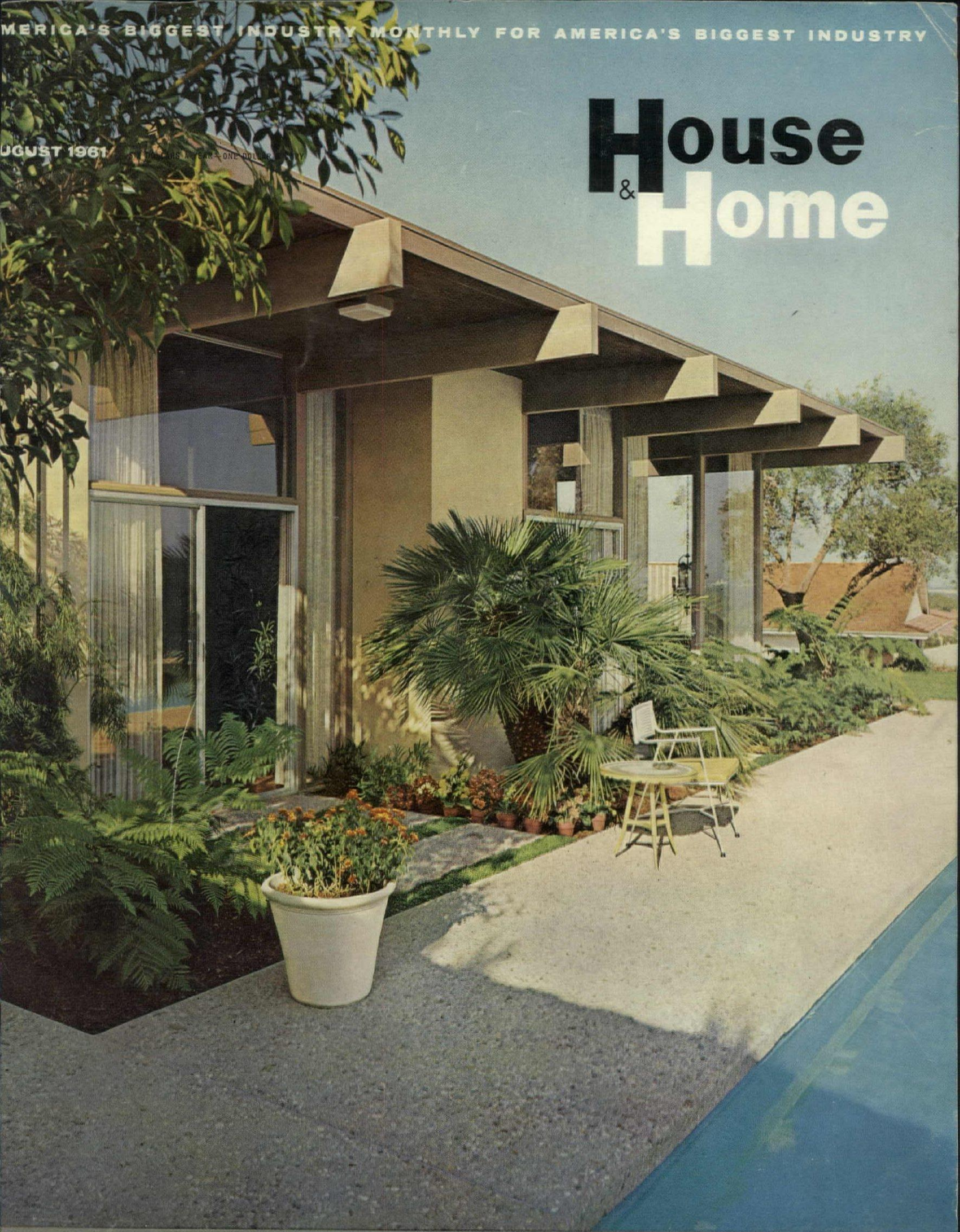


AMERICA'S BIGGEST INDUSTRY MONTHLY FOR AMERICA'S BIGGEST INDUSTRY

AUGUST 1961

US \$1.00

House & Home



OUTDOOR LIVING: A portfolio of good ideas for patios, fences, and landscaping
Gas industry roundup: How new promotion and new technology will help housing in 1962

NEWS BEGINS ON PAGE 43 / COMPLETE CONTENTS, PAGE 101



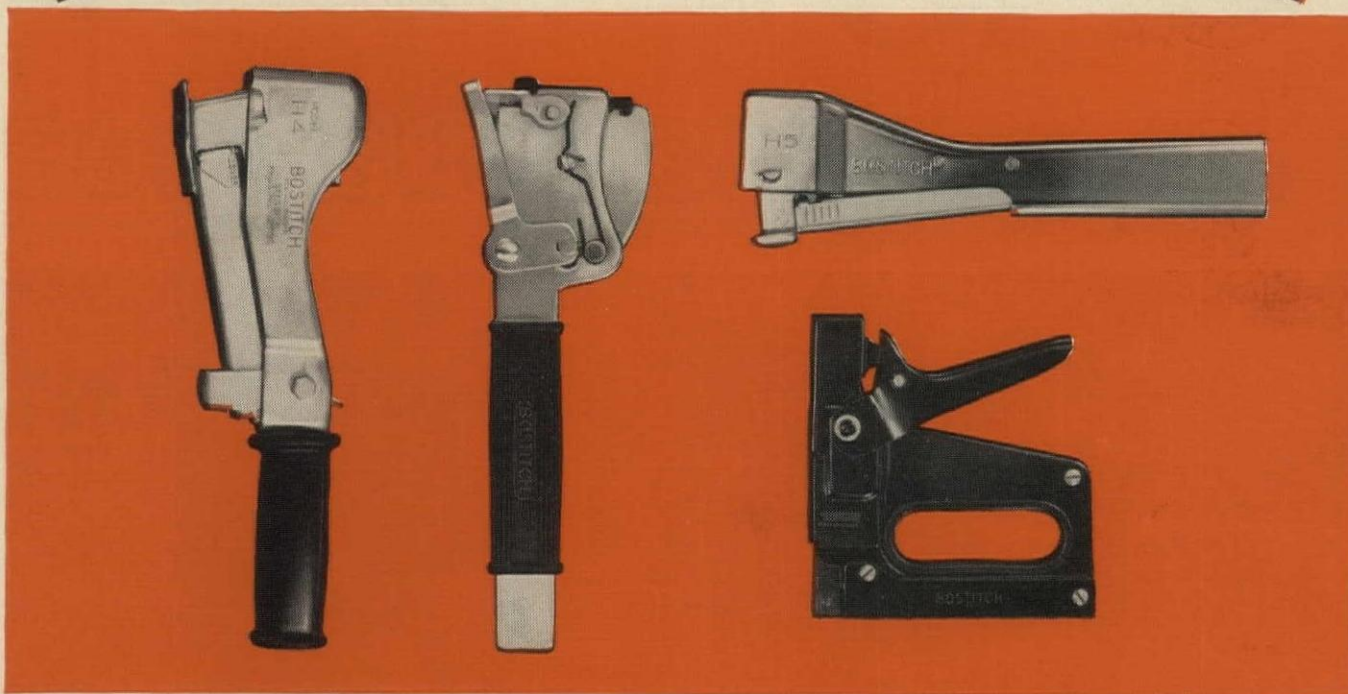
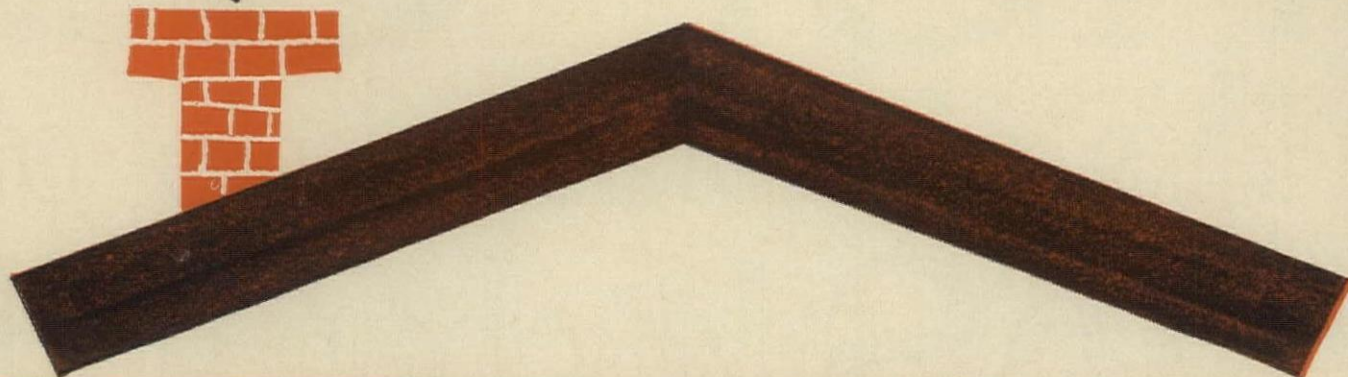
Style Supremacy ...@ \$4.50* sq.yd.

Congoleum-Nairn has startled the building world with its brilliant design leadership. Now we present "Tangier," vinyl-plus linoleum — style and budget news. Here is today's most popular floor fashion by the yard — 3-DIMENSIONAL inlaid mosaics — at 25% to 40% less cost! Write for a free sample of "Tangier" today. Address Home Builder Service Department, Congoleum-Nairn Inc., 195 Belgrove Drive, Kearny, New Jersey.

Congoleum-Nairn
FINE FLOORS

*Average installed cost

BOSTITCH TOOLS MEAN MORE BUSINESS



YOU GET JOBS DONE FASTER, GET TIME FOR MORE JOBS, CUT COSTS ON THE JOB

H4 Hammer—heavy-duty roofing stapler. For shingling and other heavy tacking jobs. Recommended by International Conference of Building Officials. Builders say it cuts shingling time in half.

H2B Stapling Hammer—drives medium-weight staples fast, with little effort. Long reach, one-hand operation. Experienced builders depend on it for many tacking jobs.

H5 Stapling Hammer—for light tacking jobs, gives you fast fastening action. Light yet strong enough to drive staples with 3/16", 1/4", or 5/16" legs into soft materials

or wood. It's ideal for installing foil-type insulation.

T-5 Tacker—the standard by which all other spring tackers are compared. Operates with an easy squeeze of the hand. Small nose permits staple location as close as 1/16 inch to inside of rabbet. Also available with heavy spring for hard-to-penetrate materials.

Rugged Bostitch tools speed work on all building jobs where staples can be used. You can equip your crew with Bostitch tools before your next start. Then, see for yourself how much faster the job goes, how much time and money you save. To prove to yourself without capital investment, rent Bostitch tools for a trial. Your building supply dealer will be glad to work with you. See him soon.

Fasten it better and faster with

BOSTITCH[®]
STAPLERS AND STAPLES

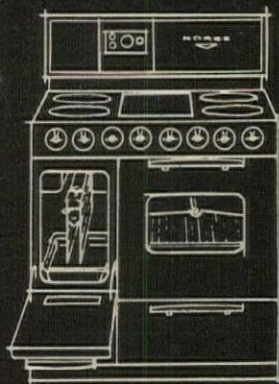
528 BRIGGS DRIVE, EAST GREENWICH, R. I.

NORGE

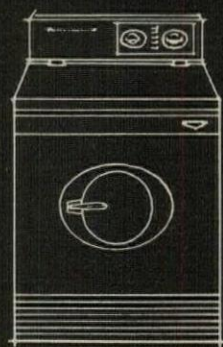
the complete line of
GAS kitchen and
laundry appliances



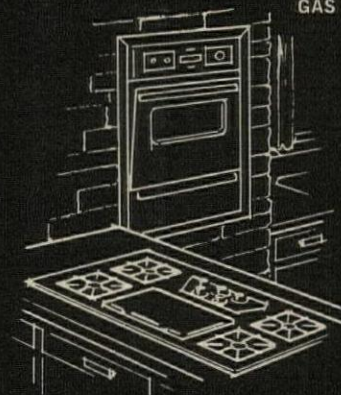
NORGE GAS REFRIGERATORS



NORGE GAS RANGES



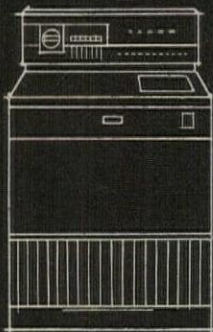
NORGE COMBINATION GAS WASHER/DRYERS



NORGE BUILT-IN GAS OVENS



NORGE GAS WATER HEATERS

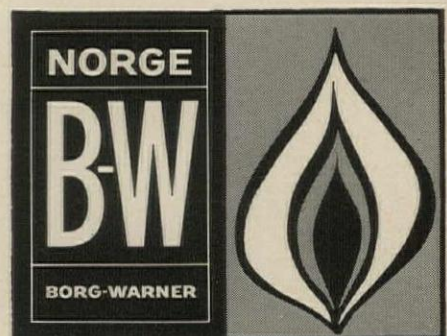


NORGE GAS DRYERS and MATCHING AUTOMATIC WASHERS

NORGE GAS SURFACE COOKING UNITS

QUALITY that creates and sustains customer satisfaction is built into every Norge gas appliance. The result is maximum dependable performance and minimum servicing needs. Norge gas appliances make the modern all-gas home the finest for modern living.

Norge Sales Corp., subsidiary of Borg-Warner Corporation. Distributed in Canada by Moffats, Ltd., Weston, Ontario.



HOUSE & HOME

ADD AN OUTDOOR "LIVING ROOM" OF REDWOOD at an overall cost of only \$2 to \$4 a square foot. By adding an attractive redwood deck, the builder identifies his home with the best in contemporary design and the luxury of indoor-outdoor living. Prospective buyers are quick to visualize how this outdoor "room" will be a continuing source of pleasure and will enhance the value of their investment. Redwood, in durable heartwood grades, is the wisest choice for all types of garden structures. It has a warm, natural beauty and provides exceptional resistance to the elements, to termites, to decay.

Write Dept. A-6 for your copy of "Garden Redwood", containing many illustrations of how redwood has been used effectively by leading architects for decking, fencing, benches, screens, and shelters.

Landscape Architect: Lawrence Halprin



All the wonderful warmth of wood is best expressed in redwood

CALIFORNIA REDWOOD ASSOCIATION • 576 SACRAMENTO STREET • SAN FRANCISCO 11
CRA-TRADEMARKED CERTIFIED KILN DRIED REDWOOD

The California Redwood Association coordinates the research, forest management, grading and consumer service activities of these member mills: GEORGIA-PACIFIC CORP., WILLITS REDWOOD PRODUCTS COMPANY • ARCATA REDWOOD CO. • SIMPSON TIMBER COMPANY • UNION LUMBER COMPANY • THE PACIFIC LUMBER COMPANY

25 years
is a
long time...



Much longer than the standard asphalt roof can be expected to last. Yet, a roof of colorful Carey Fire-Chex Asbestos-Plastic Shingles will retain its outstanding weathering qualities for at least 25 years. And probably longer. We guarantee it. For literature on Class "A" Fire-Safety Rated Fire-Chex Shingles, and on the Fire-Chex 25-year Warranty Bond, write Dept. HH-861, The Philip Carey Mfg. Company, Cincinnati 15, Ohio.

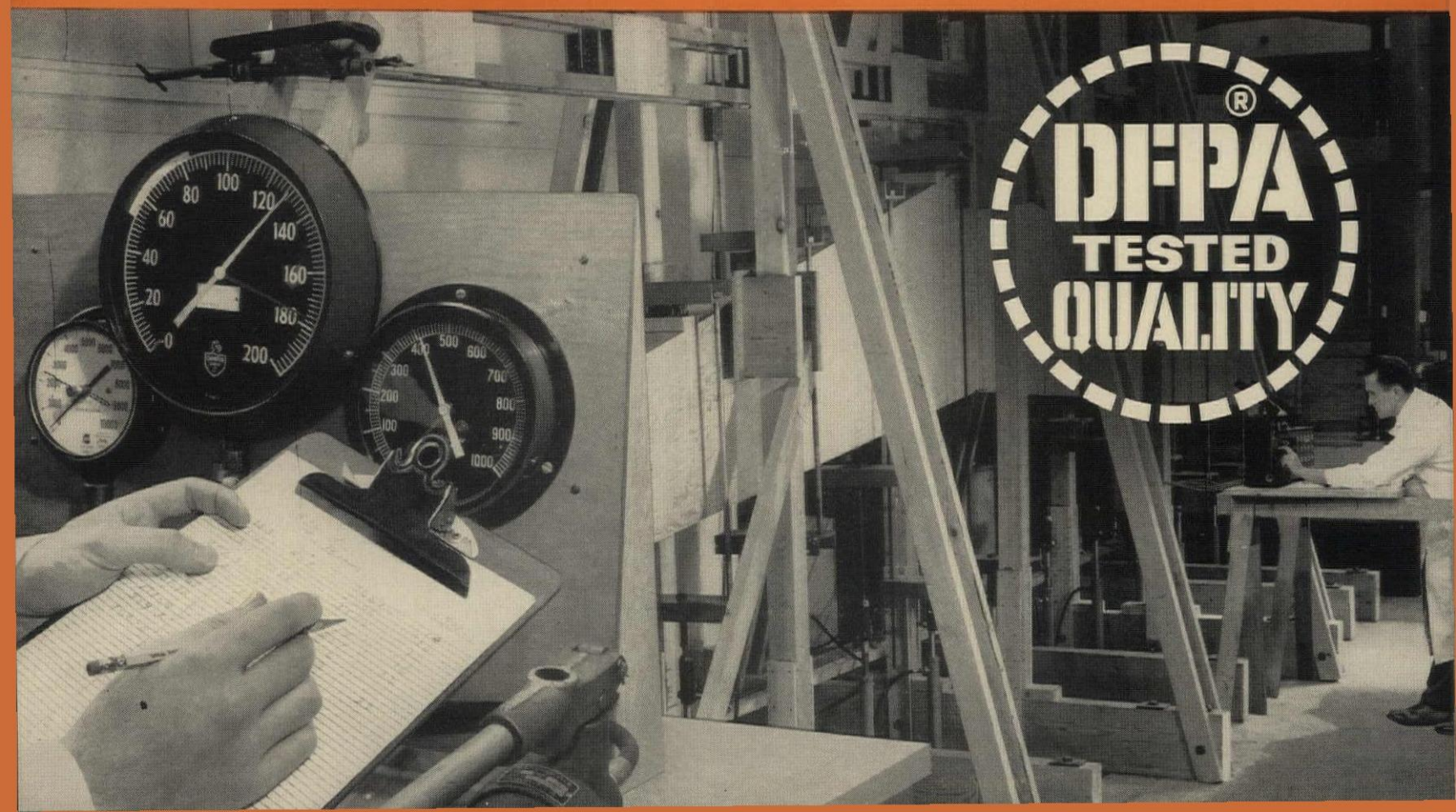
ROOFING SHINGLES
SIDING
INSULATION
FOUNDATION DAMPPROOFING
ASBESTOS-CEMENT BOARDS

Inside, outside
all around the house

PHILIP
Carey[®]

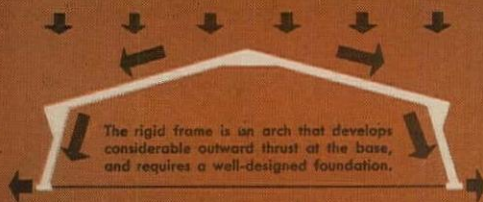
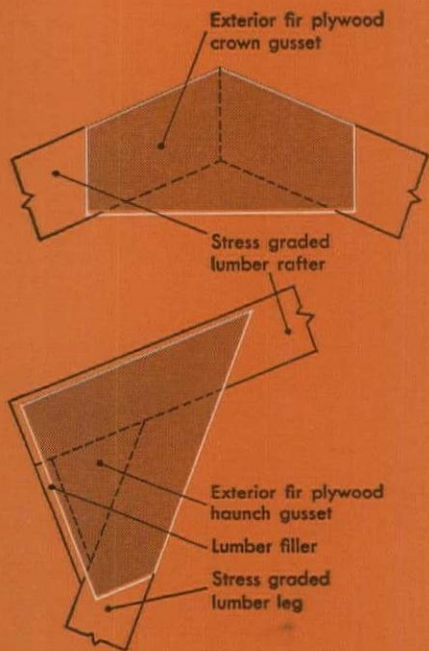
FOUR NEW IDEAS FROM DFPA PLYWOOD RESEARCH

- 1** A basic structural system for farm and commercial buildings that costs less than \$1 a square foot **2** One-step wall method that takes just one thickness of plywood for siding and sheathing **3** Two new plywood floor systems that cut floor construction time in half **4** A new truss that costs less, weighs less and is easier to make





Always specify by DFPA grade trademarks



DFPA FIR PLYWOOD

RIGID FRAME

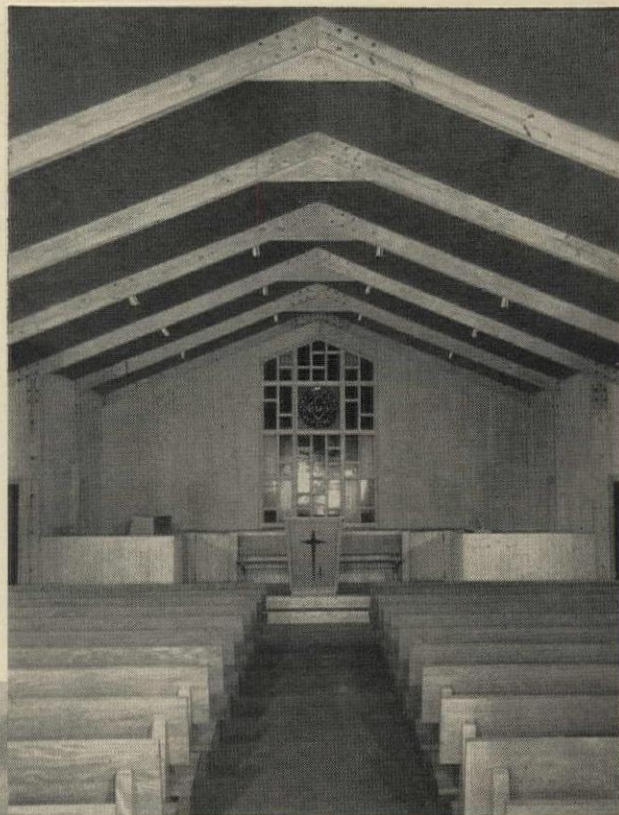
Simplest, most economical way to enclose space and get buildings that have clear spans up to 52 ft.

THE RIGID FRAME SYSTEM is a quick, inexpensive way to get basic shelter for less than \$1 a sq. ft. It's economical in material, time and capital outlay. It's easy to master, even for unskilled labor. The system consists of a series of load-bearing arches, made of four lumber members rigidly connected by nailed plywood gusset plates, and tied together by plywood walls and roof. Frames are quickly assembled, offsite or on, and quickly set in place.

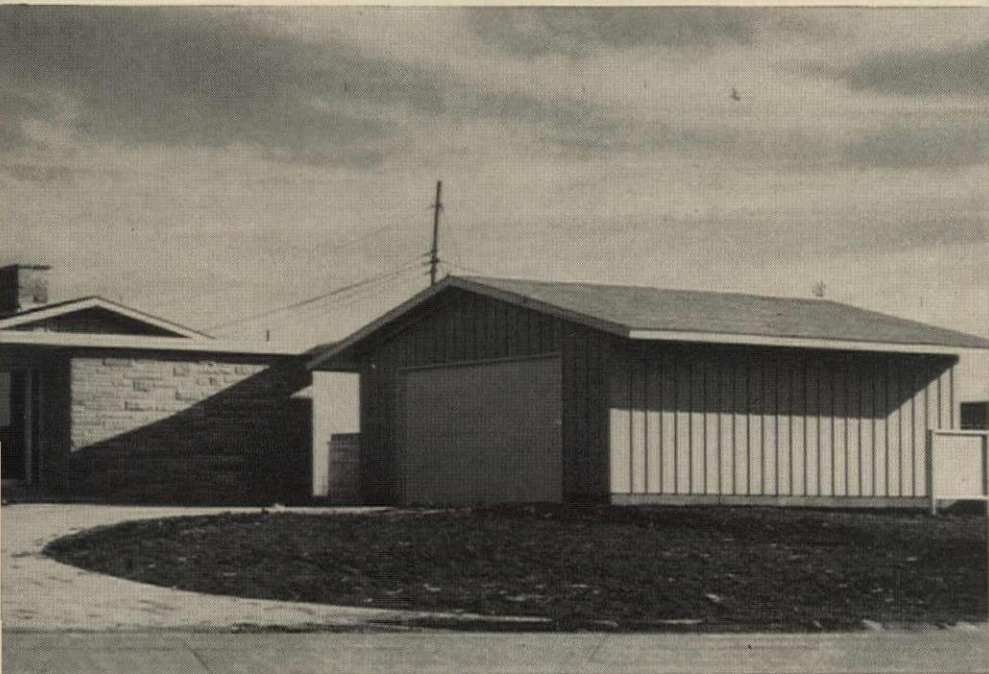
DFPA has rigid frame building plans for spans from 24' to 52', and construction data for over a thousand variations, to conform with conditions in various parts of the country, and commercial as well as farm uses. Included are different spans, leg heights, roof loads, frame spacing, wall treatments, etc.

The first application of the rigid frame was for farm buildings. Poultry houses like the one above in Western Washington have been built for 80¢ or less per sq. ft. for the basic shell. One of the most recent large-scale farm uses, four 52-ft.-clear-span potato warehouses, cost \$2.10 a sq. ft.—including insulation, wall lining, shingles and a ventilation system. But rigid frame buildings need not look utilitarian and plain. The system, when varied with vertical walls and different window and siding treatments, is extremely logical for public buildings, churches, schools, and even residential construction. See examples at right.

One of the first residential applications of the rigid frame was at the Champaign, Illinois Research House built by the Douglas Fir Plywood Association last year. The two-car garage was built with prefabricated rigid frames made up of 2 x 8 West Coast lumber framing and gusset plates of $\frac{3}{8}$ " plywood. Frames were delivered to the job site as half-sections, assembled on the ground, and quickly tilted up into position, two feet o.c. Roof decking was $\frac{3}{8}$ " plywood, applied with Plyclips.



▲ This North Carolina chapel demonstrates the adaptability of the rigid frame. It differs from the usual design in its straight sides—DFPA's construction recommendations for builders include details of this variation. The chapel cost \$6.96 per sq. ft., including masonry, foundation, Texture One-Eleven siding-sheathing and roof of plywood stressed skin panels.



► Park shelters and school buildings can make good use of the rigid frame system. For a cost of \$3.05 per sq. ft. the Little Rock, Ark. Park Department got this 25-foot-clear-span cooking shelter with a concrete slab and large stone fireplace. Rigid frame members are 4 x 10's and rest on concrete footings six feet o.c. Architect Robert Robinson and engineer Scott Farrell worked closely with DFPA engineers in designing the structure so sidewalls could be partially open. Contractor was H. L. Upton.

For more information on the rigid frame system, write Douglas Fir Plywood Association, Tacoma 2, Washington.





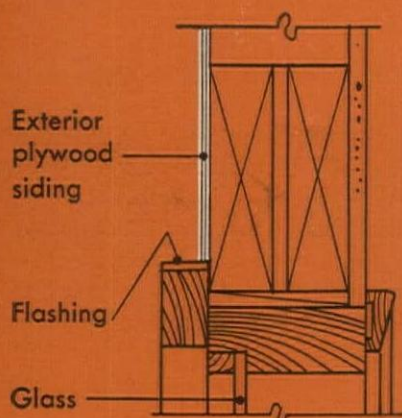
Always specify by DFPA grade trademarks

DFPA FIR PLYWOOD

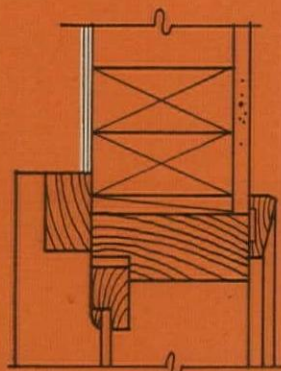
STURD-I-WALL

A time-and-money saving wall system that gives you both siding and sheathing in one operation

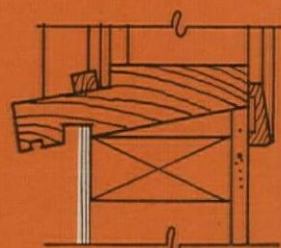
STURD-I-WALL is a one-step building system that uses a single thickness of exterior plywood as both siding and sheathing. By eliminating one whole step in wall construction, you can save in time, labor and materials. Yet you get a strong, good-looking wall. You can suit any taste in siding because plywood can be used in such a wide variety of ways: Texture One-Eleven with distinctive vertical grooves; overlaid plywood for an ultra-smooth, long-lasting paint job; horizontal lapped siding, either regular or overlaid; panel-and-batten; board-and-batten effect, etc. Sturd-i-wall meets FHA requirements, and is in fact even stronger and more rigid than a wall with diagonal sheathing and other siding. Where climate requires it, insulation can be applied between the studs. Sturd-i-wall works well with panelized construction, too.



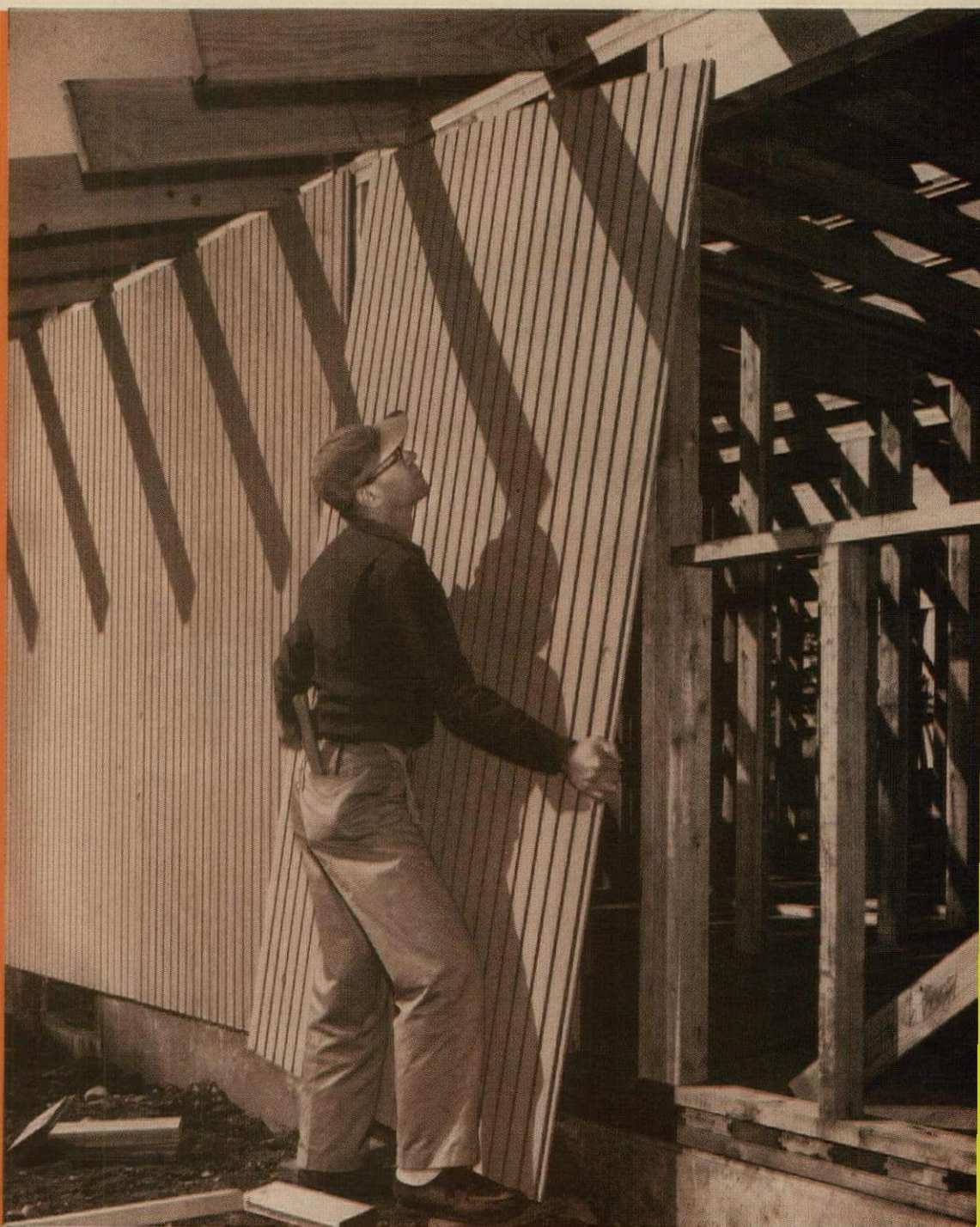
HEAD

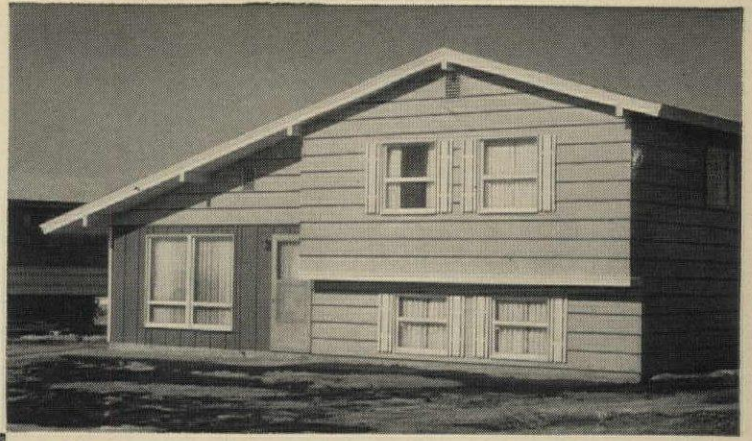


JAMB



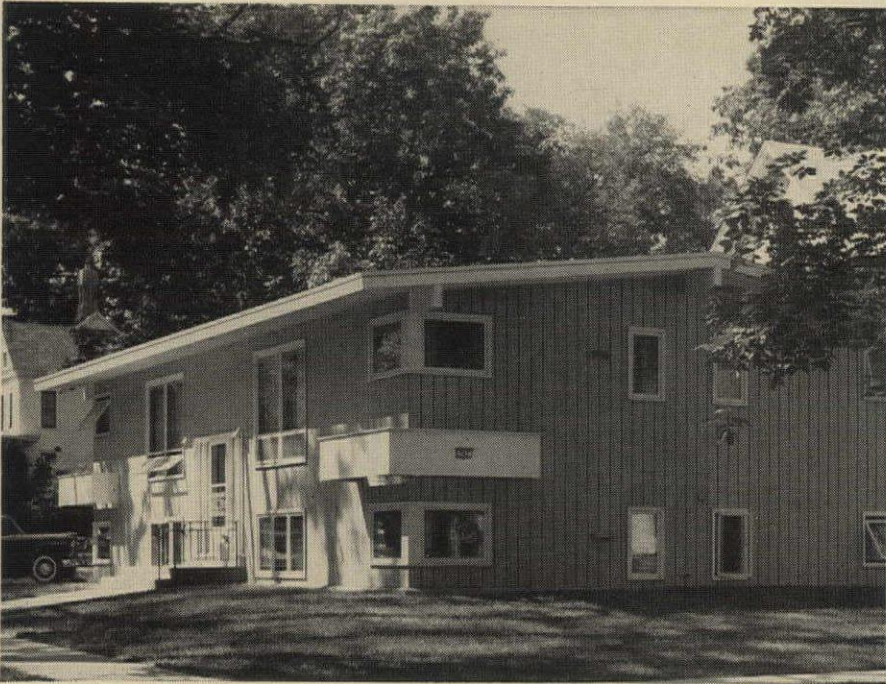
SILL





▲ **Sturd-i-wall cuts per-house costs**

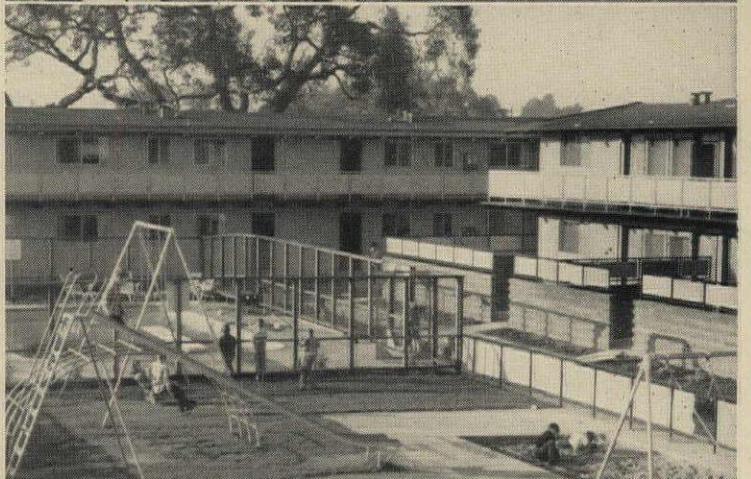
by \$175-\$245 for Bob Miller, one of Minot, North Dakota's larger builders, with houses in the \$15,000-\$19,000 range. He saves at least \$175 when he applies beveled siding of medium density overlaid fir plywood directly on studs. When he uses Texture One-Eleven for sheathing-siding, he lops \$70 more off his costs (compared with fibreboard sheathing and cedar siding). With savings from Sturd-i-wall on a typical 1200-sq. ft. house, Miller installs top-grade wool carpeting and built-in kitchen appliances without increasing his basic price—a definite competitive advantage. Buyers say the all-plywood houses are warm and comfortable, even on a sub-zero day. Plywood is so stable, with less shrinkage than other materials, that there's less chance for seams or cracks at door or window openings.



▲ **Sturd-i-wall saved \$210** on this new fourplex built by Wimer Construction Co. in Cedar Rapids, Iowa. Ben Wimer says the Texture One-Eleven combined siding-sheathing not only saves time and materials, but builds a better house. In his custom houses, which account for most of his business, Wimer has gone almost entirely to Sturd-i-wall and says that he saves \$700 on a house in the \$25,000 range. About half his savings are in labor. He feels Sturd-i-wall helps him give his customers more house for the money, both in square footage and quality.

► **Sturd-i-wall construction helped** hold costs to \$9 per sq. ft. at this 70-unit, low-rise apartment in Mountain View, California. Combination siding-sheathing was $\frac{3}{8}$ " medium density overlaid fir plywood, scored 8" o.c. to give a plank effect. It went over 3 x 4's, 16" o.c. Vertical edges of panels were shiplapped to give a continuous groove pattern. Let-in bracing was not required because of plywood's superior bracing strength. Overhangs seen here, a continuation of the ceiling, are relief-grain plywood with a natural finish.

The same structural system will be used for a projected 406 additional apartment units. Jack Douglas, superintendent on the job for Premier Construction Co. of San Jose, said, "Waste in wall construction is practically non-existent. Plywood is the big time-saver on this job. There is no plastering or stucco—the siding is a one-operation deal and it is ready to paint." Overlaid plywood takes and holds a paint job well, too.



For more information on plywood Sturd-i-wall construction, write Douglas Fir Plywood Association, Tacoma 2, Wash.



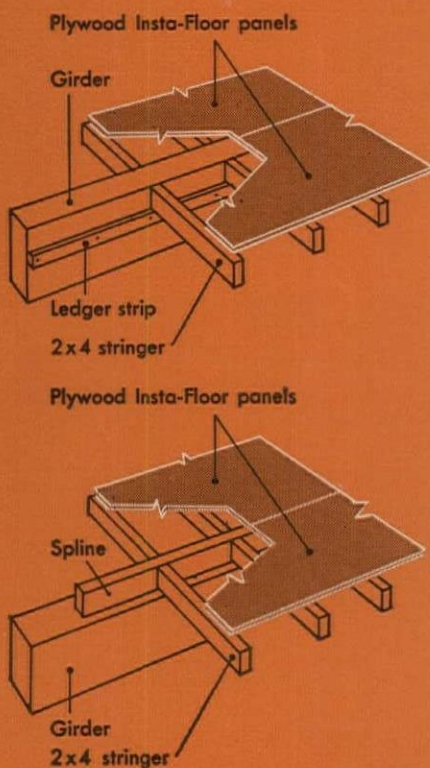
Always specify by DFPA grade trademarks

TWO NEW DFPA FIR PLYWOOD

FLOOR SYSTEMS

Two ways to cut floor construction time in half by using plywood over supports on 4-ft. centers

INSTA-FLOOR FASTENING METHODS



1 **Insta-Floor** is a panelized system with preframed plywood floor sections that cost as little as 35c per sq. ft. in place. Most savings are due to sharply reduced labor requirements, because the system entirely eliminates time-consuming cutting and fitting of hundreds of small pieces on the job. As a demonstration, Chehalis, Wash. builder, George Osborne, laid 1170 sq. ft. of Insta-Floor, including main supporting beams, in just under 10 minutes with a six-man crew. Another builder, C. C. Johnson of Muskegon, Mich., used Insta-Floor and saved \$39.40 on his first try. He expects savings per house to come to about \$75 when his crew becomes more familiar with the system.

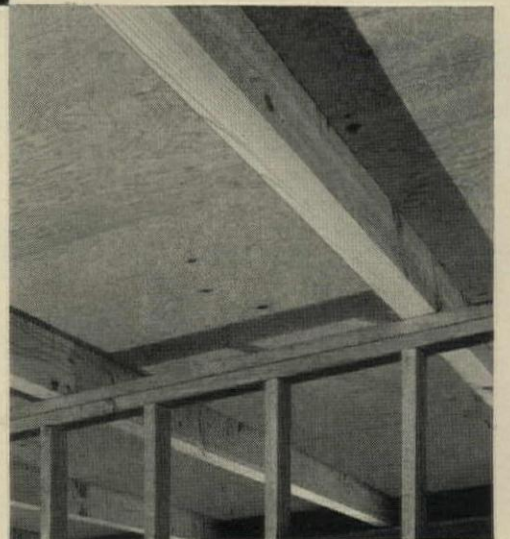
Both for Insta-Floor (above) and the 2.4.1 floor system (at right), supporting beams may be set into pockets in the foundation. This lowers the house, giving it a ground-hugging look, and saves significantly in labor as well as materials for wall sheathing, siding and painting.



FOR BOTH SYSTEMS, supports may be solid or built-up beams or, as on this ▶ Insta-Floor job, plywood box beams for long span, light weight, low cost.



Basement ceilings are neat and attractive — one more advantage you get when you use 2.4.1. Smooth plywood and exposed beams are easy to finish and easy to maintain; ceiling looks uncluttered.



2 Tongue-and-groove 2.4.1: Now DFPA has engineered a tongue-and-groove joint for 2.4.1, the 1 $\frac{1}{8}$ -in.-thick combination subflooring and underlayment plywood. Standard 2.4.1 requires blocking under panel edges—new t&g panels do not. Plywood floors are firm and solid and make a smooth base for any kind of resilient flooring. The new 2.4.1 system saved one builder in California \$100 per 2000-sq. ft. house, compared with 2 x 6 car decking. Another builder, G. E. Chacksfield Construction Co. of Gardena, Calif., used t&g 2.4.1 on a 154-unit development in Rolling Hills, Calif. (above). Chacksfield likes the floor system because it saves three ways over others: in time, labor and cross-blocking. It took only 10 man-hours to install framing and plywood for a 1400-sq.-ft. floor.

For information on both systems, write DFPA, Tacoma 2, Washington.



Always specify by DFPA grade trademarks

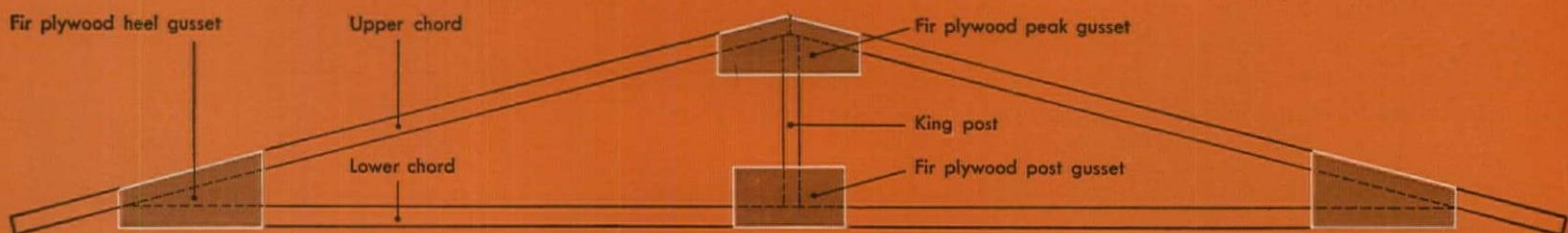
DFPA FIR PLYWOOD

KING POST TRUSS

Here's a new simplified design that gives you a truss that's lighter-weight . . . easier and quicker to build . . . and lower in cost

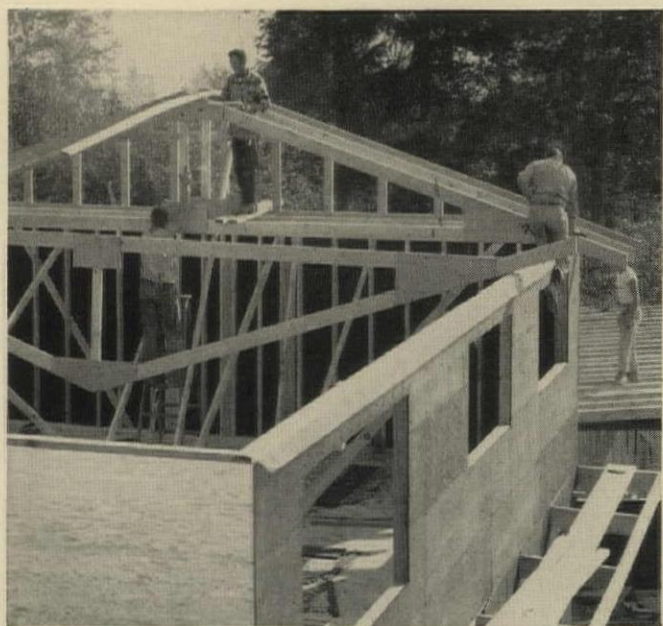
THIS IMPROVED plywood and lumber king post truss is less expensive to fabricate, easier to install, and does the job as well as or better than trusses with more members and costly metal connectors. Developed by the University of Illinois, it has been tested both in the laboratory and in use. Key to the system is the plywood gusset plate, which insures an absolutely rigid connection. DFPA tests of fastening methods show pressure-glued gusset plates stronger than nail-glued connections. For both, gluing must be done under carefully controlled conditions. For most builders, nail gluing is satisfactory and may be more practical.

Builders who have used these king post trusses with other plywood components have completed the basic shell of a house in three days. Most savings come from simplified roof framing. The truss system also permits non-load bearing partitions, and simpler, less expensive floor and foundation construction.





▲ **Hebb & Narodick** use these king post trusses with plywood gussets, and other Lu-Re-Co components, for homes in the Seattle-Tacoma area. Blackstock Homes of Seattle (affiliated with Muttart Homes of Edmonton, Alta.) fabricates the nail-glued trusses on a simple jig in the yard, and supplies them to builders in the area as part of a complete prefabricated house package. Some builders who have used them claim savings up to \$300 a house due to the prefabbed components.



▲ **Bell & Valdez**, large Pacific Northwest builders, used king post trusses in 100 houses during a trial run, then converted all their models to this type. Low cost was the chief reason. Trusses were fabricated by Totem Lumber in Seattle. Totem makes the double-gusseted truss 30 at a time in a special manufacturing process and figures costs at about \$1 less than for a comparable truss with metal connectors.

For more information about king post trusses, write to Douglas Fir Plywood Association, Tacoma 2, Wash.

THE DFPA TRADEMARK IS YOUR ASSURANCE OF QUALITY PLYWOOD

TODAY, QUALITY OF CONSTRUCTION is more critical than ever before. New building systems like those shown here make greater demands on materials, and dependability of performance is absolutely essential. Buyers are more quality conscious. That's why it's more important than ever before for you to specify and buy *only* DFPA grade trademarked fir plywood. It's the only plywood backed by an industry-wide quality control program, and a quarter century of experience in plywood testing and inspection. This program is supported by the overwhelming majority of fir and western softwood plywood manufacturers, accounting for 85 percent of industry production.

You can depend on plywood with the DFPA grade trademark because the DFPA quality control program checks every critical step in plywood manufacture. It includes factory inspection by trained quality supervisors—rigorous laboratory testing of production samples, and exposure to actual weather conditions—and in-use testing of new products and finishes. Quality control is backed by DFPA research into new structural systems, and information to help you to build better with plywood at lower cost.

Your reputation depends on the quality of your construction. That's why it pays to specify *only* DFPA grade trademarked plywood.

DOUGLAS FIR PLYWOOD ASSOCIATION

TACOMA 2, WASHINGTON

—an industry-wide organization devoted to research, promotion and quality control



Only plywood bearing the DFPA grade trademark is made under the industry-wide DFPA quality control program. Always look for the letters "DFPA."



**SAVE \$414 per truck
IN THE FIRST YEAR!**
**NEW FORD
ECONOLINE
VANS**

Now, you can save \$312 to \$433 in price* alone on a Ford Econoline Van compared to the leading conventional half-ton panels. In addition, you can save over \$100 every 16,000 miles you drive!

These savings come with a man-size truck. The Econoline's cab-forward design with welded "body-frame" gives bridge-like strength and reduces dead weight to haul over ¾-ton. Only 14 feet overall, Ford Econolines are nimble in traffic, easy to park, need less garage space. Big 4-ft. door opening (both curbside and rear) and level cargo floor provide new loading ease . . . new load workability.

Special Note To Pickup Owners: Now, you can protect your loads from weather and theft with an Econoline Van . . . yet, pay less* than for most conventional ½-ton pickups. And you can get the same \$102 savings on operating expenses as shown at the right.

*Based on a comparison of latest available manufacturers' suggested retail prices



HERE'S HOW YOU SAVE

SAVINGS ON OPERATING EXPENSES EVERY YEAR!

GAS—Econoline trucks can give 30% better gas mileage than conventional ½-tonners. Figuring 16,000 miles per year at prevailing gas prices, you save.....

\$70

OIL—Crankcase capacity is only 3½ quarts instead of 5 quarts, and the recommended oil change interval is 4,000 miles versus 2,000 miles. In 16,000 miles you save.....

\$13

TIRES—Econoline tires last longer, cost less to replace. Prorated saving for 16,000 miles as high as \$53. Typical saving.....

\$16

LICENSE—In many states (not all) the license for an Econoline costs appreciably less—up to \$30.40 per year. Average for all states is.....

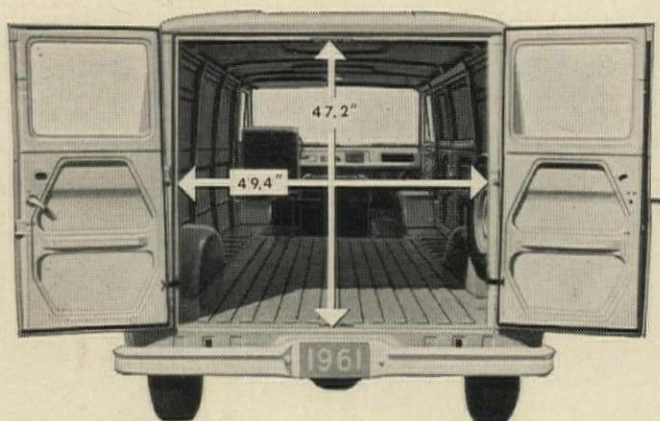
\$3

\$102

SAVING ON PRICE—You can save \$312 compared to even the lowest-priced popular ½-ton panel—and up to \$433 against others! Saving at least.....

\$312

TOTAL FIRST YEAR SAVINGS... \$414
 and you keep saving
\$102 EVERY YEAR!



NO REAR ENGINE HUMP!

The Econoline's "up front" engine leaves a level, knee-high floor almost 9 ft. long. There's no awkward rear-engine-housing hump to shrink the back entrance or hinder loading. And the Econoline Van provides over 204 cu. ft. of loadspace . . . up to 80 cu. ft. more than conventional ½-ton panels.

FORD TRUCKS COST LESS

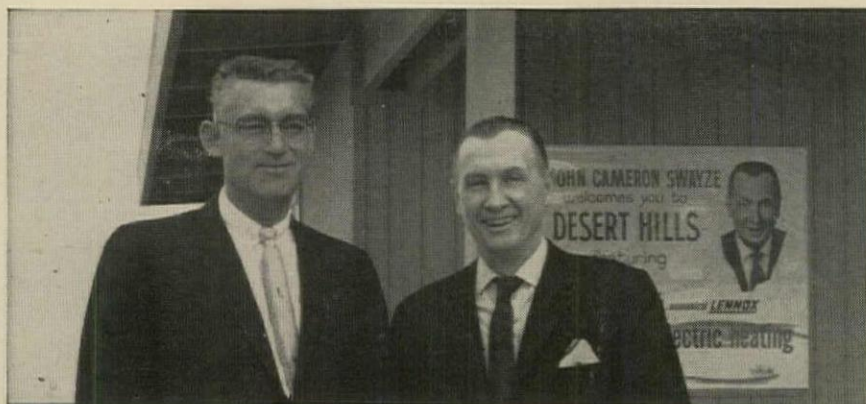
SEE YOUR FORD DEALER'S "CERTIFIED ECONOMY BOOK" FOR PROOF!



FORD DIVISION, *Ford Motor Company*

Some folks in Las Vegas like to gamble...
but not Maslow Construction Corporation

“We had to have a sure thing, so we chose Lennox heating and air conditioning for our 1,600 homes”

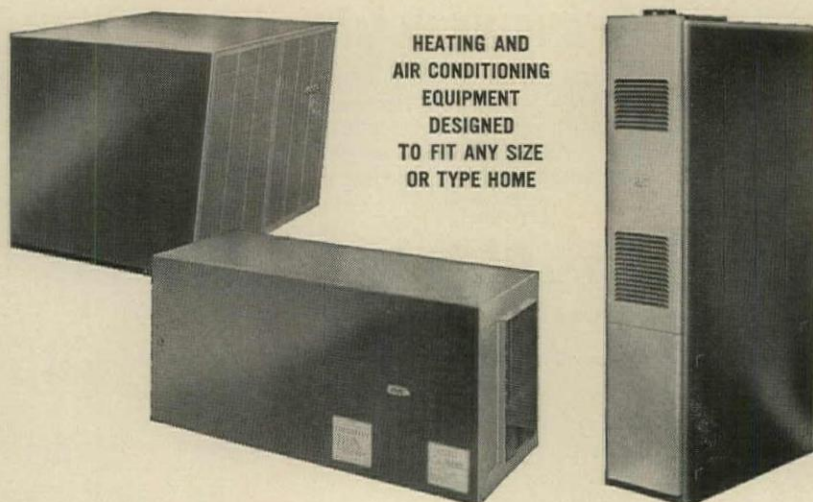


“Mike” Maslow (left), builder of Desert Hills Homes, Las Vegas, Nevada, talks over opening day activities with John Cameron Swayze (right), famous radio/TV personality, the new “Voice of Lennox.”

“We wanted four things when we first set out to select electric heating and air conditioning equipment for our Desert Hills homes. We found all four in Lennox! First, we wanted a quality name that home buyers recognize and respect—equipment that would be a sales-plus. Next, we wanted to streamline installations to meet our scheduled completion date. We knew that Lennox could and would work with us to meet our deadlines. Third, we naturally had to watch costs and the Lennox

extra qualities cost less than I had expected. The factory representative worked closely with us to help us cut costs . . . installed prices were competitive with the cheaper, bargain-priced units. Fourth, we chose Lennox equipment because of the John Cameron Swayze Builder Promotion. The Swayze theme was used in our radio, newspaper, and on-the-site advertising. And, to cap it all, we even had Swayze appear in person to add extra push and interest to our opening.”

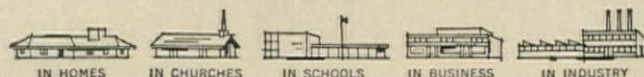
For more information about Lennox equipment and the Lennox Merchandising Programs that help builders sell their homes, check with your Lennox representative or write Lennox Industries Inc., 323 South 12th Avenue, Marshalltown, Iowa.



Don't be satisfied with less than

LENNOX

HEATS, COOLS, TREATS AND MOVES AIR



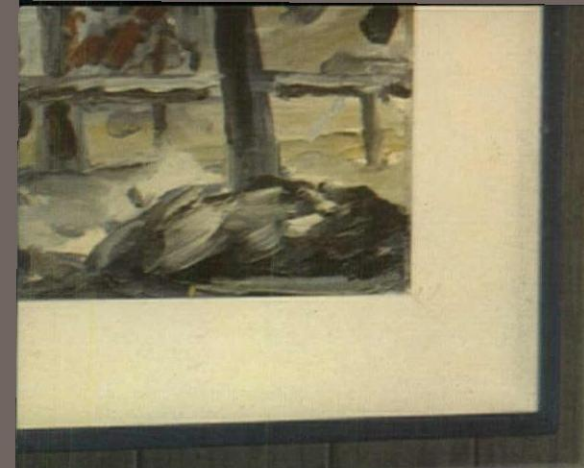
LENNOX Industries Inc., est. 1895—Marshalltown, Iowa; Columbus, O.; Syracuse, N.Y.; Decatur, Ga.; Ft. Worth, Tex.; Salt Lake City, Utah; Los Angeles, Calif. LENNOX Industries (Canada) Ltd.—Toronto, Montreal, Calgary, Vancouver, Winnipeg

HINES

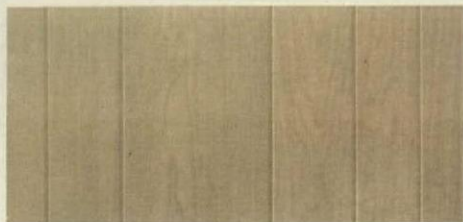
Cherribord

NEW PREFINISHED PANELING





Hines Mount Hood Cherribord



Hines Palomar Cherribord



Hines Smoky Mountain Cherribord

HINES

Hines Mount Hood Cherribord is a reddish-brown tone that blends particularly well with Early American and other traditional decorative treatments. Smoky Mountain Cherribord—stark, silvery beauty with

HINES ALLWOOD EMBOSSED HARDBORDS

Wickerbord

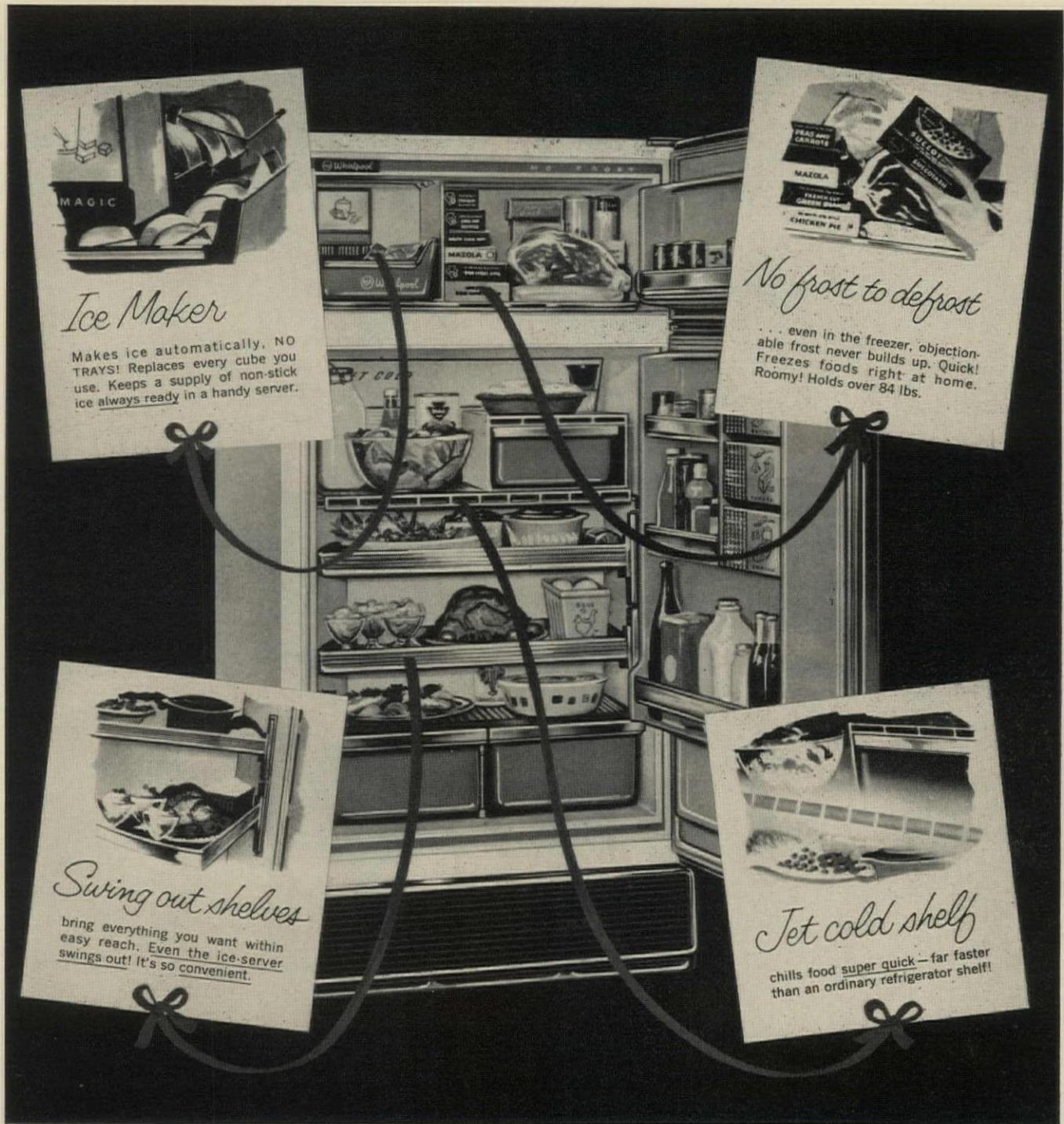
Shadobord

Weavbord

Louverbord

Stribord





NEW GAS REFRIGERATOR-FREEZER

All the modern features plus the Big Plus... it's GAS!

A Gas refrigerator-freezer is so modern, so beautiful, so practical that, other things being equal, it may well be *the* thing that wins her over to *your* home! Because it's Gas, it's quiet, dependable—and it will *save her money*. The heart of the refrigeration system is a tiny Gas flame—no moving parts, nothing to wear out or break down . . . and system is fully protected by a safety shut-off.

Features like these will enchant the women "lookers": The ICE MAKER makes ice *automatically*, replaces every cube as used. No trays. SWING OUT SHELVES—even the ice-server swings out. NO FROST, even in the freezer! JET COLD SHELF chills food super quick. MODERN BEAUTY—fits flush to walls and cabinets.

It's smart sell to offer your prospects a chance to

LIVE MODERN
FOR LESS
WITH


GAS



GAS WASHER-DRYER COMBINATION

The home laundry that helps make your home her home!

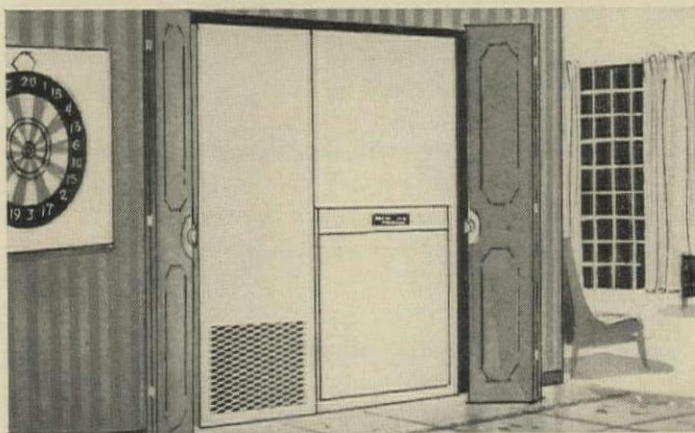
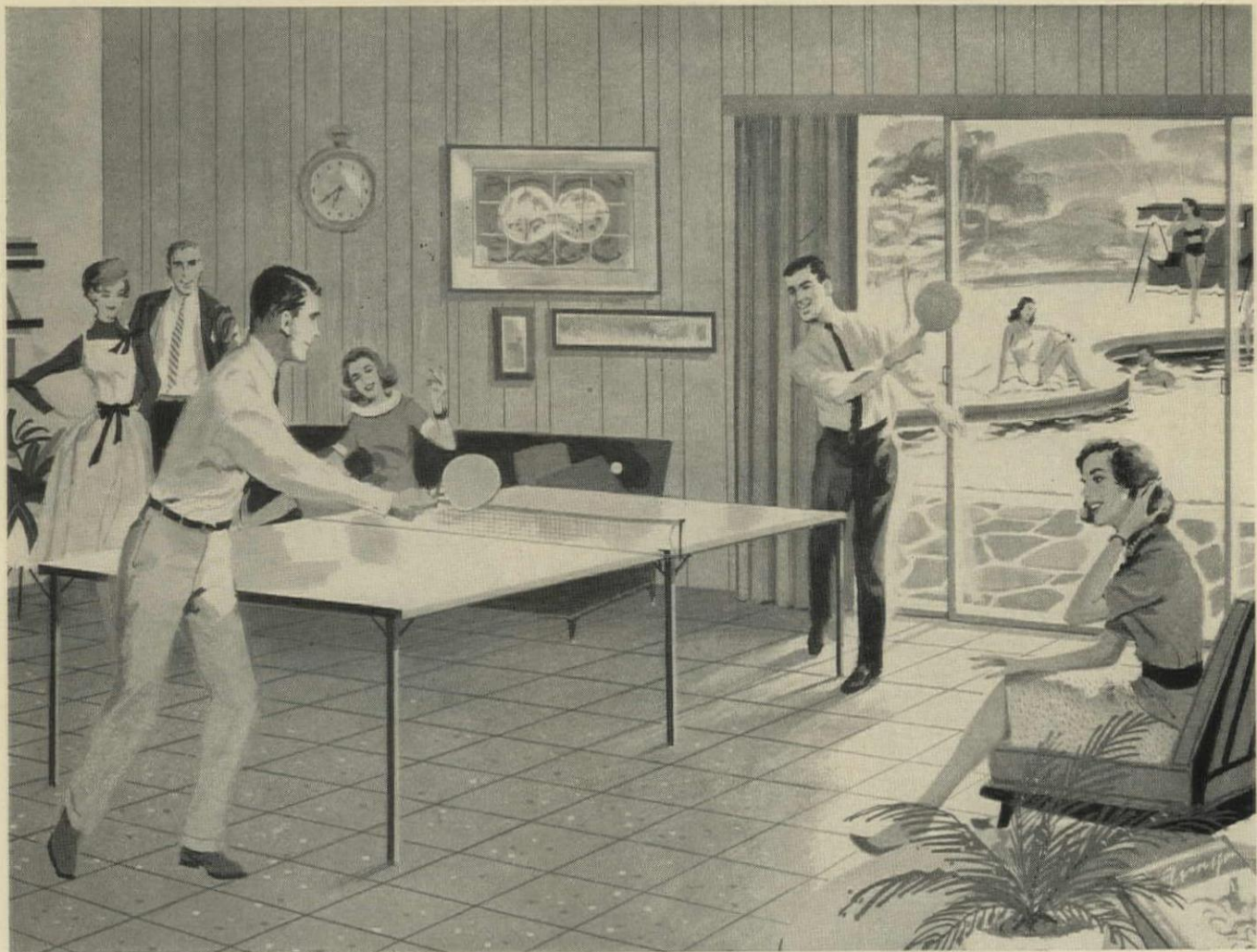
Here's the kind of laundry a woman dreams about for her new home. She loads it, she sets it, and — and that's all. A Gas washer-dryer is faster, more economical *because* it's Gas! Gas heats the water, fast and hot, for the two wash cycles. Gas dries the wash, soft and fluffy. This Gas dryer lets her "dial the dryness"—damp-dry, fold dry, any dryness she wants. It's *safe* drying, too, for all fabrics, and the fastest ever!

Because it's Gas, *you* will find it costs less to install . . . the home buyer will find it costs less to maintain and to use, as well as saving her untold hours of work every week!

Ask your wife, Mr. Builder, how any woman would react to a Gas washer-dryer combination in a new home she was looking at.


Powerful inducement to new house buyers! All-year air conditioning is one of the most appealing features your new home can offer. Women like the cleanliness of Gas—the fact that it heats and cools with fresh, filtered, circulating, dehumidified air. Men like its economy—fewer moving parts, less chance of breakdown, practically no maintenance costs. Often it costs less to cool a whole house with Gas than to cool just part of it with individual units. Build with a single Gas unit that heats and cools the whole house, all year round, with just one turn of a thermostat. Or install a Gas heating unit plus a Gas cooling unit. Or put in a modern Gas heating system that the homeowner can easily convert at any time simply by adding on a Gas cooling unit, using existing ductwork.

ALL-YEAR GAS AIR CONDITIONING



*It's smart sell to offer your prospects
a chance to*

LIVE MODERN
FOR LESS
WITH

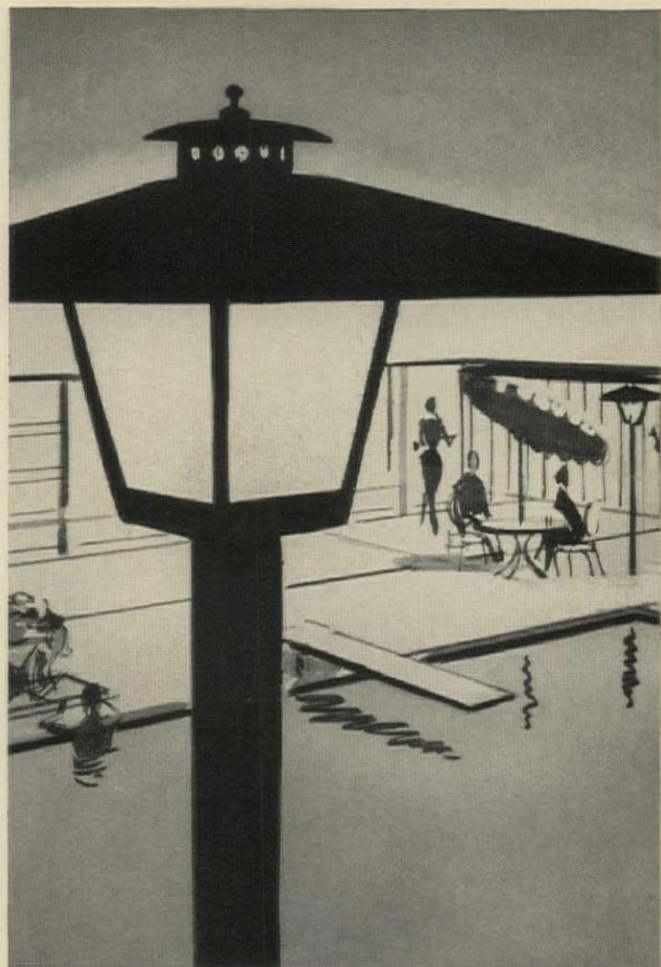

GAS



GAS WATER HEATER

Nationally 90% of new home buyers insist on Gas water heaters. No wonder. A Gas water heater gives the whole family the luxury of instant hot water. No time wasted warming up—Gas gives instant heat. The second more hot water is needed, Gas comes on full force, *automatically.*

Gas water heaters cost you less to buy and install—will cost the buyer of your home far less to operate. And remember—when you install a *Gas* water heater in your homes, you are installing the kind that nine out of ten new home buyers prefer! Include them in your homes.




OUTDOOR GAS LIGHTS

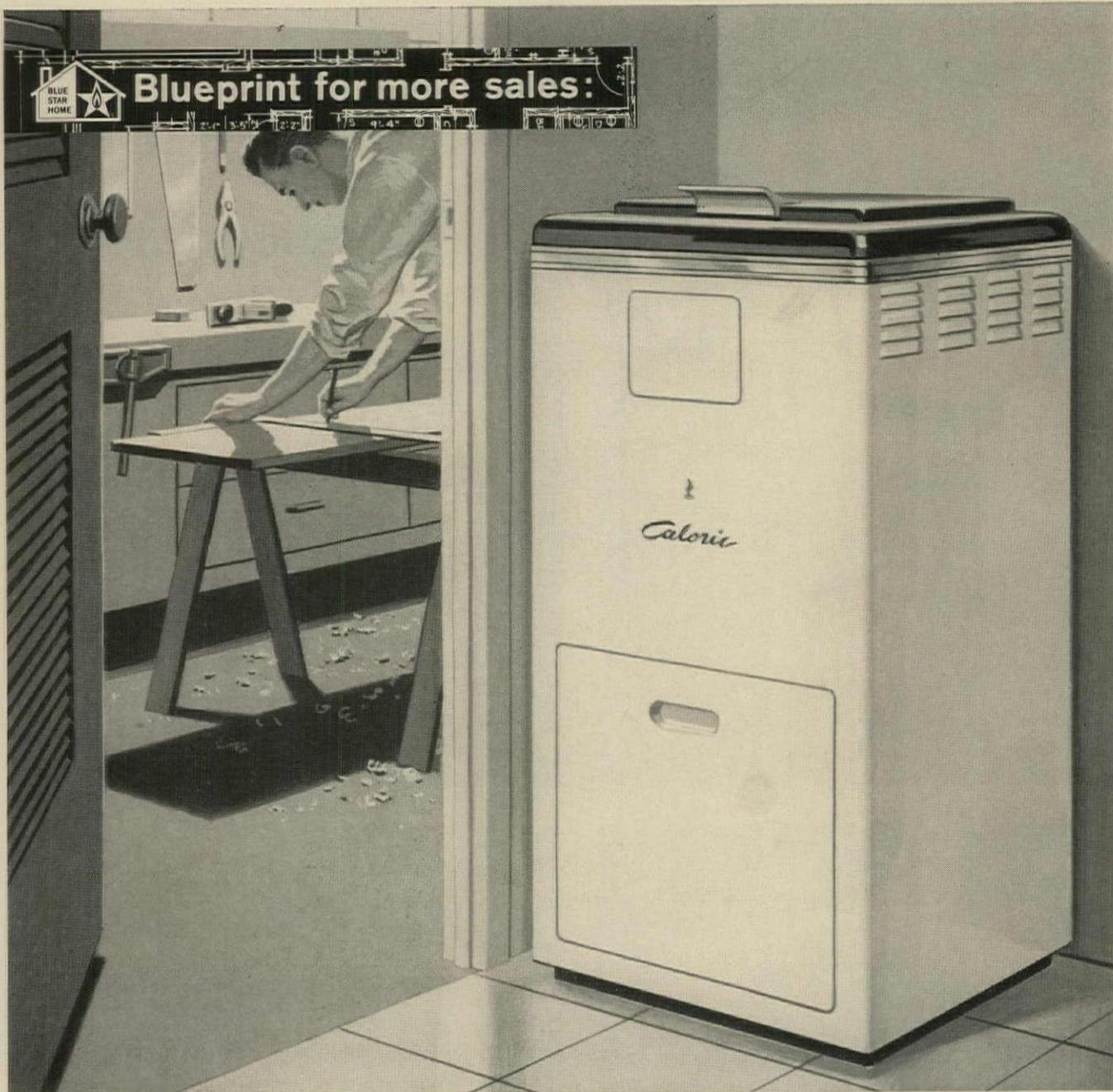
Impress prospects coming and going!

Before they get inside your house, they'll be impressed! An outdoor Gas light stamps you as an imaginative builder. It's picturesque, yet practical. Gives a different and charming look to your entrances, drives, parking areas, patios. These softly glowing, decorative, modern versions of the Gay 90's are getting so popular they're actually selling better than they did in the old Gas Light Era! Today's Gas lights come in a wide choice of models . . . all kinds of styles, finishes, designs, both post and wall bracket . . . to add prestige and beauty and value (and light!) to any kind of home. Use outdoor Gas lights on your homes . . . they make an outstanding house stand out even more!

It's smart sell to offer your prospects a chance to

LIVE MODERN
FOR LESS
WITH


GAS




GAS DISPOSER

Saves home owner the nuisance of garbage carrying! What an extra, added attraction to a prospect—the prospect of cleaner, healthier, more convenient living in a new home with a modern Gas waste disposer. Smokeless, odorless, safe, clean, convenient, automatic, foolproof—and economical to use *and install*. They just drop in burnable trash and garbage, set a dial and Gas goes to work immediately. With a Gas disposer, you can make an interesting point to prospects: no more trips outside in all kinds of weather to get rid of trash and garbage.

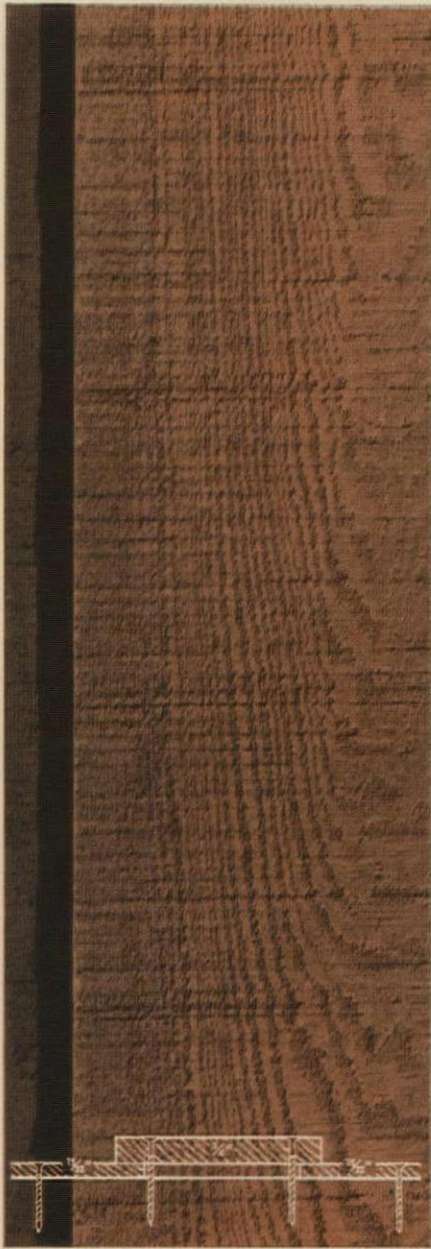
*It's smart sell
to offer your prospects
a chance to*

**LIVE MODERN
FOR LESS
WITH**


GAS

See your local Gas company representative *now*. He knows the area you're building in, the preference of many of the prospects who will consider your homes. He'll give you valuable information about sales-starting, local builder and dealer programs sponsored by the Gas company and the American Gas Association. He'll help you with your planning and with facts about Gas appliances. Take advantage of his services.

AMERICAN GAS ASSOCIATION



BOON FOR BUILDERS

SANTA ROSA
saw-textured board-on-board redwood siding



All the natural warmth and beauty of redwood is enhanced in our new **PALCO Santa Rosa Siding** — saw-textured for added visual interest and greater durability. Saw-textured siding holds stains and other finishes longer and weathers beautifully. Home buyers like its rich, handsome appearance, its long life and low maintenance. Packaged in dust-free, water-repellent paper wrap for on-site protection. Another PALCO Architectural Quality product, the standard of comparison since 1869.

PROFIT WITH



PALCO[®]
THE PACIFIC LUMBER COMPANY

100 Bush St., San Francisco 4, Calif.

35 E. Wacker Dr., Chicago 1, Ill.

2185 Huntington Dr., San Marino 9, Calif.

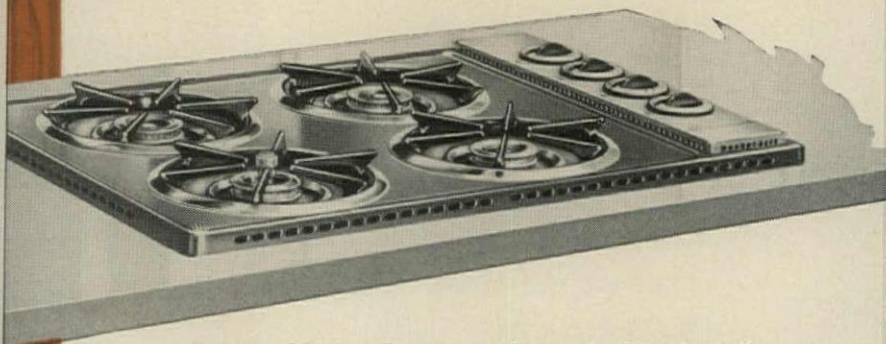
YOUR GREATEST ASSET IS OUR QUALITY PERFORMANCE!

RCA WHIRLPOOL

put more value



If you read Carl Norcross' recent 27-city report on the home building market prepared for *House & Home*, you probably noticed that emphasis throughout was on the *greater value* needed to sell homes today. How to add real value without sending costs spiraling is every builder's problem . . . and one where RCA WHIRLPOOL quality gas appliances can help. It's no secret that women are frequently sold or unsold on a home by the kitchen, so what better place to upgrade value? The RCA WHIRLPOOL brand name on gas appliances means quality women instantly recognize . . . means more of the "woman-planned" features that make your selling job easier. No matter what the price range of your homes, you'll find RCA WHIRLPOOL gas appliances designed to fit your requirements—superb, top-of-the-line models . . . practical, lower-cost units, too, which share the same basic engineering and design quality. So let this quality line of gas appliances help you add more of that *real value* which sells homes easier, faster. Do like so many other builders are doing . . . call your RCA WHIRLPOOL distributor!




For true kitchen beauty and practicality, install RCA WHIRLPOOL built-in gas ovens and range tops. So many most-wanted automatic cooking features . . . new, fast-installation design . . . a complete line of colors, and brushed chrome.

*It's easier to sell homes with
RCA WHIRLPOOL appliances than sell against them!*

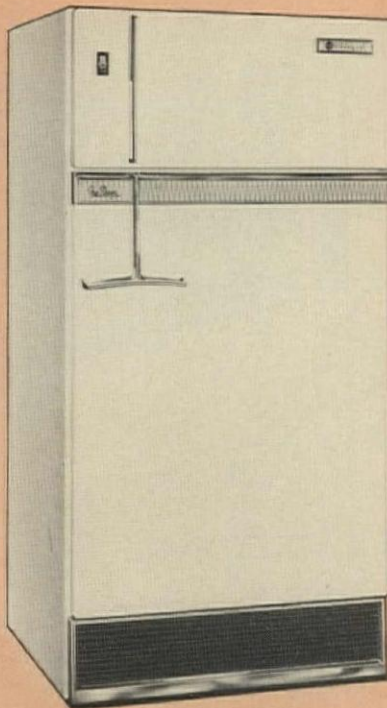


CORPORATION
ADMINISTRATIVE CENTER, BENTON HARBOR, MICHIGAN

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

gas appliances can into your homes!

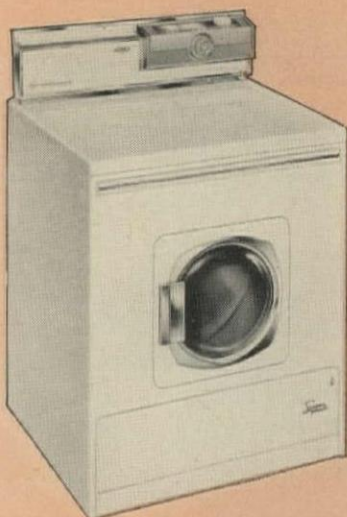
Thrilling Cabinet-Mate* design sets these free-standing gas ranges apart from others. So many practical good-cooking features women want, too.



New, gas RCA WHIRLPOOL Ultimatic, the washer that also dries clothes, is a complete home laundry in one unit. Neat, slim, counter high and only 29" wide, you can install it with counters, in closet or wall niche.



World's first and only No-Frost gas refrigerators. So beautiful, so quiet . . . to complete the all-gas kitchen in high style.



Revolutionary new Blanket-O-Flame® gas range top . . . a prestige unit . . . features air-tempered heat for incomparable cooking results. Excites tremendous interest in homemakers wherever it's shown.



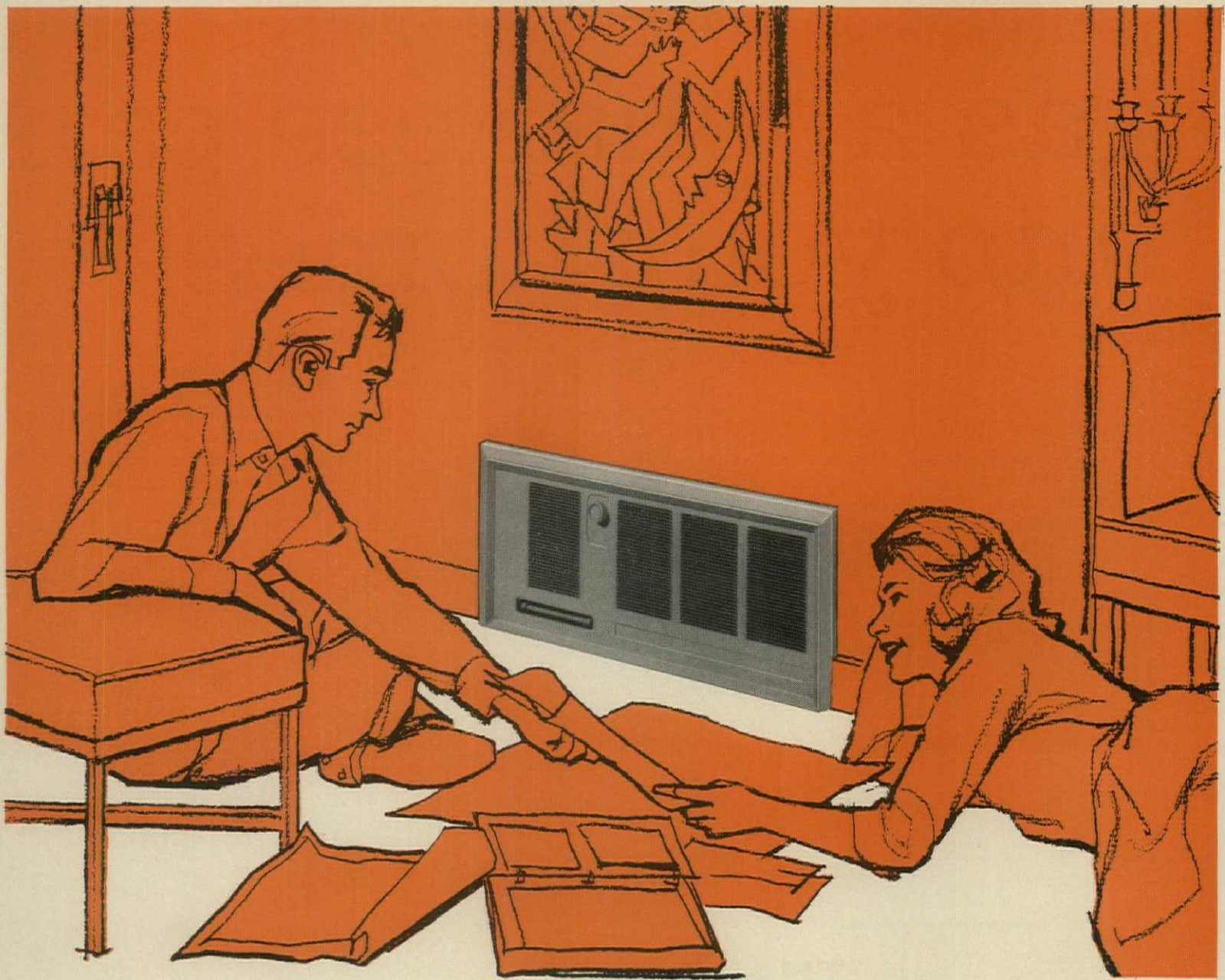
New super-speed gas dryer offers Modulated-Heat* drying that automatically shuts off when "dry enough" . . . plus the wonderful convenience features your buyers are seeking.

*Tmk.

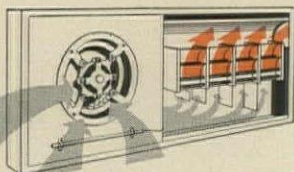


Modular built-in gas range gives a neat new built-in look, yet is free-standing. In brushed chrome and decorator colors.

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



New, improved HUNTER electric heat... FORCED AIR BASEBOARD



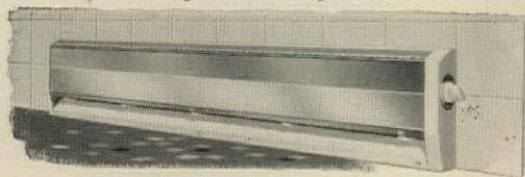
Arrows show flow of air drawn into unit, heated evenly, and distributed over a wide area.

The best features of electric baseboard and forced air heating are combined in the Hunter Forced Air Baseboard. Quiet, trouble-free operation makes this unit the ideal choice for many installations. Automatic control is by built-in thermostat (optional) or wall thermostat. Low surface temperature and automatic cut-out give complete safety. Recessed (with trim-flange) and Standard (surface-mounting) models install easily in new or existing construction.

HUNTER / TRADE WIND DIVISION, ROBBINS & MYERS, INC., MEMPHIS, TENN.

NEW FOR BATHROOMS

34"-long unit installs against wall



HUNTER BATHROOM CONVECTION BASEBOARD
Highly efficient unit has chrome face-plate and white casing to blend with standard bath fittings. Thermostat control is end-mounted for easy access.

HUNTER
ELECTRIC
HEAT

It's Matchless!



MAIL FOR COMPLETE DATA

Hunter/Trade Wind Division, Robbins & Myers, Inc.
2734 Frisco Ave., Memphis 14, Tenn.

Please send data on Forced Air Baseboard
Bathroom Convection Baseboard to:

Name _____

Company _____

Address _____



NEW! URETHANE VARNISHES SAVE TIME, CUT COSTS, GIVE TWICE THE WEAR

Kids—and customers—needn't "baby" floors finished this new way . . . with urethane varnishes based on Du Pont HYLENE® organic isocyanates. These remarkable new finishes outlast any conventional varnish 2 and 3 times over, combine high gloss retention with surprisingly easy upkeep! Yet, for the homebuilder, they're easy and quick to apply (*can* be formulated to dry in *minutes*), require no special skills or tools! Result: substantial savings in time and labor.

Outstanding resistance to abrasion, impact and scuffing is what gives urethane floor varnishes such long-term beauty and durability. Their smooth, hard surface sheds dirt, withstands oil,

grease and household spills, resists moisture, heat and aging . . . makes them easy to care for. Important quality differences like these reassure your customers, help you clinch the sale!

Perfect for stairways, doors and partitions as well as floors, new urethane varnishes are available in formulations to meet your exact requirements. You'll like the profitable difference they can make! Du Pont produces only the key ingredient, HYLENE; not the floor finishes themselves. However, we'd like to send you detailed information plus a list of suppliers. Write: E. I. du Pont de Nemours & Co. (Inc.), Elastomer Chemicals Dept. HH-8, Wilmington 98, Delaware.



HYLENE®
FOR URETHANE FINISHES

Better Things for Better Living . . . through Chemistry

**THE TARTANS
ARE COMING!**



Strong, Modern,
Dependable

OTHER REPUBLIC MONEY-SAVERS



CUT COST OF ROOF DRAINAGE with Republic House-Long "K" Gutters. No soldering, no joints to line up. Just position, fasten, and the gutter is installed in half the time. No seams to mar the beautiful appearance of the finished job.

THE LOWEST COST, MAINTENANCE-FREE INTERIOR FRAMES FOR 1³/₈" DOORS...

The Truscon TARTAN

The Truscon Division of Republic Steel presents the TARTAN Frame—a new high in low-cost, sturdy, steel frames for interior doors.

See how the TARTAN saves you money from \$start to \$sale:

It's Quicker and Easier to Install Because . . .

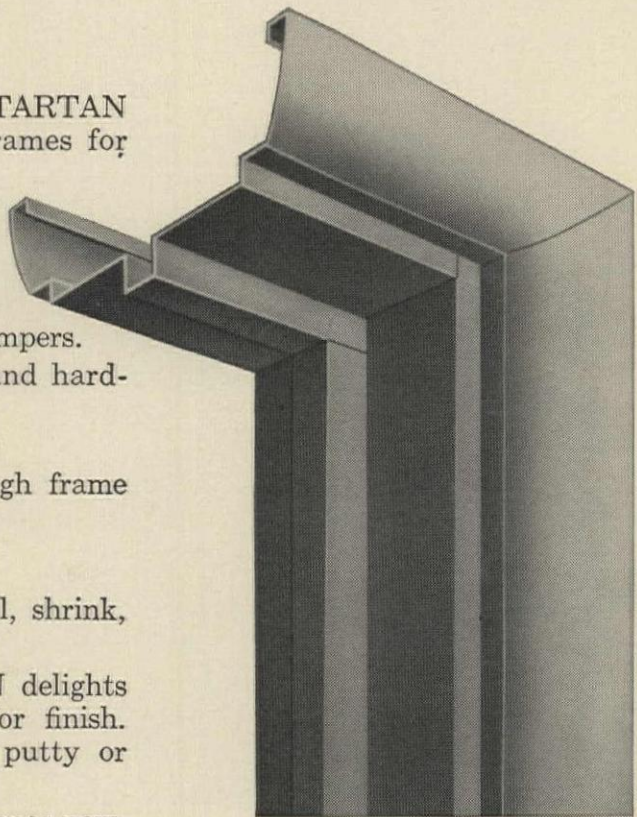
- It's a complete package: frame, strike, and bumpers.
- It eliminates mortising, finishing, sanding, and hardware preparation.
- It can be installed *after* drywall.
- It's a self-aligning, self-adjusting frame—rough frame need not be completely flush and square.

No Costly Call Backs Because . . .

- The TARTAN is steel . . . can't warp, swell, shrink, twist, or rot . . . it's maintenance-free.

The clean, contemporary styling of the TARTAN delights the ladies. They like the smooth, easy-to-care-for finish. There are no cracks to widen, *no nailheads* to putty or work up.

Order your brand-new cost saving TARTAN Frames now. Contact your Truscon dealer or your Truscon office in your area. The TARTANS are in stock. Mail coupon for more details.



REPUBLIC STEEL

REPUBLIC HAS THE FEEL FOR MODERN STEEL

FOR BUILDERS . . .



CUT THE COST OF HOUSEPOWER: Republic E.M.T. in the next larger size costs no more installed than threaded conduit. Permits extra capacity conductors in original installation, gives grounded protection.



CUT COST OF KITCHENS with tenant-proof Republic Steel Kitchens. Durable baked enamel over Bonderized steel never needs repainting, cabinets never warp, swell, or sag.

REPUBLIC STEEL CORPORATION
DEPT. HO-2384
1441 REPUBLIC BUILDING • CLEVELAND 1, OHIO

Please send complete information on the new Truscon TARTAN Door Frame (Series 610)

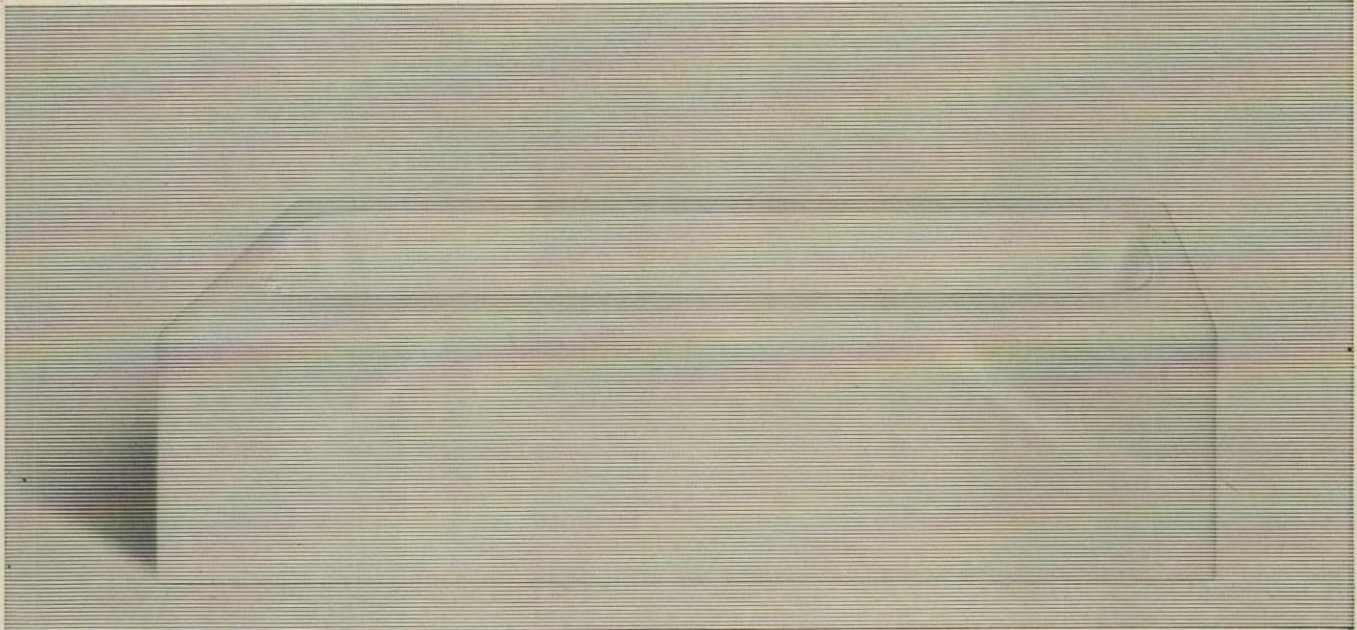
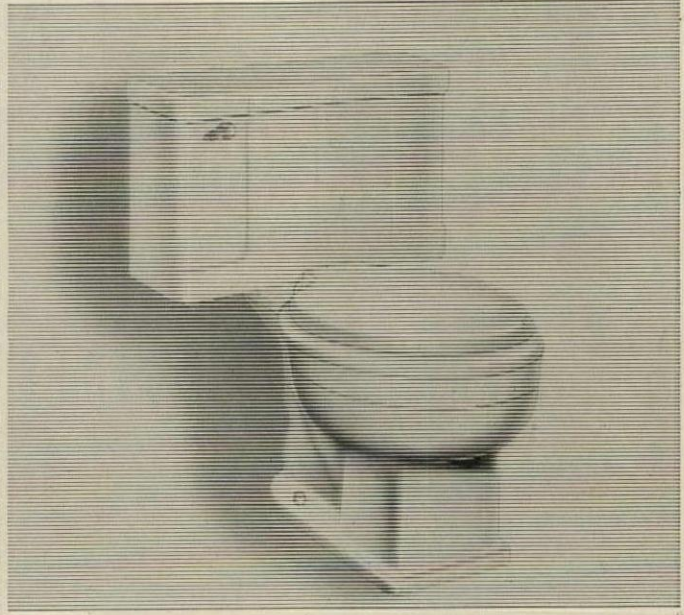
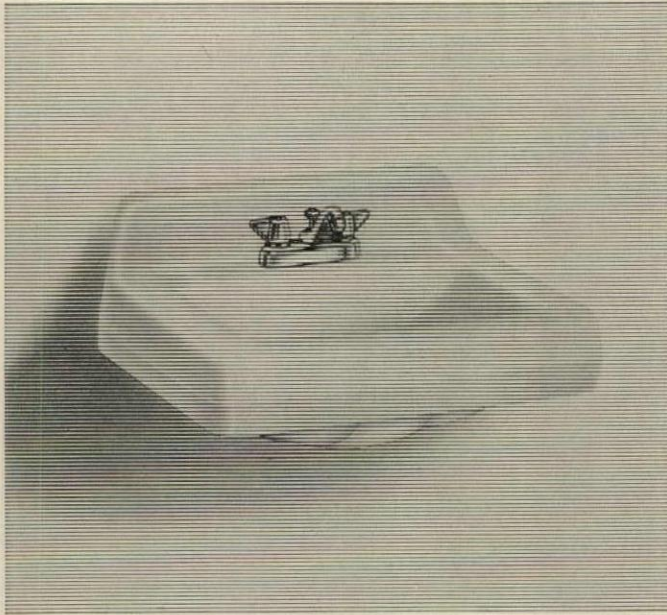
- Republic Steel Kitchens
 Republic Steel House-Long "K" Gutters
 Republic ELECTRUNITE® Electrical Metallic Tubing

Name _____ Title _____

Firm _____

Address _____

City _____ Zone _____ State _____



The Crane Economy Group: Priced for the development builder's budget... styled to please fastidious buyers.

