

January 1953

house + home

1953's most influential house?

NAHB's Trade Secrets house, being built across the USA, demonstrates what new ideas many of the country's top builders think the public is ready to accept (p. 99 and below)

A carpenter's handbook

Harwell Harris' house sets forth a wealth of wood detailing and planning ideas (p. 126)

Look what's selling in Ohio

Toledo builder gambles on a California house making good in the Midwest, finds he has a best seller on his hands (p. 144)

An open letter to General Eisenhower

Round Table proposal suggesting ways by which federal cooperation with homebuilding could be made (1) more effective and (2) more economical (p. 116)

10 ways to save 10%

"Builders know them. Why won't they use them?" asks Small Homes Council Director (p. 152)

It happened in New Canaan

This New England town has the highest concentration of modern houses in the East, land values are up (p. 132)

Prefabricated partition

Three-in-one sandwich (core and two exterior panels) industrializes interior partitioning (p. 140)



It takes **MORE THAN A BLADE**



It takes **BOTH** Fan Blade and Fan Housing to make a Ventilating Fan Really Get Rid of Kitchen Grease and Odors!



Wind tunnel tests prove that NuTone's exclusive combination of Deep Pitched Blade PLUS Venturi Tube Housing give **GREATER AIR VOLUME** . . . operate **MORE QUIETLY** . . . at half the cost.

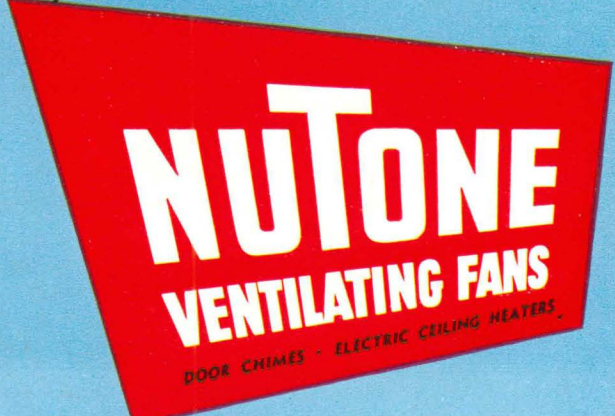
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1

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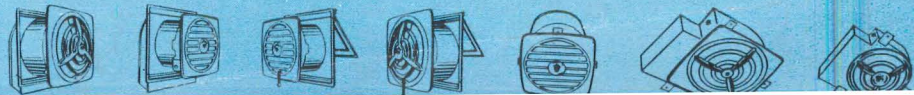
2

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house+home

January, 1953

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Cover: Interior of Trade Secrets house; photo by Arnold Newman—LIFE

Watch women respond to

LUDMAN

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AUTOMATIC LOCKING
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WINDOWS



Why? It is so *plainly* evident! Auto-Lok is the new, modern miracle window . . . the window that "makes its own weather". It's the window selected by leading architects for their prize-winning homes. No wonder it's the window that actually *sells* homes to women!

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CLEAN THE OUTSIDE FROM THE INSIDE . . . TOP VENT TOO!

The amazing truth is . . . it's the window women want most!

It's the first window that combines the best features of all window types . . . the first and only window that actually gives women everything they've always wanted in a window . . . with none of the disadvantages they've put up with in the past.

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IT'S THE WINDOW THAT MAKES ITS OWN WEATHER!

air conditioning package you asked for!

**NOW Servel gives you packaged, All-Year
air conditioning to fit the needs
and the budget for low-cost homes**

All-Year air conditioning for the entire home—the biggest news in building—will be ready for the coming building season! Using clean, low-cost gas as fuel, Servel's revolutionary, entirely new, built-in Air Conditioner will be completely practical for the small-home building market.

It's the equipment you builders have asked to have designed—not just a smaller version of Servel's established line of *All-Year* Air Conditioning, but a pre-assembled package. Just wheel it in, set it down, make a few connections, and the home is air conditioned! And instead of presenting space and air-distribution problems, this compact heating-cooling package solves them, and allows new freedom of home layout besides!

You've asked for low price—This new unit is priced right—priced to fit the small-homes market, as small as five rooms. Furthermore, new savings in space and materials . . . plus the new freedom of room planning you'll get from the inherent advantages of summer cooling . . . can, in some cases, change your plans to the point where you may actually save money over the cost of heating alone!

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All-Year Air Conditioner can be installed in a floor space of only about 8 square feet! And with some types of design, room-to-room return air duct-work can also be completely eliminated.

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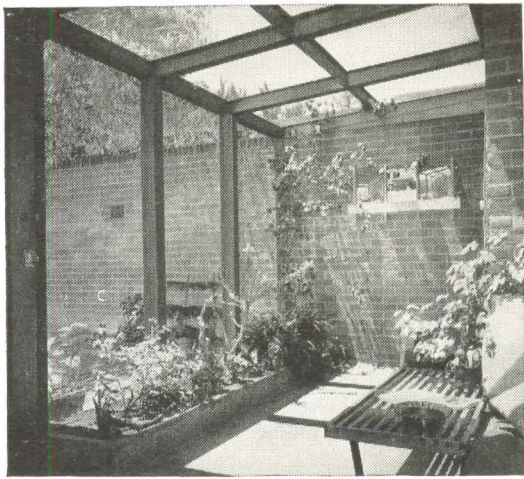
This newest member of the famous Servel line has all of the great features that have put Servel *All-Year* Air Conditioning in more homes than any other make. It can give you *all seven* benefits of true air conditioning:

1. Heats in winter.
2. Cools by refrigeration in summer.
3. Cleans the air.
4. Removes excess moisture on hot days.
5. Adds needed moisture on cold days.
6. Circulates the air.
7. Ventilates with outside air.

This Servel package will be in the hands of your Servel distributor in time for the coming building season. He's a good man to know, because he can help you sell more homes. See him, or write Servel, Inc., Dept. HH-1, Evansville, Indiana.

— the name to watch for great advances in

AIR CONDITIONING ✓ **REFRIGERATION**



View of entrance-way. Inner garden is at left.

HONEYWELL | ZONE CONTROL | MAKES POSSIBLE

Ideal "Indoor Climate" For Your Clients

Now you can provide the temperature they want—in every room—with Honeywell Zone Control

Just how you can bring the feeling of outdoor spaciousness and natural beauty into the modern house is well exemplified by the handsome new home of Mr. and Mrs. Victor Hornbein in Denver, Colorado.

And it well exemplifies, too, the ideal "indoor climate" Honeywell Zone Control makes possible—in every part of the house—in the most changeable winter weather.

When developing the plans for their home, the Hornbeins saw an ordinary temperature control system wouldn't do.

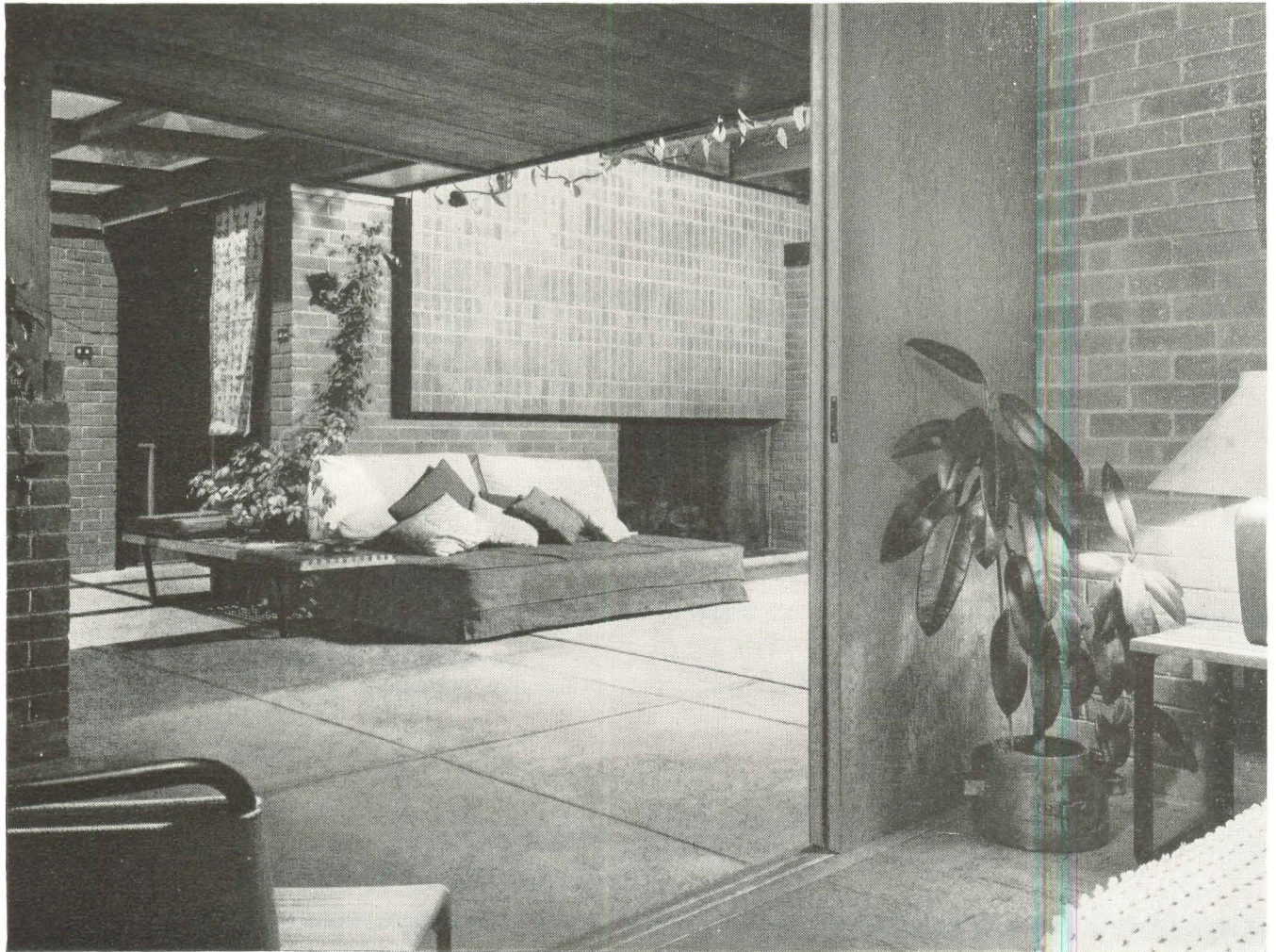
As Mr. Hornbein, himself an architect, puts it, "What we wanted was a house that afforded real *comfort*—all winter long. So we divided the house into three heating zones, each with its own thermostat system."

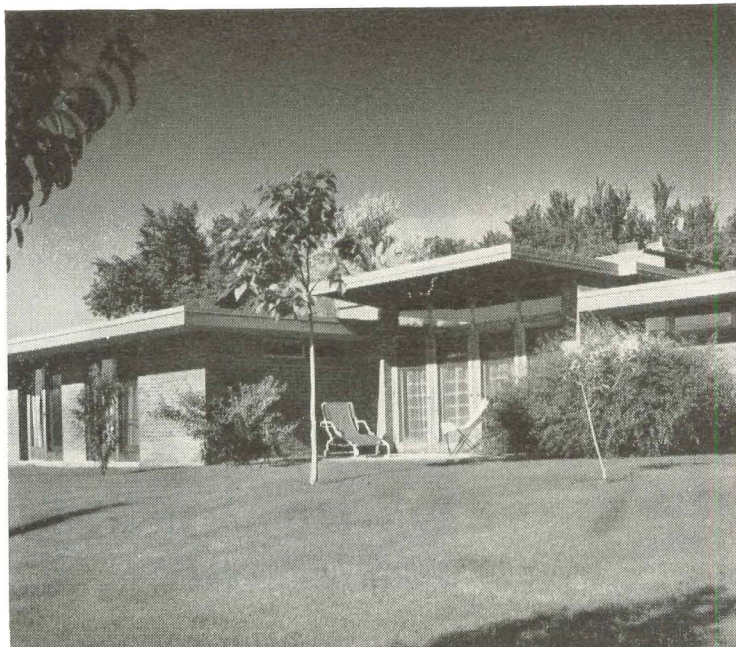
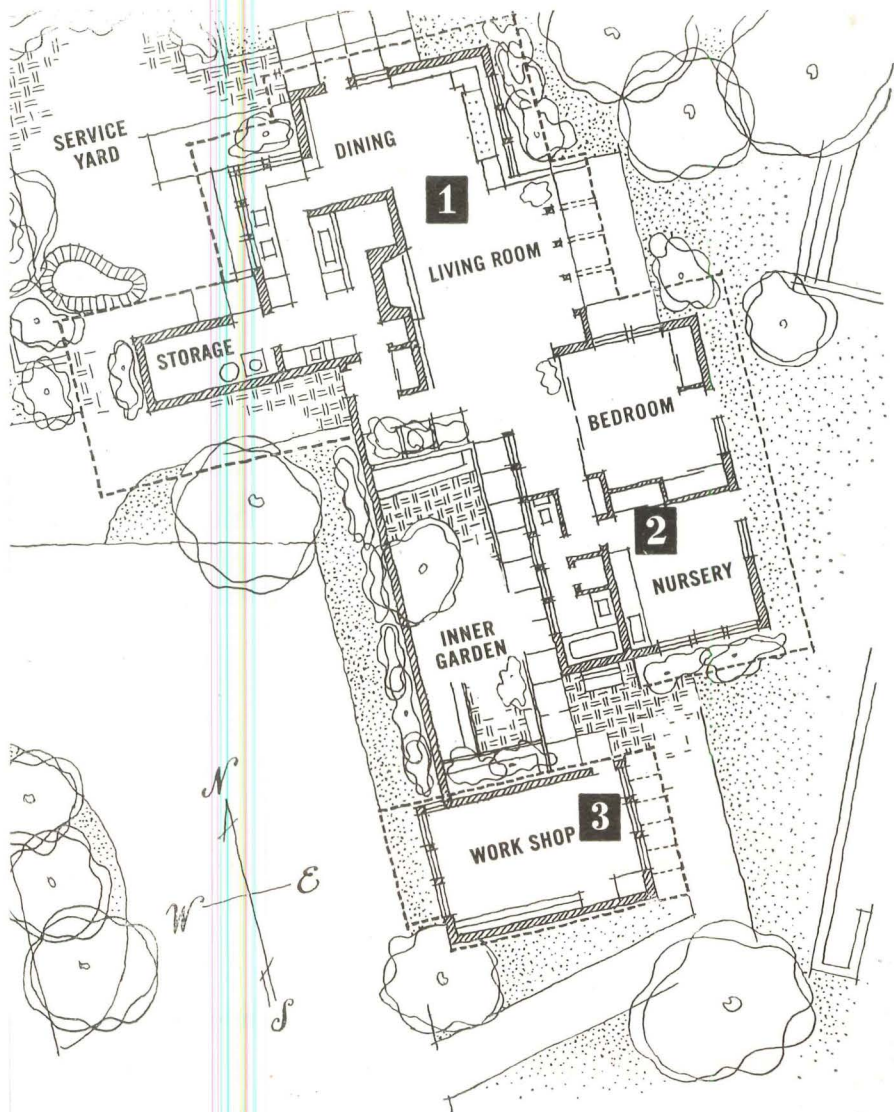
And today, with separate Honeywell thermostats in each of these zones, the Hornbeins and their guests enjoy ideal "indoor climate," in all parts of the house, no matter what the winter weather.

So why don't you find out more about Honeywell Zone Control—and specify it in the homes you design? Then you'll be helping your clients enjoy the ideal "indoor climate" it provides.

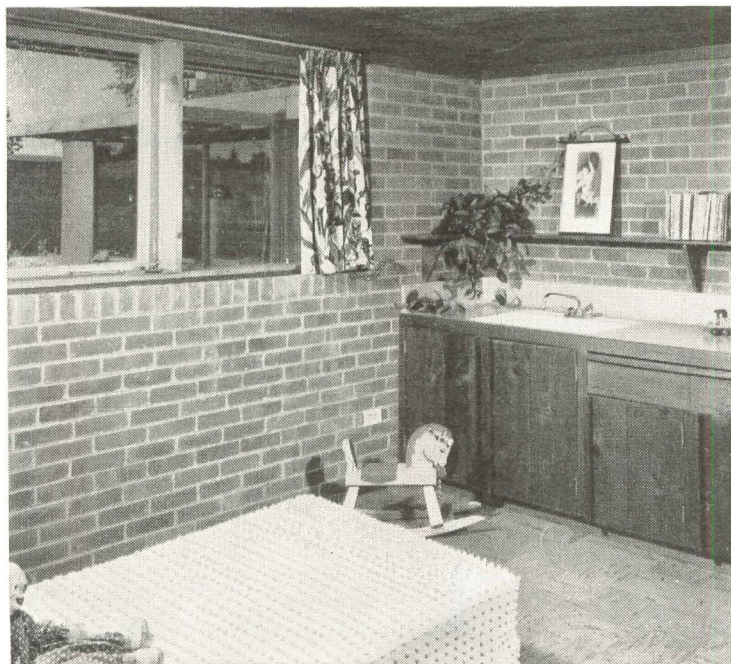
Heating zone 1—the living-dining area

A separate thermostat is needed in this area to counter-act strong winter winds that blow from the north-east—and to compensate for extra heat from the fire-place.



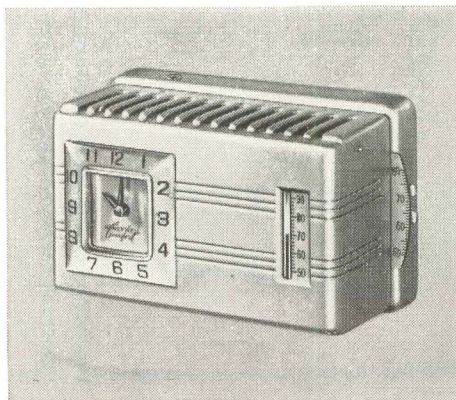


The modern look of the Hornbein home is dramatically evident in this view of the exterior. Note the generous overhang of the flat roof that shelters the small terrace. Note, too, the modernized version of French doors that open into the living room. A separate Honeywell thermostat assures wintertime comfort in the area behind these doors by compensating for heat lost through the large glass area.



The bedroom of the Hornbein's four-year-old daughter is located in heating zone 2. The varying amounts of solar heat admitted by the room's southern windows, on a day when it's alternately cloudy and bright, are easily compensated for by an individual thermostat. Thus, the room is always comfortable—even for a child playing on the floor.

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CLOCK
THERMOSTAT



Owners say the Honeywell electric or electronic clock thermostat is wonderful because it turns down the heat—automatically—when they go to bed, and gives them a nice cool room to sleep in; turns up the heat—automatically—while they're still asleep, and their home is warm when they get up. Saves them fuel, besides! The clock thermostat is ideal for use with zone control.

MINNEAPOLIS
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First in Controls.

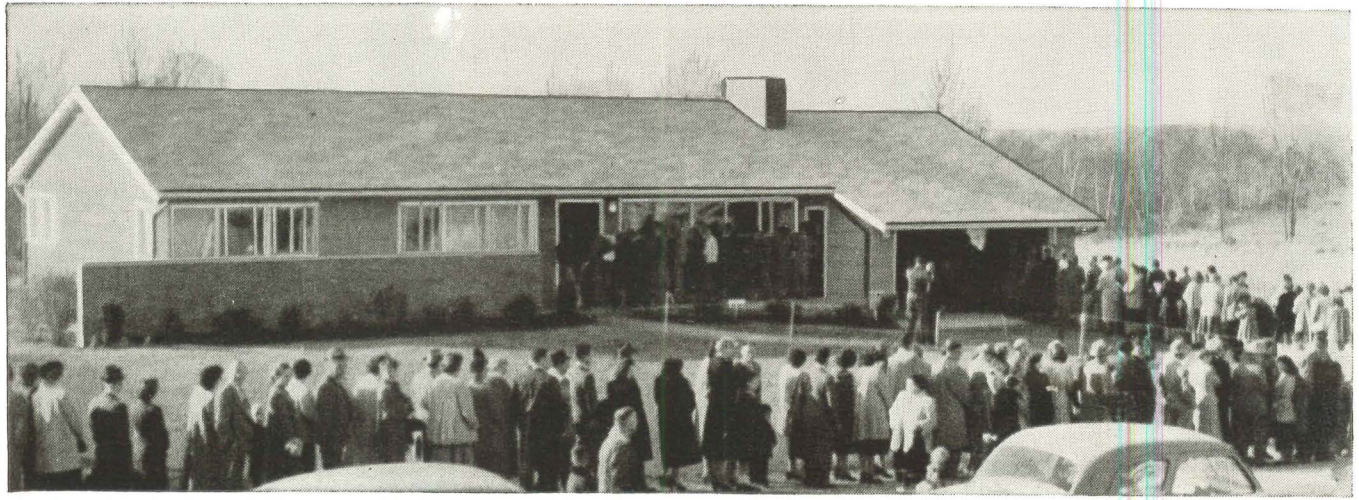
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Dept. HH-1-08, Minneapolis 8, Minnesota

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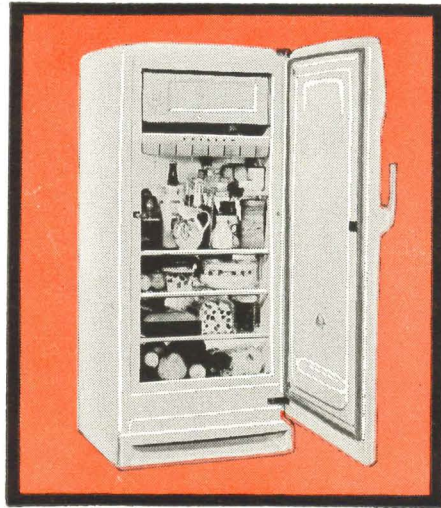
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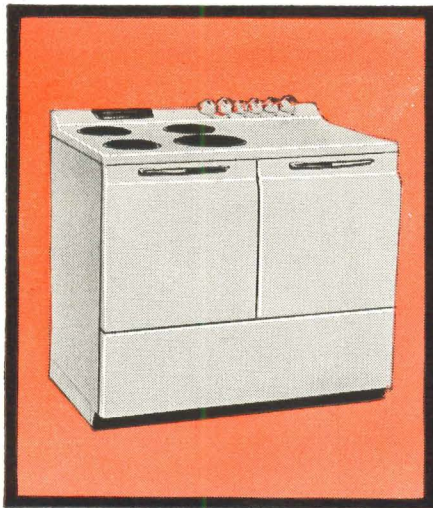


NEW '53 General Electric



G-E REFRIGERATORS

Seven new beautiful General Electric models—completely new inside and out. New Roto-Cold Refrigerators with automatic defrosting. New combination refrigerator-freezer models.



G-E RANGES

This is the "Beacon," a brand-new full-sized model that supplements others in the low price field, and priced even lower. The General Electric range line for 1953 is new in design!



G-E ELECTRIC SINK-DISHWASHER

Brand-new design. Models of special interest to builders will be basically the same as de luxe models, but with modifications to *pare costs*.

New G-E Laundry equipment, too!

New Automatic Washer and new Automatic Clothes Dryer—matched in appearance and in performance. Also: Wringer Washers and Toe-Touch Automatic Ironer.

New G-E Steel Base and wall Cabinets!

Designed to blend with the new matched line of General Electric appliances. White baked-on enamel. Steel specially processed for resistance to rust.

'53 seen as year of change for housing with war key to volume

A year ago, pessimism over credit and materials controls and the shortage of 4% money for VA loans led many a homebuilder to predict housing production might dive as much as 10% in 1952. Instead, with the defense stretchout, last year displaced 1951 as the second biggest year in housing's history. Even if December produced no more than 61,000 starts, 1952 would top 1.1 million units against 1951's 1,091,300.

Last month, like the rest of US businessmen, homebuilders looked forward to 1953 as another year of booming business, brimmed with confidence they could lick such remaining internal problems as mortgage money, high building costs, slow sales of existing houses.

Would housing in 1953 really match its 1 million home promise? As the old year ended, it looked as though the ultimate answer hinged as ever on 1) the cold war and Korean war, 2) the general health of the US economy.

Theorized Vice-President Harold R. Berlin of Johns-Manville Corp: "Had [the government] decided to follow the original plan of speeding defense expenditures to the \$72 to \$74 billion level by the end of 1952, entire classes of the construction industry would have found it exceedingly difficult to operate because of lack of critical materials, intense labor shortage and tighter governmental controls." To his forecast that construction's \$42 billion volume in 1952 might be topped by a record \$43 billion volume in '53, Berlin hedged: "If the Korean war or cold war in general is stepped up the optimistic estimate of a \$1 billion increase for the industry would have to be revised considerably."

Knife-edge economy. Builders could hope that some answers on the course of the cold and Korean war would be forthcoming from the Eisenhower administration before the spring building season. Men close to the President-elect said last month that in Ike's mind the most important thing was to keep the nation's economy on an even keel. They said Eisenhower regards the economy as teetering on a "knife-edge" between potential inflation and depression.

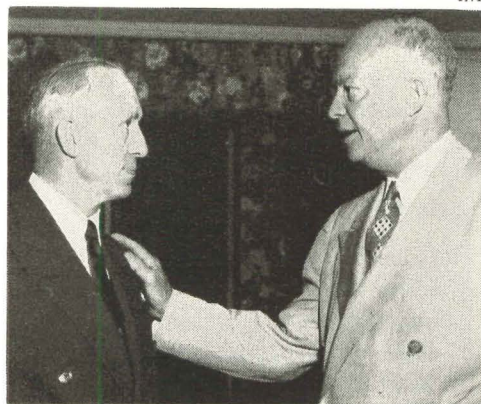
Some signposts of inflation were visible in construction. Fir dimension lumber went up \$3 a thousand feet (see p. 37). Cement prices appeared headed for a round of increases. One top economic adviser to Eisenhower, asked about prospects for a recession, said he was much more worried about the "boomlet" in business, based on post-election optimism. His first task, he thought, might be to devise ways to keep the boomlet from getting out of hand.

Continued controls? Such thinking suggested a strong possibility the Republicans may delay junking direct controls—or at

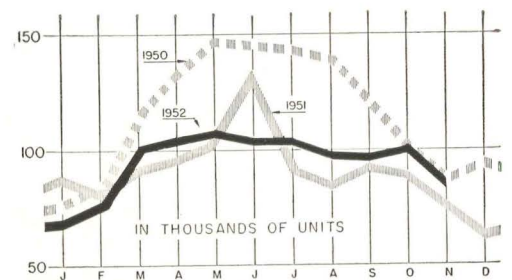
least that Ike will ask some sort of standby price and wage control laws. Sen. Homer Capehart (R, Ind), who was in line to become chairman of the Senate banking committee which shapes most federal housing policies, said bluntly that standby controls "might be necessary." In an interview with the Indianapolis *Times*, Capehart unburdened himself of many another idea about what tinkering the GOP Congress should do to housing. He thought:

Both FHA and VA interest rates should go up to 4½% (see p. 39). Present FHA down payments on both new and existing homes are "higher than necessary." Congress should continue federal financing of housing research. A compulsory warranty on FHA and VA houses is a good idea. ("Builders should accept more responsibility for good workmanship," said he.) FHA remodeling and home improvement terms (Title I) are too stringent. A study should be made of ways to encourage construction of more low rent housing.

Authorities by default. Capehart's views carried more than the usual weight of a Congressional committee chief. With Eisen-



COMMERCE UNDERSECRETARY in the new cabinet will be W. Walter Williams (shown in campaign pose with Eisenhower), Seattle mortgage banker and one-time (1934) president of the Mortgage Bankers Assn.



Source: Bureau of Labor Statistics

HOUSING STARTS for November were 86,000, boosting the 1952 eleven-month total over the million mark. Annual total for 1952 would be close to 1,125,000, if the present pattern persists. After seasonal adjustments, the annual rate based on November was 1,160,000, just a shade under the 1.2 million figure which theoretically could bring back Regulation X.

hower's long delay over naming a new HHH Administrator, Capehart and Rep. Jesse Wolcott (R, Mich.), prospective chairman of the House banking committee, had emerged at least temporarily as the GOP's chief spokesmen on housing policy. Wolcott, in his November talk to NAHB in Oklahoma City, had given the housing industry a still more challenging offer: "There will be ample assistance on the part of the government to effectuate any program which you agree upon." Wolcott suggested "revamping" FHA and Fanny May, boosting VA interest rates, adjustments to the Home Loan Bank System to make it work effectively as a "small Federal Reserve" for its members.

Such talk gave plenty of warning that 1953 would be a year of changing rules and policies for homebuilding. Not only federal rules and policies, but much about houses themselves seemed headed for decisive changes. NAHB President Alan Brockbank predicted that, because the "postwar shelter demand has largely been filled," 1953 homes will be larger, have more built-in storage, more expandable floor space, bigger kitchens, much more airconditioning, more emphasis on indoor-and-out privacy, sound-proofing, planned landscaping.

Construction lieutenants. What the construction industry had seen so far of the new administration's top men, it generally liked. Designation of W. Walter Williams of Seattle as the next undersecretary of commerce put a widely respected mortgage banker in a spot to be of much aid to the building industry. In picking President Martin P. Durkin of the AFL plumbers union as Secretary of Labor (see People), Eisenhower did more than placate organized labor. For the first time since the labor secretaryship was created in Woodrow Wilson's administration, a man with a first-hand knowledge of the building industry would hold the post.

Federal building code, more HHFA research asked by national security resources board

After six months of interagency deliberations, the National Security Resources Board last month gave President Truman its advice* on what to do about the controversial report of the President's Materials Policy Commission (H&H, July '52, News). The advice looked likely to touch off an even bigger salvo of denunciation from parts of the industry than greeted the original report. NSRB urged immediate adoption of three recommendations:

National Building Code—In its most controversial specific proposal, NSRB urged Truman to "designate an agency of the federal government, presumably HHFA," to formulate and keep up to date "national standards of building construction." NSRB agreed with the commission headed by CBS Chairman William S. Paley that HHFA should have the advice of representatives from "interested federal agencies and non-government technical groups." It noted disagreement among the eight agencies it consulted over who should give the technical advice. The Labor Department insisted labor representatives (and state and local governments and the construction industry) should be consulted. The Federal Security Agency insisted administration of a national code must be farmed out to the myriad bureaus of the government which have their fingers in construction. NSRB sensibly rejected such special pleading.

More housing research—With the backing of all affected agencies but the VA, the security resources board urged Truman to "direct HHFA to develop an expanded research program," consult BRAB or similar nongovernment groups about coordinating and spreading the results. VA's objections, NSRB noted, "raise the fundamental issue of the role of the government in housing research." Said VA: federal research aid is needless because competition, pressure of costs, and the search for substitute materials "combine to form a most effective research program." NSRB answered with the Paley commission's own words: "Professional and technical associations of engineers, architects and builders exert some influence on technical progress but their approach is at best sporadic and unorganized. Producers of materials conduct considerable research limited chiefly to improving and developing

particular products. There has been little research in the performance of products when combined with others into elements and components of structures."

More antitrust suits—The Presidential commission had demanded that the Department of Justice and Federal Trade Commission step up their efforts to enforce antitrust laws against building and building materials industries. "Nowhere," it had mourned, "are technological opportunities and barriers to their attainment better illustrated." NSRB urged Truman to "direct the Department of Justice and Federal Trade Commission to request funds necessary to enable them to intensify their efforts, in the building and building materials industries particularly, to promote a rational, efficient distribution system, and to study the need for legislation authorizing prosecution [against] restraints that cannot be reached under present laws."

Pigeonhole for waste. On the presidential commission's other recommendations involving buildings, NSRB urged more study—bureaucratise for "file & forget." Included were some of the presidential group's most courageous but unpopular ideas for having government batter down the roadblocks preventing waste-and-cost-cutting economies of raw materials. Said NSRB:

▶ The suggestion that FHA and VA adopt the proposed "national construction standards" as their minimum requirements needs "further investigation," although "the board concurs with the objectives." NSRB noted that both HHFA and the Defense Department warned any such plan would run afoul of "local traditions, customs, prejudices and pressures."

▶ For FHA and VA to withhold mortgage insurance from areas with wasteful codes and zoning laws is a worthy objective toward economy of scarce raw materials, but should not be undertaken now. It cited HHFA's objection that the penalty was too drastic to fit the crime.

▶ The presidential commission's recommendation that the federal government make its "national standards" mandatory for all federal construction including public housing is a worthy objective, but likewise needs "further investigation." NSRB noted the Defense Department's objection that such a move "goes too fast and too far."

In recommending that Truman buy less than half a loaf of the Paley commission's

ideas on construction, NSRB was apparently trying to urge a plan with some chance of success. But the building industry could be expected to gang up against NSRB's watered-down version, too.

Four more guilty in San Diego VA loan scandal

Four more defendants in San Diego's VA home loan scandal (H&H, Jan. '52 et seq.) were convicted in federal court. Francis G. Paige, former assistant loan guaranty officer, began a 3½ yr. prison term after pleading guilty to forgery, making false statements to VA and receiving bribes. He was also fined \$5,300. Contractors Chris Cosgrove, Roy R. Brockbank and Howard R. Mueller were found guilty of bribing Paige \$10,000. The score so far: seven of 24 defendants tried, five convicted, two acquitted.

NPA orders 'biggest' relaxation of controls

For the first time since CMP went into effect, builders were granted the right to self-certify structural steel. NPA's holiday present to the homebuilding industry (the new rules became effective Jan. 1) was part of the biggest relaxation of controls since they were instituted Oct. 26, 1950. Biggest beneficiary was the recreational building, long banned except for what indulgence sponsors would wangle on hardship pleas. It was granted self-authorization. Substantial boosts were given the self-certification limits for commercial projects, schools, hospitals, public works and multi-family housing (see table).

NPA was hoping to decontrol steel for building entirely by '53's second quarter. There should be enough aluminum to go around by then, too, but the copper outlook was for just barely balanced supply and demand by mid year. And copper would be the first metal to tighten in any new emergency. The new rules:

SELF CERTIFICATION

per project per quarter*

BUILDING TYPE	STEEL	COPPER	ALUMINUM†
1-4 family houses	1,950 lbs. carbon +	400 lbs.	275 lbs.
(with copper pipe)	1,500 lbs. structural		(unchanged)
1-4 family houses	2,300 lbs. carbon +	200 lbs.	275 lbs.
(with steel pipe)	1,500 lbs. structural		(unchanged)
Over-4-family houses	2 tons	200 lbs.	275 lbs.
(walk-ups)	(not over 500 lbs. structurals)		
Over-4-family houses	3 tons	225 lbs.	275 lbs.
(with elevators)	(not over 600 lbs. structurals)		
Recreational	5 tons	500 lbs.	300 lbs.
(Not over 2 tons of structurals; foreign and conversion steel may be used additionally without limit.)			

A reclassification gave most other types of building the same self-authorization limits already enjoyed by industrial construction. Included were schools, hospitals, commercial and public works. The new ceilings:

	STEEL	COPPER	ALUMINUM†
"All other"	25 tons	5,000 lbs.	4,000 lbs.**
(carbon, alloy & structurals including wide flange beams but not over 2½ tons of alloy and no stainless.)			

* Except houses, where self-certification limits apply to entire unit irrespective of construction time

† Effective May 1, 1953

** Only 2,000 lbs. until May 1

* In *The Objectives of US Materials Resources Policy and Suggested Initial Steps in Their Accomplishments*. For sale by Superintendent of Documents, Washington 25, D. C. 50¢

FHA adds 1/2% service fee to woo mortgage money for pint-sized Title I, Sec. 8 loans

Low cost housing's perennial white hope—FHA Title I, Sec. 8, got a shot in the arm this month. Lenders have long maintained that Title I loans (with their legal ceiling of \$4,750*) yielded too little money at 4 1/4% interest to be attractive investments. It costs the same (about \$2 a month to collect payments on a pint-sized Title I mortgage as on a Title II mortgage which bears the same interest but may yield three times as much return because it can total as much as \$14,000.

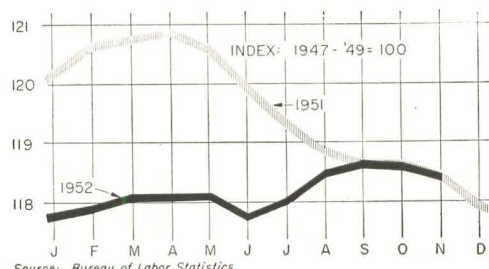
Lame duck largesse. In December, FHA decided it wanted to sweeten the kitty for Title I lenders. The plan: a 1/2% service fee on top of the 4 1/4% interest, to be applied to the declining mortgage balance. For three weeks, HHFA dragged its feet over giving consent—necessary for such rate tinkering since FHA was tied to HHFA in the 1947 reshuffle of housing bureaus. Finally, HHFA agreed. On Jan. 5, FHA Commissioner Greene ordered the service fee into effect. Said he: "This program has not been going over."

Not going over was putting it mildly. Official figures showed what the building industry well knew: Title I, Sec. 8 was running at the tail end of FHA's pack of programs. It registered only 4,900 starts in the first ten months of 1952, compared to 161,000 under Title II and 28,000 under Title IX. Since Sec. 8 went into effect in April, 1950, FHA had insured only 11,360 homes under it.

Interest ladder. FHA was breaking no precedents in putting what amounted to a higher interest rate on Title I (4 3/4%) than on Title II (4 1/4%). It already allowed a higher rate on Title I, Sec. 8 and the one-to four-family sections of Title II than for large rental developments. These were held to 4%. Reason: they involve much bigger mortgages than one-family homes, so the handling cost per mortgage dollar is less. The new maneuver merely added one more rung to that interest ladder. And 1/2% on a \$4,750 loan would add \$23.75 to interest the first year—almost exactly the average servicing cost.

The service fee was the most dramatic example yet of what builders felt was a new aura of sweet reasonableness that overcame FHA after 1) Greene replaced Franklin Richards as boss 2) election results jeopardized many top FHA jobs.

* Except in some high-cost critical defense areas, where Title I, Sec. 8 loans were raised to \$5,700 (see p. 47).



MATERIALS PRICES as reported by BLS dipped slightly from 118.6 in October to 118.4 in November. Biggest decrease came in lumber and wood products, particularly softwood plywood which dropped from 113.1 to 103.9. But there were signs of reversal. On Dec. 15, hefty Georgia-Pacific Plywood raised its f.o.b. mill price on Douglas fir plywood from \$80 to \$85 per 1,000 sq. ft. In the Northwest, market-sensitive Douglas fir boards and dimension underwent general increases of about \$3 per M.

FHA pushes \$9,000 homes, 4 bedrooms, with 95% loan

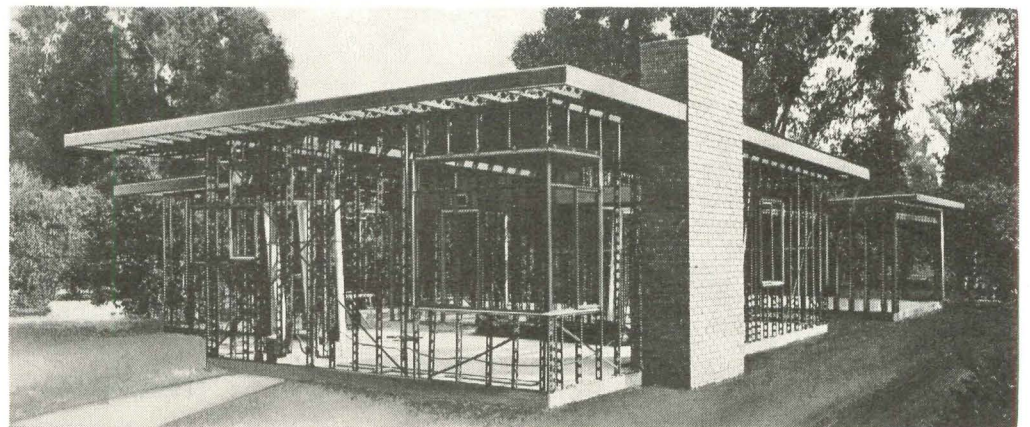
FHA thumped once on its muffled publicity drum for an overlooked segment of its program that permits a 95% loan on a \$9,000 house with four bedrooms. Involved was Sec. 203b 2(D) which provides that the normal \$7,000 maximum valuation base for 95% loans to owner-occupants may be upped \$1,000 apiece for a third and fourth bedroom. Loans to operative builders under that subsection (which carries a 25-yr. amortization)

carry an 85% limit, but have the same \$1,000 step-up for the third and fourth bedrooms. Net effect for owner-occupant loans is to make a \$9,000 house with a \$450 down payment possible. Most other FHA \$9,000 homes would require at least a \$950 down payment.

Explained FHA: the deal went into effect only a little while before Korea and subsequently was suspended by imposition of credit controls. So few in the industry were aware of it that not one of the 31 homebuilding leaders of HOUSE & HOME's round table on the too-small house (H&H, Oct. '52) had taken note of it in suggesting that FHA should grant higher percentage loans on housing above the bargain-basement class. Needled by the omission, HHF Administrator Ray Foley called on FHA to lift the bushel off its four-bedroom light. Predicted an FHA official: "Many builders will do some serious planning to see if they can build these projects in this price range."

Britain permits builders to erect 12 homes at once

Britain's Conservative government last month began taking some of the shackles off private building. Housing Minister Harold Macmillan announced that on Jan. 1 Britain's rigid building license law will be relaxed to permit anyone to build a house up to 1,000 sq. ft. using limited quantities of lumber. Operative builders would be permitted to build as many as 12 homes at a time for sale.



Steel-framed house near cost of wood, sponsors claim

Steel's effort to grab a slice of lumber's big market in homebuilding has moved slowly. In the nine years it has owned Gunnison Homes, US Steel has managed to raise steel use per house from 1 1/2 to 3 tons. Last month, the steel-lumber competition was sharpened by Penn Metal Co.'s announcement it is producing lightweight structural steel sections designed for house framing, as demonstrated by the ranch-house skeleton in California shown above. The sections are made from strip steel by cold rolling, much cheaper than the usual hot rolling. Weight is cut by a double truss, open-web design, which also permits wiring and piping to

run through studs and joists without difficulty.

The basic section is a channel-beam, precut to order in lengths up to 28'. It comes in widths of 3 1/4", 3 5/8", 4", 6" and 8". Double studs or joists are formed by welding channels back to back like an I-beam. Track, oversize to fit around standard sections, and undersize bridging to fit inside the flange of standard sections, permit top and bottom plates, bracing, sills. Penn President G. A. Sagendorph said the price of 3 1/4" metal stud (\$150.75 per M, f.o.b. Parkersburg, W. Va.) was lower in some areas than 2 x 4 lumber, which around New York last month was about \$110 per M.

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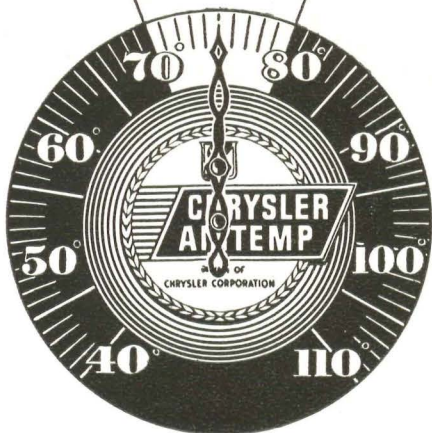
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Experts agree FHA, VA interest rates will be raised; Capehart suggests 4½% for both

In the minds of experts, all doubt vanished that FHA and VA interest rates would rise.

The question was when. The range of guesstimating: as much as two to three months or as little as two weeks after the new administration takes office Jan. 20.

The two- to three-months school of thought figured new officials would want time to get seated, make at least cursory surveys, and think things over twice before instituting such major changes. The much-sooner school figured that need for a rate hike was so well proved already that GOP Treasury Secretary Humphrey and the new VA and HHFA chiefs would use their power to act at once.

Market flight. One thing that could compel a fast decision was widespread "marking time" on loans by lenders waiting for higher rates. Reports were last month that some were already doing so. Many a lender who kept up a volume of loans at current rates was making all advance commitments subject to upward revision as soon as FHA and VA authorized increases.

At month's end Sen. Homer E. Capehart (R, Ind.), who will direct housing legislation in the new Senate as Banking and Currency Committee chairman, proposed lifting both FHA and VA rates to 4½%. (He also said current FHA down payments on new and existing houses are "higher than necessary," but did not say how much he thought they should be lowered.) Rep. Jesse P. Wolcott (R, Mich.), who will hold the parallel position in the House, was already on record as espousing higher interest rates, "especially in VA loans."

Compelling economic factors. Philadelphia Mortgage Banker William A. Clarke at a regional MBA clinic in Pittsburgh last month predicted interest rate increases, probably to 4½%, for both programs. He foresaw action in the "reasonably near future," later refined this to about two or three months after Jan. 20. His outline of money-market conditions that make increases virtually inevitable:

▶The supply of money for mortgage lending this year will not be much greater than in 1952—only the normal proportion of normal increases in assets and repayments to the lending institutions. But demand for mortgage and competitive long-term funds will be much more. Result: "We will continue to have a tight money market, with nothing to indicate that FHA or VA loans will be in very great demand except at prices to meet the market. If the Treasury returns to orthodox financing (see below) . . . FHA and VA interest rates will be lifted to the market rate."

▶Three reasons for growing demands on a "sluggish" supply of funds: A) Sustained or even increased demands for commercial and industrial expansion (an outlook shared by many government and private construction and business surveys); B) Continued high housing volume, a prospect indicated by the late fall rush of starts (see p. 35); C) A return to orthodox public debt financing, strongly suggested by Eisenhower's appointments. This would mean "refunding of a very substantial volume" of short-term US borrowings. Thus the Treasury will be leaning heavily on the long-term money market . . . could not expect to sell its long terms at less than 3%, might have to go to 3¼%. Most likely it will take a realistic position to assure putting them into the hands of life insurance companies and other institutional holders."

Signs multiply. Clarke was not alone in feeling that higher-yield government bonds would become the most compelling reason for a hike in mortgage interest. President W. W. Townsend of Townsend-Skinner & Co., Manhattan investment counselors, advised a meeting of the National Association of Mutual Savings Banks to expect an issue of 30-year 3% federals.

At that rate and maturity, he said, 20-yr. issues should sell to yield 2.75; 10-yr. issues 2.5; 5-yr. issues 2.35; 2-yr. issues 2.25; 1-yr. issues 2.125 and bills 2. All such issues are now selling "within a few basis points of exactly those yields," he noted. "This means that the government bond market has been put in readiness for a long-term 3."

After effects. Will prices of old FHA and VA loans break when higher rates are set? Will Clarke thought not. "Those prices have already 'gone to hell'—that's why they are selling at present discounts."

Will premiums come back? "You may get them in some areas unless lenders are smart and give the break to the borrower."

Will the VA direct lending program be given more funds? "Not by the new administration. More likely it will be ended."

Atlanta savings & loan unit revolts over Bodfish rule

In November, durable, hard-hitting Morton Bodfish, executive head of the US Savings & Loan League since 1930, weathered a revolt in the ranks that sought to oust him as a league official. Instead, Bodfish emerged elevated from chairman of the executive committee to the new post of board chairman and pointed for a mid-1945 retirement so graceful that one insider cracked: "Mort came out smelling like a rose."

Last month, Bodfish found he had new troubles. The Atlanta league, one which had worked to end Bodfish's dominance, voted unanimously for members to withhold dues from the parent body until the Georgia state league can review the situation at its April convention. It urged all other Georgia members to do likewise.

Double dues-ers. Roots of the ruckus went back nine years to 1943, when dissatisfaction with Bodfish policies caused 192 US league members to set up the rival Na-

Robert J. Anderson & Co.



Detroit meeting urges pension funds to buy FHA, VA loans

Biggest push yet in the mortgage banking industry's campaign to get pension funds to invest in FHA and VA mortgages came Dec. 5 in Detroit. There, the Michigan Association of Approved Mortgagees met with 105 pension officials, mostly from state, county and municipal funds. Participants included (l to r) FHA Commissioner Walter L. Greene, Acting Mayor Lewis C. Miriani of Detroit, Association President Benjamin Levinson, Mortgage Consultant H. Eliot Kaplan of New York and James F. Schwerin,

chief examiner for VA's loan guaranty division.

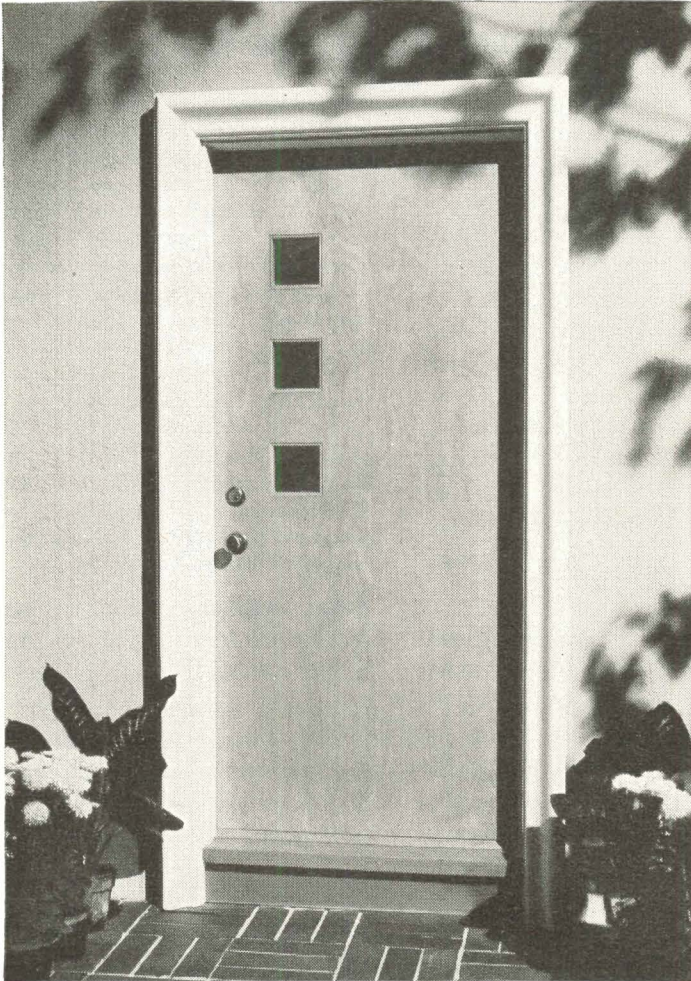
Levinson, spark plug of the Michigan drive, said after the clinic that pension funds in ten of the state's largest cities are preparing to make FHA purchases. The cities: Detroit, Jackson, Flint, Saginaw, Pontiac, Royal Oak, Allen Park, Birmingham, River Rouge, Grosse Pointe Farms. Levinson credited HOUSE & HOME's pension round table in November, 1951 with inspiring him to begin his drive. Chief lure: mortgages should give pension funds more income.

NEW

"Pictures in Wood"

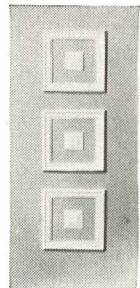
BY CURTIS

Decidedly contemporary in design, yet extremely versatile, this Curtis New Londoner flush door gains additional interest from the smart new Curtis trim—one of several choices.

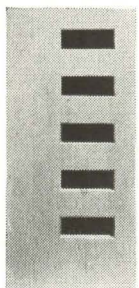


Fresh and original, these new flush door designs by Curtis can help increase your scope in adding distinction to the homes you plan. And the beauty of these doors is as durable as it is striking—thanks to their all-wood, moisture-proof construction that guards against warping or sagging.

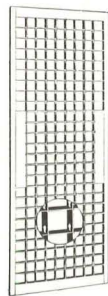
Door designs shown here are available either with Curtis New Londoner hollow core construction or Curtis American solid core. These designs are only a few of the many Curtis offers, both for exterior and interior use. Curtis New Londoner hollow-core flush doors are available in wide widths for schools, hospitals and public buildings.



← Skillful proportioning and effective use of simple ornamentation create rare charm in this new Curtis door, made in both hollow-core and solid-core construction. Superior dimensional stability has been proved in more than 4,500,000 installations.



← Note the carefully-matched grain pattern in this New Londoner Curtis exterior door. Curtis New Londoner and American doors offer a choice of carefully selected veneers in birch, maple, oak and other woods—creating effects of rare beauty.



← Here is the patented, locked-in, all-wood core that assures lifetime dimensional stability in Curtis New Londoner hollow-core flush doors. Each New Londoner door is one completely joined unit with nothing to "float" or get out of place. Curtis American solid-core flush doors have a kiln-dried pine core and are completely sealed against moisture.

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tional Savings & Loan League. National leaguers credit the same unrest for the growth of "double dues-ers"—local savings and loan associations that belong to both leagues (288 on the basis of '51 directories). Last spring, Everett C. Sherbourne, executive vice president of City Federal S&L, of Elizabeth, N. J. became the first "double dues-er" on the US league executive committee, frankly announced he hoped many other associations would follow his firm's example by joining both leagues. Discussing the situation last month, he said: "That's the only thing [league officers] will understand" as pressure for the end of the Bodfish reign and merger of the two leagues.

Leading anti-Bodfish complaints: as president of First Federal in Chicago, third largest in the nation (\$111 million assets), Bodfish cannot give full time or serve the interests of the league exclusively; his outspoken utterances on legislation and public affairs have often lost good will for the league unnecessarily; his telegram to a savings and loan group at the Republican convention last summer discussing platform issues which was construed as favoring Sen. Taft's nomination was participation in politics in an unwise and dangerous manner for any trade group.

Convention flipflop. Last July, the Georgia state league adopted a resolution that praised Bodfish personally, but sought his replacement. At the US league's November convention (H&H, Dec. '52, News), J.D. McLamb of Savannah and Sherbourne thought they had found support in the executive committee for hastening Bodfish's complete departure. But to their discomfiture the full board of directors next day (adopting Bodfish's own proposal) voted 50-4 to give him his new title and give Executive Vice-President Norman Strunk "full executive and administrative authority" in keeping with more gradual retirement for Bodfish.

Dissidents still grumbled that Bodfish remained in the saddle. But US League spokesmen viewed the complaints as picayune, and representative of only a small faction of their 4,000 members.

