

April 1953

house + home

What makes a house a best seller?

Six case histories, first in a new series analyzing America's fastest-selling houses (p. 119)

Low-cost prize winner

For the narrow lot: an AIA award winner at \$10.50 a sq. ft. (p. 110 and below)

The economics of trees

What they cost and how they improve property values (p. 130)

\$11,250 house

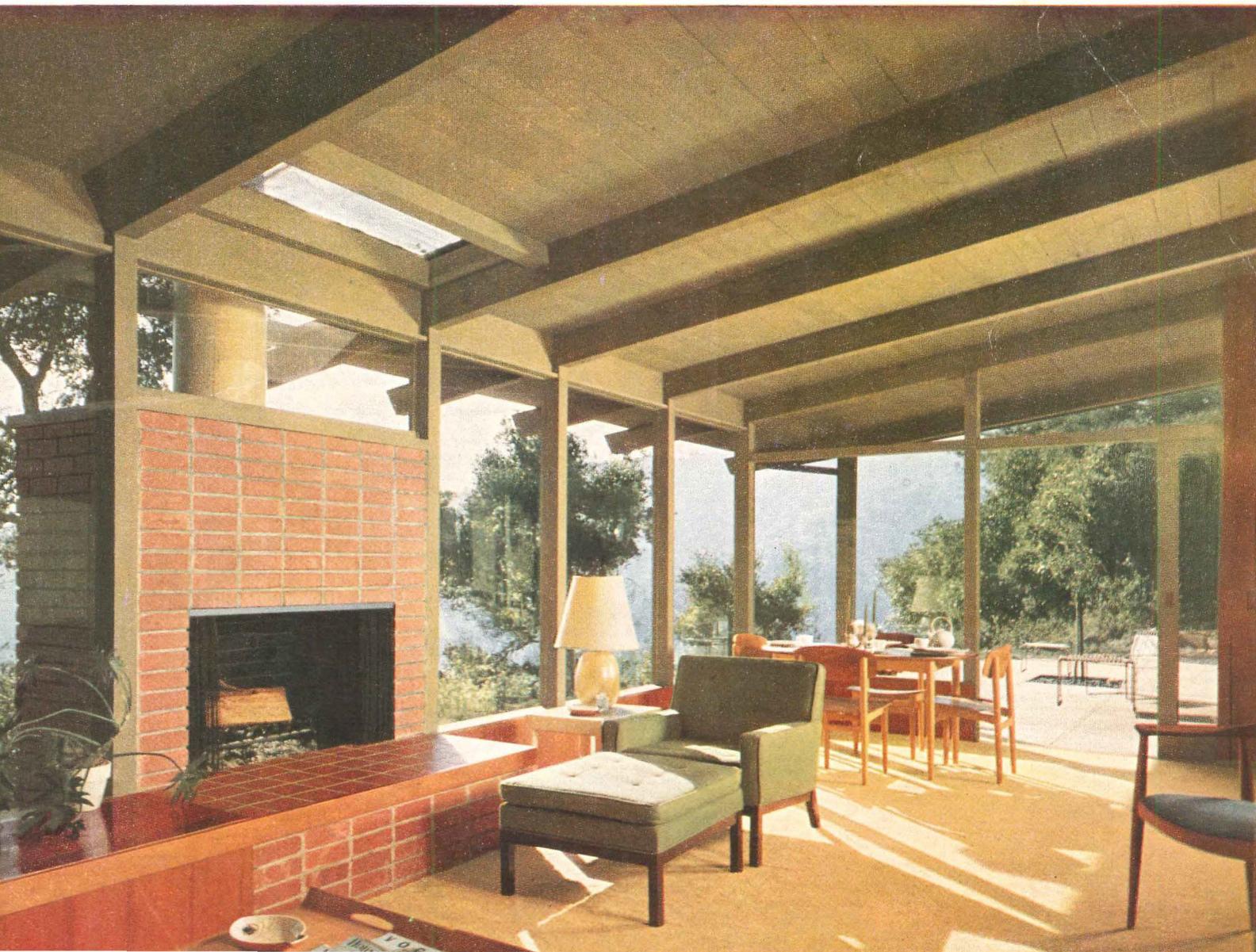
Stock materials, dimensional lumber and modular plan produce a sell-out (p. 102)

Architect-builder team

What builders want from their architects and what architects want from their builder clients (p. 142)

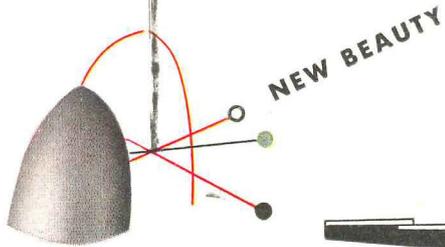
Air conditioning at half price

In many parts of the country well water can do the job if builders follow specific ground rules (p. 150)

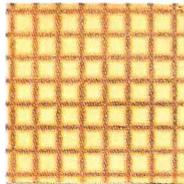


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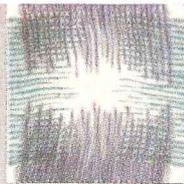
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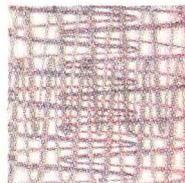
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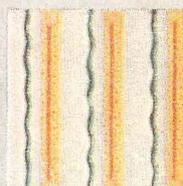


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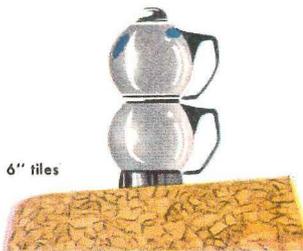


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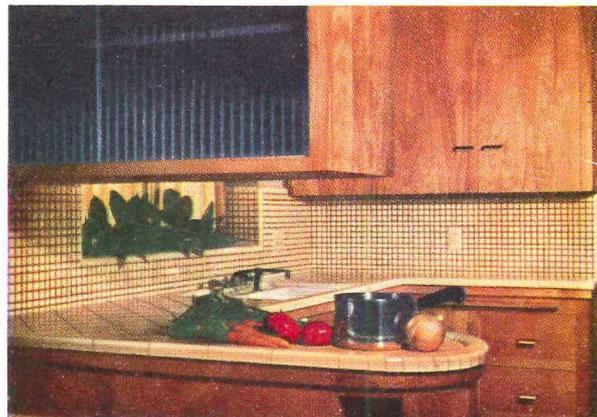
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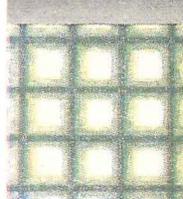
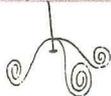
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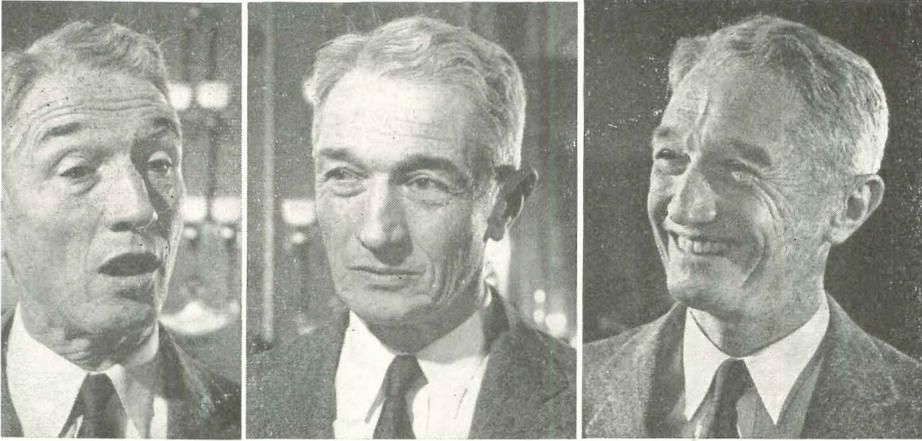
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MORE TITLE INSURANCE MAN, GUY HOLLYDAY HAS BIG SMILE, MOBILE EXPRESSION

Guy Hollyday, former mortgage banker president, to head FHA

at Eisenhower's choice for FHA Commissioner, Guy T. O. Hollyday of Baltimore, a longtime Democrat. Hollyday, however, chairman of his city's Voters Eisenhower committee, which came into light after the GOP nomination. Hollyday's own nomination went to the April 7. With not even a murmur of opposition in sight, unanimous confidence looked like a good bet.

Draftee. Although Hollyday is unknown and universally well-liked in the building industry (his biography fills a column in *Who's Who*), his selection to head the FHA Commissioner Walter Greene surprised some builders. Hollyday did not figure in the early speculation over the job. And although he is the president (1946) of the Mortgage Guaranty Association, he had not lately been in the limelight of industry news. The reason is simple: Hollyday was not. The choice did not originate with anyone close to the White House, but with someone of the building industry itself who is not actively concerned with the far-reaching agency he will head. But the ready acceptance that greeted his name testifies to his standing as anything else to the esteem in which he is held.

Guy Hollyday has an iron gray hair, a ruggedly lined and kindly face that lights up when he flashes his friendly smile. He keeps his lithe figure (5' 8" lbs.) by wielding a shovel weekly on his 22 acre farm home ten miles from Baltimore, where his wife, Louise, raises a tractor and raises steers, and his daughter, Louise, 26, raises ponies. Guy, 24, is studying history at the University of Edinburgh. Virginia, a salesgirl at Roten's art store in Bal-

timore. His youngest son, Este, 19, is a senior at Baltimore's Gilman School.

Would-be doctor. Hollyday was born Dec. 27, 1892 in Baltimore, son of a doctor (John Guy), who practiced in the suburbs for 50 years. He was baptized simply Guy Tilghman Hollyday, but added Ormé to his name when he was 12 in deference to his mother's wish to have some of her family represented, too. Seeking to follow his father's career, Hollyday studied medicine at Johns Hopkins (class of '14) but his father's death led him into the real estate business as soon as he had his A.B. (he worked his way through college the last two years as business manager of the college paper). By 1921, after an interlude as an Army second lieutenant during World War I, Hollyday was sales manager of Baltimore's Mortgage Guarantee Co. From 1926 to 1932, Hollyday was sales manager of the Roland Park Co. For three depression years, he was vice president of Key Realty Co., which had charge of liquidating real estate foreclosed by the Baltimore Trust Co. In 1935, he became Baltimore agent (he is still vice president) of Randall H. Hagner Co., Washington mortgage correspondents for New York Life Insurance Co. Since 1944, he has been president of the Title Guarantee Co., whose business he has broadened from purely local to a national concern with 50 issuing agencies in ten states.

The price of service. Before taking office as FHA Commissioner, Hollyday will give up not only the presidency of his title firm (and his stock in it), but also directorates and titles in half a dozen commercial and civic enterprises, including the Hagner Co. Some others: vice president and director,

Permian Abstract Co., Midland, Tex.; director, Loyola Federal Savings & Loan Assn.; director, The Savings Bank of Baltimore; president of Fight Blight, Inc.

For the last five years, Hollyday has given over half his time to civic activities. For a man who is by no means wealthy, such selflessness naturally evokes from friends an admiration somewhat rare in an industry that has its share of men who respond largely to the profit motive. Says Mortgage Banker James W. Rouse: "Guy Hollyday is a deeply motivated Christian man. As a result, he is a very inspiring person. His friendliness, kindness and courage lift him way above other people. He looks for the best in people and so he generally finds it. That's what he is going to bring to his FHA work."

New blood for old? Hollyday will also bring to FHA a broad understanding of both its achievements and its problems. Says he: "I think FHA is deservedly fortunate in having had friendly relations with all the different trades in the industry." But he is under no illusion that FHA is as young as it was at its birth 20 years ago, thinks perhaps it "can stand a little new blood." He expects to name an industry advisory committee to tell him "where FHA is falling behind" and to "make recommendations we can study and analyze." He hopes FHA can do more to aid urban rehabilitation, and in the process give a boost to a big untapped market. In Baltimore, he notes, "we spent a million dollars a year just moving outside toilets in." Hollyday hopes Commissioner Greene will stay on as his deputy, at post Greene held five years until last June.

New district directors. Even before an Eisenhower appointee was designated, FHA last month began to show the effects of the new administration. In Philadelphia, Lumberman William A. Kelley, former partner of GOP Sheriff Austin Meehan, was named FHA director to succeed Leo Kirk April 13. Kelley is a former chairman of the city zoning committee. At Grand Rapids, Daniel H. Treleven, an insurance man, replaced Eugene Beatty, acting FHA director since Feb. 1 who returned to Washington as ass't director of FHA's region I. Changes were in the wind. More could be expected in the months ahead.

NEWS ON THE INSIDE:

- Housing heads for a 1.2 million year, despite harder selling.
- Urban rehabilitation suffers setbacks in Baltimore and Miami.

(pp. 126-129)



ALBERT M. COLE (l) took the oath of office as HHH Administrator from Frank K. Sanderson, White House executive clerk, while President Eisenhower looked on. Cole became the second man ever to head the big agency created in 1947. But his first month in office found him so busy he did not even bother to hang up the blue-ribboned certificate of appointment which the President handed him at the end of the ceremony.

AT HOUSE & HOME ROUND TABLE, Cole (4th from l, rear) listened to leading architects, builders, lenders and realty men discuss what makes a better home and how to sell it in a buyers' market (see p. 96). Participants pictured (clockwise from upper l): Banker Harry Held; Guy T. O. Hollyday of Baltimore who will be named FHA commissioner; Editor-Publisher Perry Prentice of *HOUSE & HOME*; Cole; Realtor-BUILDER Robert Gerholz; and (backs to camera) Architect Herman York, Architect Morgan Yost, NAHB President Manny Spiegel and Vice President Dick Hughes.



Cole becomes HHFA chief, plans parley to update FHA architects

On March 11, Albert MacDonal Cole was sworn in as HHH Administrator after the Senate confirmed his nomination, 64-18. By month's end, neither he nor the agency appeared much altered.

The most visible change: the medium-sized ex-Congressman from Kansas had the high-backed, leather chair that served his bulky predecessor, Ray Foley, shipped down the hall to a conference room. There, cracked Cole, "people can enjoy sleeping in it." With scant regard for the symbols of bureaucracy, Cole replaced the massive chair with a smaller-sized model (the big one was originally built for Herbert Hoover when he headed the government reorganization commission). Foley, departing for a rest in Detroit, took Harry Truman's autographed picture with him. Unostentatiously, Cole had not yet got around to covering the faded spot on the wall with President Eisenhower's smile.

Slow approach. If changes were superficial the air tingled with expectancy. Cole faced enough urgent problems to keep him busy some months. Topmost was personnel. Cole told his staff he would make "no drastic changes until I know what I'm about." Fundamentally, he thought "people in civil service jobs should be protected." But like other Ikemen, Al Cole questioned the Democratic practice of blanketing virtually all jobs under civil service. The higher-ranking grades (Schedule A) had been put in civil service by presidential order. Eisenhower last month took them out. Inside HHFA, the effect of that fell

chiefly on the Public Housing Administration, which had tried to protect practically all of its top men. By month's end, Cole was free to fire any he chose.

For FHA, Cole said he was planning—after listening to *HOUSE & HOME*'s roundtable (see cut)—to call a conference of his own to bring FHA chief architects together with private builders and architects. The meeting would be welcome news indeed to many a long-suffering designer who thinks FHA ideas need renovation.

For public housing: 35,000. Cole's first policy problem was also one of the most ticklish: how many federal public housing units should he recommend be built next fiscal year? Opposition to his appointment had centered around his congressional record against public housing. Cole had promised to carry out the law faithfully. His recommendation handled a delicate situation gracefully. With White House concurrence, Cole suggested to Congress that public housing be kept at this year's 35,000 starts level, which Congress itself set. This was, he told a House appropriations subcommittee, the "fair and consistent thing to do . . . until we have completed our review [of government housing programs] and make further recommendations."

Accordingly, he suggested trimming PHA's budget \$600,000 below what it had sought—to \$13,900,000. Public housers kept a discreet silence but confessed privately that 35,000 units was more than they had expected. Said the pro-public housing National Housing Conference: "The Ad-

ministration and Mr. Cole have indicated that they are not out to break wind.

The Independent Offices appropriation bill, which puts the ceiling on public housing, was not due to come out of committee until the latter part of April. If performance was a guide, the committee would whittle the 35,000 units down somewhat if it did not, there would be an effort to get it on the floor of the House. Public housing private housers girded for the annual

For HHFA: few reductions. While the rest of Cole's recommendations on the Truman's HHFA budget were kept in wraps in deference to Congressional opinion, the new administrator did reveal the cut in PHA's funds was the most drastic in his far-flung agency. One thought FHA would come out relatively untouched. But there was serious question whether the Federal National Mortgage Association (Fanny May) and defense housing would get more than a token appropriation. Cole feels defense housing has been washed up. He had not committed to Fanny May, but its own officials could squeeze through the next fiscal year without more funds. Last month, PHA had \$900 million—\$731 million for public housing and disaster mortgages and \$236 million for over-the-counter purchases in defense areas.

Cole was still wrestling with the burning problem: interest rates on government backed mortgages. He had persuaded the Senate banking committee and soon after Easter. Because Cole r

the answer with both VA and the... action might have to await ap... of a VAdministrator to replace... ray, who still backs 4% VA loans.

Best bet seemed to be that Ikemen were convinced VA and probably FHA rates should go up, but were holding back until veterans' groups saw the light, too.

burgh was almost ready to submit recommendations to the Legion executive committee. Informed opinion was it would either recommend a higher rate so more veterans could benefit from the guaranty program, or else some form of flexibility without setting a specific rate. If so, it might well be the nudge Congress and the administration need to act.

Order tying loans to take home pay stirs test; Legion struggles over 4% rate move

The Republicans clung to New Deal... waited for the customers to cry... before raising the 4% GI loan rate... stumbled into another mortgage... that potentially might make its inter... latches look like a picnic.

its current practice (which roughly corresponds to FHA rules)? Are guaranty provisions still valid on nonconforming loans made since 1949 by supervised lenders under "automatic" approval regulations?

Eventually the new administration must come to grips with the vanishing GI loan, which was dipping under par even in New York this month. One possible course of

Roy Stevens



action was offered last month by tireless planner Tom Coogan, armed forces housing chief.

March 17 VA distributed a circular... if monthly carrying charges for a... n, plus allowances for heating and... exceed 25% of a veteran's take... ay after any pension, social security... ome tax deductions, he is not eligi... a loan. In northern areas, heating... each \$20 a month, thus require up... a month higher take home pay... might amount to \$3 to \$5 a month... \$12 to \$20 additional income.

Scarcity amidst plenty. While officialdom still stalled on an interest rate increase, claimed there were adequate funds available for GI's at 4%, the US Savings & Loan League released a revealing set of figures. Its data, based on VA and Home Loan Bank Board reports:

Year	Mortgages Under \$20,000	VA Loans	Ratio of VA to Total
1946	2,497,122	412,037	16.5%
1947	2,566,632	541,922	21.1
1948	2,534,702	349,934	13.8
1949	2,487,521	276,793	11.1
1950	3,032,452	497,596	16.4
1951	2,877,860	447,373	15.5
1952	3,028,157	306,466	10.1

MOSES "It should be thoroughly understood that nothing can be done to reproduce the happy money market that existed from 1946 to 1950," Coogan explained. "No rate will bring California mortgages to par without developing excessive premiums in New York and New England. No rate will produce the necessary price for mortgages on minority group housing without the same results."

rebellion. Protested Boston Real Board Secretary Ray Hofford: "This... out removes the veteran from the... Taking a \$10,500 house as an ex... we find the veteran who makes a... own payment and gets a 20-year... mortgage would have to earn \$7,500... the new requirement."

Commenting on the sharp drop in GI loans last year Loan League Executive Vice President Norman Strunk pointed out direct government loans to veterans totaled 34,000 last year, thus those from private lenders were only 272,000.

Coogan's solution: Equalize VA and FHA interest rates at 4 1/4%. Allow fair and reasonable brokerage fees. Permit mortgages to sell in a free market for the price they will bring. Have the closing statement based on the price of the mortgage instead of its face amount, with all other disbursements calculated accordingly.

on and New York lenders who had... calculating GI loans on the basis of... f gross pay without heating or re... penses hurried to Washington. As... ised" lenders authorized to make... own determinations of a veteran's... to meet his monthly charges they... ncerned about guaranty validity on... ans. They also threatened to refer... re loans to the VA for prior ap... processing, thus swamp the agency... per work they had spared it.

Legion action soon. At month's end, the American Legion committee to study the GI rate headed by Tom Moses of Pitts-

Administration asks rent control extension to September 30 but Congress may balk

month's end, VA postponed strict en... nt of the rule. Loan Guaranty Di... . B. King called an April 10 Wash... meeting of mortgage industry lend... ron out the situation if possible.

The administration last month told Congress what kind of rent and other controls it wanted. But the odds seemed to be that it might not get all of them. Defense Mobilizer Arthur S. Flemming, one of the few holdover officials to be clasped to the new administration's bosom, gave the Senate banking committee these proposals:

Prices and wages. The administration does not want a standby controls law, but if Congress wants to pass Sen. Homer Capehart's bill to give President Eisenhower power to slap a 90-day freeze on wages and prices in an emergency, it would be "acceptable."

ns never posted. The joker was... d taken by King that the March 17... was not a new rule, but only a... refinement of an order sent to all... es in 1949 (but never before sent... ers). Obviously, it was never ob... extensively, even on loans VA proc... An awkwardly discovered "sleeper,"... l three big questions:

Rents. Extend controls until Sept. 30 for all areas now under rent control to give states ample time to take over if they choose. Extend controls until April 30 next year for all critical defense areas, but narrow the definition of critical areas to those caused by military bases, atomic energy developments "or a government installation such as a shipyard, air depot, ordnance depot or arsenal."

Only 100 areas. In suggesting that industrial impact areas be weeded out of the critical areas list, Flemming had a logical argument: "We are now relinquishing most of our material controls. It follows that most of these industrial plants will be producing for the civilian economy [more] than for defense." After Oct. 1, he told the senators, critical areas can be cut from the present 209 to about 100.

now going to enforce the original... standards? Will it officially ease

Materials. Continue federal power to assign priorities for defense orders, including the AEC, and the right to promote plant expansion by government loans or guarantees.

Flemming proposed that the Office of Rent Stabilization "be closed out" Sept. 30 when he thought federal rent controls ought to expire in the communities where

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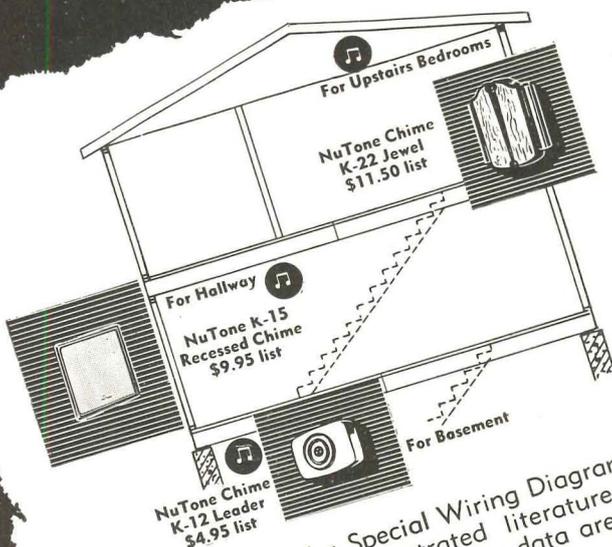
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left from World War II (see below). What is left of rent control, said [unclear], could be turned over to a "con- agency," perhaps ODM.

Professional opposition. There was for serious doubt that Congress agree with administration plans on Old guard elements in the House. Particularly will be inclined to kick over [unclear]. Chairman Jesse Wolcott (R, of the House banking committee

Vacancies rise as states ponder own rent controls; some think vacancies exceed 1940

rent control losing popular support? [unclear] that President Eisenhower put on notice Jan. 20 that federal con- might end April 30 in nondefense [unclear]. There was remarkable little action last [unclear] among state and city governments [unclear] stand-by rent laws.

the 4.3 million dwelling units still Federal rent ceilings left from World [unclear], 85% lay in only ten states: Penn- sylvania, Illinois, Massachusetts, New Jer- sicut, Missouri, Maryland, California, [unclear] and Minnesota. Minnesota was [unclear] a decontrol bill. Connecticut [unclear] New Jersey had stand-by rent legisla- [unclear]. Although the other seven legislatures [unclear] session, no rent law had emerged, [unclear] Maryland, Massachusetts and [unclear] had ones under consideration. [unclear] Philadelphia was the only Pennsylvania [unclear] seriously thinking of a rent ordinance. [unclear] San Francisco, where California de- [unclear] for rent lids was strongest, the [unclear] \$450,000 a year cost was a [unclear] block

New York, where state controls super- [unclear] federal controls in 1950, Gov. Dewey [unclear] a new rent law which gave land- [unclear] 5% rent increases above 1943 levels, [unclear] rolled one- and two-family homes [unclear] after they become vacant after April [unclear] allowed owners a 6% return on [unclear] investment. One potent political rea- [unclear] rent control is a "must" in New [unclear] only 38% of the state's families own [unclear] own homes, the lowest percentage (by [unclear] of any state in the nation.

Vacancies climb. Many a sign, both sta- [unclear] and colorful, pointed to a signifi- [unclear] increase in vacancies across the nation. [unclear] es:

Portland, Ore. Mayor Fred L. Peterson just- [unclear] opposition to a \$7 million redevelopment [unclear] that included 200 units of public housing [unclear] explanation: "There is too much vacant [unclear] in the city already."

Indianapolis medium-priced apartments were [unclear] available for the first time since 1942.

had always found rent control repugnant. Although he probably will support the ad- [unclear] administration's stand out of loyalty, he will [unclear] have trouble getting the five-month exten- [unclear] sion of controls in nondefense areas [unclear] through his committee. Even if he man- [unclear] ages, he will find the going still harder be- [unclear] fore the House rules committee, which [unclear] must give its blessing if the measure is to [unclear] win the priority it needs for House pas- [unclear] sage before rent controls expire April 30. [unclear] Some decontrol was a real possibility.

▶ In San Francisco, bankers and insurance men reported 10% to 15% more rental vacancies than a year ago.

▶ Since 1950 (including estimates for this year), builders have put up some five million nonfarm houses and conversions have added something between one and two million more. But household formation amounts to less than four million. While some of the resulting vacancy has been taken up by the vast migration of minority groups (largely Negroes) from farms to cities, the number of vacant dwellings has grown. Some experts think it now may be as much as 3.5 million units nationally, double the 1950 rate and higher than 1940, which is considered a normal year.

FHA debenture interest raised from 2½ to 2¾%

In December, FHA Commissioner Walter Greene urged the Treasury to agree to raise the 2½% interest on FHA longterm (over 10 years) debentures to 2¾% (H&H, Mar. '53). Last month, the Treasury assented so the yield would be "more in line" with other longterm government securities. Out- standing debentures (only about \$1.6 mil- lion) were unaffected.

Vets themselves urge House committee to hike VA rate

Do the veterans' group leaders who insist 4% VA interest be retained really speak for their members? A House veterans affairs subcommittee heard four days of testimony in Ohio last month that sug- gested a 4% rate was far less of a political untouchable than many a legislator thinks.

In Cincinnati, the committee chair- manded by Rep. William Ayres (R, Ohio) heard these complaints:

▶ Most Ohio veterans "simply cannot get anything else but a conventional loan unless they engage in underhanded dealings," testified Richard H. Davis, AMVETS national service officer.

▶ "At least 40 men in my post alone have tried to get loans and couldn't," related VFW's Clarence H. Baerthlein, of Bellevue, Ky.

▶ "When we ask for a GI loan at 4%, the people just laugh in our face," testified Mrs. Violet Costa, wife of a city fireman. "We have about \$2,000 to put down. We asked one lending agency representative and he said: 'GI loans make me sick to my stomach. If the government wants you to have a loan, they should make one.'"

AMVETS' Davis and other witnesses agreed they might go along with an interest rate increase to 4½% "under protest" so long as down payments were kept low.

In Cleveland, the subcommittee heard Bernard B. Drenfeld, president of the joint veterans commission of Cuyahoga County testify that veterans wanting homes "don't care whether the rate is 4% or 4½%. What they want is homes." Vice President H. H. Jurgens of Central National Bank testified he requires 25% down payments plus a 1% service fee to discourage VA loans.

Builders say they will absorb 5% cost increase

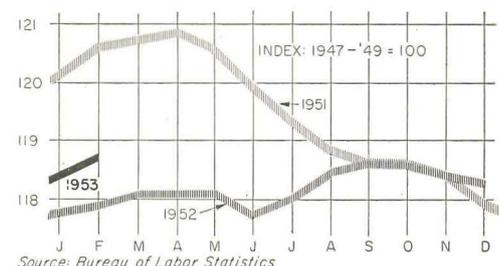
Price, wage and materials decontrol had little effect on homebuilding.

Copper was stabilizing at 30¢ a lb., 5½¢ above its frozen price. Cement and some gypsum products edged up slightly in scattered localities. But steelmakers made no major price boosts by month's end. Lumber continued its gentle decline.

Wage decontrol freed unions to bargain for whatever they could get as contracts expire this spring. The target would usually be 25¢ an hour more in wages or wel- fare payments, the typical compromise about 10¢ to 15¢ an hour in one form or another.

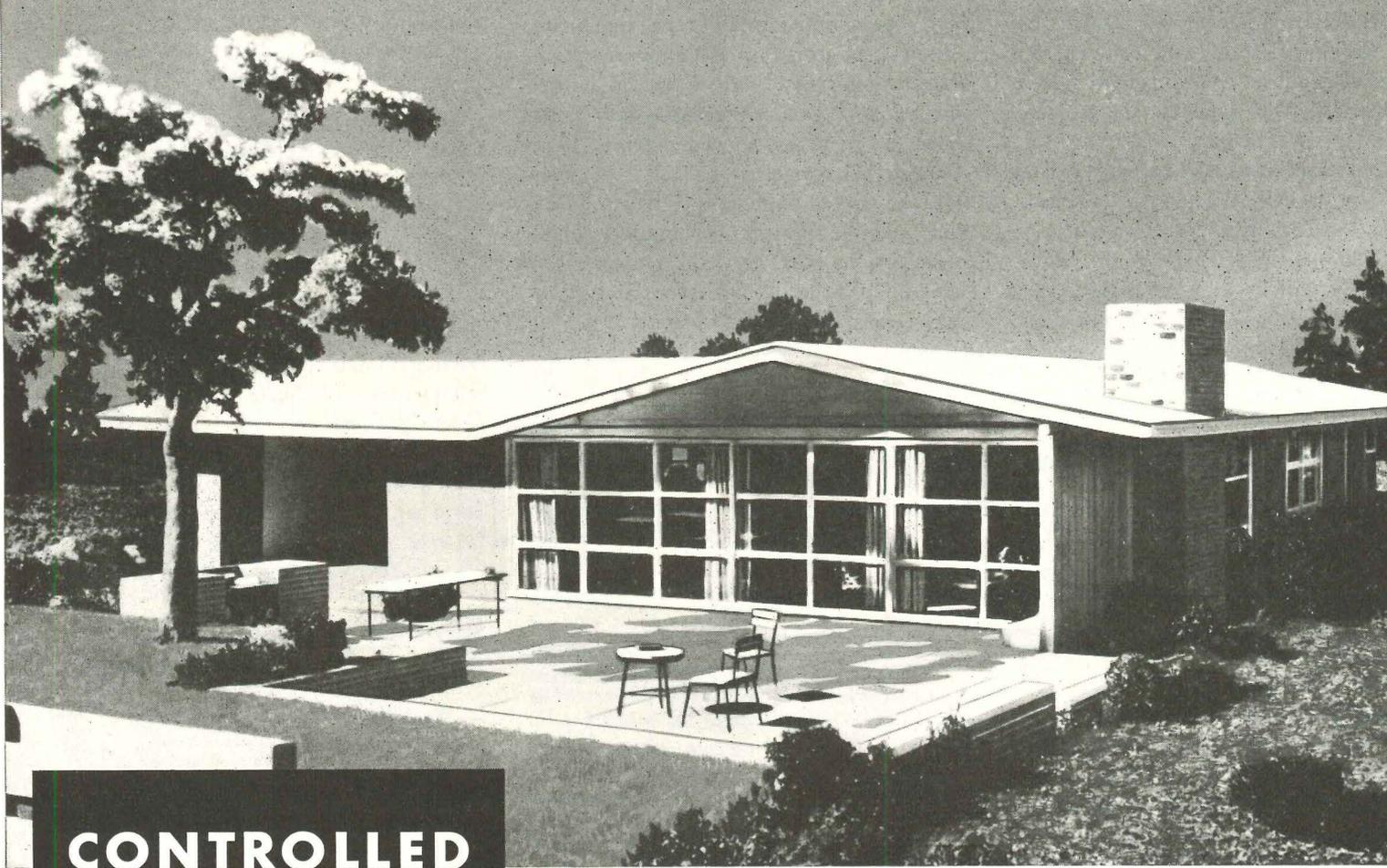
Most observers expected overall material prices might drop a little as the year ad- vanced, but this would be more than offset by continued wage increases. In city after city across the nation, homebuilders said they expected higher labor pay to drive their costs up about 5%. But most of them thought they would have to absorb the in- crease: the market would not stand higher home prices.

Miller Nichols and most other Kansas City builders expected costs there to rise 5-6% under new wage rates. In San Fran-



Source: Bureau of Labor Statistics

MATERIALS PRICES inched up to 118.7 in Feb- ruary from a revised index of 118.5 in January. The gain was not ascribed to price decontrol, which had not yet influenced the BLS' index. Even when it does, little change is expected.



Model of actual Trade Secrets House, Dayton, Ohio

**CONTROLLED
CLIMATE**
\$1⁰⁵ per square foot!

This Trade Secrets House just completed in Dayton, Ohio, has Year 'Round "Controlled Climate." And the builder's total cost—installed and ready to go—was only \$1.05 per sq. foot!

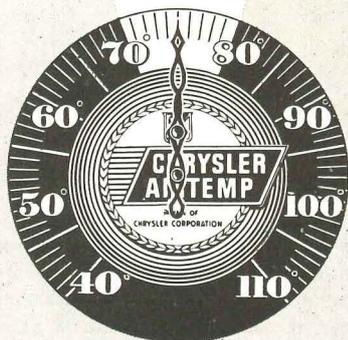
The 96000 B.T.U. of heating and 3 H.P. of cooling keep this modern 1340 square feet in the Comfort Zone—regardless of extremes of outside weather. Air is cooled and dehumidified in summer; heated and humidified in winter and it's filtered and circulated every day of the year.

Year 'Round Air Conditioning by Chrysler Airtemp helps sell *your* home.

HERE'S WHY:

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 - 15 years of residential installation experience! Chrysler Airtemp offers you and your prospects a time-tested package.
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HEATING • AIR CONDITIONING
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Please send full details about the Chrysler Airtemp Comfort Zone.

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Henry Doelger anticipated a 3-7% rise from labor costs. Milwaukee's Jerry Hirsch looked for a 5% cost increase.

Richmond, Va. builders thought prices would remain steady, but a few saw a slight dip. Lumber, plumbing and heating items have eased there, said Henry Holt, "and labor is beginning to produce a little more." Several Chicago and Cleveland builders expected prices to drop as much as 5% because increasing competition had started "hungry" contractors shopping for work more actively than at any time since the war.

Georgia supreme court blocks redevelopment

A defeat in Georgia last month offset a victory in Ohio (H&H, Mar. '53, News) for urban redevelopment. Georgia's supreme court held the state's urban redevelopment law unconstitutional on the ground eminent domain must not be used to acquire property to be turned over to private use. The court halted an Atlanta project to redevelop 139 acres of close-in residential property into commercial use. It stopped work on similar projects in Savannah, Columbus, Athens, Griffin, Augusta and Waynesboro.

This year, redevelopment laws had received approval in four state supreme courts: Arkansas, Illinois and Rhode Island and been declared unconstitutional (Georgia and Florida). Court tests of the urban redevelopment laws pending in Oregon and Virginia.

Prefab Institute marks 10th birthday; new president sees 10% rise in output this year

The Prefabricated Home Manufacturers' Institute celebrated its 10th birthday last month in Chicago. The annual convention, held in the Bismarck Hotel, drew some 60 top prefab executives. PHMI Manager Harry Steidle offered some facts to nourish the optimism felt by most producers:

Since 1946, the prefabrication industry has supplied one out of every 25 new non-farm houses built. More than one million Americans now live in postwar prefabs. Still expanding, the industry produced a record 57,000 units last year, 21% more than in 1951 and 6% of total US housing output. Steidle forecast prefabs soon will swell to 10% of new US homes. Incoming President William B. F. Hall forecast at least another 10% gain for the industry this year. Other convention news:

► Prices for prefabs are not likely to rise in the near future. In fact, many producers suggested that buyers may soon be getting "more prefab house for their money" through larger kitchens and other improvements at no increase in prices.

► Most mortgage lending and servicing procedures are geared to local operations, but prefabbers need national or sectional service, said retiring President John C. Taylor Jr. Some prefabbers already have organized their own finance companies, and Taylor predicted if the established mortgage industry does not adjust soon to serve the prefab market, it may lose it entirely.

Oscar Associates

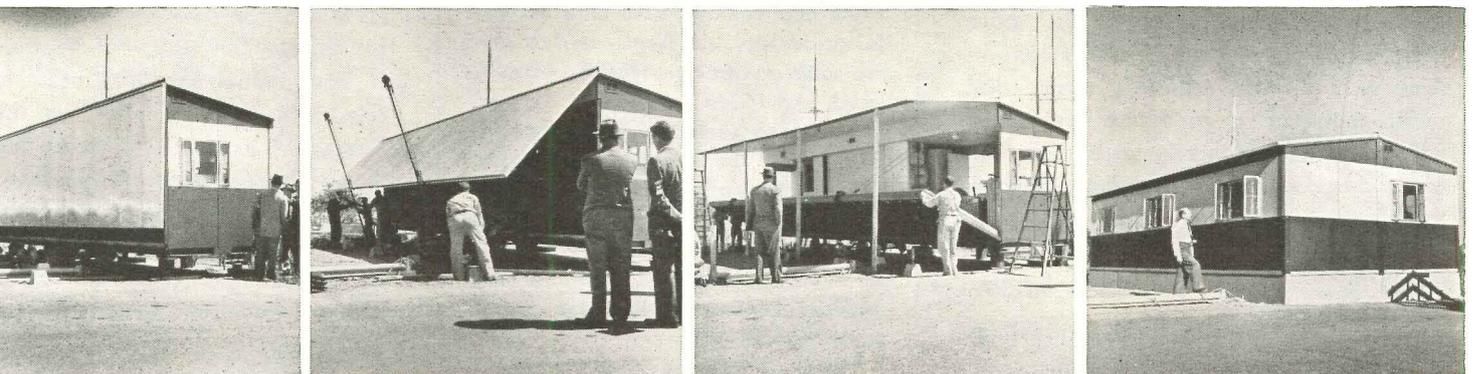


CONGRATULATIONS are offered William B. F. Hall (c) on his election as PHMI president by retiring President John C. Taylor (r) and Gen. John J. O'Brien (l), new vice president.

► A recommendation by Richard B. Pollman of Thyer Manufacturing Corp. for establishing industry test procedures and design standards, reviewing new products and techniques, conducting technical industry research, was approved in principle. Driving from Toledo to Fort Wayne after the convention to discuss it with President Hall, Pollman was seriously injured in an automobile accident, will probably be hospitalized about three months.

President Hall, 47, Yale, '26, was mortgage loan manager for Lincoln National Life Insurance Co. in Fort Wayne for ten years before his World War II service as a Navy flyer in the Pacific. Under Guam palm trees he developed preliminary designs for a prefab house, after his discharge established General Industries, Inc.

Photos: Adam Ooms



California manufacturer unveils fully portable, 520 sq. ft. defense house for \$3,500

ago, HOUSE & HOME speculated that the housing's need for really mobile but not cramped living quarters would lead either prefabricators or the trailer coach industry to the other. Last month, at Newport Beach, Transa Homes, Inc. took the wraps off a trailer-relocatable house that constituted the first evidence yet that HOUSE & HOME's prediction is coming true.

In an audience of HHFA officials and others, Transa Homes demonstrated how its model (pictured above) can be unfolded into highway-sized traveling shape and

transformed into a 520 sq. ft. home in only 12 man-hours. What impressed officials even more was the price: \$3,500 fob factory, including refrigerator, stove, heater and furniture. Although the house is smaller than officials like, it is so much cheaper than other relocatable housing offered for defense areas where no permanent need is foreseen that one HHFA man said "It knocks the tar out of PHA's temporaries as well as the prefabricators' institute test house." Next step, HHFA's Ralph Kaul hoped, would be a test project of 100 to 200 at Camp Pendleton.

Builders and prefabbers would do well to pon-

der, too, the mushroom growth of the trailer coach industry. While prefab shipments climbed from 50,000 in 1951 to 57,000 last year, trailer dealers' sales shot up 23% to 83,054 units. One Los Angeles building publication declared the popularity of permanent trailer living (250,000 people in California alone dwell in trailers) constitutes "a threat that frankly dwarfs all the ruckus over public housing." Now, 25% of trailers are bought by the military services. Mobile workers take about 68%. Their industry is gunning for the retired persons' market, which it thinks is even bigger—potentially.

NON WHITE HOUSING: in the postwar housing boom, most builders away from Negro housing; now with homes harder to sell, the big untapped market be

To many a thoughtful builder, one of the shameful facts of the postwar housing boom has been private industry's comparative lack of building for nonwhite citizens. Nobody disputes that their need is the greatest. But building minority housing involves extra problems ranging from tedious to awesome. In the years when the white market clamored to buy almost anything with four walls and a roof, only a handful of homebuilders produced for nonwhites.

This spring, as farsighted builders eye the coming drop in family formation and ponder how they can keep selling the million homes a year that mean prosperity, interest is turning to the untapped market for minority housing.

One sign was a rush of oratorical eloquence. Perhaps Philip M. Klutznick, the former FPHA chief who is now president of Chicago's American Community Builders, posed the problem most forcefully. Said he:

"There was a time when a person who discussed this problem was considered a 'do-gooder' or 'leftist' or even worse. Now it is no longer a matter of political ideology. Our treatment of this aspect of our housing concern may well determine our ability to save many of our cities from central deterioration and decay physically. . . . Honesty compels the admission that we have failed miserably. . . . We need to recognize the fact and move forward."

New crop of customers? Most of the basic moving forward has already been done by the nation's preponderant nonwhite minority, the Negro. In the words of Gunnar Myrdahl, world-famed Swedish economist, the last ten years have seen "a dramatic movement upward in the entire plane of living of the Negro people in America." In less scholarly terms, that means thousands of prospective customers with better jobs, higher incomes, and more education clamoring for housing to replace the hovels they now call home.

The emergence of the nation's newest middle class is spelled out in census figures:

► Between 1940 and 1950, annual earnings of nonwhite workers trebled, while earnings of white workers rose only 158%. While the median Negro income now is only \$1,295 a year—about half of the median white income of \$2,481—the middle income group of Negroes has expanded so enormously (see graphs, p. 47) that it has created a whole new market for private housing where none existed before. In 1939, a negligible 0.1% of Negro families earned over \$5,000 a year. In 1950, that important able-to-buy group had grown to 5.4%. Still more significant, the median 1950 income of nonwhite families whose

chief source of cash was nonfarm salary was \$2,047.

► Not only were more Negroes employed, but they were working at better jobs, which made them better mortgage risks. From 1940 to 1950, the number of nonwhite clerical workers tripled. Nonwhite salesmen and craftsmen doubled.

► The past decade saw both a higher rate of housing improvement and a larger increase in home ownership for nonwhites than for whites. In 1940, only 717,771 Negro homes were owner-occupied. By 1950 their ranks increased 66.2% until Negroes owned 1,196,000 of the 3,508,000 homes in which they lived.

► Disparities between market values of white and nonwhite homes narrowed. Relatively more mortgages were assumed by nonfarm

TRADE SECRETS FOR NEGRO MARKET:

From builders who have built successful projects for the Negro market, here are some pointers on sensitive items to watch and follow:

Build the same quality house you would build for the white market, particularly in northern cities.

Before you commence, be sure your site will not involve you in a civic hassle. Go quietly to the planning commission; check with important industrial groups in your area.

Try to get to know Negro families—not the leaders of militant organized groups, but the kind of people you will be doing business with.

Smooth the way with wide publicity—even before ground-breaking. Have a big dedication ceremony. Advertise nonsegregation if this is the case.

Choose a management or sales staff (if you can) which is racially integrated (if you are in the North) from top to bottom.

Form a tenant council to take unnecessary worries off your hands.

nonwhite property owners than by **Urban migrants.** The rise of the Negro population in the North was in great part caused by migration spurred first by war and then by industrial mobilization. Negroes moved from rural areas to better-paid jobs in cities, both in the South and elsewhere. They flocked to industrial centers, particularly in the Northeast and Southwest. Southern states, from 1940 to 1950, showed a 17% population gain for whites, but only a 3% gain for nonwhites. By contrast, the eight major industrial states (Calif., Mich. Ill., N. Y., N. C., Pa., Penna. and Mo.) experienced a 1.5% jump in nonwhite population. Their total nonwhite population rose from 10.4% in 1940 to 6.4% ten years later. In Michigan and California, the nonwhite population doubled.