What can you get from low-cost bathroom fixtures besides low cost? Styling? Color? Long-lasting quality? Customer appeal?

Yes — with the Crane Economy Group you get them all. And you get the advantage of the famous Crane name — a name homeowners have favored for over 100 years.

The Fermont Lavatory is made of porcelain enameled lifetime cast iron. Comes in

seven colors and white. Smart rectangular basin so popular today. Exclusive Crane controls.

The Fairfax Recessed Bath is five feet long with either left or right hand outlets. Gleaming porcelain enamel finish on a cast-iron base. Equipped with Crane bath and shower fittings. Comes with deviator spout, ball joint shower head, and pop-up drain. Seven pastel colors and white.

The Oxford Closet is smooth, lustrous vitreous china. Whirlpool flushing action. Solid, unbreakable molded Crane plastic seat and cover. Choice of seven decorator colors and white.

For more details on Crane quality plumbing, heating and air conditioning equipment for builders, see your contractor or architect. Or write Crane Co., Box 780, Johnstown, Pennsylvania.

AT THE
HEART
OF HOME AND
INDUSTRY

CRANE

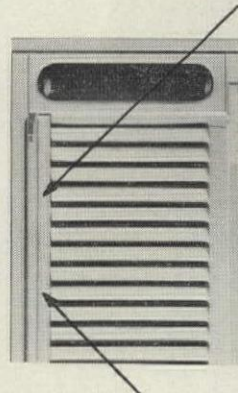
VALVES AND PIPING
ELECTRONIC CONTROLS
PLUMBING
HEATING • AIR CONDITIONING



Shhh!

Float-Away Metal Closet Doors Operate Soundlessly!

Yank open a Float-Away closet door! There's no clang or bang...whisper-quietness...just one more of the many reasons for Float-Away's prestige leadership in the closet door field. Other Float-Away quality features:



- Side trim furnished—no other molding needed . . . **Float-Away exclusive.**
- Neutral, velvet-finish prime coating —may be painted or left for later redecoration . . . **Float-Away exclusive.**
- Doors of rigid, reinforced 24-gauge steel . . . zinc plated, Bonderized **Float-Away exclusive.**
- Completely pre-assembled with all hardware—unique adjustment system providing unlimited horizontal and vertical adjustment **Float-Away exclusive.**
- Beautiful oak threshold bottom track and trim designed wood top track **Float-Away exclusive.**

Wall-to-Wall, Floor-to-Ceiling Float-Away doors save you substantial money per closet by eliminating need for materials and labor. The Float-Away system provides greater convenience, storage space, and beauty. Don't settle for less. Write, wire or phone today.

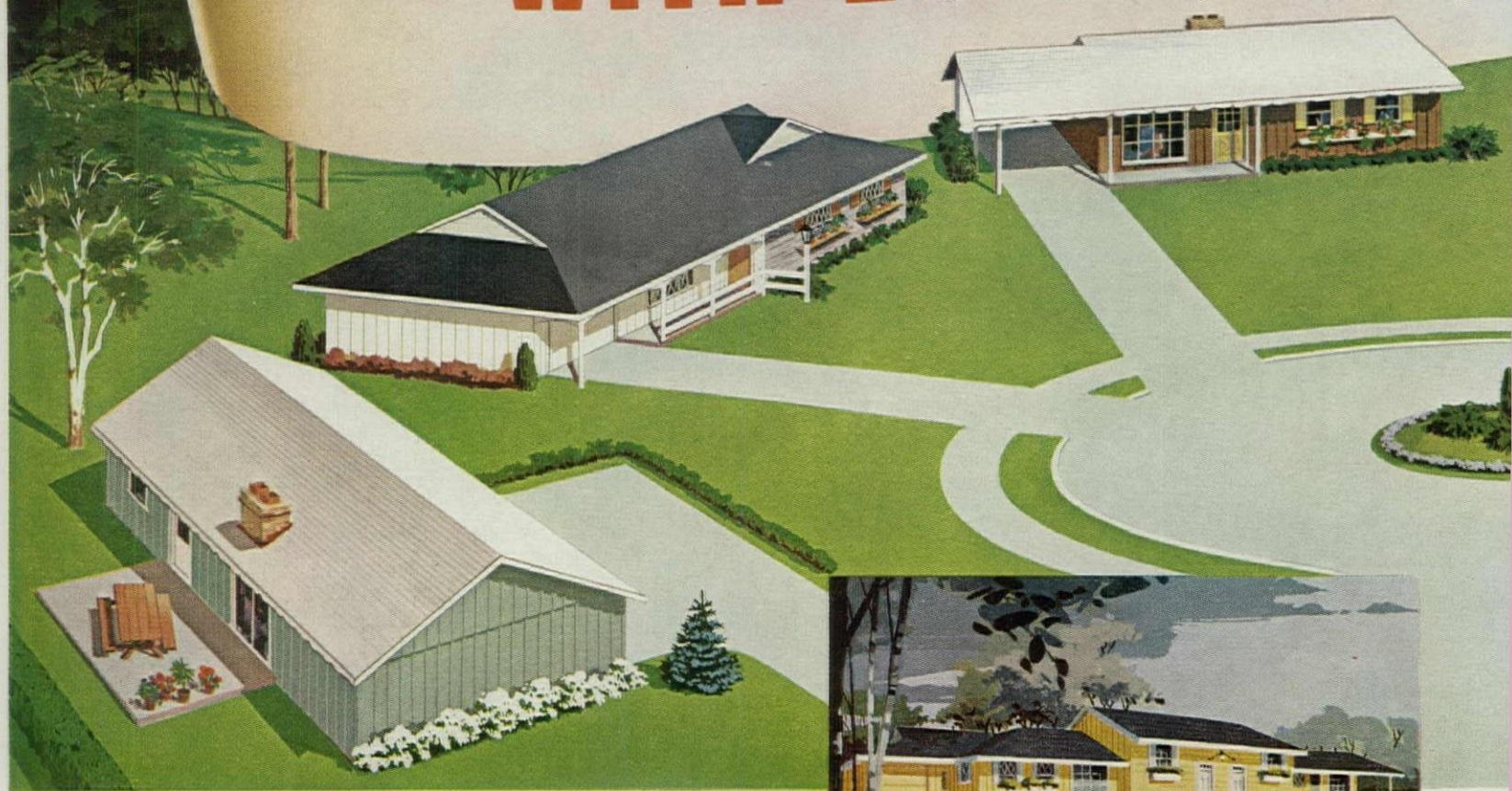
FLOAT-AWAY DOOR COMPANY

1173 Zonolite Road, N. E.
Dept. H-861, Atlanta 6, Georgia



Qualified firms selling to builders and contractors are invited to inquire.

NATIONAL HOMES WITH EVERYONE



"Senior Citizen" Homes



New! Apartment-Style National Homes

ADVANCE SHOWINGS SWEEP MARKET AFTER MARKET—In subdivisions across the country, model introductions of the 1962 National Homes and Lafayette Series Homes are piling new sales records on top of heavy spring sales.

BONUS SPACE—BONUS VALUE—The greatest space-per-dollar values ever offered touched off this sales landslide . . . with "optional-use" areas in these 1962 Bonus Space Homes driving home sale after sale to growing families.

SENIOR CITIZENS SOLD—Adding a solid smash to soaring sales records has been the overwhelming acceptance of our new Senior Citizens Homes . . . designed specially for the comfort and convenience of retiring couples. Now you can offer them retirement in their own home towns, among friends and families.

\$500 CONSTRUCTION SAVINGS—Newest National technical advances have given builders new profits, by trimming another \$500 from construction costs:

- 1. New Precision Floor System**—Cuts installation time to 4½ man-hours, saves a full day! **SAVINGS: \$167.50!**
- 2. New Aluminum Perforated Soffit**—Slashes installation time 6-10 man-hours, gives superior ventilation and rain/snow entry barrier. **SAVINGS: up to \$50!**
- 3. New Dual-Duct Heating System**—The greatest technical advance in home heating systems since World War II. **SAVINGS: \$250!**
- 4. Single Combination Rear Door**—House door and screen/storm door in one. Ends second-door installation cost, cuts insurance claims!

LET NH RESEARCH YOUR DEVELOPMENT—National can pick winners for you . . . with National's field-tested market research . . . the proven sales-maker of all time. You'll build models tailored to meet your local buying trends . . . far ahead of competition. Write now for full details, to the nearest National Manufacturer listed at the right.

ARE DESIGNED IN MIND!



Nationally advertised in LIFE

"Bonus Space" Homes

NATIONAL HOMES CORPORATION



divisions:

LAFAYETTE, INDIANA

HORSEHEADS, NEW YORK

TYLER, TEXAS

subsidiaries:

NATIONAL HOMES CORP. of California

Newark, California

AMERICAN HOUSES, INC.

Allentown, Pa.; Lumberton, N.C.

LESTER BROTHERS, INC.

Martinsville, Virginia

KNOX HOMES CORPORATION

Thomson, Georgia

FAIRHILL HOMES

Memphis, Tennessee

W. G. BEST HOMES CORPORATION

Effingham, Illinois

THYER MANUFACTURING CORPORATION

Toledo, Ohio; Collins, Miss.

NATIONAL HOMES CORPORATION • LAFAYETTE, IND.



Vina-Lux® FLOORS

add more value to your homes...
more profit to your business

Homebuilding profits begin with efficient construction techniques...
that's why easy-to-install Vina-Lux vinyl asbestos tile is a wise investment in
good looks and easy care for the buyer... in lower flooring and
construction costs for the builder.

Versatile Vina-Lux saves time and labor, installs quickly and easily on or below grade
over concrete slab — today's lowest-cost construction method — or over wood or plywood sub-floors.

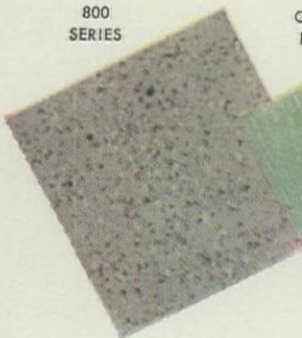
Vina-Lux national advertising helps pre-sell your customers...
why not tie in? Model home merchandising kit, samples and "Vina-Lux Floor Styling
Handbook" are yours without charge. Write today!

AZROCK FLOOR PRODUCTS DIVISION
Specialists in the manufacture of vinyl asbestos tile and asphalt tile flooring
UVALDE ROCK ASPHALT COMPANY • 554 FROST BANK BLDG. • SAN ANTONIO, TEXAS



Over 50 colors and a style for every builder requirement

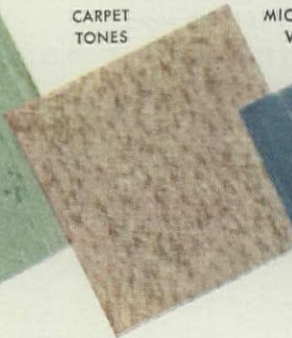
800
SERIES



GRAINED
PASTELS



CARPET
TONES



MICROMATIC
VEINING



CORK
HUES



WOOD
TONES



Roundup:

Administration bucks the row over S&L taxes to Congress

The in-fighting inside the Administration over whether to cut the tax-free reserves of S&Ls and savings banks, and so collect more income taxes from them, has ended in a virtual stalemate. HHFA and the Home Loan Bank Board fought to preserve the status quo on the ground that higher income taxes would mean less mortgage money. The White House sidestepped a decision. The upshot was that the Treasury sent Congress a staff study suggesting two ways to collect more income tax from mutual thrift institutions. But the lack of a clearcut Administration policy seems to mean that the issue will be shelved for this year, at least.

One Treasury scheme would tax all transfers to reserves above 3% of *uninsured* mortgage loans. This would yield an estimated \$500 million in taxes, but would probably put a major crimp in S&L and mutual savings bank FHA and VA lending. Another plan would impose full taxes on the imputed earnings of reserves, and yield \$125 to \$150 million. S&Ls and mutual banks are fighting both plans.

The Joint Committee on Internal Revenue wants its staff to do a complete study between sessions of the Administration's plan to end the tax shelter enjoyed by real estate owners. Realty owners now may use accelerated depreciation to offset income, thus escape most income taxes when a building is young. When depreciation catches income (normally in seven to ten years), buildings are usually sold and the owner pays only 25% capital gains tax on the excess over the depreciated value. President Kennedy wants to collect income tax on the difference between depreciated value and original value, and treat the rest as capital gains. Opposing realty groups admit they will probably have to compromise. Most likely settlement: only straight-line depreciation (usually 2½% of value for 40 years) will be permitted if the owner wants to pay at capital gains rates when he sells. An owner could still use fast depreciation but if he sold in three or four years, he would pay ordinary income tax on the difference between accelerated and straight-line values. Or he could recalculate his depreciation completely.

NEWS INDEX

Housing policy	43
<i>Housing Act of 1961: an analysis</i> ..	44
<i>New FHA down payments, monthly payments</i>	45
<i>How useful is 35-year term?</i>	45
<i>FHA's new modernization loan program</i>	46
<i>New ways to use federal aids</i> ..	47
<i>The controversial subsidized 221 program</i>	49
<i>Public housing gets major boost</i> ..	49
<i>What the press thinks of the new law</i>	53
Mortgage money	54
<i>FHA, VA discounts on new plateau</i>	54
<i>S&Ls warned not to boost dividends</i>	54
<i>New study urges free FHA, VA rates</i>	54
State legislatures	57
<i>Reports on new laws in 11 states</i> ..	57
People	65
<i>Four top aides named at URA</i> ..	65
Housing market	69
<i>Government predicts rise in starts</i> ..	69
Canada	69
<i>Hard sell brings gain in starts</i> ..	69
Stock market	73
<i>Realty trusts get into the act</i>	73
Public housing	77
<i>Builder sells row units to authority</i> ..	77
<i>One-family units kill 221 market</i> ..	77
<i>Terror in New York City project</i> ..	77
Land	78
<i>Wenzlick's recipe to cut land prices</i> ..	78
Statistics & indexes	
<i>Mortgage quotations</i>	55
<i>FHA, VA applications</i>	69
<i>Housing construction costs</i>	69
<i>Housing stock quotations</i>	73

What can builders learn from the boom in shell houses?

Economist Robinson Newcomb contends builders ought to take the growing shell house industry more seriously. Shell housing, trailers, apartments and government-built (ie public) housing now constitute about 40% of the true US housing market, he argues. So builders of homes for sale have only 60%, instead of the 80% they had a few years back.

"The housing market is sluggish (*see p 69*) because builders are letting so much of it slip by," Newcomb told a conference on shell houses at the Natl Housing Center last month. "A good part of the shell houses (he figures they are 15% of the market now) are going up because builders have failed to meet the problem of housing for Negroes. For some reason, neither the government nor home builders seem interested. . ." Newcomb concedes some sweat-equity housing commands steep interest rates—up to 20%. But he argues: "It's better for people to have a house at 20% interest than not to have a house at all."

WASHINGTON INSIDE: Settlement looms in the controversial Long Beach Federal S&L case. Insiders hear a deal is nearing which will 1) close the \$130 million S&L, and 2) reestablish a twelfth Home Loan Regional Bank in Los Angeles. The Home Loan Bank Board took over Long Beach Federal more than a year ago (*NEWS*, June '60 *et seq*), contending its operation was "unsafe and unsound." A Congressional inquiry and lawsuits followed. The settlement brewing involves the Federal S&L Insurance Corp taking over a big part of Long Beach assets to protect itself on \$47 million in advances. There's talk the S&L might wind up as a state-chartered institution (it had sought to convert three weeks before its takeover). Pressure for the twelfth HLB in Los Angeles comes from Rep Chet Holifield (D, Calif.), who says he'll introduce a bill to set up the new bank if HIBB doesn't do so. Before 1946 HLBB had a regional bank in Los Angeles, another in Portland, Ore. But a dispute over who should head the LA office resulted in consolidating 19 Western states in one regional bank in San Francisco. S&L men figure return to the two banks would be unwise because it would 1) cut California in half, and 2) possibly result in one bank being without enough income to justify its existence.

HHFA intends to get tougher with cities that fail to carry out promises to fight slums via workable programs for urban renewal. Realtors have been demanding such action for a long time.

Budget Bureau has cooked up a scheme to shift the property management sections of FHA and VA to the General Services Administration. GSA, as the government's housekeeping agency, normally takes over surplus property, old buildings from all other federal departments. It's too soon to forecast whether this idea will get anywhere. For one thing, the House veterans' committee is against it. Committeemen argue that the two housing agencies ought to manage their own defaulted housing so they won't let more be built in cities where, for instance, there are vacant rental units already.

The Natl Housing Conference, the public housing lobbying group, has asked the Public Housing Administration to give local authorities permission to buy—with federal subsidy funds—a proposed daily newsletter devoted to legislative and technical developments. Lawyers fear this might put the government in the position of using tax funds to support a group whose No. 1 aim is lobbying, but at mid-month no decision had been made.

NEWS continued on p 44

Housing Act of 1961: costly, controversial

Democrats: 'A giant step toward better cities, improved housing.' Republicans: 'The worst features of both bills'.

By Gurney Breckenfeld

The Housing Act of 1961 is the most controversially costly and crazily complex piece of law housing has ever had. It is loaded with something for everybody—cities, railroads, farmers, poor people, middle-income families, builders, S&Ls, prefabbers, public housers, urban renewal promoters, even trailer park operators.

The new law—and the administrative regulations that are following—is stuffed with new programs intended to stimulate housing (unemployment is heavy among construction workers). But don't expect it to produce a quick upturn in housing. For one thing, most of the new programs are so complicated it will be months before the industry—and officials—know how to use them. For another, the Housing Act has not repealed the laws of supply and demand. And the evidence is strong that housing demand isn't what it was (see p 69).

Parts of the new omnibus legislation will be put to immediate use. Most important is the sizable cut in FHA down payments in middle-bracket prices from \$14,000 to \$27,000 (see next page).

But even this long overdue correction of discrimination against middle-bracket home buyers (a result of down payments and mortgage ceilings on a barely amended formula from the 1930s while construction costs have trebled)—even this long overdue correction is offset by the Kennedy Administration's effort to play King Canute with the money tides. The second cut in FHA rates, from 5½ to 5¼% in May, has not produced any corresponding drop in actual mortgage yields. All that has happened, HOUSE & HOME's survey shows, is that discounts have gone up two points to compensate. But because of the timing of the rate cut many builders are stuck with advertised prices and find themselves unable to bury the 2% extra cost in the retail price of their houses. So the incentives to use FHA are not all they would appear on the surface. The rate cut "merely impairs the usefulness of the FHA program and has hurt rather than aided housing," charges Present Otto L. Preisler of Home Federal S&L, Chicago.



SIGNING THE BILL into law, President Kennedy asserted that it "provides an opportunity for a giant step toward better cities and improved housing." Onlookers included (l to r) Mayor Richardson Dilworth of Philadelphia, HHFA administrator Robert C. Weaver, Deputy HHFA administrator Jack T. Conway, PHA Commissioner Marie McGuire, Vice President Lyndon Johnson, Rep Leonor Kretzer Sullivan (D, Mo.) and Chairman Brent Spence (D, Ky.) of the House banking committee. Conspicuous by their absence were Sen John J. Sparkman (D, Ala.) and Rep Albert M. Rains (D, Ala.), chairmen of the housing subcommittees. "Having this bill signed without them here is somewhat like having Hamlet played without the prince," observed Kennedy.

Moreover, Congress' refusal to let FHA spend enough of its own income to operate efficiently—a refusal as stubborn as it is idiotic—now means the agency is thoroughly fouled up on its processing of applications for mortgage insurance (eight weeks behind in San Francisco, for instance instead of the normal one or two).

Mortgage men are warning FHA Commissioner Neal Hardy that FHA operations have now grown so sloppy that the FHA 203 sales and 207 rental programs, which have been the backbone of the agency, will evaporate unless FHA acts quickly. Items:

- Home sellers have to wait 4 to 6 weeks to learn if FHA will insure a loan on an existing home. So S&Ls get more and more of the business.
- Builders have to wait 4 to 6 months to learn if FHA will insure loans on a new subdivision or rental project.
- Investors must wait 8 to 10 months for settlement of claims and issuance of debentures on defaulted loans. "Disgracefully slow," cries one mortgage expert.

Some significant points about the new law:

The new 35 year, lower down terms cover not only Sec 203, but also Secs 220, 221, 213, and 809. So for the first time FHA terms are equal for almost all of its important programs. But this also raises doubt how much the new Sec 221 expansion to 35 year, 3% down loans—the one all the shouting was about—will be used. The new 221 sales program has two significant advantages for builders:

1. Homes may be built under the more relaxed property and neighborhood standards of Sec 203i instead of FHA's normal minimum property standards under Sec 203b. This is no innovation but many builders are unaware of it. The easier standards let builders cut costs by shaving room dimensions, installing less heat, insulation and storage space and omitting refinements like coat closets, gutters and down-spouts, and sometimes even finish flooring.
2. Sec 221 houses need not meet FHA's stern underwriting test of economic soundness.

Before the new law, Sec 221 was intended to provide lowpriced housing for \$200 down to displaced families. Now, Sec 221 is open to everybody for an experimental two-year trial (ending July 31, 1963). It covers only one-family homes. But the red tape is eased. HHFA no longer sets a quota for 221 units for each community. Localities no longer need federal approval of a workable program as a prerequisite for 221 mortgages. Communities no longer need to make a formal request that the program be made available. A curious compromise in the final version of the law provides that a 35-year maximum mortgage may be expanded to 40 year maturity if FHA determines the borrower can't pay the higher monthly payments of the 35-year loan. But FHA officials warn: "It will have to be a very unusual case to get a 40-year mortgage." The difference in monthly payments is slight, anyway.

But the same low down payments and 35-year term are now available under Sec 203. So many experts figure only a few builders will bother.

In the beginning, the housing bill steamed through Congressional hearings without much debate. But on the floor of both the Senate (NEWS, July) and House, controversy erupted. In the normally friendly atmosphere of the Senate, Kennedy's housing plans narrowly escaped serious emasculation. In the House, canny Rep Albert M. Rains (D, Ala.) larded the bill with sugar (see p 48) which enticed congressmen from the South and other rural areas, and then, with near-perfect timing, gave way a few inches on the most hotly contended item by himself offering to substitute 35-year for 40-year loans and adopt the Senate's requirement of 3% down. The bill went through, 235-178. Senate-House conferees—heavily stacked with liberal-spenders—spliced the two versions together so generously that Republican conferees refused to sign the conference report. They charged the final product contained "most of the worst in each bill." This is what President Kennedy signed into law June 30.

Industry reaction follows expectable lines. Home builders call the new law "a major milestone" likely to boost starts. Says President Robert Tharpe of the Mortgage Bankers Assn: "The inflationary potentials... are enormous." In a way, both are right. The 1961 Housing Act is a Big Brother law. Its ultimate effects will likely be a long time in showing.

For a detailed analysis of the law's stimuli to housing, and its controversial new subsidy programs, see the next six pages.

NEW FHA DOWN PAYMENTS AND MONTHLY PAYMENTS FOR NEW AND OLD HOMES

FHA VALUE	NEW HOME MORTGAGES APPROVED PRIOR TO BEGINNING OF CONSTRUCTION								EXISTING CONSTRUCTION MORE THAN ONE YEAR OLD							
	HOUSING ACT OF 1961 LIMITS AND REQUIREMENTS 2/				PREVIOUS LIMITS AND REQUIREMENTS 3/				HOUSING ACT OF 1961 LIMITS AND REQUIREMENTS 2/				PREVIOUS LIMITS AND REQUIREMENTS 3/			
	MAXIMUM MORTGAGE AMOUNT 5/	LOAN-VALUE RATIO	MONTHLY PAYMENT 7/	MINIMUM DOWN PAYMENT	MAXIMUM MORTGAGE AMOUNT 5/	LOAN-VALUE RATIO	MONTHLY PAYMENT 8/	MINIMUM DOWN PAYMENT	MAXIMUM MORTGAGE AMOUNT 5/	LOAN-VALUE RATIO	MONTHLY PAYMENT 8/	MINIMUM DOWN PAYMENT	MAXIMUM MORTGAGE AMOUNT 5/	LOAN-VALUE RATIO	MONTHLY PAYMENT 8/	MINIMUM DOWN PAYMENT
\$6,000	\$5,800	96.7%	\$32.63	\$200	\$5,800	96.7%	\$34.47	\$200	\$5,800	96.7%	\$34.47	\$200	\$5,800	96.7%	\$34.47	\$200
7,000	6,750	96.4	37.97	250	6,750	96.4	40.12	250	6,750	96.4	40.12	250	6,750	96.4	40.12	250
8,000	7,750	96.9	43.59	250	7,750	96.9	46.07	250	7,750	96.9	46.07	250	7,750	96.9	46.07	250
9,000	8,700	96.7	48.94	300	8,700	96.7	51.71	300	8,700	96.7	51.71	300	8,700	96.7	51.71	300
10,000	9,700	97.0	54.56	300	9,700	97.0	57.66	300	9,700	97.0	57.66	300	9,700	97.0	57.66	300
11,000	10,650	96.8	59.91	350	10,650	96.8	63.30	350	10,650	96.8	63.30	350	10,650	96.8	63.30	350
12,000	11,600	96.7	65.25	400	11,600	96.7	68.95	400	11,600	96.7	68.95	400	11,600	96.7	68.95	400
13,000	12,600	96.9	70.88	400	12,600	96.9	74.90	400	12,600	96.9	74.90	400	12,600	96.9	74.90	400
14,000	13,550	96.8	76.22	450	13,500	96.4	80.25	500	13,550	96.8	80.54	450	13,500	96.4	80.25	500
15,000	14,550	97.0	81.84	450	14,400	96.0	85.59	600	14,550	97.0	86.48	450	14,400	96.0	85.59	600
16,000	15,400	96.3	86.62	600	15,300	95.6	90.94	700	15,400	96.3	91.54	600	15,300	95.6	90.94	700
17,000	16,300	95.9	91.68	700	16,200	95.3	96.30	800	16,300	95.9	96.89	700	16,200	95.3	96.30	800
18,000	17,200	95.6	96.74	800	17,100	95.0	101.64	900	17,200	95.6	102.24	800	17,100	95.0	101.64	900
19,000	18,100	95.3	101.81	900	17,800	93.7	105.80	1,200	18,100	95.3	107.58	900	17,800	93.7	105.80	1,200
20,000	19,000	95.0	106.87	1,000	18,500	92.5	109.97	1,500	19,000	95.0	112.94	1,000	18,500	92.5	109.97	1,500
21,000	19,800	94.3	111.37	1,200	19,200	91.4	114.13	1,800	19,800	94.3	117.69	1,200	19,200	91.4	114.13	1,800
22,000	20,500	93.2	115.31	1,500	19,900	90.5	118.29	2,100	20,500	93.2	121.86	1,500	19,900	90.5	118.29	2,100
23,000	21,300	92.6	119.80	1,700	20,600	89.6	122.45	2,400	21,300	92.6	126.61	1,700	20,600	89.6	122.45	2,400
24,000	22,000	91.7	123.74	2,000	21,300	88.8	126.61	2,700	22,000	91.7	130.77	2,000	21,300	88.8	126.61	2,700
25,000	22,800	91.2	128.25	2,200	22,000	88.0	130.77	3,000	22,800	91.2	135.52	2,200	22,000	88.0	130.77	3,000
26,000	23,500	90.4	132.19	2,500	22,500	86.5	133.75	3,500	23,500	90.4	139.69	2,500	22,500	86.5	133.75	3,500
27,000	24,300	90.0	136.68	2,700	22,500	83.3	133.75	4,500	24,300	90.0	144.44	2,700	22,500	83.3	133.75	4,500
28,000	25,000	89.3	140.62	3,000	22,500	80.4	133.75	5,500	25,000	89.3	148.60	3,000	22,500	80.4	133.75	5,500
29,000	25,000	86.2	140.62	4,000	22,500	77.6	133.75	6,500	25,000	86.2	148.60	4,000	22,500	77.6	133.75	6,500
30,000	25,000	83.3	140.62	5,000	22,500	75.0	133.75	7,500	25,000	83.3	148.60	5,000	22,500	75.0	133.75	7,500

1. Limits and requirements are shown for home mortgages insured under Sec 203b of the National Housing Act, as amended.

2. Mortgage amount limited to 97% of first \$15,000 of value plus 90% of next \$5,000 plus 75% of value in excess of \$20,000 to maximum mortgage of \$25,000.

3. Mortgage amount limited to 97% of first \$13,500 of value plus 90% of next \$4,500 plus 70% of value in excess of \$18,000 to maximum mortgage of \$22,500.

4. Mortgage amount limited to 90% of first \$20,000 of value plus 75% of value in excess of \$20,000 to maximum mortgage of \$25,000.

5. Mortgage amount limited to 90% of first \$18,000 of value plus 70% of value in excess of \$18,000 to maximum mortgage of \$22,500.

6. After adjustment to next lower multiple of \$50 for mortgage amounts up to \$15,000 and \$100 for mortgage amounts in excess of \$15,000.

7. For the maximum term of 35 years. Monthly payment includes principal, interest at 5 1/4% per annum, and 1/12th the first annual mortgage insurance premium at 3/8% per annum.

8. For the maximum term of 30 years. Monthly payment includes principal, interest at 5 3/4% per annum, and 1/12th the first annual mortgage insurance premium at 3/8% per annum.

Stimulus No. 1: another cut in FHA down payments

A glance at the table above will show you that the big new cut in FHA down payments affects primarily the price bracket from \$14,000 to \$27,000—the bracket which benefited least from reductions in down payments legislated during the last decade. This should be a help to sales of both new and old homes (which qualify for the same down payments).

As the table shows, new homes under FHA's main program, Sec 203b, now qualify for a 35-year mortgage. This has the effect of reducing also the monthly payments compared to payments under the old 30-year maximum loan. The same terms now also apply to Secs 220, and 809.

For instance, the buyer of a \$15,000 house

(which builders say is the typical new-house price today) would put 3% down and pay \$81.84 a month instead of paying 4% down and paying \$85.59 a month. By the customary credit standards, this would mean a buyer could qualify to buy the house for \$20 a month less income than he needed before. The buyer of a \$20,000 new house must now pay \$1,000 down and \$106.87 a month compared to \$1,500 down and \$109.97 a month before the new law. For houses priced from \$27,000 up, monthly payments under the new law are *bigger than they were under the old* because the down payment is so much smaller. But from this level up, 90% conventional S&L mortgages—if you can get them—give most

buyers a better deal than FHA can, anyway.

For existing houses (more than one year old), the new law leaves the maximum term where it was: 30 years. But down payments, as noted above, drop to the same low level as for new homes. This has the weird effect of requiring bigger monthly payments than before—if you use the minimum down payment—for all homes priced from \$14,000 up. The difference isn't great. For a \$15,000 used house, for example, the new monthly payment would be \$86.48 compared to \$85.59 before. The spread gets bigger as the price goes up. For a \$25,000 FHA-value used house, the monthly payment now would be \$135.52 compared to \$130.77 before.

Questionable stimulus: 3% down, 35 year FHA loans

Builders are banking on stretched-out mortgage terms to qualify more buyers and so sell more homes. But many a realty analyst questions how effective this will be in today's market. Predicts President Richard Nelson of Real Estate Research Corp, Chicago: "It won't work this time. There is no longer a backlog of people who are ineligible because of financing terms."

Another question is whether 35-year terms are a good deal for house buyers. Almost all the arguments against 40-year, no-down loans apply nearly equally to 35-year, 3% down loans.

1. Take the question of the house deteriorating faster than it is paid for. A man buying a \$10,000 house with a 40-year, no-down loan would have an equity of only \$312 after paying on the mortgage for 20 years. That is 1%

less than the real estate commission to sell it. With a \$12,000 house and a 35-year, 3% down mortgage, the buyer would have a \$406 equity after 20 years—if you figure the depreciation at 2% per year. That would just about pay the cost of selling the house—with a conventional mortgage. With FHA loans commanding a discount of 4%, as they now do, the owner would not get his money back if the house was sold FHA.

2. Consider how much longer loans boost the total cost of a house to a buyer. With a 40-year, no-down loan, a \$15,000 house could cost a total of \$37,137. A \$10,000 house would cost \$24,768. With a 35-year, 3% down loan, a \$15,000 house would cost \$34,373. A \$12,000 house would cost \$27,405. A \$10,000 house would cost a mere \$22,915.

Is this a good deal for buyers? Lenders

chorus: "No." FHA Commissioner Hardy concedes: "I have mixed feelings. But it's the only alternative I have seen for people at certain income levels to acquire and live in decent housing rather than in more expensive substandard housing."

In the Senate, the attack which killed the no-down payment provision focused on these low equity, high cost features. But after Rep Albert M. Rains (D, Ala.), House manager for the housing bill, adroitly volunteered to shave the maximum term from 40 to 35 years, the bumbling Republican opposition muffed the point that this concession has much more form than substance (see table, p 46).

Private lenders dislike 35-year loans so much that you can expect only a few banks and S&L's to start making them soon.

continued on p 46

Best guess in the lending fraternity is that a 35-year FHA loan will cost about 1/2 point more discount than a 30-year loan does now. But don't be surprised if lenders insist on 1 point more discount at the outset. The big market for 35-year loans is clearly going to be Fanny May. Up to mid-July, Fanny May had not announced its prices for 35-year FHA's, but a good guess is that it will charge 1/2 point more.

What 35-year, 3% down loans on new homes may do to sales of existing homes worries many an analyst. The trouble is that mortgage money on FHA 30-year, minimum down terms for used houses is hard to get in many cities. More often, much bigger down payments than FHA's are required by conventional lenders. The net effect could well be to depress the prices of used homes (they have already begun to slip in some cities).

35 YEAR HOME LOANS

It takes 16 years before a \$12,000 house is worth more than the buyer's equity in it.

Year-end	Depreciated value of house ¹		Outstanding principal balance (to nearest dollar)		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	2 1/2% depreciation per annum	2% depreciation per annum	25-year maturity	35-year maturity																							
1	\$11,746	\$11,797	\$11,417	\$11,509	7,428	8,346	4,868	8,164																			
2	11,492	11,594	11,172	11,404	7,174	8,143	4,271	7,858																			
3	11,238	11,391	10,914	11,271	6,920	7,940	3,642	7,534																			
4	10,984	11,188	10,642	11,132	6,666	7,737	2,978	7,193																			
5	10,730	10,985	10,355	10,985	6,412	7,534	2,279	6,834																			
6	10,476	10,782	10,052	10,829	6,158	7,331	1,542	6,455																			
7	10,222	10,579	9,734	10,666	5,904	7,128	766	6,057																			
8	9,968	10,376	9,398	10,492	5,650	6,925	0	5,636																			
9	9,714	10,173	9,044	10,310	5,396	6,722		5,192																			
10	9,460	9,970	8,671	10,119	5,142	6,519		4,726																			
11	9,206	9,767	8,278	9,918	4,888	6,316		4,234																			
12	8,952	9,564	7,864	9,704	4,634	6,113		3,715																			
13	8,698	9,361	7,428	9,481	4,380	5,910		3,169																			
14	8,444	9,158	6,968	9,244	4,126	5,707		2,593																			
15	8,190	8,955	6,484	8,995	3,872	5,504		1,986																			
16	7,936	8,752	5,973	8,733	3,618	5,301		1,348																			
17	7,682	8,549	5,435	8,456	3,364	5,098		675																			
					3,110	4,895		245																			
					2,856	4,692																					
					2,602	4,489																					
					2,348	4,286																					
					2,094	4,083																					
					1,850	3,880																					

¹ The house involved has an original value and price of \$12,000, of which the lot is \$1,850. The original principal amount of

the mortgage is 97%, \$11,650, at 5 1/4% interest (the respective maxima under Sec 203).

Source: Miles L. Colean

Stimulus No. 2: a new way to finance big fixup jobs under FHA

FHA's new program of 20-year, 6% home improvement and rehabilitation loans up to \$10,000 breaks such new ground that it will probably catch on slowly. It will take months to train FHA's 75 field offices (some of the rules are going to be different in each district). And as an urban renewal tool, the scheme has a major bug nobody seems to have thought of while the housing bill was zipping through Congress.

Even so, Housing Administrator Weaver calls the new fixup plan "more sure fire than anything else" in the new law for today's "crazy economy" in which "people have money but are hesitant about major commitments to spend it."

Biggest innovation is that FHA, for the first time in its 27 year life, will accept second mortgages. In fact, it will not insist on a mortgage lien at all in every case. The law requires security "satisfactory to the commissioner." What kind of security will vary from state to state to provide the best possible coordination with state laws. Local FHA directors will decide what kinds of loans to permit under the new program. "In Texas," says Commissioner Hardy by way of illustration, "a mechanics lien seems to be preferable to a second trust deed because of some foolishness about the Homestead law." Elsewhere, he expects FHA to take on many second mortgages under the fixup program. In some states, FHA may well accept non-real estate collateral, like pledged stocks or bonds, for a loan. "You might require a pledge of \$1,000 extra collateral on a \$5,000 second mortgage," Hardy theorizes. This means the new home fixup loan program will be as complicated as the Balkan pattern of FHA acceptance of appliances and equipment in package mortgages. "FHA will attempt to get security of some kind in all cases," says Commissioner Hardy. "For large loans, there will have to be some collateral."

Other principal provisions of the new plan:

Eligible properties: Only one- to four-family houses at least ten years old, except that loans may be made on younger houses if they are used primarily for major structural improvements, to correct defects which were not known when the house was completed or which were caused by fire, flood, windstorm or other casualty.

Eligible improvements: New loans may be used only for something that will, in the words of FHA's letter July 7 to approved mortgagees announcing its regulations, "result in the improvement or rehabilitating of the basic livability or utility of an existing struc-

ture, or in the conversion or expansion of a structure so as to change the number of family dwelling units." Explains Hardy: "Our aim is to discourage dealer-originated applications for equipment items. We're not opposed to equipment under the new program but the clear Congressional intent is the upgrading of structures. Where equipment, like a new kitchen or a bath room, is part of this, of course it will be approved." But these rules are obviously designed to prevent shell house buyers from using the new fixup program to complete their unfinished homes.

Eligible borrowers: Owners or lessees who have either 1) a 99-year or longer renewable lease or 2) a lease with at least 50 years to run from the date of the loan.

Discounts are prohibited and FHA will require the usual certification that no borrower is paying a discount on his loan. Neither may lenders collect a continuing service charge as they used to be able to do on mortgage loans under \$9,000 under most FHA programs.

The new fixup program is divided into two parts:

For urban renewal areas: A new Sec 220(h) covers one- to eleven family properties. Minimum loan: \$1,000—but local FHA directors may approve smaller loans if that is all a house needs to be brought up to local rehabilitation standards. The loan, when added to any outstanding debt on the house, must not total more than the existing Sec 220(d)(3) limits. These are 97% of replacement cost of the first \$15,000, 90% between \$15,000 and \$20,000 and 75% of cost in excess of \$20,000 up to a maximum mortgage of \$25,000 for a one-family house and \$27,500 for a two-family house.

FHA will pay off defaults in cash. Loans are eligible for Fanny May special assistance. And FHA will waive economic soundness in processing applications.

Outside urban renewal areas: A new Sec 203(k) covers only one- to four-family units. Minimum loan: \$2,500. When added to other outstanding debt on the house, the loan may not exceed the permissible limits of regular Sec 203 mortgages. Payoff on defaults will be in ten-year debentures. Loans must be economically sound. And Fanny May has decided it will not buy 203(k) loans under its special assistance program even though the Congressional conference report on the housing bill clearly states that they are eligible.

Biggest bug in the new setup is that it leaves older city neighborhoods out in the cold where

they have always been with FHA. And it is these so-called gray areas of US cities that have the big need for massive rehabilitation. Yet lenders usually shy away from them.

Under Sec 220(h) in urban renewal areas, FHA will merely take the value of an old house, add to it the costs of the improvements and insure the loan. But everywhere else, FHA underwriters are told by FHA's new regulations to stick to the old concept of economic soundness. How does this work? Example: An old house valued at \$5,000 is to be spruced up by improvements costing \$3,000. As long as it requires loans to be economically sound, FHA might well rule after measuring the market in the neighborhood, that the house will not be worth \$8,000 when the work is completed. It might well come up to the financial valuation of only \$6,500 or \$7,000.

Is there a remedy? All FHA brass can suggest so far—short of changing the law, which they oppose—is that the Urban Renewal Administration modify its approach to urban renewal problems and certify great chunks of cities for so-called non-assisted renewal projects. In these, no federal subsidies are sought. All a city needs to do is to designate an area and show URA that it will 1) enforce its housing code and 2) improve some of the public facilities. By labelling the area a non-assisted renewal project, URA could make the maximum benefits of the new fixup program available. Cities have been sluggish about grasping this opportunity. If the building industry wants to make the most of the new law, it will have to prod city halls into action in this direction.

Who will lend? Another serious question is whether private lenders will make pint-sized fixup mortgage loans at 6% interest. Reason: There is no profit in servicing a \$5,000 loan for 1/2%, according to mortgage men. "We can only set the interest rate at the legal ceiling and hope it works," says Commissioner Hardy. Local FHA offices will be asked to urge lenders who have agreed to set up urban renewal mortgage pools to use the new program.

Each loan will be processed as a regular mortgage loan, not insured by FHA in bulk without individual review as under its existing Title I repair loan program, which continues. This decision, Hardy concedes, means the new program "will probably catch on slower than we all would like." He adds: "We are trying to accomplish something that will take a lot of training and understanding. But we insisted on processing in full knowl-

edge of the problems it might create. We can't let this program free wheel. The suede shoe boys would take advantage of it."

Training on the road. To teach FHA's old dogs the new tricks of its fixup plan, Hardy is beginning a series of zone meetings

at which he and other top men from FHA will explain how it works.

"We will try to recruit one expert per office—probably a rehabilitation advisor reporting to the director," says Hardy. This would leave actual processing in the hands of FHA's regular staff of architects, appraisers,

and underwriters—a group not notably sympathetic to rehabilitation or to older neighborhoods.

Will it work? Says Hardy: "I'm hopeful. I can't see any other way to do it. The idea of setting up a separate processing staff in each office is too staggering to contemplate."

Stimulus No. 3: \$1.2 billion more for VA direct lending

The omnibus housing law got the fanfare, but the VA direct lending law—signed July 7 by President Kennedy—will give housing a much bigger and quicker shot in the arm.

It is the kind of legislation Eisenhower would have vetoed as inflationary and more costly than necessary.

VA gets another \$1.2 billion for six years of direct mortgage loans—at par—to veterans in small towns or remote areas where VA money (with its politically frozen, submarket interest rate) is supposed to be unavailable. (Builders pay 2 points for an advance commitment.) Actually, VA has declared all or parts of two-thirds of the nation's counties eligible—even including parts of Los Angeles County, the nation's third biggest metropolitan area.

From now until next June 30, VA can ladle out \$500 million for direct loans. Here is how the balance is to be spent:

Fiscal Year Ending	Amount
June 30, 1963	\$200 million
June 30, 1964	150 million
June 30, 1965	150 million
June 30, 1966	100 million
June 30, 1967	100 million

For the last 11 years, VA direct lending has limped along with an undependable authorization of \$150 million a year. The Treasury did not always make the money available.

The new law also boosts the maximum direct loan from \$13,500 to \$15,000.

For the regular VA home loan program, the law provides an extension that is becoming so routine that some critics wonder if Congress will ever let lapse this temporary program intended to help veterans get adjusted to civilian life after World War 2. Now, a veteran's eligibility for a VA home loan can be computed three ways:

1. Ten years after his discharge from wartime service plus an extra year for each three months of active wartime service.

2. Notwithstanding this formula, World War 2 veterans remain eligible until July 25, 1962, Korean War veterans until January 31, 1965.

3. Even though their service might make them eligible longer, the program ends for World War 2 veterans July 25, 1967, for Korean veterans January 31, 1975.

VA's \$500 million will finance about 35,000 homes. But as of March 1, nearly 30,000 direct loan applications were piled up on VA's waiting list.

VA says it can cope with the impending spurt in its business. For one thing, the agency has always relied on fee appraisers. For another, VA says it has been building up its supervisory staff during the last year in anticipation of a new boom.

And don't forget about these new ways to use US aid

Federal Natl Mortgage Assn gets another \$750 million authorization to buy FHA and VA loans under its special assistance program (ie at subsidized prices). In addition, funds left in the 1958 Program 10 (about \$200 million) and, during the next four fiscal years, the \$140 million-a-year return from the Fanny May management and liquidation portfolio, become available for special assistance. Thus Fanny May will have about \$1.1 billion available to buy loans private lenders tend to shun. Tip: Sec 220h modernization loans are eligible for special assistance. So builders doing modernization in a renewal area can now get a better price for loans than builders doing modernization in other parts of the same city. The law makes the new FHA Sec 221 loans on homes priced up to \$15,000 (in high cost areas) eligible, too, but FNMA plans to buy them under special assistance only when they are actually sold to a displaced family, as before.

Military housing loans under Secs 809 and 810 and co-op loans under FHA Sec 213 in renewal areas become exempt from FNMA's \$17,500 mortgage ceiling.

Now, for the first time, FNMA can make short-term loans against FHA and VA mortgages pledged as security—a deal long sought by builders and realtors. Loans may be up to 80% of the outstanding amount of the pledged mortgages. Term: one year, renewable for one more year. Borrowers must buy FNMA stock equal to ½% of the loan. Interest rates, charges, and fees are to be set by FNMA. Up to mid-July, the White House had yet to approve its proposed schedule. But FNMA officials expect this new program to be little used. Reason: private lenders will often lend more than 80% against a mortgage portfolio.

A little noticed provision of the law lets FNMA sell its stock for more than par. Brokers have long contended the stock is underpriced at par, has a book value of

about \$112/share because of undistributed profits. If FNMA decides to boost its stock price, builders forced to buy stock equal to 1% of mortgages sold to FNMA would simply get fewer shares per mortgage. By charging more for its common stock, FNMA could build up its surplus faster, cut down its reliance on Treasury holdings of preferred to give it a base for borrowing in the private capital market.

Condominium: FHA is now empowered to insure a mortgage covering a family unit in a multi-family structure plus an undivided interest in the common areas and facilities of the structure. The condominium device, which originally appeared in Roman law about the sixth century but has been little used in the US, amounts to a vertical subdivision. Apartments are treated legally and financially like individually built houses. Condominium's advantage over ordinary co-operatives is that if one family defaults, the others in the building are not responsible for his share of the total mortgage and taxes. Builders figure the condominium device will give rental construction an added lift. Mortgage amounts cannot exceed the per-room or per-unit limits of FHA Sec 207 rental property or Sec 203 loan-to-value ratios. Maximum term: 30 years or 75% of remaining economic life, whichever is less. Condominium may be used for new, existing, or rehabilitated properties. Sec 203 provisions will govern such items as interest rate, premium, payoff by FHA on defaults.

Experimental housing: FHA gets power, for the first time, to insure mortgages on sales and rental housing involving advanced technology in design, materials, or construction or "experimental neighborhood design deemed significant in reducing cost or improving quality." These Sec 233 mortgages must meet Sec 203 or Sec 207 requirements, except that economic soundness is waived. The

mortgage amount will be set on the basis of replacement cost with conventional materials and methods. FHA is empowered to protect occupants (who must agree to let their property be inspected from time to time) by spending its funds to correct any defects. Defaults will be paid off by FHA in cash. FHA headquarters must approve the experimental aspects of every Sec 233 house before local FHA offices may accept a formal application and fee.

Housing the elderly: FHA's Sec 231 program gets higher mortgage limits but they are still among the lowest of any FHA rental program. Old limits were \$9,000 per unit in walkups, \$9,400 per unit in elevator buildings. New limits: \$2,250 per room for walkups (or \$9,000 for units with less than four rooms), and \$2,750 per room in elevator-structures, (or \$9,400 per unit for small apartments). On top of this, FHA may boost the mortgage another \$1,250 per room in high cost areas. This means a mortgage ceiling of \$4,000 per room in most big metropolitan areas. Non-profit sponsors qualify for 100% loans based on replacement cost. Profit seeking sponsors can get 90% of replacement cost for new construction or 90% of value if they are refinancing an existing structure.

HHFA's Sec 202 direct lending program, which was created by the Housing Act of 1959, gets another shot in the arm. Loans go up from 98 to 100% of cost. HHFA's lending authorization jumps from \$50 million to \$125 million. Consumer cooperatives and public agencies which are not engaged only in public housing become eligible for Sec 202's 3¾%, 50-year loans.

How much this really means depends on whether Congress appropriates funds to make the loans. Unlike most other welfare housing programs, elderly housing direct loans do not involve backdoor spending. But demand

continued on p 48

for the loans from private non-profit sponsors—churches, fraternal orders, labor units, civic groups like Kiwanis and Rotary—has exhausted not only the \$20 million Congress appropriated last year but also the original authorization of \$50 million.

Savings & loans gets a new tool to help trade-ins work better: power to put 5% of their assets into 80%, 18-month non-amortized mortgages. This way a builder or realtor who takes a house in trade can finance it conventionally for a year-and-a-half while he tries to resell it.

S&Ls also get permission to put another 5% of their assets into shares of real estate investment trusts established by two or more insured S&Ls to finance urban renewal property. The effect is to give S&Ls a new way to finance urban renewal jointly where the size and cost of the project would be too big for one institution.

S&Ls get permission to put 5% of assets in 90%, 30-year mortgages for housing the elderly (over 55), and rest homes and nursing homes for the elderly.

S&Ls get permission to put 1/2% of their outstanding loans or \$250,000, whichever is less, into business development credit corporations.

Farm housing changes should open up a market for prefabricators. The law gives the Agriculture Department's Farmers' Home Administration (note the confusing FHA initials) power to lend another \$200 million to build, repair, or remodel farm dwellings and essential farm buildings. Loans are at 4% for 33 years. Moreover, families living in rural areas become eligible even though not engaged in farming. Applicants must own a farm or a housing site in a rural area; be without decent, safe and sanitary housing; be unable to obtain the needed credit elsewhere; and be without enough money to provide the housing with cash. Previously, only farmers qualified. Since 1949, the Farmers' Home Administration has made \$300 million of farm housing loans to 44,000 families. Losses written off so far: 0.03%.

Community facilities: The expanded and liberalized community facilities loan program may well prove as handy to builders in opening new subdivisions as the proposal to let FHA insure land development mortgages which was dropped from the housing bill in conference.

The new law should make it much easier to persuade localities to pay the cost of in-

stalling sewer and water service in developments on metropolitan fringes or in isolated smaller communities. Up to now, there has been little activity in this area because the law required HHFA to charge the average interest rate of 20-year municipal bonds. This formula produced two rates—4 1/8% for general obligation bonds, 4 3/8% for revenue bonds. The new law switches the public facility loan program to the same interest formula as college housing and direct loans for elderly housing—the average rate on all interest-bearing obligations of the US. So the rate on public facility loans plunges to 3%.

Bigger towns become eligible, too in the past, the program has been generally limited to cities under 10,000 population. Now, any city under 50,000 is eligible. In depressed areas the population limit goes up to 150,000 and the interest rate goes down still further to 3 3/8%. Eligible borrowers: municipalities or other political subdivisions of states. CFA's backdoor-spending authority goes up another \$500 million—with \$50 million set aside for mass transit loans. HHFA may now let fast growing communities postpone paying interest on half of any community facility loan for as long as ten years if the loan is no bigger than half the cost of the project.

Look how big the housing tent has grown

New subsidy programs for open space, mass transit; bigger renewal grants for small towns

"The housing bill has to have a little bit of sugar in it for Congressmen whose towns don't have renewal and not even public housing."

The new law puts this noble sentiment of Rep Albert D. Rains (D, Ala.) into action. Rains helped his small-town friends by getting bigger grants for urban renewal (75% instead of 67%) in cities under 50,000 population.

But two other new subsidies that crept under housing's ever-expanding tent are tailored more to the pork-barrel taste of big cities (which are also Democratic strongholds).

Mass transit: Congress overruled President Kennedy's plan for \$10 million in planning grants for mass transit as being too small. Instead the law sets up two programs by which cities can get \$75 million for mass transportation aid. The Administration had urged that such planning be done before big payments are doled out to cities for expensive new railroad cars, rail lines (and perhaps subway and elevated monorail equipment). The new transit aids:

1. \$50 million for 3 3/8% loans to public bodies for new transit facilities and equipment. Public agencies must own the equipment but can lease it to private companies for operation.

2. \$25 million for grants under urban renewal so cities can "demonstrate projects designed to contribute to the improvement of mass transportation." Cities must match these grants 50-50.

3. Planning for mass transportation is made expressly eligible for HHFA's planning assistance grants, which were increased \$55 million.

Mayor Richardson Dilworth of Philadelphia is already showing what kind of projects the

big cities intend to "demonstrate." He is pressing for 14.5% (or \$10.9 million) of the funds granted for the whole nation. Dilworth wants a \$6 million loan to help buy 30 air-conditioned commuter cars for the six commuter lines subsidized by the city. Another

\$4.9 million in demonstration grants would help clear right-of-way for an underground rail connection between downtown terminals of the Pennsylvania and Reading Railroads and help build a 2.3 mile high-speed trolley line from the Eastwick renewal project to downtown.

Dilworth says about \$80 million "would give the city a first-class commuter system."

Mayor Robert Wagner of New York is also seeking a loan to help bail out the New Haven Railroad, which has just gone in reorganization under the bankruptcy laws. The New Haven, which carries 25,000 commuters into New York City daily, had won \$6 million in tax concessions earlier this year from New York, Connecticut, Rhode Island, and Massachusetts.

HHFAdministrator Weaver believes that government cannot deal effectively with housing problems unless it can also act on transportation. "Mass transportation has gotten beyond the capacity of the cities to cope with," he says. In addition to the new grants and loans—which he considers a starter—HHFA and Commerce are going ahead with a \$98,000 joint study of transit ills.

Open space: The law sets aside \$50 million so cities can buy permanent "open space" around them. Cities can get 20% of purchase price, or 30% if they assume responsibility for preserving open land in their urban area. All purchases must be in accord with a comprehensive plan.

Planners have long complained such a setup is needed to keep natural beauty spots from being overrun by sprawling subdivisions. But even ardent supporters of the new grants agree it opens a "Pandora's box—in terms of zoning possibilities." Congress says land purchased cannot be used for other purposes except with consent of the HHFAdministrator. But some backers pushed the plan so com-

WHAT IT WILL COST

Type of authority ^a	New authorization		Budget Deficit Impact—GDP version
	—HHFA	version	
FNMA mortgages and improvement loans (special assistance)			
Presidential authorization ^b . . . BA	\$ 750	\$1,550	
Loan programs			
College housing loans BA	1,200	1,200	
Public facility loans BA	450	500	
Mass transportation loans . . . BA	50	50	
Public works planning advances . AA	10	10	
Housing for the elderly AA	75	75	
Subtotal	1,785	1,835	
Grant programs			
Urban renewal grants CA	2,000	2,000	
Urban planning assistance . . . AA	55	50	
Public housing:			
Annual contributions ^c CA	...	3,146	
Demonstration grants CA	5	10	
Open space grants CA	50	50	
Subtotal	2,110	5,256	
Total—HHFA	4,645	8,641	
Programs of other agencies			
Farm housing loan programs ^d . BA	200	407	
Farm housing research AA	1	1	
Defense hospital construction . AA	15	15	
Small business renewal loans . . AA	25	25	
Subtotal	241	448	
Total	4,886	9,089	

^a Key: BA—Treasury borrowing authorization. CA—Contract authority. AA—Authorization for appropriations; new obligational authority when actually appropriated.

^b Excludes additional \$200 million from the "Program 10" antirecession authorization of the Housing Act of 1958; and \$140 million a year for four years from management and liquidating functions.

^c Assumes use of \$79 million balance of contract authority, which otherwise would be unavailable, to place under contract approximately 100,000 units of low rent housing. Effects of additional subsidy for units occupied by elderly persons and families cannot be estimated with available information.

^d Law provides for the use of approximately \$235 million of Treasury borrowing authority which would otherwise have expired on June 30. Law also provides for \$200 million of new authority shown.

munities could create a "land bank" from which they parcelled land for development as they saw fit. The purchase plan will be watched to see if it drives suburban land prices still higher.

Urban renewal: Smaller cities (under 50,000 pop.) are wasting no time asking for 75% renewal grants. (Cities under 150,000 in depressed areas also qualify for the bigger grants.) No less than 33 of 71 cities with \$197 million of new projects qualify for the bonus subsidy.

Other renewal provisions:

- Allow 30% (instead of 20%) of nation's renewal outlays to go for non-residential projects.

- Give cities credit for money spent by hospitals for land acquisition and clearance in renewal areas in the same way as outlays by colleges for land acquisition and clearance are now credited to cities.

- Let cities sell cleared renewal land at fair value—without bidding—for rental or cooperative housing for moderate income families. Eligible purchasers include limited dividend and non-profit corporations, cooperatives, and public bodies.

- Give special Small Business Administration loans at 3½% to businesses displaced by renewal projects. A \$3,000 ceiling on relocation payments to business is removed entirely.

Something for everybody via federal loans, insurance

Four programs which many builders have regarded with skepticism (and suspicion) are beefed up by the new housing law. For home-builders looking for ways to expand and diversify, all but one are potential sources of new business.

College housing: Revolving loan authorizations go up by \$300 million a year for the next four years, so that present loan authorizations gradually increase from \$1.675 billion to \$2.875 billion. Tip: a non-profit corporation formed to provide housing for students at more than one institution is now eligible for college housing loans.

Within the overall loan authorization, \$30 million is now earmarked each year for dining halls and student unions (which may include beer halls), and \$30 million for residences for hospital interns, medical residents, and student nurses.

College loans this year will be made at 3½%, down ¼% from last year. The way Congress hides a subsidy in this rate has been subject of controversy since the program began in 1950. Twice President Eisenhower asked Congress to raise the rate; he got nowhere. The law now fixes the rate at ¼% above the average rate of the total interest bearing debt of the government at the end of each fiscal year, including everything from 90-day Treasury bills to long-term bonds. But the government has no obligations longer than 37 years outstanding, and only \$5 billion of the total debt (\$288 billion) runs over 30 years. Result: the formula for interest on college housing loans, (as well as elderly housing and public facility loans) forces the US to lend money at less than its cost of borrowing for such a term as 40 year college loans. For college housing, through February, CFA had approved applications totaling \$1.2 billion but had disbursed only \$906 million. The loans provided 260,167 units for students and interns.

Nursing homes: Congress pushed FHA much deeper into the welfare business by greatly increasing loan limits for nursing homes under Sec 232. New limits: 90% of value instead of 75%.

FHA didn't want the program when it was forced on the agency by Congress in the 1959 Housing Act. FHA thought proprietary homes should be handled by the Health-Education Welfare Dept, whose specialists were more fitted to help nursing homes (which may become part-time hospitals).

Struggling with its unwanted burden, FHA drew property specifications. But up to the

Middle-income subsidized housing disguised as an FHA program

To many private housers, notably lenders and realtors, the most disturbing element of the whole controversial law is FHA's new bargain-basement expansion of Sec 221. Their fear, not really allayed until mid-July after lawyers had poured over the fine print of the legislation, was that this was middle-income public housing disguised as an FHA program and that it would let public housing authorities run away with the rental housing market for \$4,000 to \$6,000 a year families.

Apparently this isn't so. The final version of the law excludes from the bargain-basement 221 public agencies that get federal financial aid exclusively for public housing. HHFA spokesmen say this means that the only eligible public housing authorities among the nation's 1,188 are the 127 which are urban renewal authorities too. "This was never intended as a sneak play with public housing," HHFA Administrator Bob Weaver told HOUSE & HOME. "We thought in terms of urban renewal authorities, though we did not exclude public housing." (Congress excluded public housing.)

Bargain-basement 221 makes 40-year 100%-of-cost loans for rental housing of five or more units available to co-ops, non-profit or limited dividend corporations, and public agencies other than public housing authorities. Loan limits: \$12,500,000 maximum or \$2,250 per room in walkups, (or \$8,500 per unit for apartments of less than four rooms) and \$2,750 per room for elevator structures (or \$9,000 per unit for apartments of less than four rooms); these base figures may go up \$1,000 per room in high cost areas. Interest rates will be subsidized, but must be the same for all types of borrowers. In mid-July,

Public housing gets four new tools to expand in housing the elderly

Public housing, which has been pushing hard to grab the burgeoning new market for housing the elderly, gets four new tools to make it easier to expand its empire in this direction.

Local authorities, which have already built some 30,000 units for old folks, now may:

- Participate in direct loans for the elderly under the HHFA Sec 202 program. The interest rate on 50-year elderly housing loans was cut on July 1 to 3½% from 3½%. The rate is calculated by adding ¼% to the average rate of the total interest bearing debt of the government at the end of each fiscal year and compares to an average 3.4798% for recent bonds issued by authorities themselves. But an authority which receives funds under the 1937 Housing Act and is exclusively engaged in public housing would not be eligible.

end of last year, only two applications covering 171 beds had been insured. FHA sets maximum term for 5¼% Sec 232 loans, generally restricts them to 20 years.

Trailer parks, another slow moving program since starting in 1955, now get higher loan limits: \$1,800 per trailer space vs \$1,500 before. Maximum mortgage for one trailer park stays at \$500,000. FHA has insured two loans providing 533 spaces for trailers.

Military housing is extended until Oct 1, 1962, and 3,000 more units added.

HHFA had not yet set the rate, but the law permits it to be as low as the average yield on all outstanding marketable Treasury obligations. This might mean as low as 3½%. FHA may reduce or eliminate its insurance premium and pay off defaults in cash if it chooses. The mortgages will be eligible for FNMA special assistance purchase. The program expires in two years.

"I expect to see this program move fairly quickly," predicts Weaver. "Many communities will welcome medium priced housing from a social and economic view." Occupancy in bargain-basement 221 projects is limited to families and individuals whose incomes exclude them from the general housing market (and displacees get preference). This provision of the law suggests the program will remain controversial. Realtors, basing their argument on the government's own statistics, contend families in the \$4,000 to \$6,000 bracket are *not* excluded from the general housing market in almost all cities. Items:

- Some 7 million US families in the \$4,000 to \$6,000 income group are owner-occupants of one family homes, according to the 1956 housing inventory.

- Some 3 million of these own their homes free and clear.

- More than a million families of this income group had acquired homes with a VA mortgage; some 700,000 have acquired them with an FHA mortgage.

To realtors, facts like these mean the charge that middle income families are neglected by the private market has been often reiterated but never proved. Weaver concedes: "Nobody knows what middle income means," but he smiles and adds: "If it works, we are right; if it doesn't, they are."

Florida has already changed its state law to permit these loans and Miami is considering a project.

- Charge private-market rentals for displaced and elderly families. The law eliminates a rule that rents for these groups must be 5% below private levels. But the 20% gap for all other families stands.

- Spend more for units to house the elderly. Cost ceilings go up from \$2,500 to \$3,000 a room, allowing more projects like the celebrated Victoria Plaza PHA Commissioner Marie C. McGuire built while she headed the San Antonio HA.

- Collect an extra \$120 a year subsidy from PHA for units rented by elderly persons. But

NEWS continued on p 53



"I'm sold on how Ruberoid's 'Open House Plan sells my prospects!" ...says Vincent Amore, Builder of "Stratford," one of Pittsburgh's most attractive, new communities.

"There are many ways to turn a prospective home buyer into a customer," notes Mr. Amore. "But one factor always stays the same. Customers making an important long-term investment *appreciate* quality construction that *protects* the investment. That's why the Ruberoid Open House Plan has become one of our best selling tools.

"For the first time," continues Mr. Amore, "the Ruberoid 'Sell-O-Rama' Display has given us a powerful visual demonstration that adds plenty of conviction and meaning to our *quality* sales story. The display shows our customers the quality building products that go into our houses. It provides that extra sales push that can seal the deal."



Builder Amore makes use of the Ruberoid "Sell-O-Rama" Display to point out the advantages of Ruberoid Lok Tab Shingles and Ruberoid Fiberglas* Insulation used in his homes. Written Warranty with Lok Tab Shingles is an extra salesman.

*T. M. OCF Corp.



Mr. Amore takes two prospective buyers on a tour of "Stratford", Churchill Borough, Pa. twelve miles from downtown Pittsburgh. Topic of discussion: "Trend Colors" of Ruberoid Shingles that enhance and individualize each home, yet provide color harmony for the community.



Curiosity aroused by the "Sell-O-Rama" Display, the prospective man-of-the-house takes a close-up view of Lok Tabs in actual use; sees for himself how they lock together to lock out weather.

Now in its second year, the Ruberoid Open House Plan is a *proven* success with builders all over America. It has succeeded in converting building materials that were usually "forgotten" into strong selling points. It has *proven* that nationally-advertised products are genuine sales-makers when featured by the "Sell-O-Rama" Display at the point-of-purchase!



Still active in the business as Vice President and construction supervisor, "Pop" Amore comments: "When I need shingles, Ruberoid gets them to me fast!"



Mrs. Prospect gets really enthusiastic about the beautiful White "Trend Color" Shingles selected for her home.

Open House Plan Individually Tailored for Builders

Complete program includes:

1. Sell-O-Rama Display. 2. Product Displays.
3. Magazine Signs. 4. Consumer Literature on roofing, siding, floor tile and insulation.
5. Exterior color styling suggestions.

Take advantage of this sales-producing plan. For complete information without obligation, call your local Ruberoid representative or write directly.

RUBEROID®

The RUBEROID Co., 733 Third Ave., New York 17, N. Y.

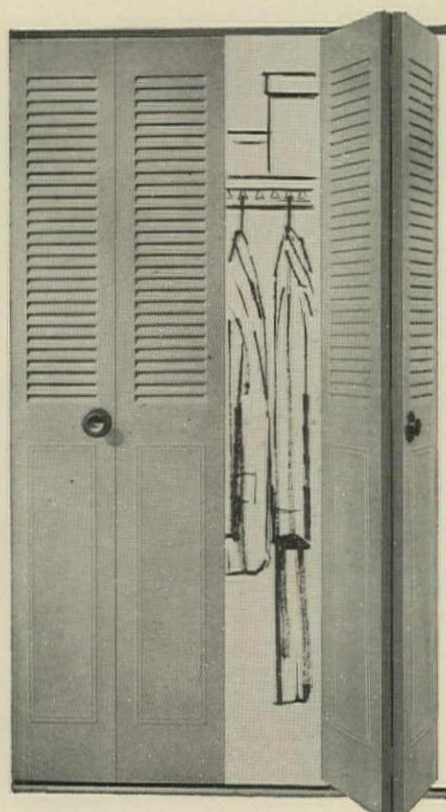


Leigh NEWSLETTER



NEW PRODUCT NEWS ON THE EVER-GROWING LEIGH PRODUCT LINE

AUGUST, 1961



NEW STYLE LEIGH FOLDING DOOR SETS PACE WITH DESIGN CHANGES

New Full-Vu Door Line Features High Quality, Reduced Prices

Leigh Building Products has just announced a complete revamping of their Full-Vu Folding Door line with the introduction of a new Panel-Louvered Door. The door highlights the line's new features—faster installation, easier operation and trouble-free performance. Despite all these improvements the new line features prices as much as 22% lower.

Ventilation and elegance have been combined in Leigh's new Panel-Louvered Door. Featuring a louvered section above and a framed panel below, the door makes an attractive closure to blend with any decor. From escutcheon plates to prevent scratches and finger-marks to a jamb bracket allowing easy installation—even on a concrete floor—the door typifies the attention-to-detail given

each model in the line.

Leigh's ever-popular Flush Doors retain their characteristic simple styling and clean lines which have made them a favorite for closets and hide-away work areas.

A number of changes in both interior and exterior components make the doors fully adjustable and full floating. A unique mounting arrangement prevents the doors from binding and sticking, even in out-of-square openings or on slanted floors.

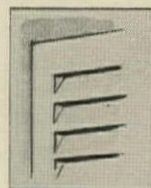
BEAUTIFUL NEW FINISHES

A beautiful new finish—Desert White—is standard on all Leigh Full-Vu Doors. Styled to harmonize with any interior, the Desert White finish is a baked-on, semi-gloss enamel which also acts as an excellent prime coat for refinishing if desired. Flush doors are also offered with a Birch Grain finish accenting the sheer beauty of the flush styling. The warmth and color of wood is added, but without costly trimming, sanding and finishing that wood doors so often demand.

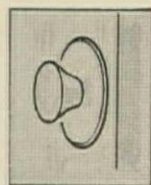
The many new styling features and finishes of Leigh's Full-Vu Folding Door Line are described in detail in Bulletin 299-L. Write for your copy today on this profit-making line!

Leigh's Full-Vu Folding Doors Give Builders 12 Important Improvements

Offered in a complete range of sizes, the new Leigh Full-Vu door line is unsurpassed in quality. Check these 12 important improvements:

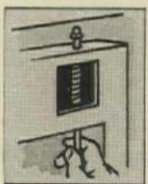


(1) Rigid, vibration-free closed-end louvers provide ample ventilation. (2) New Desert White Finish, baked on phosphatized steel, matches any decor . . . also serves as an excellent prime coat. (3) Doors are $\frac{1}{8}$ " thicker for added strength and rigidity. (4) Each pair of panels is permanently joined with piano-type hinges and aligned at the factory to reduce installation time. (5) New escutcheon plates—a decorative touch to eliminate scratches and finger-marks—furnished with all doors. (6) Neoprene cushion provides exact pressure desired to close quietly, hold them shut firmly. (7) Exclusive jamb bracket allows mounting track directly



to door jamb, eliminating costly fastening to concrete floor—provides $1\frac{1}{4}$ " horizontal adjustment to square and align doors. (8) Adjustable pivot brackets compensate for out-of-square or too-wide openings—adjust horizontally up to $\frac{3}{8}$ " to provide for center and edge alignment. (9) Full-floating spring-loaded top and bottom guides ride up and down to compensate for warped headers, uneven floors, out-of-square openings. Spring pressure keeps nylon-capped guides firmly in track. (10) Aluminum top and bottom tracks hold doors in perfect alignment—need no finishing. (11) Spring-loaded top pivot snaps into pivot bracket, installs in seconds, can't slip out. (12) Adjustable adjust to compensate for over-size openings.

to door jamb, eliminating costly fastening to concrete floor—provides $1\frac{1}{4}$ " horizontal adjustment to square and align doors. (8) Adjustable pivot brackets compensate for out-of-square or too-wide openings—adjust horizontally up to $\frac{3}{8}$ " to provide for center and edge alignment. (9) Full-floating spring-loaded top and bottom guides ride up and down to compensate for warped headers, uneven floors, out-of-square openings. Spring pressure keeps nylon-capped guides firmly in track. (10) Aluminum top and bottom tracks hold doors in perfect alignment—need no finishing. (11) Spring-loaded top pivot snaps into pivot bracket, installs in seconds, can't slip out. (12) Adjustable adjust to compensate for over-size openings.



to door jamb, eliminating costly fastening to concrete floor—provides $1\frac{1}{4}$ " horizontal adjustment to square and align doors. (8) Adjustable pivot brackets compensate for out-of-square or too-wide openings—adjust horizontally up to $\frac{3}{8}$ " to provide for center and edge alignment. (9) Full-floating spring-loaded top and bottom guides ride up and down to compensate for warped headers, uneven floors, out-of-square openings. Spring pressure keeps nylon-capped guides firmly in track. (10) Aluminum top and bottom tracks hold doors in perfect alignment—need no finishing. (11) Spring-loaded top pivot snaps into pivot bracket, installs in seconds, can't slip out. (12) Adjustable adjust to compensate for over-size openings.

LEIGH BUILDING PRODUCTS

2561 Lee St., Coopersville, Michigan
Please send me data on Leigh's Full-Vu Folding Door line!

Name _____
Address _____
City _____ State _____

LEIGH BUILDING PRODUCTS, Division of Air Control Products, Inc., 2561 Lee Street, Coopersville, Michigan

West Coast Warehouse: Leigh Industries (California), Inc., 649 S. Anderson, Los Angeles, California; Made in Canada by: Leigh Metal Products Ltd., 72 York Street, London, Ontario; Prairie Provinces Affiliate: Leigh Products Western Ltd., 313 Archibald St., St. Boniface Manitoba.

low rents from older persons must threaten the solvency of the project before PHA will pay the bonus.

The new law also gives local public housing its biggest authorization in 12 years: 100,000 new units. Congress imposed no deadline when the units must be started. "We can take the time to plan wisely and well," says Mrs. McGuire.

Mrs McGuire hopes to contract with local public housing authorities for about 37,000 units in the 1961-62 fiscal year. She says she is "thinking in terms of a three-year program in an informal way." Some 36,000 units were waiting for an annual contributions contract when the bill became law, and about 5,000 of these are ready for immediate signing. Construction started on 30,000 subsidized units last year, highest level since 1953, and PHA forecast 43,000 this fiscal year.

In approving 100,000 new units (which are actually the last of 810,000 units originally

authorized in 1949), Congress freed \$336 million in annual contributions to local authorities.

The new law lets local authorities go their own way on some other items public housers have been seeking for years. And it sets up some new programs which they can test under PHA's eye. Local authorities can now:

- *Determine their own admission policies and priorities.* Mrs McGuire expects they will continue giving preferences to families displaced by renewal and other government actions. She feels the established preferences are fairly valid and need little change.

- *Let over-income tenants continue living in public housing.* But local officials must certify that the family is unable to find private housing within its financial reach, and collect a higher rent based on the family's higher income.

- *Demonstrate new and improved ways of housing low-income families.* The housing

agencies have \$5 million for this. Says HHFA Administrator Weaver:

"I expect we'll experiment with design, experiment with types, like row houses, single family houses and duplexes in small communities." He also wants to experiment with social problems like relocation housing and perhaps use of transitional housing as in England. "Teaching better housekeeping has been talked of. But nothing that I've seen accomplished has been more than fluff," says Weaver. "You've got to involve these people. You've got to let them feel it isn't being done for them entirely." This is significant, for the housing administrator thus recognizes philosophically that the US approach to fighting slums has focused too much on real estate, too little on people and so may be taking the people out of the slum but not the slum out of the people—at least not in proportion to the vast millions that are now committed to the job.

How the nation's press views the new housing law

If there is a word that sums up, it is irresponsibility . . . The provision which seems to us to set the tone of the bill as a whole is the key one concerning housing for families of "modest" incomes; that is, in the \$4,000 to \$6,000 a year range. The White House asked FHA insurance of 40-year mortgages with no down-payment on homes costing up to \$15,000. The Senate finally stuck in a token down-payment requirement, a small sop to responsibility . . .

Certainly a case can be made that the community should try to provide tolerable housing for the truly indigent, despite the considerable abuses associated with public housing in practice. But when it comes to this sort of "assistance" for people of moderate incomes, we are leaving the standards of prudence far behind.

By definition, people of moderate incomes do not need public assistance. What the government is in effect saying with this proposal is that if such a family does not have exactly the house of its heart's desire, it is the duty of government to help provide that house. That is a concept of government which has no place in any system short of socialism.

To call such proposals by the name of assistance is to debase the language; they are nothing but an invitation to folly. Unfortunately that approach is typical of the whole bill.

For what is the broad housing problem this bill is supposed to remedy? Certainly this country is not up against a general housing shortage requiring the slam-bang measures of desperation in this catch-all bill. There is increasing evidence that housing is catching up with demand; in some places, plain evidence of overbuilding and excessive speculation. Into this market the government proposes to pour new billions for everything from public housing to farm and college housing. The one clearly discernible effect would be massive new inflation of a market in no need of stimulus.

And what is the fiscal background against which these huge new expenditures must be viewed? It is that of a government increasing its spending for all conceivable domestic, military, and foreign programs, of a government plunging ever deeper into deficits and debt. Even if the housing bill were otherwise desirable it would not do in such circumstances.

—Wall Street Journal.

The federal government is no more obligated to provide nice homes for all its citizens than it is to provide fat pensions for all its veterans. A nice house is something to be earned, not to be demanded as a birthright.

The housing bill just signed by the President is a monstrosity, covering everything from grants for city park land to subsidized middle-income apartments to federal funds for city streetcar systems to loans for local community facilities (\$500 million of its cost is for these, put in to buy Southern support).

A lot of Americans are badly housed. Some are disgracefully housed—and a New Yorker doesn't have to go far to find examples. Even aside from humanitarian considerations, intelligent community self-interest calls for a vigorous effort to combat slums. . .

But encouraging people to spend beyond their means is not sound policy, and this is inherent in the discretionary extension to 40 years for persons whose incomes are deemed (by the FHA) too low to meet monthly payments on a 35-year home mortgage, for a house on which a down payment, including closing costs, of only \$450 or less is required. This is an invitation to flirt with insolvency.

Taking up the notion, which this bill implicitly does, that the federal government ought by subsidy to raise the living standards not only of the poor but of middle-income families too, leaves one wondering who's going to pay for it all. And where it will end. And why a man should still go out and work, as Americans pretty successfully have done in the past, to buy at a fair price that nice house he's always wanted.—New York Herald-Tribune.

. . . one of the new Administration's brighter legislative victories. To an encouraging degree, the housing bill reflects an Administration search for new, non-doctrinaire approaches to the staggering problems of urban decay and congestion . . . The omnibus bill, despite several costly "sweeteners" designed to attract Southern and farm-belt support, gives Dr Weaver and HHFA something solid to work with.—New York Times.

In view of Republican strategists' emphasis on cultivating the urban vote it is rather difficult to understand the party's massive opposition to urban housing . . . Be that as it may, it is a gain for urbanized America that Con-

gress is providing funds not only for outer space but also for more and better living space.—St Louis Post-Dispatch.

Passage of the housing bill is a great personal victory for President Kennedy. Kennedy is not the only winner in this matter. Extravagance is another . . . Now we must add the residential builders to the lengthening list of businesses with a major vested interest in unending government spending. Once government becomes established as a principal customer, suppliers of goods and services acquire a passion for having their bills guaranteed by tax powers. Negotiated contracts and cost-plus arrangements multiply. *Cozy deals for insiders provide motivation for tireless and lavish lobbying for more and more.* We have seen it happen with military contractors, foreign aid contractors, road contractors, school contractors—and from now on increasingly with building contractors.—Chicago Tribune.

. . . The motive in ever-lower down payments and every-longer payback terms is noble. The wisdom of this latest stretch-out is questionable. Barring another period of galloping inflation—which Mr. Kennedy is pledged to prevent—the under-\$15,000 houses this proposal would father will depreciate faster than the purchaser's equity builds up . . .

People, not houses, make slums, of course. Most buyers will start out with the best of intentions. But much of the maintenance in this price class is do-it-yourself. Some try and do well, some try and fail, some try hardly at all. There's little incentive toward proper maintenance, if it's at all inconvenient or expensive, for an owner who has no initial investment in the property and who knows that his built-up equity is nil.

Ultimately the nation must face a basic question: how far down the family income ladder shall it try to provide single-ownership, single-occupancy dwellings? A place of his own is Everyman's dream. It is economically feasible for every man, regardless of income?

The FHA concept, in its lifetime, has worked miracles for the American people and the economy. We would not want to see it scuttled. But the laws of economics are only modified, not canceled, by FHA operations. At some point they make further miracles impossible.—The Detroit News.

NEWS continued on p 54

Discounts level off; latest rate cut by FHA riles both lenders, builders

Discounts on mortgages are on a new plateau. Beneath the quiet surface mortgage trading is chaotic. Economist Miles Colean calls the market "as confused and disrupted as it ever has been, with the possible though doubtful exception of two periods in 1951 and 1956." Mortgage men are waiting for the showdown over prices brewing since FHA cut its rate from 5½% to 5¼% on May 29. Most lenders are insisting on 2 points more discount to keep previous yields. This leaves Fanny May, charged by law to follow the market, with prices that lead it by as much as 1 point.

Why isn't Fanny May business picking up? The supply of mortgages, especially good quality ones, isn't holding up. "There is generally a dearth of mortgages," reports Executive Vice President Harold Finney of Citizens Mortgage Corp., Detroit.

President Robert M. Morgan of the Boston Five Cents Savings Bank predicts "the paper will start heading to FNMA soon. There will be some break in the market." And one savvy New York mortgage banker agrees that loans will start pouring into Fanny May by September. So far Fanny May activity is inconclusive. Only 3,671 mortgages were offered to the agency in June, compared to 3,724 in January and 1,837 in April.

In Miami, President Lon Worth Crow of the Lon Worth Crow Co is buying mortgages at FNMA prices plus a 1% brokerage fee, then reselling them to institutional lenders at a ½ point loss to be recovered if possible through construction loans. Says Morgan: "This can't go on indefinitely."

If Fanny May becomes the major source of mortgage money—at its smaller discounts—the demands on its cash might force the agency to take itself out of the market. This happened in 1959. If the agency decides to borrow more money from the public to continue buying, it could scarcely avoid interfering with major Treasury refinancing this fall. Experts figure the Treasury will need some \$3.5 billion of new money this month (and another \$6 billion by year end). Chances are that this will not upset the mortgage market the way the celebrated Magic 5s of 1959 did. But builders and mortgage men will want to keep an eye on the terms and yields of the Treasury financing because they will set a pattern for the whole money market.

Yields on FHAs and VAs have not kept pace with rising bond yields. So many major pension funds refuse to talk about buying mortgages. Some insurance companies are reluctant to take FHA 5¼% loans, too.

Builders are squawking loudly at higher discounts, crying that the increased costs could nip the budding recovery in housing.

FHA's change hit builders in the midst of a building season when plans were already made, sales prices set. Some are renegotiating their commitments. Others are being forced to absorb the higher costs as buyers insist on 5¼% interest with no increase in selling price. One Philadelphia builder says he had to absorb \$5,000 in extra discounts in a single week.

President E. J. Burke Jr of NAHB is urging the government to "move rapidly, but with the utmost care, to use all available methods . . . to see that the money markets respond favorably to the new FHA rates." Since the government's handiest method for doing this could be to use Fanny May to support the submarket FHA rate. Burke contends that unless action comes fast "incentive will be killed, production will be irrevocably lost and 1961 will see fewer houses built than 1960."

Economist Colean calls the new FHA rate cut "ill-timed and certain of failure unless the budding business recovery itself fails to materialize." Colean reasons that in mid-May three forces combined to bring rising interest rates: 1) the recession gloom of March had vanished, 2) stocks grew more alluring, and 3) savings growth in mutual institutions slackened abruptly. President Thomas P. Coogan of Housing Securities Inc, New York, agrees the cut was ill-timed and caused a "further slowdown in buying." Compounding this, FHA at mid-month abolished the ½% extra service charge it had been allowing on mortgages under \$9,000. The action was taken under pressure from Capitol Hill.

Lenders, as expected, are cold-shouldering the new 35-year, 3% down FHA loans despite keen builder interest.

Says V.P. Robert S. Irving of First Pennsylvania Bank & Trust Co: "I can't find any lending institution that will take them." Others agree. Most of the new loans will apparently go to Fanny May at first, although a few New York savings banks give signs they will buy—a little.

Discounts on the new loans will be higher. How much? Fanny May now charges ½ point extra for each five years beyond 30 years terms, but could change this. Private lenders may charge an extra point at first—if they take them at all.

MORTGAGE BRIEFS

HLBB: 'Don't misuse bonus'

The Home Loan Bank Board has warned S&Ls not to use its new bonus dividend plan (NEWS, July) to boost interest rates paid to shareholders.

If any S&Ls get out of line, the board will "utilize to the fullest extent its statutory powers," admonishes Chairman Joseph P. McMurray. The board would do this either by supervising individual S&Ls or changing its regulations instead.

Split-level dividend rates under the bonus plan would be "appropriate," says McMurray, only 1) when a S&L cuts its basic dividend rate or 2) when an S&L would otherwise have to raise its basic rate to meet competition.

S&L dividends rise

The Home Loan Bank Board is getting nowhere fast in its campaign to lower mortgage interest rates by persuading S&Ls to cut dividends paid to shareholding depositors.

Major Boston S&Ls and savings banks boosted their rates from 3¾ to 4% July 1. In Columbus, Ohio, S&Ls moved up from 3½ to 4%. One Cleveland S&L went from 4¼ to 4½%. Western Federal S&L in Los Angeles increased its rate from 4½ to 4¾ but other Los Angeles S&Ls stayed put at 4½.

Savings banks in New York City are talking about pushing for state permission to pay depositors 4%. They are now permitted to pay 3½% with an extra ¼% for funds on deposit two years.

There are signs that this could grow into a first class cross-country rate war. West Coast S&Ls have been buying lavish display ads in big New York newspapers for the past month to woo out-of-state savings by advertising their 4½% federally insured rates. Sometimes you can find a full page of such ads in the Sunday financial sections.

Free FHA, VA rates urged

The controversial report of the private Commission on Money & Credit—first full-dress study of monetary policy since the Natl Monetary Commission of 1911 paved the way for the Federal Reserve Board—has added new weight to the housing industry's long efforts to get rid of political interest ceilings of FHA and VA loans. The study may give a nudge to future government financial decisions because the 27 members, chaired by Frazar B. Wilde, chairman of the Connecticut General Life, come from the highest echelon of industry and labor. Three members—Adolph A. Berle Jr, Henry H. Fowler, and Builder Philip M. Klutznick—left the commission to join the Kennedy Administration.

The commission noted that pegged interest rates on mortgages force deep discounts on builders and added: "There is widespread evidence that at least part, and sometimes most, of this expected loss is passed on to the homebuyer in less house for his money." Asserted the commission: "The harmful effects of the ceiling rates on underwritten mortgages outweigh their automatic contribution to economic stabilization and [should] be abolished."

The group observed that "credit markets have become essentially national in character and the possibility [of the Federal Reserve] of utilizing differential regional discount-rate policies is negligible."

Although this doesn't jibe with the eco-

conomic facts of life in the mortgage market, the group urged these steps to aid flow of funds in the mortgage market:

- State and federal laws should encourage the free flow of interstate mortgage funds.
- Federal charters should be granted to mutual savings banks.
- National banks, savings banks, and savings & loan associations should be allowed to establish branches in "trading areas" irrespective of state laws.
- Banks, savings banks, and S&Ls should have the same rules governing equity investments.

Are interest rates dropping?

The Home Loan Bank Board, amid plugging for lower mortgage interest rates, has ventured into sampling conventional interest

rates. But there is concern that incomplete (or late) data gathered in its first three monthly reports may have helped to paint a distorted picture of the mortgage market, and so helped produce FHA's controversial second cut of its interest rate.

HLBB reported on July 5 that its survey of 182 of the 214 biggest S&Ls ending June 10 found "a further softening" of rates for conventional home mortgages. The evidence: the average interest dropped from 6.15% in April (when HLBB made its first survey) to 6.03% in June. The earlier reports, plus the monthly report by FHA district directors of what they think the average discount on FHA loans is in their districts, apparently weighed heavily in the FHA decision.

HLBB's findings do not dovetail with mort-

gage banker reports to HOUSE & HOME (see below). Their quotations, based on actual transactions, have shown stable or rising yields for 60 days.

Many pension funds are out of the mortgage market now because bond yields have risen to a level where they are more attractive than mortgages. A committee of the American Bankers' Assn reports demand for commercial loans is growing, an indicator that rates may rise. Bankers say a new boost in the prime rate may be in the offing. HLBB's findings:

LOANS	AVG INTEREST %		FEES, CHARGES AS % OF LOANS		
	June	May	June	May	April
Construction.....	6.16	6.24	6.16	2.18	2.01
New home purchase	6.08	6.13	6.15	1.14	1.22
Existing homes .	6.23	6.26	6.29	1.20	1.28

NEWS continued on p 57

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending July 14, 1961

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

FNMA Scdry Mkt ^{x,y}	New Construction Only				Existing ^a Min Down 25 year Immed
	Minimum Down* 30 year		10% or more down 20-25 year		
	Immed	Fut	Immed	Fut	
96 1/2 96	95-95 1/2	96 1/2	96-96 1/2	96 1/2	95 1/2-96
97 1/2	par-101	par-101	par-101	par-101	par-101
—	95-96	a	95-96	a	—
96 1/2 96-97	95 1/2-97	96 1/2-97 1/2	96 1/2-97 1/2	96-97	96-97
96 1/2 97-98	97 ^a	98-99	98	98-99	98-99
96 96-97	96-97	96-97	96-97	96-97	96-97
96 96 1/2-97	a	96 1/2	a	96 1/2-97	96 1/2-97
96 96	96	96 1/2	96 1/2	96-96 1/2	96-96 1/2
96 1/2 95 1/2-96	a	97	a	95 1/2-96	95 1/2-96
96 95 1/2	95	96	96	95 1/2 ^o	95 1/2 ^o
96 1/2 96	b	96	b	96	96
97 97-97 1/2	97	98	97	98	98
97 1/2 97	97	97	97	97	97
96 95-96	95-95 1/2 ^b	96	96	95-96	95-96
97 98	98 ^b	98	98 ^b	98	98
96 96-96 1/2	96-96 1/2	96 1/2-97	96 1/2-97 ^b	96-96 1/2	96-96 1/2
96 1/2 95-96	95-96	96-97	96-97	94-97	94-97
97 96 1/2	96	96 1/2	96	96	96

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

FNMA Scdry Mkt ^{x,y}	New Construction Only				Existing ^a Min Down 25 year Immed
	Minimum Down* 30 year		10% or more down 20-25 year		
	Immed	Fut	Immed	Fut	
98 1/2 97 1/2-98	a	98	a	97-98	97-98
99 par-101	a	par-101	a	par-101	par-101
— 97-98	a	97-98	a	—	—
98 1/2 a	a	a	a	a	a
98 1/2 99-par	a	99-par	a	99-par	99-par
98 97-98	a	98-99	a	98-99	98-99
98 98 1/2-99	a	98 1/2-99	a	98 1/2-99	98 1/2-99
98 98	a	98	a	98	98
98 1/2 98	a	98 1/2	a	98	98
98 97 1/2	a	97 1/2-99	a	97-97 1/2 ^a	97-97 1/2 ^a
98 1/2 97 1/2-98	a	97 1/2-98	a	97 1/2-98	97 1/2-98
99 par	a	par	a	par	par
99 99 ^b	a	99 ^b	a	99 ^b	99 ^b
98 98	a	98	a	97-98	97-98
99 par	a	par	a	par	par
98 98	a	98-98 1/2	a	97 1/2-98	97 1/2-98
98 1/2 a	a	a	a	a	a
99 98 1/2	a	98 1/2	a	98	98

VA 5 1/4s

FNMA Scdry Mkt ^{x,y}	New Construction Only		City
	No down 30 year	Immed Fut	
96 1/2 95 1/2-96	95 1/2-96	95 1/2-96	Atlanta
97 1/2 par-101	par-101	par-101	Boston local out-of-st.
— 95-96	—	—	—
96 1/2 96-97	95 1/2-97	95 1/2-97	Chicago
96 1/2 96-97	95-96	5 1/2-5 3/4	Cleveland
96 94-96	94-96	5 3/4-6	Denver
96 96 1/2-97	a	5 3/4	Detroit
96 96 ^b	96 ^b	6 1/4-7	Honolulu
96 1/2 95 1/2-96	a	5 3/4-6 1/4	Houston
96 95 1/2-96	95	5 3/4-6	Los Angeles
96 1/2 95 1/2-96	95 1/2-96	5 3/4	Miami
97 96 1/2	95 1/2 ^b	5 1/2-5 3/4	Newark
97 1/2 97	97	5 3/4	New York
96 95-96	95	5 3/4-6 1/4	Okla. City
97 98	a	5 1/2-5 3/4	Philadelphia
96 95 1/2	95 1/2	5 3/4-6	San Fran.
96 1/2 a	a	5 1/2-6	St. Louis
97 96 1/2	96	5 3/4-6	Wash., D.C.

Conventional Loans

Comm. banks, Insurance Cos.	Savings banks, S & Ls	Interest + fees	
		Banks, Cos. & Mtg Cos.	Savings banks, S & Ls
5 1/2-6	5 3/4-6 1/2	6-6 1/2+1-2	6-6 1/2+2
5 1/4	5 1/4 ^d	5 1/4	5 1/4
5 1/2-6	5 1/2-6	5 3/4-6+1-2	5 3/4-6+1 1/2-2 1/2
5 1/2-5 3/4	5 1/2-6	6+1	6+1
5 3/4-6	6-6 1/2	6+1 1/2-2 1/2	6+1 1/2-2 1/2
5 3/4	5 3/4	6+ 1/2	6+ 1/2
6 1/4-7	6 1/4-7	6+1 1/2	6+1 1/2
5 3/4-6 1/4	5 3/4-6 1/2	6+1-1 1/2	6+1-1 1/2
5 3/4-6	5 3/4-6.6	5 3/4-6+1 1/2	6+2-2 1/2
5 3/4	5 1/2-5 3/4	6+1	5 3/4+0- 1/2
5 1/2-5 3/4	5 1/2-5 3/4	6+1	6+1
5 3/4	5 3/4	6+0- 1/2	6+0- 1/2
5 3/4-6 1/4	5 3/4-6 1/4	6-6 1/2+1-2	6-6 1/2+1-2
5 1/2-5 3/4	5 1/2-6	6+1	6+1
5 3/4-6	6-6 1/2	6+1 1/2	6 1/2+2
5 1/2-6 1/4	5 3/4-6 1/4	5 3/4-6 1/2+1-2	5 3/4-6.6+1-2
5 3/4-6	5 3/4-6	5 3/4-6+1	5 3/4-6+1

* 3% down of first \$13,500; 10% of next \$4,500; 30% of balance.

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

Footnotes: a—no activity, b—limited activity, c—for 30-year loans, d—a few loans advertised at 5%, w—six months construction loan unless otherwise noted, 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 1% stock purchase figured at sale for 50¢ on the \$1, z—on houses no more than 30 years old of average quality in a good neighborhood.

SOURCES: Atlanta, W. L. Patterson, vice pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, pres, Boston Five Cents Savings Bank; Chicago, Harry G. Gottlieb, vice pres, Draper & Kramer Inc; Cleveland, David O'Neill, vice pres, Jay F. Zook Inc; Denver, A. C. Bradley, asst vice pres, Mortgage Investment Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Honolulu, Gordon Pattison, vice pres, Bank of Hawaii; Houston, Everett Mattson, vice pres, T. J. Bettes Co; Los Angeles, Christian Gebhardt, asst vice pres, The Colwell Co; Miami, Lon Worth Crow Jr, pres, Lon Worth Crow Co; Newark, Arthur G. Polis Jr, pres, Franklin Capital Corp; New York, Gabriel Swartz, vice pres, J. Halperin & Co; Oklahoma City, B. B. Bass, pres, American Mortgage & Investment Co; Philadelphia, Robert S. Irving, vice pres, First Pennsylvania Banking & Trust Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, D. C., Hector Hollister, exec vice pres, Frederick W. Berens Inc.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 5 1/2s

Immediates 97-97 1/2
Futures: 97

FHA, VA 5 1/4s

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

FHA 5 1/4 spot loans

(On homes of varying age and condition)
Immediates: 94-95

Prices for out-of-state loans, as reported the week ending July 14 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			
	June 14	July 13	low	high
Bid	70	74 1/2	70	74 1/2
Asked	72	76 1/2	72	76 1/2

Quotations supplied by C. F. Childs & Co.

Introducing . . . the new steel, rigid-foam-core, flush

Ever Strait Door by PEASE

IT CAN'T WARP

COSTS LESS THAN A WOOD DOOR

EVER-STRAIT,* the new Pease exterior residence door is the lowest-cost answer to warp-free doors. Latest product of research and development in the family of Pease building materials, the EVER-STRAIT is the finest looking door you can buy. Light weight ($\frac{1}{3}$ lighter than conventional doors). Available in eight flush designs.

This door has a substantial feel and never has an "oil can" sound. It's made of steel | foam | steel construction, with a rigid Koppers Dylite** core.

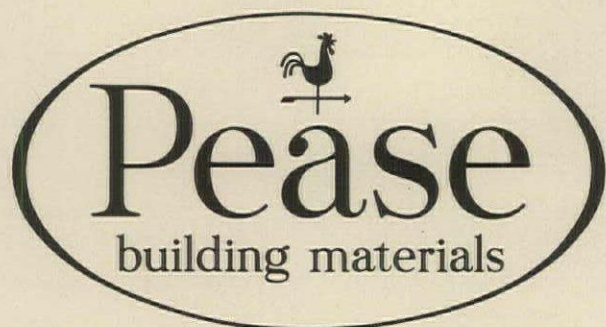
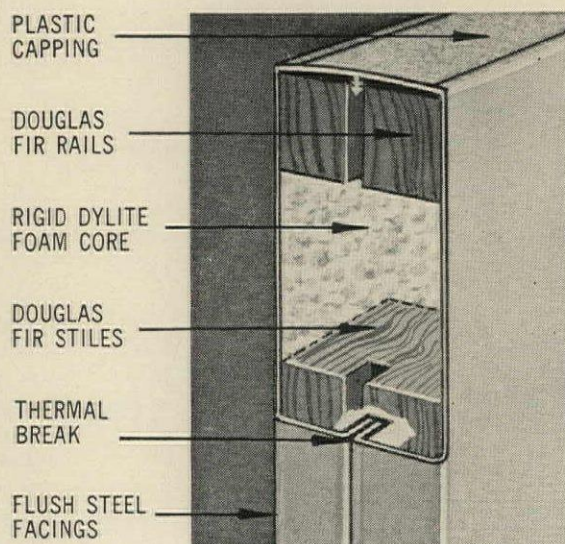
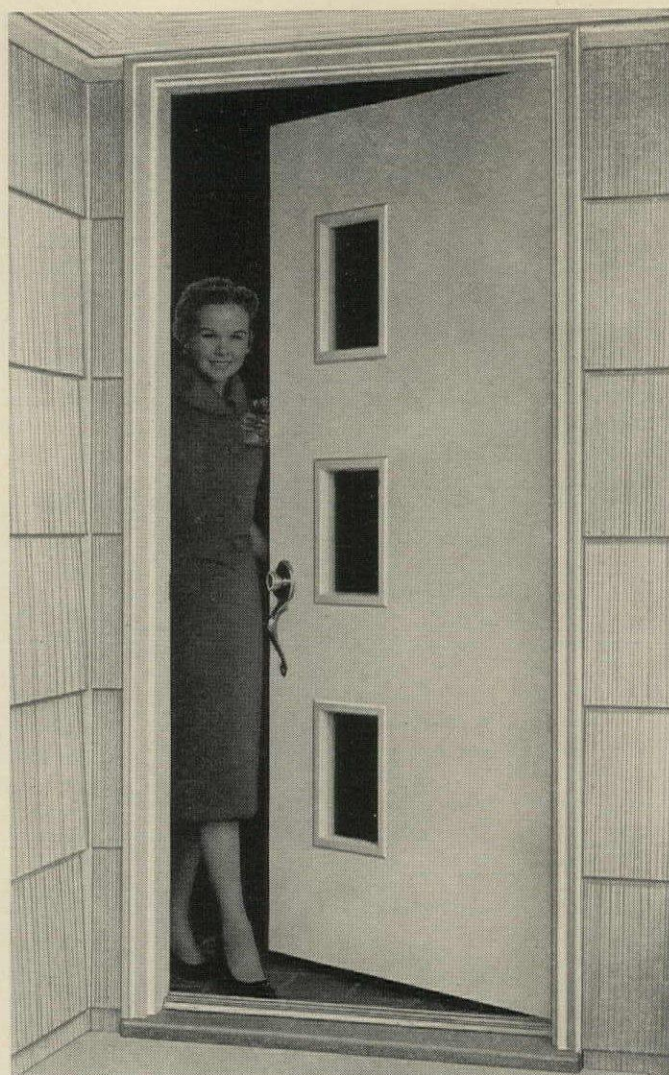
In the exclusive Pease process, Dylite foam is compressed to a rigid core between two steel panels. The resulting EVER-STRAIT door is heat-proof, cold-proof and warp free!