Antitrust indictments name nine Detroit roofing firms

Federal antitrust indictments were returned in Detroit Dec. 9 against the Detroit Sheet Metal & Roofing Contractors Assn., Inc., nine roofing firms and 18 individuals. The accusation: since 1940 the defendants observed uniform bidding rules; collected and exchanged information through the association, which then might "designate" which member would be allowed to be the successful bidder.

What kind of housing do retired folk want? A \$40,000 survey offers some answers

One of the biggest voids in the housing industry's new-found concern with homes for senior citizens is information. Census figures spell out the basic market: 13 million men and women over 65 whose ranks are growing about 400,000 a year. Details of what kind of housing they want—and can afford—have been almost nonexistent.

Last month, Investors Diversified Services Inc. of Minneapolis divulged the results of a \$40,000 effort to provide some answers. IDS ran questionnaire ads in 11 US magazines and two newspapers, tabulated replies from 6,030 readers, of whom 30% expected to retire within the next two years, 50% within five. Result was the best picture anyone has yet drawn of the market for housing aging Americans. Some of the answers:

Where do you want to live after you retire?

Stay put	34.20%	Arizona	3.13%
Florida	17.08%	Gulf Coast	1.46%
California	10.60%	Great Lakes33%
Pacific NW ...	4.44%	Other	28.76%

(Highest proportion [25%] of the people who wanted to stay put already lived in California.)

Do you now own or rent your home?

Own	66.80%	Rent	31.74%
Trailer25%	No answer	1.21%

What accommodations will you need and prefer when you retire?

Separate house	76.37%	Row house ...	4.73%
Apartment ...	12.92%	Trailer36%
		No answer	5.61%

What type of housing will you prefer?

One bedroom...	21.10%	No answer	5.24%
Two bedrooms.	57.70%	One floor	82.87%
Three bedrooms	14.70%	Over one floor..	9.10%
Four or more	1.26%	Not specified ..	8.03%

What will your monthly income from all sources be after retirement?

\$ 50	6.25%	\$300	10.90%
\$100	15.42%	\$350 or more..	14.74%
\$150	20.33%	Unknown or no answer	2.40%
\$200	18.24%		
\$250	11.72%		

How much cash do you expect to have for a down payment (nearest figure)?

\$ 500	6.80%	More	37.05%
\$1,000	11.61%	Unknown or no answer	17.18%
\$2,000	12.14%		
\$3,000	15.22%		

(Of the don't knows, 79% owned their homes.)

What type of work have you done mainly up to now?

Profession	17.76%	Transportation	4.69%
Office	10.51%	Factory	4.49%
Executive	9.57%	Farming	3.40%
Own business..	7.23%	Other	36.30%
Salesman	6.04%		

IDS President Earl E. Crabb, 68, noted that a fundamental aim of the survey was to lay groundwork for low cost, mass produced "retirement living houses in specially planned communities." On the basis of the results, guessed one IDS official, his company would look for mortgage offerings on such properties in Florida and California.

N. Y. Daily Mirror Photo



Pit drownings bring tighter safety laws on Long Island

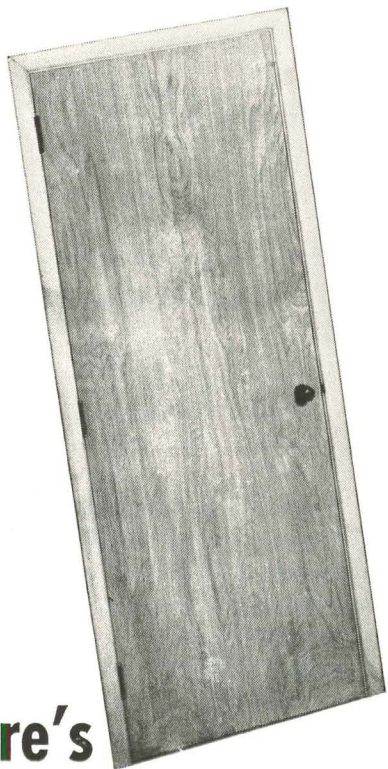
On Long Island, many a homebuilder makes the sump he must dig to provide a drainage basin for storm sewers do double duty as a borrow pit during construction. Last month, the unfenced edge of such an excavation crumbled beneath the weight of a 7-year-old boy, who suffocated in the resulting landslide. Four days later, when a 3-year-old drowned in the 14' of rain water in the same sump, not only Jade-

Hicksville Inc. but all Long Island builders had a problem on their hands.irate residents (above) grabbed shovels and bulldozers, filled in the hole (which will have to be excavated again). And Nassau County officials drafted an ordinance requiring that a chain link fence, set in concrete foundations and topped with three strands of barbed wire, be built around all such pits, with a guard on hand whenever the gates are open.

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On the surface, flush hollow core doors may look much alike, but it's what's beneath the face that determines the service and satisfaction that you can expect. Here's where the superiority of Paine Rezo doors is most pronounced; for nowhere else will you find equal dimensional stability, nor such lightness in weight combined with great structural strength.

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of every type. No other hollow core door has been so widely endorsed, so thoroughly time-proved. Remember, when you decide on Paine Rezo doors, you specify a door that not only looks good, but is good *all the way through*.

See Sweet's File — or write for an illustrated data bulletin.

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Economists attack theory of building cycles, say public works won't cure big depression

Some of the construction industry's most widely held theories about itself were challenged last month by two respected economists. In a 340-page book financed by the Committee for Economic Development ("Stabilizing Construction: the Record and Potential," McGraw-Hill, \$6), Miles L. Colean and Robinson Newcomb set forth a statistic-buttressed argument that:

- ▶ There is no such thing as an 18 to 20 yr. normal construction cycle, which helps touch off depression. A postwar collapse of US building is by no means inevitable. Instead, with the right government policies, construction can stay at high levels.
- ▶ Public works cannot be counted on to offset any major recession. Even their limited use as first aid to counteract lesser business setbacks will require far greater long-term planning, budgeting and coordination of federal, state and local programs. Instead, "government intervention should be the last and not the first step in stabilizing construction and investment."
- ▶ Although the historic instability of the construction market has led to belief that its violent ups and downs multiply their effect on the US economy, actually the building industry is more victim than villain. In the absence of wars, dropping demand for some kinds of construction is often offset by growing demand for others.
- ▶ Restrictive practices by employers, labor and government alike have failed to produce the protection against market swings their creators intend. Instead, they have "prevented growth" of the industry by buoying up costs rather than employment, by "discouraging technological advancement and thwarting incentives to increased productivity." Thus price fixing and market control add to instability. Labor gains without corresponding gains in productivity are such a serious hazard to the industry's welfare that antitrust immunity "requires immediate and thorough consideration."

Basic causes. "Instability," write Authors Colean and Newcomb, "is at the heart of the problems of the construction industry. It has given the industry its peculiar pattern: looseness of organization and dispersion of managerial control. . . . It is responsible for an inclination to concentrate technological effort on improvements in adaptability and time rather than on reduction of cost—on the ability to erect an Empire State Building in a year's time rather than to build a house at the lowest possible cost." Against the theory that construction's violent ups and downs come in depression-producing cycles, Colean and Newcomb offer evidence that the real cause is wars. Looking back over construction statistics as far as the Civil War, they find the big drops entwined with the Civil War, World Wars I & II (see graph).

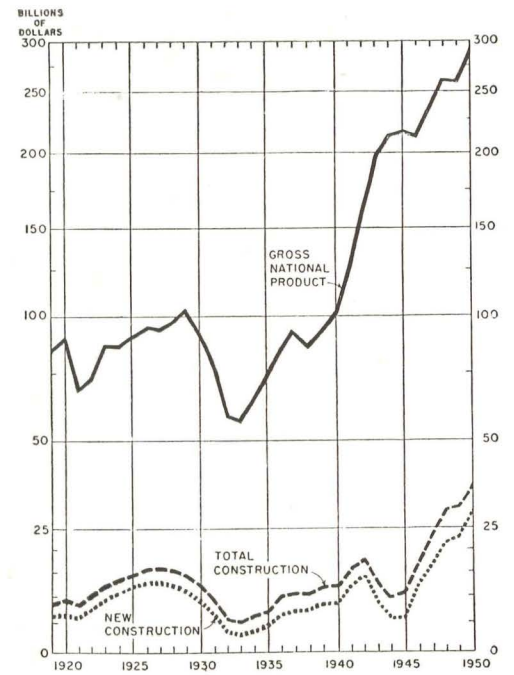
How to lick depressions. With many a GOPlanner figuring that increased public works are the handiest medicine for any business setback, the two economists' views on the limitations of such remedies took on added importance. It is technically possible, they say, to step up public works enough to offset a 30% plunge in private construction. But this "is not a tool which can ordinarily be used at an early stage of a decline" because it is nearly impossible to tell then what kind of a recession it is. If construction falls off because prices are too inflated, a rush of public works will only

support unsound price levels, make the eventual plunge worse. Huge engineering works like dams, harbor improvements and expressways take so long to get going they are hard to use at the right time. Moreover, building contractors and labor cannot usually shift to such heavy engineering work. Thus if highway building were already fairly high, expanding it to fight a recession "may raise prices more than volume."

Booby traps cited. Warns Newcomb in a detailed study of how to manage contra-cyclical public works: "[They] must be used very selectively to provide only facilities which are needed and to absorb unemployment—not to create overtime."

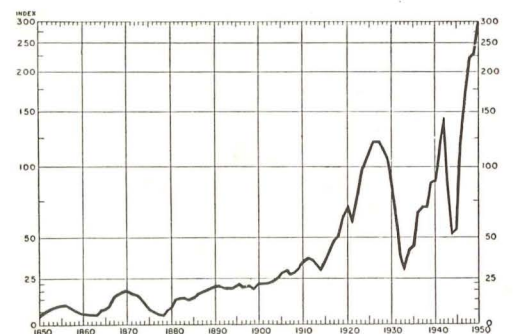
The basic trouble with nearly all stabilization devices, say Colean and Newcomb, is that they "carry the risk of retarding growth and leading to stagnation as well as to stability." For instance, they point out that fast tax write off "might tend to expand the volume of investment in boom times and decrease it in depression times." They counsel: "controls exercised broadly on the volume of money and credit usually will be far more satisfactory than specialized and selective controls designed to affect specific market decisions."

Within the industry, the "first line of defense" against boom and bust should be increased productivity, the authors say, "rather than government subsidy" or the anticyclical use of public works."



Source: "Stabilizing Construction," Colean and Newcomb

CONSTRUCTION'S SIZE, in comparison with the gross national product, is too small for it "to swing a preponderant weight" in the US economy often ascribed to it, say Colean and Newcomb. Since 1919, construction has ranged from 2.5% of GNP (in 1944) to 12.6% (in 1927).



Source: "Stabilizing Construction."

DOLLAR VOLUME index of new construction from 1850-1950 shows three major slumps—all caused by wars, say Colean and Newcomb. Elsewhere, the general trend is up, setbacks irregular.

Walter Bennett



AUTHORS Miles L. Colean (l) and Robinson Newcomb (r) are two of the nation's most influential building economists. Colean, FAIA, now a private consultant with offices in Washington, was the principal creator of FHA technical and property standards. He was assistant commissioner from 1937-40. Newcomb, a government careerist, has been economist for the Office of Defense Mobilization since March 1951.

FIGHT AGAINST SLUMS: cities step up rehabilitation programs; Los Angeles adopts new slum cleanup machinery; Chicago ponders slum prevention

Most US cities have moved against their growing cancer of slums with discouraging torpor. Last month, talk about rehabilitation and conservation or run-down urban areas was joined by encouraging action in a few new spots.

In Los Angeles, builders and realtors who persuaded voters to reject public housing (H&H, June '52, News) did not stop with their negative victory, drove ahead to get something done about the slums that gave some justification to the demand for public housing. Last month their efforts were rewarded. Four new city ordinances went into effect creating a division of rehabilitation and slum clearance within the department of building and safety and giving the division broad powers to compel repair or demolition of an estimated 60,000 substandard housing units at landlords' expense.

Building Chief Gil Morris estimated it would take a ten-year rehabilitation program to catch up with 50 yrs. of neglect. But he was confident he had at last the legal tools to do the job—tools which many another city might want to study and perhaps copy for its own fight against slums.

Central authority. Under the old Los Angeles setup, responsibility for weeding out unfit housing was split between the fire, health and building departments. None had enough money or men to do the job. The new ordinances centralized enforcement power for housing in Gil Morris' building department (except for rodent, vermin and contagious disease control which remained with the health department). Fire and health inspectors who come across building violations were re-

quired to report them in writing to the building department. The building department was given power to order the other two departments to make inspections for fire and sanitation violations.

One ordinance spelled out in detail what standards all housing must reach, incorporating the stringent provisions of the State Housing Act on room sizes, light and air, electric outlets, plumbing, heating. Most important of all, the nation's No. 4 city closed a loophole under which housing built before 1923 had been exempt from meeting minimum standards. The building department got power to compel evacuation of substandard housing after written demands for repairs have gone unheeded 45 days, power to demolish the structure entirely after another six months. But landlords with hardship pleas can go before a five-man appeals board whose members are subject to confirmation by the city council.

Cost: \$100,000 a year. To carry out the rehabilitation drive, Gil Morris asked for and got only 12 more inspectors, one supervisor and \$100,000 a year more money. To some rehabilitation experts in older, eastern cities that looked like too little to get the job done. But Morris figured each inspector could inspect about 600 houses a year. He was counting also on police psychology: for every cycle cop chasing a speeder, twenty other people slow down. Moreover, Morris has a rare flair



Fran Byrne

REHABILITATION PLANS like Baltimore's, said Mortgage Banker James Rouse (r) at Chicago conference on neighborhood conservation, are "no panacea and not intended to obviate the need for public housing." Architect Walter Gropius (l) said: "We must direct ourselves not just to buildings but to the total architectural picture: parks, clearance areas, traffic and the street system."

for selling projects that cost Los Angeles property owners cold cash. Sample: in three years, he managed to virtually clear downtown Los Angeles of dangerous cornices, get pre-1933 buildings restressed for lateral load without hauling one owner into court. He planned to tackle his new assignment in the same spirit.

Public housers opposed. Los Angeles builders counted the new ordinances as an important victory in the city's still-boiling housing ruckus (see People). Pro-public housers sought to block the rehabilitation plan, lined up with small property owners who feared they could not afford repairs the city might ruthlessly demand. To cries the switch would "dismember the health department," the Los Angeles Times retorted: "The public housers' opposition to a rehabilitation program is easy to understand. If the program succeeds the chief argument for public housing is lost." Builder Fritz Burns, chairman of a committee that plugged for the new setup, says "we took the point of view that ownership of real estate carries with it a responsibility for maintenance. We used comparisons with pure food laws: buildings must be healthful just as food must be."

Another argument Burns used before the city council: "reconditioning of property (he likes that word better than rehabilitation) cannot be solely voluntary. To be effective it must be uniform and universal."



Mildred Meed

CHICAGO CLEANUP: Preventing or curing neighborhood blight is a hard and often dreary job. In Chicago, residents and University of Chicago students clean up a rubbish-strewn vacant lot as part of a drive to improve the rundown area around the campus.

Most property owners, says Burns, recognize the wisdom of maintenance, provided that other landlords in the same neighborhood are forced to adhere to the same standards.

In Atlanta, the end of rent control Sept. 30 brought a stepped up drive for rehabilitation of rundown housing—as dramatic evidence as a lobbyist could want that rent control encourages slums. During rent control, reported Building Inspector William Wofford, his department seldom went beyond urging, wheedling and begging landlords to meet minimum housing standards. Reason: he feared going to court with a demand for a high-priced repair job because a landlord could well say his frozen rents would not repay the cost. Said Wofford last month, “Now it’s a firm program—no wishy-washy business.” Atlanta’s real estate board asked its members not to handle properties for clients who do not comply with fix-up orders. This year, Wofford hoped to get repairs made on about 5,000 of Atlanta’s estimated 19,000 substandard units (20.2% of the city’s housing).

In Philadelphia, December brought the first fruits of a five-year-old effort at rehabilitation. In 1947, the Friends Neighborhood Guild (a Quaker settlement house) and the American Friends Service Committee began a self-help housing experiment in a rundown block a mile from Philadelphia’s city hall. After Architect Oscar Stonorov drew plans, they persuaded the Philadelphia Redevelopment Authority to acquire the property by eminent domain, sell it to the Quakers for \$78,400, some \$150,000 below cost. It took from 1948 to last May to wangle a commitment from FHA in a Sec. 213 co-op deal under which tenant-owners would make their 10% down payment in labor instead of cash.

As the first two families moved into their apartments at 709 North 8th St. on Dec. 20, it took no expert to see the change wrought by replumbing, rewiring, repainting, re-fenestrating the three-story, semidetached houses built in Civil War days. The 100 reconditioned units (which cost about \$7,500 each, will involve monthly payments from \$45 to \$80 including utilities and janitor service) were spacious, well-lighted, cheerful. In the house at 707 North 8th St., where rehabilitation had not yet begun, a typical two-room dwelling had no bath, no hot water. An old wood-burning stove heated the living-bedroom. Holes in the floor were covered with tin patches. The wiring was a fireman’s nightmare.

In Chicago’s tough, crime-ridden south side, a neighborhood cleanup commission was swinging a weapon other cities could

well adopt to block neighborhood decay. Where narcotics peddlers used real estate, where landlords were illegally sneak-converting apartments into smaller units, the commission persuaded banks and insurance companies to cancel mortgage loans. Said Commission President Lawrence A. Kimp-ton, chancellor of the University of Chicago: “This is pretty tough and rough stuff, but we’ll use it again and again whenever it’s needed.” One result: the crime rate in two districts had dropped 25%.

Chicago was also taking the lead at developing ways to prevent the growth of slums, thus avoid the financial drain of costly cures like urban redevelopment, public housing. More than 300 lawyers, architects, builders, city planners, public housing men and law enforcers (twice the number invited) crowded into the Sherman Hotel for the nation’s first major conference on conserving middle-aged neighborhoods. Said Mortgage Banker Ferd Kramer, chairman of the cosponsoring Metropolitan Housing & Planning Council: “It’s a measure of the undeveloped character of the attack that we planned a limited

series of discussions and, inevitably, found ourselves with a town meeting.”

It was a measure of how much thinking needs to be done on neighborhood conservation that experts found themselves in disagreement. In fact, luncheon speaker Walter H. Blucher, director of the American Society of Planning Officials, said bluntly: “Conservation of near-in (to slum) areas is an impossibility.” To keynote speaker James Rouse of Baltimore, the No. 1 problem lay in organization of cities to cope with decay. Said he: “There is as yet no adequate structure in city government. The job can’t be done by a bureau in a city department. You can’t have a lower official coordinating the duties of higher officials, especially where there’s been delinquency for 100 years.” Suggested Rouse: big cities ought to appropriate \$1 million a year to block slums, not the \$100,000 or less most now spend. Said Architect Walter Gropius, chairman of one of six study panels: “The architect may hope the whole thing will be razed so he can start again with a fresh design, but this is not realistic.”

Compulsory year guarantee for FHA, VA homes urged in final Rains’ committee report

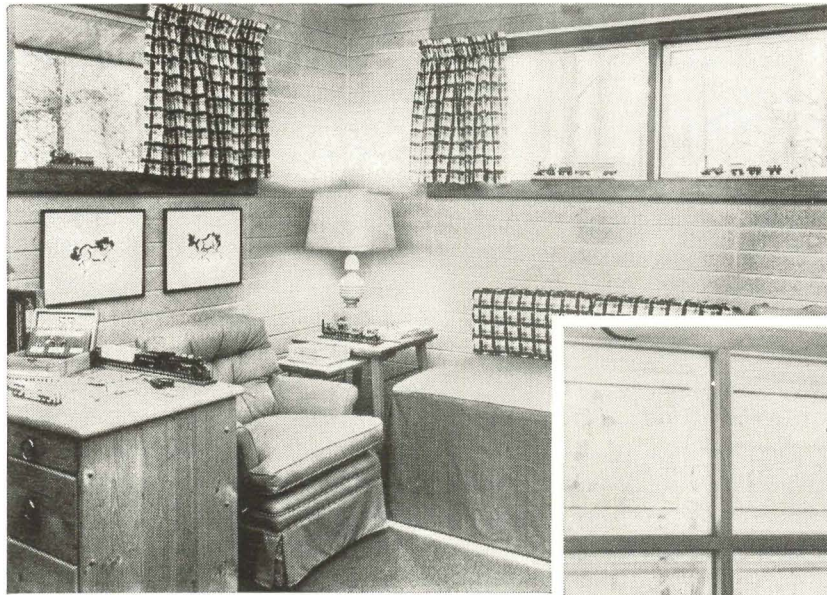
Builders got no holiday cheer from the final report last month by the Rains subcommittee of the House Banking Committee. The investigating committee spoke its final piece about shoddy construction under the FHA and VA programs, recommended nine remedial steps. Two committeemen—Ralph A. Gamble (R, N. Y.) and William B. Widnall (R, N. J.)—supplemented the findings with a quickie junket through government housing projects in the Canal Zone, Puerto Rico and the Virgin Islands.

Most disturbing to builders was the well-heralded recommendation that buyers of GI- and FHA-insured housing be given a “binding” one-year guarantee against “bad workmanship and bad materials.” The Rains group proposed to make such compulsory warranties a part of standard sales contracts tailored for the laws of the various states. Protested NAHB: “Those recommendations make no distinction between reputable builders who will stand behind their product and those who won’t. They would penalize the majority of builders . . . to correct abuses of a few speculators.”

Pigeonhole in sight. If action on warranties depended on new legislation, observers agreed that builders had little cause for worry. Reports of dying investigating committees on the eve of a new session are seldom taken seriously. They carry

even less weight amidst a political turnover.

To builders, the proposal was given an ominous twist by the subcommittee’s calculated assumption that both FHA and VA already had power to put it into effect. NAHB was mollified by the reaction of the two housing agencies. Veterans’ Administrator Carl R. Gray Jr. doubted that the GI Benefits Act was broad enough to permit such a crackdown, though he professed to see merit in the idea. FHA conceded it had the authority. But Commissioner Walter Greene said: “FHA has no need of imposing a warranty on builders. In our eighteen years of operation we have never had any real difficulty in compliance. If we find there is something on which a builder should make good and he does not, . . . we simply refuse to do business with him any more. Moreover, Commissioner Greene foresaw difficulties ahead for any government-imposed builders’ guarantee. Said Greene: “Sometimes when the purchaser has a legitimate squawk, the requested corrections go too far. Endless arguments could ensue when it comes to determining what constitutes reasonable compliance.” He asked, “What about equipment items like refrigerators, garbage grinders and automatic washers? The builder is just the middleman for such apparatus and is in no position to stand behind their operation



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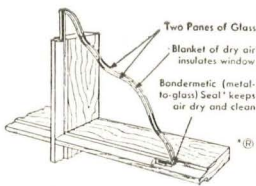
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except to the extent he is backed up by the producers.”

Whitewash or cure? Spokesmen for the investigating subcommittee were less certain that the FHA method of meting out discipline was effective, even more dubious about the agency's ability to render impartial judgment on its own program. Retorted one of the sleuths: “The first reaction of the FHA is to absolve itself when a complaint is brought to its attention. With their rules, if they admit a builder performance is a mess they are confessing a failure on their own part. Besides, what good does it do to blacklist a bad actor if he is a one-shot builder? To half a dozen home buyers whose septic tanks are backing up on them, it is small comfort to say that the builder responsible has been read out of the program.”

To enforce the mandatory warranty, the Rains committee called for a “bonding or escrow device” to protect purchasers against elusive builders who hide behind collapsible corporations or ragged-edge operators one jump ahead of insolvency. Cried NAHB: “Unworkable, unfair.”

Elsewhere, industry leaders generally felt that the subcommittee had pointed to defects that need fixing. Examples:

▶ All were inclined to concur in the recommendation that VA switch from its fee appraisal system to the salaried staff appraisals as employed by FHA.

▶ Most applauded proposals for greater emphasis on land and site planning.

Rent control in three critical areas ended

In a small way, the Republican climate reached even into rent control last month. The Truman administration had thwarted the automatic lapse of rent control in 15 communities Sept. 30 by declaring them critical defense areas specifically for rent control. Now it relented, took two of them off the list: Youngstown, Ohio and Bay City, Mich. The lame explanation: new surveys showed the in-pouring of defense workers was not so heavy as had been supposed.

Rent ceilings also ended in Wichita Falls, Tex., which had been given total rent control Dec. 19, 1951 through the critical-area route. The Wichita Falls' action was at the urging of the local rent advisory board, which convinced the Office of Defense Mobilization's defense areas advisory committee that defense housing construction had eased housing shortages and ended “rent inflation.” Defense housing aids remained in force. So far, no US defense area had been decertified for such help.

New York state building code adopted by 48 towns

When New York's state building code for one- and two-family dwellings was issued Nov. 1 last year, even its strongest supporters wondered if enough of the state's 1,567 municipalities would adopt it voluntarily to make the \$300,000-a-year cost of drafting and operating it worth-while.

Last month—13 mos. later—a surprising 48 municipalities had adopted the state code. A little less than half were communities that made it a replacement or alterna-

tive for existing rules. The others previously had no building standards.

Pleased state code commissioners had also conferred with representatives from more than 100 more interested municipalities, anticipated accelerated acceptances. Added incentive for adopting the state performance standards next year will be the introduction of the multifamily residential code, now nearly completed. During '53 work will also start on a “comprehensive” code, covering nonresidential construction, which commissioners hope will bring still more municipalities into the fold.

FHA yields to year's urging, raises defense housing mortgage ceilings in dozen areas

For a year, homebuilders had been urging FHA to use its discretionary power to raise mortgage ceilings in high-cost defense areas. Although production of needed defense housing lagged, the housing agency refused to act, insisting it would be difficult to set boundaries on high-cost zones inside big defense housing areas, still harder to keep the increased prices from spreading from a few areas to the bulk of the nation's defense housing program.

Last month, FHA belatedly agreed with private builders, ordered mortgage ceilings boosted to the full extent permitted by law in 12 of the nation's 204 defense areas. The areas: Gary-Hammond-E. Chicago; Quad Cities, Iowa-Ill.; Milwaukee; Wright-Patterson Air Force Base, Ind.; Anaconda, Butte and Great Falls, Mont.; Williston, N. D.; Lorain, Ohio; Great Lakes-N. Chicago-Waukegan, Ill.; Joliet and Sterling, Ill. Instead of trying to set boundaries inside each area, the order sensibly included all of it. For Sec. 903 one-family homes, the order made these changes in mortgage amounts insurable (still subject to a 90% loan-value ratio):

House size	Old ceiling	New ceiling
1 or 2 bedroom	\$8,100	\$9,000
3 bedroom	9,150	10,000
4 bedroom	10,200	11,100

Spreading boon. Forthright Commissioner Walter Greene admitted that the defense housing program's low mortgage ceilings had been delaying construction in the twelve areas. Henceforward, he promised, “if the delay is due to the fact that higher costs prevail, we are going to act promptly.” Three or four more defense areas were under consideration for higher mortgage limits, he added.

In keeping with higher ceilings on Sec. 903 paper, FHA also raised mortgage limits on Sec. 203 b2(D), backbone of its regular housing program, in the same areas:

For owner-occupant borrowers (subject to 95% loan-value ratio)		
House size	Old ceiling	New ceiling
1 or 2 bedroom	\$6,650	\$7,600
3 bedroom	7,600	8,550
4 bedroom	8,550	9,500

For operative builder-borrowers (subject to 85% loan-value ratio)		
House size	Old ceiling	New ceiling
1 or 2 bedroom	\$5,950	\$6,800
3 bedroom	6,800	7,650
4 bedroom	7,650	8,500

Mortgage ceilings on Title I, Sec. 8 loans received a similar increase:

	Old ceiling	New ceiling
Owner-occupants	\$4,750	\$5,700
Operative builder	4,250	5,100

(Subject to 95% loan-value ratio for owner-occupants; 85% for operative builder.)

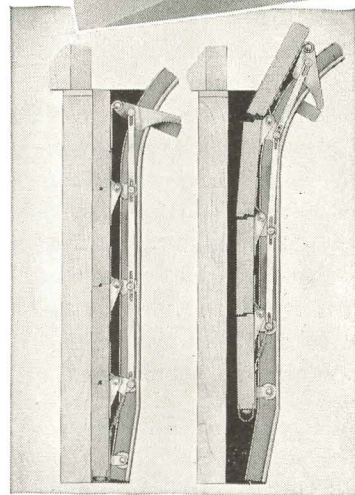
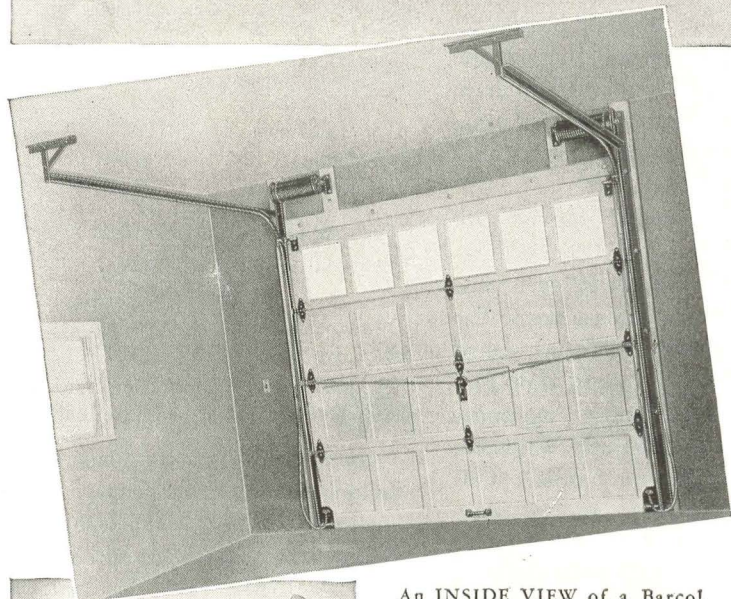
On another defense housing problem, Commissioner Greene kept a promise he made to NAHB officials last summer. To FHA's field offices went authority to waive some of FHA's debt-service rules to make defense rental housing buildable within the government's low rent ceilings. Ruled FHA: “In cases . . . involving properties classified as amenity-income properties, mortgages having debt service in excess of 90% of net income (the old ceiling) may be approved for insurance provided there is other satisfactory assurance that the mortgagor will have the financial ability to make the mortgage payments despite the deficiency in the net income.”

Turtle's progress. In March, the defense housing program would be two years old. Yet on Dec. 17, HHFA could count only 43% of the 98,029 programmed units as actually started. Still less (25%) had been completed. The best construction rate lay in the region where building is generally cheapest: the South. The box score:

Units programmed.....	98,029
Units started.....	41,983
Units completed.....	24,697

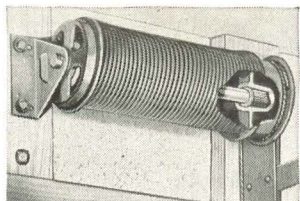


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This is how the exclusive Barcol Closing Action works. Right, door closing (moving downward), lever engages stop on track, pulls roller plates up, moves door to left. Left, door closed, roller plates up, door pressed uniformly top to bottom against jamb. Reverse of action gives immediate release on opening.

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FACTORY-TRAINED SALES AND SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

PEOPLE: Brock, Holtzendorff lose city posts in Los Angeles row; NAHB seeks successor to retiring Cortright

Los Angeles was embroiled in another private enterprise vs. socialism housing row. It began when Mayor **Fletcher Bowron**, ardent public housing supporter, ousted **Howard Holtzendorff**, executive director

Gladser Studio



BROCK

L.A. Times Photo



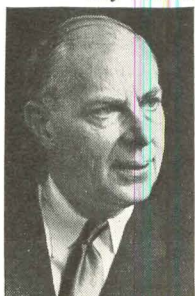
HOLTZENDORFF

of the LA City Housing Authority, and **Milton J. Brock Sr.**, homebuilder and anti-public housing leader, from the city's Community Redevelopment Agency Commission. Realtor **Philip Rea** moved to Glendale and was disqualified from the five-man slum-clearance Commission, leaving it temporarily immobilized for lack of a quorum.

Said Mayor Bowron: "All I was trying to do was to get the CRAC completely out of the public housing argument. During that controversy Holtzendorff and Brock were on opposite sides, both throwing rocks at each other." But Brock charged "public pressure" forced the mayor to remove Holtzendorff. He protested being asked to resign to "appease" the mayor and to "balance" the situation. So the city council, 9 to 1, "asked" the mayor to reappoint Brock, but not Holtzendorff.

In the background was a plan to provide a \$50,000 revolving fund for CRAC work. Mayor Bowron and Holtzendorff contended this was available as a federal handout. Brock and other commissioners insisted projects should be completely city-financed and city-administered.

NAHB directors faced a difficult assignment finding a new executive vice president as capable and respected as **Frank W. Cortright**, who will retire at his own request March 1. No appointment was anticipated before executive sessions at the annual Chicago convention Jan. 18-22. Staff head of NAHB since its birth in 1942, Cortright was confined to bed four months last year with a siege of polyneuritis (an inflammation of the nerve ends). Since then he has

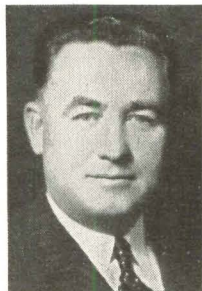


CORTRIGHT

walked with difficulty. But his doctors promise him 100% recovery this year, said Cortright, if he trims his work load (often 100,000 mi. a yr. for speeches and meetings alone). On retiring (with a pension) he will become a special consultant for the association and an honorary life member of its top policy-making executive committee.

ELECTED: **L. S. Meyer**, president of Hydraulic-Press Brick Company, St. Louis, as president of the Structural Clay Products Institute, with **Russel G. Eshenaur**, president of Glen-Gery Shale Brick Corp., Reading, Pa. as vice president, and **George Gammie** and **Joseph J. Cermak** re-elected treasurer and secretary; **Frederick S. Blackhall Jr.**, president and treasurer of Taft-Pierce Manufacturing Co., Woonsocket, R. I. as president of the American Society of Mechanical Engineers; **Harold S. Osborne**, retired chief engineer of AT&T and former president of the American Society of Planning Officials, as president of the New York Regional Plan Assn.; **Walter G. Stackler**, as president of the 929-member Long Island Home Builders Institute (third largest in NAHB) succeeding **Frederick E. Gibson**.

Two top positions in labor went to men who started as plumbers. Eisenhower's secretary of labor, **Martin P. Durkin**, 58, was a steam-fitter's apprentice at 17, business manager of Chicago Local 597 of the plumbers'



DURKIN



MEANY

LIFE: Gordon Coster

union for 20 yrs., director of the Illinois State Labor Department, and since 1943 the \$20,000-a-year president of the AFL Plumbing and Pipe Fitting international. (Taking over as acting president of the international: First Vice-President **Peter T. Schoemann**, president of the Milwaukee Building and Construction Trades Council.)

Only four days after the death of William Green, the AFL executive council elected as president **George Meany**, 58, who was an apprentice plumber (his father's trade) in New York City at 16. In 1922 he was elected a plumbers' local business agent. In

1934 he became the youngest president ever elected by the New York State Federation of Labor. He has been AFL secretary-treasurer since 1939.

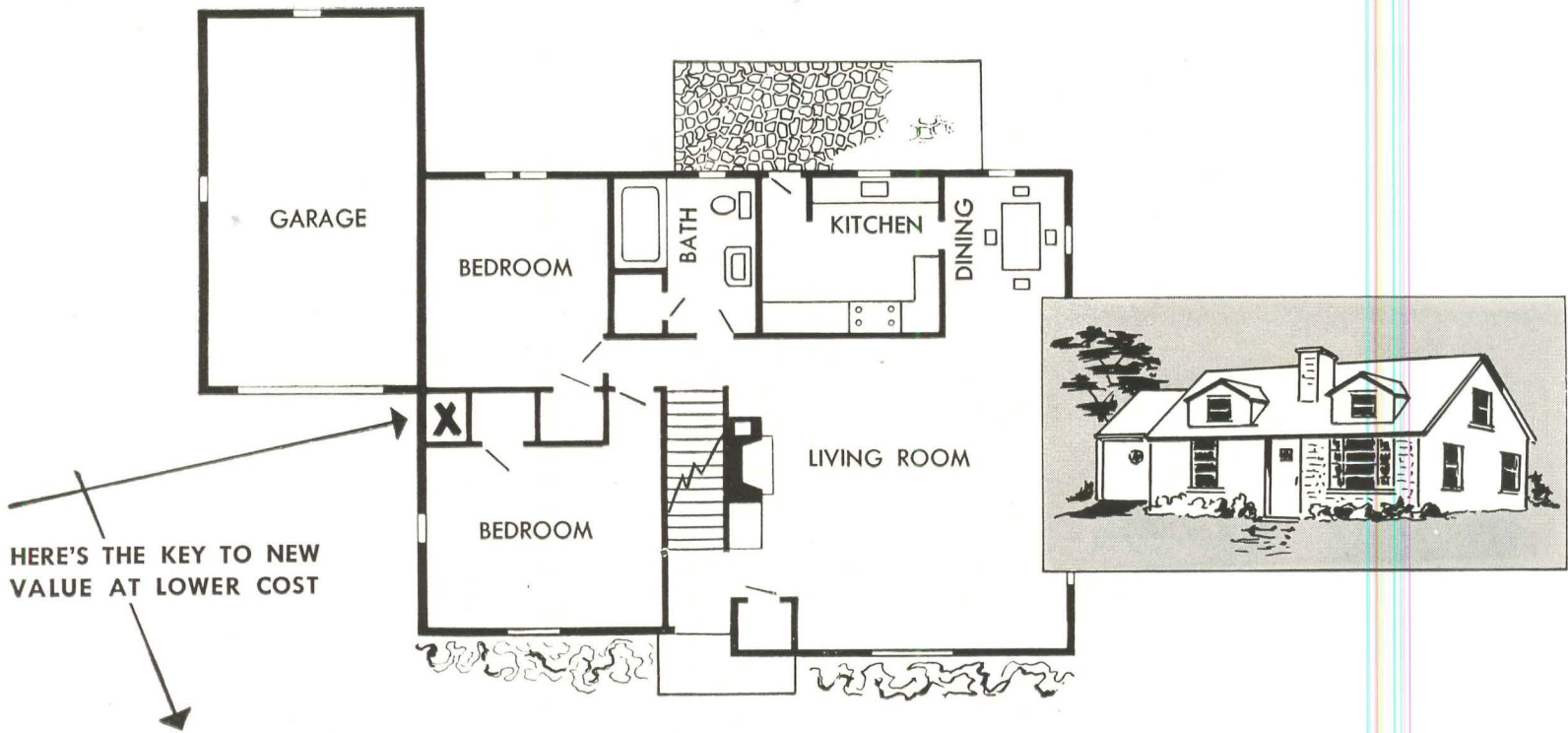
NAMED: **Walter T. Rolfe**, FAIA, of Houston, as a member of the US National Commission for UNESCO; **Arthur B. Holmes**, executive director of the AIA New Jersey chapter and its president in 1937-39, as national convention manager for AIA; **Frank J. Hanrahan**, chief engineer of the National Lumber Manufacturer's Assn. since 1936, as executive vice president of the American Institute of Timber Construction; **Maxwell A. Cantor**, president of the AIA Brooklyn chapter, as recipient of the Sidney L. Strauss Memorial Award of the New York Society of Architects for his legislative activity and other work as the architect who did most for the profession in New York state last year.

DIED: **Reginald D. Johnson**, 70, FAIA, who after a long career as a designer of Spanish and Georgian mansions in Los Angeles and Santa Barbara was so struck in 1934 by what he saw in Washington's slums he withdrew from general practice, spent most of the rest of his life battling for public housing, slum clearance, urban rehabilitation, became a convert to contemporary design, Oct. 28 in Pasadena;



JOHNSON

Charles Edward (Eddie) Skaitis, 36, president of the Tulsa Home Builders Assn., who when he learned five months before that he was doomed to die of incurable leukemia launched a leukemia research fund to aid future victims, so won the hearts of Tulsa University's football team it elected him honorary captain, Nov. 5 in Tulsa; **Robert Knight**, 82, former president of the Building Officials Conference of America and deputy building commissioner of Chicago for 35 yrs., Nov. 24 in Chicago; **John C. Tredwell**, 56, former president of the American Institute of Real Estate Appraisers who established condemnation values at the Oak Ridge and Los Alamos atomic energy sites, Nov. 25 in Suffern, N. Y.; Architect **Electus D. Litchfield**, 80, designer of the National Armory in Washington, other public buildings, monuments, and a founder of the New York Building Congress, Nov. 27 in New York; **J. Raymond Prideaux**, 48, retiring president of the New Jersey Association of Real Estate Board and a member of the New Jersey Real Estate Commission, Dec. 5 of a heart ailment in Atlantic City.



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Remington Consoles are available in 1-ton and 1½-ton units for installation in closet, attic, or basement—to cool two good-sized rooms. They are available in both air cooled and water cooled units for various voltages AC or DC.

Fully automatic in operation, they have Remington's exclusive Climate Compensator, which maintains a perfect balance between cooling and dehumidification no matter whether the situation is "hot and dry" or "warm and sticky."

Remington, with the most complete line in the industry, also offers console models in handsome traditional mahogany or blond cabinets—for living room or master bedroom—as well as a full line of window units in these capacities: ⅓, ½, ¾ or 1 h.p.

With 64 years' experience in refrigeration, Remington now manufactures room air conditioners exclusively—heavy-duty, tropics-tested equipment, proved by installation in 57 countries all over the world.

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Warm air on brisk mornings . . . From Remington's optional heating feature (up to 7,000 BTU's per hour). This can save use of the central heating system for several weeks or more every year.

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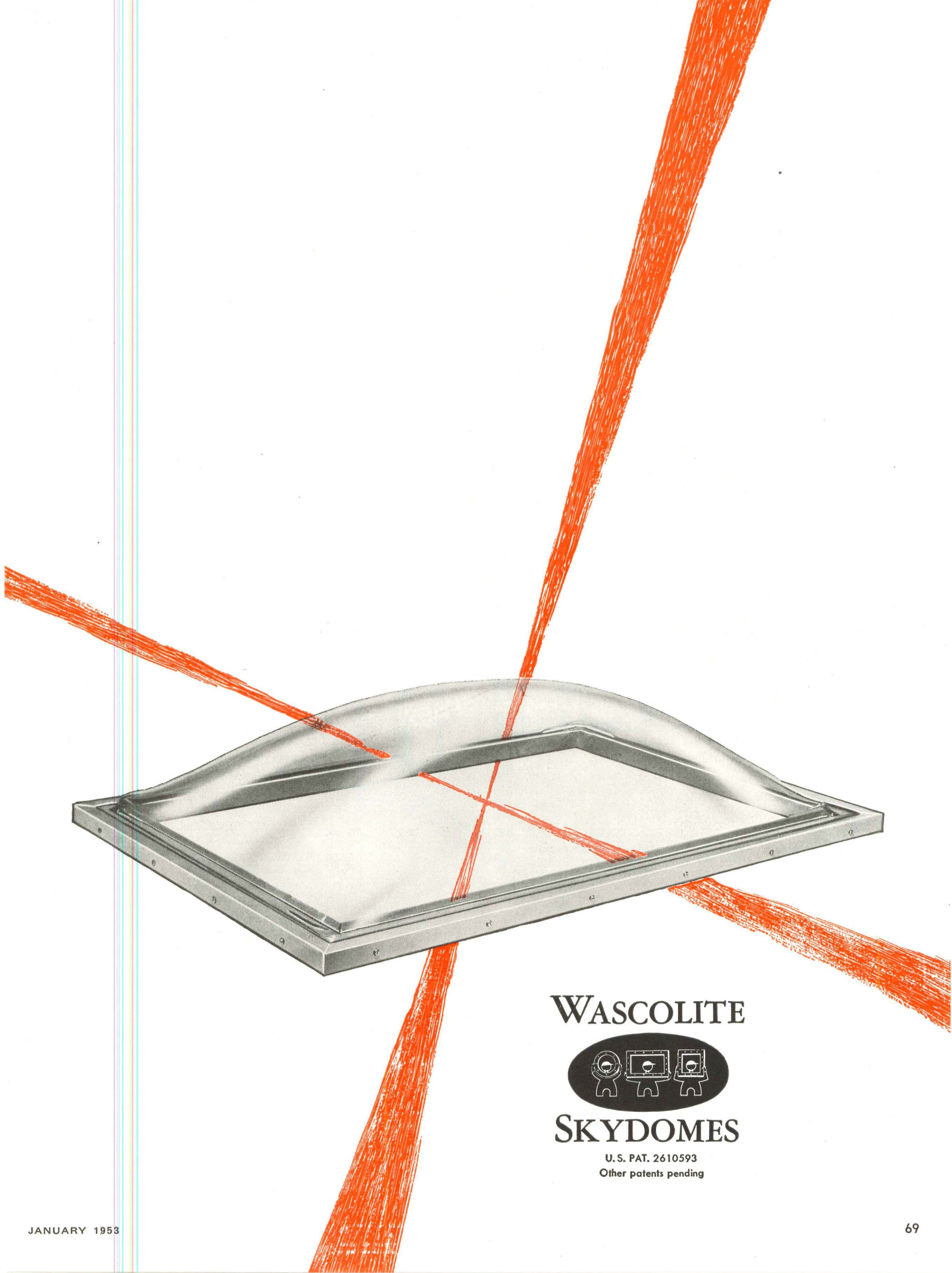
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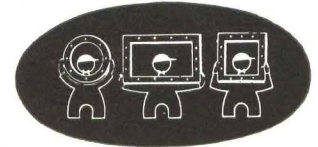
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WASCOLITE



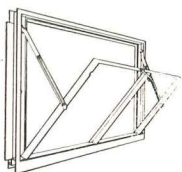
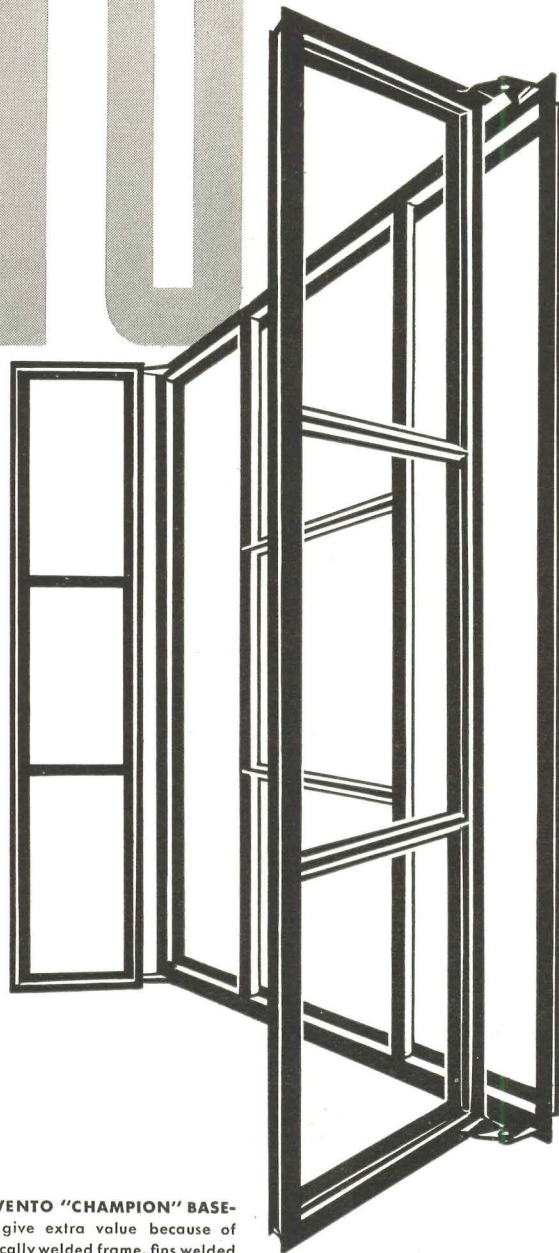
SKYDOMES

U. S. PAT. 2610593
Other patents pending

VENTO

THE STEEL WINDOWS OF EXTRA VALUE

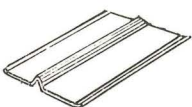
The extra value in Vento Residence Casement Windows includes: all casements drilled and tapped to receive storm sash and screens, operator arm guide channels attached with screws for easy removal and replacement, if necessary; ventilator frames constructed from the same heavy sections as the outside frame. This provides greater rigidity and stronger ventilators.



NEW IMPROVED VENTO "CHAMPION" BASEMENT WINDOWS give extra value because of their 14-gauge electrically welded frame, fins welded to jamb for quick installation and double contact with leak-proof watershed sill. A plus value incorporates a redesigned latch which assures positive operation under all conditions.



VENTO "THRIFTY" BASEMENT WINDOWS give extra value because they are a real economy window especially designed for lower cost housing. Two position ventilation and easy sash removal. Fin flanges at jambs for quick installation. Three sizes, putty type only.



VENTO FORMED STEEL LINTELS give extra value because they permit the use of standard 8" blocks over door and window openings. Of 10-gauge steel, with stiffening crimp in center. Also formed steel lintels for brick constructions.

Also Vento "Champion" Barred Basement Windows; Vento "Champion" Utility and Barn Windows; Vento "Thrifty" Utility and Special Type Windows.

Write us for full information and name of nearest distributor.

VENTO

STEEL PRODUCTS CO., INC.
256 Colorado Ave., Buffalo 15, N. Y.

LETTERS

FREE ENTERPRISE PLAN

Sirs:

I like your approach. (The low-income family and the too cheap house, H&H, Oct. '52.)

It now looks as if 1953 will be a very good year for building, and we here are making our plans accordingly.

MELVIN H. BAKER, *chairman*
National Gypsum Co.
Buffalo 2, N. Y.

Sirs:

I believe that the problem has been carefully and thoughtfully considered. The older house in particular can be of help to an extraordinary degree in taking care of housing problems and relieve the pressure which FHA consistently puts on for construction of houses that are too cheaply built and too expensive to maintain. All in all I believe the program as you have outlined it is going to receive a lot of serious consideration in the building and financing interest.

What consideration it will receive among government bureaus at this time will be just about anybody's guess. Perhaps with the change in administration we will be able to have these problems approached in a more realistic fashion. I am one of those who sincerely hopes so.

ALLYN R. CLINE, *president*
Cline Mortgage & Trust Co.
Houston 2, Tex.

Sirs:

The carpet is worn thin where many speakers have stood evaluating and criticizing the architect and his relative services to the small-house field.

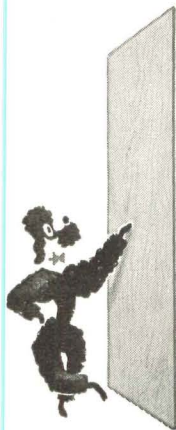
The value of an architect is a good deal more intrinsic than the discussions of this panel lead any reader to believe. They include development or recommendation of new materials, versatile use of our natural materials, development of new structural designs and applications, and development of normal procedure in specifications, contracts and finally supervision.

The design of residences, without the slightest doubt, has been influenced and constantly improved more by architects than by any other single group.

Please don't look at the architect as though he were the only limb on the tree that has no leaves. He isn't. It is hard to realize from the examples of successes of larger buildings that the architect has suffered defeat in the small-house field. Or, has he been given the proper opportunity and cooperation?

I wonder at the logic of Mr. Parker's statement concerning the minimum fee of 6% for designing a house for mass production. If the fee is for one house. I am sure that most architects can show in black and white that they would lose money. If the fee were involved on the entire project, most architects would tell you that they would have no hope for the

continued on p. 76



Rooms that make the **BIGGEST HITS** feature **WELDWOOD® PLYWOOD!**

This den-playroom in the Shelter Island home of Mr. and Mrs. H. G. Carpenter, Jr., gets plenty of "Ohs" and "Ahs" from visitors and friends!

The Carpenters and Peter Schladermundt, their architect, are even *more* pleased with it!

The walls are made of 1/4" Weldwood Oak Plywood in pre-finished Plankweld form and the desk is made of matching 3/4" panels (with a Micarta Truwood® desk top!)

Weldwood Plywood helps you add great charm to your houses and also gives you a material so tough and strong it even stands *abuse* beautifully. And interior Weldwood Plywood is *guaranteed* for the life of the building in which it is installed.

It is available in a wide variety of fine woods

... Genuine Walnut, Knotty Pine, Oak, Maple, Birch, Gum, Mahogany.

With Weldwood Plywood you get a material that drastically cuts down the cost of maintenance. No yearly repainting or other decorating. A feature your clients will appreciate!

Weldwood Plywood is reasonable in first cost, too. It's easy to handle, easy and quick to set in place. It saves weeks of construction time. And once the panels are installed, the room or rooms are ready for immediate occupancy... no waiting for walls to dry.

Whether remodeling or building, don't fail to consider the many advantages and economies of using beautiful Weldwood Plywood, in either large or narrow Plankweld® panels.



WELDWOOD® Plywood

Manufactured and distributed by

UNITED STATES PLYWOOD CORPORATION New York 36, N.Y.

Largest Plywood Organization in the World

and **U. S.-MENGEL PLYWOODS, INC.**, Louisville 1, Ky.

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Modern builders know that "outstanding features sell homes." A Lau Rancher Fan properly installed not only adds dollar value to your homes, but offers down right customer appeal which means faster, more profitable sales at a nominal cost . . . within reach of *every* buyer!

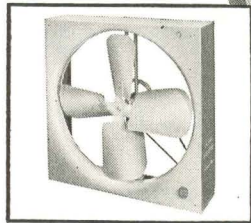
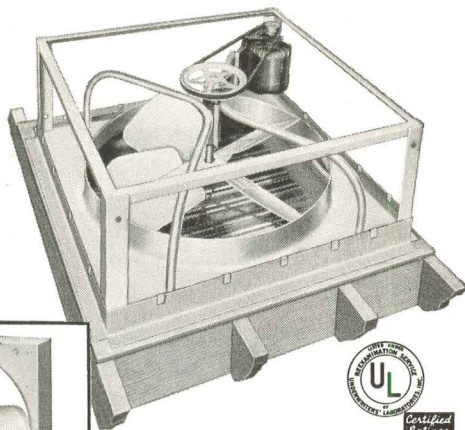


Famous Lau "Niteair" Rancher Fans and Panel Units mean greater satisfaction, plus complete air movement and trouble free service. Write us today for further information. Ask for catalog pages and specifications sheets—#629 and #630.