Except for the deplorable farm areas, which neither the building industry nor government is now prepared to enter, the Negro's 1953 housing problem springs from his vast migration.

The simple truth is that the urban whites have resisted giving their cities' new Negro populations as much living space as their money would buy. Census Bureau figures that any room occupied by 1.01 to 1.50 persons per room is crowded (that allows five persons in a three-room house). It considers a room over 1.51 persons per room "overcrowded." Only 5.5% of the nation's rural nonfarm dwellers live in overcrowded conditions. But 18.2% of Negroes

For all races, only 9.2% of US homes are classified as "dilapidated" by the Census Bureau. But 31.3% of Negro homes are. Among Negro homes, 58.4% have no tub or shower, against a national average of 27%. Outdoor privies are the norm for 47.8% of all Negro homes, compared with a national average of 22.5%.

A dual market. Over-all statistics on income, population shifts and overcrowding give only a partial picture of the Negro housing market. For if the average Negro home life is even lower than that of the white man by his pay level, it is also true that the active fringe of Negroes is closing in on the white standard of living, while the lower levels of Negroes remain relatively untouched. So the Negro housing market is two markets: one for low-rent (under \$30 a month) housing (which there is still little evidence of enterprise can reach); the other

at homes among the growing middle per income groups.

of the first to capitalize on the new market was Atlanta Attorney Morris, a crew-cut ex-Rhodes scholar. Says three years ago, I suddenly woke up to the fact that Negroes' incomes had radically changed—not in expanding to new jobs but in a general upgrading of wages. They were making \$50 to \$60 a week, but they were still slum dwellers. There was no money for them to go." Abram's answer was to help sponsor Highpoint Apts., the first big (452-unit) private Negro housing project. It has rents \$45 to \$55 a month. Yet about 20% of Highpoint's tenants are schoolteachers, doctors and nurses, clerks and carriers, and some laborers who came from public housing. Another 20% graduated directly from slums.

Now other builders who have overcome the knottiest problems of building for Negroes, land and financing (see page 10) have found easy sales.

"Flat Top" Smith erected a 425-home development, "Parchester Village," on unincorporated land just outside Richmond, Calif. (a San Francisco industrial suburb) three years ago, and it has its open occupancy with the smoothest integration of white and nonwhite tenants. Says Smith: "We had no idea whether it would be a home community for all Americans or not." He wound up with a 100% occupancy of his \$6,500 to \$8,000 homes (guaranteed). Today, less than half a dozen signs of disrepair, and Smith is so pleased with the civic pride of Parchester's residents he would build another 1,100 houses there if I had the financing" (he has the lots). Until now, Smith's was the only postwar subdivision in San Francisco where Negroes were welcomed as equals.

In Philadelphia, Developer Daniel Gervinson reported that his Flamingo Apartments, the first privately operated biracial apartment building, had 100% occupancy. The 15-story, 300-unit building was built a year ago, despite advice that such a venture was "financial suicide." Gervinson says maintenance costs are lower, and rent is more prompt (average rent: \$26 a room) than in four all-white projects he also operates.

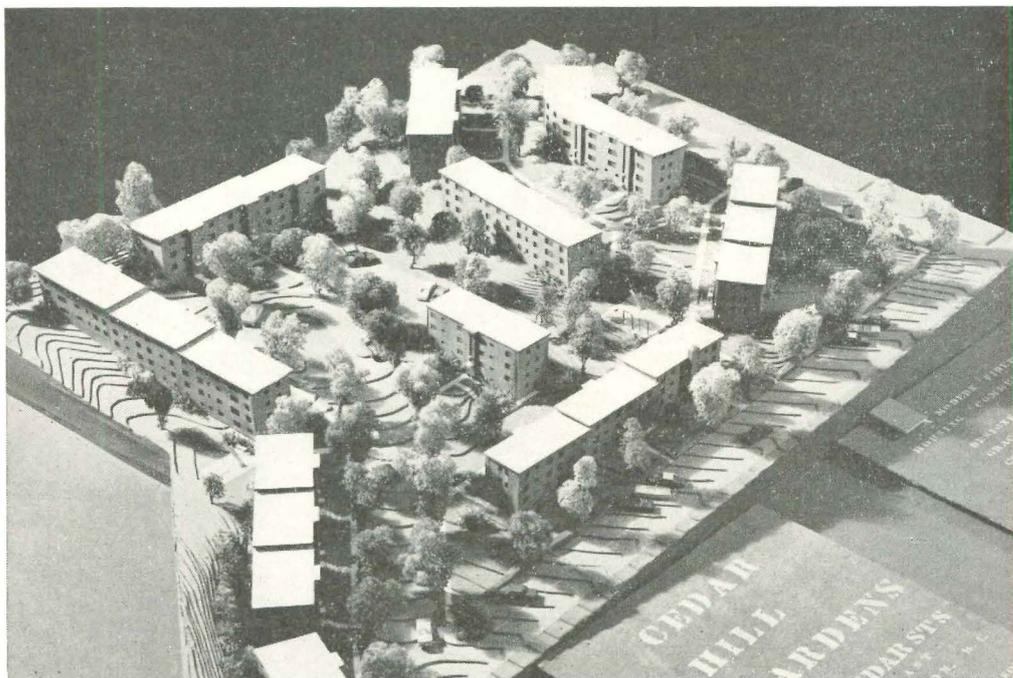
In Boston, Builder Melvin A. Silverman found that mortgage payments from Negroes in the 236 family homes in his Pleasantville development came in far more promptly than any of the mortgage company's other subdivisions. Pleasantville's 2-bedroom homes sold for \$7,075 and the 3-bedroom models for about \$1,000 more. The \$10.50-a-week rent in Pleasantville's apartments, Silverman adds, is "no greater" than in many of Houston's Negro slums. Says he: "The slums taken from slums take far greater care of their apartments and the general premises than the families living in the finer sections of the city."

In Miami, Investors Diversified Services, Inc. reports a foreclosure rate on its 1,001-house development, Park less than 2%, which it calls "extremely low for colored home buying in the

South." Bunche Park two-bedroom homes (see cut) sold for \$5,725; three-bedroom homes cost \$6,325 on 75' x 100' lots.

Outskirt vacancies. Not every project built with Negro occupancy in mind has been an unqualified success, even in some cities where overcrowding in central city

slums is worst. In one eastern seaboard city, for instance, a 260-unit development renting for \$62.50 a month had 40 vacancies two months ago. But the project lay some 5 mi. from the heart of town and was not served directly by mass transit. The *Miami Herald* recently reported: "There



ONE OF THE HANDSOMEST of the FHA Sec. 608 projects for Negro occupancy is Washington's 152-unit Cedar Hill Gardens, designed by Architect Hilyard Robinson and now under construction on a site overlooking the Potomac. The three-story brick walk-ups cover only 30% of the land area.

Levin & Miller



MEMPHIS BUILDERS have one of the nation's leading records at serving the Negro housing market, say HHFA sources. The typical development pictured is Clark and Fay's Chelsea Gardens, a 426-unit Sec. 608 project built in 1950. Two-bedroom units rent for \$41 a month. Vacancies have been nil.

McKay Aerial Photos



MIAMI'S Bunche Park homes, built by the Gaines Construction Co., were sold with the aid of down payments as low as \$25 and monthly payments of \$37.

Clay & Green



NONSEGREGATED homes like this one are being planned under FHA 203.6.2 (D) in Portland, Ore., by Home Builder President Ed McClellan and Herman Plummer, the city's largest Negro real estate broker. The 720 sq. ft. two-bedroom house sells for \$7,000. A beam-plank floor improves appearance by getting house closer to the ground.

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vacant houses for sale in Richmond, Bunche Park, Eleanor Village and [other Negro subdivisions], but a lot of Cadillac families seem to prefer to Miami's downtown slum." In Chicago, Negro realty sources say Negroes generally decline to move from near-in slums to homes in the outskirts. Outlying areas on Long Island and in Savannah, Georgia, suffered vacancy problems, too. "The explanation for the seeming stagnation? One of the men who knows the market and its problems best, Frank Horne, HHFA expert on minority housing, says lagging occupancy in suburban areas "nearly always is the result of not something quite right." Usually, the problem is faulty construction, or bad planning, or a bad transportation set-up to now," Horne notes, "the Negro has never had the same know-how to it that has been applied to other areas."

Land financing. One reason for difficulty in Negro housing, Horne admits, is a lack of knowledge of the market. Horne ranks that as the No. 3 problem of Negro housing. The first two, land and financing, loom far bigger.

Put, the land problem is segregation. Says Chicago's Builder Klutznick: "More than anything else [the Negro housing problem], is the search for space in urban centers on which to build . . . We cannot pretend to mean anything by saying about abolishing slums and continuing to force large groups of people into tight geographical pockets of poverty where we compel them to increase at their own peril and simultaneously deny them the opportunity to expand into space as a prerequisite for decent living."

Builders and realtors, if they might agree with Klutznick in general terms, find it difficult to translate a nonsegregation policy into action. Public sentiment, which is with much justification, is not yet strong enough for it. Thus, around Boston there is a single community with a private development for Negroes, not one which attracts Negro buyers. Explain developers: "It has to be practical. Nobody would buy." In Denver, lack of land where to build for Negroes without controversy led Builder Franklin Burns to the thoughts of serving the nonwhite market.

Militant Negro groups have criticized William Levitt for keeping Levittown on a white basis (it may become the largest all-white community in the US). HHFA's Frank Horne admits, Levitt's explanation that any other course would create sales trouble is perfectly true.

Against segregation: law. In housing as with other aspects of Negro life, the principal blows being struck against segregation are in the realms of law and legislation. The biggest one, probably, was 1950's Supreme Court ruling that race restrictive covenants are not enforceable in court. But in many a less spectacular way (in the North where nonsegregation is a political possibility), Negroes have been gaining ground. Samples:

► San Francisco's supervisors adopted a non-segregation policy for urban redevelopment in 1949. If present plans are carried through, this will enable Negroes to compete for housing in some of the city's finest residential areas.

► The nonsegregation line for public housing is moving South. Last month, Washington's National Capital Housing Authority voted for nonsegregation in all projects built in the future.

► HHFA, disturbed by complaints that many an urban redevelopment project was shrinking the already restricted residential areas available to Negro families, forbade displacement of minority groups unless other homes are made available to them "either through new construction or in existing housing that heretofore was not available to Negroes."

Slum clearance crisis? As HHFA's Horne sees it, "the problem of ethnic ghettos is being brought to a head by the slum clearance program." It is possible, he thinks, that race problems may slow it down. Often half the residents in an area marked for redevelopment prove eligible for public housing, but if public housing is cut back by Congress more or less permanently there may be nowhere else for them to go.

The problem is all the more acute in northern states because the movers and shakers among Negroes are strenuously resisting segregation. In the South, the basic acceptance of segregation at least limits the problem of rehousing Negroes. "In many northern towns," says Horne, "you can't talk of a Negro FHA community. Negroes object."

The biggest practical result of the struggle for land has been the expansion of ethnic ghettos into adjacent white areas. This trend has brought bombings of Negro homes in both the North and South—Atlanta, Miami, Kansas City, Los Angeles. In the most celebrated instance, it led to the riot in Cicero, Ill. which was finally quelled by state militia. In Chicago, property owners' leagues of five years ago, which worked passionately against Negro move-ins, are virtually dead. In their stead have risen community councils dedicated to harmony. But Kansas City had another bombing March 31—its third in a year.

Even the efforts of such groups as Chicago's commendable Hyde Park-Kenwood

Community Council do not prevent white people from moving away. And it is still true that the Negro buying into a white neighborhood must often pay exorbitantly for his property. Frequently, the white seller will use his profit to move to the pleasanter environment of the suburbs, in effect subsidized by his nonwhite purchaser.

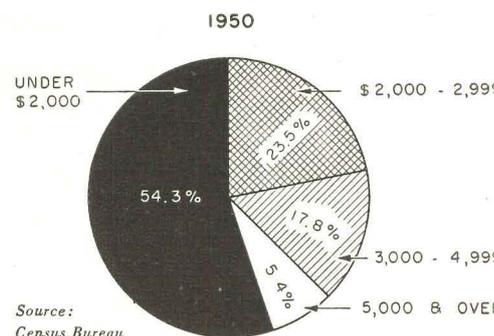
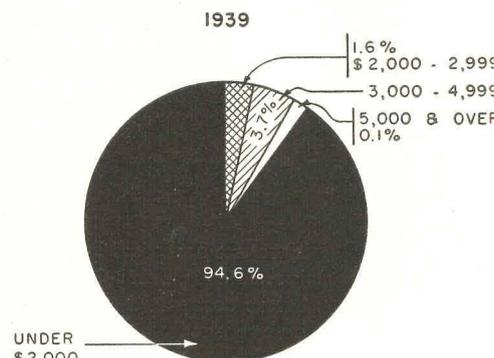
An arresting but still insufficiently known fact is that Negroes who buy homes in transition neighborhoods do not depreciate their value. The first few sales to Negroes often depress market values temporarily. But after the wave of scare-selling sub-

THE RISE IN NEGRO INCOME . . .
(median incomes, US population)

Year	Total	Nonwhite	White	Nonwhite as a percent of white
1950	\$2,133	\$1,295	\$2,481	52.2
1949	2,016	1,064	2,350	45.3
1948	2,017	1,210	2,323	52.1
1947	1,865	863	1,980	43.6
1939	877	364	956	38.1

Source: Census Bureau.

. . . HAS WIDENED POTENTIAL MARKET



Source: Census Bureau

RISING INCOMES have dramatically swelled the percentage of nonwhite US families whose annual income is enough to buy homes. (FHA says a family with \$2,000 a year income is the bottom limit of eligibility in some cities.)

NOTE: 1939: family income for nonwhites, 1940 census, includes wages, salaries, and "other income" (from roomers and boarders, business profits, professional fees, receipts from the sale of farm products, rents, interest, dividends, unemployment compensation, direct relief, old-age assistance, pensions, annuities, royalties, regular contributions from persons other than members of immediate family, and income received in kind from sources other than the immediate family). 1950: Census Bureau's "Current Population Survey of 1951" gives total money income of nonwhite families (excluding unrelated individuals).



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Cedar Siding (¾" x 10") @ \$325 per M (including waste) x 15 sqs.	\$487.50*	Color-Grained Siding @ \$12.00 sq. x 15 sqs.	\$180.00
Felt @ \$1.00 sq.	15.00	Felt @ \$1.00 sq. x 15 sqs.	15.00
Painting 15 sqs.	350.00		\$195.00
Total cost of lumber construction..	\$852.50	\$852.50 — \$195.00....	\$657.50 SAVINGS

For a real luxury siding on soft sheathing compare this perfect combination — *Color-Grained Siding plus ShadoWedge Double Coursing Strips and Twist Nails*. ShadoWedge (described at right) adds a new dimension to color and texture . . . deep shadowlines. And Twist Nails are the perfect fasteners (see panel at right). This deluxe combination still saves you \$545* compared to wood siding!

Not only does Color-Grained Siding save you money. Color-Grained is new and different with proven sales appeal. It's decorator-designed and color-styled in step with the latest developments in home planning . . . it never needs painting. And, to top all these great features, Ruberoid has added a new plus . . . *Duroc*, a protective finish that enriches the color, resists dirt, stains and weather.

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*Figures are based on prices in upstate New York in June 1952. Ask your Ruberoid dealer for price comparison based on your local rates.

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Designed especially for fastening shingles to non-lumber sheathing, Twist Nails anchor Color-Grained Siding with a lock-tight grip. They're easy to apply too. Your apprentice or helper can twist them into place faster than you can drive them. Twist Nails cost no more. No special knack to driving. Twist Nails are the simplest, most economical, and one of the most effective special fasteners on the market today!

†Patent Nos. 2307733, 2307734, others pending
#Patent No. 2394379, others pending

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ices generally climb past where
e before.

Education. The basic problem
ing Negro housing, the more can-
ers say, is "relative unattractive-
enders would simply rather do
with white projects, if for no
son than because they know far
out the white market. Amid the
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the main obstacle to lenders put-
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enough to date." Says a Texas
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at defaults have been larger and
records poorer. I have heard one
York bank say it will take non-
rtgages in the South in preference
orth. But I have not found Negro
e any more trouble than others."
er difficulty is that many a lender
most collect rents weekly in Negro
if he is to avoid delinquencies.
es servicing costs. Discussing that
recently, Vice President John J.
f New York's Chase National Bank
d: "We must recognize that this is
nt type of mortgage and probably
ave a 1/2% service charge. I don't
at else to suggest to bring out the
(The conventional market already
es this in many cities.

by FHA. One of the major forces
to steer both lenders and builders
white housing is FHA. Once, the
pooh-poohed Negro housing as a
problem. But that attitude has long
ast fall, FHA doubled its staff of
lations officers from five to ten.
b, as described by Madison Jones,
rk race relations adviser, is to act
ysts between the nonwhite housing
d the desire of builders to fill it.
nes, a former executive assistant to
White of the National Association
Advancement of Colored People:
is very little room here for socio-
mplications. The builder wants to
buck and we have to help him."
is providing builders with statis-

tical aid, too. In 18 metropolitan areas,
it has compiled available statistical data
on Negro incomes, jobs and housing con-
ditions which shed the kind of detailed
light on market conditions that builders
need. Four more studies are underway.
Unfortunately, fear of becoming involved
in racial controversy leads FHA to keep its
conclusions secret. But the factual data
(which will be the subject of a forthcoming
article) it gladly makes available to inter-
ested builders.

Sec. 207 amendments. On a policy
level, FHA has taken two recent steps to
boost construction of Negro housing. By
tacking a 1/2% service charge onto Title I,
Sec. 8 loans (H&H, Jan. '53, News), it
perhaps anticipated suggestions like John
Scully's. Prefabber Peter Knox Jr. thinks
there is a big market in Georgia and South
Carolina for a stripped-down prefab under
Title I. Already, he has two 25-house proj-
ects underway at Thomson and Waynes-
boro, Ga.

By administrative adjustments in Sec.
207, FHA may have paved the way for a
sizable volume of Negro rental construc-
tion. Builder Wallace Johnson of Memphis
says FHA, by permitting him to figure on
a 5% vacancy rate instead of the normal
7% and by allowing a 6 1/4% capitaliza-
tion rate, unblocked a 400 unit project
which can rent at about \$46 a month, tap
a market so big Memphis builders have
not even bothered to map it.

In the broad picture, HHFA's Frank

Planned town of 30,000 near Toronto to 'insist' on modern design, Canada-style

Six years ago Toronto Industrialist E.
Plunket Taylor and his general assistant,
Karl C. Fraser, decided that the rolling
countryside between the forks of the Don
River eight miles northeast of downtown
Toronto would be perfect for a planned
residential and light industry community.

Quietly, they acquired control of 3,000
acres, engaged town planners, architects,
engineers. Last month, they confirmed the
news (H&H, Mar. '52, News) that their
\$200 million Don Mills development would
be launched this year with construction of
about 525 single-family \$10-\$12,000
houses, plus 350 garden apartments offered
for rent or sale under \$10,000.

The complete town will be built in stages
over five to eight years, eventually have 30-
35,000 population, houses costing up to
\$100,000, a \$7.2 million shopping center.
For automobile safety, all intersections but
one will be T-shaped.

Horne may be right in saying the most
promising way in sight for attacking the
Negro housing problem is with "a little of
everything." That means some public hous-
ing, some redevelopment and some scat-
tered private developments both in big
cities and their environs. As Builder Ted
Kimbrough said recently in urging more
builders to serve the Negro market: "We've
got to have some altruism. It's a profit
spread over a long period of years."

Lumbermen worry over rise in Canadian imports

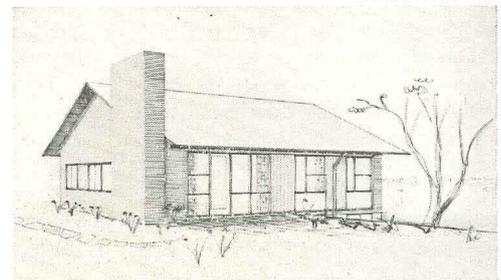
Not only were lumber prices drifting down,
but US producers were worried by soaring
imports from Canada. Cried H. V. Simp-
son, executive vice president of the West
Coast Lumbermen's Assn.: "A flood of
Canadian lumber poses a serious threat to
our Atlantic coast market . . . and the ef-
fects will be felt by lumbermen in other
softwood producing areas. In the six months
ended March 1, 1952, British Columbia
coastal mills shipped only 2.6 mbf by water
to our Atlantic coast, but in the six mos.
ended Mar. 1 this year shipped 245 mbf.
Drying up of United Kingdom demand for
Canadian lumber is the main reason they
have turned to US market."

Three things helped the Canadians: 1)
they can charter ships of any nationality,
gain a \$5 to \$10 water differential, 2) wage
scales in Canada's woods and mills are 20%
to 30% below US levels, 3) their stumpage
and supply costs are less.

Controlled contemporary. Staff Plan-
ner Macklin L. Hancock explained how the
developers will control architecture, set-
backs, land use and general design by deed
restrictions requiring their approval for all
structures. "If builders don't conform . . .
[or] don't build in a certain time the land
reverts to us," said Hancock.

Considering local marketability, said
Fraser, "we will veer as far as we can to

Albert A. Milne



TYPICAL HOUSE in Don Mills development will
look like this sketch, say architects. No more
than 30 homes of same design will be allowed.

Plan
your
kitchens
for a
woman's
approval



THE right combination of good looks and practical features in the kitchen is usually a big factor in the sale of a house. For nine times out of ten, the final decision depends upon the approval of the housewife, and her standard of measure is her feeling for charm and her eye for efficiency.

In this kitchen, there are several good ideas that you can put to use in adding to the sales appeal of the homes you sell. The movable work counter, for example, which doubles as a lunch bar, will impress any woman with its convenience. So will its Lazy Susan cabinet for utensils which are in constant use.

But no one feature in this kitchen has wider appeal than the floor of Armstrong's Spatter Linoleum. In addition to bearing the Armstrong trade-mark—the best known name in linoleum—Spatter is today's most popular style in the Armstrong Line. Its cheerful beauty, offered in a range of thirteen colors, can be adapted to any style of decoration. The Spatter design helps

to conceal tracked-in dirt until it can be swept up from the floor.

Perhaps the main reason why the housewife prefers Armstrong's Linoleum, whether it's Spatter or one of the many other Armstrong designs, is its ability to lighten her work load. The smooth, virtually seamless surface is extremely easy to keep clean. It's also a floor that's completely greaseproof. Armstrong's Linoleum has a reputation for long wear, and it is quiet and comfortable underfoot.

It's economical to offer the added attraction of an Armstrong's Linoleum Floor in the kitchen, bathroom — in fact, in any room. As a means of promoting sales through appealing to women, you'll find Armstrong's Linoleum a wise investment.

SEND FOR FREE ROOM PLAN. For a sketch plan of this kitchen, with color scheme description and a complete list of furnishings, write today to Armstrong Cork Company, Floor Division, 4604 State Street, Lancaster, Pennsylvania. 



ARMSTRONG'S LINOLEUM

porary design." Added Hancock: "I'll insist on it. Tempered by Canadian conditions where the climate is more severe, our houses do not reflect the usual temporary spirit shown in the US, but they will have . . . large glass areas, open living" (see cut).

to encourage competition and design diversity. Housing sites have been sold to eight buyers. Trusteel Corp. of Canada initiated the planning of 75 steel frame houses.

Money at hand. Modern, landscaped residential and industrial plants and the shopping center will occupy about 400 acres. The plant sites have been sold already. One site of 26 acres for a Philco electronics plant that will employ about 500 persons is to be completed next year. Adjoining the development is a modernistic \$3.5 million International Business Machines plant with 1,000 employees.

into Architect and Town Planner. The architect has handled basic planning.

Levitt discards sliding partitions, 3-way fireplace

When the bellwether of US housebuilding was hit by the World War II. After selling thousands of houses in their Bucks County, Pa. town, William and Alfred Levitt were forced to make some changes in their \$10,990

sliding partition separating living room and dining room has been discarded. The source of the customer complaints (it came off the hinges and warped) the partition will be replaced by a solid plasterboard wall or no partition at all, depending on the homebuyer's choice. The new scheme may be the overwhelming choice, but it probably will become the standard. At first, the Levitts considered substituting a fixed glass partition with curtain for privacy provided by homebuyers for the sliding room divider. But a single pane of glass is 1) difficult and therefore expensive to handle, 2) a poor acoustical barrier.

The 3-way fireplace is now only two direct. The reason: "works better in production," says John Sierks, chief assistant to Designer William Levitt.

The new 36" range with a stainless steel top and a 20" range and 15" stainless steel cabinet. The increased size of the range and the stainless steel surface yields a more impressive package than the smaller, porcelain-topped stove.

The 4 cu. ft. refrigerator replaces an 8 cu. ft. unit. The switch stems from redesign by manufacturer now offering the newer, larger model at the same price as the older smaller unit.

The circuit breakers are installed in place of less expensive fuse boxes.

The five changes, though minor, mean a new sales appeal, say the Levitts. In view of the Levitts' talent for selling houses, other builders would watch with interest.

PEOPLE: Los Angeles builders form young men's council; ex Lustron vice president convicted of perjury

Los Angeles' Home Builders Institute sponsored formation of a Young Builders Council of California, aimed at developing young men in the industry. Temporary officers for the first chapter in Los Angeles and Orange counties, elected by about 120 initial members, were **Perk H. White, R. Reese Myers, William A. Wilson, Eugene D. Cole** and **Rarrell A. Wright**, junior executives with building, lending and utility firms. They scheduled a meeting April 7 to study sponsoring a San Francisco chapter, predicted the group would become a national organization.

Ghosts of the ill-starred Lustron prefab and its \$3.5 million in RFC loans haunted federal court in Washington last month at the perjury trial of **E. Merl Young**, who resigned his \$7,500 RFC post for an \$18,000 Lustron vice-presidency the day it got one \$10 million loan. One of four counts on which Young was convicted charged that he lied to Senate investigators and a grand jury when he denied having any part in approving Lustron loans while he was an examiner. It was Young's wife, **Lauretta**, who made the mink coat famous in Washington. As a White House stenographer,

she accepted a \$9,450 royal pastel mink coat from an attorney who represented RFC loan applicants.

General Manager **G. E. Karlen** of the Eatonville (Wash.) Lumber Co. was elected president of the West Coast Lumbermen's Assn., whose members supply nearly one-third of the nation's softwood. He succeeds Pope & Talbot's Vice President **Hillmann Lueddemann**. Lumber retailer **Rex Clark**, general manager of Consolidated Lumber, Wilmington,



KARLEN

Calif. warned the association's annual meeting that excessive use of No. 3 grade wood by cost cutting homebuilders in New York and southern California was giving lumber a "black eye," recommended grade marking every piece at the mill to discourage it.

No slouch at speechmaking, Builder **William J. Levitt** last month regaled the Philadelphia *Bulletin's* Forum with his explanation of why his Levittown, Pa. had no train service although it adjoins the Penn-

FDCA photo

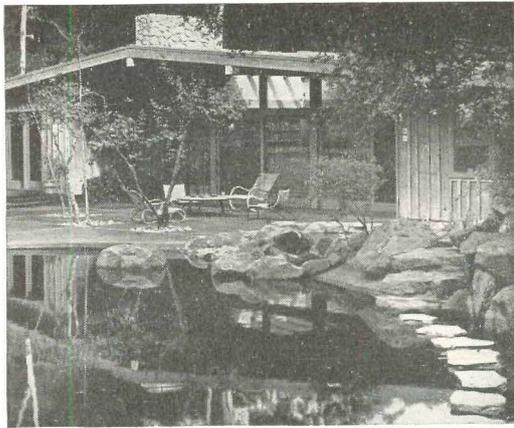
International



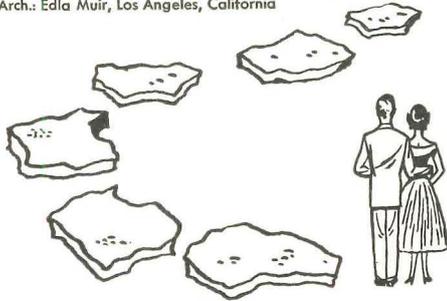
Inexpensive shelter withstands atom blast, not radiation

In the two test houses for the atomic explosion in Nevada March 17, civil defense officials erected basement lean-to shelters that could be constructed by a home handyman for about \$40. The closest house, 3,500' from "ground zero" was knocked off its foundations, crushed into charred, radioactive kindling. But its lean-to protected a mannequin from loosened members (r), although not from radiation. The second house, 7,500' from the blast, was struck by a shock wave of about 2 psi. Result: 75% of the

12' living room joists parallel to the front of the house facing the blast buckled; those in front of a fireplace pulled away from headers. About 25% of first-to-second-floor front studs failed, mostly those closest to doors and windows, where there was most rigidity. All the front roof rafters were snapped midway from plate to ridgepole. Executive Vice President Leo Bodine of the National Lumber Manufacturers' Assn. said the test showed that wood's resiliency made it the best material to withstand atom blasts.



Arch.: Edla Muir, Los Angeles, California



ADDED DISTINCTION

with

Cabot's Stains

The charm of a beautiful home is often its naturalness. You can get that effect with Cabot's Creosote Shingle Stains, the finish that accents the true beauty of shingles, siding and clapboards. Houses finished with Cabot's Stains blend nicely with the landscape.

Cabot's Stains contain 60-90% creosote oil—best wood preservative known... yet they cost only 1/3 as much as paint. Cabot's Creosote Shingle Stains come in a wide range of colors—from clear brilliant hues to soft weathering grays and browns—many available from no other source.

Write today for free copy of "Stained Houses" and Cabot's Creosote Shingle Stains color card showing 18 different shades.

CABOT'S STAINS

SAMUEL CABOT, INC.
430 Oliver Bldg., Boston 9, Mass.

sylvania Rail Road main line: "It's the old chicken and the egg philosophy. The railroad wants to make sure there are enough commuters to use their trains. But there aren't any commuters because there aren't any trains to use." Levitt complained that he finally built the Pennsy a railroad station at cost, but still no trains. He always thought, he said, that trains ran on electricity or diesel oil, but now apparently the fuel was "guaranty." Three days after he spoke, the railroad ordered seven more trains a day to stop at Tullytown—close by the still unused Levittown station.

As the San Diego VA home loan scandal drew to a close, officials made one more arrest: Builder **Elmer J. Hubner**, who was charged with participating in bribes totaling \$7,000 to former VA loan guaranty officer **Francis C. Paige**, who is serving a 3 1/2-year sentence on other charges (H&H, Jan. '52 et seq.). Hubner pleaded *nolo contendere*. If convicted, he could be fined \$6,000, given six years in jail.

Appointments by newly-elected Mayor Fred L. Peterson were giving the Portland (Ore.) Housing Authority a free enterprise look. **Ted R. Asbahr**, 1952 Portland Home Builders Assn. president, was made a commissioner in February. Last month, the mayor picked **Robert B. Hurd**, vice president and director of the Portland Trust & Savings Bank. Hurd said he was not "flatly opposed" to public housing, but against it as now constituted. He believed in a referendum before any public housing or redevelopment project is undertaken.

"For rare and outstanding contributions in the development of model building codes... reconciling conflicting points of view... bringing to the nation higher standards of housing, safety and uncounted savings by the elimination of unnecessary restrictions." So read the citation with the Department of Commerce gold medal awarded last month to **George N. Thompson**, 61, assistant chief of the Bureau of Standards building technology division. Thompson joined Standards in 1924, held various housing, building and codes posts and from 1945-47 was codes and specifications division chief. He has written extensively on code problems.

NAMED: **William A. Molster**, former OPA apparel expert, as special assignments assistant to NAHB Executive Director **John M. Dickerman**; **Edward F. Howrey**, law partner of **Douglas Whitlock** representing the Structural Clay Products Institute and many other private building ma-

terials manufacturers in Washington member of the Federal Trade Commission; **Grosvenor Atterbury**, architect, town planner and designer of Forest Hills Garden City, L.I., as recipient of the 1953 Merit Honor of the New York AIA chapter; **Edward P. Park**, vicepresident of the California Building and Construction Trades Council, and business agent of Sacramento operating engineers local 100; California state labor commissioner emeritus **Rent Boss Tighe E. Woods**, as licensed real estate broker in Virginia; **John Johnson** of Leesburg.

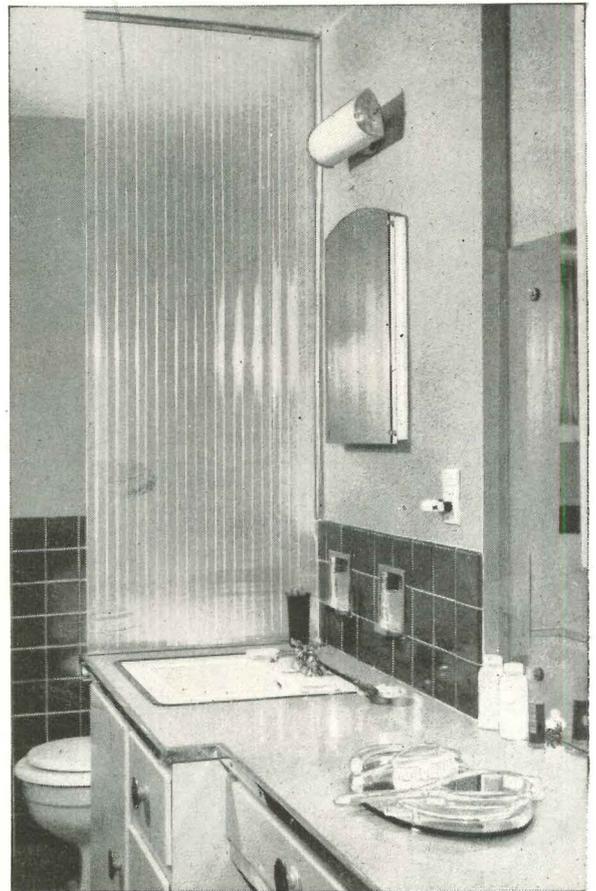
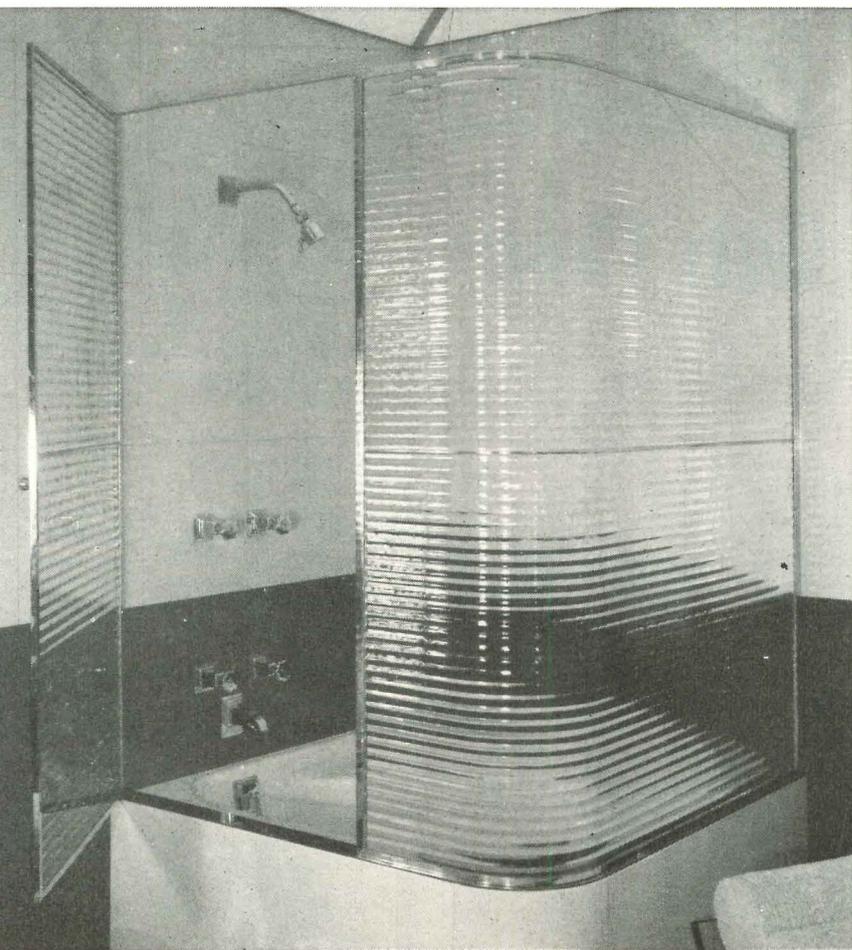
ELECTED: **Charles E. Fry** of Los Angeles as president of the California Council of Architects succeeding **William Kobler** of Sacramento; **Robert W. Purcell**, vice president and counsel of Allegheny County, Pa., as president of the Chesapeake & Ohio Railroad, as president of Investors Diversified Services; **Earl E. Crabb**, who continues as chairman of Minneapolis mortgage lenders, succeeded **Earl E. Crabb**, who continues as chairman.

DIED: **James Andrew Moffett**, a millionaire who lived aboard his yacht on the Potomac while he served as the

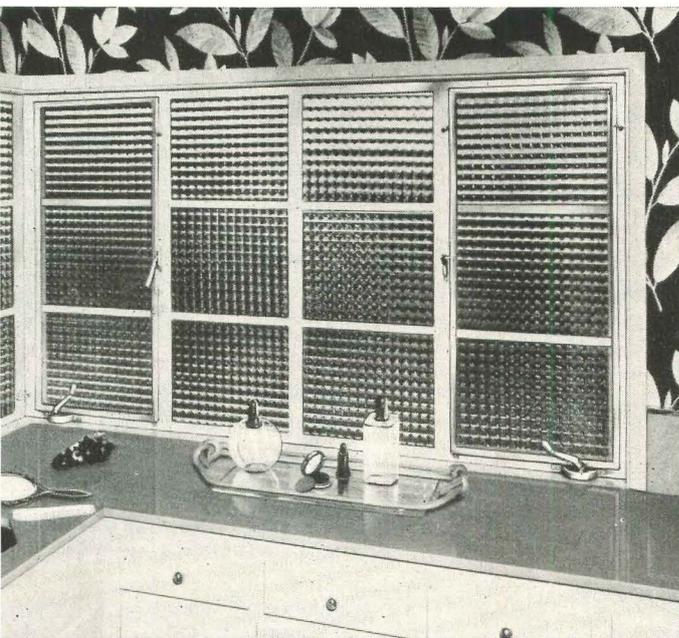


MOFFETT

AP FHAdministrator chairman, March 25 in New York; **J. Reilly Stanton**, 65, former (19) District of Columbia FHA director, later worked for the General Services Administration, March 4 in Washington; **James P. Murrin**, 61, PHA assistant commissioner for development, plans and specifications supervisor for the original Security Administration "green" March 10 in Washington; **Frank H. Cott**, 62, New York office manager Nat'l Lumber Manufacturers' Assn., 16 in New York; **W. Scott Blanchard**, board chairman of the Blanchard Lumber Co. of New York and Boston, March 10 in West Palm Beach; **Frederic A. D.**, 89, city planner and uncle of the late president Roosevelt, one time (1927-42) of the National Capitol Park and Planning Commission, March 28 in Washington; **Joseph Patterson Sims**, 63, FAI designer of the many federal and state building projects, March 29 in Philadelphia.



PATTERNED GLASS . . . adds a lot for a little



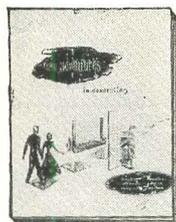
Doublex glass in aluminum windows by Timm, Los Angeles.

You know how prospects go for the extra little touches—like the panels of patterned glass in these bathrooms. This glass provides privacy, but passes light through. Just a few feet of inexpensive glass mark houses as different, attractive, appealing.

Many builders have used Blue Ridge *Patterned Glass* to give homes extra—and quicker—saleability. They've used panels alongside the entrance door—as a partial or full partition between rooms—as exterior glazing where they want both daylight and privacy.

Blue Ridge *Patterned Glass* does double duty for you—for it decorates on both sides—and needs no decorating. It comes in a wide range of patterns—linear, checkered and over-all patterns—in plain, Satinol* and textured finishes. Your L·O·F Distributor or Dealer can show you samples. Call him. And mail the coupon for our book of decorating ideas. *

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Please send me your idea book: *New Adventures in Decorating*.

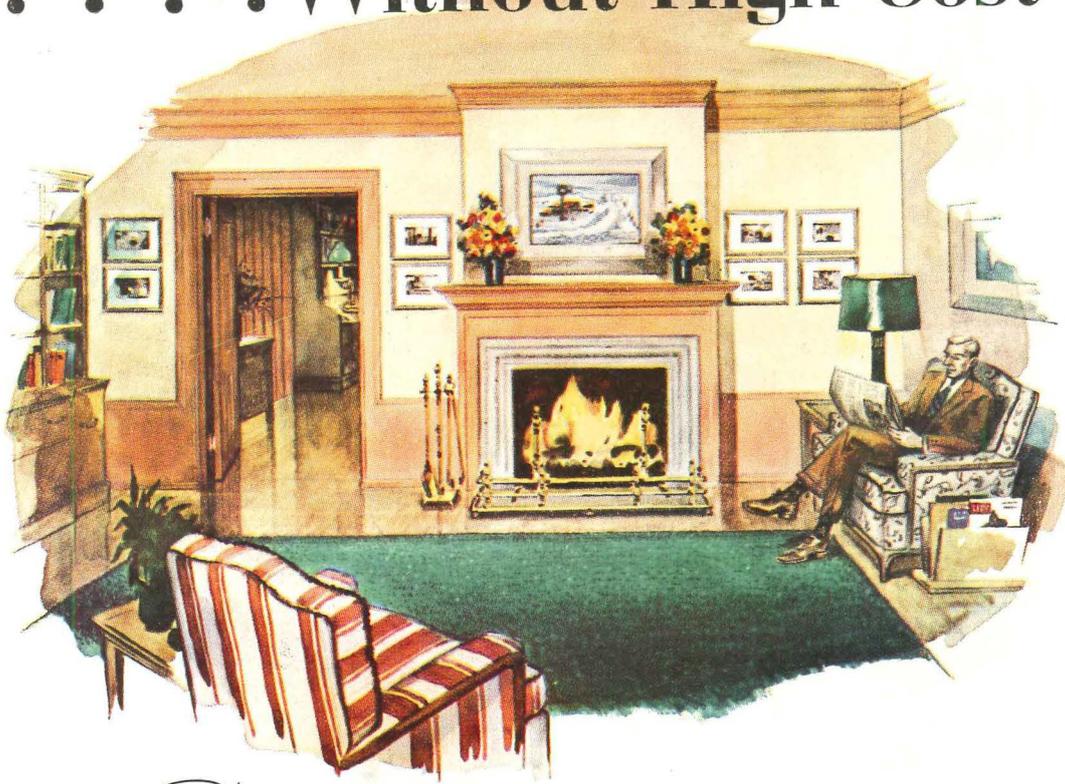
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Truly Satin-like, Arkansas Soft Pine's soft texture works easily to close detail, contours matching exactly at miters. Free from pitch and supplied at specified moisture content, the wood doesn't shrink or swell. Thus stabilized, it absorbs primers evenly, holding finish coats uniformly smooth, permanently free from raised grain.

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Of the same guild-craft refinement, are Crossett's related Arkansas Soft Pine products for built-ins, stair work and the like, identified by these trademarks and available at your local lumber dealers. For further information, address:



Typical of authentic patterns promptly available.

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CROSSETT, ARKANSAS



New England Home Show combined with Living Exposition, **Apr. 18-26**, at the Building, Boston. Participating are builders, mortgage interests, realtors suppliers and others. Home Show (Boylston St., Boston 16, Mass.

American Institute of Steel Construction annual National Engineering Conference **23**, Detroit, Mich. Sessions at Detroit Engineering Society Building, 100 Farnsworth headquarters: Park Shelton, 15 E. Ki

National Association of Housing Officials conferences: Middle Atlantic, **Apr. 23** McAlpin, New York; New England, (not set); North Central, **May 18-19**, Shelby, Detroit; Southeastern, **May 2** Tona Beach; Southwestern, **June 3-5** Hotel, San Antonio; Pacific Southwest Hotel Claremont, Berkeley; Pacific Portland, **Sept.** (date not set).

Royal Architectural Institute of Canada's assembly, **Apr. 23-25**, Royal York Hotel

Competition. Ponderosa Pine Panel Design Competition to obtain designs for interiors suitable for mass-production methods consistent with current standards of architectural design. Prizes total \$7,600 including student and school prizes. AIA approval **Apr. 27**. For program write: Ponderosa Pine Woodwork Competition Headquarters, Pico Blvd., Los Angeles 6, Calif.

