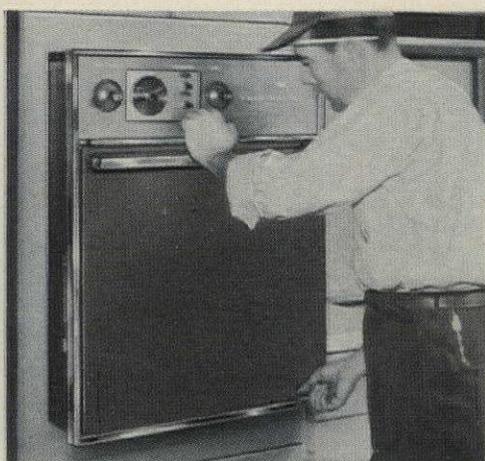
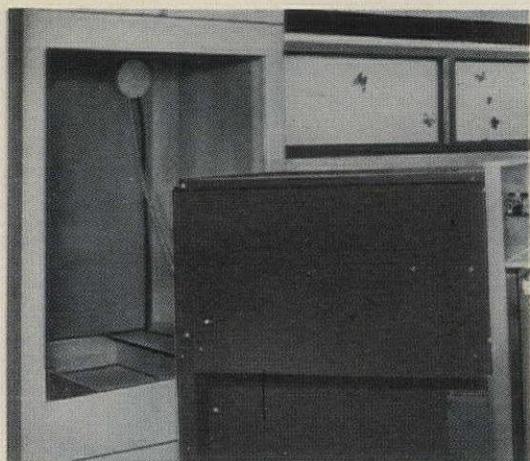
For details check No. 37 on coupon, p 244

continued on p 228

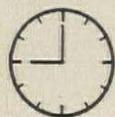
DESIGNED WITH BUILDER SALES IN MIND

ADVANCED FRIGIDAIRE BUILT-INS

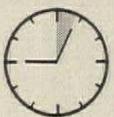
install fast—usually in 3 simplified steps



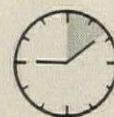
HERE'S PROOF! *Uncrated Drop-Leaf Door Wall Oven builds-in as fast as 7 min. 52 sec.*



9:00 In typical cabinet opening with rough wiring completed, mount junction box and connect attached 54" armored cable.

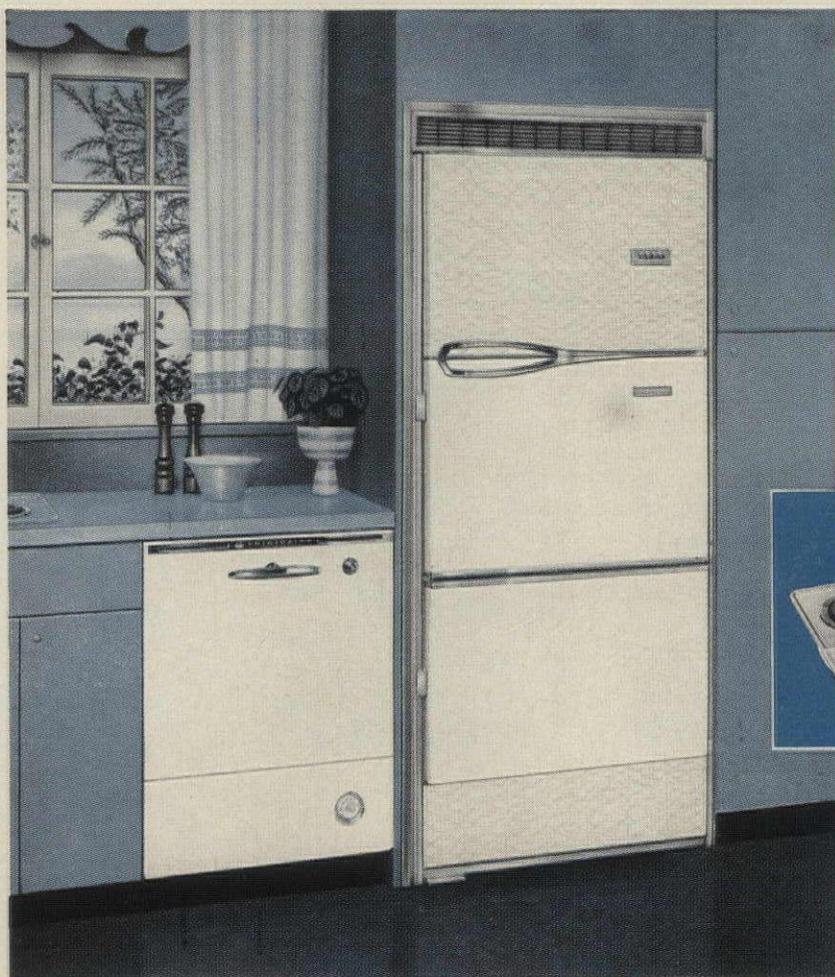


9:03:34 Test controls, then slide oven onto level* shelf. (Needs NO internal braces or external vents.)



9:07:52 Mount oven in cabinet with four concealed screws, and wipe oven clean.

*If necessary, leveling could have been done quickly with feet provided.



You get a real 1-2 jump on competition when your homes feature Frigidaire Built-Ins! *First*—You get Built-In Savings, as proven by the factory time-test shown above. *Second*—Your customers are assured of Built-In Satisfaction with stay-sold products like the *only* Wall Ovens with Drop-Leaf Doors for cleaning without stretching; "Drop-In" Cooking Tops and Space-saving Fold-Back Surface Units; Imperial Dishwashers that Sparkle-Clean up to 48% more than comparable models checked; and new feminine Sheer Look Refrigerators. PLUS a choice of five Kitchen Rainbow colors or Satin Chrome (most models).



Cut Costs, Offer Satisfaction with FRIGIDAIRE!

Get first-hand information on Frigidaire Built-In Appliances—designed with *you* in mind—and on cost-cutting "Minute-Man" installations from your Frigidaire Builder Representative, or write Frigidaire Division, GMC, Dayton 1, Ohio.

GET THE FULL-PROFIT STORY ON WHY YOUR MODEL HOME SHOULD BE A



FRIGIDAIRE

Built and Backed by General Motors



FRIGIDAIRE Model Home

Homes with an "XTRA"



"Our customers want and buy the 'extra' quality features like

X-PANDA SHELVES

that make a house a home..."

says M. C. Cole



CHECK THESE FEATURES:

- Telescoping shelf, pole and accessories in a package
- Install in 5 minutes, nothing to cut, fit or paint
- Save 80% on total labor, 10% to 20% on total installed costs
- Closet can be painted before installing
- Shelves and accessories for every need—clothes closets, linen closets, wall shelves, etc.
- Choice of linen or greytone finishes



M. C. COLE, PRESIDENT
M. C. Cole Co., Garland, Texas

M. C. Cole has a well-earned reputation for building quality homes. Here's what he thinks of X-Panda Shelves:

"We have found that X-Panda Shelves can be installed in about 5 minutes. In the past we have had trouble with wooden shelves splintering, warping and knot holes showing through the painted finish. We have no problems with the beautiful linen-finished X-Panda Shelves. We plan to feature X-Panda Shelves in 250 homes in 1959 . . . an "extra" value to purchasers of Cole Homes."

You, too, can give your homes that custom-look with . . .

X-PANDA SHELVES

WRITE FOR FREE BOOKLET TODAY

HC Sales Co. A-100
3300 N.E. Adams Street, Peoria, Ill.
Please rush me literature on X-Panda Shelves.

Name _____

Address _____

City _____

State _____

* Trade Mark of Home Comfort Mfg. Co.

New products

start on p 204



Swanson deluxe hood has a twin variable-speed fan that can be vented through the top or back of the hood. Vent area is covered by a large removable aluminum filter to serve as a grease trap. Motor plugs into hood, comes out for easy cleaning. Built-in light has glare-free lens. Retail price: \$68.

Swanson Mfg Co, Owosso, Mich.

For details check No. 38 on coupon, p 244



Gas-heat modulator is controlled by tiny thermistor which reacts immediately to small changes in temperature. Flame size is varied to maintain a steady ambient, eliminate off-and-on cycling. Usual thermostat acts as top-limit switch to cut off burner when atmospheric temperature rises above heating level. Blower operates continuously, prevents dead-air blankets. Price: \$82-\$94.

Maxitrol Co, Detroit.

For details check No. 39 on coupon, p 244



Portable 2-speed recorder holds an hour of on-the-job notes on a 3" reel of dual-track tape. Small (2 $\frac{7}{8}$ "x6 $\frac{1}{2}$ "x9 $\frac{3}{4}$ ") unit is transistorized, weighs about 6 $\frac{1}{2}$ lb. Mercury-cell penlight batteries run amplifier up to 300 hours, motor to 50 hours. Retail price, about \$200.

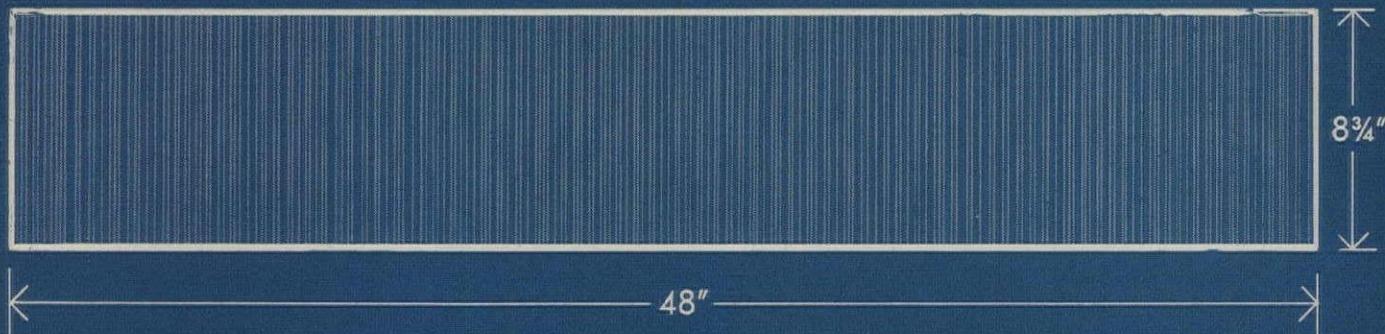
Steelman Phonograph, Mt Vernon, N.Y.