"I'm sold on installing Lau Comfort Cooling. It's a great low cost selling feature."

Lau "Niteair" Fans are available in a wide range of sizes and capacities to meet every possible need.



Each fan carries Certified Rating. Entire unit is Underwriters' Laboratory Approved. Fully Guaranteed.



THE LAU BLOWER COMPANY • 2027 Home Avenue, Dayton 7, Ohio
World's Largest Manufacturer of Warm Air Furnace Blowers

LETTERS *continued*

client retaining them. It is not feasible to ask an architect to execute house plans at \$50 per set in anticipation of the successful endeavor of the client.

JOSEPH W. PAHL JR., AIA
Great Falls, Mont.

CODE BABEL

Sirs:

Here is a little builder who is tickled to death by the letter you published from the building inspectors of Hempstead. (H&H, Nov. '52.)

Now we know: they read it!

Too bad they didn't start reading HOUSE & HOME when it was still the FORUM, for since then you have delicately dissected each cadaver (re-exhumed for me today).

My congratulations to HOUSE & HOME for getting this ignorance out in print where all can see.

PAUL A. BUTKEREIT
Freeport, N. Y.

Sirs:

All custom-designed houses, and most of the houses built by speculative builders in Seattle, are of better quality than is required by our codes, incorporating such features as insulated walls and ceilings, additional lateral bracing for earthquake resistance, heavier floor joists and beams to avoid deflection and vibration, metallic conduit for electrical wiring to lessen fire and shock hazards, additional fire resistance for safety, and many other things which may be more or less whimsical on the part of the designer, builder or owner, but all of which contribute to higher building costs.

ALLAN POMEROY, mayor
City of Seattle

Sirs:

Properly written codes should encourage improvements, should not require modification for every valid idea. If codes omitted the usual 2 x 4's on 16" centers, the current carrying capacities of copper wire, the ratio of window area to floor area, etc., in favor of general requirements for wind resistance, maximum allowable temperatures, and light levels, architects could accomplish these things in countless ways. The ratings of new products should be determined by engineers and underwriters, not building inspectors.

WILLIAM D. MCGUIGAN, head
*Equipment Engineering Group
 Stanford Research Inst.
 Stanford, Calif.*

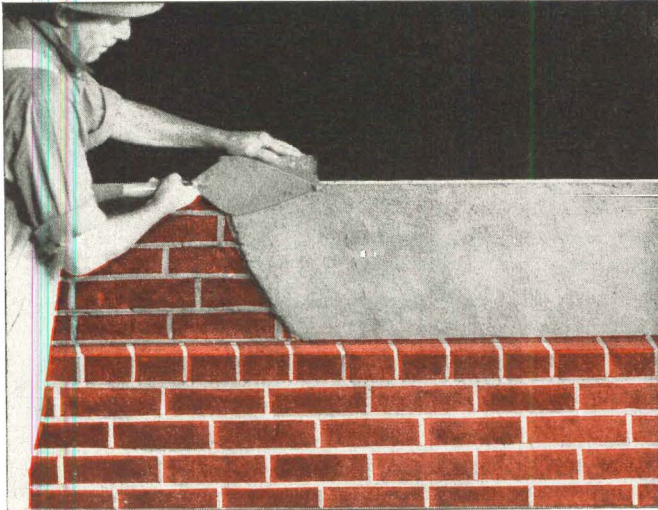
Sirs:

Our local code, which is approximately 25 yrs. old, does not add any appreciable expense to the cost of building when compared with the latest uniform codes and standards.

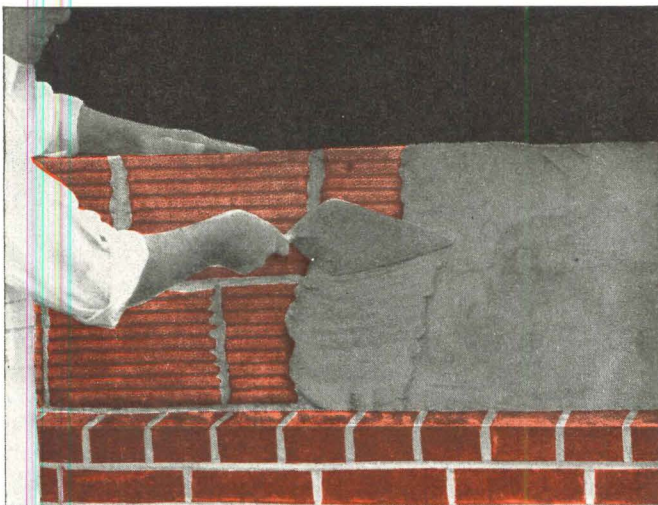
The people from whom the most complaints and expressions of dissatisfaction come are usually builders or owners trying to construct buildings in an improper and unsatisfactory manner. The purchaser of such construction

continued on p. 82

GOOD BRICKWORK = GOOD DESIGN + GOOD WORKMANSHIP + GOOD MATERIALS



The face brick should be backplastered.



If the back-up units are laid first, the front of the back-up units should be plastered.



Backplastering should not be attempted over protruding mortar joints.

PARGING

WITH

BRIXMENT

HELPS ASSURE

DRY WALLS

When a masonry wall leaks, water almost never passes through the masonry units or through the mortar. It works its way through cracks or channels between the masonry units and the mortar.

Most cracks through which water can pass are due to one of two causes — either a good bond was not secured at the time the brick was laid, or the bond was broken after the brick was laid.

In either case, parging provides an effective barrier against the passage of water . . . The face brick should be back-plastered with not less than $\frac{3}{8}$ of an inch of mortar, before the back-up units are laid. Or, if the back-up units are laid first, the front of the back-up units should be plastered with not less than $\frac{3}{8}$ of an inch of mortar, before the face brick are laid.

Dry brick walls are primarily the result of good design and good workmanship. You'll find a wealth of information on how to secure dry brick walls in the Louisville Cement Company's two authoritative booklets, *Type of Workmanship Recommended to Secure Dry Brick Walls* and *Specifications Recommended to Secure Dry Brick Walls*. Write for your free copies of these important booklets, today.

Address:

Dept. HH-8, Louisville Cement Company
Louisville 2, Kentucky

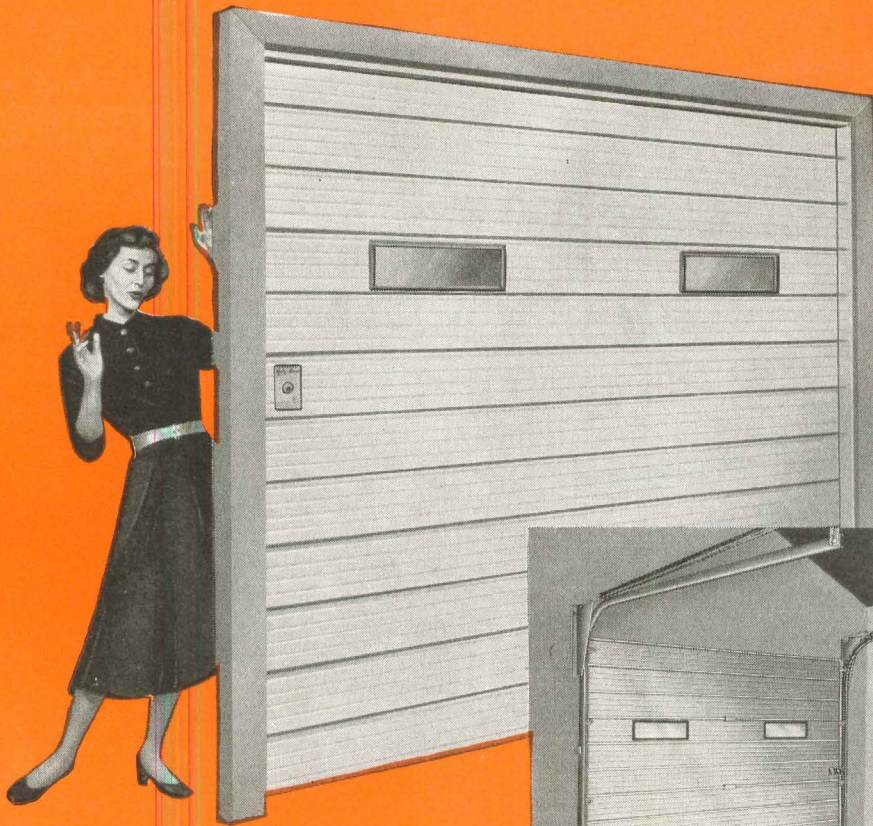


Roly-Door

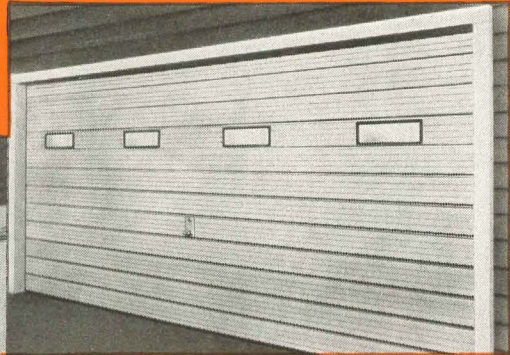
STEEL GARAGE DOORS

8 AND 9 FOOT ROLY-DOORS

Ideal for single or double garage door openings. Precision engineering and modern mass production account for the low initial cost and installed cost. All parts that can be attached to the doors at the factory are in place. 8' and 9' doors come in one package, complete with application instructions and everything you need for installation. Their low installed cost opens up new markets which will help you to give added value by including garages with the homes you build. Can be used for multiple garage installations for apartment garages. Available with or without window openings. Write for complete information today.

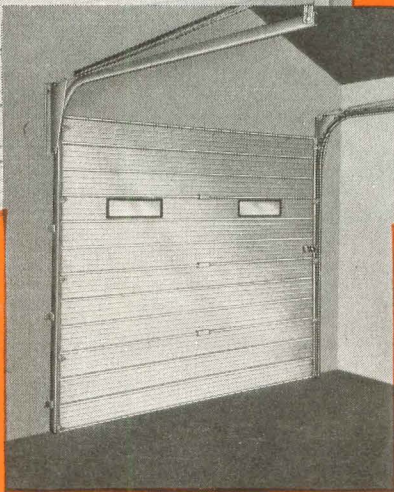


The snug, weatherproof fit and simplicity of the Roly-Door installation is illustrated by this view from the interior of the garage.



16 FOOT ROLY-DOOR FOR DOUBLE GARAGE

Here is your answer to the two-car garage door problem. The exceptionally rugged design of the Roly-Door plus the added strength that comes from its ribbed construction makes it especially suitable for single door requirements for two-car garages. The entire door weighs 415 pounds. The precision counter balancing with ball bearing operation on a 14 gauge steel track makes its use almost effortless. The 14" radius of the curved section of the track provides smooth, easy operation. Available with or without window openings. Comes complete with all necessary installation materials and instructions.



for BUYERS' MARKET Homes

MORRISON Roly-Door

Only four sectional all-steel overhead type garage door designed and engineered to conform to all styles of architecture and provide high quality at low cost. Here is what Roly-Doors give YOU.

- Easy, low cost installation. Quiet, free rolling, ball bearing operation.
- Welded steel, rugged construction and exceptional strength.
- Weatherproof—will not warp, rust or absorb moisture.
- Tight fit with resilient rubber astragal—conforms to uneven floor surfaces. Morrison design of sectional joints makes them weather tight.
- Conform to any style of architecture. Can be painted to match house color or trim.
- Infrared baked prime coat.
- Packaged complete with tracks, hangers and hardware, including pin tumbler lock with cylinder keyable to house locks.
- Morrison Roly-Doors conform to all building codes.
- Three sizes—8, 9 and 16 foot widths. Headroom 12 inches. All 7 feet high.
- Morrison Roly-Doors are guaranteed for one year against defects in materials or workmanship.
- Morrison Roly-Doors cost less to buy. Cost less to install.

VISIT OUR DISPLAY NAHB SHOW
Booth 286 — 288

BIG SALE OPPORTUNITIES

FOR DEALERS WITH MORRISON ROLY-DOORS

Morrison Roly-Doors open up an entirely new market for dealers and distributor-applicators. Some desirable territory is still open. For complete information on the Roly-Door sales opportunity, write Dept. HH, Roly-Door Division, Morrison Steel Products, Inc.

MORRISON

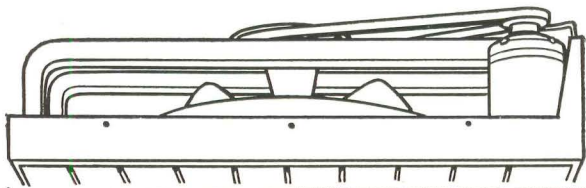
ROLY-DOOR DIVISION



STEEL PRODUCTS, INC.

now! the SALES POWER of night cooling

COSTS LESS!



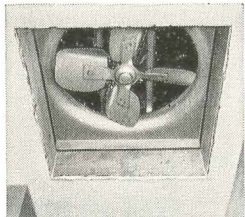
Satisfy your prospects with this complete, dependable home-cooling system. *It's a complete package—no extras needed!* Everything arrives on the job in one easy-to-install unit. Automatic ceiling shutter included, from \$139.95* retail.



*Price subject to change without notice



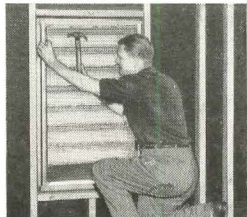
No other attic fan can be installed quicker or cheaper! Fan simply sets over roughly framed opening.



View from below before shutter is installed. No finishing needed. Rubber cushion seals fan to opening.



Complete automatic shutter unit fastens with screws to ceiling opening frame; flange forms ceiling trim.



R & M louvers provide proper exhaust areas. Special sizes should be covered with 1/2" mesh wire.

Lookers become buyers when they see this comfort feature in a house. This "extra" suggests to prospects that you were equally thorough in all your planning. R & M "Package" Attic Fans are ideal for low attics, all standard hallways and "moderns" with limited attic spaces. Certified air deliveries: 5000 and 7000 CFM. Available in sizes up to 16000 CFM. Fan is

guaranteed five years; motor and shutter, one year.

A reliable 28-page guide to better comfort cooling is yours for the asking. Order this book for your reference file: You'll find it helpful every time you specify cooling and ventilating equipment. Mail the coupon now.



Consult Sweet's Architectural File for complete Robbins & Myers cooling and ventilating data.

ROBBINS & MYERS

"Package" attic fans

IT'S FREE!



Atlanta, Chicago, Houston, Kansas City, Los Angeles, Greensboro, N. C., New York, New Orleans, Oklahoma City, Orlando, Philadelphia, San Francisco, Springfield, Ohio.

A FEW HIGHLIGHTS OF THIS BOOKLET!

- The advantages of attic fan comfort-cooling.
- Description of automatic and manual ceiling shutters.
- Complete instructions for attic fan installation.
- Features and applications of Belt-Driven Fans.
- How to install Belt-Driven Fans.

Robbins & Myers, Inc., Fan Division HH-13

387 So. Front St., Memphis 2, Tennessee

Please send me your Booklet—"Robbins & Myers Package Attic Fans, Belt Driven Fans." A.I.A. File No. 30-D-1.

Name _____

Address _____

City _____ Zone _____ State _____

LETTERS continued

is the loser in these cases and, for the most part, does not hesitate to register his complaint with the building department.

Our experience indicates that it is not a particular code that disturbs this type of person but rather it is the enforcement of any form of regulation which prevents them from taking an unfair advantage of innocent people.

I would suggest that your publication warn prospective homebuyers to be cautious of those individuals who experience much difficulty with the local building official. His job is to make every effort to protect them and their neighbors in such matters.

JOHN W. HOWARD, *inspector of buildings*
Everett, Mass.

Sirs:

The City of Knoxville adopted the Southern Standard Building Code on May 8, 1951. We believe this new code is an improvement over the previous codes which Knoxville has used in that it is in loose-leaf form and remedial, providing for adjustments to newly perfected building materials.

It should not be overlooked that a factor of safety is necessary when dealing with the human element in construction work. This applies particularly to residences where the owners build for a quick sale.

BEN R. ENGLAND, *building inspector*
City of Knoxville, Tenn.

PREFABRICATION

Sirs:

. . . The finest editorial coverage of the home prefabrication industry (H&H, Nov. '52) that I have ever seen. I am sure it will help to straighten out the thinking of many people concerning this growing industry.

HARRY H. STEIDLE, *manager*
Prefabricated Home Mfrs. Inst.
Washington 6, D. C.

IN DEFENSE OF HHFA

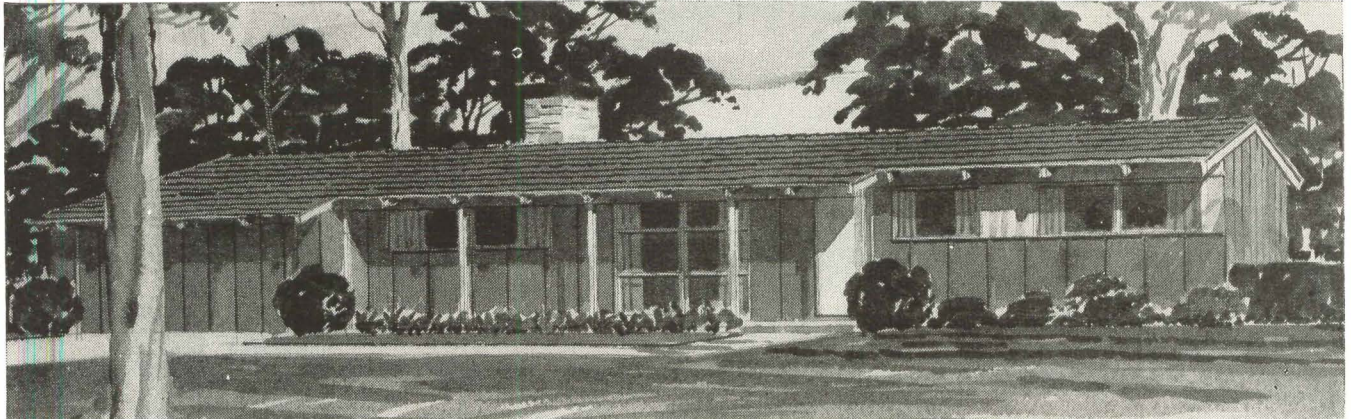
Sirs:

Before I get up full steam, let me say I am as much for economy in government as old Herbert H. himself. However, I see no reason for the building industry to kill its most faithful servant, the HHFA (H&H, Nov. '52). Sure, many government agencies may have overstepped their bounds but HHFA's cause for existence is the magnificent research projects it quietly executes. The *HHFA Quarterly* summarizes projects in the works. We (all taxpayers and the building people in particular) are more than getting our yearly \$4,700,000 worth in lessons on how to conserve materials and update codes—HOUSE & HOME's own crusade, no? Anyone who sends 25¢ to the US Government Printing Office can find out the facts for himself.

Breaking up HHFA and scattering it to the winds of other agencies just does not make sense. In fact, it sounds more wasteful.

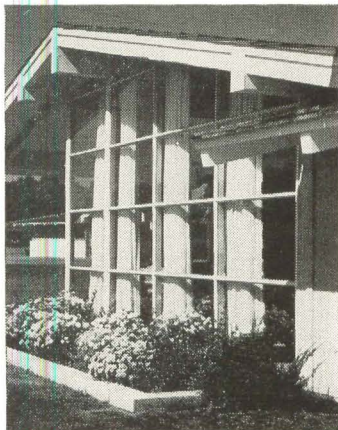
ESAU SARDIN
Madison, Wis.

BUILDERS— WHY EXPERIMENT ?



When **Scholz Designed** "California Contemporary" units enable you to take advantage of the terrific pent-up demand for contemporary design by giving you—

1. **SURE COST and PROFIT FIGURES BEFORE YOU START**
2. **UNPRECEDENTED SALES APPEAL**
3. **AT A COST WHICH IMMEDIATELY PLACES YOU AT AN ADVANTAGE OVER COMPETITION**



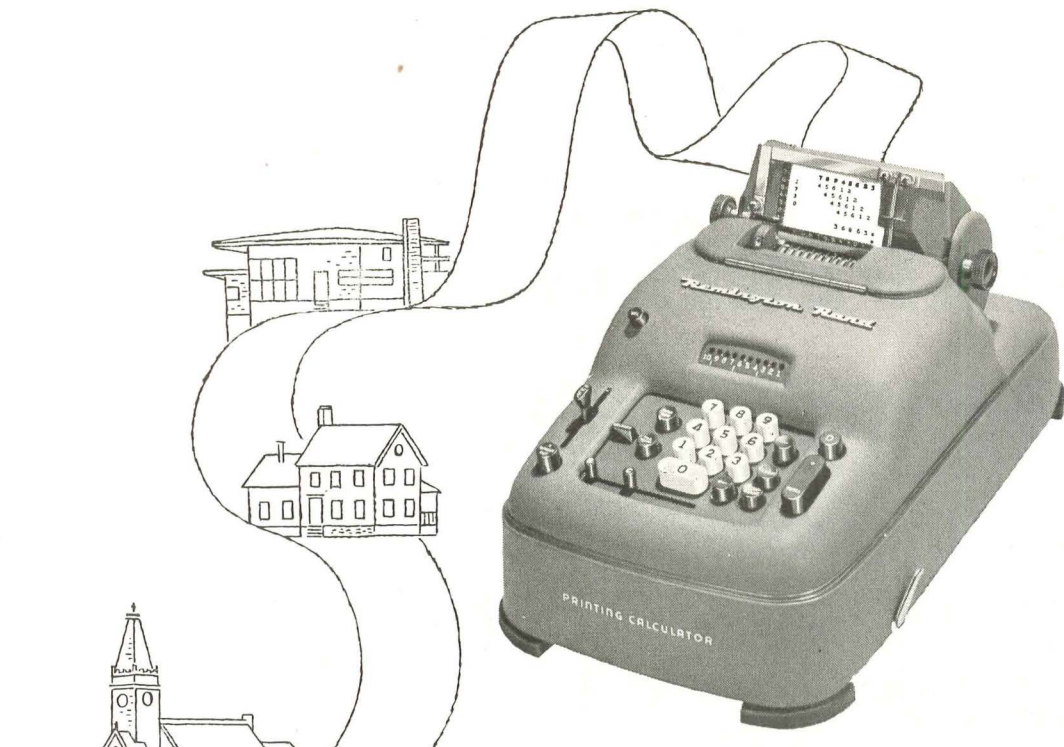
See feature article in this issue which gives complete details on the **Scholz Designed** "California Contemporary" homes which sold out original project of 43 homes in 9 days and an additional 60 homes in 60 days in Toledo. These homes are being built for \$9 a sq. ft., an unmatched figure today in the Mid-West and are complete, including tile baths, woodburning fireplaces, thermopane, complete insulation, vent fans, hot water-radiant heat. This record is in the process of being duplicated in other cities. Midwest Millwork and Supply Corp. is now shipping these same units along with complete cost estimates,



engineered procedures, and cost-cutting techniques, to builders throughout the middle-west. Progressive builders can not afford to fail to investigate this combination of rock bottom controlled costs, building know-how and sales appeal.

Write today on your letterhead for complete information to

Scholz Designed CALIFORNIA CONTEMPORARY HOMES
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Architects, builders and contractors appreciate the importance of a good figurework foundation. That's why so many prefer the Remington Rand Printing Calculator for fast, accurate figuring from start to finish on every job.

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Send for your free copy of the new folder, "Figure-Fact Efficiency For Contractors and Builders". It shows many practical uses of the Remington Rand Printing Calculator, from estimating cellar wall area to computing your payroll. Mail the coupon today.

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SEE and TRY the Printing Calculator at the Remington Rand Exhibit-NAHB Show-January 17-23, Conrad Hilton Hotel, Chicago.

Room 2577, 315 Fourth Avenue, New York 10, N. Y.

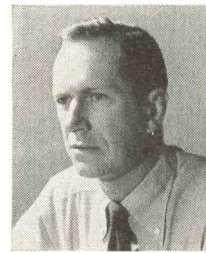
Please send me my free copy of "Figure-Fact Efficiency For Contractors and Builders", (AD 535 Rev. 1).

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____



MARTIN L. BARTLING JR.

was appointed chairman of NAHB's Trade Secrets Committee in January, 1952, has directed the five-man group through a rewarding year of regional meetings (more than a dozen), in which progressive ideas were pooled for the benefit of all participating builders. The "Trade Secrets" house was designed by the committee recently for duplication by builders all over the country (p. 99). Chairman Bartling hails from Kansas City, is an ex-insurance man turned builder. With Partner Stuart Fonde, he has been building in Knoxville, Tenn. since 1939.



SERGE CHERMAYEFF, one

of modern architecture's best-known exponents, has influenced designers on two continents. Born in Russia in 1900, he went to England in 1910, attended Harrow and Cambridge, studied art and architecture on the continent. In England he practiced alone, eventually became a Fellow of the Royal Institute of British Architects, and from 1933 to 1936, he worked with Eric Mendelsohn. In 1942, Chermayeff came to the US, headed first the Brooklyn College Department of Design for four years, then the Chicago Institute of Design for five (1946-51). He is currently visiting lecturer and critic in MIT's department of architecture. Chermayeff's houses have not been as numerous as they are provocative, include his own widely published house in Halland, England built in the thirties, and this month's Payson House in Maine (p. 108).



Though an architect's son, **HARWELL H. HARRIS**

was studying sculpture when he discovered Frank Lloyd Wright's work and became interested in architecture for the first time. Born in Redlands, Calif. in 1903, Harris was educated at Pomona College and the Otis Art Institute. He built his first house in 1934 and in the ensuing years designed a memorable series of California houses that brought him fame and awards. Harris' handling of wood has helped stimulate the existing wood carpentry of the US to a new flowering. His preoccupation with the highly individualized needs of each client has also been apparent in all his designs. Since the spring of 1952, he has directed the school of architecture at the University of Texas, combining practice with academic duties in Austin. Featured this month is the gabled Wyle House in California (p. 126).



"More than 4,000 homes I've built have Mosaic Clay Tile baths and kitchens

Norman R. Schuermann, Schuermann Building & Realty Co., St. Louis, Missouri. Mr. Schuermann's Bissell Hills homes have equipped kitchens, 2 and 3 bedrooms, full basements with poured foundations and Mosaic Clay Tile baths and kitchens.

... as a result, they've **sold faster,**" says Norman R. Schuermann, St. Louis builder.

"Since 1937, every house I've put up—over 4,000 houses—has had a Mosaic Clay Tile bath and kitchen. I've found that clay tile is a *big sales feature*. It's what my buyers want and expect. They like Mosaic Tile's good looks, its permanency, its easy cleaning.
"In my new Bissell Hills development I have

2,300 homes built or under construction. They'll sell for an average cost of \$11,400 each. And each one will have a Mosaic Tile bath and kitchen.

"I find that I can't go wrong on the real thing. And I should know, for I've spent far too much money repairing and replacing substitutes for real clay tile."

Mr. and Mrs. Merle Plitt, Bissell Hills, St. Louis, Mo., two-time purchasers of Schuermann-built homes.



"This is the second Schuermann-built house we've bought in twenty years," says Mr. Plitt. "We've been completely satisfied both times. Our present home is just what we want, and it's built with quality materials from one end to the other."

"I like the Mosaic Clay Tile on my kitchen walls," Mrs. Plitt points out to Mr. Schuermann. "It saves me a lot of work . . . will never need paint or repair . . . and it's a dream to clean. I'll never have to worry about splashing water or grease."

"My little boy is like all other boys," Mrs. Plitt adds, "boisterous and just a bit careless about where he puts his hands, and how he takes his bath. With Mosaic Clay Tile on my walls and floor, I don't have to scold, for nothing harms my Mosaic Tile."

Use Mosaic Clay Tile in your low-cost homes. See Mosaic Clay Tile at any Mosaic showroom, or at that of your local Tile Contractor. For helpful literature, write Department 29-13, The Mosaic Tile Company, Zanesville, Ohio.

Visit our N. A. H. B. Exhibit, Room 618-A, Conrad Hilton Hotel, Chicago.

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Offices, Showrooms and Warehouses across the nation
Over 4000 Tile Contractors to serve you



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PREFABRICATION S-T-R-E-T-C-H-E-S building budgets

If you're faced with growing competition and want to build comfortable, quality homes despite higher costs—look to PREFABRICATION. Here, new sales records are being set because prefabrication's modern methods result in greater economies.

From thrift model to luxury home, builders can erect prefabricated houses faster, at lower cost and with fewer headaches.

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- ✓ BUILD SOONER
- ✓ COMPLETE QUICKER
- ✓ SELL FASTER

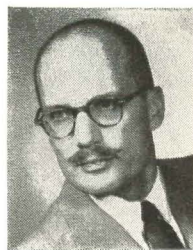


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MANUFACTURERS' INSTITUTE**

935 20th St. N.W.

Washington 6, D.C.

BEHIND THE BLUEPRINTS



Since 1949, **JAMES T. LENDRUM** has been director of the University of Illinois' Small Homes Council, the coordinating agency for all housing research carried on by the various departments of the university, trade associations and government agencies. Director Lendrum, 45, is an architect, trained at the Universities of Michigan and Illinois. He has both professional and professorial experience, having worked with the architectural firm of George E. Ramey and taught at the two universities he formerly attended. An articulate critic of current building practice, Lendrum thinks "building by modern tested and approved techniques is 90% common sense and 10% forgetting past procedures and experience" (p. 152).



Builder **DONALD J. SCHOLZ**, 33, was born in Cleveland and studied engineering at the University of Toledo. On his first jobs he designed industrial buildings for firms in Toledo, Cleveland and Detroit, and in 1944 he organized his own consulting engineering firm in Hartford, Conn. with three other partners. After the war he returned to Toledo, went into the homebuilding business with his father, who has since died. In six years Scholz has become a leading figure in Toledo housebuilding. He does both contract construction and merchant building, has a manufacturing unit just starting to ship his "California contemporary" models (p. 144) all over the Midwest. Scholz sells modern design to Toledo, finds it pays to the tune of \$2 million sales a year.



Builder **WILLIAM ALEXANDER SIMMS** has always been eager to face new adventures. He learned to fly in 1926. And he is now one of the two dozen forward-looking builders rushing "Trade Secrets" houses (p. 99) to completion. Simms is 47, and a Cornell graduate (1928) with a degree in mechanical engineering. His family came to Dayton, Ohio in 1793, and from his great grandfather on, his ancestors were builders, later bankers, in the community. Simms became a housebuilder in 1934, starting his first subdivision in 1936. Since September, 1945, when he was mustered out of the air force as a lieutenant colonel, Simms has built 1,800 houses in Dayton, progressively changing and improving the designs because he is convinced people want contemporary planning.



Is this 1953's most influential house?

**From NAHB's Trade Secrets Committee comes this house
—now being built across the country.**

**Many of America's top builders believe that
this is the house the public will accept**

There are four reasons why this may be the most influential house of 1953:

1. It was developed by NAHB's Trade Secrets Committee as a showcase for the best building methods from 40 Trade Secrets meetings in 1952.
2. It is being built by 23 of the most important builders in the country in 14 states.
3. It offers contemporary design and a modern open plan that are perfectly adaptable to most sections of the country.
4. It is being featured in 5,200,000 copies of LIFE, insuring a tremendous impact on the home-buying public. It will almost certainly exert a major influence on the kind of houses people will want to buy. In scale-model form it will be seen by thousands of builders at the Chicago NAHB meeting this month.

Why is this a good house for builders?

Because it will sell. Three years ago most builders would have considered this house too far ahead of the times, too risky. Today, on the contrary, perhaps the first thing to note is that it does not contain one single feature that has not been tried out successfully by some of the most sales-minded builders in the country. It is not a "house of tomorrow." But it is a "house of today," and as such deserves study by builders who are still building "houses of yesterday." Designwise, though it may not excite architects, it is far in advance of the average builder's house.

Why is this a good house for the public?

This is the kind of house that many progressive builders think people are waiting to buy. It is the kind they have been reading about—not only in LIFE but in other magazines—but which usually costs far more than this house costs.

While numerous builders have used one or two Trade Secrets ideas in their houses, there is not a builder's house in the country that has all of these features. This is not just another house—it is a better house. It deserves the most careful study. Its good features include:

An exterior that gives a builder great latitude in materials and is not radical enough to frighten away buyers.

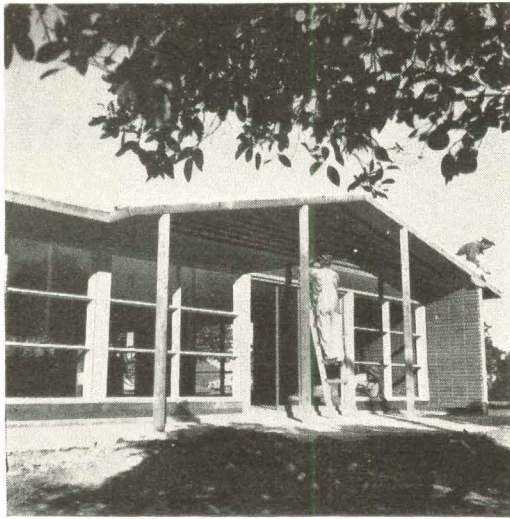
An open floor plan containing 1,332 sq. ft. (plus carport and outside storage) with excellent circulation and an unusual amount of livability.

A new kind of flexibility in room planning which will let different families use it in different ways. The rear living room has a study-bedroom on one side marked off by a folding partition. On another side of the living room is the dining room combined with an activities room. On the third side is a paved terrace. All of this large space can be separated from the living room or become part of it.

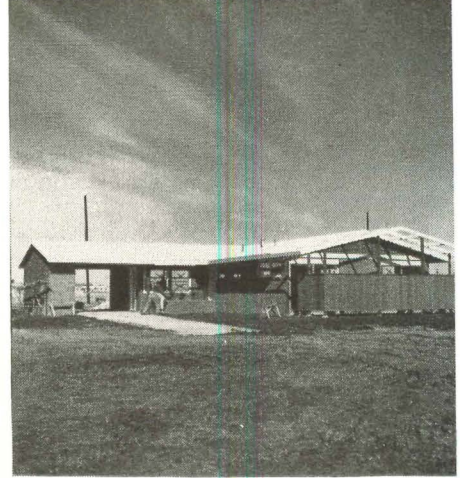
continued on the next page



South Bend, Ind.



Phoenix, Ariz.



Dallas, Tex.

Philippe

An area of 170 sq. ft. in the combined dining room and all-purpose family room. This is a new sort of space in builders' houses in that it can be used for many kinds of activities. It relieves the pressure on the living room. It is large enough so that the dining table can be put in any one of several locations.

A 36'-4" long double-glazed window wall at the south end of the house with a door to the paved rear terrace, which will introduce many families in northern cities to a new kind of indoor-outdoor living. A commendable feature is the 4' overhang to protect the glass from summer sun but let in the welcome winter sun.

An open kitchen at the front of the house which most families will want, but which can be turned into a closed kitchen if buyers prefer it that way.

A well-planned full bath and an extra half-bath both located where they will be most efficient for family use. They are equipped with electric wall heaters.

Storage walls that will be an eye opener to public and builders alike. These are real walls replacing old-style partitions and closets. They provide some 720 cu. ft. of storage (plus another 66 sq. ft. next to the carport). Several styles are available.

LIFE: Ralph Morse



Committee at work evolving the Trade Secrets house climaxing the year's work are Architect Leonard G Haeger, NAHB's technical and research director; Chairman Martin Bartling, Knoxville; Architect Ned Cole, Austin, Tex.; Andrew Place, South Bend, Ind.; and David Slipher, Los Angeles.

Valance and outdoor lighting that should become a sales attraction and numerous other details calculated to make this a show house wherever it is built.

A well-engineered construction system illustrated by the photographs on the following pages.

Jelled, but not frozen, design

The plans for this house, worked out by the committee of architects and homebuilders who were most active in the year's Trade Secrets meetings, are flexible, not dogmatic. Though an effort is being made to keep the 23 models as close to the prototype as possible, there is ample provision for a variety of changes to meet local preferences or practices. For example:

- ▶ Four different heating systems went into the first 14 houses;
- ▶ Three types of flooring were used;
- ▶ Two different factory-built storage walls were suggested in the plans, but full diagrams are included for any builder who wishes to mill and assemble his own units;
- ▶ In Phoenix and Dayton, the builders added air conditioning (at extra cost), and in South Bend, kitchen cabinets were changed to accommodate two combination units, a washer-dryer and a refrigerator-freezer;
- ▶ Plans were drawn for brick, brick veneer and frame.

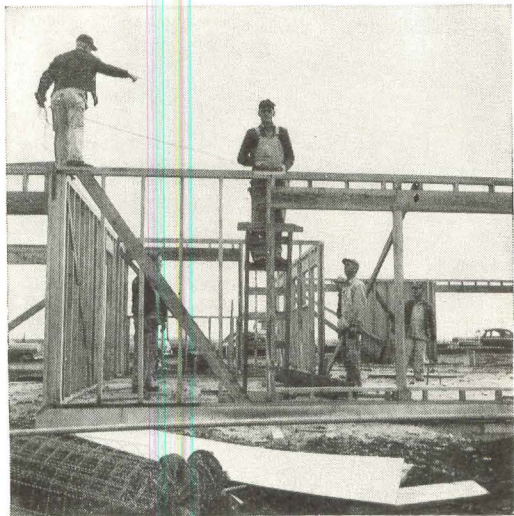
More than skin deep

Design preference may vary throughout the country, but the Trade Secret methods are feasible anywhere and will save time, money and materials for most US builders. They can be used large scale or on a one-house level with equally good results. None of them depends on large investments in equipment or machinery. They are not new methods. The pioneers have proved them. But nonpioneers could well compare newer methods to their own cut-and-fit, measure-and-join operations. Most important:

1. Tilt-up construction and a trussed roof

With precut lumber falling into place like the pieces of a memorized puzzle, studs, top plate and sheathing are assembled and tilted into place. Windows and window walls go against top plate, eliminating all blocking and fitting. Trusses are easily lifted to the top of walls and nailed into place. A house completely erected, sheathed and under cover in one day is almost guaranteed.

Midwest City, Okla.

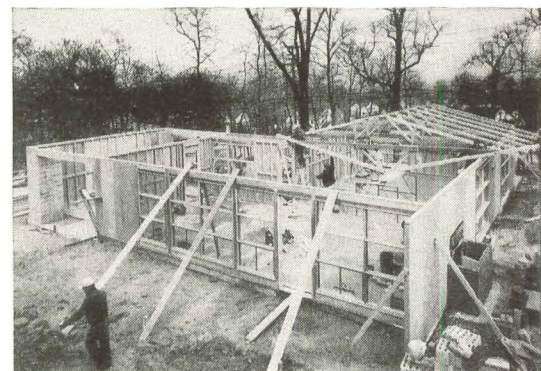


LIFE: A. Y. Owen



Media, Pa.

Werner Wolf



Dayton, Ohio

LIFE: Arnold Newman

Above, six of The Trade Secrets houses going up.

You can see completed houses in the 23 cities below:

2. "One big room" interior

This makes possible fast, uninterrupted installation of dry-wall or plastered ceiling and side walls. There are no partitions to interfere with straight line production of rough wiring, flooring and prime painting.

3. Factory or job-built storage wall units

The builder simply sets these in place to provide all interior partitions. Gap ($\frac{3}{8}$ " to 1") between top of wall and ceiling is covered by molding.

4. Simplified design and construction

These make possible a long list of extras (electric heat in bathrooms, valance and outdoor lighting, etc.) without raising the basic price goal of approximately \$12 a sq. ft.

The adaptability of these methods is shown by one striking fact: No builder had even laid eyes on the plan before November, and several have completed their house in 30 days in spite of this unfamiliarity. Any such savings in calendar days means an obvious saving in overhead, especially for the small builder, who often sees his profit disappear in wasted time, missing materials and procrastinating subs. With each set of plans for the NAHB house (\$100 to any NAHB member) goes a work schedule which endeavors to make the builder get everything and everybody to the right place at the right time.

"Somebody else, not me!"

What the committee set out to show is that the best ideas of the most progressive builders can be used by any builder, in any area, in any price range. It dramatically exposes the common alibi: "That's all right for the big guy, but I could never build that way." With only minor variations in exterior materials and insulation, the house has been built in Indiana's cold and Arizona's heat, in Seattle's hills and Wichita's flatlands. Builders in the north can no longer claim that window walls are only for the West Coast and Florida (see also p. 144). It is being built by small, medium and large-scale operators. Price varies somewhat in different sections, but the goal for the 1,396 sq. ft. house is \$15,000, plus land, and in reasonable multiple production, this figure could be lowered.

Everywhere, too, the house demonstrates that good building practices can save any builder money and give his customers

Amarillo, Tex.—Lowell Munday

Austin, Tex.—Ned A. Cole

Colorado Springs, Col.—Todd Sloan

Dallas, Tex.—Leslie Hill

Dayton, Ohio—Alex Simms

Denver, Col.—Franklin Burns

El Paso, Tex.—William Elliott

Flint, Mich.—William Gerholz

Fort Worth, Tex.—R. B. Billings

Houston, Tex.—Miles Strickland

Janesville, Wis.—Laverne E. Burmester

Media, Pa.—Arters Brothers, Inc.

Memphis, Tenn.—Wallace Johnson

Midwest City, Okla.—W. P. Atkinson

Pampa, Tex.—Richard G. Hughes

Phoenix, Ariz.—Thomas Riskas

San Antonio, Tex.—Frank Robertson

Seattle, Wash.—Albert Balch

Sequin, Tex.—A. B. Cover

Shreveport, La.—Frank Zuzak

South Bend, Ind.—Andrew Place

Wichita, Kan.—Kenneth Stowell

Wilmington, Del.—Frank Collins

This was the complete list as HOUSE & HOME went to press.

Architect: Ned Cole

better houses. A trussed roof means more than just erection speed and material saved—it also eliminates load-bearing partitions which interfere with planning freedom and it allows for handsome, handy storage walls.

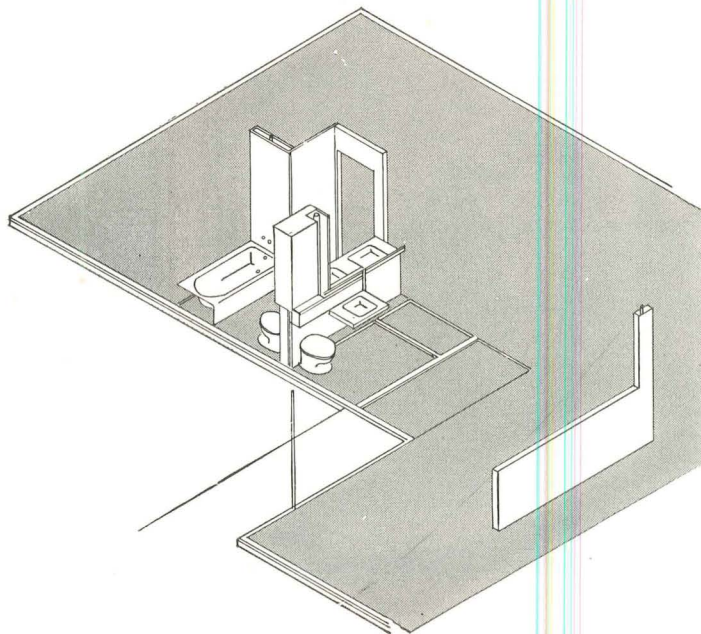
East state, West state, all around the country

There may never be a “universal” house for the US, with its wide range of climate, zoning and other conditions (not to speak of the native American avoidance of any “mold”), but this is designed to fit into most areas. As a product of the Trade Secrets program, it will be offered to the public in more places simultaneously than any house heretofore. Any builder who misses seeing it will be able to inspect the plans and a complete scale model at the annual NAHB meeting in Chicago this month.

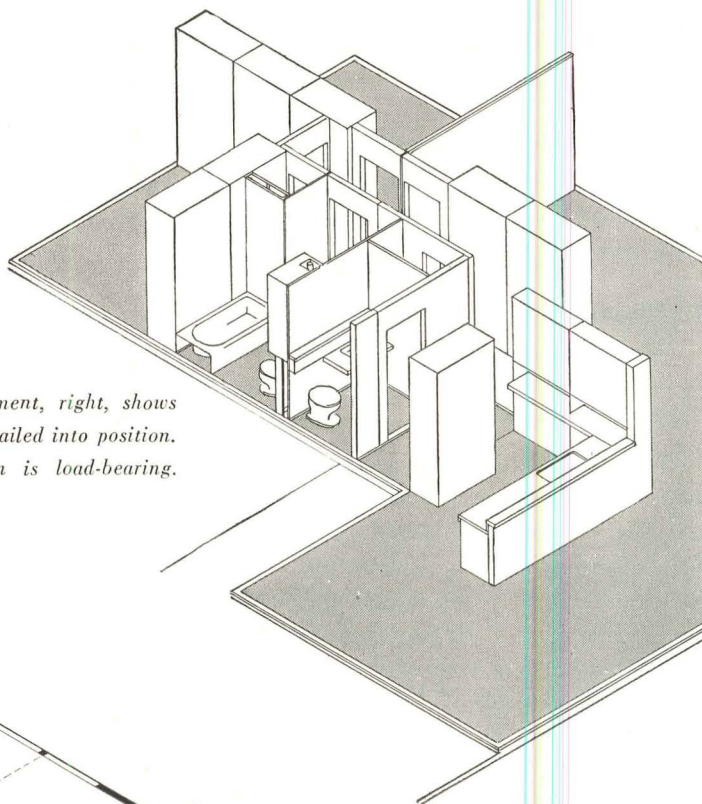
The real lesson

What the Trade Secrets house teaches is that from an exchange of information among builders, as typified by the Trade Secrets meetings, come solutions valuable to all builders. To prove that good design and sound construction have a dollars-and-cents value: this house exceeded the maximum FHA valuation in every area in which a commitment was asked. The reason: it is far better than the majority of houses offered for sale.

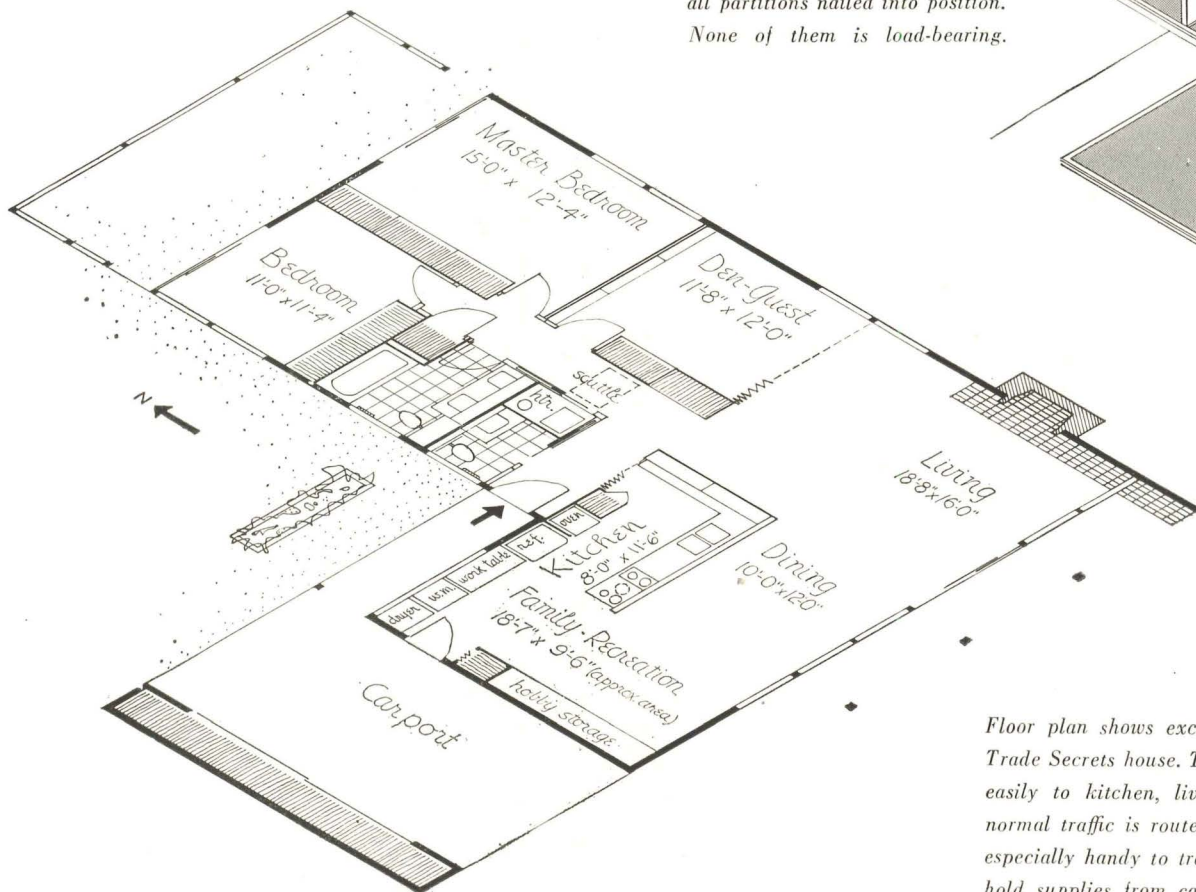
For many years now, builders have been familiar with phrases like “tilt-up,” “trussed roof” and “open planning,” but often only as phrases. They still, in most cases, do not apply these methods to their own operations. The plans for this house (complete to the most minute detail) would be a quick education in housebuilding for anyone willing to study them. This house would be good for any builder to build, to show himself and his workmen and subs how much easier it is to work the modern way than the way they always have worked.



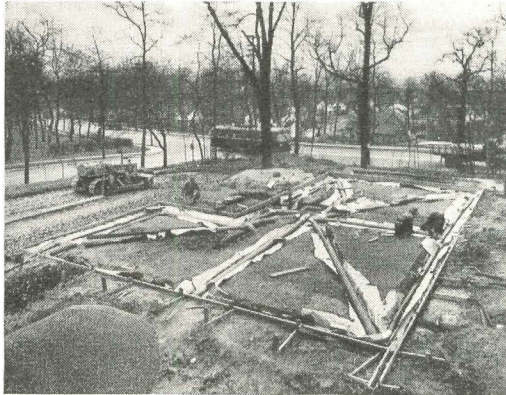
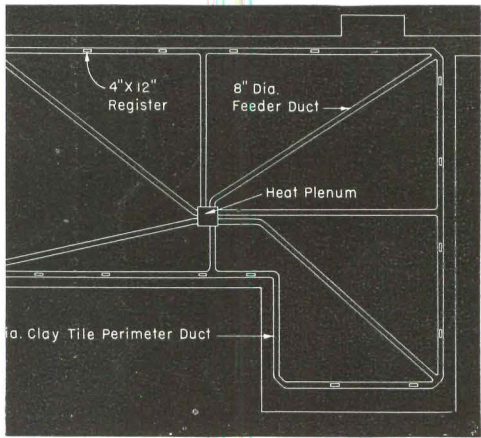
Interior partitions are installed in predetermined order, starting at sewer stack, only fixed point



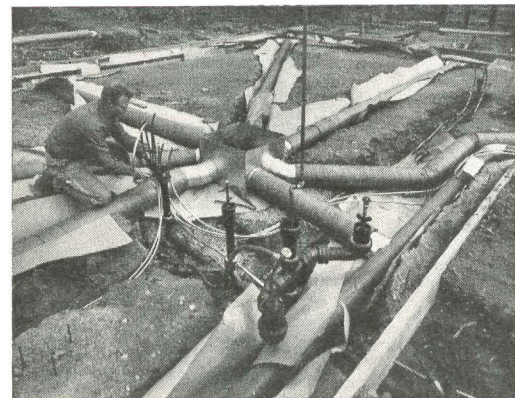
Final arrangement, right, shows all partitions nailed into position. None of them is load-bearing.



Floor plan shows excellent circulation achieved in the Trade Secrets house. Traffic through main entry can flow easily to kitchen, living, sleeping or bath areas. No normal traffic is routed through living room. Kitchen is especially handy to tradesmen and for unloading household supplies from carport or outside storeroom.



Feeder ducts are 8" in diameter, with perimeter ducts only 6". Perimeter system was suggested, to the builders but no equipment was a "must."



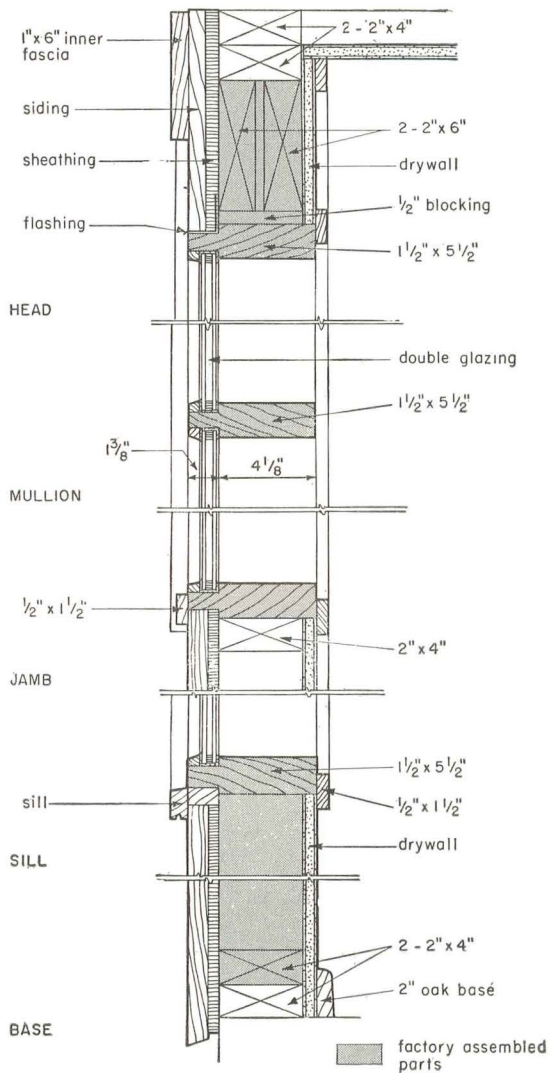
Photos: LIFE-Arnold Newman

Radial counterflow heating system is embedded in slab. Four outlets keep a curtain of warm air next to glass window wall.