New garden for The Museum of Modern Art, New York City, will open **Apr. 29**. Designed by Philip C. Johnson, a 175' x 100' sunken garden provide a variety of areas and backgrounds for the outdoor display of various kinds of sculpture.

National Savings & Loan League's 19th convention **May 10-14**, Chase and I Hotels, St. Louis, Mo.

National Housing Conference's 22nd annual meeting **May 11-12**, Statler Hotel, Washin

National Association of Building Owners and Managers' 46th annual convention **June 7-9**, Pittsburgh, Pa.

National Store Modernization, Building and Finance Show, Madison Square Garden, New York City, **June 9-12**. Included will be exciting winning designs in nation-wide competition for suburban shopping centers, stores, supermarkets, etc.

Forest Products Research Society's 7th annual meeting **June 15-17**, Memphis, Tenn.

AIA Board of Directors annual meeting, Olympic Hotel, Seattle, Wash.

The American Institute of Architects' 100th anniversary convention, **June 16-19**, Olympic Hotel, Wash.

National Home Week dates set by the National Home Builders' Conference. The week will be the Trade Secrets house (see '53) developed by a committee of leading home builders. Also forecast is a big upsurge in conditioned homes.

National Association of Real Estate Boards' 100th anniversary convention **Nov. 8-14**, Statler and Hotels, Los Angeles, Calif.

Mortgage Bankers Association of America's 100th anniversary convention **Nov. 13-19** at Miami Beach. In conjunction, a home show conducted by offering services or manufactured products relating to homebuilding.

A big talking point for the homes you sell



Uskon ceiling panels are quickly and easily installed.



Uskon eliminates radiators, ducts, dirt. Architects and decorators get new freedom of design.

U.S. Rubber's **USKON**[®] electrical radiant heating ceiling panels

No prospective homeowner can resist these facts about USKON:

- (1)—Gives quick heat with a flip of a switch or thermostat.
- (2)—Nothing to break down or wear out—no ashes to haul, no soot or smoke.
- (3)—No furnace to clean or repair.
- (4)—Eliminates unsightly radiators and ducts. Blends with any decorative scheme. Panels can be painted over with any ordinary flat paint. Panels can be installed in one room or all rooms, new homes or old.

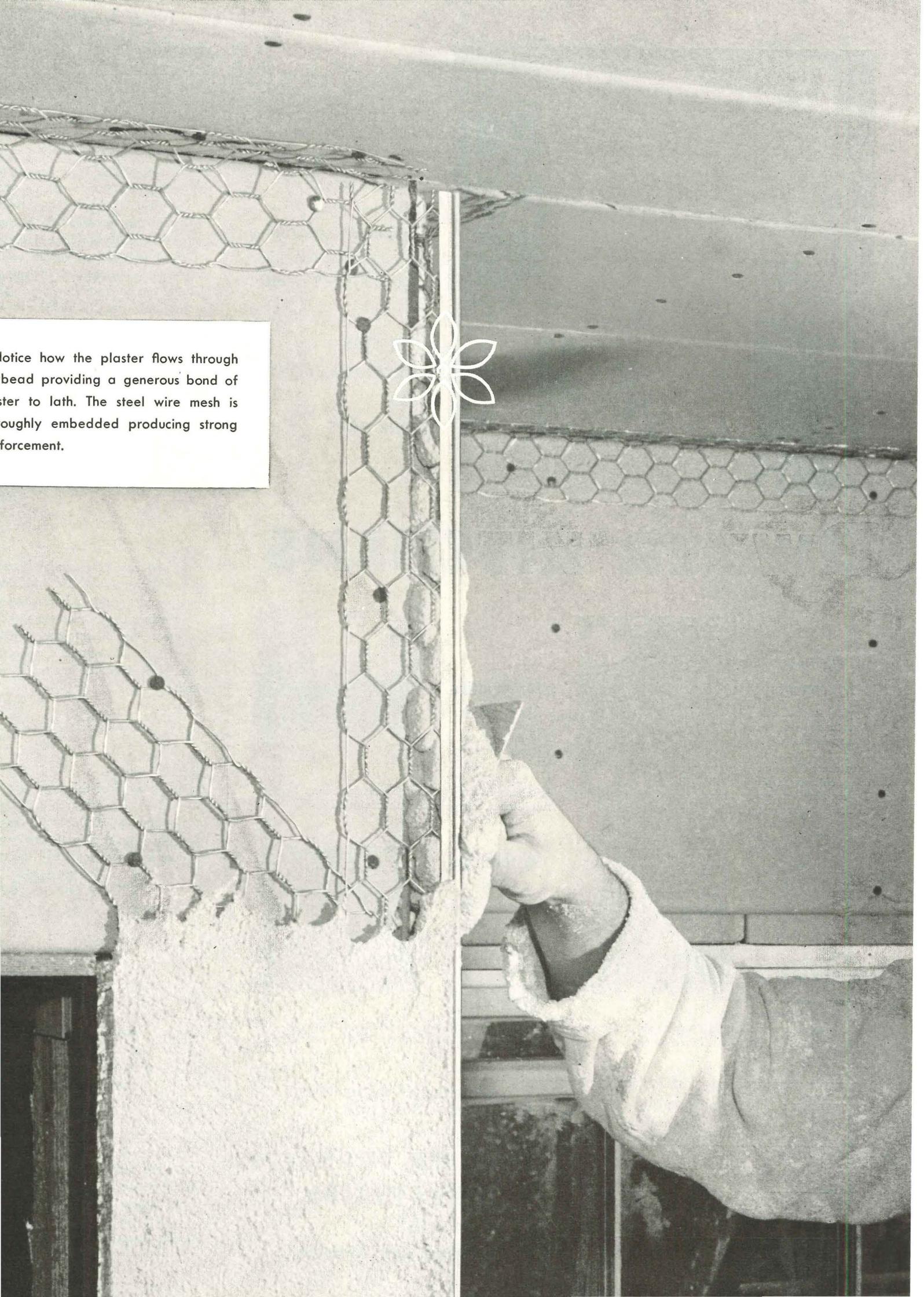
No prospective builder can afford to overlook USKON. You will find that Uskon electrical radiant heating *will help you sell* the homes you erect. It will add to your reputation for installing the newest,

proven developments in the field! Uskon is a development and product of United States Rubber Company. It has had a tremendous success for several years in homes, apartments, offices, commercial and industrial buildings, bathrooms, sun porches, game rooms, garages, basements, motels, summer cottages. Approved by Underwriters' Laboratories, Inc.

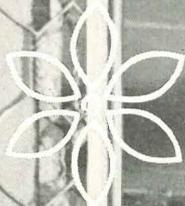
USKON is quickly and easily installed—the panels are simply *applied* to the ceiling, not embedded. No preliminary preparation—a minimum of time and trouble for you. Your costs stay at rock-bottom.

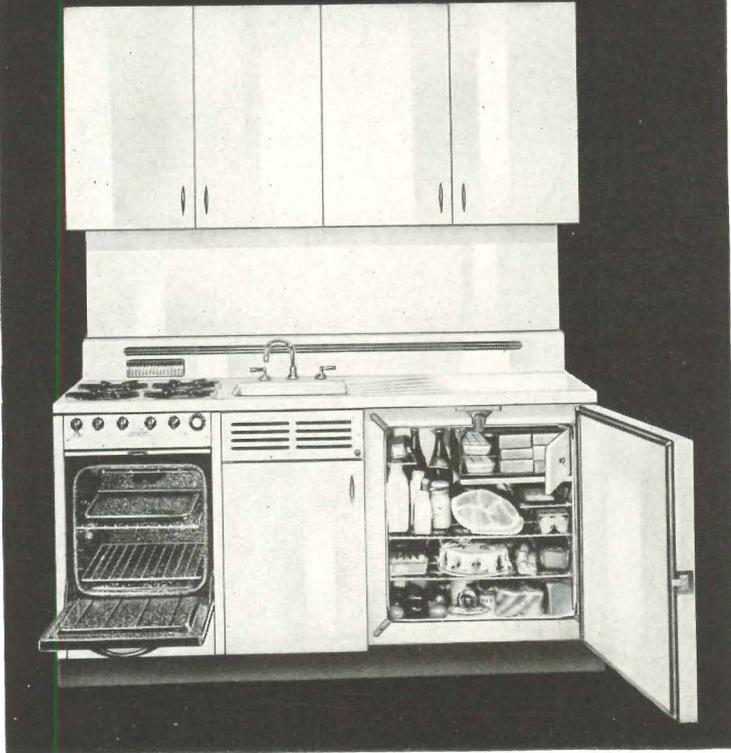
For complete technical data and costs information, write to Mechanical Goods Division, United States Rubber Company, Rockefeller Center, New York 20, N. Y.

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Notice how the plaster flows through the bead providing a generous bond of plaster to lath. The steel wire mesh is thoroughly embedded producing strong reinforcement.





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Electric refrigerator.
Counter, range-top
and sink in one
seamless piece.
Cupboard and under-
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Typical are the Essex Apartments in Indianapolis where 390 Dwyer Kitchens save room for more spacious living areas.

Dwyer Kitchens enjoy 26-year record for durability and trouble-free operation in rental properties.



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Change old residences from tax-eaters to profit-makers. Dwyer Kitchens are the key to remodeling into quickly rented apartments.



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Convenient for coffee, for simple or sumptuous food. Thousands used in offices, stores, banks, television and radio stations, fire stations, schools, churches . . . used for night shifts . . . and wherever close-at-hand kitchen facilities are needed.



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Michigan City, Indiana

afford them. Whether or not these it pay for themselves in added sales ap included in the financing is the so tion that always must be answered improvements adding to the cost of are installed. Frankly, the correct answer to this question lies in the competence of the builder to judge l

I don't believe our buyers would of the open-plan bath. It deprives feeling of privacy which is a primar for the bathroom. In addition, I f to appreciate the advantage.

I cannot see the desirability of p washing machine in the bathroom. this would save trips from the cloth to the washing machine, it will not from the washing machine to the of course, no one else could occup room while the laundress is at wor idea is as valid as placing dining t the bathroom.

SA
Wa

Sirs:

We believe a very nice and attra room will pay for itself in added sa Most people prefer a larger open

According to our customers, the the place for an automatic wash house does not contain a laundry room, they prefer the automatic w kitchen.

PAU
Kess
Celi

Sirs:

I think more of this type of art be written, as most architects, es homes below \$20,000, seem to hav conception of the size of a bathro average family of four, and up, re

C. BECKWITH, s
Toledo Desk & P
Maumee, Ohio

Sirs:

Although we are in complete with your objective of attaining a room for the American public, v feel that you have overlooked strongest trends which has evid over the past few years. That rapidly growing preference of p ages for cabinet-shower or stall-sho Furthermore, the trend has been more toward a prefabricated, pac net shower and away from the other types of built-up stall show it is a unit designed to give more and longer service for less cost.

The cabinet shower, as you may away with the need for lead par proofing membranes of any kind, a

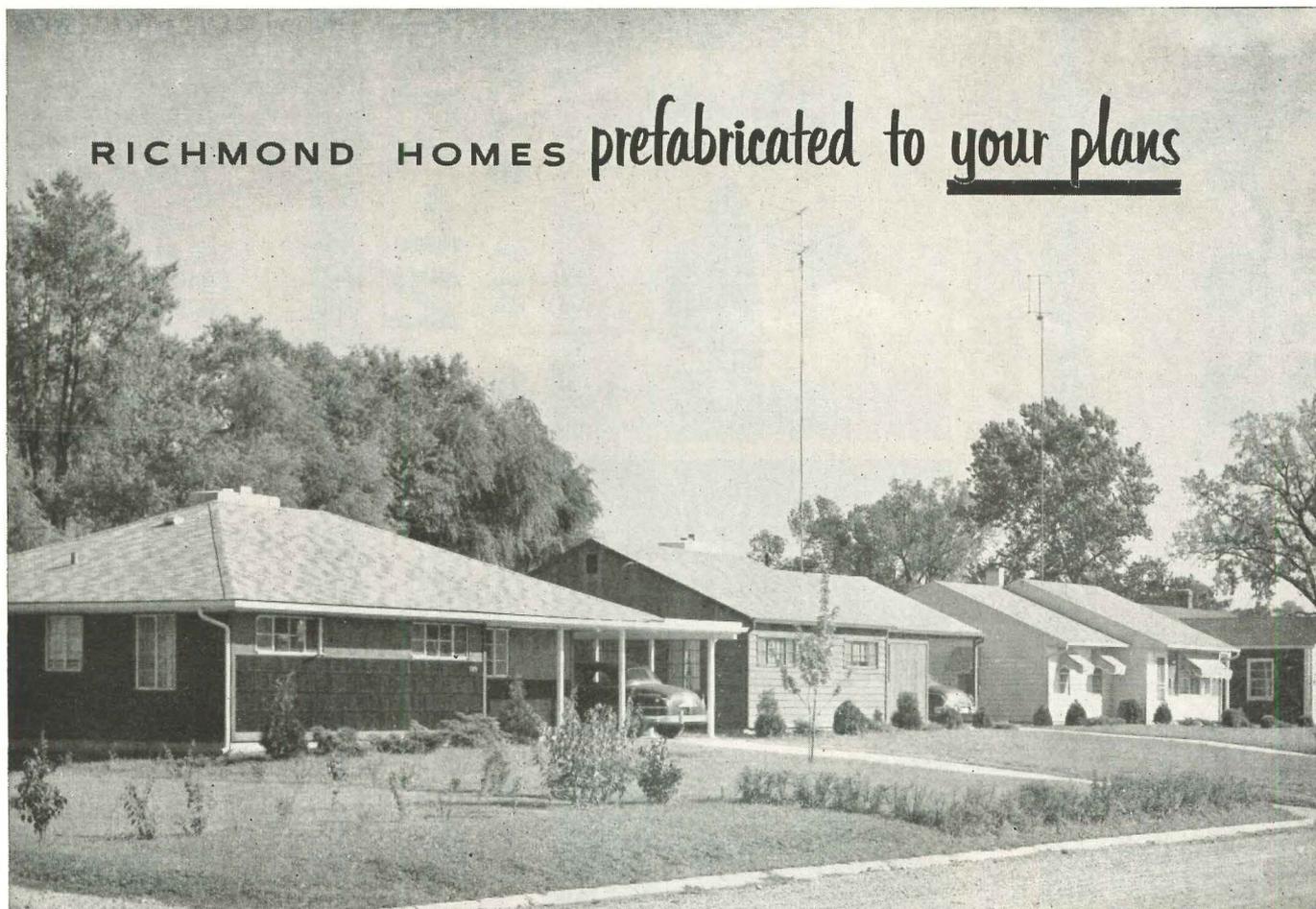
contin



for project builders

Prefabrication is the answer to increased profits for the builder of large projects. Richmond Homes will prefabricate your entire project, using your own successful plans to create a variety of exterior elevations. You can build faster, at lower cost, with fewer headaches, when

you use Richmond Homes. Sections are shipped with BOTH interior and exterior finish applied. Richmond Homes are regarded by competent builders as the shining example of the finest in prefabricated homes because of conventional construction features and custom-built appearance. Investigate the tremendous profit possibilities . . . today!



Our program, naturally, has certain requirements relative to the financial status and experience of the builder. If you feel that you can qualify, we would like to hear from you. Write, wire, or phone for complete information. New 1953 brochure now available.

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homes

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430 Northwest "K" Street, Richmond, Indiana

it is independent of the building structure and will not be affected by the building's shrinkage with the consequent downward movement of ground-floor ceilings in the event that the ground is on the second floor.

R. S. SHOOK, sales manager
Henry Weis Manufacturing
Elkhart, Ind.

Sirs:

The article is very good and very interesting. I believe some home buyers will be interested in the "In-A-Top" for larger bathrooms in certain types of houses where the location warrants the extra cost of the house. For example, it would be logical to put in a large expensive bathroom in some location where the people who would live on account of the adjoining property could afford to pay more would not mind. In other words, a large bathroom should have most other things in it. One thing I have in mind is the size and value of the lot.

WALTER S. JOHNSON
Walter S. Johnson Builders
Niagara Falls, N. Y.

Sirs:

You say on p. 101, "Handsome tile costs only \$1 to \$1.50 per sq. ft." This is below costs in this area, that it is. Costs here, starting from stud walls and mic tile on metal lath stuccoed under about \$2.75 per net sq. ft. Using tile and applied over plastered walls, tile walls cost \$1 and more per sq. ft.

Please advise the basis for your costs.

SIMON MEYER
Property Developer
Charleston, W. Va.

See article, "Adhesives pave way for tile," p. 162, March H&H. We have found that tile is being set at \$2.75 starting from stud walls in your area. Through use of drop adhesives, tile can be set (and is being set) in many areas for \$1.25 per sq. ft. Cost caption did not refer to cost from studs.

Sirs:

We were very pleased and proud to undertake the article on bathroom windows. We want to congratulate you on it.

We thought it was an excellent article.

ROBERT F. ANTON
Briggs Manufacturing
Detroit, Mich.

Sirs:

As you know, we have been using the "five ways to cut bathroom windows" for a number of years.

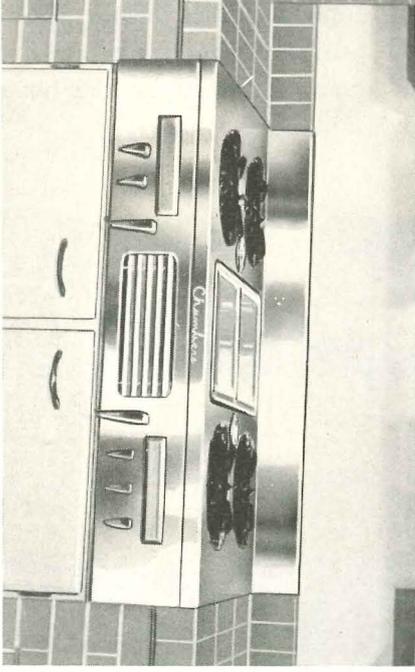
The window the entire width of the wall does not sound very good to me. In fact, it would not lend itself to modular windows. Aesthetically the question of conforming to other windows presents itself. Except for

continued

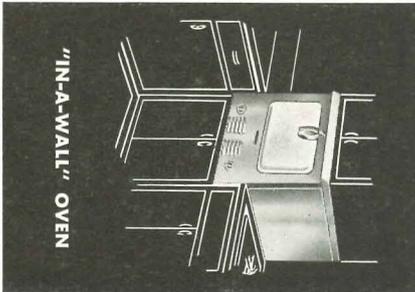
ANOTHER GREAT CHAMBERS "FIRST" IN BUILT-IN COOKING EQUIPMENT...

THE ONLY "BUILT-IN" Broiler and Griddle THAT SETS IN A COUNTER-TOP!

- ✓ CHECK CHAMBERS' SELLING FEATURES!**
- ✓ Completely Waist-Hi, No-Stoop Cooking!
 - ✓ Gourmet Broiling at Waist-Hi Level
 - ✓ No Outside Venting Required
 - ✓ World Famous Cooking Performance
 - ✓ Stainless Steel Construction-- Fits Standard Kitchen Cabinets-- Wood or Metal
 - ✓ Can Be Bricked In Solid
 - ✓ Oven Doors in 7 Decorator Colors
 - ✓ For City... Bottled... Tank Gases
 - ✓ For City... Bottled... FHA Approved
 - ✓ AGA Approved... FHA Approved



This compact unit combines 4 burners and Chambers' famous "IN-A-TOP" Broiler and Griddle in only 42" of counter! Broiler rises to counter-top with a flick of the wrist. Of lustrous stainless steel.



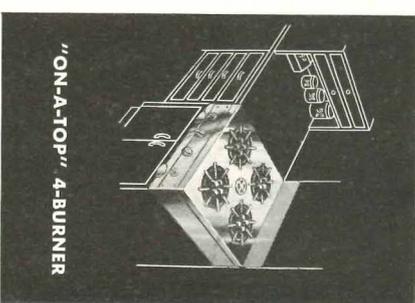
"IN-A-WALL" OVEN

Super insulated to give Chambers' world-famous performance. Requires only 24" of counter.



IN-A-TOP "DROP-IN" BURNER

Chromium plated steel, perfect for wall, island, or peninsula cooking arrangements.



"ON-A-TOP" 4-BURNER

Big capacity, compact space. 4 burners in only 27" of counter. Satin stainless steel.

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I am interested in: AIA Specification Sheet Dealer Franchise
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Chambers
COOKS WITH THE GAS TURNED OFF[®]





of builder Hendy's Price Hill development. These moderately priced homes are all
equipped with General Electric Kitchens.

With G-E Kitchens in 60 days —before even one single foundation was completed!

Learn about this a minute. Mr. William F. Hendy, builder of Arcose Company Houses in Price Hill, Cincinnati, Ohio, took a tip from the pages of other successful builders—and sold his houses in record

time. And, we say YOU can, too . . . when you install a G-E Kitchen-Laundry.

Reasons why: First of all, women prefer General Electric appliances to any other brand. A survey shows that 55.7% of the people interviewed believe that G.E. makes the best appliances for the home.

Second: A G-E Kitchen-Laundry can be built right into houses in the \$10,000 or \$12,000 price range—and the monthly cost to the homeowner may be no more than that for a typical telephone bill, because under modern home-financing the cost of these dependable appliances can usually be included right in the regular mortgage.

Start selling your houses faster, just as many other builders are doing from coast to coast. See your local G-E distributor or write to the Home Bureau, General Electric Company, Louisville 2, Kentucky.

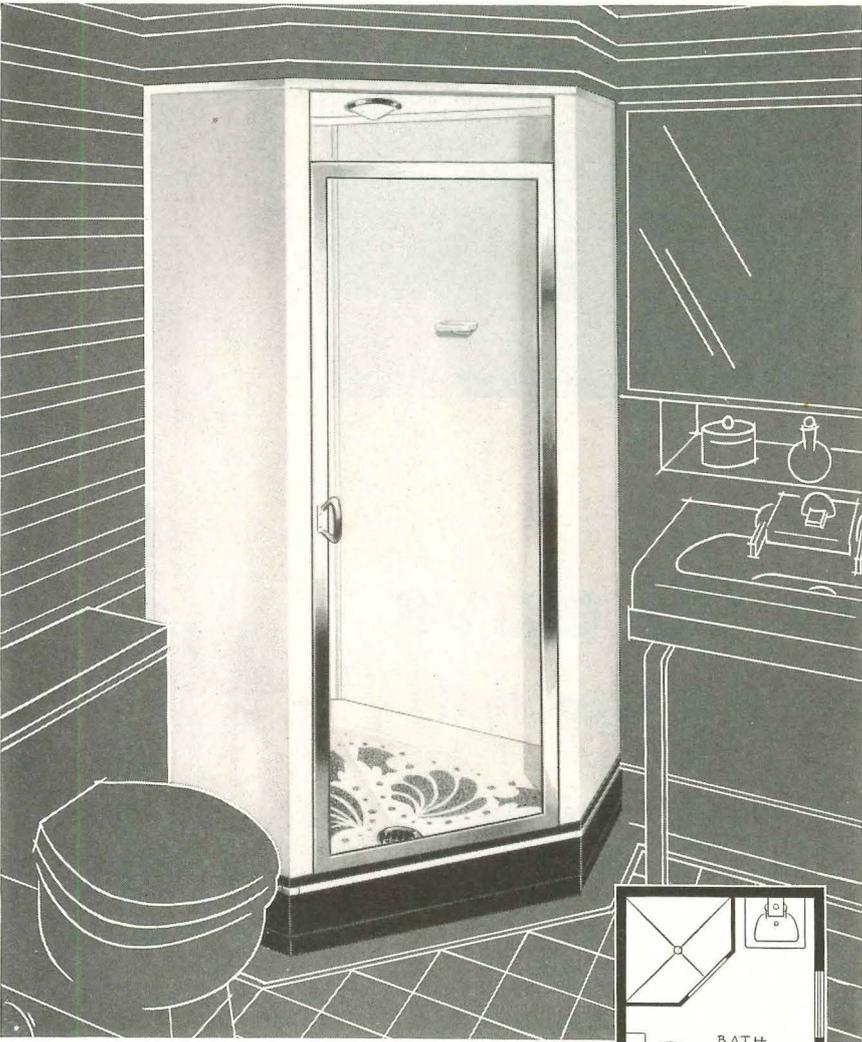
GENERAL  ELECTRIC

for Added Baths

You can put the added sales appeal of extra baths into homes of every size and price range with guaranteed Weisway Cabinet Showers. These self-contained leakproof baths are engineered and precision-built for quick, easy installation. No special treatment of building walls or floor required. One man easily places vitreous porcelain enamel receptor. Quality-built Weisways are in complete harmony with latest building techniques and materials.

WEISWAY VITRECEPTOR

Leakproof, rustproof receptor for use with walls other than metal. Foot-Grip, No-Slip floor of vitreous porcelain, safe, sanitary, non-absorbent!



Corner entrance Weisways are especially adaptable to space-saving bathroom planning.

Weisway CABINET SHOWERS

Mail Coupon for full color catalog with detailed information on complete Weisway line.

HENRY WEIS MFG. CO., INC., 442 Weisway Building, Elkhart, Ind.
Please send catalog and details on Weisway Cabinet Showers and Weisway Vitreceptor.

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City _____ State _____

low areas in a bathroom create a special problem due to body radiation to the faces and the generally necessary ventilation window over the tub, which tends to let cold air to spill down onto the bare feet of the bather.

Practically all the ways mentioned in the small bathroom add something to the room. Those which don't, such as warming the floor and using a bathtub such as Briggs with vertical steel flanges on three sides, we can't mention.

The article is stimulating and constructive.

IRWIN G. JACOBSON
Levitt & Sons
Levittown, Pa.

Sirs:

I have done considerable research in bathroom design and in my opinion the most direct way to provide bathrooms of modern standards without increased cost is through prefabrication.

Because a conventional bathroom is composed of several hundred parts made of a great variety of materials, and involving many different trades, it would obviously be advantageous to treat such an intricate item as a "prefabricated" rather than as a "site built room." As a result, with a mass market, the bathroom could benefit by all the well-known advantages of industrial methods which are part of modernization and which are enthusiastically accepted by the US public.

The amount of time which could be saved by research and experimentation for the production of a bathroom for mass production is many times the amount of time spent by even our most conscientious designers on the design of a complete development. However, the initiative in this matter should be more to the manufacturer than to the architect. Little is accomplished with periodical "updating" of fixtures and fittings, when the coordination of all the different parts of the bathroom is done in the same imperfect manner as was done years ago, and the design of these parts is not in coordination.

In other industries it is common for a manufacturer to produce an entire product and assume full responsibility for it. Just as you buy a Ford engine, and then have it put in and shop for a body, chassis, etc. This is precisely the situation in the bathroom industry and the public is paying the price for these wasteful practices.

GUY G. ROTHENSTEIN
Forest Hills, N. Y.

Sirs:

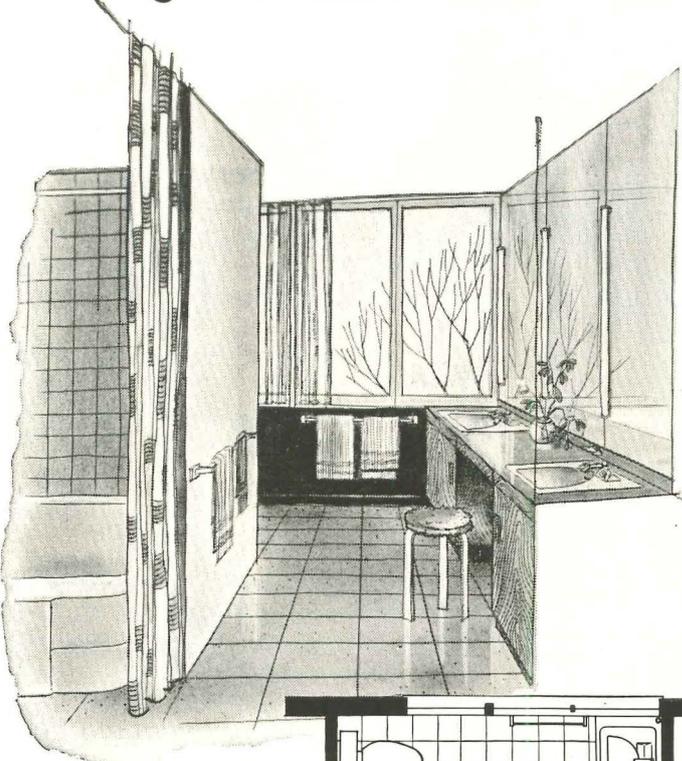
I believe your policy of reporting on trends in various items and equipment done in the 39 Ways to Build a Better Room is going to help the builders and the manufacturers.

You know of our difficulties in securing better-designed products from manufacturers. You know, too, that one of the reasons

continued

CRANE'S ARCHITECTURAL COMPETITION

brings out dozens of room ideas that help sell houses



Crane wants to help builders sell more houses . . . easier. That's why we like to pass along ideas that put more sales-appeal in bathrooms, kitchens, and utility rooms.

Many such ideas have been developed for you. And to get more of them, Crane has just concluded a nation-wide architectural competition offering generous cash awards.

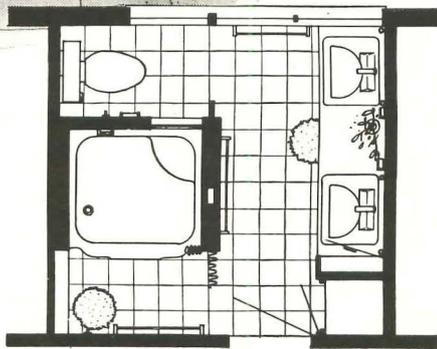
Out of this competition has come the best thinking of almost 500 architects and draftsmen —dozens of original, prize-winning ideas like the two shown here.

The best of these ideas are being built into actual rooms, full details of which will soon be available. In the meantime, don't forget that the big Crane Sketchbook of Ideas is filled with usable ideas like these. And it's yours for the asking. Get your copy from your Crane Branch or Crane Wholesaler.

1ST PRIZE BATHROOM

FOR HOMES COSTING UP TO \$25,000

J. A. Curtis, Boston, Massachusetts



COME TO

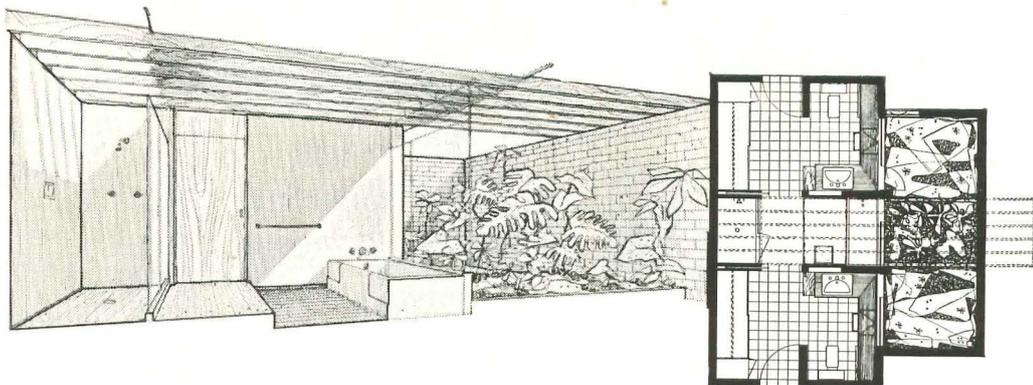
CRANE

FOR IDEAS

1ST PRIZE BATHROOM

FOR HOMES COSTING MORE THAN \$25,000

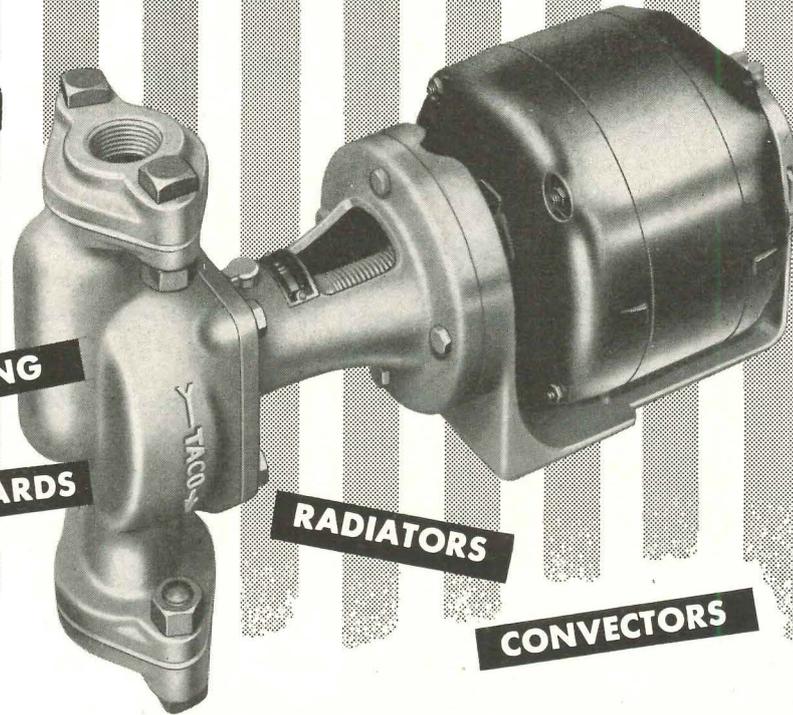
Charles West Jones, Jr. Hollywood, California



CRANE CO.

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VALVES • FITTINGS • PIPE
PLUMBING AND HEATING

get FAST, RESPONSIVE HOT WATER HEAT for



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RADIATORS

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with this popular TACO CIRCULATOR

EVEN LOW BUDGET HOMES CAN NOW HAVE THESE LUXURY ADVANTAGES

RADIANT WARMTH • DRAFTLESS WARMTH • CONTROLLED WARMTH

MORE HOT WATER FOR KITCHEN, BATH AND LAUNDRY

Yes, forced hot water heat with a TACO circulator gives all this *plus* economical warmth. No need for a separately fired water heater. TACO TANKLESS, hooked up to a heating boiler, supplies year 'round *low cost* hot water.

The TACO circulator delivers heat where it will give the greatest comfort . . . whether you use radiant panels, convectors, radiators or baseboards.

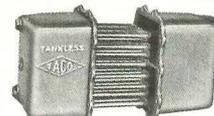
**ARCHITECTS-ENGINEERS
WRITE FOR . . . SIMPLIFIED
SELECTION CHART FOR SIZ-
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UNDER ANY CONDITIONS.**

Three other famous TACO PRODUCTS for houses



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eliminates air from hot water radiation automatically



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gives an abundant supply of hot water instantly. No need for storage tank.



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**Better Heating-
Better with Taco**



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better products have not been designed to meet a demand for better products has proved to the manufacturers. Naturally, they are not going to put out a new product every year as the automobile manufacturer does. Less pressure is applied where it will do the most good.

I believe your article . . . and I believe it is part of a series . . . will do much to help those who have not realized that the possibilities of their houses may be improved by the utilization of the trends shown.

It is evident to me in my travels that these trends are fast becoming the standard in the homebuilding industry. Articles presented in this magazine are more widely quoted than ever before in my experience more quoted than in any other periodical's. Thus far, you have been treated too deeply to the trades people. However, I'm sure that that effort is part of an over-all policy and that it will be accomplished in the not-too-distant future.

Sirs:

The "39 Ways to Build a Better Home" is simply sensational. Our design department is now working on many of these. We have found your article to be one of the most interesting that we have read in some time.

We doubt that it is possible actually to save \$150, while we do believe that considerable savings can be had by following the program. I do agree that home buyers should pay extra for a larger bath, bigger windows, mirrors, built-ins, etc., and we are not against the use of them. I do not believe that the kitchen is the proper place for the washing machine. I think the washing machine should be in the kitchen or in a utility room which is adjacent to the kitchen.

Your article has been most helpful. Congratulations on the fine work that you are doing for the homebuilding industry.

FLOYD E. KIMBROUGH
Kimbrough Investment
Jackson, Miss.

TRADE SECRETS HOUSE

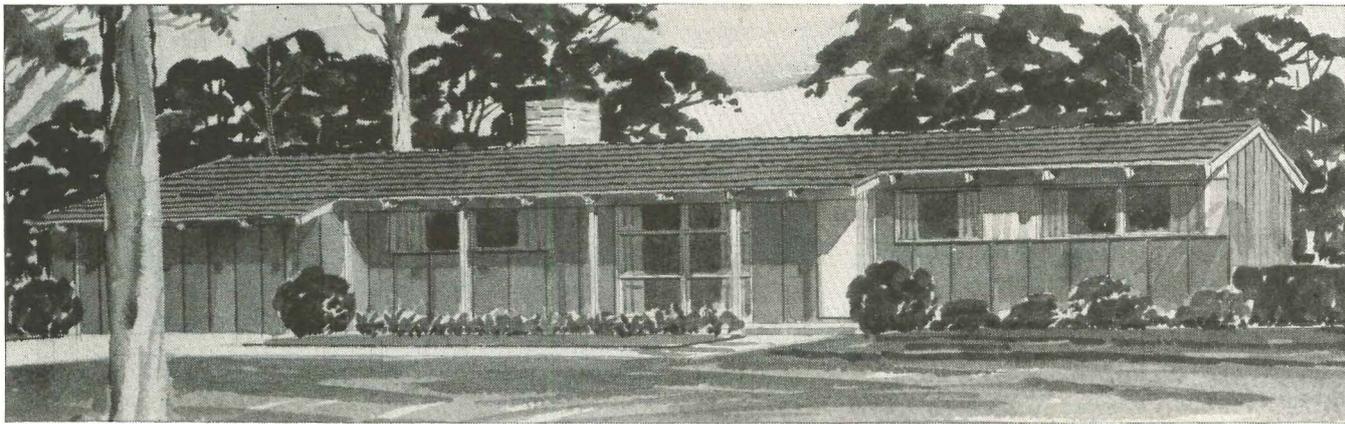
Sirs:

I feel that the NAHB has made a great step in the right direction with the Trade Secrets House (H&H, Jan. and Feb. '53). It should be the perfect answer to the problem of the time, but if it could be incorporated into NAHB's 1953 model this program, it must be followed through by NAHB with a 1954 model house. The homebuilding industry can place itself on a more sound and the healthier business conditions with

FRANK L. COWTON
Burns Construction
Denver, Col.

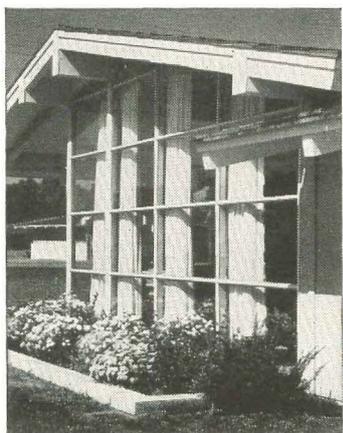
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BUILDERS— WHY EXPERIMENT ?



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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Glazing the Air-Conditioned Home

WHY AIR CONDITIONING CALLS FOR SPECIAL CONSIDERATION OF WINDOWS

Windows are possible sources of heat gain in summer, just as they may waste heat in winter. That's why, in air-conditioned homes more than ever, windows must be thoughtfully planned to give home buyers the comfort they want, and to assure efficient and economical operation of the air-conditioning system.

YOU HAVE THESE CHOICES FOR BETTER HEATING AND COOLING:

1. Resort to old-style, small windows to reduce heat loss and heat gain.
2. Use insulated windows. There are two ways to do this:
 - a. Storm sash on all windows the year 'round.
 - b. Sealed insulating glass in all windows.

SMALLER WINDOWS

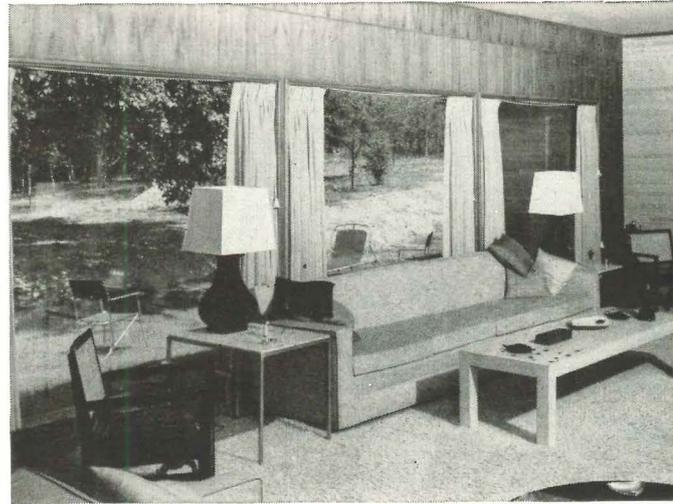
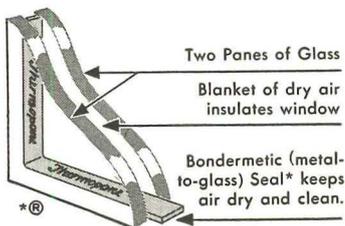
Smaller windows have steadily lost favor with architects, builders and buyers. Home buyers have shown a tremendous and continued desire for picture windows and window walls. To give them smaller windows would be a backward step that is sure to run into sales resistance—resistance which would be felt by builders, architects, real estate people and air-conditioning people, too.

INSULATED WINDOWS

Insulated windows, the other possibility, are a more logical and saleable answer to glazing for air-conditioning and heating economy. With insulated windows you reduce heat loss in winter and heat gain in summer. They save fuel in winter and power in summer, and help make the house more comfortable the year 'round. Consider the two ways of insulating windows:

1. Storm Sash is one means of window insulation. They can be left in all year to provide summer as well as winter insulation. But they must be taken down periodically for washing, since dirt and moisture will infiltrate between them. And storm sash in sizes required for today's larger windows are unwieldy.

2. Sealed double glazing allows the use of large windows for daylight and view without the bother of storm sash. More and more builders have been putting *Thermopane** insulating glass in medium and low-price homes just for its winter benefits. Now, in the air-conditioned home, these become year-round benefits and the extra cost of double



Architect Everett V. Welch, Dallas, Texas, used *Thermopane* insulating glass in this air-conditioned home in Dallas. Says Mr. V. "This resulted in savings on both heating and air conditioning from the standpoint of initial cost and second, from the standpoint of operational cost".

glazing is doubly justified. The extra cost is minimized by use of standard size units, standard sash and simplification methods.

The table below shows *Thermopane's* effectiveness in cutting down heat transfer by conduction and convection from the warm side to the cold side. *Thermopane* saves, roughly, half of the heat that would be wasted through single glass by these forms of heat transfer.

Kind of Glass	Thickness	Winter U. Value
Single pane (plate or sheet)	1/8"	1.16
	1/4"	1.15
<i>Thermopane</i> (double-pane units)	1/2" (1/4" air space)	.65
	1" (1/2" air space)	.58

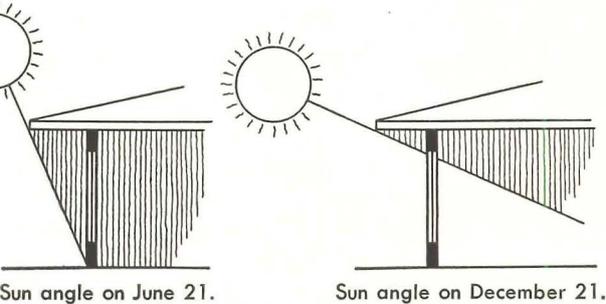
NOTE: Heat transmission coefficients (U. values) vary with ranges of temperature. Winter U. values above are based on 10° outside temperature, 70° inside temperature. Summer U. values are based on 95° outside temperature and 70° inside temperature. Wind velocity of 15 mph outdoors and normal free air circulation inside are assumed in both cases.

HOW TO PLACE WINDOWS IN AIR-CONDITIONED HOMES

Insulation, alone, is not enough. Location and exterior shading of windows are vitally important if heating and air conditioning are to work with maximum effectiveness and economy. Windows facing south are to work with maximum effectiveness and economy from the sun and sky place by far the biggest load on air conditioning systems in homes. The house should be designed to make maximum use of the sun for winter warmth, but also provide provision for shading certain windows in summer.

SOUTH WINDOWS

For maximum use of solar heating in winter, the house is laid out along an east-west axis, with large windows on the south. This brings in the low winter sun for fuel savings and comfort. South windows are easily protected from high summer sun by a roof extension (so designed that the low winter sun is under it). The diagrams below show how this works. For design information for this overhang, see an architect or engineer. Most of them are equipped with the necessary guides and tables set out for your latitude.



Sun angle on June 21.

Sun angle on December 21.



This exterior view shows how Architect Welch provided a roof overhang to shade south windows from the sun in summer.

WEST WINDOWS

West windows must be more carefully considered than those on other elevations. Due to the buildup of heat through a hot summer and the fact that the west elevation is exposed to the low afternoon sun, heat transmission through west windows can place a great load on the air-conditioning system. There are several possible ways to handle the west elevation problem:



1. Some architects and builders solve this problem by placing the porch, garage, carport or utility room on this side of the house.
2. If there are large trees on the site (or if they can be added) to shade west windows, the problem is solved by nature. The leaves provide summer shade—the bare branches let the welcome winter sun come through.