For details check No. 40 on coupon, p 244

continued on p 230

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

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



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

AVAILABLE IN
Trend Colors

ANOTHER
RUBEROID
DESIGN...

FOR HOMEBUILDING ECONOMY!

Autoclaved® CLAPBOARD siding

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

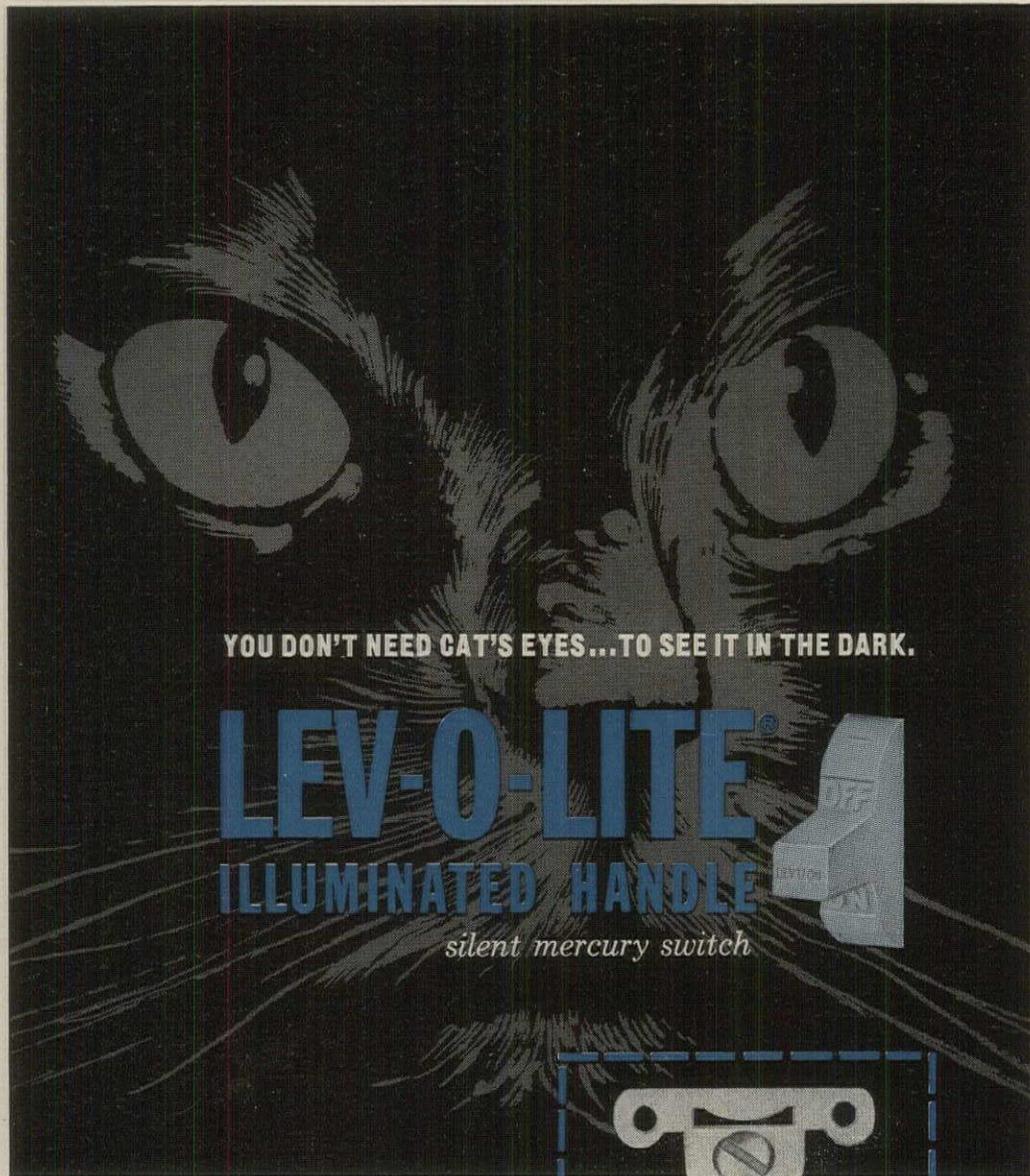
Autoclaved Clapboard Siding is another original Ruberoid product *designed* to improve new homes

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

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

RUBEROID®

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



YOU DON'T NEED CAT'S EYES...TO SEE IT IN THE DARK.

LEV-O-LITE®
ILLUMINATED HANDLE
silent mercury switch



No more fumbling in the dark . . . no more dirty walls from "switch-groping." Instead, a tiny, built-into-the-handle neon lamp that always remains bright, lasts a lifetime, and costs but a few cents a year to operate! This switch is sturdy, easy-to-install, with no moving parts to wear out, no springs to snap. Ideal wherever silence is essential . . . now popularly priced for every installation.

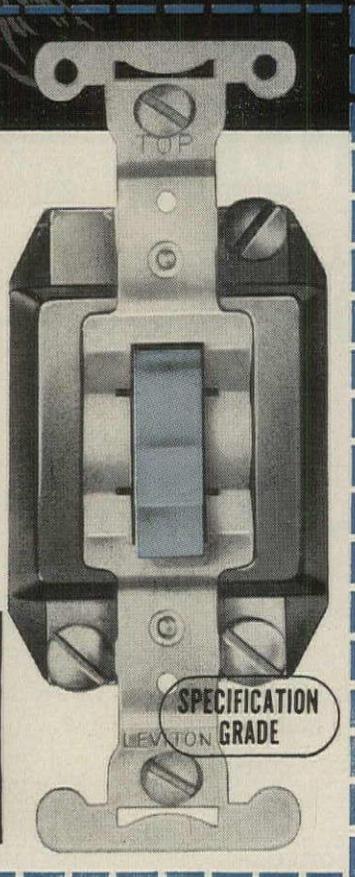
And . . . it's just one of the many fine, economical devices made available to everyone through the superior skills and complete resources of LEVITON!

For the complete story, write today on your letterhead.

All silent switches listed by U.L. and C.S.A.



LEVITON SILENT MERCURY SWITCH:
Fully enclosed, rated 10A.-125V. T., 5A.-250V. Ivory toggle, with illumination. Single Pole No. 5561 or Three Way No. 5563



Available boxed or carded. Specify "K" when ordering on card.

Your best jobs are done with . . .

LEVITON MANUFACTURING CO., INC., BROOKLYN 22, N. Y.

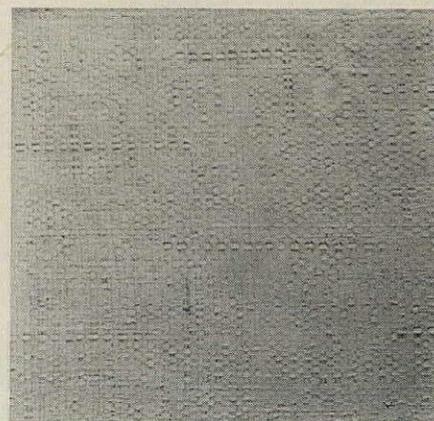
Chicago • Los Angeles • Leviton (Canada) Limited, Montreal

For your wire needs, contact our subsidiary AMERICAN INSULATED WIRE CORPORATION



Uni-bilt wall-hung fireplace is factory-made, complete with chimney. Ceramic firebox is held on a cantilevered hearth in an enameled housing. Baffles and insulation insure safe exterior temperatures. Chimney is stainless-steel lined with galvanized outer casing, aluminized middle flue. Exterior housing and rain cap are also galvanized. Prices, fob distributor, \$380-\$511, depending on roof height. Tile hearth, \$31, and grate, \$9, are extra. Vega Industries, Syracuse.

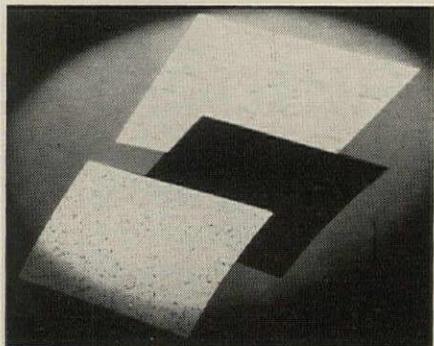
For details check No. 41 on coupon, p 244



Straw Weave Koroseal, the latest wall covering from B.F. Goodrich, comes in 14 colors: pearl, eggshell, Nile green, canary yellow, sand, coral, spruce, gold, corn, carnation pink, flame, cinnamon, charcoal, and tobacco.

B.F. Goodrich, Marietta, Ohio.

For details check No. 42 on coupon, p 244



Economy vinyl flooring, called Supreme, is new in Goodyear's .080-gauge line. The 9"x9" tiles come in 20 colors in four patterns including eight terrazzo, five romance, five metallic. Supreme patterns are reverse printed in heavy-duty vinyl on all vinyl backing. Guaranteed for lifetime occupancy. Price: about 45¢ per sq ft.

Goodyear Tire & Rubber, Akron.