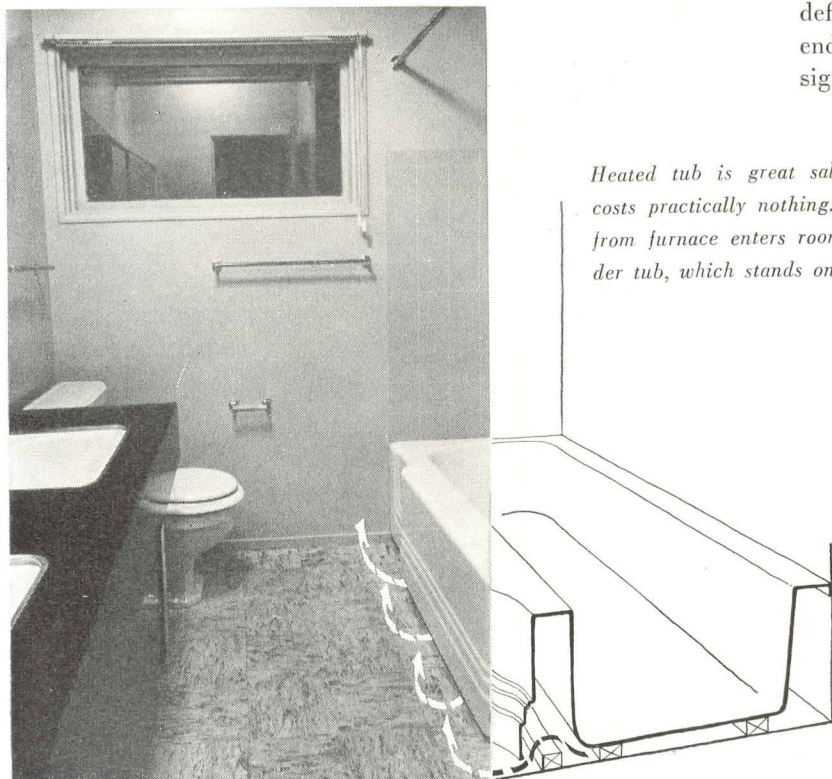
South-facing living room is shielded by overhang and extended side wall, is open to terrace

Pressure testing of all plumbing lines takes place before concrete slab is poured to eliminate expensive trouble later if a line should begin to leak.





WINDOW WALL



Heated tub is great sales feature, costs practically nothing. Warm air from furnace enters room from under tub, which stands on 1" blocks.

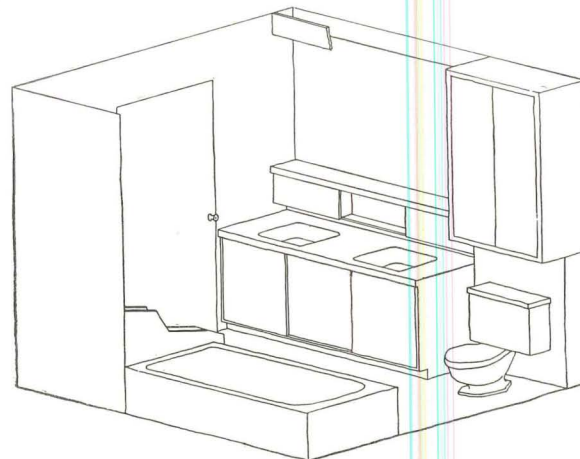


Precutting and preassembly are important factors in reducing building time. In quantity production, an on-site cutting shop would probably be set up.

How much?

One of the toughest jobs the committee faced, and one that it was not completely able to solve, was that of holding costs to a figure in the medium price range, while still keeping the glamorous, useful extras that make the house so salable. The basic construction methods, most interesting to a builder, would not rank so high in public interest as some of the features.

In its final form, the house carried a price tag of \$15,000 plus land, but this price can only be achieved in quantity production, and in some areas builders claimed they could not meet this figure, even in a large operation. Economy was not the prime objective, but rather, a good design able to demonstrate the building ideas. Builders a great distance from storage wall manufacturers, and without facilities for making their own, might find the units expensive. The "L" shape of the house, while contributing to appearance, definitely adds to costs. Bluntly, the house is not meant to be an end in itself, but a jumping-off point for further progressive design and building thinking.



Storage space in bathroom is more than ample. Cabinet on wall above water tank uses space generally wasted. Mirror is valance lighted, and electric heater is in wall. Window is not over tub, a mistake often made in many small houses.

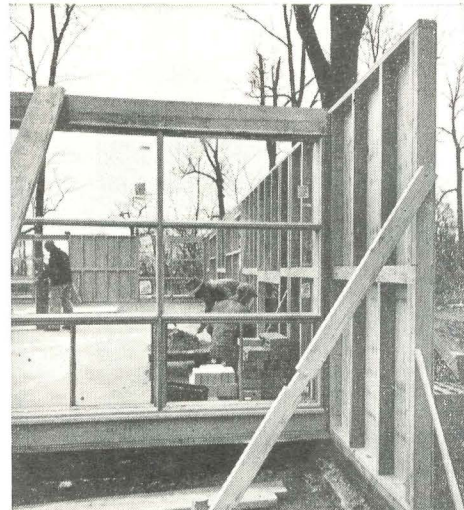
Photos: LIFE-Arnold Newman



Cleared slab furnishes an ideal work surface for assembling wall sections. This house had two small furnaces installed above ceiling. Cost: \$50 more than one large furnace.



Tilt-up walls are fast, easy to install. They can take roof trusses immediately. A good method in any size operation.



Fireplace wall projects beyond house, gives added privacy to large expanse of glass and partly shields terrace from neighbors.

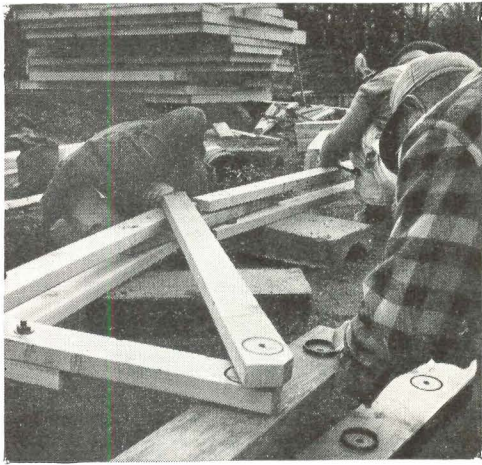


Front of house, above, shows privacy given bedrooms by wood screen

View from terrace, below, shows spacious open room available for entertaining



Photos: LIFE-Arnold Newman

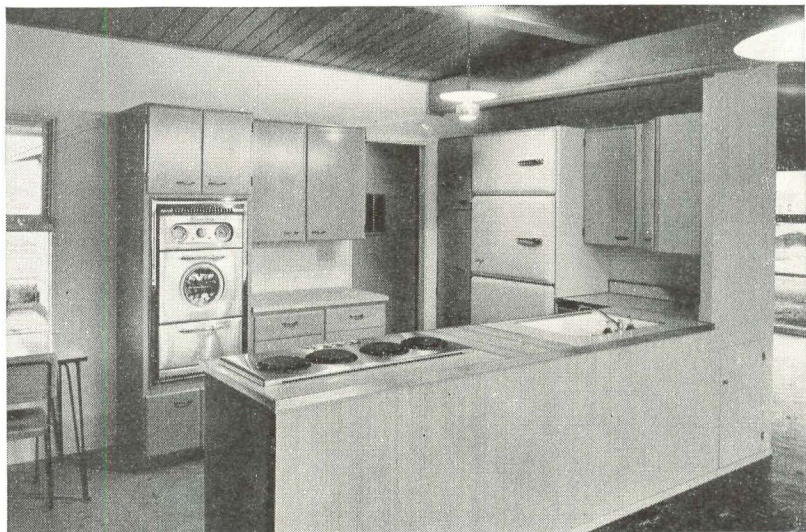


Trusses are bolted together prior to erection. Split rings are used at joints to give them added strength.

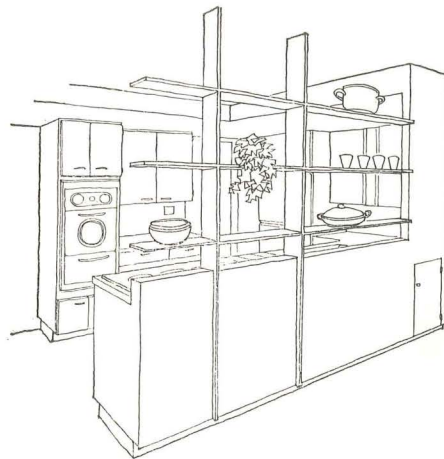


Four-man crew easily raises trusses to top plate. As soon as first few are up, the plywood roof sheathing can begin.

Construction goes fast with large components like trusses and wall sections fed promptly to carpenters from subassemblers.



Open kitchen as seen from the activities-dining area. Separating wall between rooms is easily built if customer prefers to have closed kitchen.



Storage space

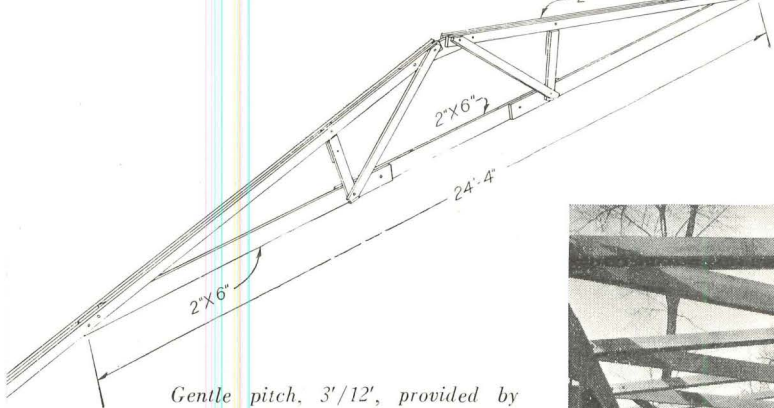
Key to the livability of the Trade Secrets house is the storage space furnished by the built-in units. Thousands of buyers of postwar homes complain that there isn't enough room in the average house in which to put the family's accumulation of items needing storage (an HHFA survey found 45% dissatisfied with storage facilities). The design committee set out to show builders what storage could be built into a house economically.

Storage wall units offer 648 cu. ft. in the three bedrooms and hobby space, as well as 72 cu. ft. in a hall closet. In addition, extra shelves and closets in both baths furnish room for all bath towels and miscellaneous bath equipment and space beneath lavatories is utilized. Cabinets line two walls of the kitchen, and there are shelves and drawers beneath counters. Outdoors, the carport furnishes 66 sq. ft. of covered storage handy to car, yard or kitchen.

Final touch of convenience is the shelving built into study and available, if desired, as a separation for kitchen and dining space. All of this space is *usable* storage, for units have full-length doors and may be compartmented in various ways to accommodate odd storage needs.



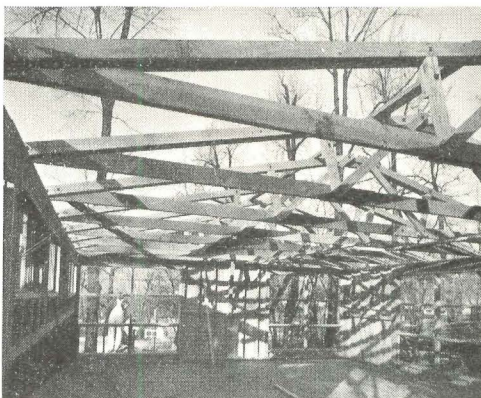
Changes in kitchen were made in South Bend house to accommodate new equipment. Combination washer-dryer permits eating space in kitchen, and refrigerator-freezer was developed by manufacturer to builder's specifications.



Gentle pitch, 3'/12', provided by trusses, gives low, sheltering look, needs built-up roof construction.

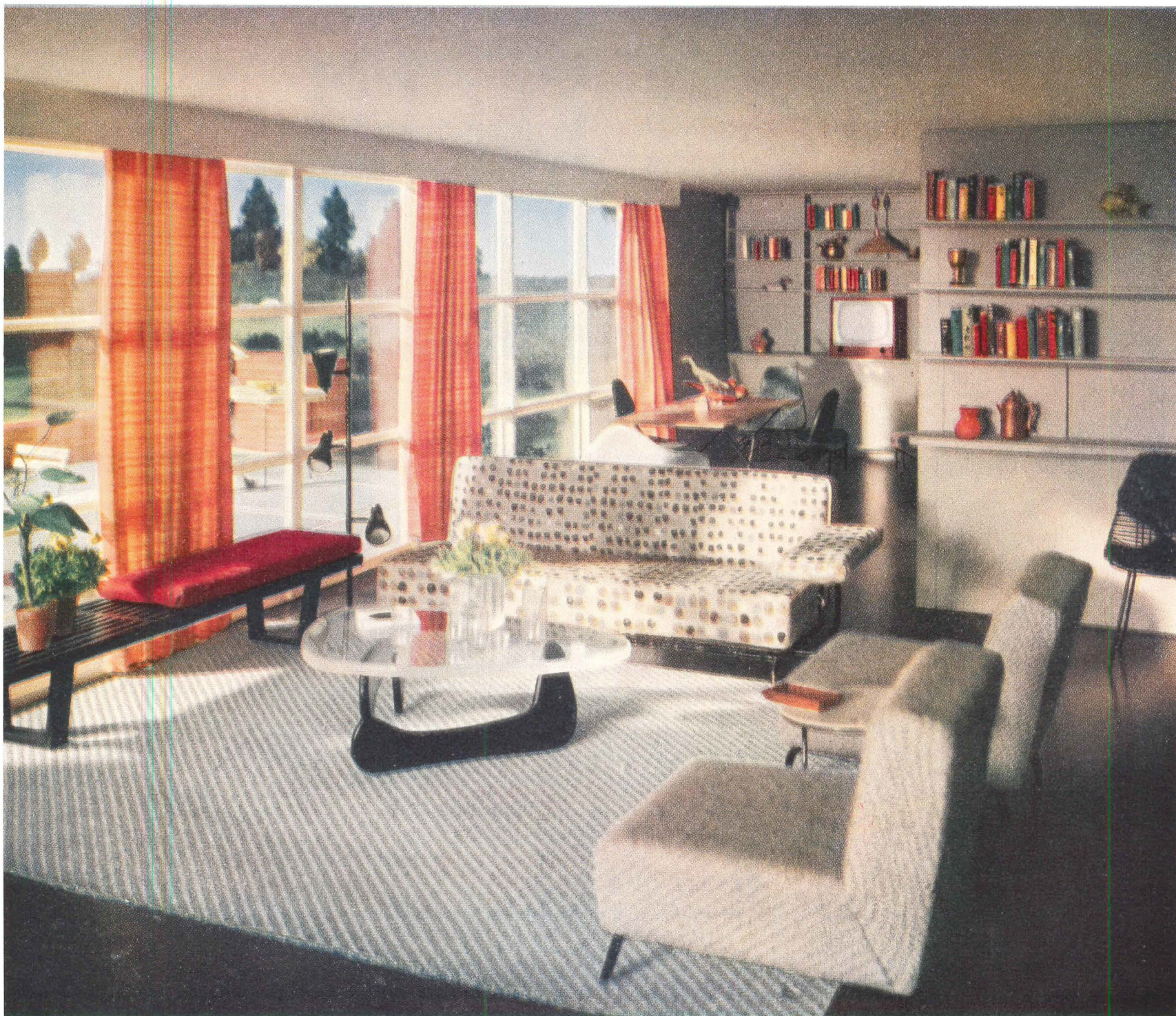
Open interior, right, permits all following workmen to operate out of weather in shelter of house "shell."

Photos: LIFE-Arnold Newman



Plywood roof sheathing goes on fast with little cutting. Each sheet erected can be work platform for next.

Double-glazed window wall, below, makes the terrace a continuation of the living room. Furniture and fabrics by Herman Miller





Photos: © Ezra Stoller

20th-Century house for a 19th-Century landscape

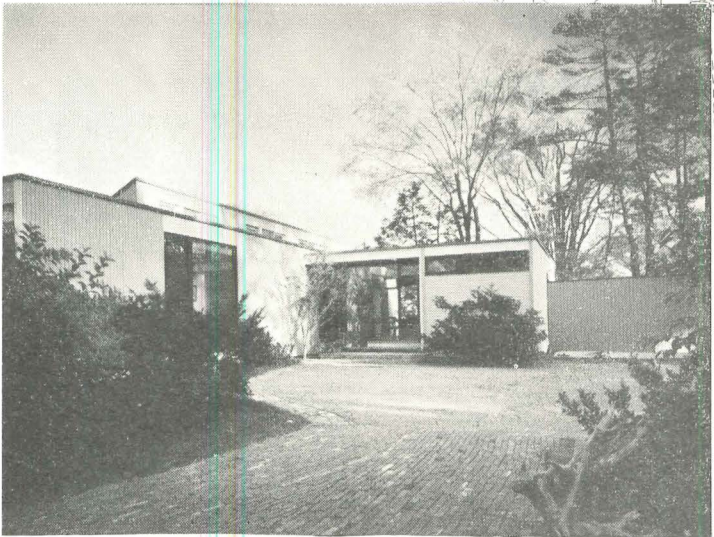
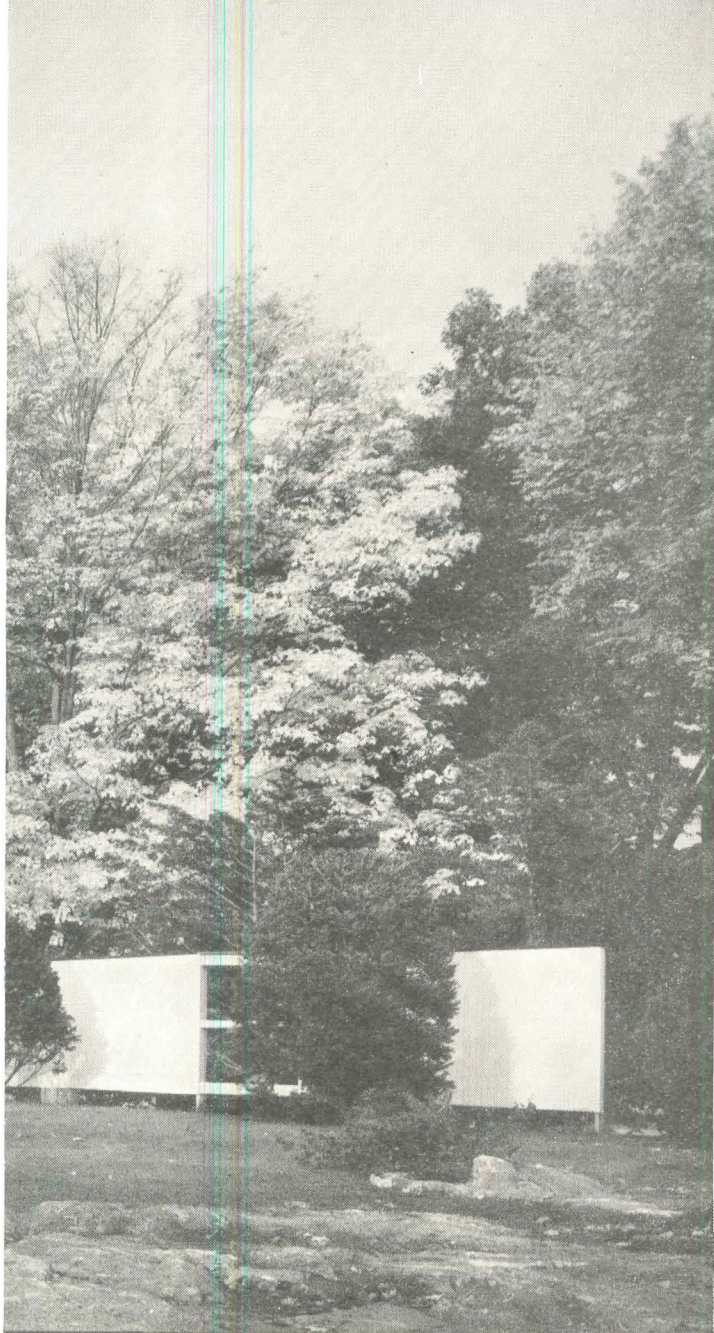
LOCATION, Portland, Maine
HERBERT PAYSON, JR., owner
SERGE CHERMAYEFF, architect
THE ARCHITECTS COLLABORATIVE,
technical assistants
LOUISE PAYSON, planting consultant
CASBURAGE CO. INC., general contractors

This is a simple frame house in Maine. There would be little reason to show it if it were “just another flat wooden box with big areas of glass cut in” but the fact is that the longer you look at it the more appealing it becomes. The walls of carefully placed windows in white board surfaces meet and match the essentials of New England architecture at its best. The old carving is gone—but today’s economy makes it impossible to produce such carving as farmers did who had plenty of time all winter long for handicraft. The roof is flat instead of pitched—but many a fine old classical New England house had a flat roof. The white flat shape is used as New England used white houses—completely surrounded by rich natural growth, and as a contrast to it.

When you go into this house, the contrast is repeated—this time the smooth, light-colored walls are a foil to the bright colors of lively Oriental rugs, the rich luster and opulence of Victorian furniture. The design demonstrates also that:

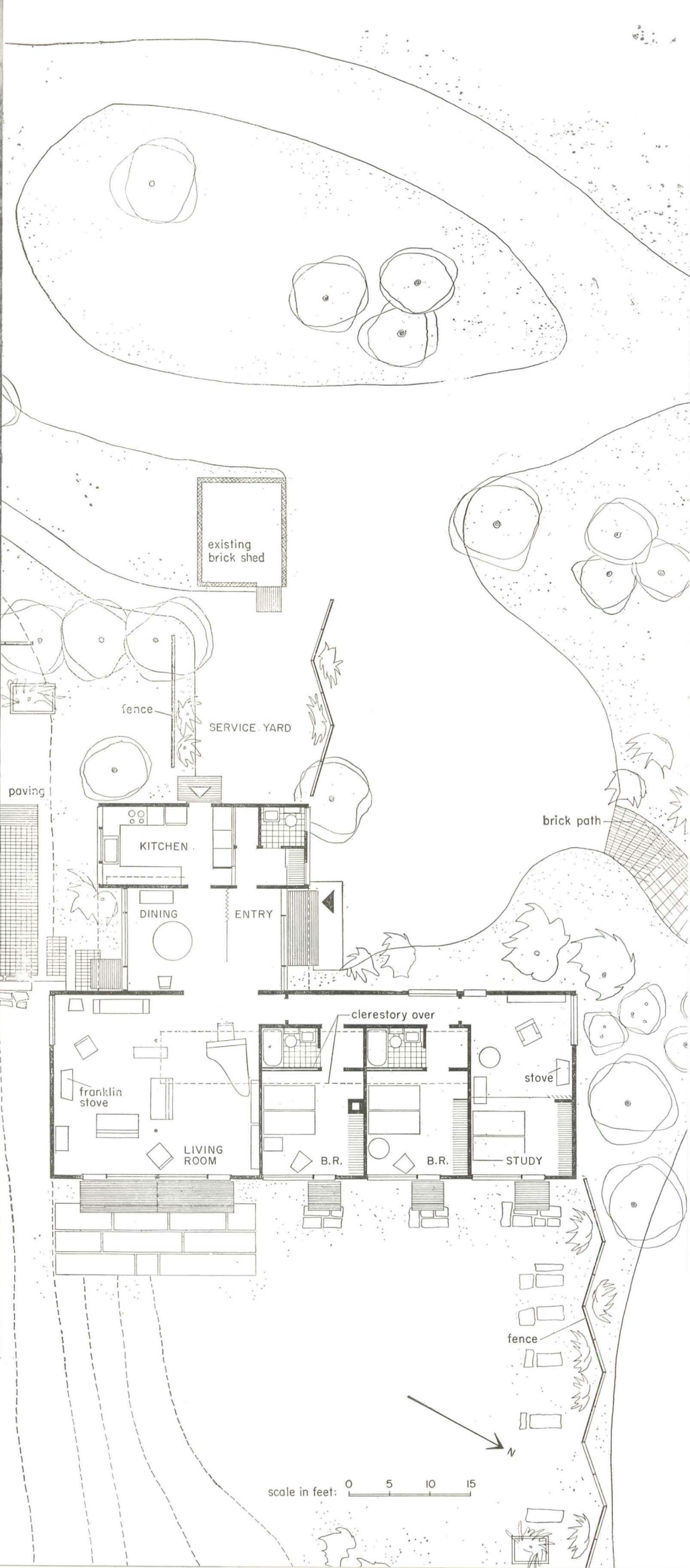
Cheap materials can produce great dignity. At a time when fussy details are expensive, and machine-made ornament can’t satisfy the best taste, precise workmanship and faultless detailing of common wood siding can be as dignified as only marble used to be. It is the man who designs, not the material.

Modern skill is mature enough to accept other periods modestly and unaggressively—and sometimes with amusement. This house is furnished with old chairs, rugs and other



View down walk. Brick and slabs of fine Vermont granite from old house formerly on site provided a valuable stock of paving material. Large photo, top, is view from sea side of house.

JANUARY 1953





sophisticated proportions / simple materials

pieces left over from the 19th Century. Far from treating them as poor relatives, the new kind of interior brings out even more of their character, because there is no fusswork in the walls themselves for the furniture to compete with.

The modern house can include many contrasts. The architect here, for instance, placed black stoves (instead of fireplaces) against light walls, and implied all the degrees of tone in between—which a more literal-minded man might have tried for with great inclusive detail.

Modern houses do not have to be monotonous in mood. This one stares at you coolly until you enter, then embraces you.

The designer in this equation was Serge Chermayeff, an eloquent architect in the van of the modern movement for many years, here doing his first house in ten years.

His skill was challenged because this building had to replace the memory of a great old 19th-Century house which stood vastly on the site until several years ago, when its inheritors reluctantly ripped it down. The old house was three stories high, with eight bedrooms on the third floor alone, and even more important than its remembered glories was the grandly scaled landscape of large trees it left. The new house is built precisely on a small part of the cavity of the old mansion's cellars and it was a very difficult thing to come up to the challenge of the old landscaping, and do it economically. Lavish gestures, elaborate materials and great piles of cubage were all beyond the budget, so Architect Chermayeff had to build very crisply and emphatically to make the small house noticed against the overpowering backdrop.

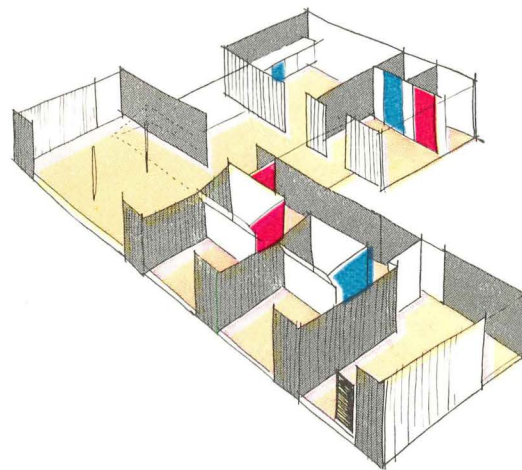
So it is no surprise that the grandson of the old mansion is a much more formal type than its ancestor was. Chermayeff countered the profuse, diffuse natural surroundings with sharp black-and-white intensity in the exterior character of the house, but then, once he had put the fear of God and carpenters into the lordly landscape, he did not press on to build a pure, zealous temple. His design does not go cold; it relaxes winningly. Inside and out, the house is even more comfortable than its predecessor.

ELEMENTS IN BALANCED OPPOSITION

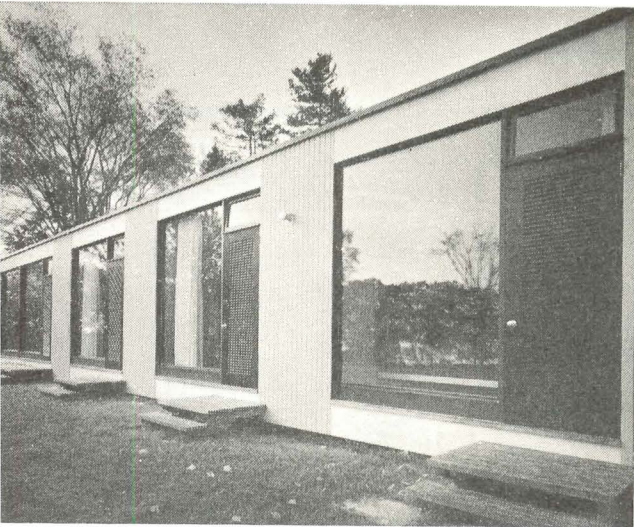
Some of the notes

in Architect Chermayeff's chord of contrasts

are pictured on these two pages

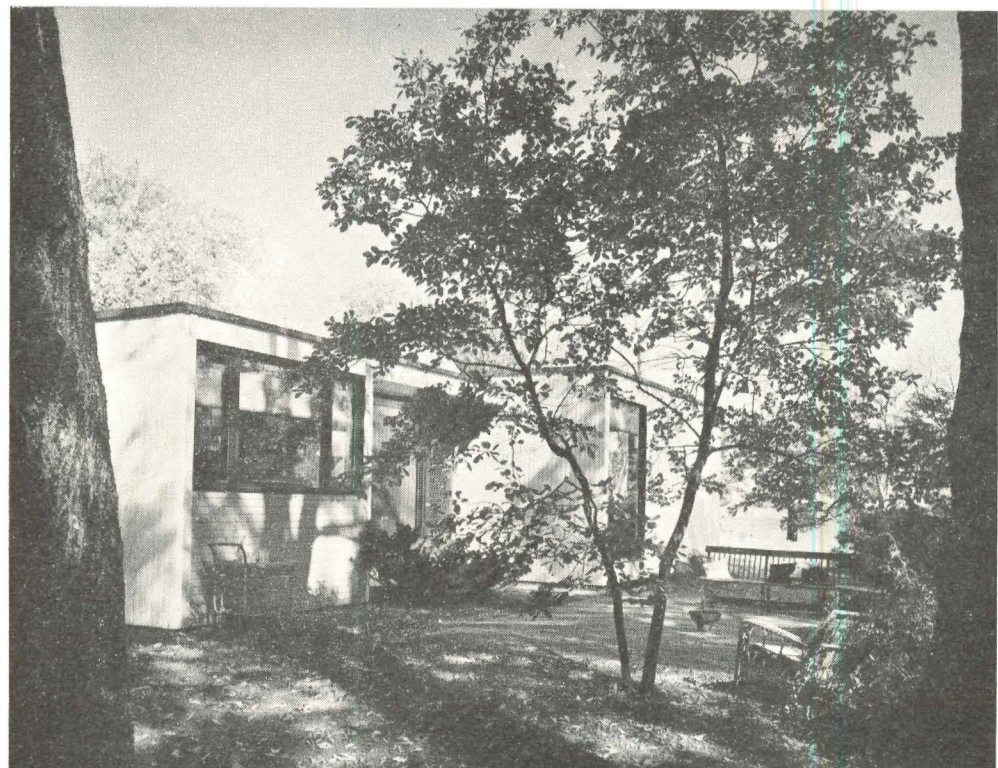


large cool-colored planes / small intense counterpoints



standardized repetitive framing / opulent character

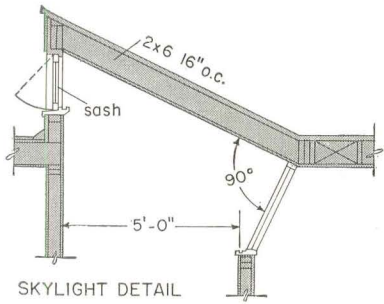
precise building forms / informal landscaping





severe exterior / informal interior spaces

JANUARY 1953



Living room has walls of plaster, flat painted. Floors are all birch

Bedroom closets have vertical split-bamboo shades instead of doors

Bedroom-study has walls of vertical board siding, old family rug on floor

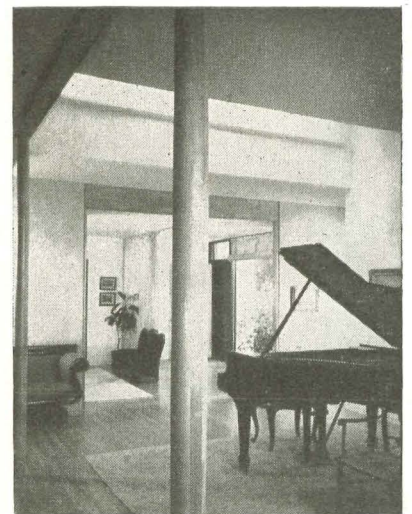
Bathrooms are lighted by skylight, and bedrooms also benefit through glass transoms.



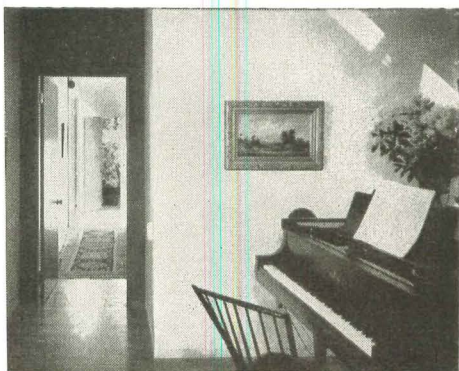


Two birch posts in living room preserve standard bay structure

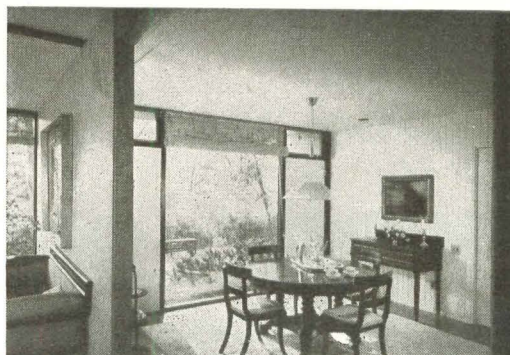
THE FURNISHINGS, mostly old pieces reupholstered with verve, invite the 19th Century back into this house. This was not done whimsically, although they are a big sentimental hit; they are a large budgetary hit, too. Franklin cottage stoves, which are made in nearby Portland, are placed both in living room (above), and study-spare bedroom. Predominantly white and gray, the walls are hit here and there with areas of brilliant color. Both paintings on facing page are by Architect Chermayeff, a finishing touch to his design.



Skylight in living room keeps it lively. View is toward entrance.



Hall to bedrooms



Dining room. Views from house toward maples and elms determined many fenestration positions.



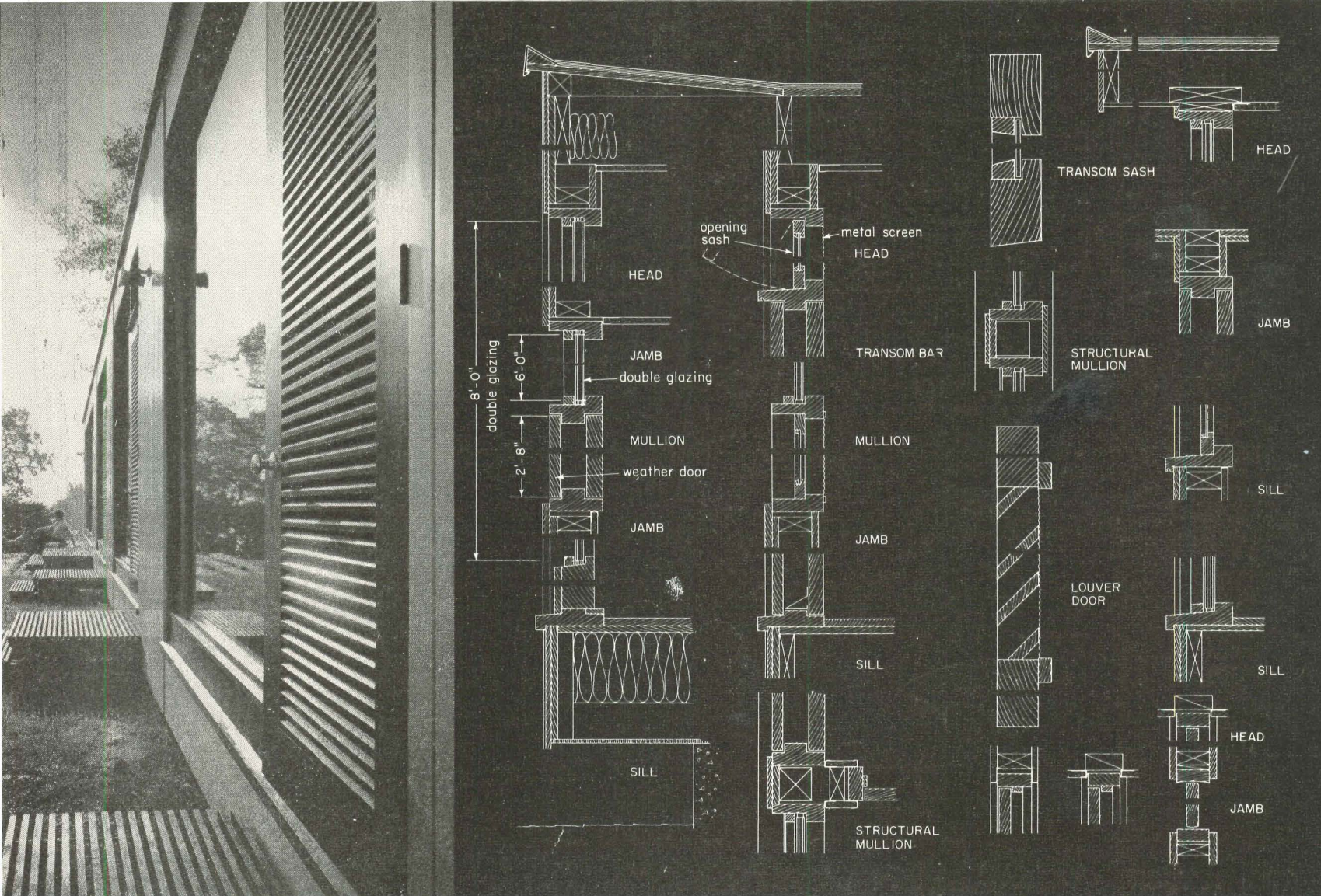
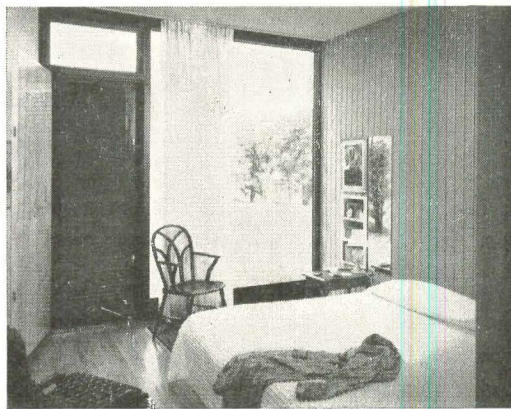
In kitchen, mechanical equipment is subdued to general house atmosphere. This is no laboratory.

Each individual room (bedroom below) has its own outdoor exit through a double door: the outer one being a louver screened inside, the inner one a solid storm door shut in winter.

HEATING, LIGHTING AND VENTILATION. Radiant pipes are set in the ceiling; glass is double, insulating; daylight through a central skylight reduces contrast with the glass walls; transoms and louver doors admit enough Maine air to cool even in summer.

The whole house cantilevers out over its foundations about 12", and is entered everywhere over open oak-slat steps. These two devices are intended to absorb variants in snow level and minimize the risk of snow drifts and ice on the steps proper.

Standard detail and window and door units are repeated all around walls of house. Windows proper are 6' x 8' sheets of fixed double glass for light and view. Ventilation is through louver doors, and central clerestory awning.





Round Table panel

FROM THE AMERICAN INSTITUTE OF ARCHITECTS

Ralph T. Walker
past president

FROM THE NATIONAL ASSOCIATION OF HOME BUILDERS

Alan Brockbank
president

Emmanuel Spiegel
first vice president

Richard M. Hughes
treasurer

Thomas M. Coogan
past president

Rodney M. Lockwood
past president

William Levitt

FROM THE PREFABRICATED HOME MANUFACTURERS INSTITUTE

William F. Hall
first vice president

FROM THE NATIONAL ASSOCIATION OF REAL ESTATE BOARDS

Fritz Burns

FROM THE AMERICAN BANKERS ASSOCIATION

William Marcus
Real Estate Mortgage Committee

FROM THE NATIONAL ASSOCIATION OF MUTUAL SAVINGS BANKS

Fred C. Smith
vice president, Bowery Savings Bank

Robert Morgan
vice president, Boston Five Cents Savings Bank

FROM THE MORTGAGE BANKERS ASSOCIATION

Brown M. Whatley
president

Aksel Nielsen
chairman, Mortgage Stabilization Committee

George Dovenmuehle
Mortgage Stabilization Committee

James Rouse
Mortgage Stabilization Committee

John Austin
Mortgage Stabilization Committee

John Halperin

FROM THE LIFE INSURANCE ASSOCIATION OF AMERICA

L. Douglas Meredith
chairman, Subcommittee on Housing & Mortgage Lending

Robert B. Patrick
chairman, Investment Research Committee

Milford Vieser
chairman, Subcommittee on Housing & Mortgage Lending

FROM THE NATIONAL SAVINGS & LOAN LEAGUE

Charles Wellman

FROM THE US SAVINGS & LOAN LEAGUE

M. K. M. Murphy
past president

FROM THE NATIONAL RETAIL LUMBER DEALERS ASSOCIATION

Norman Mason
*past president-chairman
Construction and Civic Development Committee
of US Chamber of Commerce*

Harold R. Northup
executive vice president

Photos: Roy Stevens



FROM THE MANUFACTURERS

John H. Ashbaugh
vice president, Westinghouse Electric Corp.

Clifford J. Backstrand
president, Armstrong Cork Co.

Melvin H. Baker
chairman, National Gypsum Co.

Harold Boeschstein
president, Owens-Corning Fiberglas Co.

Donald D. Couch
vice president, American Radiator & Standard Sanitary Corp.

F. F. Elliott
senior vice president, Crane Co.

Lawrence Ottinger
president, US Plywood Corp.

Charles R. Pritchard
president, General Electric Supply Co.

FROM THE AMERICAN LEGION

Thomas Moses
chairman, Housing Committee

CONSULTING ECONOMISTS

Miles Coleman

Dr. Ernest M. Fisher, *director, Institute of Urban Land Use & Housing Studies
Columbia University*

Dr. Marcus Nadler
*Graduate School of Business Administration
New York University*

MODERATOR: Dean Philip Young

*Graduate School of Business Administration
Columbia University*

CHAIRMAN: Roy E. Larsen

president, TIME INC.

Andrew Heiskell
vice president, TIME INC., publisher, LIFE

P. I. Prentice
vice president, TIME INC., editor and publisher, HOUSE & HOME

AN EISENHOWER PROGRAM FOR BETTER HOMES

A proposal from homebuilding's leaders to cut the cost—

to streamline the methods—

to lift the effectiveness

of federal cooperation with America's biggest new industry

Once again homebuilding has set an example of teamwork and constructive foresight for other industries.

On the eve of the new administration at Washington, leaders from every important association in homebuilding have met and agreed, with only one dissenting voice, on a 30-point proposal to help General Eisenhower meet more economically and more effectively the housing needs of the country and the problems of the industry that must meet those needs.

This program was drafted at a two-day Round Table conference held at Rye, N. Y., at the invitation of HOUSE & HOME and its sister magazine, LIFE. Represented were the architects, the homebuilders, the mortgage bankers, the savings and loan associations (both groups), the realtors, bankers, savings bankers, insurance companies, prefabricators, lumber dealers and building material manufacturers.

General Eisenhower sent his personal representative to listen in on the discussions, and the chairman of the American Legion housing committee took part in the deliberations and joined in the recommendations.

"This meeting may well prove one of the most momentous in the history of homebuilding in America," said TIME Inc.'s President Roy E. Larsen in opening the Round Table. "If you succeed in developing a constructive program and in making clear just what minimum help from the federal government is essential the success of your meeting will be of great importance not only to your industry but to the prosperity of our national economy and to the happiness of every family that wants and needs a better home.

"Such a success may prove important, too, in setting a pattern for other industries, other business leaders, in articulating their goals to the leaders of our new national administration.

"This is a critical moment in the history of American business. We have a new president about to take office who has shown in many ways his willingness to place great confidence in the leadership of American business. He is thus placing a great responsibility on American business leaders. And if we businessmen fail to meet that responsibility and to live up to this opportunity, it may be a very long time before we have another such chance."

The program agreed upon at the Round Table covers almost every homebuilding problem, from the interest rate on insured mortgages to the future of HHFA, from public housing to rent control. It is presented in the form of a five-part open letter to General Eisenhower which appears on the pages that follow:

- 1. An outline of the present position of homebuilding;**
- 2. Twelve basic principles for housing policy;**
- 3. Eighteen suggestions on organization and administration;**
- 4. The need of mortgage insurance;**
- 5. A proposal for slum clearance and low-income housing.**

An open letter to General Eisenhower

Dear General Eisenhower:

We welcome the interest you have expressed in the problems and the potentialities of homebuilding and, most particularly, we welcome the opportunity you have given us here today to suggest certain changes in federal housing policy which, we believe, can save the federal government many millions of dollars and at the same time contribute more effectively to our common goal of raising the standard of American housing.

As our industry has grown in size and in importance it has grown in responsibility. Homebuilding is our business and all of us—architects, builders, lenders and suppliers—recognize that that makes it our business and our responsibility to help every American family have a good home at a price it can afford to pay.

Some of our suggestions have to do with details of legislation and agency organization or administration, but some of them involve quite fundamental principles. Before we present these suggestions we would like to explain four basic facts about the present situation as we see it:

1. America's biggest new industry

The biggest new US industry since World War II is not television, nor electronics, nor any of the other fabulous new products of the laboratory. It is homebuilding, newly reborn as an assembly-line industry after many centuries as a handicraft.

By 1950 homebuilding had mushroomed into one of America's biggest industries—not so big as steel or automobiles or oil, but much bigger than railroading, bigger than all utilities combined, as big as the whole textile industry (cotton, wool, silk, and all the synthetics combined), much bigger than the coal industry, almost as big as the whole chemical industry.

This sudden rise of homebuilding did more than any other single factor to confound the prophets of postwar depression, for the new homebuilding industry played much the same part in America's prosperity after World War II that the newly great automotive industry played in America's prosperity after World War I. It provided new homes for one out of every seven American families, and whenever a new house was occupied many other families played musical chairs and moved into nicer homes. All this spelled boom for many other industries, for each such move called for new furniture, new appliances, new cars, new stores, new highways, new schools, new churches.

As President, we believe the health and continued progress of such a dynamic industry will be one of your principal domestic concerns.

2. 1,000,000 new homes a year

Our industry is now geared to produce 1,000,000 to 1,200,000 houses a year, and for three reasons we believe you will wish to help keep it at about that level:

- a.** Nothing less than 1,000,000 new homes a year can meet the needs of 700,000 new families and at the same time provide a margin of 300,000 new units to replace old homes fit only for demolition, either because they are substandard or dilapidated or because the neighborhood is no longer suitable for homes. Even that 300,000 margin would require more than a century to replace 43,000,000 existing dwellings.
- b.** Nothing under 1,000,000 new homes a year can maintain full employment in our industry and in all the other industries whose prosperity depends on homebuilding.
- c.** In our industry, as in every other industry, high volume is essential to lower costs. A stable output of 1,000,000 new homes a year offers our greatest hope of offering lower prices and better values for the people who need new or better homes.

3. Competition in homebuilding

Your administration takes office at a turning point in the history of our new industry. We have had seven good years—years when the war-born housing shortage and the record rate of family formation (well over 1,000,000 a year) helped us sell new homes as fast as we could build them. Now we must face the problem of seven leaner years, for new household formation is expected to dip below 700,000, the war-time housing shortage is almost satisfied, fewer families are doubled up than at any time since 1930, and the American people are better housed than ever before.

Our industry, in brief, is entering a period of intense competition—competition not only among ourselves but also competition against the existing supply of houses. This means that our industry will soon be regulated as never before by competition.

4. Reconditioning existing homes

The US housing problem can never be solved until we recognize the importance of maintaining, improving and rehabilitating the 43,000,000 existing dwellings. They are the biggest single asset (\$200 billion) in the inventory of our national wealth. Their improvement is essential to any plan for raising the standard of housing, for in most communities good low-cost housing can be provided much cheaper and much faster by reconditioning and modernizing existing dwellings than by building new ones.

Too many of these existing houses are being allowed to fall into decay, through either disrepair or obsolescence. This is partly because of rent control. It is partly because local governments are lax in enforcing good housing standards, partly because they fail to provide adequate neighborhood protection against spreading blight.

But perhaps a still more important reason is the difficulty of obtaining adequate low-cost, long-term financing for reconditioning and modernization.

We believe amazing and momentous results might be achieved if the kind of mortgage insurance now available only for new construction could also be made available for improvements and modernization. Those results could include (1) a better living standard for millions of families, and (2) a great stimulation of business activity affecting the whole economy.

These results would be hastened if this better financing could enable homebuilders to participate directly in the reconditioning process by accepting old houses in trade as automobile dealers do and reconditioning them for resale. The sale of each new house could lead directly to the improvement of a succession of older dwellings.

We suggest these principles to guide the housing policies of the new administration:

1. We do not ask any federal subsidy, open or concealed. On the contrary, we are unanimous in asking not to be subsidized.

Mutual mortgage insurance

2. Our industry can get along very well without subsidies, but it cannot continue at anything like the present volume without mortgage insurance to help close the gap between the down payments most home buyers can afford to pay and the down payments required for uninsured mortgages. At least for the present we do not see how nationwide mortgage insurance can be operated without the cooperation of the national government; i.e., without FHA.

Without subsidy

3. FHA should be clearly defined as a self-supporting mutual mortgage insurance institution and kept above all suspicion of subsidy. It can best serve the homebuilding industry and the home-buying public by spreading the risk on sound mortgages and so helping to make more mortgage money available at lower interest rates for low down payment loans.

The integrity of this mutual insurance should not be compromised if and when the government wishes to use the FHA mechanism to stimulate some special type of homebuilding with what amounts to a contingent subsidy.*

This is not true mutual insurance. It is a federal guaranty, and that difference should be clearly indicated to avoid discrediting the mutual insurance principle.

With more private risk

4. The participation of private industry and capital in the risk of building and lending should, if possible, be increased. To that end, careful study should be given to the possibility of reducing the government's almost 100% contingent liability on FHA insurance, either by some use of the pooled risk principle or by insuring only the top part of the loan, as is done under the VA guaranty.

At flexible interest rates

5. The interest rate and term of both VA and FHA loans should be kept flexible enough to attract private capital under changing money market conditions.

In the past 18 months unrealistic restrictions on interest rates have caused undue hardship to home purchasers. This is particularly true of the VA rate, which has created a drought of mortgage money for veterans throughout the US and has thus,

* Like getting defense and military housing built by private sponsors at much less cost and with no direct appropriation, or like getting very low rent apartments for minority groups built by private sponsors instead of by public housing.

Photos: Roy Stevens



Moderator Young: *I hope you will not pull any punches.*



Burns: *Public housing has failed to do the two things taxpayers thought it would do.*

in effect, destroyed the mortgage loan privileges of the G. I. Bill of Rights. In many areas veterans have had to pay as much as \$500 in hidden charges that would be eliminated if VA interest rates were on a realistic basis.

Money is a commodity, the same as bricks, stone or mortar. We believe its price, i.e., the interest rate, should be governed by the law of supply and demand. At times this will result in a higher rate than is now permitted. At other times it will be lower. At the present moment most of us believe nothing less than an allowable rate of 4½% on both FHA and VA mortgages will bring into the market the amount of money that is needed for this type of financing.

Without treasury support

6. The government should stop using the taxpayers' money to provide a market at par for guaranteed or insured mortgages whose yield is too low to attract private investors. In the past 18 months the federal treasury has poured well over \$1 billion into this unsuccessful effort to suspend the law of supply and demand in the mortgage market, either through the direct purchase of VA loans or through the operation of the Federal National Mortgage Assn. (Fanny May).

On a simplified pattern

7. The FHA mortgage pattern should be simplified and the present heavy discrimination against middle-income families in the terms of mortgage insurance should be stopped. There is no economic reason why the down payment on an \$11,000 house should be five times as big as the down payment on a \$7,000 house.

To improve existing housing

8. What is done to improve existing housing is at least as important as what is done to improve new housing for this simple reason: there is so much more old housing.

The great achievement of the outgoing administration in the housing field was the development of adequate mortgage insurance for new construction. The great opportunity for the incoming administration is to extend these mortgage insurance benefits to the improvement of existing homes.

There is no economic justification for the present policy of insuring much higher percentage mortgages for the purchase of new housing than for the purchase of old housing, realistically appraised at its depreciated value and then brought up to acceptable standards.



Fisher: Public housing has become a program of redistributing the wealth.



Murphy: Bert King has done a terrific job.



Whatley: One policy has been to make living in public housing respectable.



Morgan: Some day somebody is going to have to say the figure 4½%. Isn't this the time to speak?

9. The cost of reconditioning existing rental housing should be borne by the landlords instead of the taxpayers, but mortgage insurance should be made available to help them finance improvement costs at the same low interest as new construction and over a much longer term than is now generally possible.

For better design and planning

10. In its appraisals, FHA should give much more recognition to the value added by higher standards of space, design, construction and land planning.

We recognize that FHA has already done much to raise housing standards. Nevertheless, actual practice in most FHA and VA offices today does not allow enough credit for higher space and construction standards to cover the actual added cost.

It is our unanimous opinion that quality and good design can add far more than their cost to the long-term value of a house, and that higher value should be truly reflected in the FHA appraisals.

End rent control

11. Federal rent control should be terminated next April 30, except that in certain critical defense areas it might be continued briefly at the specific request of the local authorities.

Rent control creates blight faster than any subsidy can cure it. The hard fact is that when the government puts the squeeze on rents the first thing the landlord cuts is his maintenance.