Heat absorbing glass is an effective means of decreasing solar

heat gain. This blue-green glass is made with a special chemical composition which enables it to absorb solar energy. Much of this heat is dissipated back outdoors, so that less load is thrown on cooling equipment. For best results in west windows, therefore, *Thermopane* should have heat absorbing glass as the outer pane. This heat absorbing *Thermopane* reduces the heat gain through west windows approximately 50% as compared to single-pane, clear glass windows. This has been determined by calculations made for west windows at 4:00 P.M. in summer, when the sun is considered to be at its worst angle. By reducing the cooling load, heat absorbing *Thermopane* may even reduce the size of the air-conditioning equipment required for the home.

EAST AND NORTH WINDOWS

North windows rarely present a problem of radiant heat gain. Windows in the eastern elevation, if exposed to the morning sun, may require shading as suggested for western windows. An engineer's or architect's recommendations should be obtained on this.

TYPES OF SASH TO USE

Architects and builders employ fixed sash in air-conditioned homes, relying on the heating and air-conditioning system to provide ventilation. In some cases, louvers or other kinds of sash are used for supplementary ventilation. Fixed sash are economical and they do away with the need for insect screens on windows. Standard picture window and window wall units are available from a number of manufacturers through L·O·F Distributors and Dealers. These frames take the same sizes of *Thermopane* insulating glass which is readily available from L·O·F Distributors and Dealers.

Many people will insist upon having ventilating sash

in their homes for psychological reasons and because they may want to use natural ventilation in the more moderate seasons of the year. Their preferences can be satisfied with ventilating sash which take standard *Thermopane* units. These sash, of wood or metal, are available in all common types. Your L·O·F Glass Distributor or Dealer can furnish information about them and about standard *Thermopane* units for them. Or, write us if you wish more complete information on *Thermopane*, its standard sizes and types of sash for it.

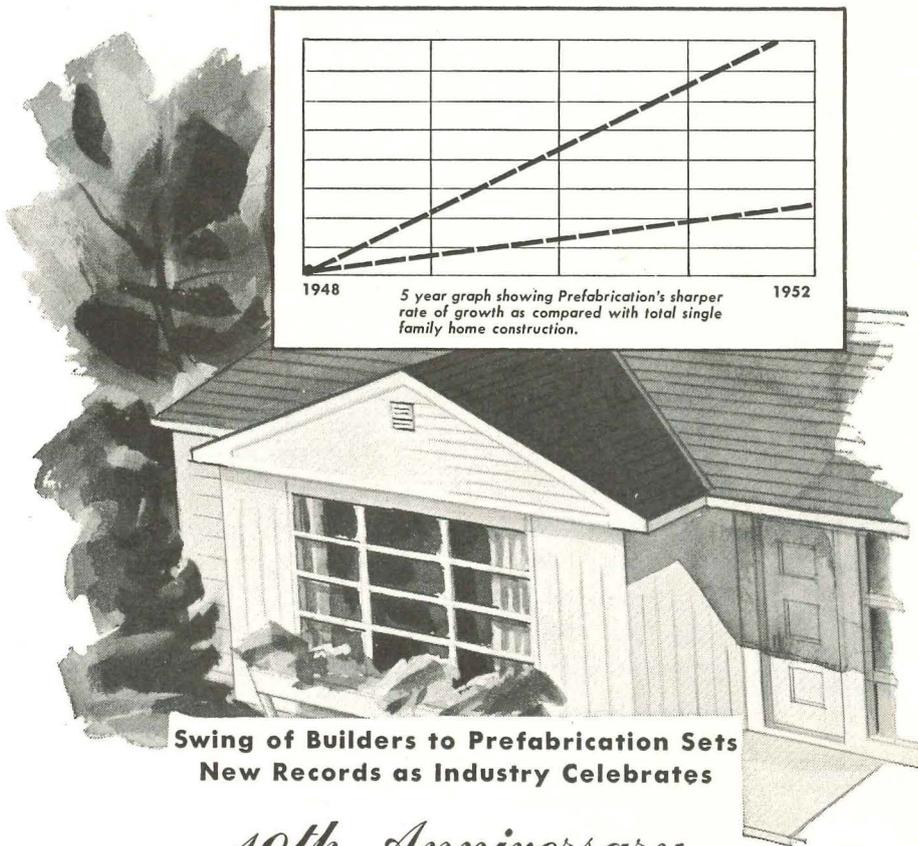
These two pages are a condensation of a brochure that covers the entire subject more fully with additional technical supporting data. We shall be pleased to have you write for a copy of "Glazing the Air-Conditioned Home".

Libbey·Owens·Ford Glass Company, 943 Nicholas Building, Toledo 3, Ohio



LIBBEY·OWENS·FORD a Great Name in **GLASS**

More and More of America's New Homes are PREFABRICATED!



1948 1952
5 year graph showing Prefabrication's sharper rate of growth as compared with total single family home construction.

**Swing of Builders to Prefabrication Sets
New Records as Industry Celebrates**

10th Anniversary

Responsible for the spectacular gains of Prefabrication is the fact that Prefabrication delivers the *utmost* for the building dollar. New sales records continue to be set in the Prefabricated field because Prefabrication provides permanent, attractive homes geared to comfortable living and meets housing needs quickly and economically. Furthermore, Prefabrication's modern methods result in greater savings, from economy model to luxury home. In 1953, as it celebrates its 10th Anniversary, the Prefabrication Industry is ready for its greatest year. Join this big swing to Prefabrication.

Today, write for FREE booklet, "Build Better, Build Sooner."



**PREFABRICATED HOME
MANUFACTURERS' INSTITUTE**

931 20th St. N.W. Washington 6, D.C.

FLUSH DOORS MADE IN USA

Sirs:

We take exception to the statement in the Housing Research Foundation (H&H, Nov. '52):

"Builders throughout the country claim that domestic slab doors warp, when exposed to the weather. To remedy this, many have imported flush doors from Finland and other foreign countries. Surely this is an opportunity for the domestic manufacturer."

As one of several manufacturers of factory flush doors, we claim this statement to be untrue and cannot be supported.

In the last 20 years we have manufactured over six million flush doors in thicknesses from 3 1/4", widths 11" to 9'-6", and heights from 13" to 26'-3".

These doors, made in domestic woods, have been shipped into all parts of the continental US and its possessions.

They have proved 99.8% satisfactory.

D. C. McCRAY, v.p.
Paine Lumber Co.
Oshkosh, Wis.

The statement, made by C. W. Smith in the west Research's book, *New Frontiers in Building*, was based on his own survey. H&H believes that most builders, architects, and specification writers have found US flush doors entirely satisfactory.—Ed.

ORIENTATION

Sirs:

All the houses you print show large windows facing south. Haven't you noticed that there are some lots in America facing north? In your Trade Secrets (H&H, Jan. '53), you rave about lots that can be built anywhere. Suppose south exposure is to the busy traffic street, north exposure is to the mountains, woods, or a lake, or a brook. Do you picture a window to the freezing north wind? All of your brilliant architectural masterpieces have been of architectural masterpiece if the view was to the south and then oriented to the south.

IRVING MARIASH, columnist
New York, N. Y.

ERRATUM

Sirs:

In your February issue of H&H 143, our name was incorrectly given as American Homes, Inc."

We understand how easy it is for the general public to confuse our name with the magazine *American Home*, and we are daily trying to counteract it.

M. E. TAYLOR
American Home
New York

• Our apologies to American Home

one look and you know

a

FIAT

shower door means more

MORE QUALITY built-in means MORE SATISFACTION. Inspect a FIAT door and you'll see why you get more. The quality is evident—the styling unsurpassed.

FIAT Doors fit standard 24" door openings. Easy to install on new or old stall showers of any type—steel, tile, marble or glass.

Look to FIAT DOORS for added beauty—more years of satisfactory service. When you specify a shower stall, include the vital, finishing feature . . . a FIAT DOOR.



Simple design and attractive appearance at low cost—here's the fine quality and sound construction you would expect to find only at a much higher price. The Neptune measures 24 by 64 inches and is reversible for right, or left-hand hanging; one-piece satin-finished heavy aluminum frame with mitered corners and glass set in rubber channel. Extruded aluminum jambs, top and bottom suspension hinges. Bullet catch, offset handles and water deflector.



Here's unrivaled quality, finest construction! Standard 24 by 72-inch size—a full height door with grille; one-piece chrome plated frame of extruded brass with mitered corners; glass set in rubber channel. Chromium plated brass jambs and continuous piano hinge riveted to frame. (FIAT'S moderately priced Zephyr has the same appearance and features as the Dolphin but is made with satin-finished extruded aluminum frame).

FIAT METAL MANUFACTURING COMPANY
THREE COMPLETE PLANTS—ECONOMY • CONVENIENCE • SERVICE



Long Island City 1
New York



Franklin Park, Ill.
(Chicago Suburb)



Los Angeles 63
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BEHIND THE BLUEPRINTS



Born in the nation's capital, Washington Builder **EDWARD R. CARR**, 54, served in World War I, made his business debut in Washington real estate in 1920. In 1925 he branched out into building,

put up 2,000 houses and apartments in the ensuing years. Carr has been an industry spokesman as president of the NAHB and of the Washington Real Estate Board, is currently board secretary. Extracurricular activities included the chairmanship of the 1951 and 1952 Cherry Blossom Festivals and President's Cup Regattas and the 1953 Inaugural Parade. Distilled from his 27 years of building experience is Carr's conviction of the importance (p. 130) of tree preservation in developments.



Atlanta Architects **JAMES HARRISON FINCH**, 37, and **MILLER DAVIS BARNES**, 43, have been partners since 1949 in a residential-commercial practice. Both men were born in Atlanta, were graduated from Georgia Tech, were former employees of Burge & Stevens, Atlanta architectural firm now known as Stevens & Wilkinson. Barnes had his own private practice from 1934 to 1939. Finch is a Princeton alumnus and a 1937 winner of the Princeton Prize. A Marine Infantry officer in World War II, he was recalled to active duty in January, 1952, is now a lieutenant colonel in Korea. The Golf View Development of medium-priced contemporary houses (p. 144) has the colorful touch of Finch and Barnes, was designed before Finch's departure.



Architect **MICHAEL M. KANE**, 31, studied at Western Reserve University and Case Institute of Technology, received bachelor degrees in interior design and architecture from the University

of Michigan. A native Clevelander, Kane worked for local architects from 1939 to 1942 before becoming a naval officer in World War II. Separated from the Navy in 1946, Kane returned to Cleveland, took a post with Architects Walker & Weeks, subsequently left to design schools in the Chicago office of Perkins & Will. He returned to his home town in 1950, now has a six-man office designing apartments (p. 148), builder developments, shopping centers and, increasingly, schools.

continued on p. 86

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air
temperature
privacy



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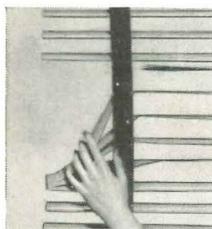
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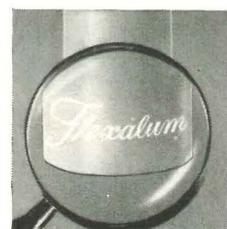
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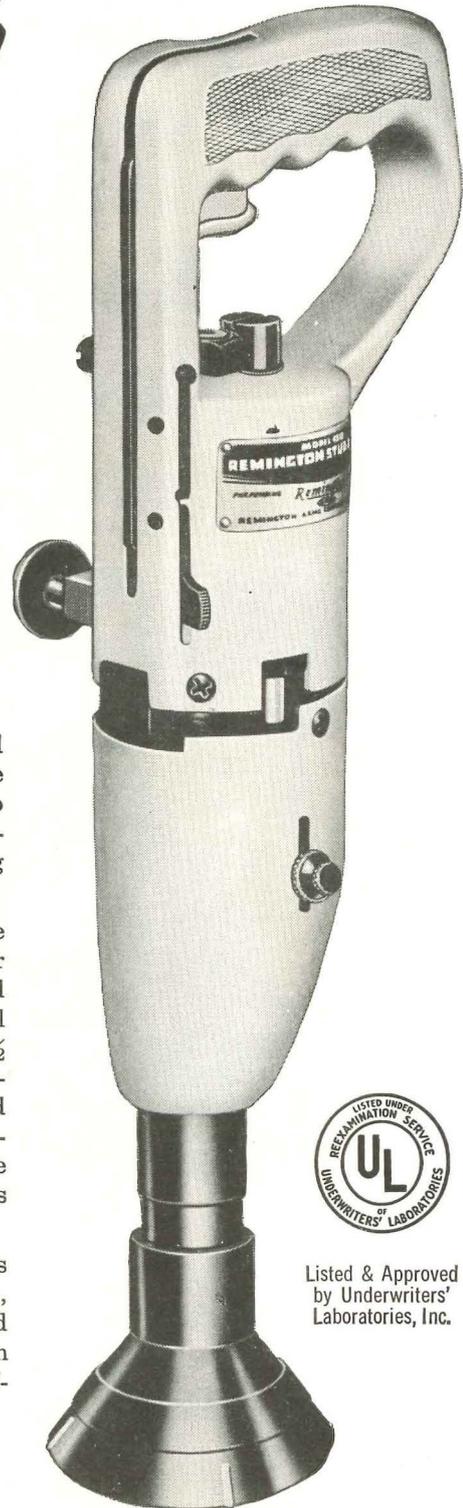
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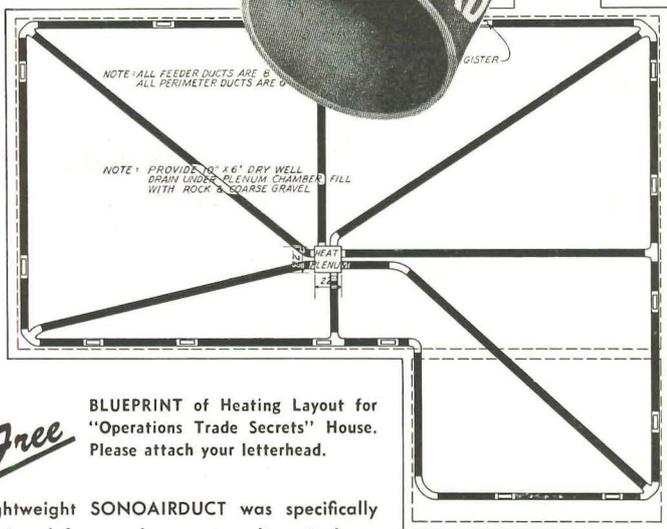
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GEORGE ROCKRISE earned his architecture degrees at Syracuse and Columbia Universities (M.S. in Architecture). During World War II, he designed hospitals, barracks for the Army and Navy in the Pacific.

His first postwar job was with the firm of Stone in New York, planning the Panama Hotel (Apr. issue, '51). Rockrise joined the UN Headquarters Planning Commission as architectural designer. He was design stages of El Panama, where he was project's landscape architect in San Francisco. Thomas Church, eventually became his associate. Since 1950, Rockrise has his own San Francisco practice, largely devoted to residential architecture (e.g. the flying-butressed house).



Architect **ED TAFEL**, 40, studied architecture at NYU for two years. He worked for Taliesin for two years. During the last two years, he supervised construction for Frank Lloyd Wright's world-famous "Falling Water" house and Johnson Building.

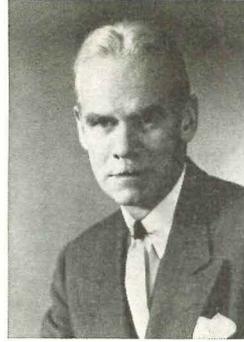
Tafel's experience includes work in the Chicago office of Holsman & Co. and a two-year sojourn in the engineering office of the Jerome Utley Co. in Flagstaff, Arizona. He had a 2½-year tour of duty with the U.S. Engineers in Calcutta, India. Since 1946, he has had his own architectural practice in New York, a diversified one encompassing houses (p. 116) ranging in price from \$125,000, stores and factories.



Architects **RALPH S. TWITCHELL** and **RUDOLPH** were partners when they designed the Siegrist House, p. 96. Twitchell is an architectural and engineering designer at Rollins College, McGill and Columbia Universities. After World War I, he shuttled between the Berkshires in the summer and the Berkshires in the winter, selecting Sarasota, Florida, as a year-round locale several years ago. Twitchell says he is "still in the mood and personalities in sticks, in the sunshine." Rudolph graduated from Polytech and Harvard, became an architect in 1946. Since March 1946, the two men have had separate Sarasota practices. Rudolph is currently guest critic at the University of Pennsylvania.

MODERN MORTGAGES

Monthly report on important developments in the modernization of mortgage credit with particular emphasis on the expanding potential of the package mortgage, the open-end mortgage and the expandable mortgage.



This month H. R. Northup views the open-end mortgage.

Open-end: boon to modernization market

by H. R. Northup,
executive vice president of the
National Retail Lumber Dealers Association

ation's retail lumber and building materials dealers are preparing to use the most of the open-end mortgage to stimulate the home-repair and modernization market, thus helping to preserve the country's structurally sound housing. To assist them, their national association has given the 18,000 members of the organization a folder explaining in detail how the idea works and urged them to acquaint their local mortgage lenders with the plan. Already the NRLDA office in Washington has been deluged with requests for more copies of the folder to distribute to all mortgage bankers in all communities.

The National Retail Lumber Dealers Association will also join with other organizations in urging FHA to abandon its opposition to the open end (since there is no legal basis for FHA's position, it can be assumed that—like VA—it will agree to insure mortgages with open-end provisions).

Case study

Several lenders who have seen the NRLDA folder write of experiences they have already had with the open end. Sample: a savings and loan association in Bloomfield, Ind. stated it had granted additional advances under open-end mortgages up to \$500 without a title search (a not uncommon practice) and was planning to grant advances up to \$1,000 under the same circumstances if a mortgage did not exceed a fair appraisal. J. Albert Jackson, secretary of this association (Farmers & Mechanics Federal Savings & Loan) says flatly: "We find this type of loan beneficial to both borrower and ourselves: it certainly saves a lot of time and work when only a modest amount of money is required."

Clinics over the country

Regional building materials association secretaries are holding one-day clinics in many areas of the country to stimulate even more interest in the open end. Says Robert A. Jones, executive director of the 2,500-member Middle Atlantic Lumbermen's Association, "There is a huge number of houses in our territory (10% of the housing in the country) that need repair or modernization; the key to opening up this untapped reservoir is the open-end mortgage. It could easily be the springboard for a tremendous program to maintain the nation's housing inventory. Banks will find more security in the open end."

How open end works

The folder which NRLDA placed in the hands of its members reads in part as follows: "Take a homeowner whose unpaid principal has been reduced from \$10,000 to \$7,500 and who wants to spend \$2,000 modernizing a kitchen and adding a garage. With an FHA Title I or similar loan, the monthly payments would come to \$63.80 per month and the interest rate would be 9.6%.

"But if the mortgage still has 10 years to run, the \$2,000 can be repaid at the rate of only \$21.22 per month, assuming the rate of interest on the mortgage to be 5%, provided the funds are obtained by adding the cost of the modernization job to the unpaid principal amount of the mortgage.

"Thus the unpaid balance would be increased to \$9,600 and the monthly payments over the remaining 10 years would be increased by only one-third as much as with a Title I loan."

Benefits to the retailer

"He can get customers who want or need to spend a substantial sum to modernize but are in no position to pay cash or pay for the job in three years with an FHA Title I or similar loan.

▶ "Low monthly payments allow the dealer to clinch a sale to a customer who otherwise would not modernize.

▶ "A customer may decide to go ahead with an even bigger and better modernization job because the payments are moderate."

Low-cost title insurance

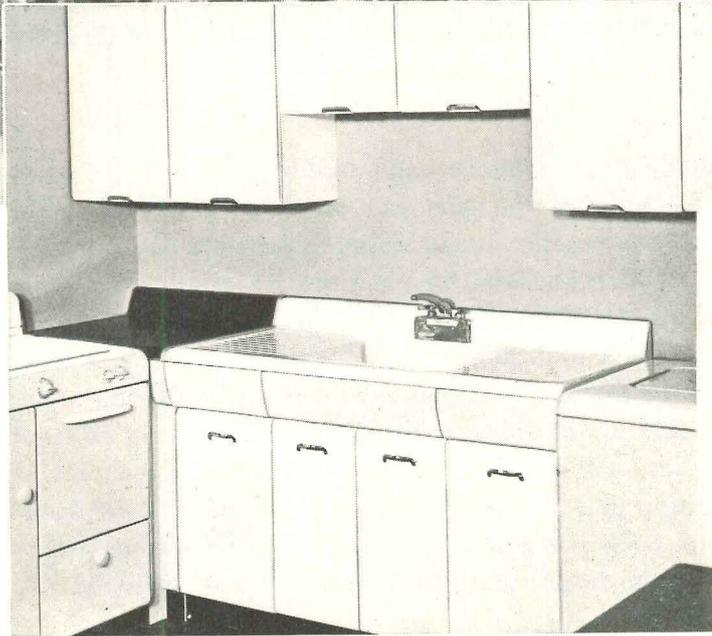
Action by title companies in New York, Chicago and Los Angeles in making title insurance costs low enough to make the open-end mortgage attractive permits lenders to accommodate home owners for whom they have written mortgages with full title protection.

Mortgage advances by banks, savings and loan associations, and mortgage companies reached an estimated \$500 million last year. That could be only the beginning in conserving the trillion-dollar value of housing which represents one-quarter of our national wealth.



Mr. Stanley Praver. They line up to buy his Ruskin Heights Homes in Kansas City! These low-priced houses—selling for about \$10,000—feature “luxury” items like Crosley Kitchen equipment.

Here's the salesroom in the Ruskin Heights Homes. The Crosley Sink and Wall Cabinets supply more than ample working space and convenient finger-tip storage in this sales-winning kitchen.



KANSAS CITY BUILDER MAKES THE “CROSLEY ROOM” HIS SALESROOM

A Crosley-equipped Kitchen is an effective sales aid for any builder, according to Stanley Praver, of Praver & Sons, one of America's foremost builders and builder of the Ruskin Heights Project. A well-designed kitchen, completely equipped with brand-name appliances, can put a prospect in a buying mood right from the start.

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In a buyers' market

what kind of houses can you sell?

Just plain selling will soon be the biggest problem for the homebuilding industry and every individual homebuilder.

Now that the war-born shortage has been filled and new family formation has dipped under 700,000, how can industry keep its sales above 1,000,000 new houses a year?

How can you keep your own sales booming? And if homebuilding volume sags, what will happen to national prosperity and all the other industries dependent on homebuilding?

To help homebuilding—and every homebuilder—meet this challenge we are dedicating the whole next issue of *HOUSE & HOME* to this one question of *How to sell more homes in a buyers' market*.

Because selling is homebuilding's next big problem, all the big trade associations in the industry agreed to help us help you with your selling problems. And so this issue will feature the recommendations of a special round table attended by:

1—Top officers of the National Association of Homebuilders—President Manny Spiegel, Vice President Dick Hughes, Executive Director John Dickerman, Chairman of the Mortgage Finance Committee Nate Manilow, Research Director Len Haeger, Technical Chairman Earl Smith.

2—Six of the most famous and successful builders' house architects and designers, Morgan Yost from Chicago, Bob Anshen from San Francisco, Cliff May from Los Angeles, Charles Goodman and Nicholas Satterlee from Washington, Herman York from Long Island.

3—Spokesman for all the big mortgage lending groups which have such a stake in the house you sell—savings and loan groups, savings banks, mortgage brokers.

4—Spokesmen for the material suppliers who must produce the better products you include in your homes and the retail dealers who distribute them to you.

The Round Table was made doubly important by the presence of the new Housing and Home Finance Administrator Albert M. Cole and Eisenhower's choice for the new Federal Housing Commissioner Guy T. O. Hollyday.

Second only to better financing all these industry leaders agreed that the one best way to sell more houses is to build in more sales appeal and more sales value. To that end they recommended various ways to increase your sales by making your houses *look* bigger, by adopting the open-kitchen plan, by providing much more built-in furniture, by widening your overhangs, by better use of color, by intelligent use of more fences, and by many other new ideas you will surely wish to study and use in the houses you design, finance or sell.

These are only a few of the selling ideas you will find in this issue, which will report the best thinking of hundreds of successful architects, builders and real estate salesmen from coast to coast on pretty much everything from how much furniture to use in a model house to how to turn lookers into buyers.



Quality house

Though it is the opposite of a builder's "production" house, its efficient plan and structure have ideas that can be used anywhere

This house is one of the 19 postwar houses in America selected by The Museum of Modern Art for "quality and significance."

These qualities, or qualities, we have tried to analyze below. The significance now is that some of these qualities may influence the popular house of the future.

This house was also picked by the school children of Venice, Fla. as something of significance: the whole fifth grade was asked to be taken through it the week after they visited the municipal power plant. This honor delighted the children, who think it is a wonderful place to live in—much more so than the Colonial house they used to live in up North.

Most people won't like the looks of this house. At first glance there seems to be very little to it—just enough roof over the house to keep out the weather. Actually, what the house has is considerable. It takes a simple boxcar plan and big ideas to make them perform a number of highly useful things:

Keeps the view. The long (71' x 24'), in-line plan* gives every room the main (and only) view to the south by placing the main living areas on that side, lining up service-work areas—kitchen, study, bathroom—along the less-desirable north side.

Keeps the breeze. Oppressive heat and destructive dampness are kept out by through-ventilation in every room (see sketch).

Keeps the outdoors. Without elaborate expense, it divides a long terrace into four functions: outside dining, reflecting pool, screened sun porch, bedroom-sitting porch. From the interior, the flow of water next to the house yields a cooling effect and a shimmering pattern of reflected light on the ceiling.

Concentrates on the inside. Most "ranch" plans are picturesque and irregular on the outside, but when you live in them you find the rooms are a series of little square boxes. This house, on the other hand, looks like a big, plain box from the outside, but inside of its more economical rectangle is full of variations of space—irregular features that make it not only more livable and more picturesque inside, for its occupants rather than passers-by. The difference is one of approach: the "ranch" is designed to bring the outside in, this house from the inside out.

Total square footage: 2,189 (1,704 + screen porch + carport figured in). Total cost (excl. 150' x 180' lot but incl. terraces and pool): \$11 per sq. ft.

LOCATION: Venice, Fla.

ALBERT SIEGRIST, owner

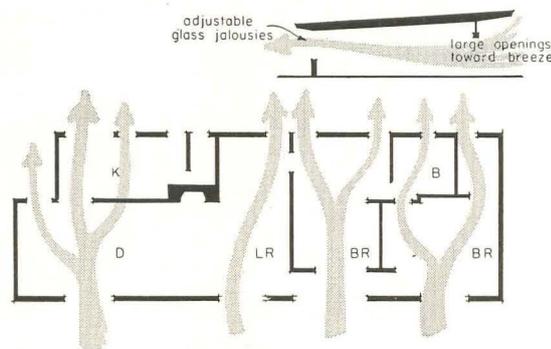
TWITCHELL & RUDOLPH, architects

ASSOCIATED BUILDERS, INC., contractors

Photos: © Ezra Stoller



Approach side (west): carport is linked to front door at right by spur wall of lime block that hides kitchen yard.



Breezy plan is oriented to catch every stir of the prevailing southerlies, filter it through four large windward openings, out north side.



Garden side (south): rhythmically spaced structural bents are tied laterally by a horizontal sliding-door track.

It standardizes the framing. The 7'-4" x 24' modular bays—just under the 8' limit that 2" roof decking will span without snow load—economize by making lumber lengths and sizes the same throughout.

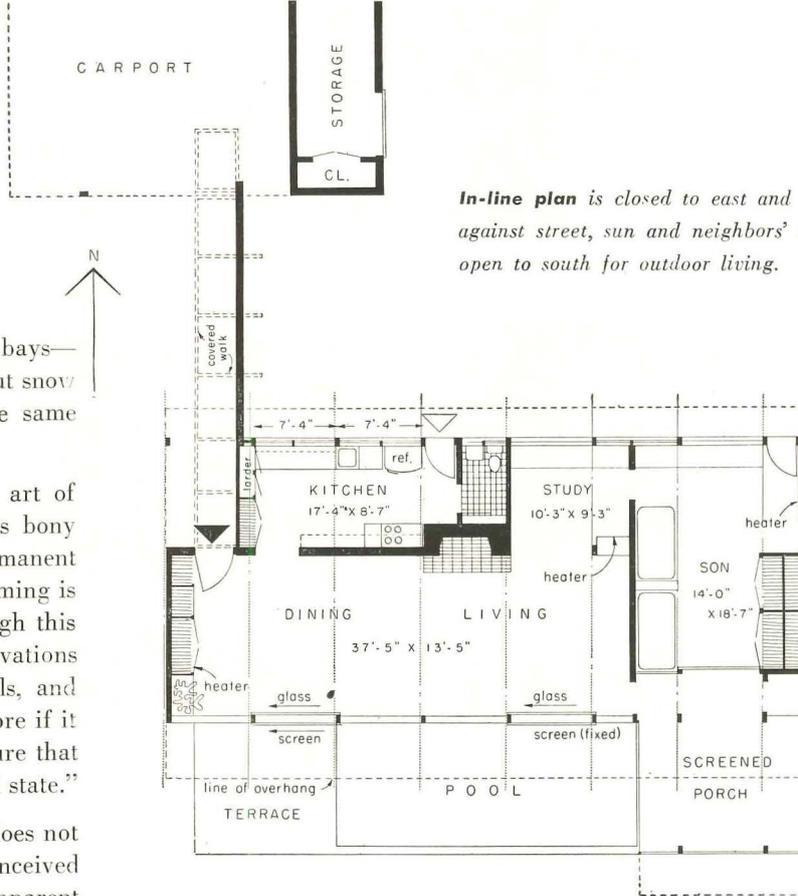
It plays up the structure. This house rejoices in the art of carpentry. Structurally, it is as revealing as an X-ray: its bony skeleton of heavy members, exposed inside and out, is a permanent show of strength and good form for the occupants. The framing is made to *look* simple and understandable to anybody, though this has required complex hidden joinery. (See p. 100.) The elevations are *rhythmical*, underscoring a "beat" at regular intervals, and *proportioned* properly, something that would be noticed more if it were absent. "We have tried," say the architects, "to capture that beauty which almost all structures have in their half-finished state."

It "floats" the roof. Designed for a mild climate that does not demand a great sense of overhead shelter, the roof was conceived as one large, thin sheet hovering above the frame. The apparent lightness comes from: a) a thin section of 2" deck and built-up roofing edged with the gravel stop instead of a wide fascia; b) partition walls that stop short of the ceiling, giving a play of light, as well as air, across the tops of rooms; and c) a band of glass under the ceiling all the way around the exterior walls of the house (except the master bedroom's east wall, where the owners wanted to exclude early morning sunlight).

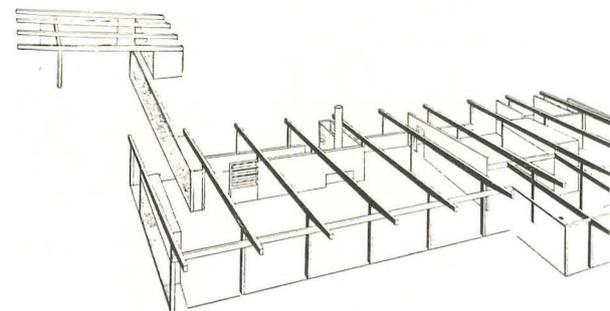
It interprets the materials. Twitchell and Rudolph gain a regional flavor with their familiar Ocala lime block and native cypress. And they express the nature and the possibilities of the materials they use: the sturdy bearing quality of cypress, a strong Southern hardwood; the great transparency of glass uninterrupted by trim, stops, mullions. The exposed common gray lime block, its vertical joints aligned to give it new character, emphasizes the most natural use of masonry; it occurs always *under* openings, never above, where it would require a steel lintel. Terrazzo, moistureproof and easily cleaned, is a logical choice for floors in an informal hot-country house near the sea.

It controls the climate. All that glass in a house could be a mistake, in some situations. But here the "fishbowl" south side is protected from summer sun by an accurately designed 4'-8" overhang. The owner notes that the sun does not strike the glass at all during the warm months from Mar. 21 to Sept. 21; it reaches into the living room a distance of 9' by Dec. 21 to help warm the house, recedes again to the sill line by Mar. 21. Four electric unit heaters, spotted through the house, team with the fireplace to insure against cold waves. (The house is ready for hurricanes, too. At the time of a storm warning, the owners can actually tie down the south side: wire ropes with turnbuckles are hooked to eyelets in every third beam and secured to the foundations. Plywood panels are put up over all glass areas.)

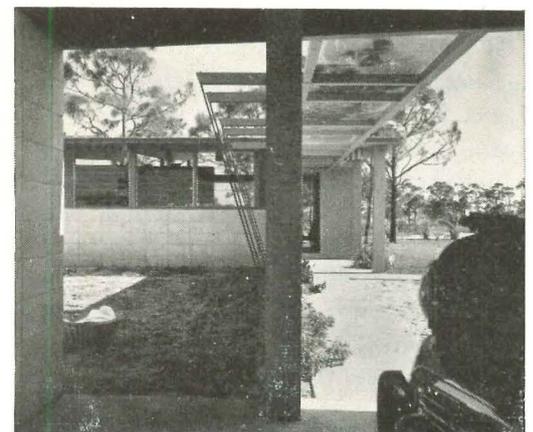
Some will consider this house too skinny, too wide open and unprotective. But the architects believe that man, in the last 20 years, has undergone a change: he is no longer afraid of his natural surroundings, and a house like this one will help him live in nature easily and efficiently.



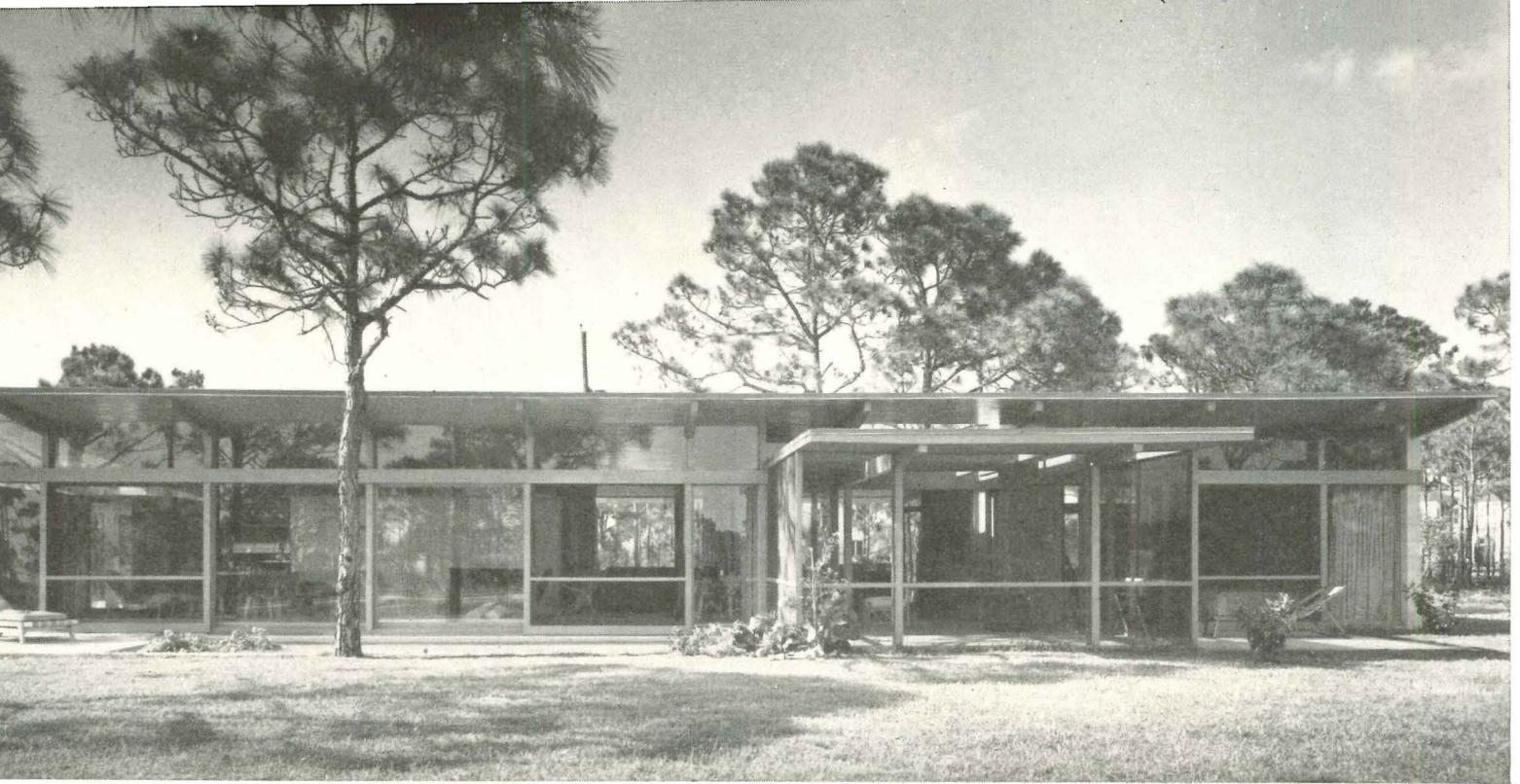
In-line plan is closed to east and against street, sun and neighbors' open to south for outdoor living.



Structural system uses 7'-4" x 24' bays. Low block walls define

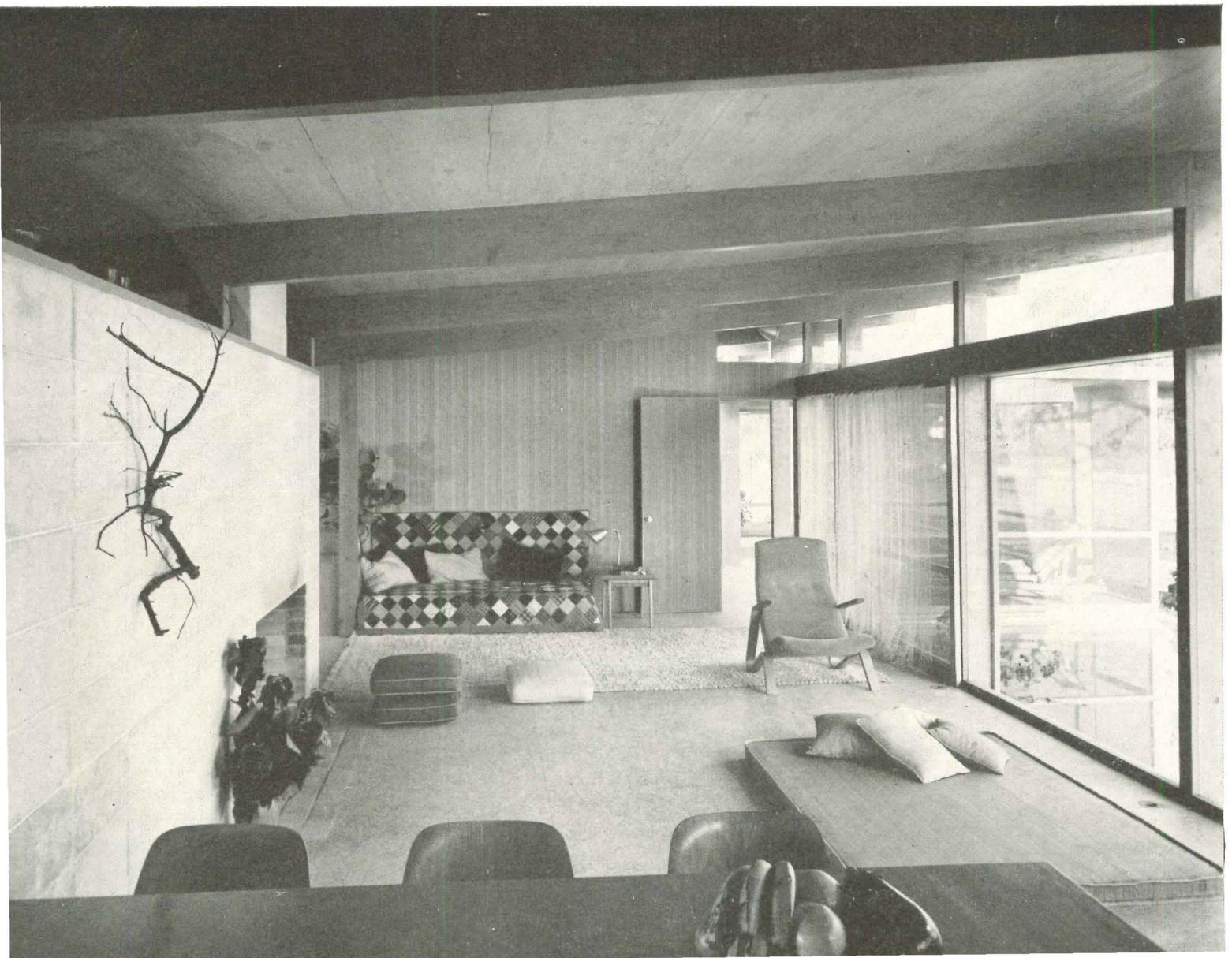


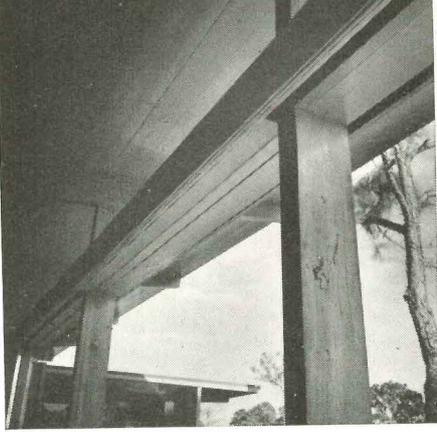
Spur wall, center, separates driveway, right, from service yard, anchors tie rods for canopy of blue sun-absorbing glass. Note glass jalousies at left.