Its compressed foam core—plus the unique thermal break between the flush, smooth faced steel panels—provides extraordinary insulation. When heated to 75°F inside and cooled to -20°F outside, the door shows no trace of condensation or frosting.

COMPLETE PACKAGE SPEEDS INSTALLATION

Pease EVER-STRAIT doors are factory zinc coated, bonderized and primed for long lasting rust protection. They come pre-hung in a primed, weatherstripped outside Ponderosa Pine frame with Oak sill, complete with aluminum threshold, outside casing, metal flashing, drip cap and (when specified) door lights. All you need is the wall!

WRITE TODAY FOR SIZES, PRICES AND DESIGNS IN THE BOOKLET "WELCOME TO WARP-FREE DOORS"



PEASE WOODWORK COMPANY

Hamilton, Ohio

*Patent Pending

**Reg.Tdm.

LEGISLATURES:

How new state laws affect housing, lending, renewal

New Jersey, Oregon add realty tax shelters
but Pennsylvania, New York pass new levies

The housing industry's continuing struggle to get better state laws brought a few gains this year. Massachusetts builders, for instance, won protection against quick rezoning to stymie unwelcome building. Lenders persuaded three more legislatures to ease doing-business requirements, thus encouraging more out-of-state mortgage money. But every three steps forward were offset by two backward—such as taxes in Pennsylvania that will hit S&Ls, a tax shelter for Oregon farmers that will probably boost land prices. Laws to ban racial bias in private housing were debated in 17 states, adopted in three, strengthened in two, defeated in 11; one is pending.

Maryland stymies effort
to block S&L crackdown

In a brisk seven-hour emergency session on a hot June day, Maryland legislators finally passed a law they hope will regulate the state's S&Ls.

The emergency law puts S&Ls under supervision of the state Taxation & Assessments Dept. The legislators had passed a similar bill months earlier (NEWS, Apr et seq). But Democratic politician James H. (Jack) Pollack of Baltimore nullified their work by leading a drive which gathered 45,000 signatures on a referendum petition. Under Maryland law this automatically suspended the S&L control act, which had been scheduled to go into effect June 1, until a state referendum could be held in November 1962. Since Pollack hadn't figured in earlier S&L fights, political dopesters wondered about his sudden interest in collecting signatures (at 3¢ to 15¢ a name) along block after block of Negro housing. Best opinions: 1) Pollack was miffed at Democratic Gov Millard Tawes' snub of his son-in-law, chief magistrate of Baltimore's just abolished traffic court, in filling the bench on the city's Municipal Court that replaced it; 2) Pollack will use his machine to oppose Tawes if he runs for re-election next year.

Tawes answered Pollack's referendum drive with the emergency session. The two new bills passed uncontested in the House. In the Senate only two negative votes were cast. One came from Pollack's son-in-law, who had just been appointed a senator. Pollack now threatens to challenge the constitutionality of the hurry-up laws in court.

Park dedication: Two populous counties, Montgomery and Prince Georges, ringing Washington, D. C., got power to require subdividers to donate land for recreation.

Redevelopers win tax
abatement in New Jersey

New Jersey joined the growing list of states and cities granting realty tax concessions to urban renewal builders. A new law lets cities forgive realty taxes for 15 years on renewal buildings if the redeveloper promises to pay the city 15% of gross rental income.

The measure overcame stiff opposition from unexpected sources. Mayor Leo P. Carlin of Newark denounced an original version (which called for 20-year abatement with payments ranging from 12½% to 17½% of rentals) as a potential "giveaway."

The State Housing Council claimed that limiting a redeveloper's profit to 1¼% of the overall cost of a project actually guaranteed redevelopers a profit, thus promoting luxury

units at the expense of middle-income housing. Mortgage bankers and the League of Municipalities opposed the bill.

But after amendments had cut the tax abate-term to 15 years, supporters pressed their claim that the law would attract \$500 million in renewal construction to 35 cities.

Aged homeowners' aid: Legislators eroded the tax base by approving an \$800 property tax exemption for owners over 65 earning less than \$5,000 annually.

Discount gouging: Last minute increases in discounts charged homebuyers for mortgages were banned. A new law requires written notice of all demands for such fees 12 days before closing of a real estate sale.

Middle-income housing: Retiring Gov Robert B. Meyner (D) again proposed a \$25 million issue of tax free bonds to lend money to private builders of housing for families in the \$3,000-\$7,000 income group. Again the plan passed the Democratic-dominated Assembly. And as in 1960 it died in the Senate. Backers had hoped to lower interest rates by pledging the state's credit for the bonds (as does New York State's Mitchell-Lama program) and so to reduce monthly rentals. Companion bills suffered similar fates. They would have let public housing authorities build middle-income housing and let cities buy land for middle-income homes in non-renewal areas.

1% realty transfer tax: A proposed 1% realty transfer tax to raise \$10 million yearly was killed.

Fringe area farmers get
tax shelter in Oregon

Legislators passed a new law protecting farmers on suburban fringes of metropolitan areas from higher assessments based on the value of their land for urban development. To qualify for the low agricultural tax rate, farms must be at least five acres, zoned for agriculture, and in actual farm use.

But the Portland *Oregonian*, the state's largest newspaper (circulation: 207,837), editorialized on dangers of the new law: "The act safeguards the farmer against an overzealous assessor, but it is also an invitation to collusion to build up the value of a prospective residential subdivision area while paying low taxes, and it threatens the natural and constructive growth of the cities, even though the farmers who stand in the way be truly interested in farming rather than in some future killing in real estate." To prevent abuses, the newspaper urged "the highest sort of both alertness and courage on the part of the zoning commissions."

Tax on Pennsylvania S&Ls
heads for court test

Pennsylvania savings and loan associations are girding to fight an eight-mill tax on their

reserves, surpluses, and undivided profits. The tax was part of package which Gov David Lawrence sent to the legislature with orders not to change it. So no public hearings were held. Officials estimate the tax will yield \$3 million this year and \$3.6 million in 1962.

S&L leaders complain the law will undermine their reserves. Says President Elwood Knapp of Pittsburgh's Friendship Federal S&L: "Here we have the rather unique situation where state government requires by one law that savings and loan associations set aside part of their profits into a reserve to be used exclusively for future losses, then by another law eats away at that same reserve by a constantly repeating annual tax." Tax counsel for most of Pennsylvania's S&Ls advised them not to pay tax on federal securities they hold. This could cut yield to \$1.1 million and set up a court test of the law.

More power for cities
arouses Texas builders

For years rural-minded Texans have urged curbs on the almost unlimited annexation powers of Texas cities, who can gobble up land around them faster and more easily than any other state allows. This year they proposed to limit annexation powers to 10% of a city's area in any one year. In return, cities would enforce their zoning, building, subdivision, and health rules for up to five miles outside their boundaries.

The bill steamed through the House almost unnoticed before builders awakened to dangers they professed to see in the bill. "The practical effect might have been to create a green belt around cities where no building was allowed," warned one.

A senate committee, amended the bill until the Texas League of Municipalities, a strong backer, urged it be killed unless the House version could be passed. When the Senate twice refused to consider even the amended version, the idea died.

Realty investment trusts: Lawmakers permitted formation of real estate investment trusts and provided limited liability for shareholders. Such trusts are expected to qualify for conduit tax treatment under last year's federal law (NEWS, Oct '60).

Iowa becomes 47th state
to clear public housing

Iowa lawmakers cleared the way for cities to build public housing units.* Des Moines officials pressed for public housing as the only way to solve relocation problems arising from demolition for expressway and urban-renewal projects. Rep William Lybes (R) denounced the idea as "the beginning of the end for private enterprise." In the heat of the debate Sen Barry Goldwater (R, Ariz.), visiting Des Moines, spoke out against public housing. State Sen Charles Van Eaton (R) retorted that he had seen people living "in wickiups and adobe houses" in Goldwater's home town. Van Eaton added there were 200 or 300 persons living in substandard homes in his Sioux City district "despite the efforts of private enterprise."

continued on p 60

* Oklahoma, Utah, and Wyoming have no laws enabling public housing. South Dakota and Vermont have enabling laws which have not been used.



No need to worry about denting or chipping... with a gleaming sink of Nickel Stainless Steel

Sinks made of Nickel Stainless Steel are sure to please any homeowner. They don't have the problems other sinks have because they're made of a solid material that combines strength, hardness, resilience and durability . . . for extra long life!

Nickel Stainless Steel sinks resist denting because they're solid metal . . . sturdy, yet resilient. Uniform all the way through, Nickel Stainless Steel can be counted on to last a lifetime.

They won't chip because there's no coating, no covering on top of the

metal. It's the same hard-wearing, high quality stainless steel inside and out. You just can't chip it.

Outstanding resistance to denting and no chipping are only two of Nickel Stainless Steel's many important qualities...qualities your customers look for when they buy. Write to Department HA for Inco's

new color booklet, *For Beauty That Keeps Your Kitchen Young...a Sink of Nickel Stainless Steel*, and get all the facts. And be sure you specify, supply, or install sinks bearing the Nickel Stainless Steel label. Your customers will be looking for it.

THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street, New York 5, N. Y.



INCO NICKEL

Nickel makes stainless steel perform better longer

Long-Bell
TIP★



A LONG-BELL CONTEMPORARY KITCHEN

★ **TO INSURE PROFITS...**

Long-Bell® Natural Wood Kitchens

Here's a Long-Bell Kitchen that's brimming with feminine sales appeal! What housewife could resist the warm "livability" of its natural Birch cabinets and smart contemporary styling?


What woman could say "no" to the many quality features that go with each Long-Bell cabinet—the careful workmanship, knee and toe room, adjustable wall shelves, non-warp doors, slide-out Nylon-glide base shelves, magnetic door catches, attractive hardware, and hand-rubbed appearance of Super Microseal® finish.

And how enthused she'll be about Long-Bell's special pur-

pose cabinets—Lazy Susans, Vegetable Bins, Vertical Storage and many others. Yet, with all their beauty and quality features, Long-Bell cabinets are surprisingly low in cost.

From a builder's point-of-view Long-Bell cabinets mean extra profit because of their ease and speed of installation and finishing, due to 3" modular construction and the Microseal® pre-sealing process. Long-Bell cabinets are quickly available in Birch or Rift grain fir, setup or knocked down from stock at three conveniently located warehouses. Ask your dealer or call or write Long-Bell for information and price.

©General Plywood Corp.

 **INTERNATIONAL PAPER**
Long-Bell Division

A Quality Name in Forest Products



Kansas City, Missouri • Longview, Washington • Primos, Pennsylvania

The bill finally passed sets maximum income limits at \$3,600 yearly plus \$100 for each dependent. Sixty percent of voters in a city must approve public housing before the law can be used. Des Moines is expected to call such an election before summer's end. Its outcome is uncertain, though. Realtor O. G. (Bill) Powell of Des Moines, president of the Natl Assn of Real Estate Boards, says the city currently has some 800 vacant apartments and 250 vacant houses. Worse, an 11-man enforcement team for the city's housing code isn't accomplishing much, in Powell's view. Bills to permit trust deeds died in committees of both houses.

Massachusetts builders win protection from fast zoning

Struggling for protection from unfriendly towns all too eager to rezone a builder out of their community, Bay State builders sponsored a bill extending a zoning freeze on new subdivisions from three to five years. The measure passed. Now, town planners may not change lot frontage or area requirements for five years after an official plat is filed.

Middle income housing: The Senate doomed a plan to let the Boston Housing Authority and Boston Redevelopment Authority use eminent domain to buy land for middle income housing projects in Boston's South End. The authorities would have either built the units themselves or provided special financing to private builders.

Realtor-builder tiff weakens rules for Colorado promoters

Few challenge the judgment of a Colorado state official that the state is "wide open for the promoters and the con men." The fast-

buck promoters know it's true and each spring flock to Colorado to peddle "mountain estates," "cabin sites," and "ranches." Often they sell optioned land, because state law does not require subdividers to survey and record plats of their land. By first snow fall they've skipped, leaving thousands of suckers, many of whom bought land sight unseen, holding nearly worthless land with uncertain title.

Reform has been attempted periodically and unsuccessfully. This year a tough control measure died for the third time in the legislature because builders and realtors failed to agree on how to crack down on the fly-by-nighters. But an admittedly weaker bill was passed.

The Colorado Assn of Real Estate Boards backed a bill requiring full disclosure of all facts about developments: status of land title, financial backing, reputation of the promoter. It passed the Senate by a 29-6 vote.

But in the House, homebuilders spearheaded by the HBA of Metropolitan Denver, argued realtors were "empire building" through the bill by requiring tract builders and subdivision promoters to obtain real estate licenses. Builders urged that counties control the land speculators instead of bringing subdividers under control of the state Board of Real Estate Brokers. Caught in the crossfire, the tough bill died in committee.

But legislators passed a weaker bill requiring subdividers to obtain specific county approval before selling building lots. Violators can be fined \$500 for each site sold, with each day's offense being a separate violation.

But still "the state is wide open," says Executive Secretary Keith Koste of the Real Estate Brokers Board. He believes few counties have the men to enforce the new law. He predicts rigid controls will be passed "after a

few more promoters have burned a few more citizens—and they will."

Annex bill vetoed: Legislators approved giving cities power to annex suburban areas without vote or consent of residents. But angry suburbanites outside Denver threatened to incorporate a "spite city"—a 1' wide ribbon ringing an unincorporated square mile in which they resided. Gov Stephen L. R. McNichols then vetoed the bill.

Arizona toughens penalties on false realty advertising

Arizona lawmakers have made false advertising of land and subdivisions a felony instead of a misdemeanor. Violators now face fines up to \$10,000, instead of \$2,000, and a two-year jail term.

To make sure landbuyers know what they are getting, the state real estate commissioner can require salesmen to give each customer a copy of a report on the land prepared by the commissioner's staff. Up to now the commissioner could only publish the report; he had no assurance customers would ever learn its findings. Definitions were tightened to include land "divided or proposed to be divided" into five or more lots. Peddlers of jungle acreage in Brazil or orange groves in Florida are as subject to the law as promoters of desert and mountain land in Arizona.

The Arizona Real Estate Board supported the stiffer penalties and the changes swept through the House and Senate with only one dissenting vote.

At the urging of the Phoenix HBA Arizona also required general contractors to post a \$2,000 to \$10,000 bond to cover claims for non-performance of a job. Claims must be made within one year.

BOOMING 20th CENTURY
BY SCHOLZ

1200 SQ. FT. — 3 OR 4 BDR'S — 2 BATHS.

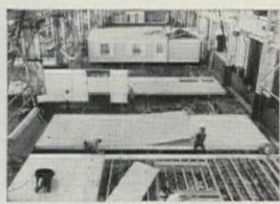
Above is a reproduction of an advertisement which appeared in House & Home Magazine, December, 1960.

This ad appeared in December, 1960, introducing the revolutionary new 20th Century concept of lower cost home building.

Fantastically mounting production economies permit a \$1000 across the board price cut. Continuously increasing volume puts 20th Century builders in line for future reductions — on homes at costs already under the market in many areas.

Delivered in finished sections . . . erected complete in one day by crane on builder's foundation at firm costs . . . wide variety of architectural styling . . . luxury quality specifications throughout . . . provision for brick veneer if desired . . . assembly line savings

Housing's Great Breakthrough



Production line 20th Century Plant



Basement foundation



8:00 A. M. Section #1 placed



8:45 A. M. Section #2 placed



9:30 A. M. Section #3 picked up

Maine savings banks gain 75%, 25-year mortgages

Maine joined the trend toward longer and higher conventional mortgage loans by approving three important changes for the state's 32 mutual savings banks.

New laws increase 1) loan limits for amortized mortgages from 70% to 75% of appraised value, 2) limits for non-amortized mortgages from 60% to 66 2/3% of value, and 3) maximum term for monthly amortized mortgages from 20 to 25 years.

Maine stiffened its blue laws on Sunday selling but the change apparently will not affect real estate sales. Although real estate sales are not excepted under the new law, President Floyd R. Beecher of the Maine Assn of Real Estate Boards says: "We are just not affected by any of the state's present blue laws." Real estate transactions were not mentioned in debate on the new law.

Builders letters win veto of New York escrow bill

Two bills to keep a "minute fringe of irresponsible builders" from making off with cash down payments on homes never delivered to buyers provoked one of the hardest but least publicized fights of this session. Legislators pondered two bills:

1. The escrow bill would have required builders to put down payments in escrow or furnish a performance bond to buyers. Offending builders would have been guilty of larceny—even though no money was misappropriated. Practical effect would have been to keep builders from using progress payments from buyers in constructing a house.

2. A bill to classify down payments as liens on the property second only to the construction loan and/or mortgage.

Organized builders assailed the escrow bill as "one of the most harmful pieces of legislation." They insist it will boost house costs, drive many small builders out of business.

But lawmakers passed both bills. When they reached Gov Nelson Rockefeller, builders peppered his desk with hundreds of letters urging him to veto the escrow bill, sign the lien bill. The governor did.

Other legislature action:

Renewal aid: Two new laws 1) extend from 25 to 50 years the term over which cities can amortize financing costs for renewal projects, and 2) let cities issue "urban renewal notes" to finance projects temporarily. A third law appropriated \$10 million from current revenue to put state aid to renewal projects on a pay-as-you-go basis. New York pays one-sixth of renewal project costs, and Gov Rockefeller said the change would save \$4.5 million in interest on the \$10 million state aid by avoiding issuing bonds.

Realty corporation tax: Despite the expectable protests from organized real estate brokers that more tax increases would "impose an unconscionable burden on real estate," Gov Nelson Rockefeller signed a law removing a franchise tax advantage enjoyed by real estate corporations. Instead of paying a franchise tax of 1/4 mill on gross assets, realty corporations will pay 2% of net worth in excess of paid-in capital for 1961. Thereafter the tax will be 5 1/2% of net income. Tax Counsel Harold J. Treanor of New York City estimates corporations will pay from five to 11 times higher franchise taxes—and that their total tax load will increase between 3% to 10%.

Slumlord lists: Gov Rockefeller and Mayor Robert Wagner of New York City differed over who was to do what with the names of the city's slumlords. In March, Mayor Wagner, with one

eye on this November's mayoralty election, established by administrative order a Housing Violation Bureau to catalog notorious landlords. But Manhattan Assemblyman Samuel A. Spiegel, like Wagner a Democrat, sponsored a bill setting up by state law a Central Violations Bureau in the city. Said Republican Rockefeller in signing the law: "There is nothing inconsistent between the mayor's more limited action and the more comprehensive registry provided for by this bill."

90% loan reserves: In clarifying the state's unree-year-old law allowing mutual saving banks to make 90% loans on one- and two-family homes, legislators dropped a requirement that banks put 1/2% of the loan into a special reserve. Most recent count by the New York State Banking Dept shows 7,479 such loans totaling \$133.5 million outstanding.

Good-neighbor zoning: The 46 municipalities in suburban Westchester County must now notify a neighboring town when they want to rezone property within 500' of the town boundary. If the neighboring town disapproves, the zoning is subject to court review.

Rent control, building codes: Bills extending New York State's controversial rent control (NEWS, May) and making the state's model building code permanent (NEWS, June) were signed into law.

Quick evictions: Gov Rockefeller vetoed a bill requiring housing authorities to prove in court tenants they want to evict were "undesirable or objectionable." Tenants retain the right to appeal to court from administrative rulings. Public housers said the power to order quick evictions is essential to keeping tenants in line.

Slum repair: Mayor Wagner's proposal that New York City be allowed to take over and repair slum buildings whose owners refuse or are unable to improve them died in the Republican-dominated legislature. Opponents said vigorous city enforcement of housing laws could make the law unnecessary. *NEWS continued on p 65*

PRODUCTION DROPS PRICES \$1,000!

.. COMPLETED IN ONE DAY ..

~~\$8950~~

\$7950

(House Unit \$7,500 • Erection \$450)

provide costs as much as \$1,000 under comparable houses . . . seven tremendous Scholz designs from \$8,000 to \$20,000 (completed house prices) . . . short erection time eliminates need for construction loans or capital tied up in houses in process . . . disbursements made directly from purchaser's mortgage closing . . . Provision for complete promotion including display model furniture.

The Scholz-20th Century Plant and model display in Toledo is the outstanding builder attraction in the nation. If you have not seen it—call today and arrange for an inspection of the building industry's most advanced technology. You will find it of value in your own operation.

For information, call JE 1-1601 Toledo or write today.



10:00 A. M. Section #3 placed



5:00 P. M. Classic model complete

Please have your representative call on me with complete details of the 20th Century Program

Name _____		Address _____	
City _____	Zone _____	State _____	Phone _____
I have been building _____ homes per year in the \$ _____ price range.			
I presently have _____ developed lots available.			

Mail to: 20TH CENTURY HOMES • 2001 N. Westwood, Toledo 7, Ohio

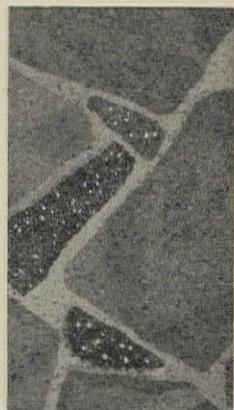
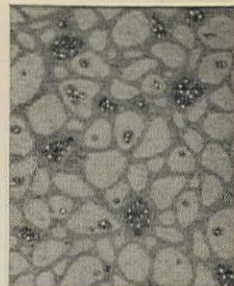
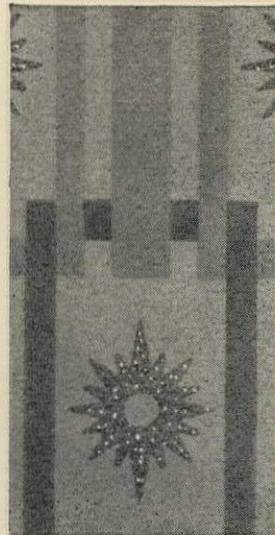
HH-8-61



A floor that does more than its share of



NEW! Armstrong Elegante Inlaid Linoleum. Your flooring contractor will show you the striking designs in this new kind of linoleum. Its embossed surface is studded with sparkling, translucent plastic accents.



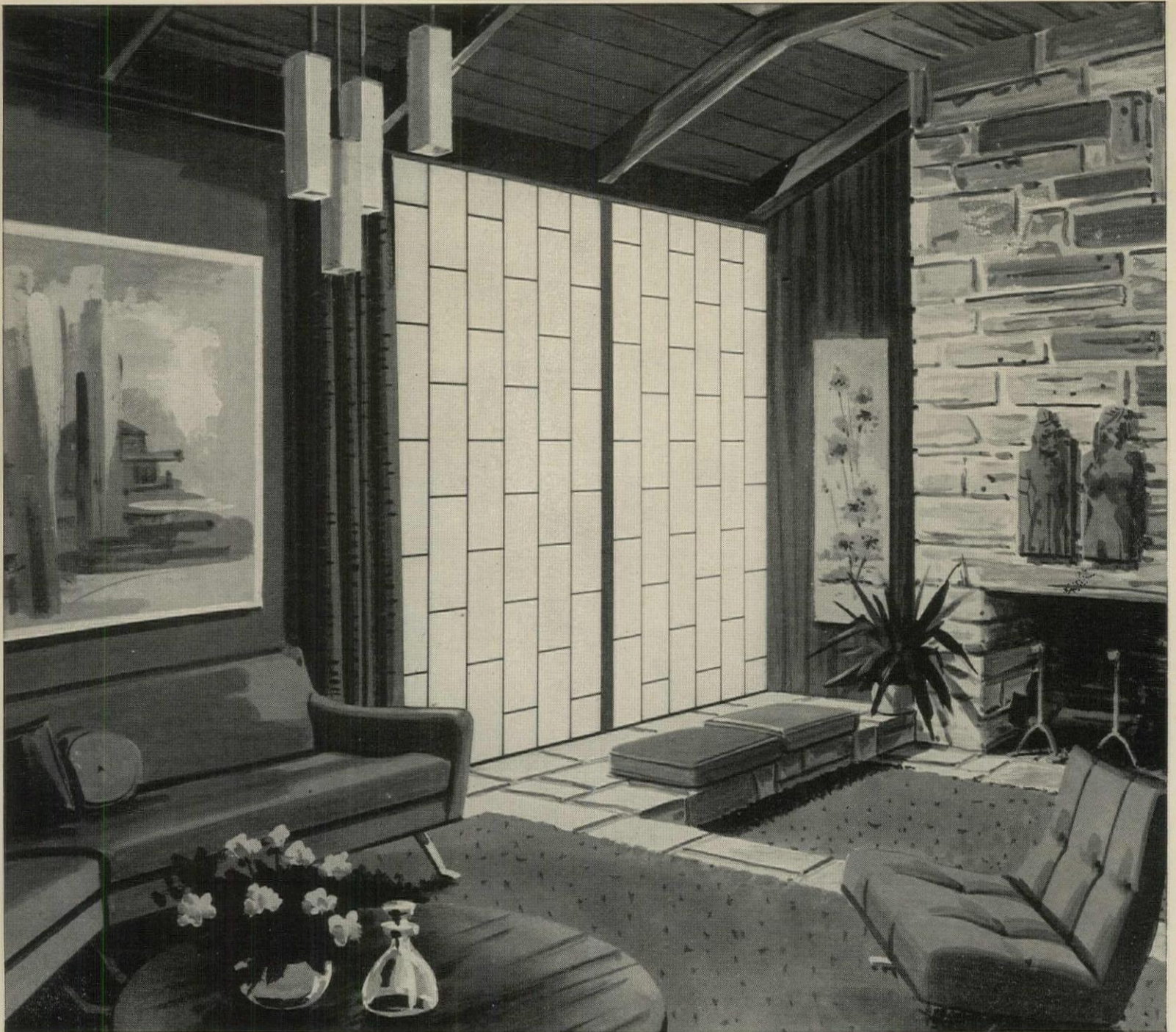
your selling job—Embossed Inlaid Linoleum

The good looks and easy care of this famous Armstrong floor have made it a favorite with owners for some 28 years. Embossed Inlaid Linoleum—an Armstrong exclusive—comes in a wide range of striking designs—flagstone, brick, tile, and similar popular effects—all of them embossed for natural beauty. The dramatic beauty of an Embossed Linoleum floor does an extra decorating job for your model home—providing a smart setting with the minimum of accessories. And the embossed surface “hides” minor subfloor imperfections. Embossed Inlaid Linoleum comes in 26 patterns, costs about \$.50 per sq. ft. installed. (In the room at left above is the brick effect, style 5571. Below, the flagstone effect, style 5310.) And new Armstrong Elegante Inlaid Linoleum (see swatches above) comes in 8 different designs, costs about \$.55 per sq. ft. installed. Both floors can be used in any room, above grade.



VALUABLE SERVICES TO HELP YOU CLOSE SALES THE ARMSTRONG ARCHITECTURAL-BUILDER CONSULTANT IN YOUR AREA IS A FLOORING EXPERT WHO CAN HELP YOU SELECT THE FLOORS BEST SUITED FOR YOUR NEEDS. HE WILL ALSO GIVE YOU YOUR CHOICE OF EFFECTIVE MERCHANDISING DISPLAYS AND MATERIALS. IF YOU DESIRE, HE CAN ARRANGE TO HAVE THE ARMSTRONG BUREAU OF INTERIOR DESIGN WORK WITH YOU OR YOUR DECORATORS. NO CHARGE, OF COURSE. CONTACT HIM AT YOUR ARMSTRONG DISTRICT OFFICE OR WRITE DIRECT TO ARMSTRONG, 108 SIXTH STREET, LANCASTER, PENNSYLVANIA.

Armstrong FLOORS



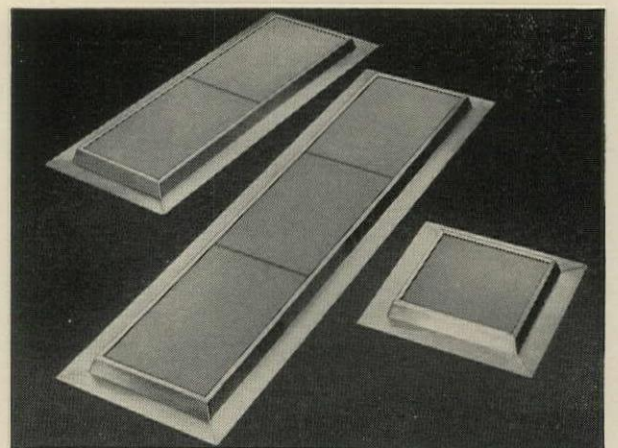
LUMINOUS LIVING ROOM—Kalwall Translucent Wall is dramatic new light source.

Wall of light ... a Kalwall idea that draws "ohs" and "ahs" from home buyers

Kalwall Translucent Walls, Skyroofs and Skylights impress homebuyers, the minute they walk in your door. *† † †* People are delighted with the soft, soothing, natural light that Kalwall provides—the freedom from shadows and glare. *† † †* Translucent Kalwall *diffuses* light ... eliminates "hot spots." And it's a strong, shatterproof, insulating building material, too. *† † †* You can get Kalwall in a choice of colors and patterns—in large, lightweight, self-supporting panels. Installation is simple—total cost, reasonable. *Write for free folder: "Outdoor Light for Indoor Living."*

KALWALL CORPORATION

Dept. N-81, 43 Union St., Manchester, N. H.



You can take the gloom out of any room,
with prefabricated Kalwall Skylights.

PEOPLE:



SLAYTON AND AIDES (L TO R) WHARTON, BANKS, SHIVELY, HAYES
The new top team at URA is up from the ranks

Deputy, three assistant URA commissioners named

Commissioner **William Slayton** has picked a new top team to guide the Urban Renewal Administration's spending in the next four years of as much money as former URA men had to spend in the last 12.

Slayton followed FHA Commissioner **Neal Hardy** in promoting men who have worked up through the ranks. The Democratic team:

- **Howard Wharton**, 48, who got into redevelopment under the first urban redevelopment head, **Nathaniel Keith**, becomes deputy commissioner, the inside man to run the shop. Wharton was a regional renewal director in Philadelphia and moved to the Community Facilities Administration in 1956. Former URA Commissioner **David Walker** brought Wharton back to URA as assistant commissioner for redevelopment, a job now being scrapped.

- **James G. Banks**, 40, a branch chief under **William Ewald**, former assistant commissioner for technical standards, moves to the new post of assistant commissioner for relocation and community organi-

zation. Slayton says Banks "probably ran the best relocation job in the country" when he handled relocation for Washington, D. C. Ewald, a Republican appointee, got the political ax even though he was an able renewal expert and, even rarer in a bureaucracy, an idea man.

- **John Shively**, 56, steps into Ewald's spot as assistant commissioner for technical standards. Shively, a graduate of the University of Kansas, is another renewal veteran who started in 1949 under Keith. Before that he was on the information staff of HHFA's predecessor, the Natl Housing Agency, and worked for the Public Housing Administration. Shively is a onetime realty editor of the *Kansas City Star*.

- **Frederick Hayes**, 37, shifts from the Budget Bureau (where he was chief examiner for housing programs) to assistant commissioner for program planning and development. A studious expert in municipal finance—he has two master's degrees from Harvard,

Hayes was recommended by his Republican predecessor, **Martin Millspaugh**, now deputy director of the Charles Center renewal project in Baltimore.

Other new faces in the federal housing agencies:

John Graeme Melville, 61, becomes HHFA regional administrator for 11 Western states and Guam. Australian-born Melville joined Home Owners' Loan Corp as an appraiser in 1933, switched to FHA in 1934, and joined the Public Housing Administration in 1942. Since 1956 he has been PHA regional director in San Francisco. He succeeds **Annabelle Heath**, who quit to become president of Merit Development Corp, real estate and urban development concern. Merit's directors include Past President **Nels Severin** of NAHB.

Kenneth C. Cavanaugh, 45, moves in as director of HHFA's direct loans for the elderly. He has worked for PHA 15 years, most recently as director of management for the Washington regional office.

H&H staff

Lee Johnson quits Denver housing job

Insiders knew the recent battles around **Lee Farnum Johnson** meant his resignation was coming. But when he quit last month as executive director of Denver's Housing Authority, Johnson did so with a flourish that was typical of the astute persuader once called a "one-man housing lobby."

Johnson, now 55, came to Denver three years ago after 14 years as executive vice president of the Natl Housing Conference, public housing's No. 1 lobby. He considered the 1949 Housing Act and its 810,000 public housing units his—and NHC's—greatest victory.

At Denver, Johnson took over an authority which had completed the last of its 3,270 units in 1956. Johnson started planning for 500 new units. But when he asked city approval for scattering 250 units on dispersed sites throughout the city at his own discretion, Mayor **Richard Y. Batterton**, a Republican, vetoed the plan.

Accused of "politicking" by



PUBLIC HOUSER JOHNSON

'Basic ideological differences,' he said

Democrats, Batterton replied with statistics showing just who was politicking: without adding any new units Johnson boosted the authority's staff from 27 to 129 in three years. Worse, cried the mayor, "half are not registered [to vote] in Denver, including Johnson. Of those who are registered, 57 are Democrats and two Republicans."

Next Johnson's five-man authority board, by a 3-2 vote, rejected Johnson's choice for a \$10,000-a-year assistant. Johnson promptly

resigned, not out of "haste or pique," he said, but because of "basic ideological differences. I believe in the low-rent public-housing program with a full heart. I believe it fair to say that a majority of the present board of commissioners accepts low-rent housing reluctantly, if at all. I cannot continue to serve under such negative direction."

EDITORS: **Hubbard H. (Hub) Cobb**, 43, steps up from building editor to editor of *American Home* (circ. 3,700,000), succeeding **John Mack Carter**, who resigned. **Stephen G. Thompson**, 49, associate editor of ARCHITECTURAL FORUM since 1952 and onetime associate editor of HOUSE & HOME (1952-54), has moved to Webb & Knapp as vice president, public relations. Thompson, former (1947-52) realty editor of the *New York Herald-Tribune*, also edits *The Appraiser*, monthly newsletter of the American Institute of Real Estate Appraisers. **Ernest A. Baumgarth**, 65, real estate and home section editor of

the *Detroit News* since 1939, has retired. His assistant, **Carl Konzelman**, succeeds him. Baumgarth, a *News* staffer for 44 years, was honored by Detroit homebuilders, who made him an honorary life member. And the mayor proclaimed "Ernie Baumgarth Day." Dr **George Cline Smith**, vice president and economist of F. W. Dodge Corp (publishers, among other things, of *Architectural Record*) quit to join MacKay-Shields Associates, New York economic consulting organization, as a director and senior partner.

MANUFACTURERS: **Robert W. Lear** has become vice president of marketing with the Carborundum Co, a new post. He was marketing services director for American Radiator and Standard Sanitary Corp.

John H. Eikenberg, 51, has been elected president of Revere Copper and Brass (1960 gross: \$211,975,000 net \$7,288,000), makers of copper roofing and tubing. Eikenberg, with Revere since 1924 and a vice-president since 1945, succeeds **Charles A. Macfie**, who retired.

Builder Andy Place becomes manufacturer

Builder **Andy Place** of South Bend, Ind., a pioneer in field-tested research, has formed a company to make building products he has developed and tested. It will sell direct to builders as well as through distributors. Andy Place Products Co, owned by its officers and directors and Place & Co, will concentrate on the Midwest market. First product offered will be a modular cabinet system using a monolithic, high-pressure laminate over an aluminum frame. Place is chairman of the new company and **Edward R. Novak Jr**, 40, former Midwest marketing manager for Flintkote, is president and general manager.

NAHB chief endows building law course

Thanks to a three-year endowment from NAHB President **E. J. (Jim) Burke Jr**, St Mary's University law school in San Antonio this fall will start a curriculum in municipal and homebuilding jurisprudence. Burke believes it will be the first of its kind in the US. **Carlos Cadena**, for the last seven years San Antonio's city attorney, has resigned to return to the law school as a professor to do the teaching. His first course, he told HOUSE & HOME, will be on land-use controls. Later he hopes to expand the list to include such topics as zoning law, construction codes and their enforcement, FHA procedures, and labor relations law. "Most Texas lawyers can't handle the simple sale of a \$9,000 FHA home," says Cadena. "Once they get away from a straight-out warranty deed they are lost."

George A. Morgan and **Robert F.**

continued on p 69



"You know what, Howard? This pipe'll last for a hundred years."

"Who said so?"

"The guy who's building all these houses told me. He said this pipe prob'ly wouldn't need any repairs or nothin' because it's so strong."

"You mean nothin'll happen to it for a hundred years?"

"Yeah. Prob'ly."

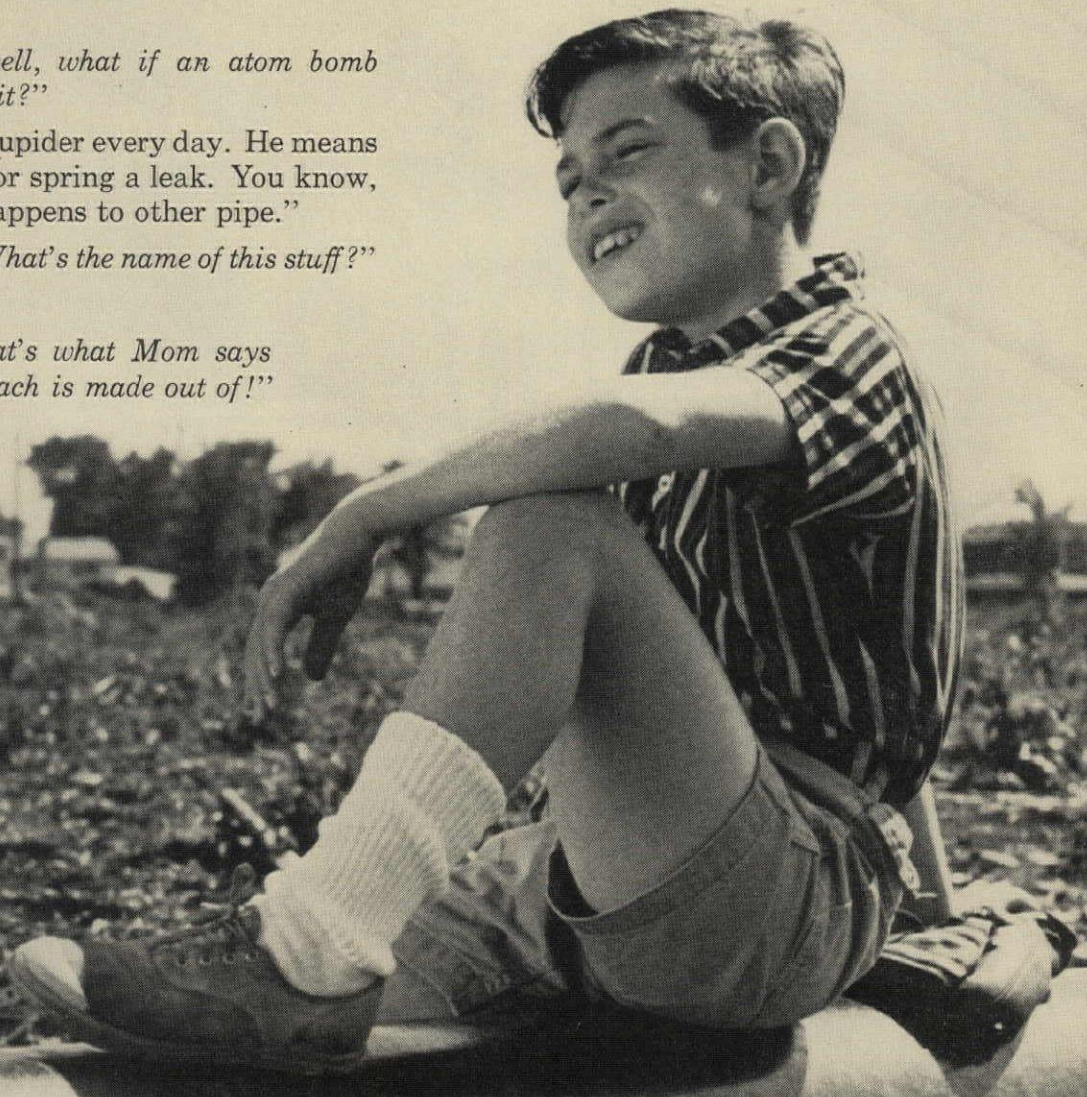
"Yeah, well, what if an atom bomb falls on it?"

"Oh Howard, you get stupider every day. He means that it won't wear out or spring a leak. You know, the kinda things that happens to other pipe."

"Yeah? What's the name of this stuff?"

"Cast iron pipe."

"Gee. That's what Mom says my stomach is made out of!"

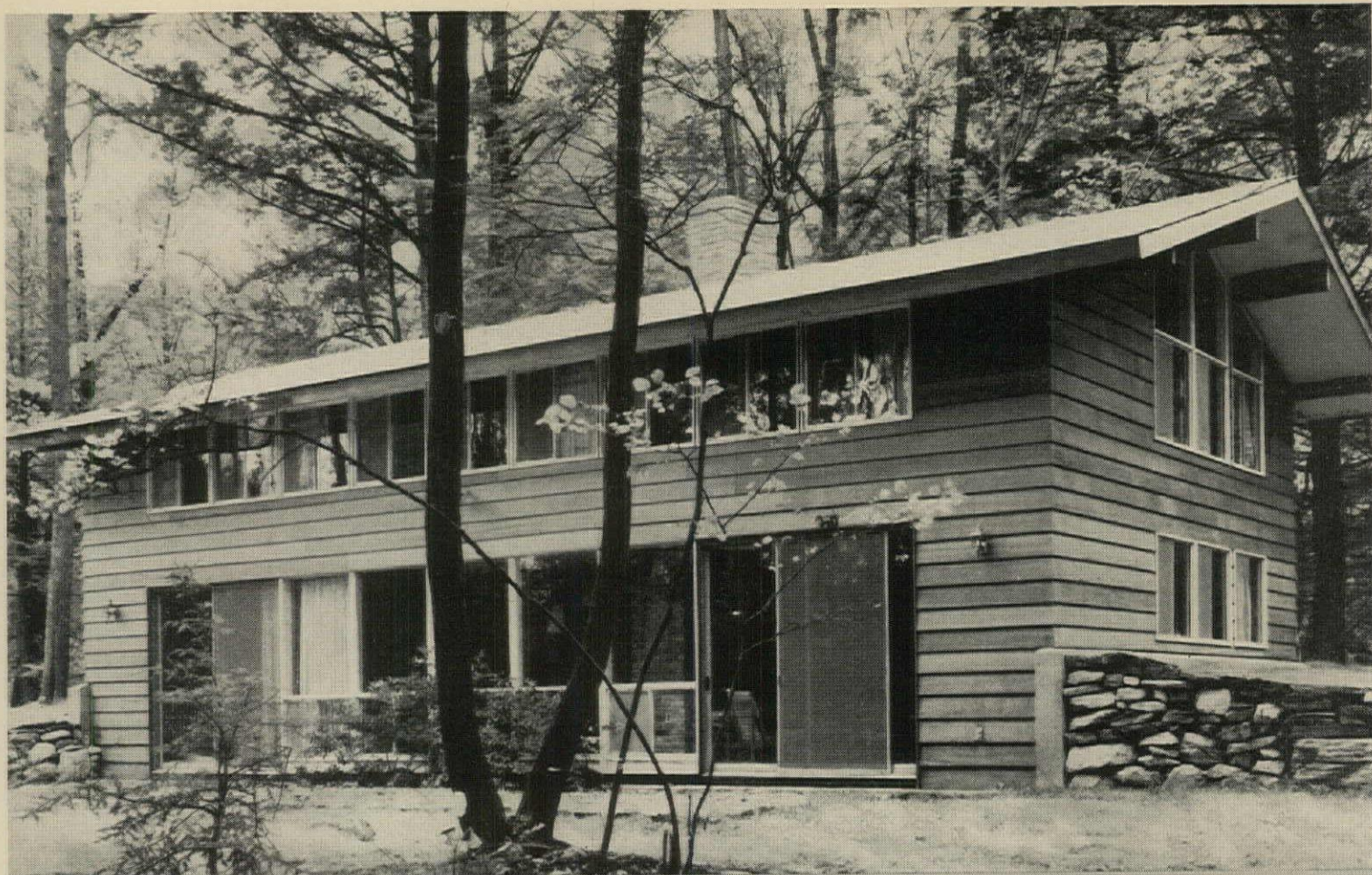


CAST IRON PIPE

THE MARK OF PIPE THAT LASTS OVER 100 YEARS

CAST IRON PIPE RESEARCH ASSOCIATION

Thos. F. Wolfe, Managing Director, 3440 Prudential Plaza, Chicago 1, Illinois



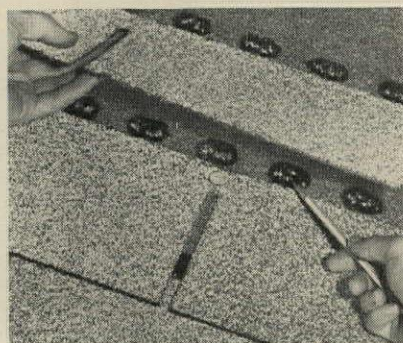
NEW ENGLAND COASTAL WINDS DON'T BUDGE BIRD WIND SEAL[®] SHINGLES

Award-winning home manufacturer protects his wind-swept houses with this hurricane-proof shingle

High winds hit everywhere: the U. S. Weather Bureau has reported winds of 113 MPH even in New York City. "Exposed locations on the New England coast need extra insurance against wind damage" — these are the words of John R. Wilson, president of Techbuilt, Inc., Cambridge, Mass. "That's why we choose Wind Seal Shingles."

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

Prize-winning Techbuilt house, which received first honors of the American Institute of Architects for residences in the \$15,000 to \$25,000 category constructed by merchant builders. Located in Sterling Forest Development, Tuxedo, N. Y., a project which will total over 2,000 homes in the next 5 years.



- powerful seals spaced for drainage
- proved to hold in 125 MPH hurricanes
- lay fast in the usual way — no pulling apart or turning
- long lasting double-surfaced construction
- advertised to your customers in The Saturday Evening Post

BIRD
Wind Seal[®]
SHINGLES

Wightman, both 39, have expanded their big (estimated \$7 million gross in 1961) Morgan-Wightman Supply Co into a new field by buying Modular Homes, luxury prefab manufacturer, from **Burton W. Duenke** in a cash deal. Both are St. Louis companies.

Builder Duenke, who has prefabricated 200-250 homes in the \$20,000-\$35,000 range annually since founding the company in 1952, plans semi-retirement. **Mel Hendricks**, formerly general manager of Hathaway Homes in St. Louis, was named general manager of Modular Homes, which will be a subsidiary of Morgan-Wightman.

Folmar & Flinn sue bonding company

Builders **James Folmar** and **Harry Flinn, Jr** of Montgomery, Ala. have added a new dimension to the still unexplained puzzle of how they came to build some 900 more units of FHA Sec 221 homes in 1959 than the Alabama market could absorb.

In federal court at Mobile, a Folmar & Flinn subsidiary sued its bonding company, American Casualty of Pennsylvania, for \$4,225,394. Grounds: Folmar & Flinn's Meadow Corp lost that amount in eight subdivisions in six Florida and Alabama cities because of "fraudulent or dishonest

acts of its employees." A total of 3,388 homes—half of them built under Sec 221 as relocation houses—are involved for a whopping loss of \$1,247 per house. The biggest loss, \$1,783,511, occurred at Hillsdale Heights in Mobile, the suit charged, where some 300 of 931 homes (733 under Sec 221) still remain unsold.

When the glut of 221 houses first turned up (NEWS, Oct. '59), builders blamed the trouble on poor market estimates by the state FHA office and the manner in which Sec 221 commitments (which are eligible for Fanny May purchase at subsidized prices) were handed out. In the background, newsmen soon found, lay a skein of profitable land deals with prominent GOPolitical figures.

DIED: Earl B. Teckemeyer, 56, Indianapolis realtor and noted speaker before US and Canadian realtor groups, author of two books on selling and appraising, former president of the Indianapolis Real Estate Board and the Indiana Real Estate Assn, June 27, at Indianapolis; **Paul Howard Leach**, 59, president of Leach Brothers Lumber of Joliet, Ill., past president (1953-54) of the Illinois Lumber & Material Dealers Assn, June 27, when the plane he was flying crashed near Joliet.

DIED: Hugh R. (for Reynolds) Pomeroy, 62, one of the nation's most widely renowned planners, July 1 in Croton-on-Hudson,



PLANNER POMEROY
Even judges understood him

N. Y., of an unexpected heart attack.

For the last 15 years, he had been planning chief of wealthy Westchester County, N. Y. But he was far better known as an evangelist of good planning ideas whose time had arrived—like preserving open space for parks, clustered homes in subdivisions, planning cooperation among adjacent communities. No planning convention or even a regional meeting, it seemed, was complete without a panel featuring Hugh Pomeroy as chairman or speaker. As an associate recalls, "he was

usually not more than one step ahead of what was politically possible. What was unique about him was his sense of timing—his mixture of high principles for urban development plus a political feel for what was appropriate."

Pomeroy had a talent, too, for making the complexities of zoning and planning clear to laymen. He was much in demand as an expert witness in court cases. One state supreme court justice had admitted he did not understand zoning cases until Pomeroy explained them.

Born in Burbank, Calif., Pomeroy attended nearby Occidental College, sometimes delivered Sunday church sermons while still a student—an early bent which sheds some light on his almost missionary zeal for planning. He was elected to the California legislature in 1923 at the age of 23, the youngest Assemblyman the state had then had. As executive director of the Los Angeles Regional Plan Commission, he wrote the nation's first county zoning ordinance. From 1939 to 1942, he was director of the Virginia State Planning Board, then became executive director of the Natl Assn of Housing Officials (now NAHRO). He was a past president of the American Institute of Planners and had been a professor of planning at Columbia University.

HOUSING MARKET:

Government predicts upturn for starts

The pace of housing is about to quicken. The market has been soggy the first six months of the year and only rental construction has boomed (up 21% from its 1959 level, compared to a 17% gain above '59 last year). But forecasters agree a significant upturn is due during the last half of 1961—though nobody expects a return to the high levels of 1958 and early '59.

The Commerce Dept, issuing its mid-year prediction on housing starts and volume, has scaled down its estimate of 1961 starts from 1.3 million to 1,275,000. The new figure would mean a 3% gain this year from 1960's 1,238,000 starts. But the important thing is that all of the increase is expected in the months ahead. Commerce trimmed its prediction because housing has not turned up as soon as government forecasters expected it would. During the first five months of this year, private starts were only slightly above the 1.2 million-a-year mark. In the last six months of 1961, Commerce says it expects a "significantly better volume of starts," although it adds this will be "only a partial recovery from the low rate prevailing since mid-1960."

Dollar outlays for private non-farm residential building this year should reach almost the same total as last: \$22,500,000,000 for '61

vs \$22,546,000,000 in '60. But this estimate is a compound of a predicted 3% drop in outlays for new dwelling units, a 2% gain in additions and alterations and a whopping 30% jump in money spent on nonhousekeeping units (eg motels, hotels). Outlays for public housing should rise 12% this year to \$800 million.

Since World War 2, housing has usually led the US economy out of recessions. Not this time. For the first time since the war, a loosening of mortgage credit has produced no appreciable spurt in housing. Most economists agree this is a sign of profound long-range change in the US housing market: the nation has built itself out of the postwar housing shortage just at the time when the low birth rates of the depression 30s mean fewer people need homes for the first time. So the market—in most areas—is concentrated on second-time buyers who want to upgrade.

Two other items should help housing grow gradually. Personal income is running much higher than a year ago. During this recovery, the US consumer has turned saver, with the rate of saving probably running above 8% (vs 6.9% in 1959). That rate has proved in the past to be the accumulation of money that burns holes in pockets. Second, the urban renewal market is poised for a major boom—and the new Housing Act will add fuel to it.

CANADA:

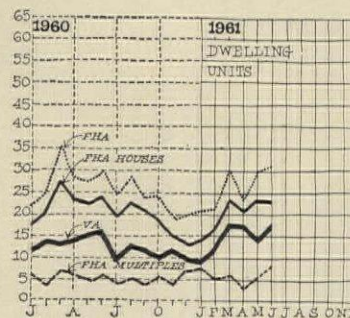
Sales respond to hard selling

The market is there, but only if builders go after it with hard selling.

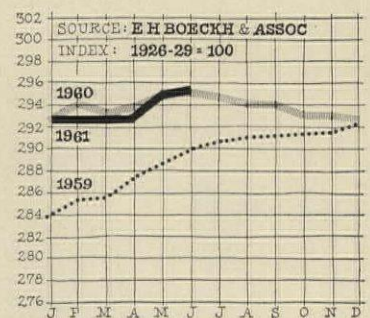
This is the picture that emerges from a look at starts across Canada, city by city, for the first five months. In May, starts fell below their 1960 level in several cities where flabby sales efforts are the norm. In Montreal, Canada's largest housebuilding center, May starts were off 300 from 1960 although the five-month total was still 150 ahead. Other cities in a slump include Vancouver, London and Hamilton. Vancouver has only

a handful of merchandising builders. Montreal builders are far more conservative than builders in Quebec City (which had 247 May starts vs 165 a year earlier).

Toronto, Edmonton, Calgary, Winnipeg and Halifax showed gains. Toronto, despite warnings of overbuilding by some analysts, is way ahead of last year despite a concerted labor effort to unionize housing. So is builder advertising. One Toronto builder who advertised little until the middle of last year says his campaigns since then have saved him. He sold 25 homes the first weekend in June after he ran an ad announcing new designs.



FHA APPLICATIONS are showing great strength. Applications for 1- to 4-family homes are 7% ahead of 1960 on a seasonally adjusted basis, even though they fell to 23,436 in June. Six-month total is 123,286, or 7.6% above 1960. Total applications in June hit 31,416, up 5.1% over May. VA appraisal requests spurted 20% in June to 17,643, are 10% above '60.



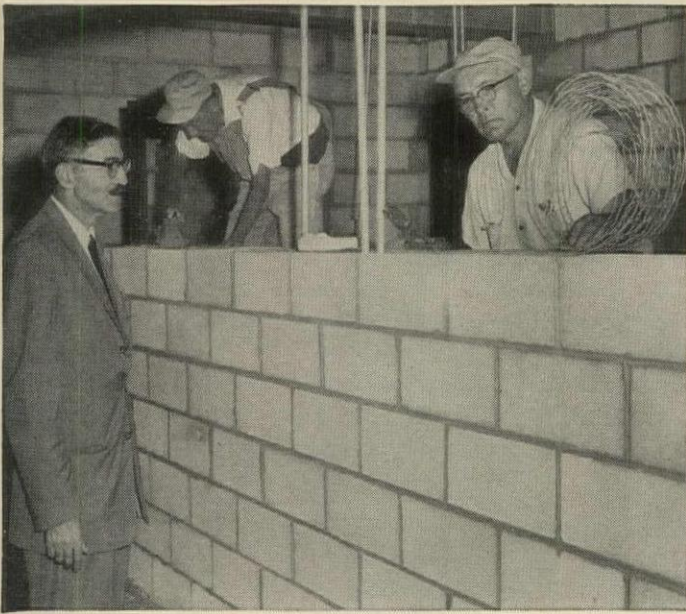
HOUSING CONSTRUCTION COSTS are higher than year-ago levels for the first time in 1961. Col E. H. Boeckh says this spring's round of wage increases (a 15¢ an hour boost was the favorite), account for a 0.3% rise in June. The index is at 295.6—0.2% over a year ago. Lumber prices are still weak as East Coast resistance to higher prices remains strong.

IN CHICAGO...

Al Rubin, leading masonry contractor, gets maximum crack resistance with

KEYWALL

galvanized masonry reinforcement



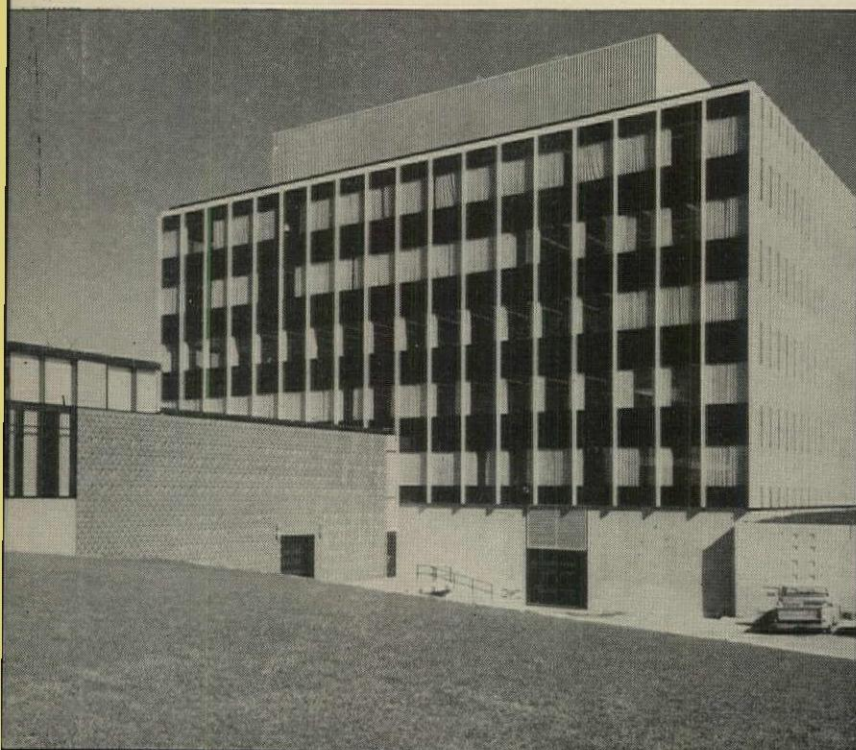
Mr. Rubin (standing) notes how easily Keywall is handled on one of his current jobs, the Hyde Park Shopping Center on Chicago's south side. Hyde Park Project Contractor: Webb & Knapp Inc., Chicago. Architects: I. M. Pei & Associates, New York; Harry Weese & Associates, Chicago. General Contractor for Shopping Center: Inland Construction Co., Chicago.

"You just can't beat Keywall," says Al Rubin, president of Arco Construction Company, Chicago, Illinois. "It's the easiest-to-handle joint reinforcement I know... my men really like to work with it. And I get the results I want. That's why I always urge the use of Keywall wherever joint reinforcement is specified."

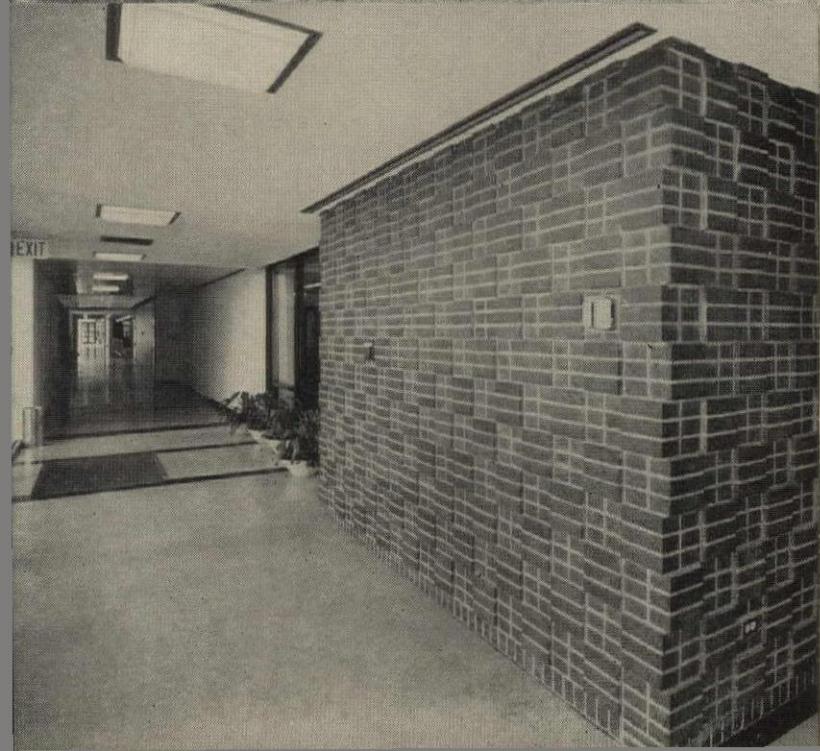
By using Keywall masonry reinforcement on his jobs, Rubin gets stronger walls with greater crack resistance. This is one of the reasons he's recognized for quality masonry by leading Chicago architects and builders.

Rubin's men prefer Keywall. They use it right. Installation details, such as reinforcing corners so they are stronger than the wall itself... lapping joints in straight walls to assure continuous reinforcement... getting full embedment of reinforcement, even when lapping, without increasing thickness of masonry joints... are easily done with Keywall. These superior features, vital in the effectiveness of any reinforcement, make walls reinforced with Keywall stronger and more crack resistant at lower cost.

Keywall comes in easy-to-handle 200-foot rolls, galvanized for rust-free storage. Made for the following wall thicknesses: 4", 6", 8", 10" and 12".



These two Lake Meadows units on Chicago's south side are a prime example of Rubin's fine masonry work. Keywall was used throughout. Architect: Skidmore, Owens & Merrill, Chicago. General Contractor: Turner Construction Co., Chicago.



Rubin used Keywall on the International Minerals & Chemicals Company office building in suburban Skokie. Photographs (left) show interior and exterior masonry construction of this attractive building. Architect: Perkins & Will, Chicago. General Contractor: Turner Construction Co., Chicago.

KEYSTONE STEEL & WIRE COMPANY

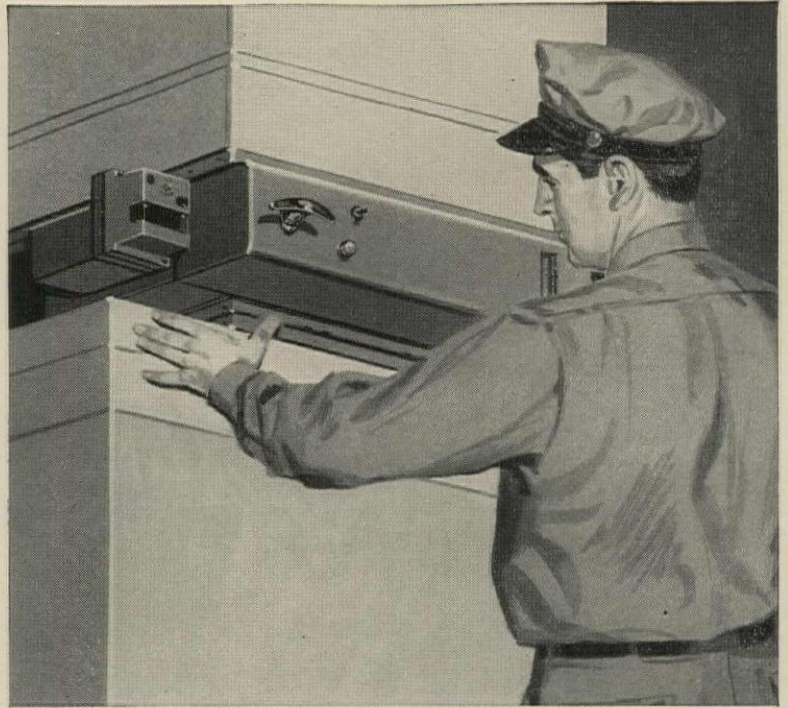
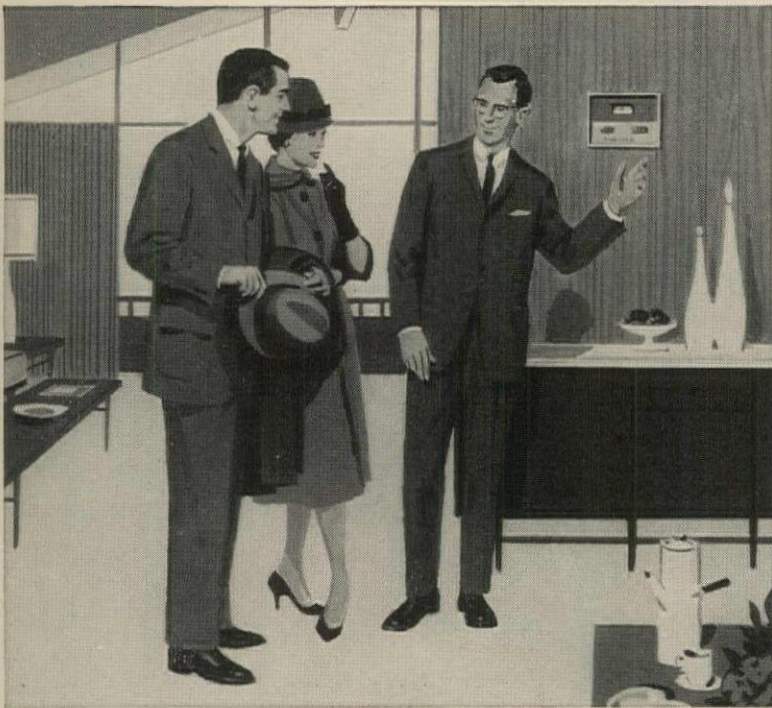
Peoria 7, Illinois

Keywall • Keycorner • Keymesh® • Keystrip • Welded Wire
Fabric • Nails

Now! Sell

The Self-Cleaning Home!

Honeywell announces an electronic air cleaner
designed exclusively for the home!



Less housework sells the woman—The Honeywell Electronic Air Cleaner gives every homemaker a headstart on cleaning chores, because most of the dust and dirt has already been removed from the air. Endless tasks like dusting, cleaning, window washing and wall washing are all cut to a fraction. With a home that stays cleaner longer, the homemaker can enjoy hours of new leisure and family fun.

Reduced decorating costs sell the man—For the most part, redecorating is necessary only when a change in colors or atmosphere is wanted. Walls, drapes, wallpaper stay clean and fresh looking much longer when whole-house air cleaning is on the job.

Benefits for the entire family—The Electronic Air Cleaner is no cure for allergies, but it does remove as much as 95% of the irritating airborne pollen and dust in the home—including many of the odors that cling to these airborne particles. A high percentage of airborne bacteria is electronically trapped, as well.

Handsome Living Area Panel—The Living Area Control Center is your merchandisable symbol of whole-house air cleaning. The Honeywell Electronic Air Cleaner is one of those standout features that brings your prospects back for that all-important second look.

A new sales extra—easy to install—The Honeywell Electronic Air Cleaner is the most modern advance in environmental control since air conditioning. Here is a truly modern feature to help sell today's modern homes. And the Electronic Air Cleaner is compact (only seven inches thick, installed) to fit standard forced air ducts.

Costs no more than a good refrigerator—The price of Honeywell's Electronic Air Cleaner is right where everyone can afford it. A price that lets you make a substantial profit, too! And the Electronic Air Cleaner is designed and built to require the very minimum of service—and most of that the homeowner performs himself.

Backed by Honeywell—The Electronic Air Cleaner is backed by famous Honeywell quality design and manufacturing. This new residential unit is a compact design of the Honeywell Electronic Air Cleaners used in hospitals, factories and office buildings for years.

Additional support—Currently featured in national consumer advertising, the Electronic Air Cleaner is backed by a full promotion program, with many elements designed for the model home. Call your nearest Honeywell office, or write Honeywell, Minneapolis 8, Minn.

Honeywell

HONEYWELL INTERNATIONAL

Sales and Service offices in all principal cities of the world.
Manufacturing in the United States, United Kingdom,
Canada, Netherlands, Germany, France, Japan.



First in Control

SINCE 1885

STOCK MARKET:

Realty trusts woo public's cash at \$5 to \$20 share; IRS rules no bar

What started in early 1959 as a rush to the stock market by housing companies has now swelled to torrential proportions. Since Jan. 1, no less than 56 assorted housing, building and lending companies have filed registration statements with the Securities & Exchange Commission for stock issues totaling more than \$300 million.

Most issues are small, but a few are giant-sized. Real Estate Investing Assn of New York (Lawrence A. Wien, president), wants to issue \$50 million of 20-year participating notes in \$25,000 units. Organized in February, it seeks mortgages on income properties. Jim Walter Corp (James D. Walter, president at \$51,200 a year), giant of the burgeoning shell homes field, floated \$20 million of debentures with stock warrants, will use the proceeds to finance sales, and Far West Financial Corp (John S. Griffith, president), a Los Angeles holding company for State Mutual S&L, sold \$17,366,250 of stock (at \$27.50/share) to pay debts and make development and construction loans.

Realty trusts. Despite Internal Revenue Service regulations so tough some experts wondered if they would stymie use of the real estate trust law Congress voted in Aug 1960, some 15 companies have either issued stock or sought approval for issues, at least nine of them since Jan 1. In the latter group, stocks totaling more than \$65 million are offered at from \$5 to \$20/share. Flato Realty Fund of Corpus Christi, Tex. (managed by the Edwin Flato Co) seeks approval of a \$20 million first issue at \$10/share to buy varied income properties. Next biggest issue is \$15 million at \$15/share by First Mortgage Fund, Boston, first closed-end trust dealing exclusively in government-backed mortgages. It would invest half the proceeds in FHA & VA mortgages and half in land development and construction loans for FHA & VA projects, concentrating on Florida, Texas, Arizona, and California.

Frederick H. Mueller, former Commerce secretary; and J. Aldrich Hall, ex-general counsel for the Federal Home Loan Bank Board, have agreed to be trustees. Trustees now serving are Wilton B. Persons, former Presidential assistant; Rex G. Baker Jr, chairman of Southwestern Savings Assn, Houston; Enrique Campos del Toro, chairman of First Federal S&L of Puerto Rico; Arthur H. Courshon, chairman of Washington Federal S&L of Miami Beach; Jack R. Courshon, president of First Mortgage Advisory Corp of Miami, and Edmond F. Dagnino, chairman and president of Boston Federal S&L.

Other real estate trusts going public:

- Real Estate Investment Trust of America, Boston (Philip H. Theopold, president), has issued \$10 million at \$20/share, will invest half in retail properties and half in office buildings, other commercial, and light industrial properties and land.
- US Realty Investments, Cleveland (Henry S. Gottfried, presiding trustee), issued \$6,619,750 at \$10/share to invest in apartments, office buildings, shopping centers, other retail units and semi-industrial properties in Cleveland.
- Stephen Realty Investment Co, Denver (John T. Webb, president), issued \$5 million at \$5/share to invest in diversified real estate and mortgages.
- Denver Real Estate Investment Fund (Ralph B. Mayo, trustee and executive agent) seeks to issue 600,000 shares (at a price to be set), to invest in office buildings, shopping centers, apartments and hotels.
- First National Real Estate Trust, New York (H. Struve Hensel, chairman), seeks to issue 1 million shares (price to be announced), to buy income properties.
- Washington Real Estate Investment Trust seeks

a \$3 million issue at \$5/share to buy apartments and other properties around Washington, D. C.

Ten shell homes companies have taken steps toward public stock offerings in the past seven months, most of them in Florida or other Southern states. Besides the big Jim Walter issue, Modern Homes Construction Co, Valdosta, Ga. (Ralph S. DeLoach, president), raised \$10.4 million (at \$38/unit—\$20 of debentures plus two shares).

Home building. One of the nation's biggest general contractors, Perini Corp of Boston (Louis R. Perini, president — at \$213,490 a year) which recently moved into housing and land development, issued \$17,376,992 of new common stock in June (\$12.25/share) to finance expansion. In a separate deal, Perini has joined Martin Cerel, biggest home builder in New England, to develop industrial parks through Cerel-Perini Associates which seeks approval for a 200,000-shares issue.

Builder Joe Eichler floated \$2½ million of 6½% convertible debentures due June 1, 1973 — at par. They are convertible to Eichler Homes common stock at \$12 face amount of debenture per share until May 31, 1965. Eichler will use the money to develop land.

The trend has spread to Canada. Consolidated Building Corp Ltd, Toronto, in June be-

S&L STOCKS RECOVER

The Kennedy Administration postponed sending its tax proposals on savings & loan associations to Congress and as a result stocks of S&L holding companies recovered much of the loss they suffered a month earlier.

In June, amid reports that the Administration might ask Congress to tax S&Ls more heavily, average price of the 16 financial stocks in House & HOME's survey dropped 4.16 points. By July 11 they had recovered 2.97 points of this to 33.09.

Financial Federation led the advance as its bid price jumped 10 points. Midwestern Financial ordered a two-for-one stock split on June 26, and the new stock was bid at 21½, comparable to a 5 point increase from last month's 38 bid. California Finance rose 6½, Gibraltar Finance 5, and Wesco 4½.

Mortgage company stocks climbed 2.25 points on the index. Palomar rose 3½, Colwell 2.

HOUSE & HOME's index for 61 housing stocks increased 1.59% to 15.95. In contrast the Dow-Jones industrial average dropped 0.19% to 694.47 and the Natl Quotation Bureau's industrial average sagged 0.20% to 123.45.

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

	May 9	June 14	July 11
Buildings	7.86	7.90	7.32
Land development	8.62	9.03	8.58
Finance	34.28	30.12	33.09
Mortgage lending	17.33	19.08	21.33
Realty investment	10.41	10.94	11.06
Prefabrication	10.99	9.99	9.70
Shell homes	25.66	22.79	20.62
TOTAL	16.45	15.70	15.95

came the country's first home building company to go public with a \$3 million issue.

NEWS continued on p 77

HOUSING'S STOCK PRICES

Company	Offering Price	May 9		June 14		July 11	
		Bid	Ask	Bid	Ask	Bid	Ask
BUILDING							
Eichler Homes... e	12	12½	11	11%	10%	11½	
First Natl Rlty & Const	2	5¼ ^b	5¼ ^b	4½	4%		
General Bldrs .. e		7%	8%	7½ ^b			
Hawaiian Pac Ind 10	16¼	16%	14	14½	12%	13½	
Kavanagh-Smith 5	9½	10	13½	14½	9½	10%	
Levitt	10	6½	7	6%	7½	7	7%
US Home & Dev e		2½	3	2½	3	2½	2%
Del Webb		9%	9%	8½	8%	10%	11½
Wenwood		1	1%	1	1½	1	1½
LAND DEVELOPMENT							
All-State Prop .. e		13%	13%	13 ^b			
Arida		11%	11%	10%	10%	9	9%
Cons Dev (Fla) 5	9½	10½	10%	11%	10½	11½	
Coral Ridge Prop e		2	2¼	2%	2%	2	2½
Fla Palm-Aire .. e		2%	3	2%	2%	2%	2½
Forest City Ent. 10	12½ ^b		15%	14%	14%		
Garden Land .. 6¼		5½	6	5	5½	4½	5
Gen Dev		14%	17%	16 ^b			
Grt Southwest 18	16¼	17	18½	19½	19	20	
Laguna Niguel .. e		12¼	12%	12%	13%	12½	13
Lefcourt		2½ ^b		2%		2½ ^b	
Major Rlty		4	4¼	3%	5	3%	4½
Pac Cst Prop .. 10	10¼	10%	9%	10¼	8%	9%	
Realsite Inc .. e		1%	2%	1%	2%	1½	2
United Imp & Inv e		10 ^b		9½ ^b		8½ ^b	
S&Ls							
Calif Fin	45	47	38	39½	44½	45½	
Emp Fin		22½	23½	21½	22¼	23¼	24
Fin Fed		89	92	80	84	90	93
First Chrtr Fin. e		49%		42%		45%	
First Fin West .. e		18½	19½	15%	16%	18	18%
Gibraltar Fin .. e		38	39½	35	36	40	41½
Grt Western Fin. e		48%		43%		46%	
Hawthorne Fin .. e		15%	16½	12½	13%	12%	13½
Lytton Fin		24¼	25	21	21%	23	24
Midwstrn Fin .. 8%		40	41½	38	40	21½ ^a	22½ ^a
San Diego Imp. e		12¼ ^c		10%		11%	
Trans Cst Inv. 15	24	24%	21	22	21½	22½	
Trans World Fin 8%	23	23%	20%	21½	22	22%	
Union Fin	15	15%	16	17½	14½	16	

Company	Offering Price	May 9		June 14		July 11	
		Bid	Ask	Bid	Ask	Bid	Ask
United Fin of Cal 10	39¼	39%	33½	34	35	35%	
Wesco Fin		43%	44½	33½	34¼	38	39
MORTGAGE BANKING							
Colonial	9	12%	13%	11½	12%	12%	13½
Colwell	10	22	23	27	29	29	31
Palomar		17¼	18¼	18%	19%	22¼	23
REALTY INVESTMENT							
Gt Amer Rlty		%	¾	½	¾	½	%
Kratter A		23¼ ^b		25%		25¼ ^b	
Rlty Equities .. 5¼		7½ ^b		7 ^b		7 ^b	
Wallace Prop .. 10		10%	10%	10½	11%	11½	12
PREFABRICATION							
Admiral Homes .. e	4	4¼	3%	4¼	3%	4¼	
Crawford	13	12	12%	11%	12½	10¼	11
Harnischfeger .. e		24	23	24	22	23	
Inland Homes .. e		22¼ ^b		18%	19¼	18 ^b	
Natl Homes A .. e		18	18½	16%	16%	16½	17
Natl Homes B .. e		17	17½	15%	16%	16¼	16%
Richmond Homes e		4%	4%	3%	3%	3	3½
Scholz Homes .. e		4	4%	3%	4%	3¼	3%
Seaboard Homes .. e		3%	4%	3¼	3%	3%	4¼
Techbilt Homes .. e		¾	¾	¾	¾	¾	¾
SHELL HOMES							
Bevis	d	3%	4%	3%	4%	3	3%
US Shell	e	26	28	25	27	22½	24½
Jim Walter	e	55%	56%	47½	48½	47	48
Wise Homes	e	17	18	14%	15½	10	10%

^a stock not yet marketed

^b closing price (ASE)

^c closing price (NYSE)

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

^e stock issued before Jan 1, 1960

^f price quoted is for May 15

^g reflects two-for-one split effective June 26, 1961

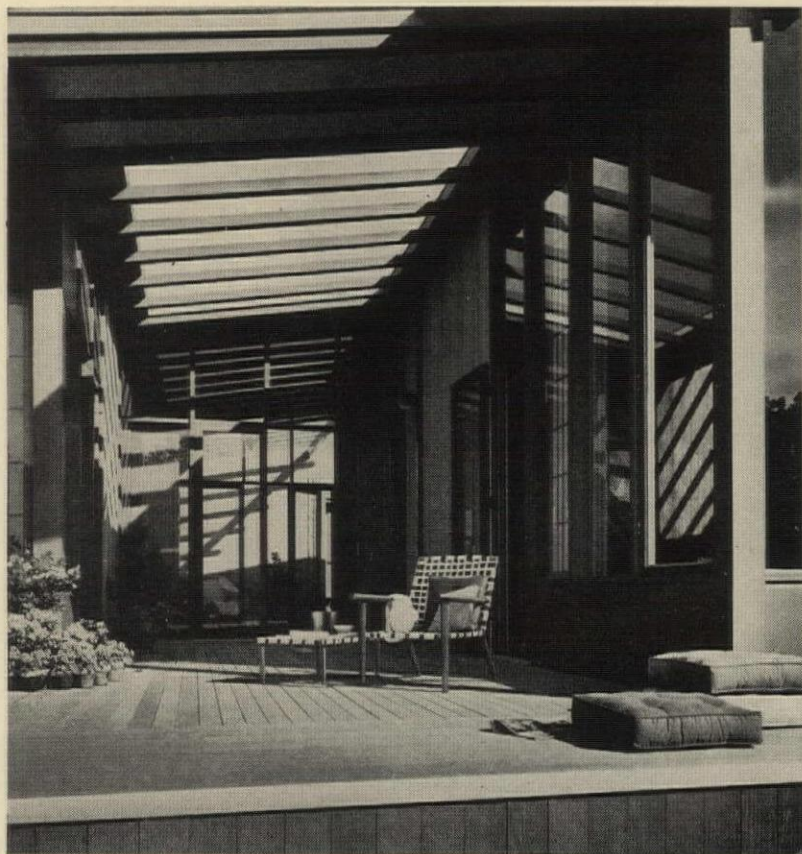
Sources: New York Hansett Corp; American Stock Exchange; New York Stock Exchange.



The indoor-outdoor utility of wood makes this room blend beautifully with its natural surroundings. The wall extension, the joists, beams, and decking of the porch, the door and window frame—all of wood—combine with the tree for an effect of secluded privacy. Architect: Boyd Georgi, A.I.A.

Open rooms of wood increase the sales-appeal of indoor-outdoor living

WOOD sells the rooms that sell the house



Wood gives this sun deck the feeling of all outdoors, yet keeps it as cozy and private as any room. The airy pattern of beams, the paneled walls, the floor and the window frames of wood emphasize wood's beauty, comfort, and utility.

Most of your prospects will buy homes with living quarters reaching into the open. On your part, this requires continuity of design and material . . . what else but wood? Nothing in the world is so relaxing, so functional, or fits so many budgets. Wood posts and beams make solid and attractive supports for a ceiling as well as a porch roof. Outdoor areas decked with wood extend the beauty and utility of wood floors. And doors of wood look good from either side. Also, as a builder you appreciate wood's natural weather resistance and the ease with which carpenters can put together even highly complex designs. Any or all of the uses of wood can help convince your prospects to stop holding out and start moving in.

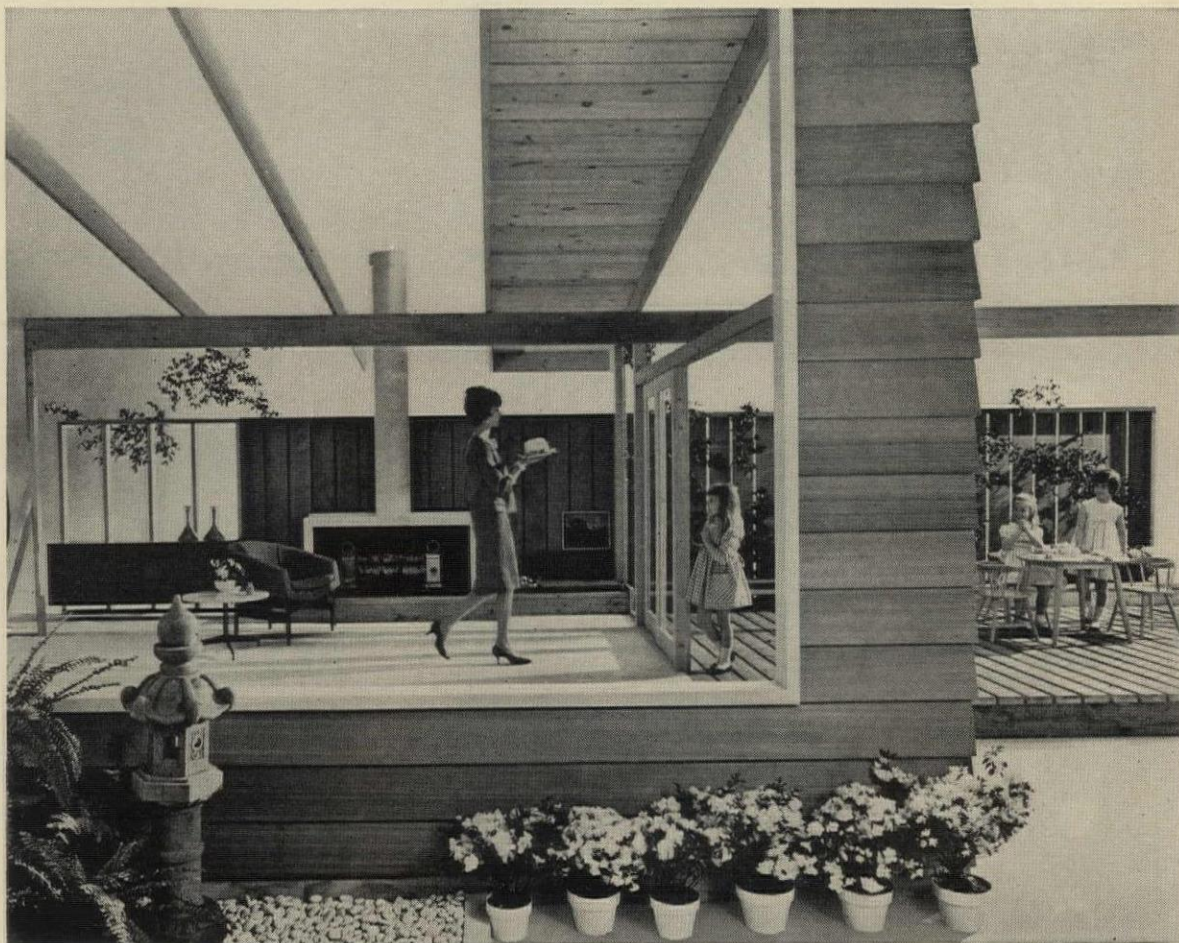
Do you recall seeing the picture below? It appeared as the illustration of a two-page, full-color NLMA advertisement in LIFE a short while back. Your prospects were among the millions who saw it. Now more than ever, they will be looking for indoor-outdoor uses of wood in the houses you build. For more information on better homes of wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION
Wood Information Center, 1319 18th St., N. W., Washington 6, D. C.

nlma

Built of **wood** means built to sell

You can find all the selling points for indoor-outdoor uses of wood in this picture. Wood's comfort, beauty, and strength are dramatically shown, as are its varied applications for structural unity and continuity of design.

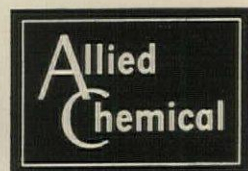




Houses sell faster... with BARRETT "Storm King"[†] shingles! "For sale" signs don't last long when you use BARRETT "Storm King" self-sealing shingles. One reason is that today's home buyer is extremely quality-conscious. (After all, nobody likes to part with \$15-20 thousand without careful consideration.) Saleable "Storm King" points to consider: they're leak-proof, self-sealing and won't blow off in the worst storm. Features like these provide tangible sales advantages for you to present to your prospect. Based on a \$15 thousand home... let's assume you sell a "Storm King" home 2 weeks sooner than you'd sell a standard-shingled home. You'd be making roughly \$40 per home—or about \$500 in 6 months. Help stamp out "for sale" signs by writing...

OFFICES IN: BIRMINGHAM, BOSTON, CHARLOTTE, CHICAGO, CLEVELAND, HOUSTON, NEW YORK, PHILADELPHIA, ST. PAUL.
[†]Trade Mark of Allied Chemical Corporation

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





BUYING THESE ROW HOUSES FROM A BUILDER SAVED \$3,838 PER UNIT

PUBLIC HOUSING:

Private builder's row houses solve housing authority's budget woes

A suburban Philadelphia housing authority is saving \$3,838 a unit by buying 37 row houses from a private builder instead of building them under PHA red tape.

The deal focuses new attention on Builder Joseph Singer's plan of two-years ago (NEWS, Dec '59 *et seq*) to show that public housing can be put up cheaper, faster, and better by private builders. Cautious PHA brass squelched his idea on legal technicalities. Singer bought six acres from the Philadelphia Housing Authority and built 98 row-house units. He planned to resell the houses to the authority for \$11,990—or \$5,300 a unit less than PHA could have built them on the same land. But a taxpayer's suit challenged the deal, saying the authority could not legally buy land it had once sold. Former Commissioner Bruce Savage of PHA refused to back up the Philadelphia authority and Singer sold the houses privately after a year's fight.

But just outside Philadelphia a similar deal

has just been completed by Builder Richard G. Kelly and the Delaware County Housing Authority. The sale came about by accident.

Delaware County planned to build some new units and had an award-winning design for them. But the units cost more than the \$600,000 the authority had budgeted. While Executive Director George P. Bauer and architects were inspecting sites and trying to prune costs of the planned units, they saw Kelly beginning work on 37 row houses for sale. Could they buy them? Kelly said yes.

When word of the plan leaked out, 400 residents of a nearby group of private homes protested. Darby Township officials balked at first, but agreed to the idea this spring. Result: the authority bought the row houses (all built to FHA standards) from Kelly for \$410,300, or \$11,089 a unit. That saved the authority \$142,000, or \$3,838 a unit. The authority will use part of the savings to add storm doors and windows to cut tenants' heating bills.

One-family public units succeed In driving builder from market

Construction of one-family public housing units has pushed a private builder of FHA Sec 221 homes out of the market in Toledo.

Builder George Moore began building homes for displaced families in a spotty North Toledo neighborhood in June 1958. He offered a three-bedroom, one-bath concrete-block home with brick trim for \$9,400 to \$10,000, depending on cost of the 30' lots. In 1959, Moore increased production. He continued building till June 1960, when a slowdown at nearby Rossford Ordnance Depot began pinching sales. He sold the last of his 23 houses this spring.

But in late 1958 the Toledo Metropolitan Housing Authority began planning one of the first single-family subsidized rent projects in the nation. It bought lots near Moore's homes, including two next door. On these, the authority has just finished the first of 47 one-family colonial homes costing half again as much but renting for about the same monthly payment—with US taxpayers paying the difference. The public units cost \$16,000 and \$17,000 each. Models are extra large: four-bedroom, one-bath and five-bedroom, 1½

baths. The houses were designed by the firm of John Noble Richards, past president of the American Institute of Architects.

The first 20 families have just moved in and will pay rents generally in the \$60 to \$65 range. Rents are 20% of family income, which can be as much as \$5,660 for families with ten minors. Moore also sold his first houses for \$65 monthly payments. But in the

Dick Greene



COLONIAL STYLE PUBLIC HOUSING

midst of building FHA decided it would insure only 30-year loans (vs 40 years permitted under Sec 221) and monthly costs soared to \$75 and \$80. FHA later relented to allow 35-year terms.

Moore has built no homes there this year because "they [TMHA] froze us out. They picked up lots at higher prices than we paid (\$800 to \$1,000 vs \$300 to \$900) and replatted the 30' lots into 50' and 60' lots. We can't get any lots now. They have a good house, one you'd be proud to live in. But it's still on subsidy—and our houses pay full taxes."

Life in NY public housing: 'I never open the door'

The problem that public housing sometimes merely transfers the terror of slum life into new surroundings has been dramatized again by the senseless murder of a 76-year-old man in one of the 13 housing projects which dot Manhattan's lower East Side.

Returning to his apartment in Baruch Houses from evening prayer at his synagogue, Harry Heisler, a retired plumber, was trapped in a self-service elevator by four youths aged 14 to 17. They shot him in the abdomen with a .22 caliber bullet and fled with \$2.60. He died two hours later.

Next day, when reporters talked to residents of the 2,914-unit project (34 buildings, 13-stories high), they got an earful of what life in a public housing project in Manhattan is sometimes like:

"*Terror stalks this project.*"

"*I never open the door.*"

"*I've been mugged here three times.*"

"*Once my son was mugged for 6¢.*"

"*They took all my money—all the money we need for food after we pay the rent.*"

"*People here are afraid to report incidents to the police. The muggers tell them, 'If you report this, I'll come back and kill you.'*"

Chairman William Reid of the Housing Authority assigned 14 more policemen to help Baruch's five regular officers. But he wished "something could be done about parental delinquency."

Was that really the problem? Four Baruch-dwelling youths, swiftly arrested and booked for the killing, said they planned the robbery so one of them could buy shoes. His parents had given him \$7 and he spent \$2 for candy. And the pair he wanted cost \$11.

After Heisler's funeral, an agency delegation of tenants called on the housing authority to ask for more police protection. They emerged weary and dissatisfied. "They're gonna give us 14 more policemen, but only for a couple of weeks," said one. "What good is that?"

PUBLIC HOUSING BRIEFS

Some New England public housing commissioners worry that the new 3% down, 35-year FHA loans will create "awful competition" for existing public housing projects, many of whose tenants may leave to take advantage of the new program.

Efforts are afoot in California to pass a law permitting local public-housing commissioners to be paid, as they now are in Massachusetts. In Fresno, the public-housing commissioners have announced they will refuse to accept any money, even if it is offered.

NEWS continued on p 78

Rx to cut land prices: assess vacant land by the rules

If local assessors would start assessing raw land around cities the way state laws order them to, much land now held off the market for speculation will go up for sale and prices of land available for building "will have a tendency to drop."

These are the views of Roy Wenzlick, the celebrated St Louis realty economist.*

Land prices are soaring, says Wenzlick, not because land is becoming scarce around big US cities but because "a great deal of land has been held off the market by speculators and long term investors."

The trouble, he contends, "lies in the failure on the part of assessors to assess properties on the basis of fair market value rather than on use . . . Land used for truck gardening or for farming is assessed on a nominal basis, while adjoining land developed into subdivisions is assessed more nearly in relationship to its fair market value."

Illegal. In most states, this violates either the constitution, the law, or the assessing manuals of state tax commissions, charges Wenzlick. Practically all states (except California, Florida, and Maryland) "insist on all types of properties being assessed on the same basis—that is, either at fair market value or at some standard percentage of fair market value." He continues:

"When an honest reassessment program takes place in an area where the assessor had not been following the manual and the state constitution, the owners of much of this close-in land are up in arms, claiming that they are being driven from their land as they cannot secure enough income through farming or from other uses of their land to pay a return after paying taxes on the basis on which their land is being assessed. I have heard the same complaint raised by a woman living in a single-family residence on a commercial street, where all of the properties around her were developed with sizable buildings. She maintained that to tax her property on the basis of what she could sell it for would drive her from her home.

"I believe that it would and that it should.

* In his copyrighted, *The Real Estate Analyst*.



ANALYST WENZLICK

Does speculation hurt communities?

Her calamity is not too great, however, as the price she could get for her property exceeds its value as a residence by a great many times. She can sell and buy a comparable residential building for a small fraction of the selling price and can invest the balance to yield a sizeable income."

Promotes sprawl. Land owners who keep their property from its logical use "hurt the community and the area," contends Wenzlick. Why? One reason: "continued operation of a farm in a metropolitan area can disrupt its orderly development, causing developers to skip over this land. This increases the cost of maintaining water mains, sewers, streets, and transportation. It causes workers to travel further than would otherwise be necessary." Moreover, contends Wenzlick, "assessing farm land on the basis of use rather than market value does not help the farmer." Why? "A large part of this land is bought by speculators and then rented to farmers as a tax dodge."

As an example of how undertaxed raw land is, Wenzlick cites the following actual assessments and real estate taxes per acre of vacant land sold in one assessment district of "a large metropolitan county" in 1959 compared with the assessments and taxes on the same properties if rulings of the state tax commission had been followed. Under state law, the table shows, the average vacant parcel should have been taxed 14½ times as much as it was:

Parcel	Assessed Value Per Acre		Real Estate Tax Per Acre	
	Was	Should Have Been	Was	Should Have Been
1	\$ 175	\$ 1,525	\$ 7.95	\$ 69.24
2	185	1,010	8.40	45.85
3	190	6,133	8.63	278.44
4	160	5,333	7.26	242.12
5	153	873	6.95	39.63
6	175	1,067	7.95	48.44
7	158	1,690	7.17	76.73
8	158	9,070	7.17	411.78
9	175	3,210	7.95	145.73
10	175	1,264	7.95	57.39
11	170	741	7.72	33.64
12	176	2,700	7.99	122.58
13	485	1,111	21.11	50.44
14	116	600	5.27	27.24
15	160	4,200	7.26	190.68
Total	\$2,791	\$40,527	\$126.73	\$1,839.93
Avg per acre	\$ 186	\$ 2,702	\$ 8.45	\$ 122.66

Comments Wenzlick: "It is one thing for a speculator to carry vacant land at an average cost per year of \$8.45 in taxes. It is another thing entirely to carry vacant land at an average of \$122.66 per year in taxes. When vacant properties are assessed on the basis of fair market value it becomes impossible to hold them for appreciation for a long period.

"I do not believe in the single tax of Henry George, as I think it is impossible to separate economic land value from the total value of a property which is developed to its highest and best use . . . Once improvements are made, the land and buildings become a joint product like a chemical compound in which the elements no longer exist in their pure state . . ."

Wenzlick, now 66, has made a career of real estate appraising and forecasting for nearly three decades. He first leapt to national prominence in 1936 when his paperback pamphlet, *The Coming Boom in Real Estate*, appeared. "When I started forecasting it, they didn't believe it," Wenzlick has recalled. But the record shows that real estate activity expanded rather steadily from the time Wenzlick began writing his book in 1935. About 1950, Wenzlick decided the boom had run its course, began predicting a compensating depression. First Korea upset his predictions and then, in Wenzlick's view, the 1954 Housing Act "built a boom on top of a boom. The time to loosen credit and terms in real estate is not when we're setting new records, but when building volume has been falling off," he said.

Letters

Environmental planning

Congratulations on your July issue. I was very pleased to see your emphasis on environmental planning and the use of townhouses for our urban areas.

WILLIAM L. SLAYTON, *commissioner*
Urban Renewal Administration
Washington, D.C.

Sincere congratulations on your splendid July issue. Please airmail immediately 15 reprints of the Round Table article on environmental planning and the articles on apartments for a presentation this Thursday to government officials. We are trying to achieve the objectives outlined in these articles.

PETER KEEGAN
West Gate Capital Co
Santa Rosa, Calif.

The July issue is outstanding. The problem of urban growth is certainly of major importance and the many examples of wise land

use and attractive city living make this issue a real contribution to the subject.

RICHARD G. KNOX, *manager*
Public Relations Bureau
Portland Cement Assoc.

New Frontier

"What the New Frontier wants to do next" [NEWS, June] was most informative. Your prediction of the FHA rate reduction came true even before the ink on the magazine was dry (or did you have inside information)? As usual, the whole issue is excellent and worth reading from cover to cover.

PETER H. ULRICH, *vice president*
Security First National Bank
Riverside, Calif.

Automatic data processing

Your June article on ADP accounting systems was very timely. We do survey work and service center data processing and suggest that the customer first obtain the services of a firm offering systems engineering. These firms

already know the capabilities of the various machines and can also perform a survey in depth beyond that offered by equipment manufacturers. Most equipment sales representatives appreciate our servicing a client because we call them only if their equipment meets the probable need and they do not waste time working on unsuitable applications. We hope you will continue to publish articles illustrating specific paperwork applications. Please advise us of the cost of a substantial number of reprints.