For details check No. 43 on coupon, p 244

continued on p 234

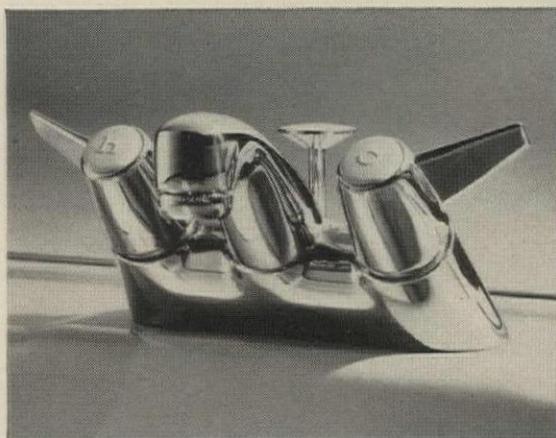
Vitreous Enameling Iron Tub: Briggs unique process permits porcelain finish to be fused *into* the metal rather than merely *on* it as occurs with other finishes. Result: the full-depth tubs are both chip- and acid-resistant, colors won't fade.



Smooth, Easy-Cleaning Contours and vitreous china surfaces have the built-in beauty of Briggs compatible colors. Certain to be points of pride with your home owners.

**YES,
THERE IS A DIFFERENCE
IN PLUMBING FIXTURES!**

*Briggs Beautyware proves it
with these sales features... and more!*



Interchangeable Color Inserts for new Briggs fittings—an idea that color-matches fittings with Briggs fixtures. Inserts slip neatly, securely into place . . . make an important selling difference.



Nearly Noiseless, Syphon-Jet Operation of the "Emperor" Closet is a Briggs feature that makes a difference . . . as does the streamlined, one-piece styling, fashioned of high-density vitreous china.

Now available to help you sell homes with Briggs Beautyware: the complete Briggs Spring Builder Promotion. Get more information from your Briggs representative.

BRIGGS

B E A U T Y W A R E

WHICH IS THE SHAKE-A-PLY SIDE OF THE STREET?

If you could stand where our panoramic camera stood for this picture, you'd be able to see the difference easily with your own eyes.

These homes (same basic floor plan) were built six years ago by the same builder. * In the middle of the project, he discovered Shake-a-Ply Cedar Siding and switched to it for the left-hand side of the street. He had already used ordinary shingles and shakes across the street on the right. * *Name on request.*

Here are the differences that showed up:
Sales—The Shake-a-Ply homes on the left sold faster than the right hand side of the street. This was partly due to two factors in their appearance. The

Shake-a-Ply homes have fitted corners (using Shake-a-Ply Mitred Corners), while the others have moulded wood corners (to save the cost of fitting individual shakes).

The Shake-a-Ply homes have fewer nail heads exposed, while the others have the characteristic rows of nails in each course.

Costs—Because of the smaller nailing job mentioned above, the factory-made corners, and the ease of cutting the 8-foot panels to fit around openings, the Shake-a-Ply homes cost the builder less to build.

Paint Retention—The paint on the Shake-

a-Ply homes has lasted beautifully (thanks to our built-in moisture barrier), while on many of the others you can see where small moisture blisters have formed and broken and had to be touched up.

Interested? Write today for full information and the name of our nearest distributor. The Shake-a-Ply Co., Box 7A, North Portland, Oregon.



Shake-a-Ply®

New products

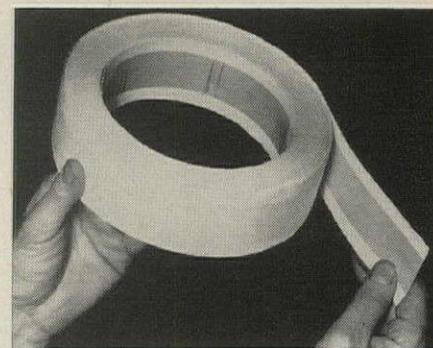
start on p 204



Zonolite insulation is claimed to improve U factor of an 8" cinderblock wall from .39 to .20 for only 10¢ a sq ft of wall area. Expanded vermiculite is water-repellent treated, will not hold moisture, set up capillarity, or compact through settling. A 4-cu-ft bag will fill 16 three-core 8" blocks or 14½ sq ft of wall. Bags are tabbed for easy pouring.

Zonolite Co, Chicago.

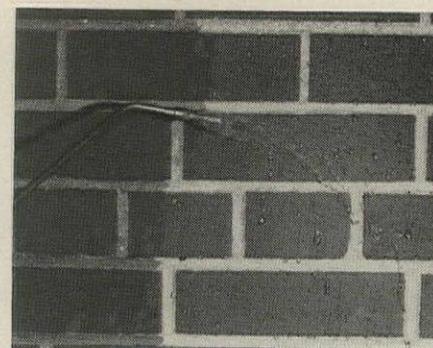
For details check No. 44 on coupon, p 244



Metal-back joint tape is said to eliminate drywall joint lines, shrinkage lines, and ridging. Flexible steel backing is 1¼" wide .0075" thick, will bridge gaps to ½" and more, will cover large overcut holes, openings at sills and jambs. The metal is centered on 2" paper tape, takes less cement, goes up faster than ordinary tape. Retail price, per 100', 4½ lb roll \$3.80.

United Dry Wall Prods, Cleveland.

For details check No. 45 on coupon, p 244



Silicone water repellent from Dow is claimed to give five-year service. Dow Corning 770 can be diluted with plain mineral spirits, is as clear as water, is effective on mortar, brick, concrete, or other masonry. The new repellent is shipped as 33% solids, is available now at competitive prices in any quantity.

Dow Corning, Midland, Mich.

For details check No. 46 on coupon, p 244

continued on p 236

HOUSE & HOME

Gerber helps you sell

THE MIGHTY MIDDLE

Gerber specializes in plumbing fixtures most wanted by 9 out of 10 families

Nine out of ten home buyers are in The Mighty Middle market. They want popular priced quality homes with quality features. Gerber makes plumbing fixtures for only this market—deluxe fixtures that increase the saleability of your homes without increasing your costs.

By specializing in fixtures for only the mass market, Gerber can give you more for your money. We make no slow-moving "ultra-luxury" items that add costs which must be absorbed by the more popular lines. Thus, we can offer smart styling, high quality, and deluxe features usually found on more expensive plumbing fixtures, at a sensible price. You maintain the high quality you want in your homes, sell more of them, and make more profit at no extra cost.

Gerber makes a complete line, including deluxe or economy "packaged" bathroom outfits that save you money on specifying, ordering, shipping and receiving. In stainless white, or Petal Pink, Wedgewood Blue, Forest Green, Driftwood Tan, Daffodil Yellow, Cloud Gray.

Families ... The Mighty Middle is the mass market. *89% of all U.S. families have 2 to 5 persons, account for 92% of the nation's children. This is your biggest, most profitable market.

*Source: 1959 Statistical Abstract of the United States.



Reverse Trap Closet and Lavatory, featuring No. 1200 Reverse Trap Unit Closet. Vortex swirl-flush action, 12-in. rough-in, two-bolt hitch and extended horn for quick installation. No. 380 Ledge-Type Lavatory, 20 by 18 in., is complete with No. 143A pop-up and has concealed overflow, integral soap dishes, anti-splash rim. In stainless white, or petal pink, wedgewood blue, forest green, driftwood tan, daffodil yellow, cloud gray.



Washdown Closet and Lavatory, featuring No. 900 Washdown Unit Closet with 12-in. rough-in, lifetime nylon seat ballcock, two-bolt hitch and extended horn for quick installation. No. 310 Ledge-Type Lavatory, 19 by 17 in., is complete with No. 141 Centerset and has concealed overflow, integral soap dishes, anti-splash rim. In stainless white, or petal pink, wedgewood blue, forest green, driftwood tan, daffodil yellow, cloud gray.

Write for Gerber Folder 416



GERBER Plumbing Fixtures

Gerber Plumbing Fixtures Corp., 232 N. Clark St., Chicago 1, Illinois

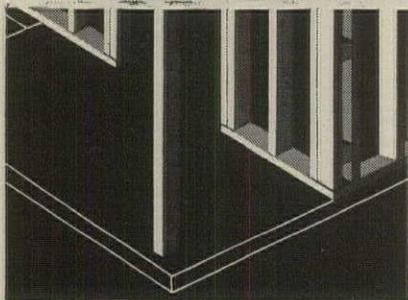
Dependable service from leading jobbers, or prompt delivery direct to your job from 5 modern factories: Kokomo, Ind., Woodbridge, N. J., Delphi, Ind., Gadsden, Ala., West Delphi, Ind. Export Division: Gerber International Corp., 500 Green St. Woodbridge, N. J.



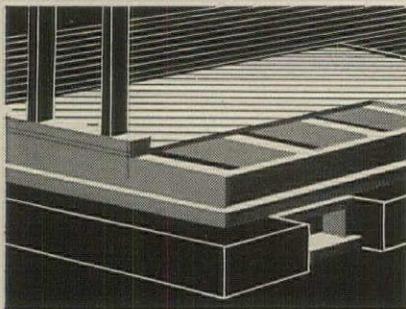
recommended practice

for termite and decay resistant design

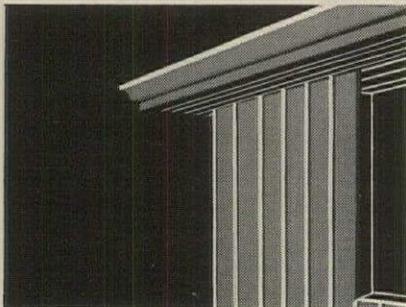
Wolmanized
®
PRESSURE-TREATED LUMBER



Plates and Studs on Slab



Sills, Joists, Subfloor over crawl space or basement



Gutter, Fascia, Board and Batten Siding

Wood can remain your most versatile and economical material for residential, commercial and institutional construction even in areas of termite infestation—or where conditions are conducive to decay . . . IF you specify Wolmanized pressure-treated lumber.