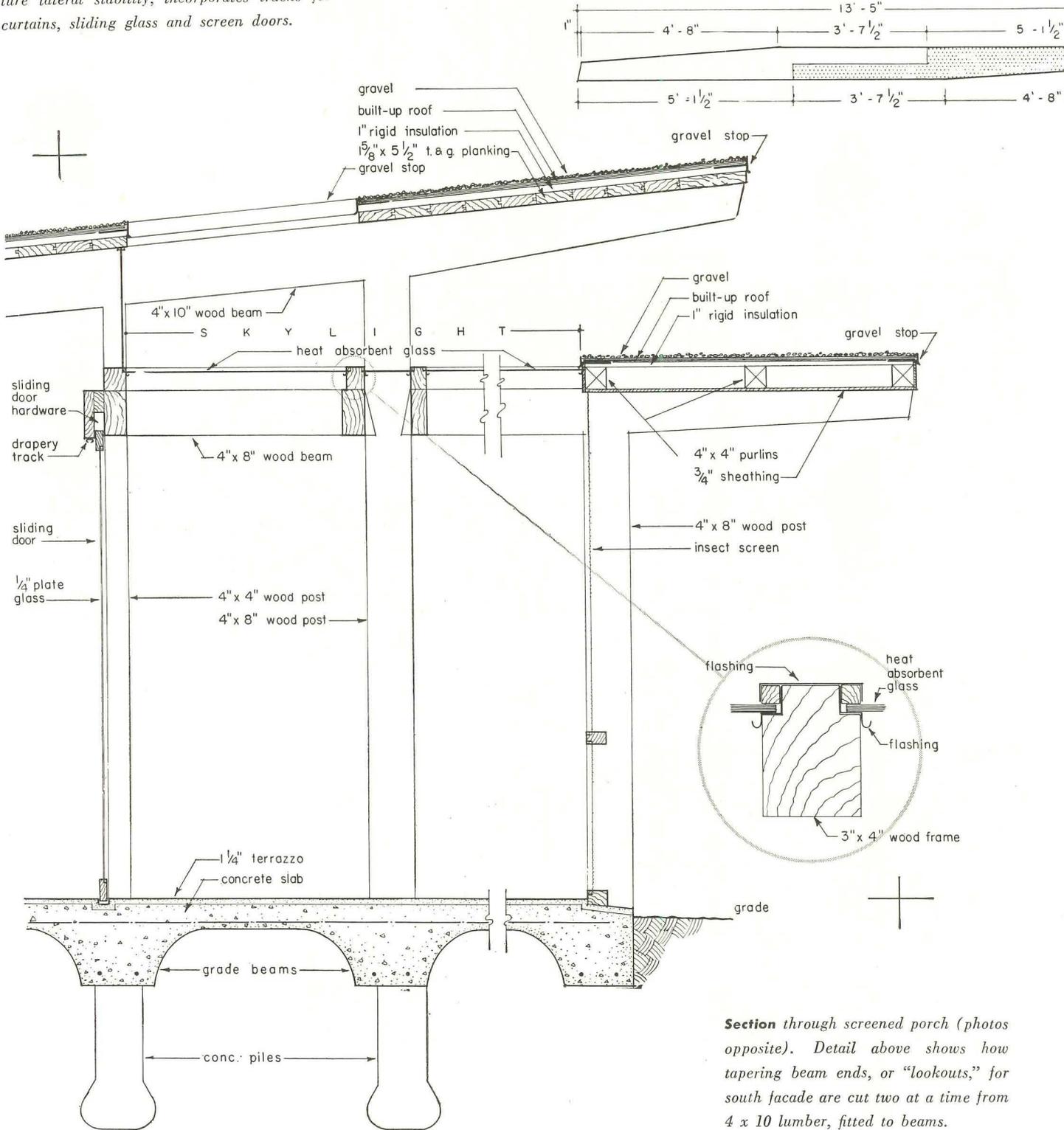
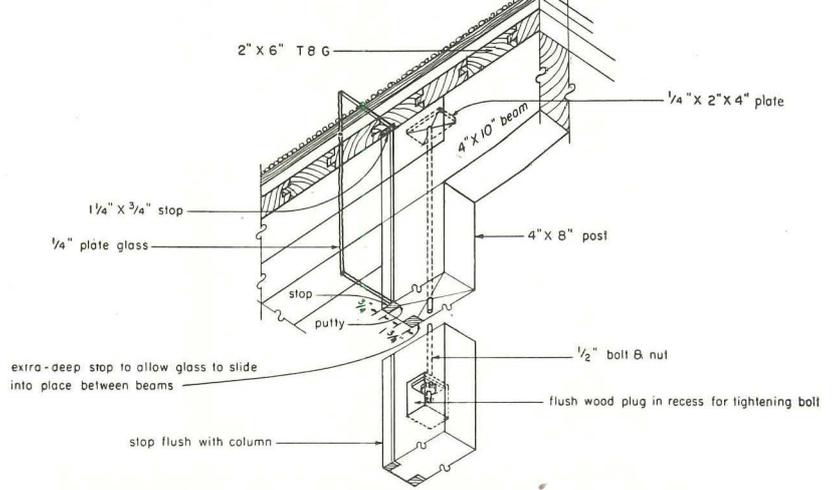
Structure and thin roof line give through-views, a feeling of airy coolness

Slab wall separates kitchen from living-dining. Note reflecting pool, right

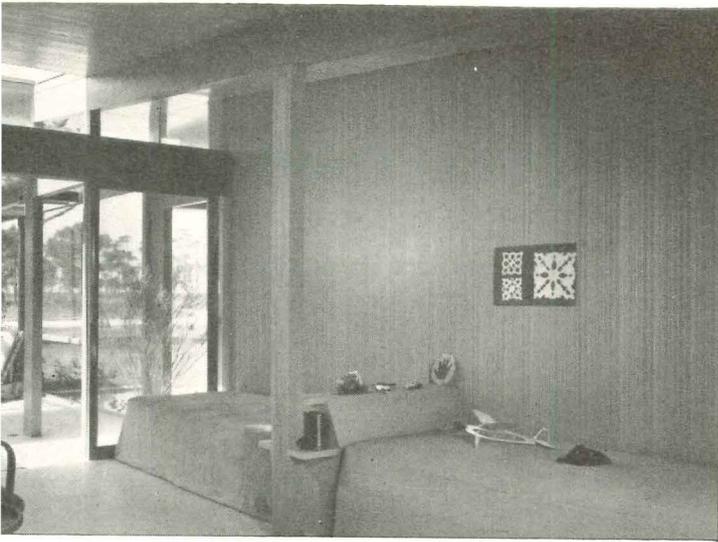




Precision joinery makes a clean juncture of posts, beams and glass on south side (detail, right). Thick horizontal element gives structure lateral stability, incorporates tracks for curtains, sliding glass and screen doors.



Section through screened porch (photos opposite). Detail above shows how tapering beam ends, or "lookouts," for south facade are cut two at a time from 4 x 10 lumber, fitted to beams.



Son's bedroom has walls of striated plywood, beds built in head-to-head. Sliding glass door opens room to screened porch.

Square aperture in roof casts light on hall area through blue, sun-absorbent glass in roof. Breeze sweeps through son's bedroom and out glass jalousies, background. Note cabinets under windows, storage wall at right separating bedrooms.



A better-than-ever

4' is the divisor of this house; low cost, fresh design its dividend

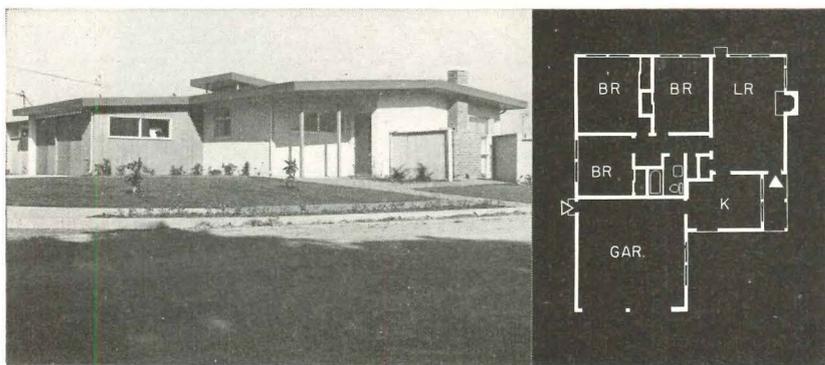
Now that the "California" or Western house is a market-tested seller (the Trade Secrets house and similar designs in Kansas, Missouri and Ohio top best-seller lists), these Palo Alto houses are particularly significant for merchant builders who must satisfy the growing demand for better, more livable homes.

Add to the growing list of crack architect-builder teams Kump Associates and Barrett & Hilp. They prove again that architect-builder collaboration can pay off in sure-fire sales.

Builder Harry Hilp of Barrett & Hilp was frankly skeptical when School Architect Ernest Kump said he could design a house at lower cost for B&H's University Village tract in Palo Alto, Calif. Kump told Hilp he could rearrange the same stock material—4x4 dimensional lumber B&H were using and come up with a house that had all the facilities of other B&H University Village houses, but with much more buyer appeal and good architectural quality.

That was a big order: B&H were already using many of the techniques for low-cost building (precutting, preassembly, volume buying) and these big builders knew which side of their lumber the production economies were nailed to. But what they needed was a fresh design. So they took Kump's bet.

The result was this 900 sq. ft. (three bedrooms, attached carport) house that sold for \$11,250. Conventional models in the project (1,010 sq. ft. (three bedrooms, two-car attached garage) were sold for \$11,750. B&H spotted the Kump design in their 600-house project as an experiment (about two dozen Kump-designed models). Builders found they could take a higher markup on Kump's design because of their superior design. They were quick sellers.



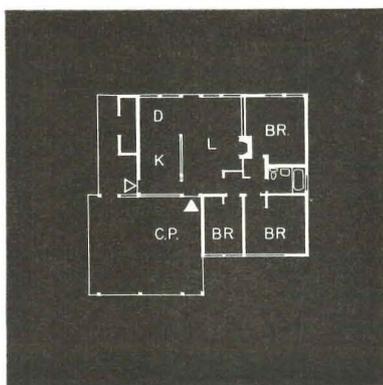
Living-dining area of first B&H house (above)

occupied considerably smaller portion of total floor space.

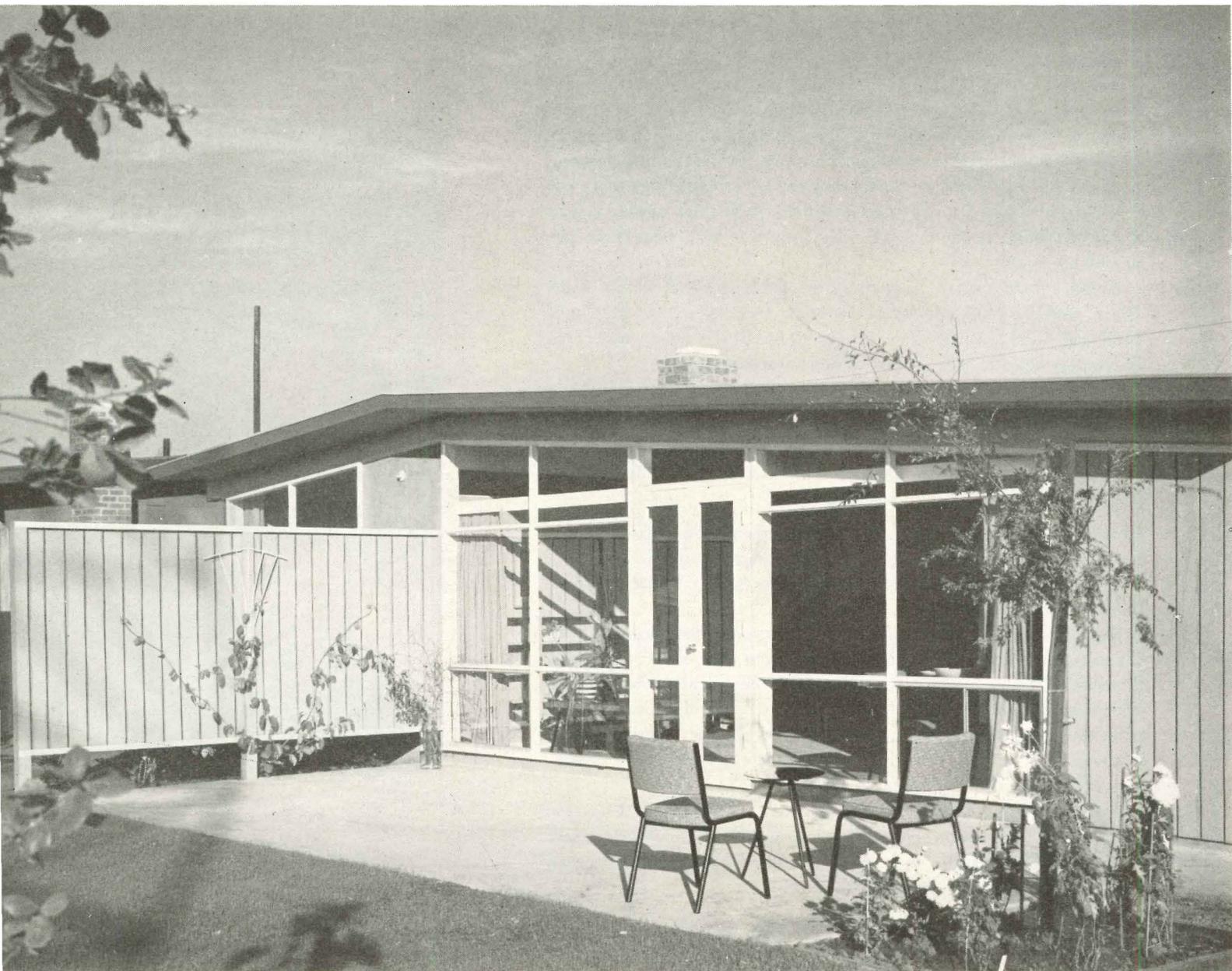
Note indoor-outdoor transition in Kump model (below).



Photos: (top left) Gene's Studio; (others) Ron...



r fast sales



Entire wall of living-dining room is glass. Large panes and transom glass under gable ends are fixed. Half of lower portion of glass is movable for ventilation. Glass doors are between 4" x 4" posts. Wide expanse of glass opens up the living room to the outdoors. Note vertically sided fence to afford patio privacy.

UNIVERSITY VILLAGE, Palo Alto, Calif.
KUMP ASSOCIATES, architects
BARRETT & HILP, builders
DOUGLAS BAYLIS, landscaping
HILDA REISS, interiors

Savings within savings

To use or not to use a module is never a question for Kump Associates. Architect James Fessenden says: "In our office we use a modular basis so automatically that we would be at sea without it."

The builders had felt that a modular grid was of doubtful value. They pointed out that on an individual house such a grid might save materials and time in layout, but on a production house it would not especially matter whether the dimensions were modular or not because: patterns and jigs could be set for any easily worked dimension; volume buying allowed them to get materials to fit their needs; getting the relationships in the house exactly right was more important than modular distances.

Kump agreed that the economies of standardization were already being used to good advantage (window sections were being mass produced with assembly-line techniques in B&H's own yard) even though not all dimensions were modularly coordinated.

But he pointed out that:

▶ Use of a 4' module which already meets the dimensions of many standard materials and B&H's lumber list—and many of B&H's own stock sizes—could still bring added economy to the building by saving lumber, sheathing and gypsum board.

▶ Inefficient space dimensions could be avoided by careful use of a module that fits the known materials best. Thus, the plans were completed with no forced compromise between plan efficiency and an "ideal dimension."

Kump believed that the small 4" module often proposed was too refined and delicate a unit (though better than none at all) to express dimensional order in a small building. He believed the economy and efficiency of modular discipline required a large unit like 4'. In projects like schools, Kump has used a whole series of integrated modules ranging from 4" to 144', all related to the fineness or coarseness of the unit they apply to.

Thus by adding to the existing principle of standardization that of modular coordination, Kump was able to give the builder a house with a double dividend. For, as he promised Harry Hilp, he gave the builder good architectural quality to boot.

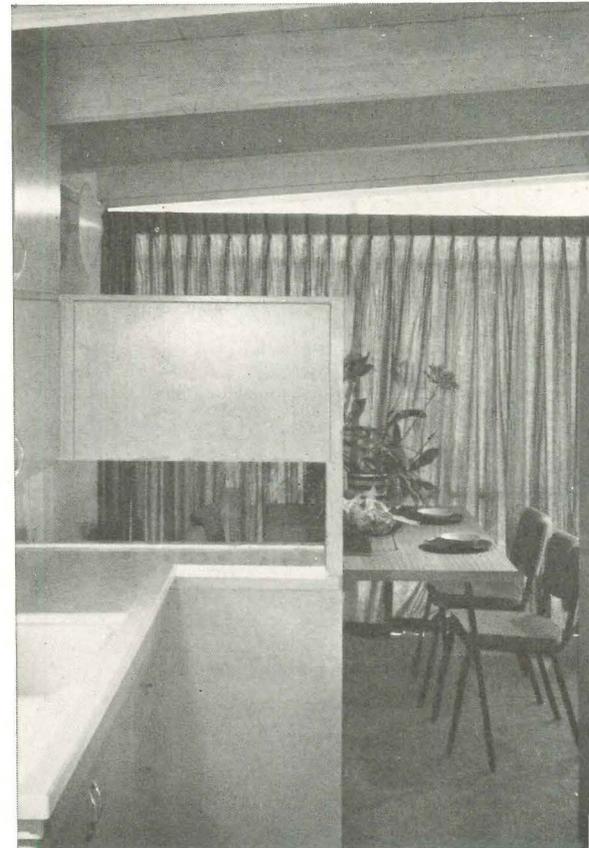
Material, labor savings

Use of the 4' module produced a double saving, one in materials, the other in labor. On materials:

▶ Going counter to B&H's belief that post-and-beam construction would save nothing over stud framing, the architect used posts and beams on 4' centers and saved an estimated 8% in total rough carpentry lumber, about 600 bd. ft. over the larger but more conventionally built B&H house. With their mass-produced window sash, the builders were able to increase the depth of the windows under the same headers at no additional cost. The full-glass wall in the living room with its added appeal cost no more than half as much glass under headers.

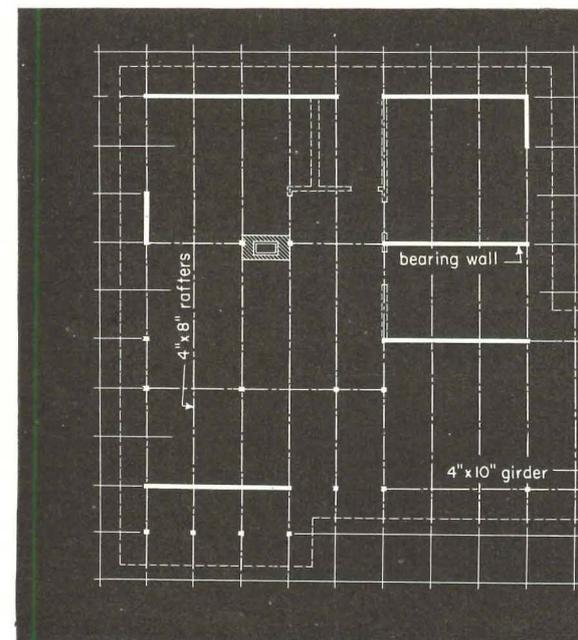
▶ Use of gypsum board on the 4' module minimized vertical cutting. Even where 4" x 6" posts were more than 4' apart, intermediate studs on 16" centers permitted the 4' x 8' wide dry-wall sheets to be used uncut. The problem of making dry wall reach varying ceiling heights (from 7' on the low side of the sloped ceiling to a height over 8' on the high side) was solved simply by using cutoffs from the low side as fillers on the high side.

▶ Use of 4' wide sheathing beneath stucco or vertical redwood panels allowed economical use of these modular widths between 4' o.c. posts or 16" o.c. studs.



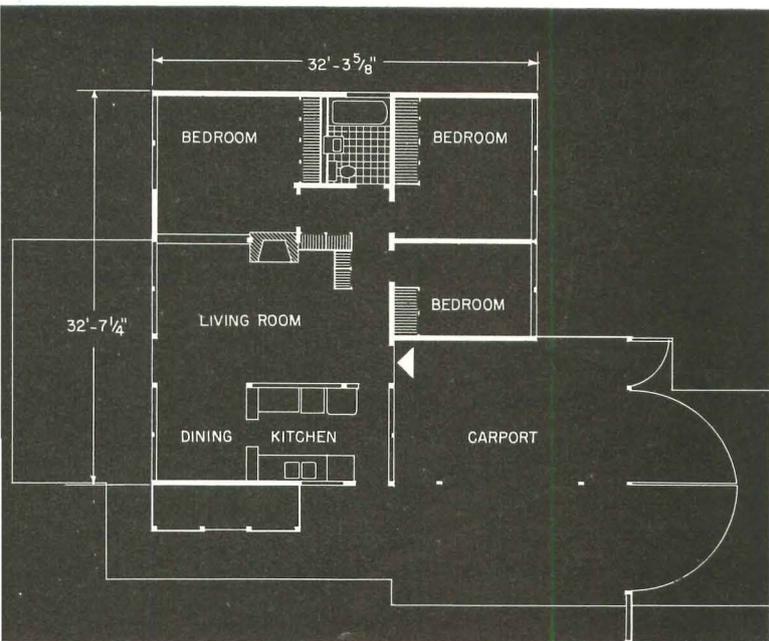
Pass-through from kitchen to dining area provides a handy way for housewife to get food to table with a minimum of tired steps. Open arrangement of kitchen allows her to be part of the action going on in the dining area even while she is working in the kitchen. Transom glass in dining area adds an open feel.

Roof framing plan shows use of 4' module





plan is a model of step-saving economy



Strategic placement of door to patio keeps living room from being a runway. Brick fireplace offers nice texture, a warm friendly focal point for the room. Beamed ceilings above living area help give room a look of spaciousness beyond its dimensions. Storage wall (right) has bookshelves in lower half, within easy reach of chair set in front of them. Top portion of storage wall opens into bedroom to provide shelf space. Living-room floor seems to continue outdoors because paved patio repeats its width precisely.

▶ Even on the roof the modular discipline achieved savings: B&H, using white pine for beamed ceilings, could buy cheapest by accepting these proportions: 60% in 16' lengths; 40% in 14' lengths; 20% in 12' lengths; 10% in 10' lengths; the remainder, odds. With rafters spaced at 4' and verge rafters 2' out beyond the walls, the widths of various house elements were made such that roof decking could be cut without waste from this lumber list (see roof framing plan).

▶ Since interior partitions are held to a bare minimum by open planning, there was an additional material saving.

On labor

Men knew what to expect from the 4' module once they had built the first house, which Kump Associates closely supervised. The repetition of similar details every 4' made things simple, thus easy and fast.

Wall construction was preassembled in a central yard and carried to the job on two-wheel trailers, a standard B&H construction procedure. Preassembly of parts at a point where units of the design could be assembled in the field with a minimum of head scratching, little measuring and marking, hardly any cutting and fitting, and less general milling around, was a big cost cutter.

Good looking, big looking

The builders agree that the house has wonderful eye appeal and looks much bigger than its slightly less than 900 sq. ft. John Sparolini, manager of the Barrett & Hilp Peninsula (housing) Division, says, "In the Kump house we got better design while holding the cost down. Sometimes you put an intangible like good looks into a house and that, too, is worth money."

But architects, builders and home buyers would agree that the house doesn't just rest on its looks. It has excellent circulation, and looks much bigger than it actually is—*inside* because of the glass filler strips at partition heads topping the beams, *outside* because of the more than 70' of fencing included in the sales price, wide expanses of concrete patio and driveway.

What the buyers liked

▶ Basic appearance of the house. They sensed what Architect James Fessenden describes as an organicness, a certain orderly calmness of the house. When the house was first shown, the sales force noted that young people were the ones who liked it most. "Many people," says Sparolini, "fell in love with it at first sight."

▶ The semiopen kitchen that allows a housewife to see out into the dining area, living room and the carport-play yard. The kitchen is also strategically located so bathroom and bedrooms can be reached without trekking through the living room.

▶ A small garden enclosed by a fence (landscaping included in price).

▶ The treatment of carport to include play space for children, though this might be considered questionable since it attracts them to an area where vehicles move in and out.

▶ Indoor spaciousness through open planning and glass filler strips.

▶ Plans for the future: University Village's own shopping center to cover 6 acres, a 4½-acre park, a 10-acre school site.

Architect-builder wedding

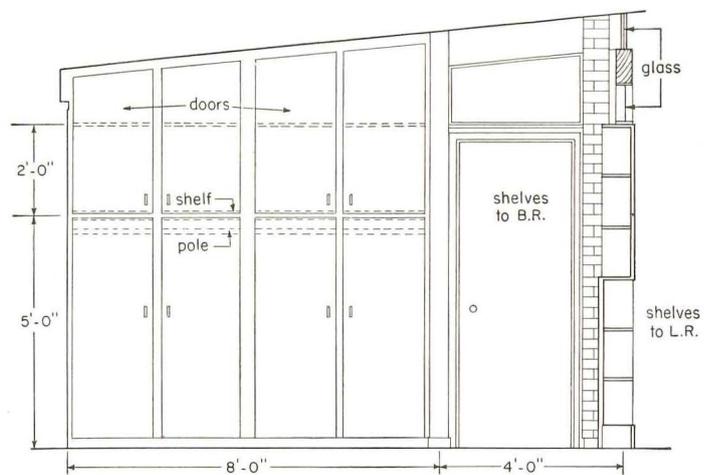
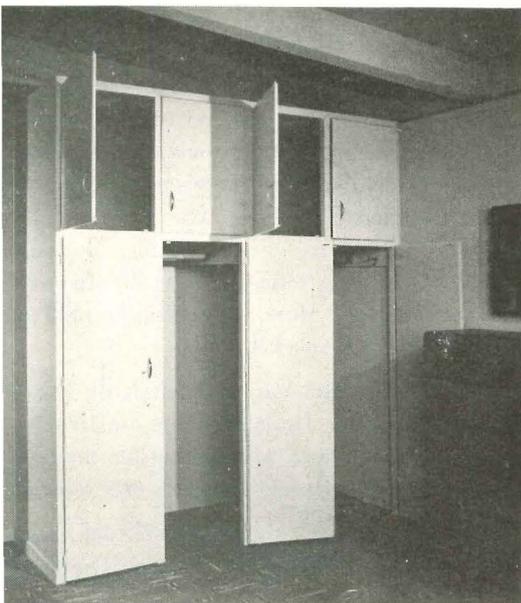
For the Kump and Barrett & Hilp's team this is only the warm-up. Already Kump is working on several more B&H projects. Fittingly, their collaboration resulted in a model aptly named "The Honey-mooner."



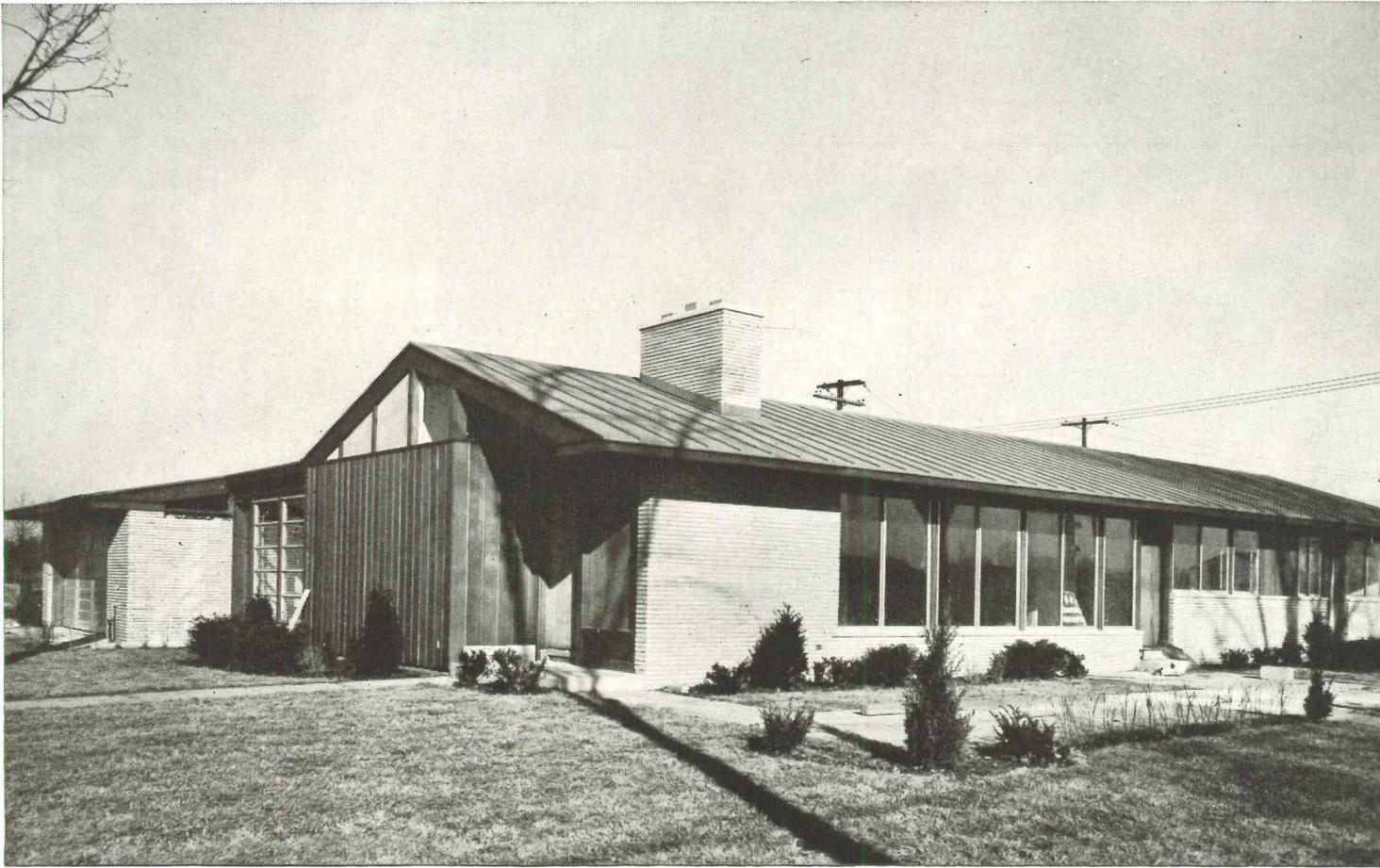
Economy-minded builder manufactures his cabinets in a mill shop. Fixture at right is space heater. Note beamings (liked particularly by young buyers) and white pine decking. Roof beams are 4" x 8" sturdier and in a nicer section than 4" x 6" required for minimum building standards. Architect Kump predicts a nonsagging roof "25 years from



Glass filler strips atop wall and beam allows eye to follow roof pitch to living room



Plenty of storage space is provided by closets. Detail (above) shows that top shelf is within easy reach of housewife. Closet pole is at sensible height. B&H buyers, like those everywhere, liked the double closet. Says Kump, "A small house doesn't work unless you increase storage space."



For Detroiters, an idea hou

**Builders Association's Home Show house
is as newsworthy as the latest Detroit car
. . . and the public loves it**

LOCATION: West Eleven Mile Road, Detroit
RICHARD DONKERVOET, designer
HENRY F. FETT, builder (for the Association)

Detroit homebuilders are stirring up a great deal of future business for themselves with their "1953 Ideal Home" now open to the public. It is so full of ideas new to Detroiters that it may make every other home owner in town want a new house.

For the first time thousands of families (like visitors, elsewhere, to the Trade Secrets house) have seen the differences between a 1953 house and an obsolete design. People either liked the house wholeheartedly or were very cold toward it. Fortunately for the sponsors, some 70% loved every one of its 1,576 sq. ft. This enthusiasm will probably be felt first by builders of semi-custom houses in the over \$25,000 price class, as this house probably cost \$35,000-\$40,000. Other builders, watching the crowd's reactions, may be influenced in their next year's models.

A house of contemporary ideas

The open plan was new to many visitors and they liked the way the living room, multipurpose area, dining room and kitchen flowed together to form a large living area.

Floor-to-ceiling windows and window walls were an attraction, plus the glass jalousied doors to the terrace and balcony.

Three lavatories and a full bath were an unusual feature. The house has one bathroom, a powder room next to the front door, a half-bath and dressing room between the study and bedroom, and one of Carl Boester's famous sewerless toilets (introduced in Mar. and Apr. '52) in the garage. The Boester toilet brought derisive comments, then scores of men decided it might be just the deal for hunting lodges, summer cottages or other places without sewer connections. Most were disappointed when they learned it is not as yet on the market.

Auxiliary heat was popular too, as each bath, the bedroom and even the garage ceiling (to melt snow and ice on the roof) had electric heat. Low-voltage wiring, master control panel and a well-designed set of lighting fixtures were also liked.

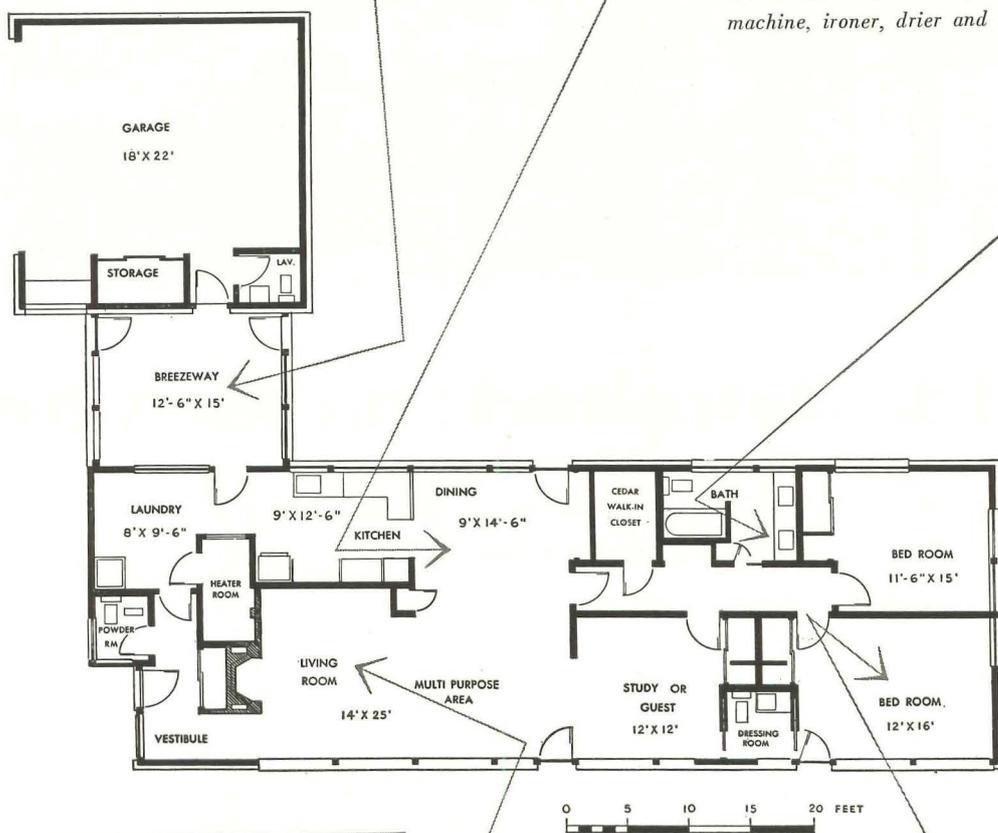
Air conditioning, the corrosive-resistant steel roof, ample space and a breezeway that is also an enclosed room were other eye openers to Detroiters.



new idea was the enclosed breezeway between house and garage, adding 12' x 15' of space. Flat garage roof is carried over breezeway. Six baseboard radiant glass panels provide heat. Rear doors open to garden.



Kitchen was filled with merchandising features: built-in range and oven with two exhaust outlets and washable filters, separate room for laundry machine, ironer, drier and freezer.



Main bath has two basins, long tiled counter, with toilet and tub in private recess. Extra-long fluorescent fixtures flood room with light. Mirror is a freestanding folding screen.



Only half of living room-study area is shown in photo, left. High ceiling and great length combine to make an impressive room. Planks, beams and paneling are redwood, floor red quarry tile and cork. Nearly one entire wall is glass. This big, light room brought favorable comments. The house will be given away free as a Home Show prize.



Master bedroom has large sliding windows, door to front patio, a large closet with built-in chest, plus master control switch for lights all over the house. Furnishings are by the J. L. Hudson Co.



Photos: E

What makes this house so good?

A nice balance of thoughtful, practical details and reasonable costs earned it a

Here is a small (two-bedroom) house to which a jury of distinguished architects (Belluschi, Neutra, Stone) gave a top honor award in the 1953 awards program conducted jointly by three AIA Chapters in California. Is it significant that this well-deserved distinction comes to a house that is extraordinarily adaptable to the requirements of many small homebuilders?

For example, among other qualifications:

It is economical; cost \$10.50 per sq. ft. to build.

It is versatile; adaptable to a hillside or a narrow, flat lot.

It is practical; simply constructed of simple materials.

It is appealing; a carefully studied collection of attractive features throughout.

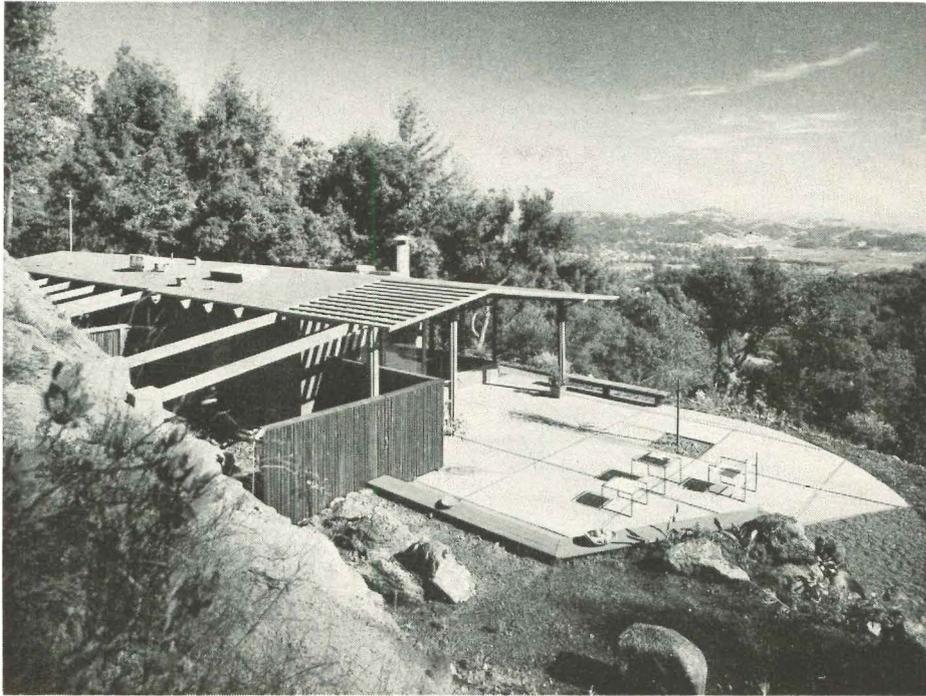
Fitted on a very narrow shelf gouged out of a hillside, the house is designed to take advantage of impressive views to the south and east. Complete seclusion from the road on the north and a maximum area for gardening were required. (If the site had been a flat, narrow lot, this house, set lengthwise on it with the entrance close to one lot line, would pay comparable dividends.)

The structure shows a single combination bearing wall and beam, off center, running the length of the nearly rectangular line plan. Exposed 4" x 8" wood rafters bear from this wall to the outside walls. Concrete slab on grade provides a uniform base for plastic cork tile and wall-to-wall carpeting. (In bedroom carpet laid only around borders; cement slab gives better grip for carpet, cuts difference in height.)

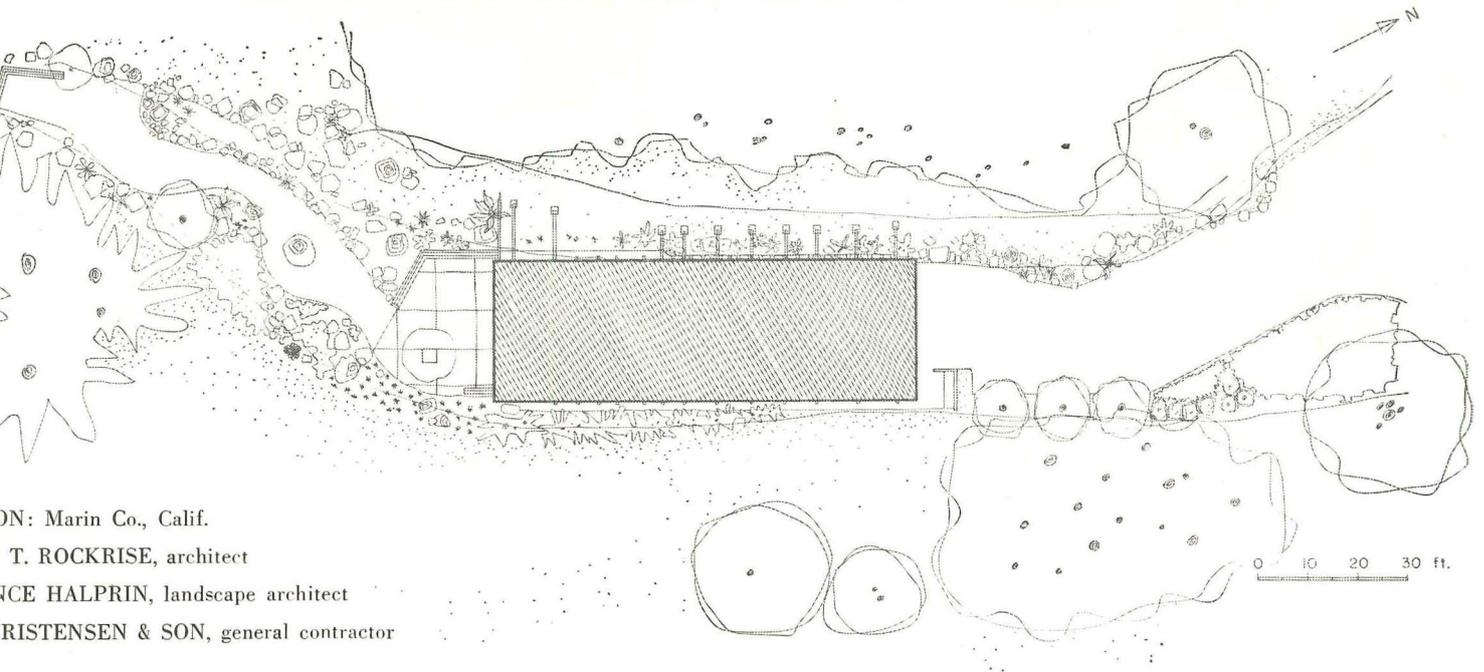
Over the ceiling's 2" x 6" exposed T&G planking, 3/4" insulation is surfaced with four-ply tar and gravel. Only the ceiling is furred for warm-air ducts with outlets to bedroom and bath; a false beam carries duct past entrance and along wall partition to outlet at dining room.

Extensive glass areas on two sides capitalize on the views and give a feeling of spaciousness to the rather narrow dimensions of the living-dining area. Continuation of the terrace over the paved terrace extends the apparent length of the house while affording shade from summer sun.

Sun control required generally broad overhangs, but light is reintroduced at strategic points via skylights over the living place, kitchen and bathroom, and a trellis which is part of the porch, over the dining terrace.



Terrace looks east to San Francisco Bay, south to Mt. Tamalpais. Photograph opposite shows detail of the trellis and service-area screen.



ON: Marin Co., Calif.
 T. ROCKRISE, architect
 NICE HALPRIN, landscape architect
 RISTENSEN & SON, general contractor



Cutback overhang and skylight brighten fireplace; light from kitchen skylight comes through opening above the partition.



Basic colors reflect those of the surrounding countryside. Window seat and walls are natural.

The kitchen is planned for direct access to the front entrance, as well as to indoor and outdoor dining areas. Extension of the counter along the wall of the dining area increases work and serving space and allows the hostess to keep in touch with guests while the “works” of the kitchen remain hidden from view. Other features include an ingenious refuse chute (see detail on opposite page), a full-length cooler vented to outdoors, and deep broom and larder cabinets.

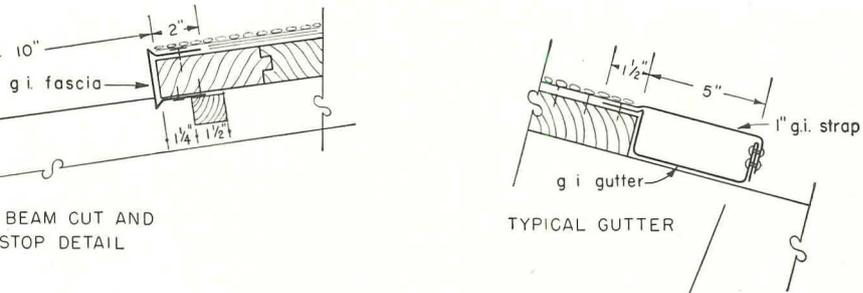
Less successful, the architect points out, is the quarry-tile kitchen counter, designed for tight joints but executed with wide ones which will accumulate grease. This, he claims, is a perennial problem with tilers, as is also their fondness for diagonally set tile and for borders, either of which detract from the appearance of a tiled surface.

The fireplace location, in the window wall, helps maintain a single focal point of interest, facilitates furniture arrangement and creates a useful diversion where an uninterrupted expanse of glass might be monotonous. Ceiling and fireplace are daylighted, avoiding harsh contrasts of light and dark.

Storage facilities include generous bedroom closets; 5' wide mirrored bathroom cabinet; wood box, record player and radio built into living-room window seat (speaker outlets provided in furred space over hall and at south terrace); tool and general storage near carport. Two access doors to heater room save space.



Unequal spacing of beams is useful, generally passes unnoticed. From right, shows where and why variations.

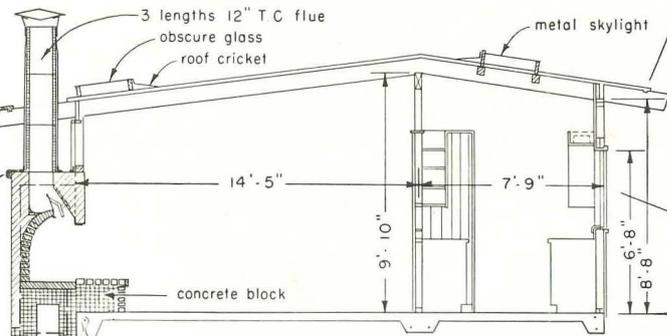


BEAM CUT AND STOP DETAIL

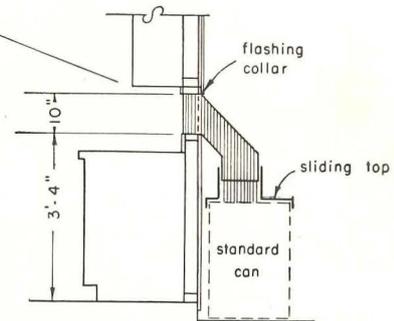
TYPICAL GUTTER



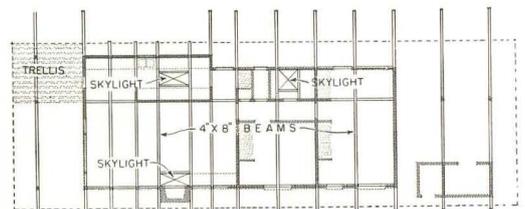
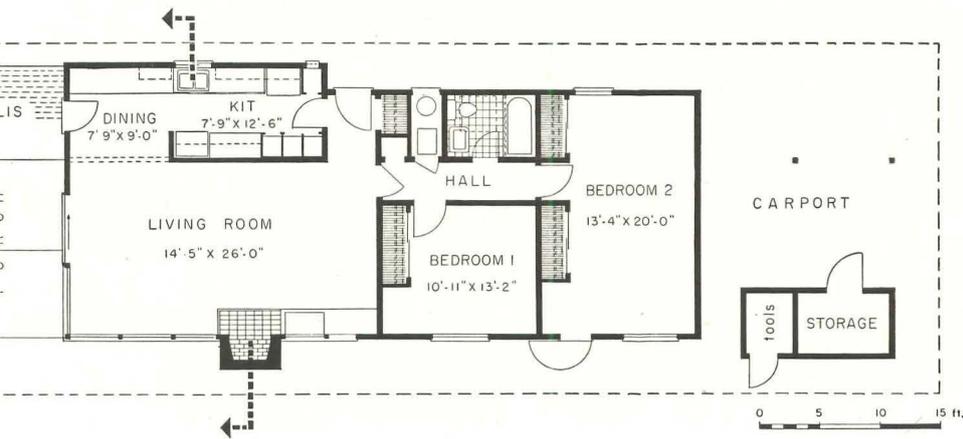
Kitchen counter extends across dining area; cabinets are painted to match carpet. Garbage-chute door is at right (detail below).