EUGENE P. COLLINS
Procedures analyst
Tacoma.

I just finished reading "Let the machines take over your paperwork . . ." my compliments on a very fine job. I was particularly impressed with the language styling which made the article easy and interesting to read. Also it contained many practical examples of how ADP is being used to lighten accounting burdens in so many areas.

ANTHONY J. ROMERO
Business Economatation Inc
Santa Rosa, Calif.



TECO inspects veneers before approving for the grade stamp on plywood.

The TECO Grade Stamp means that plywood carrying this stamp has undergone production line inspection and testing by a technician employed by Timber Engineering Company. It is your assurance that you can't buy a poor piece of TECO-Tested plywood. The TECO technician is on duty every day watching and checking every step of the manufacturing process. He knows what goes between the two outer plys—the core material, the mixture of glue, patching, in fact the whole operation from log to finished product. This is your guarantee of a consistent supply of superior quality plywood.

WESTERN VENEER & PLYWOOD CO.

Albany, Oregon
Phone WAbash 8-3341, TWX Alby 696

YOU

can't
buy a poor
piece of
plywood
from

WESTERN VENEER

DAY-BY-DAY INSPECTION
GUARANTEES EVERY
PIECE AS GRADED...

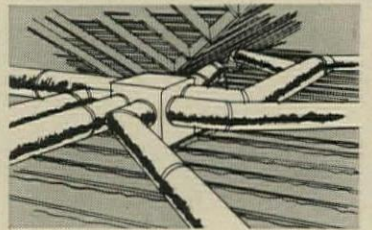


C-D (STRUC.) INTERIOR

Western Veneer & Plywood Co.
Albany, Oregon

STOP HEAT LOSS

with
G-B DUCT



When it comes to reducing heat loss or gain in residential air handling systems, nothing does it like G-B DUCT—the round, prefabricated glass fiber duct. Molded entirely of insulation, G-B DUCT is an efficient thermal and acoustical insulation and a hot and cold air handling system all in one. For the homeowner, this means substantial savings in utility bills.

G-B DUCT also eliminates equipment noises—a major complaint about residential air conditioning systems. Every foot of its all glass fiber construction contains millions of tiny sound absorbing cells.

Encased in a vapor barrier sleeve, G-B DUCT is air-tight and waterproof—absolutely prevents condensation. Best of all, 6' sections of G-B DUCT can be installed in half the time required for an insulated metal duct system. Write today for complete information.

GUSTIN-BACON

Manufacturing Company

258 W. 10th St., Kansas City 5, Mo.



High efficiency duct that's easier to install



SONOCO
SONOAIRODUCT®
FIBRE DUCT

Capehart
Housing Proj-
ect, Fort Lee,
Virginia. Con-
tractor: H. L.
Cable. Subcon-
tractor: Ed-
wards & Mills.
Architect:
Lubin, Magee
& Assoc.

With its HIGH efficiency and LOW installation cost, SONOAIRODUCT Fibre Duct is the *economy answer*—for slab perimeter heating, cooling, or combination systems!

SONOAIRODUCT has an aluminum foil lining that offers minimum resistance to air flow. This lining, together with the thick fibre wall, provides a very low B.T.U. loss ratio from plenum to register. SONOAIRODUCT has a sound deadening quality, too—for a quieter home.

Another thing—SONOAIRODUCT installs quickly, easily, inexpensively. It is lightweight for fast leveling and joining; long lengths mean fewer joints; and it's easily cut to size or mitered with a hand saw. Won't chip, crack or break when dropped—every piece is usable.

For efficiency and economy, use low-cost SONOAIRODUCT Fibre Duct. Meets or exceeds all F.H.A. criteria and test requirements for products in this category. 23 sizes, 2" to 36" I.D., standard 18' lengths.



FREE
INSTALLATION MANUAL

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

See our catalog in Sweet's
For complete information and prices, write

SONOCO

Construction Products

SONOCO PRODUCTS COMPANY, HARTSVILLE, S. C. • La Puente, Calif. • Fremont, Calif.
• Montclair, N. J. • Akron, Indiana • Longview, Texas • Atlanta, Ga. • Ravenna, Ohio
• MEXICO, Mexico City • CANADA, Brantford, Ont.

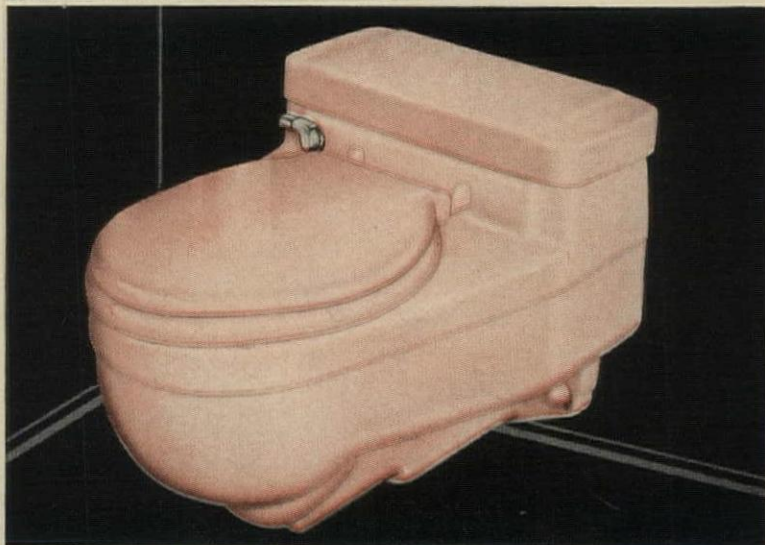
5716



Imperial House

This spacious 30-story New York City luxury apartment contains over 900 non-overflow Case one-piece water closets.

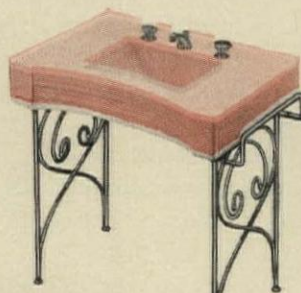
ARCHITECTS
Emory Roth & Sons



The Finest Fixture You Can Specify ... Case One-Piece Water Closets

The new Model 3000 wall-hung Case one-piece closet provides the same unique operating features and time-tested fittings as other Case floor models. Case "E-Z" mount carriers make possible an easy and quick installation in any type of construction.

Only Case one-piece water closets offer positive protection against overflow of the bowl, plus quiet flushing and positive performance. All models are available in glistening white and 45 colors that correspond to or complement fixtures of other manufacturers.



The Wellington Vanity
with wrought iron legs—
32" x 24", 27" x 22", 24" x 20"



The New Whitney—22" x 18"—
one of eight built-in
Case lavatories

Send for catalog and color chip chart of the distinctive Case vitreous china line, including Water Closets, built-in Lavatories, Urinals and Drinking Fountains.

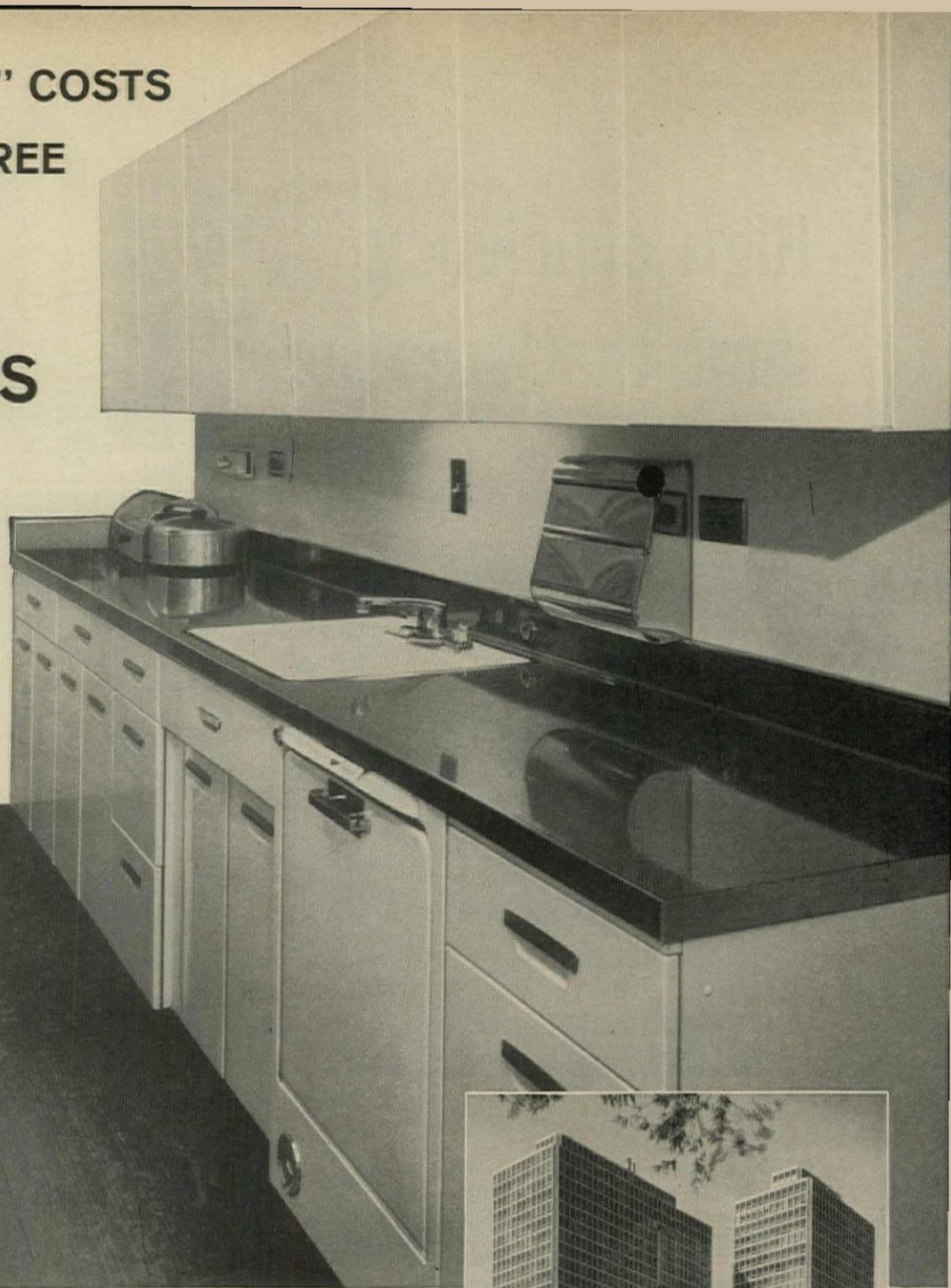


SINCE 1853

CASE MANUFACTURING
Division of Ogden Corporation
1051 Pine Street • Robinson, Illinois

REDUCE "NEW TENANT" COSTS
WITH MAINTENANCE-FREE

REPUBLIC STEEL KITCHENS



Increase apartment appraisal values—reduce the high cost of tenant turnover with Republic Steel Kitchens. Factory-built for a lifetime of service, Republic Steel Kitchens cost less to install, less to maintain. Baked enamel finishes in attractive colors, applied over Bonderized steel, clean quickly and easily with ordinary soap and water—eliminate forever the expense of redecorating with every new tenant. Naturally, the steel construction will never warp or swell in moisture-laden kitchen air.

Easy to install, Republic Steel wall and base cabinets, sink centers, and cabinets for built-ins can be arranged for every kitchen size and need, without costly floor alterations—every apartment different, without added investment.

Whether you are building or remodeling apartments or multi-family units, your Republic distributor can help you plan, offer exciting prices, and assure prompt delivery from warehouse stocks. Call or write . . . or use the coupon for complete information.



Installation of Republic Steel Kitchen photographed at
COMMONWEALTH PROMENADE APARTMENT,
Chicago, Illinois.

Architect: Ludwig Mies van Der Roe
Contractor: Herbert Construction Corp. Chicago, Illinois

Strong, Modern, Dependable



REPUBLIC STEEL *Kitchens*

REPUBLIC STEEL • BERGER DIVISION
CANTON 5, OHIO

REPUBLIC STEEL CORPORATION • DEPT. A-2358
1028 BELDEN AVENUE • CANTON 5, OHIO

- Have Republic Kitchens representative call
- Send complete information on Republic Steel Kitchens

Name _____ Title _____
Firm _____
Address _____
City _____ Zone _____ State _____



Before You Buy... Check **FASCO** Superiority



Attention contractors and builders! **FASCO HOODS** Now offer Fully-Certified Performance

FASCO is consistently **FIRST** with the **LAST** word in RANGE HOODS



Fasco is consistently first with range hood advances that are constantly being copied by others. This leadership pays off for builders and contractors who install Fasco range hoods... pays in freedom from costly callbacks, in better styling, more rugged construction, and it pays in the customer satisfaction that means so much in your business.

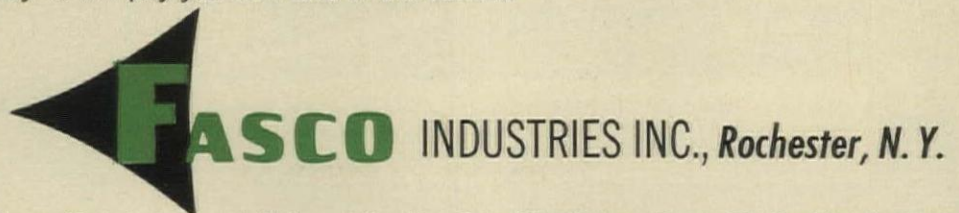
Fasco was first with a powerful 10" impeller in a completely self-contained hood.

Fasco was first with a 21" depth hood.

Fasco was first with the slim-trim styling that added fashion and function to kitchen ventilation.

In another progressive step, Fasco offers certified performance on all ducted hoods in accordance with FHA and local codes. So check Fasco before you buy. It will pay you now and in the future.

An ideal mate for the 94 and 95 series hoods is Fasco's 80 series oven hood. This powerful companion-piece to the line of other Fasco hoods installs quickly in small space, is pre-wired and has snap-out easy-to-clean filter.



Fasco Manufactures a full line of Quality Fans, Ventilators, Range Hoods, Electric Heat

"Excellent dimensional stability... no callbacks on Insulite Primed Siding"

Medema Builders, Inc., builders of fine homes in Oak Forest, Illinois, have used Insulite Primed Siding since 1957—have never had a customer callback on any Insulite product

"In the four years we have used Insulite Primed Siding we have seen no warping, buckling, shrinking, expansion or contraction."

No splitting. Further statements point up the Medema brothers' satisfaction with other qualities of this fine product: "We like the fact that Insulite Primed Siding comes to us completely packaged in uniform lengths and thicknesses. And it's

easy to work with—it just won't split or crack from nailing."

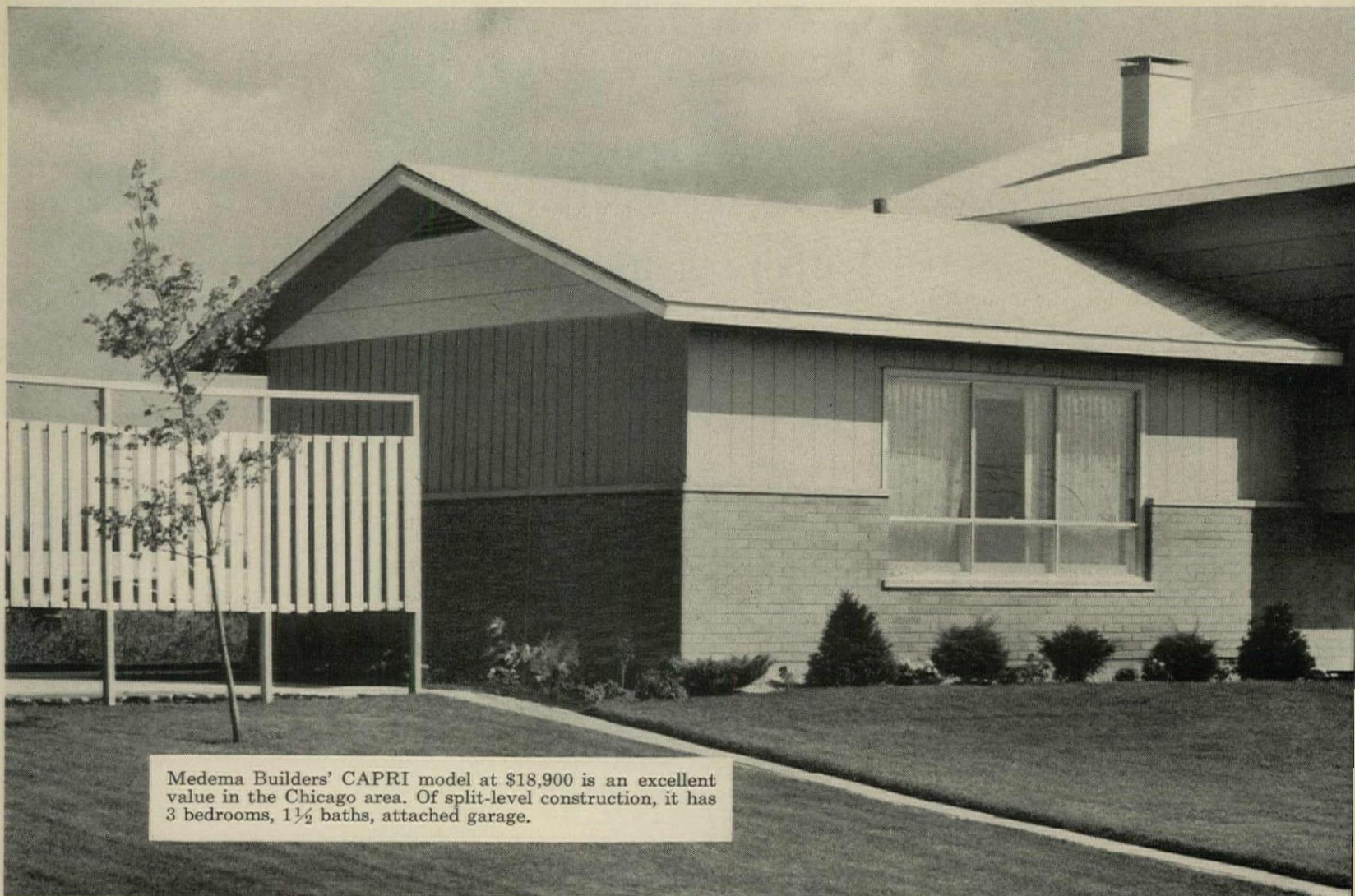
Quality at a fair price. The use of name-brand materials is one of the big reasons why Medema Bldrs., Inc. can live up to its motto of giving every buyer "quality at a fair price." And this has paid off in enthusiastic owners who act as "salesmen" for homes still to be constructed in the \$12 million

Medema-built "El Vista" community. In fact 55% of all "El Vista" homes now sold result from a recommendation by a present owner! **Get complete facts.** Find out how Insulite Products can help you keep your building costs down—while keeping quality up. Just call your nearby Insulite Sales representative; or write now to Insulite, Minneapolis 2, Minnesota.

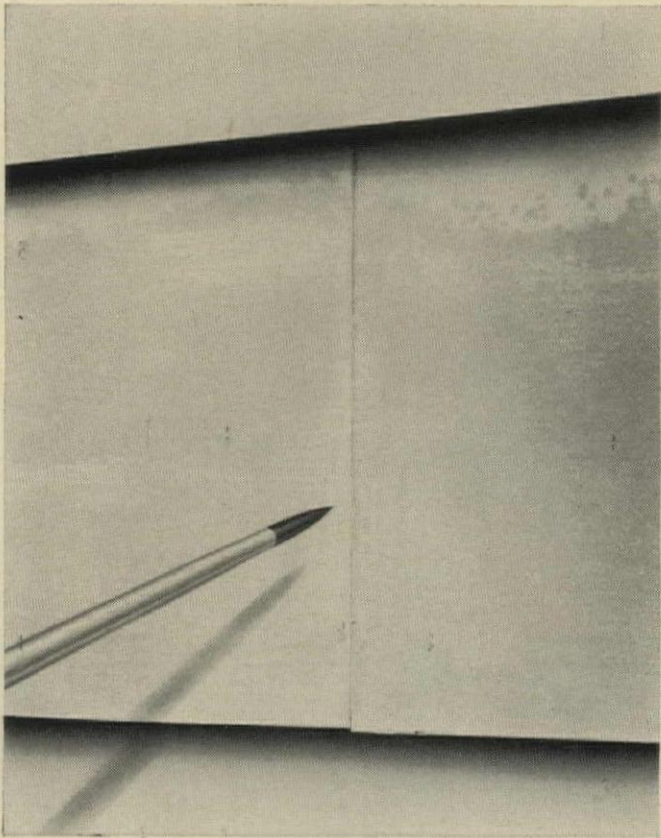
Build better with **INSULITE**® Primed Siding



Insulite Division of Minnesota and Ontario
Paper Company, Minneapolis, Minnesota



Medema Builders' CAPRI model at \$18,900 is an excellent value in the Chicago area. Of split-level construction, it has 3 bedrooms, 1½ baths, attached garage.



NO SHRINKAGE. This unretouched photo was taken almost four years after this Insulite Primed Siding was applied. Notice that this siding's excellent dimensional stability has kept the butt joints as tight and weatherproof as the day they were first made.



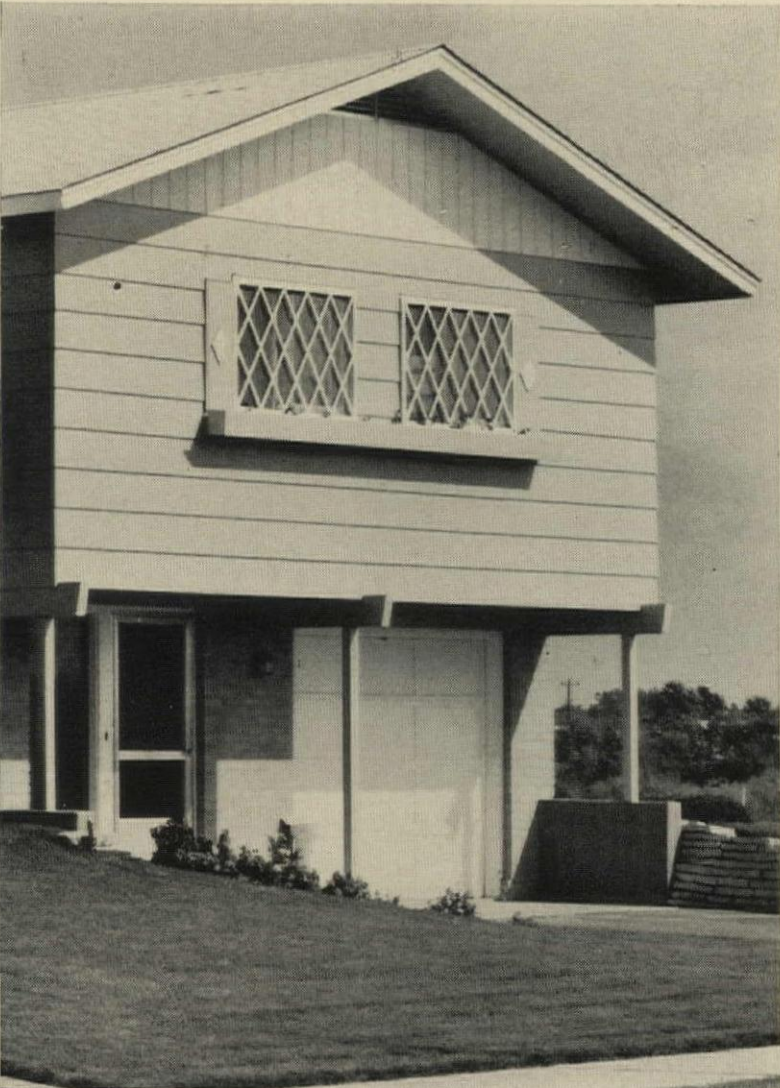
EASY TO SAW AND NAIL. Medema Builders say Insulite Primed Siding "cuts easily with hand or power tools—won't crack, split or splinter." And because its density is close to that of natural wood, no special nails are needed.



GOES UP FAST. Here's how Medema Bldrs. put it: "Insulite Primed Siding is easy to handle, easy to apply over the rugged Insulite Sheathing we also use. Packages unload from truck quickly—either manually or with fork lift."



SAVES \$65 PER HOME. Medema estimates "savings of \$65 per house because factory-primed Insulite Siding saves us one complete coat of paint. What's more, we find it helps make the finish coat blister-free. We have never had a paint complaint on Insulite."



HYDRONIC HEATING

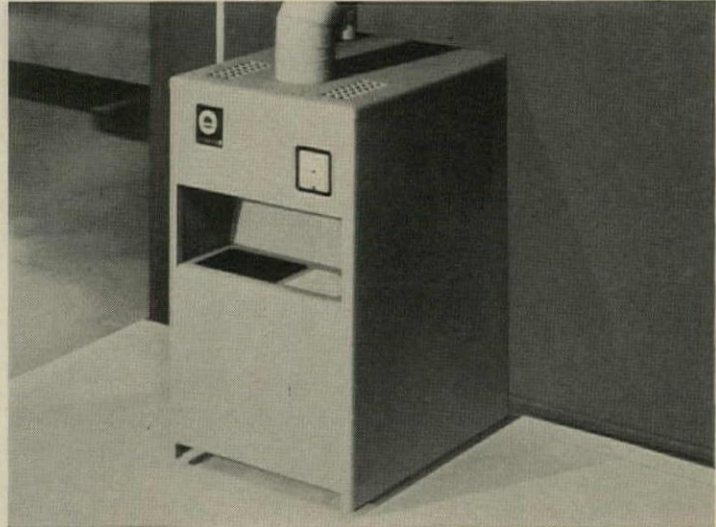
if these 6 money-saving steps are followed!

When you work with a progressive contractor, you can save hundreds of dollars per house, yet offer the quality sales features of hydronic heating. Use this 6-point program as a check list to be sure you get the most modern American-Standard equipment and that the latest installation methods are used.

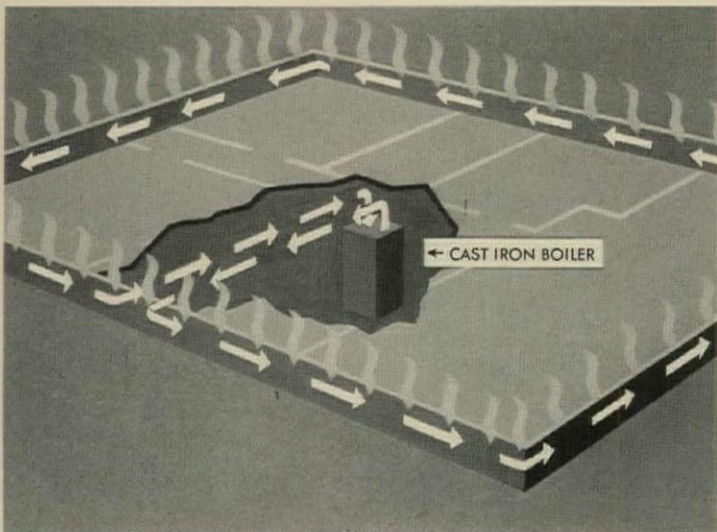


1 An accurate heat loss calculation developed by I-B-R* makes it unnecessary for your contractor to add the wasteful safety margins used in many rule-of-thumb methods.

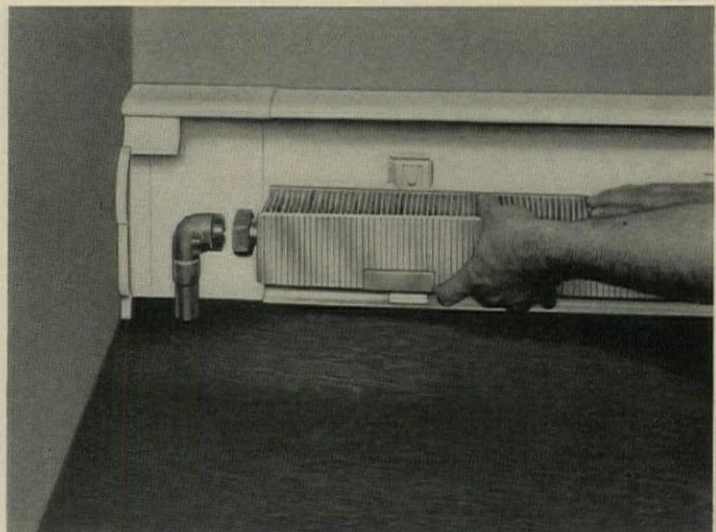
**Institute of Boiler and Radiator Mfrs.*



2 Accurate sizing of the boiler to heat loss calculated for the house eliminates need to over-size boiler—a costly practice inherited from hand-fired-coal-boiler days.



4 Accurate sizing of pumps and piping is simple when the I-B-R guide is used. Depending on the size of the house, many builders save as much as \$100 through accurate sizing.



5 Organized labor procedures slash costs. Using the American-Standard "rhythm of installation" two men install packaged G-2 gas boiler and Heatrim panels for 6-room house in a day. Boiler arrives with accessories, controls, tankless water heater factory-installed.

can be installed in almost any price range



Builder of \$11,000-\$15,000 homes finds hydronic heating system helps him sell

Connecticut builder Henry Murphy says, "People who bought Sherwood Park houses are more than willing to pay small price differential for hot water heating in order to get advantages of better performance and savings over the long run." Murphy is convinced that the system impressed buyers because they associate hydronic heating with more costly houses.

Extra advantages of Hydronic Heating help sell houses

House can be zoned economically with only one boiler.

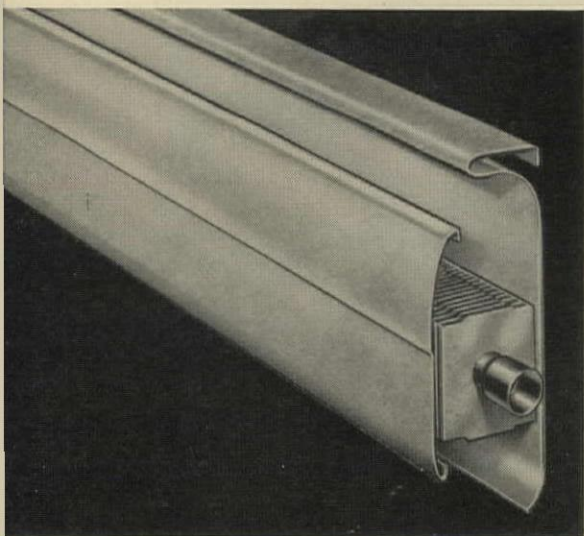
Built-in water heater delivers abundant hot water—saves cost and space of separate water heater.

Snow-melting system for driveways, sidewalks, porches is a sales-making benefit.

Compact American-Standard boilers can be installed in basement, utility room, garage . . . need little space.

Heating panels replace ordinary baseboards to provide decorating freedom . . . furniture can be placed against walls, wall-to-wall carpeting can be laid, draperies can hang to floor. Panels can be painted to match walls, if desired.

For more information see your local American-Standard representative or write AMERICAN-STANDARD PLUMBING AND HEATING DIVISION, 40 W. 40 St., New York 18, N. Y.



3 Accurate sizing of baseboard based on 215° water, instead of 170°, saves 47 feet of heating panels in a 60,000 Btu/hr. house when you use American-Standard N85-L Heatrim.

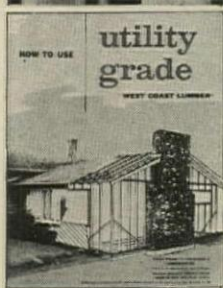
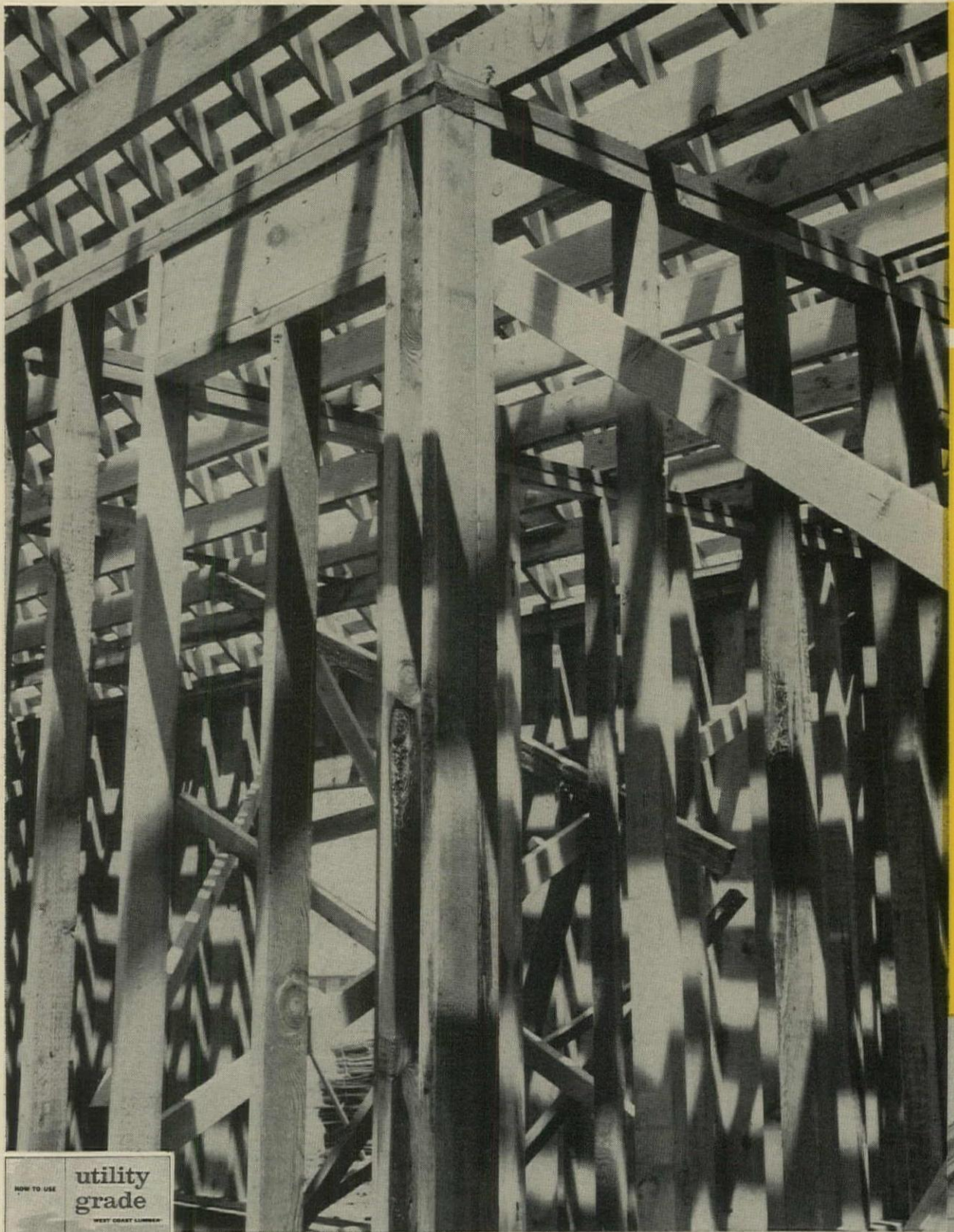


6 I-B-R test-rated equipment insures that these cost-cutting steps work. American-Standard boilers and radiation are I-B-R rated. With this equipment, you offer the comfort and health advantages of hydronic heating without increasing the cost of your house.



AMERICAN-Standard

PLUMBING AND HEATING DIVISION



WRITE FOR
**FREE
TECHNICAL
FACTS**

about Utility grade
West Coast Lumber.
Contains span tables.

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

WEST COAST LUMBER

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

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

**“I build 50 quality homes a year
with money-saving **UTILITY GRADE
WEST COAST** framing lumber,”**

says Builder Ira W. “Bud” Andersen,
Kansas City, Missouri

“I can save at least 25% on framing lumber costs with Utility grade framing lumber and build a quality house at the same time. My experience in building 50 houses a year in the \$25,000 to \$40,000 price range has proved to me that the proper use of Utility grade maintains quality, holds my reputation and establishes a realistic profit on each house,” Andersen concludes.

Utility grade framing lumber can give your profit a boost, too. Use it for studs, plates, joists, rafters, headers and bracing.* Ask your retail lumber dealer about Utility grade West Coast Lumber...he's your local source of supply.





PHOTO: ROBERT STEINAU

THE CHANGING FACE OF AMERICAN HOUSING: **Want to buy a town house?**

Less than 24 hours after HOUSE & HOME published this picture, scores and then hundreds of housing professionals began telephoning, telegraphing, writing, and even traveling hundreds of miles to see for themselves how so much was done for so very little in these houses.

Builders came to see them.
So did government officials—city, state and federal.
So did distributors and dealers of housing products.
So did architects, designers, mortgage lenders, realtors, even house salesmen.

These houses were privately built to redevelop one of the worst slum areas in Louisville, Ky. Nearly 500 were sold to Negroes. Air-conditioned, they sell for nothing down and as little as \$63 a month!

These are patio town houses. For seven years HOUSE & HOME has been urging more architects to plan them, more builders to build them, more lenders to finance them, more realtors to sell them. With their small private patios and their ample communal playgrounds they permit the most economical enjoyment of costly land.



These sell for as low as \$63 a month—air-conditioned!

This is a fine example of what private enterprise can do when it turns its know-how to urban renewal.

Urban renewal is the big new market for housing and everything that gets built into houses. One purpose of the Kennedy housing program is to get the whole industry into the renewal act—architects, designers, builders, suppliers, lenders, appraisers and realtors alike.

These are the all-important housing professionals whose help manufacturers will need if they want to sell their products into any kind of building—to get their products designed in, built in, appraised in, financed in, delivered in, sold in.

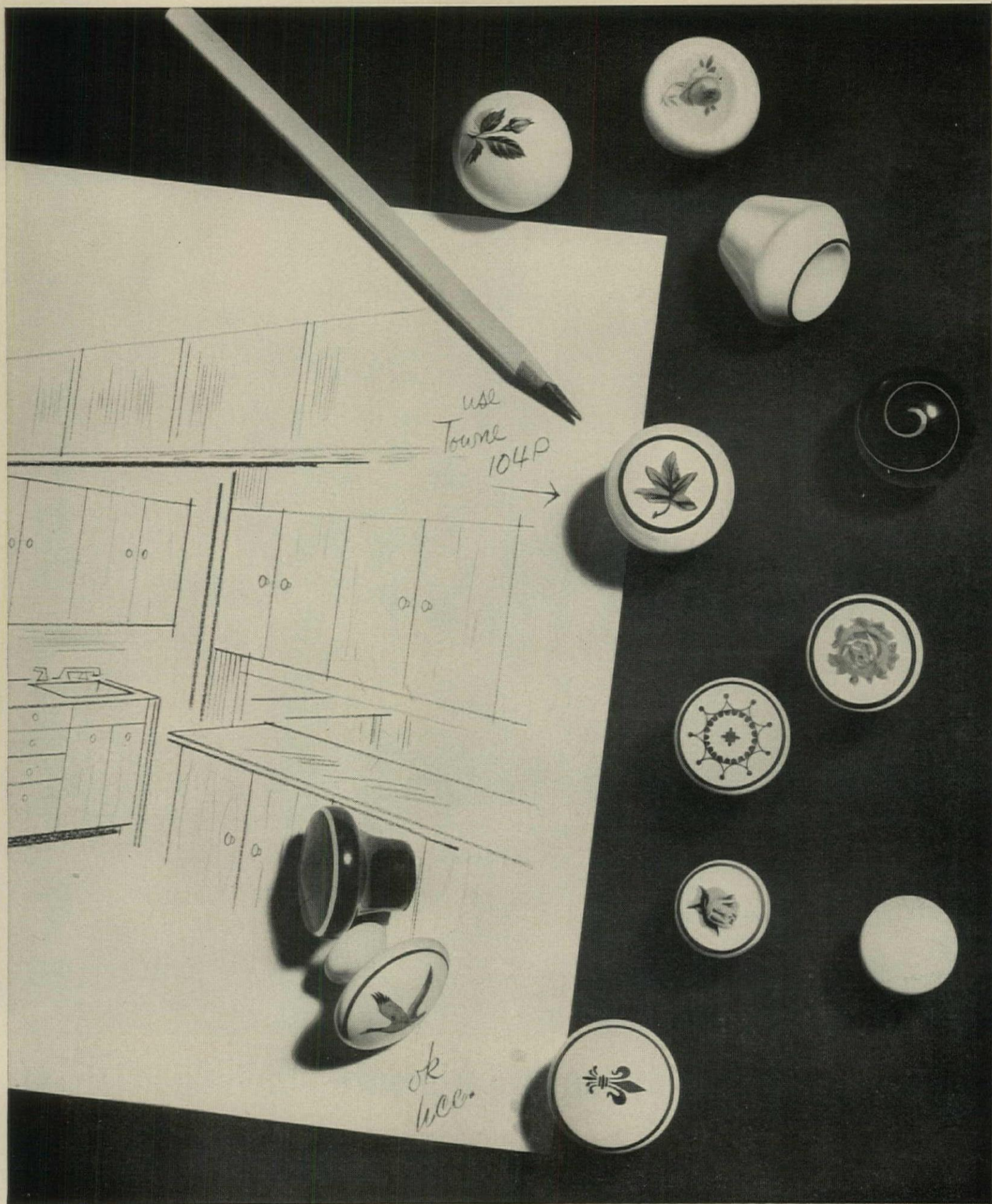
So ask yourself these three important questions:

- 1) Will these professionals give you all the help you need to make more sales?
- 2) Do they know enough about your products' quality and sales appeal to want to sell them for you?
- 3) Are you doing enough to get your selling story across to these men whose help is so important to you?

HOUSE & HOME—and only HOUSE & HOME—is read by almost everybody who could help you make more sales, so HOUSE & HOME is mighty important to your selling.

**House
&
Home**

published by TIME INC.



INTERIORS, whether modern or traditional, depend on smart items to enhance an overall effect. That's why it's wise to specify Towne ceramic drawer knobs for cabinets, chests, vanities and storage tables. There's a Towne design for every style and color scheme — and all are hand decorated, corrosion-proof, easy to clean — and reasonably priced. For further information write for free, colorful Towne brochure. The Towne Hardware Division, The Yale & Towne Manufacturing Company, 144 East 44th Street, New York 17, N.Y.

Hardware
of Elegance
Towne
YALE & TOWNE

HARDWICK BUILT-INS



**for style,
performance
and ease of
installation**

For 1961 Hardwick presents a beautiful, new line of built-in ranges that add extra value to every home. Only Hardwick, the leading producer of popular priced ranges, can offer so much style, quality and convenience for the money. Here are "plus" features to help you sell your homes.

• Easy installation, long-lasting, trouble-free service.

• Six fashion colors — turquoise, yellow, pink, coppertone, brushed chrome, and white.

• Three different surface unit styles.

• Bigger, 18-inch Queen-Size Oven which has 23% more baking area and a new, picture-big oven window.

• New Flame Master Heat Control accurately controls temperatures as low as 140° so food stays serving warm without over-cooking.

• Hardwick's exclusive EquaFlo Burner provides perfect broiling flame *without smoke*.

• Companion MicroRay meat oven — a Hardwick Exclusive.

Send me the complete story in the new Hardwick Built-in folder

Hardwick Stove Company, Cleveland, Tennessee

Name _____

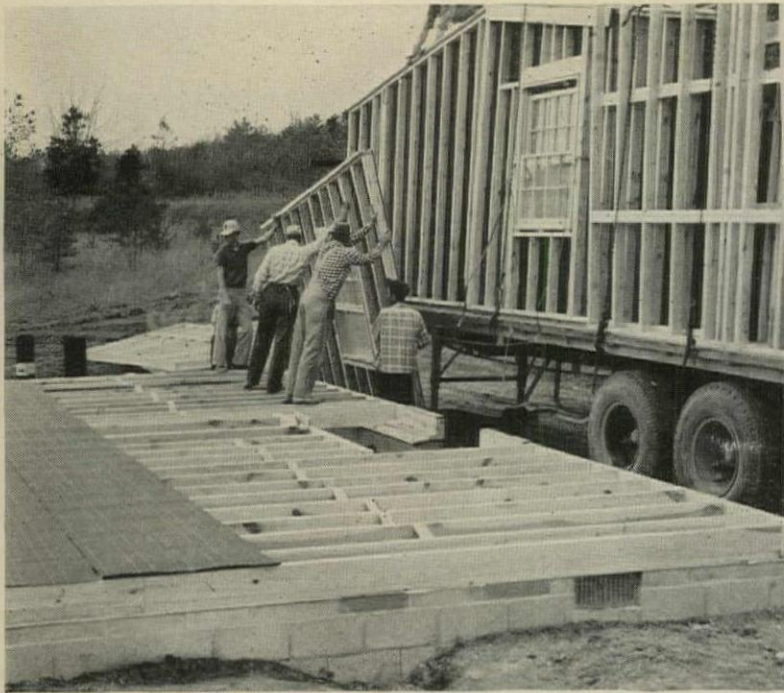
Address _____

City _____ Zone _____

State _____



**HARDWICK
STOVE COMPANY**
Cleveland, Tennessee



7:00 Kingsberry package arrives at site *complete*—on pre-arranged schedule. Components are bundled, marked, and unloaded in proper sequence. No waiting for items from individual suppliers.



4:30 Houses are erected and closed-in by seven-man crews in 8 hours, and are ready for interior finishing. Prime-coat painting of the exterior components safeguards them from inclement weather.

Kingsberry's speed of erection helps you profit 4 ways!

Kingsberry houses close-in quick . . . finish-out fast! Kingsberry Homes cut construction labor 62% to help you earn more money

Making your money work faster is the key to success in today's market. That is why so many southern builders are turning to Kingsberry's unique advantages.

1. Cut construction costs: Save 62% on labor costs—manufactured wall sections go up fast without cranes . . . most models dry-in with a 7-man crew in one working day . . . labor and material savings in Kingsberry's truss-roof system permits flexible floor planning . . . pre-finished and pre-hung door units. Kingsberry's complete package lets you schedule delivery of 80% of building material at a firm cost . . . no expensive labor waiting for material . . . no purchasing agent, no expeditor. Finished cost comes out right on original construction-cost estimates. You eliminate all warehouse problems and reduce material waste and pilferage.

2. Pre-sell from models: Customers get into their homes quicker (2 weeks from start to finish), and you can pre-sell from model homes. Build to firm orders and avoid speculative building risks. Shift quickly with market changes, build houses in demand. Kingsberry's Salesmaker Program creates a sales-producing, customer-promotion program, and gives you up to ⅓ the necessary advertising money.

3. Reduce interest on construction loans: Kingsberry's fast building schedule permits you to save \$150 to \$450 per house in financing expenses. By shortening your building cycle, in time, you can build more houses, make more profit with the same capital investment and overhead. Kingsberry's Construction Loan Program can also help you further control your construction costs.

4. Build all year 'round: Costly weather delays are less frequent. Build right through the winter season, and keep experienced crews together all year long.

Kingsberry offers these savings in a tremendous selection of quality homes, priced to sell from \$9,000 to \$35,000 with land. To learn how you can increase sales, speed construction and increase profits, write or call today: Jerry Nowak, General Sales Manager, Kingsberry Homes, Phone, Fort Payne Alabama 845-3550.

TIME IS MONEY

Here's proof the Kingsberry System cuts building time to help you earn more money.

Conventional on-site time required for dry-in and trimming, interior and exterior (1548 square-foot house)	720 man hours
Time required for same operations with Kingsberry system	275 man hours
Your savings in man-hours alone	445 man hours

With a fast, efficient building cycle plus a reduction in on-site labor, your costs can't get out of line!



"PROGRESS IN HOUSING THROUGH ENGINEERING AND RESEARCH"
At the present time Kingsberry serves builders only in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee.



Just one of Caloric's dramatic color-coordinated ranges that win customer approval.

COOL BEAUTY FROM CALORIC CAPTIVATES HOME BUYERS

Everyone knows it's the kitchen that "sells" a new home. And what woman can resist a color-planned kitchen by Beatrice West, famous color consultant, featuring the sheer beauty of a Caloric built-in? When she can see—in *your* home—how Caloric's color-coordinated built-ins blend with today's floor coverings, wallpapers and paint, counter tops and accents, she's yours!

She'll be completely overwhelmed with the style and convenience features of every Caloric built-in! Streamlined, modern design, graceful sweeping oven handles, illuminated control panels. New 18" extra capacity Caloric ovens with 2 more inches of cooking space in a standard

24" cabinet. And that wonderful extra she's dreamed of: *completely removable* oven and broiler doors for easier cleaning of the porcelain enamel interiors.

She'll delight in Caloric's Gold Star Award features, too: Thermo-set top burners, meat thermometer, clock controlled oven, roto-roaster

rotisserie. And, of course, Caloric's famous Keep-Warm oven system.

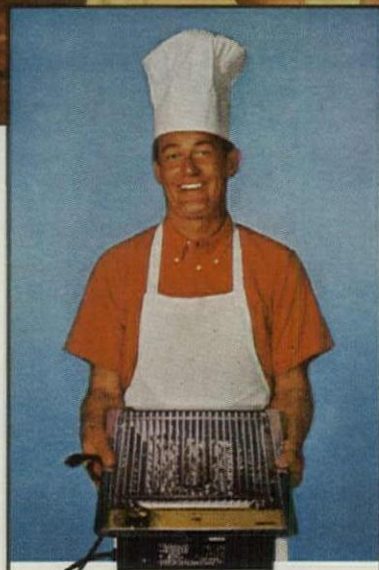
She'll be absolutely breathless by the time you show her Caloric's Lectro-Static hoods, single or double bowl porcelain enamel sinks, protective splash plates... all in colors to match Caloric ranges: pink, yellow, turquoise, copper-tone, satin metal, black and white.

No wonder, a beautiful Caloric built-in featured in a color-planned kitchen wins any home buyer. And color-coordination by Beatrice West is yours... free... *exclusively with Caloric!* Write for more information or contact your Caloric representative.

Caloric®

STOP

BEFORE YOU START THAT NEW KITCHEN



STANTHONY'S Electramic Char-Broiler grills, roasts, broils. Unit with patented Cerracoals delivers even, radiant heat and true barbecue flavor—inside or outside.

6-2

Get a money-making hand from **Mr. Inside-Outside**

Now an economical, easy-to-install kitchen appliance with sales features that appeal to every home buyer—men and women alike! Mr. Inside-Outside enhances any range unit because it gives housewives a second oven—broiling and baking can now be done *simultaneously*. It also eliminates tedious oven cleaning, and saves valuable kitchen space. Men like its portability. Just pick it up, carry it outside and enjoy true barbecue flavor in seconds. See this revolutionary new appliance and you'll see important sales advantages that can work for you.

BUILT-IN ECONOMY and CONVENIENCE

- Motorized rotisserie and griddle top add versatility.
- Patented Cerracoals never need replacing—give barbecue flavor without fuss.
- One-piece reflector removes readily for easy cleaning.
- Continuous temperature control and safety signal light for perfect results every time.

EASY LOW COST INSTALLATION

- Needs no special wiring—uses standard 115V element.
- Saves space, fits anywhere. Only 3" deep, it never replaces valuable cabinets or shelves.
- Handy cutting board available. Slips into counter top when Mr. Inside goes Outside.
- Fits standard 18" base cabinet. Measures: 20 $\frac{1}{16}$ " x 14 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ "—serves the whole family.

COMBINATION PROMOTIONAL PACKAGE

Stanthony offers a top-quality Ventilating Hood and Broiler assuring proper ventilation for Broiler and surface unit. No extra charge for 48" size hood used with most surface units. You save the cost of your present hood.

Stanthony's ELECTRAMIC® CHAR-BROILER

For information on how Stanthony's Electramic Char-Broiler can help you build sales and the name of the warehousing distributor in your area, write: Stanthony Corp., Los Angeles 39, Calif.

EDITOR-IN-CHIEF.....HENRY R. LUCE
CHAIRMAN, EXECUTIVE COMMITTEE.....ROY E. LARSEN

CHAIRMAN OF THE BOARD.....ANDREW HEISKELL
PRESIDENT.....JAMES A. LINEN
EDITORIAL DIRECTOR.....HEDLEY DONOVAN
ASSISTANT DIRECTOR.....ALBERT L. FURTH

EDITOR & PUBLISHER
P. I. Prentice

MANAGING EDITOR
Robert W. Chastaney Jr

EXECUTIVE EDITOR
Carl Norcross

ASSISTANT MANAGING EDITORS
Gurney Breckenfeld
John F. Goldsmith
Walter F. Wagner Jr

ASSISTANT EXECUTIVE EDITOR
Edward Birkner

ART DIRECTOR
Jan V. White

ASSOCIATES
Jonathan Aley, Kenneth D. Campbell
James P. Gallagher, John L. Gerfin
Maxwell C. Huntoon Jr, David R. Kerr
Robert W. Murray Jr, Richard W. O'Neill
Richard Saunders (Washington)
Natalie F. Siegel

ASSISTANTS
Marcia Frank, Olive F. Taylor
Jenepher Walker, Cornelia Wooldridge

CONSULTANTS
Carl Boester, Miles L. Colean, FAIA
Thomas P. Coogan, Ruth Goodhue
Leonard Haeger, AIA, James T. Lendrum, AIA

BUSINESS MANAGER
Lawrence W. Mester

CIRCULATION MANAGER
John E. Pflieger

ASSISTANT TO THE PUBLISHER
Walter R. Browder

DIRECTOR OF MARKETING
Arthur S. Goldman

ADVERTISING DIRECTOR
Richard N. Jones

Volume XX No. 2

HOUSE & HOME is published monthly by TIME INC. Time & Life Building, Rockefeller Center, New York 20, N. Y. Yearly subscription payable in advance. To individual or firms (and their employees) engaged in building—design, construction, finance, realty; material distribution, production or manufacture; government agencies and supervisory employes; teachers and students of architecture and trade associations connected with the building industry; advertisers and publishers: U.S.A., Possessions, Canada, \$6.00; elsewhere, \$9.50. Single copies, if available, \$1. All copies mailed flat. Please address all subscription correspondence to HOUSE & HOME, Time & Life Building, Rockefeller Center, New York 20, N. Y. When ordering change of address, please name the magazine and furnish an address label from a recent wrapper, or state exactly how the magazine is addressed. Both the old and the new address are required. Allow four weeks for the change. © 1961 by TIME INC. All rights reserved.

TIME INC. also publishes TIME, LIFE, FORTUNE, SPORTS ILLUSTRATED and ARCHITECTURAL FORUM. Chairman of the Board, Andrew Heiskell; Chairman, Executive Committee, Roy E. Larsen; Chairman, Finance Committee, Charles L. Stillman; President, James A. Linen; Executive Vice President and Treasurer, D. W. Brumbaugh; Senior Vice President, Howard Black; Vice President and Secretary, Bernard Barnes; Vice Presidents, Edgar R. Baker, Clay Buckhout, Arnold W. Carlson, Allen Grover, C. D. Jackson, Arthur R. Murphy, Ralph D. Paine, Jr., P. I. Prentice, Weston C. Pullen, Jr.; Comptroller and Assistant Secretary, John F. Harvey; Assistant Treasurer, W. G. Davis; Assistant Comptroller and Assistant Secretary, Charles L. Gleason, Jr.

AUGUST 1961

House & Home

Published by TIME Incorporated

GAS IN TOMORROW'S HOUSE

- 102 *All-gas house combines elegance with easy informal living*
110 *Fast-changing technology is pacing growth of the gas industry*
121 *What's new in gas-fueled products*
126 *Alert gas utilities now push house sales as hard as they push appliance sales*

INDOOR-OUTDOOR LIVING

- 132 *Outdoor space—housing's neglected asset*

COMMUNITY PLANNING

- 150 *Three planning ideas that can make any community more desirable—and more profitable*

MARKET REPORT

- 160 *Hawaii: where a business boom is bringing radical changes and rugged competition in housing*

NEWS

- The new Housing Act: how it will affect homebuilding and the housing market*
Mortgage market: rising discounts vex builders
Stock market: first realty trusts float new issues
One-family public housing pushes 221 builder out of market
43 *Index to these and other News reports*

HOW TO BUILD BETTER FOR LESS

- 169 *Technology: mushroom house tests new methods and new materials*
170 *NAHB digs for inefficiency in Bob Schmitt's efficient operation*
177 *What the leaders are doing: lender's plan makes trade-up work*
178 *New prefabricated apartments are off to a fast start*
192 *New product reports: what you should know about water softeners*
200 *Reviews of new technical films and literature*

DEPARTMENTS

- 78 *Letters to the editor*
204 *Advertising index*

COVER

Good Housekeeping's all-gas house. Architects: Jones & Emmons Builder: Harlan Lee. Photo: Julius Shulman. See p 102.

COMING NEXT MONTH

How to profit from new opportunities for remodeling



Good Housekeeping and the American Gas Association

join in national promotion of . . .

An elegant house for easy informal living

This combination of polished design and practical planning—typified by the formal living room and convenient terrace opposite—is important to every housing professional because it will be seen by several million potential homebuyers.

The house will be shown in 12 color pages in the September issue of *Good Housekeeping* (circulation: 4,961,000). In addition, it will be heavily promoted at local and national levels by A.G.A., Southern California Gas Co, and several manufacturers of building products.

So here is a house with ideas that will influence the tastes of people all over the country—ideas that will help make them critical of their present homes and stir up their desire for better living.

The house (for exterior photos, see cover and *p 104*) was designed by Architects A. Quincy Jones and Frederick E. Emmons. It was built by Harlan Lee in his 500-home Encino Hills community near Los Angeles (where it is expected to draw 100,000 visitors after its opening Aug 20).

Says Mary Kraft, director of *Good Housekeeping's* Decorating Studio and Building Forum: "Although this house is in California, it is not simply a regional house. And although it is sponsored by the gas industry, it is not simply a showcase for gas products. It has ideas for builders and buyers everywhere. Its formal elegance, its practical plan, and its indoor-outdoor living could well be adapted to houses in Maine, Florida, Texas, or Ohio."

continued



LIVING-DINING WING, seen here from rear terrace, has extra-high (10') ceiling. Path at left leads around house to entry court (opposite).

Good Housekeeping/A.G.A. house shows

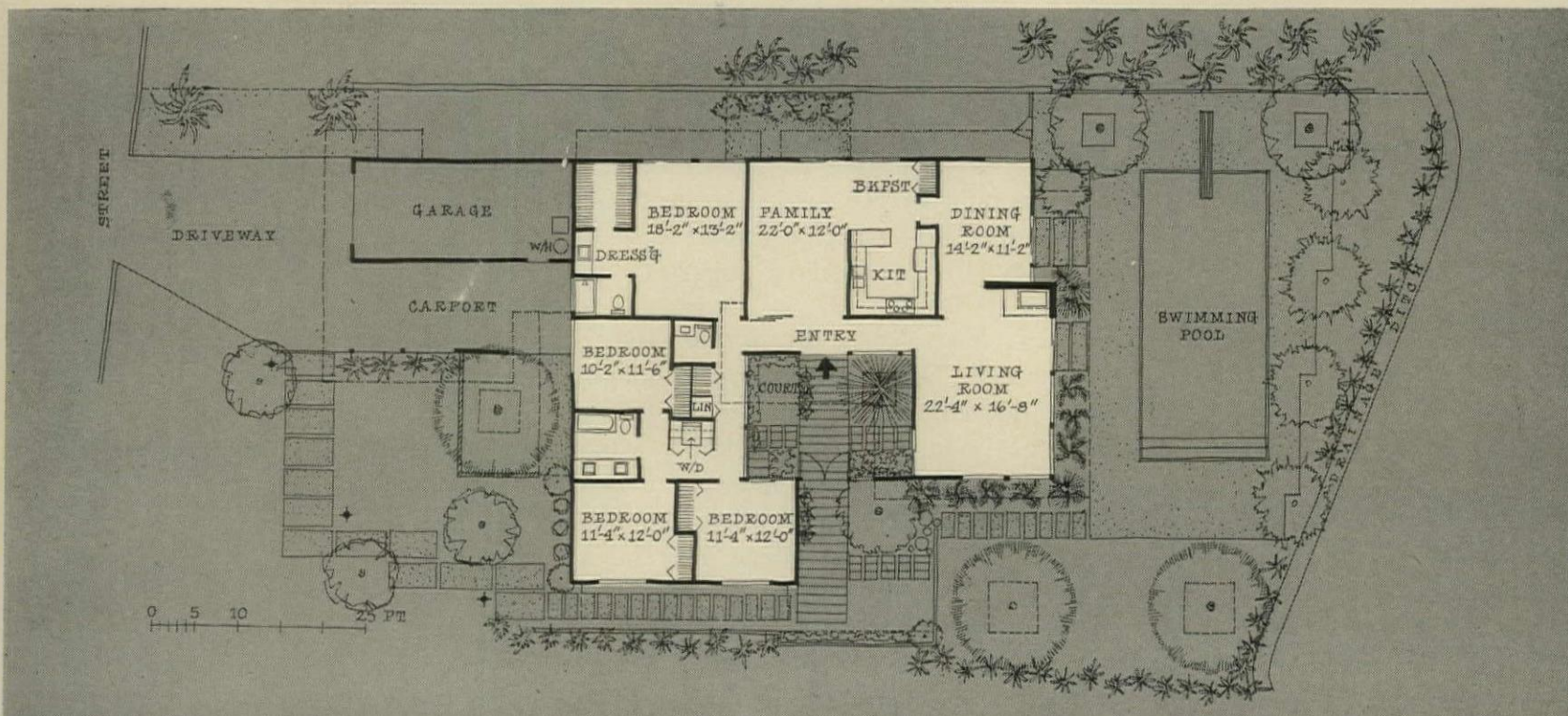
Private outdoor living and a gracious entry court

The entry court (opposite) is not only inviting but also large enough (20' x 14'6") to serve as one of three outdoor living areas. And it plays a key role in the plan (below) by isolating the living room from the bedrooms and by setting up an efficient traffic pattern—the entry hall leads directly to the living room, the bedroom wing, and the kitchen-family-breakfast room area.

This house was planned and sited to provide what so few houses have—outdoor privacy and a close relationship between outdoors and indoors on a relatively narrow lot.

Its three outdoor living areas are hidden from the street, easy to see from indoors through fixed glass walls, and easy to reach through sliding glass doors. The entry court—tucked into the house and almost enclosed by it—opens off the entry hall, living room, and fourth bedroom (or study). A large rear terrace and swimming pool (above) open off the living and dining rooms. And a small informal dining terrace opens off the family room and breakfast area. The garage, carport, and bedrooms (with high shallow windows) face the street. House has 2,440 sq ft, is priced at \$43,000.

FLOOR PLAN wraps around entry court screened in front by double gate and opaque glass panels. Landscape architect: Edward E. Warde.





SECLUDED ENTRY COURT opens into glass-walled entry gallery. Family room is straight ahead, living room to right, bedroom wing to left.

To see the interior, turn the page



FIREPLACE WALL (a) separates living and dining rooms. Transom over glass doors extends to ceiling (2" solid t&g sheathing on 4x12 beams).

Good Housekeeping/A.G.A. house shows

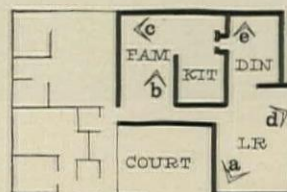
Elegant interior spaces that flow into each other



They gain a feeling of richness from high (10') ceilings, from patterned and highly polished vinyl-cork floors, from a simple but impressive fireplace, from slender detailing around windows and doors, and from the fine finish of the plaster walls.

Each design feature extends the interior space. The diagonal lines of the flooring lead from room to room. The short walls of the central kitchen lend openness to the surrounding rooms. The lightly framed areas of glass do not interrupt the eye. And though the rooms flow together, they are subtly defined by spur partitions, shoji, and the fireplace wall.

In the bedroom wing, ceilings are a conventional 8' to create a more intimate feeling and to offer a dramatic contrast to the high-ceilinged living area. Interior design and decoration were coordinated by *Good Housekeeping's* Mary Kraft.



FAMILY ROOM (b) can be closed off from entry gallery and entry court beyond (p 105) by sliding shoji.

Photos: Julius Shulman



BREAKFAST AREA (c) off kitchen is between family room, foreground, and dining room.



MASTER BEDROOM is big enough (13'x18') to include sitting area. Louvered doors close off bath and dressing room.

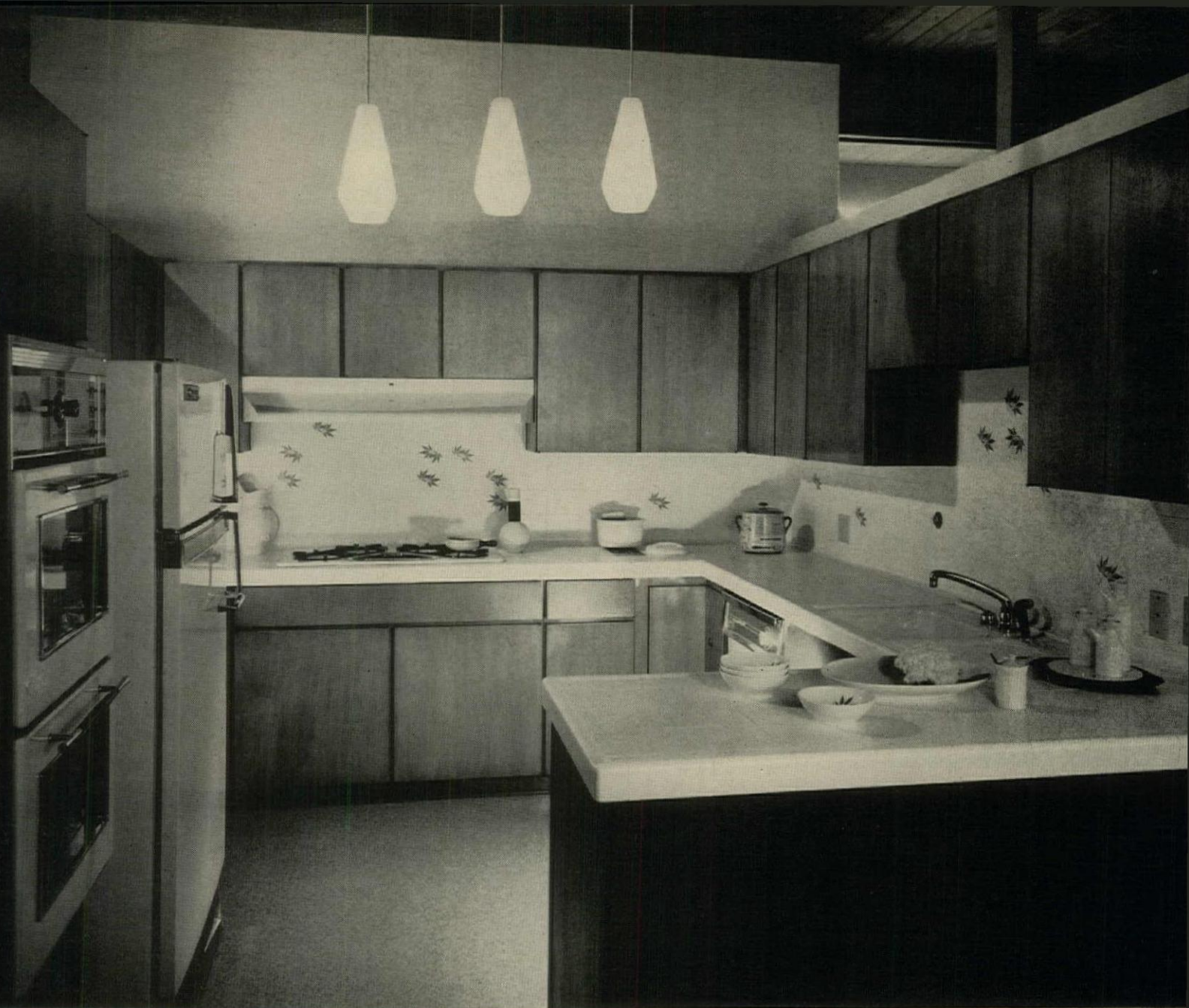


LARGE LIVING ROOM (d) is 22'4"x16'8" and can be entered from entry court, left rear, or entry gallery at right.



FORMAL DINING ROOM (e) flows into living room and, like living room, opens to terrace and swimming pool (p 104) at rear of house.

To see some of the gas equipment in the house, turn the page



INTERIOR KITCHEN—shown before gas rotisserie (opposite) was installed—puts all major appliances within seven steps of each other.

Good Housekeeping/A.G.A. house shows

The latest gas equipment for easier living



For example: The U-shaped kitchen (above) is not only arranged to save steps but also equipped to save time and effort.

Its gas equipment includes: 1) a large double oven with low-temperature control to keep food at ready-to-serve temperature; 2) a gas range with a burner that automatically controls cooking temperatures; 3) a rotisserie (opposite) with permanent coals fired by gas flames; 4) a frost-free refrigerator-freezer. The kitchen also has a dishwasher, garbage disposer, and exhaust hood.

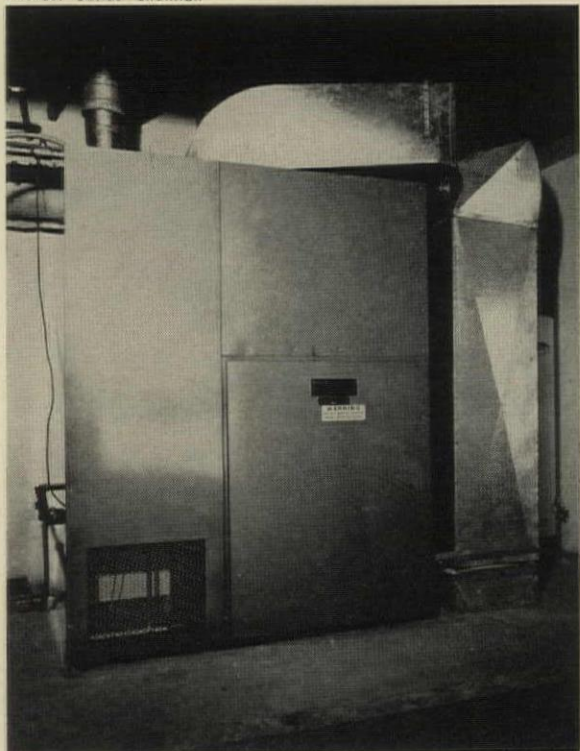
The house is cooled and heated by an air conditioner (opposite) with year-round temperature control. Its fireplace (p 102) has a gas log lighter. And it has a gas washer-dryer (opposite)—conveniently located in the bedroom wing where most laundry is generated.

GAS DOUBLE OVEN is large enough to roast a turkey in either compartment. Frost-free gas refrigerator-freezer has automatic ice maker and fast-chilling shelves.



GAS RANGE, with gas-fired rotisserie, has "burner with brain" that controls cooking temperatures within precise limits by automatically raising or lowering flames.

Photos: Julius Shulman



GAS AIR CONDITIONER—located in garage—automatically switches from heating to cooling to produce year-round climate. Unit's only moving part is fan that circulates air.

GAS WASHER-DRYER is in closet with bifold doors that open to allow plenty of work space. Corridor next to laundry gives a pleasant view of landscaped entry court (p 105).





Gas production capacity is growing over 10% a year.

New gas pipelines are spreading across the country

at a 16,000-mile-a-year rate. And . . .

Fast-changing gas technology is pacing growth in the gas industry

The aim of all the research now going on in industry laboratories: make gas an all-purpose fuel that will supply all the energy needed to run the house.

Right now, industry spokesmen point out, gas can heat and cool the house, refrigerate and cook the food, heat the water, dispose of the garbage, and dry the clothes. And industry engineers predict it may not be long before the electricity to light the lights and run the motors will be generated in a small unit powered by gas.

The gas industry's optimism is backed by real technological progress. Almost all of today's gas appliances are undergoing radical change:

The industry has developed new, smaller gas cooling equipment to bid for a bigger market (*p 112*); more efficient—and cheaper to operate—heating systems (*p 114*); cooking equipment that works faster and more automatically (*p 116*); refrigerators that are competitive with electrical units (*p 117*); clothes dryers that cut gas consumption in half (*p 117*); water heaters with variable recovery rates that can handle widely varied demands (*p 118*); disposers to handle garbage or sewage (*119*); and gas-powered generators that produce electricity directly from gas (*p 120*).

Many of the technical developments on the following pages are being used in products now on the market; for a list of their manufacturers, *see page 121*. And for a look at other new gas-fueled products, *turn to page 122*.



Free-piston engines and heat pumps promise cheaper gas cooling

And by adding this lower cost to gas cooling's almost maintenance-free operation, the gas industry hopes to break the virtual monopoly electricity now has on residential cooling.

Two problems have been chiefly responsible for the gas industry's lag in cooling: high initial cost of the equipment (25% to 30% more than comparable electrical equipment), and a lack of equipment in capacities (2 to 5 tons) needed for average-size houses. Both of these problems are getting increased attention from the industry. For example:

New absorption-type air conditioners (facing page) may cut initial equipment costs up to 25%. The reason: a gas flame can be modulated to operate at varying rates, while an electric motor must either be on or off. Thus a gas unit need not be oversized to handle sudden peak loads, and smaller capacity units can be used.

Gas cooling equipment small enough for the average house is now coming on the market. Last year, only 20% of all houses built were big enough to make use of available gas cooling units. Within the next few months the industry hopes to have available equipment with small enough capacities to serve 80% of the houses built, and by 1965 it hopes to have captured 25% of the entire residential air conditioning market.

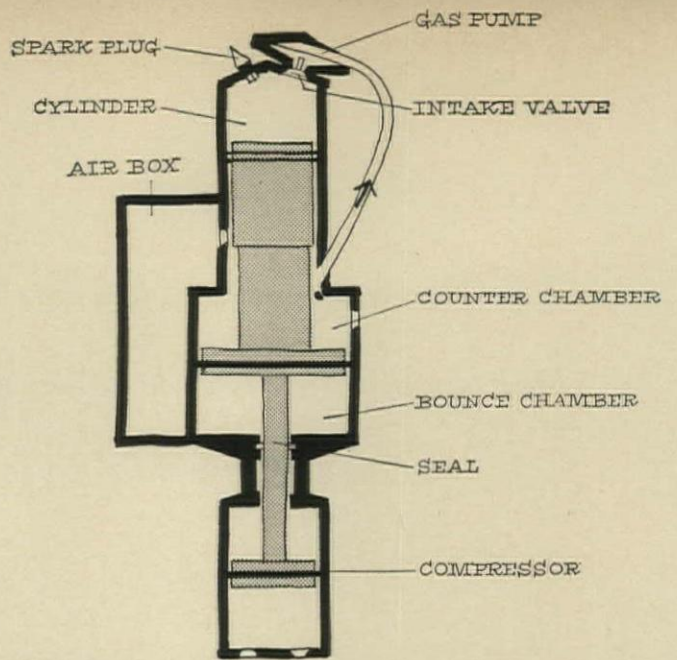
Here are the cooling systems with which the industry hopes to make this breakthrough:

The absorption type of air conditioner promises to be the bread-and-butter system. It is quiet, simple, and its only moving parts are a fan and a water pump. It can be made as small as necessary (units as small as 1/8-ton are used for refrigerators). And it is a year-round system which, at the turn of a valve, becomes a more-than-80%-efficient heating unit.

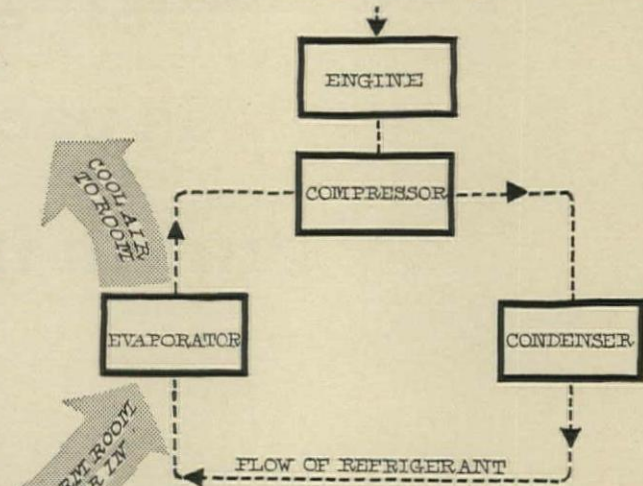
The adsorption type of air conditioner is most useful in areas where high humidity is the big problem. It can operate at high ambient temperatures, and so is a far more efficient and simpler dehumidifier than the usual refrigerating type (which has to cool the air below the dew point to remove moisture). The adsorption unit can also cool air either with a water-chilled heat exchanger (as at right) or with evaporative coolers, which also control rehumidification.

The free-piston engine unit is an engine-compressor unit with only one moving part. Now just reaching the market, it holds greatest promise for larger installations (over 5 tons), but is made in units as small as 3 tons.

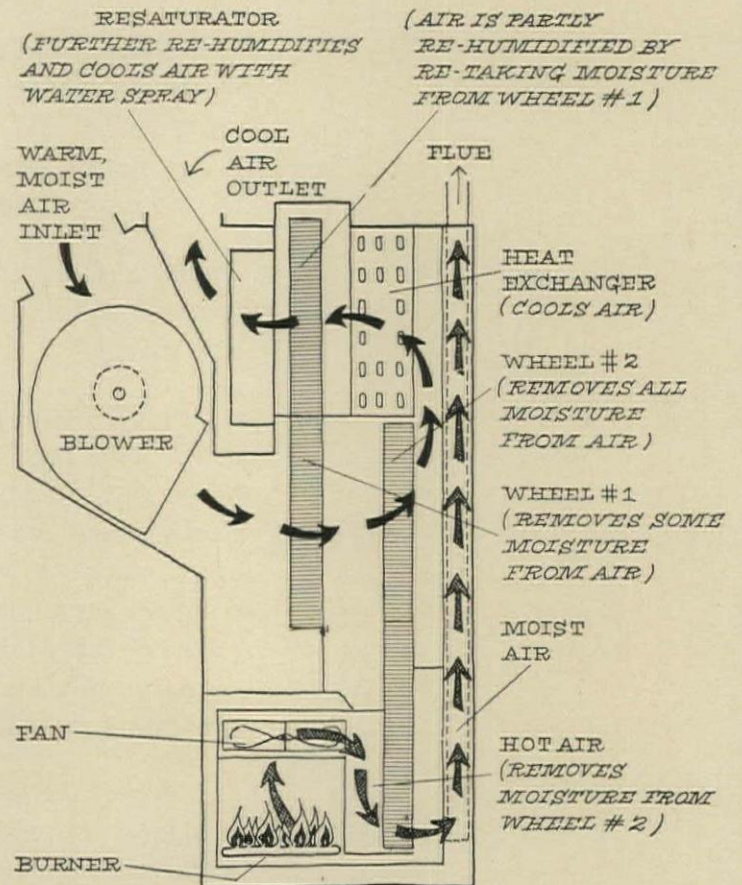
Also available as power for compressor-type cooling systems are gas-fired reciprocating engines, and, for very large commercial installations, gas turbines (p 120).



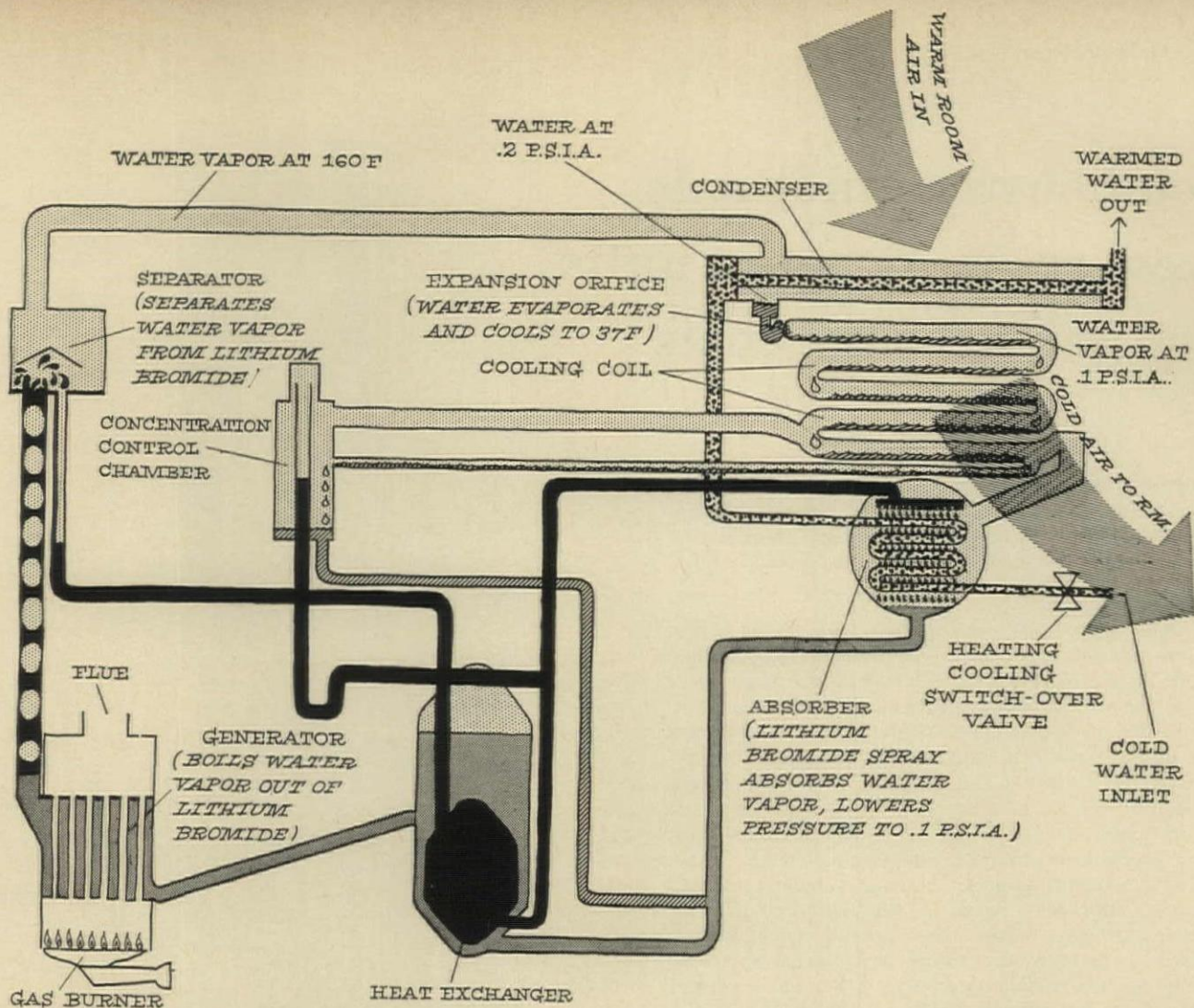
FREE-PISTON ENGINE-COMPRESSOR is powered by explosion on down stroke, by air compressed in bounce chamber on return stroke.



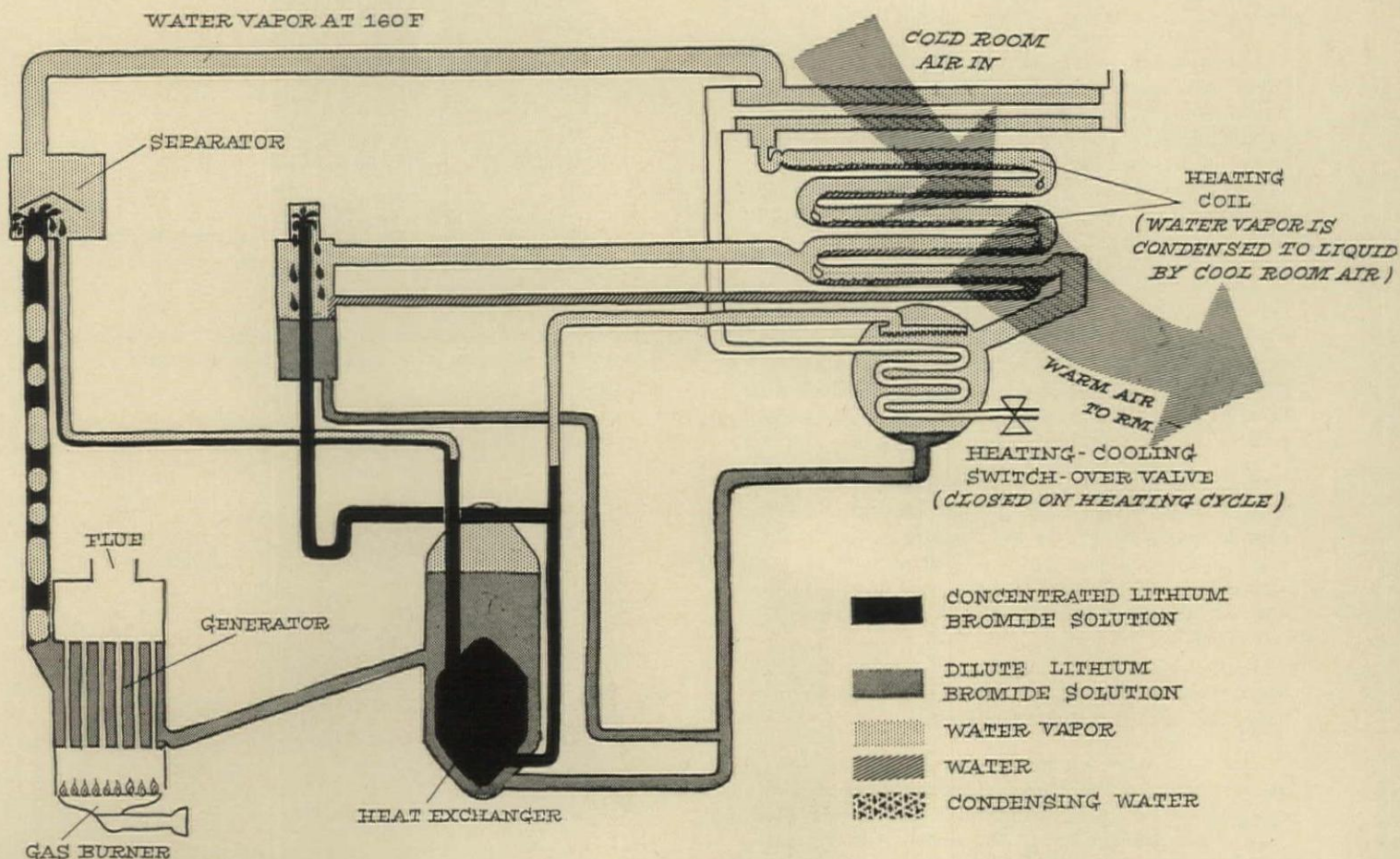
COMPRESSOR SYSTEM can be powered by free-piston unit (at top of page), gas-fired reciprocating engines, or small gas-fired turbines.



ADSORPTION SYSTEM uses two wheels, made of honeycombed paper saturated with a salt, to pick up moisture from air before it is cooled.



ABSORPTION COOLING CYCLE uses water vapor as refrigerant, and lithium bromide solution as the absorbing agent. Cooling takes place in coils beyond expansion orifice, where condensed water is reevaporized. System operates in a vacuum (.1 to .2 psia).



ABSORPTION HEATING CYCLE starts when condensing water for the cooling cycle is shut off (either manually or by thermostatic switch-over). Room air is then passed over condenser—to cool and condense the water vapor—and picks up heat in the process.

continued



New combustion methods and new room-by-room units can cut gas heating costs

And by cutting costs, the gas industry hopes to increase its already commanding lead in home heating (about 80% of all new houses are now gas heated). Here are some of the developments on which the industry pins its expectations:

New pulse-combustion burners are up to 15% more efficient than flame-type burners. Pulse units now on the market have efficiencies well over 90%—vs the 80% minimum required for A.G.A. approval. And they need no chimney because 1) heat transfer is so complete that exhaust temperatures are very low (100F to 200F) and 2) pulse combustion needs no draft.

In these units a gas-and-air mixture is drawn into the combustion chamber and ignited by a spark plug. The resulting pulse of hot gas, under pressure, expands through a spiral of "jet pipe" into the exhaust cushion chamber and muffler. Combustion-chamber pressure then drops to a partial vacuum, allowing the diaphragm valve to admit another charge of gas and air, which is ignited by residual heat from the previous firing. This cycle repeats 70 to 80 times a second.

Because the hot gas is moving so fast through the jet pipe, there is a harder "scrubbing action" than in conventional heat exchangers, and heat is transferred to the water at a higher rate.

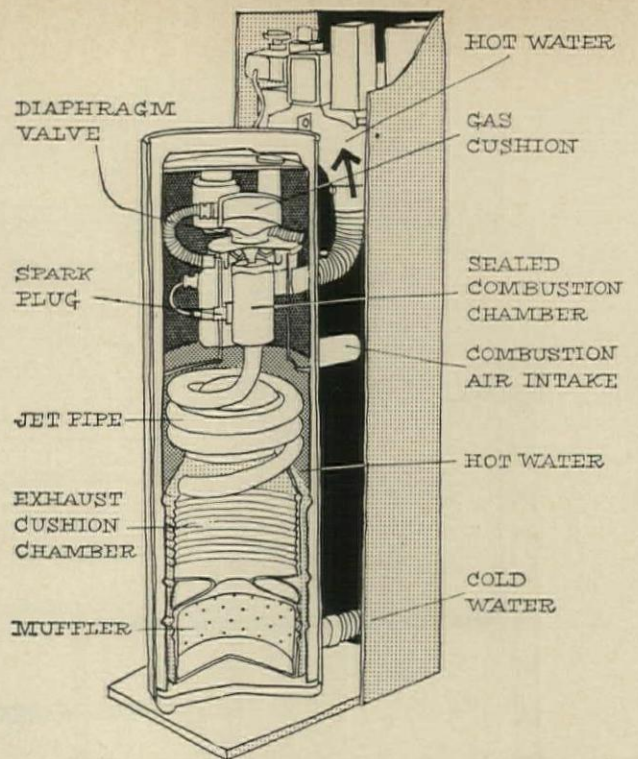
New systems for modulating gas flow to gas furnaces may also boost efficiencies. In these systems, house temperature is regulated by varying the rate of fuel flow to the burner instead of turning the flame on and off. By eliminating peaks and valleys of heating loads, and by working continuously at minimum stack temperature, this new system should give a more even flow of heat with less waste.

New direct-fired baseboard gas heaters have been developed to meet the competition of electrical room-by-room systems. In the new baseboard convector developed by A.G.A., gas is fired in a 3/8" stainless steel tube mounted inside a bigger (1 1/2") radiant-fin tube. Heat output and surface temperatures are comparable to good hot-water baseboard units.

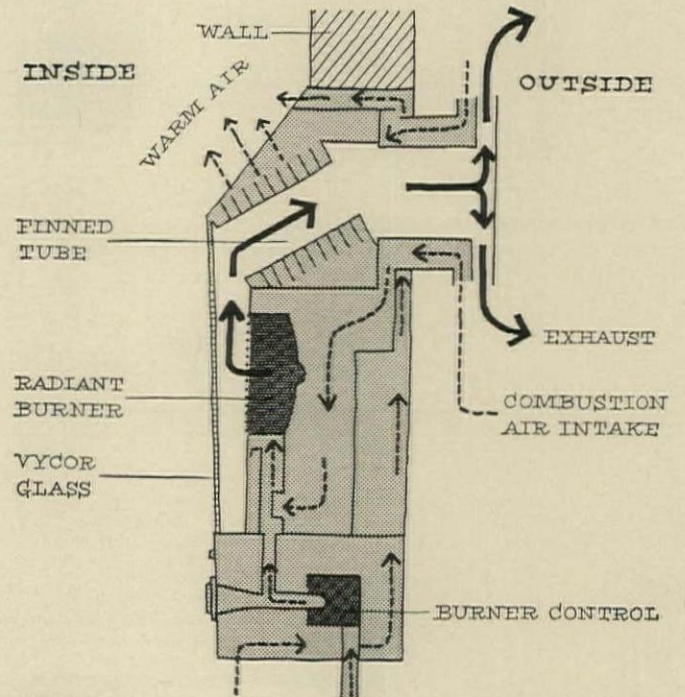
A new infra-red wall heater supplies radiant heat as well as convected heat. In this unit, also developed in the A.G.A. lab, the gas flame heats two 3 1/2" x 5 1/2" ceramic radiant burners. About half of the output is in the form of radiant heat (which heats objects, but not the air) and half in the form of convected hot air.

Another use for infra-red units: patio heaters, which keep people warm, but waste little energy trying to heat the whole outdoors.

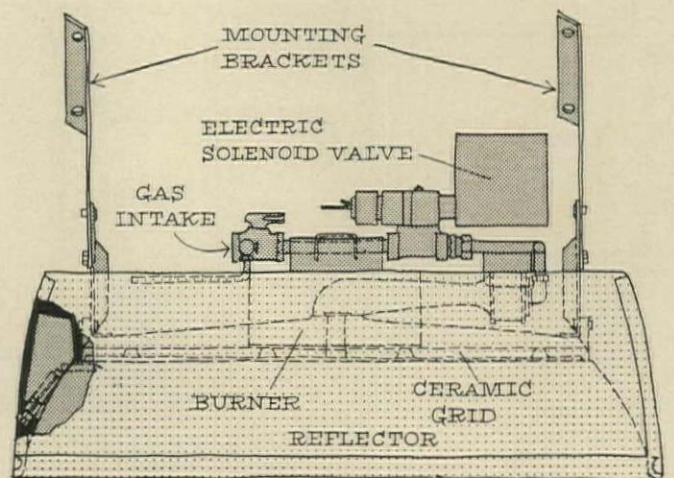
And two other room-by-room gas heaters offer the advantage of zoned heat. Through-the-wall units combine the combustion air source and the exhaust vent in one short stack to the outside. In-the-wall heaters draw combustion air from the room, exhaust through an in-the-wall stack.



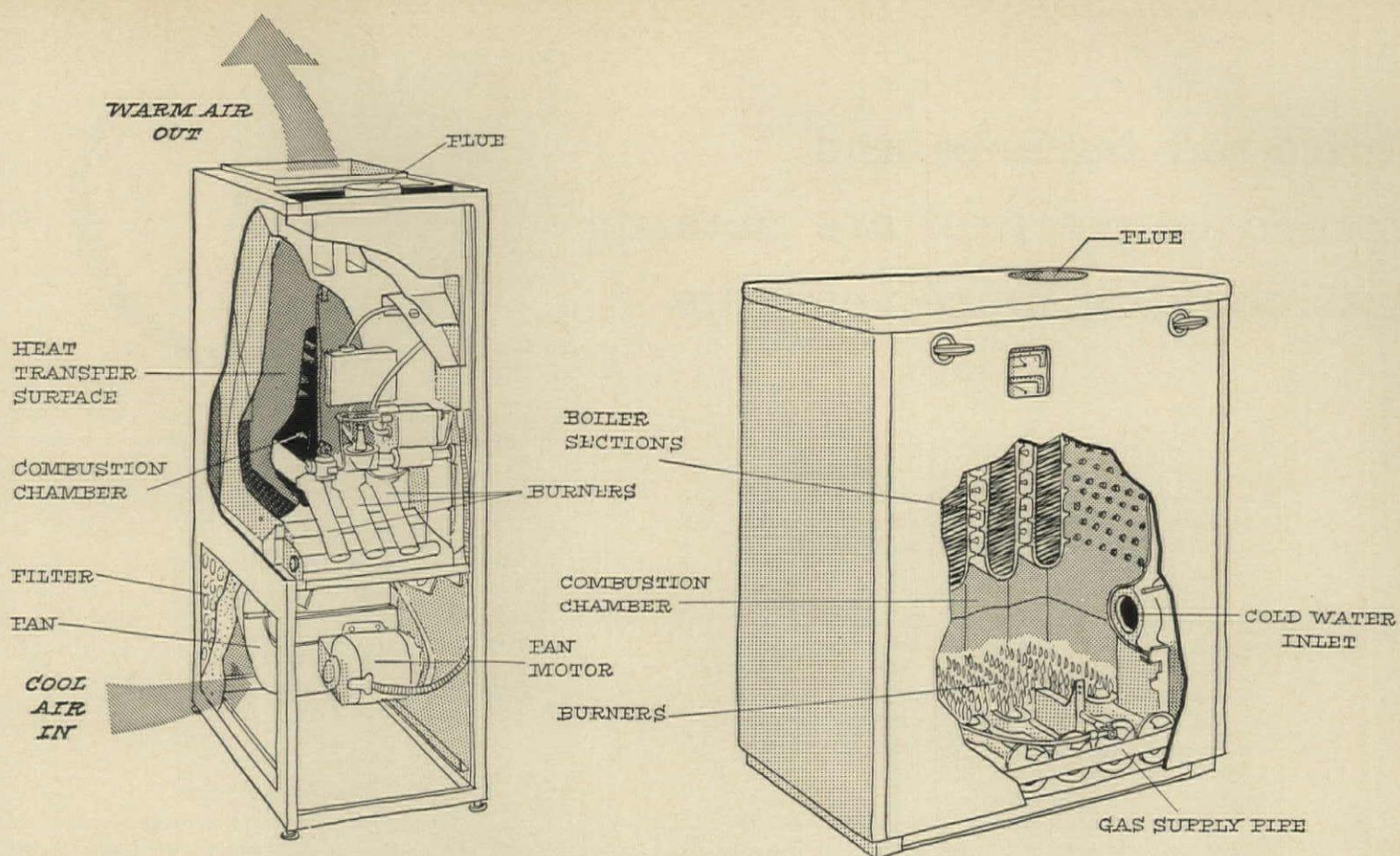
PULSE-COMBUSTION BOILER burns gas in short pulses (70 to 80 per second) instead of a steady flame. System is over 90% efficient.



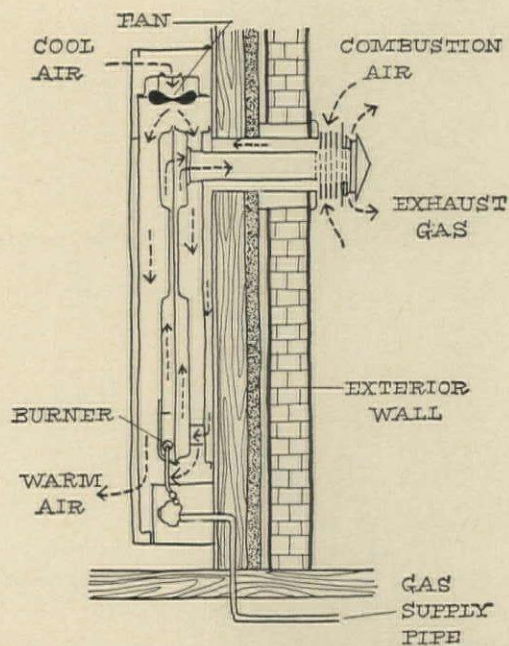
INFRA-RED WALL HEATER combines flame and ceramic grid, supplies about 50% of its heat in radiant form, 50% by convection.