Americans today are paying a smaller percentage of their income for rent than at any time in the past 100 yrs., and so much new housing has been built since the war that in most communities the growth in the housing supply since 1940 has outstripped the growth in population.

Public housing?

12. The multibillion-dollar public housing program should be carefully reviewed before any further funds are committed or appropriated. This review should consider first whether or not the public housing program has been diverted from the purposes which won it support; namely, eliminating slums and providing decent housing for the lowest income groups.

The homebuilding industry has recorded again and again its opposition to public housing. This Round Table would serve no useful purpose if it merely recorded that opposition once again. We seek the development of a more comprehensive program to eliminate slums and to provide decent housing for the lowest income families. (See p. 124.)

These changes in organization and administration should help:

1. Our industry was almost unanimous in opposing the creation of HHFA as a superagency for housing five years ago. Before HHFA is continued, we believe its record should be carefully studied to determine whether or not it has served a good purpose, whether it should be continued at all, and if so, which of its component agencies should be given or returned to independent status, assigned to other agencies of government, or discontinued.

FHA and the Home Loan Bank

2. In any event, the independence of FHA and the Home Loan Bank should be restored. (See *FHA and the Welfare State* by Miles L. Colean, p. 180.) We believe the experience of the past five years has confirmed our fears that putting these two agencies under HHFA would subject them to pressures based on political and welfare state considerations rather than sound economics. In principle, we believe that lending and insurance agencies should be independent, just as the Federal Reserve System is independent.

The fact that both FHA and the Federal Home Loan Bank systems are self-supporting institutions is one more good reason for restoring their independence.

Industry advisory committee

3. The President should appoint a five- to nine-man industry committee for FHA, broadly representing major factors in the homebuilding industry. Its functions should be kept strictly advisory.

FHA appraisals for VA

4. The VA should accept FHA appraisals and inspections, thereby relieving the taxpayer of the cost of duplicated service and relieving the homebuilding industry of all the details, difficulties and costs entailed in dual processing. The independent appraisal and inspection operations of the VA Loan Guaranty Division should be abolished.

Now that a competitive market for housing has been re-established, VA should abandon the "reasonable value test," insisting only that the Veteran buyer should know the FHA appraisal and should sign a declaration for VA that he has seen it.

Secondary mortgage market

5. The homebuilding industry needs a better secondary market for federally insured or guaranteed mortgages, preferably under private ownership subject to government regulation. Under present legislation and administration, the Federal National Mortgage Assn. is now kept so busy creating a primary market for mortgages whose

terms the market will not accept that it no longer provides the secondary market for which it was originally designed. It is, in fact, specifically forbidden to accept any mortgage made before April 30, 1948. It is buying new mortgages at a premium instead of accepting old and new mortgages at a discount.

This is a difficult problem and calls for the most careful study. The new administration should lose no time in undertaking that study, preferably in collaboration with an industry committee set up to work on the problem.

Simplified mortgage pattern

6. The various FHA titles should be restudied and overhauled to develop one simplified insurance pattern for all owner-occupied one-to-four-family units and one simplified insurance pattern for all civilian rental housing. We can see no good reason for the special terms now allowed under Section 611 for more than 25 houses, under Title VII for yield insurance, under Section 203D for farmhouses, or under Section 609 for prefabricated housing.

Down payments

7. To simplify the mortgage pattern for owner-occupied houses and to recognize the lower buying power of the dollar, the ceiling for 95% loans should be raised from \$7,000 to \$8,000. Above that point the mortgage limits should be scaled down gradually to 90% at \$12,000, 85% at \$15,000 and 80% at \$25,000 valuation.

Higher mortgage limit

8. The present limit on FHA mortgages—\$16,000 by law and \$14,000 by present practice—should be raised to \$20,000.

FHA rental program

9. FHA should consolidate its multifamily civilian rental housing programs under Section 207 which permits 90% loans on the first \$7,000 of valuation and 60% loans on the next \$3,000. And the administrative and appraisal procedures should be reviewed as necessary to make Section 207 workable for low rent, family-sized units.

Lowest price housing

10. Title I, Section 8, should be retained, but Congress should consider raising the maximum mortgage to \$5,700 and permit a 1/2 of 1% service charge on these small loans to make the title workable with private financing.

Defense housing

11. The government has saved many millions of dollars on defense area housing and military housing by using FHA insurance to get them sponsored and erected by private enterprise. But the special provision for defense and military housing under FHA should not be extended beyond the present expiration date next June 30 unless study reveals a continued need for more of this kind of construction. We believe there has been considerable over-programming of defense housing in many sections.

Cooperative housing

12. FHA's administrative practices for insuring mortgages on cooperative housing under Section 213 should be carefully reviewed. Such a review may show that many of the people who are being sold cooperative housing under this section do not understand all the provisions of the cooperative agreement they must sign to participate.

Open-end mortgage

13. FHA should immediately be permitted to work out simple procedures under which it would be willing and able to insure additional advances. The open-end mortgage offers homeowners by far the most economical way to finance the cost of enlarging, improving or modernizing their homes, and we believe it could be an important tool in arresting neighborhood decay. For years, VA has been covering these additional advances with its guarantee; FHA's position has been the principal stumbling block to general acceptance of the plan.

Package mortgage

14. FHA should require all its offices to accept the package mortgage plan and to give a fair valuation to the added equipment items whenever local laws permit (VA already does so).

FHA should set up a clear distinction between package and non-package mortgages, and should modify its minimum income credit requirement to let buyers of fully equipped houses assume larger mortgages than those same families could assume if they had to buy the same equipment as an extra on short-term credit.

FHA debentures

15. FHA should keep the interest rate and terms of its debentures realistic to meet market conditions. At the present moment, the need of a higher rate and/or shorter term seems indicated.

FHA authorizations

16. The FHA authorization for administrative expenses should be made adequate for its needs. If higher salaries are needed to attract and hold first class men to serve as chief architects and appraisers, etc., FHA should certainly be in a position to pay them.

FHA insurance authorization should be kept sufficient to stop the regularly recurrent crises when its authority runs out.

Small communities

17. The higher cost of originating and servicing loans in small or remote communities should be recognized; and additional initial and service charges of up to 1/2 of 1% should be permitted where experience has shown that without such charges FHA and VA money will not be available from private sources. We believe such a service charge would actually make the cost of mortgage money in those communities substantially cheaper than it is today.

Direct loans to veterans

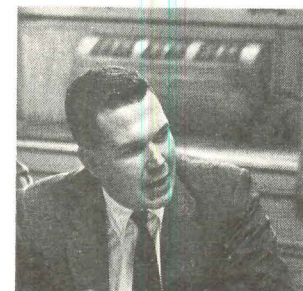
18. If the returns on VA loans were made adequate to attract private capital even in small communities, it would no longer be necessary for the government to make direct loans to veterans, and the present legislation authorizing direct loans to any veteran who cannot find mortgage money at 4% should be repealed.



Marcus: Millions of dollars could be saved by consolidation of VA and FHA.



Patrick: Funds that built these houses are savings of the people.



Moses: I think the American Legion stands for keeping the government out of banking.



Nielsen . . . He listened.



Dovenmuehle: *I would like a revolving fund.*



Wellman: *Some kind of pool insurance to spread the risk.*



Northup: *Let us quit compromising and pussyfooting.*

Mortgage insurance needs no federal subsidy but federal sponsorship is essential

The new invention which made our new homebuilding industry possible is the new type of mortgage insurance worked out in partnership with government. This mortgage insurance has:

1. enabled millions of families to buy new homes with little or no down payments at a monthly cost cheaper than rent;
2. enabled builders, through advance commitments, to finance housing developments on a scale big enough to permit the efficiencies and economies of quantity production;
3. permitted mortgage money to flow freely across state lines and into small communities;
4. justified single lenders in assuming the concentrated risk of financing volume building in large developments.

So well has this plan worked that in the past 14 yrs. the total cost of FHA to the taxpayers has been zero. This is an outstanding example of government-and-industry cooperation at minimum cost to the government and maximum benefit to the people.

There is no reason why the continuation of this mortgage insurance should raise any question of subsidy provided the security is adequate and the insurance system is sound. No one suggests that the federal government is subsidizing the banks by handling the insurance on their deposits.

Closing the gap

The hard fact is that nothing like a million families could afford to buy new homes each year if they had to put up the down payments of from 25% to 50% required for uninsured mortgages under the varying laws of the various states. Some way had to be found to close the gap and enable families to buy their homes with a cash payment they can afford.

Low down payment loans properly administered do not necessarily require subsidy. In England, under the Tory administration before World War II, a mortgage insurance plan was developed by the builders and the building societies *without government help* under which many thousands of houses were sold with down payments of only 5%. The losses under this plan were so small that most of the guaranty payments were

returned. If ours were a small country like England, which is hardly larger than the single state of New York, it might be equally possible for private enterprise here to work out a mortgage insurance plan which would make similarly small down payments possible. But this country is more than 60 times as large as England and it is divided into 48 separate states, each with its own laws on mortgage investment, each with its own laws on mortgage foreclosure, and each with its own restrictions on the interstate flow of mortgage funds. So it is many times more difficult here to set up the needed nationwide system of mortgage insurance except under federal auspices.

Tremendous demand for funds

There is one other major obstacle to any insurance plan without federal help and that is the magnitude of the mortgage need. The homebuilding industry requires more new investment money for its mortgages each year than is required for all new corporation bond issues combined, plus all new state bond issues combined, plus all new local bond issues combined. Could any privately financed corporation be big enough to insure so great a volume, especially when the principal risk to be insured may be the risk of what the federal government itself may decide to do about the supply of money and credit?

At the present time, therefore, we believe only a federally sponsored mutual mortgage system like FHA can meet the need. But we believe:

1. Every effort should be made to keep this insurance on a sound actuarial basis with adequate security assured by the value of the property and the honest intention and ability of the owner to meet his obligation.
2. As experience demonstrates the safety of low down payment loans, as state loan-to-value ratio limitations are brought in line with nationwide experience and policy, and as archaic foreclosure laws in many of our states are modernized and simplified so that institutional investment funds may flow more freely throughout the nation, we hope that the present need of federal cooperation with mortgage insurance will gradually diminish and will ultimately disappear.

The homebuilding industry's 9-point proposal to end slums and provide better low-cost housing

The slum problem is far too complex for any simple solution. It involves at least two separate problems which are too often confused:

1. How to eliminate existing slums and prevent their regrowth;
2. How to provide enough decent housing for every income level.

Neither public housing nor private enterprise can solve this dual problem by new construction alone, for new construction alone does nothing about the squalor and rot in existing slums. These are the fearful conditions whose very existence and continuing growth has made housing a national issue and persuaded many people that private enterprise is inadequate—that only vigorous federal action can meet the need.

Public housing? No solution

But public housing likewise offers no adequate solution. The present multibillion-dollar public housing program is barely big enough to keep up with the rate at which slums are still growing, and even if slum formation were completely stopped it would take nearly two generations and nearly \$100 billion for public housing at the maximum Taft-Wagner-Ellender rate to replace the 5,500,000 dwellings which are now listed as substandard.

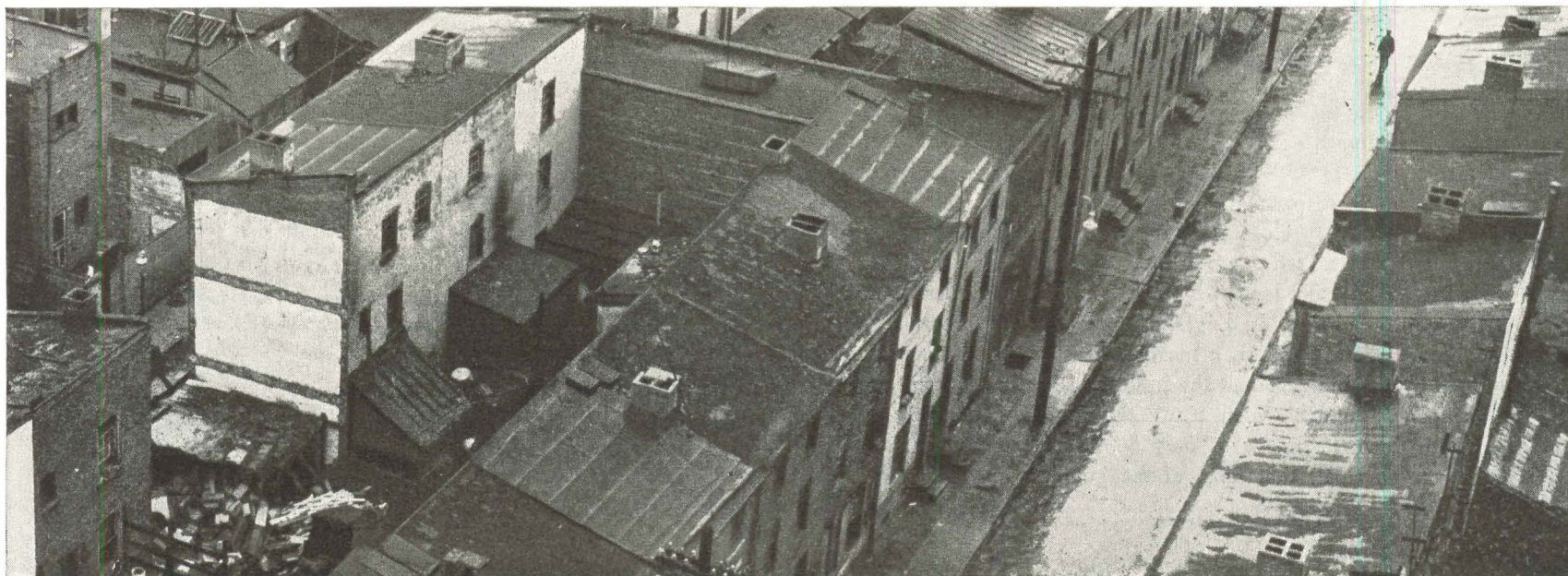
Furthermore, the clearance of slums and their replacement with new subsidized public housing units fails to deal with the cause of slums or their prevention. It may even be that slum clearance is chasing former slum occupants into nonblighted areas and so fanning the fire farther into the forest, instead of putting it out.

The emotional pitch generated by the battle between private and public housers has obscured certain very important facts about what private capital has actually done to provide good housing for low-income families without federal subsidy.

For example, how many voters realize that 70% of all US urban rental units rented in 1950 for \$49 per month or less, i.e., for about the same rents as subsidized public housing? How many voters realize that although many of these privately owned low-rent dwellings are substandard, at least 6 million are in good condition?

Private enterprise? A workable solution

If a free economy can supply 6 million good low-rent housing units, we see no reason to believe that with proper cooperation from both local and national government a free economy cannot go on to meet the balance of the low-rent housing need.



Slums are a local problem, and the correct answers to that problem must be found locally and will vary from city to city—although some form of federal guidance and assistance is needed to induce and coordinate local action. A proper local approach would involve the following steps:

Take inventory

1. The city should take a thorough inventory of housing throughout its blighted areas and analyze the blight symptoms to evolve a cure. This inventory should include enough information to rate the intensity of blight in various sections; mark the nonsalvageable housing; to determine the needs of additional recreation areas, the extent of overcrowding and congestion, the degree of commercial and industrial encroachment in residential areas, etc.

Study needs

2. The city should study its needs for highways, parks, recreation areas, school sites, additional industrial sites, retail areas, off-street parking, etc., and plan to meet as many as possible of those needs through the elimination of slums and the destruction of the maximum number of nonsalvageable housing units.

Replan neighborhoods

3. For the balance of the blighted areas the city should replan its neighborhoods to eliminate congestion, add recreation areas and schools, and rehabilitate all substandard housing to acceptable minimum standards. That which cannot be rehabilitated should be wiped out under an adequate local redevelopment law.

Maintain standards

4. The rehabilitation program should include a vigorous, broad-scale, organized campaign to force the owners of housing to maintain it at an acceptable minimum standard of decency and livability. Adequate funds must be appropriated and in most communities special courts will be needed to handle housing cases, just as special courts are maintained to handle traffic cases. This minimum enforcement is essential not only to determine the magnitude of the remaining slum problem but also to prevent slums from moving into nonblighted districts.

Finance reconditioning

5. Local lending institutions should cooperate by helping landlords to finance the cost of reconditioning and modernizing their property wherever it is determined that the dwelling is worth salvaging, and mortgage insurance should make it possible to obtain this financing at the same low interest rates as for new construction and for a much longer term than is now possible.

Rehabilitate attitudes

6. The law enforcement program must be accompanied by a major effort to rehabilitate the attitude of the people as well as their houses. In this effort the Departments of Education, Recreation and Welfare must play a major part, working in phase with the planning and law enforcement agencies. Churches, civic groups, trade associations, etc., should be drawn into the movement. The resultant team can start a new contagion for both the elimination and prevention of slums.

Salvage cleared land

7. The tracts of land, large and small, which become available as a result of wiping out nonsalvageable housing, should be put to uses appropriate to the neighborhood and community needs. Much of it would be found suitable for commercial or industrial use and should be sold or leased for those purposes.

Determine need for low-cost housing

8. Only after all this has been done can the need for a greater supply of housing units in the lower rent brackets be determined. It is only in meeting this residual need that the construction of subsidized housing can be justified.

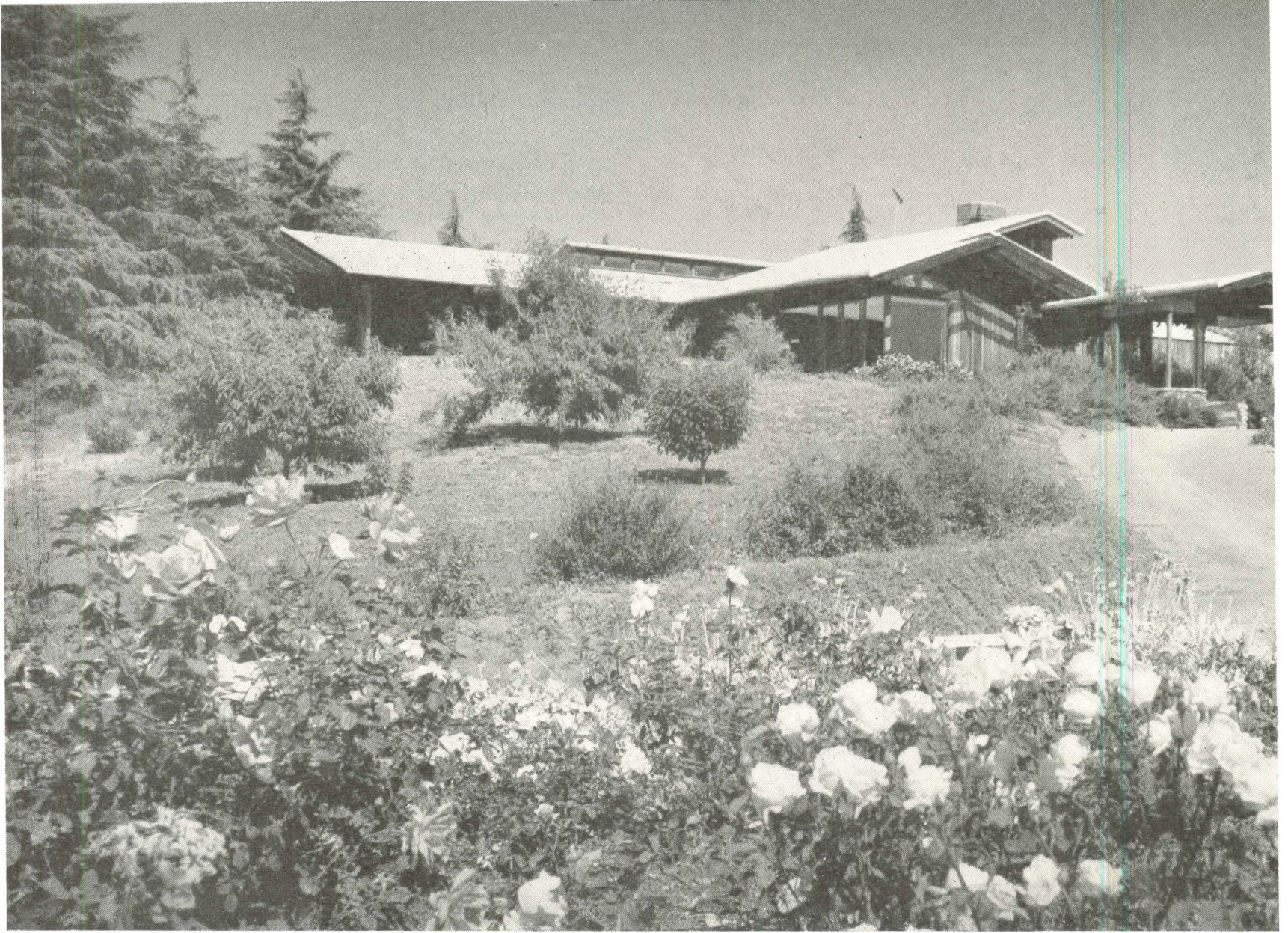
Build housing locally

9. If subsidized housing is needed it should be built by the local community with rents set at acceptable levels. It should be operated by the city a short period of time, perhaps a year, paying full local taxes, and then it should be sold to the highest bidder on the basis of a predetermined rent level. In this manner the community will take its losses plainly and promptly. The amount of the loss should be financed through local bond issues as in the case of other public improvements.

This program is a local program. It should be locally planned and operated. Federal assistance to the extent found necessary should be given in the form of direct grants. It should be designed to promote local initiative and imagination and to minimize federal control. It might well involve grants to assist in neighborhood replanning, rehabilitation and redevelopment as part of an over-all package designed by the community to eliminate its slums. It should be kept at the minimum needed to produce action over a reasonably short period of time among a preponderance of American cities.

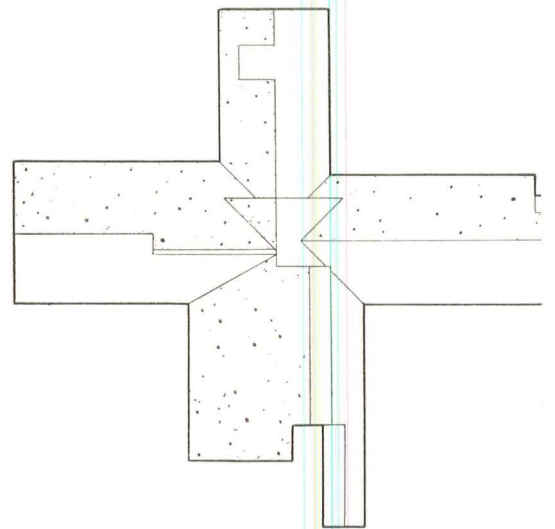
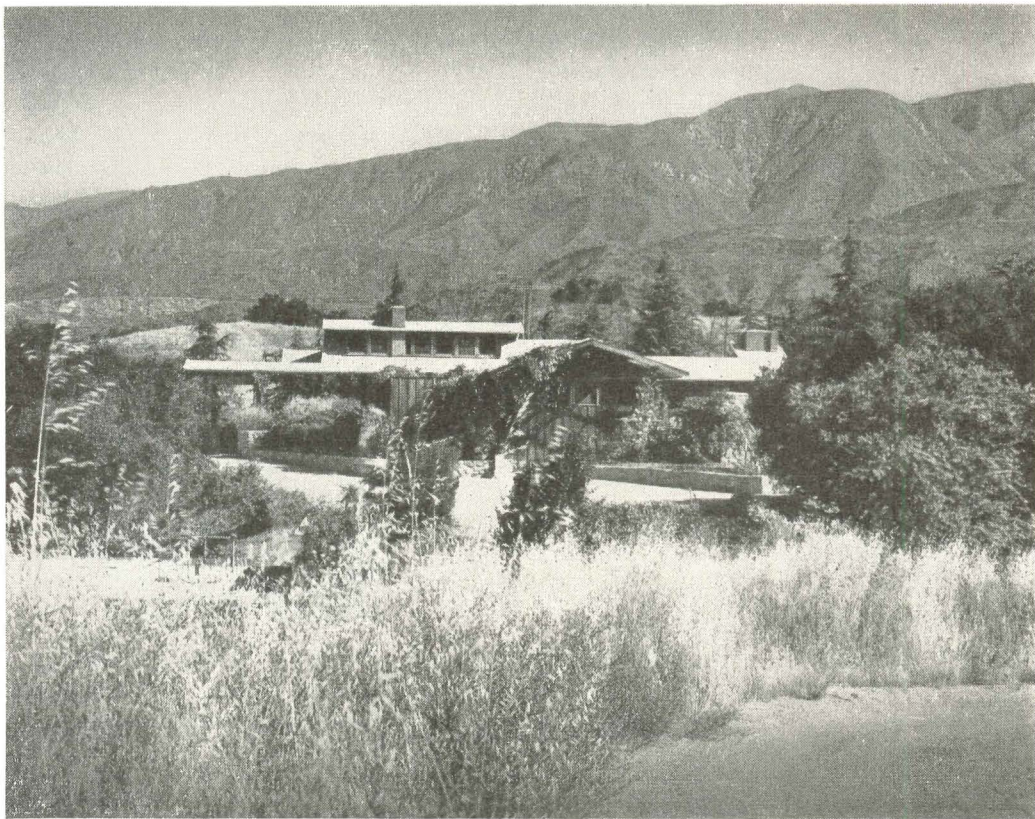


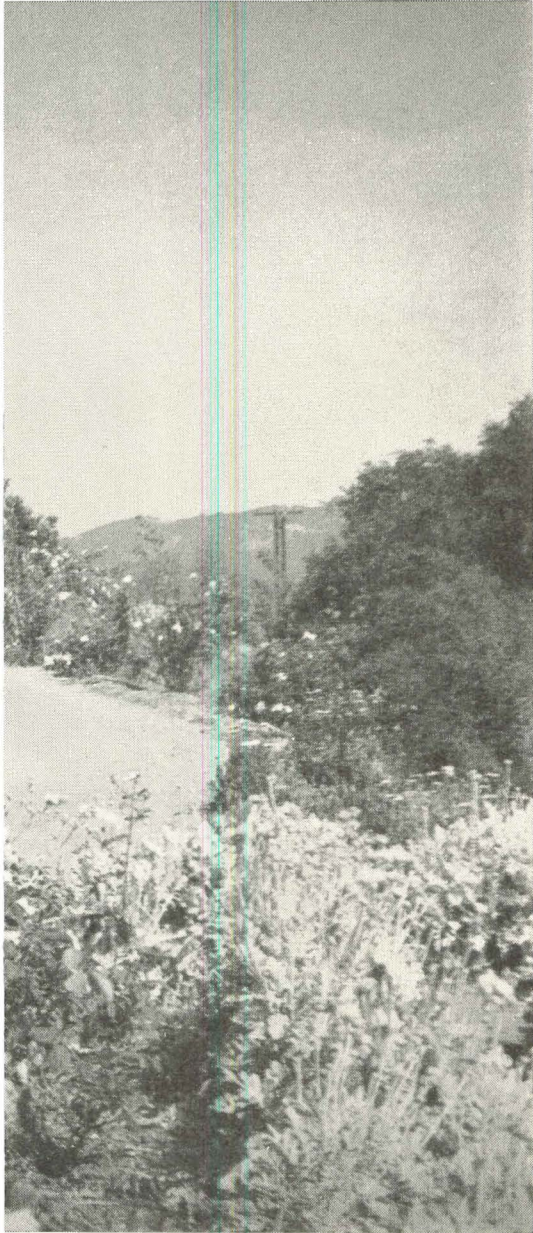
Rouse: Basically the slum problem is one of developing good municipal housekeeping.



It might be called a "house of 70 gables" but the fascia line is absolutely level and the structural system is uniform throughout

As easy looking as a ranch house, this architectural performance is by a designer who knows building





Photos: Julius Shulman

Simple ideas from a complex house

LOCATION: Ojai, Calif.

C. H. WYLE: owner

HARWELL HARRIS: architect

MARTIN DAVIDSON: contractor

Architect Harwell Harris's elaborate houses are important to people planning simple houses because the complex houses are made up of simple ideas, simple systems of parts. Just as song writers have plundered the symphonies of Mozart for pop tunes, so designers of simple houses can benefit from studying this full development of Harris's characteristic themes. For example:

Harris's wood construction—which he detailed with his own pencil for this Ojai house—is a veritable textbook for those who would learn how to use direct carpentry methods, which any workman can employ with ease. Harris produces not only orderly economical construction but architectural delight. What is meant by his “vocabulary” is explained on the next page.

His use of an elaborate pinwheel plan is unusual because the big rooms are at the ends instead of the middle of the house. The reasons why Harris did this are important to simpler, smaller houses, too (see plan, p. 131).

In this particular house the reason for the pinwheel plan, with the main rooms at the ends, was that the clients are an older couple visited frequently by children and grandchildren. Putting the main rooms as far apart as possible and letting bathrooms and dressing rooms serve as buffers in the middle was a way of giving maximum freedom to different generations in a single home.

The breakerlike roof forms he uses here are not only full of poetic suggestion of the nearby ocean, but full of hard-headed ideas for those who would make simpler roofs less drab in the

long rows of suburban houses that we continually build today.

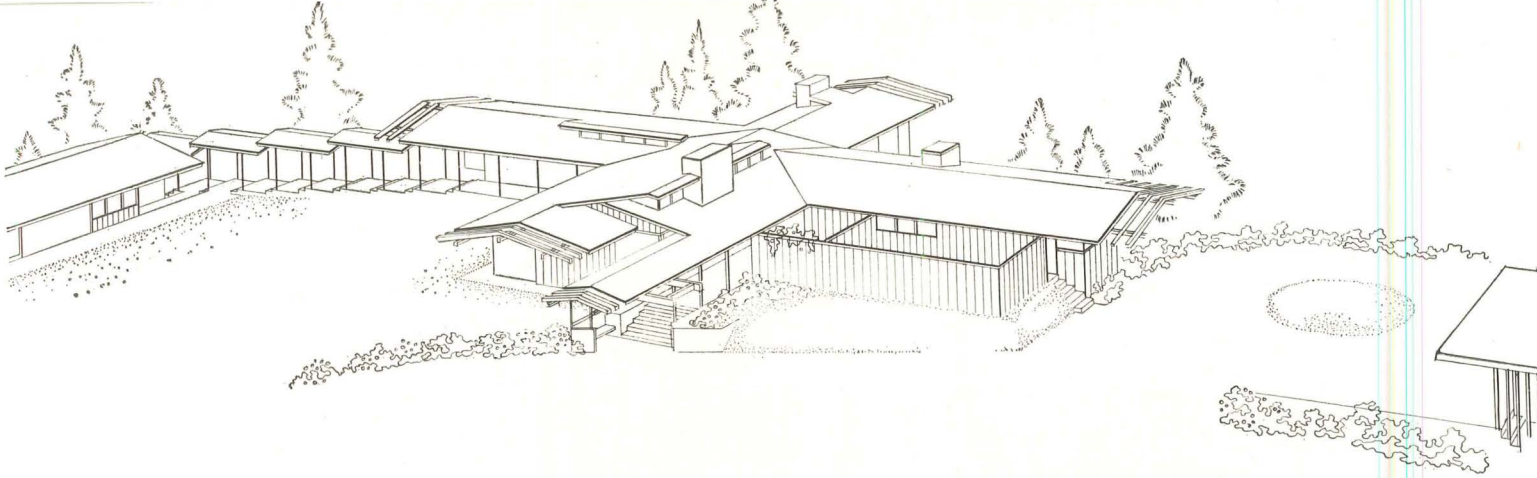
The rooms under these surging roofs are high-ceilinged and spacious but the corners are often treated as intimate alcoves—with low-ceiling frames under the high ceiling or a low gable projecting out beyond the main ceiling. Builders have long remained faithful to the idea of secluded “nooks” which modern architects have generally left out: here are nooks or alcoves done with dignity and grace. (Pp. 130, 131.)

Rhythm enters through the modular grid of the plan as well as the systematic handling of the structural “vocabulary.”

The dominant roof

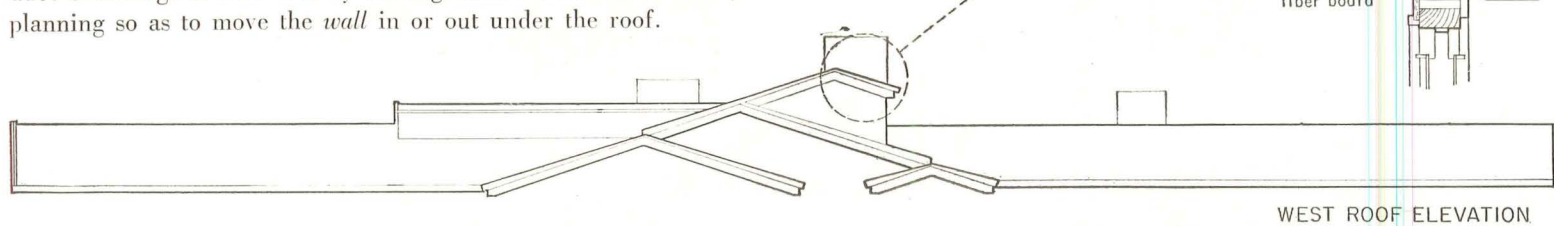
In contrast with Architect Chermayeff (p. 108), who uses a flat roof, virtually invisible, Harris has designed a roof that dominates the entire house “to produce a sense of shelter.” Note how the roof “rolls” like a series of ocean breakers. Note especially how the “crest” is turned over, at the highest clerestory, by means of a “hockey-stick” gable (where most architects would have left a shed roof sticking out into the air). Note, too, how gable ends are softened by trellis rafters out beyond the end of the building.

Since the *form* of the roof is complex, Harris took special pains to keep its *surface* continuous and simple. The composition sheet roofing, covered with white chips, is turned over the fascias to keep the roof “all of a piece.” It thus dominates the busy wall, broken by windows and doors. (For details, see next page.)



The structural "vocabulary"

Where the ordinary designer meets every new situation with a new detail, a systematic designer such as Harris works out a detail that can meet all possible situations. Example: the meeting between wall and roof. The *baseline* of Harris's turbulent roof in this house is kept absolutely level in one line. This is done by a constant fascia height of 7' above the floor. Harris can produce overhangs at will—not by tacking them onto the roof but by planning so as to move the *wall* in or out under the roof.

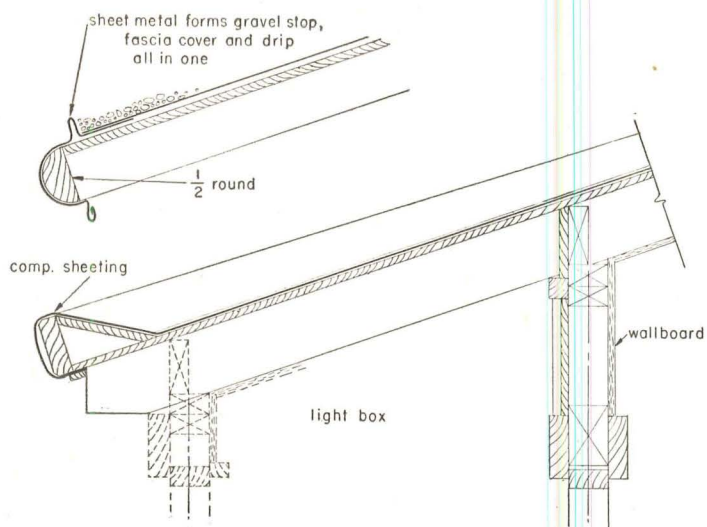


Where rafters cross the wall at a higher point Harris makes the adjustment very simply: either by cripple studs above the regular wall plate or by cut-in headers (see detail, right).

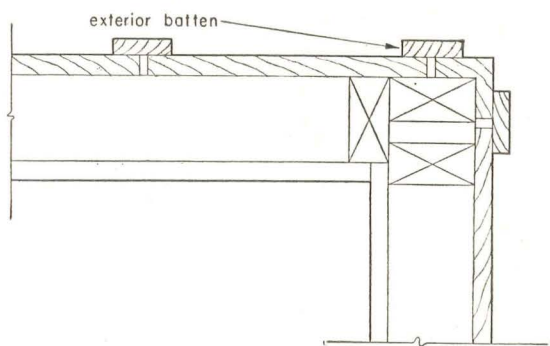
Like the fascia height, the plate height is constant—6'-3" above the floor. And a similar top plate detail is used, regardless of whether there is a plain wall, or doors and windows (the plate forms the head) or whether the plate makes an interior return to form a lighting frame or a dropped ceiling. (See building section across-page.)

By putting a great effort into developing such standard details, and then using them consistently as a "vocabulary," Harris establishes standard handling and a coherent appearance. And it proves more economical in the end (even though it may "waste" a stick here and there) because workmen learn to understand it and operations are repeated again and again.

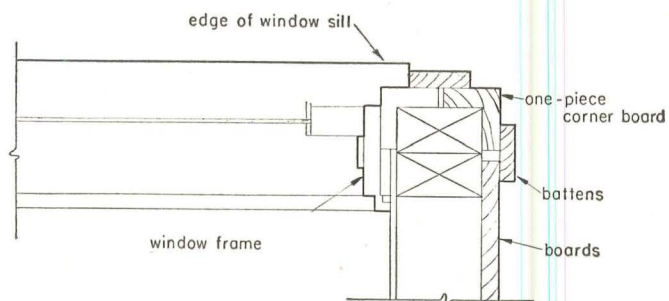
"Hockey stick" gable, seen in detail above, enhance clerestory roof. Roofing sheet is rolled over fascias, seen in two versions below. (The simpler of the two details comes from another, similar, house.)

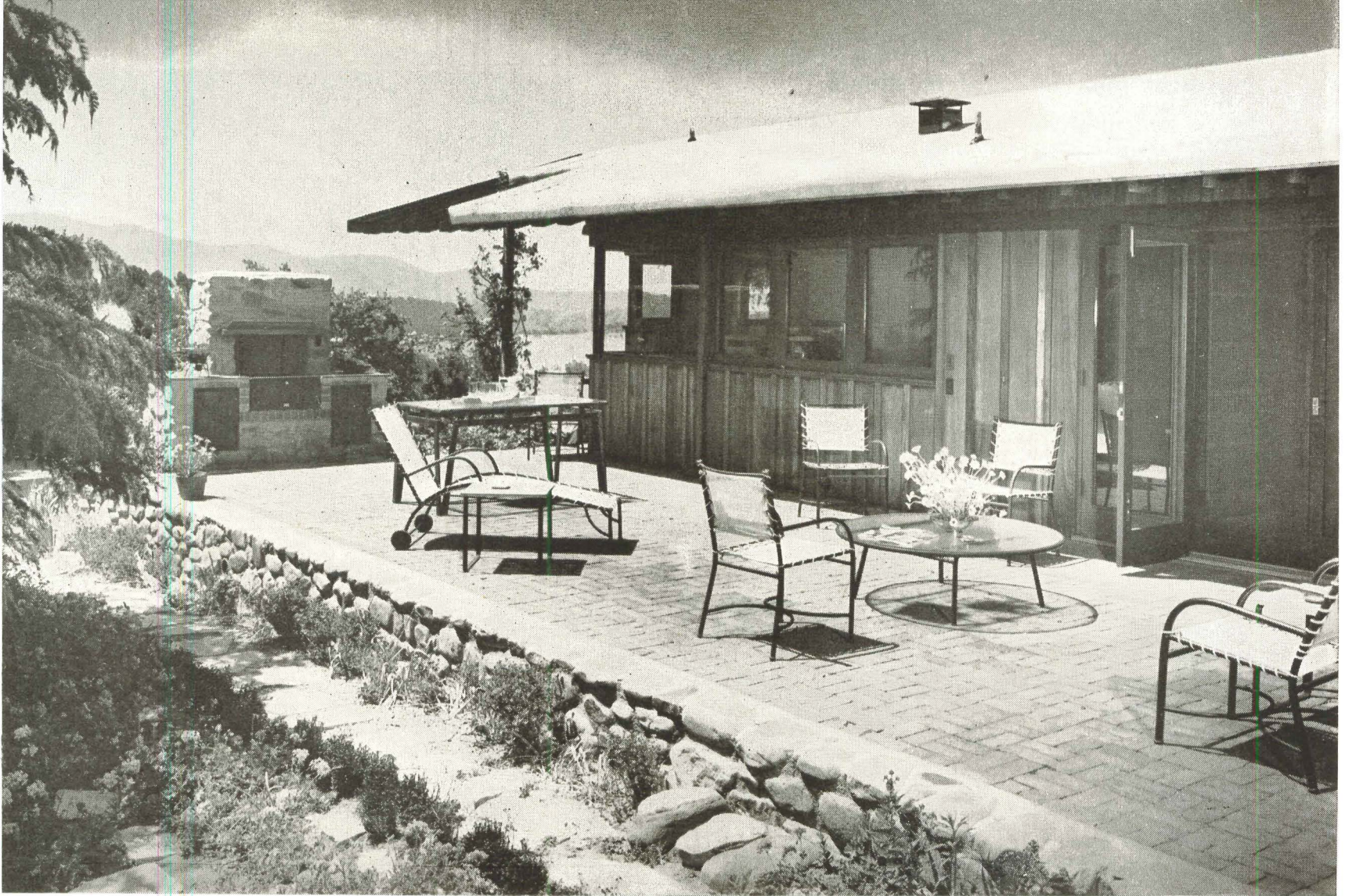


Dashed lines (at left, above) show plate in "normal" position under rafter end; where wall is moved back and rafter is higher, "cripple" stud (r.) is used with same plate.



Neat details are used to turn corner with board-and-batten wall





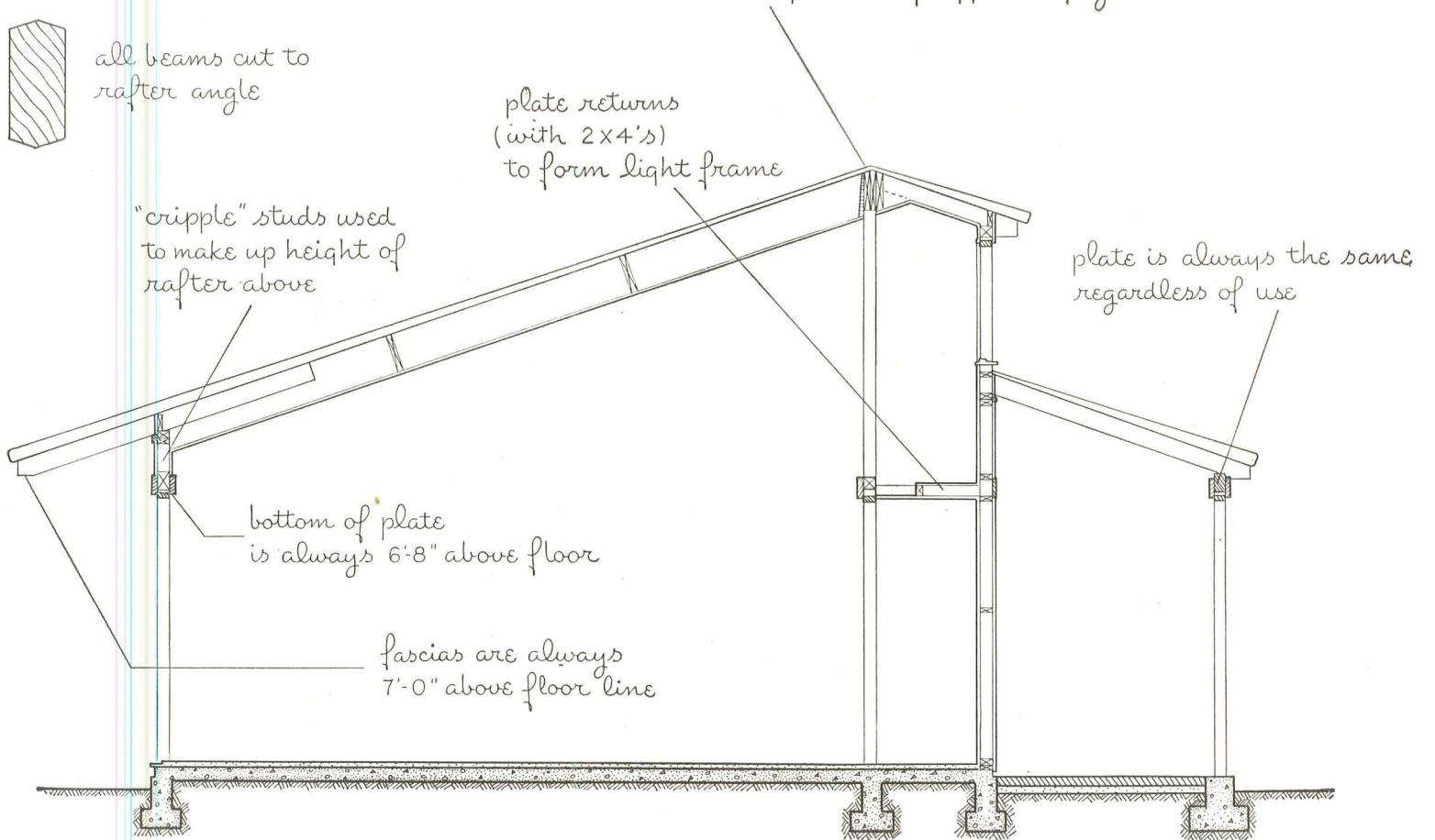
Julius Schulman

Composition sheathing covered with white chips makes for a quiet roof surface contrasting with the busy effect of a board-and-batten wall with diverse openings. Rolling sheet over fascia is a way of making a paper roof look more substantial, and quieting and softening the effect of the roof's edge.

for detail of "hockey stick" gable see top drawing, opposite page



all beams cut to rafter angle



Pinwheel plan frees room shapes

Pictures on this page give some impression how Harris's plan—with all main rooms at ends of wings—let him develop these rooms with nooks and extensions. And, besides, how he could give them all a three-way view.

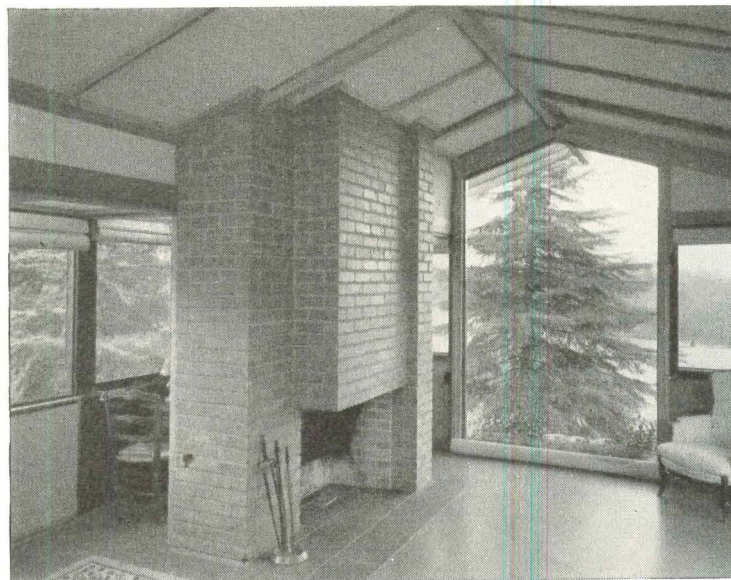
Pictures *cannot* fully convey the excitement of the sloping ceiling of the main living room (views below, left and right) as it rises toward the high clerestory windows and seems to stay suspended there. Because this ceiling is so positive an element of the room, Harris made it look more substantial, covering the wallboard joints with battens (though wall joints are simply butted).

The living-room space is actually three spaces rolled into one: the main big space, and two subspaces: one formed by a dropped light frame at the inner corner over the grand piano (not pictured); the other a library extension under a dropped gable, at the outer end (see view below).

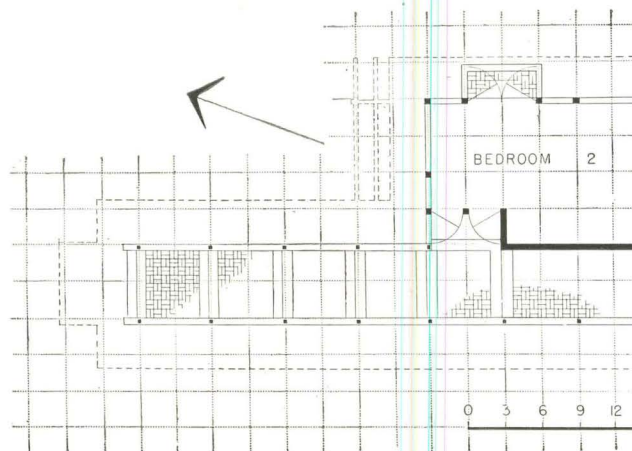
Both bedrooms have similar subspaces—the master bedroom having two little alcoves with desks behind the fireplace (see top views, left and right).

The central area of the house is a maze of bathrooms and dressing rooms, less complex than they look in plan. Harris lights them from overhead, not only by means of luminous ceiling panels (worked out on his 3' grid) but by daylight through clerestories in the roof high overhead.

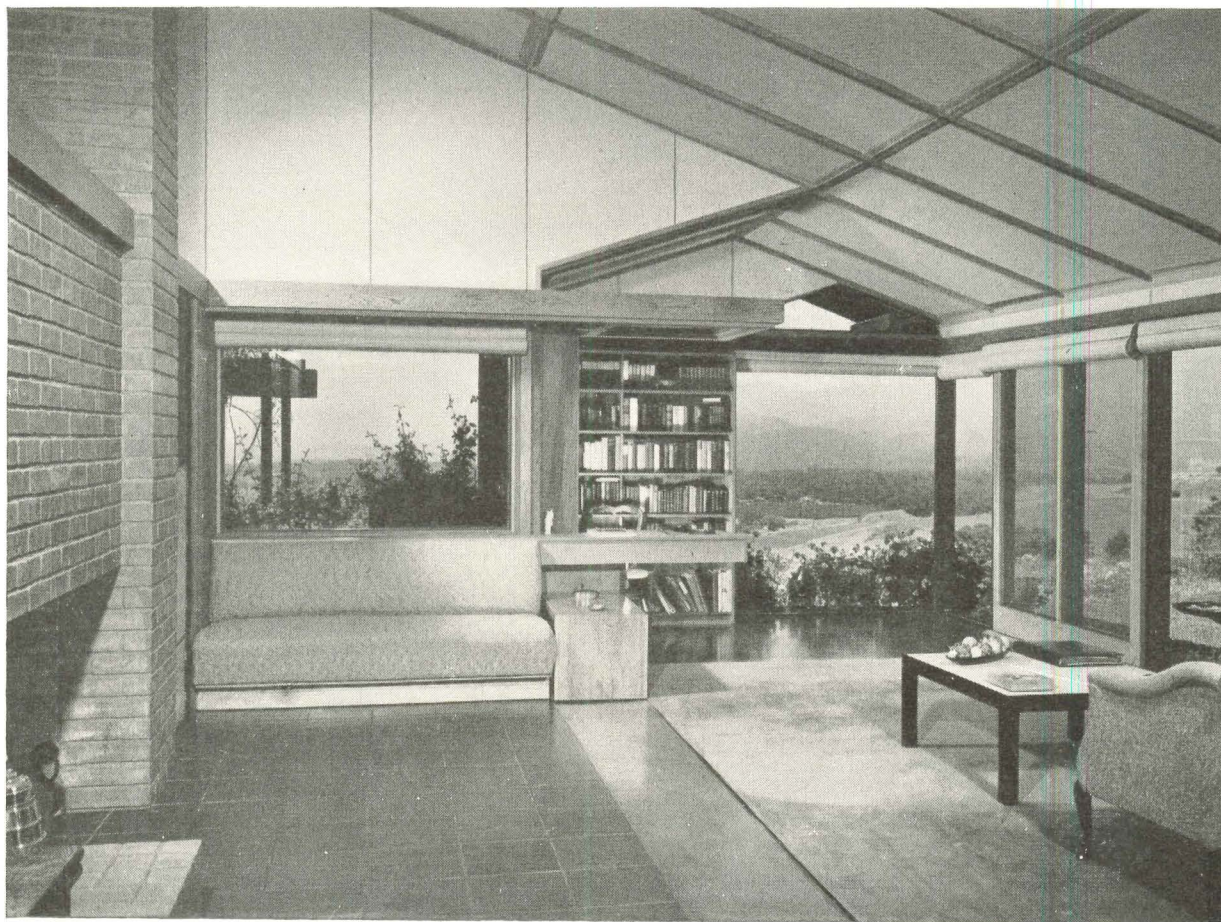
The cost of the house was \$13 per sq. ft. in 1948.