SECTION THROUGH LIVING ROOM AND KITCHEN



GARBAGE CHUTE



ROOF FRAMING PLAN

Buttresslike flying beams are not structural but serve to relate house more securely to narrow site and afford a sense of enclosure to walk from carport to entrance.



For a northern climate: **shelter**

For a good site: **selected views**

For informal living: **an open plan**

This house has a hearty yard—167 acres of rolling Westchester County woods and farmland—and looks pleasantly at it through wide areas of glass. But two wise considerations denied the temptation to glaze the entire house and thus incorporate the landscape into the living room:

▶ Because the site is near the top of a hill, it is exposed to the rough elements, as well as to their bland moods, so building a sheer glass wall, even of double glass might have been asking for trouble.

▶ Also, the people who live here, and their architect, think that a house should imply a strong sense of shelter, even if perched before the world's view. The house deliberately attains shelter, saving its vistas for moments of repose, aspects from within the rooms. Says Architect Tafel: "It's better for someone to go over to a section of glass to see the view, than to force someone to sit in the middle of it constantly, with the bathroom his only refuge."

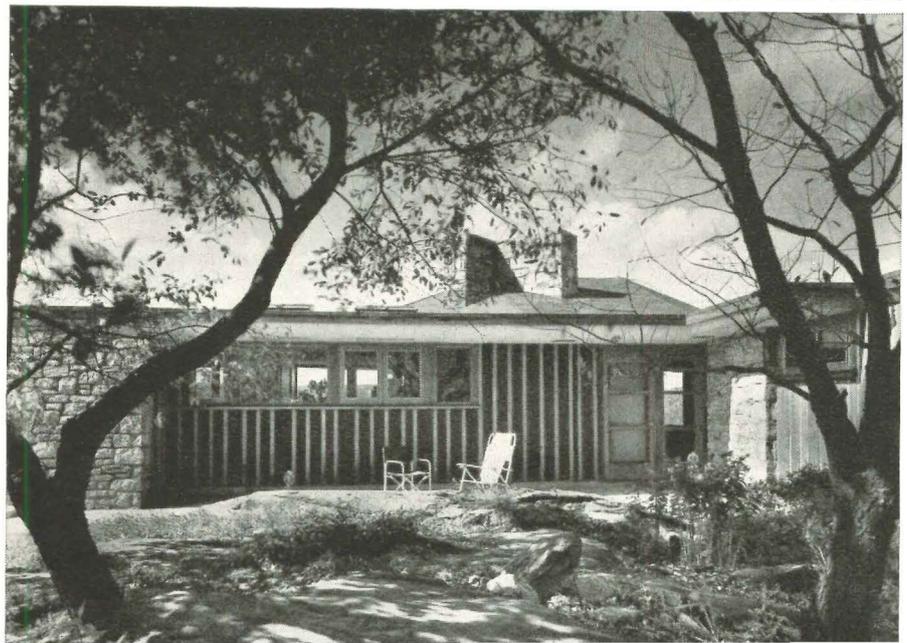
This decision was only the beginning of the architectural realism which went into creating the sense of shelter, permitting real repose. Materials were chosen in an interesting textural way, neither ostentatiously nor oversimply. Vertical wooden boards and battens which compose most of the exterior are used alternately to create contrasting vertical stripes, with the boards rough-finished and the alternating battens varnished. A bright sun does a lot with this play of shadowing and sparkling these walls.



Central living-dining space is winged by bedrooms, left, and garage and storage, right

Photos: Lionel Freedman

N: Bedford Village, N. Y.
 MRS. STEVE MUDGE, owners
 AFEL, architect
 CHUCKROW CONSTRUCTION CO.
 contractors



*... court, backing the peak-roofed center of this
 board-and-batten wall is colored more vividly
 here. Wide random boards are stained barn red
 the rest of the siding is a natural creosote stain.*

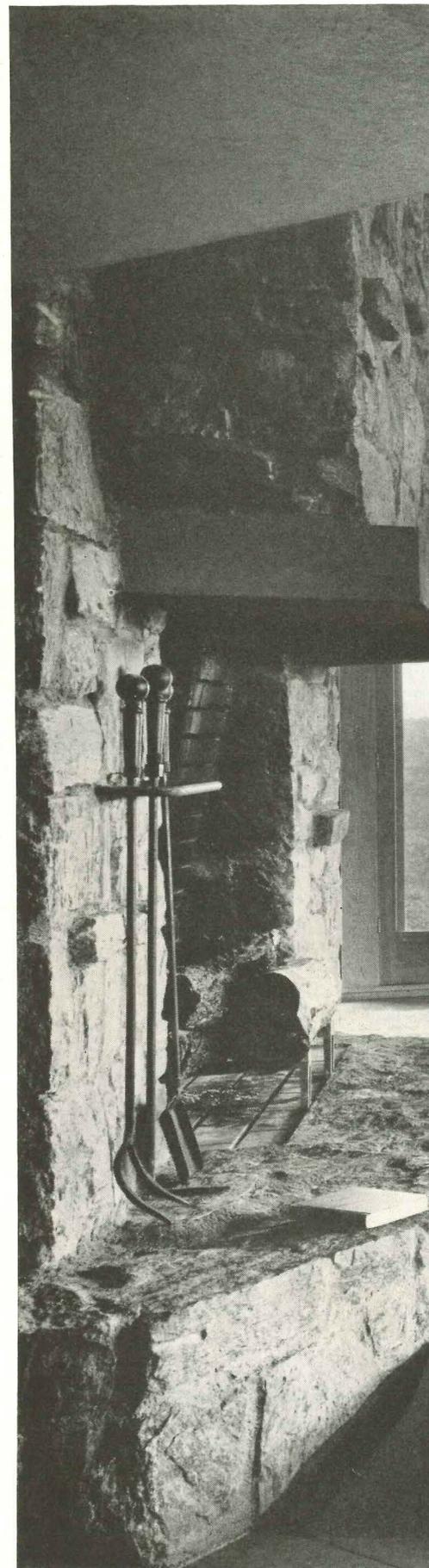
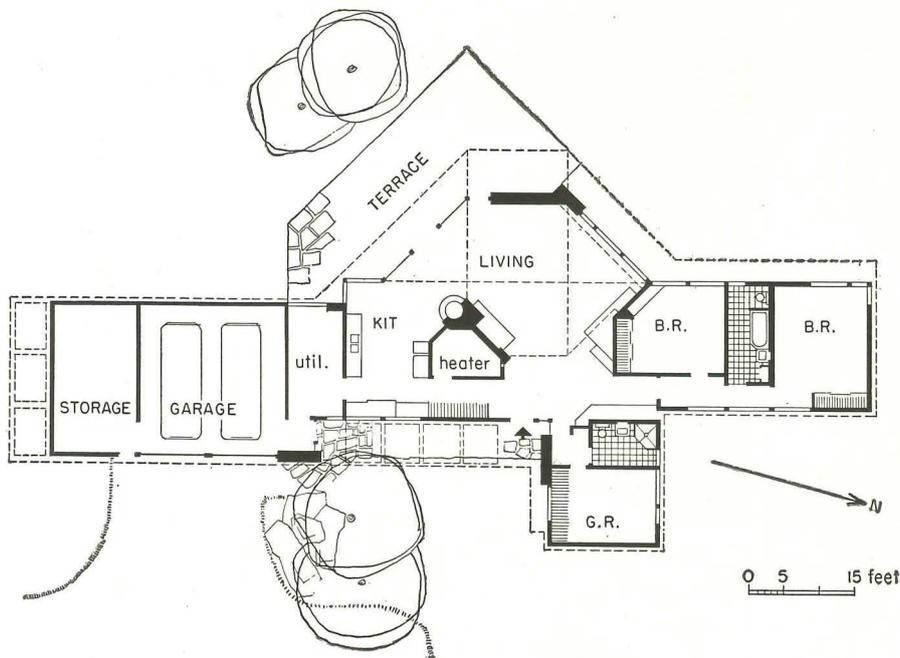
Shapes too were deliberately sculptured away from right-angled planes; the main living section of the house has a six-surface pitched roof, and, inside, a ceiling that follows the slants.

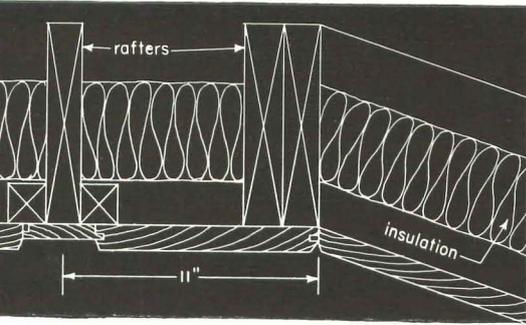
In plan the core of the house is a large masonry section jutting up as a central column in the living-dining area. This pile of handsome stone holds two fireplaces and also embraces the mechanical heating room for the house—a nice bit of architectural allegory. Because the clients are a couple whose family has grown up and moved on, interior privacy is unimportant, so this central living core is a truly open plan. And because of the extent of the plot, exterior privacy is not important either—although this house has turned out to be one of those which sometimes draw trespassing Sunday sight-seers.

Tafel's technique of composing his materials with frank intricacy is carried consistently into the interiors; the ceilings are batten boarded in the same way the siding is applied, and these interiors repeat a statement worth repeating: complexity in form and surface frequently has its own rewards in creating an environment of warm and continuing interest. To appreciate the technical nicety of this rich detailing, examine the drawing on p. 118.

Additional bedrooms originally were planned to extend the guest wing farther north, and fill out the entering view of the house, but the owner had set his budget at \$30,000, and there Tafel stopped. Square-foot figure for this house (built pre-Korea) was about \$12.50.

Looking around the masonry core you see into dining area and informal kitchen. In plan below, note how various masses of building are deliberately offset to direct, or limit, certain vistas, adding surprising subtlety to this relatively small building. For instance, when you enter the house, you are not presented immediately with all the view; it is blocked at first by the heater core, is seen only when you move farther into the living room.

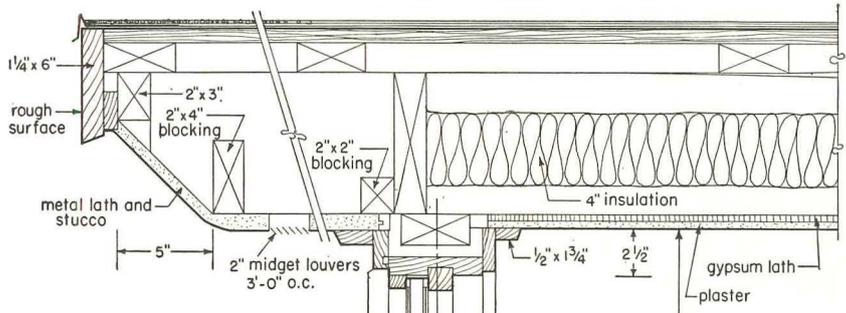




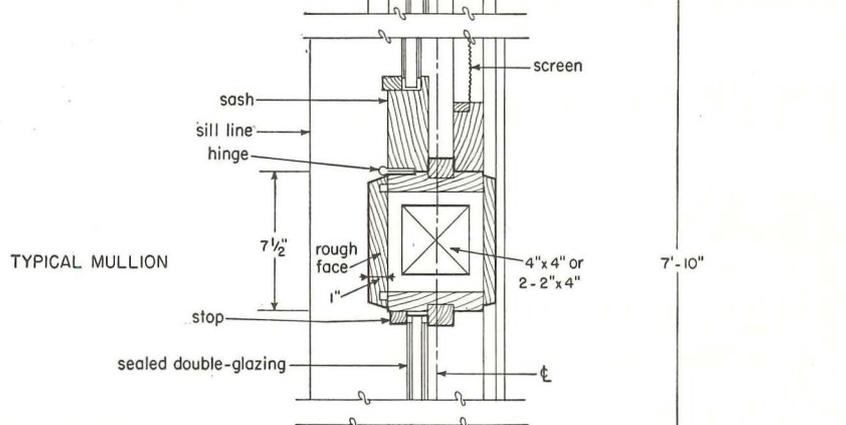
Board-and-batten construction is used outside for siding, and inside for the ceiling (detail left). Built-in cabinetwork also picks up the same construction. Boards are natural, or creosoted; battens are varnished.

Living room view, as you step into it after entering the house

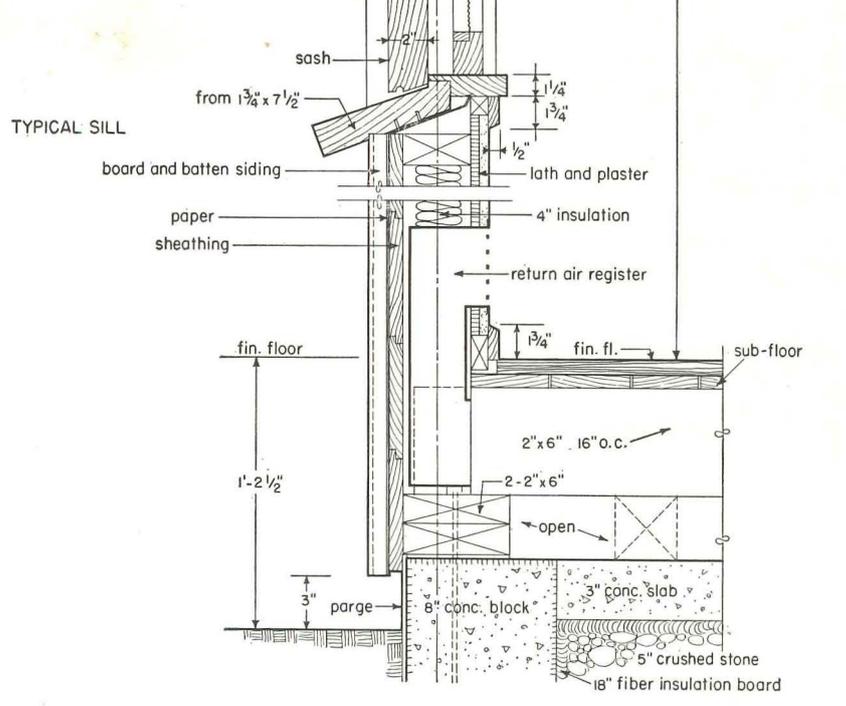




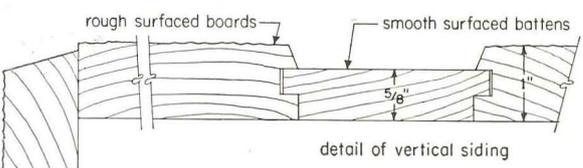
HEAD & CORNICE



TYPICAL MULLION



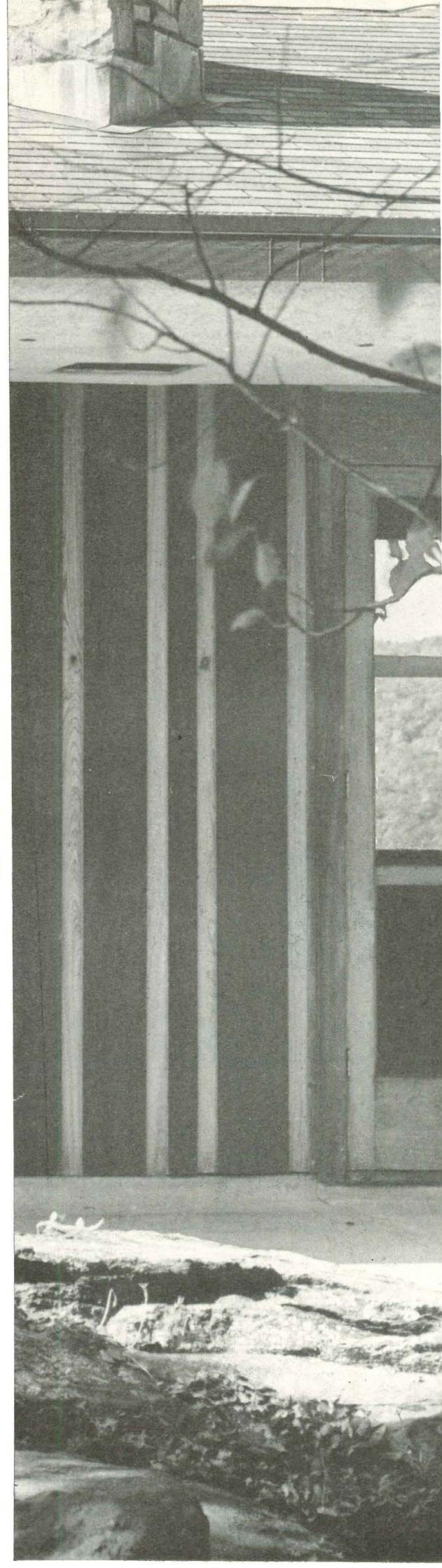
TYPICAL SILL



detail of vertical siding

siding at corner

Says Tafel: "In wood construction you've got to give the workmen and materials play. Materials come and go with the weather; and measurements on the job sometimes do the same thing. By separating the finish carpentry from the structure, you can: 1) get higher quality finish; 2) allow for this realistic, necessary play." House sits on a slab over a rock base, but is built up over the slab for two reasons: 1) underfloor is used as return plenum for warm-air heating system; 2) resilient wood floor is thus kept warm in winter despite decision not to have radiant heating or crawl space.





LIFE: Floyd Bright

The fastest selling houses in the USA

Inaugurating a new series, House & Home takes you on what may be your most important business trip of the year, to visit best-selling houses in key cities

Builders everywhere have to know what it takes to sell houses. In the midst of tougher competition, in a growing buyers' market, sales are harder to make this year. Next year may be even tougher.

What makes a best seller?

Design? price? favorable financing? low down payments? location? smart salesmanship? the most house for the money? the best floor plan? Is a house that sells like hot cakes in one city sure to sell in another city?

There are many lessons to be learned from the answers in the grass-roots' survey on the next six pages. Some are familiar to builders: generous terms, lower-priced houses, down payments within reach of even low-income families. Some are familiar to readers of this magazine: a product as up-to-date as this year's car, architect services, a bigger-looking house, cost-cutting techniques, more space. Some are recent developments: increasing demand for three-bedroom houses, additional work, play and storage space to compensate for the disappearance of basements. Specifically:

In Dallas a luxury-house feature installed in low-cost houses sold out a 240-house development.

In Cincinnati a new way to get a taker for VA mortgages and a tie-up with the national advertising of a prefabricated-house manufacturer yielded an average 20 sales a week.

In Greater Boston more house for the money—three bedrooms and an attached garage, \$13,990—averaged better than a sale a day.

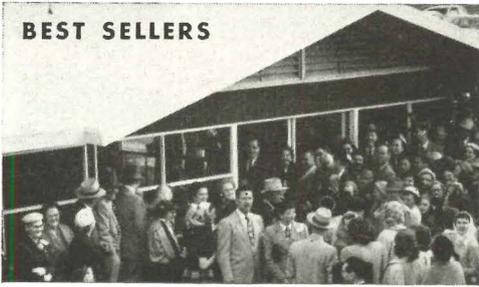
In Omaha cost-cutting know-how, learned in the toughest homebuilding market in the country (Phoenix), netted a 90-house sellout.

In St. Louis cost cutting by precutting plus contemporary thinking—physically and financially—sold 50 houses ahead of starts.

In Minneapolis collaboration between builder and an architect who fits houses to people and furniture, sold a house a week.

Here then are point-of-sales examples of why prospects buy houses and how homebuilders makes sales.

BEST SELLERS



A. Y. Owen

This Omaha best seller demonstrates one good way to sell more houses faster: give a lot more house for the money. Says Omaha's best-informed housing evaluator: "These houses would be great bargains even at \$1,500 more. The builder is a production-line operator, willing to take a smaller profit than the competition, but even so I think he must have underestimated his costs. I don't think he will offer any more at \$10,195."

Lower still. But Builder Don Decker who learned his business in Phoenix, toughest homebuilding market in the US (see H&H, Apr. '52, p. 114), says "we've made a substantial profit," will soon offer a slightly smaller house with a still lower price tag, not only in Omaha but in Sydney, Neb. and Council Bluffs, Iowa."

This Omaha best seller is a three-bedroom model with 1,000 sq. ft. of living space plus carport and 70 sq. ft. of outside storage on a 62' x 115' \$1,500 lot, priced from \$10,195 to \$10,495. Sixty were sold from the model house within two weeks, 30 more before Decker stopped taking orders.

First in Omaha. The house is the first volume-produced, concrete-block model on slab in Omaha. Only other houses that come close to selling as fast are prefabs, one a Gunnison built by T. H. Maenner, former NAREB president, the other a P&H prefab built by Earl Wilson. Both models are built on slabs. Prospects at first were skeptical about the concrete block exterior until it was given three coats of oil-based paint. One reason the block was accepted so well was that it was shaped like a brick instead of the awkward conventional block shape.

Eye appeal. The block is half the size of an ordinary concrete block (complete with the slot in the center), measures 4" x 8" x 16" and is scored at joints to enhance the brick-appearing facade it presents to the eye.

To get his block economically, Decker furnished dies to a local company which at first thought the block was not feasible to manufacture.

This is the same house that Decker sold in Omaha for from \$7,750 to \$8,950, except that for the colder climate he had to sink

Big bargain in Omaha

Don Decker from Phoenix builds concrete block houses on slabs with \$10,195 to \$10,495 price tags, makes them Omaha's fastest sellers

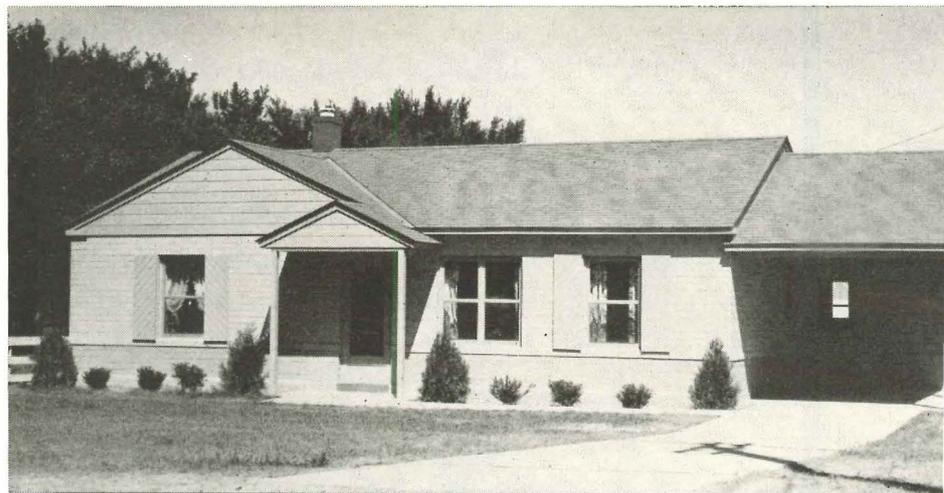
deeper footings, put in more insulation and a bigger heating unit.

In the bargain. "There is nothing cheap about this house," says Len Bourke, of Omaha, who handled sales. Here is what Decker offered: forced air perimeter heating, colored bath fixtures with some ceramic tile, aluminum windows with self-stor-

ing storm sash and screen, double kitchen sink, hard-top kitchen work surfaces, expensive mahogany flush doors.

Because he had trouble getting mortgage lenders to handle financing (concrete block was new to Omaha) Decker had New York Life to take the mortgage. National of Council Bluffs handled the financing.

Donald J.



Houses rose at two-a-day rate when built into production. Decker offered nine elevations. Exteriors of houses were given three coats of paint, scored to make block look like brick.



Louis builders have no sales blues

Fischer & Frichtel do no advertising but have quietly sold over 50 houses so far this year because they offer contemporary design at low cost

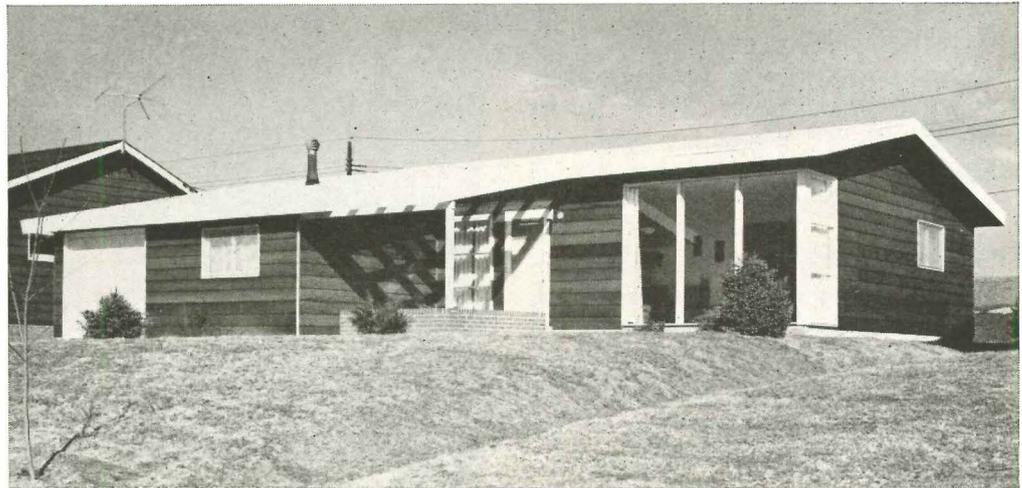
St. Louis best seller proves the advantages of cost-cutting techniques and contemporary design. Fischer & Frichtel use almost all their material to eliminate measuring and marking, cutting and waste on the job, are able to build at a lower per sq. ft. selling price, including land, and would build the lowest-priced contemporary house in the St. Louis area.

Effusive team. The two Fischers and brother-in-law Frichtel are in their 30s (average age: 32) and progressive. They have experimented with almost every cost-cutting method, hit upon preassembly as the biggest, most important way to offer home buyers a livable, low-cost house. Builder Fischer says they tried preassembly of parts but lost most of their savings in transportation costs, would not recommend preassembly to any builder unless they were building upwards of 1,000 houses a year.

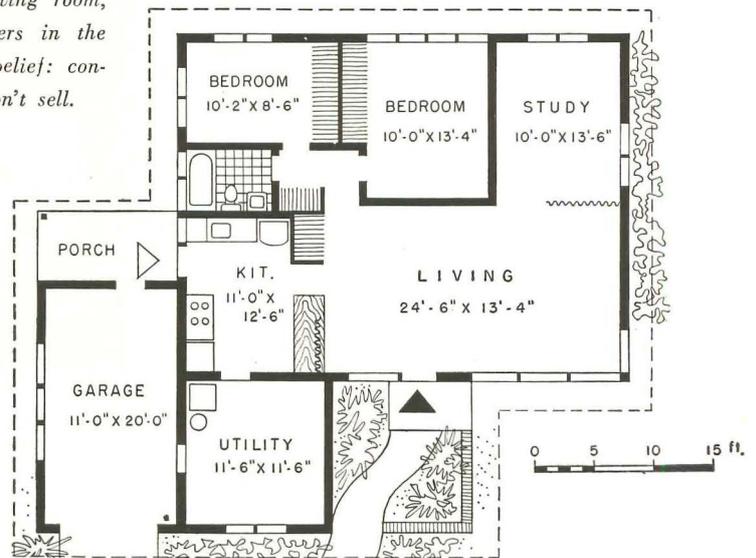
Cost on low cost. The builders have always been interested in low-priced houses, although their dollar volume on \$20,000 to \$25,000 houses is as great as their volume on most building (approximately 100 houses a year). The builders give their maximum effort for keeping construction costs down. They keep a large crew working most of the year, do not have to pay overtime time and money breaking in new workers who are unfamiliar with contemporary design.

Minimum house. In their latest development, Frostwood, F&F offer radiant heat (the Fischers' father is in the heat-contracting business), redwood siding, kitchen cabinets. Their 7,500 sq. ft. house is completely sodded. Concrete walks, streets and storm sewers are bought and paid for by the builder.

Popular model. Fastest selling in Frostwood is the model shown. Price: \$12,400. Next most popular is a house that sells for \$8.25 per sq. ft. including land. The builders are now working on a brick model that will sell for \$9.00 per sq. ft. (\$11.50 with land). John Fischer says quietly, "Sales have been going very well and acceptance



Buyers liked the advanced (for St. Louis) open planning of kitchen into living room, scotching what progressive builders in the area think is a commonly held belief: contemporary design and planning won't sell.



is excellent for our houses even though St. Louis is an awfully conservative community. It has always been our policy never to do a great deal of advertising (they have done no media advertising yet this year, produced only one small sales brochure). And we do not like to encourage sales too far ahead of production."

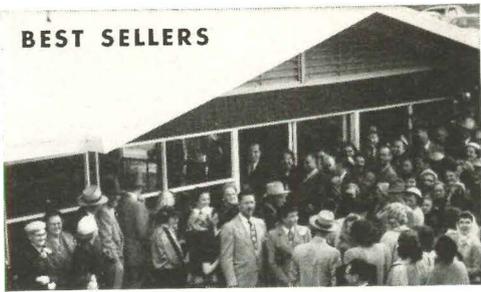
Yet they are 50 sales ahead of production right now, had firm contracts for eight brick houses three weeks ago, although they had not yet arranged FHA financing. They do not furnish their model house, keep it open only on week ends, rely on word-of-mouth advertising.

Up-to-the-minute. Contemporary styling is not new to Fischer & Frichtel. In 1948-

49 they built 160 shed-roof houses in the Champlain tract, got wonderful reception for houses that sold as low as \$6,950. Their next venture was also contemporary, 100 houses selling between \$9,400 and \$11,000 in Engler Acres.

What the customer wants. Demand in Frostwood is about 4:1 in favor of three-bedroom houses. Says John Fischer: "Even people with no need for a third bedroom want the extra room." In the basic-plan house, buyers like particularly the big combination work or play space and utility room (space for washer, drier, ironing, sewing machine) that keeps a housewife out front and with a feeling that she's in the swim of things.

BEST SELLERS



There are two good reasons why these prefabricated houses make best sellers: 1) an intelligent financial man found a way to get VA mortgage money; 2) the builder rode the national advertising bandwagon that National Homes Corp. is driving around the country.

Paper work. When its GI mortgage commitments were running out with Prudential, Dick Sandberg of Ohio Homes searched around for a means of getting another taker for VA-insured loans, found one in a Cincinnati insurance company. This is how they worked it out: Sandberg made a point of borrowing construction money from the insurance company at 4½%, allowed it to take the 1% that could be charged the veteran for the loan, and did all the paper work (CRVs, credit report, eligibility certificate, etc.) before turning over the completed deal to the lender.

Two of a kind. The selling record—now a fast 20-per-month—is all the more remarkable because the National prefabs sell for more around Cincinnati, where land development costs (improvements are about \$50 per running ft.) and labor are higher than almost anywhere else in the country. Next best seller in Cincinnati is another National prefab built by Runck & McClure.

Ohio Homes' President Harold D. Comey attributes much of his sales success to National Homes' advertising and promotion. Last October Ohio Homes participated in the nation-wide promotion that saw 300 houses, identically furnished and decorated, opened the same day all over the country. When Ohio Homes opened its Dillonvale subdivision in February, it took advantage of another such promotional scheme and had 15,000 visitors trail through its model.

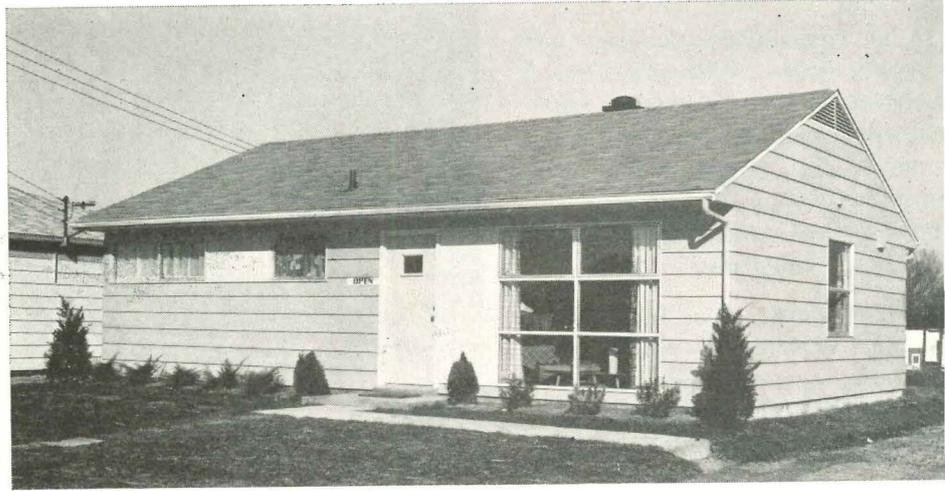
Because of the ease with which the prefabs could be bought on VA terms, over 90% were sold GI in Ohio Homes' newest subdivision in Mason Meadows.

Current best seller is the Coronet model (pictured here) for \$12,500. Price includes a minimum 54' lot. The Cornell, next best seller, is \$1,000 less.

Buyer appeal. What buyers like when they get one of the prefabs are the appli-

Cincinnati's best sellers: prefabs

Ohio Homes finds a way to get GI mortgages, cashes in on National Homes advertising and promotion, creates a best seller. Runner-up: another prefab by National



Basementless Coronet has inside-outside storage. Buyers liked ease with which garden tools could be stored under cover. Dining area open to both kitchen and living room appealed to efficiency-minded housewives because it saves steps.



Spacious living room is cross-ventilated



ances and extras that come with the house. Included in the \$12,500 sales price of the Coronet is the new combination washer-drier, steel cabinets and hard-top work counters in the kitchen, sliding mirrored doors in an oversized medicine cabinet and full-width vanity shelf in bathroom.

All houses are built on slabs. Garages or carports are extras for \$900 to \$1,050.

What mortgage lenders think of prefabs? Says Claude C. Fletcher, regional manager

for Prudential which still handles Ohio Homes mortgages: "These houses are popular because of their price range. They appeal to a larger segment of the population than do the higher-priced houses."

Comey, in the prefabricated-home business over 15 years, is in an excellent position to judge prefab acceptance. Says "Even in a conservative community like Cincinnati the resistance is now so small that it's hardly worth mentioning."

out in Dallas

Centex started its Indian Hills tract last June, sold out its 240 houses in one month, most on less than \$450 down

Dallas best seller demonstrates another way to sell more houses faster: offer the buyer at low cost something it has seen only in more-expensive houses—then merchandise the house well. Centex Construction Co.'s Dallas office recently offered a house with a low-pitched roof topped with marble chips and brick veneer. The public liked what they saw and bought. Prices: \$7,750 for a two-bedroom house with attached carport (775 sq. ft. of living space), \$8,650 for a three-bedroom house (1,000 sq. ft.).

Promotion. Centex, with a backlog of experience in low-cost houses in Texas and California, does things in a big way. It offers \$30 per house for three-color full-page newspaper ads, opened five model homes, offered 18 elevation variations and heavily wooed veterans who could afford \$200 down and \$250 closing costs. In the \$9,000 bracket in Dallas usually require closing costs from \$250 to \$300. Centex's practice of lumping closing costs with down payments together to make up the required 5% is not standard in the area, although several builders are now doing the same thing.

Home valuations were from \$50 to \$100 but all houses were sold at the VA price. Nonveterans got them for \$850 plus \$250 closing costs, or a total of \$1,100. The builder planned to build only one-story frame houses with two bedrooms, quickly changed his mind when he saw which way the trade winds were blowing. The score when the 240 houses were finished: 61% with three bedrooms.

Sales. Sales Manager Walter Spickard says, "The houses sold just as fast as they could be finished. Many people saw a low-pitched marble roof for the first time. They were used to seeing that kind of roof on \$20,000 to \$25,000 houses." Other builders witnessed the sales success of Centex, pitched marble-chip roofs are becoming more usual around Dallas. There are other features that were unpopular for a house in the area: an all-steel front and more brick veneer on front porches of some houses.



Basing its plan on previous experiences of what homebuyers liked in Texas and in California, Centex offered a low-pitched built-up roof covered with crushed marble, under it, 992 sq. ft. of living area. Note large windows facing street.



Many Dallas builders agree Centex builds a good house, are envious of the fine financing arrangements the builder can make because of volume and building reputation. Says Spickard flatly, "Lenders give us a better program because of our background since they don't expect to have as high servicing costs or as much trouble on such big volume."

A big Dallas builder says: "They sell because they are at least \$500 under the local market."

The houses are on 60' x 125' lots, which

with all improvements are worth over \$1,000. The tract has city utilities, concrete streets, curbs and gutters.

Currently Centex is building 300 houses in the Gaston Park section of Dallas, another 276 in the San Antonio area. The San Antonio houses, because of location, have about \$1,500 higher valuation. Two-bedroom models will sell for \$9,100; three bedrooms for \$10,200, but will have garages instead of carports, sliding doors. Centex is also active in defense housing: 1,300 in San Diego, 250 in Hawaii.



Here is another builder who has found that he can sell more houses faster by offering the consumer more for his home-buying dollar. Martin Cerel is able to offer more house (1,104 sq. ft.) because he builds in volume. He is able to build in volume because he finds it pays to advertise.

"The houses are the best value in Greater Boston," says a mortgage lender. Cerel probably is able to sell several hundred dollars below the market because he builds so much and sells so fast. His volume building allows him to do volume buying, and tight scheduling of subcontractors and material men—working regularly with him—accounts for big savings.

Sellout. His most recently completed development, Wethersfield-at-Natick (304 houses), was a complete sellout. Price: \$13,990 for a three-bedroom model with attached carport. He has averaged better than a sale a day since the first of the year.

In his latest tract he is over 50% sold out. His sales staff reported 36 sales in 18 days a few weeks ago.

Unlike builders who start with their own likes and dislikes, Cerel keeps the home buyer uppermost in mind. "We have to," says A. L. Cochrane. "Buyers in our area shop around for good value. We have to offer them more for their money." To get more livability in his subdivisions and in his houses, Cerel uses the services of a land planner and architect, R. I. Williams of Wollaston, Mass.

Prospects who look at Cerel's houses are always suprised by their wide, expansive look. When they get inside the house they are pleased by the three bedrooms he offers. Although Cape Cods are still popular in Massachusetts, young and old alike find advantages in the one-floor plan in Natick: older people do not like stairs to climb; young couples like to feel they are always at ground level where they can keep an eye on the children.

Some of the other values in Wethersfield: electric range, automatic washing machine, steel kitchen cabinets, electric exhaust fan, ceramic-tile worktops in the kitchen, tile around and above combination tub-shower, sliding-door closets, an

In Greater Boston: sales ahead of starts

Martin Cerel's formula for successful selling

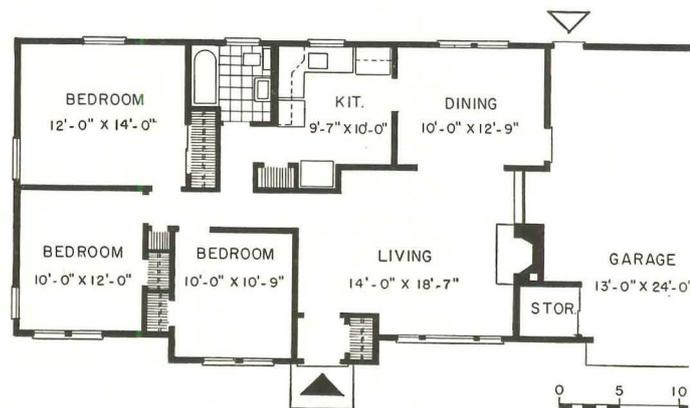
is: build a large volume of houses and advertise them

oversized garage that can be used as a workshop and makes up for no basement. Lots vary from 10,000 to 14,000 sq. ft., are landscaped.

Merchandising-minded. Admitting that he is in a homebuilder's paradise ("Natick is a bedroom for Boston"), Cerel nevertheless leaves nothing to chance. "As far as advertising is concerned," says an employee, "he jumps in with both feet." He uses newspaper and radio advertising, works up attractive sales brochures, uses furnished models and has built himself a reputation for honest value and conscientious servicing ("I stand behind all the houses I build and folks who buy them know it and tell others").

Mortgage money. One big factor in Cerel's selling favor is that he is able to market his VA loans at par. The two reasons why he is able to get GI loans locally. One: the local lenders do not have to pay out 1/2 of 1% servicing charge; they can service the mortgage themselves (they service other mortgages, anyway). Another: for in-state mortgages they do not have to pay the 1/2 of 1% state tax rebate for out-of-state mortgages.

"There is plenty of money in New England," says Norman Barrett, treasurer of the Charlestown Savings Bank. "And we are not hungry for 4% mortgages and cannot afford to take them from out of state—we are perfectly willing to let them stay in our territory."



Floor-to-ceiling windows, brick fireplace, a big window covering one entire wall were particularly appealing to buyers. Clever design feature: wide overhangs which make the house look bigger than a foot or more added to floor

Best seller in Minneapolis

How Bruce gets site planning, architectural service,

and why it's a good house, then merchandises it well

Bruce Siford

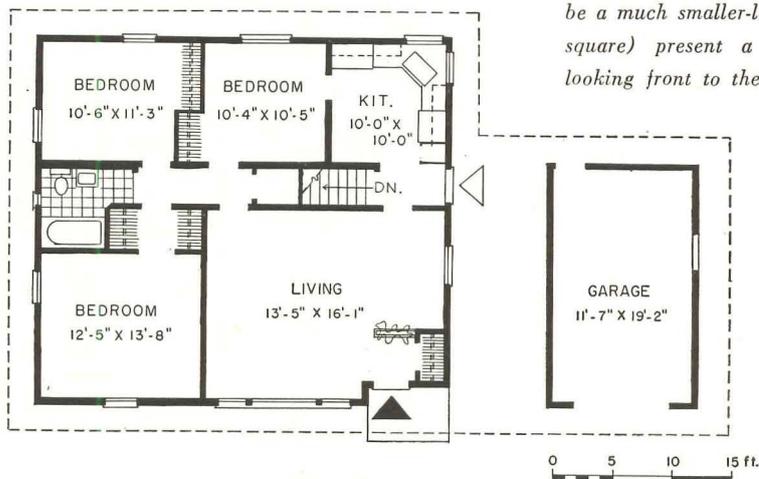
Minneapolis best seller demonstrates a good way to sell more houses faster: use architects' services. Says Builder Bruce: "Many builders find it hard to sell their houses because they won't pay for architectural services. The builder and the architect should get together. That's basic in selling houses." Bruce is one of the only merchant builders who work closely with architects in the Minneapolis area. Although other builders in his area sell houses in a lower-priced bracket, he can match his selling record percentage. On his Cedarcrest subdivision in St. Louis Park (124 houses in a 2-acre tract) Bruce sells his houses for \$3,900 to \$18,000. His fastest seller: a house for \$16,000. Even in this price range he sells most of his houses before they are finished, has averaged better than a house a week for the past four months.

Architect-builder collaboration. Working in close cooperation with his architect, Armstrong & Schlicting of Minneapolis, Bruce gets site planning, design, construction control and furnishing advice. Says Bruce: "We work furniture into a house during the design stage. Many speculative builders make the mistake of building bedrooms that won't take beds or rooms that are so poorly planned that they are impossible to furnish practically. Common errors are making poor use of materials, placing them incorrectly or giving unattractive shapes." A 2' overhang around the Cedarcrest houses makes them look even bigger than their 1,000 to 1,200 sq. ft.

Basement floors for one. Bruce, who had architectural training himself, is completely successful in making the most of his building. Of the more than 50 houses already sold in St. Louis Park, 40 sold first because they have walk-out basements. By the advantage of his rolling site Bruce is able to put full-sized windows and doors in the basement. Says one of his clients: "The basement rooms at ground level are just as desirable to the buyers as the upper rooms in his house." Prices on houses with the walkout-basement feature are 10 to 20% higher than others because of the



Wide overhangs and breezeway connecting house to garage make what otherwise would be a much smaller-looking house (it is almost square) present a longer, more expensive-looking front to the street side.



deeper footings required and additional millwork. Breezeway between house and garage is an important expansion feature. Several buyers have had it completely closed in for winter living.