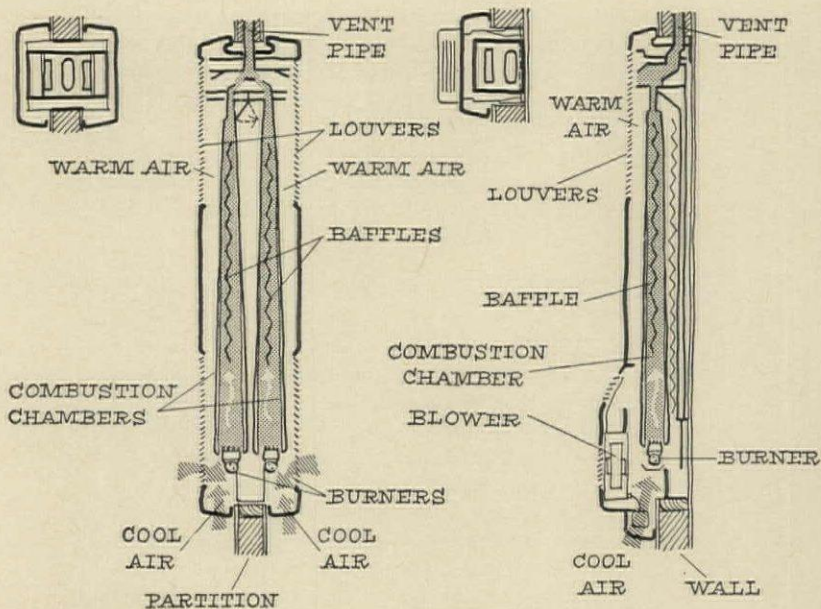
INFRA-RED PATIO HEATER gives off all its heat in radiant form, so it warms people or objects but not surrounding air.



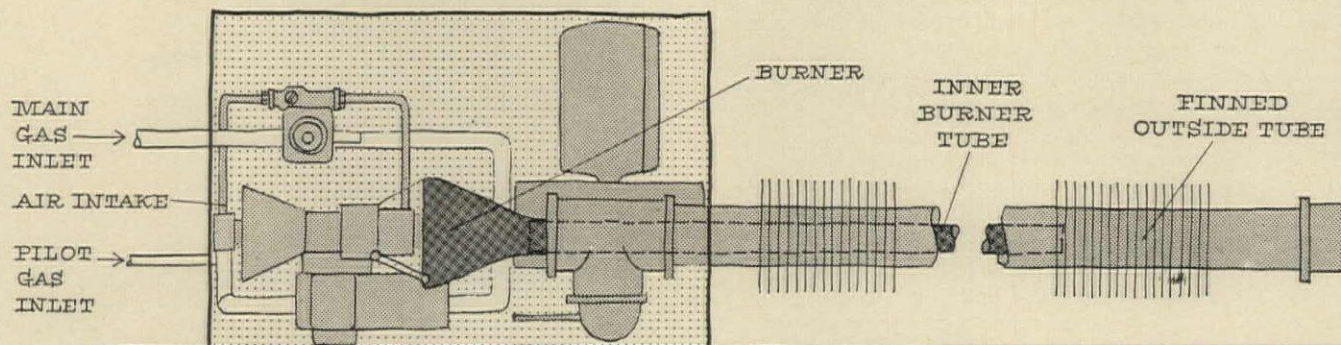
MODULATING GAS FURNACES (left) and boilers (right) vary flow of gas to burners as temperature demands vary, provide more even heat.



THROUGH-THE-WALL ROOM HEATER uses single vent fitting to draw in fresh combustion air and to exhaust fumes to outdoors.



IN-THE-WALL ROOM HEATERS take combustion air from inside, exhaust fumes outside. Dual wall unit is at left, single unit at right.



GAS-FIRED BASEBOARD HEATER adds the advantages of individual room temperature control to the comfort of floor-level radiation.

continued



Infra-red burners and forced convection are making gas cooking more versatile

Gas cooking equipment has always had two important advantages: low fuel cost, and infinite control of the heat—from a very low flame to very high flame. New developments should cut fuel costs even further, and give even more flexible control of cooking. For example:

New infra-red burner tops are 25% more efficient, and new infra-red broilers use only half as much gas. A regular range burner operates at about 48% efficiency, but experimental infra-red burners operate at 60% efficiency. A ceramic grid above the gas burner emits infra-red rays. It in turn is covered by a special glass shield that protects the grid from spillovers and provides an easy-to-clean surface.

New infra-red broilers cook in a shorter time than conventional broilers and with about 35% lower gas input—for a total fuel saving of 50%. As in the infra-red top burners, ceramic grids are set in front of the gas flame. These grids heat up almost instantaneously to 1,600F. When the infra-red rays strike the food, it starts cooking at once. There is much less build-up of air temperature than in a conventional oven, a factor that prevents the food from drying out. In some new infra-red broilers a turkey can be cooked at ten minutes per pound instead of the usual 25.

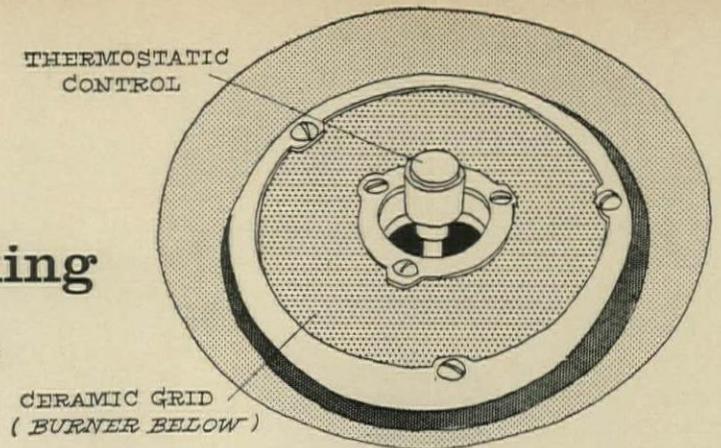
Infra-red broilers also make good outdoor patio broilers. They are faster and cleaner than charcoal broilers, and the infra-red grill gives the same "charcoal" flavor as the charcoal itself.

Forced convection provides more even heat, on the range top or in the oven, and permits lower cooking temperatures. In the new forced-convection top burners, air under fan pressure is metered (according to the cooking heat desired) through openings in the burner unit. This air spreads the flame wider and more evenly over the cooking surface. With these new burners, it is possible to maintain a heat so low that melted butter or gravy will stay warm indefinitely without scorching or browning (you can even cook an egg on a paper plate). And with the thermostatic controls, these burners can maintain a set temperature within 10F.

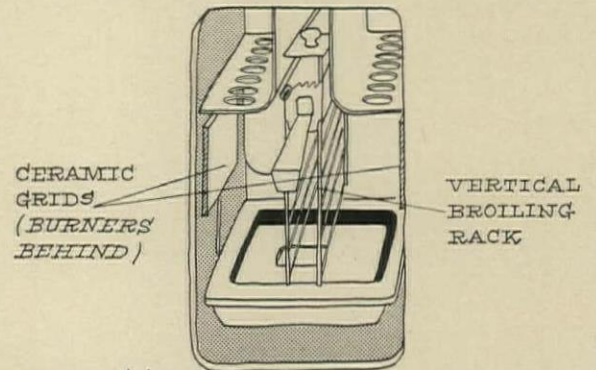
Forced-convection ovens have been made in commercial sizes for some time, will soon be available in residential sizes. In these units, a fan creates eddies of air around the food, increasing heat transfer. Thus, food can usually be baked at 75F to 100F lower temperatures and in 30% to 40% less time—for a total fuel savings of about 50%.

New gas ovens can now maintain steady temperatures down to 140F. This means that food can be kept at serving temperatures without overcooking, and frozen foods can be thawed without cooking.

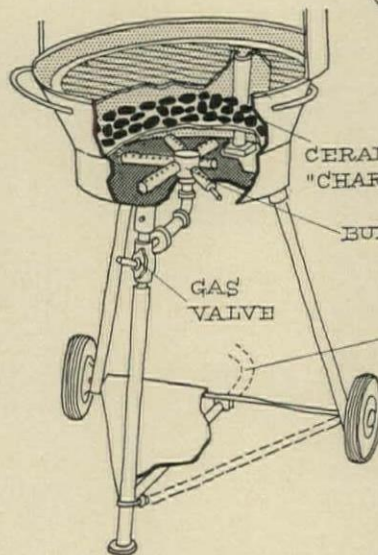
The next important development to hit the market will be oven timers that will "program" cooking temperatures: eg, roast meat at 350F for two hours, then automatically drop to the 140F "holding" temperature.



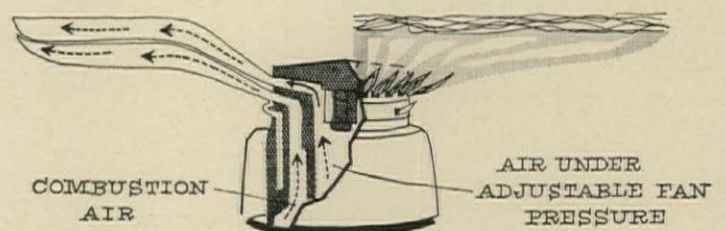
INFRA-RED RANGE BURNER has ceramic grid which emits infra-red rays when heated. Thermostat in center controls burner temperature.



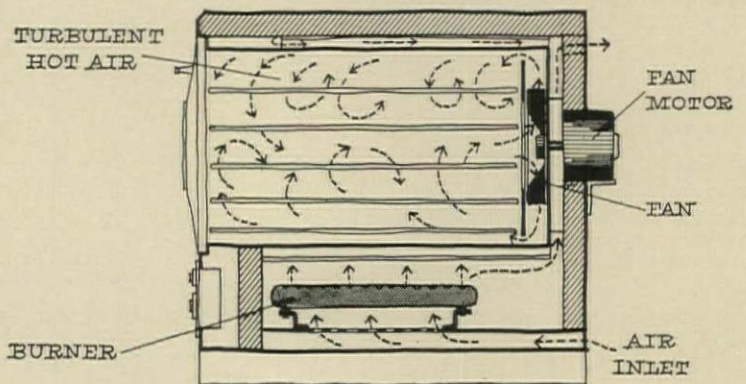
INFRA-RED BROILER may have ceramic burners on both sides, cook meat on both sides at once. Other units use horizontal grids.



INFRA-RED PATIO BROILER uses glowing ceramic "charcoal" to do cooking. Flexible gas tube allows unit to be moved about.



FORCED-CONVECTION BURNER spreads cooking flame evenly under bottom of pan. Flame width is controlled by velocity of fan-fed air.



FORCED-CONVECTION OVEN uses fan to keep hot air turbulent, improve efficiency of heat transfer from burner to food.

New engineering ideas are making other appliances better and more efficient

With these technical advances, the gas industry hopes to get a bigger share of markets where it is already strong (like clothes drying), and also a bigger share of markets where it barely has a foothold (like refrigeration).

New clothes dryers that may dry clothes in half the time are now in the laboratory. In these units, infra-red ceramic heating elements are curved around the drum. Preliminary tests show that clothes can be dried with about one-half the gas used by present dryers—an important cost advantage, since drying a load of clothes can use enough fuel to heat a whole house for the same period of time.

Many new dryers now on the market have controls which sense the moisture content of the clothes and turn the unit off when they are dry rather than after a preset time interval.

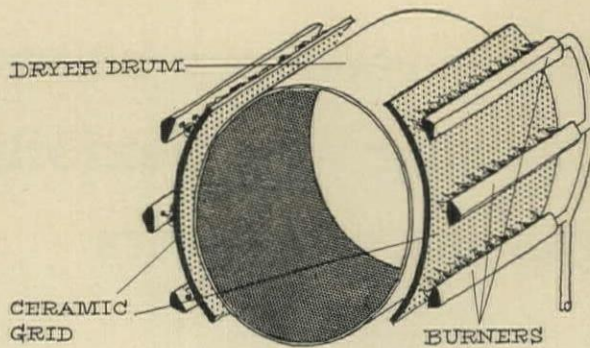
New gas refrigerators are close to electric refrigerators in price, are starting a comeback. Until recently, the complications of manufacturing gas refrigerators (the famous Servel units needed, for example, nearly 150 hand welds) kept the price high and the market small. But redesign and engineering improvements have brought today's price down to within \$50 of comparable, frost-free electric refrigerators. At this price differential, the saving in operating costs (about \$1.50 per month in many parts of the country) puts the gas refrigerator back in competition—and industry experts have now set a sales goal of 400,000 units per year by 1965.

Cooling units of gas refrigerators use an absorption system. They are similar in principle to the house cooling unit shown on p 113, but have these differences: They operate above atmospheric pressure rather than in a vacuum, use air to cool their condensers instead of water. Present refrigerator systems use ammonia and water rather than water vapor and lithium bromide.

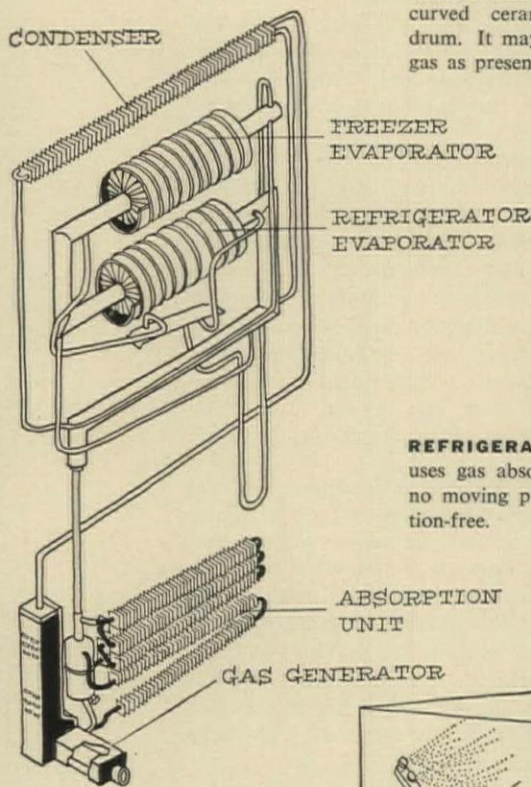
The sealed refrigerating units have no moving parts and require almost no maintenance. So leading manufacturers back them with a ten-year warranty.

New dishwashers use gas heaters to boost rinse-water temperature to 180F. The heaters in these units can boost input water to 160F for washing and 180F—well above pasteurization temperature—for the final rinse. The gas industry hopes to build a market for these units by promoting the pasteurization effect.

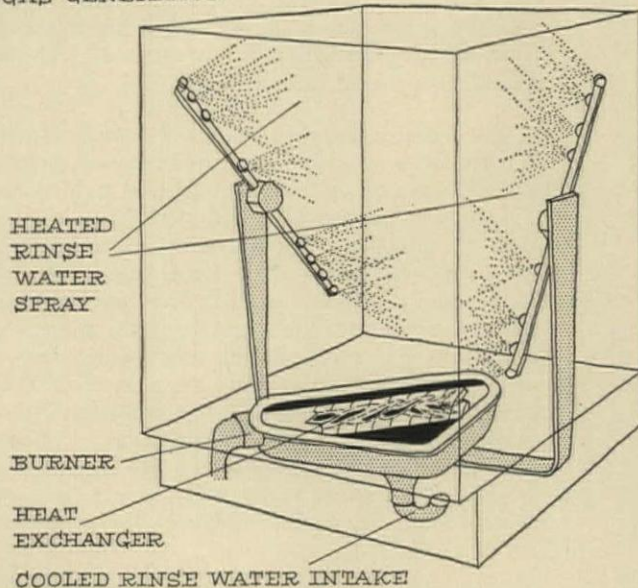
And new flexible connectors will make it possible to move gas appliances without expensive re-piping. One of the drawbacks of gas kitchen appliances has been that they were connected to rigid pipe, and could not be moved for cleaning or remodeling. But A.G.A has now developed a flexible connector—a corrugated metal hose with an organic plastic coating—that prevents leaks and provides a smooth outer surface. Specially designed fittings and valves allow easy connection and disconnection of appliances.



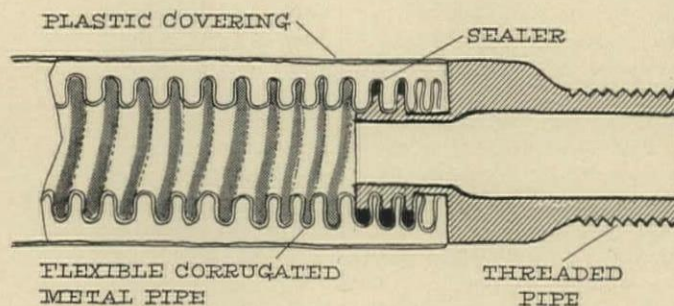
HIGH-SPEED CLOTHES DRYER has curved ceramic grids around the drum. It may use only half as much gas as present models.



REFRIGERATOR COOLING UNIT uses gas absorption principle. It has no moving parts, is silent and vibration-free.



DISHWASHER HEATER boosts temperature of domestic hot water to 180F, both for better rinsing and low bacteria count.



FLEXIBLE HOSE allows gas appliances to be moved after they are installed. Plastic cover assures against leakage.

continued



Variable-recovery controls are adding new flexibility to gas water heaters

These variable-recovery controls—which vary the flow of gas to the water heater depending on the amount of hot water needed—may give gas water heaters a still greater competitive edge in operating costs.

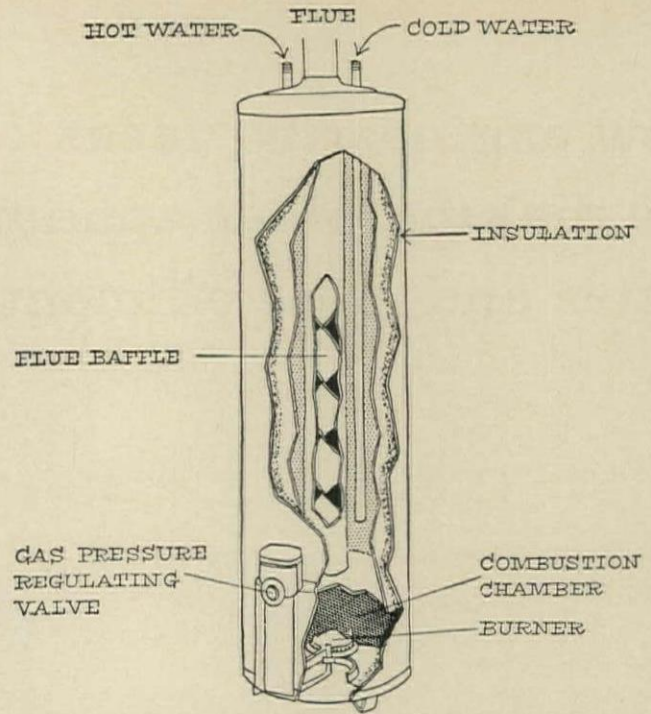
One unit now on the market has a control valve which allows the homeowner to “dial” the amount of hot water he needs. This dial is actually a gas-pressure regulating valve. At the top dial setting, the gas-pressure regulator allows enough gas to pass through the burner orifice to support a flame of 60,000 Btuh input—enough to heat 50 gallons of water from 50F to 150F in an hour. At the minimum dial setting, the input is 36,000 Btuh—enough to heat 30 gallons to a 100F rise in one hour. The storage tank of this unit holds 30 gallons.

There are two other possibilities for these variable-recovery systems: 1) The gas-pressure regulating devices might be timed, so that the heater would automatically provide a maximum of hot water at times of peak usage (eg, early in the morning and evening and on laundry days) but operate at a much lower fuel input during “off periods.” 2) With variable-recovery controls, one size of heater could serve a wide range of family needs. Fewer models would need to be produced and warehoused, and there should be a saving in unit costs.

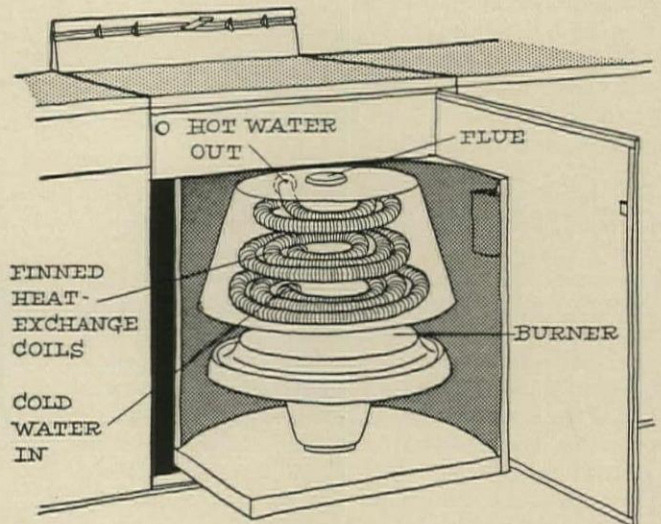
Other design improvements are making possible much smaller water heaters. High-recovery units are already available in under-the-counter models from several manufacturers. Other small, space-saving units are designed for installation in crawl spaces, attics, and bathrooms. The A.G.A. has gone a step further and designed a high-capacity unit that is integrated with a wall oven, and fits in the space above and below the oven. In this unit, which uses the same gas piping as the oven, the water-heater tank is placed above the oven, the heat-exchanger is below. It is a high-capacity unit capable of handling consecutive clothes-washer loads. Savings are made in space (the space above a wall oven is usually wasted), and installation (there is almost no extra gas pipe).

A new through-the-wall water heater, just put on the market, promises to cut installation costs. It needs no venting flue; instead, it is set up next to an exterior wall, and a short length of concentric duct is run through the wall (as with a through-the-wall furnace). This duct both brings in combustion air and vents exhaust gases.

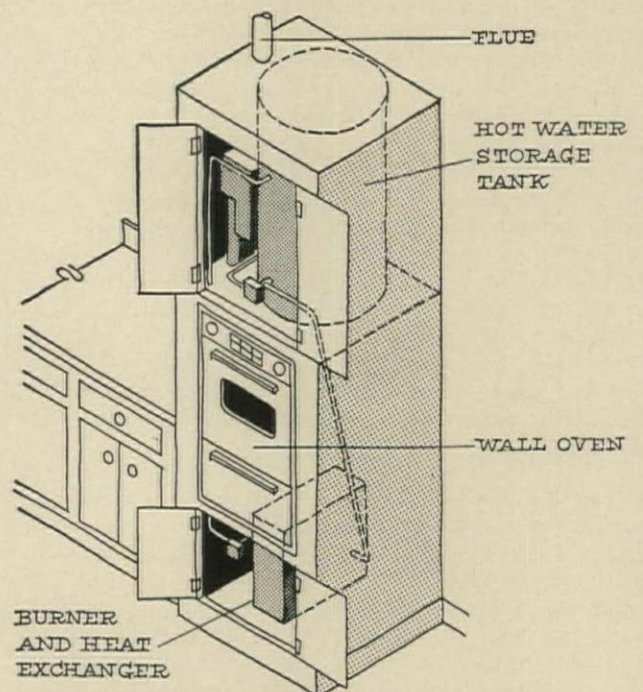
And water heaters for swimming pools are becoming important in many markets. Heaters for this application are usually indirect heaters—that is, the unit heats hot water in a boiler, and this water is run in a closed system through a copper-and-brass heat-exchanger. The pool water is passed over the coils of the heat exchanger. The pool temperature can be raised about 1F per hour.



VARIABLE-RECOVERY WATER HEATER has gas pressure regulator which gives a 30-gallon unit the same capacity as a 50-gallon unit.



COMPACT WATER HEATER is experimental unit which fits below kitchen counter. Big heating coil gives it a high recovery rate.



SPACE-SAVING WATER HEATER fits in oven cabinet. Storage tank goes in space above the oven. The heating unit is below.

Improved afterburners are making gas incineration smokeless and odorless

With units now on the market, nearly all garbage and refuse—and even sewage—can be disposed of. About the only household waste products that gas disposers cannot handle are tin cans and bottles.

The new disposers first dry and burn the garbage—then burn the smoke and odor. In most units, the gas burner is enclosed in a stainless steel or porcelain-enameled-steel housing. The garbage in the combustion chamber is dried and then ignited by the burner. Smoke and steam are drawn through a screen at the top of the combustion chamber, then down into the direct flame of the burner, which incinerates the smoke particles and odor.

Cool room air is circulated continually between the shell of the combustion chamber and the heavily insulated cabinet wall, and then out through the flue, so the exposed surface of the disposer does not warm up appreciably.

For safety, once the loading door is locked, the ash drawer is automatically locked. The burning cycle begins when the dial is set to "wet," "normal," or "dry" depending on the condition of the refuse. The unit shuts off automatically at the end of the burning cycle. Ash is removed from a drawer below the combustion chamber.

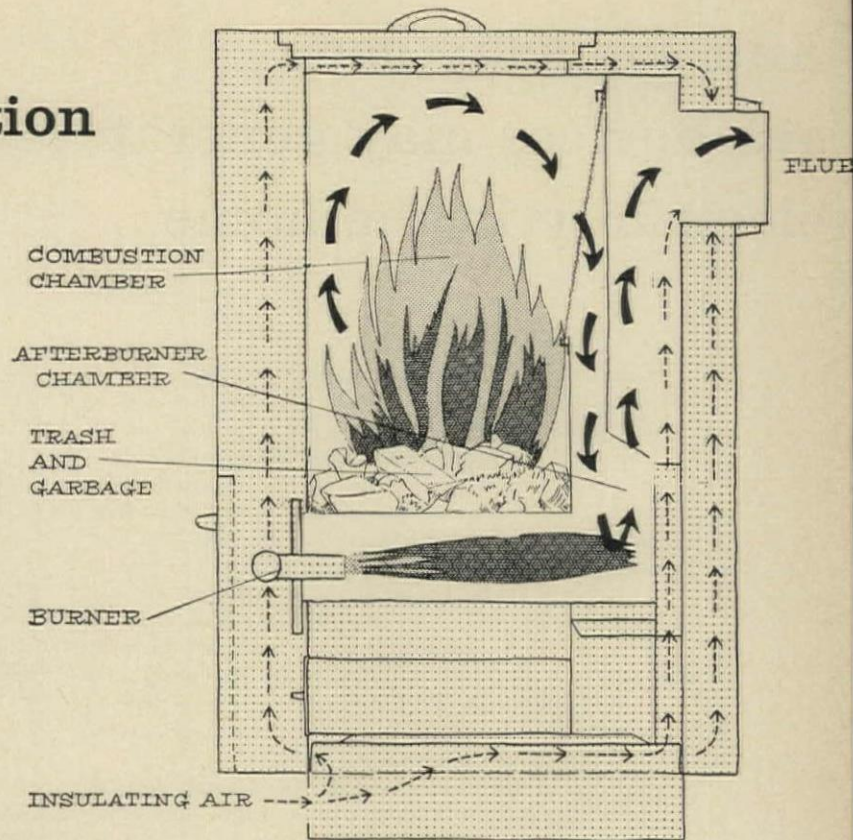
A gas-fired toilet, which requires no water or waste lines, has just been put on the market. Its makers feel it has a big market potential in areas where water is in short supply (a single toilet flush takes six gallons) and where septic tank installation or drainage is a problem.

Here is how the unit works: It is divided into an upper and lower section, like any conventional water toilet. The hopper section is separated from the lower combustion section by a rotating trap door. The trap is hollow and bowl-shaped, designed to accept a disposable, polyethylene-and-paper bag which is inserted prior to use and then consumed along with the waste material it holds.

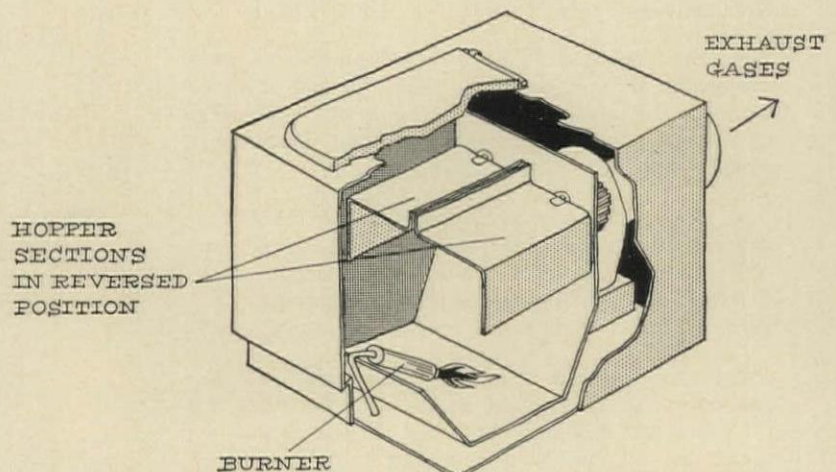
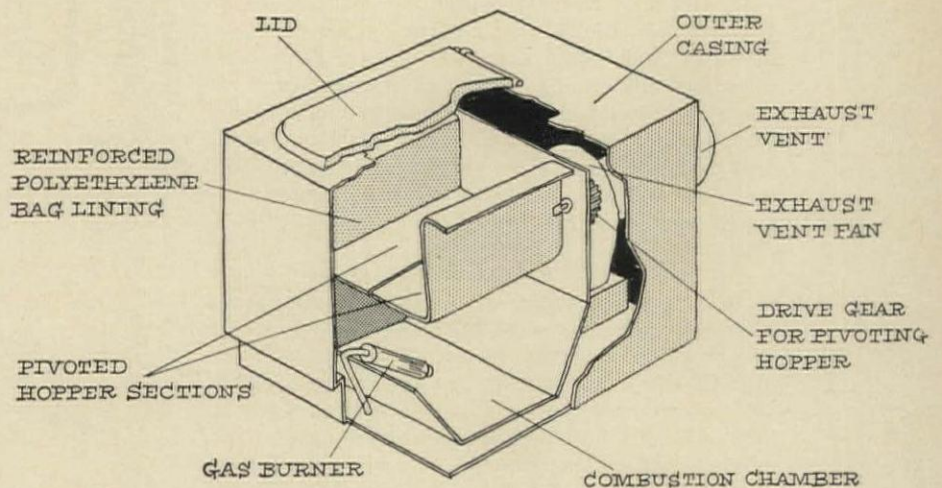
After use, the "dispose" button on the front of the unit is pushed. It opens the rotating trap, deposits the bag in the combustion chamber and recloses the trap. (The trap will not rotate until the cover is in down position.) Wastes are then consumed by a gas burner, which is ignited by turning the burner control on the front of the unit. The burner control starts an automatic timer to regulate the burning time. Waste is dried and burned, and then the smoke and odors are consumed completely as in an incinerator.

An electric exhaust fan is also operated by the burner control. This fan gathers air for efficient combustion, is started before the burner is ignited to help inflate the disposable bag as it is placed in the bowl. It helps keep odors inside the unit until the waste products are burned, and forces the exhaust through the vent.

The unit requires a 4" diameter flue to exhaust combustion gases. The flue must accept flue temperatures up to 450F.



GAS DISPOSER has two sections: trash is burned in combustion chamber, and smoke particles and odors are consumed by afterburner.



GAS-FIRED TOILET is shown ready for use in top drawing, and in "dispose" position with burner operating in bottom drawing.



And someday soon gas devices may generate electricity in the home

Gas-fueled generators to produce enough electricity for all lighting and motors in a house are now in the prototype stage. Already, at least two utilities (Southern California Gas and Southern Counties Gas) are preparing the way for the new units with their "The Future Belongs to Gas" promotion. How soon will the units be marketed? Earliest date anyone will yet quote: "1968."

Lower cost is the big promise held out by gas-generated electricity. In many areas, gas energy costs only one-sixth to one-eighth as much as equivalent electrical energy—a difference, say engineers, that should more than offset the higher cost of generating electricity in many small household units rather than in a few large central plants.

None of the four generators now under development have any moving parts. Here is how they work:

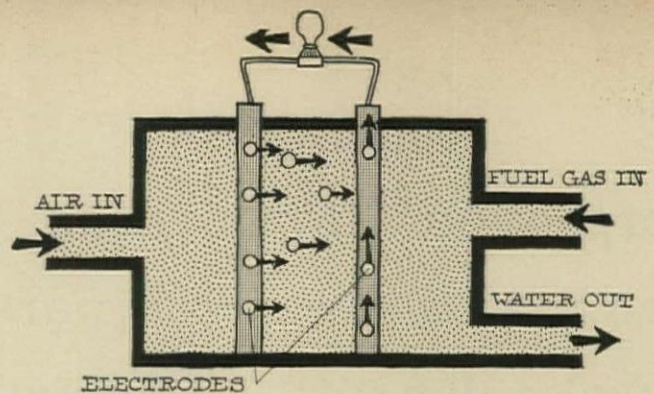
1. The fuel cell is similar to the ordinary storage battery. But instead of requiring periodic recharging, it operates continuously as long as gas and air are fed into it. The reaction of gas and oxygen causes a movement of electrons within the cell, and a consequent flow of electric current across the cell's terminals. Small fuel cells are already being used experimentally in the field: the Marine Corps has operated a radar unit with them, and one tractor manufacturer has tested a tractor with an electric motor powered by Lp gas-generated electricity. And fuel cells will be used to supply the electricity for the gas exhibit at the 1964 World's Fair.

2. The thermoelectric generator is actually a large thermocouple. It makes use of the Seebeck Effect: when two dissimilar metals are joined and heat is applied to the junction, an electric current will flow through the junction. One manufacturer is marketing a room heater using this principle: a series of thermocouples, heated by the flame of the gas burner, develop sufficient electric current to drive the heater's circulating fan. And a gas boiler manufacturer has just put on the market a unit in which a thermoelectric system powers the boiler control circuit.

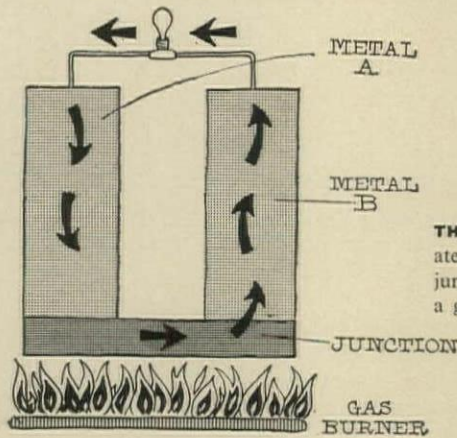
3. The thermionic converter operates much like a vacuum or television tube. Heat is applied to a treated metal plate, causing electrons to "boil" over to another plate and create an electric current. Its widest use is in electronic equipment.

4. The magnetohydrodynamic converter (MHD) is like a conventional generator, except that a stream of high-temperature gas, rather than a copper coil, is moved through the magnetic field to produce the current. This system is still in the laboratory stage.

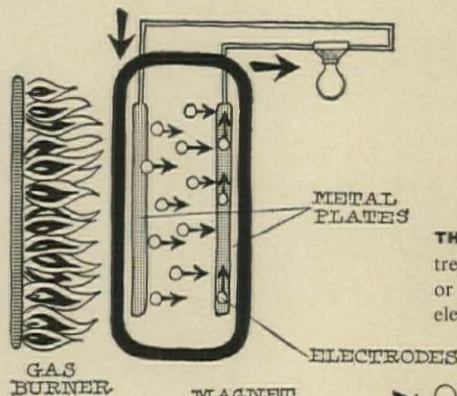
Gas turbines can also run conventional electric generators. In the system shown at right (used in a Little Rock shopping center) a surplus jet engine fueled by gas, drives a generator to produce the building's electric power. The hot exhaust gases are then passed to an absorption unit where they are used to heat and cool the building.



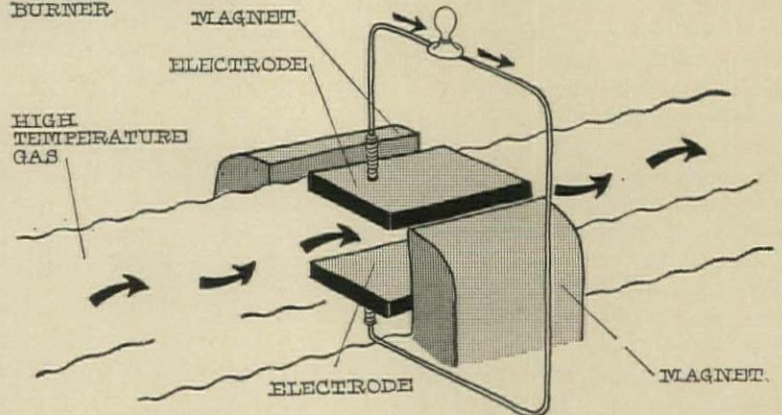
GAS FUEL CELL is furthest advanced of gas-to-electricity converters. It does not burn gas; electricity is produced by chemical reaction.



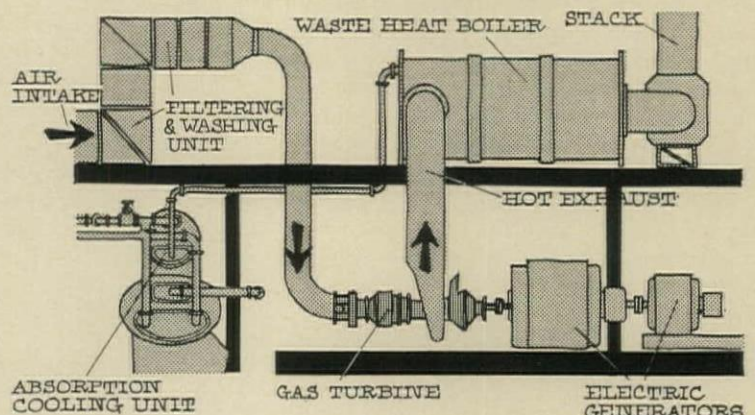
THERMOELECTRIC GENERATOR creates electric current by heating the junction of two different metals with a gas flame.



THERMIONIC CONVERTER has treated plates suspended in a vacuum or a cesium atmosphere. Heat "boils" electrons from one plate to another.



MHD CONVERTER is similar to conventional dynamo but substitutes a flow of hot gas for the armature moving in magnetic field.



GAS TURBINE in this commercial installation runs conventional generator. Exhaust gases can be used to heat or cool buildings.

Here are manufacturers of products that use the new gas technology

Absorption air conditioners are made by . . .

Arkla Air-Conditioning Corp, Little Rock
Bryant Mfg Co, Indianapolis

Adsorption air conditioners are made by . . .

Bryant Mfg Co, Indianapolis
Midland-Ross Corp, Toledo

Free-piston engine compressors are under development by . . .

Robertshaw-Fulton Controls Corp, Richmond, Va.

Gas-fired engine air conditioners are made by . . .

Bell & Gossett Co, Morton Grove, Ill. (commercial units)
Comfort Products, Inc, Dallas
ICED Inc, St Petersburg
Ready Power, Detroit
Vector Engineering Contractors, Dallas
York Div, Borg-Warner, York, Pa.

Pulse combustion boilers are made by . . .

E. W. Bliss Co, Canton, Ohio (commercial units)
Lucas-Rotax Ltd, Toronto
Allcraft Mfg Co, Cambridge, Mass.

Gas-fired baseboard heaters are under development by . . .

A. G. A. Laboratories, Cleveland

Infra-red wallheaters are under development by . . .

A. G. A. Laboratories, Cleveland
American Thermocatalytic Corp, Mineola, N.Y.

Infra-red patio heaters are made by . . .

Perfection Div, Hupp Corp, Cleveland
Solarflo Co, Glendora, Calif.

Through-the-wall and/or in-the-wall heaters are made by . . .

Bastian-Morley Co, La Porte, Ind.
Chattanooga Royal Co, Chattanooga
Coleman Co, Wichita
Empire Stove Co, Belleville, Ill.
Heil-Quaker Corp, Nashville
H. C. Little Burner Co, San Rafael, Calif.
Martin Stamping & Stove, Huntsville, Ala.
Oakland Foundry Co, Belleville, Ill.
Ohio Foundry & Mfg Co, Steubenville, Ohio
Peerless Mfg Div, Dover Corp, Louisville
Perfection Div, Hupp Corp, Cleveland
Samuel Stamping & Enameling Co, Chattanooga
Stewart Warner Corp, Lebanon, Ind.
Suburban Appliance Co, Morristown, N.J.
Temco, Inc, Nashville

Infra-red range top burners and/or broilers are made by . . .

Hardwick Stove Co, Cleveland, Tenn.
Magic Chef, Cleveland, Tenn.
Majestic Co, Huntington, Ind.
Norge Sales Corp, Chicago
O'Keefe & Merritt, Los Angeles
Geo. D. Roper Corp, Kankakee, Ill.
Suburban Appliance Co, Morristown, N.J. (commercial units)
Tappan Co, Mansfield, Ohio
Tennessee Stove Works, Chattanooga

Forced-convection ranges or ovens are made by . . .

Specialties Appliance Corp, Chicago (commercial units)
Whirlpool Corp, St Joseph, Mich.

Low-temperature ovens and/or thermostatic control burners are made by . . .

Brown Stove Works Inc, Cleveland, Tenn.
Caloric Appliance Corp, Jenkintown, Pa.
Chambers Corp, Chicago

Crown Stove Works, Chicago
Gaffers & Sattler, Los Angeles
Gray & Dudley Co, Nashville
Hardwick Stove Co, Cleveland, Tenn.
Magic Chef, Cleveland, Tenn.
Mt Vernon Furnace & Mfg Co, Mt Vernon, Ill.
Norge Sales Corp, Chicago
O'Keefe & Merritt, Los Angeles
Pan Pacific Mfg Corp, Los Angeles
Philco Corp, Philadelphia
Preway Inc, Wisconsin Rapids, Wis.
Geo. D. Roper Corp, Kankakee, Ill.
Samuel Stamping & Enameling Co, Chattanooga
Sears, Roebuck & Co, Chicago
Stiglitz Corp, Louisville, Ky.
Suburban Appliance, Morristown, N.J.
Sunray Stove Co, Delaware, Ohio
Tappan Co, Mansfield, Ohio
Tennessee Stove Works, Chattanooga
Waste King Corp, Los Angeles
Wedgewood-Holly Appliance Co, Culver City, Calif.
Whirlpool Corp, St Joseph, Mich.

Programmed dual-temperature oven controls are made by . . .

Harper-Wyman Co., Chicago
Robertshaw-Fulton Controls Co, Richmond, Va.
Wilcolator Co, Elizabeth, N.J.

Infra-red clothes dryers are under development by . . .

Maytag Co, Newton, Iowa

Gas refrigerators are made by . . .

Morphy-Richards Inc, Englewood, N.J.
Norcold Inc, Los Angeles
Norge Sales Corp, Chicago
Sears, Roebuck & Co, Chicago
Whirlpool Corp, St Joseph, Mich.

Gas heated dishwashers are made by . . .

Preway Inc, Wisconsin Rapids, Wis.

Flexible connectors are made by . . .

Central D. Mfg Co, Culver City, Calif.
Cobra Metal Hose, Chicago
Flexible Connector Co of America, Boston
Jamaica Mfg Co, Brooklyn
Johnson Metal Hose, Waterbury, Conn.
S. H. Leggit Co, Marshall, Mich.
Rapid Specialties Co, Cedar Rapids
Reliance Tubular Products Co, Cleveland
Standard Connector & Mfg Co, Los Angeles
Techniflex Div, 601 West 26th Corp, Port Jervis, N.Y.
United Wire & Supply Corp, Providence

Variable recovery water heaters are made by . . .

American-Standard, New York City
Rheem Mfg Co, Chicago

Oven-integrated water heaters are under development by . . .

A. G. A. Laboratories, Cleveland

Thru-the-wall water heaters are made by . . .

Bastian-Morley Co, La Porte, Ind.

Swimming pool water heaters are made by . . .

Bryan Steam Co, Peru, Ind.
Day & Night Mfg Co, La Puente, Calif.
Rheem Mfg Co, Chicago
A. O. Smith Corp, Kankakee, Ill.

Gas disposers are made by . . .

Bastian-Morley Co, La Porte, Ind.
Calcinator Corp, Bay City, Mich.
Caloric Appliance Corp, Jenkintown, Pa.
Dornback Furnace & Foundry Co, Eastlake, Ohio
H. C. Little Burner Co, San Rafael, Calif.
Locke Stove Co, Kansas City, Mo.
Majestic Co, Huntington, Ind.
Martin Stamping & Stove, Huntsville, Ala.
E. L. Mustee & Sons, Cleveland
Queen-Products Div, King-Seeley Corp, Albert Lea, Minn.

Gas toilets are made by . . .

La Mere Industries, Walworth, Wis.

Thermoelectric generators are in development by . . .

American Thermocatalytic Corp, Mineola, N.Y.
Lone Star Gas Co, Dallas
Minnesota Mining & Mfg Co, St Paul

For more about new products from the gas industry, turn the page



Here are new products offered by the gas industry for heating and other services

Besides the technical advances described on *p 114*, there have been many other improvements in gas heating.

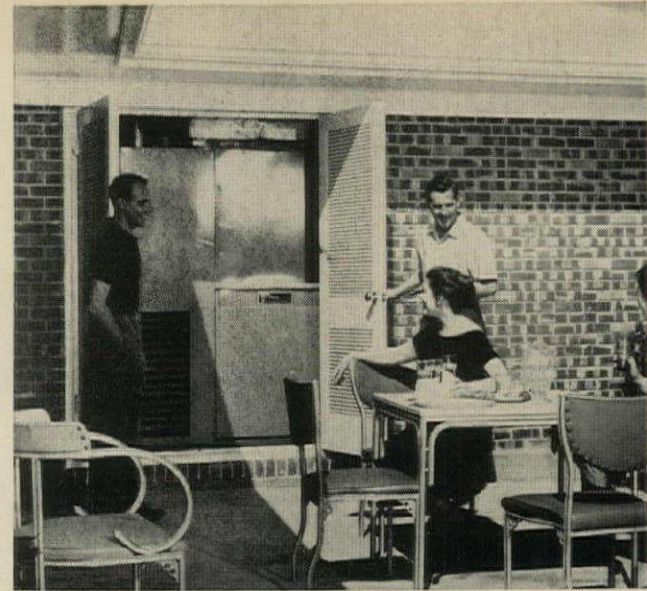
Warm-air furnaces (like those made by Armstrong, Carrier, Coleman, Fedders, Lennox, Majestic, Trane, etc) and hydronic boilers (like those made by American-Standard, Crane, Edwards, Hydrotherm, etc) have controls to prevent blow-back at ignition, modulate the gas flow, anticipate heat demands, provide full safety shut-off. New compact assemblies with better insulation allow closet installation with zero clearance. And most new models come pre-wired and factory-assembled.

Air conditioning is possible with almost any of these heating systems; expansion coils can be added to ducted systems, chillers to wet-heat systems. Bryant and Arkla each make residential absorption-type cooling units and Bell & Gossett, Comfort Products, ICED, and Vector Engineering make compressor units powered by gas.

Gas can also supply supplementary heat for a compressor heat pump or the main heat for installations where cooling is the main job. Fedders offers its heat pump with an optional gas duct furnace and Day & Night has a new exterior-mounted year-round conditioner that uses a gas-fired exchanger as a heat source. Through-the-wall and in-the-wall heating units (*p 115*) can be used to supplement central systems in bathroom or add-on rooms or, in mild climates, handle the whole heating load. Radiant patio heaters (*p 114*) can supply heat for terraces, porches, doorways, or other outdoor areas. (You'll find a list of manufacturers on *p 121*.)

While variable recovery is the biggest news in gas water heaters (*p 118*), there is a general upgrading of all makers' units. Many top-line water heaters now carry 15-year prorated guarantees and one maker (A. O. Smith) offers a ten-year full-rate, "no-mileage" guarantee on its best quality tanks.

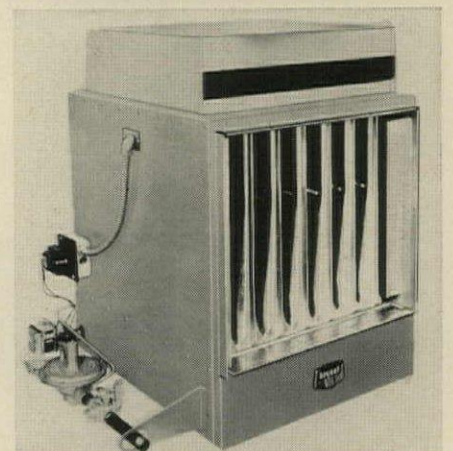
The gas-fired, smokeless-and-odorless household incinerators (*p 119*) are now being widely promoted as an answer to trash collection problems. They are automatic-timed, insulated for use indoors, usable with a standard gas vent, and appliance-styled. They carry retail prices of \$170 to \$200. (Manufacturers are listed on *p 121*.)



YEAR-ROUND CONDITIONING, with gas supplying both heating and cooling, is unique to the Arkla system, which comes in units as small as 3½-ton capacity.



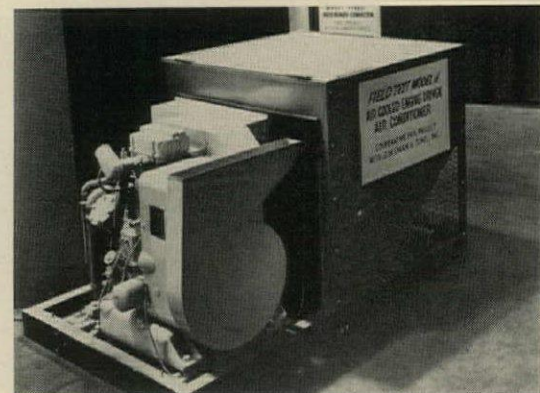
GAS COOLING UNIT made by Bryant uses absorption principle. Vertical exhaust lets owner landscape around it.



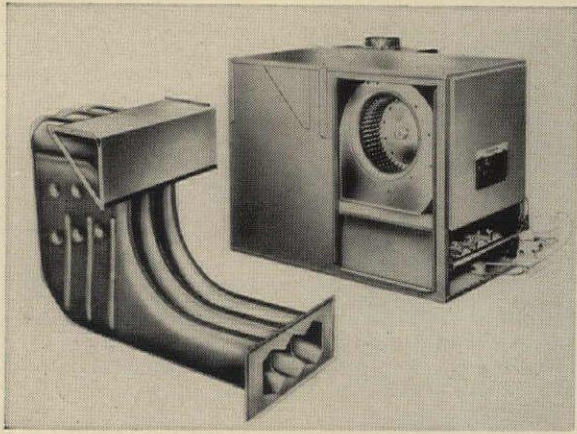
GAS DUCT FURNACE (this one is by Bryant) can add heat to a ducted cooling system. This one can also be used as a large space heater.



GAS FURNACES, like this from A. O. Smith, are cleanly styled to go in recreation room. This one has matching cooling unit.



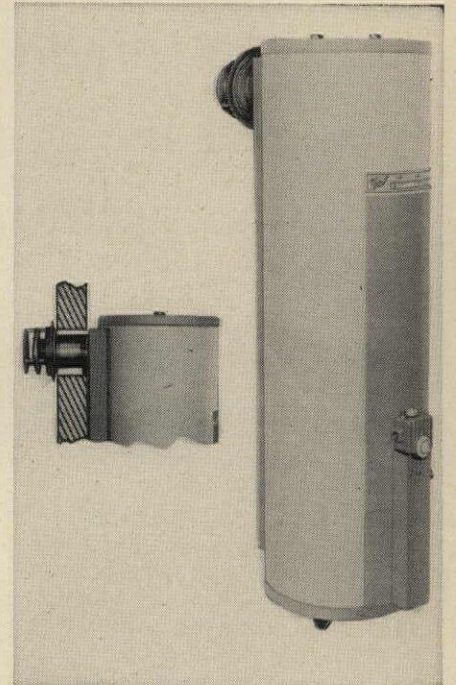
ENGINE-DRIVEN COOLER is popular in the South and Southwest. Gas engine (this one from D. W. Onan & Sons) powers compressor.



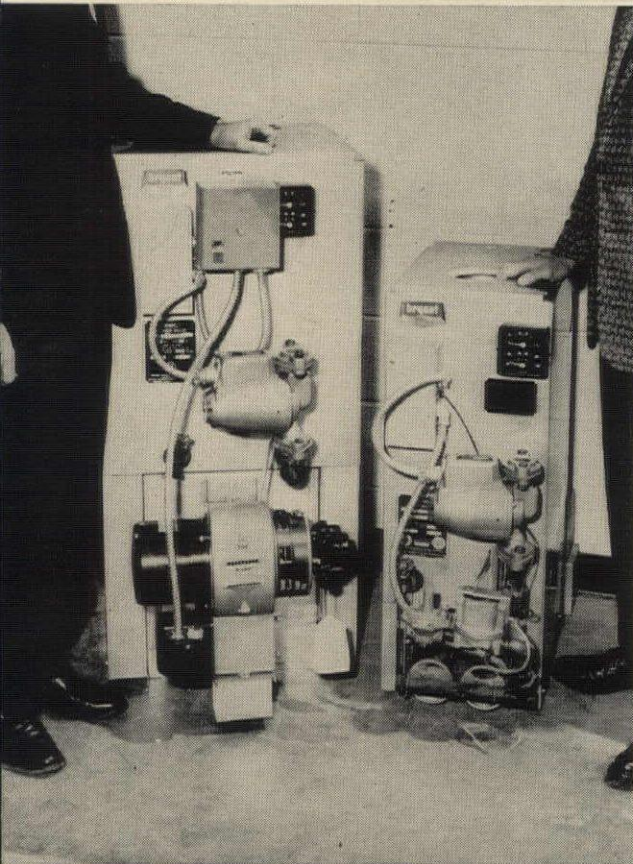
HORIZONTAL FURNACE can go in attic or crawl space. Carrier unit above is designed to do this job. Other makers have units that can be adapted to up, down, or horizontal flow.



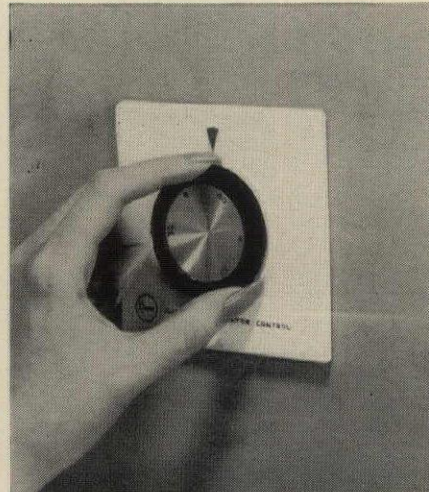
GAS DISPOSER (*nee* incinerator) does a more complete job of consuming household waste than garbage grinder. By Calcinator and others.



DIRECT-VENTED WATER HEATER from Bastian-Morley draws combustion air through stub vent. Like wall furnace, it needs no chimney.



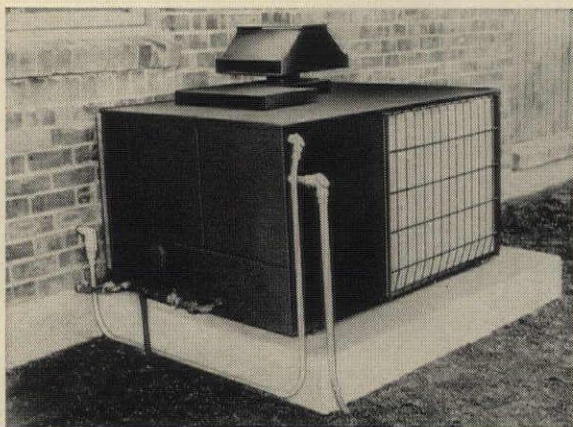
COMPACT GAS BOILER, right, is smaller than oil-fired boiler of same capacity, left. Gas units save space and cost of burner blower. Both units are made by Bryant.



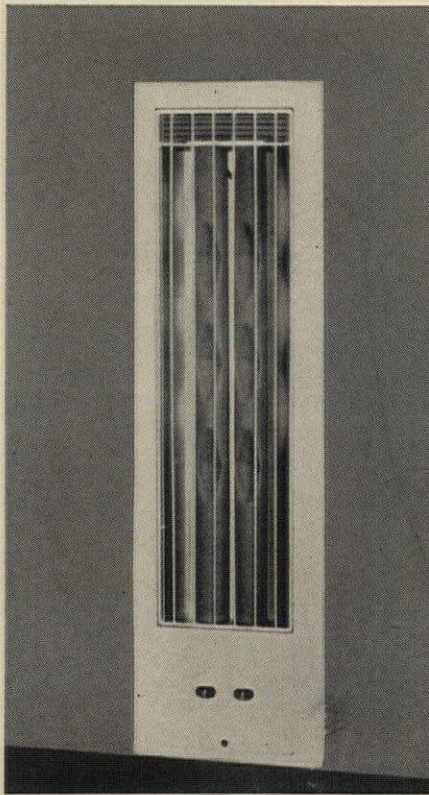
HOT-WATER CONTROL for Rheem 30-Plus unit lets owner change recovery rate as he needs more or less hot water.



SWIMMING POOL HEATERS supply a growing market for gas. Burkay model has self-generating controls, needs no external wiring.



YEAR-ROUND CONDITIONER from Day & Night combines gas furnace and electric cooling unit in a unique package designed to be mounted completely outdoors.



IN-A-WALL FURNACE can heat a whole house in mild climates. Combustion occurs in sealed chamber. See manufacturer list, p 121.



RADIANT PATIO HEATER (Perfection) warms with three-micron rays from glowing ceramic burners, heats occupants, not the air.



And here are new products offered by the gas industry for the kitchen and laundry

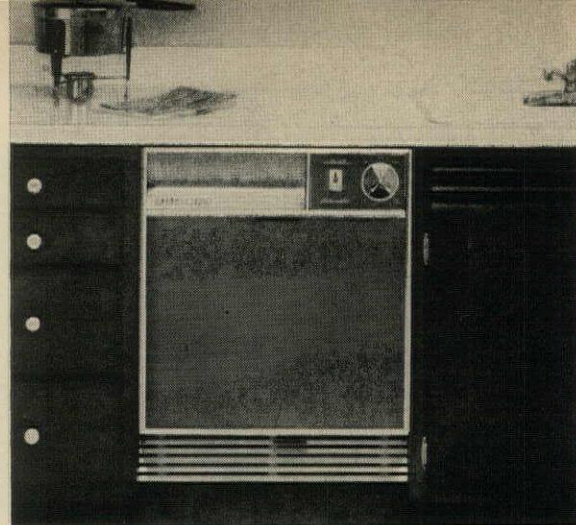
With the development of Preway's dishwasher—now being test marketed—and the comeback of the gas refrigerator, the gas industry has closed a big merchandising gap—it now can promote the all-gas kitchen.

Preway is just beginning to go after the market with strong claims of greater sanitation and better cleaning than current dishwashers offer (see p 117) and is packaging its new product in a high-style cabinet like its other built-ins.

In addition to closing the price gap between gas and electric refrigerators (see p 117), Whirlpool, Norge, and Sears Roebuck have built into their new units all the features of the top-line electrical competition: they are frost-free, have thin, foamed-in-place insulation, 0°F freezer compartments, "zoned cold" in the refrigerator section, automatic ice makers—plus exceptional quiet and freedom from vibration. Smaller gas refrigerators—for bar or recreation room use—are made by Norcold and Astral.

Gas range manufacturers (listed on p 121) are packing their lines with operating, installation, and merchandising features. Some of the newest operating features—like the ceramic burners, forced-convection burners, low-temperature and dual-temperature ovens—are discussed on p 116. Others—like easy cleaning devices and new broiler arrangements—are shown on these pages. Many lines show a new versatility for built-in installation, with drop-in burner tops, separate grill-griddles, single ovens in several widths, double ovens in vertical or horizontal arrangement. Also new: wall-hung units (from O'Keefe & Merritt, Roper, Tappan, and Sears Roebuck) and slide-in freestanders (from practically everybody). For eye appeal, crisp modern lines and all popular colors are general.

In laundry equipment—at least until infra-red heaters are perfected (see p 117)—the big news is moisture-gauged drying. One system (Maytag) uses an electronic device to turn off the gas when the clothes are dry. Another system (Robertshaw-Fulton) moderates the gas flow as the temperature (and hence the dryness) of the air in the drum rises. Also new from Easy, Maytag, Norge, Philco, O'Keefe & Merritt, Sears Roebuck, Whirlpool: washer-dryer combinations that have been reduced 20% in exterior size.



GAS DISHWASHER, first of its kind, is now being test-marketed by Preway. Its big asset is high-temperature water, but it also has double jet wash arms for better cleaning.



COLOR COORDINATION promotes the all-gas kitchen. Major manufacturers like Tappan (above), Caloric, Roper, and Whirlpool match their appliances—including sinks and range hoods—in one style and one shade. The trim lines of these appliances are typical.



SMALL REFRIGERATORS like this one by Norcold put gas appliances in recreation areas. Models come freestanding or built-in.



BIG REFRIGERATORS and refrigerator-freezers from Norge and Whirlpool (above) offer all today's top sales features.



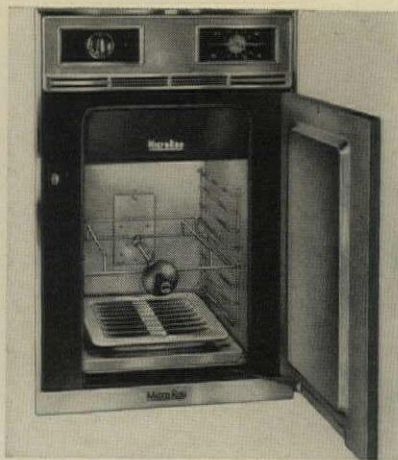
COMPACT WASHER-DRYER fits flush to wall in space only 34" wide. Maytag unit (above) handles all types of fabric.



GAS DRYER shown next to gas water heater, now moderates the drying cycle to match moisture in load. (Whirlpool).



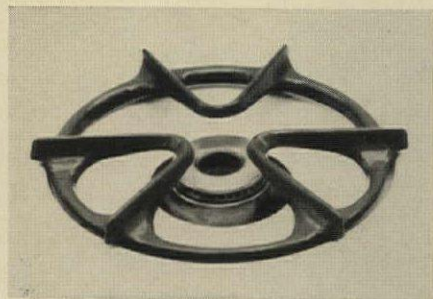
VERTICAL CERAMIC BROILER in new Norge ranges cooks with infra-red rays. Space below broiler is used to cook vegetables, potatoes.



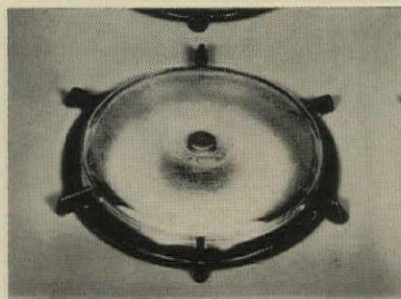
INFRA-RED OVEN is now available as a built-in from Hardwick. Other makers use infra-red burners in range ovens.



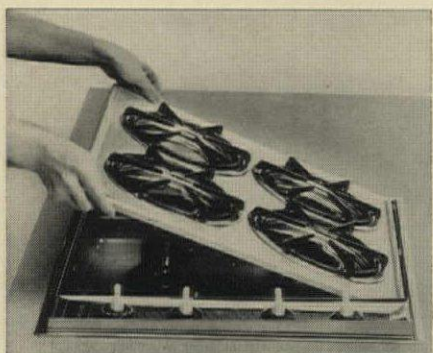
WALL-HUNG RANGE (by Roper) features the latest in styling and oven arrangement. Surface units are in front, can be concealed when not in use. Double ovens are set at eye level.



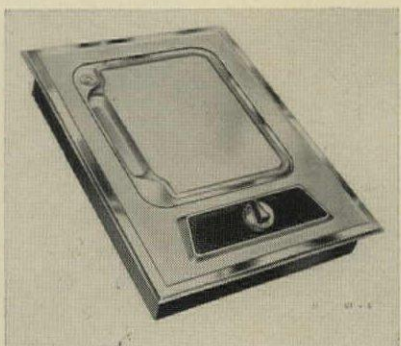
OPEN-THROAT BURNER is being introduced by Waste King. Btuh input can be varied continuously from 500 to 16,000.



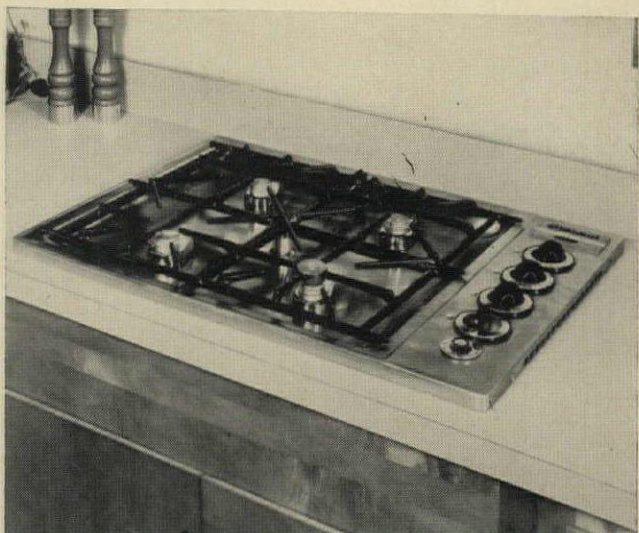
CERAMIC BURNER is designed to boost range-top efficiency, save fuel. This one by Hardwick is thermostat controlled.



EASY-CLEANING FEATURES are becoming more important. Tappan's entire top lifts off so smooth surfaced burner bowl can be wiped.



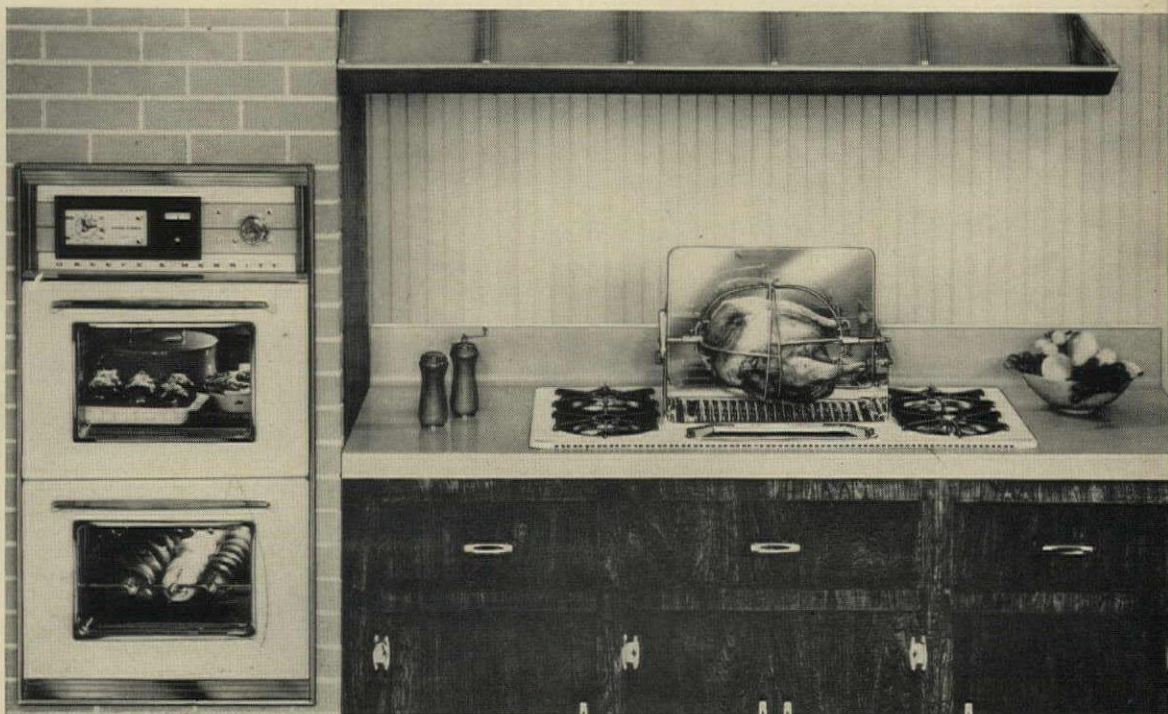
DROP-IN ELEMENTS adapt cooking units to custom situations. Modern Maid unit combines high-input burner and griddle.



FORCED-CONVECTION RANGE is Whirlpool's Blanket-o-flame, which pioneered the ultra-low input, even-spread flame, and sealed stainless-steel burner pan. Burner grid is also less massive.



PORTABLE BARBECUE (from Majestic) "charcoal" broils over glowing ceramic coals. Flame is fueled from an Lp gas tank in cart.



BUILT-IN ROTISSERIE turns over ceramic coals in the countertop unit of this O'Keefe & Merritt assembly.



RIVER BEND ESTATES

Antique gas lamps—which have become remarkable sales boosters—symbolize the news that . . .

Now you can get more help than ever from the gas utilities

“We used to sell gas by promoting gas-fueled appliances. Today our big emphasis is on promoting new houses that use these appliances.”

So says R. J. Vandagriff, vice president of Laclede Gas Co, St Louis, which supplied gas lamps (left) at cost for Builder Burt Duenke’s River Bend community, shared costs for Duenke’s advertising, and staffed his models on opening day.

Adds Vandagriff: “The new-house market is also our market, the model house a showcase for gas-fueled products. So our residential sales program focuses on builders’ display houses. And we make their promotion a joint effort by getting cooperation from kitchen-cabinet and appliance dealers.”

Laclede’s Vandagriff speaks for many gas utilities.

Gas-company promotion of new houses is becoming the rule rather than the exception. For example: New Jersey Natural Gas gives builders an advertising allowance equal to the cost of a gas dryer for every house in which they put four gas appliances. Other utilities join national promotion of houses featured by consumer magazines (p 103), back big local promotions, advertise houses in TV commercials, sponsor clinics at which homebuyers get advice from housing experts, sponsor “idea centers” for housing professionals and their customers and clients, and even help builders close sales.

For a close look at what seven utilities are doing to push house sales, turn the page.

Houston utilities staff builders' models with house salesmen

And at this year's Houston Parade of Homes, gas company salesmen, like the one showing a kitchen at right, also helped close six sales for builders.

The salesmen—from United Gas and Houston Natural Gas—staffed all gas-fueled models in the Parade. They not only demonstrated features of gas equipment but also got names and addresses of hot prospects.

The utilities also deferred payment on gas appliances until after the houses were sold, and agreed to help the builders advertise all unsold Parade houses until six months after the end of the Parade.



Harper Leiper

Phoenix utility will show houses on TV commercials

Starting this fall, pictures like the one at right will be seen on TV screens in the Phoenix area.

They will be shown in 60-second commercials sponsored by Arizona Public Service Co. The commercials will advertise the merits of gas appliances and give the names and locations of builders whose houses include the appliances. Also advertised on the commercials will be the utility's "Gas Appliance Showcase," a promotion store in a new shopping center. At the "Showcase" homebuying prospects will be directed to developments to see appliances in model-house settings.



Columbus utility runs clinics for homebuying prospects

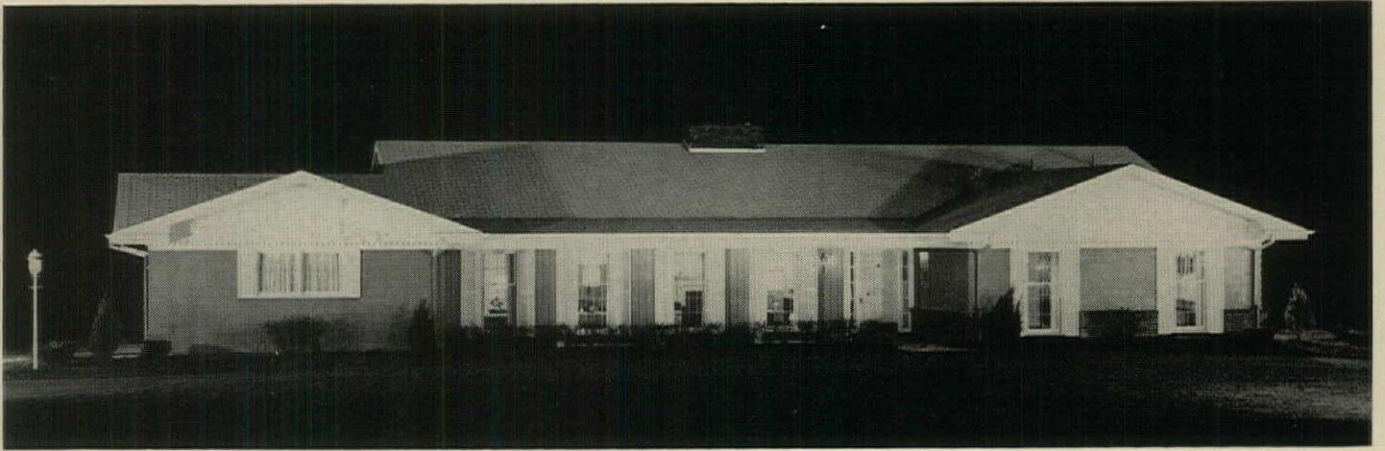
Crowds at the weekly clinics (photo, right) sponsored by Ohio Fuel Gas Co get expert advice on buying a house or having one built.

The experts, who illustrate their talks with slides and other graphic material, include architects, builders, mortgage lenders, appraisers, interior designers, and kitchen-planning specialists. During intermissions, prospects direct personal queries at the experts, see mockups of modern kitchen plans, and are served refreshments prepared on gas appliances.

Ohio Fuel Gas also sponsors an annual all-gas "House of Enchantment" in eight or ten communities.



continued



NIGHT-LIGHTED MODEL by Builder Burt Duenke was promoted by Laclede Gas Co. It features gas lamp, log lighter, rotisserie, and appliances

St Louis utility sells gas lamps direct (and at low cost) to builders



GAS LAMPS light the landscaped entrance of Berkley Construction Co's Hickory Hill subdivision.

"These eye-catching lights add sales appeal to both houses and communities," says R. J. Vandagriff, vice president of Laclede Gas Co.

Laclede has installed 2,500 gas lamps since it started selling them direct to builders in July, 1960. The builder picks out the lamp he wants, and the utility supplies it at cost (about \$30 for a \$50 unit) and hooks it up free.

Laclede also gives builders a \$15 allowance on gas dryers, ties in with distributors in cooperative advertising of houses with built-in gas appliances, and lends ranges, refrigerators, and dryers for display in model houses. Sums up Vandagriff: "New-house construction stimulates the use of gas each year and has a predominant effect on the use of gas appliances in older houses."

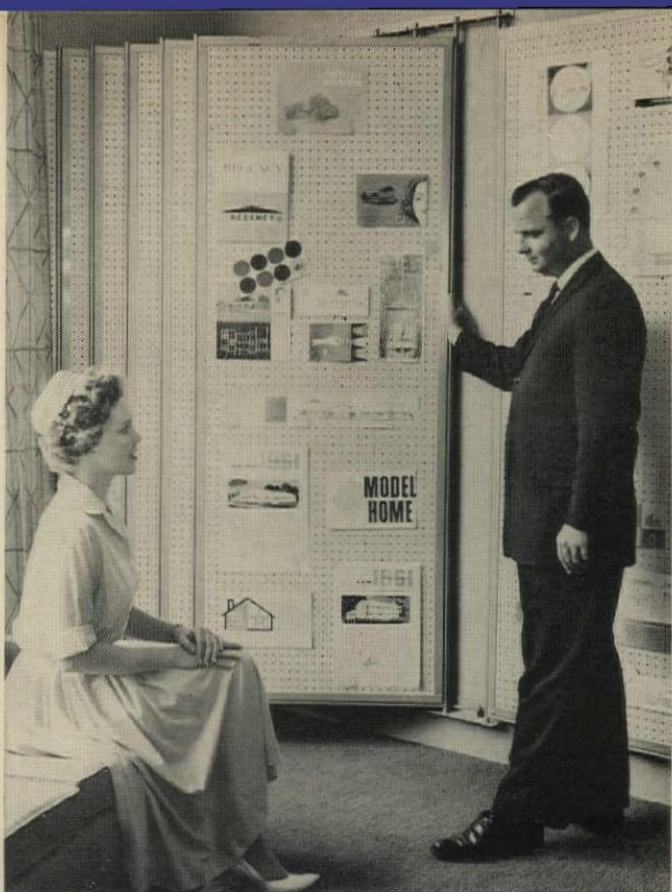
Pittsburgh utilities back big special promotions

"We invest in them because they are the biggest attention-getters and crowd-pullers," says John Lammert, new-building promoter for the Natural Gas Companies of Pittsburgh.

In the last 12 months, the utilities have shared newspaper advertising costs in all the promotions shown in the montage at left and below. And in each case gas promotion was subordinated to builder promotion. So far this year, Pittsburgh's gas companies (People's Natural Gas, Manufacturers Light & Heat, Equitable Gas) have promoted 300 display houses which have drawn about 175,000 visitors. To keep display-house salesmen on their toes, the utilities offer cash awards to star salesmen checked by their "Mystery Shopper."

The collage features several newspaper advertisements:

- Young Home Makers:** "ALL GAS LIVING FOR Young Home Makers With GAS Air Conditioning".
- Better Homes:** "In a Class by Itself... the Better Homes and Gardens 1960 IDEA HOME ANOTHER BLUE STAR ALL-GAS HOUSE OF SAVINGS".
- SCHOLZ Mark '60:** "YOU ARE CORDIALLY INVITED TO VISIT THE SCHOLZ Mark '60 HOUSE OF THE YEAR".
- 5th Annual Cavalcade of Homes:** Advertisement from The Pittsburgh Press.
- ORCHARD PARK:** Advertisement for a new home.
- HIGHLAND HEIGHTS GRAND OPENING:** Advertisement for a new home.
- WANT! DON'T GIVE UP:** Advertisement for a home.
- HI-GATE:** Advertisement for a home.
- MINNOCK:** Advertisement for a home.
- WILLIAMSON:** Advertisement for a home.
- PHILIP:** Advertisement for a home.
- KRONZ builders:** Advertisement for a home.
- FAIRHAVEN:** Advertisement for a home.
- HARVEY HOMES:** Advertisement for a home.
- MASTERS:** Advertisement for a home.



GAS COMPANY MAN (Loyd Payne, Lone Star's architect-builder assistant representative) shows model-house brochures to prospect.



BUILDER (W. R. Short) explains floor plans, elevations, and details and gives cost estimates to prospect, who has now become a customer.

Dallas utility helps sell houses from a downtown "Idea Center"

The center, at Lone Star Gas Co's main office, is a convenient spot for housing professionals to work with the home-buying and home-planning public. It is used by builders, architects, remodelers, and interior designers to confer with customers and clients. And it gives the customers and clients

an opportunity to scan model-house literature, read housing periodicals, inspect building-materials samples, study plans and specifications, and make decorating selections. The center is handy to Lone Star's architect-builder assistance section and its appliance-display area.

BUILDER AND GAS COMPANY MAN show customer color slides of kitchen plans. Rack at left holds variety of housing periodicals.




Photos: Alex L. Acheson

END



The epitome of outdoor living, this broad, inviting deck has everything: sun, shade, trees, room to lounge, play, and eat—plus a view. Architect: John Carl Warnecke.



HOUSING'S NEGLECTED ASSET:

Outdoor space

Are you making the most of it?

*With a little imagination and some professional help
you can use it to double the appeal of house and lot*

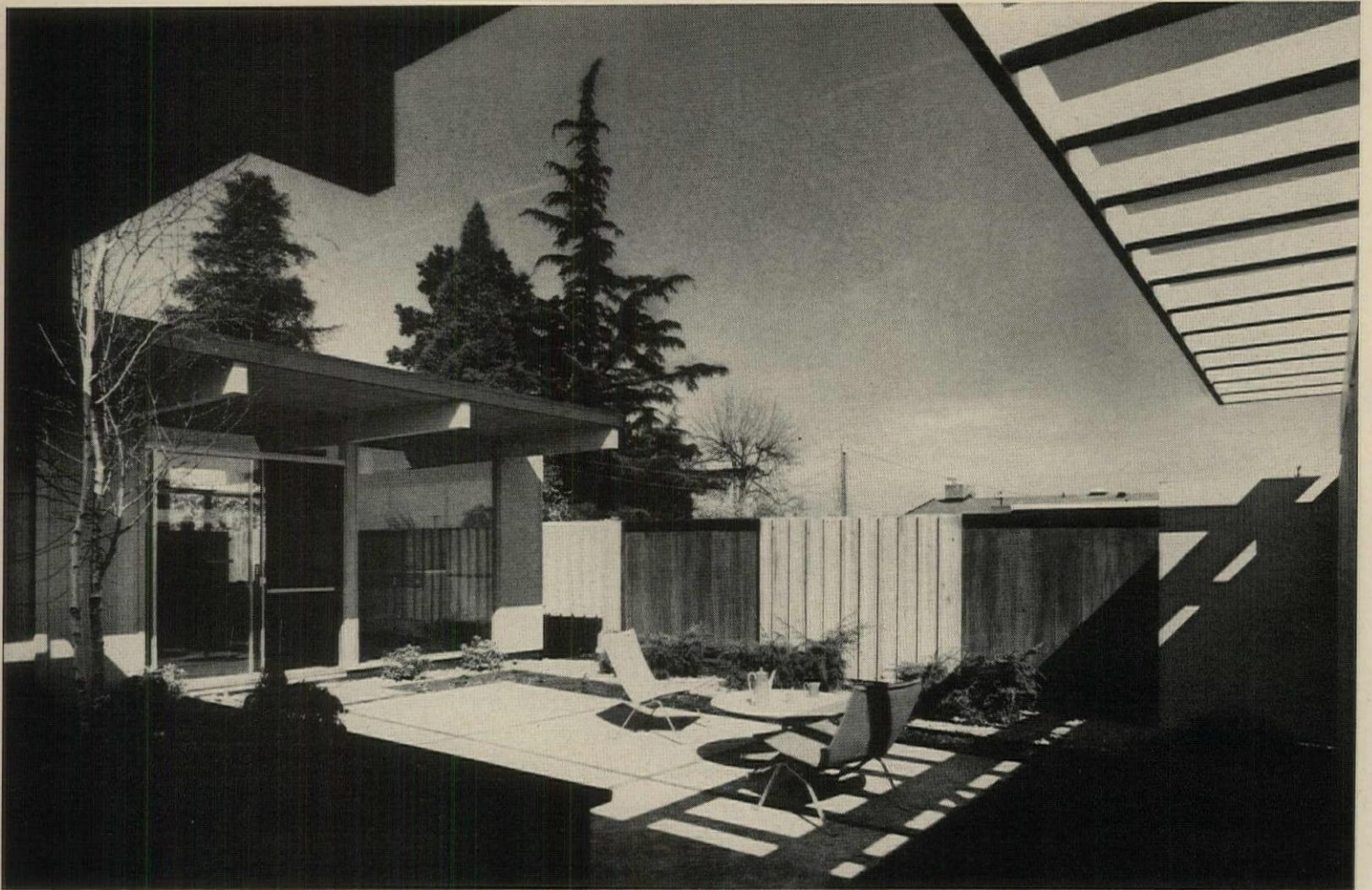
Many people building this house (photo, left) would have stopped with the big windows. They would hardly have thought of adding the enormous deck and giving the house its handsome and invaluable outdoor living room.

Not every house offers an opportunity as rewarding as this. But most houses—even quite small ones—have latent possibilities which a skilled designer can develop to extend the living space beyond the four walls and to create more attractive surroundings. Not only can he extend the living area in space but he can also extend it in time—the number of months that outdoor space can be used and enjoyed. Well planned outdoor space can be lived in six, eight or ten months a year (depending on climate), and, regardless of climate, it can be enjoyed visually all year round.

What the architect and landscape architect can do to create better-looking and more-enjoyable outdoor areas is vitally important to the prosperity of the housing industry today. Skillfully planned outdoor living space helps to give a new house an edge over the “stay put” appeal of older houses with their big trees and well established plantings. That is why smart builders are retaining landscape architects to “furnish” their model houses outdoors, and to develop basic landscaping schemes that can be given to buyers as a guide for the homeowner’s own landscape program.

Starting overleaf:

*49 good ideas
for outdoor living*



1. Where you have the walls of a house you have the start of a patio

And you have it where it should be—where indoor and outdoor space can flow into each other, and where the walls can serve as part of the privacy enclosure. In L- or T-shaped

houses, the patio can often be tucked into a corner—where the house shelters and fences the patio on two sides. And in H- or U-shaped designs (like this Eichler house by Architects

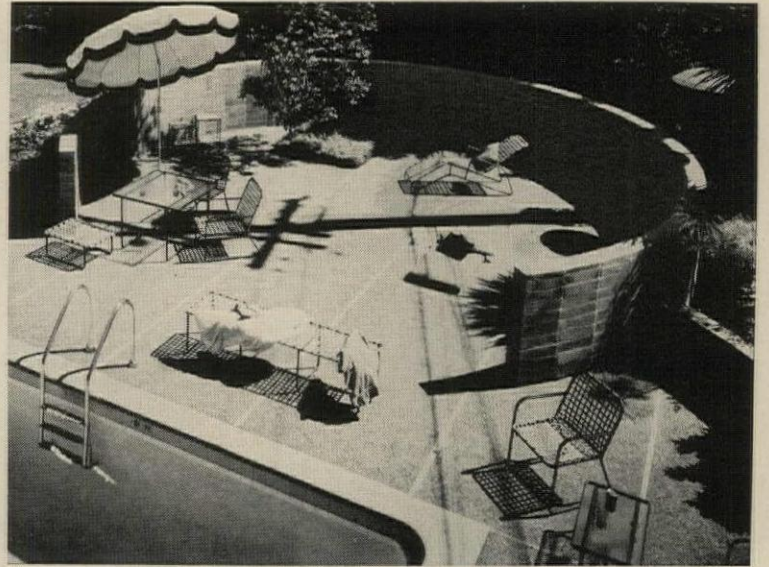
Jones & Emmons) the patio can be enclosed on three sides by the house—so it offers pleasant views for nearly every room and requires a minimum of extra fencing.

Julius Shulman



2. Outdoor living often means a swimming pool

Carefully planned in relation to the house, and to the terraces and gardens, a pool becomes the center for relaxed outdoor living. Many are laid out as part of the architect's original design. This one is by Architect Howard Morgridge.



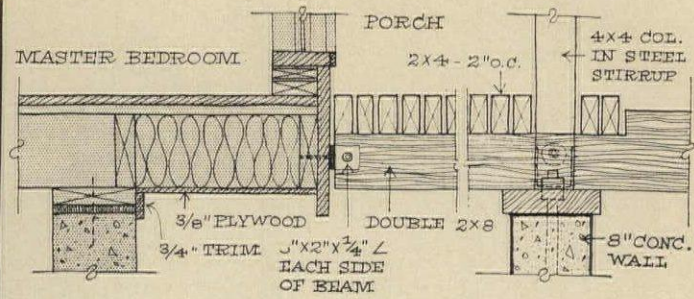
3. A swimming pool often needs a wind screen

On cool or breezy days, a sheltered lounging area like this makes life around the pool more pleasant. This terrace is ringed by a circular wall, simply built with nine courses of concrete block with a thin top cap, and set off with planting boxes.



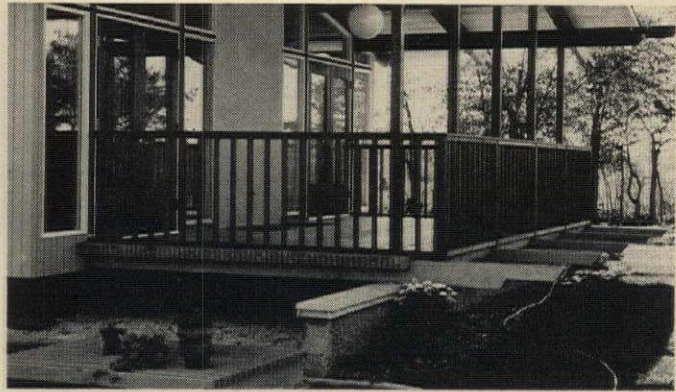
4. Why not a grass-covered terrace?

It is good looking, does not reflect the sun's glare into your eyes or your living room windows, does not bounce heat, and has a low first cost. Architect: Ives & Hogan.

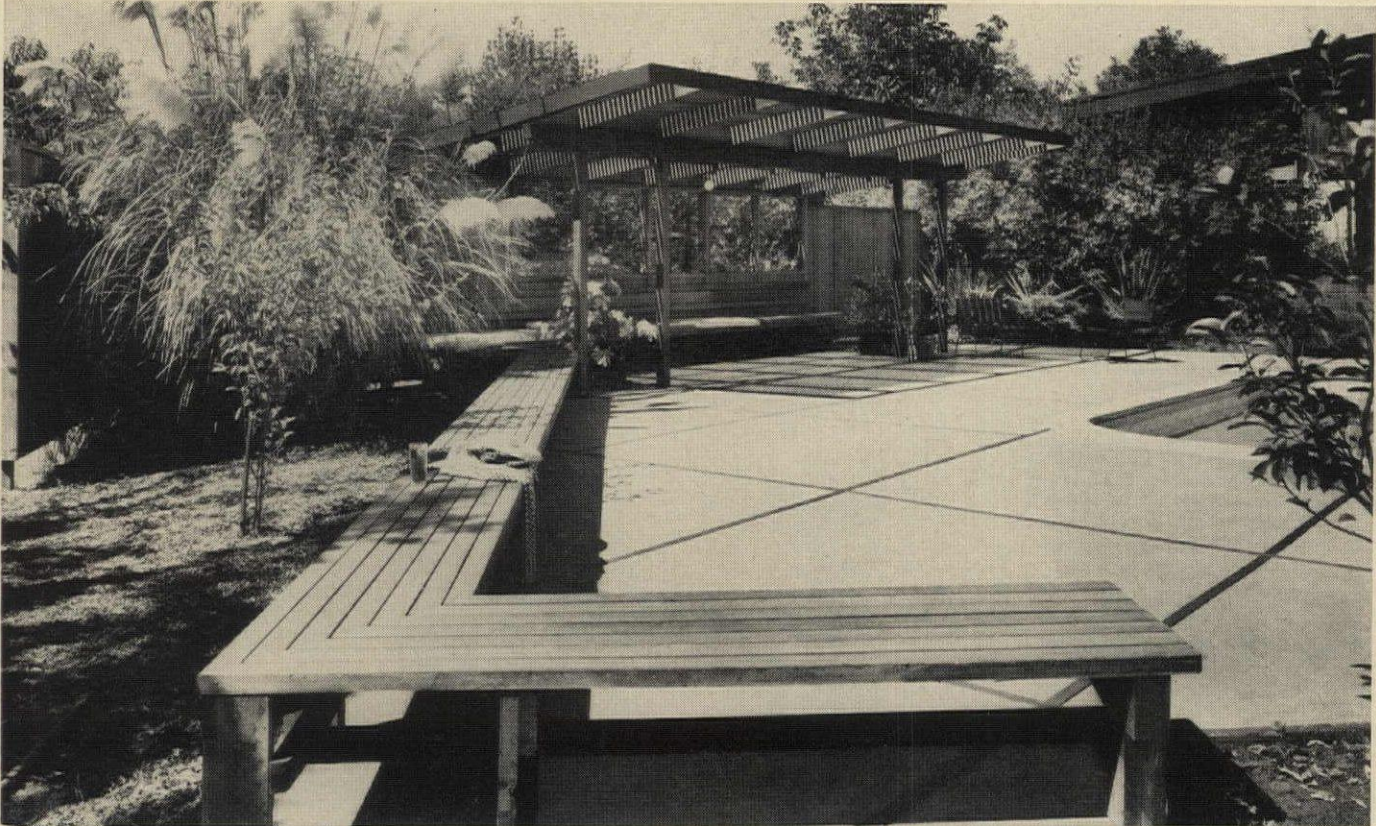


5. It is simple to add a wooden deck

This one was made by bolting the joists (double 2x8s) to the box sill of the house at one end, to an 8" concrete wall at the other. Flooring is 2x4s on edge, laid 2" oc for a drainage space between. Architects: John McKenzie and Gerald Rembowski.

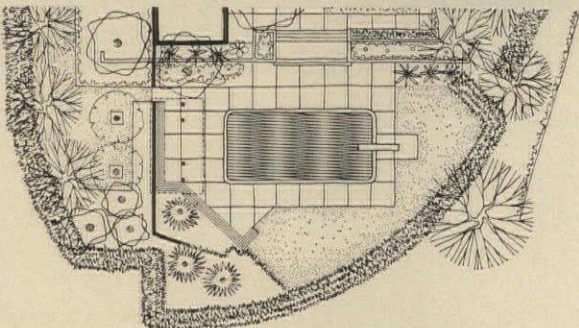


Maynard Parker



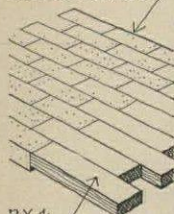
6. Outdoor space needs furniture and structure

The redwood benches and trellis serve a dual purpose: They provide a place to rest in the sun after a swim. And, by giving a suggestion of walls and roof, they define the outdoor lounging space. The trellis has a sunshade roof of narrow slats, but is open wide to the breeze. The surrounding plantings and fence, tied into the house on both ends, make this area private. Landscape Architects: Osmundson & Staley.

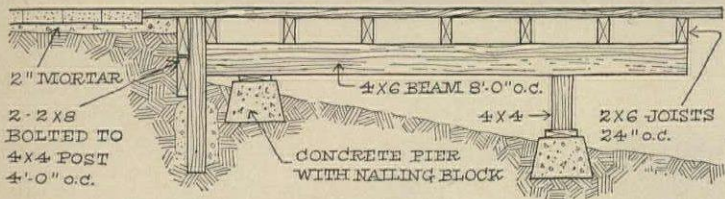




STANDARD SIZE BRICK WITH TIGHT JOINTS

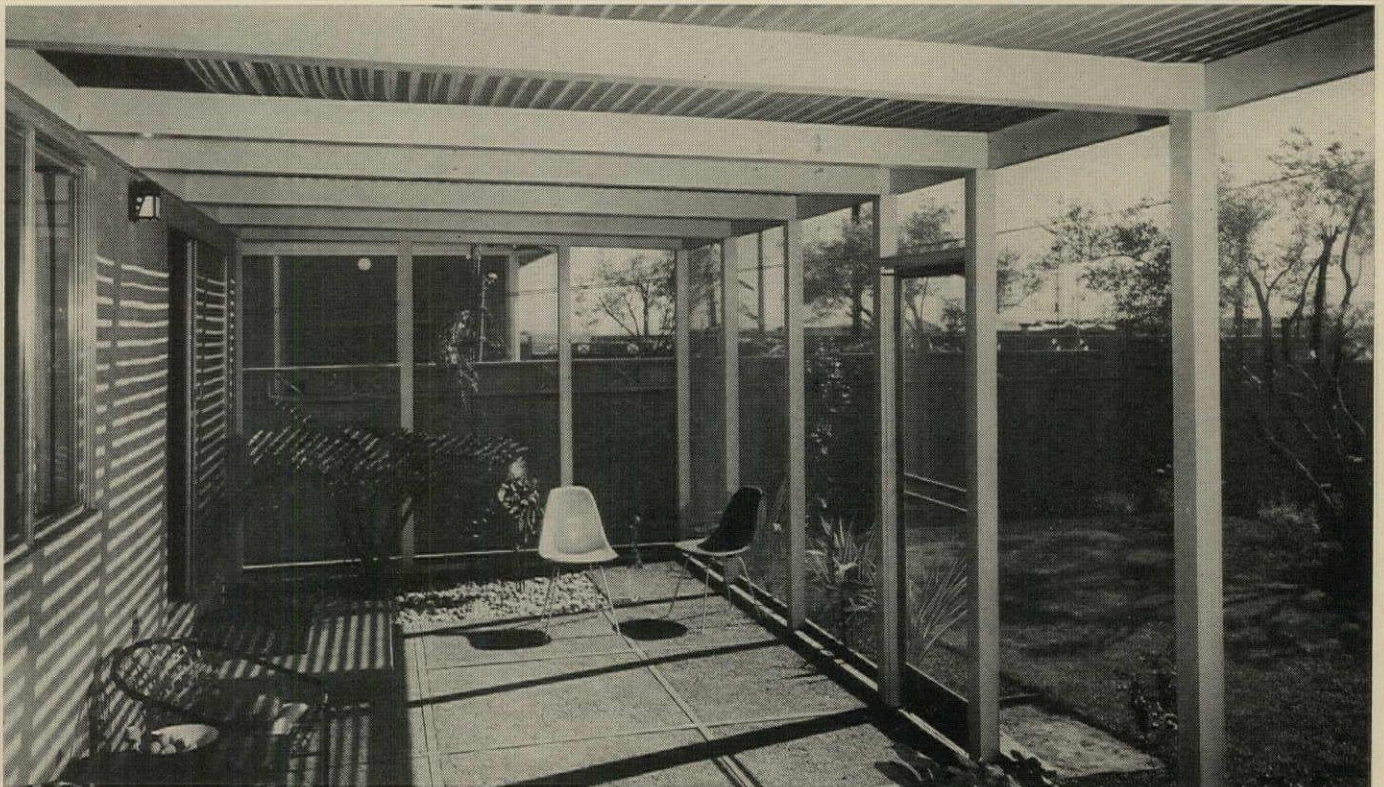


2X4 DECKING
1/8" SPACING



7. You can capture sloping land for living space

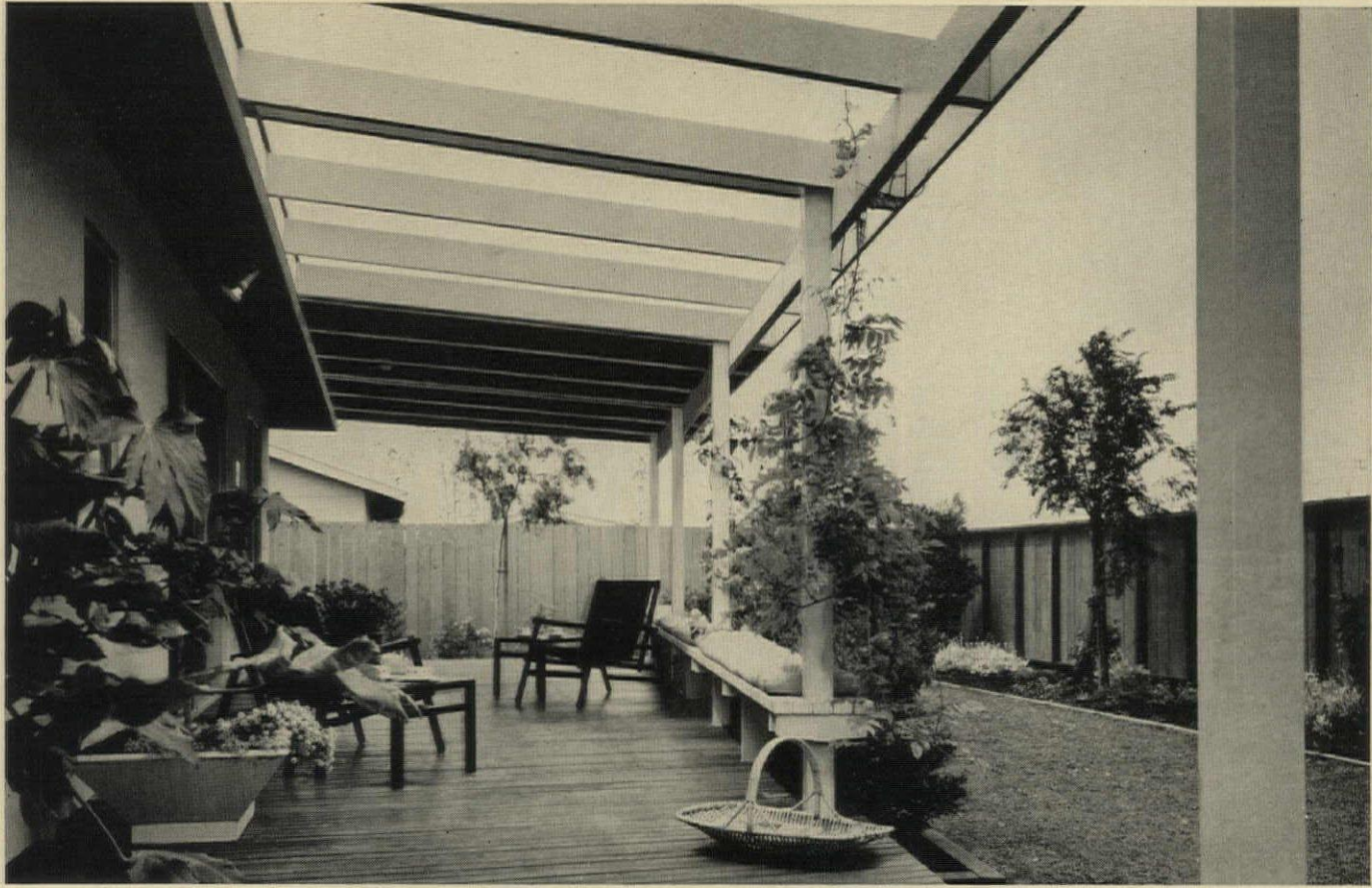
By extending a flat wooden deck out from a brick terrace, Landscape Architects Royston, Hanamoto & Mayes turned otherwise unusable space into this handsome patio and garden. Two-by-fours were fitted into the fluted spaces at the edge of the brick terrace and carried out over the sloping area on a joist and beam structure supported by concrete piers (see drawings, left).