Wolmanized treated lumber, plywood and laminated timbers are chemically protected against insect and fungi attack and remain clean, paintable and easy to handle.

The cost? Less than 2% of the total in houses . . . even lower in other buildings!

Wolmanized Preservative Department, Koppers Company, Inc.
753 Koppers Building, Pittsburgh 19, Pennsylvania

Please send me 16-page booklet on Wolmanized pressure-treated lumber in light and heavy construction.

Name _____

Firm _____

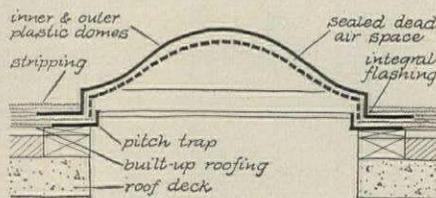
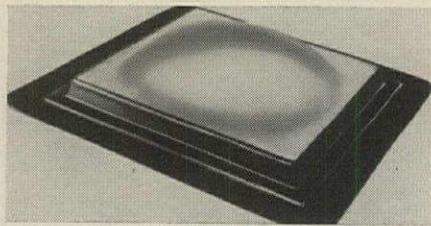
Address _____

City, Zone, State _____

 **Wolmanized® Lumber**

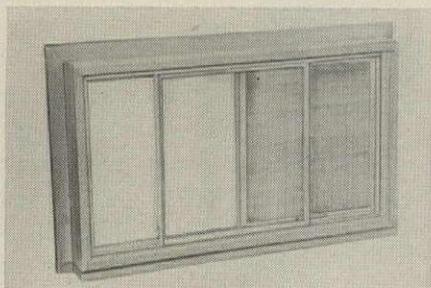
New products

start on p 204



Colored skylights in green, pink, yellow, blue, and mist white are now available in Consolite double-dome units. Two reinforced plastic skins cut down condensation, give a U factor of .5. New units may be square, round, or rectangular, in sizes from 14" square to 38"x74", and in self-flashing or curb-mounting types with low or high silhouettes. Prices start at \$22. Consolidated General, Houston.

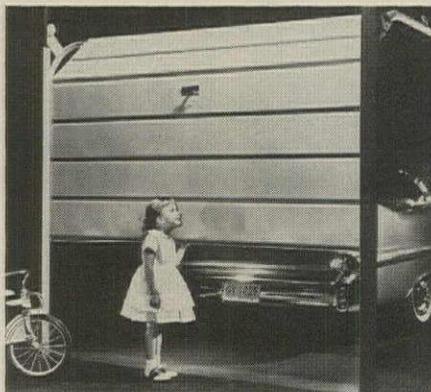
For details check No. 47 on coupon, p 244



Plastic sliding window is the latest in the Plyco line. Claimed advantages include quiet easy operation, no maintenance, no condensation. Plastiglide unit has double wool-pile weatherstripping, is economically priced, will be available in all popular sizes.

Plyco Corp, Elkhart Lake, Wis.

For details check No. 48 on coupon, p 244



Steel roller door is built so folding sections will push your hand or fingers out of the way when door is closing. Panels are galvanized, bonderized, and prime painted on both sides, are held in alignment by full width hinges. Nylon rollers are locked in a tapered track. Bottom weatherstrip is vinyl. Five-year warranty. Price \$69 for single-car door.

Steel Door Corp, Birmingham, Mich.

For details check No. 49 on coupon, p 244



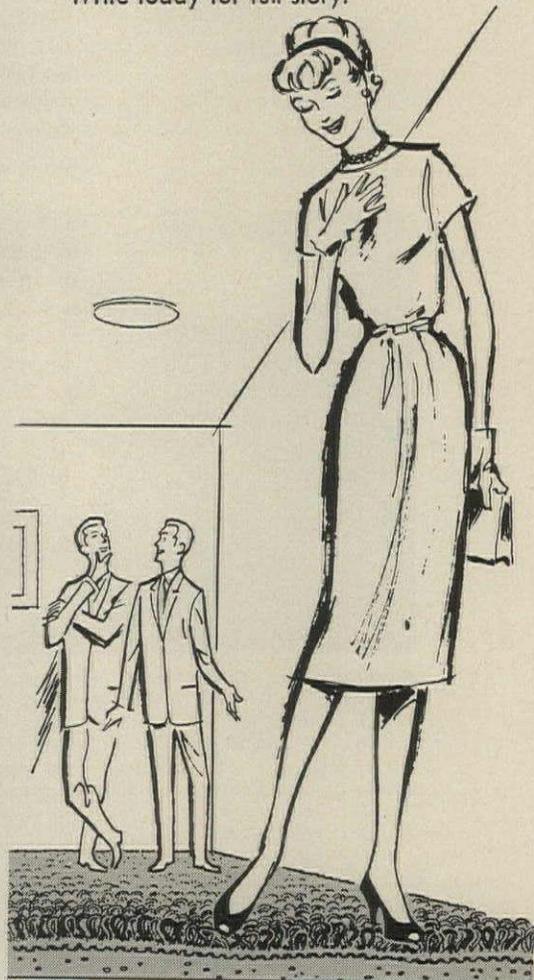
NOW!  **LUXOR**
carpeting
direct to builder

Luxor now offers the one "big" feature that really sells houses . . . wall-to-wall carpeting that brings them in, delights them, then "sells" them.

Luxor carpeting is available in 12' broadloom: deep pile 100% nylon in a wide range of colors; deep loop cotton pile in four colors; viscose tweed in four colors, and 100% nylon low loop pile in eleven colors.

ALL LUXOR CARPETING IS CUSHION-BACKED WITH 3/16" LATEX RUBBER FOAM THAT PROVIDES: A walk-on-air feeling; low installation cost (directly to concrete if you wish); years of extra wear.

Write today for full story.



 **LUXOR**

LUXOR CARPET COMPANY
17 South Cherry St., Akron, Ohio • HEMlock 4-4551

Publications on p 238

HOUSE & HOME

Here is what you need to know about Section 207		. . . and Section 220	
Construction	Eight or more detached, semi-detached, row or multi-family units.	Five or more detached, semi-detached, row or multi-family units.	
Total amount insurable	\$12,500,000 priv corp. \$50,000,000 supervised corp. <i>Unit walk-up:</i> \$2,250 per room—but \$8,100 per unit if less than four rooms avg. <i>Elevator:</i> \$2,700 per room—but \$8,400 per unit.	Same as for 207: <i>Unit walk-up:</i> \$8,100 per unit if less than four rooms. Avg \$2,250 per room per unit where avg no. rooms per unit equals or exceeds four. <i>Elevator:</i> \$8,400 per unit if less than four rooms. Avg \$2,700 per room per unit where avg no. rooms per unit equals or exceeds four.	
Loan-value ratio	90% of estimated value.	90% of estimated replacement cost when improvements are completed. Appraised value used in rehabilitation cases and new construction cases not approved prior to construction.	
Interest rate	4½%	5%	
<p><i>Note:</i> If you're building in a high-cost area you're allowed \$1,000 extra per room. Cost certification is required and you need FHA approval prior to construction. The pending 1959 housing bill would boost interest rates, loan-value ratios, per-unit and per-room mortgage limits. (For complete details of Senate and House proposed changes, see H&H, March, p 42.)</p>		<p><i>Note:</i> Same allowance for high-cost areas as for 207. Cost certification and FHA approval prior to construction required. Property must be in area certified by HHFA as having a workable program to combat slums, or in one covered by a Federal-aid contract or granted approval before effective date of Housing Act of 1954. (For proposed Senate and House changes, see H&H Mar, p 42.)</p>	

Here is what you need to know about FHA's room count

Your way of counting rooms and FHA's may not always be the same, particularly if you've been building nothing but single-family houses.

So make sure you get the best help you can find in planning to meet FHA specifications. One of the best ways to make sure you are on the right track is to work with an architect who is used to designing rental units to FHA requirements. Another good way is to study the room count rules which any local FHA field director can show you. Remember that ignoring the provisions for room count can make a big difference in the amount of mortgage money you can get.

For example: Suppose you want to build some two-story walk-up efficiency units (living, dining, sleeping—all in one room). The efficiency room itself gets a 2 count (that's because more than one activity takes place there). If you add a 50 sq ft kitchenette, you'll get credit for an extra ½ count. If you add a 60 sq ft kitchen, you'll get 1 additional credit.

Here's what the extra count means in terms of your mortgage money. You start with \$8,100 for an apartment of less than four rooms, and you get an extra \$1,000 per room count if you're building in a high-cost area. So, with your 60 sq ft kitchen, you get a room count of 3 instead of 2½. This gives an \$11,100 mortgage instead of \$10,600.

Here's another example: you get a ½ room count for an outdoor balcony of at least 70 sq ft. It must be 6' in its

smallest dimension and must have parapet walls or the equivalent for safety. If you're building a walk-up garden apartment project of over four rooms, you'll get an extra \$1,125 for the balcony, plus an additional \$500 if you're building in a high-cost area. Total: \$1,625 added to the mortgage maximum. (Some New York builders figure that a 6'x12' balcony costs no more than \$500.)

You also get a ½ room count for a 7' wide sleeping alcove in any apartment, as long as it's separate from the living area and has a separate passage to the bath. And you can create this sleeping alcove with a movable partition instead of a structural wall. (For one example, see p 138).