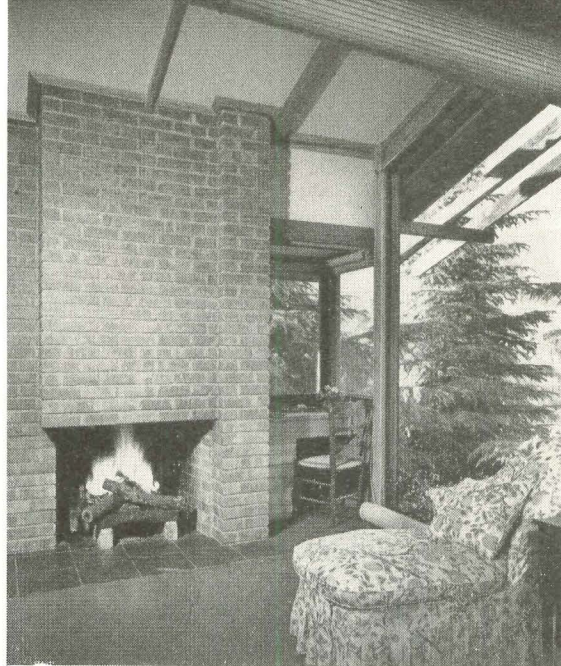


Jog in floor plan of master bedroom is possible because it ends off a wing, like all major rooms of pinwheel plan. **5**

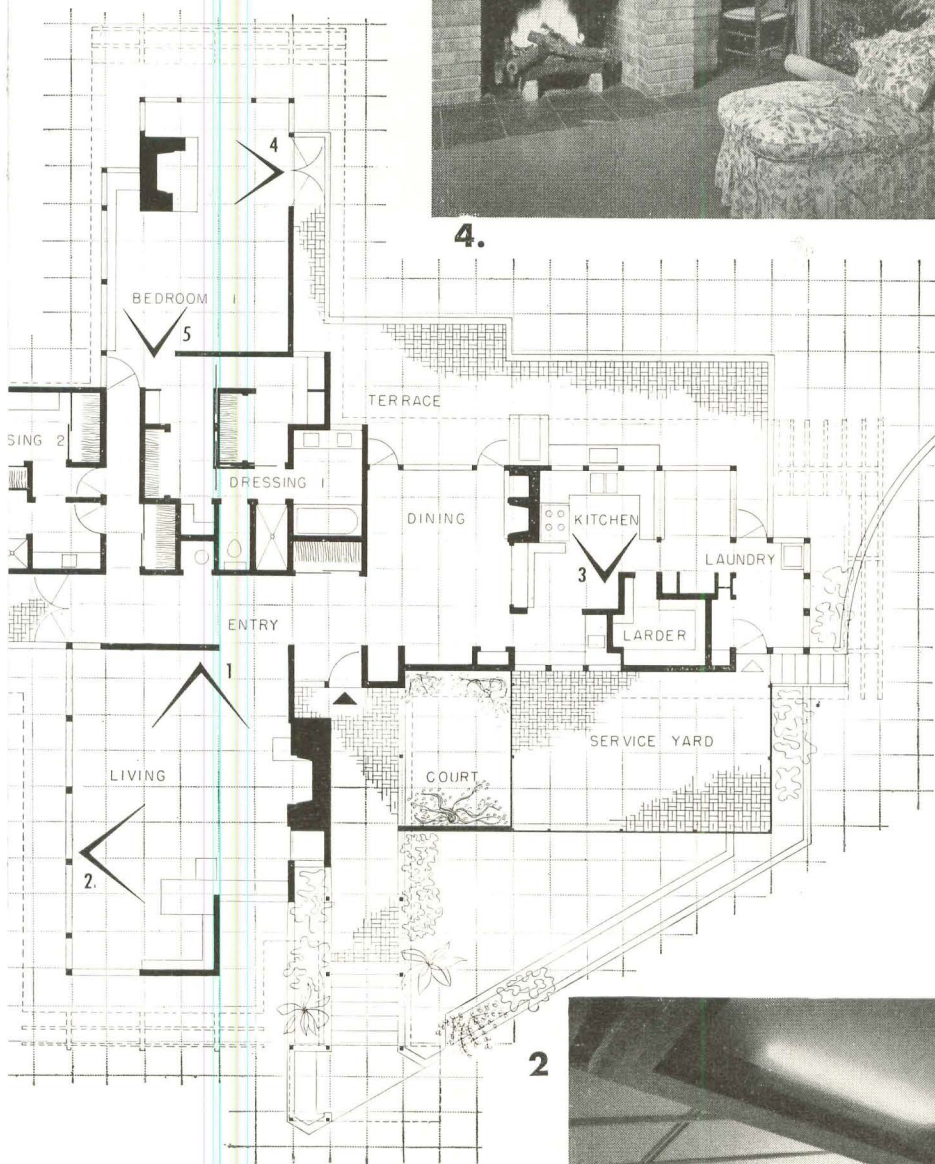


Dropped gable over projecting alcove, below, makes it a natural and intimate part of the room, easy to use. And since the main ceiling surges upward so high, Harris pulls it into the room by giving it full batten treatment.





Alcoves behind fireplace (left and opposite) make master bedroom a charming sitting room-study for both occupants. Wing-end position gives room a three-way view.



3 Square glass panels in dropped ceiling give kitchen diffused light like that in baths and dressing rooms at center of plan. Kitchen has separate cooking and serving areas.



Light frame extending over part of alcove conceals fluorescent bulbs and is created by returning the wall plate (using 2 x 4 instead of 2 x 6 members).

What's going on in . . .

. . . the town with more
modern architecture per capita
than just about
any other place in the East

*"It seems to me there are about seventy-nine hundred out
of our eight thousand population*

*"That wish to hell that Harvard and the Modern Art
Museum*

*"Had provided padded cells for their brilliant graduate
architects*

*"Complete with air-conditioned junctions and cantilevered
sundecks—*

"Windowless, doorless, charmless and escapeproof. . ."

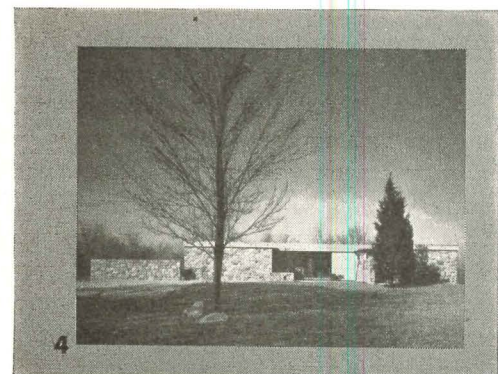
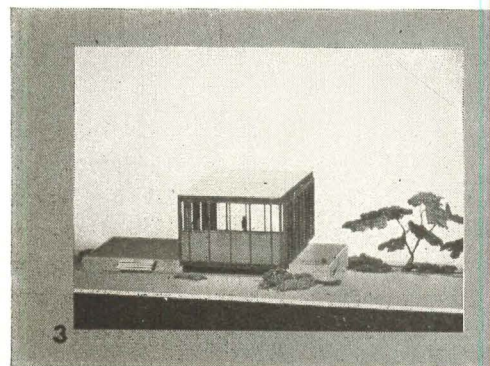
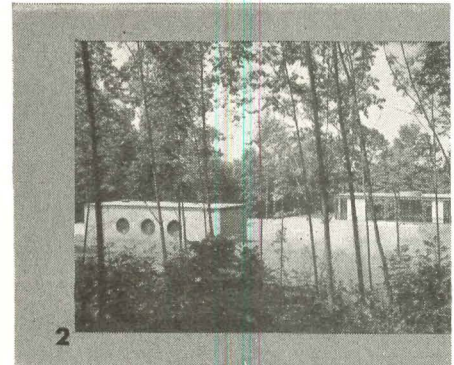
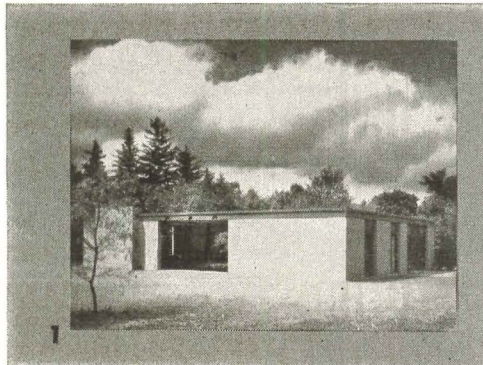
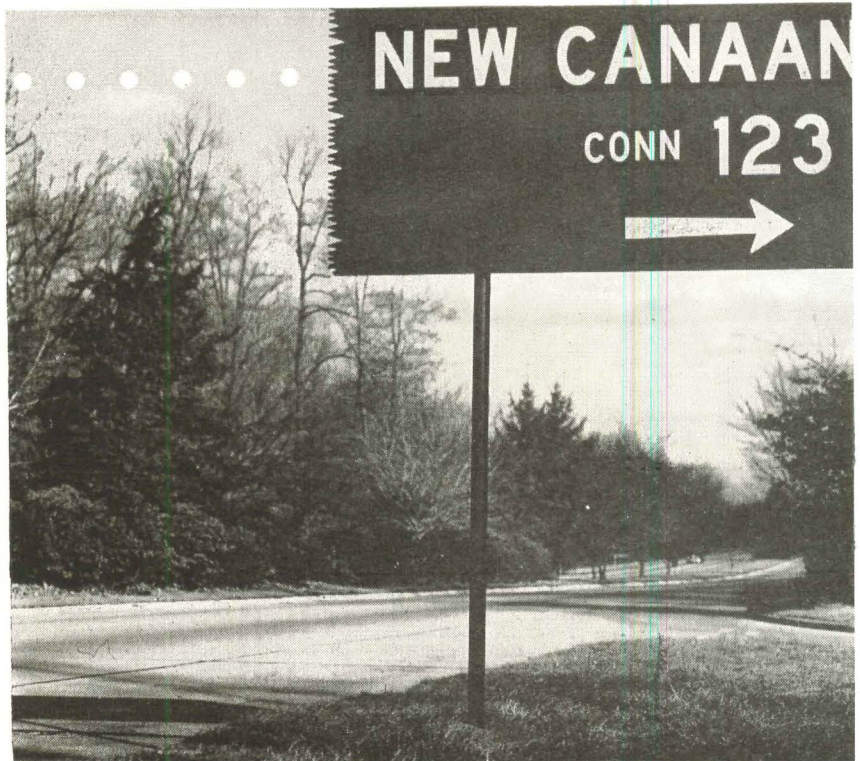
This interesting bit of verse is from a lengthy poem that first appeared in the New Canaan (Conn.) *Advertiser* of March 13, 1952. It was signed by one "Ogden-Nash Teeth," but every New Canaanite will tell you, in strictest confidence, that it was Stockbroker Lewis Mack who was Nashing his Teeth in anonymous meter.

The Bard of New Canaan was, of course, irked by the houses shown on these pages. To H&H readers, these houses are pretty familiar, and some of them are pretty famous houses at that. And so are their designers. As every reader of this magazine knows, New Canaan is the home of men like Marcel Breuer, Philip Johnson, Eliot Noyes, John Johansen, Landis Gores and others. They have made New Canaan a symbol of creativeness in modern American architecture.

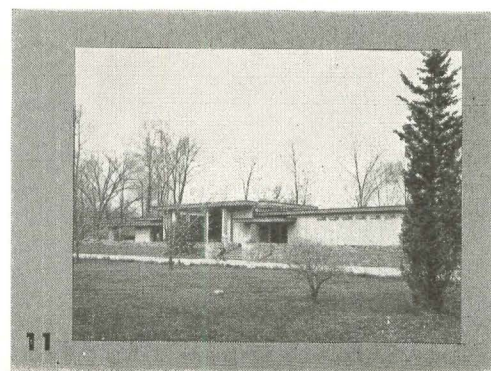
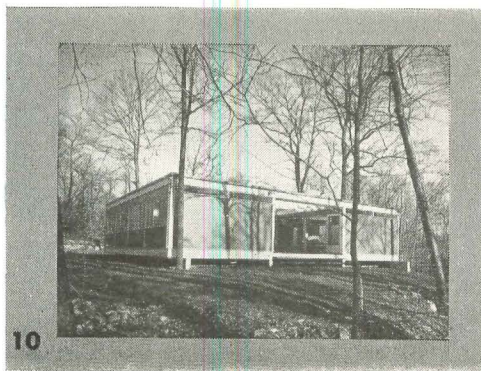
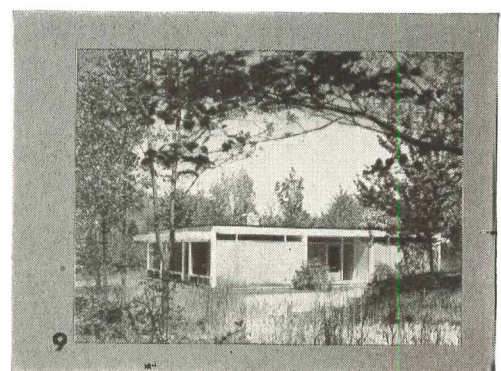
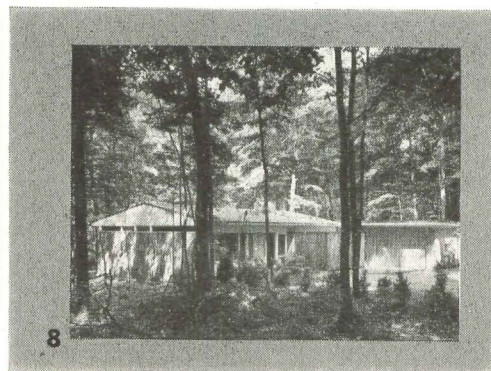
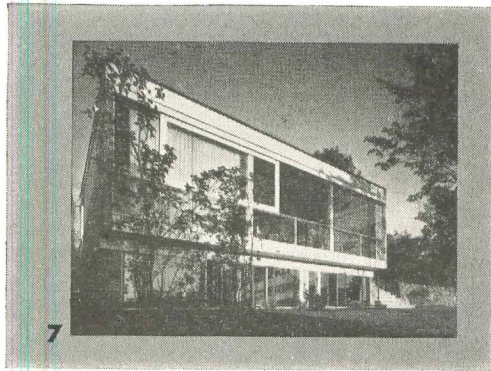
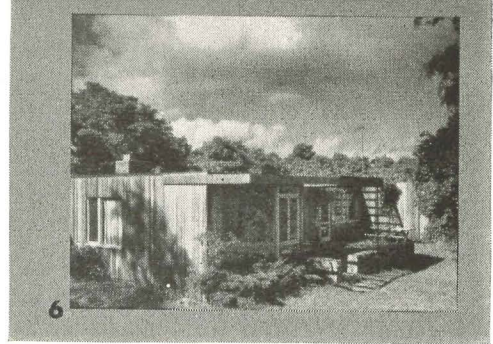
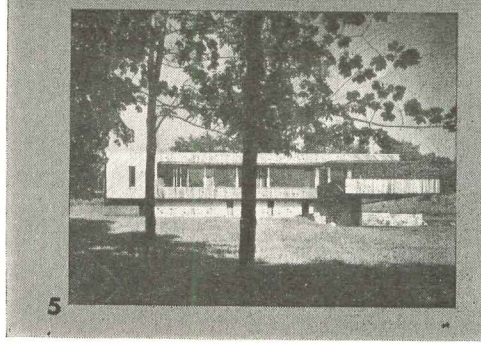
But if the bard is anywhere near right, and all but 100 New Canaanites tend to burst into indignant verse every time they see a flat roof or a glass wall, that would be a pretty serious matter for a lot of modern architecture and a lot of modern architects in the US. To get to the bottom of this, H&H has tried to make a fair survey of the situation. (See p. 136.)

Their conclusion: Things are looking up for modern architecture. Obviously, New Canaan is no "Middletown"—for how many US towns are more than 300 yrs. old, or feel as tradition-conscious as Williamsburg? And how many US towns act as "dormitory suburbs" for well-to-do businessmen and professionals, whose preferences (from neckties to politics) tend to be conservative?

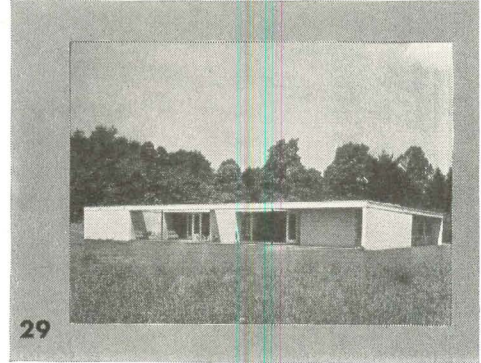
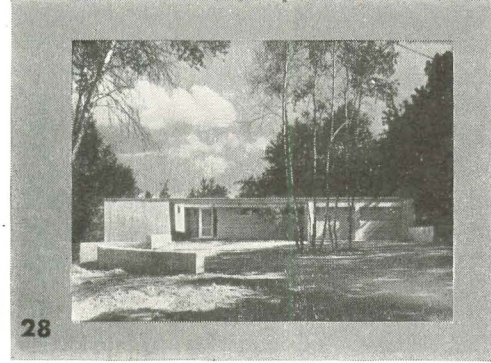
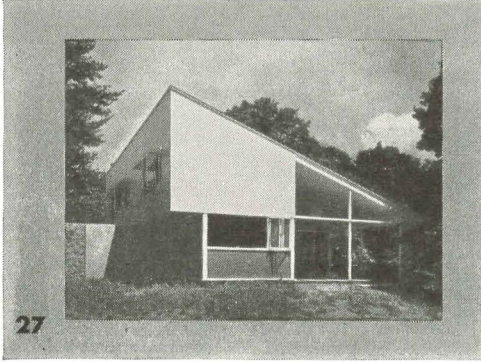
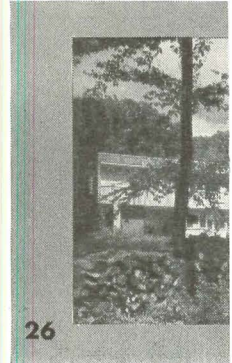
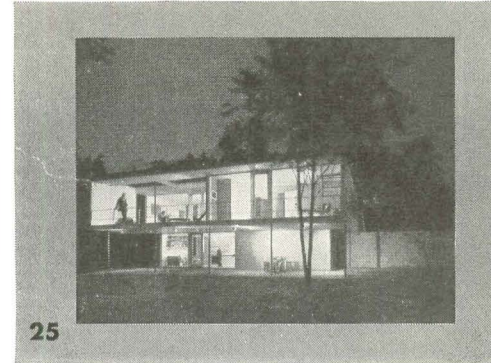
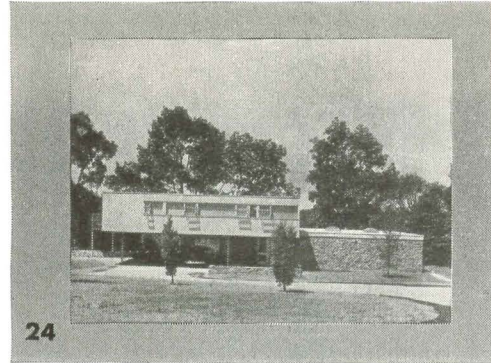
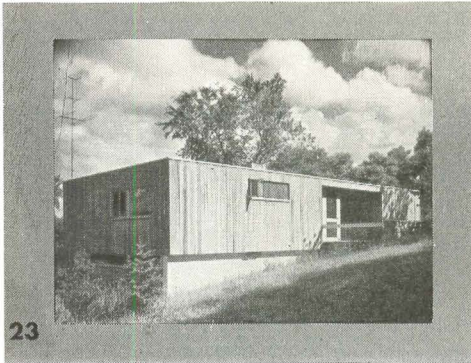
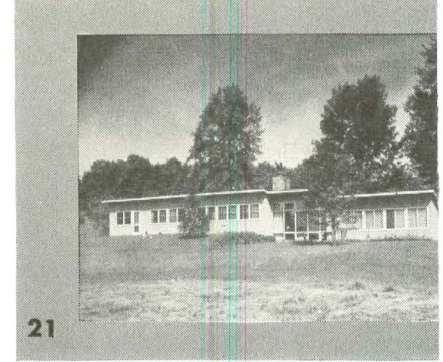
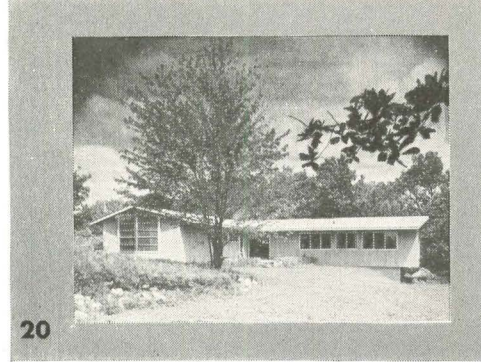
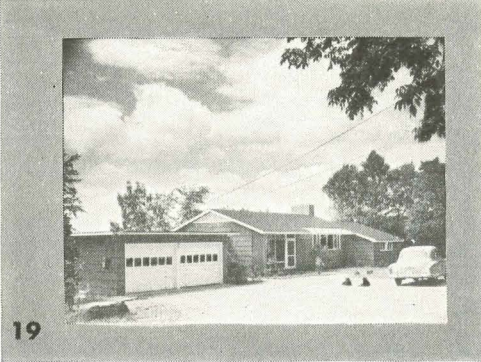
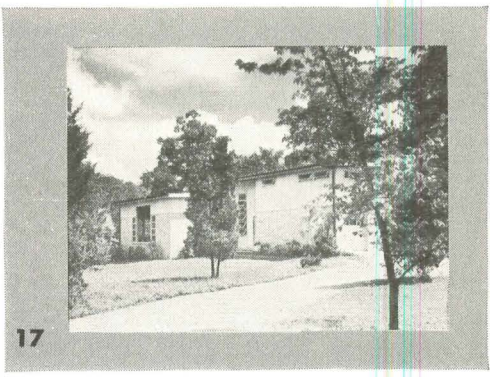
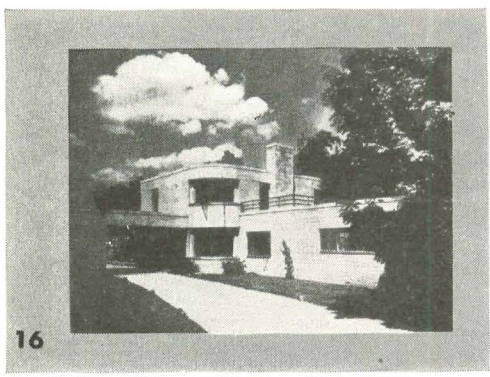
The dice are loaded heavily against modernism in New Canaan. If, in spite of this, modern architecture is making headway there, modern architects (and builders of modern houses) can be pretty sure that glass in the gable end will soon raise no eyebrow, that glass can reach from floor to flat roof and gain the same acceptance as the columns of the Colonial two-story porch.



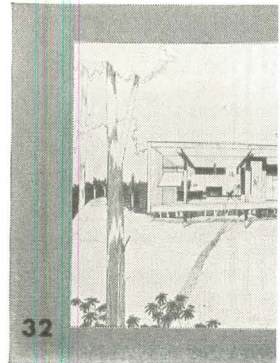
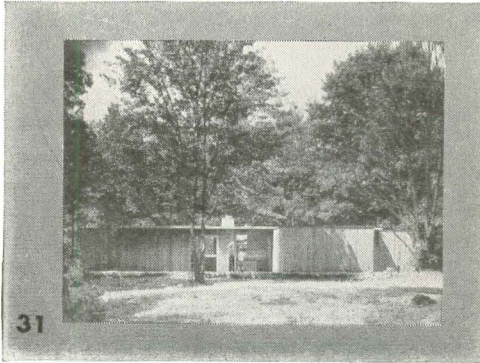
- 1-3 by Philip C. Johnson
- 4-6 by Marcel Breuer
- 7-10 by John MacLane Johansen
- 11 by Landis Gores
- 12 by Marcel Breuer and Eliot Noyes

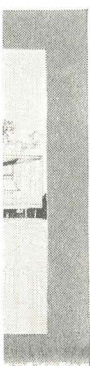
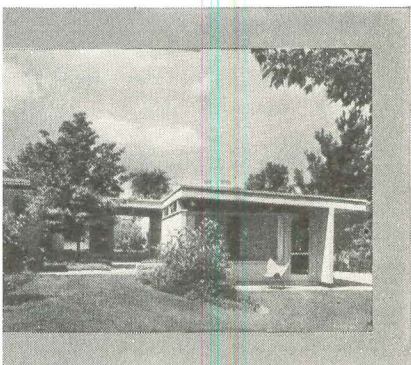
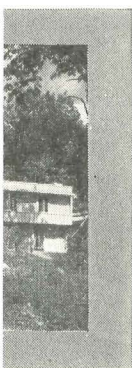
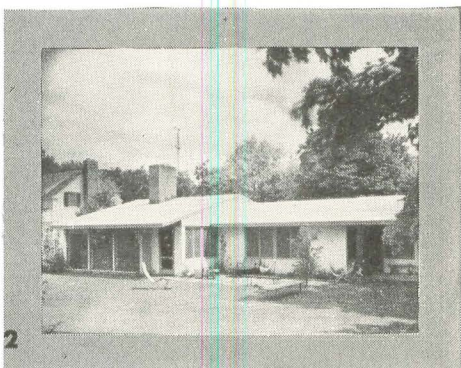
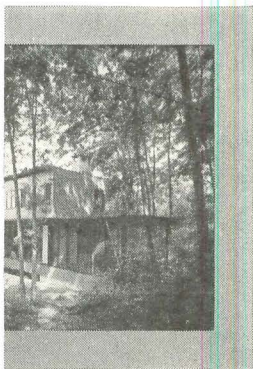
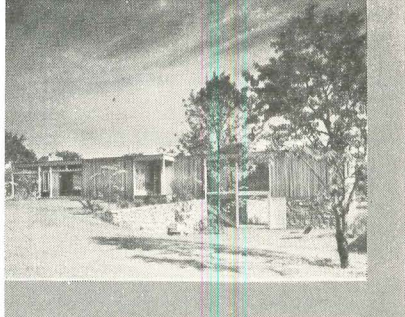


Photos: Ben Schnell 1, 4, 6, 8, 9, 12
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E. J. Cyr 3, 10, 11
Damora 7



- 13-15 by Victor Christ-Janer
- 16 by Robertson Ward
- 17 by Bimel Kehm
- 18 by Chauncey W. Riley
- 19-22 by Sherwood, Mills & Smith
- 23-30 by Eliot Noyes
- 31 by Frederick T. Gates
- 32 by John Lee





What sort of place is New Canaan?

It is a town of some 8,000 people, located in Connecticut's Fairfield County, where Cadillac convertibles roam.

Many of its inhabitants work in New York City and commute (fastest train: 1 hr. and 3 mins.).

It was incorporated as a township 150 1/2 years ago. For 150 years before that it was part of Norwalk.

Its architecture is predominantly Colonial, some of good quality.

Its politics have been Republican for a very long time.

It has very little industry, being located on an almost prehistoric branch line. (Once the town offered a Brooklyn shoe manufacturer \$5,000 if he moved to New Canaan and brought 30 worker-families along. After five years of rent-free and tax-free shoemaking in the town, he failed.)

But the New Canaan retail trade (carried on in the phony-Colonial shopping center along Elm St.) does more than \$20 million worth of business a year.

The only New Canaan newspaper, the *Advertiser* (a weekly), is edited by quiet and friendly Carlton Hill, who plays cards with some of the local boys (a doctor, a builder, a cattleman) every lunchtime at a table just to the left of the entrance door of a bar-and-grill called "Izzy's Place."

The *Advertiser's* motto is "GROW OR GO."

New Canaan certainly grew. . . .

What are these modern houses doing there?

The first man to build a "modern house"—in the current sense—in New Canaan was a businessman named Frank Kirkbride, who got architects Robertson Ward and William Muschenheim to build it for him at the end of West Road in 1938. Architect Eliot Noyes

says that Kirkbride is "a wonderful, progressive, intelligent old man," whose opinions carry a lot of weight in New Canaan.

But the first of the new group of architects to buy land in New Canaan was Noyes himself, who came there in 1947.

His reason for picking New Canaan (over Westport, etc.) was that the town was within easy commuting distance from New York, but not too close to either the NY Central or the NY, NH & H lines (with their industrial fringes). He also liked the rolling countryside.

He persuaded his friend, then associate and former teacher, Marcel Breuer, to come to New Canaan.

Soon others joined Noyes and Breuer. Among them: Philip Johnson, John MacL. Johansen, Landis Gores, and various designers and draftsmen working with them.

Independently, men like Chauncey Riley, Jens Risom, Bill Petersen (architect, furniture designer, architect, respectively) moved into the town.

Nearby, architects Lester Tichy and Joe Salerno built their homes.

By the end of 1952, there were more than 30 modern houses in New Canaan township. (If your definition of "modern" is not too "pure," you can double that number.) Many of them have been published, filmed, discussed all over the world. Many have been visited by thousands of tourists. "New Canaan" has become an architectural household word in many parts of the world.

Once a year, eight or ten of these houses have been thrown open to the general public (admission: \$2 a person; beneficiaries: New Canaan schools, public library, etc.). Last spring, "Modern House Day" in New Canaan drew more than 2,000 paying visitors who came through torrential rains and ankle-deep mud to praise and criticize—but mostly to praise.

Photos: Ben Schnall 14, 17, 19, 20-23, 25, 26, 31
© Ezra Stoller 18
E. J. Cyr 13, 15, 24, 27, 28, 29, 30
Alfred Cook 16

Some traditionalists (in New Canaan and elsewhere) think that modern architects ought to "go back where they came from"; others think that people who build modern houses are rather vulgar "strangers" from New York who have no feeling for the beauty of the New England countryside, don't understand the wealth of the Colonial tradition and represent the most Philistine element in our materialistic society.

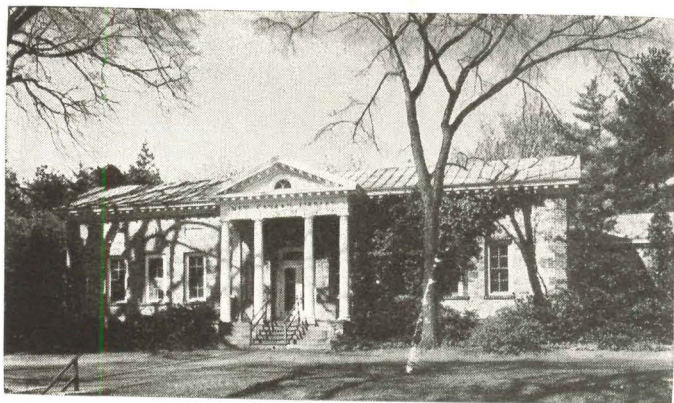
Some modernists, on the other hand, think that all traditionalists are reactionary snobs; others think that modern architecture is a delayed creative extension of the New England tradition and will soon be recognized as such; still others just want to be left alone to work out esthetic problems that they feel are still far from a final solution.

Now the above is no more than a summary, in capsule form, of the prevailing opinions in a town like New Canaan. To anyone who takes the trouble to find out, most of these opinions will soon turn out to be based on some degree of misinformation. For example: most of the New Canaan modernists happen to be New Englanders. Most of them highly regard the New England tradition. And most of their clients are exceedingly well-educated businessmen and professionals (including, for instance, one of the best-known art collectors in the country).

But the traditionalists have no monopoly on misinformation. Modernists can be just as wrong. For example: a lot of people in New Canaan don't object to modern architecture *per se*; they just think that some of the New Canaan houses are not very good! A lot of traditionalists are exceedingly tolerant and liberal people who passionately defend the right of anyone to live in the house of his choice, object to modern architecture only in public buildings (where, they feel, it still violates majority preference—surely some sort of democratic principle). Finally some traditionalists (members of the highly articulate local Historical Society, for instance) will tell a modernist, who talks about "New England formality" when describing his latest design, that he just doesn't know what he is talking about.

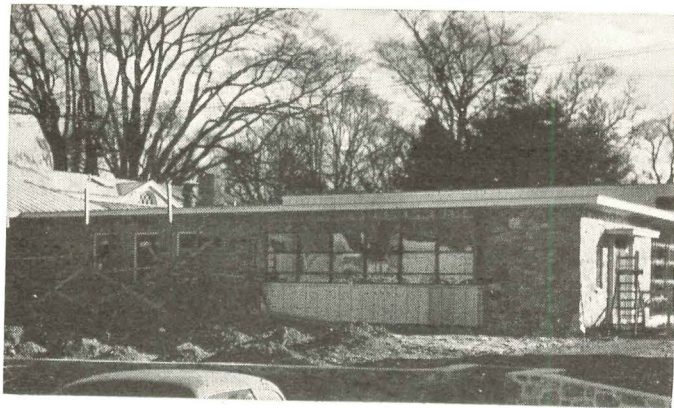
There are plenty of other interesting facts to be picked up around New Canaan. To gather some of them, H&H asked four questions:

1. **Do only cranks live in modern houses?**
2. **Do only reactionaries object to modern architecture?**
3. **Has anybody switched to modern (or to traditional) recently? If so, why?**
4. **Do modern houses affect real estate values?**



Photos: E. J. Cyr

New Canaan library (left) is symmetrical colonial building. New wing (below) now under construction was designed by Moore & Hutchins, has flat roof and large areas of glass.



Here are some of the surprising answers.

QUESTION: Do only cranks live in modern houses?

FACTS: Most of the owners of New Canaan's 30-odd modern houses are professional men, businessmen, stockbrokers, advertising executives.

A few are exceptionally wealthy; most are well within the upper 10% income bracket.

The majority (judging by station-wagon stickers and lapel buttons) voted Republican last November (though the architects were perhaps equally divided).

Most of the wives have college degrees, some have had (and continue to have) active professions, many participate in community activities of one sort or another (local Cub Scouts meet each week in a glass-walled house).

Far from being strangers to New England, modern-house owners have such New England names as Mosley, Dunham, Weeks, Hodgson, Stackpole. Several come from old New England families.

Their extracurricular activities are typically suburban: golf, bridge, country-club dances, college football week ends, etc.

ANSWER: Modern-house owners seem no more and no less cranky than other suburbanites.

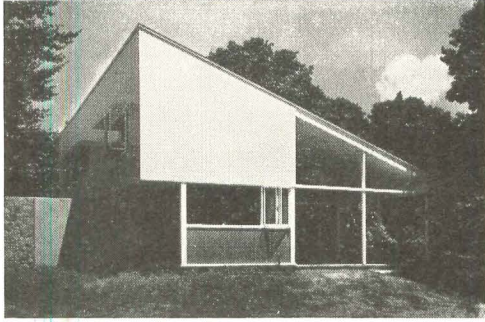
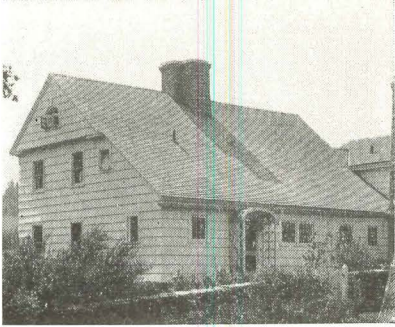
QUESTION: Do only reactionaries object to modern architecture?

FACTS: Carlton Hill, editor of the *Advertiser* thinks anyone has the right to live in the house of his choice, happens to prefer a traditional house, objects to modern architecture only in the center of town (which he would like to see preserved as a unified "Colonial" development).

Philip Johnson, designer and owner of the famous glass house, says that traditionalists understand his kind of steel-and-glass classicism most clearly.

Landis Gores finds that his Usonian mansion is most severely criticized by modern functionalists who don't think he has the right storage space in the right place, and who question the circulation patterns in his plan.

Victor Christ-Janer says the most serious challenge to contemporary architecture in New Canaan comes from old, well-established, tradition-minded and intelligent



F. J. Cyr

Weeks Family used to live in 200 years old colonial house. In 1942 it was struck by airplane and burned to its foundations. Recently Architect Noyes built this modern house on old footings for younger generation of same family. Says he: "They showed a lot of courage doing a modern house, and they seemed a little worried at first. Today they're crazy about it!"

families whose contribution to the community (in other fields) makes them justly respected.

One of the most respected New Canaanites, Judge Stanley P. Mead, who is a convinced traditionalist, objects to many local modern houses because he doesn't think they are very good architecture. Says he: "I frankly wonder what they are going to look like perhaps 25 yrs. from now. We have so many traditional houses that have endured for centuries in use and today are beautiful, both as to form and line, and practical and comfortable to use."

The first modern house owner in New Canaan, highly respected Frank Kirkbride, says: "While there is nothing worse than deadly uniformity, the other extreme of unrelated diversity can grate equally on nerves and irritate sensibilities. . . . We welcome the creative instinct and, if at times genius gets too exuberant, you can always 'plant it out'."

Finally, a group of four impartial (but architecturally "conscious") visitors on last year's Modern House Day tour reports that overheard criticism of the eight houses on view rarely questioned the basic premise of the modern idiom, instead concentrated on some poor finishes, some bad proportions, some inefficient plans, some absence of landscaping and other matters of execution.

ANSWER: No. A lot of the criticism comes from people who demand better modern architecture.

QUESTION: Has anybody switched?

FACTS: Most interesting *switch from traditional to modern* is reported by Victor Christ-Janer, who persuaded Builder Robert Roles, long a champion of traditional speculative houses in New Canaan, to put up two of Christ-Janer's modern houses on Wahackma Road. Says Roles: "I now think we can do a good modern speculative house in this area. I don't care whether it has a flat roof or not; give me the plans of a house that makes sense and I'll build it."

Other modernists report that clients with traditional concepts could be won over to a modern design by patient persuasion, reference to magazines. Says one real estate broker: "Look, go to the local magazine stores, all you see is modern architecture, modern furniture, modern lamps, modern fabrics—everything is modern. Let's face it, modern is here to stay." This broker, who once restricted his properties against modern architecture, now employs a local modernist to serve as a consultant.

The New Canaan Library, a symmetrical, Colonial building of stone, has just had a new wing added to it. The wing has large glass walls, flat roof, stone base, no Colonial trim. (Significantly, its architects are Moore & Hutchins whom local moderns consider "traditionalists.")

On New Canaan's all-Colonial Elm Street, Architects Sherwood, Mills & Smith have just built a group of simple, contemporary stores of brick and glass.

New Canaan's South School (built 3 yrs. ago by Sherwood, Mills & Smith) is simple and decidedly modern.

But a similar *switch from modern to traditional* is also reported: the proposed new high school, for whose design a group of local modernists put in a strong bid, has just gone to conservatives Moore & Hutchins instead.

A plan to develop a major block in the downtown shopping area in a simple, modern way (the plan was backed by Architects Noyes, Johansen and Mills) was opposed by the *Advertiser* and turned down. Said the *Advertiser*: "Balustrades, fanlights, gables, cornices and other trim in Elm Street building are more pleasing to the eye than straight stark lines." (The Sh., M. & S. stores actually built on Elm Street are the only part of the project to have been realized.)

Sh., M. & S., although uncompromising in many a stand they have taken in New Canaan affairs, have themselves built a number of houses in the area that are only a few degrees more "modern" than a good "ranch-style" job in, say, California.

ANSWER: Looks like a tossup—except that more and more modern houses are commissioned every month.

QUESTION: Do modern houses affect real estate values?

FACTS: Broker Shaughnessy (of The Ross Agency, Inc.) denies that modern houses have affected local real estate values one way or the other, believes that the local controversy and attendant publicity have actually helped real estate by bringing more people to New Canaan.

Brokers Brotherhood, Stevens & Hickley agree.

Broker Estelle N. Dawes, on the other hand, thinks that modern houses are not in keeping with New England tradition, have depressed real estate values in the area. Of five New Canaan realtors interviewed, she was the only one to express this view.

Broker Maurice Roche disagrees with her, says that there is a tremendous demand for modern architecture, that values of modern houses are on the increase, those of traditional houses down.

Broker Roger Kelly (of the R. B. Morse Agency) is slightly less sure of this, admits however that modern houses have not depressed values, but rather have increased land values slightly.

New Canaan realtors and architects agree that it is no more difficult to get a mortgage for most modern houses than for traditional houses in the area.

Breuer's first New Canaan house sold for at least 25% more than it cost to build four years earlier. Eliot Noyes (who is planning to build a new house for himself) expects to sell his present house at a 50% profit. Victor Christ-Janer's houses for Builder Robert Roles are priced to sell for between \$35,000 and \$60,000—and Roles is sure that they will. Finally, some modernists report unsolicited offers for their houses at well above initial cost.

ANSWER: Only indirectly—and then favorably. Resale value of modern houses is high.



Builder Robert Roles used to do speculative houses like the one shown above. For the past six months, however, he has been working with modernist Victor Christ-Janer. They have finished two uncompromisingly modern houses to date. Price range: \$35,000 to \$60,000.



Elm Street shopping center is shown in the top picture, was built as mock-colonial development some 15 yrs. ago. Recently, modernists Sherwood, Mills & Smith built simple glass and brick stores (shown in lower picture) in the face of much opposition. More modern (but, unfortunately, also some "modernistic") stores are under way.

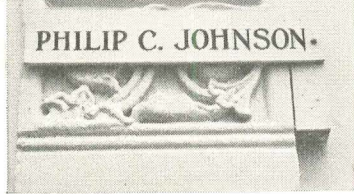
Photos: Ben Schnell;
Arnold Newman;
E. J. Cyr

Here are some further poetic contributions
made by readers of The New Canaan Advertiser
after "Ogden Nash-Teeth" started the ball rolling

(Note: The words "Station next to Heaven" are synonymous with New Canaan)



PHILIP C. JOHNSON



LANDIS GORES
ARCHITECT

ROUND-ROBIN REPLY

Editor New Canaan Advertiser:
In the interest that last week's quasi-rhymed broadside concerning the desecration of the New Canaan countryside may not go unanswered by at least a modest salvo, I have been delegated, perhaps unfortunately in view of the immediacy of my involvement, to submit you the following round-robin decalogue composed by the assembled guests at a dinner party within the town limits last Saturday night.

I must unequivocally disclaim either praise or blame for any more than my rationed share of the versification; further, not another architect of any coloration was implicated, while I for myself disdain to emulate last week's dubious example by taking refuge behind the skirts of a petulant pseudonymity.

I should like also to express appreciation of the stalwart unanimity of sentiment of the present contributors, even if at the expense of mellifluous transition from one line to the next.

We see by the Advertiser of March 13, Page 4, Column 6,
That in the crew of Mr. Gnash-Teeth modern architecture sticks,
Allergic to glass, steel, bureau drawers and cantilevers,
A stuffy old stuffed-shirt with green myopic fever
Undulant, ruminant, tobacco on his vest,
Grandiloquent grandson of a grandson of the best,
Who latterly has failed, we fear, to grasp in the slightest
That that which was found good in the past is no longer today the object of affection of the brightest—
That pigeons chalk his widows' walk, while widows chauffeur-driven
In sportscars pop from soda to lingerie shop, next the Station Next to Heaven.

I will be pleased to show you the longhand holograph at your request.
Landis Gores.

PIGEONS COO

Editor New Canaan Advertiser:
Pigeons on the widow's walk,
Chalking up their double talk—
This is what they dodely cooed,
Turtling in an antique mood:

Johnson, Johansen, Gores and Noyes:
Other folks' woes to them are joys.

Noyes and Johnson and Gores-Johansen:
Come hell or high taxes, they all keep their pants on.

Gores and Johansen, Noyes and Johnson:
Revivalist houses they find no response in.

Johnson, Noyes, Johansen and Gores:
Together they cry, "Nobis etmpora, nobis mores!"
Eavesdropper.

"NO TEPEES ANY MORE"

(With apologies to
Edna St. Vincent Millay)
Editor New Canaan Advertiser:
Ogden! Don't you think you are
Just a wee bit insular—
Standing, as you do, aghast
At the vista of the past
From "the Station next to Heaven"
Lightened with a little leaven?

So, I guess, the Indian, jeering,
Watched the pale-face in the clearing,
Never using pole or pelt or
Other means of making shelter
Long approved by building code,
Raising up a new abode—

House no canny Indian would
Pass the door of, if he could.
"Ugh, this solid thing of horror"
(Perhaps a building of tomorrow)
"Lacks the red-skin's prime utility
Lacks for squaws all portability."

Ogden, if you think upon't,
Indian braves with painted bonnet
Never saunter now in Elm Street
Trading skins for things to eat;
But those who took the "function"
risk
Report that building, yes, is brisk.

Chatter, chatter, little teeth.
How I wonder whose you beeth,
Teeth like yours ought not to bite
Or to overcome with fright
Those who build a tepee better
For the modern tepee-getter.

Teeth like yours, dear Ogden, really,
In New Canaan sound quite silly.
Let me voice a neighbor's thought:
If in verse you must disport,
Before you pen your idle ventures
Sterilize your Knashing dentures.
Edgar A. Kniffin.

MOSSES FROM AN OLD MANSARD

Editor New Canaan Advertiser:

In architecture
There's conjecture

About that goddern
Bloomin' modern.

Even so
We know

The man Baroque
Would likely choke,

If his castle so baronial
Were made over in Colonial;

And bulbous Jacobean,
Themselves antiquarians,

Would soon question the origin
Of houses in the Georgian.

So hail to the flying buttress and
ionic,
But don't forget cantilevers and
supersonic.

Acanthus, acanthus, Wren, Palladio:
Form follows function, from chair
to radio.

Chippendale, cabriole, Grindling Gib-
bons;
Gropius, Van der Rohe, Robsjohn
Giggings.

Morris Chair or Africar Camp,
Guests will rest without a cramp—
Good things labelled "made today"
Don't toss the old away,

So why then let antiques
Call new things freaks?

Next time you prate of Heppelwhite
Don't forget that maybe Frank
Lloyd's Wright.

Just Anon.
Aberdeen Proving Ground, Md.

OH TEMPERATURE! OH GORES!

Editor New Canaan Advertiser:
Our modernists have turned to verse,
To speak of grave-stark trends and
worse

In houses.
Behold now down where Elm meets
South,
Their pudding—which in any mouth
Belouses.

Iambically, their lines don't scan,
Artistically, they mock the man,
These mouses.

Postlude
(danced to muted lutes)
Waltz me upon my widow's walk,
My mansard aged by pigeon'd chalk,
Unleash Victoria's best barrages
Upon the set without garages.

New Canaan Federated Wigwamists.

Ben Schnall

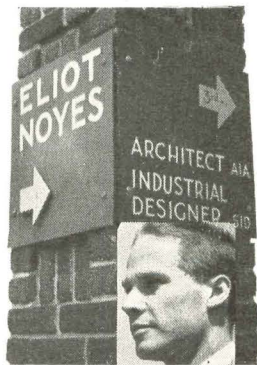
John MacL. Johansen
ARCHITECT



JANUARY 1953



BREUER



SMITH



MILLS



SHERWOOD



CHRIST-JANER'S
OFFICE

Ben Schnall

TEPEE OR NOT TEPEE

Editor New Canaan Advertiser:

Howdy! Kniffin, Edgar A.,
Minstrel of the latest lay,
Architectural judge, impartial,
Sounder of the tocsin, martial
In behalf of modern tepees—
Inducers of the heeby-jeebies.

Pueblo built himself adobe
Houses in the Sixteenth Century—
Heap much like New Canaan "mod-
ern"—
Roof much flat—cost plenty wampum.
Injun still walk streets of Taos
Much amused at modern chaos

Caused by Kniff's amusing view
That bureau drawers are something
new;
That bebop should replace Beethoven,
Since bebop sells and Ludwig
doesn't,
Come, come my little Princeton
griffin,
Your logic's weak, your flat roof's
leakin'.

A Carport.

AMEN

Editor New Canaan Advertiser:
(With apologies only to the readers)

When Messrs. J. and J. and G. and N.
Are side by side with Christopher
Wren,
Editors historical
Will be satirical
About our Station Next to Heaven!

In publishing a town review,
Come twenty hundred and fifty-two,
Will anybody glorify
Or even try to justify
The building mode that caused this
stew?

This Public Forum of so-called
"verse"
Makes clear of late that many curse
In terms expostulate
How they abominate
What's happening to this universe.

So let's call it quits at that!
Rockin' Chair Annie.

What does it all add up to?

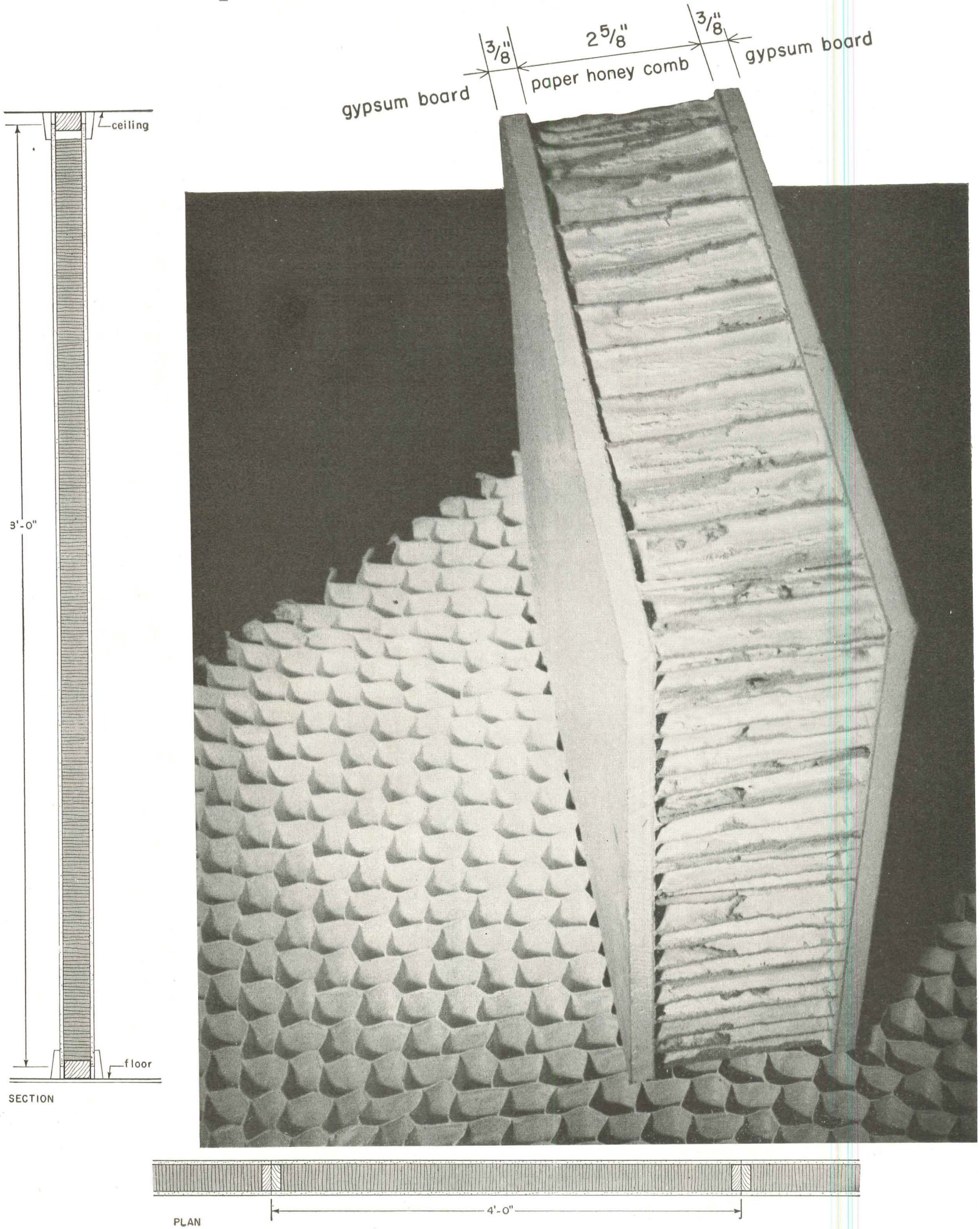
When you question a new Canaan modernist about the violent local opposition to his work, he is likely to ask "What opposition?" After a moment's thought, he might add: "I suppose there is a lot of antagonism somewhere, but, frankly, all we ever come across is interest, enthusiasm and a desire to know more. Even the people most likely to object to us are polite and friendly; I guess they're reconciled to us, because the children of a lot of the old New Canaan families are building modern houses for themselves and their children to live in."

Yet, whether the modernists know it or not, opposition still exists and it is often strong. One reason may be found in the confusion among those who have been trained to think of various "periods" as if they were uniform "styles"—the way decorators sell "styles." Such people have a hard time finding common denominators among the various New Canaan houses. "What" asks the layman "do the houses of Johnson and Gores have in common? And why is Noyes' Bremer house, for example, way up in the air and his Ault house flat on the ground? Why did Breuer build his first New Canaan house as a light wooden box balanced on a small base and his second as a monumental-looking house of stone? Why do some of the houses have deep overhangs and others none? Do roofs *have* to be flat? Isn't there some simple way of getting the 'hang' of these modern houses just as there is with Colonial or Greek revival houses?"

The answer, of course, is "no." In New Canaan as elsewhere in the US or abroad, modern architecture is alive and growing, not finished and fixed, so it has many attitudes expressing themselves. With time the best characteristics will come to prevail. And with patience they will be understood.

As one New Canaan traditionalist put it recently: "Who knows—perhaps when we celebrate our 300th anniversary, we'll be pointing proudly to these houses and telling the world that here, in this little town, we helped create a new architectural tradition. It would be too bad, anyway, if all we had to show for the next 150 yrs. would be some more of the same."

A new prefab plasterboard partition



with a hard heart of paper

Here is one of the most significant stirrings toward real industrialization that the sleepy giant, the housebuilding industry, has made since stock windows were first sold: a premanufactured partition ready to stand in place—two gypsum-board faces bonded to a core of expanded stiffened paper honeycomb which can be manufactured simply and sold for a simple price, 28-30¢ per sq. ft.* This new partition panel is a strong steady wall to match the stud wall in its partitioning function and undersell it substantially.

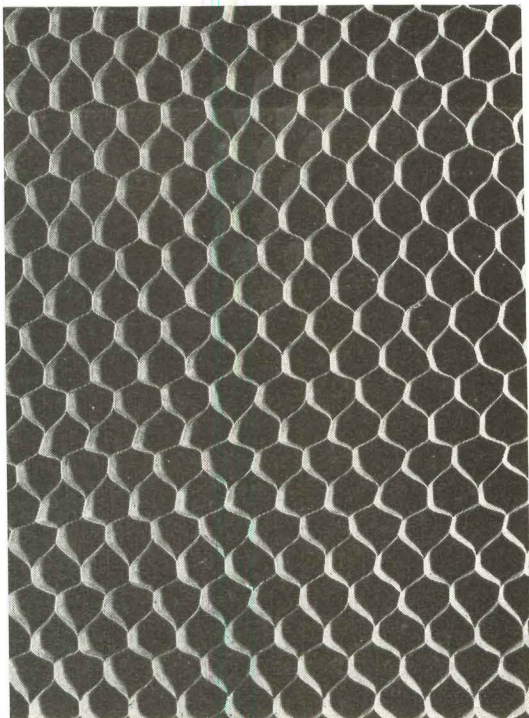
The idea for this sandwich panel partition is not untried; flush doors and office partitions have been constructed on much the same principle, with the same core material, for several years, and a comparable partition is in production in Europe. (See p. 142.) But until now it has been held that the sandwich is not economically feasible using gypsum board as "bread" because of the high damage potential, shipping costs and difficulty of bonding. It took two New Hampshire Yankees, Boardman M. Randall and Ralph S. Frobisher, who between them have had 75 yrs. experience in the building material field, to disprove the doubts. Their company, based in a former garage in Portsmouth, is called Sico, Inc. and it has already furnished partitions and other panels for five buildings in New England.