8. Protection from sun and insects need not be elaborate or expensive

It can be as simple as this screened room at the rear of a house in South Park, Fremont, Calif. The frame is 4x4 redwood painted white. The walls are fiberglass screen and the roof is a fiberglass

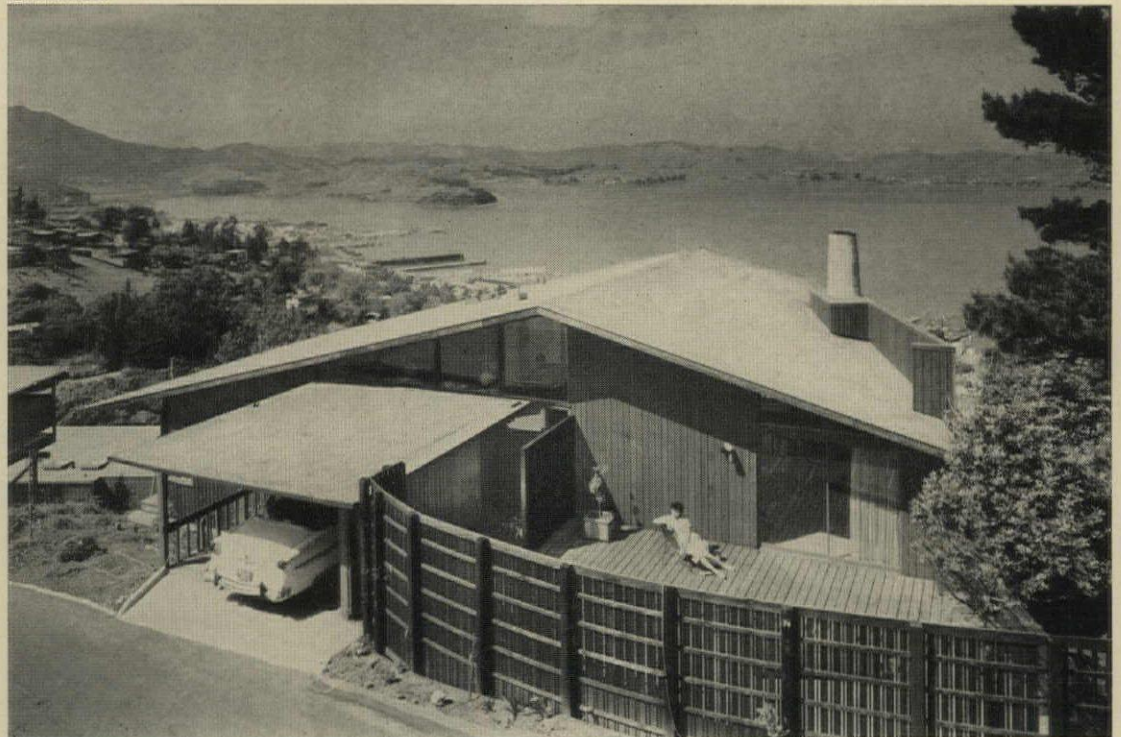
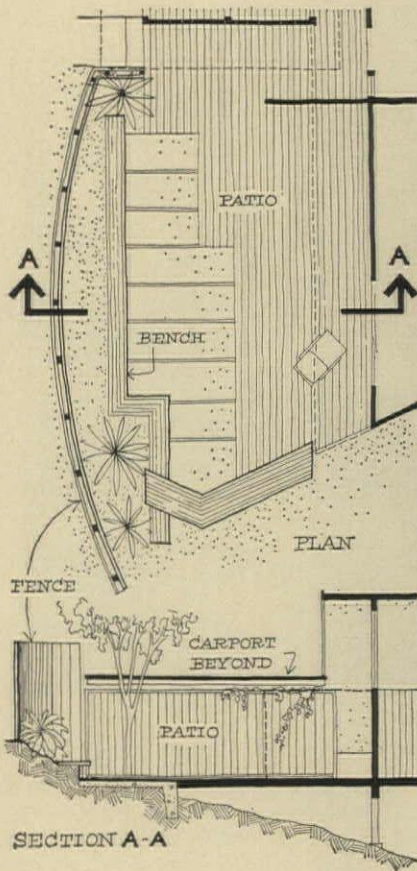
reinforced plastic. Cement floor has redwood dividers and open areas for plantings. Porch is 35' x 12' which provides 420 sq ft of outdoor living. In model houses it could be an optional extra.



9. On a site without big trees an open trellis creates a sense of shelter

Used with a raised deck or terrace it changes any back yard into an outdoor room, and for a model house like this one at Foot-hills Farm in Sacramento, it is also a quick way to add a "settled" look. The deck (redwood supported on joists and piers) and the trellis (4x4 posts and 2x6 beams) were designed by Landscape

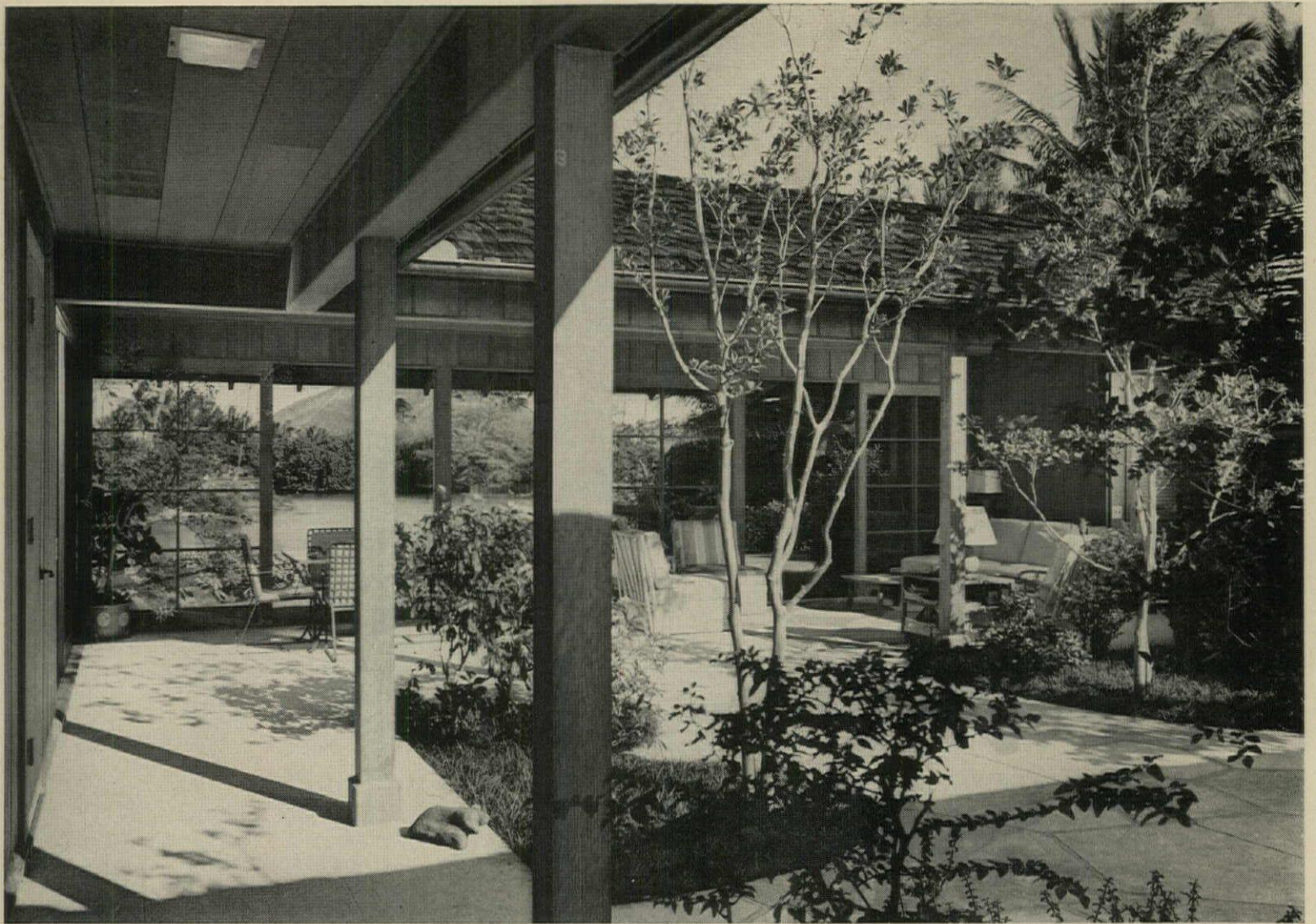
Architect Douglas Baylis. Baylis also prepared blueprint booklets which the builder gives to homebuyers to show them how to build this deck and trellis. The booklet also contains specific suggestions for patios and gardens suitable for other homes in the subdivision. Most buyers make good use of this help.



10. Fencing gives you back the land near the street

And in the case of a sloping hillside being able to use the small front yard for private outdoor living makes all the difference! It is even more important when the house faces the warm afternoon sun in a cool San Francisco climate as this one does. To create a sun trap, Architects Marquis & Stoller designed a curving fence of alternating wide and narrow slats.

continued



11. Patio and breezeway can combine the appeals of sun and shade

The two outdoor living areas of this house—one entirely open, the other semi-enclosed—are tied together by a common floor level,

a common flooring material, and a minimum of spacedividing structure. They work as a unit visually and practically. And taken together,

they prove the non-Euclidian proposition that the whole is greater than the sum of its parts. Architects: Ives & Hogan.

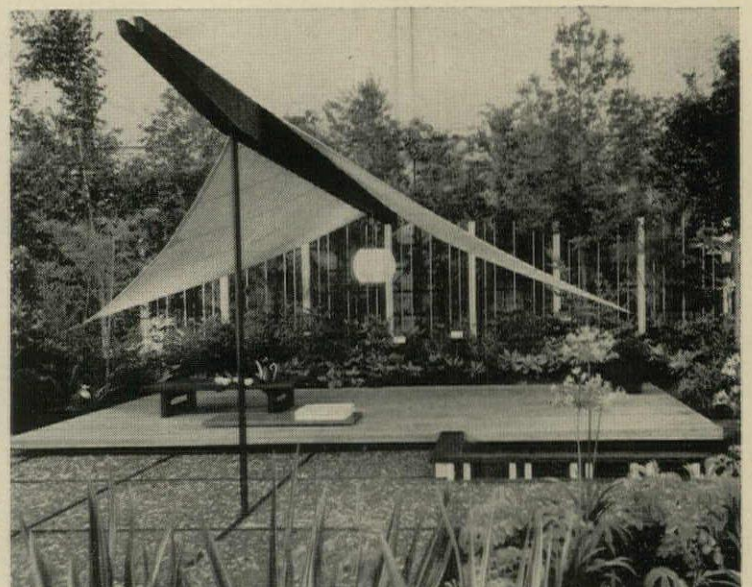
Phil Palmer



12. Preformed plywood catches the sun—and the eye

Floating above the outdoor deck, these plywood wings are suspended from an A-frame of 4x4s, and held in position by guy wires. This deck is in the garden of a small apartment in Berkeley, and the vaulted sunshade echoes the building's roof shape. Architects: Corlett & Spackman.

Phil Palmer



13. Canvas makes a light and airy cover for a deck

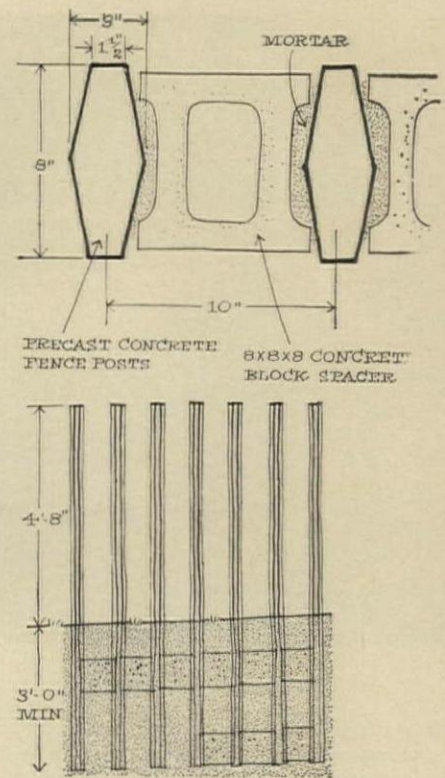
This canvas awning, shading a redwood garden deck, is held in place by a double 2x12 redwood ridge beam. The beam is supported by the slender pipe column in the foreground, and, at rear, by one of the posts in the garden fence. Designer: Eric Clough.



14. These precast concrete posts form a new kind of fence

Its most unusual feature: there are no rails or other horizontal members. Yet this no-nonsense fence is rigid and durable: as the drawing shows, the hexagonal concrete posts are set 3' into the

ground, spaced by 8"x8"x8" concrete blocks, and set in a mortar bed that ties the whole assembly together. This house is in Miami. Architect: Robert B. Browne.



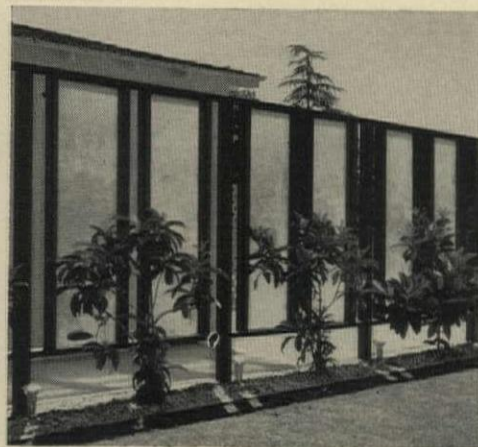
Julius Shulman



15. Blocks are a versatile divider

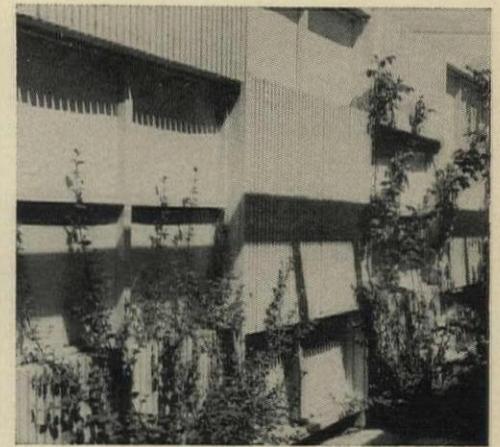
This garden wall is made of blocks laid "the wrong way"—with the hollow core exposed. For contrast, the street wall, background, is laid up in the orthodox way.

William Aplin



16. Panels are handsome day and night

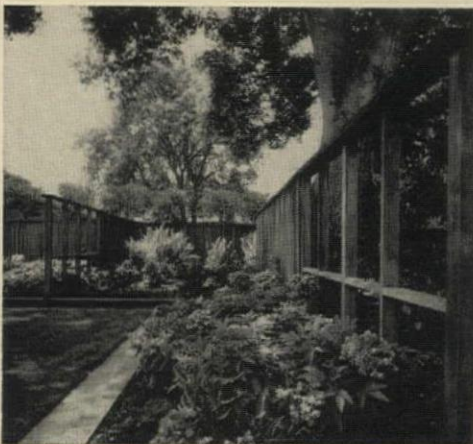
This fence is made of plastic sheets mounted on redwood posts. Plants' shadows on the panels (spotlighted at night) create a dramatic effect. Landscape Architect: L.K. Smith.



17. Textures add interest to fencing

A fence this high would be dreary—if it were not for the texture created by nailing on 1x1s in a pattern of squares and rectangles. Designers: Osmundson and Staley.

Ernest Braun



18. Wood frame can be open or covered

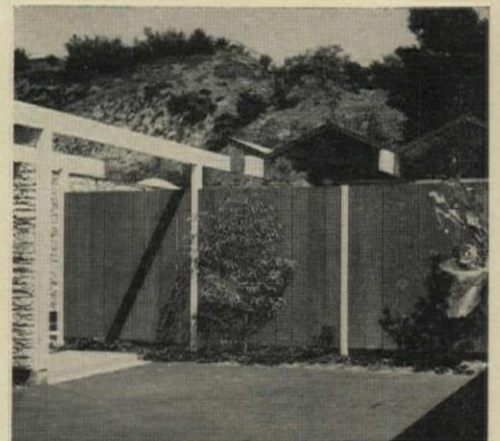
A redwood fence which is both solid and open was designed by Landscape Architect Thomas Church to break up this large garden. Planter bed in foreground is raised 2' above walk.



19. You can combine two types of fence

Front fence here is of horizontally laid t&g boards with a 2x4 top plate, but side fencing is a basket weaving of boards laced around vertical 2x4s and nailed to 4x4 posts.

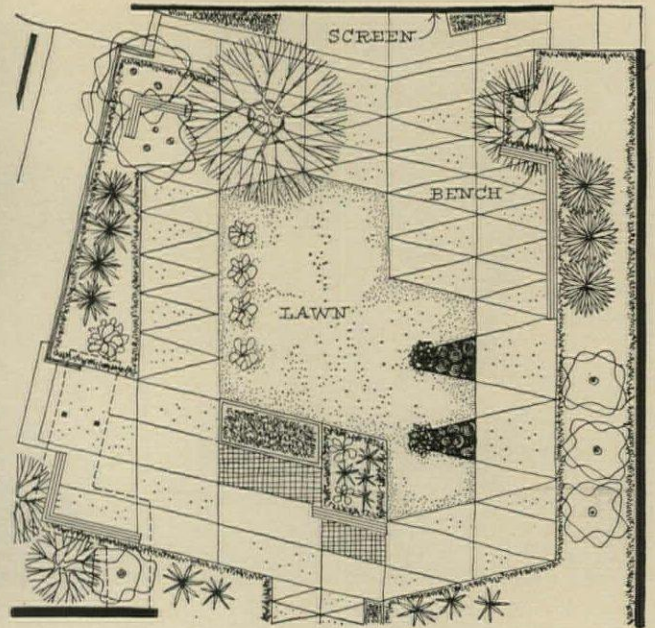
Larry Frost



20. Color and simplicity can be elegant

This fence of wide redwood boards stained dark brown gets pattern and visual excitement from the contrasting white posts and trellis. Architect: Richard Dorman.

continued



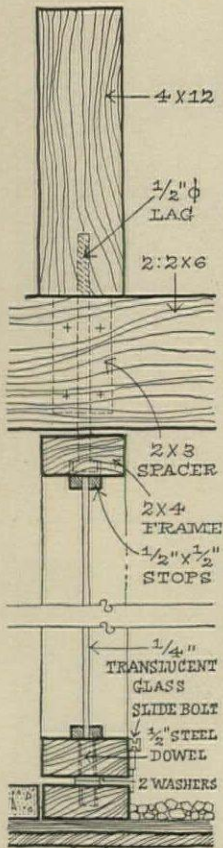
21. Floorscape defines a patio's varied uses

This area uses several kinds of paving or flooring, depending on function. The central portion is in lawn, surrounded by a wide walk of alternating smooth and pebbled concrete divided

into pie-shaped sections. In contrast are the small inserts on which two tubs of azaleas are placed: the paving here is redwood rounds in loose gravel. In addition, there are planting

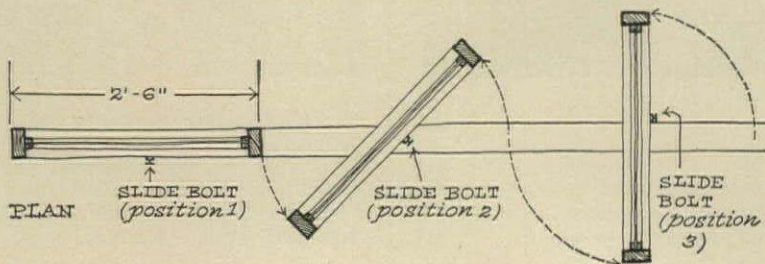
beds surrounding the garden and fencing on three sides. (Only the righthand third of the plan is shown in the photograph.) Landscape Architects: Osmundson & Staley.

Rochelle Kappe

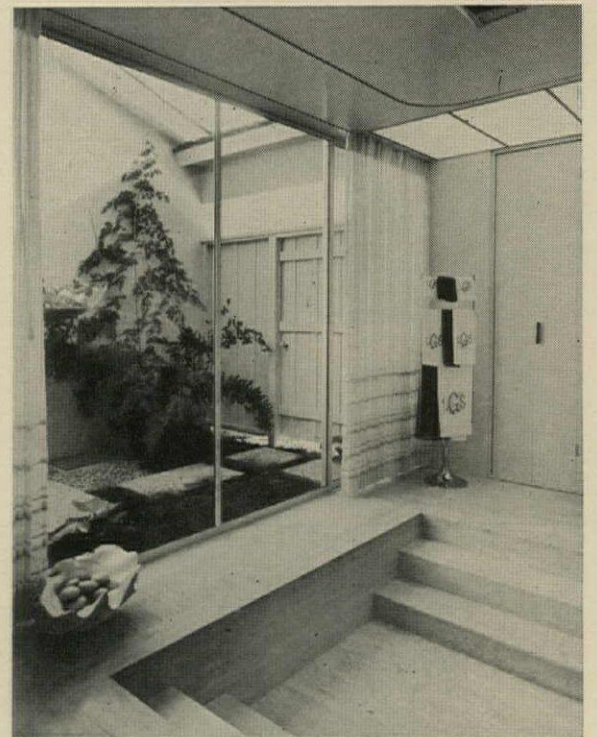


22. These translucent panels pivot

They are bolted in the center top and bottom, can rotate on their axis. At center of bottom frame a lag bolt, pushed down into three different holds, locks the panel in positions shown in the drawing. Architect: Raymond Kappe.

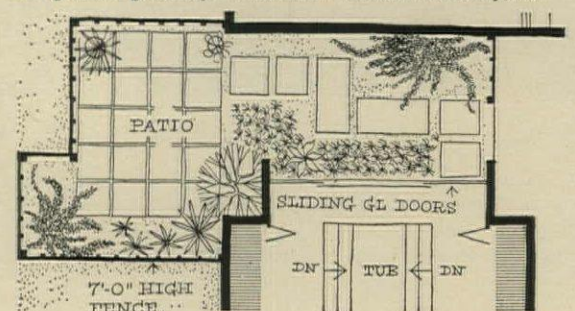


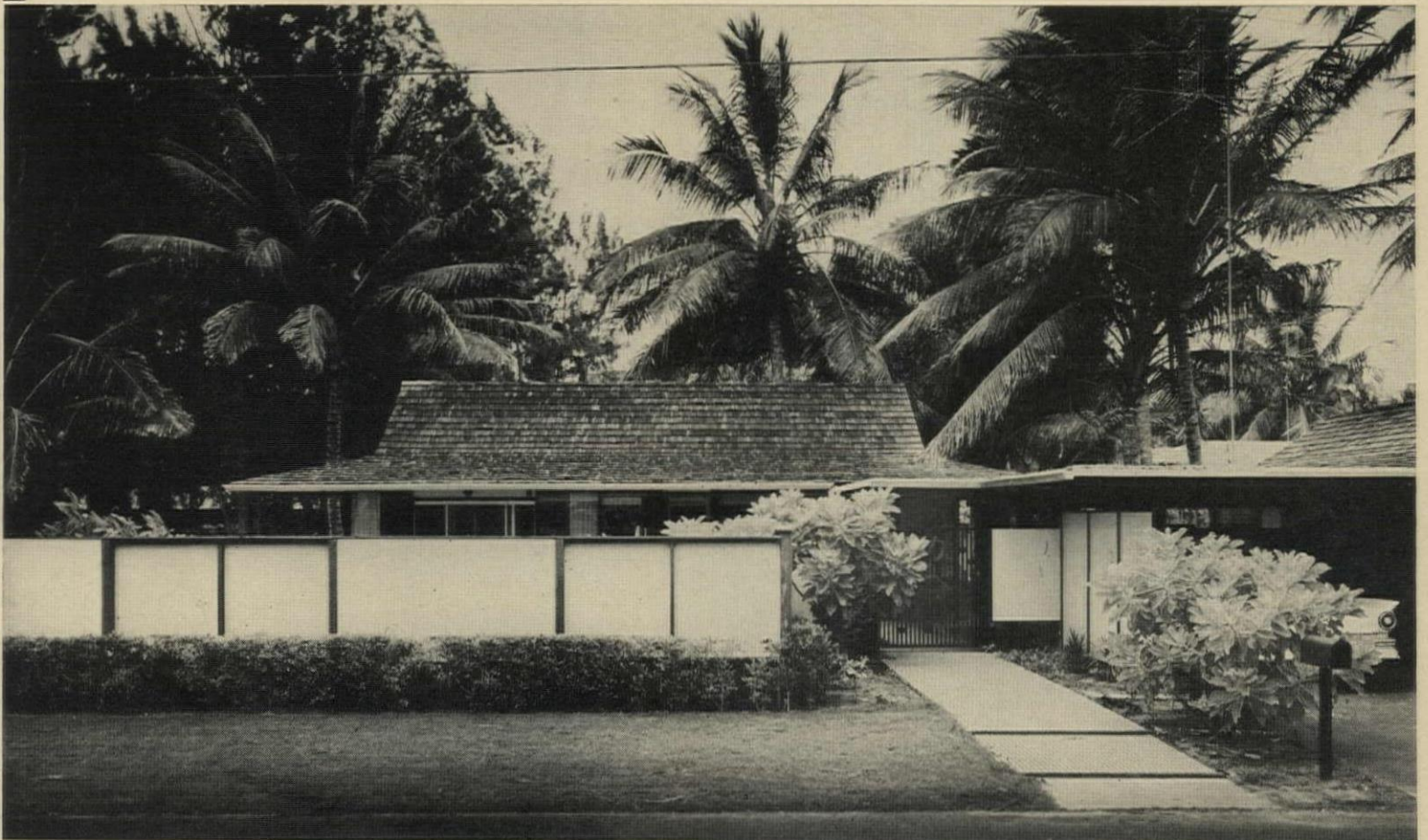
Charles Schneider



23. People like a bath patio

In the West you find a small patio off the master bath not only in custom houses, but even in built-for-sale models. Patios are used for sunbathing and for enjoying the garden greenery. Architect: Selden Kennedy, Jr.





24. Well designed privacy can be an asset to the homeowner—and to the neighborhood

Front fences are often prohibited or discouraged because of their appearance. But this smartly tailored design by Architect Howard Wallace,

with a low hedge and other planting, is so pleasant it enhances the house and neighborhood. Asbestos-cement panels painted white are

mounted on alternating sides of the redwood frame. This design is repeated on garage side of the front walk. House is in Honolulu.

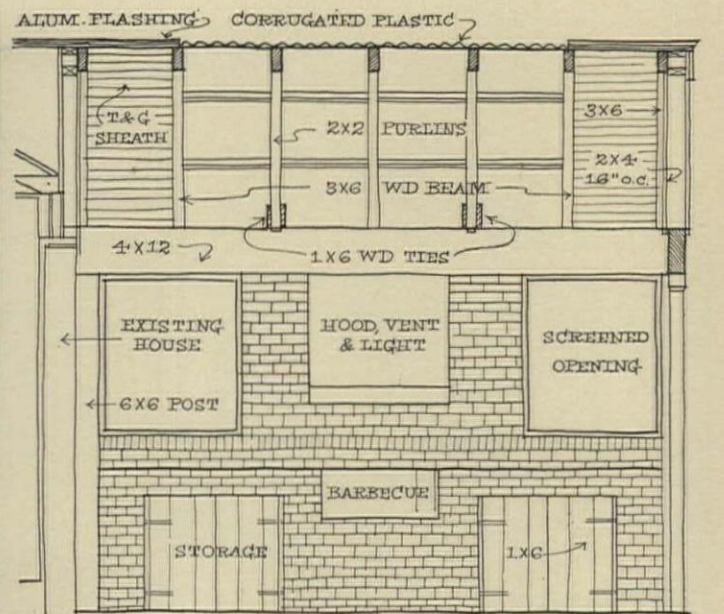
James Dunlop



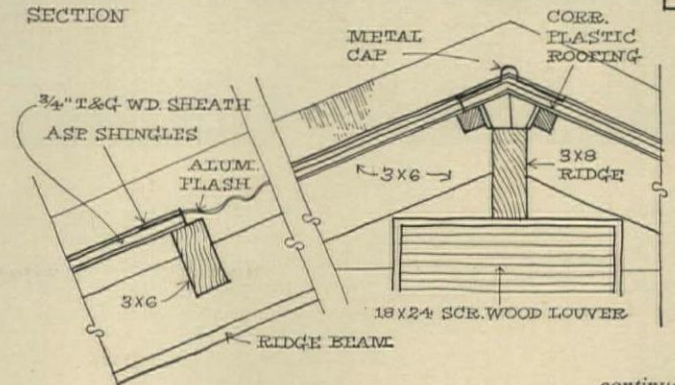
25. Here are two ways to trap sunshine

Outside, a walled garden gives this house a place in the sun which, in the Washington, D.C. area, can be used a good part of the year. Inside, a plastic roof in the family room lets sunlight filter through for a pleasant day-long atmosphere. Drawing shows how cor-

rugated plastic roof sections rest on beams and purlins, and fit into aluminum flashing at ridge and two sides. Plastic panels cover only two-thirds of roof, as side panels are conventional. House was designed by Gomersall & Ayers for Builder Edward Carr.

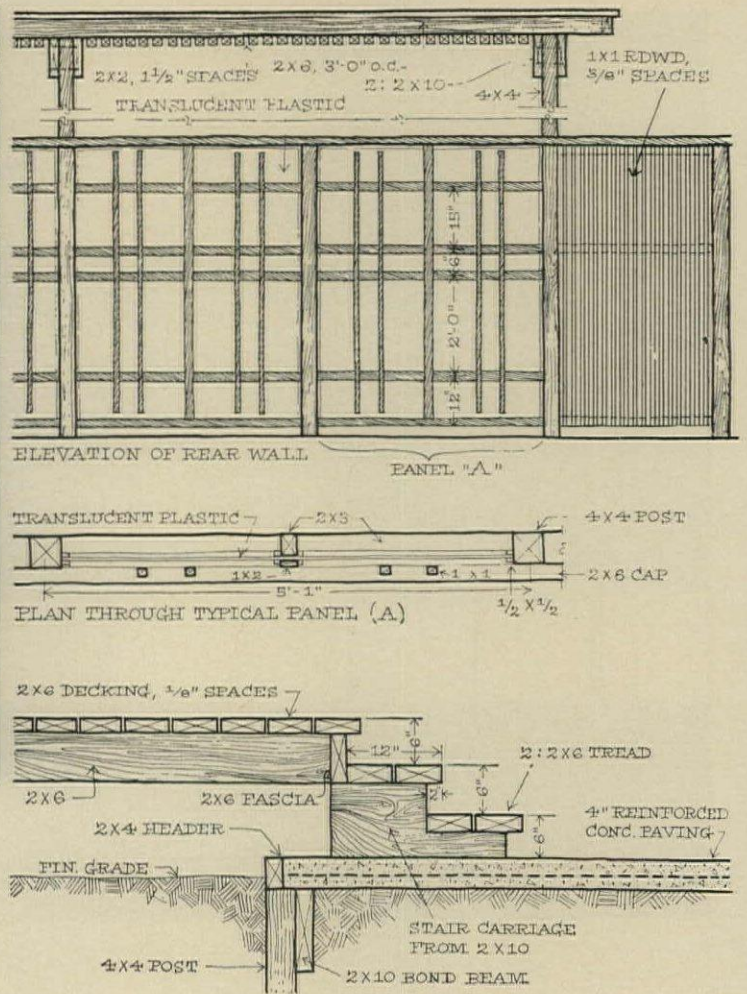
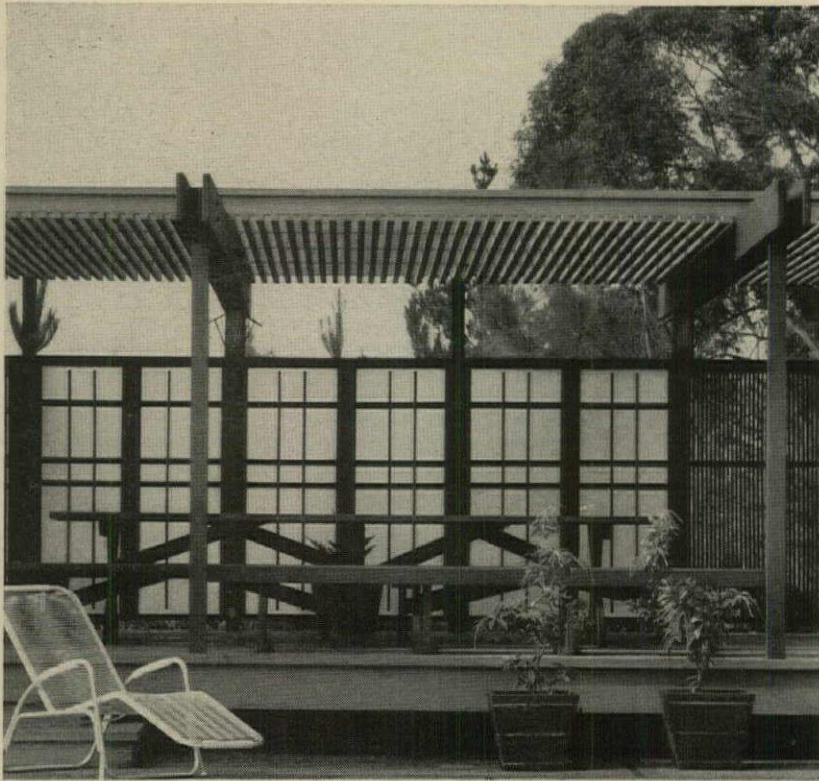


SECTION



continued

Pirkle Jones



26. Simplicity is best for summerhouse design

And this one is simple to build, though it is highly styled. Its focal point, the rear panel, is made of plastic sheets in a redwood frame with 1x1 decorative strips. Side panels of 1x1 rounds reflect the 2x2 slats in the sunshade roof. Roof frame is 2x6s 3' oc running lengthwise, supported by double 2x10s and 4x4 columns. Platform is 2x6 decking with 1/8" drain spaces on 2x6 joists. Landscape Architect: Robert Babcock.



27. Expanded aluminum is a versatile screen

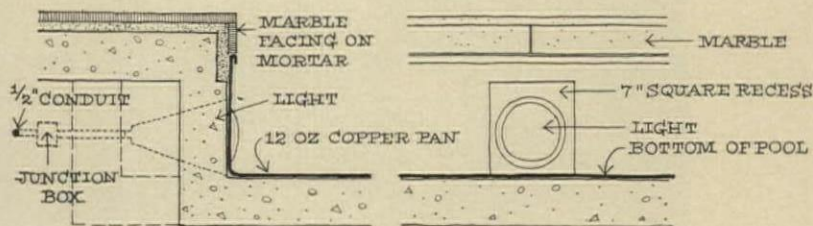
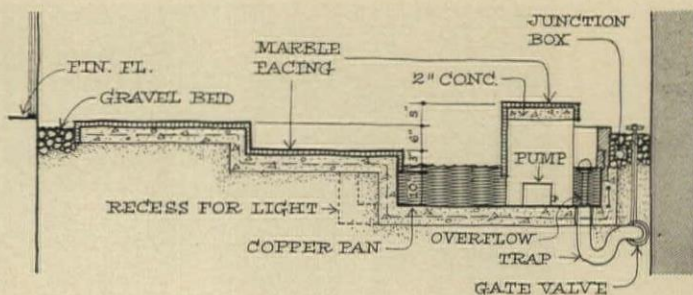
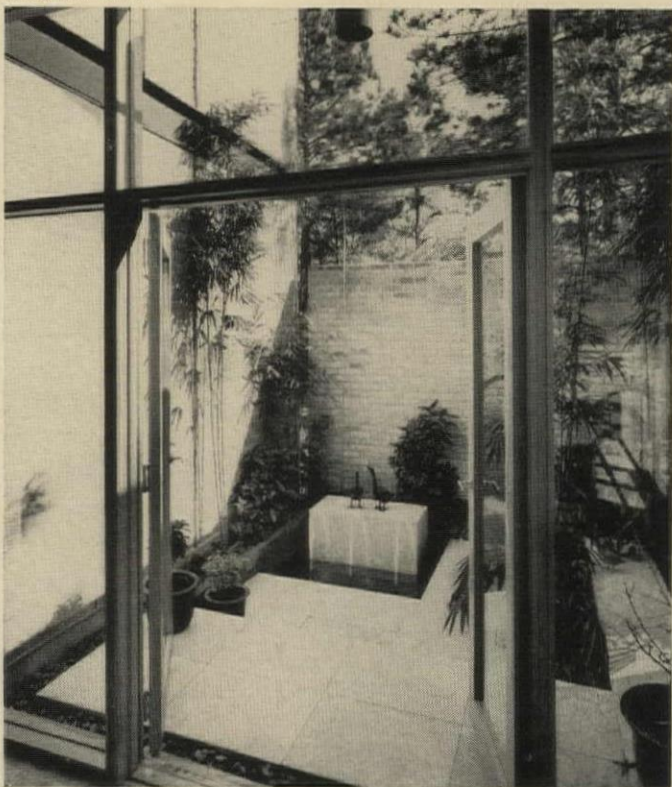
Here, expanded metal panels serve as a sun roof and as a screen blocking the view between the living room, rear, and studio, far right. The orientation of the openings in the metal permits a "straight ahead" view of the garden from the living room. Landscape Architect: Garrett Eckbo.



P. E. Guerrero

28. Translucent plastic lets sunshine into a breezeway

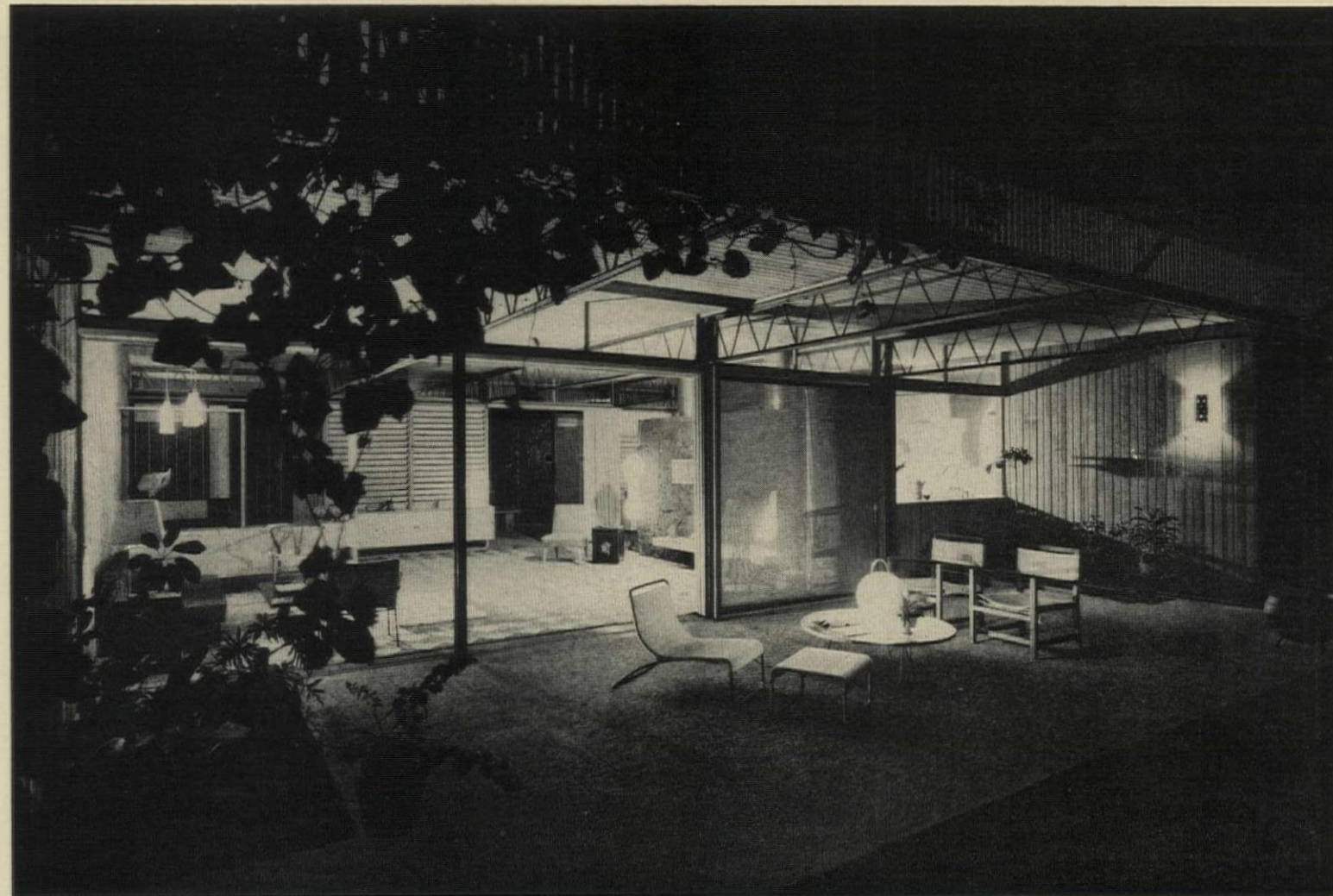
A soft, mellow light filters into this garden through corrugated plastic panels that form the roof. Panels rest on an eggcrate pattern of 2x12s, which in turn are carried on light steel beams and lally columns. This is the house Architect Edward D. Stone designed for Celanese.



29. Outdoor space is for looking at as well as living in

This square, brick-walled court is at one end of a formal entry hall in a contemporary house. Its chief purpose is to please the eye—though its wall also helps screen the entry. A border of

planting and flowers sets off the brick wall as well as the precisely detailed marble pool with its three-jet fountain. Underwater lights illuminate court at night. Architects: Bolton & Barnstone.

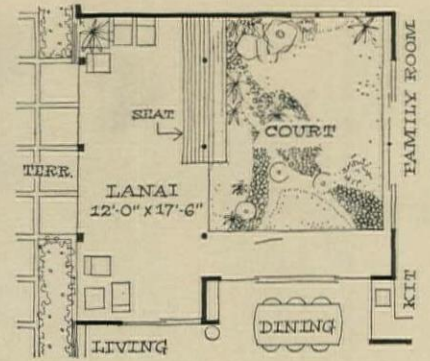


30. Well planned lighting adds glamor and usefulness to an outdoor room

It makes a terrace usable five or six more hours a day. It lets a family expand evening parties outside the house, thus doubling or tripling the entertainment area. And it adds a new dimension of glamor because it softens the lines of a house and creates dramatic effects with lights

and shadows as on a professional stage. Thanks to skillfully planned lighting, some houses have more charm at night than in the daytime. House and garden structure take on a new appearance and plantings take on a new form and color. Architects: Fisk & Chapman.

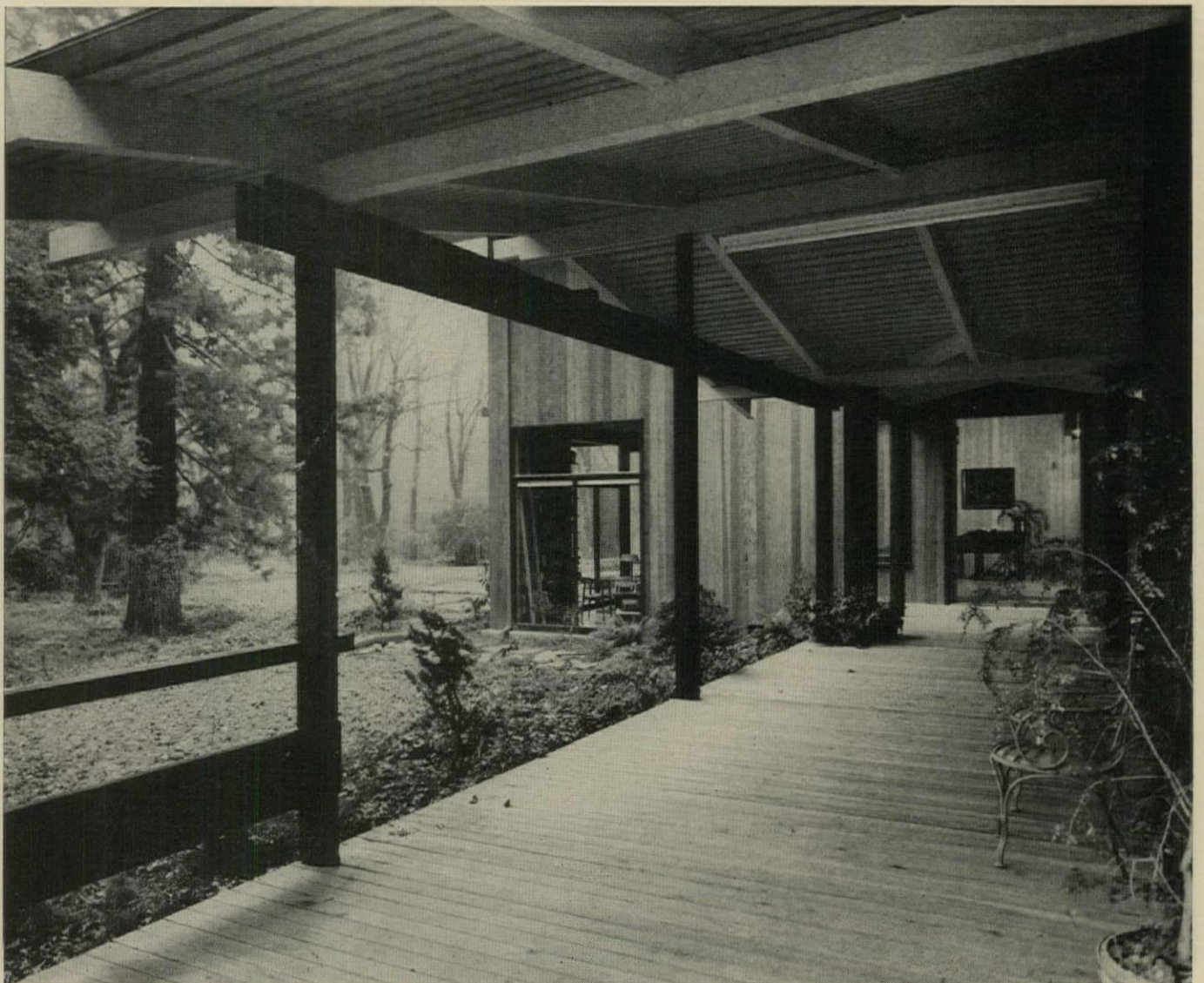
R. Wenkam



31. This house was designed for three kinds of outdoor space

First is the open terrace (far left in photo and plan). Second is the roofed-over but open-walled lanai—which offers shelter from rain and sun. Third is the inner court, with its garden view for both the lanai and the enclosed living space. Architects: Johnson & Perkins. Landscaping: George Wago.

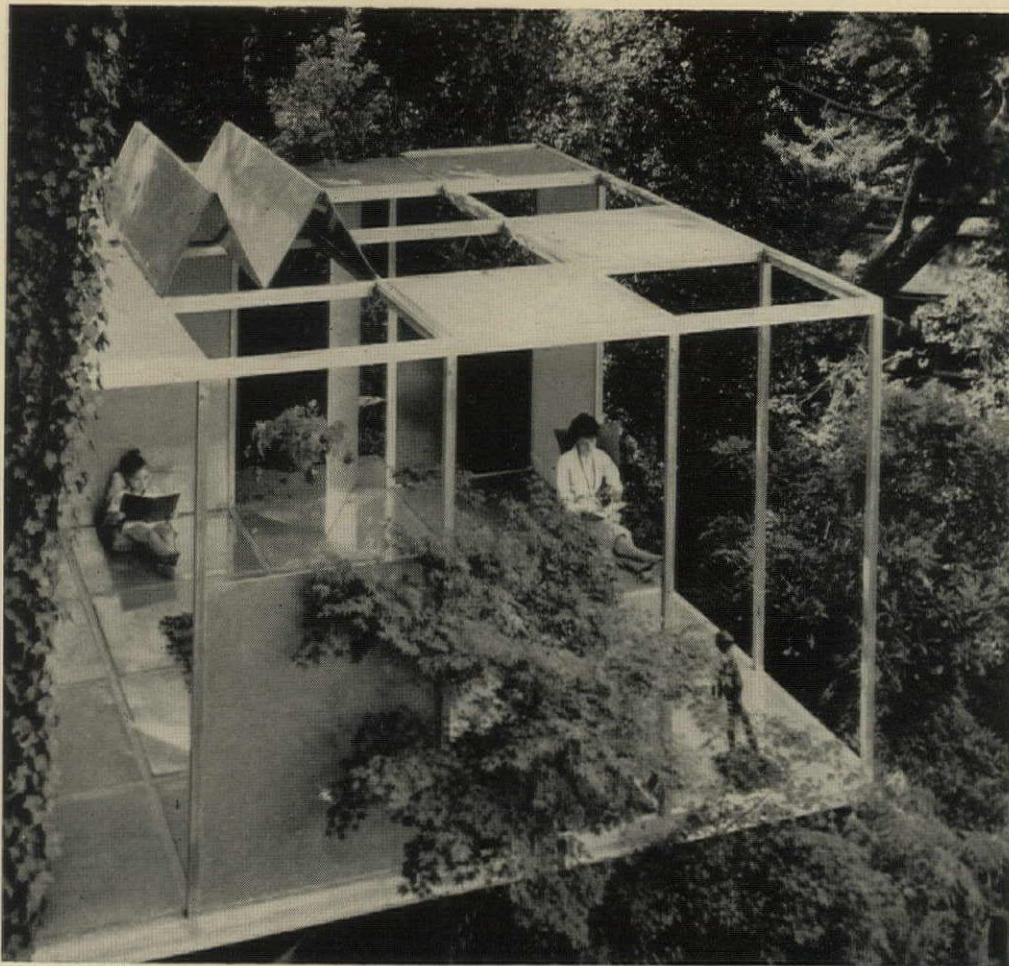
Phil Fein & Assoc



32. Here is the tried and proven front porch concept in a contemporary idiom

The broad sheltered porch is being revived by contemporary architects—because it is still such a good idea. This porch, opening to the entry (rear) in a house by Architect Joseph

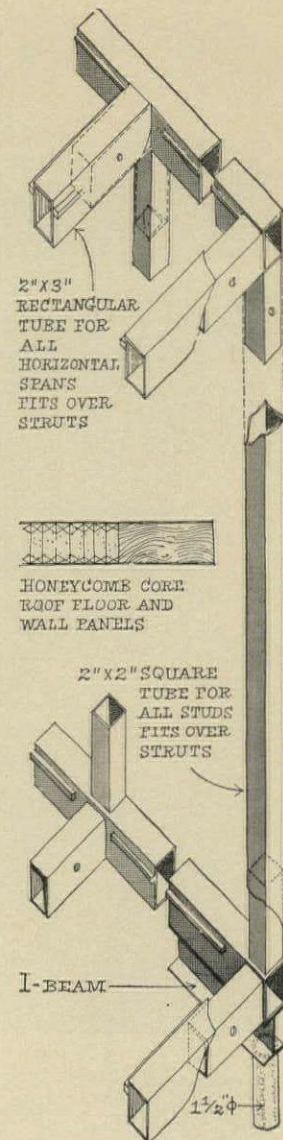
Esherick, offers shelter from rain and sun, and is more flexible in function than an uncovered patio or terrace. Today, you often see “the big front porch” in the rear, opening to a garden.



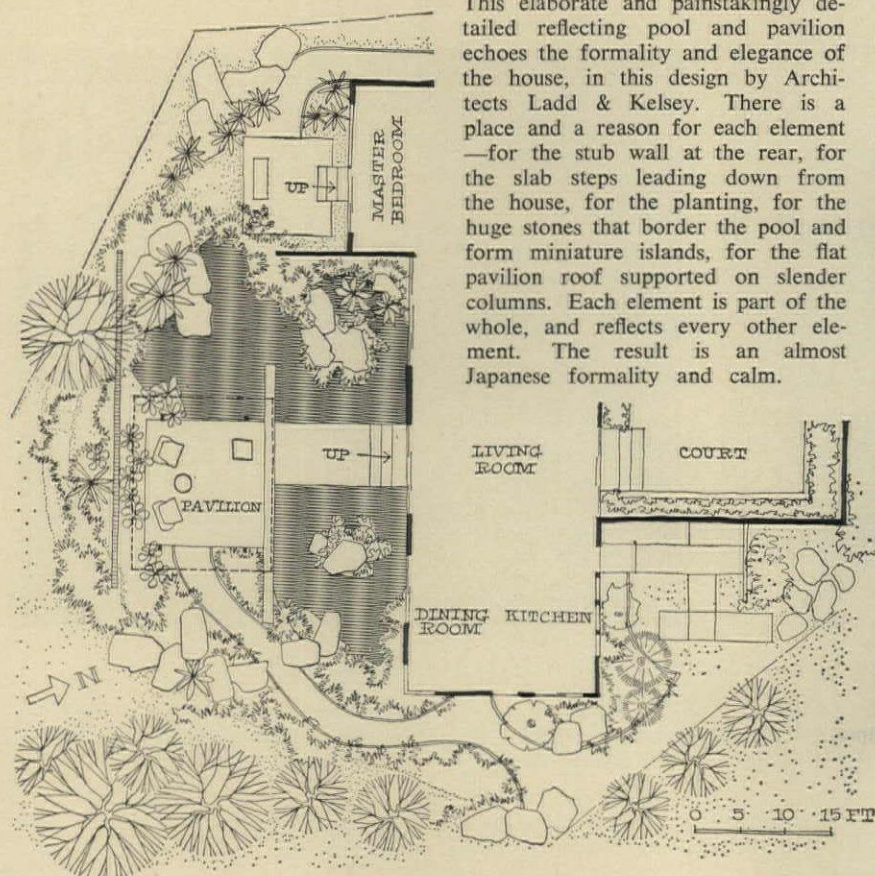
33. A gazebo is for fun—looking in or looking out

This is a contemporary version of another old favorite. It is contemporary in design and in materials—its “post-and-beam” frame is on a 4' module, made of square aluminum tubing.

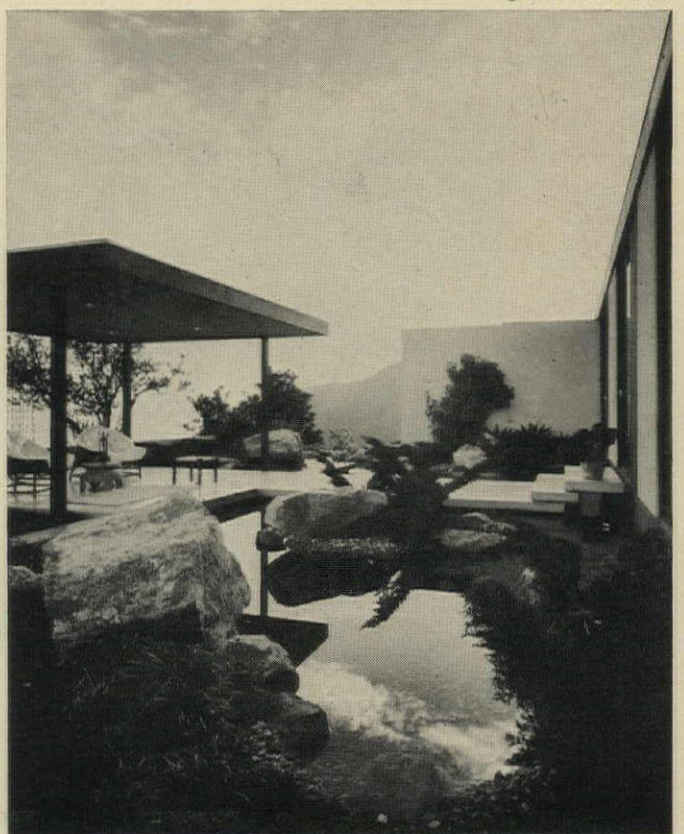
The brightly colored panels used for the floor and the closed sections of the roof and walls have aluminum skins, honeycomb cores. This playful design is by John Matthias for Alcoa.



34. Outdoor space can be as formal or elegant as you please

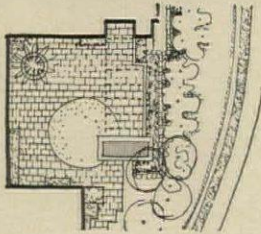
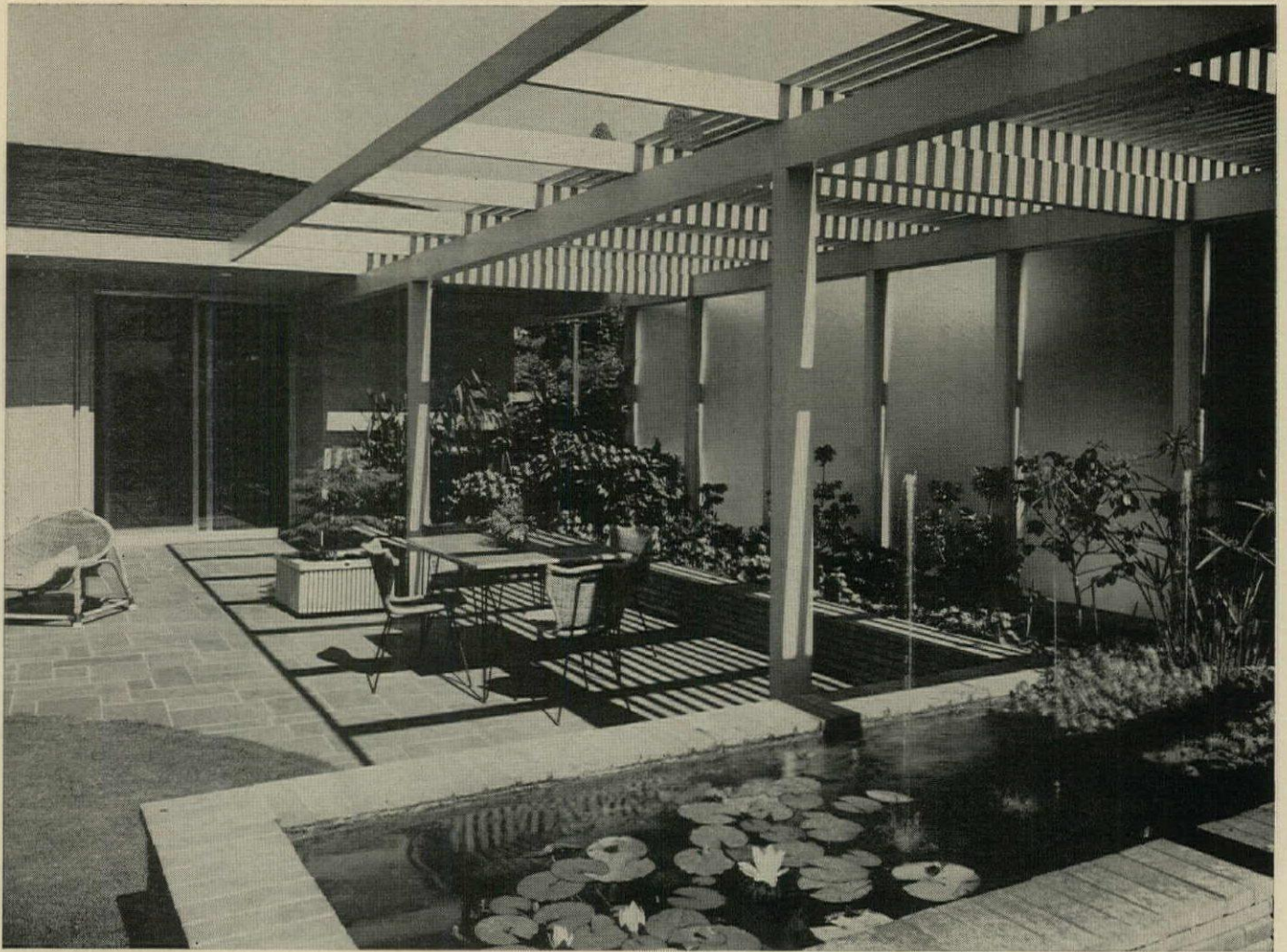


This elaborate and painstakingly detailed reflecting pool and pavilion echoes the formality and elegance of the house, in this design by Architects Ladd & Kelsey. There is a place and a reason for each element—for the stub wall at the rear, for the slab steps leading down from the house, for the planting, for the huge stones that border the pool and form miniature islands, for the flat pavilion roof supported on slender columns. Each element is part of the whole, and reflects every other element. The result is an almost Japanese formality and calm.



© Ezra Stoller Assoc

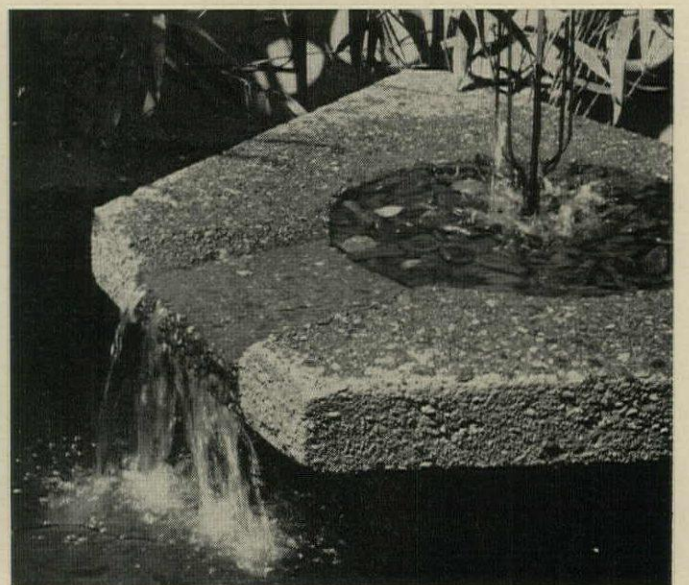
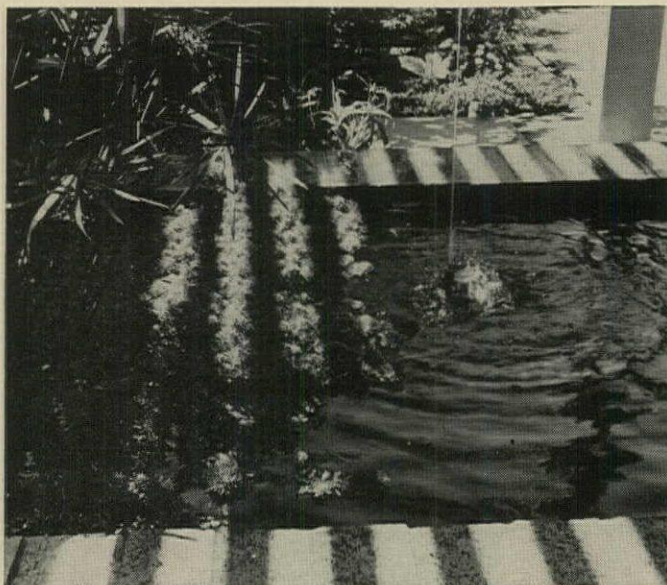
continued



35. A trellised structure ties the terrace to the house

In addition to unifying house and terrace, the latticed sun screen casts an interesting pattern on the paving. Besides its usefulness, the structure lends dignity and importance to the whole outdoor area. Translucent panels on the right create a pleasant feeling of enclosure at one

end of the terrace, a privacy barrier that lets in the light. The raised lily pool with its fountain and capping (wide enough to sit on) is an important design element. As the plan shows, the square terrace encloses a grass circle. Landscape Architects: Osmundson & Staley.



36. The sound of running water is one of the delights of outdoor living

Its low-key murmurs are just enough to cover street noises or a neighbor's radio, and the rising and falling water make changing light patterns for the eye to follow. The pool on the left, striped

with shadow from an overhead trellis, has a three jet fountain. On the right the water bubbles up, then tumbles to a larger pool. Both garden designs are by Osmundson & Staley.

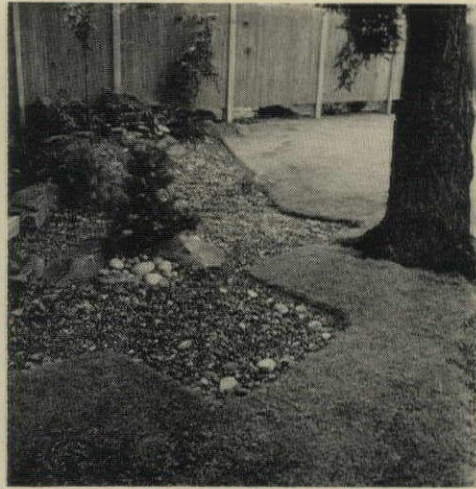
Steven Wilson



37. Brick is traditional outdoor flooring

And it is still one of the smartest. Laid two by two on sand, this pattern is easy to put down. Landscape Architect: Robert Chittock.

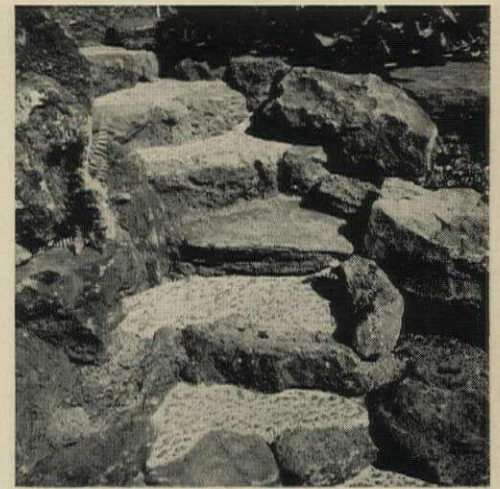
Steven Wilson



38. Lawns can take a free form edge

You can give grass borders any shape you wish around a pebbled garden as shown here by Landscape Architect Robert Chittock.

R. Wenkam



39. Nuisance boulders have many uses

You can make attractive garden steps, for example, by leveling them with concrete. These are by Architects Dennis, Whitaker, Slavsky.

Steven Wilson



40. Steps can fit slope and spirit

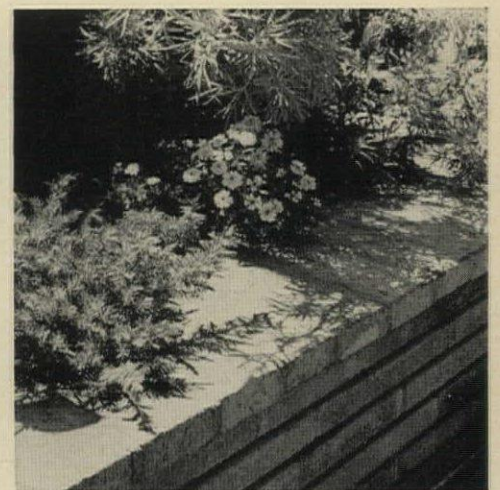
On this gentle, wooded slope near Seattle, where wood is extensively used, Robert Chittock designed wide treads with shallow risers.

R. Wenkam



41. Big and little gain by contrast

The effectiveness of these large millstones is greatly enhanced by small black and white stones in this inner court by George Wago.



42. Planting takes the edge off walls

And plants also add color and texture as they grow out across the tops of masonry walls to soften sharp edges. Osmundson & Staley.

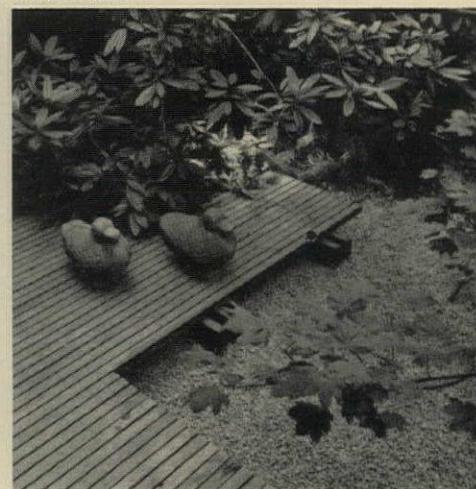
Steven Wilson



43. Pebbles are today's vogue

For example: small pebbles in concrete, large flat stones in concrete, and still larger ones loose as a flower bed. Osmundson & Staley.

Steven Wilson



44. Duckboard is simple and handsome

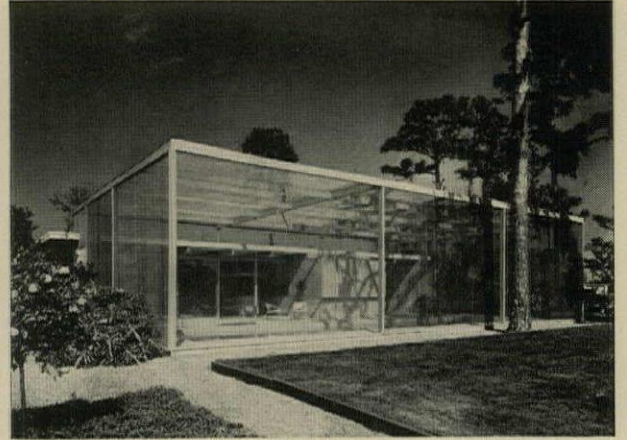
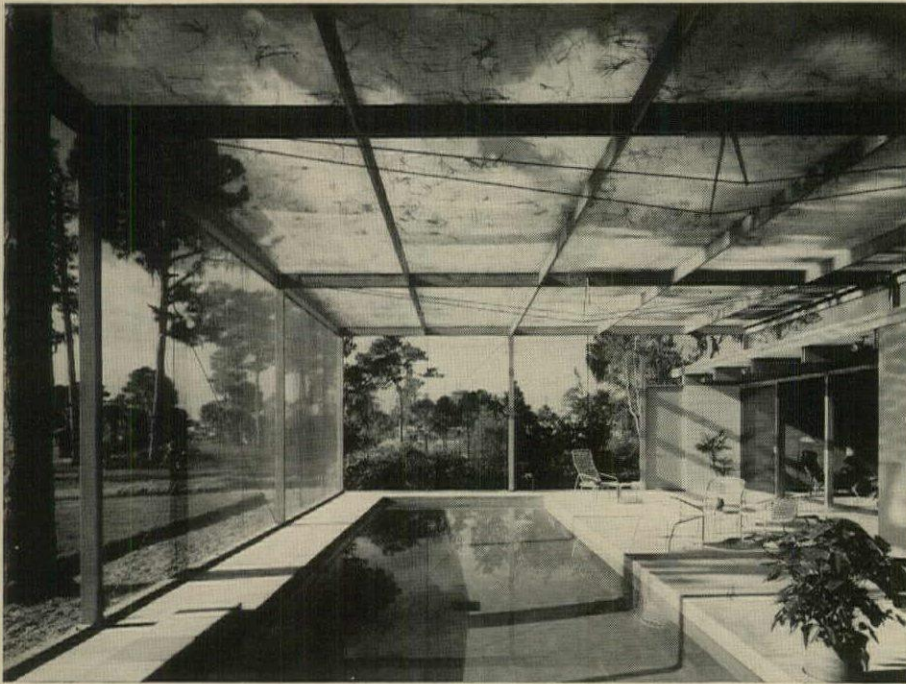
Its narrow pattern is attractive and the design is functional when water must get through. Landscape Architect: William Teufel.

R. Wenkam



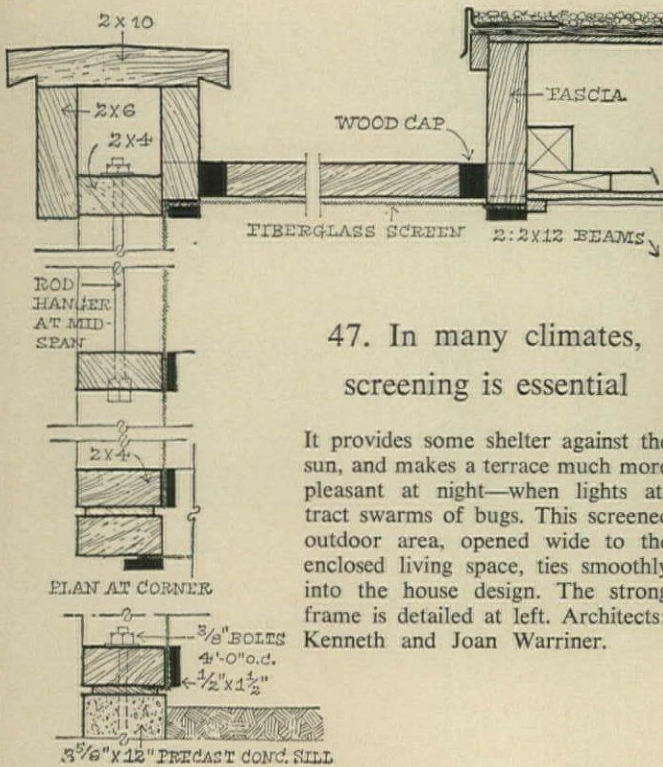
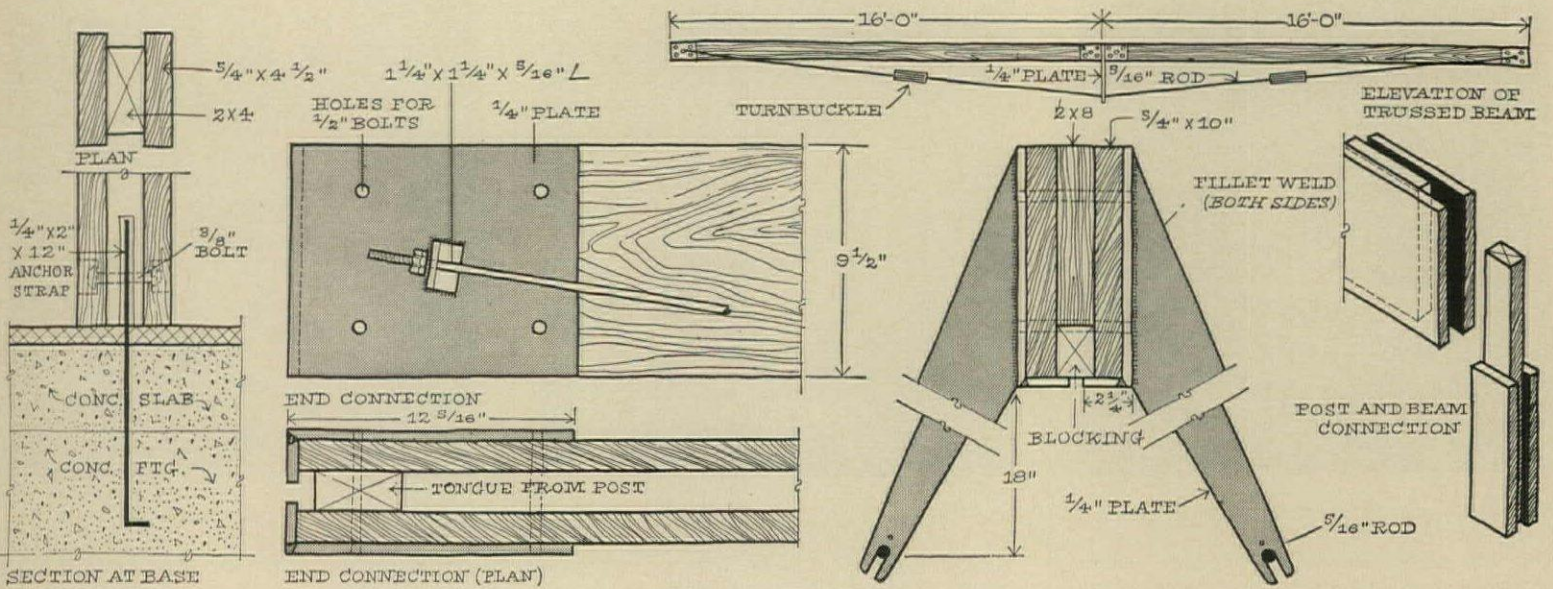
45. Block makes a fine paving

Concrete blocks 4"x12"x2" can be laid rapidly, are durable, have texture and pattern. This entry walk is by Vladimir Ossipoff.



46. A screen cage makes a pool practical

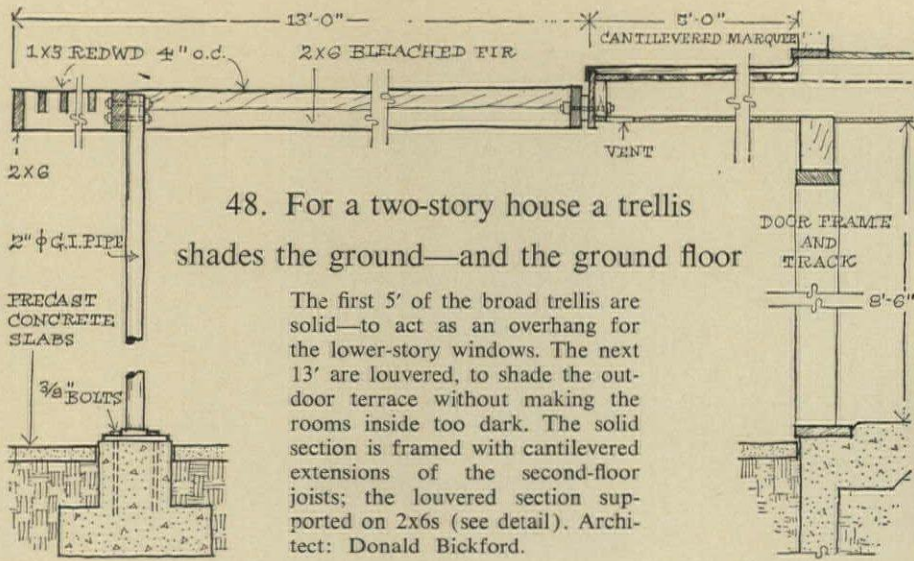
It keeps out litter and insects. And it relieves worry about neighbors' children falling in. This design, by Architect Edward Seibert, uses 32' beams trussed by jumper struts and tie rods (see details), stiffened by four longitudinal 2 x 10s, supported by widely spaced posts.



47. In many climates, screening is essential

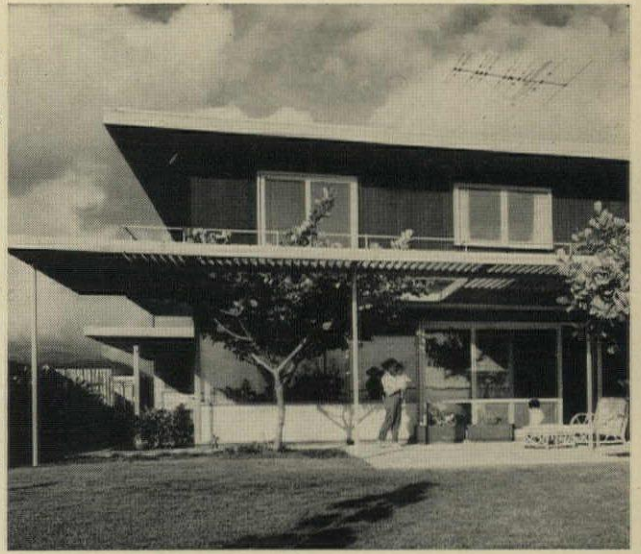
It provides some shelter against the sun, and makes a terrace much more pleasant at night—when lights attract swarms of bugs. This screened outdoor area, opened wide to the enclosed living space, ties smoothly into the house design. The strong frame is detailed at left. Architects: Kenneth and Joan Warriner.





48. For a two-story house a trellis shades the ground—and the ground floor

The first 5' of the broad trellis are solid—to act as an overhang for the lower-story windows. The next 13' are louvered, to shade the outdoor terrace without making the rooms inside too dark. The solid section is framed with cantilevered extensions of the second-floor joists; the louvered section supported on 2x6s (see detail). Architect: Donald Bickford.



49. Outdoor space is where you find it and what you make of it

This delightful patio is in a city backyard—the kind of space that often is filled with rusting junk and flapping laundry. Landscape Architect

Lawrence Halprin put down old brick for paving, framed the space with planting beds and high fences that create privacy and a sense of

enclosure. Imagination and skill have made this space into an outdoor room usable most of the year. /END



This unspoiled oceanside is being developed with three ideas you could use almost anywhere

These ideas are aimed to make the most of the natural advantages of the land. The three ideas:

1. Adapt the cluster plan to a waterfront site, to open a maximum number of lots to the beach and the view.
2. Develop a second premium area around—and within—a golf course.
3. Establish and preserve the character of the whole development with an effective system of design controls and covenants.

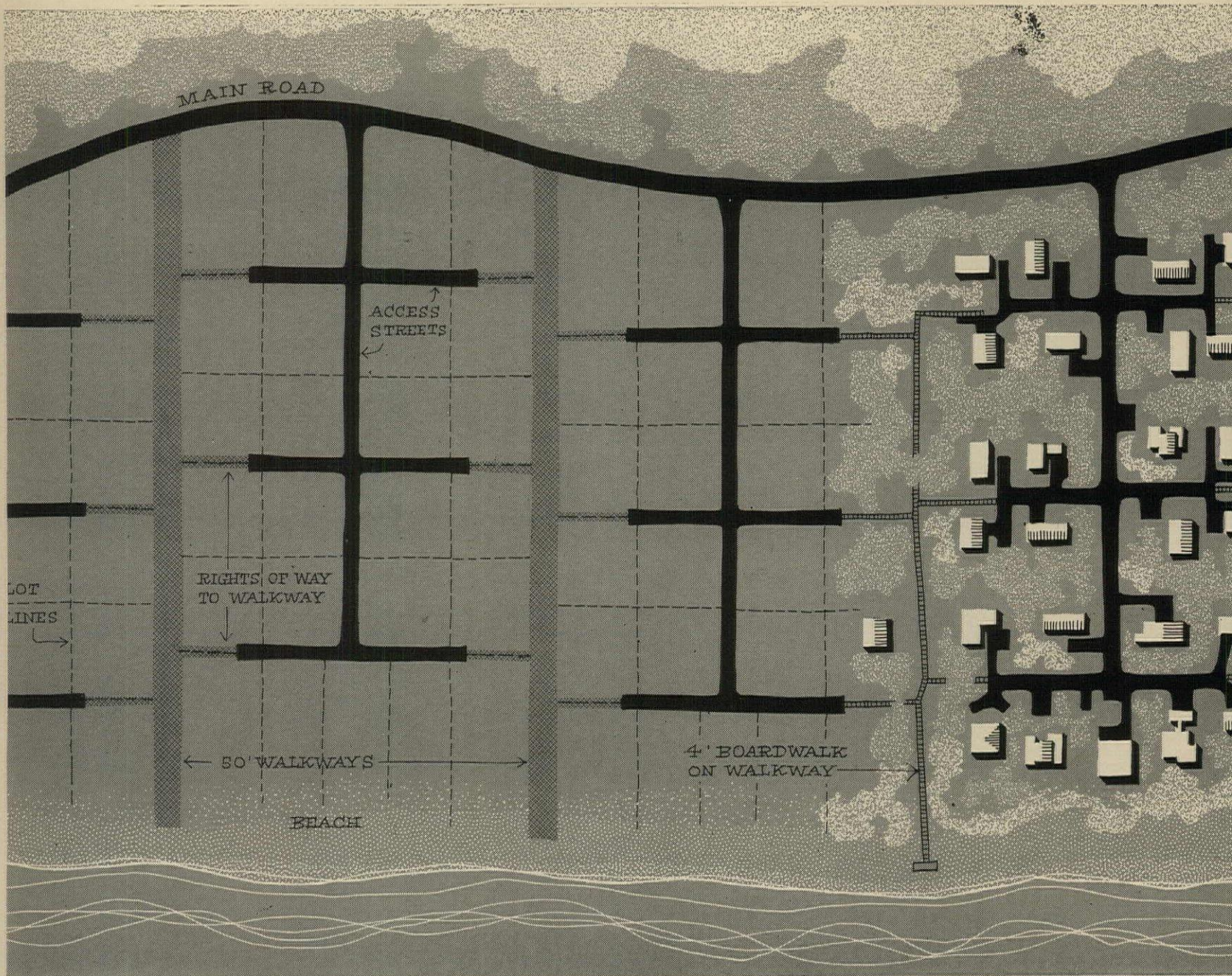
At Sea Pines Plantation, a 5,000-acre vacation development on Hilton Head Island, S.C. (35 miles from Savannah), these ideas have done more than create a good environment for buyers. They have provided the developers with important business advantages, both short and long term. Some of the advantages cited by Sea Pines' President Charles Fraser:

Land values have been high from the start—lots back from the beach sold for as much as \$7,500 before a single house was built.

Lot sales are brisk—well ahead of the projected 200-a-year rate.

And financing has been no problem—Fraser has been able to get all the money he has needed for development, both from local sources and from investment firms as far away as New York.

To see how the new planning ideas are being used, turn the page



PLAN OF CLUSTER LAYOUT shows basic scheme of roads, lots, and walkways at left; boardwalks, planting, and house positions at right.

Idea 1:

On the water, use a cluster plan to get

The cluster layout can put as many as six rows of lots on the "ocean side" of the main road—compared with the single row provided by most conventional land plans.

Sea Pines Plantation's cluster plan was laid out by Sasaki-Walker Assoc of Watertown, Mass. It has dead-end roads and branches leading in from the main road for car traffic, and 50'-wide walkways (with 4' boardwalks) leading back from the beach to the last row of lots.

"We call it an 'interlocking finger' plan," says Land Planner Hideo Sasaki. "Actually it's very similar to the cluster plan used in Radburn, N.J., 32 years ago. All lots are either on a walkway, or no more than one lot width away with a right-of-way across the intervening lot."

The net effect: since all lots are on the ocean side of the main road, the beach serves as a "village green" shared by all homeowners, and this increases the value of all the lots—especially those back from the water.

Here's why the land values go up:

Buyers feel there's a psychological advantage in being on the "ocean side of the road," even though they may be several lots back from the beach. Says Fraser: "There's less drop in prestige than there would be if you had to cross a road."

And there are practical advantages to being on the ocean side. The ocean can be seen from several lots back (see photo, bottom right), and both the roads and the walkways carry the breeze to the farthest lots. The short cul-de-sac roads present little traffic hazard, and pedestrian and auto traffic are well separated. And since the main road is quite a distance from the beach, there is less chance that tourists will invade homeowners' privacy to get to the beach.

There are also important advantages for the developer in the cluster plan: 1) Land can be developed one cluster at a time, putting lots of all prices (from \$10,200 for a beachfront



Andrew Bunn



WALKWAY TO BEACH is 50' wide, runs from oceanfront to rear row of lots, and provides traffic-free access to beach for houses on both sides. These strips are owned and maintained by the developer.

Frank Miller

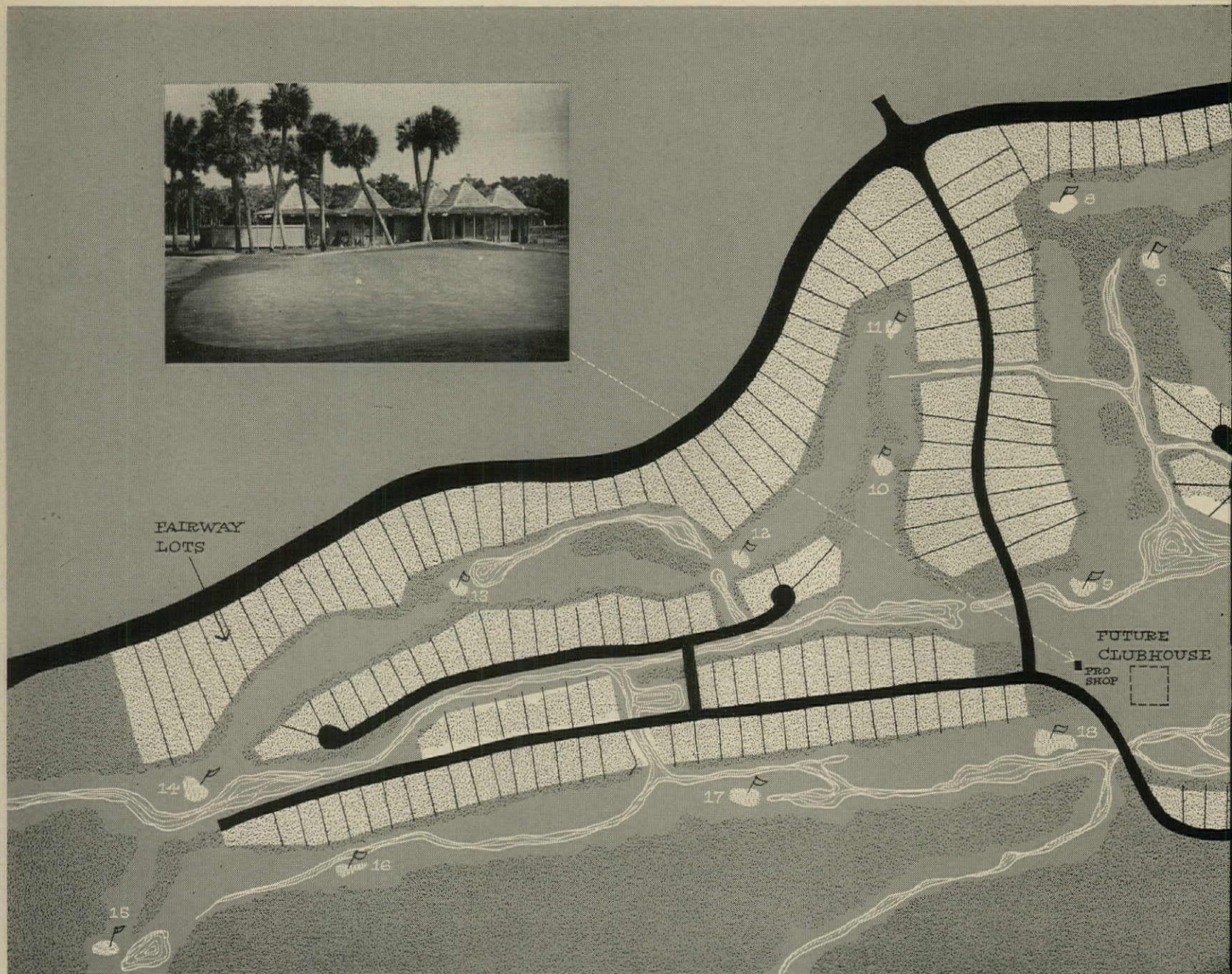


VIEW FROM BALCONY of second-row house shows how walkway opens up the view to houses back from the beach, leaves a corridor for the ocean breeze. Wooden boardwalk has not yet been built.

more premium lots

lot to \$3,500 for a back lot) on the market at one time. Although the two rows closest to the beach usually sell first, Fraser reports that an entire cluster can usually be sold out before the next one is opened up. 2) Future profits will be higher. Says Fraser: "As the whole community increases in value, our lot prices will rise too. By opening a cluster at a time, we maintain a balanced inventory of unsold lots—waterfront as well as back lots. With the traditional way of laying out lots, waterfront sites would be sold out almost immediately, and the increased value of the land could be realized only in the much lower priced 'wrong-side-of-the-road' lots."

The only drawback of the cluster plan: there is more road length per lot—about 25% at present. "But," says Wade, "this will drop to about 10% when we open the lots on the other side of the main road. And it's a small price to pay for the better plan and the increased land values we get from the cluster."



GOLF-COURSE PLAN puts building lots around every fairway, not just around the whole course. Inset shows fresh design of pro shop.

Idea 2: On a golf course, separate the fairways to get

At Sea Pines, as the plan above shows, almost every fairway is lined with lots on both sides, making a total of 304 highly desirable sites that sell for an average of \$6,000. And here again, the homeowners gain from shared, open green space.

Says Landscape Architect George W. Cobb of Greenville, S.C., who planned the Sea Pines course: "The key is to lay out the whole course as an integral part of the development, rather than set it off on a solid block of land. That way you get the maximum perimeter, which is the determining factor in the number of fairway lots you can have."

The golf course and the fairway lots were a chicken-and-egg development:

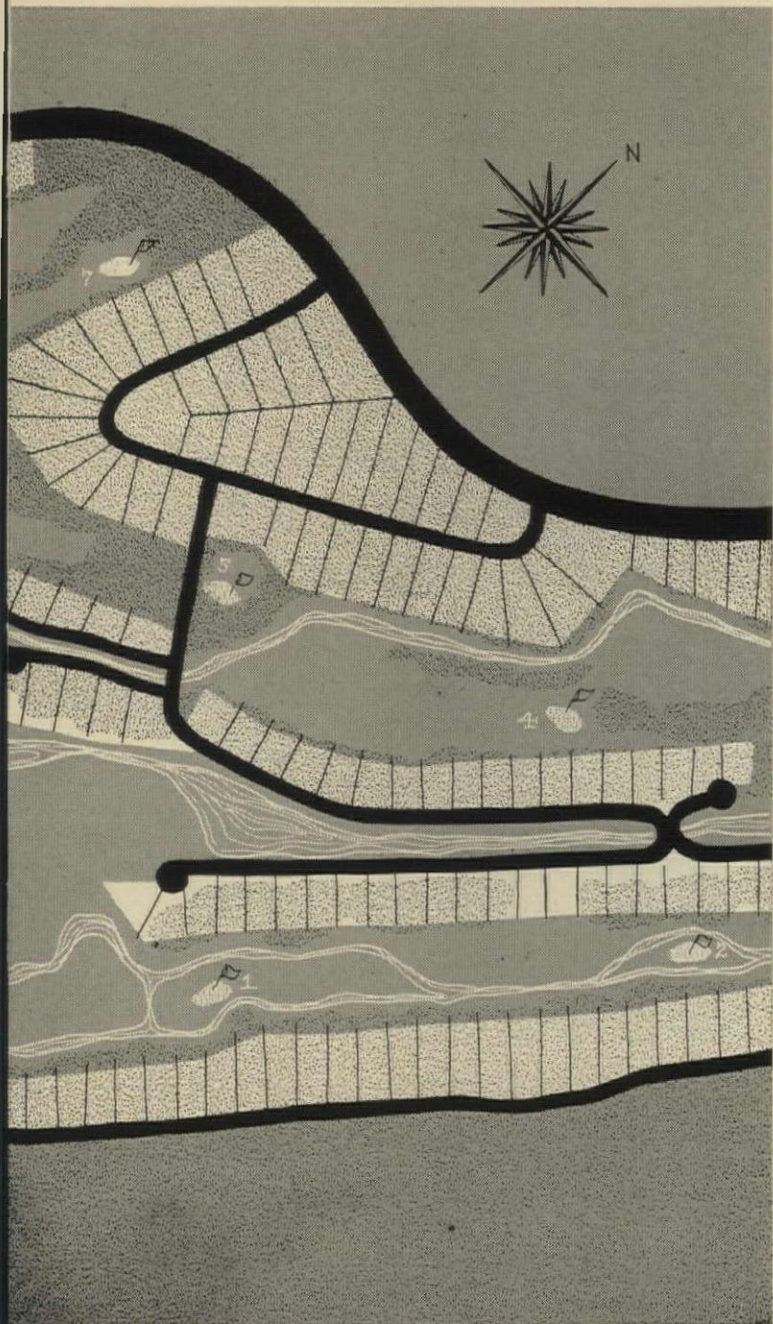
The lots made the golf course possible. Says Charles Fraser: "Any golf course is expensive, and this one especially so [about \$750,000] since it was built up from low, swampy land. We couldn't have afforded to build it except for the

almost \$2 million-worth of fairway lots we created at the same time. As it is, we will come out well ahead."

The golf course made the lots possible. Says Architect John Wade, Sea Pines' architectural advisor: "The land where the golf course—and the fairway lots—are located was virtually unsalable in its original condition. It was not only low and swampy, but it was too far from the beach. Now it is considered prime land, and the lots are selling very well."

All the actual improvement work was done on the fairways. Since they had to be in open land, they were located in the treeless areas or built up from the swampy sections (six fairways were made by filling in marshes). The good wooded land around the swamp was left untouched and set aside for lots. It required no earthmoving, and its drainage is taken care of by the golf-course drainage system.

(The development of the golf course was, however, not



Don Uhrbrock, LIFE



GOLF-COURSE FAIRWAYS are built on swampy land, useless for building lots. Course cost \$750,000, including drainage, pumping systems, and fill, but it more than paid for itself by raising land values.

Photos: Frank Miller



GOLF-COURSE LOTS bring premium prices (an average of \$6,000), made it economically possible to build the course. Most houses are sited close to the fairways for view, but are shaded by trees.

more premium lots

only a business proposition. "In one case," says Fraser, "we gave up twenty golf-course lots to save a lovely old magnolia tree we found while clearing some woods.")

The golf course has been an important sales asset in attracting golfing buyers to Sea Pines Plantation; but it has other less obvious but equally important advantages:

"We used to be a one-season resort," says Fraser. "People left when the swimming got cold. But the golf course makes us a year-round resort." There are two important results of this year-round operation: It helps the William Hilton Inn, Sea Pine's big resort motel, hold the 70% average occupancy rate it needs to operate in the black. And it brings in stores and other services that couldn't afford to set up for a four-month season, but are important to residents of Sea Pines Plantation, and a big sales feature for the company itself.



RAISED HOUSE has walls made of sliding glass doors to open house to view and to breeze. Long balcony serves as corridor in this simple plan.

Idea 3: **And keep enough control over design so houses**

At Sea Pines, all house designs must be approved by the company, and there is a strict set of restrictive covenants regulating the siting and maintaining of all property.

"We certainly don't want any regimentation of architecture," says Architect Wade. "What we do want are good design, materials and finishes that blend well with the land, and assurance for ourselves and our buyers that land values will stay high."

The five houses shown on these pages (all designed by Wade, though buyers may use any architect) show that Sea Pines' architectural control has not inhibited homeowners in their choice of design. But despite their varied exteriors, the houses have certain features in common:

All the houses are raised off the ground. South Carolina is in hurricane territory, and since all of these are beach houses, they are raised high enough so storm seas could sweep under them. In most cases, the expensive parts of the living areas are

put on the higher levels, the "expendable" parts, like carports and screen porches, on the lower levels. And foundation piers are designed and oriented to offer a minimum of resistance to water.

All the houses are built with similar exterior materials. "We prefer bleached cypress, redwood, pine, or fir," says Wade. "It looks good, lasts well, and fits the mood of the oceanfront. We use block and concrete masonry, but stay away from brick [except for Savannah 'gray brick' which blends with wood]."