Don't try to add a bedroom to an efficiency apartment. You'll lose out on the count and run up your sq ft costs. Reason? You're already getting credit for the kitchenette or full kitchen. If you add a bedroom, FHA will simply figure the unit as a normal apartment and give the efficiency room (required minimum, 220 sq ft) a 1½ count. That's the count for a living-dining room, and its minimum is 195 sq ft.

So pay strict attention to the FHA rules. They can mean the difference between profit-and-loss—or to put it another way between a project you can finance and build, and one you can't. One thing you can't expect: any credit for a second bath in a two-bedroom apartment. (FHA doesn't give you credit for the first one, either. They look upon the bathroom as an indoor necessity.)

Don't overlook co-ops they may be the answer to your market

The builder has many options in co-operative housing:

- . . . he can build single- or multi-family units.
- . . . he can finance conventionally or under FHA 213.

Which option you take is a matter of simple arithmetic—you will have to explore the market and the availability of money in your area to see which would be most profitable.

But the general pattern of co-op building in the recent past is fairly well defined:

Most multi-family co-op housing has been conventionally financed, and tends to be in the luxury or near-luxury market. Since there has been a fair volume of this kind of building, it is obvious that:

- 1) The builders have found it more profitable for them than rental housing—and . . .
- 2) Many well-to-do buyers find that co-op housing offers them a tax advantage they cannot get by renting.

Co-op housing financed under FHA 213 has been predominantly single-family housing. Recent figures indicate that for every unit in a multi-family building built under 213, at least two single-family houses were built.

Further, a very substantial percentage of the "sales-type" co-ops (usually single-family) built have been released from blanket mortgages, put under individual-owner mortgages.

Although the proposed housing bill would make co-op building under 213 more attractive (the Senate version, for example, would reduce the required equity from 10% to 3% and let community and commercial facilities come under the mortgage), there is no reason to anticipate that a greater percentage of 213 housing will be multi-family.

If you are planning to build under 213, take a word of warning from Tom Coogan: "213 financing is one of the trickiest kinds of mortgage to negotiate." /END



Capitol details new low-cost dome construction

A new publication from Capitol Products tells how to erect and how to use the company's new \$3,750, 57' diameter aluminum and plastic dome.

The dome goes up quickly and easily: The structure is hexagonal. Each strut connector forms the hub for six struts which are fastened to it with straight stainless-steel pins. Each hub also serves as an attachment point for the vinyl-coated nylon envelope and, at ground level, as an anchor point for the ground stakes.

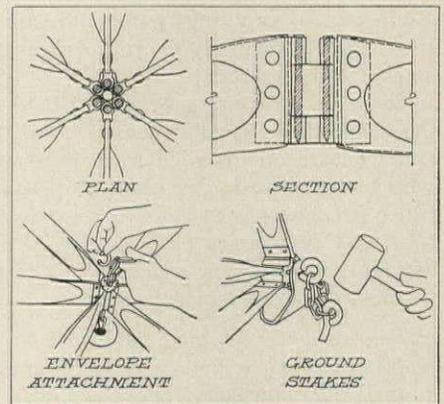
The maker claims the lightweight

dome can be put up in eight manhours, can be lifted and moved after erection by a crew of men, a crane, or a heavy-duty helicopter.

The supporting structure weighs 850 lb, the envelope, 450 lb. When erected the dome covers 2500 sq ft, has a center height of 16', and encloses a volume of 23,000 cu ft.

Uses suggested in the booklet include job sheds, temporary warehouses, sales and showrooms.

Capitol Prods, Mechanicsburg, Pa.
For copy check No. 50 on coupon, p 244



How to make a Textolite tub alcove

A new 8-page brochure from GE spells out the step-by-step fabrication of the solid walls of a new type of bathtub enclosure.

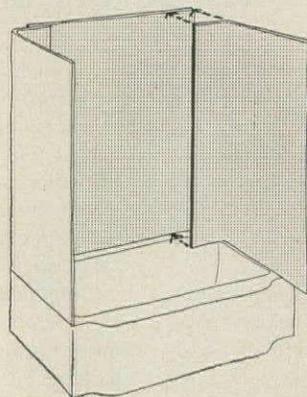
GE's plastic laminate is used two ways in the new bath: it is used as a flat sheet on the back wall and as postformed "countertops" on the end walls.

The studs are first covered with exterior-grade plywood. A flat sheet as much as a foot shorter than the tub (ie, a 4' wide sheet for a 5' tub) is fitted to the tub rim and the wall height, is centered on the wall, and is bonded to the plywood.

The two end pieces are made up just like countertops, with a 7" backsplash and a top surface wide enough to span the tub. They are put in place so that the backsplash laps the back wall surface. Because of the overlap, slight irregularities in the alignment have no effect on the looks of the wall and no close fitting is needed. The job is completed with a Textolite soffit.

Solutions to problems that might arise in new or old construction and clear specification of materials to be used are included in the booklet.

General Electric, Coshocton, Ohio.
For copy check No. 51 on coupon, p 244



THREE-PART ALCOVE is made of a flat back sheet and two postformed end pieces.

How to plan electric-heat systems

Markel Electric Products has a new 8-page manual detailing the advantages of electric heat, types of equipment and applications, insulation needs, ways to calculate heat loss, power demand, and costs. A 2-page graph gives watts heat loss for various sorts of building surfaces. Other charts give examples of heat loss and operation cost calculations for a residence, recommended units for various rooms, an outline of Markel equipment available, design-temperature and degree-day maps.

Markel Electric Products, Buffalo.
For copy check No. 52 on coupon, p 244

How to protect wood structures

Protection Products offers complete information on how to use Woodlife preservatives to treat wood to preserve it against attack by water, decay, fungus, termites and other insects. Folders also show how to reduce warping, checking, splitting, grain raising, etc, while improving paintability.

Protection Prods, Kalamazoo, Mich.
For copy check No. 53 on coupon, p 244

continued on p 240

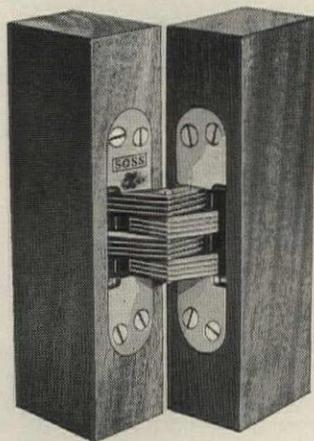
The darling of MONTICELLO

With rockets out in space
 N'atom subs under the sea,
 It seems out of place
 To use butt hinges—
 Mais Oui!

To get your design in line
 And keep abreast of time,
 Soss Hinges work just fine.
 Clients think they're
 sublime.



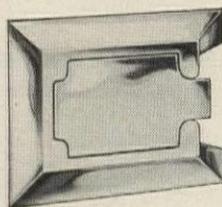
SOSS
 INVISIBLE
 HINGE



Eliminates ugly protruding hinge butts. Entire hinge is hidden from view when doors or lids are closed. Used the world over, in all type buildings, whenever the ultimate is demanded in materials and design. Available in a wide range of sizes for nearly every wood and metal application.

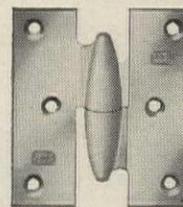
TODAY...
 there's a Better Way thanks to
MODERN SOSS HARDWARE

SOSS
 LEV-R
 LATCH



Eliminates knobs. Opens doors with the flick of a finger. Modern, streamlined design enhances interiors and blends beautifully with contemporary styling. Available in all standard U.S. Finishes.

SOSS
 OLIVE
 BUTT



In those instances where it is mandatory to use a butt hinge this one does the job in a very complimentary way. The low price makes it doubly attractive.

For complete information and prices on these advanced SOSS Products see your nearby building supply dealer or hardware dealer, or write:

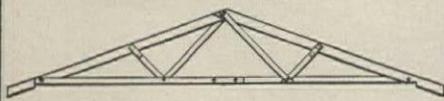
SOSS MANUFACTURING COMPANY

P. O. Box 38, Dept. HH-3 Harper Station • Detroit 13, Michigan

With this TECO Split Ring



... you wed yourself
to greater savings with
trussed rafters



Here's Why—

- 1 No metal or plywood gusset plates needed. No nailing. One TECO ring equals 30 ten penny nails.
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- 3 No gluing or time consuming curing. Trusses can be shop or job fabricated.
- 4 Easy shipping. Save up to 80% in shipping space.

Send for free fabricating
instructions on TECO
trussed rafters



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Please send me free copy of TECO fabricating bench design and "How to Build Wood Frame TECO Trussed Rafters"

Name.....
Firm.....
Street.....
City..... State.....

HH-592

Publications

start on p 238

More about ARI certification

A first revision to the *Directory of Certified Unitary Air Conditioners* published by the ARI (H&H, Mar) has already been issued. Curtis Mfg Co, Friedrich Refrigerators, US Air Conditioning Corp, Westinghouse, among other makers, are new on the list and York has added new models to its listing.

For copy check No. 54 on coupon, p 244

Also new on the certification program, a booklet explaining what it is and how it works.

Air Conditioning & Refrigeration Institute, Washington, DC.

For copy check No. 55 on coupon, p 244

Flooring guide for Tile-Tex

A new wall chart from Flintkote shows how to install all Tile-Tex products. It shows various types of subfloors, and how to prepare them, and what kind of adhesive to use to bond the tile.

Flintkote Co, New York City.

For copy check No. 56 on coupon, p 244

Ideas for lumber paneling

An 8-page booklet from Western Pine gives basic data on sizes, grades, stability, pattern, etc. Included are paneling styles, estimating guides, installation details, surface textures.