Nice neighborhoods. "People want nice neighborhoods; they, too, sell houses," says Bruce. He offers four basic models and various front elevations, insists upon maintaining exterior color control, and will not put just any house next door to another. "That way," he says, "we keep our houses from looking like so many sitting ducks."

The selling pitch. A building official says of Bruce: "He succeeds where many builders fall down: after building a good house he merchandises it well." Here are some of the things he does:

►Furnishes a model completely and in good taste ("We keep it the way a house should look—lived in; we don't scatter many signs around").

►Displays a spotlighted model of the subdivision with the type of houses that go into it ("We landscape the model so folks can get an idea of what kind of a neighborhood they'll live in").

►Puts display signs in the basement. These include the names of the architects, Armstrong & Schlicting, a complete listing of the building materials, and a certification of adequate wiring.

During National Home Week last year Bruce had his architects produce renderings of the houses for display in his model, says: "I forget how many houses we sold on just the basis of the pictures."

Despite harder selling, housing heads for 1.2 million unit year

For the third straight year, housing was confounding the prophets by booming more than most of them thought it was going to.

In 1951 when HHFA expected credit controls to keep housing starts down to 850,000 units and some builders feared a plunge to 600,000, the industry actually began 1,092,000 houses. Last year, most experts looked for about a million homes. Instead, starts rose to 1,130,000. This winter, Commissioner Ewan Clague of the Bureau of Labor Statistics has been predicting a 1.1 million housing year for 1953; other seers have put the figure lower.

Last month, when BLS counted up February starts (see graph), it found a surprising 8% gain over January, despite heavy storms in the last half of the month in the Midwest and Great Lakes regions, which might have been expected to offset the effect of a generally mild winter elsewhere. February's 77,000 starts meant a seasonally adjusted annual rate of 1,227,000 units (compared to a projected annual rate of only 1,157,000 computed on January starts). And BLS added: "A fairly substantial rise during February in building permit issuance foreshadows continued gains in housing starts for March."

Confirming forecast. Would the surprising pace continue? The month's most authoritative answer was "yes." It came from HOUSE & HOME's sister magazine, FORTUNE, which decided after hearing the plans of 400 builders in 22 cities that 1953 will bring 1.2 million new homes. In the past two years, FORTUNE's April prediction of housing volume has been accurate within 2%.

The Federal Reserve Board's 1953 survey of consumer finances added more weight to predictions of good business. On the basis of a survey conducted during January and February, the Fed reported: "Plans to purchase new and used houses in 1953 appear to be slightly more numerous than they were a year ago." Moreover, "substantially more" consumers expected to buy major household goods like TV sets and furniture than a year ago. One big reason, it appeared, was that Mr. and Mrs. America thought their income would be more secure and prices steadier or lower this year than in either 1951 or 1952.

The consumer survey is not the most accurate forecast of housing. In 1951 and 1952,

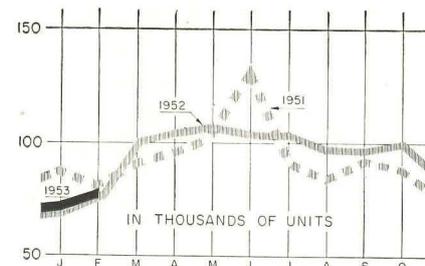
it reported consumers planned no increase in home buying. But the studies spotted big trends in consumer thinking just the same.

Buyers' market. The strangest aspect of the 1953 housing boom was that builders generally tempered their optimism with the qualification that a buyers' market had arrived. Said Denver's S. G. Russell: "The rush for homes is over, and the buyers are becoming increasingly critical. He will take the first house he sees."

Despite harder selling, many a builder was planning to expand his output. For instance, Indianapolis' L & L Builders Corp. planned to hike its output from 600 to 700 or 800 homes this year, although a spokesman said "the market is softer." President Russell G. Showalter of the St. Louis home city's NAHB chapter, who built 100 homes in the \$9,000 to \$12,000 bracket last year, expected to boost his output to 150 although he admitted homes "took a little longer to move."

On the average, builders were finding it took about a month longer to sell a house than it did a year ago. But complaints about increasing competition were rare. Most builders thought it was a healthy thing. Besides, their buyers' market was a relative thing. Housing expert Sterling Hogan, recalling that he used to be able to sell houses as fast as loans were approved, explained: "Now you've got to show the customer what the house is like inside."

Bearish lenders. If builders were optimistic, many a lender was not. And their warnings were based on economic realities not hard-to-measure government influences. In New York City, Vice President Joseph R. Jones of the big Security



Source: Bureau of Labor Statistics

HOUSING STARTS climbed to 77,000 units in February, an 8% gain from January. For the first two months of the year, housing was 5,400 units ahead of 1952.

IN THIS MONTH'S NEWS

(see pp. 37 through 52)

Guy T. O. Hollyday of Baltimore, former president of the Mortgage Bankers Assn., is picked for FHA Commissioner

HHFA Administrator Cole plans a conference between industry and FHA architects to spur up-to-date design thinking

A look at the nonwhite housing market suggests builders are passing up a profitable business

The administration asks Congress to approve 35,000 public housing units in '54

An expandable, portable defense housing unit offers 520 sq. ft. of living space for a remarkable \$3,500

Bank of Los Angeles told a bank conference: "Possibly we are approaching the point of saturation of the market." He cited census figures that show there had more housing per capita in 1940—"a very normal year, with no surpluses or shortages." In 1940, the average housing unit served 3.53 people. In 1953, it served only 3.26 people, indicating that the housing shortage was actually less than three years ago. Thus, Jones says the housing boom since 1950 "is due very largely to the very liberal financing now available." He warned: "The average buyer of a tract house today is on a much thinner margin of equity than in the past." President Ben Hazen of the US Savings and Loan League warned builders to watch their profit ratios closely if they want to avert the performance of housing overproduction in 1927-29. Hazen disagreed with those who hope slum clearance and replacement of small and obsolete homes will be a housing boom at its million-a-year clip in 1953. His opinion: starts soon will be at least 15 or 20%, and more probably 25%.

Analyst Roy Wenzlick forecast a 15% drop in homebuilding this year. Vice President Arthur C. Babson of Babson's School of Business told the National Established Contractors, Siding and Insulating Contractors Association he expects residential building to drop 15%.

Housing demand. To economists and bankers, the deepest puzzle of housing is its continuing strength is that family formation has been dropping for three years. (1953 total may well be one-third less than the number of housing starts.) Classical family formation is the No. 1 influence on demand for new homes. Most pessimists expect 1953 housing output rely on its ability to bolster their gloomy predic-

the very strength of housing through the last three years suggests that other factors may have gained increasing influence on the basic demand for housing.

the increasing mobility of US population—nearly ten million of the nation's families have moved from one residence to another this year. Most are still migrating west and south.

as FORTUNE notes, a "backed up demand for better housing." Young couples who have a minimum one and two-bedroom homes before the war are outgrowing them. In city areas, builders reported more demand for four-bedroom homes (and incidentally, homes with more storage space, two-car garages, bigger lots, and quality craftsmanship). With vacancy rates were rising significantly in most of them were in the central cities

from which homebuyers were fleeing to settle in the suburbs where space, light and nature come cheaper. In the suburbs, where homebuilding was heavily concentrated, vacancies were still slim, reflecting continuing demand.

Unrepeating history? The concentration of homebuilding in the suburbs led Morton Bodfish and Ralph Lueders of Chicago's First Federal Savings & Loan Association to predict that—in Chicago at least—there was little chance of a plunge in housing like that of the '20's. In the seven big building years of the '20's, they noted, 74% of Chicago's housing went up inside the city limits, yet 41% of the area's population gain was in the suburbs. Between 1940 and 1950, however, Chicago area building exactly matched the two-thirds population growth of outlying communities. Their conclusion: a "strong case" can be made that the overbuilding of the '20's was largely a matter of building in the wrong location.

On balance, it looked as though housing could continue its remarkable pace so long as the nation's economy itself stayed in good shape. If so, it promised a big rise in the nation's standard of housing during the '50's.

Connecticut court upholds town which bans subdivision because it can't afford schools

Can a city bar a small development on the ground it would strain the town budget to provide accompanying schools, services and utilities?

The common pleas court of New Haven, Conn. ruled last month that the town of Milford does have such powers. Judge John Clark FitzGerald upheld Milford's planning and zoning commission in rejecting Property Owner Ralph Beach's application to subdivide 60 acres of farmland into 145 lots for houses in the \$12,000 bracket.

New precedent. The decision held serious implications for builders everywhere. Although many a swank suburban community has restricted construction of small homes with stiff site development, zoning and planning rules, the Milford case was one of the first, (if not *the* first) which barred new housing so bluntly.

For New England, Milford has been growing at an explosive rate. Its population—mostly overflow from Bridgeport and New Haven—has shot up from 16,439 in 1940 to 30,000 last year. In rejecting Beach's subdividing application last Oct. 28, Milford's zoning commission held that the town's finances, already strained by school building and other expansion, could not stand more

Contemporary accepted. One striking aspect of 1953's housing market was the rapid acceptance of contemporary design in some areas which had long resisted it. Said Executive Vice Pres. John C. Donovan of the Niagara Frontier Builders Assn.: "Heretofore the Buffalo builder risked his shirt on mass production of contemporary. But 1953 will certainly show public acceptance of the functional architecture." Donald Drummond, who builds some of Kansas City's most modern tract homes, planned to increase his production from 42 to 63 units. But some big builders of conventionally designed housing were planning to retrench.

If the vast majority of builders were right, one way the government could guarantee a big housing year would be to raise VA mortgage interest rates. Reason: more GI financing would let them reach more buyers with only a little cash on hand for the downpayment. Typical was the comment of Builder Harry Levy in Oklahoma City: "A raise in GI interest rates would really cut things loose." Ex-NAHB President Tom Coogan dissented: "A simple change of rate is expected to be a cure-all. No cure-alls exist."

homes until some of the current debt is cut back. Town sentiment strongly backed the commission.

Legal arguments. Bringing suit, Beach argued: "Provision of fire and police service [and] schools is a natural function of towns . . . a taxing and not a zoning problem. The act of the commission amounts to setting up a barrier in the local interest of the town in conflict with the general interest of the public." Replied Town Counsel Richard J. Lynch: "The sole issue [is] whether the commission has the power to disapprove a subdivision plan when, in the opinion of the members, the approval would seriously injure the general welfare of the entire community. If it has such discretionary power its action must be sustained."

Upholding the town, Judge FitzGerald ruled the zoning board had power to regulate "the density of population and the location and use of buildings, structures and land." He argued it had power to make discretionary rulings beyond its formal regulations if it had sound reasons for doing so. To make sure, he ordered a later hearing on whether the rejection of Beach's subdivision was "supported by fact and not by whim and caprice."

SETBACKS FOR REHABILITATION: leaders of Baltimore slum plan

as mayor blocks scheme to make it work better; Miami jettisons its slum clearance department

There was plenty of cheerful talk last month about rehabilitating the nation's urban slums. But in actions that counted, the housing industry's newest campaign suffered two setbacks that showed rehabilitation needs far broader community support and understanding if it is to succeed.

▶ In Baltimore, cradle of the slum renovation plan that has spread across the nation, a quarter of the 16 members of the housing bureau's advisory council resigned in protest against politicians' refusal to give the fight against blight administrative powers equal to the task.

▶ In Miami, the nation's first city slum clearance department was scuttled by the city commission after its political enemies found a legal mixup in the ordinance that created it only last September. Miami realtors and builders let the promising department be voted out of existence without raising a peep of protest.

They Wanted a Change . . .



ROUSE



HOLLYDAY



MRS. RAMSAY



HEALY

For all its pioneering and national attention, the Baltimore Plan in 10 years has made only small inroads on Baltimore's 2,100 blocks of slums. By the widest stretch of statistics, the plan has touched only 300 blocks. And in many of these, there was neglect of the re-education of slum dwellers that so few people even in the building industry realize is an indispensable part of fighting urban decay. As a result, some of the 300 blocks are again slipping back into slums.

One of the chief reasons why progress is so slow, Baltimore's slum fighters think, is the clumsy tools they have to do the job. Like Topsy, Baltimore's slum-attacking housing bureau just grew. It grew where it was born, inside the city health department. As a result, the housing bureau found itself stifled in layers of bureaucratic red tape. Its inspectors not only lacked complete power to act against slum housing on their own authority, but could only wheedle aid from police, firemen, the bureau of buildings, zoning enforcement office, the bureau of highways, bureau of sanitation, park, education and public welfare departments.

'Ineffective, slow.' A year ago, Chairman James W. Rouse of the housing advisory council warned Mayor Thomas

D'Alesandro the Baltimore Plan "needs prompt and vigorous assistance if it is to survive." He explained: "When a problem arises which blocks progress in the improvement of a slum neighborhood it is studied by the housing bureau and its advisory council, neither of which has authority to take action or to negotiate with such other departments as may be involved. The housing bureau must proceed through the commissioner of health, who is free to accept or disregard its advice, whether or not its recommendations relate to a health matter. As a result, the machinery created [by the 1951 ordinance establishing the housing bureau] not only moves slowly; it also moves ineffectively. It takes an inordinate length of time and an extravagant quantity of letters, memoranda and conferences to produce simple,

. . . They opposed it



D'ALESSANDRO



BIDDISON



WILLIAMS

worth-while results which should be accomplished quickly, easily and directly.

Mortgage Banker Rouse offered the solution: set up a nonpaid commission on blight (akin to a redevelopment commission) which would take over the health department's functions and powers in blight-doctoring, with direct access to the mayor and exclusive power to enforce the ordinance of separate and overlapping commissions for specific areas picked by the city for rehabilitation.

Advice rejected. Last month, on the advice of his city solicitor, Mayor Thomas D'Alesandro turned Rouse's sense-making proposal down. The solicitor had found the plan unworkable and impractical. To the slum fighters, the mayor's action looked arbitrary and thoughtless. More probably the mayor had merely taken the usual political course of siding with the stronger party. City Solicitor Tom Biddison got his advice from Dr. Huntington Williams, long-time health commissioner who is unwilling to let the housing bureau get out of his hands. Williams, in turn, was backed by an advisory board of his own which included such powerful figures as Dr. Abel Wolman, professor of sanitary engineering at Johns Hopkins University and widely known industrial consultant; and Dr. Ernest B. Wilson, Johns Hopkins medical school. There was also the possibility that the seldom-seen hand of slum-owning landlords was at work. Baltimore has never heard a full explanation of why Governor McKeldin did not reappoint Harry Healy as judge of its housing court when his term expired in 1951.

Protest resignations. On March 1, a disheartened advisory council met. Most of its members agreed to resign on their fight for a separate blight commission before the Maryland legislature, which must pass an enabling act if the city can create it.

housing bureau's director, G. Yates perhaps sensing the rejection to had already quit to head a new housing rehabilitation department (Mar '53, News). Resigning with were Council Members Guy T. O. ay, former president of the Mort-Bankers Assn. who was scheduled come President Eisenhower's new commissioner; Mrs. John B. Ramsay, president of the Baltimore League men Voters; and Thomas J. Healy, AFL teamster boss. Others who d to quit wavered later as the row into a full-fledged civic war.

on wrong ball. Rouse wrote the : "It is time we recognize that the ore Plan cannot grow and develop e kind of a program the city desy needs under its present structure government." In rejecting the plan blight commission, he said, Solicitor on "has his eye focused on the problem. He is preoccupied with t may disturb the traditional pro of city government to set up the ery to fight blight effectively." charged that Baltimore's machinery o "ineffective, and inefficient" that n the 27-block pilot area where the ore Plan had been brought to its flower, some violations remained ected after two years. Reason: the g bureau cannot get the five or more ctors from separate departments to up violations, report on corrections. orted Mayor D'Alesandro: "We are with a choice between the dictation . Rouse and the advice of the city or and the commissioner of health." ok another customary step, ordered nquiry into why violations went unted.

ody gave the blight commission bill Maryland's legislature much chance ssage this year. It was introduced to a crowded schedule, would almost e lost in the last minute rush. ith the powerful backing that Rouse muster and with a slight change in ore's political climate, it might get h when the legislature convenes in two years. Meanwhile, Baltimore's etting slum plan seemed headed for certain future.

do in Miami. Miami's slum clear-epartment was so new it had never chance to function. Still worse, it anded none of the broad community t without which slum renovation t succeed. So it was no great trick for en of the city's building and zoning tion divisions, who had fought crea-

tion of a separate slum department, to find a legal shenanigan to wreck it.

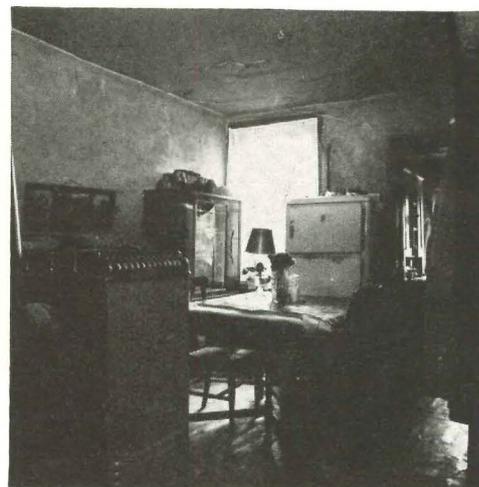
Involved were slum areas' nonconforming wooden shacks which were built before the city's current zoning laws were adopted in 1934. Florida's Supreme Court ruled two years ago that Miami cannot force owners of pre-1934 shacks to tear them down. But Miami has an ordinance forbidding structural repairs to nonconforming buildings. The ordinance creating the slum department did not repeal it. So Zoning Inspection Supervisor Robert Korner warned the city manager: "You have created a new department with authority to order property owners to violate the city's general zoning ordinance by

directing them to make structural repairs to nonconforming buildings." Backed up by an opinion from City Attorney John E. Cicero, the building department refused to issue any more permits for major repairs.

Stymied, the city commission decided to reinstate the old law it repealed to set up the slum department. This returned slum rehabilitation to a voluntary basis by letting slum owners disregard zoning laws in repairing dangerous structures.

Miami's decision virtually wrecked chances of any real slum rehabilitation. Cried Mrs. Elizabeth Virrick of the Citizens Slum Clearance Committee: "This means that repairs to shacks in our slums will perpetuate them for another 30 years."

Photos: Walter Bennett



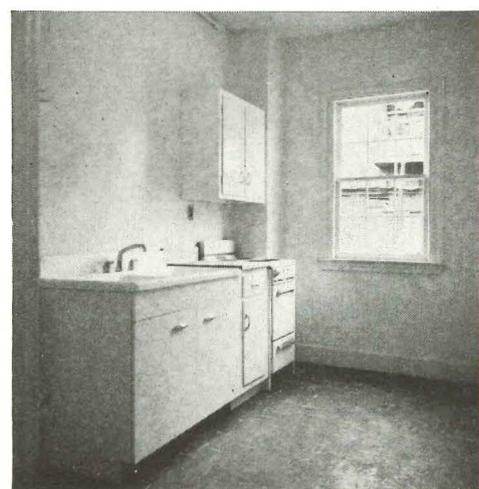
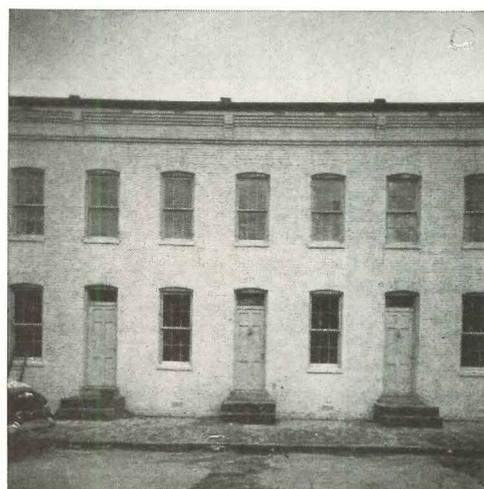
Washington builders renovate a slum at a profit

Fenton Place lies almost within the shadow of Washington's Capitol. It is—or was—a narrow, unkempt street of small, dilapidated brick row houses 75 years old, peopled mostly by Negroes on relief or close to it.

In this forbidding setting, a group of Washington homebuilders led by Herman Schmidt last month were completing a rehabilitation pilot project they hope will demonstrate what builders elsewhere can do to help save US cities from rot. Forming a limited dividend corporation, the builders bought eight Fenton Place homes like the ones pictured above, converted them into the trim, modern dwellings shown below. It re-

quired a complete renovation job: rotted joists and front doorsteps were replaced; inside toilets and electricity were installed; floors were covered with plywood and asphalt tile; kitchen equipment, hot water and automatic gas heaters replaced cold water sinks and pot-bellied stoves.

The renovation cost ranged from \$3,000 to \$4,500 per house, so the sale price tag is \$9,450 for six room homes and \$8,950 for five room units. But the builders expect to find a ready market among Negroes in government jobs, still make a profit to be ploughed into more projects like this one. Schmidt says the profit secret lies in complete renovation of several units at once.



The economics of TREES

How, when and why it pays

to make use of nature's biggest sales

By Jule R. von Sternberg, AIA



H&H St

This is the exact spot near Washington, D. C. which Builder Ed Carr so angry he asked HOUSE & H publish an article about saving trees. Once this entire site was covered by trees like those at left. But all the building site ruthlessly bulldozed off, left houses unattractive. Trees would greatly increase their

**Trees too much of a luxury
in low-cost home?**

By leading builders,
back up their opinions with dollar figures.

**The cost of big-size trees (4"-6")
included in FHA and VA commitments?**

By officials—
they qualify their statements significantly.

**Wooded sites be stripped
to simplify construction?**

Says Ed Carr, former president of the NAHB,
"The clearing is better and cheaper."

**Buyers of low-cost homes
pay extra for big-size trees?**

By a price-setting Long Island builder
who is going out.

If most builders agree with the answers, left, our new small-house communities are about to sprout trees by the grovefull. And high time, too! Home buyers will be grateful. So, too, will architects, town planners, civic associations and mortgage companies.

For, to date, most builders have unenviable records when it comes to preserving wooded sites, or planting trees on their customary bare sites. Their neglect is inexcusable. Inexcusable because it stamps them as bad builders (unfamiliar with the value of trees for shade and shelter), as bad planners (with little sense of the importance of trees to the maintenance of values in a community), and as bad businessmen (because trees can make money for any smart builder (earn more, relatively, says one builder, than his actual building operation).

But the chief reason why builders from now on should dedicate themselves to the study of tree values is because it is time they graduated from the status of *housebuilders* to that of *community builders*. If they are to mastermind the creation of entire new communities, they will have to restyle their thinking. The simple objective—"My project must make money for me"—must be qualified by: "And be as comfortable, as healthy, and as attractive as it is possible to build."

Builders agree . . . There can be no arguing about the value of trees to the over-all beauty, comfort and economy of a residential community. Their ability to air condition an entire area, prop up property values, quiet the noise of traffic, and screen objectionable views is well-known by all builders. Most builders believe in trees with the same fervor that they believe in virtue and motherhood. They never fail, when advertising their houses, to show them—in drawings, at least—surrounded by fine trees.

. . . but fail to act. Study their building habits, however, and these two shocking facts stand clear: 1) Too many builders take handsomely wooded land and bulldoze it down to the raw earth, destroying for decades the advantages that such a stand of trees might have given the buyers of their houses. 2) When they build on meadow and farmland, they make little or no effort to supply the trees that every well-planned community desperately needs. The trees they do plant—if any—are invariably buggy-whip saplings that will take years to achieve effective size.

When asked why, they give these stock answers:

. . . We rip down the trees because it's much cheaper to build on cleared land than on wooded property. Trees get in the way of trenches; crew traffic from house to house, and the storage of materials.

. . . It's impossible to spare trees when you're using power excavating and grading equipment. Workers and truckmen have no respect for trees, and we can't stand over them with a club.

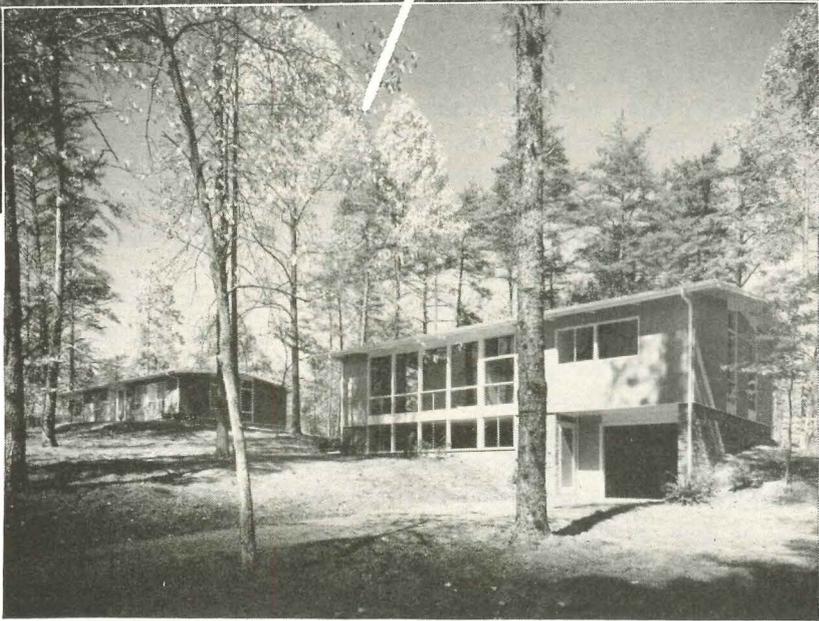
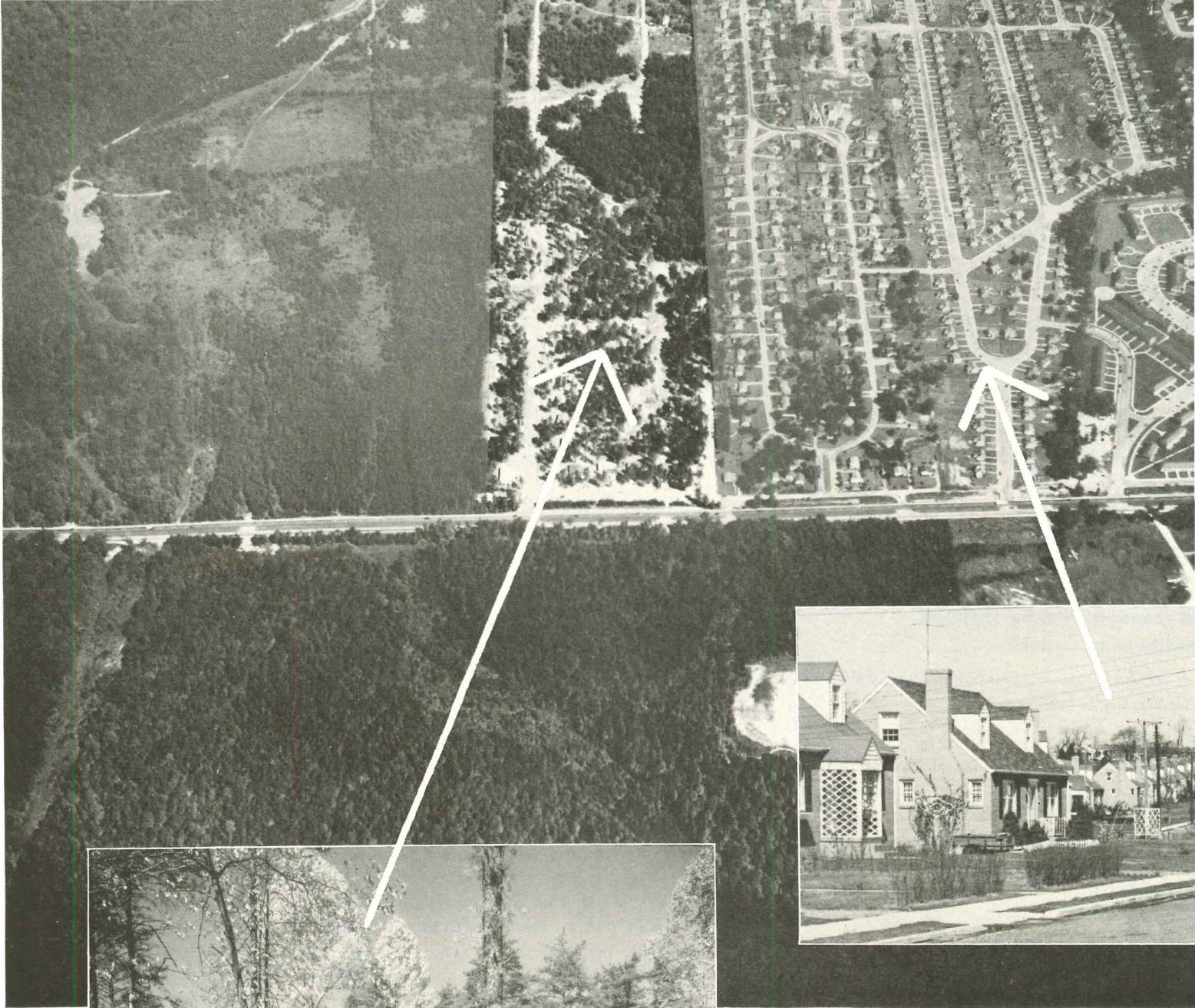
. . . We'd have more trees around our houses if someone would pay for them. Neither the FHA nor the VA will increase commitments to cover the cost of saving or planting trees. And the buyer won't make a larger down payment to cover their cost.

These answers are partially true, but builders are beginning to discover: it *is* possible to build economically on wooded land. The FHA, VA and private bankers *are* finding ways to enlarge commitments to cover the cost of trees. Building labor *is* more than cooperative, once it is made aware of the value of trees. As a result, even the low-cost house *can* have the beauty and comfort of good-size trees.

I. IF YOU HAVE TREES—SAVE THEM

Edward R. Carr, past president of the NAHB and an advocate of tree salvage, maintains that in most cases it is cheaper to save than to clear trees. As proof, he cites the brutal stripping of a 640-acre wooded site near Washington, D. C. (opposite). The builder started by bulldozing every tree and shrub on the property, at a cost of \$2,000 per four-acre block.

Says Carr, "If he had left a rectangular panel of trees in the middle of each block, he would have cut his clearing costs by \$1,000 a block—and had a highly attractive sales feature: a private forest and picnic grove for each family, and a good view for all rear windows. The cleared front of the property would have permitted free construction access.



Photos: (above) Reni; (left) Robert C. Lautman

Value of the Luria property is greatly enhanced by fine trees. These houses are selling as fast as any in their class and trees are definitely a sales factor. Air photo above, made before streets were installed, shows careful thinning of trees.

The most beautiful parts of the new Levittown are areas like the one at the right where old trees were saved.

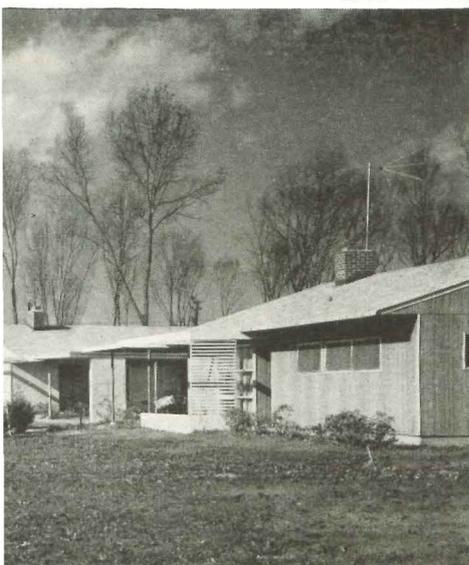


erent builders do with heavily wooded land is the large photo, left, of Fairfax County, Va., just Washington. At right nearly every tree was cut though a few clumps were saved. Long, narrow rec- enter shows how carefully Luria Bros. saved trees.



area in air photograph, top left, appears above. ous effects of tree cutting are clearly evident. It many years for property owners to grow trees that this a good place to live in. Builders who take hort-change their buyers for life.

Lionel Friedman



"This green-belt idea could have been carried a step further. If the builder had scalloped the sides of the panel so that thin spurs of tree growth extended down the lot lines, they would have produced perfect screening from garden to garden.

"Such tree belts make fine 'nurseries'. We can scoop-lift 2"-2 1/2" trees out of them to place in front of our houses when landscaping. Cost per tree—moving and planting—is only a few dollars.

"On the other hand, under some conditions it is uneconomic to save trees, and certain trees may be undesirable:

"If grading makes much filling over the roots necessary, a tree expert should appraise the cost of saving the tree as against its value. Even 2" or 3" of fine loam or clay fill may kill a tree by suffocation.

"If the terrain is rough, with great differences in grade, it may be only sensible to clear all the trees, especially in small lot developments where it is usually impossible to take advantage of land contours.

"If much fill is required, it may be cheaper and easier to scoop it off the high land, in which case many trees are sacrificed.

"If a really fine view is blocked, or if there are so many trees close to the house that grass won't grow and the house is continually damp, some clearing is obviously called for."

Spare the tree and save the sale. Ned Cole of Austin, Tex., believes in sparing the tree to save the sale. On wooded land (which he prefers, even for lowest-cost homes) he first clears a strip between lines 30' and 60' from the street and preserves trees for both front and rear yards. "And in pine areas," he says, "the cut timber more than pays for clearing the strip."

The J. C. Nichols Co. of Kansas City prefers wooded sites and often develops them. Chairman of the Board John C. Taylor reports that his company has planted over 150,000 trees, and maintains its own nurseries.

"On bare land which we purchase for future development," Taylor says, "we make a practice of doing a large amount of tree planting, based on a preliminary street and house layout. This growth is usually several years older before we get into actual construction. We know that it contributes materially to the desirability of the property."

How to protect trees. It is possible to educate building crews to save trees, says John Matthews of Little Rock. "Choose your trees before you build; save the best and clear out the undesirables." Easiest way to mark a tree for saving is to tie a white rag around it. If it's near a truck dump, protect it with a box. Establish well-marked rights of way for bulldozers and other equipment, instead of letting them break their own trails into the property.

A landscape plan will help to avoid the best trees in locating streets, houses and driveways. Many of the existing stands of trees in Bucks County Levittown have been saved this way, and thousands of new trees added. "Good-sized trees have this virtue," claims William Levitt. "As buildings deteriorate, growing trees enhance their value."

Buyers will pay. The consensus of a number of leading builders is that average buyers prefer wooded property, and are willing to pay for it.

Ed Carr saved a magnificent beech at a cost of \$500 for drainage tiles and fill, and collected \$2,000 more for the house it shaded. Ervin Peterson, Lincoln, Neb.: "Our buyers will pay an extra \$200 and more for a house with trees." C. J. Goucher, Madison, Wis.: "Trees add from \$100 to \$800 to the value of a house." Martin Bartling Jr., Knoxville, Tenn.: "Trees are worth at least \$500 per house." Virgil Place, of Place & Co., South Bend, Ind.: "Buyers of our \$10,000 to \$12,000 homes will pay \$500 to \$750 more for houses with trees."

But if your buyers won't pay the cost of trees (and some won't, some builders insist), you may be able to charge trees off as a selling expense. Manny Spiegel, president of NAHB, says, from his experience, "People will actually pay no more for a house with trees than for one without, but sites with trees will be selected first."

LARGE TREES ARE NOT EXPENSIVE

For guidance, use this table of approximate tree prices in various areas, prepared in cooperation with American Association of Nurserymen.

Middle Atlantic New York State

Sycamore.....	2 1/2-3"	\$28.00	\$40.00
Maple.....	2 1/2-3"	28.00	40.00
Locust.....	2 1/2-3"	28.00	40.00
Willow.....	2 1/2-3"	28.00	40.00
Linden.....	2 1/2-3"	28.00	40.00

New England Boston

Maple.....	2 1/2-3"	28.00	40.00
Oak.....	2 1/2-3"	28.00	45.00
Sycamore.....	2 1/2-3"	28.00	40.00
Moraine locust.....	1 1/2-1 3/4"	20.00	—

South Atlantic Jacksonville, Fla.

Oak.....	2 1/2-3 1/2"	10.00	25.00
Tulip tree.....	2 1/2-3 1/2"	10.00	25.00
Australian pine.....	2 1/2-3 1/2"	10.00	25.00

Midwest Des Moines

Maple.....	2 1/2-3"	20.00	35.00
Hackberry.....	2 1/2-3"	20.00	35.00
Ash.....	2 1/2-3"	20.00	35.00
Amer. elm.....	2 1/2-3"	20.00	35.00
Oak.....	2 1/2-3"	20.00	35.00

Southwest Scottsville, Tex.

Sweet gum.....	2 1/2-3"	20.00	30.00
Chinese elm.....	2 1/2-3"	20.00	30.00
Oak.....	2 1/2-3"	20.00	30.00

Rocky Mts. Denver

Linden.....	2-2 1/2"	17.00	25.00
Locust.....	2-2 1/2"	12.50	20.00
Maple.....	2-2 1/2"	14.00	22.00
Amer. elm.....	2-2 1/2"	17.50	25.00
Oak.....	2-2 1/2"	15.00	25.00

Pacific Northwest Portland, Ore.

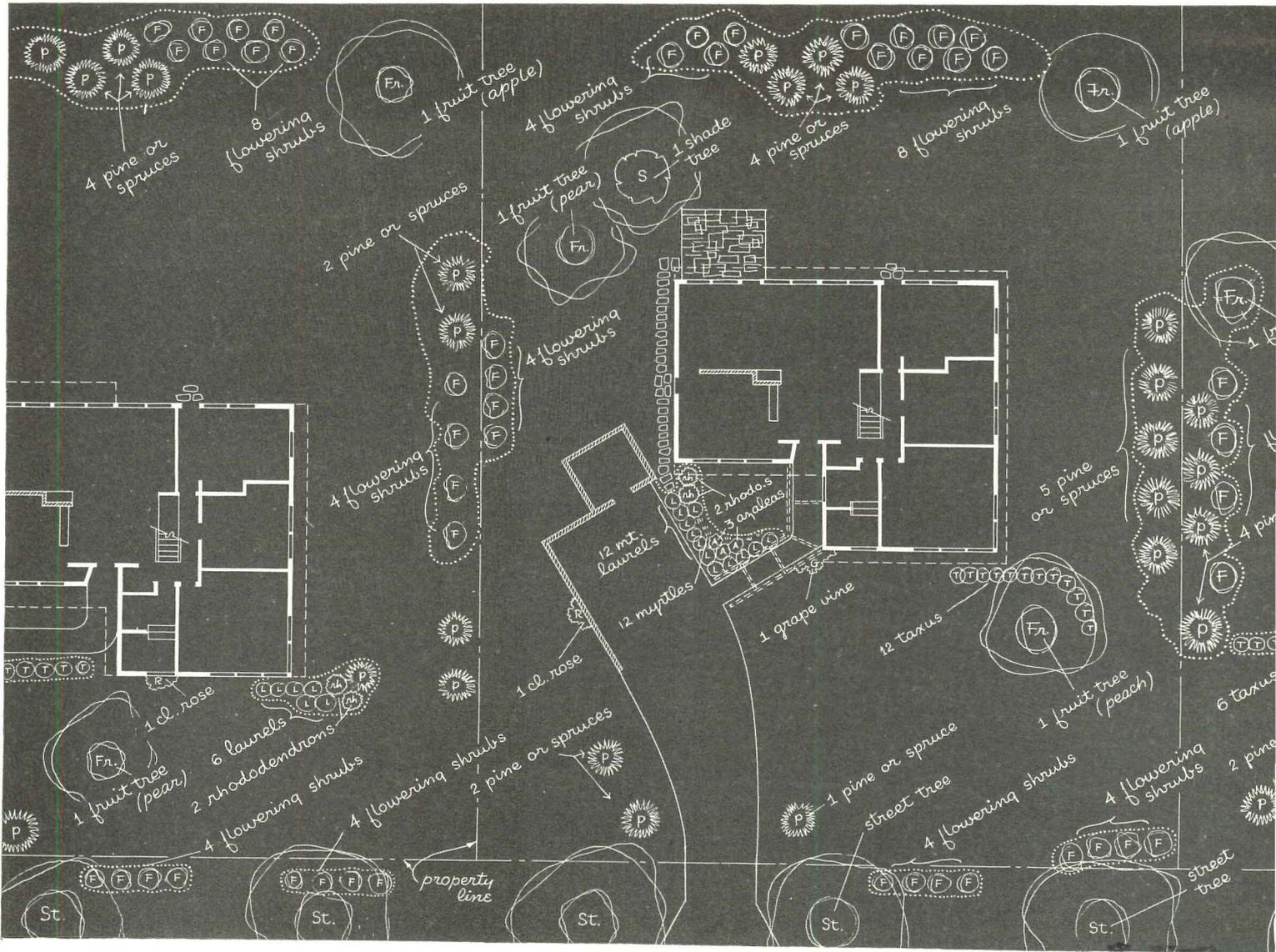
Birch.....	2 1/2-3"	15.00	25.00
Maple.....	2 1/2-3"	15.00	25.00
Oak.....	2 1/2-3"	15.00	25.00

California Los Angeles

Evergreen elm.....	5 gal.*	5.00	20.00
Liquidambar.....	5 gal.	5.00	20.00
Crinodendron.....	5 gal.	5.00	20.00

* Custom is to pack and sell trees in reused 5-gal. cans
** Usually not available in larger sizes

Planting around each of Levitt's \$17,500 Country Clubbers, being started this spring, will include two-and-one-half street trees, one shade, three fruit trees, 12 white pines or Norway spruces plus 67 shrubs. The Levitts are shrewd merchandisers and they believe tree planting is good merchandising because it helps to make a better community.



I. IF YOU HAVE NO TREES—PLANT THEM



D. Jemison Jr. of Memphis moved these big trees at a cost of about \$20 each. Though they look ragged now, if owners care for these trees they will add greatly to property value in a few years.

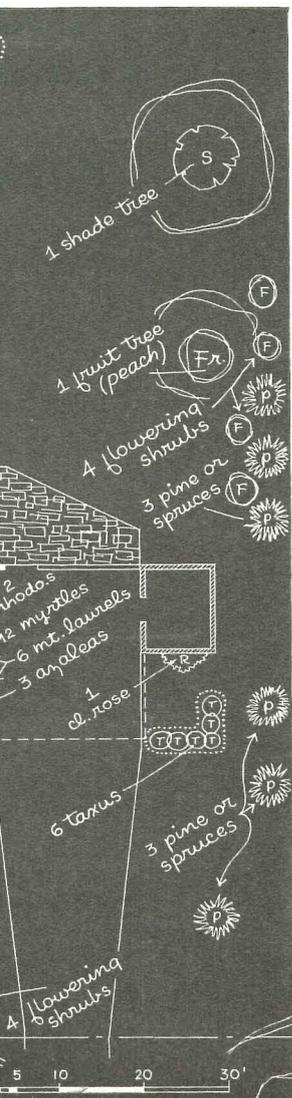
Though buggy-whip saplings may conform to FHA requirements, they can hardly be seen by the naked eye. The buyer cannot be blamed for not wanting to pay extra for this type of planting—and not rushing to buy the house that has it.

There is a long-term place for the saplings, although older people, reports Jesse R. Schroeder of the Underwood Title Co. of Omaha, feel they can't afford to wait for saplings to grow. But builders would be wise to consider planting larger (4'-6") trees. There are several ways they can cut cost. The first is to spread the larger trees through the development, allowing one big tree for every two, three or more houses. One 20' high tree for \$25 is not only a better bargain than six bean-pole saplings at \$5 each, but has many times more selling power.

Other possible economies: ask your local park department if it provides free, or subsidized, trees along the curb. (Many do.) Buy bare-root instead of balled-and-burlaped stock. (Costs half as much, lasts just as long if handled carefully.) Transplant trees from wooded parts of the property, for little or no cost. Select native trees; they are cheaper and hardier.

Brand new. An experiment now being field tested by Builders Klein and Teicholtz in their East Meadow, Long Island, development, suggests another way to get large trees at no added cost to the builder. As described by Kal Klein: "It's to the advantage of both builder and buyer to plant trees around a house. We can't expect every buyer, however, to pay for 4'-6" trees. But if one buyer in every two or three will pay extra for big trees, we'll produce an over-all wooded effect that will enhance the value and appearance of the whole community."

They now offer their five standard house models (ranging in price from about \$15,000 to \$18,000) with and without trees. If the buyer elects, he may pay \$100 to \$300 additional for trees from a cooperating nursery. According to Klein a proportional share of the cost can be contained in the mortgage loan. He forecasts that his flat and once treeless potato farm will shortly have dozens of good-size maples, oaks and sycamores.



Mortgageable trees? Can the cost of big trees be reflected in higher FHA or VA commitments? If government and private lenders will modify their stands that trees are not mortgageable, trees will come in profusion. Fortunately, there is a strong likelihood that money will be lent for trees, if the pressure of builders for mortgageable trees continues.

Kurt Mack, assistant FHA Administrator for Underwriting, says that trees, specifically, are not mortgageable. If they were, the borrower would be in a difficult position if one fell victim to disease or storm. However, trees influence the value placed on the property. "Competent appraisals should reflect the benefits of existing landscaping," says Mack.