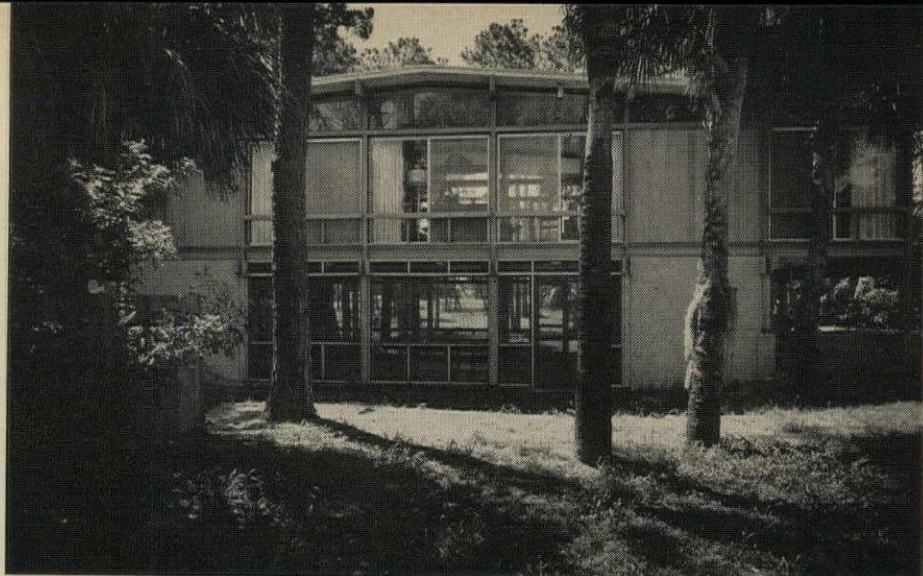
"We exercise the same kind of flexible control over siting as we have over design," says Wade. "For example, we generally require a minimum 10' setback. But where it makes sense—for instance, where it means saving a fine tree or helping a view—we have often gone to 5' or less. We try to avoid hard and fast rules."

The legal covenants are the direct result of Charles Fraser's belief that real estate can benefit greatly from intelligent re-

Photos: Frank J. Miller



SLANT-FRONT HOUSE shows freedom of design typical of Sea Pines. Slanted posts are main vertical supports.



TWO-LEVEL HOUSE has glass-enclosed upper level, screened-in lower level. In this house, trim and detailing minimize the raised house effect.



MERCHANT-BUILT MODEL is prototype of standard design that will be built to order in several areas of Sea Pines.

fit the community

strictions. "We don't want a lot of petty rules," says Fraser. "We just want the means to make sure the community is well and attractively kept up."

The covenants vary for the oceanfront, golf course, and other areas, but they are similar in principle. For example:

Minimum house areas are established for different lot locations.

Sites must be kept clean and clear of underbrush, or the company will do the clearing and bill the owner.

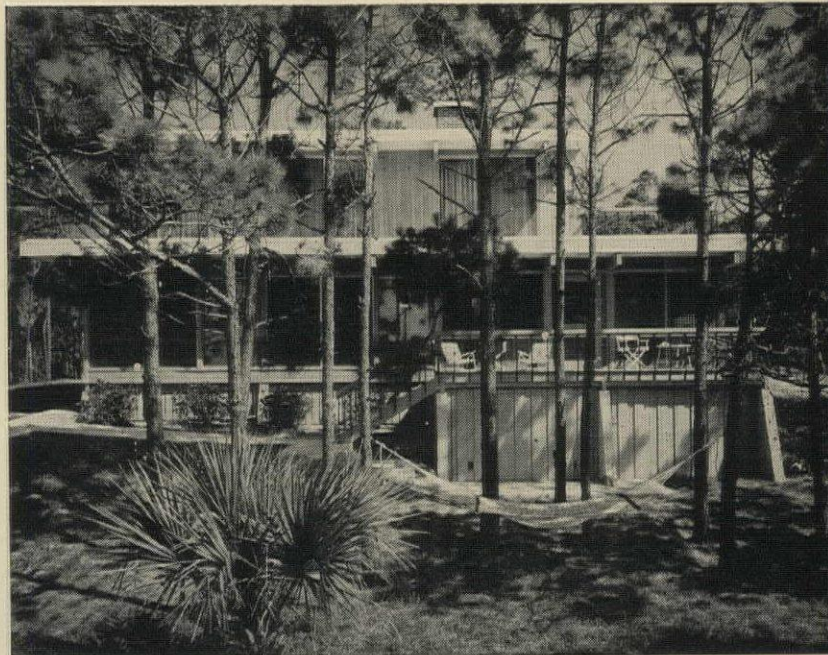
Screened service yards must be built for each house.

No tree over 6" in diameter may be cut without permission of the company.

No sand dunes on oceanfront lots may be lowered without permission of the company.

Undersides of raised houses must have finished ceilings.

Outdoor fires are not permitted on golf-course lots on days when the wind would cause the smoke to annoy the golfers.



THREE-LEVEL MODEL has two levels of enclosed living space, but, like other beach houses, is raised off ground on concrete piers.



OCEAN SIDE of house has large screened porch for most of its length. Lower level is also screened, has bath for "desanding" bathers.

Idea house: **This house set the pattern at Sea Pines**

Frank J. Miller



REAR ELEVATION shows fenced utility yard required by covenants.

It was the first house built in the new community (it is Developer Charles Fraser's own house). And Architect John Wade used in it most of the basic ideas that have since become standard for Sea Pines' ocean-front models. For example:

1. It is a raised house, built on four masonry piers that would let storm water sweep through the lower level without expensive damage. Says Wade: "It was sort of a test house that convinced people raised design could be attractive."

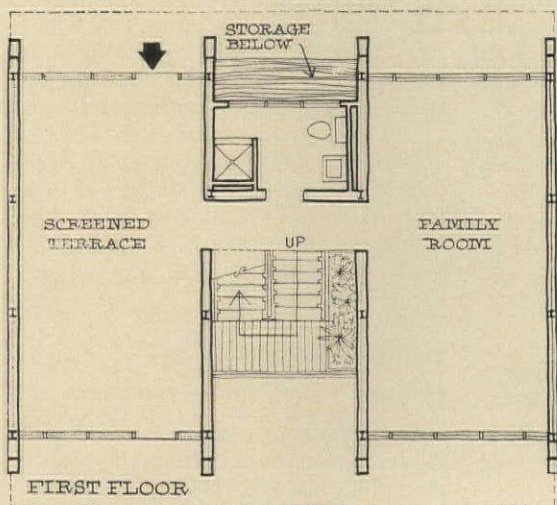
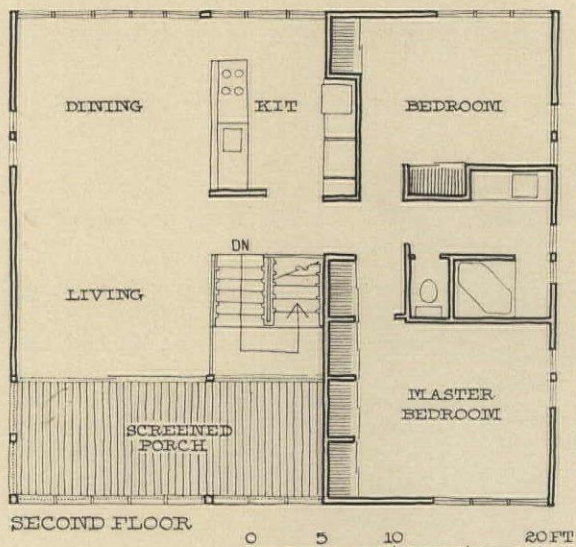
2. It uses the materials—bleached cypress and light masonry—that Wade thinks blend best with sand and trees.

3. It is a distinctly contemporary house. Says Wade: "We were fortunate in building the first two houses [the second is the slant-front house on *p* 157] for contemporary-minded owners. Now almost all prospects want contemporary design."

And it includes many ideas that make it a good vacation house—it is open to the breeze and view, has plenty of space for informal relaxation, and is easy to clean and keep up.



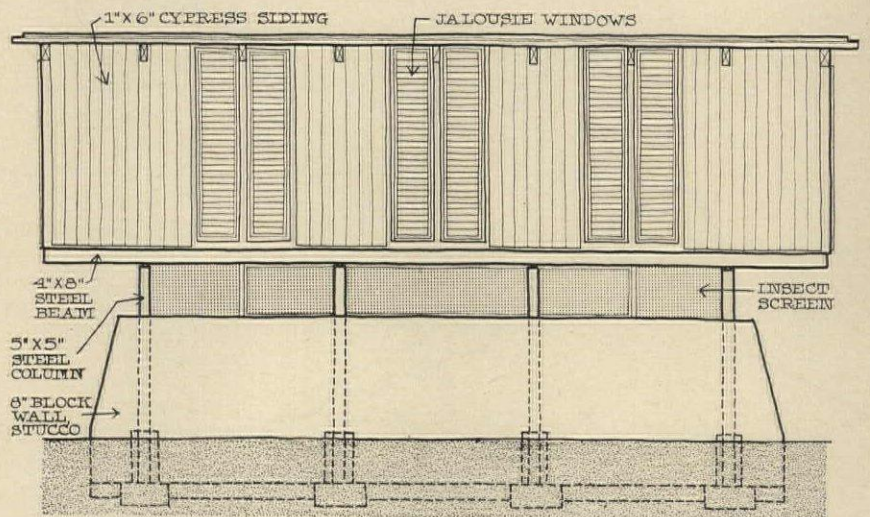
LIVING ROOM can be made part of the screened porch, background, by opening sliding glass wall. Stair leads up from screened terrace below.



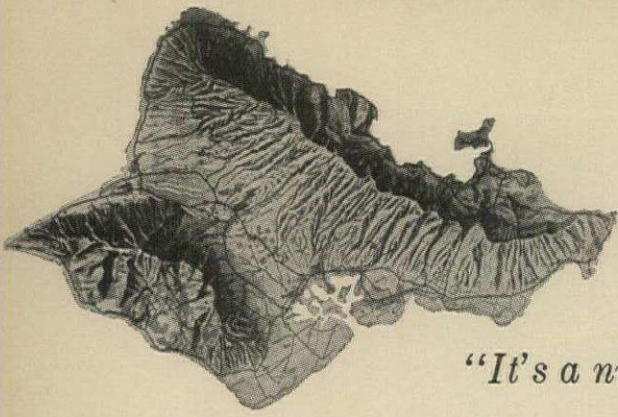
TWO-LEVEL PLAN puts expensive living facilities on upper level (top), areas that would be least affected by storm water on lower level (bottom).



DINING ROOM has jalousie windows to provide through ventilation.



SECTION shows basic structure. Steel I-beam posts are set in foundation walls, run all the way down to footings. Steel girders are welded across the top of posts. Space above wall allows extra light and ventilation into lower level.



"It's a nice place to visit—but I wouldn't like to compete there,"
 says House & Home's Carl Norcross.

Here is his first-hand report on . . .

HAWAII

where "a business boom
is bringing fast changes—and rugged competition—in housing"

I've just spent three weeks in Hawaii—touring new subdivisions and talking with housing professionals, including some mainland friends who've moved out there to try the US's newest market.

There's a lot going on in housing—and it's a reflection of a big, over-all boom in the islands. Hawaii is getting new business, new industry, and more tourists than ever. Last year alone personal incomes jumped 15%—the most of any state.

Statehood gave Hawaii the first big boost. Jet airplanes gave it the second. Honolulu is now only 4½ hours from the West Coast and as close to Chicago as San Francisco used to be in days of DC-7s. Even the East Coast is surprisingly close—coming home, I left Honolulu at 7 in the morning (New York time) and reached Idlewild at 5 that afternoon.

Before I go into details about the news in housing, let me generalize about the area.

First, Hawaii is small. On an enlarged map it may look as big as Alaska. But while Alaska is the largest state, Hawaii is one of the smallest—only

Connecticut, Delaware, and Rhode Island are smaller.

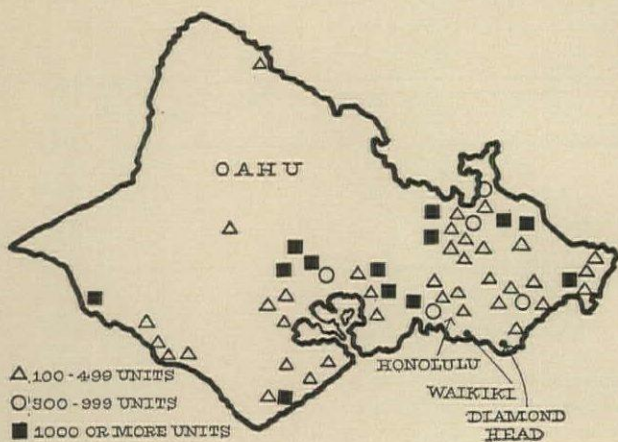
Second, while eight islands make up the State of Hawaii, only one, Oahu (which includes Honolulu, Waikiki, and Pearl Harbor), is important to housing. On the other seven islands the population is so small and scattered that only two towns have over 5,000 people.

Third, if you think of all eight islands together as small, then Oahu alone is just a dot on the ocean—22 by 27 miles. This small island has about three-quarters of all the people in Hawaii; most of the US military forces; most of the stores, hotels, and business; and most of the jobs. Its population is 500,394 (including 50,000 military) and is expected to reach 650,000 by 1970. So from now on I'm talking about this one island of Oahu where the housing market is different from any other I know about.

**The first big difference:
 you can't buy land—you lease it**

But you can't even lease it if the big estates don't know you well—and if they don't like your plans.

If you read James Michener's "Hawaii," you know that descendants of the old missionary families intermarried with Hawaiian royalty and gradually



MAP OF OAHU shows locations of 55 major subdivisions (over 100 lots each). More than 60,000 lots are being planned on the island.

inherited much of the land. Today even the taxi drivers repeat the wise-crack about the missionaries: "They came to do good and they did real well."

You can judge how well they did by the fact that throughout all the islands the 12 largest owners have 30% of all the land and 52% of the privately owned land. Another 43 owners have an additional 15%. The state and federal governments own 40%. This leaves only 15% for all other private owners. On Oahu the big estates own so much of the land that if you are a builder you must deal with one of them. No one else has a piece big enough to do you any good.

Over the years a number of the estates were converted to trusts, which had little incentive to sell land. It became the practice to lease land for homesites, much of it on a 55-year basis. The homeowner pays the real estate taxes plus an annual ground rent that averages 3½% of the lot's market value. Today at least 95% of the land in the big subdivisions is leased land.

But for a long time some land has been owned outright. And even now the big estates are selling some land—usually a small proportion of a land deal—to builders who in turn sell this fee-simple property along with the houses they build. For example, Tom Lively's Centex operation (see box, right) has a small portion of its project (less than 10%) in fee-simple land.

The men who represent the estates are as cautious as Vermont bankers. Builder Bill Blackfield told me: "They don't deal with strangers. I spent two years here just getting acquainted and learning my way around before I even tried to lease any land." A builder not only has to prove he is reliable and well financed, but he has to come in with a good land plan and with house designs that suit the landowners. "The people I deal with even tell me what roof pitch I can use," one builder complained.

Part of the ground rent paid by homeowners is kept by the builder-developer. The more a developer spends for land improvement, the bigger his share of the rent. (The average is 25% to 50% but one builder told me he gets 90%.) And developers are spending plenty to improve land. Example: all the large new subdivisions will have underground wiring (which costs about \$300 a lot).

House construction is different from any you've ever seen

Because of the mild weather, most construction is single-wall—usually t&g redwood boards ¾" or 1" thick.

Here is how a typical Hawaiian house is built: 1) A wood platform is built over crawlspace. 2) Corner posts and a jungle of 2x4s (as temporary roof supports) are erected on the platform. 3) The roof is built. 4) Siding is nailed in place top and bottom. 5) Temporary roof supports are removed. So, except for a main bearing wall, the siding holds

up the roof. You have to see it to believe it. But it works and both FHA and the mortgage lenders approve it.

About 60% of house buyers are of Japanese, Chinese, Philippine, or Hawaiian descent. By inheritance, they like wood floors and crawlspace construction. But there is also a new trend to slab construction—practically all the mainland builders now operating on Oahu prefer slabs, and all the large new houses I saw were on slabs.

Many years ago there was a plague spread by rats, and the board of health still makes builders put down a rat wall—a thin concrete footing below the slab. If builders use crawlspace, the floor must be at least 24" off the ground, and the crawlspace must be open enough so inspectors can see that it is kept clean.

Here are some other distinctive characteristics of Hawaiian construction:

1. Builders pay more attention to wind direction than in any place I've been. Winds are often strong, and even the lowest-priced houses are sited so that porches, patios, and lanais are on the sheltered side.

2. Most houses have wide roof overhangs (and jalousie windows) on all sides. Hawaii is warm and humid, so people want to leave their windows open without worrying about rain coming in.

3. Hawaii is the only place I've been where houses have no heating systems. Few houses have fireplaces, and the few fireplaces are rarely used.

Building costs are even higher than in Cleveland or Chicago

With Hawaii's vacation-type construction (no heat, no insulation, single walls), you'd expect to see big houses for little money. But the reverse is true: You see little houses for a lot of money. A typical 1,000 sq ft house sells for \$20,000—on leased ground. If the buyer wants to own his lot, he pays \$5,000 to \$10,000 more.

Local appraisers say houses are about 20% more than in typical California cities, but people who have lived in California would tell you they are much higher than that. Centex, for example, sells a 1,056 sq ft house plus carport and porch on leased land for \$20,700 to \$21,300.

Everyone agrees that prices are high, but everyone says, "It's not my fault." What are the reasons?

For years a scarcity of land and houses has made Oahu more of a seller's market than any market on the mainland, so there has been little incentive to get prices down.

Everything in the house costs more. Land is rough and development costs are \$2,000 a lot higher than in some mainland cities, according to Dave Slipher, general manager of Henry Kaiser's big Hawaii Kai subdivision. De-

These men and firms play key roles in Hawaiian housing

BISHOP ESTATE is the largest land-owner in the islands. It develops land, builds houses, leases land to other builders, and has its own realty division.

BILL BLACKFIELD, national treasurer of NAHB, is a big California builder who last year built 540 houses in Hawaii. He has several subdivisions and will soon start to build shell houses.

CENTEX CONSTRUCTION Co, giant mainland firm headed by Tom Lively, has one of Hawaii's biggest developments—a 13,000-acre tract with houses priced from \$17,000 to \$23,600—and also sells lots to other builders.

CHINN HO, partner of Developer Lou Perini at Marin Bay near San Francisco, heads Capital Investment, which will soon develop 12,000 acres on Oahu.

ED FITZSIMMONS, formerly in Massachusetts heavy construction, began building in Hawaii before World War II and is now building expensive houses at Hawaii Kai (see below) and lower-priced houses in his own tracts.

HICKS CONSTRUCTION is reported to have built 330 houses—some shell and some finished—on Oahu last year. He also builds on other islands.

HIRANO BROS built 285 houses last year and has a 1,400-lot tract in partnership with suppliers Lewers & Cook.

HUNG WAI CHING has been Hawaii's fourth largest builder for the last five years.

HENRY KAISER, big mainland industrialist, is developing Hawaii Kai—a 5,762-acre planned community which, in ten years, will provide homes, recreation, and employment for 50,000 people. Dave Slipher heads Kaiser's Hawaiian operation.

Q. C. LUM builds 400 to 500 houses a year—often in groups of 45 to 50 in several locations. Prices: around \$17,500.

TOM McCORMACK, a realtor, will soon start a 1,500-acre waterfront development on Bishop Trust land. It will include a marina and 60 acres of apartments.

NIU ESTATES, a partnership of six builders, is building \$30,000 architect-designed houses in a new 204-lot subdivision.

PACIFIC BUILDERS, a custom-house firm, built 62 last year—some for \$75,000 or more.

JOE PAO heads Hawaiian Pacific Industries, the biggest homebuilder in the islands. His firm has 18,000 acres in several locations, is aiming at 1,500 houses this year (\$16,800 to \$40,000).

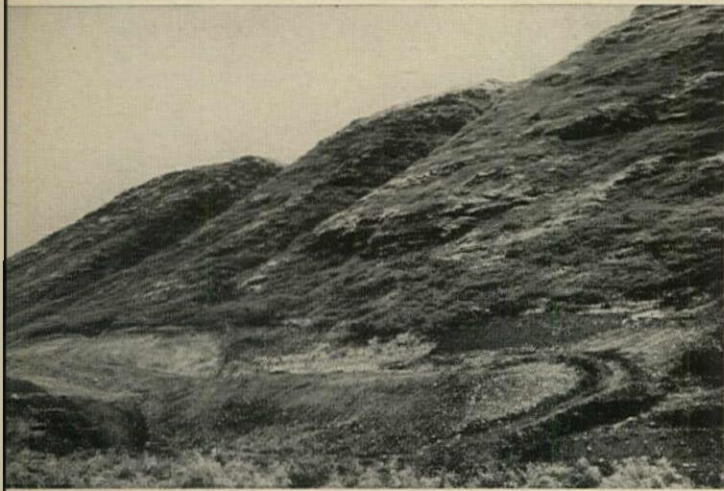


H&H staff

"Many subdivisions have spectacular backdrops"

This street—with mountains in the background—is in Bill Blackfield's Olamana subdivision. Blackfield built 630 three-bedroom, 1½-bath houses and sold them for about \$20,000 on leased land.

H&H staff



"The terrain is exciting—but tough to build on"

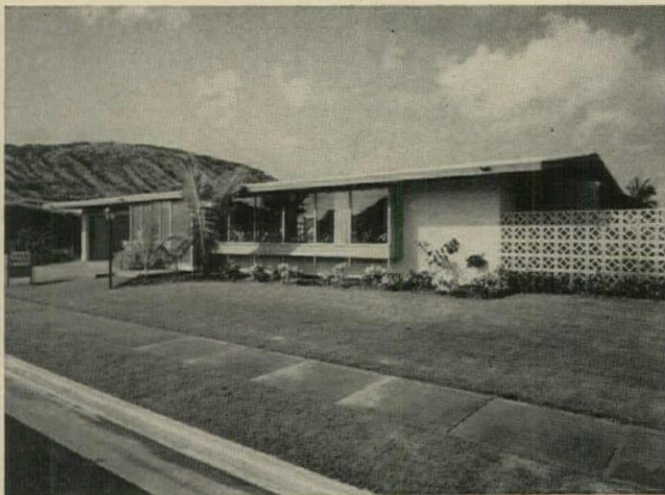
If you look closely, you'll see two bulldozers working halfway up this slope—cutting roads and making pads for houses. Rugged land like this is one reason why development costs are high.



"Prices of houses like this have doubled in seven years"

Builder Ed Fitzsimmons sold this house for \$11,500 in 1954. Today houses exactly like it—and built at the same time in the same subdivision—are changing hands for \$24,000.

Photos: R. Wenkam



"Here is one of Henry Kaiser's higher-priced models"

It sold for \$41,000, and was designed by Design Assoc, an architectural firm which does houses for several merchant builders. Photo at right shows sliding shoji that can be used to close off the entry court.



velopment costs alone run to nearly \$1 a sq ft. Part of this high cost is blamed on stiff and obsolete municipal requirements.

Practically all items used in building a house are shipped in. This means not only extra shipping costs but also extra handling, extra warehousing, and extra financing. Shipping lines and building material firms are said to have monopolies—when suppliers finance a builder and arrange for his 1% completion bond, the builder becomes their captive. Local taxes add another 7½% to costs. Labor is unionized. While hourly rates are somewhat less than in California, production is less efficient. (Bricklayers get \$3.40, carpenters \$3.40, electricians \$3.85, plasterers \$3.52, laborers \$2.50, plus benefits.)

In fairness to the builders, it should be said that high costs are not limited to construction. Everything a family buys costs more except pineapples and papaya. Military families told me Hawaii is the most costly area they've ever seen. The government recognizes high costs by giving civil service employees a 17½% nontaxable cost-of-living bonus.

No one is doing more to trim costs than Kaiser. He built his own cement plant in order to make wide use of concrete instead of imported lumber. He will use concrete not only for slabs but also for walls, partitions, and even roofs. His block walls will be laid up with epoxy adhesives. Blocks will be 12x6x16 instead of the usual 8x4x16—grinders at the plant will shave the top and bottom by 1/32" to smooth the blocks for the adhesive. When Kaiser's production gets rolling, General Manager Slipper hopes to sell a 1,250 sq ft house for around \$17,500. (Kaiser's first houses, now being built on high-priced land, are handsome architect designs priced from \$28,450 to \$43,250.) Said Chinn Ho, one of Kaiser's competitors: "I think Henry Kaiser will help us all get our costs down."

The housing market is full of paradoxes

For example:

1. Despite a big need for lower-priced single-family houses, they are not being built in nearly the volume of mainland boom towns.

Last year—the best year builders on Oahu have ever had—4,189 houses were built (the figure was 3,591 in '59 and 3,061 in '58). But from now on about 7,000 houses a year will be needed, according to State Planner Frank Lombardi. I was told that a Stanford Research report says there is a market now for 12,000 additional houses—half of them under \$16,000.

The market is under-built because builders can't get their costs down. Both builders and bankers told me sales would go up fast if good houses could

be produced for \$16,000 or less. That fact was demonstrated last year by Hicks Construction, which built 330 houses—mostly shells on owners' lots.

2. Despite its warm climate, Hawaii is not a retirement area. And it won't be until prices of houses and food go down. One mortgage man told me: "People can't retire here unless they have \$700 a month." An Army sergeant said: "After living in San Antonio, we couldn't afford it here. You'd have to be a field-grade officer at least."

But the retirement potential is great. The number of tourists is doubling every four years, and undoubtedly many who come for short winter visits will eventually stay year round.

3. Despite the need for lower-price houses, Hawaiian buyers have surprisingly large savings. Down payments of 25% are common, and many families pay more.

As Michener points out in "Hawaii," families of Oriental descent (the bulk of Hawaii's population) are unusually thrifty. They build up their savings before buying and, as a result, can often get larger mortgages than other families at the same income level. And, if a young Chinese-American or Japanese-American family runs into financial problems, it is customary for relatives to help out (mortgage foreclosures in Hawaii are less than 1%, according to Bill Blackfield). Also many Hawaiian wives work, and Hawaii is one of the few places where FHA raises no question about counting the wife's earnings.

But, builders told me, terms and down payments are still important. As Builder Joe Pao put it: "It's the financing that sells our houses."

4. And despite the need for lower-price houses, houses at \$50,000 and up sell surprisingly well. In a plush subdivision developed around a country club by Bishop Estate, the average house costs over \$55,000 (plus lot) and some were as high as \$125,000. The developer leased 140 lots so fast, you'd think they were the only good lots in town. The average lease price was \$6,850 (plus an annual rental of \$155 and taxes). And leases on vacant lots were soon changing hands at anywhere from \$10,000 to \$20,000.

House and land prices are skyrocketing

"Real estate here is like uranium stock," said Builder Bill Blackfield. "I know of one apartment site where the price of the land jumped from \$1.25 a sq ft in 1950 to \$24 a sq ft last year."

Said State Planner Lombardi: "Prices today reflect an assumed value 20 years from now."

Ed Fitzsimmons was just one of several builders who showed me examples of skyrocketing house prices. Items:

Houses he sold in '56 and '58 for \$16,500 to \$17,000 have been resold for \$45,000 to \$50,000.

A house he sold for \$25,000 resold recently for \$65,000.

A house that brought \$14,500 when Fitzsimmons built it four years ago changed hands last year for \$75,000 after the original buyer made a \$5,000 addition and built a \$3,500 pool.

Apartment construction is booming—but the boom has passed its peak

Of 16,000 units built since 1950, over 13,000 have been built in the past five years. Construction zoomed from 1,649 in 1957 to 2,455 in '58 and to 5,252 in '59—1,700 more than single-family starts. But last year it dropped back to 3,193. Now the market is over-built. I was told there are 2,500 vacant apartments in and around Honolulu, and half a dozen big apartments are still under construction.

The apartment boom has been fed by Hawaii's get-rich-through-real-estate spirit. All the natives (and that includes everyone who's been there six months) are convinced that any piece of property is sure to go up in value. I heard that half the buyers of co-op apartments—and most apartments are co-ops—never intend to live in them. They hope to sell them at a profit when the building is finished or rent them to tourists. At a party one night I met three hotel managers who admitted that co-ops rented to visitors were hurting their business.

Bill Blackfield told me: "People rush in to buy co-ops without even bothering to find out there may be a \$450 monthly additional charge. All they know is that property is going up."

Some of the new apartments I saw were very fine. They had big windows, wide balconies, big closets, swimming pools, good parking, and, above all, impressive views of Diamond Head and the Pacific. But the prices were as impressive as the views. In one two-bedroom co-op the price was a staggering \$85,000. "These are Park Avenue prices," I told the renting agent, who gave me a kind of boy-from-the-country look and said, "Yes, but this is a big apartment—2,500 sq ft—and look at our view!"

What Hawaii needs most is good townhouses (H&H, July)—the best way to cope with high land costs and to meet the need for higher-density housing. It is hard to believe, but Oahu already has more people per square mile than Japan or Great Britain.

Blackfield remarked: "I could save \$3,400 per lot on land development alone if I could build townhouses." Kaiser and others would also like to build them. Honolulu's city planners told me they are opposed to row housing because they fear it will look like

continued



"Custom houses capitalize on magnificent settings"

This A-frame house is a good example. Much of it is closed (above) to the road, but all of it is open (right) to a view of the ocean and mountains beyond. The house was designed by Architects Lemmon, Freeth, Haines & Jones.



Photos: R. Wenkam



"Here is the kind of custom house that sets an example for Hawaii's merchant builders"

This house, with its glass walls opening to terraces and views (ocean is out of photo at right), was designed by Architect Vladimir Ossipoff.

the worst of Philadelphia or San Francisco. Obviously they don't know how attractive good townhouses can be.

Grade-A merchandising has been almost nonexistent

Business has been so good until this year that no one needed to merchandise. Model houses have been furnished poorly or not furnished at all. Landscaping has been scanty. And the houses themselves have been as small as builders could get away with. "It's as though builders got together and agreed they wouldn't give more than a certain amount of house for the money," a realtor told me.

I was surprised by how little the merchant builders do to capitalize on the lanai—the best example I've ever seen of true outdoor living rooms and something that every Hawaiian family wants. Instead of a lanai, many builders are content to throw in a minimum-size porch or no porch at all. And if they have a sliding glass door to a rear terrace, they may put in a small slab of concrete, but chances are there is only dirt, not even grass. When I asked several salesmen about this they said, "Oh, every family wants to finish their lanai to suit themselves. They'll fix it up." And of course they do fix it up. Everything grows so fast that within a few months the grass is up and plantings are high enough to create privacy fences.

But as competition gets tougher, merchandising is bound to improve. Builders like Fitzsimmons, Blackfield, Centex, and Kaiser—who have come from the mainland—are already setting the pace. Fitzsimmons, for example, has just finished a *Better Homes & Gardens* Housing Forum house and is building a Horizon house in the Portland Cement Assn promotion program.

Everybody is in on everybody else's deal

I've never seen a place where builders had so many partners. Maybe it's the Chinese influence (ever know a Chinese restaurant owned by just *one* man?). The Chinese name for these family or close-friend partnerships is *hui*, and Hawaii is full of *huis* or joint-ventures.

Biggest-builder Joe Pao is typical. In 1946 he had half a dozen partners including two uncles and two brothers. In 1950 he organized a ten man syndicate to develop land. By 1955 he had 23 partners, and two years later he added five more. And last fall his firm—Hawaiian Pacific Industries—became a publicly owned company.

His board chairman is Judge A.E. Steadman who is also board chairman of the Cooke Trust Co, vice chairman of the Bank of Hawaii, vice president and director of the Hawaiian Commercial and Sugar Co and of other local firms.

Centex has a joint venture with developer Paul Trousdale. Bill Blackfield has different partners in different subdivisions. Niu Estates has half a dozen builder-partners. Realtor T.F. McCormack has several partners. Often a builder's partners are the big estates or sugar companies which have long-term leases on land. Building suppliers are silent, but strong, partners in many deals. Probably rule No. 1 for new builders would be: Get yourself some big, rich, landowning partners.

Realtors play an even bigger role than on the mainland

On two Sundays I studied house and apartment ads in Honolulu's two newspapers—at least 90% were signed by realtors. And at subdivisions I found realtors were doing most of the selling.

Typical is Kaiser's Hawaii Kai. You might think that a man who processes his own aluminum, gypsum, steel, and cement would also want to do his own selling. But Kaiser's sales are handled by Realtor Alex Castro.

Why? "Because he understands the market so well," said Dave Slipher, Kaiser's general manager. "And if there are trade-ins, he can handle them."

At Niu Estates, Realtor George Hasegawa does the selling. The principal backer at a big subdivision owned by Heeia Development Co—and the man who will handle sales—is Realtor McCormack. Builder Blackfield sells through several realtors. Big landowners like the Bishop Estate and big builders like Centex and Joe Pao (a realtor before he turned builder) have their own realty firms.

Custom houses set a fine example for merchant builders to follow

Honolulu probably has more well designed custom houses than any mainland city of its size. A dozen or more talented architects have been working there for years and, unlike many architects in most cities, are happy to design single-family houses. As a result, this is the place to go to see the originals of "Hawaiian" or "Pacifica" design.

Even the island architects won't get caught trying to define Hawaiian architecture. . . . so I won't either. One feature is the handsome roof with big overhangs all around. But what most impresses visitors is the lanai, which is truly an outdoor living room. It is roofed over, often enclosed on two or three sides, nearly always screened for privacy by plantings, and oriented for protection from the island's strong winds.

Several builders have commissioned architects to design their houses. In fact, Dave Slipher believes a higher proportion of builders use architects than in any other city. A number of builders live in very fine custom houses and know firsthand what a good house means to family living.

Life for builders used to be easy—but not any more

Until last November, almost any house would sell. Now it's different. "Around election time the market ground to a screeching halt," said Builder Ed Fitzsimmons.

The slowdown reflected the mainland recession, as well as the steady rise in building and land costs. But business is still rosy for two of the largest builders: Centex and Joe Pao. Pao reported he sold 616 houses last year and told me he hopes to sell "1500 or more" this year (but other builders doubt he'll make it).

And young Jerry Crossen, recently moved from Dallas to head up the Centex operation, sounded like the happiest builder on the island: "After the competition in places like Dallas and Boca, it's wonderful to be working here. We have 244 lots in one of our subdivisions where we'll build fee-simple houses, and we may sell all 244 before we get the models finished." Centex reports its leasehold houses are selling well, too—"profits are as good as in Chicago."

Oahu is like the competitive areas in Florida, Arizona, and California. There is still plenty of business, but too many builders want a big share of it. In fact, enough lots are now being planned or produced to take care of all the house buyers until 1970. So a real scrap for the market is developing.

An outside builder's chance of getting in is very slim

A new builder's biggest problem is to get land. When I asked Joe Pao about mainland builders moving in he grinned and said, "There is no land for out-of-state builders. I've got it all tied up."

Said Al Dow, chief engineer and coordinator for the Bishop Estate: "A builder coming out now would find it pretty hard to break in."

Said Dr Thomas Hitch, chief economist of the First National Bank in Hawaii: "Yes, it's still possible for a builder to break in here, but only if he can sell a better house for less money and that's hard to do."

Getting good subs is also a problem because the local subs have had trouble with some mainland builders—especially on Capehart jobs.

Some developers will provide lots for builders they consider outstanding. Slipher is selling lots in the high-priced area of Hawaii Kai to Ed Fitzsimmons.

Another big subdivision, to be started soon by Realtor T. F. McCormack, will invite some builders to come in. And Chinn Ho's Capital Investment Co, which has 5,400 acres around Makaha, may welcome some new builders when the subdivision is started. Centex also sells land to other builders.

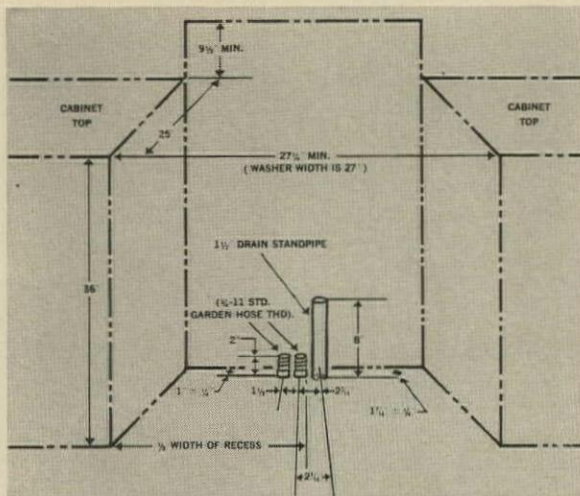
Clearly the easiest way—and perhaps the only way—for a new builder to start is under the protective umbrella of a big developer.

/END



MODEL WA-1050V

Install the new General Electric Filter-Flo® Washer flat against the wall...and save valuable space!

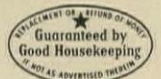


The General Electric 1961 Filter-Flo Washer may be installed flush-to-the-wall, as shown above, with special Installation Kit which is available from the General Electric Distributors. The kit contains drain hose, drain air-brake and complete, detailed directions.

To give your kitchens or utility rooms a custom-built effect—all hose and plumbing connections are recessed—in most models in the new 1961 line. Every Filter-Flo model is counter height and depth, 36" by 25". And that's what the ladies love today!

They'll love the new 12-lb. capacity, too—20% more than in previous models and now found in every model. A typical 12-lb. load is 3 double sheets, 4 pillowcases, 3 men's shirts, 4 T-shirts, 3 heavy bath towels, 5 washcloths, 12 handkerchiefs—tablecloth. Every piece gets piece-by-piece washing action.

And, you can promise the quality and dependability only General Electric delivers. Ask your General Electric Distributor for complete information. Or write to the General Electric Home Laundry Dept., Room 207C, Bldg. 1, Appliance Park, Louisville 1, Ky.



Progress Is Our Most Important Product

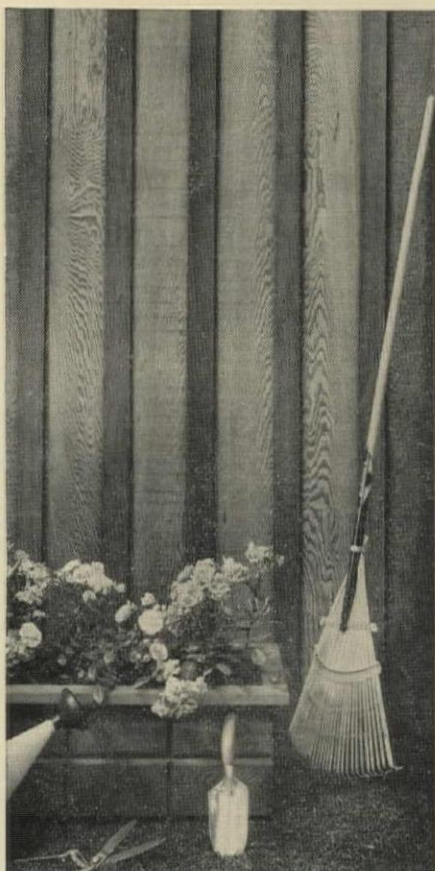
GENERAL  ELECTRIC

Be sure to see **NEW WAYS** **TO BUILD BETTER**

A monthly report on homebuilding ideas, products, and techniques

Starting here

New products

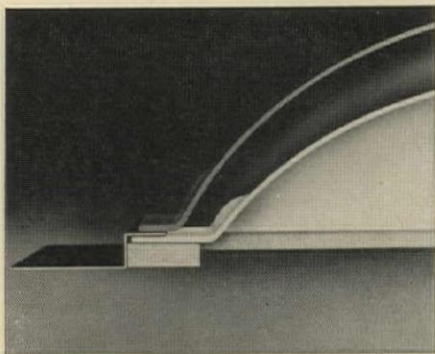


Resawn redwood is now being used by Simpson to surface all-redwood plywood. Matching rough-sawn battens are marketed with the plywood for board and batten jobs. Ruf-sawn comes in 16", 32", and 48" widths, 8', 9', and



10' lengths, $\frac{3}{8}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " thicknesses. Panels $\frac{1}{2}$ " or $\frac{5}{8}$ " thick can go directly on studs 24" oc, $\frac{3}{8}$ " on studs 16" oc. Retail price: about 23¢ a sq ft. Simpson Timber Co, Seattle.

For details, check No. 1 on coupon, p 202



Self-flashing dome in double, insulating type is now available from Wasco. Twin Dome is completely sealed. It needs no curb, can be nailed to deck through the aluminum flange. A 1" dead-air space between acrylic domes acts as thermal barrier, prevents condensation. Skylights come 20" x 20" to 64" x 96" in any combination of clear, translucent, or reflective domes.

Wasco, Cambridge, Mass.

For details, check No. 2 on coupon, p 202

And on the following pages

Technology

Mushroom house tests new methods and new materials...NAHB digs for inefficiency in Bob Schmitt's efficient operation. . . . New prefinished wood siding system. *see p 169*

What the leaders are doing

New prefabricated units for apartments and rowhouses. . . . Lender-backed trade-up plan makes trade-in catch hold. . . . Built-in foldaway model railroad. . . . Easy-to-move sales office. *see p 177*

Publications

New full-color film shows uses of ABS plastic pipe. . . . Title insurance film. . . . Catalogs on building products, hardboard, exposed beam construction, kitchen accessories, etc. *see p 200*

More New products

What you should know about water softeners. . . . New lighting lines, spray equipment, tools, drawers, temporary shelters, etc. *see p 192*

Vinyl coated aluminum siding means fine appearance easy maintenance...



Vinyl coated aluminum siding will help Seaway Terrace—modern Milwaukee apartment house—remain attractive and maintenance-free. Siding by Lumaside, Inc., 2321 Capitol Drive, Milwaukee, the architects were Miller and Waltz, Milwaukee.

And you can add easier renting, because of wide public acceptance of vinyls. It's the only aluminum coating that still looks like new after over 11 years on a home . . . and after 15 years' exposure on Florida seacoast test panels.

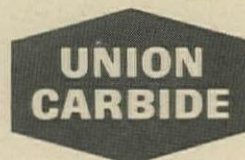
The flexibility and excellent adhesion of the vinyl coating permitted holes to be drilled and outside fixtures bolted to the siding without it chipping or cracking.

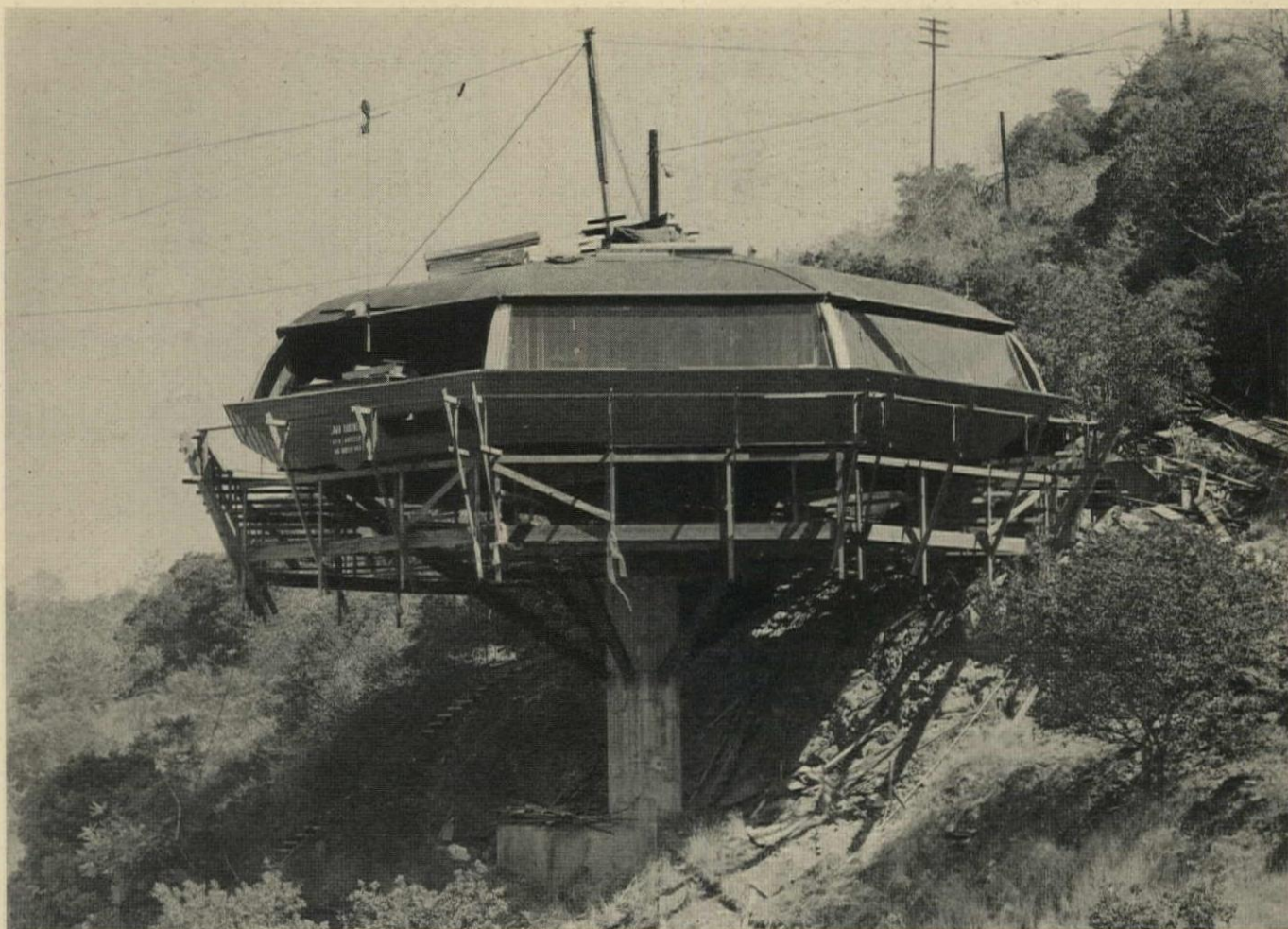
It's another fine example of the broadening use of vinyl coated aluminum siding by builders and

developers everywhere . . . for apartments, housing projects, and private homes.

For more information about vinyl coated aluminum write to Dept. JU-68H, Union Carbide Plastics Company, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, New York. *In Canada:* Union Carbide Canada Limited, Toronto 12.

BAKELITE and UNION CARBIDE are registered trade marks of Union Carbide Corporation.





STEEP HILLSIDE is site of octagonal house (shown under construction) supported by single concrete column that minimized excavating.

Mushroom house tests new methods and new materials

A single hollow column of reinforced concrete—30' high and 5' in diameter—supports this 2,200 sq ft house on a hillside in Hollywood, Calif.

And the rest of the construction is just as unusual. For example:

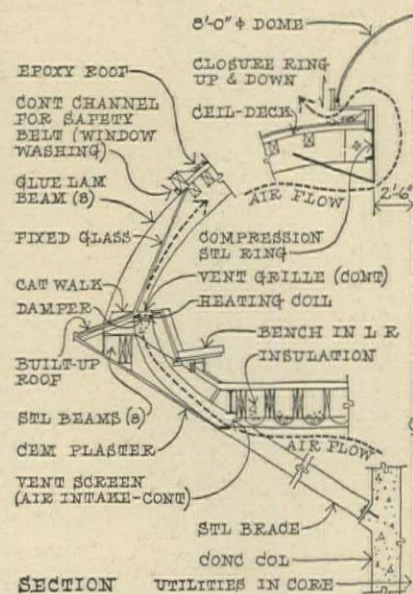
1. An epoxy adhesive binds and seals the supporting column to the concrete pad foundation—and thus eliminates

the need for monolithic construction.

2. The house is framed with steel and laminated-wood beams (see drawing). The wood beams are kept from spreading by a steel compression ring that surrounds an 8'-diameter plastic skylight at the roof peak.

3. The roof is panels of composition wood pulp "joined" and sealed with fiberglass and epoxies.

The all-gas, four-bedroom, two-bath house was sponsored by Chem Seal Corp and Southern California Gas Co. It was built by John De Le Vaux and L. J. Malin (who is also the owner) and designed by Architect John Lautner.



CROSS SECTION shows how roof beams tie into steel framing and top compression ring.

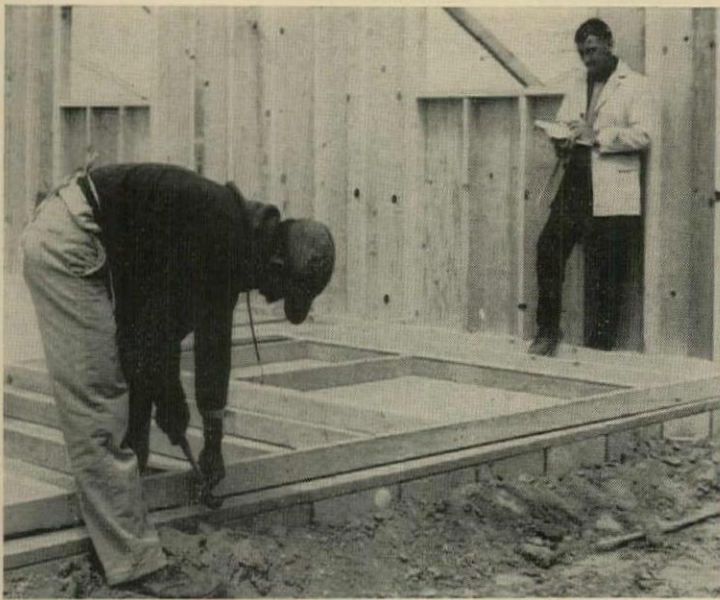


STEEL BRACES tie floor framing to supporting column. House is 60' in diameter.

More news of technology

New NAHB study digs for inefficiency in builder's efficient operation... p 170

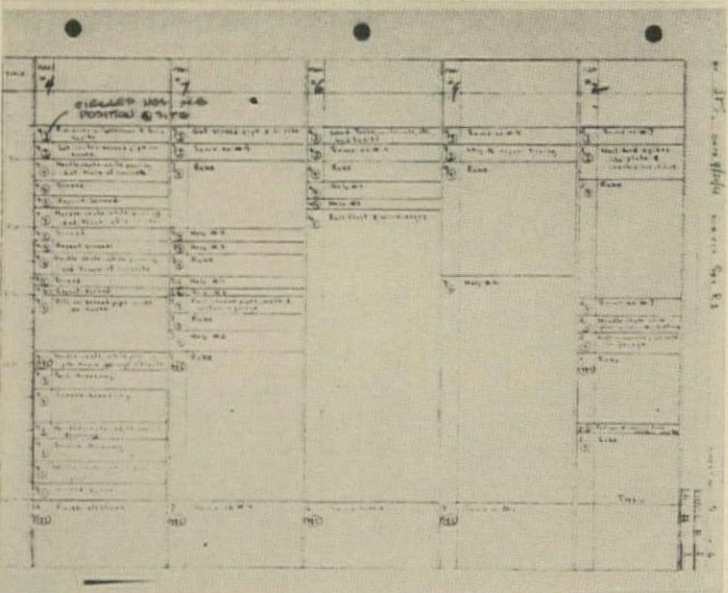
Prefinished wood siding is installed with clips p 171



STOPWATCH WORK STUDY by trained observers is used to collect data. An observer follows each man on the job, records exactly what he does all day long. Clipboard-mounted stopwatch is calibrated in 100ths of a minute.

ELEMENT DESCRIPTION	START TIME	STOP TIME	ELAPSED TIME	T.S. RATING	NORMAL TIME
2 nails per stud end					
4 nails per door assembly					
Tools					
Material					
7" portable disk saw					
20oz. claw hammer					
16d nails					
ELEMENT DESCRIPTION	START TIME	STOP TIME	ELAPSED TIME	T.S. RATING	NORMAL TIME
Slide window out	07:27	07:49	00:22	25	00:55
Trim window hole	07:49	08:01	00:12	10	00:12
Slide door to jamb	08:01	08:26	00:25	26	00:65
Idle	08:26	08:48	00:22	48	00:48
Construct man 6	08:48	08:52	00:04	52	00:08
2 Men left to hold door in Wall D	08:52	09:00	00:08	55	00:16
Hold wall for man 1 nail prep	09:00	09:21	00:21	27	00:57
Hammer nail to sill plate	09:21	09:34	00:13	14	00:14
Hold wall for man 2 nail to post	09:34	09:35	00:01	35	00:01
Idle	09:35	09:38	00:03	38	00:03
Nail prep X to wall (2 nail)	09:38	09:53	00:15	17	00:17
Idle	09:53	09:55	00:02	23	00:02
Nail wall to sill plate nail 1	09:55	10:10	00:15	13	00:13
Idle	10:10	10:12	00:02	13	00:13
Idle	10:12	10:18	00:06	18	00:18
Idle	10:18	10:21	00:03	11	00:11
Idle	10:21	10:25	00:04	10	00:10
Idle	10:25	10:28	00:03	11	00:11
Idle	10:28	10:31	00:03	10	00:10
Idle	10:31	10:37	00:06	10	00:10
Idle	10:37	10:40	00:03	10	00:10
Idle	10:40	10:48	00:08	10	00:10
Idle	10:48	10:50	00:02	10	00:10
Idle	10:50	10:58	00:08	10	00:10
Idle	10:58	11:01	00:03	10	00:10
Idle	11:01	11:07	00:06	10	00:10
Idle	11:07	11:10	00:03	10	00:10
Idle	11:10	11:12	00:02	10	00:10
Idle	11:12	11:15	00:03	10	00:10
Idle	11:15	11:18	00:03	10	00:10
Idle	11:18	11:21	00:03	10	00:10
Idle	11:21	11:24	00:03	10	00:10
Idle	11:24	11:27	00:03	10	00:10
Idle	11:27	11:30	00:03	10	00:10
Idle	11:30	11:33	00:03	10	00:10
Idle	11:33	11:36	00:03	10	00:10
Idle	11:36	11:39	00:03	10	00:10
Idle	11:39	11:42	00:03	10	00:10
Idle	11:42	11:45	00:03	10	00:10
Idle	11:45	11:48	00:03	10	00:10
Idle	11:48	11:51	00:03	10	00:10
Idle	11:51	11:54	00:03	10	00:10
Idle	11:54	11:57	00:03	10	00:10
Idle	11:57	12:00	00:03	10	00:10

OBSERVATION SHEET shows one man's activities for 15.57 minutes. *Element time* (how long it took him to do the job) is multiplied by *T.S. rating* (his estimated percentage efficiency) to find the *normal time* needed for the job.



MULTIPLE ACTIVITY CHARTS summarize observation sheets of five men, show how their activities interrelate on the job. These charts are supplemented by detailed operation descriptions.

Follow-up report on industrial engineering in homebuilding:

NAHB digs for inefficiency in Builder Bob Schmitt's efficient operation

The sponsors of the project hope to prove that the cost of building a new house can be cut as much as 10%, even by a builder as efficient as Schmitt—who consistently under-sells the Cleveland-area market. How? By finding how and where to improve management and supervision, work methods and tools, design and products—and by using new and old materials more efficiently.

This project is a follow-up of the pacesetter NAHB industrial engineering study of 14 paneled houses erected last year by Paul Bickford (see H&H Jan).

Step 1 of the new project: to find precisely how Schmitt's houses are built now. To do this, engineers are collecting second-by-second data on what each worker does each day, why, where, and how he does it, what tools he uses, how he is supervised, and how his work relates to that of the other men on the job—from staking out to move-in time.

At the same time, all materials used are being analyzed quantitatively, qualitatively, and functionally: How much material is ordered, delivered, used, left over, scrapped, and wasted? How are the materials integrated with the design of the house, and with what tools and installation methods? Why is a particular material used; when, where, how, and by whom?

An eight-man crew, headed by The Stanley Works' Chief-Industrial-Engineer James Shequine, is using five industrial engineering tools to collect the data: 1) Stopwatch work study (see photos and worksheets at left); 2) work sampling—random observations of job activities to find out the relative time spent on normal work; 3) economic analysis of materials (see above); 4) design analysis—the structural and esthetic integration of materials in the house; and 5) time-lapse photography—motion pictures of the entire operation taken at one frame every two seconds—for later study and analysis of the motions and activities of each worker.

Step 2—the analysis of the data—will use three more industrial engineering techniques: 1) Process and methods analysis—investigation the alternatives for each operation to find the best way to do it; 2) flow process analysis—charting each operation to show the entire process pictorially; and 3) value analysis—determining what a specific material or quantity of labor contributes to the value of the house relative to its cost.

Step 3—the selection of better methods based on analysis of the collected data—will take place next year. These recommendations will be used by Schmitt to build an identical house and the result will be recorded with the same painstaking observation and data collection at the site.

"We are trying to find the one best way to build this particular house," says NAHB Research Director Ralph Johnson. NAHB plans to issue a final report (after the second house is built) covering recommendations on specific new materials, methods, and equipment; a detailed case history of the Schmitt operation; and suggestions for better management and control of any building operation.

Fiberboard sheathing now has insulation ratings

And 14 fiberboard manufacturers—members of the Insulation Board Institute—have begun stamping their products with R values (the measure of surface-to-surface heat resistance).

Result: Builders and heating contractors will find it easier to calculate 1) the heat-resistance factor of house walls (add the R values of all materials in the wall) and 2) the heat-loss factor (U value) of walls (take the reciprocal of the R values).

The new rated R values for fiberboard—established by IBI—are 2.06 for 25/32" insulation board and 1.32 for 1/2" fiberboard.

Is plumbing overvented?

To answer that question, the Bureau of Standards has begun a study for NAHB on small-pipe, short-run venting of household plumbing systems.

Current venting requirements vary widely throughout the country on such points as what size vents are necessary and where in waste connections each fixture or group of fixtures should be vented. But, say many experts, all the regulations add up to too much vent pipe in too many places.

One result of the study may be a recommendation of 1" venting at only one point for the whole house.

Self-sealing shingles pass high-wind tests

Tests were made by the Bureau of Standards for the Armed Forces after the asphalt-shingle roofs of 36 Army and Navy installations were wind-damaged on the Atlantic Coast.

Results: Whether the self-sealing shingles were treated with adhesives when made or sealed down with plastic cement when installed, they withstood a continuous 60-mph wind for two hours (the Armed Forces' present requirement).

Test method: Ten types of edge-sealed shingles were subjected to high heat for 16 hours (to melt the adhesives and make them stick) and then to high winds. Seven types withstood the wind after being heated to 140F. The other three required 160F to pass the test.

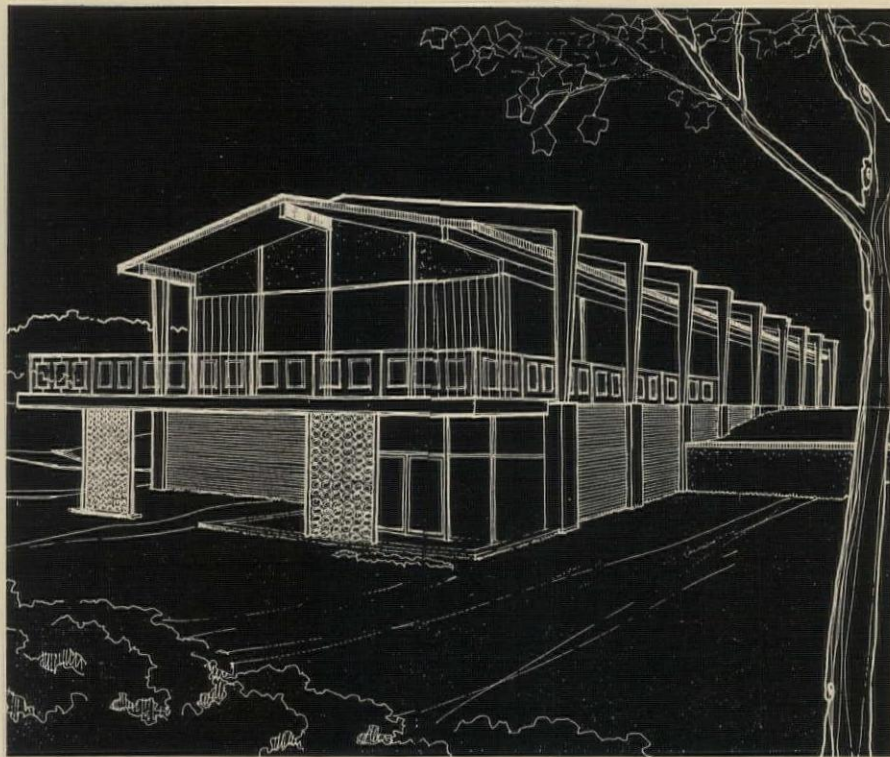
In another test, the shingle tabs adhesive, purposely broken in December, had resealed by the next April.

Do floors need bridging?

No bridging between floor joists is necessary, according to studies now being completed by the NAHB Research Institute.

Reason: Even the lightest subfloor in common use transmits enough floor load at any one point to adjacent joists to prevent undue deflection of a single joist or of the whole floor.

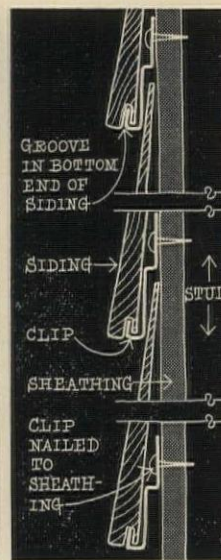
The Research Institute says it will submit results of the studies to FHA.



Here is a new kind of laboratory house

This house is suspended from roof bents that rest on piers. So the walls, partitions, and even the roof can be altered without major construction. The house is being built in St Louis by Fischer & Frichtel for Emerson Electric

Co, which will use it to test building products and systems. Equipment will include recording instruments and a power supply center for testing areas in the house with metered electricity at a variety of voltages.



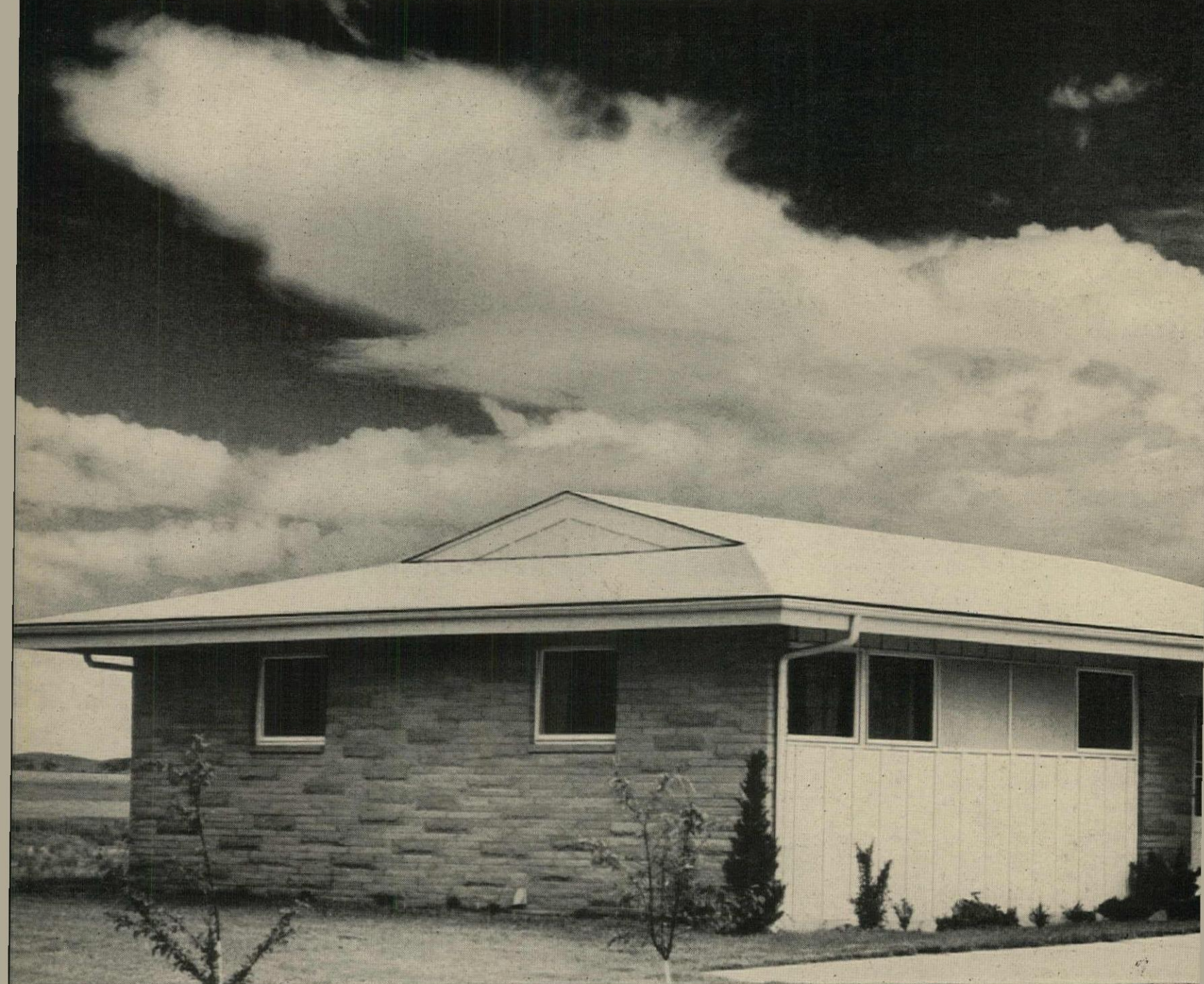
Here is a prefinished wood siding system

And there is no need to mar the prefinished surface with nails because the bevel siding is installed on clips shown in the drawing at right.

The clips are fastened to the sheathing and fit into saw kerfs in butt edges of the siding. They are self-aligning, so the siding stays level. They leave a breathing space between siding and sheathing, so moisture cannot collect there and cause paint blisters.

The siding is kiln-dried, vertical-grain redwood prefinished on the outside with a precision curtain coater (the back has a light coat of clear sealer). Pacific Lumber Co and the California Redwood Assn developed the system. Says Palo Alto Builder Doug Couch who has tried it: "We have cut our in-place siding costs and expect to eliminate callbacks for nail damage and paint blistering." /END

MORE AND MORE BUILDERS USE ANDERSEN WINDOWS



"The Andersen Strutwall* is a logical

JOHN STRAUSS, STRAUSS BROTHERS, INC., DENVER, COLORADO

"If a builder hopes to make a profit in today's market, he has to cut on-site labor costs," says John Strauss. "Andersen's Strutwall is one component that does reduce the number of costly steps necessary to complete a house."

SAVINGS—ALL THE WAY AROUND

With Strutwalls you save labor costs that would be spent in installing hardware and integrating the window unit into the wall component. Because Andersen Windows are virtually trouble-free, you save the cost of callbacks and you maintain a reputation as a quality builder.

STRUTWALLS NOW AVAILABLE IN 2 STYLES

Andersen makes a wide range of Strutwall sizes in Beauty-Line single and divided light models; it manufactures 2 sizes of Strutwall door frame; and *now* manufactures Strutwalls in the Casement style. All single light units can be ordered with Welded Insulating Glass, screens, removable grills and storm panels.

FIND OUT MORE

Your lumber and millwork dealer has full information on the complete line of Andersen Windows. Call him today.





IN COLUMBINE HILLS—one of Denver's best planned subdivisions—Strauss Brothers plans to build 2,000 quality homes.

way to reduce on-site labor costs."

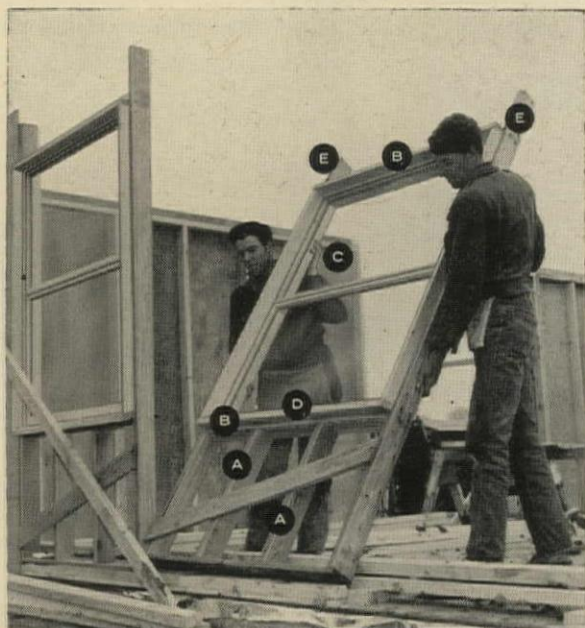
INSTALLATION IS FAST AND EASY

With Andersen Strutwalls the (A) jack studs, (B) top and bottom nailers, (C) glazing, (D) hardware and (E) side struts are factory installed.

(Also available—prime painting, sheathing, and plywood box headers.) Your labor is cut to a minimum—because you just cut

the two side struts (E) and tip the complete window unit into place. On-site installation problems are virtually eliminated. These are some of the reasons the Strutwall can beat almost any window on "installed cost" figures. Figure it this way next time you order windows.

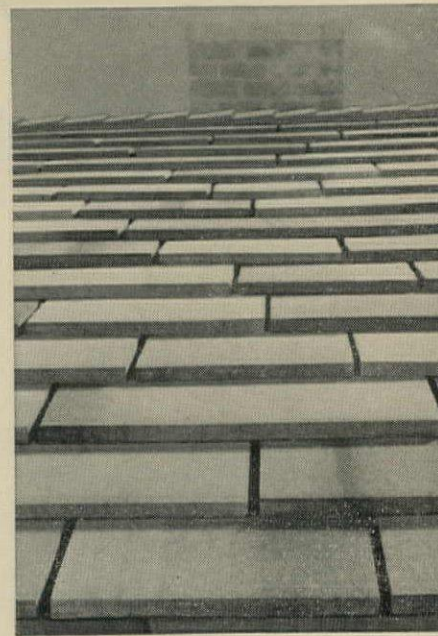
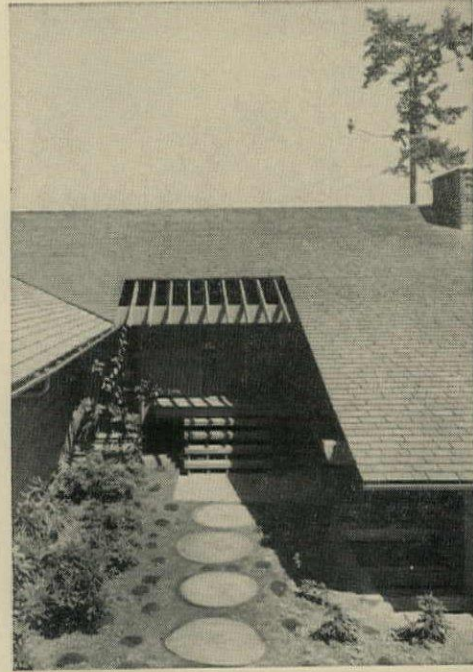
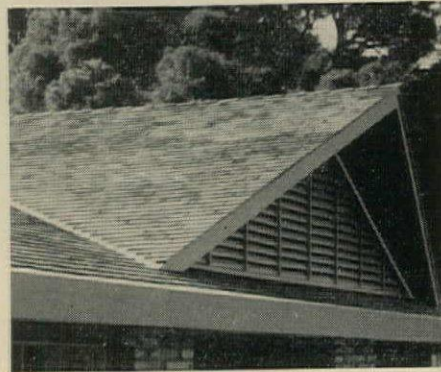
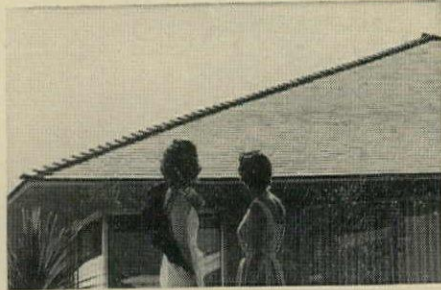
*Trademark of Andersen Corporation





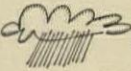

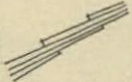



Andersen Windows 

America's most wanted windows

ANDERSEN CORPORATION • BAYPORT, MINNESOTA

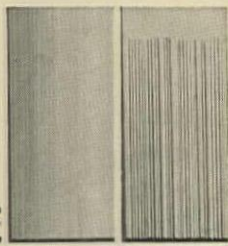


ROOFS
OF GENUINE
CEDAR
COMBINE
GOOD TASTE
WITH
SOUND JUDGMENT

No single feature of a home does more to show your concern with quality than a glistening  new cedar shingle roof. Clear from the curb,  its etched beauty and natural character are apparent. Equally important is a cedar roof's ability to assure troublefree service—even in areas where extremes of wind  and weather  are common. A properly constructed shingle roof provides three thick layers  of solid cedar. This gives the roof unusually effective insulative properties. Because a cedar shingle is strong and rigid, it also adds structural strength to the house...and it can be applied over spaced sheathing  (often saving up to 50% in decking costs). Send for your copies of "Distinctive Roof Applications" and "The House of Cedar."  These colorful folders show ways that genuine cedar can help you speed home sales while enhancing your reputation for quality. 



CEDAR GIVES YOU AN EDGE



RED CEDAR SHINGLE BUREAU



5510 White Building, Seattle 1, Wash.

550 Burrard Street, Vancouver 1, B. C.

YOUR GREATEST ASSET IS OUR QUALITY PERFORMANCE!

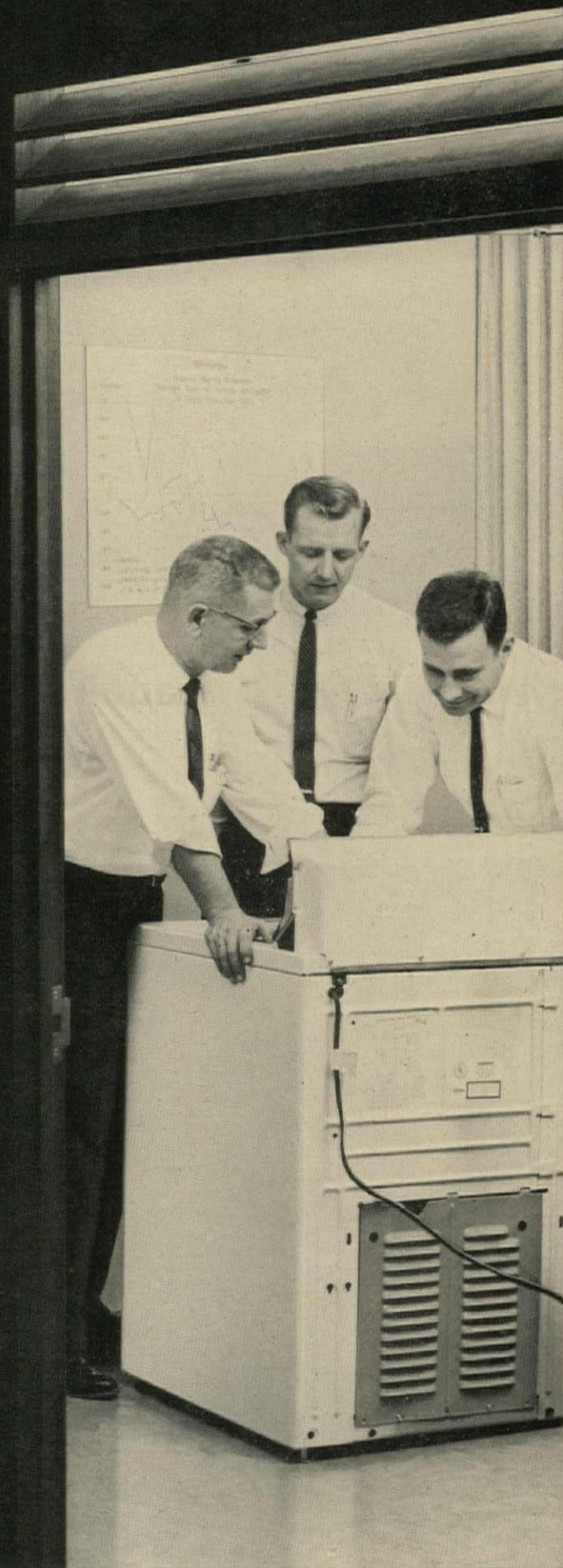
THIS IS
**HIGH
NOON**
IN ONE OF OUR
PLANTS

Sure . . . it's lunch time, but not for these three! Each day at high noon, the division heads of engineering, manufacturing and quality control meet in the Customer Acceptance Laboratory. They take random samples just prior to crating and search tirelessly for possible improvements. Their purpose? Another check on quality performance even though quality control people (every tenth person in our entire factory work force) review in detail the product's adherence to quality standards throughout the day. You see, we are convinced that quality performance brings satisfied customers who, in turn, are the best salesmen for RCA WHIRLPOOL appliances. That's why we say, "Your greatest asset is our quality performance!"





CORPORATION

ADMINISTRATIVE CENTER, BENTON HARBOR, MICHIGAN



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

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



TRADE-IN YOUR HOUSE FOR AN OUTSTANDING NEW HOME IN ONE OF THESE BEAUTIFUL COMMUNITIES


Ask these real estate brokers how you will benefit by using "Operation Trade-Up".

1. OTU guarantees the sale of your present home.
2. OTU immediately closing terms and eliminates costly temporary living arrangements.

Now you can get the best features of the best homes in South Jersey—paid, in the year that you can deduct from your own trade-in your present home. For any of the benefits listed or need the complete facts immediately about "Operation Trade-Up" call the name of your broker.

<p>Green-Field Hightstown, N. J. \$11,900 - \$19,900 1-2 BR. 1-2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>Green Ridge Hightstown, N. J. \$14,900 - \$17,500 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>Knollwood Hightstown, N. J. \$17,900 - \$21,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>L.A. GORGE Hightstown, N. J. \$15,900 - \$19,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>
<p>LONDON SQUARE Hightstown, N. J. \$11,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>MILLSIDE Hightstown, N. J. \$14,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>ROYAL HOMES Hightstown, N. J. \$11,900 - \$15,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>7776 Hightstown, N. J. \$14,900 - \$17,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>
<p>South Woods Hightstown, N. J. \$14,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>SUNSET PARK Hightstown, N. J. \$11,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>Sunset Park Hightstown, N. J. \$11,900 - \$15,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>TIMBERLINE Hightstown, N. J. \$14,900 - \$17,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>
<p>New Westbranch Hightstown, N. J. \$11,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>Whitwick Farms Hightstown, N. J. \$12,900 - \$14,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>Whitwick Farms Hightstown, N. J. \$11,900 - \$13,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>	<p>COUNTRY CLUB RETIRES Woodcrest \$14,900 - \$16,900 2 BR. 2 BATHS CERAMIC TILE FLOORING CROWN MOULDING CLOSET CUTTING EDGE DESIGN</p>

NOW'S THE TIME TO TRADE IN YOUR HOME



OPERATION TRADE-UP


1. Guarantees the sale of your present home.
2. Eliminates a double move and costly hotel bills by making it possible for you to stay in your present home until your newly purchased one is available.

WANT TO KNOW HOW YOU CAN TRADE-IN YOUR PRESENT HOME? CALL YOUR REAL ESTATE BROKER OR BUILDER... OR ANY ONE LISTED BELOW.

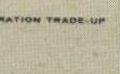
IF YOU WANT A GOOD CAPSULE OF INTERESTING INFORMATION ABOUT OPERATION TRADE-UP TELEPHONE EMERSON 2-2753 FOR A BROCHURE PLEASE.

Division of South Jersey Mortgage Company
100 MARKET STREET, CAMDEN, N. J. 08102


LET'S TRADE



OPERATION TRADE-UP



OPERATION TRADE-UP



TRADE IN YOUR HOME
SEE YOUR BUILDER OR BROKER
OPERATION TRADE-UP
CAMDEN, N. J.

TRADE-IN ADVERTISING includes co-op newspaper ads, left and top right; counter card, center; and bumper sticker, bottom right.

Lender-backed trade-up plan: Is this what housing needs to make the trade-in idea catch hold?

- More about the leaders**
- New prefabricated apartments are off to a fast startp 178
 - New co-op project will have 384 apartments, 134 townhousesp 179
 - Eichler Homes' "Showcase of Fun" boosts model-house traffic 25% p 180
 - Model house on department store roof increases builder's sales 35% ..p 181

In southern New Jersey, any builder or realtor can now offer to trade without financial risk—and at no cost.

The risk is taken and the cost paid by "Operation Trade-up," a new plan sponsored by South Jersey Mortgage Co, which promises to put up \$15 million, if necessary, to take title to traded-in used houses.

One gauge of the plan's success: So far the mortgage company's OTU subsidiary has had to take title to no houses—even though more than 35 builders and realtors are already using OTU and even though OTU has encouraged hundreds of homeowners to go shopping for new houses. It is the offer to trade—not the handling of trades—that has stimulated new-house sales.

Here is how the plans works:

When a prospect wants to trade in his old house on a new one, his builder or realtor asks OTU to get an FHA appraisal (\$20 appraisal fee is paid by prospect). Then an OTU appraiser judges the house and offers a guaranteed price based on the FHA appraisal less selling costs. The owner has 45 days to get a better price. He can then

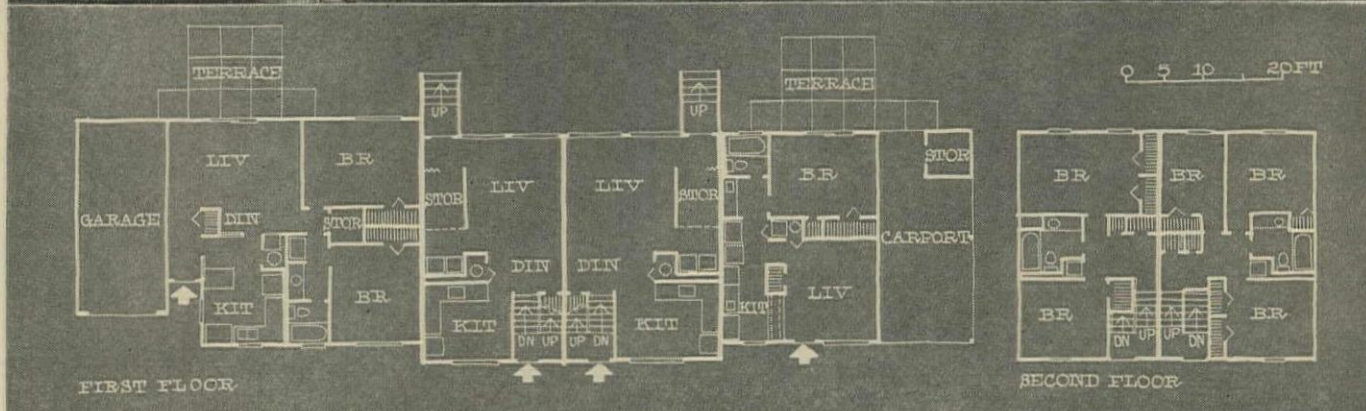
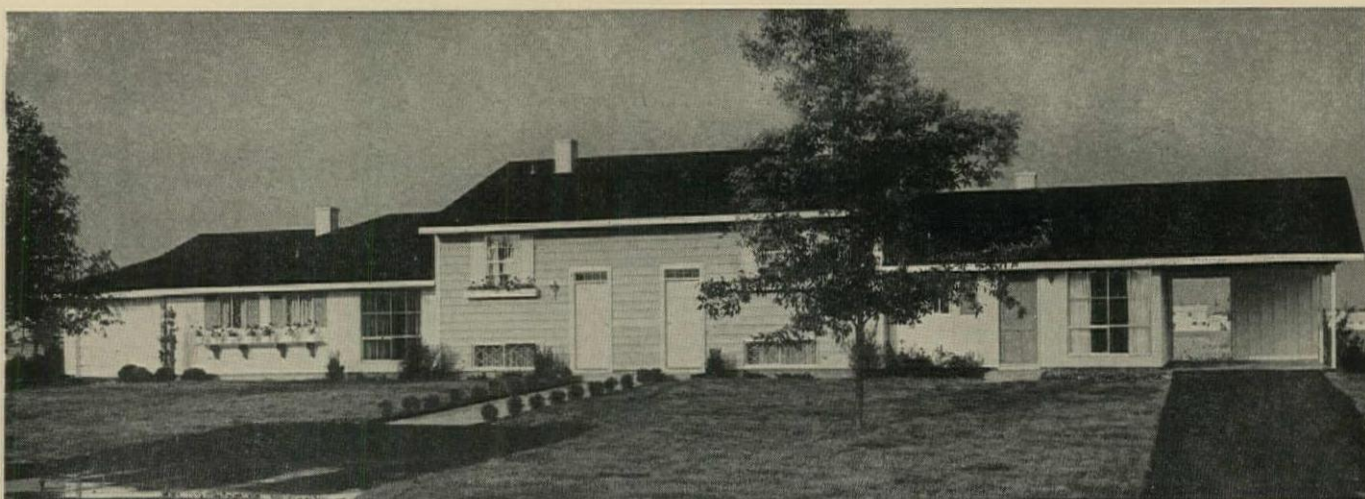
accept OTU's offer or back out of the deal. For its service, OTU gets 1% of the appraised value of the old house. Service fees about cover the cost of promoting the trade-in idea, according to Louis Meyer, president of South Jersey Mortgage.

Says Meyer: "We don't make a profit on the service and don't force builders to give us their mortgage business, but we hope to get a fair share of the extra business created by encouraging more homeowners to look for new houses."

Here are some results:

Heavy advertising and publicity (examples, above) is bringing OTU from 30 to 70 phone calls a day from homeowners (who are urged to get details from their builder or realtor after they pick a new house). Builders also report making direct sales to people who have read OTU's co-op advertising on trade-ins—and who manage to sell their old homes themselves.

Sums up Builder Bernard Peskin of Whitman Square: "This plan works as well as auto trades. Its big advantage is to remove prospects' worries about getting a fair price for their old houses."



MODEL APARTMENT has sample of four different units in National's new line. Two center units are two-story with mid-level entries.

New prefabricated apartments are off to a fast start

"Dealer enthusiasm is running high," says National Homes President George Price. "Many of our dealers are already looking for land for the new units."

Interest in the one- and two-story apartments—introduced last month—is highest in the East. Fred Harless, vice president and general manager of the Horseheads (N.Y.) division, reports plans for a 200-unit project by Washington Builder Joseph Geeraert (H&H NEWS, July), a 1,600-unit project in Baltimore by "a big construction firm" (which will open its 6-unit model next month), a 32-unit project in Winchester, Va. by Builder Frank Schaeffer, and a

small project in Woodstock, N.Y. by Builder Henric Wolters.

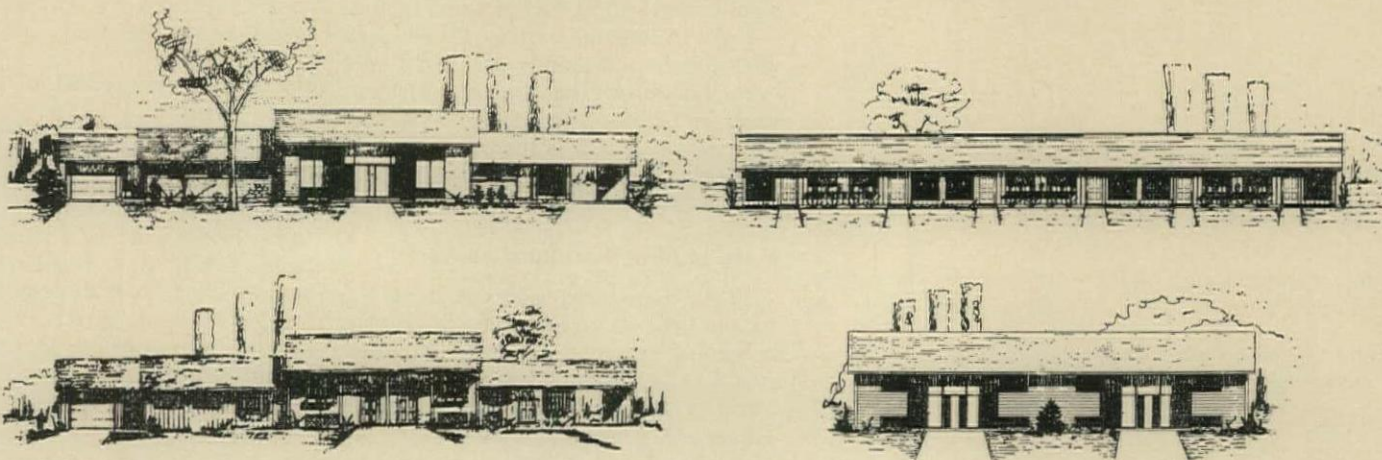
With these new units, a builder can erect apartments with little risk. Harless points out: "Normally, a builder has to build apartments or townhouses on speculation. But our dealers will be able to presell just as they do with houses. The dealer will erect a model and sell from it. Because he is building from prefabricated parts, he can offer 60-day move-in."

Builders can offer buyers a wide choice. There are four basic plans—one- and two-bedroom one-story units, two- and three-bedroom two-story units

—and a variety of exterior treatments which builders can combine to form garden apartments or row houses.

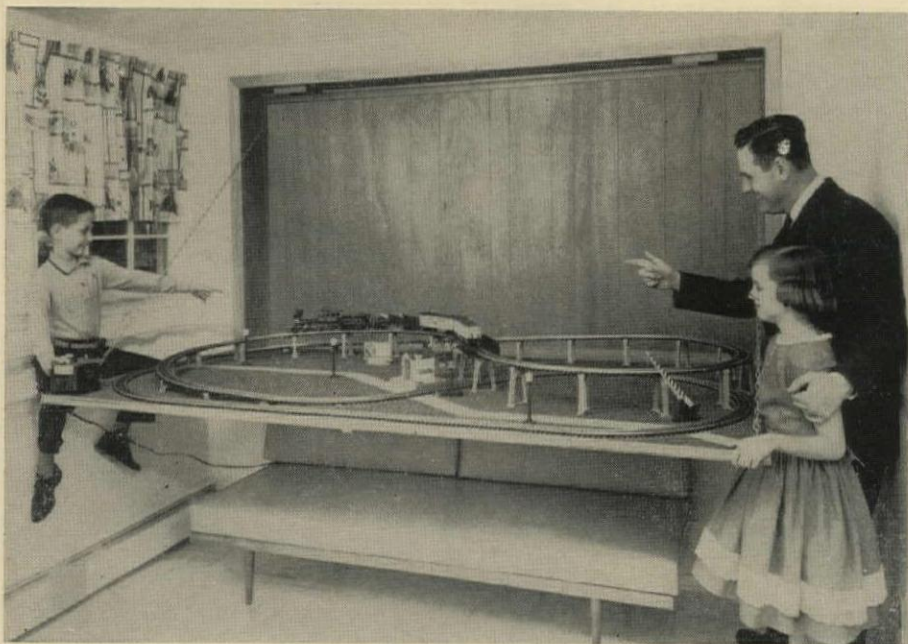
National's new "Senior Citizen" houses are also selling well

Reports Price: "One dealer who had not even built a model sold three houses from plans." Houses in this line have wider-than-normal doors, extra storage and closet space, electrical outlets 18" off the floor, nonskid flooring, etc. Most sales, says Price, are of the largest (three-bedroom, 1½- or 2-bath) models, and many sales are for cash or big down payments.



MANY ALTERNATE ELEVATIONS are possible by using different exterior treatments and arranging the four available units in different

combinations. One- and two-story units can be combined, as in the drawings at left, or buildings can be all one- or two-story, right.



New in built-ins: a foldaway model railroad

It is featured in a model house built by First National Realty and Construction Corp at Smithtown, L.I. Lionel Corp designed, assembled, and wired the track layout to fit on a 4'x8' fiber-

board sheet. The builder built the wall cabinet. Total cost—\$50 for the track and \$50 for the cabinet—is included in the house price. Not included: \$69.50 in rolling stock.



Here is a new co-op project

This is a rendering of River Park Co-operative homes—a 384-unit high-rise building and 134 townhouses to be built in a Washington, D.C. urban-renewal area. Money for the project—a \$9,285,500 loan—will come from James W. Rouse & Co, which arranged financing with a pension fund. The developer, River Park Investors, is a subsidiary of Reynolds Metal Co, and Albert M. Cole, executive vice president of Reynolds Aluminum Service Corp and former HHF administrator, is directing the development. Architects are Charles M. Goodman Assoc. Sales agents will be the FCH Co, a subsidiary of the Foundation for Cooperative Housing. General Contractor William Magazine of Standard Construction Co says he expects to complete the first units within the year.

Need salesmen? Try women

That's the answer in Puerto Rico where 90% of model houses, including those of giant IBEC (1,500 Puerto Rican starts last year), are staffed by saleswomen instead of salesmen. The island's builders say their sales ladies are well versed in FHA procedures, adept at qualifying prospects, and often better than men at relieving prospects' fears of being high-pressured.

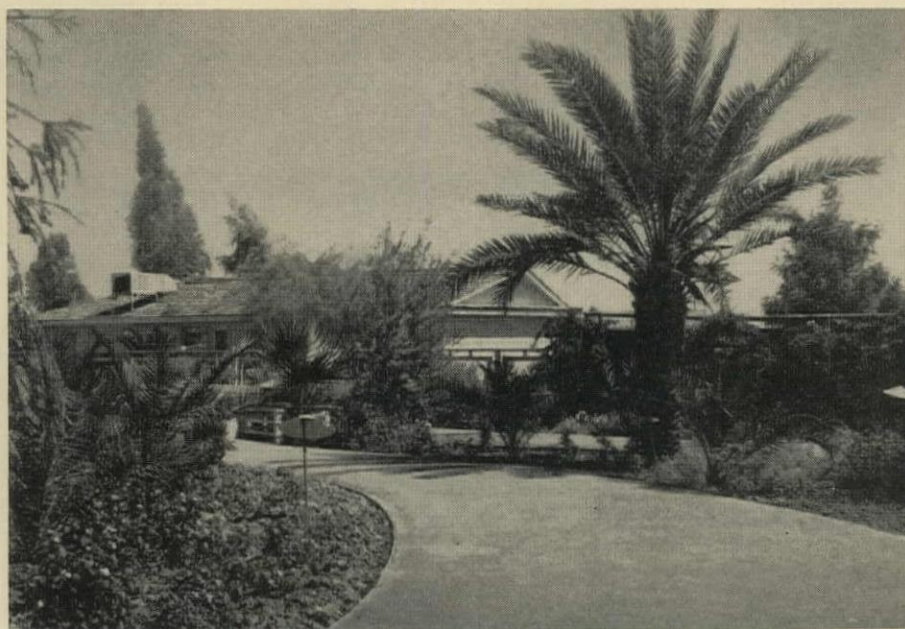
Helicopter helps house sales

Jim Rhodes of Scottsdale, Ariz., one of nine builders opening new models in the same subdivision, wanted a way to dramatize his "modern living" sales theme. So he built a landing pad behind his model and persuaded the maker of a new "compact" helicopter to introduce it at his opening. Hot prospects (for a house or helicopter) got free rides. "It worked out fine for both of us," says Rhodes. "We sold two houses, and he sold three helicopters."



Tell it to the kids

This is the Larwin Co's gentle way of reminding parents to keep an eye on their children as they go through model houses. Larwin uses these signs at the entrances of its Brentwood Gardens models in Los Angeles.

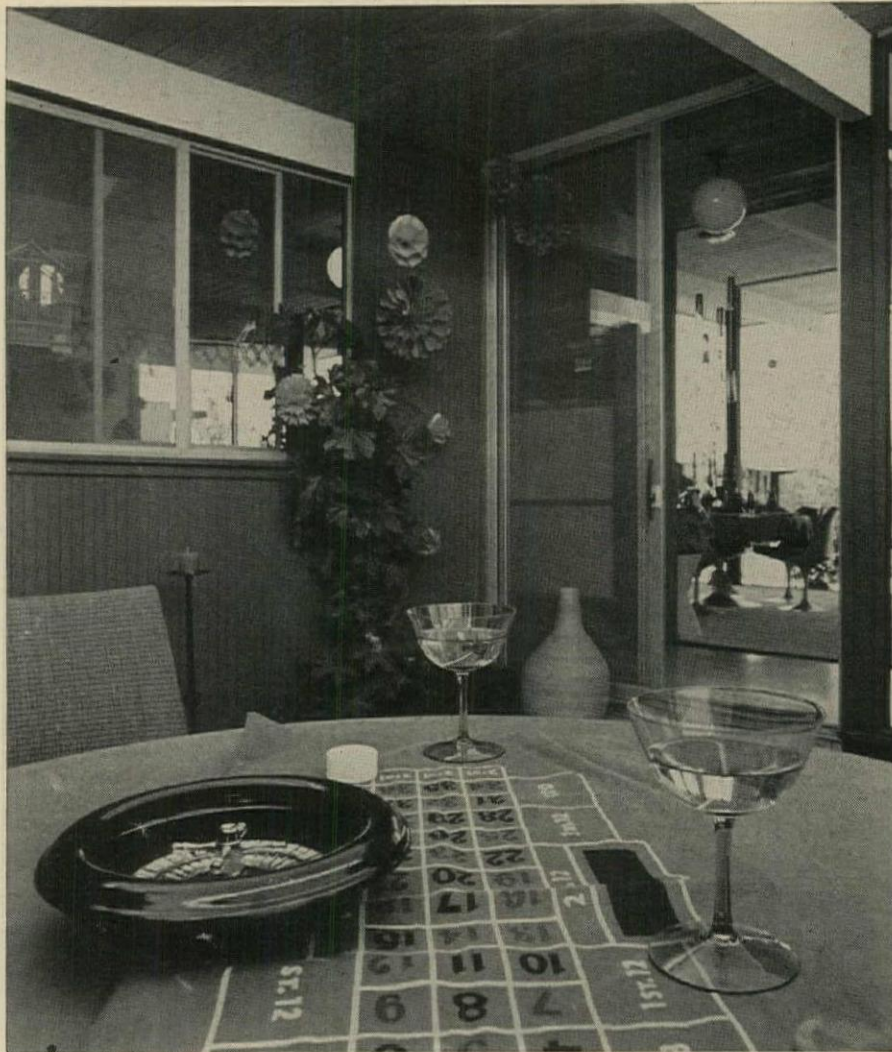


Here's what you see as you enter John Long's new sales area

Remember the flags, pennants, and clowns of Long's former sales areas in

Phoenix? Now all his models are generously—and attractively—landscaped.

Leaders continued on p 180



This is Eichler's "Showcase of Fun"

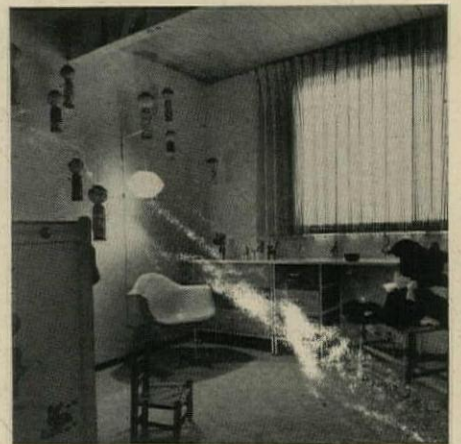
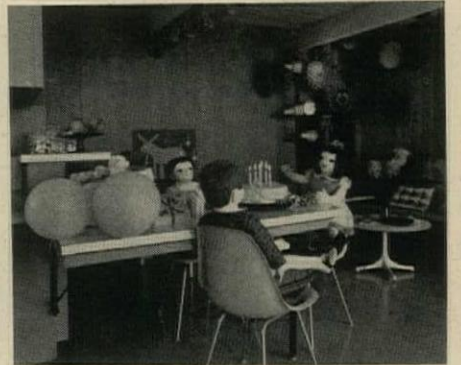
"Fun" is the key word in the latest sales promotion by Eichler Homes, Palo Alto, and it is brought to life in the "Showcase" model pictured here.