Western Pine Assn, Portland, Ore.

For copy check No. 57 on coupon, p 244

Technical data on southern pine

Architect's Bulletin No. 12 from the Southern Pine trade association talks about exterior finishes, painting, insulation, and construction details. 4 pp.

Southern Pine Assn, New Orleans.

For copy check No. 58 on coupon, p 244

Catalogs

Four-color lock brochure

Challenger Lock Co has a new sales brochure showing the various styles of decoration available in the current line. Also shown: construction details of 900, 800, and 500 series locksets and a 2-page chart of Challenger locks recommended for various functions.

Challenger Lock Co, Los Angeles.

For copy check No. 59 on coupon, p 244

Lighting fixtures from EJS

The new multi-color catalog from EJS Lighting Corp has 72-pages divided into four sections—residential, architectural, bullets, and portables. The content is organized for ready reference by builders, architects, engineers, decorators, and contractors.

EJS Lighting Corp, Los Angeles.

For copy check No. 60 on coupon, p 244

Latest Cupples windows

The 1959 line of single-hung, double-hung, and sliding windows is included in Cupples' new 12-page residential window catalog. Advantages of each type are spelled out, keyed to half-size detail drawings of construction and installation. Complete sizes of each type are given.

Cupples Products Corp, St Louis.

For copy check No. 61 on coupon, p 244

Ventrola

the **QUALITY** line

Presents a **COMPLETE** line
of **WALL** and **CEILING**
VENTILATORS featuring

MODEL
920



... An Amazing **MULTI-POSITION**
VENTILATOR with the
AUTOMATIC Weatherlok SHUTTER

Solves any installation
problem that
arises.

Now it is possible to
correctly locate a
fan for maximum
efficiency.

Easily installs in
Walls, Ceilings,
Soffits or Cabinets.



UL and CSA approved

PLUS **RANGE HOODS**
in 3 Push-button Controlled Series



COMPLETELY ADAPTABLE
FOR ANY KITCHEN
INSTALLATION

The 1500 Series

Features the "New Look" in
contemporary design, engi-
neered to Ventrola's
famous standards of
beauty, performance
and dependability.



Factory installed fan housing.
Unit completely pre-wired
... ready to install. Includes
CONCEALED LIGHT FIXTURE,
PUSH-BUTTON CONTROLS,
FILTER and REDUCER WITH
POSITIVE BACK-DRAFT
SHUTTERS.

1600 Series
Twin blower
range hood
ventilator

1400 Series
Solid top hoods

"AS REFRESHING AS THE GREAT OUTDOORS"

products of
VENTROLA
MANUFACTURING
COMPANY
OWOSSO, MICHIGAN



Write for **COMPLETE** Information

See our **BRAND NEW** Bathroom Combination
HEATER, LIGHT & VENTILATING FAN—and
a completely **NEW BUDGET LINE** of Venti-
lating Fans... the "VENAIRE" Builders'
Models in addition to Ventrola Ventilators
and Range Hoods.

continued on p 242

Cincinnati Builder provides effective home cooling with R&M-Hunter Fans



"Much less expensive than air conditioning" says Builder Sharp

Sharp & Isfort, builders of quality homes in the Cincinnati area, are big boosters for R&M-Hunter Ventilating Fans. Mr. Sharp says:

"R&M-Hunter Fans provide cool comfort for home owners without the big initial expense and operating cost of air conditioning equipment. Every buyer of our homes has been more than satisfied with the results produced by this modern ventilating system. In the ten years we have used R&M-Hunter Fans, there has been no service problem whatever."

Every size and style of house can be cooled with an R&M-Hunter Fan. Certified air deliveries range from 5200 to 22500 cubic feet per minute. 1959 line includes single-speed and two-speed models. Prices start at \$127 list. Look in Sweet's File for complete data. Consult your local phone book for name of nearest distributor.



VENTILATING FANS

The peak of quality

HUNTER DIVISION • ROBBINS & MYERS, INC.

2858 Frisco Ave., Memphis 14, Tenn.



Mrs. Janet Metscher (above) is one of the many satisfied owners of Sharp & Isfort homes with R&M-Hunter Fans.

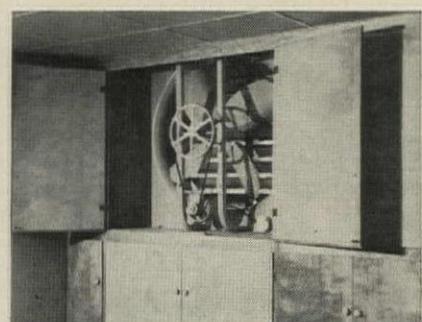
3 WAYS TO INSTALL R&M-HUNTER VENTILATING FANS



1. In normal installation, R&M-Hunter Fan (Package Type) is placed on attic floor with automatic shutter in hallway ceiling.

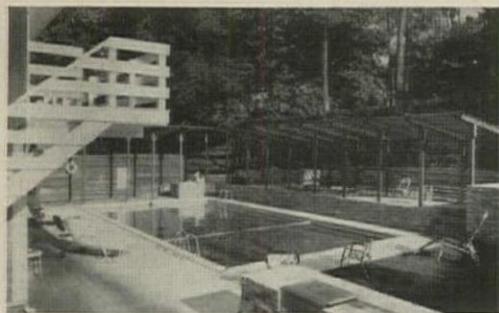


2. In gabled homes, where attic is airtight, the "A" Type Fan can be mounted as shown to discharge directly to outside.



3. Where the attic space is limited, fan may be installed in basement or sidewall for efficient whole-house ventilation.

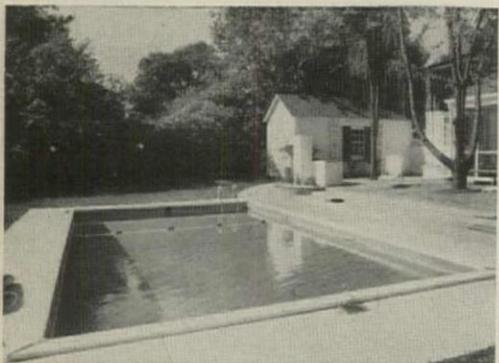
start on p 238



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transform today's homes into smart *Packaged Estates!*

Merchant builders who are aware of the increasing popularity of residential swimming pools are invited to investigate the *Romar Builder-Dealer Franchise* . . . available to a limited number of firms in the building industry. We also give special attention to inquiries from architects, lending institutions and realtors. Ask about our special pool packages for model homes.

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Romar
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Member, National Association of Home Builders • Charter Member, National Swimming Pool Institute

RSP-659

Complete Crawford door line

File sheets on all Crawford's garage doors are now available. Side one of each sheet covers the material, construction, operations, and styling features. Side two includes complete specification data. Sheets are available on Marvel-Lift single and two car doors, Fleetwood single car, Vanguard two car, Flush-Modern single and two car doors.

Crawford Door Co, Detroit.
For copy check No. 62 on coupon, p 244

Royal heaters and furnaces

Catalog pages on gas-fired furnaces, air conditioners, recessed vented-wall heaters, through-the-wall heaters, vented and unvented circulators in the 1959 Royal line are off the press. Sheets include features and specifications on each line of products. All are AGA approved.

Chattanooga Royal Co, Chattanooga.
For copy check No. 63 on coupon, p 244

Hydronic heating and cooling line

Edwards Engineering has a new 4-page brochure outlining the features and specifications on a full line of baseboard radiation, industrial and commercial radiation, zone-control valves, coaxial condensers, packaged heating units, basic boilers and water heaters, Airvec condensers, and finned tubing.

Edwards Eng, Pompton Plains, N.J.
For copy check No. 64 on coupon, p 244

Teco products and services

Latest catalog from Timber Engineering lists split-ring connectors, shear plates, toothed rings, spike grids, clamping-plate tie spacers, framing anchors, hydraulic presses, bolt hole treaters, etc. Also detailed: the activities of Teco Wood Products Laboratory.

Timber Engineering, Washington, DC.
For copy check No. 65 on coupon, p 244

Sliding glass door catalog

Complete details of each model in T.V. Walker's Capri line are shown in this new 8-page catalog. Plan and elevation drawings, feature details and exact dimensions of Capri Cadet, Cavalier, and Continental doors are shown.

T.V. Walker & Sons, Burbank, Calif.
For copy check No. 66 on coupon, p 244

Full line for Marlite

All the colors, designs, and styles available in Marlite plastic-finished hardboard are shown in the newest catalog from Marsh Wall Products. Also shown: Marlite Peg-Board and Korelock, all the various installation accessories and mouldings.

Marsh Wall Products, Dover, Ohio.
For copy check No. 67 on coupon, p 244

Sargent's short lock catalog

This new 16-page *Condensed Architectural Builders Hardware Catalog* gives concise information on four major lock lines, liquid door closers, exit devices, miscellaneous builders' hardware. Selector charts, specifications and application data, and product features for each line are included.

Sargent & Co, New Haven.
For copy check No. 68 on coupon, p 244

BRIKCRETE
GUARANTEED TO CONTAIN NO CLAY

MODERN MASONRY
for the **GREAT MASS MARKET**

B-22

Millions of Brikcrete have gone into the building of homes, apartment units, motels, schools, churches—all types of residence and commercial construction. Not only because of economy, but for the more important reasons of beauty, comfort and modernity.

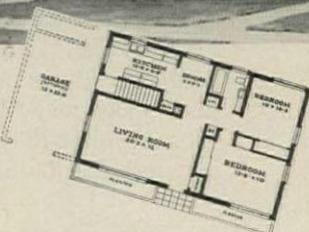
Brikcrete is the world's most modern masonry, with size, design, proportion and color range in line with today's style trends. Yet — material for material — it usually costs less than lumber. Far below that of ordinary brick. For example:

\$452¹⁰* Buys all Brikcrete for the "Brikadier"



*National average, including planters, excluding garage. May vary by locality.