Sico partitions are made without elaborate machinery, and the developers say they are ready to license the process to individual builders or other small producers throughout the country. This is the manufacturing process: a sheet of $\frac{3}{8}$ " gypsum board is buttered on one side with gypsum plaster or pure portland cement and placed in a mold (see also pictures, p. 143). A paper honeycomb, which is purchased in thin collapsed sheets from the Union Bag & Paper Co. for \$350 per ton, is dipped in a similar fluid cementitious mixture and expanded. When this has been thoroughly soaked and drained it is put in place on top of the lower piece of gypsum-board "bread" in the sandwich, and another sheet of gypsum plaster is buttered and placed on top. After being compressed in a veneer press and allowed to cure the partition is ready to go up.

The component parts can be assembled to create various thicknesses (and other surfaces besides gypsum board can be used) but the standard smooth partition comes out to be $3\frac{3}{8}$ " thick. At this thickness the 2' x 4' x 8' panel weighs about 320 lbs., approximately 5 lbs. per sq. ft. The panels are molded to fit 2 x 3 studs occurring 4' on center, braced by runners on floor and ceiling (see drawings).

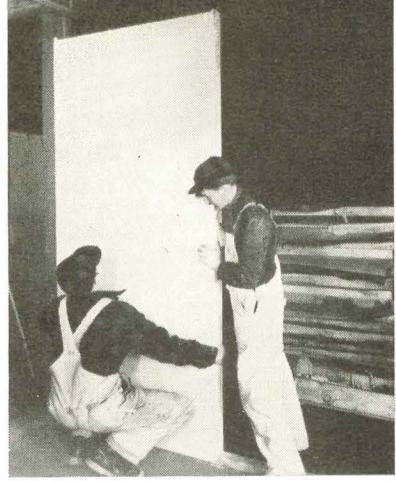
Actually the panels are delivered with half of one of these studs ($1\frac{13}{16}$ " x $2\frac{5}{8}$ " x 8') bonded to one long side for fastening. On the other long side is a removable

* Survey of merchant builders (in New York area) has established that their average cost per sq. ft. of standard dry stud wall runs about 50¢.

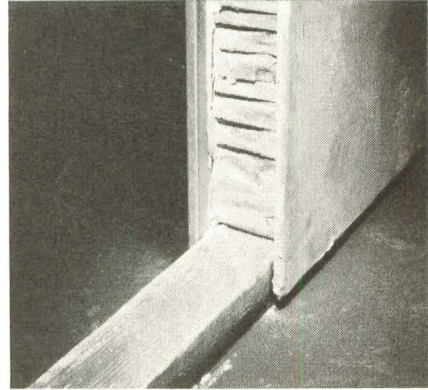


Expanded paper core (in elevation, left) shows its skein of connections. Light strong material collapses flat for shipping. It is available in a wide range of sizes, both plain and impregnated with resin. (Sico process uses it raw.) Core vertical to panel surfaces creates great strength against impact.

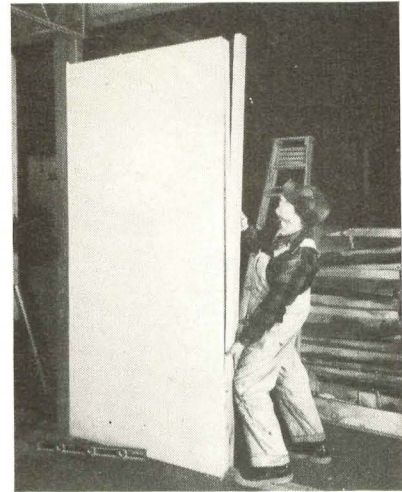
Panel is placed on shoe (1-2), then studs set every 4' (3). Detail drawing of joint, below, shows how stud system works: one half-stud is bonded in edge of panel during molding, other can be removed and nailed to first half; then second panel is slid into place (4), locking on stud.



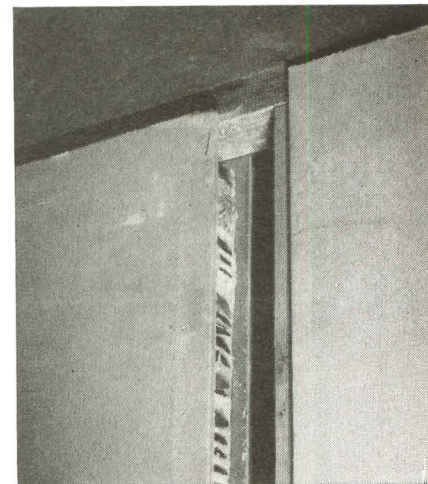
1.



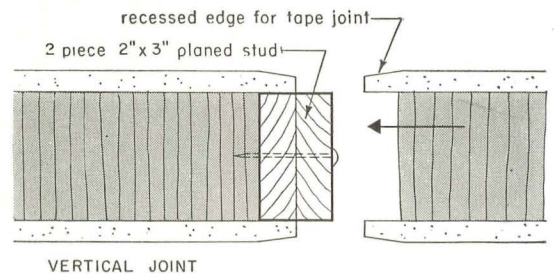
2.



3.



4.



half-stud. On the job the first panel is stood on a floor runner or base $3\frac{3}{8}$ " wide with a ceiling runner or cap of the same width. The removable half-stud in this side of the panel is taken out and nailed into the wall into which the panel is to butt. Then the panel is slid down the runner into position so that the stud again stands in the recess as a brace. The next panel is placed in line with the first on the runner, with its removable stick or stud toward the bonded half-stud of the first panel. The half-stud of the second panel is taken out, nailed to the bonded half-stud of the first panel and then the second panel is slid into final position. There are various ways of making corners and of ending the partition, such as nailing the final removable half-stud to the fixed half-stud with nails at an angle through the panel edge. Baseboards and picture moldings are nailed at the floor and ceiling runners to form a channel around the edges of the panels and hold them in place. Panel joints over the concealed studs can be square-edge, bevel-edge, rounded-edge, or with the normal gypsum board recessed-edge tape joint system.

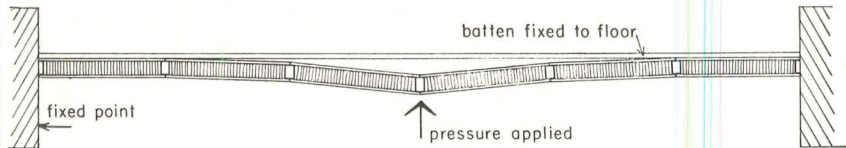
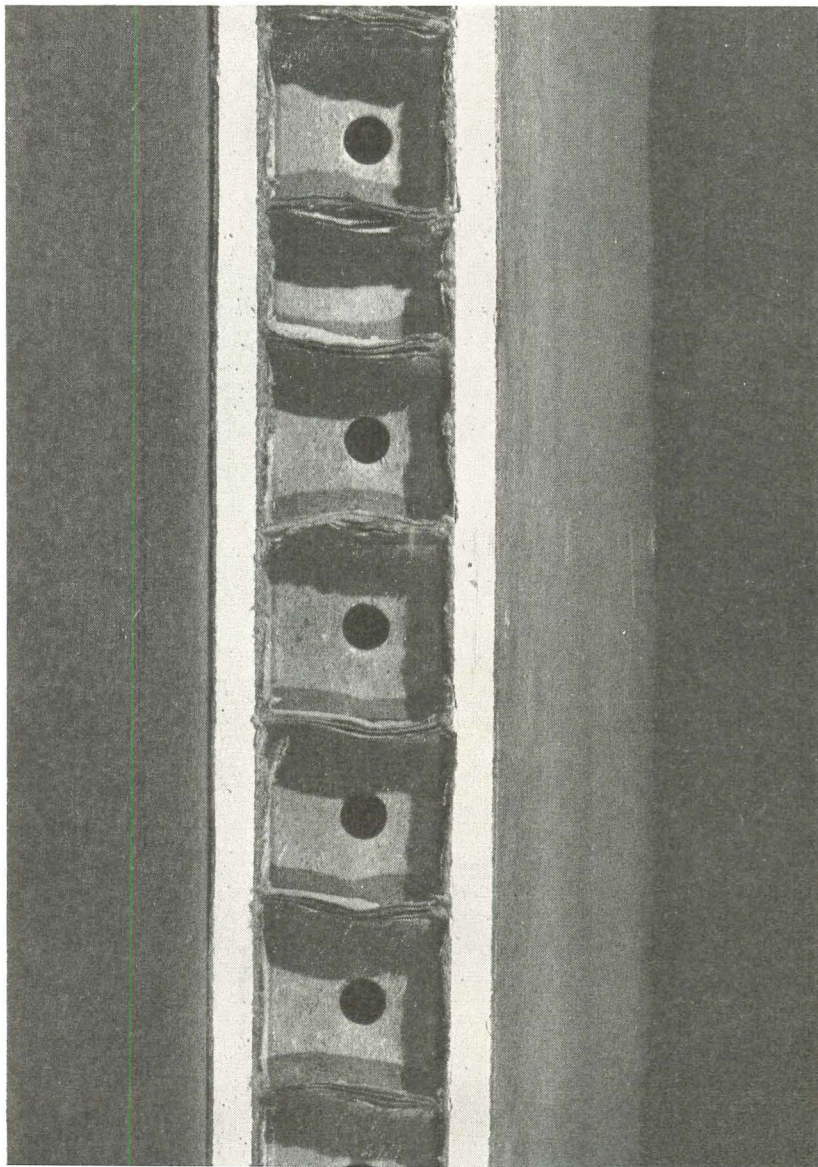
There are two other advantages besides the firm bond in using the binder of portland cement or gypsum:

► **Fire protection.** Ordinary gypsum wallboard $\frac{3}{8}$ " thick will take a 20-min. fire test and $\frac{1}{2}$ " board will take a 30-min. test; several informal fire tests already conducted on this panel give unofficial ratings of over one hour.

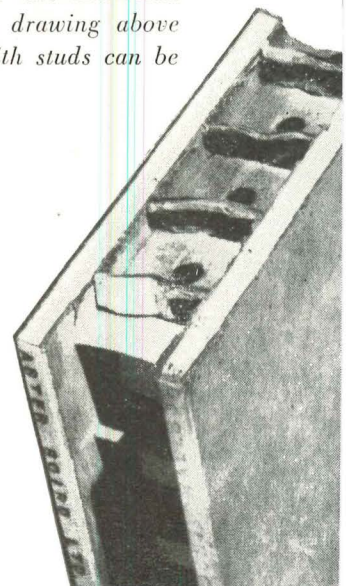
► **Strength.** Although it would be most logical to use this wall as an entirely independent partition, as in houses built with truss roofs, the panels actually are amazingly strong. Transversely the $3\frac{3}{8}$ " thick panel has withstood uniformly applied loads of over 250 lbs. per sq. ft. when tested on 48" spans. Vertically one of these partition panels supported a 6-ton applied column load.

Acoustical efficiency of this partition in reducing sound transmission from one side to the other has not yet been established, but its considerable weight should make for a good rating.

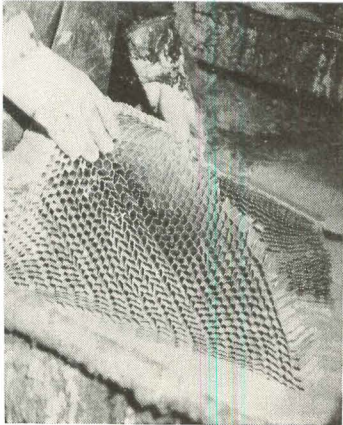
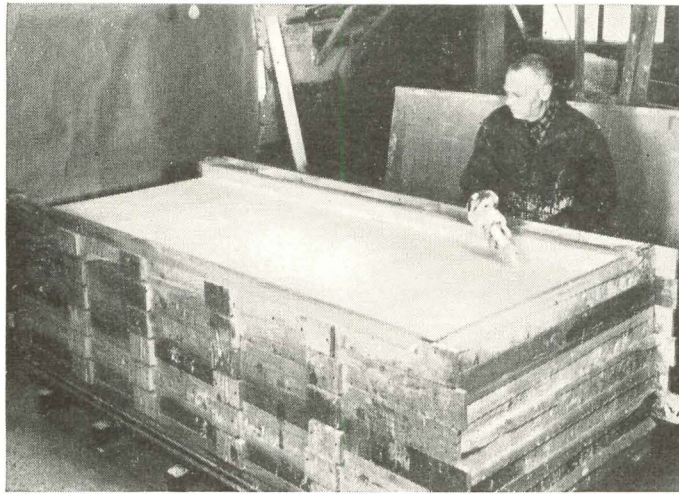
The English version, already in wide use



If the honeycomb core of the American sandwich partition panel unfolds like a Japanese fan, the paper core of an English counterpart is built like an egg box. This is the "Paramount" dry partition made by The British Plaster Board Ltd. Its two surfaces are gypsum board and the fibrous core is paper, but the binder is not gypsum or portland cement. Instead a resin adhesive is used to coat the cellular core and also to attach it to the board. Stock size is 3' wide and 7'-6" or 8' high, with two thicknesses— $2\frac{1}{4}$ " overall when facing boards are $\frac{3}{8}$ " thick, and $2\frac{1}{2}$ " overall when facing boards are $\frac{1}{2}$ " thick. The connecting details are just as simple as they are for the American counterpart, sometimes even simpler (see drawing above which indicates how assembly complete with studs can be snapped into place).

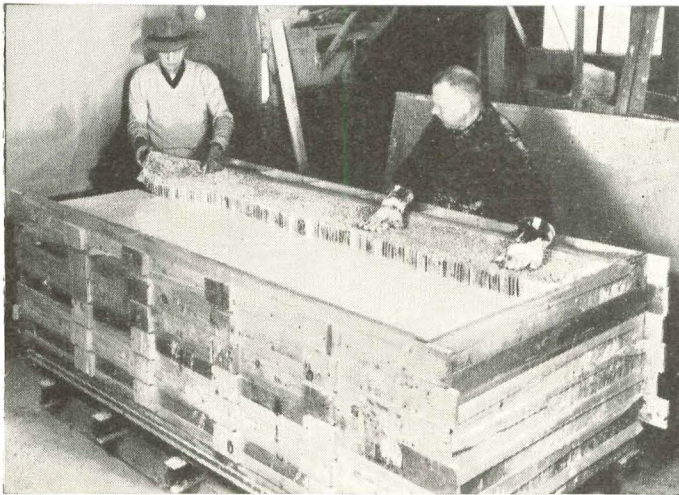


1.

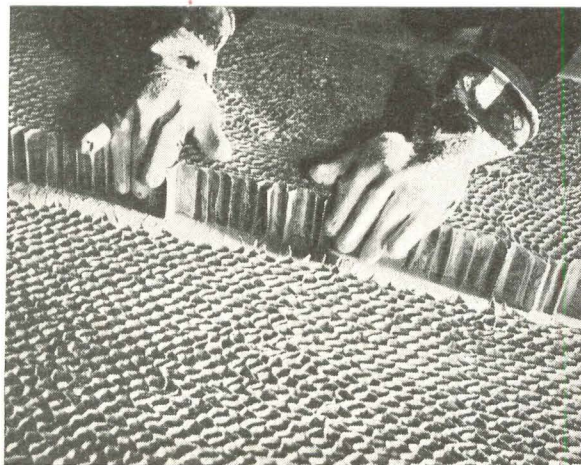


2.

3.



4.



5.

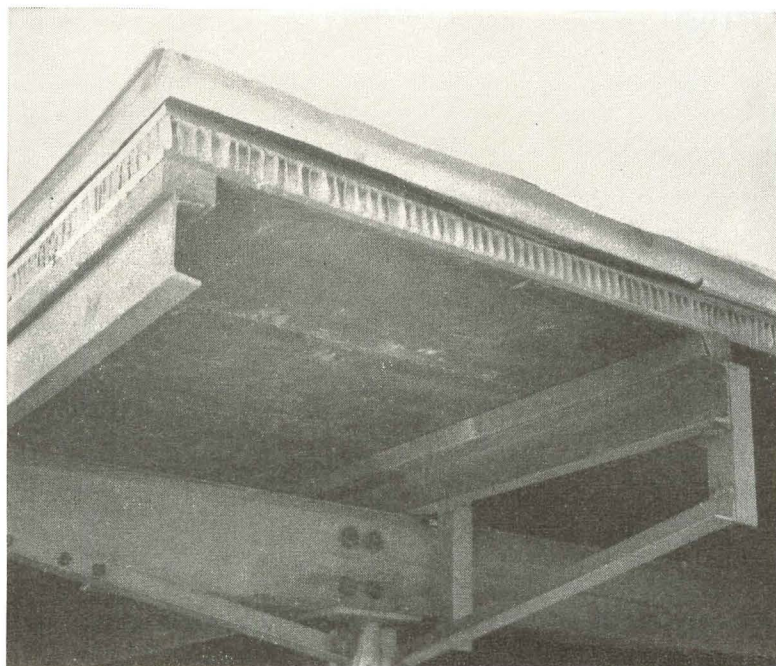


6.

Completed panels are put in veneer press for initial overnight set (6.) (only low pressures are required, 5 to 8 lbs. per sq. in.), then stored for curing under a tarpaulin outdoors.

Top layer of sandwich is buttered with bonding agent (5.), then flipped over, and the sandwich is materially complete. Form is made of a sheet of $\frac{3}{4}$ " thick plywood with thickness gauges (wood strips) on sides.

Strength of this paper-cored board as planking is demonstrated in its structural use (right, in a building in Waltham, Mass.). In tests a specimen panel 16" x 48" x 2½" thick, set over a clear span of 45", supported a concentrated center of 500 lbs. (breaking at the increase to 550 lbs.) with a deflection of .46". Translated, this means that panel will not break under anything less than 220 lbs. per sq. ft. uniform loading, giving a big factor of safety under all known snow-loads.



Look at what's selling in Ohio!

Is it true Ohio families won't swing from Midwest  traditional design

Photo below Fay Photo Service; others James T. Strong

Don Scholz of Toledo may be the year's most significant weather vane for builders. His sales clearly show which way the wind is blowing. What the families of Toledo are buying will come as a big surprise to builders everywhere who are dead sure that "California-type" houses won't sell in their towns.

Last July in just nine days Scholz sold 43 of the houses pictured here. In the next 60 days he sold 60 more. At \$15,950 to \$18,050 he is not giving his houses away to bargain-basement crowds, either.

What his sales figures prove is this:

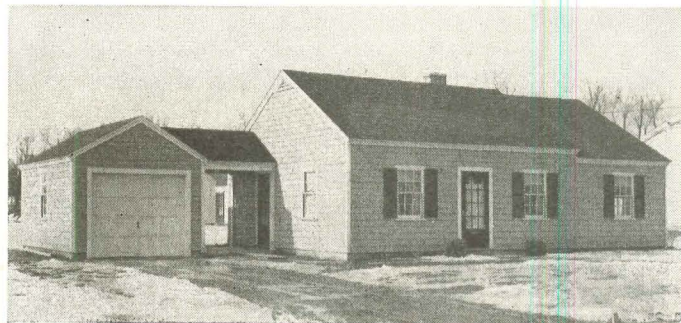
1. *Even in a conservative area like Toledo*, the buying public is far ahead of most builders.
2. *Families who want 1953 automobiles* and household equipment also want 1953 designs and ideas in their houses. They are not afraid of lower roofs, bigger windows, more open plans.
3. *There are enough buyers* in any city to start the trend to newer designs like these or the Trade Secrets house.
4. *But if they are to sell*, new houses must be well designed. They cannot be "phony modern" or freakish. From the street these houses do not look radical. The largest windows are not easily seen.
5. *FHA will approve good design*. Scholz got top evaluations and full cooperation from the Cleveland FHA office. "We didn't have much doubt about these houses," says Ray Devney, chief architect there. "There is a trend now to improve on architectural design and we were sure there would be a market acceptance for these houses."

Like numerous builders, Scholz has been edging up to his present design. Each year he offered his buyers something a little more modern. Said Charles Clifford, of the Pacific Mutual Life Insurance Co. of Los Angeles, which bought the mortgages: "We knew these houses would sell. Earlier, Don had started out with a modified design which sold, and we knew lots of people, especially young people, would take this new one. For sales appeal, two-thirds is design."

Trained as an engineer, not an architect, 33-year-old Scholz has been building houses since the end of the war. His production is now about 175 a year. Before he brought out his new line he traveled widely to learn what he could from other builders. His greatest influence was what he saw in California and West Coast houses he read about in this magazine. He has studied his lessons well.

Three plans. On these eight pages are numerous photos and floor plans of Scholz's three basic models. Model A with 1,050 sq. ft. plus garage and outside storage sells for \$15,950. For \$3,000 more a buyer gets Model B or C, with 1,260 sq. ft. including an activities room that could become a fourth bedroom, plus a larger garage. Model B has a porch. All have fireplaces and are on big lots: 80' or 90' wide and 140' deep. His new lots cost \$1,000 more so he raised his prices that much.

A most important angle is that Scholz is now selling his designs and all the precut parts to other builders. Builder Harry C. Nail Jr. has built six in Mansfield, Ohio, plans a total of 60. A builder in Columbus will erect some in the spring. Scholz himself will move into the Detroit area this spring and eventually may also build in Chicago.



to California ranch  houses?

Is it true they are afraid

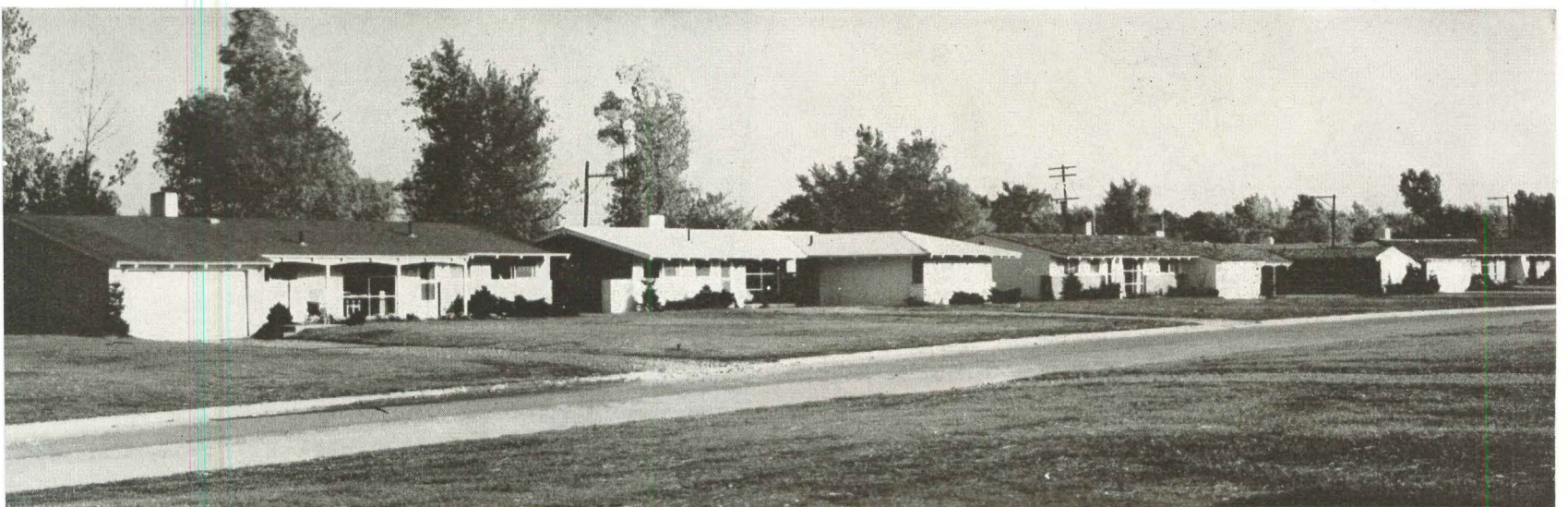
of big windows and open floor plans?

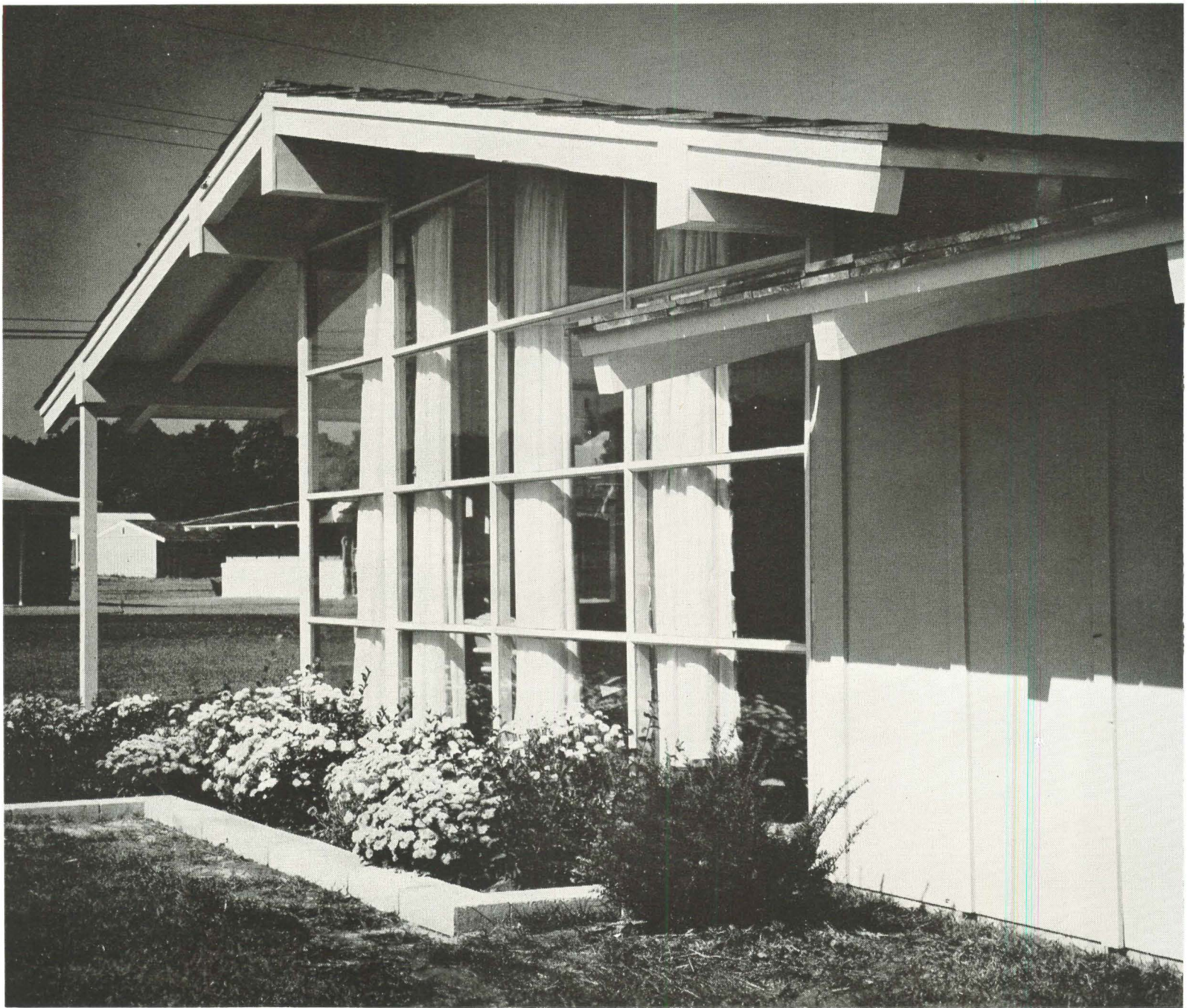
With his long, low houses on lots 80' or 90' wide, Scholz has created neighborhoods that look very expensive. House at left center, below, is Model C, 66' long. Next right is Model B, 52' long with garage at front. Streets developed later had sidewalks. Landscaping costs \$350 per house.



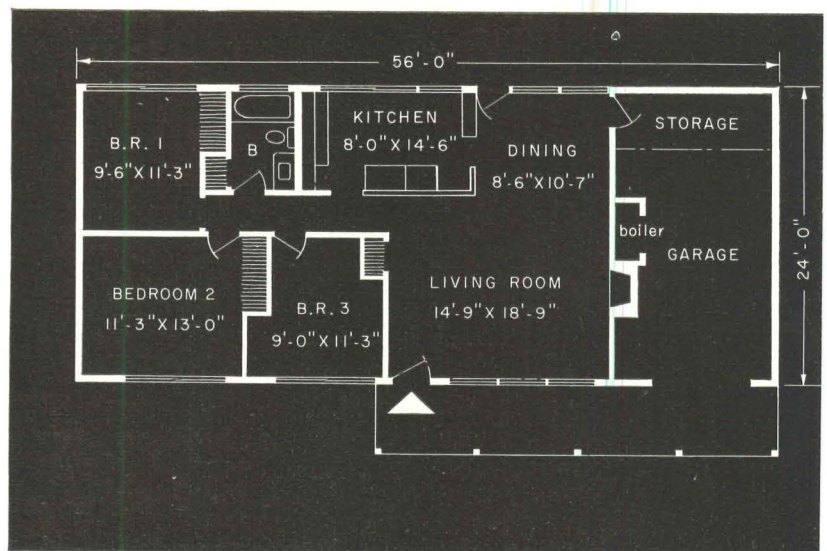


House above is Model C, with 1,260 sq. ft. plus double garage. Originally it sold for \$17,950 but is now \$1,000 more because of larger, more costly lot. This conservative facade conceals an open plan and rear window walls.

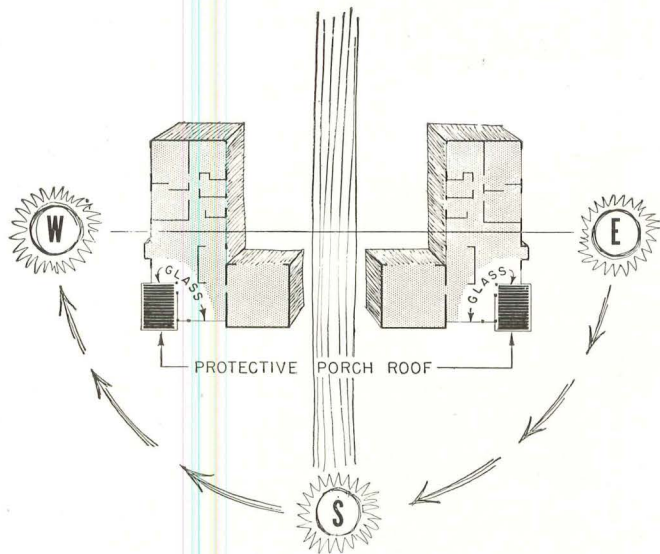




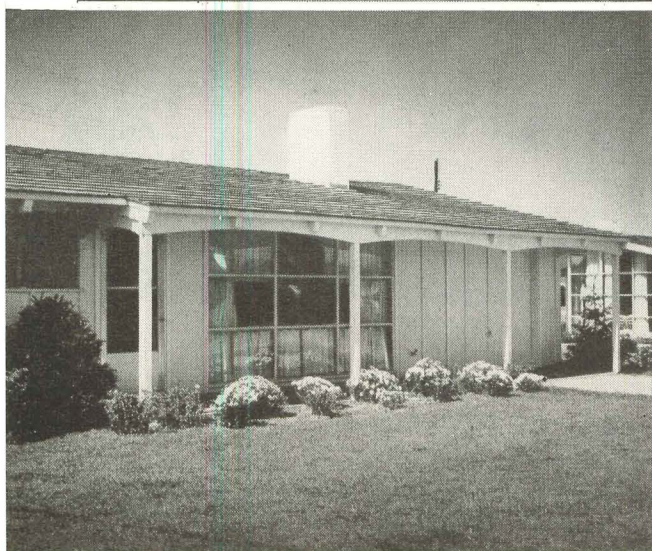
Glass end of Model B is Scholz's most advanced feature, yet 25% of families bought this model. This double-glazed end is always opposite a blank wall of house next door and is also designed to face south. Room inside is always activities area and adjoins porch, left. House has only 56,000 Btu heat loss despite all this glass.



Floor plan and facade of Model A, the smallest house, which now sells at \$15,950. It has 1,050 sq. ft. plus garage. Bedrooms and bath are practically the same as in larger houses, but it is otherwise 150 sq. ft. smaller. Because it is \$3,000 cheaper than B or C, half of Scholz's buyers chose this type. Photo, opposite, is of living room in Model A.



In his floor plans and careful details Scholz gives his buyers many custom-house features. Buyers know that big glass walls should face south, not west, so Scholz has two floor plans for Model B (shown opposite) with glass gable facing south on both sides of a north-south street. Large overhang and porch let in winter sun, block it in summer.



Why do Scholz houses sell? Because in anybody's language they are a bundle of value. Scholz believes they are about \$5,000 cheaper than the same size houses he has been selling in custom designs. Other builders who go to Toledo to see for themselves what Scholz is up to are impressed by several points:

The neighborhood is excellent. Lincolnshire is five or six miles west of downtown Toledo, adjoins Old Orchard and Ottawa Hills, is known to everyone in town as a good address.

Scholz believes that good houses deserve good lots. He is convinced that people in this price class will pay extra for big lots. The wide lots keep his houses from looking cramped, and their 140' depth gives privacy at both front and back.

His houses do not look monotonous. While his basic rectangle is about the same, his three models (each of which has several front elevations) and the garage variation in Model B, plus his exterior color designs and changes between gable and hip roofs, all help to give his streets an attractive appearance.

Houses look long and low, do not seem too "modern" from the street. Model A has a 9-pane window in the front living room, but the larger glass areas in Models B and C are at the rear or one end. His double glass plus wall and ceiling insulation keeps heat loss surprisingly low: 41,000 Btu in A, 56,000 in B, 52,000 in C.

For their price, these houses give a feeling of luxury. The large lots, wide overhangs, big windows, attached garages, beamed ceilings and open plan all help them to look larger than they are, outside and inside. Color schemes are the kind that buyers see in model houses selling for twice Scholz's prices. He has added luxury touches such as the ceramic tile bathroom, fireplace, recreation room and concealed cornice lighting, which make a buyer feel he is getting the equivalent of power steering and an automatic gear shift.

Scholz did a good selling job. He built three model houses, got Toledo's big store, Lasalle's, to furnish them, then bought a big advertisement in the newspaper to tell about them. The store also ran a full-page ad. He opened on July 4th and had three completely furnished, landscaped houses to show the crowds who came. Later he ran smaller newspaper ads each Sunday for two months. Some 80,000 people saw the models in three months.

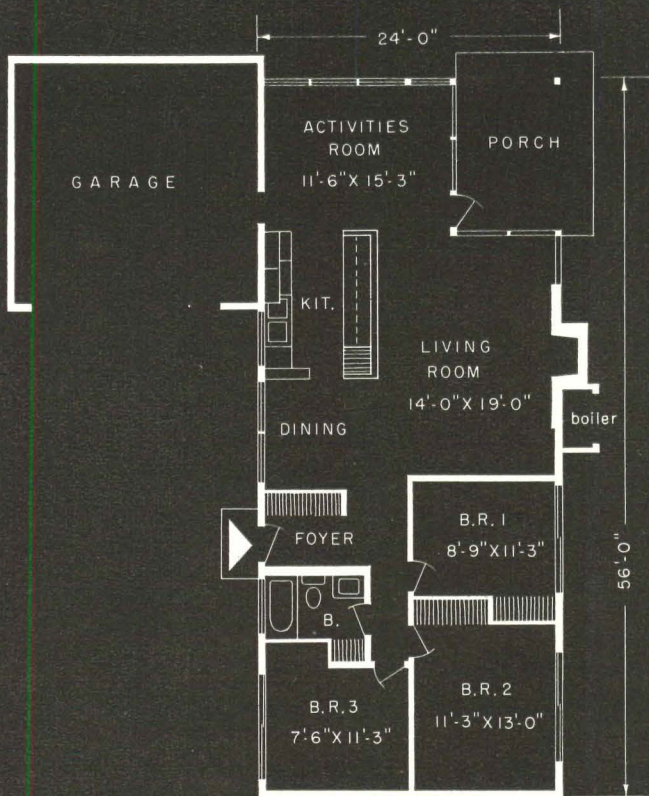
Merchandising began on the drawing board. Sales were no problem because the houses were so well designed they practically sold themselves. But the design is far more than skin deep.

"These houses reflect an actual cost of \$9 a sq. ft.," says Scholz, "an extremely low figure in the Midwest for this kind of construction. Toledo has one of the highest labor rates in the country.

"Our prices are made possible because these are probably the most thoroughly engineered houses ever built. Eight months of continuous work went into the plans. Every board, nail, and piece of pipe was completely detailed. Every operation has been analyzed for the development of labor-saving techniques." (See p. 150).

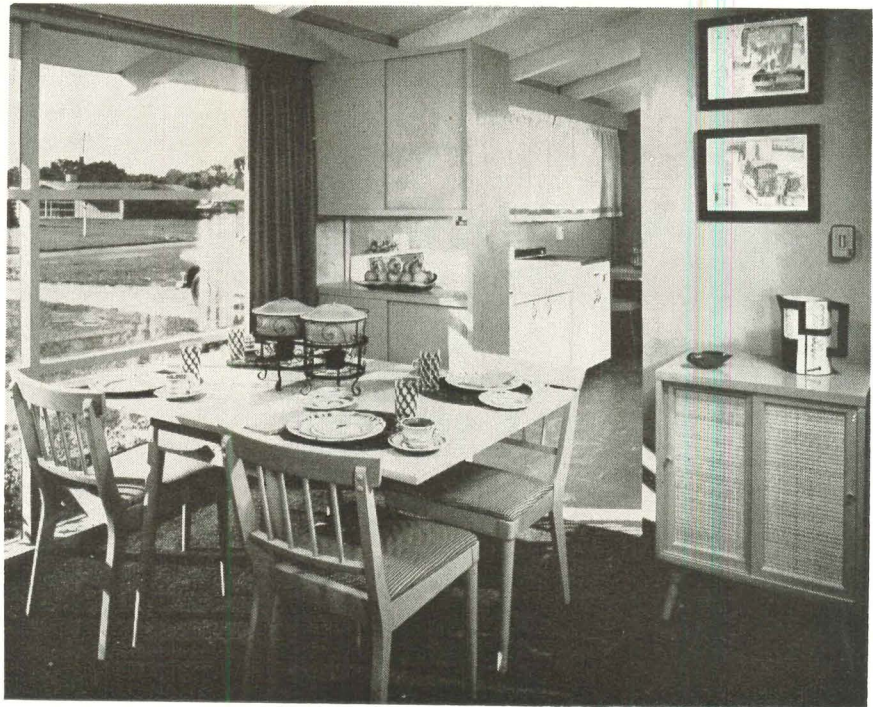
The careful planning by Scholz and his staff of engineers and draftsmen brought prices down, gave buyers greater livability and included such thoughtful ideas as shifting the position of the glass gable wall and porch for Model B (drawing above, left) depending on whether it is erected on the east or west side of the street.

It is this kind of attention to detail that helps make the difference between good modern design and poor modern design. In a city not too far from Toledo, another engineer-turned-builder is also building "modern" houses, so poorly designed that they are not selling nor do they deserve to. His houses are a hodgepodge of bad features and he is causing other builders to turn away from big windows, open plans and other hallmarks of contemporary houses.

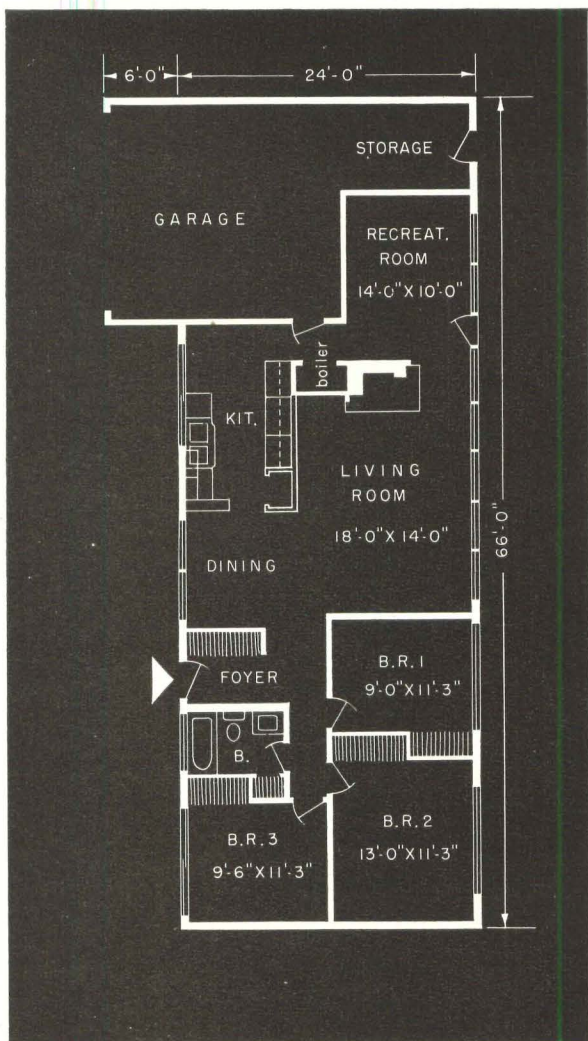


Plan and living room of Model B. In photo, activities room (which could become fourth bedroom), is seen through living room. Porch is at right. Wall at left does not go to ceiling, kitchen is beyond it. The high, beamed ceilings make rooms seem larger. Model houses were decorated by Dorothea Seeley Davis of LaSalle's store.

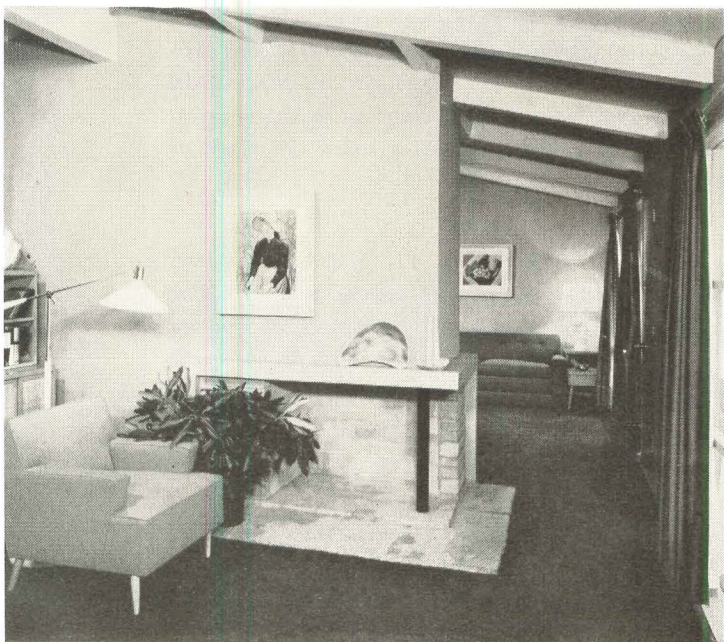
These two photos are of opposite ends of the kitchen-dining-room area, almost identical in Models B and C. All mechanical equipment is an extra except exhaust fan. In Models B and C the kitchen faces street. In Model A it is at rear. Kitchens are strategically placed to eliminate traffic through the living room.



Large floor-to-ceiling window gives dining room light and adds to cheerfulness of kitchen. Window sections are made in Scholz's own shop, then double glazed on job. Houses now have radiant warm-water heat in slab, which will soon be changed in new houses to warm-air perimeter heat. Most families bought wall-to-wall carpets.



Plan of Model C, which has activities room beyond fireplace wall in photo below. Plan shows good circulation, as members of family can enter through garage to kitchen and go to bedrooms or bathroom without passing through living room. Front door opens on foyer, with coat closet immediately available. House has 1,200 sq. ft. plus garage.



Scholz's floor plans and interiors attract buyers. Living rooms look big and impressive, are the kind that families have been seeing for years in consumer magazines in houses that cost a lot more money.

The high beamed ceiling, the front-to-back living room and the floor-to-ceiling windows give even the smallest house a feeling of spaciousness. Partition between living room and kitchen does not go to the ceiling, lets each room borrow light from the other. The living room might easily borrow air and smells from the kitchen too, but an exhaust fan overcomes this nuisance. Fifty per cent of families bought the less expensive Model A, and 25% chose each of the others.

Models B and C are alike in these respects: bedrooms, bath, entrance foyer, kitchen and dining room are the same except that Model B has no breakfast nook, since recreation room serves this purpose.

But the two houses are different in their garage and activities-room layout. Model B is 56' long because the garage sits in front of the activities room, while C is 66' long. Model B has a glass-gabled end and an 11' x 14' porch. This model is considerably more extreme than Model C in its unusual glass areas. For buyers who want less glass, Model C, has its all at the rear. Model C has no porch.

Model A, the smallest house, is 56' long. It has bedrooms and bath the same size as B and C except that the guest closet projects into one bedroom. It has no entrance hall, recreation room or porch, a slightly smaller kitchen and living room. All have fireplaces and a door to the rear terrace

Each house has its boiler room in a different position. In A it is in the garage, in B in an outside room next to the chimney at the back of the house. In C it is between the fireplace and the kitchen. Up to this time the houses have had wet radiant heat in the slab. This cost \$950 and Scholz is switching to perimeter warm-air heat to save \$200; he would stay with radiant heat if plumbers' prices were reasonable; buyers can add air conditioning later, and there will be less overheating from the slab when sun pours through his south windows.

Scholz uses an enclosed garage because he thinks people in a slab house need it for storage and because he believes a garage makes a house look better. Toledo gets a lot of snow some winters and an enclosed, attached garage is a sales feature.

Plans are open but livable. The floor plans are probably the most open that Toledo has ever seen, but people like them. In B and C the relationship between garage, kitchen and activities room is good. On wet days, or when groceries are brought in by the family, people can go directly from garage to kitchen. To get to the front coat closet or the bathroom, they need to cross the dining room. However, the living room is not a runway. If children are playing in the garage or activities room, they can cross to kitchen, bathroom or bedrooms without disturbing people in the living room. Children going to the bathroom at night can be seen from a small portion of the living room, but this is not much of a liability.

In houses of this price class, some builders feel they must add a powder room or half-bath. Scholz has had this arrangement in many of his more expensive houses but did not do it here because of the cost.

In Models B and C the activities room could be made into a fourth bedroom by adding solid or folding doors.

Plan A, the smallest house, is in some ways a better buy than the larger houses. It has almost as much room everywhere except in the garage but it lacks a recreation room. Because it has no front entrance hall, guests enter directly into the living room, but they get an impressive sight because of its large size, which will help to overcome the lack of formal entrance. Scholz says he makes proportionately less profit on the small house.

Scholz's engineering saves money. Visiting builders inspecting Scholz's many pages of drawings for each model recognize immediately the work of an engineer. Every stud, window, eave beam and sheet of dry wall or sheathing has its designated symbol and is listed on a bill of materials. It is clear that he builds from standardized parts and his real savings come from work on the drawing board.

On his earlier, conventionally built houses Scholz used as many man-hours on interior finishing as he did on erection. Now he uses 44 hrs. on interior finishing, 350 on framing and erection. He estimates he saves \$500 per house by his framing methods.

▶ *Use of standardized parts and panels* that require almost no sawing on the job. There is so little scrap lumber from each house, "it can be carried away in a bushel basket."

▶ *Many identical dimensions* for all three houses, which include front to back dimensions, wall heights, roof pitch; bedrooms and bath identical; similar plumbing; standardized windows.

▶ *Inclusion of the ten common-sense methods* recommended by the University of Illinois (see p. 152). One exception: he prefers a 4' module based on outside, not inside, dimensions, although he is able to use 4' x 7', 4' x 8' and 4' x 12' plasterboard.

▶ *Precutting of all lumber in his shop*, and considerable subassembly including sash, frame and ready-hung door units; the subassembly of a double plumbing wall which also has the copper water pipe assembled in it for the bathroom.

▶ *Reduction of millwork costs* to one-third of conventional type by use of a combination jamb, casing and stop unit milled from one piece of lumber. (See sketches opposite.)

▶ *A sliding type of window* for bedrooms and kitchens, made of these milled parts, which costs less with double-glass than most conventional single-glass windows. Tops of these windows and all window walls are immediately under eave beam, eliminating headers and extra framing.

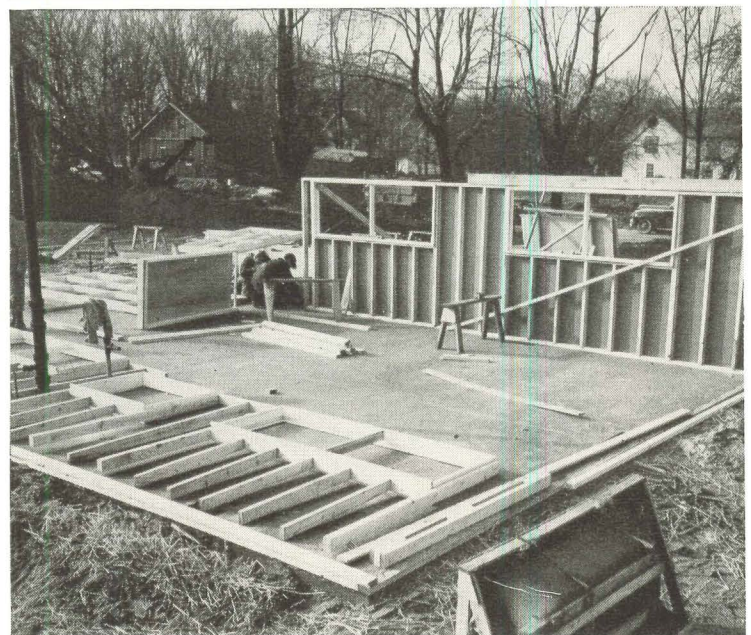
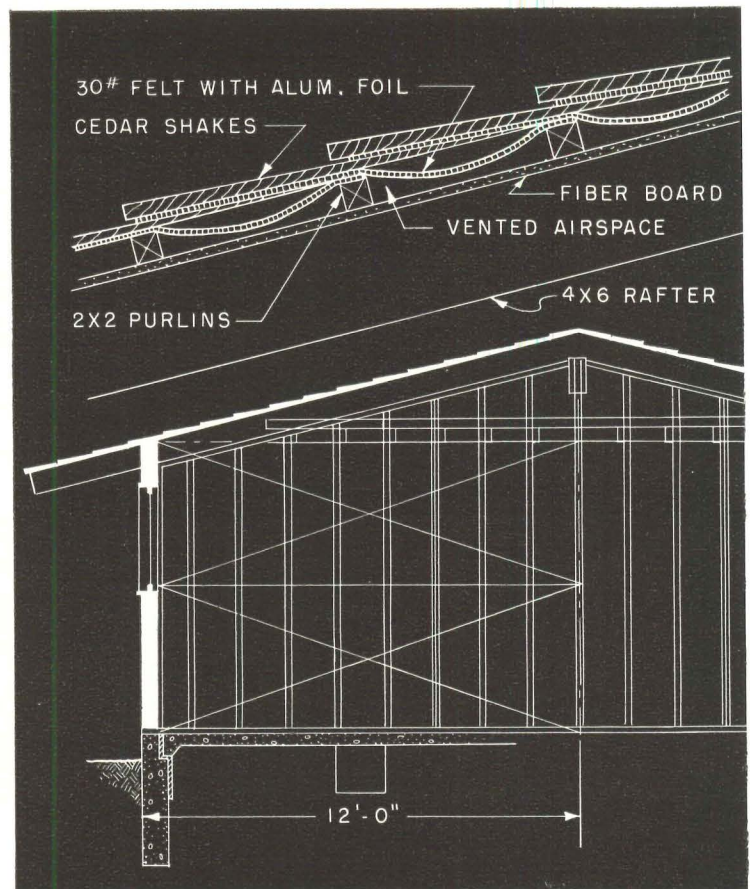
▶ *Foundations dug with a trenching machine*, which saves 24 man-hours per house over hand trenching. Foundations are poured using two standard steel curb forms. Three men set forms for a 66' x 30' house in 4 hrs. A crossbar and steel stakes, permit leveling in minutes.

▶ *Fireplace and chimney* (see opposite) are made in two pours of lightweight concrete with a high lift loader, which permits Scholz to include a fireplace at less cost than a single-flue masonry chimney without fireplace. Total cost of labor and materials has been \$216, but Scholz is cutting this to \$128 by saving in masonry time. Two forms made of plastic-faced plywood cost \$350, can be used many times.

▶ *Use of 4' x 8' asbestos sheets* for exteriors, plus battens, to save two-thirds the cost of wood siding. They are rotproof, fireproof, termite proof, moisture resistant and a wonderful paint base.