The \$21,950 model is at Eichler's new Fairgrove community. Its light-hearted, eye-catching decor is the work of Matt Kahn, an associate professor of art at Stanford University.

Advertising for the Fairgrove open-

ing played up the "fun" theme with photos like the ones on this page and headlines like "There's fun in an Eichler home," "There's fun in entertaining."

Says Ned Eichler: "This campaign has increased traffic 25%. But even without that increase, it would have been worthwhile, because it shows our houses in a new and exciting way."





Here is an easy-to-move sales office

Built on 2x10 and 2x12 girders that rest on 8"x16" concrete piers, it can be moved by 1) disconnecting utility lines, 2) putting crossbeams under the main girders, 3) jacking it up, and 4) sliding dollies under it. The building was

designed by Architect George McElvy for LaMonte-Shimberg Assoc, Tampa builders and developers. It is 28'6" x 52'6", cost \$13,000, and has three sales rooms, two reception rooms, and a sales manager's office.

Coming: more townhouses

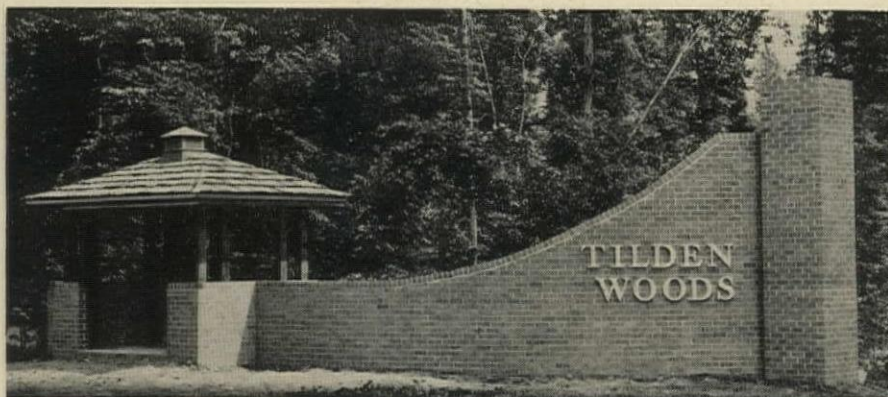
So reports Fischer & Fritchel, which will build 31 townhouses in a St Charles, Mo. urban-renewal area. The houses, to be started next spring, will be in groups of two to six units on several sites. Ten two-bedroom units will be designed to sell for \$10,000, and 21 three-bedroom units will sell for \$11,000. Houses may be sold to individual buyers or as a group for subsequent resale or leasing.

Said Fischer & Fritchel in its proposal to the St Charles Land Clearance for Redevelopment Authority: "We feel this is the best and most reasonable use of the ground. It is in character with the city in total and will be an asset to the very good residential area to the south." (For more news about F&F, see p 171.)



New way to please buyers

This secretary is mailing blueprints of floor plans to recent buyers of Perl-Mack houses in Denver. Prints—personalized with each buyer's name—are sent out as soon as the buyer passes his credit check. The idea? "To help the buyer identify with his house while it is still under construction and to give him a chance to talk to friends about 'the house I'm having built,'" says Perl-Mack partner Sam Primack.



This entrance sells houses before they are built

Thirty-five prospects who walked through the entrance and along a path through a heavily wooded site asked to put down deposits before a street was in or a house started at a new development in Bethesda, Md. So reports Hermen Greenberg of Community

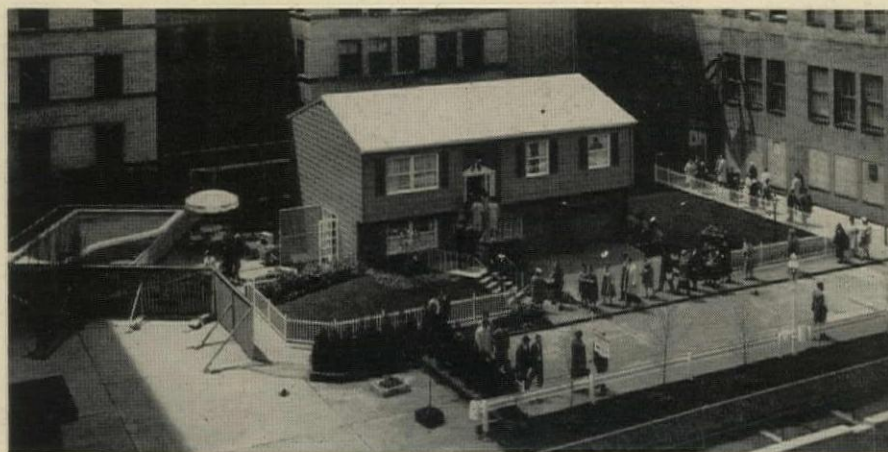
Builders, Washington, D.C. "The entrance attracted people," he says, "and the sylvan setting did the rest of the selling job." Community Builders will save trees and leave 22% of the 350-home site in its natural state. House prices range from \$24,000 to \$27,000.

Kitchens shipped complete

Kingsberry Homes, Ft Payne, Ala. pre-fabber, has started factory assembly of complete kitchens, baths, and central air conditioning systems. The company figures the economies of in-plant assembly will more than offset higher transportation costs (a fully assembled kitchen needs more shipping space than a package of kitchen components).

New trend in a big market?

On hotly competitive Long Island—where builders are quick to copy features introduced by the sales leaders—Richard Osias has sold 50 air conditioned houses in three months. At his Village on the Hill, Comack, he offers two models with central air conditioning for under \$10 a sq ft. One is a 2,350 sq ft two-story priced at \$22,990, the other a 2,500 sq ft raised ranch at \$23,490. Both models were designed by Architect Stanley Shaftel.

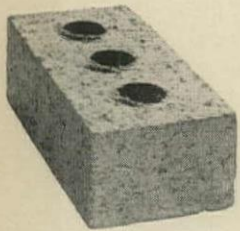


Rooftop model draws 107,848 visitors in two months

In the same period (May and June) its builder, Edward N. Ryan, sold 226 houses—35% more than he had sold in any previous two months. The model in downtown Pittsburgh was built atop Kaufmann's department store—which also displayed products used in it—and promoted by Ryan, Kaufmann's, local

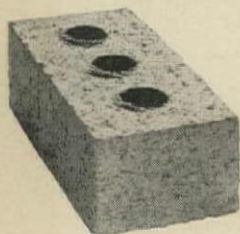
gas utilities, and US Steel. Steel products used in the model include an exterior door, threshold and support, bridging between floor joists, and a "Steel-fast" drywall system. Ryan did not sell from the rooftop house, but sent prospects to nine identical models in the suburbs "so they could see the house on the land."

Build in Salability Brick by Brick

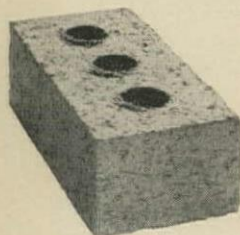


Brick provides:

Low first cost. Homebuilders find that brick homes are no more costly initially than homes of any other quality construction.



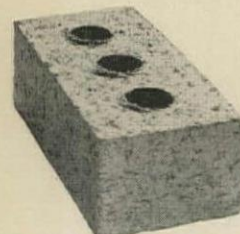
Low upkeep. No painting is required. Heat losses are minimized. Natural insulation for air conditioning provided.



Durability. Brick never wears out, never goes out of style, lasts for lifetimes without costly maintenance.



High resale. Because of home buyer preference for brick's beauty, because of longevity, because of low maintenance costs, brick homes are *salable* homes.



Easier financing. Because of the lower upkeep of a brick home, the purchaser frees money normally spent on maintenance; because of higher resale value, investment is protected; result is more attractive mortgages for bankers—and buyers.

Build with Brick — and build in sales appeal.

Structural Clay Products Institute
1520 18th St. N.W., Washington, D. C.



Don't be fooled by decoys!

This is a genuine Sherle Wagner bathroom fixture. Anything else is a decoy. The 'Swan': pure, deep, 24K gold plated. Hand chased (you can almost count the feathers). It looks poised for flight. Forever.

FOR ILLUSTRATED CATALOGUE WRITE DEPT. SH

Sherle Wagner
125 EAST 57TH STREET, NEW YORK 22, N.Y. PLAZA 8-3300





Eagle Walnut field with Par Cherry used in a strip pattern, one of many combinations available.

Elegance—Quietly priced for the mass home market

Beautiful BondWood® Parquet

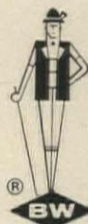
The exquisite beauty of HARRIS BondWood has caught the eye of more home builders in the medium price range than any other parquet. Actually, although BondWood is associated with only the finest, there's a BondWood parquet for *every* price home. Oak, Walnut, Maple, Cherry and Angelique (Guiana Teak). Solid hardwoods in small individual slats, arranged in squares, provide unlimited designs. The square joints assure

a tighter fit—no beveled edges—and bothersome squeaks are eliminated.

Write today for free color booklet, giving you all the details on BondWood. Harris Manufacturing Company, Dept. HH81, Johnson City, Tennessee. See our catalog in Sweets.

Finest in flooring since 1898

HARRIS FLOORING



*Par Red Oak (natural finish)
—most popular grade in the
mass home market.*

NOW YOU CAN BUILD "ALL GAS HOMES" BEYOND THE GAS MAINS

You know all the advantages of "an all gas home." But do you know that you can build these same homes with the same "all gas home" advantages on LESS EXPENSIVE, airy, much more picturesque suburban lots? Yes, you CAN build . . . "all gas homes" beyond the gas mains. One-half million satisfied customers prove that Suburban Propane Gas Service has ALL the advantages of "city gas."

USE SUBURBAN PROPANE "CITY TYPE" METERED GAS SERVICE
Save money for yourself and for your clients . . . give your clients MORE FOR THEIR MONEY . . . give yourself happy, satisfied customers.

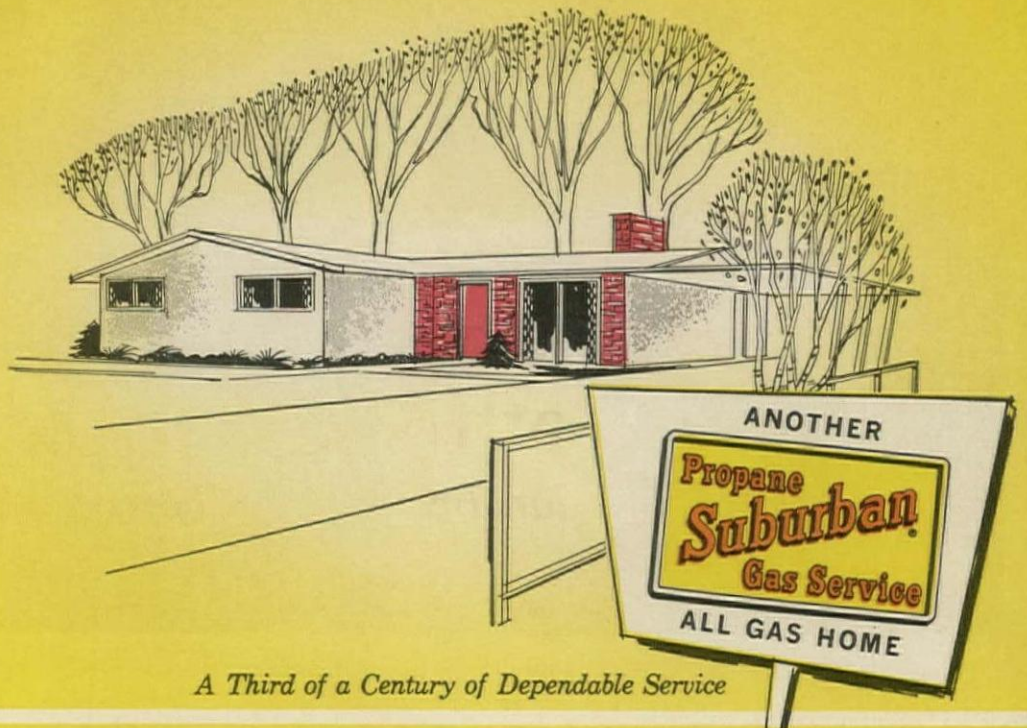
CONSULT SUBURBAN PROPANE BEFORE YOU START TO BUILD
As a SERVICE and WITHOUT OBLIGATION our local representative will gladly study your blueprints and show you how you and your clients can enjoy all the advantages of an ALL GAS HOME BEYOND THE MAINS.

OUR COMPLETE PACKAGE INCLUDES:
FREE gas service survey • Private "gas well" at every home "City-TYPE" metered gas service • Full line of modern gas appliances • SPECIAL BUILDERS' PRICES • ALL appliances CONNECTED to gas service • FREE maintenance service

Contact the office nearest you . . .
or send for information and reference file

SUBURBAN PROPANE GAS SERVICE

Dept. HH 861 • Whippany, N. J.



*NEW ENGLAND

Coventry, R.I. • Express 7-3311
Derby, Conn. • Regent 4-2503
Niantic, Conn. • Pershing 9-5418
Portland, Me. • Spruce 2-8307
Sagamore, Mass. • Sagamore 319
So. Sudbury, Mass. • Hilltop 3-8833
Windsor, Conn. • Murdock 8-3623

NEW YORK

Albany • Ivanhoe 9-3271
Brewster • Brewster 9-3736
Hicksville • Independence 3-5625
Horseheads • Regent 9-4141
Ithaca • Ithaca 9079
Millerton • Millerton 1
Mt. Kisco • Mt. Kisco 6-5174
Richfield Springs • Rich. Spgs. 137
Rochester • Beverly 5-8497
Shirley • Atlantic 1-8383
Syracuse • Oldfield 2-3747

NEW JERSEY

Belvidere • 475-2101
Bound Brook • Elliott 6-1111
Bridgeton • Glenview 1-3150
Cliffwood • Lowell 6-6200
Freehold • Hopkins 2-1776
Hammonton • Logan 1-0820
Mahwah • Lafayette 9-3500
Robbinsville • Juniper 7-8150
Whippany • Tucker 7-0500

DELAWARE

Dover • Redfield 4-4748
Rehoboth Beach • 227-3331

MARYLAND

Baltimore • Belmont 5-8529
Easton • Talbot 2-0525
Fruitland • Pioneer 8-7141
Reisterstown • Tennyson 3-1400
Rockville • Hazelwood 7-7047

VIRGINIA

Gainesville • Plaza 4-2655
Newport News • Chestnut 4-8465
Onley • Sunset 7-1567
Portsmouth • 393-4071
Smithfield • 357-8881
Williamsburg • Capitol 9-5777

PENNSYLVANIA

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

OHIO

Cincinnati • Jefferson 1-3500
Dayton • Axminster 2-4197
Eaton • Gladstone 6-3252

Greenville • Lincoln 8-5525
Grove City • Trinity 5-6351
Leesburg • Leesburg 780-4261

KENTUCKY

Monticello • Filmore 8-3161
Nicholasville • Tuxedo 5-4157

NORTH CAROLINA

Ahoskie • 332-3917
Albermarle • Yukon 2-1129
Asheville • Alpine 3-6391
Charlotte • Franklin 5-1721
Clinton • Lynwood 2757
Elizabethtown • Union 2-3471
Greenville • Plaza 2-2527
Hickory • Davis 3-6863
Lumberton • Redfield 9-5234
Marion • Marion 2154
New Bern • Melrose 7-2175
Oxford • Oxford 3753
Roanoke Rapids • 537-3383
Scotland Neck • 826-7831

Shelby • Huxley 7-5581
Smithfield • Wabster 4-4242
Waynesville • Glendale 6-5071
Whiteville • Midway 2-2428
Wilmington • Roger 3-5101
Wilson • 243-5134
Winston-Salem • Park 4-6353

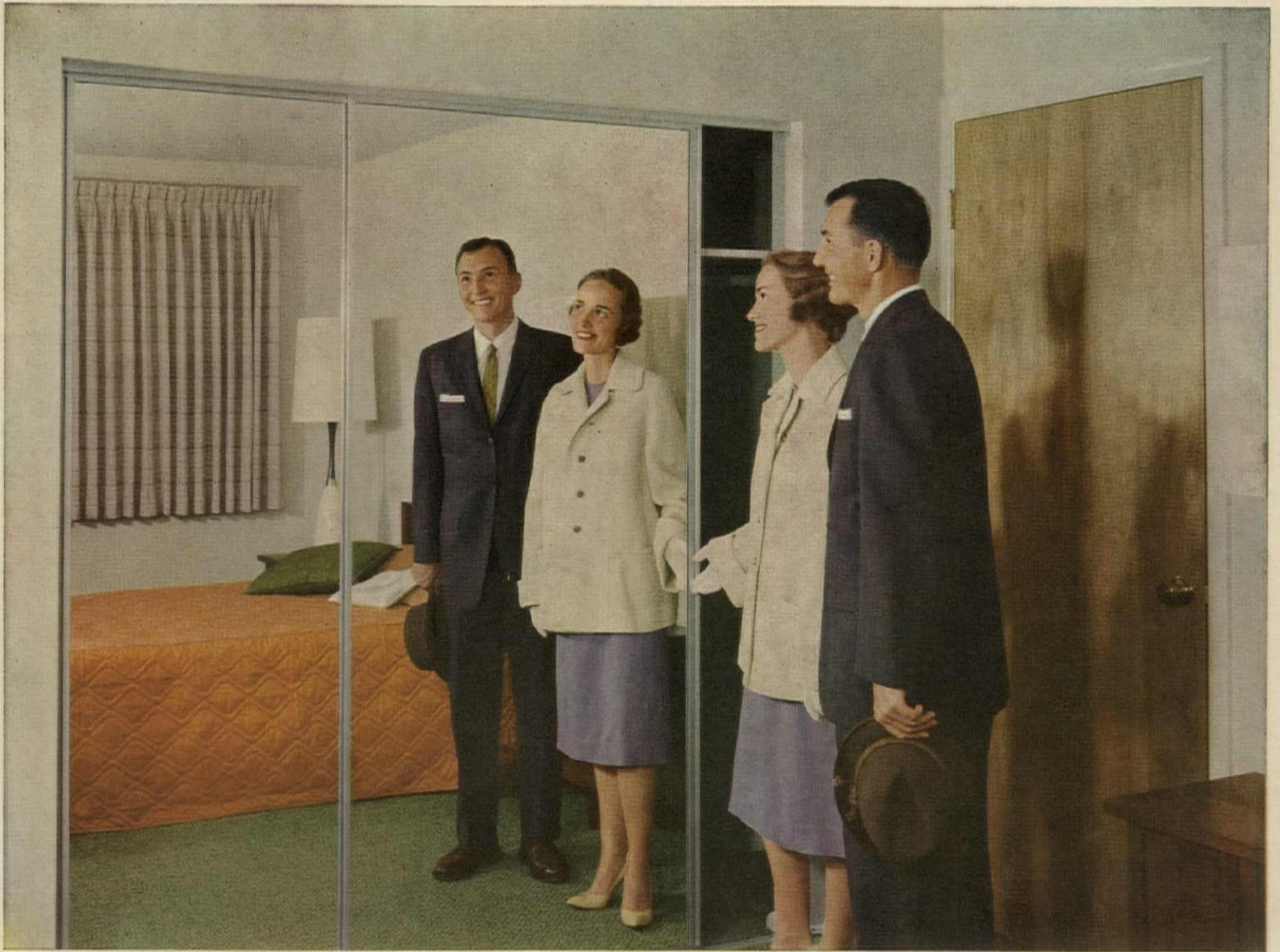
SOUTH CAROLINA

Bennettsville • Granite 9-4061
Greenville • Cedar 2-4531
Laurens • Laurens 508
Myrtle Beach • Hill Crest 8-3161
Mullins • Mullins 464-9253
Rock Hill • Rock Hill 327-3200

FLORIDA

Fernandina Beach • 261-3661
Jacksonville • Exbrook 8-9769
Lakeland • Mutual 6-6123
Orlando • Midway 4-1715
Tampa • Tampa 3-6546
Wildwood • Shadyside 8-2101

*Also see Suburban Utility-Gas Service listings under GAS-LIQUIFIED in the yellow pages of your phone book.



Mirrors make bedrooms seem twice their size in Alan Brockbank's Chevy Chase model home, Salt Lake City.

"Mirror doors have quality appeal for both women and men"

...in selling Alan Brockbank's homes

Sliding mirror closet doors in all the master bedrooms do a great job of demonstrating the quality Alan E. Brockbank has been putting into his Valley Fair Subdivision (Salt Lake City, Utah) homes.

"They add the note of luxury and spaciousness—reflect the feeling of quality we try hard to emphasize in all parts of the house," Mr. Brockbank says. As a quality-conscious builder, he chooses mirrors made of L·O·F

Parallel-O-Plate® Glass. This finest plate glass bears the *Good Housekeeping* Guaranty Seal.

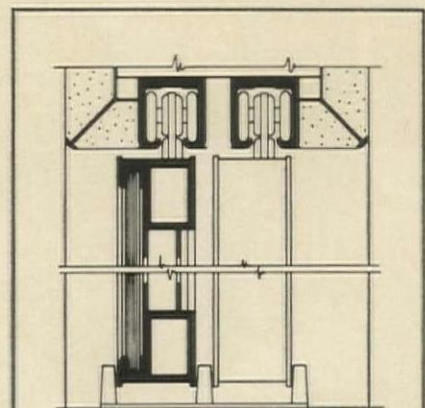
Parallel-O-Plate is twin ground for truer reflection and more freedom from distortion.

You'll find prospects like mirrors. Call your L·O·F Glass Distributor or Dealer (listed under "Glass" in the phone book yellow pages) for wall mirrors or sliding mirror doors made of L·O·F *Parallel-O-Plate*.

MIRRORS OF PARALLEL-O-PLATE

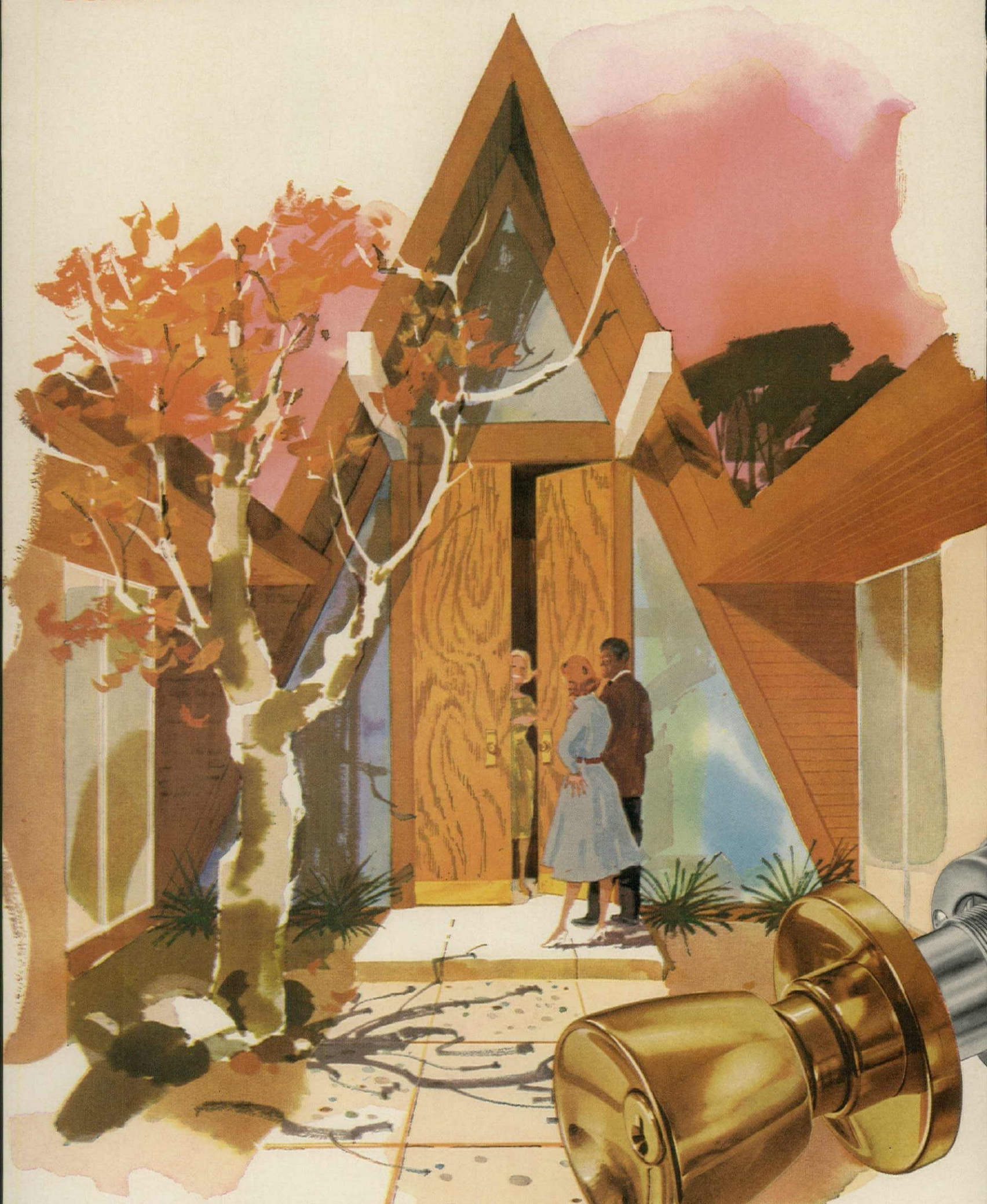
Twin Ground for Truest Reflection

LIBBEY · OWENS · FORD · TOLEDO 1, OHIO



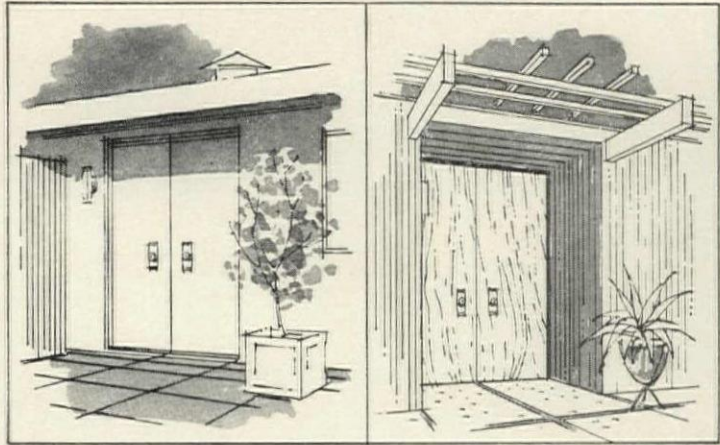
Sliding Mirror Door, bypass type, typical vertical section. For a complete set of framing details on this and other types, write today to L·O·F, 1781 Libbey-Owens-Ford Building, Toledo 1, Ohio.

SCHLAGE: Beauty where it shows... quality where it counts



DOORWAY DESIGNED EXCLUSIVELY FOR SCHLAGE
BY ANSHEN & ALLEN, AIA; SCHLAGE TULIP LOCKS
OVER SAVOY ESCUTCHEONS, BRIGHT BRASS FINISH

Original doorway design by Anshen & Allen, AIA, was commissioned by Schlage Lock Co. as one of a series of entrance ideas executed by the country's leading architects and designers. Anshen & Allen have used double doors to achieve a sense of luxury and graciousness. Materials and hardware for double doors add but little to building cost; they can vary in height from 8 to 10 feet. Double doors lend a distinction that adds to the home's saleability. Sketches above show adaptability to different styles of architecture.



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

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

But Schlage's contribution to "the quality look" in doors goes even deeper. In effect, Schlage invented the modern door when Walter Schlage developed the first cylindrical lock. For the first time, real flexibility in door design was possible.

With each passing year, Schlage has added innovations: the long backset, the decorative escutcheon, a constant flow of exciting new designs.

"Doorway Appeal" helps the sale

Home buyers now *expect* distinctive doors that show careful planning, doors with the look of quality.

So smart builders make sure their homes have doorway appeal that sells.

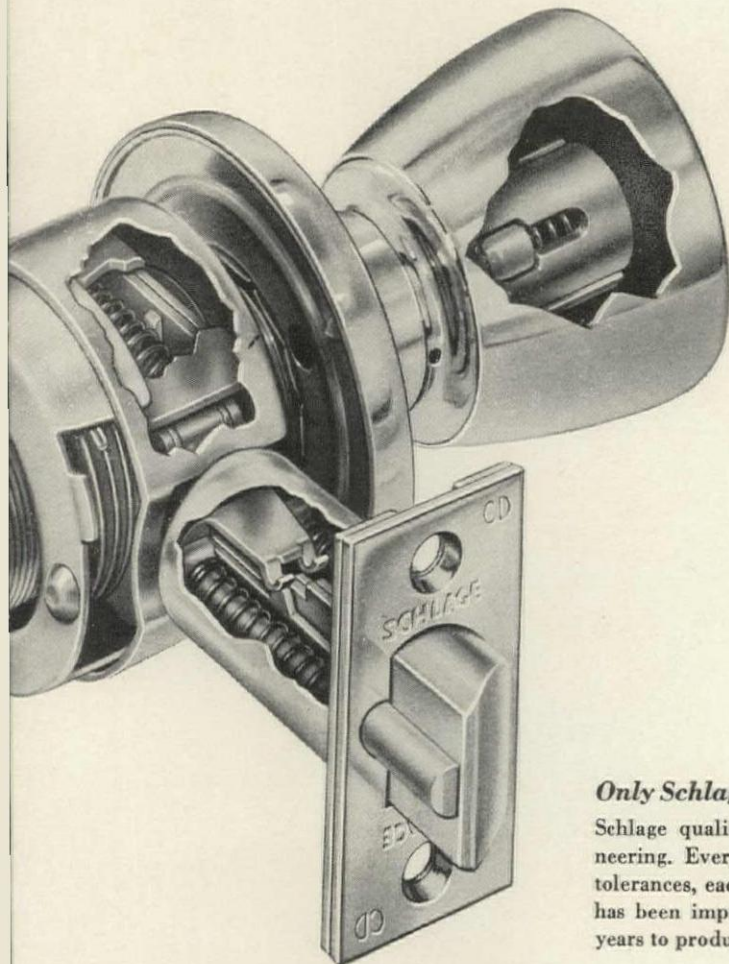
Varying the doorway treatment is the easiest way to individualize a house, and hundreds of variations are possible. Schlage's Design Department will gladly provide you with suggestions for adding interest and saleability.

Be sure... with Schlage

To make sure the *different* look is also "the quality look", be sure the locks are Schlage. Everyone knows this name. Yet the saleability it adds need not increase building cost. There are Schlage locks in every price range.

• • •

Free! A portfolio of doorway treatments you can use. Write Schlage Lock, 2201 Bayshore, San Francisco.



Only Schlage makes locks this way!

Schlage quality starts with precision engineering. Every part is machined to close tolerances, each detail of the smooth action has been improved and perfected over the years to produce the world's finest lock.

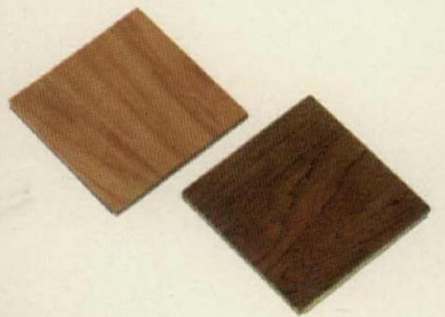
SCHLAGE
Schlage Lock Company

San Francisco • Los Angeles • Chicago
New York • Vancouver, B. C.



BRUCE Laminated Block

*Ideal floor for
use over concrete*



When you use Bruce Laminated Blocks you add a lot of warmth, beauty and comfort to your homes. The three plies of close-grained Southern Oak keep out concrete slab chill and dampness, yet provide foot-cushioning comfort. Heat and pressure bonding produce a highly stable unit and the famous Bruce factory finish saves labor, time and expense. Choose either light or dark finish . . . or mix them for really distinctive floors! Over wood subfloor or old floor use Bruce Blocks, strip-type for nailing. Write for color booklet. You'll find our catalog in Sweet's Files.



E. L. BRUCE CO.,
MEMPHIS 1, TENN.

World's largest manufacturer
of hardwood flooring

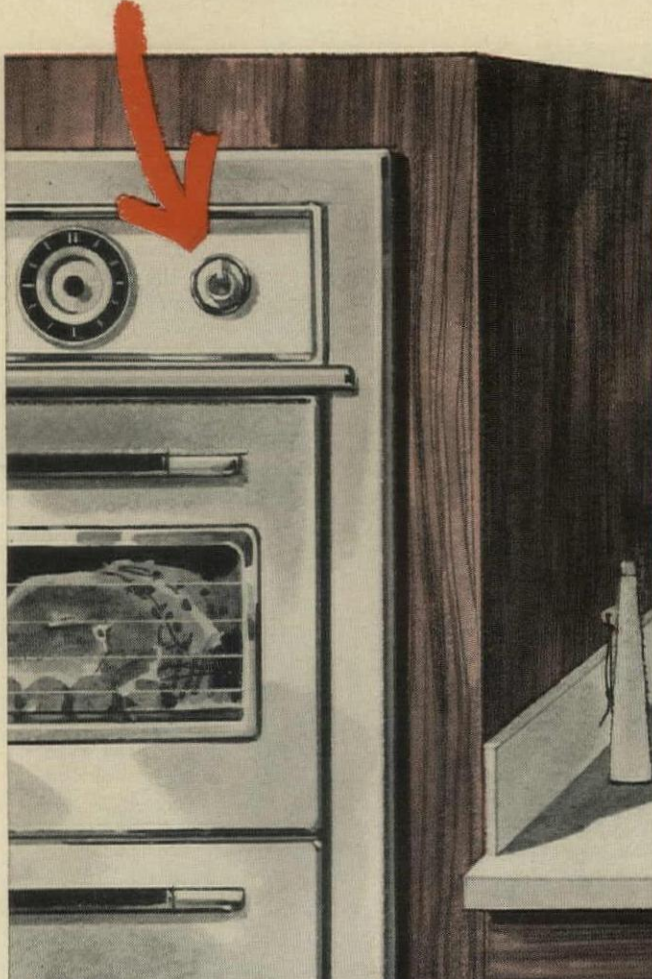
A feature floor for "special" rooms

Your kitchens will be fully equipped ...with **Robertshaw-controlled** gas built-ins



Robertshaw **FLAME MASTER**®

- full cooking and baking control, plus low temperatures down to 140°
- thaw frozen food in a jiffy
- warm plates at low temperatures that "pamper" fine china
- keep roasts for hours . . . just right
- keep complete meals at serving temperatures for hours, without overcooking . . . with leisure time to shower, dress, relax or entertain



...and the fully-equipped kitchen helps sell the new house.

The most important room in the house, to *Mrs. New-Home-Buyer*, is the kitchen. Demand Robertshaw gas range and oven controls on your new built-ins . . . and use their superior features as selling points for your kitchens.

All these superior Robertshaw **FLAME SET** and **FLAME MASTER** control features are added selling points for your new homes. Insist on **FLAME SET** and **FLAME MASTER** controls for your new built-ins.

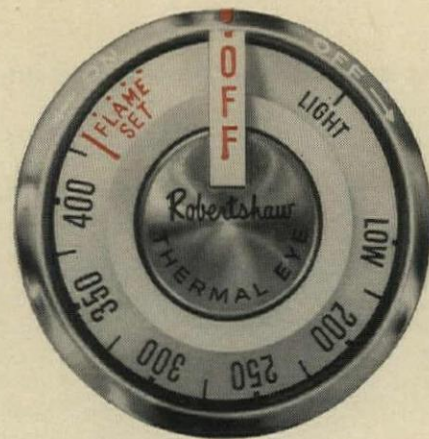
For the names of manufacturers using Robertshaw controls as standard equipment, write Robertshaw Thermostat Division, Robertshaw-Fulton Controls Company, Youngwood, Pennsylvania.

For real fast service, use **DIRECT DISTANCE DIALING**. Dial 412-242-7171.

VMA 7980

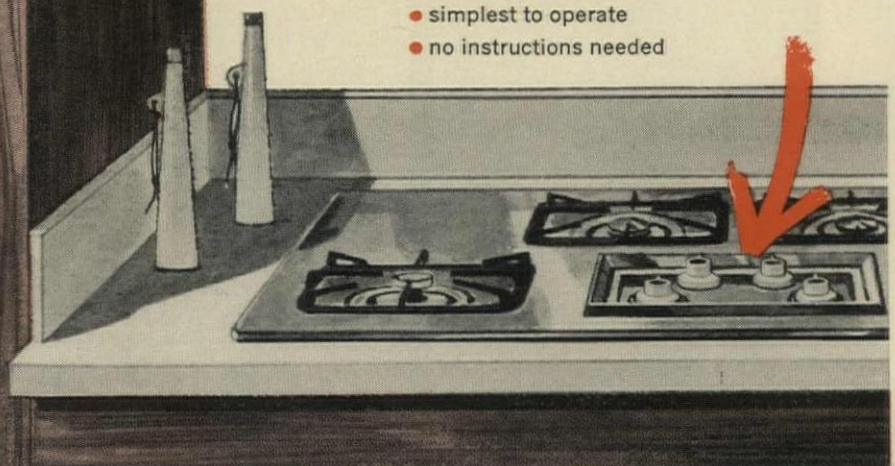
The name that
MEANS
temperature control

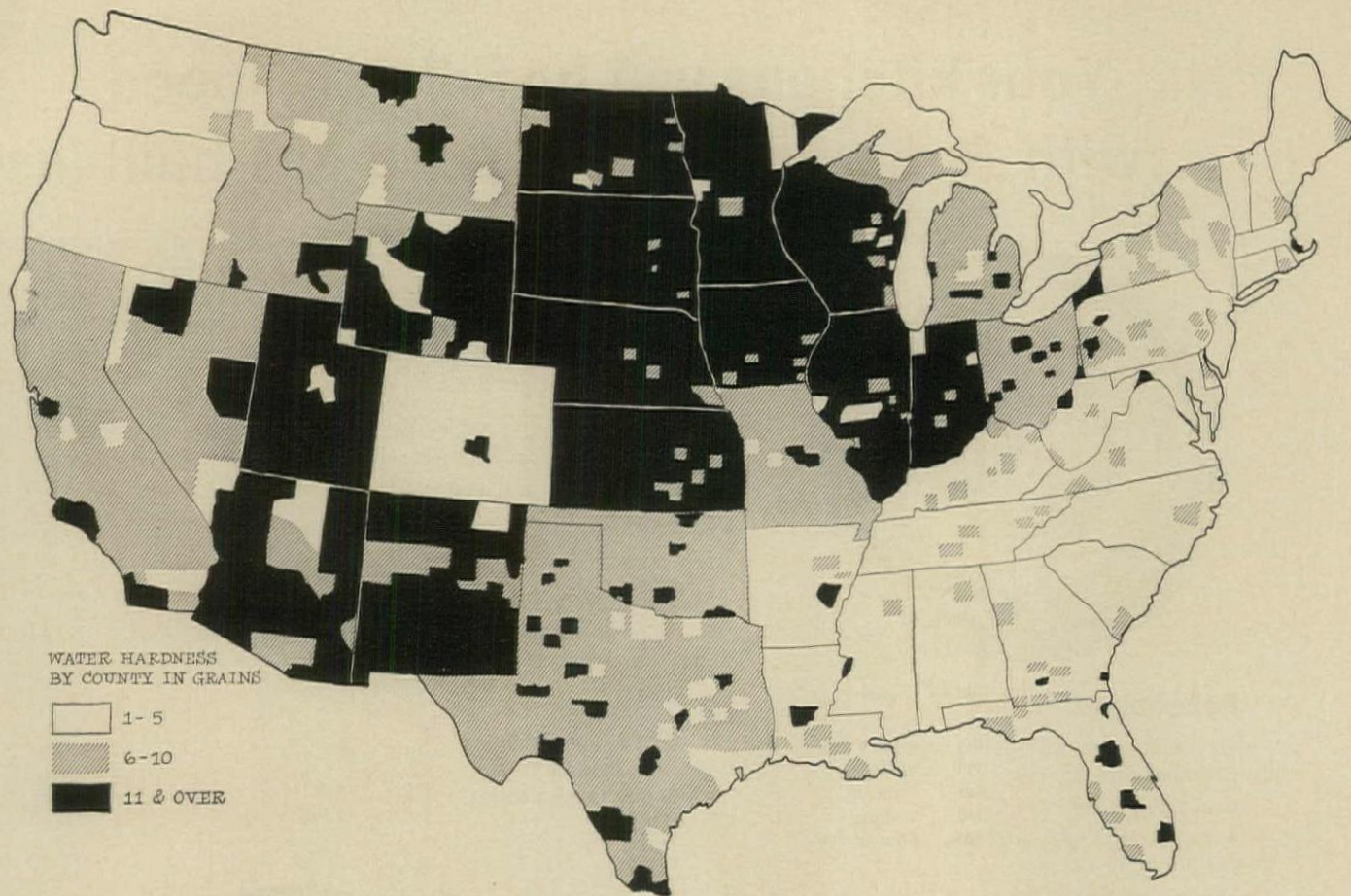
Robertshaw



Robertshaw **FLAME SET**®

- no more burned pans
- no more scorched food
- small flame for small pans
- **BIG** flame for **BIG** pans
- simplest to operate
- no instructions needed





If you build in the dark areas on this map

Here's what you should know about water softeners



MODERN WATER SOFTENER is small, neat, colorful, installs in kitchen or laundry.

In the black and gray areas on the map, hardness may be adding \$120 or more to the cost of a family's water supply.

This cost comes from the need for more soap and detergent (about 100% more) and the maintenance or replacement of hot-water heaters and heating systems, washing appliances, and piping (up to 35% more). Hardness also boosts the cost of cooking—especially for brewing coffee, tea, etc.

Against these hard-water costs, the cost of softening water is about \$1 a month for operation, \$1 to \$5 a month for amortization (softeners cost \$150 to \$600 depending on the size and type needed, have a minimal life of ten years).

How softeners work

All modern softeners work on the same principle (see opposite): Hard water is filtered through a bed of zeolite or resin. As it passes over the filter medium, the hardness elements—calcium and magnesium salts—exchange their calcium and magnesium ions for sodium ions. Sodium salts are soluble and add no hardness to the water.

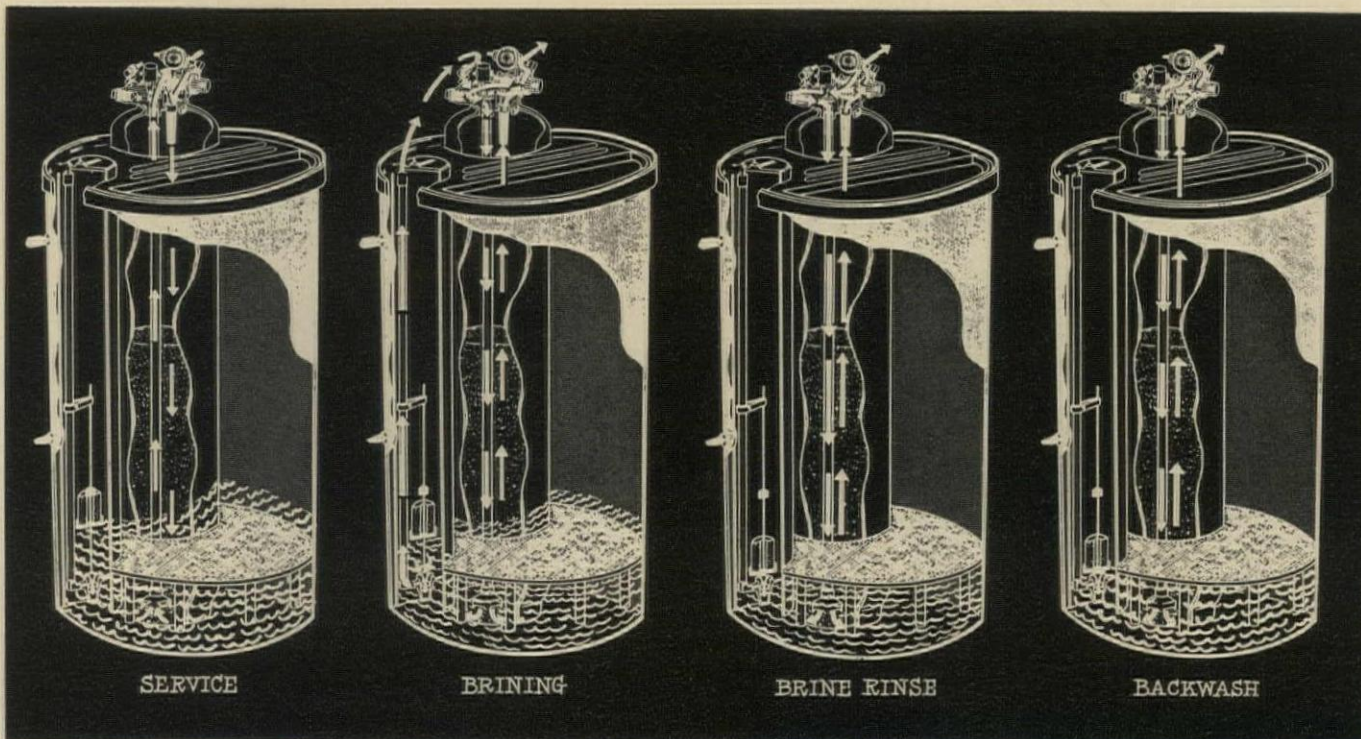
As the softener is used, it loses its ability to absorb hardness. When the sodium ions are depleted, they are renewed by flushing the filter bed with

brine, which reverses the process, replaces the deposited calcium and magnesium ions with sodium ions from the salt. This regeneration may be necessary in a day or in a month, depending on the size of the equipment, the hardness of the water, and the rate of use.

How equipment differs

Softener operation may be manual, semi-automatic, or automatic. The most modern household units are small, appliance-styled automatic devices that require no attention except monthly to semi-yearly recharging with salt pellets. A timer will cause the water to bypass the softener when it is depleted, regenerate the filter, and reestablish service without attention. This is usually done in the early morning when water demand is least.

Valves and control systems differ in complexity, depending on how automatic they are. Tanks may be single or double, are all corrosion-proofed (the newest are made of reinforced fiberglass) and often insulated against condensation. Units are usually sized to handle all household needs except lawn and garden watering (where hard water is preferable). Small automatic units make up for their size by more frequent cycling.



OPERATION CYCLE: When softener is in service (left), hard water enters at the top, trickles over resin bed, and collects in gravel bed at bottom where it enters house water lines. Regeneration starts when a bypass valve opens to let hardwater enter house lines so

service will not be interrupted. Then flow is reversed in the tank and an aspirating valve opens to draw brine from the salt tank. The brine is forced up through the resin and out a drain for five to ten minutes. The brine flow is then shut off but water continues to

flow up through the bed for about 45 minutes to rinse out the brine. A short backwash phase completes the regeneration cycle, the bypass valve is closed, and the softened water supply reenters the house lines. Total time: about one hour.

Manufacturers of home water softeners

To get more details on any manufacturer's product, check the number indicated on the coupon, *p 202*.

Allied Engineering, Vancouver, B.C. Canada. Check No. 3.

Arlington Soft Water Co, Arlington, Ill. Check No. 4.

Artesian Water Conditioning Inc, Flint, Mich. Check No. 5.

Aurora Water Queen Corp, Aurora, Ill. Check No. 6.

Bomarc Industries, Inwood, N. Y. Check No. 7.

Borgerud Mfg, Deerfield, Wis. Check No. 8.

Bruner Corp, Milwaukee. Check No. 9.

Century Softener Corp, Milwaukee. Check No. 10.

Culligan Inc, Northbrook, Ill. Check No. 11.

Elgin Softener Corp, Elgin, Ill. Check No. 12.

Everlast Engineering, Minneapolis. Check No. 13.

Everpure Inc, Chicago. Check No. 14.

Filtersoft Ltd, Winnipeg, Manitoba, Canada. Check No. 15.

Flint & Walling, Kendallville, Ind. Check No. 16.

General Ionics Corp, Pittsburgh. Check No. 17.

Granger Softwater Supply & Mfg Corp, Manitowoc, Wis. Check No. 18.

Great Lakes Corp, Glenview, Ill. Check No. 19.

Hunt Softener Co, Ft Atchison, Wis. Check No. 20.

Kisco Boiler & Engineering Co, St Louis. Check No. 21.

Kosko Mfg, Warsaw, Ind. Check No. 22.

Langenau Mfg, Cleveland. Check No. 23.

The Lindsay Co, St Paul. Check No. 24.

Link-O-Matic Mfg Co, Richmond. Check No. 25.

Modern Water Equipment Co, Freeport, Ill. Check No. 26.

F. E. Myers & Bros, Ashland, Ohio. Check No. 27.

Peerless Water Softener Co, Kalamazoo, Mich. Check No. 28.

Perm-A-Soft Co, New York City. Check No. 29.

The Permutit Co, New York City. Check No. 30.

Pioneer Industries, Cleveland. Check No. 31.

PortaSoft, Westfield, N. J. Check No. 32.

Puritan Mfg Corp, Crawfordsville, Ind. Check No. 33.

Rainbow Water Conditioning Ltd, Weston, Ont., Canada. Check No. 34.

Red Jacket Mfg Co, Davenport, Iowa. Check No. 35.

Reynolds Water Conditioning Co, Detroit. Check No. 36.

Roper-Webb Corp, South El Monte, Calif. Check No. 37.

ServiSoft, Rockford, Ill. Check No. 38.

A. O. Smith Corp, Kankakee, Ill. Check No. 39.

Southern Water Conditioning Inc, St Peterburg, Fla. Check No. 40.

Stover Water Softener Co, St Charles, Ill. Check No. 41.

United Water Products, Walworth, Wis. Check No. 42.

Velvet Soft Inc, Holland, Mich. Check No. 43.

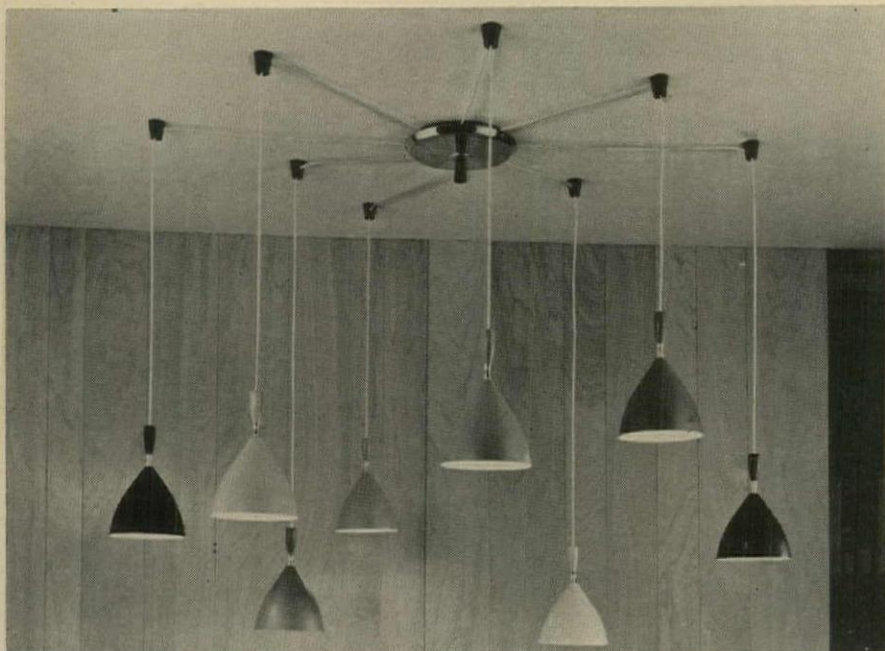
Water Refining Co, Middletown, Ohio. Check No. 44.

Wayne Home Equipment Co, Ft Wayne, Ind. Check No. 45.

White Products Corp, Middleville, Mich. Check No. 46.

The Zeo-Ran Co, St Paul. Check No. 47.

New products continued on p 194



Thomas Industries has just brought out its 1961 Enchante top-of-the line. The line includes contemporary and traditional fixtures in several styles and in all types—chandeliers, pull-downs, pendants, wall lamps and lanterns, ceiling fixtures, pole lights, and outdoor wall and post lanterns. New finishes include antique white, colonial green, Flemish brass. Prices start at \$15 for a single contemporary pendant like those in the group above (total price for this fixture, about \$136). The matte black and brass chandelier at the left is priced at about \$120.

Thomas Industries, Louisville.

For details, check No. 48 on coupon, p 202

Two producers show new lighting lines



Lightolier has a new collection of chandeliers, most of them variations on traditional themes. The three shown here are typical: Millbrook (top left) is satin black and brass with woodtone shades. Light sources are fully shielded and diffused. Price: \$72.50. Chatham (top right) is antique brass and fruitwood with antique white shades. Price: \$76.90. Deauville (left) is a decorated crystal line. Price: \$137.

Lightolier, Jersey City, N. J.

For details, check No. 49 on coupon, p 202



Outdoor lighting post of tubular aluminum is formed in a reproduction of a Colonial turned post. It telescopes from 6' to 8' high, is fitted with a 3" collar for either of two new lanterns: a 17" black and brass model with glass sidelights or a 23" model with screened panels. Both conceal the 100-w bulb in a frosted chimney. Post: \$17.75, lanterns start at \$21.95.

Progress Mfg Co, Philadelphia.

For details, check No. 50 on coupon, p 202



Railroad lantern supplies nostalgic styling for this modern electric post light. Same black fixture and glass globe were used as railroad platform lights and street lights 80 years ago. Lamp is nearly 2' high, fits any post or pipe (socket tapers from 2 7/8" to 2 9/16"). Retail price: \$24.95.

R. E. Dietz Co, Syracuse.


For details, check No. 51 on coupon, p 202



Camp lantern now comes as an electric post or bracket light. Lamp, 16" high, has brass and flat black enamel trim, a Pyrex globe, is electronic-eye controlled. Extra outlet serves as a plug-in for yard appliances or other lights. Coleman suggests lamp as a premium with its heating and air conditioning line.

Coleman Co, Wichita.

For details, check No. 52 on coupon, p 202



recessed
lighting can
dramatize a
plain brick wall

FOR ONLY \$45.60* WITH

Glamour Glow BY MOE LIGHT

Take one fireplace brick wall in your modern model home . . . add a contemporary hearth and mantel . . . and bring it all to life with MOE Light Glamour Glow lighting. MOE Light recessed fixtures give a third dimensional drama to brick and other textured walls . . . a feature that will sell a home faster than any other single decorating factor. Choose from the many different types available, square, rectangular, round and adjustable for exactly the right type of recessed lighting for your job. See your MOE Light representative today.

**for housings No. M-5680 and trims—No. M-85-1
(Pole light with table—MOE Light M-1403)*



THOMAS INDUSTRIES INC. MOE LIGHT DIVISION

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

Your FREE copy of the new MOE Light catalog, Inspiration Lighting is now ready. It's truly a library of lighting ideas. Write for yours today.

THOMAS INDUSTRIES INC.
Moe Light Division, Dept. AHH
207 E. Broadway, Louisville 2, Ky.

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

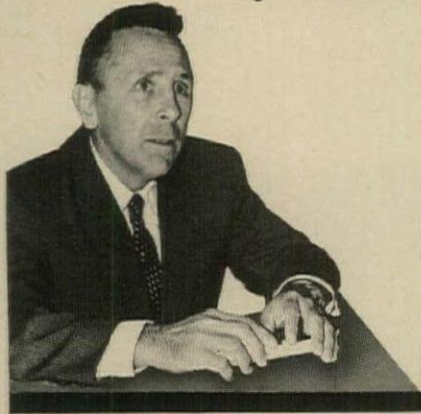
NAME _____

COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Ray Edwards Answers Some Questions On:



HOW TO HANDLE HEATING AT A PROFIT

Q. As a builder, one of my problems in making a profit is to get the heating contractor in and out at the right point in the construction time-table. Do you have any suggestions?

A. Certainly. Make sure you order a packaged hydronic heating system such as Edwards manufactures. Everything — boiler, circulator, zone valves, baseboard radiation, comes to your heating contractor from one source — not from a number of manufacturers scattered all over the country. This means reliable delivery and more profit to you, because there is no delay.

Q. Delivery is important — but my profits also depend on how fast the equipment can be installed.

A. Correct. That's another good reason why you should buy a packaged heating system. A packaged hydronic system makes it possible for your Edwards heating contractor to get in and out much faster. Installation of an Edwards system is fast and simple.

Q. Why should I specify a hydronic system in the first place?

A. A hydronic system will help you sell your homes faster. Today's home buyers know that a hydronic system means complete satisfaction — even, clean, draft-free heat throughout the house. In addition, an Edwards hydronic system offers Zone Control — a way of heating that will save the home-owner up to 30% in fuel.

Q. Just what is Zone Control? Will it help me sell homes?

A. You bet it will! With inexpensive motorized valves, the home owner can select temperatures in different parts of the house. This means that he will save money on fuel bills. Saving money year after year — is a terrific sales point.

Q. I've heard that you people advocate 1/2" baseboard tubing instead of 3/4" and that I can save as much as \$36. per house. Is this true?

A. Certainly . . . and it's another chance for you to profit. Half inch baseboard is just as efficient as three quarter inch and half inch is considerably less expensive. You can save as much as \$36. per house and you can put this savings into Zone heating.

Q. I also hear you have a great deal of merchandising help available to builders?

A. Right. For instance, we will gladly write, layout and print a brochure for you to send out and hand to prospects. We've done this for many builders with outstanding results. In addition, we have available ad mats and mailers explaining the Edwards hydronic heating system and its advantages to the home owner, also displays for you to put in and around your models. Did you know, in addition, that we will do a complete heating-cooling engineering layout on any job you have — large or small?

PACKAGED HYDRONICS
THROUGH YOUR
CONTRACTOR



For more information,
check the coupon below and send it to me.

EDWARDS ENGINEERING CORP.
Pompton Plains, N. J. • TEmple 5-2808

Edwards Engineering Corp.
Pompton Plains, N. J.

We are interested in:

- A brochure made up specially for us
- Newspaper ad mats
- Folders for mailings
- Model home display material
- Edwards heating-cooling complete catalog
- Edwards "Builders Portfolio" containing information on heating and cooling for new homes, old homes, apartments, churches and motels.
- Engineering layout service

NAME _____

COMPANY _____

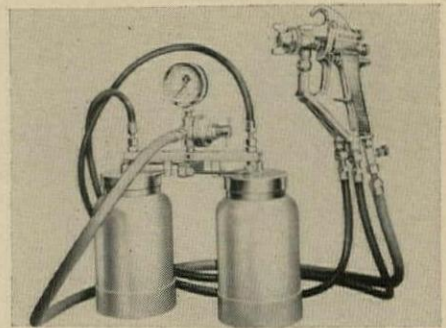
ADDRESS _____

CITY _____ STATE _____

H8

New products

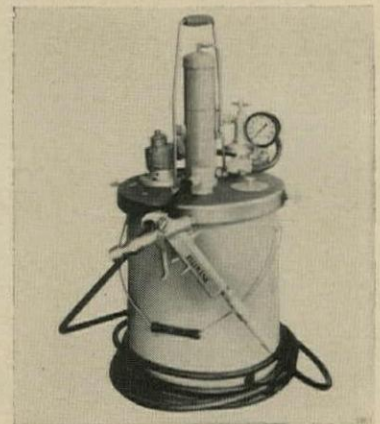
start on p 192



Two-color spray for spatter effects is possible with a new gun originally designed for the automobile manufacturers. The spray unit consists of a Model 19 gun, two paint cups (one or two quart), an air adjusting valve, hose, and fittings. Colors flow in separate hoses to the gun where they are mixed as they are applied.

Binks Mfg Co, Chicago.

For details, check No. 53 on coupon, p 202



Portable airless spray is provided by Balcrank's new Little Giant Hy-Spray units. No atomizing air or material heating is necessary. Paint is sprayed directly from the original five-gallon container. Airless spray lays down a heavy enough coat to finish a surface in one pass. It also cuts overspray and bounceback.

Balcrank Inc, Cincinnati.

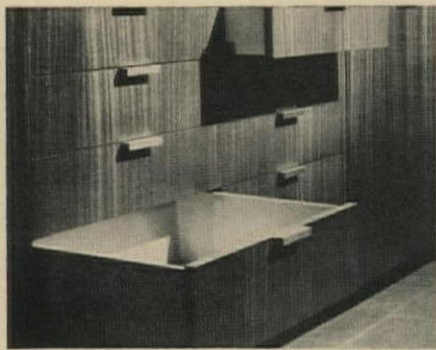
For details, check No. 54 on coupon, p 202



Air driven stapling plier is lightweight (less than 4 lb) and easy to operate with one hand. It holds up to 210 staples, works on pressures of 45 to 90 psi. Four models take staples 3/16" to 9/16" long in three wire sizes. Deep throat allows staples to be placed 4 3/4" from the edge of the work. Maximum vertical clearance is 15/16" at the clincher.

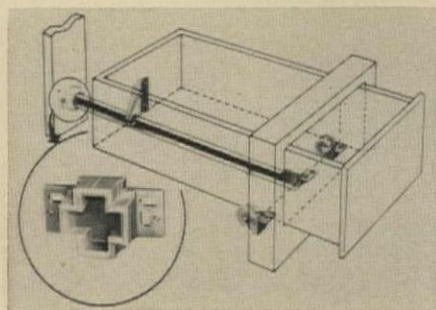
Bostitch Inc, East Greenwich, R.I.

For details, check No. 55 on coupon, p 202



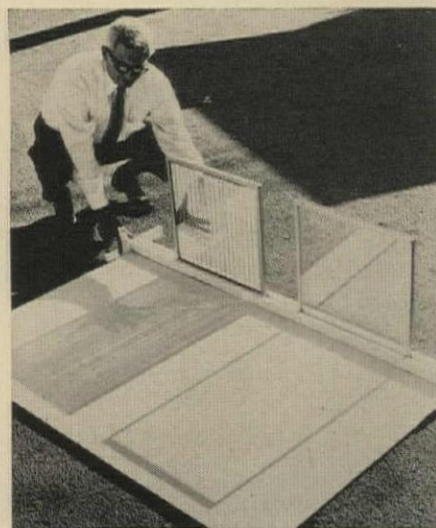
Molded plastic drawers in four basic sizes can be used for all sorts of built-in storage. Drawers have molded runners on bottom and molded flanges on top for frictionless slide, can be aligned with center or side guides. Front lip helps locate drawer fronts within minimum clearance.

Amos Molded Plastics, Edinburg, Ind.
For details, check No. 56 on coupon, p 202



Three-roller drawer slide for center mounting features a plastic rear mounting bracket. The bracket can be nailed, stapled, or screwed from inside or outside the cabinet, cushions sound and eliminates chatter. Front nylon rollers provide extra large bearing surface. Reinforced track fits in unused space above or below drawer. Sets come 18", 22", 22 3/4", and 24" long, retail at \$1 in packs of ten.

Amerock Corp, Rockford, Ill.
For details, check No. 57 on coupon, p 202



Preframed solar screen is designed to go between panes of hermetically sealed insulating glass to cut heat gain in west-facing glass walls. Because the louvered metal screen is enclosed between the glass panes, maintenance problems other than window washing are eliminated.

Armour Glass Co, Los Angeles.
For details, check No. 58 on coupon, p 202

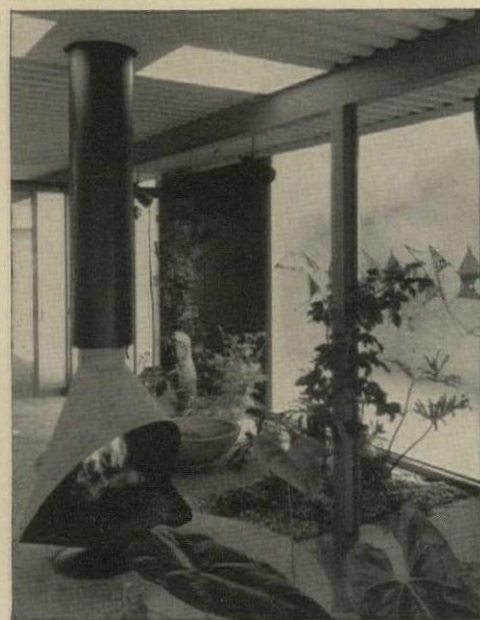
New products continued on p 198

CREATES A NEW PRIVATE WORLD OF *Living* BEHIND GLEAMING WALLS OF GLASS



The wonderful world of Eichler

Is enhanced by partitions of 7/8" patterned glass by Mississippi in Bay area residences, Palo Alto, California. Architects: Jones & Emmons and Anshen & Allen.



Owners can live, entertain, relax in the delightful atmosphere of simple elegance in these distinguished Eichler Homes, confident that the handsome translucent glass that floods interiors with diffused daylight, also protects their privacy completely. Glass does so much in these homes to achieve a feeling of spaciousness and friendliness. Effectively used in daylighting screens around patio courts and in doors, it floods adjoining areas with flattering "borrowed light", yet never needs painting, wipes shining clean with a damp cloth.

To add lustre to living, more and more builders are using beautiful, light diffusing glass by Mississippi. Available at better distributors in a wide range of patterns and surface finishes wherever quality glass is sold.



Write today for free booklet. Photographs of actual installations provide hundreds of stimulating decorating ideas. Address Dept. 9.



MISSISSIPPI GLASS COMPANY

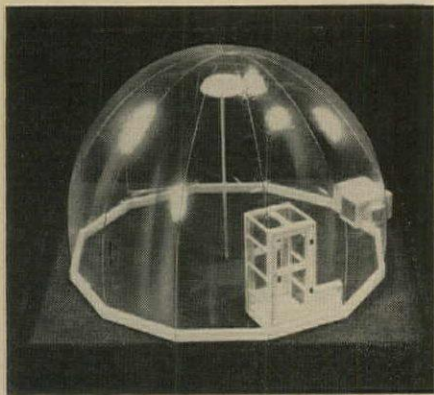
88 Angelica St. • St. Louis 7, Missouri

NEW YORK • CHICAGO • FULLERTON, CALIFORNIA

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

New products

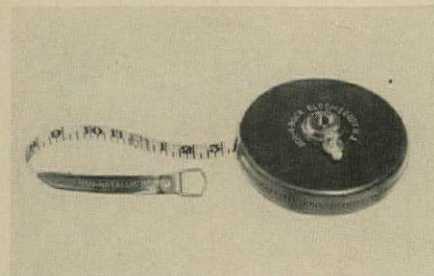
start on p 192



Clear bubble dome offers the advantages of any air house plus see-through visibility. The 20' wide 13' high dome is made of 6-mil vinyl, is supported by 5 psi of pressure. Unit, including airlock, pump, and light fixture, weighs only 73 lb, costs \$295. If pump power fails, pressure will hold for long periods before dome falls.

Crystal-X Corp. Wayne, Pa.

For details, check No. 59 on coupon, p 202



Precision tape, imported from England by Koh-i-noor, comes in non-metallic type for use around electrical wiring. Non-metallic tapes are woven linen plastic coated in 50' and 100' lengths. They are color-coded to differentiate them from similar metallic tapes. Prices: 50' for \$13.75, 100' for \$21.75.

Koh-i-noor, Inc, Bloomsbury, N.J.

For details, check No. 60 on coupon, p 202



Kodacolor business card helps remind your contact of what you look like. The cards are printed on glossy stock in standard size. Picture can be made from a Kodacolor negative, print, enlargement, or color transparency. Cards can be ordered through any Kodak dealer in lots of 100 for 20¢ each plus \$15 setup charge.

Eastman Kodak, Rochester, N.Y.

For details, check No. 61 on coupon, p 202

Publications start on p 200

VERN DONNAY homes

have a new "SOFT SELL"



Rain-Soft Water by the Lindsay Princess

Vern Donnay, president of Donnay Homes, tells Mrs. David W. Rau that her beautiful Lindsay Princess will assure her family an unlimited supply of pure soft water for baths, cleaning, dishes, and laundry. The Rau's new home is in Oak Park, Minn.



... Saves the Home Buyer a House Payment a Year!

Vern Donnay, Minneapolis builder, believes sincerely in his responsibility to the people who purchase his homes. And that's why his homes feature those "extras" that add up to quality.

Since 1949, he has undertaken eleven major community developments. The most recent are Donnay's Oak Park and Donnay's Brookdale Estates. In these areas, Mr. Donnay has provided spacious parks and recreational facilities where both adults and children can find leisure-time fun and relaxation. Many different home styles, which include modern colonials and attractive ramblers, give unusual charm and individuality to these Vern Donnay-developed neighborhoods.

In touring a Vern Donnay home, you quickly see evidences of quality. The prospective home-owner notes, for example, that national brand name materials and fixtures are used throughout.

One of the welcome "plus" features offered in the Vern Donnay homes is the Lindsay Princess water softener. This provides the home-owner with rain-soft water at the turn of a faucet.

Actually, Vern Donnay homes are built in a hard water area, as are

85% of all new houses built in the U. S. A. However, Vern Donnay is a builder who has provided a solution for all of his home-owners. With the Lindsay Princess water softener, he promises soft water for more pleasant daily living—brighter, cleaner washes for the busy housewife, delightful, sudsy baths, easier shaving. Dishes and windows come cleaner and more sparkling. The pure rain-soft water is a beauty aid to hair and skin, too. All this at a savings of up to \$117.60 a year... a house payment a year!

And those, Mr. Donnay says, are real sales points!

The Lindsay Princess is trim, only 12" wide, 43½" tall. Choice of five colors—in genuine porcelain inside and out. Snow White, Springtime Green, Vogue Pink, Sunny Yellow, Cinderella Blue. It's all-automatic, too—with an automatic by-pass in the regeneration cycle.

The beautiful Lindsay Princess is designed and engineered by America's largest manufacturer of home-owned water conditioners. Why not follow Vern Donnay's successful pattern? Drop us a letter for the full story on how you can put the Lindsay "soft sell" in your homes.



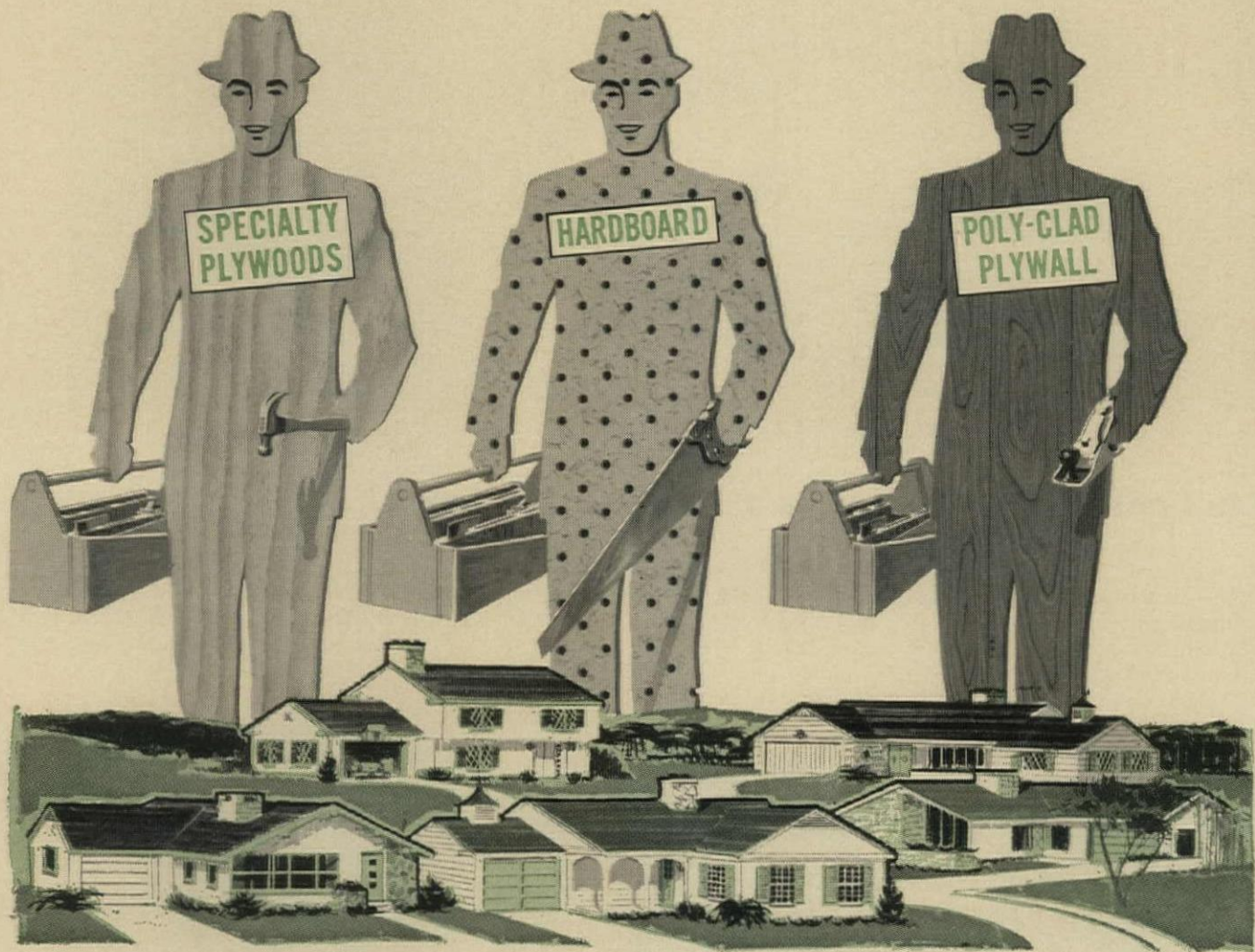
The Lindsay Company

St. Paul 4, Minnesota, Dept. 13-E

Division—Union Tank Car Company



THE EVANITE BIG 3...



For the Home Modernization Market

Build Right... Choose Evanite®

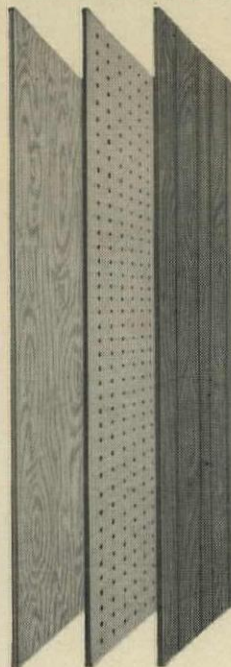
PLYWOOD: Douglas fir plywood, DFPA grade-marked; larch plywood, DFPA grade-marked. **HARDWOOD-FACED PLYWOOD:** birch, red oak, ash, madrone, Philippine mahogany, cherry, walnut. **SPECIALTY PLYWOODS:** Crezon overlaid, medium density; texture 1-11, marine plywood, "2-4-1" plywood, vertical grain fir, Ag-Ply, knotty spruce, Idaho knotty pine.

HARDBOARD: Standard, tempered, pre-finished, perforated, V-grooved, corrugated, exterior siding, garage liner. **POLY-CLAD (t.m.) PLYWALL®:** Pre-finished and matching plywood paneling, moldings, bi-fold doors, cabinet doors, cabinet stock, wainscot panel kit, doors.

Sales Offices: Chicago, Ill. • Tampa, Fla. • Coos Bay, Ore.
Anaheim, Calif. • Syracuse, N.Y. • Plymouth, Mich.

IT PAYS TO BUY FROM YOUR JOBBER

Evens is a member of the Douglas Fir Plywood Assn.



Hallmark of Quality Products



BUILDING MATERIALS DIVISION



VENT AND WASTE TREE, shop-assembled of ABS plastic off site, is a light load for one man at an Arizona development.

New full-color film shows uses of ABS plastic pipe

The film—a 20-min, 16-mm production for Marbon—shows a number of case histories of plastic-pipe installation including a 54,000' water-line job in Kansas, a gas distribution system in a Phoenix subdivision, and vent-and-drain

assemblies in mobile homes. Features demonstrated include easy handling, improved trenching techniques, solvent welding, etc. Advantages claimed for ABS plastic pipe include freedom from corrosion, no need for big handling

equipment, easy workability, good strength characteristics. The film is available on loan to accredited groups.

Marbon Chemical Division Borg-Warner Corp, Washington, W.Va.

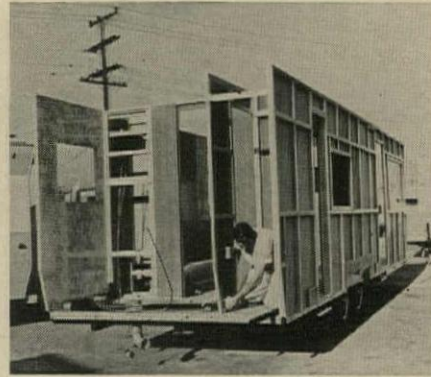
For showing write direct to the association



WATER SERVICE LINE is run out in continuous lengths and fed into narrow trench.



GAS SERVICE LINE is quickly installed in trench along rear lot line of Phoenix houses.



MOBILE-HOME PLUMBING is a natural for ABS—lightness is a virtue, codes no problem.

Title insurance film

A 21-min 16-mm movie that depicts the dangers that plague a real estate buyer is available through members of the American Title Association. Called *A Place in the Sun*, it tells in cartoon form all the legal elements that go into purchase of a home. Film won a top award in the American Film Festival.

American Title Assn, 1725 Eye St, NW, Washington, D.C.

For showing write direct to manufacturer

New building products catalog

The Carey line of building products is displayed in a new color brochure from the manufacturer. It includes various asbestos-cement products — shingles, clapboards, siding, sheet—four grades of asphalt shingles, mineral wool insula-

tion, Alcoa aluminum siding, built-up roofing, roofing maintenance products, foundation dampproofing.

Philip Carey Mfg Co, Cincinnati.

For copy, check No. 62 on coupon, p 202

Decorated hardboard brochure

A four-color folder describes and pictures Sandalite—a new hardboard with a scattered mosaic of color in the surface. Color photos show installations, line sketches show features.

Forest Fiber, Forest Grove, Ore.

For copy, check No. 63 on coupon, p 202

Exposed beam construction

How to save money in roof construction is the subject of a new booklet from Celotex. Besides describing the company products for such use, the bro-

chure lists average installed costs for fiberboard decked roofs, pitched roofs with attic vent space, flat roofs, and exposed-beam wooden roofs. Also included: specs on Celotex roof decks.

Celotex, Chicago.

For copy, check No. 64 on coupon, p 202

Fan, hood and wallclock catalog

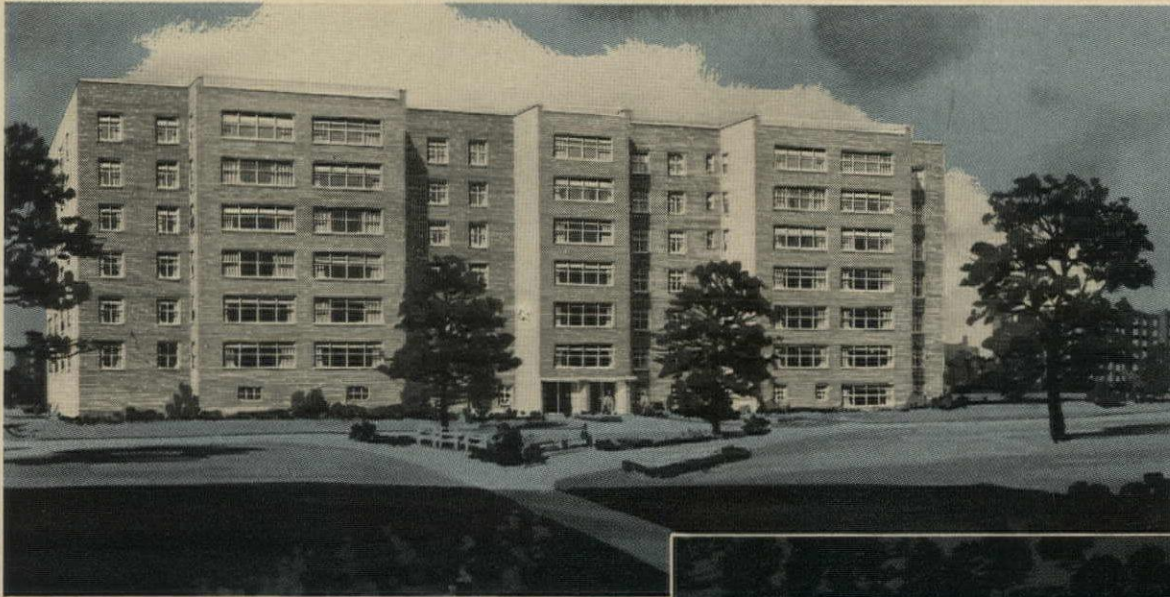
Leigh's full line is listed in new 16-page, three-color catalog. It features large illustrations, installation drawings, complete specifications—including new guaranteed air delivery ratings—on each range hood and ventilating fan. New items: ductfree hoods, high-pressure hoods, a higher-capacity economy hood. Also included, all accessories.

Leigh Bldg Prods, Coopersville, Mich.

For copy, check No. 65 on coupon, p 202

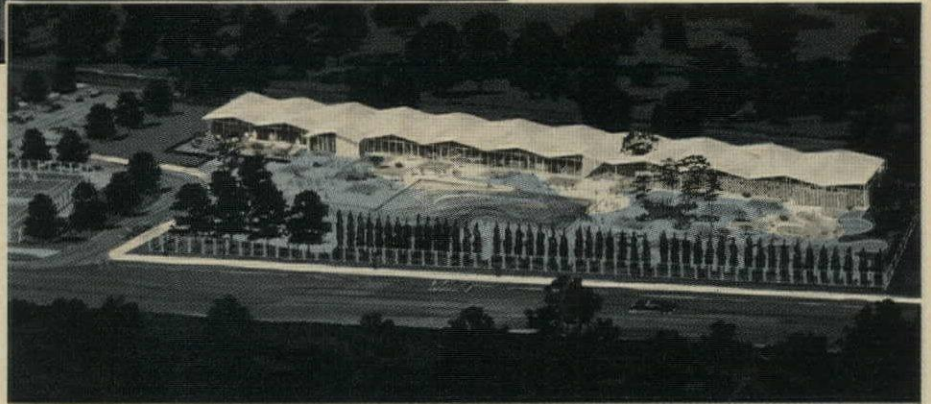
Publications continued on p 202

Fabulous \$50,000,000 apartments offer Country Club Living and Kelvinator!



The most recent addition to the huge N. K. Winston-Holzer apartment community at Bayside, Queens, New York City, is the Belle Bay Club Apartments, designed by Alex Danin, Architect. This group of buildings offers year-round central air-conditioning in spacious apartments that feature the most advanced modern conveniences for comfortable living.

When completed, this community will comprise 4,000 luxurious apartments with the best and newest appliances. Belle Bay offers country-club living in a suburban atmosphere just off New York's beautiful Little Neck Bay.



The new Belle Bay Club, on the development's 225-acre tract, is for the exclusive use of the apartment dwellers. A sleek new clubhouse offers a swimming pool, tennis courts, snack bar, steam baths, and separate adult and youth club rooms.



Superb quality and unequalled operating economy made Kelvinator the choice of the builders. Every Belle Bay kitchen offers this two-door Kelvinator beauty. Over 13 cu. ft. . . . a deluxe refrigerator-freezer completely in keeping with its elegant surroundings. This handsome Kelvinator Model 760 offers everything a woman wants, including automatic refrigerator defrosting, 102-lb. frozen food storage, deep door shelves, and twin porcelain crispers.



Builders know that the Kelvinator dishwasher, available in free-standing or built-in models, makes a happy impression on every woman prospect. Automatically washes all dishes gently and sparkling clean. When the easy-to-read dial control is set, Kelvinator does the rest—there's even a top "lazy susan" revolving roll-out rack and an automatic soap dispenser built in the door for added washing ease.

Kelvinator Appliances

Kelvinator Division, American Motors Corp., Detroit 32, Michigan

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

Biggest news in '61

J SCORES INSTANT SUCCESS
RAM

Another RELIABLE tamper by Jay



Compacts clay fast
Saves on labor
Cuts downtime

This new Jay Tamper gives better, faster earth compaction. Savings up to 90% and more. Easy to meet Proctor density spec. . . . under foundations, in ditches, under slabs. Weighs only 135 pounds. Engine 4-cycle, cast-iron—450 to 675 blows per minute. Choice of tamping plates. Saves "downtime" expense. Get a demonstration; find how Jay Tampers can save and EARN money for you.

JAY Best on Earth
tampers

Jay Company Division
J. LEUKART MACHINE CO., INC.
2222 S. Third Street, Columbus 7, Ohio

Appalachian oak brochure

An eight-page booklet tells the story of this hardwood. Technical properties are spelled out in detail. Species data is given in full. Photographs show oak in use in furniture, interiors, woodwork, flooring, etc., and in the flat to show grade, type, and finish.

Appalachian Hardwood Manufacturers, Cincinnati.

For copy, check No. 66 on coupon below

Electric heating catalog

Plastic-bound 30-page catalog of electric heating equipment deals with units for all types of installations in sizes of 500-w to 10,000-w. Residential equip-

ment includes fan-forced and radiant wall-insert heaters, baseboards, and ceiling-mounted heaters.

Markel Electric Products, Buffalo.

For copy, check No. 67 on coupon below

Structural hardware catalog

TECO has announced a new 12-page catalog of the various timber connectors, framing devices, and installation tools now available from the firm. Besides showing the various items—splitting truss connectors, truss plates, framing anchors, joist hangers, plywood clips, post caps, metal bridging, etc—the booklet is full of how-to-use data.

Timber Engrg Co, Washington, D.C.

For copy, check No. 68 on coupon below

Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

House & Home Room 1960, Time & Life Building
Rockefeller Center, New York 20, N.Y.

NEW PRODUCTS • August

- 1. Simpson resawn redwood
- 2. Wasco double dome
- 3. Allied water softener
- 4. Arlington water softener
- 5. Artesian water softener
- 6. Aurora water softener
- 7. Bomarc water softener
- 8. Borgerud water softener
- 9. Bruner water softener
- 10. Century water softener
- 11. Culligan water softener
- 12. Elgin water softener
- 13. Everlast water softener
- 14. Everpure water softener
- 15. Filtersoft water softener
- 16. Flint & Walling water softener
- 17. General Ionics water softener
- 18. Granger water softener
- 19. Great Lakes water softener
- 20. Hunt water softener
- 21. Kisco water softener
- 22. Kosko water softener
- 23. Langenau water softener
- 24. Lindsay water softener
- 25. Link-O-Matic water softener
- 26. Modern water softener
- 27. Myers water softener
- 28. Peerless water softener
- 29. Perm-A-Soft water softener
- 30. Permutit water softener
- 31. Pioneer water softener
- 32. PortaSoft water softener
- 33. Puritan water softener
- 34. Rainbow water softener
- 35. Red Jacket water softener

- 36. Reynolds water softener
- 37. Roper-Webb water softener
- 38. ServiSoft water softener
- 39. A. O. Smith water softener
- 40. Southern water softener
- 41. Stover water softener
- 42. United water softener
- 43. Velvet water softener
- 44. Water Refining water softener
- 45. Wayne water softener
- 46. White water softener
- 47. Zeo-Ran water softener
- 48. Thomas Enchante lighting
- 49. Lightolier chandeliers
- 50. Progress lamppost
- 51. Dietz post lantern
- 52. Coleman post lantern
- 53. Binks two-color spray
- 54. Balcrank airless spray
- 55. Bostitch stapler
- 56. Amos molded drawer
- 57. Amerock drawer slide
- 58. Armour solar screen
- 59. Crystal-X bubble dome
- 60. Kohinor tape
- 61. Eastman calling card

PUBLICATIONS

- 62. Carey building products catalog
- 63. Forest Fiber Sandalite brochure
- 64. Celotex roof deck booklet
- 65. Leigh full-line catalog
- 66. Appalachian oak brochure
- 67. Electric heating catalog
- 68. Structural hardware catalog

NAME _____

POSITION _____ FIRM _____

KIND OF BUSINESS _____

STREET _____

CITY _____ STATE _____

IMPORTANT:

House & Home's servicing of this coupon expires Nov, 1961. In addressing direct inquiries please mention **House & Home** and the issue in which you saw the product or publication.

I wish to enter a subscription to **House & Home** for 1 year, \$6 2 years, \$8
US and possessions and Canada only

New Renewal _____
Signature _____

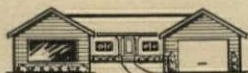


OVERLAID PLYWOOD SIDINGS

* TEXTURED
PANELS



* HORIZONTAL
SIDINGS



These leading plywood manufacturers produce the highest quality overlaid plywood by bonding CreZon to DFPA Tested exterior grade plywood:

*ABERDEEN PLYWOOD & VENEERS, INC.
HARBOR PLYWOOD DIVISION
P. O. Box 1036
Aberdeen, Washington
HARBOR Brand
CreZon Overlaid Plywood

ANACORTES VENEER, INC.
35th and "V" Avenue
Anacortes, Washington
ARMORITE

*DIAMOND LUMBER COMPANY
Pittock Block
Portland, Oregon
SUPER SIDING
CreZon Overlaid Plywood

EVANS PRODUCTS COMPANY
P. O. Box 839
Coos Bay, Oregon
CreZon Overlaid Plywood

*GEORGIA-PACIFIC CORPORATION
Equitable Building
Portland 4, Oregon
GPX YELLOW PANELS
GPX GREEN PANELS
GPX YELLOW BEVELLED SIDING

ROSEBURG LUMBER COMPANY
P. O. Box 1091
Roseburg, Oregon
CreZon Overlaid Plywood

SIMPSON TIMBER COMPANY
2000 Washington Building
Seattle 1, Washington
MEDIUM DENSITY OVERLAID PLYWOOD

ST. PAUL & TACOMA LUMBER COMPANY
1220 St. Paul Avenue
Tacoma 1, Washington
PLYALOY

*UNITED STATES PLYWOOD CORPORATION
55 West 44th St.
New York 36, New York
DURAPLY

*WASHINGTON PLYWOOD COMPANY, INC.
P. O. Box 746
Everett, Washington
EVERLAST PANELS
EVERSIDE SIDING

170,000 HOMES LATER...

In the eight years since its introduction, enough CreZon has been sold to side over 170,000 homes. CreZon's proven performance rates it THE medium density overlay for plywood.

* NOW AVAILABLE

Mill Primed—Ready for a "One Coat" Finish

 **CROWN
ZELLERBACH**

CREZON SALES

ONE BUSH STREET • SAN FRANCISCO

please



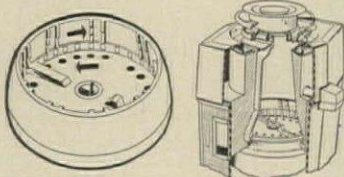
**don't make
me a
garbage
collector!**

I'm tired of garbage "trudgery." We're moving into a new home because we want a better life. Believe me, I'm making sure the kitchen has conveniences I want. Number one is a garbage disposer.*

Make it an In-Sink-Erator, and I'll be easier to sell. Unlike others, In-Sink-Erator prevents jams thanks to its exclusive, patented, automatic reversing feature. Costs surprisingly little to install.

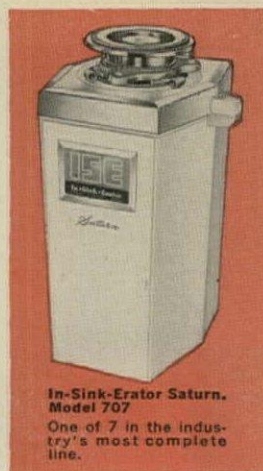
Write for full information, or a personal demonstration by an In-Sink-Erator representative. Address Dept. HH-961, In-Sink-Erator Manufacturing Company, 1225 14th St., Racine, Wis.

*An overwhelming majority of delegates to the Women's Conference on Housing voted the garbage disposer the most wanted appliance of all.



Unlike other disposers, In-Sink-Erator prevents jams thanks to exclusive, patented automatic reversing feature. Doubles shredder life. Self-cleaning.

In-Sink-Erator's exclusive sound-absorbent liner permanently blankets interior of unit... smothers sounds! That's why it's quieter than any other.



In-Sink-Erator Saturn, Model 707
One of 7 in the industry's most complete line.

In • Sink • Erator® ISE

The originator and perfecter of Garbage Disposers • In-Sink-Erator Manufacturing Co., Racine, Wisconsin

ADVERTISERS INDEX:

This advertisers index published by HOUSE & HOME is an editorial service to its readers. HOUSE & HOME does not assume responsibility to advertisers for errors or omissions in preparation of these listings.

Page:	
76	Allied Chemical Corp. (Barrett Div., The)
23-30	American Gas Assn.
201	American Motors Corp. (Kelvinator Div.)
88, 89	American Standard Corp. (Plumbing & Heating Div.)
206	American Telephone & Telegraph Co.
172, 173	Andersen Corp.
62, 63	Armstrong Cork Co.
76	Barrett Div., The (Allied Chemical Corp.)
68	Bird & Son, Inc.
4	Borg-Warner Corp. (Norge Sales Corp. Div.)
3	Bostitch, Inc.
190	Bruce Co., E. L.
183, 184	Bryant Mfg. Co.
5	California Redwood Assn.
99	Caloric Appliance Corp.
205	Cameron & Co. Wholesale, Wm.
6	Carey Mfg. Co., The Philip
83	Case Mfg. Co.
66, 67	Cast Iron Pipe Research Assoc.
2	Congoleum-Nairn, Inc.
38	Crane Co.
203	Crown Zellerbach Corp.
7-15	Douglas Fir Plywood Assn.
35	Du Pont De Nemours & Co., Inc., E. I., (Elastomers)
196	Edwards Engineering Corp.
199	Evans Pdts. Co.
85	Fasco Industries, Inc.
39	Float-Away Door Co.
16, 17	Ford Motor Co.
166	General Electric Co.
82	Gustin-Bacon Mfg. Co.
95	Hardwick Stove Co.
185	Harris Mfg. Co.
19-22	Hines Lumber Co., Edward
92, 93	House & Home
34	Hunter Div.
204	In-Sink-Erator Mfg. Co.
86, 87	Insulite Div. (Minnesota & Ontario Paper Co.)
58	International Nickel Co., Inc., The
59	International Paper Co. (Long-Bell Div.)
64	Kalwall Corp.
201	Kelvinator Div. (American Motors Corp.)
207	Kentile, Inc.
70, 71	Keystone Steel & Wire
96	Kingsberry Homes
52	Leigh Bldg. Pdts. Div. (Air Control Pdts., Inc.)
18	Lennox Ind.
202	Leukart Machine Co., Inc., J. (The Jay Co. Div.)
187	Libbey-Owens-Ford Glass Co.
198	Lindsay Co.
59	Long-Bell Div. (International Paper Co.)
78	Minneapolis Honeywell Regulator Co.
86, 87	Minnesota & Ontario Paper Co. (Insulite Div.)
197	Mississippi Glass Co.
195	Moe Light (Division of Thomas Ind., Inc.)
40, 41, 208	National Homes Corp.
74, 75	National Lumber Mfrs. Assn.
4	Norge Sales Corp. (Div. of Borg-Warner Corp.)
2A, 2B	Nutone Inc.
31	Pacific Lumber Co., The
56	Pease Woodwork Co., Inc.
174, 175	Red Cedar Shingle Bureau
36, 37, 84	Republic Steel Corp.
191	Robertshaw Thermostat Div. (Robertshaw-Fulton Controls Co.)
50, 51	Ruberoid Co., The
188, 189	Schlage Lock Co.
60, 61	Scholz Homes, Inc.
182	Sherle-Wagner
205	Showerfold Door Corp.
83	Sonoco Pdts. Co.
100	Stanthony Corp.
182	Structural Clay Pdts. Institute
186	Suburban Gas Corp.
79, 80	Tappan Co., The
195	Thomas Ind., Inc. (Moe Light Div.)
168	Union Carbide Plastics Co. (Div. of Union Carbide Corp.)
42	Uvalde Rock Asphalt Co.
90, 91	West Coast Lumbermen's Assoc.
81	Western Veneer & Plywood Co.
32, 33, 176	Whirlpool Corp.
94	Yale & Towne Mfg. Co. (Towne Hardware Div.)



We builders
(and lots More)
are switching to
SHOWERFOLD
FOLDING DOORS

- Because** We save \$25 to \$40 per shower enclosure...
- Because** They are SAFE. DuPont Alathon paneling won't crack or shatter. Can't cut or scratch.
- Because** They fold open—allowing complete access for bathing or cleaning. No dangerous, swinging door to get in your way.
- Because** They are attractive... Blend beautifully into any color scheme.



SHOWERFOLD DOOR CORPORATION

5858 N. PULASKI ROAD • CHICAGO 46, ILL.

KINKEAD INDUSTRIES, INC., 5250 W. 102nd St., Los Angeles 45, Calif.

Selling is easier when Quality is quickly apparent.



IDEAL Stack Windows meet or exceed all requirements of U. S. Commercial Standard CS 204-59. Units can be grouped in many ways to provide proper lighting and ventilation. Made of selected Western Ponderosa Pine and Preservative Treated to last a "housetime." Operating sash fully weatherstripped with anodized aluminum. Units furnished completely assembled, ready for fast, easy installation.

SOLD AT RETAIL BUILDING MATERIALS STORES

Millwork with easily recognized quality has the power to ease the selling job for dealers; has the power to help sell homes for builders. You are invited to test the sales appeal and selling power of IDEAL Millwork. For your copy of a handy pocket-size catalog on IDEAL Windows, Doors and Cabinets, please mail the coupon below.

IDEAL *Company*

P. O. BOX 889 • WACO, TEXAS

Gentlemen:
 Please send me your Ideal
 Millwork catalog free!

NAME _____

ADDRESS _____

CITY _____ ZONE _____

STATE _____ H & H—8-61



"Telephone planning helps me sell houses," says Sam Batistich. "People are looking for extra conveniences—and this is a good one. It gives my salesmen an important talking point. Everybody likes it."



Your local Bell Telephone Business Office will gladly help you telephone-plan your homes. For details on home telephone installations, see Sweet's Light Construction File, 11c/Be. For commercial installations, see Sweet's Architectural File, 34a/Be.

"Modern ideas? One of the best I know is concealed telephone wiring—in every house"

**SAYS SAM BATISTICH,
SAM BATISTICH CONSTRUCTION CO.,
RIVERSIDE, ILL.**

"We specialize in modern, ranch-type homes. We advertise that our homes have 'the best ideas in modern design.' And our prices range from \$40,000 to \$70,000. This means that our customers expect our homes to have all the latest conveniences. One of the most important—and promotable—of these is concealed telephone wiring.

"People know about telephone planning. And they respond quickly—and favorably—when they see it in Sunny Hills Estates. All of our 238 houses feature concealed telephone wiring. That's the kind of pre-planning my customers appreciate.

"Yes, concealed telephone wiring is a convenience feature that makes sense. I've been putting it in for some time now . . . and I'm convinced it helps me sell houses."

BELL TELEPHONE SYSTEM



Completely air conditioned—and telephone planned—the modern, luxurious "Sherwood" is priced at \$53,000.