Basic Brikadier is 36' x 24'; 912 sq. feet; 2 bedrooms and dinette. Blueprints, \$15.00 per set.

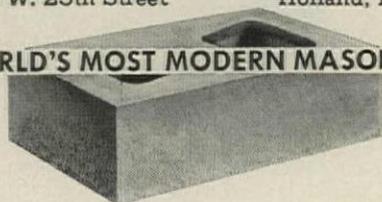


The "Brikadier" is only an example of how little Brikcrete costs. The same low price per square foot applies to any houses you may be planning to build. Local manufacturing explains why Brikcrete can give more value for less cost. Local plants, using local raw materials enable factory-to-builder contacts. Eliminate costly freight and distribution costs. Ask for Brikcrete Book No. 1.

Growing demand for Brikcrete demands more local plants. Building contractors are in exceptional position as plant owners, not only for their own projects but also to supply other needs of the community. High profit-potentials are open to men alert to latent opportunity. Plants operate in franchise-protected territories. We supply all equipment, giving responsible operators up to 5 years to pay. If interested, ask for Brikcrete Book No. 2.

BRIKCRETE ASSOCIATES, INC.
416 W. 25th Street Holland, Mich.

WORLD'S MOST MODERN MASONRY



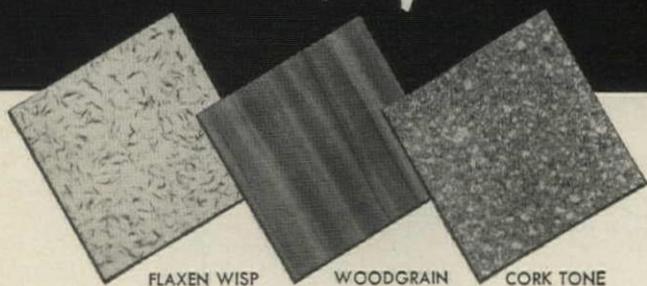
continued on p 244

Here's how to meet the demand for better quality in low cost homes and still make a good profit



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New Modern, High-Style, All-Vinyl Floor Tile for as low as \$28.00 installed in average 8' x 10' room

New Vogue is designed in eye-appealing colors and patterns that last years longer with less care. Vogue offers the resistance to stains, scuffs, spotting and fading that have made vinyl so much in demand. It mops clean as new without harsh scrubbing and does not require waxing.



Beautiful Mar and Stain Resistant Flexible Vinyl Protected with MYLAR*. Easier to install. For 1/2 the cost of pre-formed surfaces

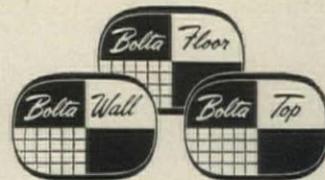
New Bolta-Top, in either standard or cigarette-resistant grades, is available in the newest decorator colors and patterns. Its beauty is protected with Mylar* for more years of resistance to scuffs and stains. Bolta-Top folds without cracking around edges and up walls . . . can be applied easily on-the-job without special tools. May be installed with or without molding.

Get the full story on these beautiful, durable, low-cost high-quality vinyls.

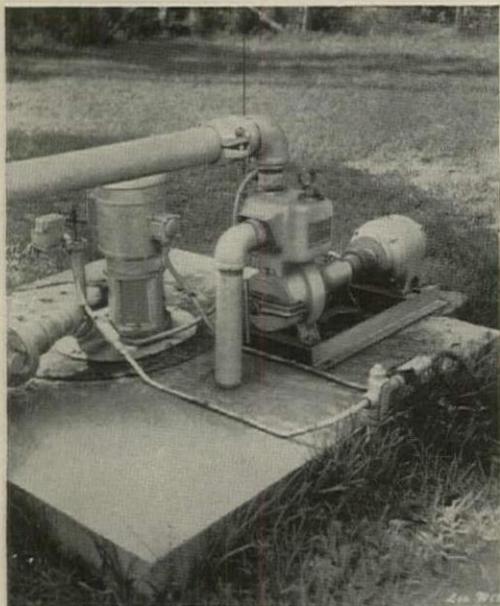
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*Mylar—DuPont's Reg. T. M. for its super-strength polyester film



In Jacksonville, Fla., a 3-inch Gorman-Rupp Sewage Pump replaced a vertical pump after 2½ years in service.

SIMPLE SOLUTION TO SEWAGE TREATMENT COSTS

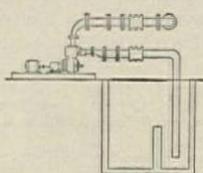
Gorman-Rupp Sewage Pumps permit simpler, lower cost installations.

Developers, disturbed at expense of normal sewage plants, are discovering the tremendous advantages of the Gorman-Rupp Sewage Pump.

In installation after installation, in lift stations and in sewer treatment plants, this Gorman-Rupp unit has shown an amazing record of savings. In a typical instance, less than half the cost of alternate equipment. With almost no maintenance whatever.

Here, for the first time, is a centrifugal pump which is self-priming in lifts above 15 feet, positive in action, and almost never clogs. No longer is it necessary to service the pump in the pit or by raising the whole unit by crane. Removable end plate provides fast access to impeller and wear plate with just a turn of the wrist. The non-clogging impeller passes spherical solids as follows:

- 3" pump, 1½" spherical solids;
- 4" pump, 2" solids;
- 6" pump, 2½" solids.



Write now for full details. Ask for illustrated bulletin and specification data sheets.

THE GORMAN-RUPP COMPANY
305 Bowman Street • Mansfield, Ohio

Reiss plastic laminates

A 4-page, 4-color catalog of the full range of Railite high-pressure plastic laminates has just been issued by Reiss Associates. Many of the 60-odd patterns, including wood grains, are shown in color. Specifications meet NEMA standards.

Reiss Associates, Lowell, Mass.
For copy check No. 69 on coupon, below

Tools for spray painting

The Graco line of cup guns, Redi-Sprays (for direct-from-the-container use), direct supply spray units, circulating paint systems, and airless Hydra-Spray make up Section A of the new Powerflo Catalog. Also shown: complete accessories.

Gray Co. Minneapolis.
For copy check No. 71 on coupon below.

Steel doors and door frames

A 20-page technical and descriptive catalog of Amweld's lines is now available. Twenty-seven door designs, KD frames, and cut out adaptations of standard locksets are featured. Suggested specs for commercial and commodity lines are included.

Amweld Building Prods, Niles, Ohio.
For copy check No. 70 on coupon, below

Rigid plastic pipe and fittings

The new catalog of Koroseal pvc piping, fittings, and valves—both normal and high impact—lists complete specifications and physical properties and includes data about common chemicals that can be safely handled.

B.F. Goodrich, Akron, Ohio.
For copy check No. 72 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 1021A, 9 Rockefeller Plaza, New York 20, N.Y.

NEW PRODUCTS • April

- 2. Dow Roofmate insulation
- 3. Plywall guaranteed paneling
- 4. Bostitch radiant-heat tacker
- 5. International industrial tractors
- 6. Pippin loaders & backhoes
- 7. Wagner loaders & backhoes
- 8. Drott loaders
- 9. Hough payloaders
- 10. J.I. Case industrial equipment.
- 11. Massey-Ferguson's industrial line
- 12. Ford's new industrial line
- 13. John Deere industrial equipment
- 14. Oliver tractors & attachments
- 15. Allis-Chalmers D14 & D17 tractors
- 16. Caterpillar medium-duty units
- 17. Bucyrus-Erie Hydrohoe & crane
- 18. Sherman 4-wheel drive & backhoe
- 19. Ottawa LX backhoe
- 20. Hyster D4 backhoe
- 21. Shawnee 88 backhoe
- 22. Clark Ranger forklifts
- 23. Charles Ditch Witch
- 24. Deltec Laster trencher
- 25. Arps Trench Devil
- 26. Auburn trencher
- 27. Mosaic tile developments
- 28. US Plywood's Glasweld
- 29. Tappan 400 range
- 30. Geneva kitchen cabinets
- 31. Aeronca Swirlflo sink
- 32. Stiglitz Debon-aire built-ins
- 33. Modern Maid built-in oven
- 34. Modern Maid range hood
- 35. Waste King 1959 dishwashers
- 36. Suburban gas clothes dryer
- 37. Maytag timed-bleach washer
- 38. Swanson deluxe range hood
- 39. Maxitrol gas-heat modulator
- 40. Steelman Translape recorder

- 41. Unibilt wall-hung fireplace
- 42. Koroseal Straw Weave
- 43. Goodyear economy vinyl floor
- 44. Zonolite wall insulation
- 45. United metal-back joint tape
- 46. Dow Corning water repellent
- 47. Consolite colored skylights
- 48. Plyco plastic slide sash
- 49. Steel roller garage door

PUBLICATIONS

- 51. Capitol's dome construction
- 52. Textolite tub-alcove plans
- 53. Merkel electric-heat systems
- 54. How to protect wood
- 55. ARI revised directory
- 56. ARI certification plan
- 57. Tile-Tex flooring guide
- 58. Ideas for lumber paneling
- 59. Tech data on southern pine