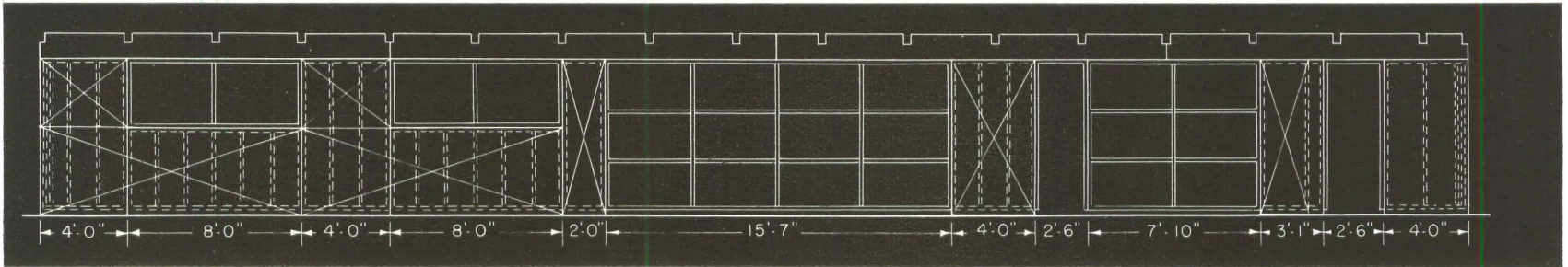
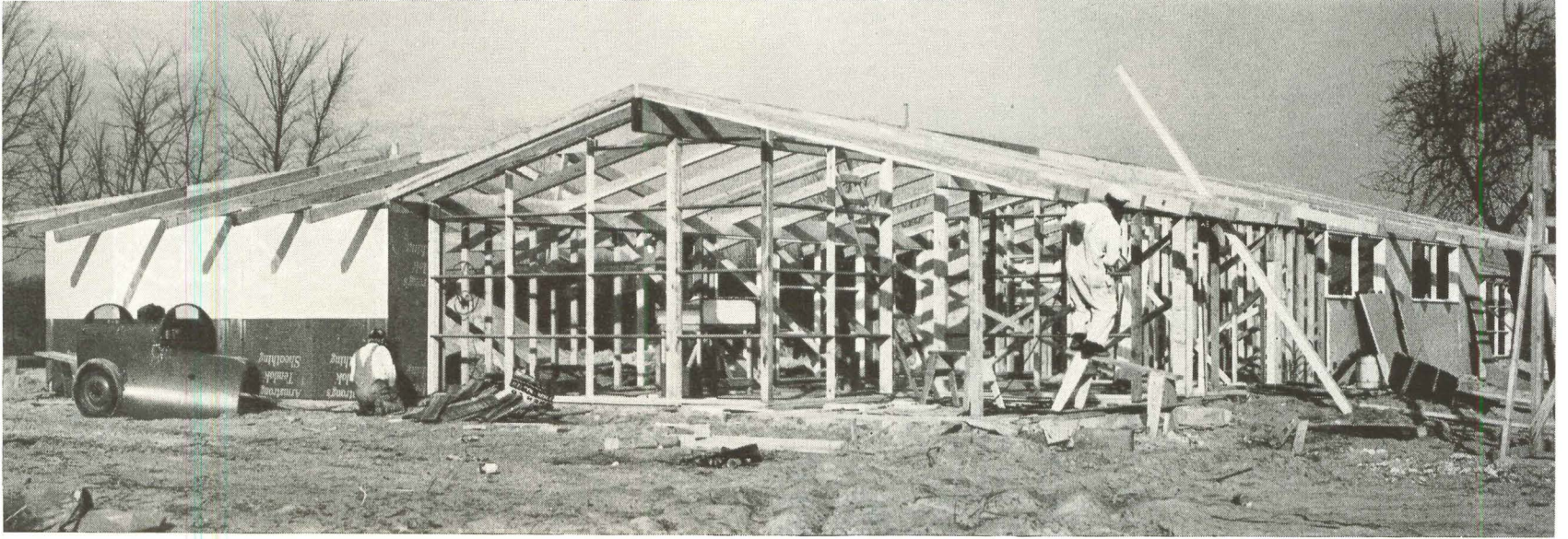
▶ *Doing most of his own work*, Scholz subcontracts only heating, plumbing, wiring and bathroom ceramic tile. His unionized crews get an incentive bonus that boosts hourly rates to about \$3.50 but costs have dropped because men get a bonus if they exceed a quota.

Hours to build Model C. To build a 66' x 24' Model C house takes these hours of labor: exterior and interior walls including sheathing and asbestos board, 138; roof rafters and 8' x 16' ceiling panels, 120; shakes on hip roof, 55; on gable roof, 46; dry wall, 57 plus 34 for taping and sanding; to set door frames, closet partitions, ceiling hatch, garage door, vent fan and heater, 53; for finish carpentry and setting kitchen cabinets, 42; interior painting, 82; exterior painting, 66. Partial list of costs: for glass and labor but excluding frames his double-glazed windows cost \$325 for Model A, \$567 for B, \$404 for C. Septic tank installed, \$215. Plumbing, \$900. Radiant heating, \$950. Wiring & fixtures, \$546. Total costs \$9 a sq. ft., incl. garage.

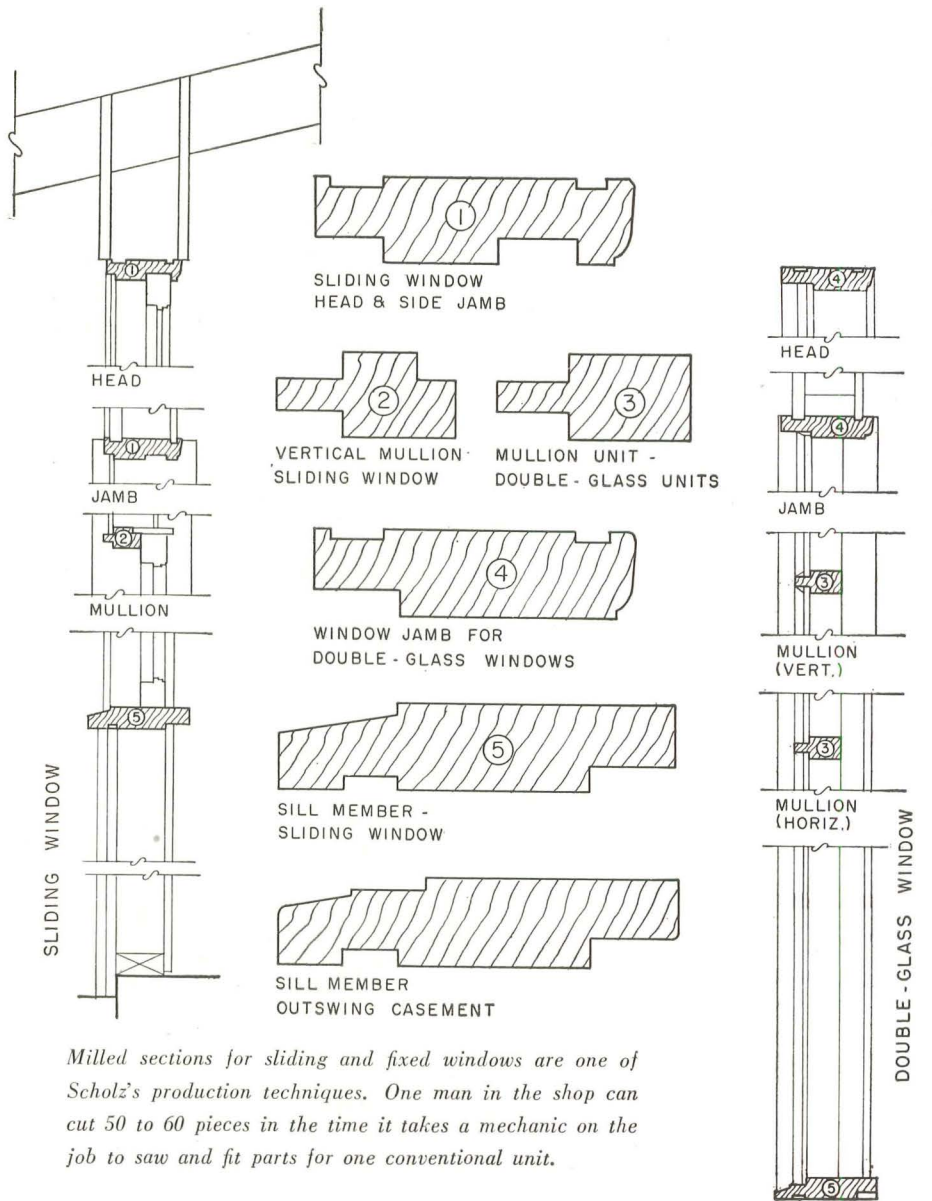
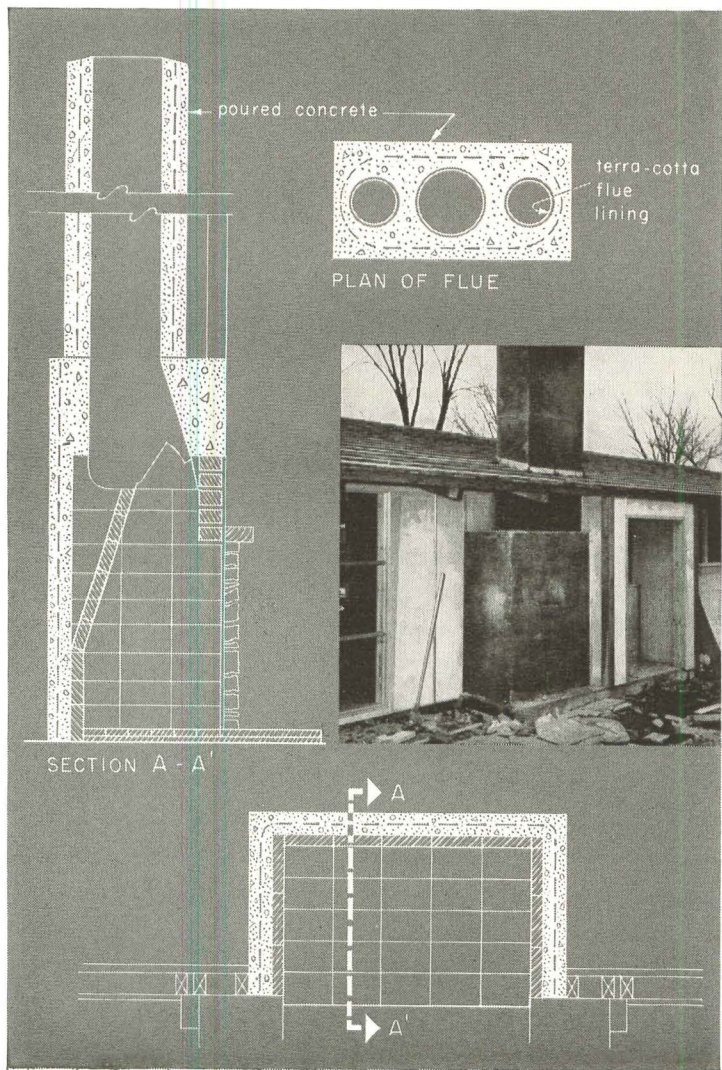


Drawing at top of this page shows closed gable end and details of roof insulation in Model B. Roof insulation overlaps like shingles. Photo is of bedroom end of any model and illustrates how wall panels are made on slab of precut members, with insulating sheathing added before wall is tilted up.

Two top drawings show how 4' module accommodates sheets of sheathing board and exterior asbestos siding without cutting on job. The sliding windows are designed to sit over a full 4' x 8' sheets of both exterior and inside dry wall. All windows go to top plate.



Fireplace and chimney, below, are made of poured, insulating concrete. A high-lift mixer has enough material for one complete unit, pours lower half of one job, top half of another. Job now costs about \$220 but will soon be reduced.



Milled sections for sliding and fixed windows are one of Scholz's production techniques. One man in the shop can cut 50 to 60 pieces in the time it takes a mechanic on the job to saw and fit parts for one conventional unit.



You know these 10 ways to cut costs . . .

. . . but how many do you use?

**You don't have to be a mass builder
or a mass buyer to cut your labor payroll 20%
and your total costs 10%.**

**All you have to do is apply these
10 methods
that almost
every builder and almost every
builder's architect knows**

Do you remember the old story about the salesman who tried to sell a farm magazine to a farmer?

"What would I want that for?" asked the farmer.

"To help you learn better ways to farm," said the salesman.

"Shucks, son," replied the farmer, "I don't farm now half as good as I know how."

Sometimes I get discouraged and wonder how much good comes of all the research that is being done on better and more economical ways to build small houses. We have already developed, tested and approved many ways to cut homebuilding costs, yet dozens of even the biggest builders still go on building their same old ways.

Here are 10 ways to save money in construction. Their value has been proved so many times that they are now beyond question. Taken together, they assure a saving of at least 10% on the total cost of a house. How many of these tried and proved methods are you using on your houses?

**JAMES T. LENDRUM, director
Small Homes Council
University of Illinois**

1. Build on an interior module

An interior module gets right to the heart of the cut-and-fit building industry. The common denominator of a house is the known dimensions of building materials (wallboard, for instance, comes in 4' x 8' and 4' x 12' sheets—multiples of the basic 4" module approved by AIA, NAHB and the Producers' Council). Stud spacing 16" o.c. (four modules) fits precisely into this scheme of building.

An interior module makes it easier to coordinate all dimensions of a house with building materials so there is a minimum of cutting and fitting. The builder gets a double saving—in labor and in materials.

The interior module can be put to work on the outside of the house, too, by applying 4' x 8' sheathing vertically or horizontally on modularly spaced studs. (Engineer Scholz does this on his houses, see p. 145.)

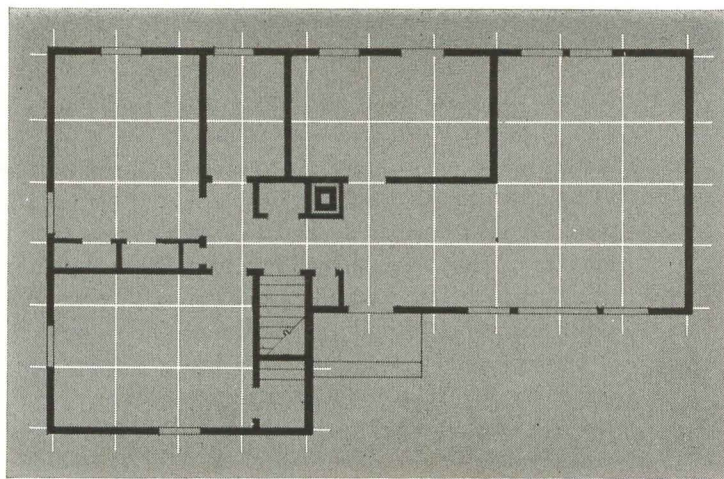
Small Homes Council finds it easier to control the interior size of the house and do most of the cutting and fitting on exterior finish materials. Here's why: if the interior module is not used, many pieces of modular wallboard must be cut and fitted. Materials like bevel siding and shingles, not produced in modular units, might just as well be cut and fitted on the outside since they must be cut anyway.

An interior module does not give dramatic savings in one fell swoop. It is a tool that allows the builder to save a few dollars here, a few dollars there. But on the whole series of operations in housebuilding these savings can add up to several hundred dollars per \$10,000 worth of house.

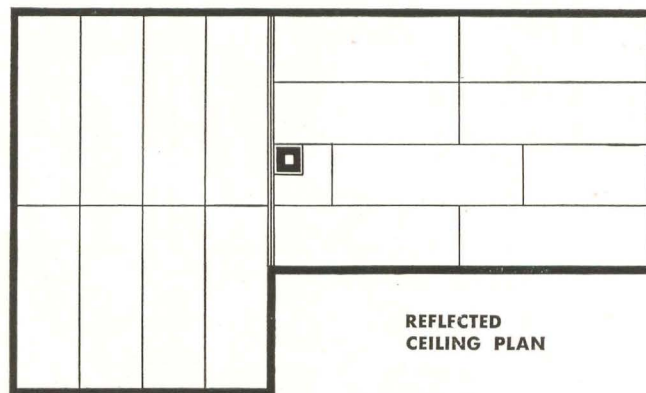
Framing members should be precut to realize the efficiencies of the tilt-up method (see next page). Precutting can often be done at the mill.



Levit Bros.



Interior dimensions of this house were designed to fit large sheet materials (below).



Builders and architects must take advantage of the economies presented by standard parts sized to fit standardized material. And it does not mean a crimp in the architectural style.

2. Precut all framing material

The expensive habit of cutting and fitting each structural member as the work progresses is a result of working from incomplete plans. Complete, carefully engineered working drawings reduce time and costly error due to guesswork in the field. By-product is a cutting schedule. (If possible, buy precuts from a mill.)

What do you get from precutting?

- ▶ A slight reduction in on-site sawing
- ▶ A sizable reduction of idle time
- ▶ Careful use of odd lengths for stakes and "cripples"
- ▶ Elimination of workman responsibility for frame design
- ▶ Improvement of framing structure.

Logical step after precutting is to preassemble all possible components: roof trusses, gable ends, stairs, even framing components such as rough door openings.

3. Tilt-up exterior walls

Exterior walls should be assembled on the subfloor one at a time. Reason: two men working on the level can do as much as three men on scaffolding or ladders. Added benefit: worker safety. From 20% to 30% is saved in labor over the conventional method of setting studs in place vertically. The tilt-up method requires advanced planning which in itself forces a builder to be more efficient. When a frame is lying flat and the sheathing is to be applied he is more likely to see, for instance, that a window can be moved over 4" to save on cutting the sheathing. When he starts to think of more than one thing at a time, he starts to save money.

Precutting and tilt-up eventually force the study of framing at the logical place, the drafting room.

Immediate advantages of tilt-up:

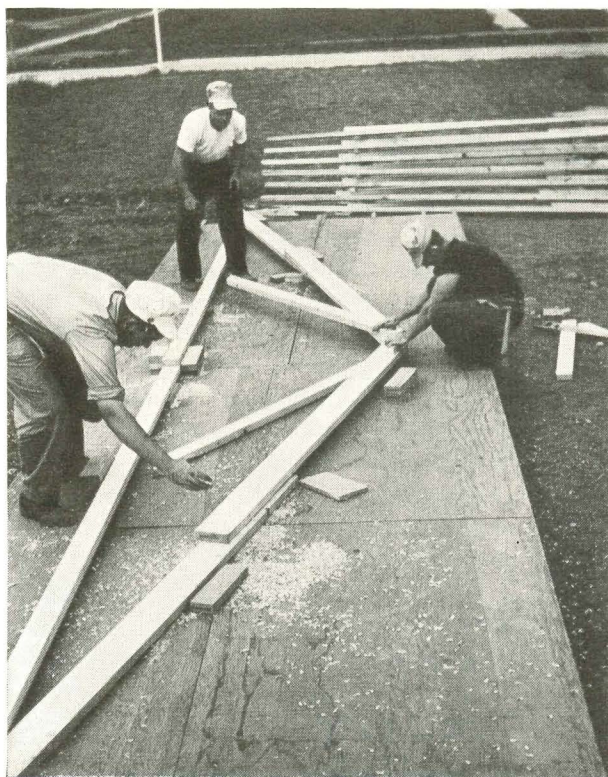
- ▶ Materials can be aligned, spaced and held in position more easily.
- ▶ Nailing is easier on the horizontal.
- ▶ Walls go up faster.

Sheathing should be applied before tilting. Greatest mistake is to tilt the wall too soon. Use sheathing material that can be supplied in large, accurately cut sheets to fit over modularly spaced studs. Walls as long as 40' can be tipped into place in one big push. The technique can be used successfully with a variety of sheathing materials. Although the sheathing of exterior walls is not new to many builders, application of siding is. SHC recommends finishing exterior as far as possible before tiltup.

Not recommended: hanging of doors. Reason: switch from rough to finish carpentry is inefficient, uneconomical.

Over-all labor saved when sheathing is applied while wall is lying flat is over 20%.

Below three men, working on a job-built jig table, quickly construct roof trusses from pre-cut lumber. After completion, trusses can be stacked in neat piles within easy reach of the houses.



Lionel Freedman; (others) Small Homes Council

When sheathing is nailed to studs while horizontal, each man can work efficiently without waiting for others.



Although assembly of wall frame on subfloor is familiar to many builders, the continuation of pre-assembly to include sheathing is far from common.

4. Use a roof truss

Exterior walls, overly strong in the first place, will easily bear the weight of trusses, finished roofing and a snow load. They need not be made stronger.

Trusses can be bought already cut and partially assembled from many lumber yards. Assembly can be completed for spans from 20' to 32'. Partially assembled trusses can be stored in a minimum of space, if built on-site, or hauled to the site easily (largest member is usually only 14' long).

Jig tables for trusses can be built on the job for just a few dollars. Gable ends can be built on the same jigs and finished completely before installation.

A 25' truss was built by SHC for only \$8. Rafter and joist construction for the same span was \$11.40. Labor saved on a roof is cut at least 25% by use of the truss. Bureau of Standards testing nailed trusses for larger spans found savings of 28% in material, 36% in labor, 29% in total cost.

- Immediate advantages of the truss:
- ▶ It can be preassembled, saving labor costs.
 - ▶ It can be erected quickly, thus putting the job under cover sooner.
 - ▶ Complicated bracing and scaffolding is unnecessary.
 - ▶ Erection is simple because, though bulky, it is light in weight (for a clear span of 24', weight would be 120 lbs.).
 - ▶ It produces a more level ceiling.

Most important, use of the truss gets workmen inside the house faster and permits many more economies inside a single open room.

Builders must use sound truss designs (see NAHB's Trade Secrets house, p. 99 and H&H, April '52, p. 139). Builders of the 1½-story house may soon be able to take advantage of the economies of a truss permitting an expansion attic (see H&H, Sept. '52, p. 110). This truss is now undergoing rigorous tests at the University of Illinois.

5. Apply wallboard on both ceiling and side walls before partitioning

Each can be finished as one continuous operation. Sheet materials for side walls can be used with a minimum of waste if a detailed layout is made in advance. Plasterboard sheets 4' x 8' can be installed vertically. The 8'-plus ceiling height will minimize cutting.

Wherever possible 4' x 12' sheets should be used, especially in the ceiling, to reduce the number of pieces to be handled and the number of joints to be treated. Two sheets are just 8' high when used horizontally. Where possible, joints in ceiling should be made in closets.

Trusses should be a maximum of 2' o.c. to keep the finished ceiling from buckling. Taping can be reduced by preplanning the layout of all sheets to reduce the number of joints.

Labor saved by applying wallboard in the open room (and later to the interior partitions) is a whopping 50% over the conventional method of applying wallboard to ceiling and walls after the house is divided into rooms.

It is most convenient for workmen to apply insulation batts just before each sheet of wallboard is placed: they won't have to crawl through cramped attic space or try to hold insulation in place if it is applied as ceiling or side walls are finished.

6. Lay entire floor before partitioning

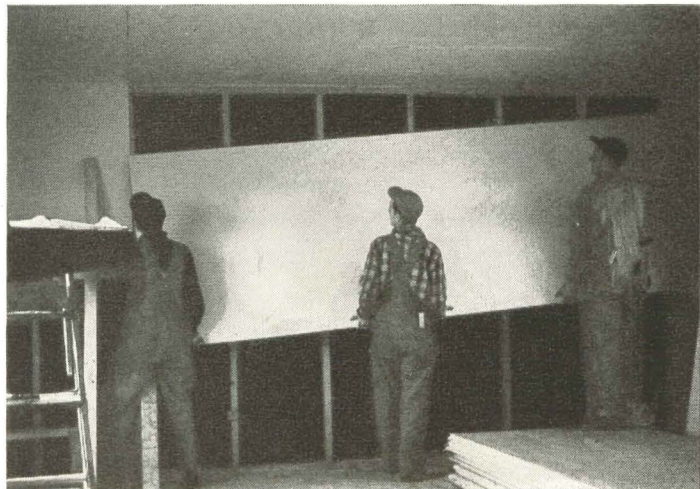
The single room provided by a truss roof is a roomy workshop where workmen can operate efficiently with power machinery. Compare it with the maze of studs through which they must worm material in conventional building.

Simple rule of thumb in flooring: the bigger the area to floor, the lower the unit cost. Hardwood flooring can be started from any point in the house and laid across the entire area. Material of any kind can be stacked at convenient intervals. The only cutting and fitting to do is around the outside perimeter or where a change—as from hardwood to tile—is necessary.

Flooring can be protected by laminated building paper. Lath or battens can be used to cover joints between sheets. Labor saved: 25% over conventional flooring.



The 16 trusses used on this house weigh only 70 lbs. apiece, are easily handled. Light metal framing anchors are used to fasten trusses to wall plate. Nails can thus be loaded in shear.



Two 4' x 8' sheets can be applied to side walls horizontally with no cutting or fitting.



Flooring can be started at either end and sweep across an area uncluttered with a forest of studs.

7. Place windows at top of walls

Cheapest and best placement of windows is directly under the plate. Placement at the top is cheaper because it eliminates an extra header. It is better because it simplifies framing and application of wallboard. (The area over a window is a difficult spot to make architecturally attractive anyway.)

Windows should be grouped to eliminate the fitting of many small pieces. As much time is needed to fit a short length as a long one.

Placed at the tops of walls windows have these added advantages:

- ▶ They permit more daylight to enter the backs of rooms where light is needed most.
- ▶ They borrow space from outdoors psychologically.
- ▶ They permit cleaner-looking architecture.

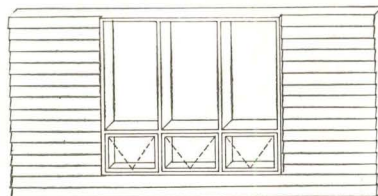
Windows should be set up and glazed before delivery to the job. Windows can be designed to fit between studs 2'-8" o.c. (8 modules) or between studs 4' o.c. (12 modules).

When fixed glass is used, 2" x 4" studs can be used as frames. If the section to hold the glass is sanded and painted before installation, carpenters will be careful not to mar the studs. Since the present trend is toward larger windows, fixed glass is one key to modernizing design; the in-place cost is not excessive (see illustrations).

Costs per 16' wall section

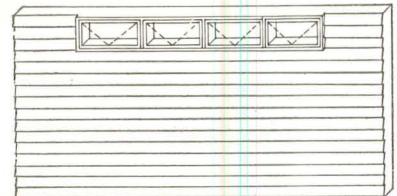
Using a window of its own design, right, SHC found it cost no more to modernize and lighten up a house with an extra large, triple SHC window section than it costs to install a medium-sized double-window unit flanked by a pair of shutters. Costs shown do not include general contractor's profit or overhead, are based on '49 material costs.

\$ 22, 11, 38, 38, 11, 22

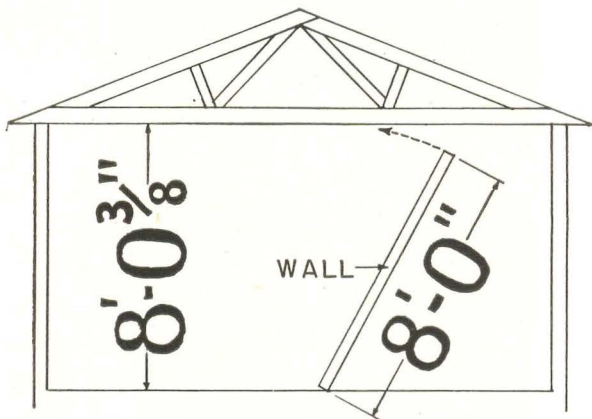


3 SHC WINDOWS - MEDIUM
TOTAL \$180

\$ 22, 36, 36, 36, 22

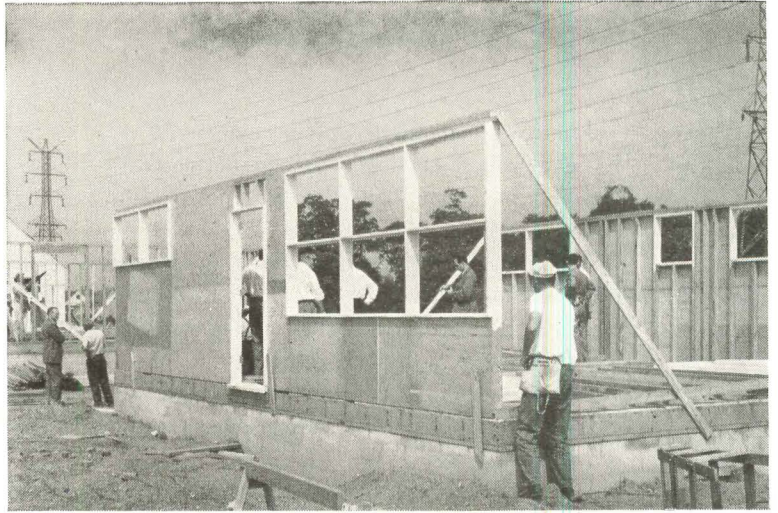


4 RIBBON WINDOWS
TOTAL \$190



A clearance of from 3/8" to 1" must be provided for interior partitions so wall can be tilted upright with sufficient clearance at ceiling and to allow for variations in building tolerances. Partition frame is economically covered with gypsum that is just 8' high. Application of wallboard is best made after frame has been tipped up.

Jerry Durbin



Transom over door makes neat line with windows all placed directly under plate

Costs per double stud space (32" wide).

\$22



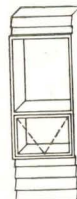
SOLID WALL

\$36



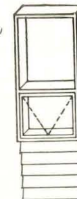
RIBBON WINDOW

\$40



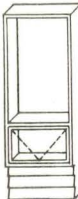
SHC WINDOW (MEDIUM)

\$40



SHC WINDOW (MEDIUM)

\$38



SHC WINDOW (EXTRA LARGE)

8. Make ceiling heights 8'-0 3/8"

Since partitions do not bear the roof load when a truss is used, they can be pre-cut and assembled on the finished floor and tipped into place. For efficient installation, partitions should be cut 3/8" shorter than the ceiling height, or just 8'. Collaborative NAHB and AIA committees on builder house design have recommended a standard ceiling height of 8'-0 3/8" for all small houses. Builders must judge for themselves just how much over 8' their ceiling heights should be, depending on the skill of their labor force in working to close tolerances.

Partitions 8' high allow application of 4' x 8' sheets of wallboard vertically or horizontally. Partitions should be shimmed up to the ceiling before wallboard is applied: a 2" base mold is adequate to cover the 3/8" (plus or minus) crack between partition and finished floor.

To avoid conflict the order in which partitions are erected is important. A cutting and assembling area in one of the large-room areas is best. Partitions farthest from the area should be erected first.



Closet wall developed by SHC under sponsorship of Lumber Dealers' Research Council has multiple shelf unit for stiffening thin wall panels, provides flexible, accessible storage space.

10. Use a double wall around plumbing

Frequently a plumber virtually cuts a house in half to get his pipe in place. Running pipe through studding is like a man threading the needle in a sewing machine. If two thin walls are built around vertical soil and waste pipe and supply lines (assuming all the plumbing is concentrated in one wall), notching, cutting and fitting of standard studding around the plumbing is unnecessary.

The ease with which a plumber can work when he does back-to-back plumbing before the plumbing wall is erected should show up in his bill. (Savings may often go in the plumber's pocket depending on the relationship between him and the builder.)

Builders should work with their plumbers in advance to avoid friction and to show them why the plumbing can and should be done cheaper. Pointing out that the plumber installs the complete supply and drainage system before the carpenter builds the wall should turn the trick.

Editor's note: Small Homes Council is a research agency supported by the University of Illinois and by grants from such outside agencies as HHFA and the Lumber Dealers' Research Council.

9. Use storage walls

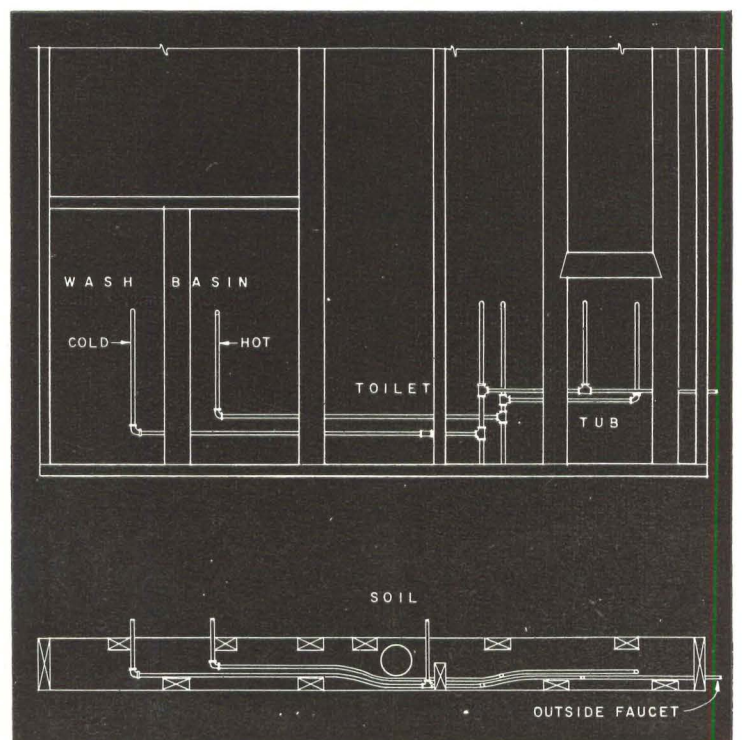
A majority of surveys on storage space in the house indicates a need for more storage space in every area. One of the neatest building tricks is to use storage walls that serve the dual purpose of closet and interior partition (see H&H, April '52, p. 138).

Closets being built by many contractors are overengineered and expensive. They occupy more space than necessary and often result in inefficient storage. A conventional door-in-a-wall front limits access because sides and space near the ceiling are blocked by door jamb and head.

Improved closet design can easily be achieved by use of full-access closet fronts built on-site or bought from the factory as a complete package.

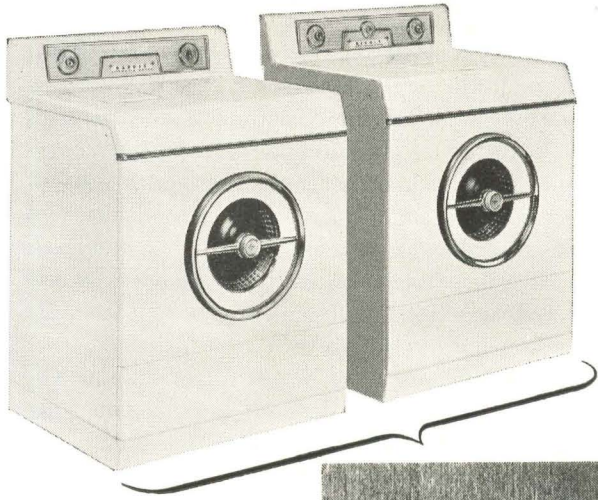
Industry is producing closet fronts for as little as \$20 less than the most economical door-in-a-wall. One type costs only half as much and can be installed in a 4'-wide, 8'-high closet in half an hour's time.

A variety of storage walls is manufactured in various parts of the country. When shipping charges are not prohibitive, they offer an economical way of achieving modern design at low cost. The SHC-designed storage wall can be built on site 20% cheaper than conventional stud-wall closets.



In detail above, double wall around plumbing used in Scholz house (see p. 144) shows how neatly studding is placed to avoid notching around pipe.

TWO-IN-ONE

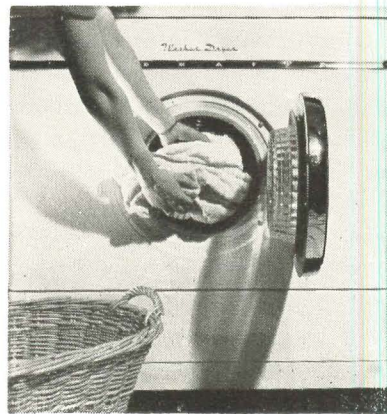
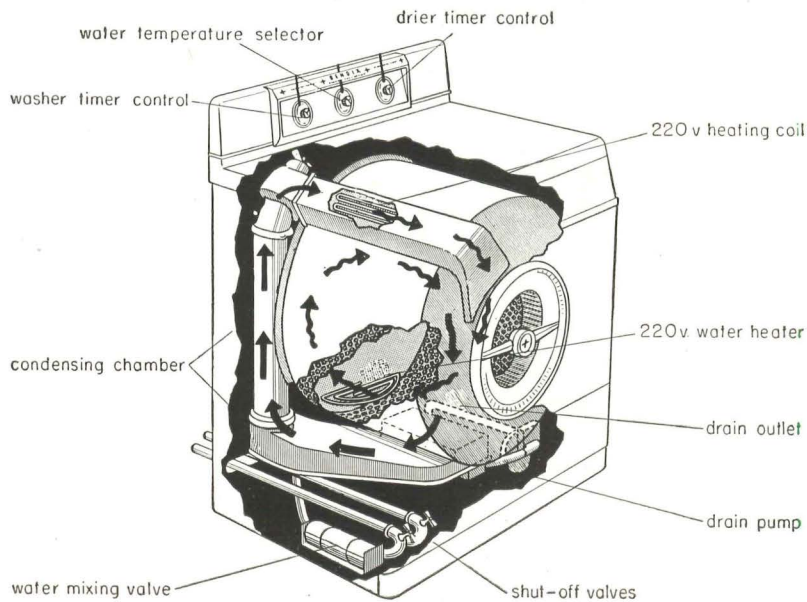


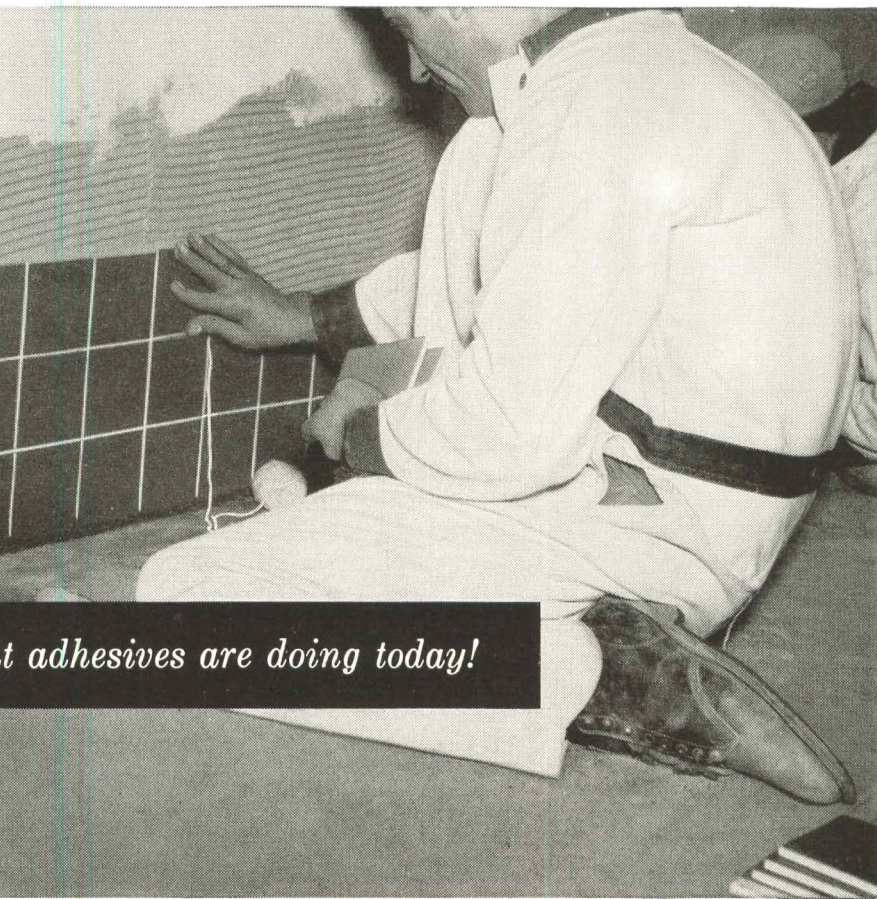
LAUNDRY APPLIANCE does double job: washes and dries clothes

Bendix, first to come out with an automatic washing machine 16 yrs. ago, again sets the pace for appliance manufacturers with this two-in-one washer-drier. Taking up less space and requiring less installation effort than separate units, the new *Duomatic* may be the key to future product-design thinking for small homes. The popularity of refrigerators with freezer compartments may lead to a full-scale double unit in a single cabinet. (Norge is already making a two-door upright food freezer; the same kind of chassis for refrigerator and freezer might sell for less and look better than two boxes.) Herbster Products of Cleveland is marketing locally a gas furnace with a clothes-drier section built into the plenum. The more components that can be integrated, the less kitchens and utility rooms will look like sanitary assembly lines—and the less floor area will be absorbed. Eventually, builders may be able to purchase complete ready-to-plumb appliance cores.

The *Duomatic* sells for \$499.95 retail—or \$40 to \$80 less than two individual machines. It is adaptable to almost any house layout since it can be situated in utility room, kitchen or even the bathroom (where it will double conveniently as a hamper for soiled clothes until enough pile up for laundering). Easy to operate, the *Duomatic* has two timing devices—one for the washing cycle, one for drying. The homemaker puts in soap and up to 8 lbs. of clothes, sets both controls, and goes about her housework while the appliance runs through an entire laundering process: in 1 hr., 8 min. it washes, triple rinses, damp dries and fluff dries the clothes. When required, either the washing or drying phase can be operated separately. Like Bendix's earlier models, the *Duomatic* utilizes a cylinder to tumble the clothes during washing and has a 220 v. heater to boost the water temperature. During the drying action, warm moist air is channeled from the tumbler to a dehumidifier, which cools and dries the air while washing lint and moisture down the drain (see diagram at the left). The same air is continually washed, dried and recirculated.

Manufacturer: Bendix Home Appliances, Div., Avco Mfg. Corp., South Bend, Ind.





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PRODUCT NEWS



FABULOUS REFRIGERATOR maintains constant ice supply; has no trays to fill or spill

On file at the US Patent Office are nearly 1,000 ice trays with divers devices for parting clinging cubes from mother refrigerator. Each of these wonderful units, however, must be filled and emptied by human hand. Servel's *Ice Maker* avoids the problem of messy trays completely. Every 25 to 30 min. it freezes seven large ice lumps (halfmoons, not cubes), loosens them up with a small electric heater, dries them off so they will not stick to one another, and dumps them in a plastic bowl. Unlike Grimm's salt mill, which is still functioning at ocean bottom, the *Ice Maker* knows how to end a good thing. An aluminum arm signals "enough" when the container is full, and stops the cycle. Ice mold and catchall take up about the same space as four conventional trays, but hold more ice.

Sure to please homebuyers who are party-givers, summer iced-drink drinkers or just purist gadget-lovers, the new two-door refrigerator-freezer series retails at \$489.95 for the 9.6 cu. ft. model, \$549.95 for the 10.4 cu. ft. refrigerator, and \$599.95 for the 11.8 cu. ft. unit. Gas and electrically operated models are available; both types work on the absorption cooling principle.

Manufacturer: Servel, Inc., Evansville 20, Ind.

SMOKELESS, SMELL-LESS INCINERATOR consumes old shoes and T-bones

Straying beyond town facilities, a titan housing project—or even a single suburban home—can mean getting out on a limb for garbage and trash disposal. Residential incinerators are one answer to this mundane but vital problem of today living in tomorrow communities. A cleanly fashioned incinerator, the *Calcinator*, is now available in electric as well as gas-fired models; one or the other is practical for every part of the country. Powered by a 600 w., 115 v. unit, the electric incinerator can be plugged into an ordinary wall outlet. A time clock puts it to work for three 1 hr. periods every 24 hrs. Disintegration capacity per load is 1.6 bus. of household waste—old

continued on p. 184

market. In addition, the Home Loan Banks were successfully urged to adopt a liberal policy on loans to members, with the result that an all-time high in outstanding credit was reached during the period 1948 to 1951. In 1949, the public housing program was revived in what at first appeared to be a substantial manner, and pressure was organized to expand it into the so-called "middle-income" area. Countering this, more special types of FHA insurance were provided for equity investment, cooperatives and military housing. In 1950, to make sure that no deserving case should go unfinanced because of the lack or unwillingness of private lending facilities, the Veterans' Administration was authorized to make direct loans to veterans.

With the growth of the welfare idea, the trend in FHA moved steadily toward a particularized view of the market as compared with the relatively broad and unified view with which it had started. Instead of one general method of doing business, it now has a dozen or more distinct methods depending upon the type of property or the character of the borrower. Instead of approaching its task on the basis of measuring risk, it tended more and more to make determinations on a measurement of need.

Toward inflation

The whole series of welfare-credit measures was taken in face of and without regard to the inflationary impact that they produced. In fact the only consideration given to the impact was to assure its intensification. As each infusion of specialized credit pushed the price curve up, guarantee limits advanced, maximum permissive mortgage amounts raised, and FNMA's facilities were more generously offered, so that the push became stronger. This lack of understanding of the basic facts of financial life only demonstrated how thoroughly the welfare approach to economic problems had pervaded and perverted official thinking.

Beginning in 1948, a number of moves were made that carried FNMA farther from its original purpose and emphasized its subservience to welfare policy. First the agency was reconstituted as an out-and-out government instrumentality, and all possibility of creating privately financed mortgage associations was ended. At the same time, the types of loans that FNMA would buy and the conditions under which it would buy them were so circumscribed as to lose all flexibility in operating policy. Finally a subsequent reorganization plan transferred management control of FNMA from the RFC to the Housing and Home Finance Agency. In 1950 a mild revolt in Congress against the inflationary excesses of the times temporarily ended FNMA's power to make advance commitments; but a wide gap still remained between the FNMA of 1950 and that of 1940.

The net result of these changes was to bring about a close approximation of the credit setup that Berle had visualized. HHFA could determine the social need; FHA, which was under its domination, could direct its insurance activities ac-

ordingly; and FNMA, now also under its domination, could assure that the policies were carried out. How well the arrangement could work was revealed during the transition to the situation that prevailed after the change in the Federal Reserve's bond-support policy early in 1951.

The original FHA attitude toward interest rates was at least as orthodox as Adam Smith's. They were to be set at the market and restricted only so as to protect the borrower from extortion. As the general structure of interest rates declined during the 1930s and early 1940s, the FHA maximum rate was revised accordingly. In 1943, when the VA loan-guarantee system was launched, the VA rate was also set at the market. A mistake was made in 1944 in giving some leeway for upward adjustments, but this was rectified by congressional action.

Vested right of veterans

As the general structure of interest rates rose again in 1951, it was plain, despite official protestations, that the view of interest rates no longer prevailed. The 4½% rate became a vested right of veterans against which other forces could not be allowed to prevail. A 4¼% rate was established by FHA's new system of insurance for defense housing, preserved because a higher rate would unduly increase housing costs. Consequently, against a trend of rising interest rates, the FHA and VA maintained their subordinated rates; and the facilities of FNMA were made more available. To make FHA effective in this, the power to make advance commitments was restored for FHA and VA mortgages in defense housing.

A social credit system

The end of this long, somewhat confused history has been the creation of a social credit system for mortgage financing. The power to decide who shall receive credit, how much, and in what locations the financing shall take place, has now resided in official hands. In this system, government and administrative decision replace individual choice in the marketplace. The only thing preventing the government from becoming dominant is the congressional restriction on the scope of its operation.

But the mechanism for dominance is present, and the desire for it to be exercised.

We are now at a crucial point. An occasion exists for a critical review of policies and institutions. At this time, a number of questions should be asked:

Can a system of private mortgage operation exist alongside a system of social-welfare mortgage operation?

Or will not a governmentally dominated system drive private funds into other areas?

Can the mortgage-credit requirements of the government be met without the particularized methods that the government has set up?

FHA and the welfare state

A blow-by-blow record of how the mutual insurance system of 1934 was transformed into an agency for social manipulation of the mortgage market

by Miles L. Colean,

FHA's technical director, 1934-37, and
assistant administrator, 1937-40

Creation of the Federal Housing Administration (FHA) in 1934 seemed a brilliant escape from the pressures for more direct government action in the housing field.

At its beginning FHA was clearly envisaged as a mutual mortgage-insurance system to which all mortgage lenders would have access, a system whose expenses and liabilities would be covered by insurance premiums collected by the lenders from the borrowers. Ultimately the system was expected to belong to the people who participated in it.

In order to augment the sources of funds for insured mortgages, the original legislation also contemplated the formation of a new type of institution, national mortgage associations, federally chartered, privately financed, and empowered to trade in insured mortgages with private lending institutions and to raise funds for this purpose by the issuance of debentures.

This strictly indirect and impersonal concept of FHA operations soon began to be diluted. The corporate form first contemplated for FHA was replaced by a single administrator, thus making the operation more vulnerable to political influence. The assumed policy of awaiting submissions from lenders was replaced by one of aggressive direct promotion with the public, accompanied by a nationwide appraisal organization that examined and approved each individual case. More and more the lending institution tended to become a passive agent between the builder and FHA, which settled the terms of the deal.

Strong influences were at work to bring about ever greater changes in policy. On one side the pressure for public housing was building up, and advocates of direct governmental action became increasingly vocal as the depression refused to yield to less drastic measures. It may be forgotten now, but a sharp cleavage existed in the early New Deal between a) those who thought of government intervention mainly as a means for getting the old economic system back firmly on its track, and b) those who welcomed it as a means for building both a new system and a new track. The FHA people were in the first group, and their running warfare with their public housing counterparts made good newspaper copy right up to the time of the forced marriage in the wartime National Housing Agency. As late as 1945 the then FHA commissioner plainly expressed his reservations at being permanently in the same administrative bed with public housing.

This internal struggle forced the supporters of FHA into a series of compromises. Since public housing offered a cure for social ills and economic depression, FHA must offer one too. Consequently, the agency began to be looked upon, not primarily as an impersonal device to make the market mechanism function better, but as a means to modify the market to meet current social and political objectives.

In other words FHA undertook to compete with the out-and-out welfare agencies in order to reduce their encroachment on the market economy.

The first full-blown public housing act was passed in 1937. It was only a few months later that special FHA insurance

provisions were enacted for houses valued at \$6,000 or less and more generous terms were provided for mortgages on rental property. At the same time, to assure a market for these two new kinds of loans, the government created the Federal National Mortgage Assn. (For still undetermined reasons, no privately financed national mortgage association had ever been chartered.) Here was the complete groundwork for the social manipulation of the mortgage market. FHA could be directed into any type of mortgage operation that at the moment seemed socially desirable or politically expedient, and the FNMA could assure the success of any such undertaking as the market did not find acceptable.

Official judgment vs. market considerations

The uses of such an arrangement (although the FHA-FNMA setup was not specifically referred to) were extolled by Adolf Berle in his testimony before the Temporary National Economic Committee in 1940. He envisaged a banking system in which the flow of funds would be determined not by the market considerations of relative risks and competitive yields, but by an official judgment of the social purpose of the loan, the terms of the loan being adjusted accordingly.

The full potentialities of the FHA-FNMA combination in this direction were not immediately recognized, possibly because management control of FNMA still rested in a separate agency, the RFC. At any rate, FNMA performed a secondary market function in a fairly orthodox manner: 1) It bought FHA mortgages when the market was dull; 2) It gave an initial impetus to lending on garden-apartment property; 3) It sold its holdings as the demand for mortgage investment grew livelier; 4) It made a handsome profit for the RFC, which had subscribed its stock. Its operation was broadly stabilizing rather than selective or discriminatory.

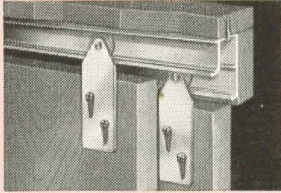
The old public-private investment controversy flared again, however, with the onset of World War II. Moving away from the mutual mortgage-insurance concept toward a loan-guarantee concept, a new type of FHA insurance was enacted providing for liberal financing of housing for defense workers. The move was successful in reducing the amount of building that otherwise would have been constructed with government funds; and since, because of war conditions, the mortgage market was starved for outlets, the eagerness of private institutions to take the new kind of insured loans made FNMA intervention unnecessary.

Terms based on needs

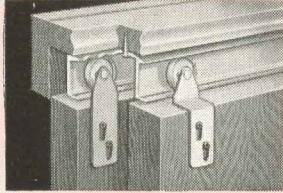
However, with the great upsurge of social legislation following the end of the war, an entirely new system of guarantees for home loans for veterans was established in the Veterans' Administration. This system, based primarily upon need, made it possible to provide that the greater the need the more generous the terms. FHA's special wartime insurance was continued in order to augment the supply of veterans' housing; and in 1948, FNMA, after being permitted to buy VA as well as FHA loans, again became an important factor in the

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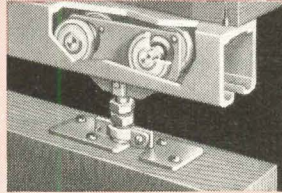
SERIES 250A Packaged kit—Deluxe track with exclusive step-up design that hides hardware from view. Designed for 3/4" kitchen cabinet and light wardrobe doors.



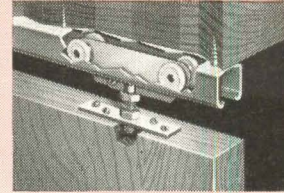
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open or closed pocket
disappearing doors.



SERIES 400A Packaged kit—Also used in Series 800 KENNAFRAME... a prefabricated frame for pocket doors up to 150 lbs. Adjustable ball-bearing hangers; 8 wheels per door.



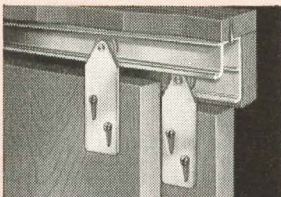
SERIES 350 Packaged kit—Also used in low-priced Series 900 SCOTTIE K-FRAME... a prefabricated frame for closed-pocket doors up to 100 lbs. Adjustable hangers; 8 wheels per door.

SELECT FROM KENNATRACK

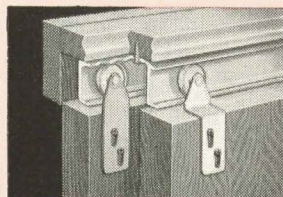
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guesswork out
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installations!

FOR SMALL WARDROBES

By-passing
2, 3 or 4 doors.
Fully adjustable.



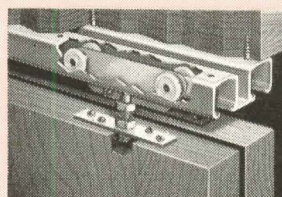
SERIES 250A Packaged kit—Deluxe track with exclusive step-up design that hides hardware from view. Designed for 3/4" kitchen cabinet and light wardrobe doors.



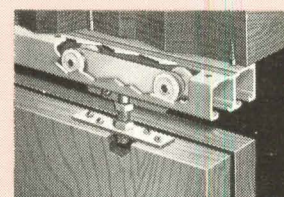
SCOTTIE SERIES Packaged kit—Low-priced hardware for 3/4" to 1 3/8" by-passing doors. Sturdy extruded aluminum track; taper-lock hangers with 3/16" vertical adjustment.

FOR LARGE WARDROBES

By-passing, heavy 2, 3
or 4 doors. Adjustable
or non-adjustable.

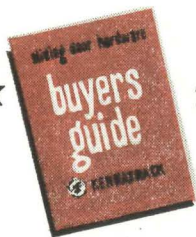


SERIES 600 Packaged kit—Double track for 1 3/8" by-passing doors up to 100 lbs. Adjustable or non-adjustable hangers; 8 wheels per door. Exclusive expansion mounting plug for minimum 1" headroom.



SERIES 700 Packaged kit—Double track for 3/4", 1" and 1 1/8" by-passing doors up to 100 lbs. Adjustable or non-adjustable hangers; 8 wheels per door. Heavy extruded track, easy to install.

Valuable book **buyers guide** free to builders, architects



KENNATRACK CORPORATION, ELKHART, INDIANA

In Canada: Kennatrack, Ltd., 104 Jarvis St., Toronto

world's largest exclusive manufacturer of sliding door hardware