Catalogs

- 59. Challenger locks
- 60. EJS lighting fixtures
- 61. Cupples windows
- 62. Crawford garage doors
- 63. Royal heaters & furnaces
- 64. Edwards hydronic units
- 65. Teco products & services
- 66. Walker sliding glass doors
- 67. Marlite hardboards
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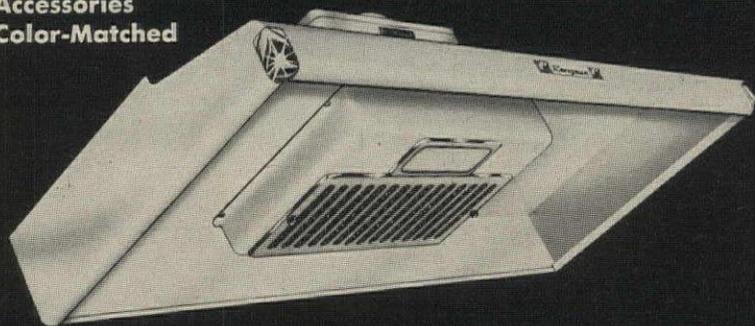
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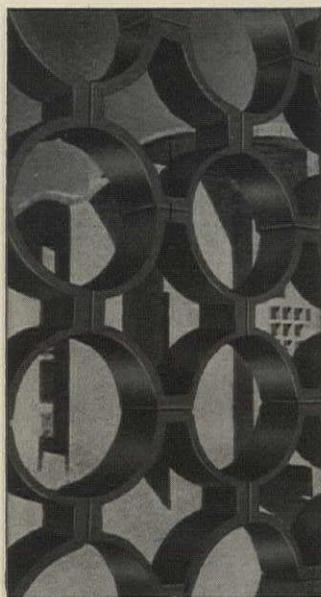
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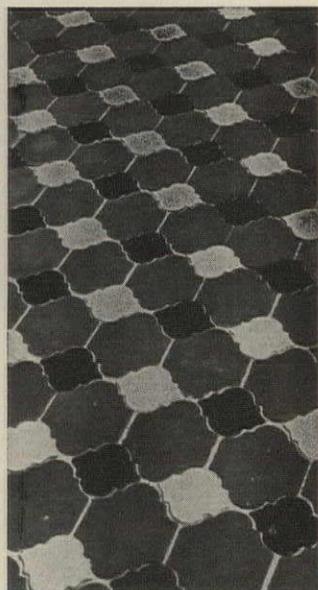
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Page:	
225	Alliance Ware, Inc.
172	Allied Chemical Corp. (<i>Barrett Div.</i>)
40, 41, 179-182	Aluminum Company of America
177, 178	American Biltrite Rubber Co. (<i>Amtico Flooring Div.</i>)
28	American Gas Association
Cover III	American Hardware Corp., The (<i>Russell & Erwin Div.</i>)
46	American Motor Corp. (<i>Kelvinator Div.</i>)
3-5	American-Standard Corp. (<i>Plumbing & Heating Div.</i>)
82	American Telephone & Telegraph Co.
96, 97	Armstrong Cork Co.
226	Barclite Corp. of America
172	Barrett Division (<i>Allied Chemical Corp.</i>)
20	Bell & Gossett Co.
242	Brikerete Associates, Inc.
233	Briggs Manufacturing Co.
23	Broan Manufacturing Co., Inc.
26, 27	Bruce Co., E. L.
89	Butler Mfg. Co. (<i>Bldgs. Div. & Plastics Dept.</i>)
222	Cabot, Inc., Samuel
2	California Redwood Assn.
173-176	Capitol Products Corp.
95	CARADCO, Inc.
58, 59	Cast Iron Pipe Research Assn.
8, 9	Celotex Corp., The
224	Certain-teed Products Corp.
169	Chase Brass & Copper Co.
223, 224	Coleman Co., Inc., The
Cover II	Congoleum-Nairn, Inc.
231, 232	Consolidated General Products, Inc.
213, 214	Consoweld Corp.
1B	Cribben & Sexton Co.
44, 45	Curtis Companies Service Bureau
29	Cupples Products Corp.
101	Donley Brothers Co., The
194	Dwyer Products Corp.
34	Edwards Co., Inc.
84, 85	Eljer Division (<i>Murray Corp. of America, The</i>)
78	Farley & Loetscher Manufacturing Co.
52, 53	Ford Motor Co.
35	Formica Corp., The
227	Frigidaire Division (<i>General Motors Corp.</i>)
16	General Electric Co.
227	General Motors Corp. (<i>Frigidaire Div.</i>)
243	General Tire & Rubber Co., The (<i>Bolta-Floor Div.</i>)
219	Georgia-Pacific Corp.
22	Gering Products, Inc.
235	Gerber Plumbing Fixtures Corp.
33	Goodrich Co., B. F.
244	Gorman-Rupp Co.
94	Harris Manufacturing Company
48, 49	Hines Lumber Co.
228	Home Comfort Mfg. Co.
241	Hunter Div. (<i>Robbins & Myers, Inc.</i>)
25	Inland Homes Corp.
246	In-Sink-Erator Mfg. Co.
64, 166	Johns-Manville Corp.
46	Kelvinator Division (<i>American Motors Corp.</i>)
38	Kentile, Inc.
198, 199	Keystone Steel & Wire Company
209	Knappe & Vogt Manufacturing Company
236	Koppers Company, Inc. (<i>Wood Preserving Co.</i>)

Page:	
190, 191	Lennox Industries Inc.
230	Leviton Manufacturing Co.
245	Lumber Fabricators, Inc.
236	Luxor Carpet Co.
32	Lyon, Inc.
195, 196	Major Industries, Inc.
66	Malta Manufacturing Co., The
14, 15	Masonite Corp.
167	Massey Ferguson, Inc.
207	Mastic Tile Corp. of America
221	Moe Light Division (<i>Thomas Industries, Inc.</i>)
73, 75, 77, 79, 81	National Gypsum Co., The
Cover IV	National Homes Corp.
21	National Lumber Mfrs. Assn.
171	National Manufacturing Co.
86, 87	National Oak Flooring Manufacturers Assn.
17	National Rubber Machinery Co. (<i>Plumbing Equipment Div.</i>)
88	New Castle Products, Inc.
1, 1A	Nutone, Inc.
30, 31	Owens Corning Fiberglas Corp.
11	Pacific Lumber Co., The
248	Peterson Window Corp.
217	Ponderosa Pine Woodwork
91, 185	Red Cedar Shingle Bureau
36	Reflectal Corp.
90	Reuten, Inc., Fred
186	Richmond Homes, Inc.
241	Robbins & Myers, Inc. (<i>Hunter Div.</i>)
245	Roberts Manufacturing Co.
93	Roddis Plywood Corp.
201, 203	Rolscreen Co.
242	Romar Filter Corp.
211	Roper Corp., George D.
229	Ruberoid Co., The
Cover III	Russell & Erwin (<i>Div. of The American Hardware Corp.</i>)
98	St. Regis Paper Co.
12, 13	Sargent & Co.
37	Schlage Lock Co.
234	Shake-A-Ply Co.
239	Soss Manufacturing Co.
55, 56	Southern Pine Association
10	Spencer Chemical Co.
215	Structural Clay Products Institute
248	Swim-Queen Pool Co.
18, 19	Tappan Stove Co.
24	Thermador Electrical Manufacturing Co. (<i>Div. of Norris Thermador Corp.</i>)
221	Thomas Industries, Inc. (<i>Moe Light Division</i>)
245	Three Centuries
240	Timber Engineering Co.
247	Touch-Plate Mfg. Corp.
164	Trane Co., The
100	United States Plywood Corp.
67	United States Steel Corp. (<i>American Steel & Wire Div.</i>)
106	Universal-Rundle Corp.
216	Van-Packer Co.
240	Ventrola Mfg. Co.
99	Wallace Co., William
102	Western Pine Assn.
62, 63	Westinghouse Electric Corp.
70, 71	Weyerhaeuser Sales Co.
6, 7	Whirlpool Corp.
236	Wood Preserving Division (<i>Koppers Co., Inc.</i>)

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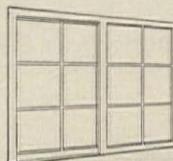
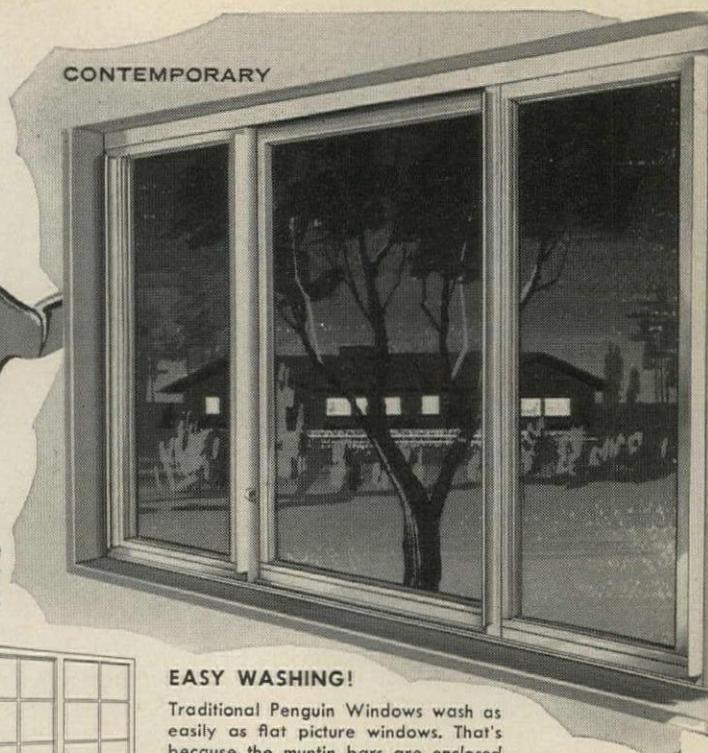
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