However, FHA will not say how much more it will allow for tree landscaping. Best advice seems to be to try and find out. Procedure: prepare a detailed landscaping plan, showing position, type and size of every important tree you plan to save or add. Submit this to the appraiser.

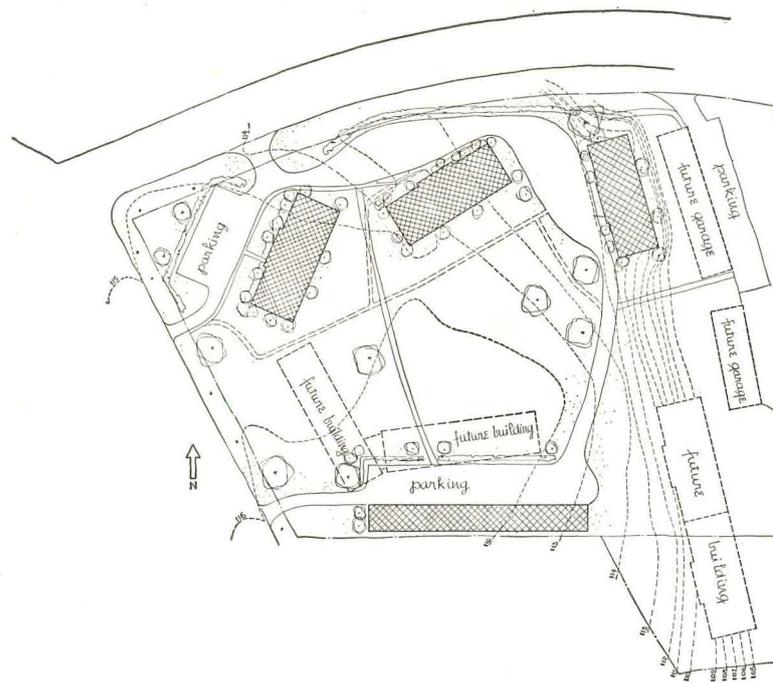
T. B. King, director of the VA's Loan Guarantee Division, doubts that the VA can boost appraisals very much, even if the builder should add trees. Trees, however, are considered a part of the landscaping; hence, are reflected in the over-all appraisal.

Here, again, the improvement will be judged on an individual case basis. The VA maintains that if it is going to guarantee a high-percentage loan, it has to be careful the loan does not reflect any amenities out of balance with the property. In other words, when planting trees, be reasonable.

Some banks and savings and loan institutions are more generous. County Federal Savings & Loan, a leading lender on housewise Long Island, will pick up its share of the tree tab, provided that the cost is not out of line with the value of the house. Attitude of the huge Dime Savings Bank of Brooklyn is similar. Apparently a basic improvement in property design is in the making. Its recognition by lenders—and builders, too—may take time. But this much seems certain: if enough builders and buyers want trees, mortgage commitments will be made generous enough to cover reasonable cost.



Mature trees were saved, even at the trouble of relocating apartment units. When future buildings are added, entire mall will be a protected enclosure, available to all families. Separators between individual balconies were discarded because friendly small-town families felt them unnecessary.





Photos: Joe Munroe

ON: Painesville, Ohio (29 mi. from Cleveland)

J. LUDWIG, realtor-owner

L. M. KANE, architect

CONSTRUCTION CO., contractors

PREE, landscape architect

Why are these apartments a success?

Because the owner gave tenants

“house-sized” rooms . . .

Because he used the site to give them views . . .

**Because he gambled on a small town’s accepting
clean, contemporary design. . . .**

Old rental units in small US towns generally wear the framework of the Victorian mansions they once were. Newer ones, built under FHA’s 608 program, are overwhelmingly “adapted” Georgian or pseudo-Colonial. Usually built on land near the center of town they rarely provide the openness considered standard for single houses, and rarely have handsome sites. But this small (21-unit) project, in a small (pop. 14,432) town, can serve as a model for other towns where there is a limited but stable market for medium-priced rental apartments.

What might have happened

The Walban apartments might have been just another stereotyped project if the realtor-owner had accepted the advice of FHA on design and orientation of the buildings. In preliminary talks, the agency insisted that the majority of units should face the street, in spite of the fact that the four-acre site was on a bluff overlooking the Grand River valley, with a five-mile view up and down the river. FHA also suggested U-shaped buildings with parking in the hollow center rather than the simple rectangles provided by Architect Michael Kane. This was a natural outgrowth of FHA’s preference for courts, which provide some view and a measure of landscaping for projects in heavily built-up areas or on flat land. The objections to Kane’s plan for Walban seemed to be based on a philosophy that amenities for the occupants should be sacrificed to a facade that would impress neighbors.

What did happen

Owner Milton J. Ludwig was so sure that contemporary buildings and an imaginative site plan would be successful in Painesville that he dropped the idea of FHA financing, provided his own construction money, then placed a conventional mortgage after the buildings were completed. This gave Architect Kane freedom to achieve:

1. Best use of his “viewful” site. Only two of the four acres were used for the first three buildings, with the remaining half for four future buildings, which will have 30 additional units. All apartments will be oriented to an easterly and southerly



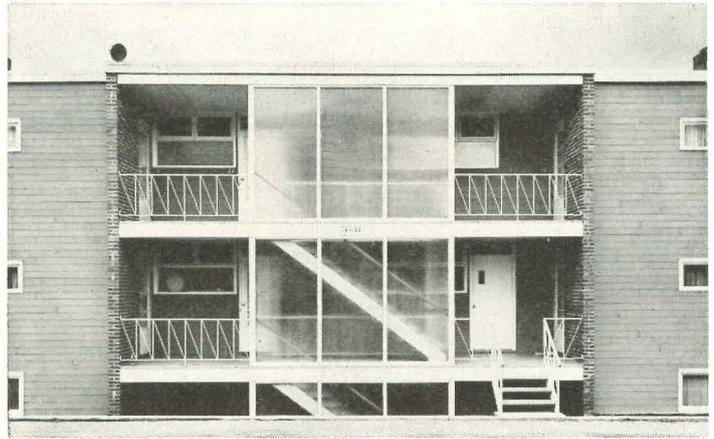
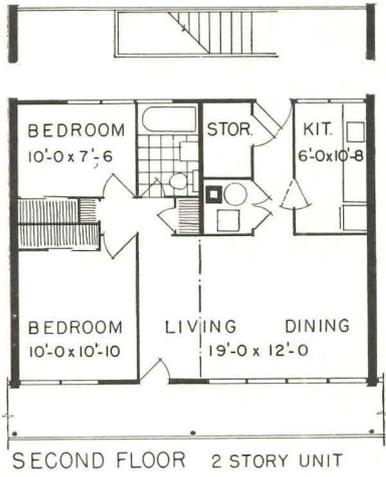
Three-story units proved most popular, were entirely rented before the others. Garage will be built into slope (foreground) with the top units. All large glass is fixed, with smaller top units used for view.

exposure, perfect for Ohio, with its cold winters and hot summers. The 20' drop in terrain from Bank St. to the edge of the bluff was utilized to put extra apartments in the most desired spot, with three-story walk-ups nearest the precipice. The land was disturbed as little as possible (total excavating, fill and grading costs were held to \$2,100), and buildings were sited to save every possible tree, some as big as 30" in diameter. Buildings are arranged in a sawtooth pattern around a central mall, so that every apartment can look past any other building to the valley. A complete landscaping job is complementing the existing mature trees that were saved, and the grassy mall is unmarred by concrete walks or driveways.

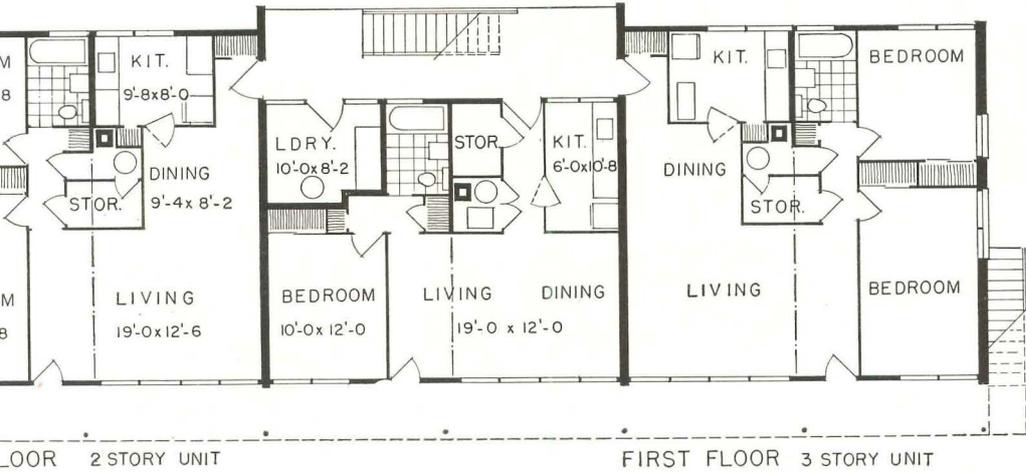
2. Spaciousness without pyramiding square foot costs. Apartments are large: 900 sq. ft. in the two-bedroom units, 653 sq. ft. in the one-bedroom, and they seem even larger since glass walls in living room and front bedroom make the entire river valley a part of the rooms. In addition, each apartment has its own balcony, which also faces the view. Ground-floor suites have terraces. Even the smaller bedroom has a full-length window facing the street, relieving the starkness of the rear elevation. These windows do not extend the width of the room, so their off-center location,

cater-cornered to the bed, allows a measure of privacy. Apartments set back from the bluff do not look at the other buildings, but across several hundred feet of open space to the valley below. With these visual "room expanders" was able to satisfy the demands of the suburbanites for space still hold costs to a respectable \$11.80 per sq. ft. in the most cost Cleveland area.

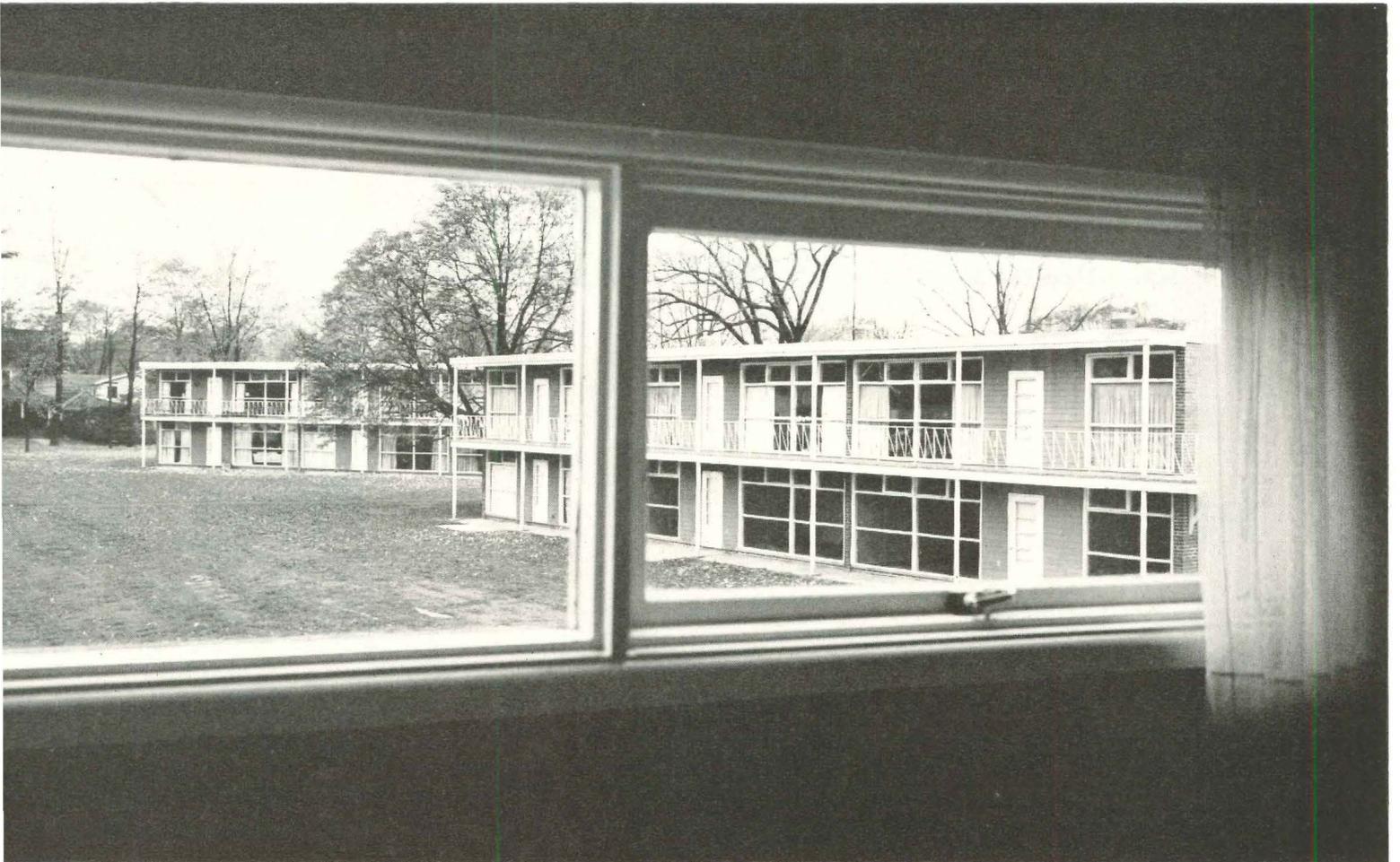
3. Cracking of the hard shell of prejudice against contrary design. Most important to the acceptance of Walban is the clean, functional lines, so successful here, might seem stark and glaring on a crowded urban site. Large areas, a drawback when they stare at another "picture window" next door, are a renting advantage when they provide a "view-decorated" wall. The flat roof is welcome when it provides a covering overhang for stairwells, porches and 4'-6" balconies. Three-story buildings without elevators, usually unpopular with Clevelanders, are made palatable here where siting permits tenants to enter the second floor from the rear grade, and for ground floor occupants to climb only one flight of stairs. Balconies, kept light by simple iron railings, a flavor of New Orleans, softens the geometric lines of the facade.

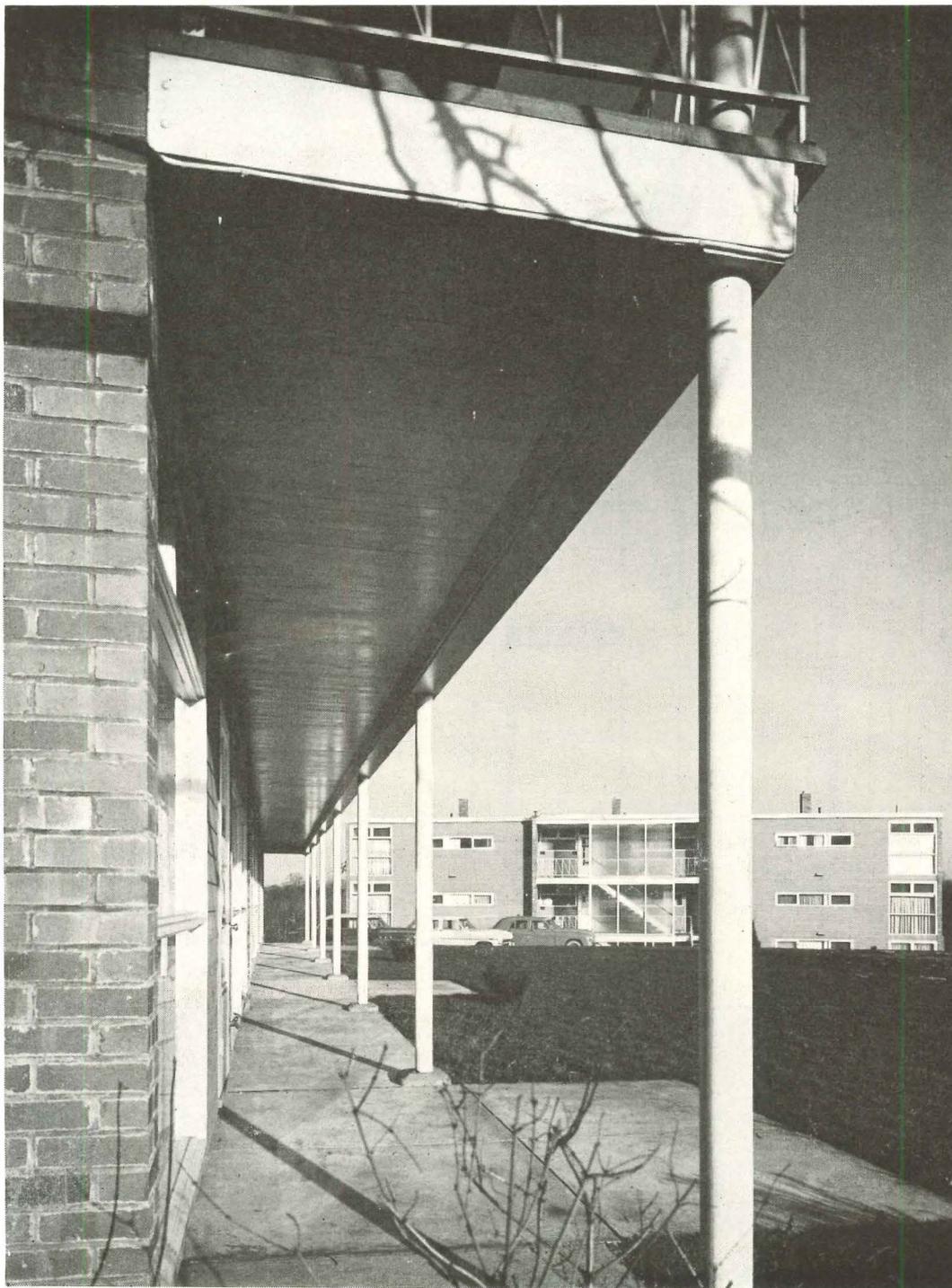


Second-floor apartments are practically at grade in rear, so top-floor tenants have to walk only one flight. Translucent glass shields stairs.



Kitchen window at eye level looks out on common mall, would be invaluable for watching children at play. First-floor center units are only one-bedroom apartments. Laundry room on this floor is shared by the entire building.

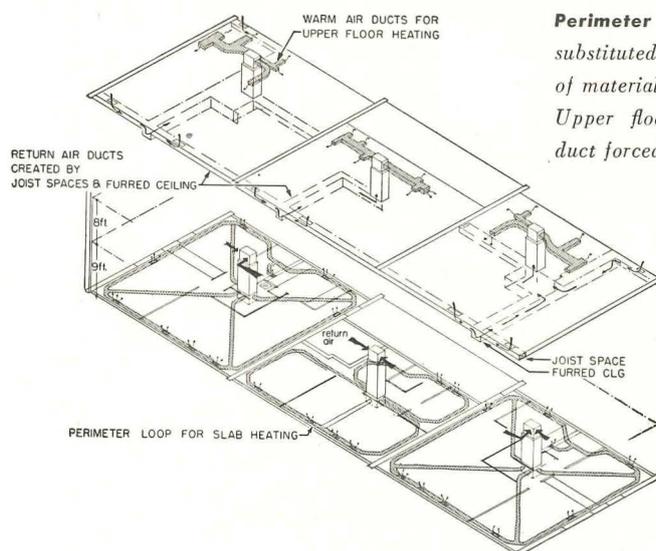




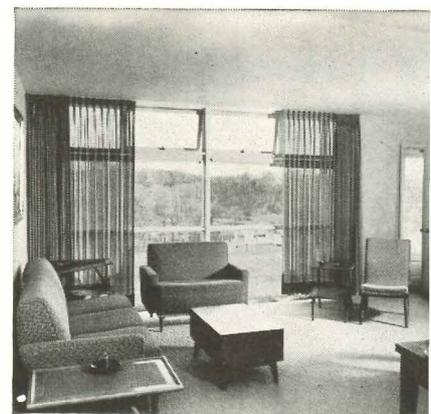
Terraces and balconies, left, will get heavy use during the summer, add equivalent of a small room to each apartment, eliminate window-washing chore for management.



End units have separate dining center apartments have eating space. Guessing rightly that would put down carpeting, own no provision against noise trans



Perimeter heat in first-floor slab was substituted for radiant system in face of materials shortages and rising prices. Upper floors have conventional short duct forced-air heat.



Traverse rods were provided large window areas, as well shades for extra privacy. Five color combinations were offered the architect served as color c

r rentals

On the rental scale for Walban is approximately \$30 lower than the metropolitan Cleveland's, it is high for Painesville which has no other apartment house, built in 1928 and still under OPS control. Walban's one-bedroom units rent for \$85, two-bedroom units are \$100 and \$115. Tenants for the first three buildings have been mostly Painesville families because Owner Ludwig feels that local residents make more permanent renters. This created the strongest pressures for the niceties included in the apartments, for the owner realized that local people would pay better-than-normal rents only for better-than-normal apartments. Kane feels that, at present, Painesville itself could not support the additional units planned for Walban. When these are built, the graciousness and modernity may attract the young executives and the growing industries on Cleveland's East Side, in the long run the most logical customers for the project's expansion.

ating drawings

From its inception, Walban has been a harried operation and serves as a good illustration of an architect's ability to change and cope with rapidly changing conditions. Kane got the design sign just four days before the post-Korea restrictions went into effect on Oct. 1, 1951. In those four days, architect and contractor: 1) signed a contract with the builder; 2) ordered, and received, all critical materials; 3) dug foundations; 4) put in improvements; and 5) poured all foundations and footings. The site had been divided into two parts for mortgaging convenience, so the 21-unit portion just came within NPA material limitations.

Living room (12' x 19') was important selling point to small-town customers used to the generous dimensions of the houses they came from.

Originally, precast concrete panels were planned for floors in the upper stories, the hollow core to be used for hot-air panel heat. But the cost of precast units rose after the Korean outbreak, and, as the architect explains, "caught with our foundations down, we changed the structural system to masonry and wood joints." At the same time, Kane eliminated radiant hot-water heat from the ground-floor slab and substituted a warm-air perimeter system. Short ducts were used in the upper apartments. All units were to be oil-fired.

After the excavation had been dug for the first oil tank, Painesville applied to the FPC for the extension of a natural gas line. Though the CMP program made any steel pipe allocation doubtful, Ludwig and Kane gambled on approval, filled in the tank excavation, changed drawings and specifications, and asked for bids on a gas heating installation. P.S.: The pipeline came through in September, just before the cold weather.

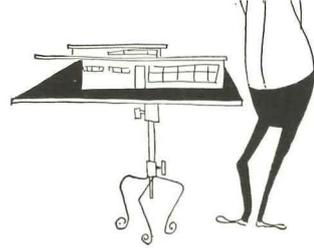
New balcony scene

In the first drawings, Kane had provided individual balconies about 12' long and 7' deep for each apartment, but the Ohio state building code insists on two separate means of egress from every suite, so the front balcony was made continuous, with a stairway down one side of the building. Dividers between apartments were designed, but were found objectionable by friendly Midwesterners, who dislike the isolation from their neighbors that eastern city dwellers prefer.

All window units were shop constructed and glazed, but the contractor chose to site-build the balcony door units in the first three buildings. When the rest of the project is built, all exterior wall sections will be prefabricated.



What payments for architect's services on merchant-built houses?



How much can an architect earn from a merchant builder? Case studies opposite, compiled by the AIA Committee on the Homebuilding Industry, reveal that architects who have successfully collaborated with builders are finding it a wide-open and fertile field. Facts and figures from the studies shed light on:

- ▶ What the architect expects from the builder.
- ▶ What the builder expects from the architect.
- ▶ Fee schedules of architects all over the US.

More and more architects are finding that working with the merchant builder can be profitable and stimulating, although it calls for a different approach.

"The architect must forget a few of his normal attitudes toward a client and recognize that the builder's problem is different from the usual custom-house problem," says one architect.

"He may at first be shocked at having to discard some of his concepts of what must be incorporated in a house to make it acceptable, but after recovering from the shock, he can get real satisfaction from the knowledge that his efforts produced a far better project than if he left the builder to do his own designing."

And the architect *can* make money as the records of such architects as Ed Fickett (H&H, Mar. '53, p. 132), Al Parker (H&H, Feb. '53, p. 134), Keyes, Smith, Satterlee & Lethbridge (H&H, Nov. '52, p. 140) and Anshen & Allen (H&H, Oct. '52, p. 82) indicate.

The builder, for his part, is usually finding the architect well worth his fee. Builders who bridled at an architect's fee a year ago are now ready to pay for the services that they need to sell their houses, for builders find that good architects provide more than just a plan and elevation variations. Architects will provide such services as site planning, landscaping, color schemes, interior decoration, professional supervision and merchandising advice. The truism "you get what you pay for" is nowhere more accurate than in regard to architects' fees on merchant-built houses. Builders who have availed themselves of more than just an architect's plans and elevations have found all additional services pay for themselves in fast-moving houses. And architects who insist on delivering a variety of services soon get the builder to expect and want them.

Although architects who work successfully with builders are paid for their services in many different ways, the predominant pattern that the AIA case histories reveals is that they: 1. charge a basic design fee plus a royalty charge each time the design is repeated ("It is only good business to get a profit on all work performed"), or 2. charge no basic fee at all but charge a royalty fee based on the cost or selling price and the number of houses to be built ("The architect has more incentive to do a good job; the more successful the job, the greater his profit").

The table opposite shows that architect services in all parts of the US are in direct ratio to the fee; "plan factory" service is bought at plan factory rates.

What the architect expects from the builder

- ▶ *A retaining fee.* When an architect knows little about a builder or meets him for the first time, he wants a retainer as a pledge of good faith. Says one, "This retainer separates the goats from the sheep."
- ▶ *An analysis of how much and what quality work the builder expects.* "Research," says one architect, "costs money. The architect expects a builder to have some idea of design production costs inherent in the type of house he wants."

- ▶ *Periodic payments.* Many architects want a payment at the finished preliminary drawings are submitted, subsequent payments either weekly or monthly. Some architects require 60% of the fee at delivery of the drawings, 40% after FHA, VA or lender approval.

- ▶ *Royalty or repeat fee.* Most architects believe they have to expect a professional fee for their designs no matter how many times these are repeated. Builders sometimes find the royalty for designs on low-cost houses a burden because they found the architect had to work harder for them than for an individual client, particularly if he developed a new approach to the structure.

- ▶ *Treatment as a professional.* The architect gives objective advice based on his knowledge, taste and experience. He expects the builder to respect his professional standards. (All architect case histories reported are practical ones; none is a "captive" architect.)

- ▶ *Community pride.* No architect wants to design the slum of tomorrow. His advice is frequently calculated to provide better housing at lower cost. Many find it difficult to convince builders to want to use only two or three basic plans in a big development (usually repeating the most popular model from a previous division), that they actually retard the success of the project and give it a tenementlike look.

What the architect *doesn't want* is ad libbing of his design by the builder because this upsets relationships which only an architect might be able to put his finger on but which over the long run would be the difference with the public, too.

What the builder expects from the architect

- ▶ *Use of stock parts and ready-made assemblies.* On a building house, which is a production house, a design fitted to stock parts and assemblies is vastly more important than on the architect's jobs for individual clients.

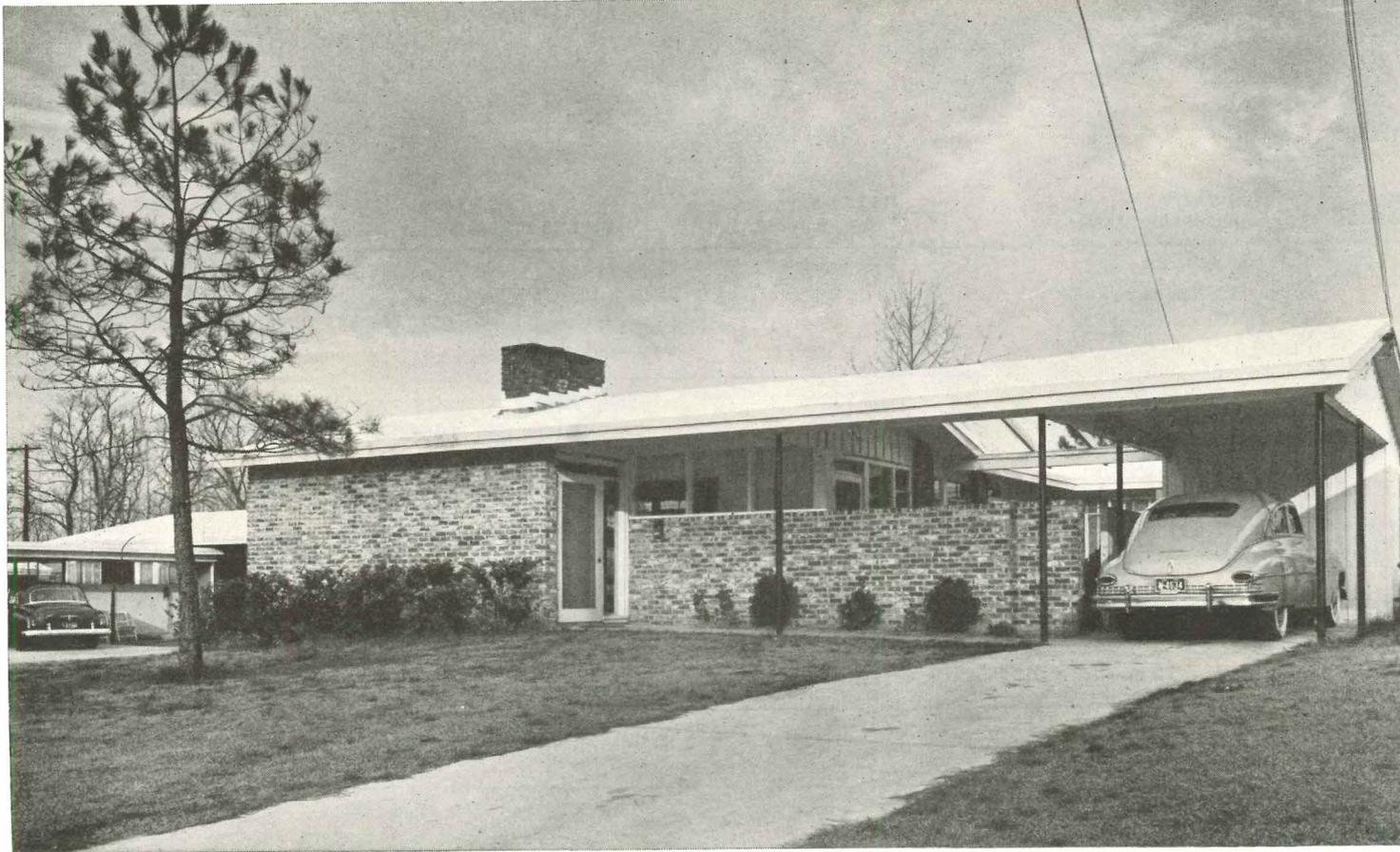
- ▶ *Economy of materials and space.* Designs fitted to standard conditions both in framing materials and finish materials, avoiding cutting and waste, are again doubly important. Many architects insist the builder insist rigidly on a rectangular plan as the simplest and cheapest to build. In this field architects cannot pretend to themselves that "a small variation would make no difference."

- ▶ *Design variation.* Builders are absolutely certain that basic designs must be varied in details such as roof lines, garage placement, entrance placement, and other features. Any architect who insists to convince a builder that variation can be achieved simply in the repetition of the same house on the lot or in variations of planting has an uphill fight and must have overwhelming proof of his ability. Usually he will do well on his first job if he persuades the builder to abandon false gables, shutters that do not shut, and so-called bric-a-brac—all of which the public has been accustomed to as the symbols of variation.

- ▶ *Knowledge of quantity construction problems.* Even an architect who has been a shining expert in individual construction must learn to relearn a great deal in view of the mass production techniques that have only sprung up in the last couple of years or sometimes in the last couple of months. Many of these techniques are pointed out by the use of unskilled labor and the use of tools not available on individual jobs. Details that are commonplace on quality jobs, such as window walls or clerestories, may have to be taught from the ground up and the architect must understand the level of unskilled labor in the area.

This chart, compiled by the AIA Committee on the Homebuilding Industry (L. Morgan Yost, chairman) from case histories of unidentified architects working with merchant builders, should not be construed as AIA endorsement of any particular type of service or remuneration.

DESIGN	ROYALTY OR REPEAT CHARGE	FEE PER HOUSE <i>based on 100 houses</i>	SERVICES RENDERED	AREA
	\$160 for first 100 125 for second 100 100 for all others	\$170	Preliminary plans, plot plans, site planning, perspective sketches, working drawings, FHA outline specifications, routine supervision	West Coast
\$1,000	\$100 for 1-25 houses 75 for 25-50 houses 50 for 50-100 houses 35 for 100-200 houses 25 for over 200 houses	\$77.75	Site plan to FHA standards, plot plans, conferences with engineers and utility company	West Coast
	\$75 each for 100	\$81	Preliminary plans, site plans, working drawings, exterior color sketches	West Coast
	\$100 each for 50	\$105	Plot plan, working drawings, limited supervision	Southeast
	\$45 for each house	\$47.50	Working drawings, plot plan for each house	West Coast
first house	\$100 each for seven variations; no other royalty charge	\$17.50 approx.	Working drawings, no supervision	Northeast
ost house	\$100 for each house (Architect revised this later to flat \$165 per house for 25 houses, plus his costs, because \$100 was too low)	\$100 approx.	Site planning, color integration, detailing to speed construction time, mechanical design	East Coast
costs third	\$100 for all future houses	\$110 approx.	Working drawings, landscaping, limited supervision	Southwest
g costs o	\$75 per house	\$85 approx.	Future building planning, site plans, discussions with planning officials, design of houses to character of community	West Coast
	\$300 for each of 10 houses only		House plans for three basic designs with three elevation variations, specifications. Supervision extra	New England
	\$500 } 350 } 250 } 100 } } varying with size } and quality of the house		Working drawings, land and market analysis, color guidance, limited supervision	Northeast
	Up to \$75	\$75	Three or four standard designs with variations, master specifications	East Coast
	\$100 for 40 75 for 100	\$100	Basic plans for three houses with 12 variations, no specifications. Supervision extra	East
	\$150 for 100 100 for 300	\$150 100	Four basic floor plans, working drawings	East
	\$25-\$50	\$25-\$40	Four basic plans and variations, FHA description of materials	Northwest
	\$100 for 50 50 for 100	\$100 50	Basic plans plus elevation variations, plot plan work on existing street layouts, all sketches, working drawings, detail drawings	Northeast
	\$60 for first 50 40 for all over 50	\$50	Basic plans, plot plan, alternate elevations, detail drawings, seven sets of prints for each house, FHA specifications	Gulf Coast
	\$25 each for 100-150 houses	\$25	In 5 years only four basic plans were used	North Central



Photos: Gabri

Atlanta goes modern

—without going overboard. Architects Finch & Barnes gave their builders clean design, efficient techniques and just a hint of tradition.

Result: a “new” market in the old South

GOLF VIEW SUBDIVISION

LOCATION: Atlanta

ARCHITECTS: FINCH & BARNES, Atlanta

BUILDERS: THOMAS NORTH CUTT & RAYMOND SANDERS, Atlanta

PRICES: \$21,400 to \$24,000

This 16-house project has gone a long way toward selling Atlanta's merchant builders on the value of architects' services and up-to-date design. One of the area's first contemporary subdivisions—and one of the few local projects in the 10- to 20-house bracket that has made money—it drew a record-breaking crowd of 10,000 visitors on opening day and sold itself with a minimum of advertising and sales effort. Builders Northcutt and Sanders feel the architects added “immeasurably” more than their fee of \$250 per house to the value of the finished product, are using architects on new projects of 20 contemporary houses in the \$12,500 class and 107 at \$16,000.

In the case of Golf View, professional design contributed many things not always found in traditional houses, among them:

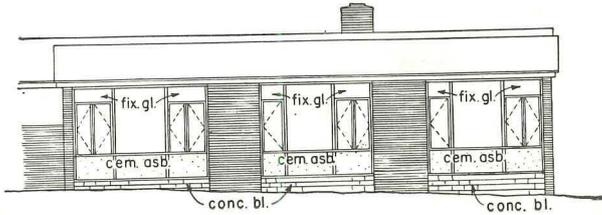
1. Better siting for privacy and view: houses placed for the best views, screened from each other by fences, brick walls, planting.

2. Better floor planning: enclosed terraces, service yards, living rooms, good circulation and room arrangement (see page 145).

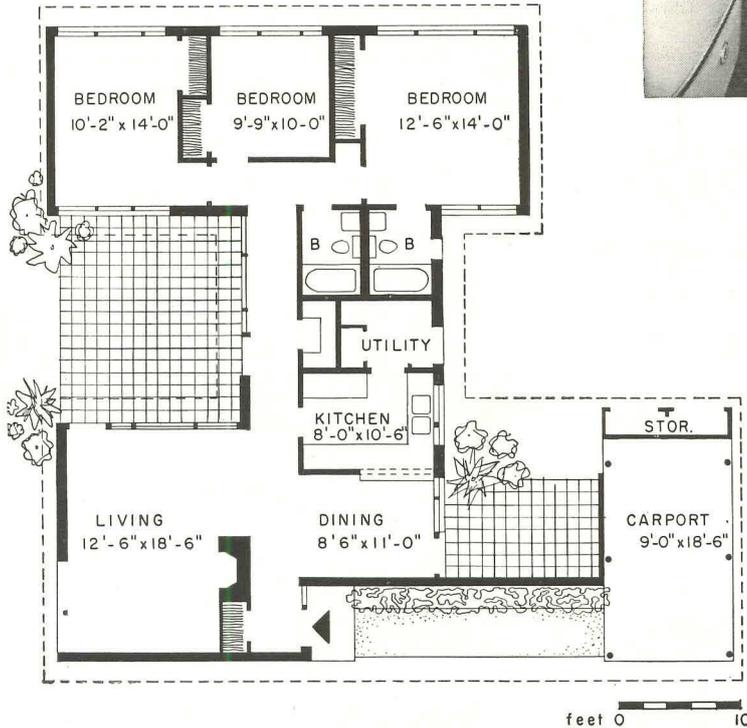
3. More variety. The three basic plans were turned into 16 different houses by reversing plans, turning houses around and alternating brick siding with boards and battens.

4. Orderly, unified facades. Four types of wall sections were used in big panels adjacent to one another around the exterior of the houses: a standard stud wall with *board-and-batten* siding and plaster interior; a 4" *brick veneer* on studs, plaster interior; a 10" *brick cavity wall* wherever the texture of used brick was exposed inside; and a *window wall panel*. By keeping the different wall areas big, simple and clearly defined from each other, the architects achieved a visual variety of materials without a minimum of confusion.

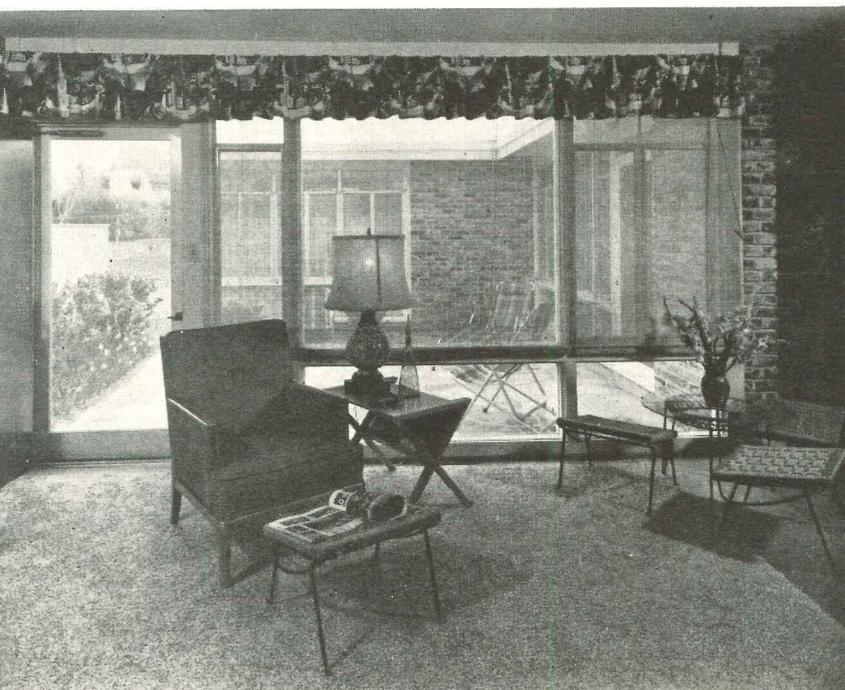
ing" principle, grouping in large ground-to-roof window-wall units are fitted cement asbestos board under brick veneer between concrete block foundation wall.



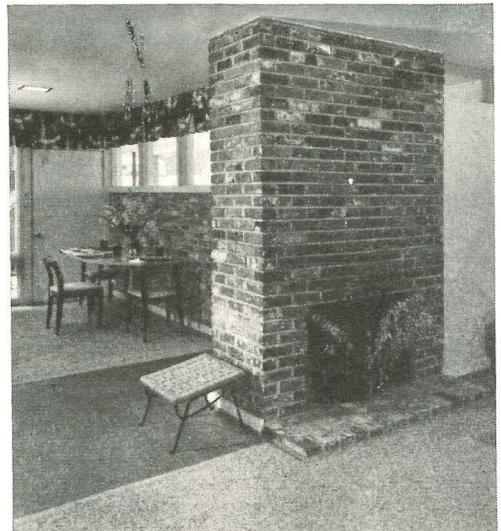
ty, H-plan is reversed and all of living room, right, is with vertical wood siding.



L-shaped kitchen has painted wood cabinets, pass-through to dining area at right. H-plan, left, relatively new in builder houses, is most popular plan in development. With all utilities in it, the "link" separates noisy areas from sleeping, creates private courts outside living, dining areas. House: 1,480 sq. ft.



1—Living room has its window wall and access door to patio, partially enclosed patio, instead of on the street.

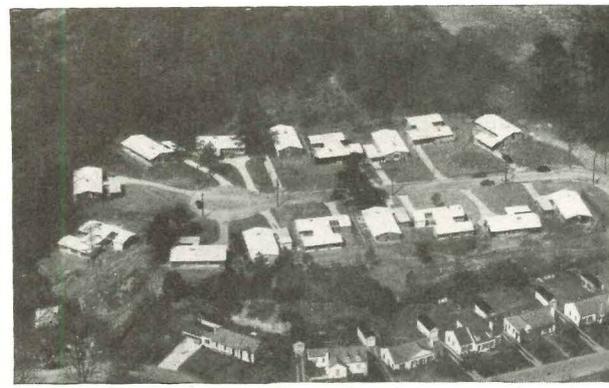


Freestanding fireplace and attached coat closet (see plan above) are located to give an entry hall and to separate living and dining areas. Note: both are entirely traffic-free.

5. Wall-window sections. The parts of the wall containing windows (see photos and elevation sketches) are not of the usual stud construction with cripples, jack studs and headers around the openings. Instead they are wide-spaced post-and-beam frames extending from sill to top plate—whole walls that can be preassembled at moderate expense. In these big frames are set aluminum casements and fixed glass, with colored panels of cement asbestos board above and below wherever glass is undesirable. In all cases windows go up to the top plate, giving a cleaner, simpler exterior. Brick never occurs above windows, thus eliminating the need for expensive steel lintels and allowing wider spans of glass.

6. Truss roof. Trussed rafters 2' o.c. (2 x 6's, 2 x 4's and metal connectors) did away with most bearing partitions inside each house and grade beams under the 4" floor slab, which permitted greater freedom of interior planning.

7. Perimeter heat. Inside the concrete block foundations fiber ducts were imbedded in the slab for combined radiant-forced-air perimeter heat.



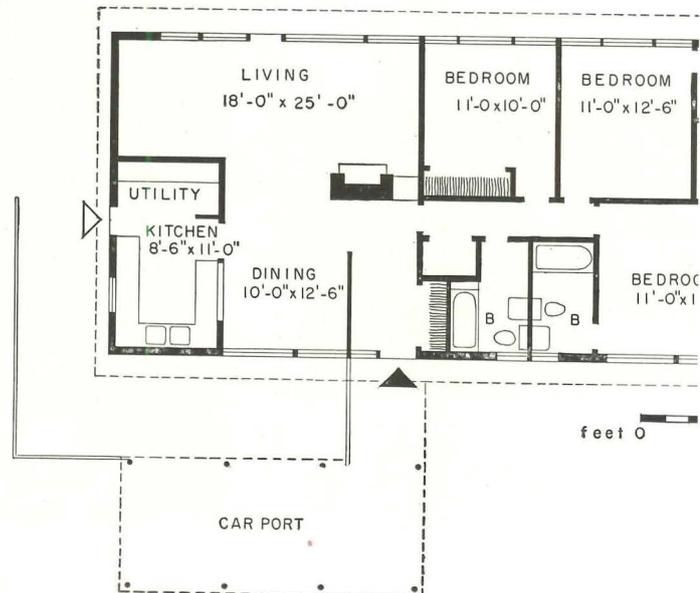
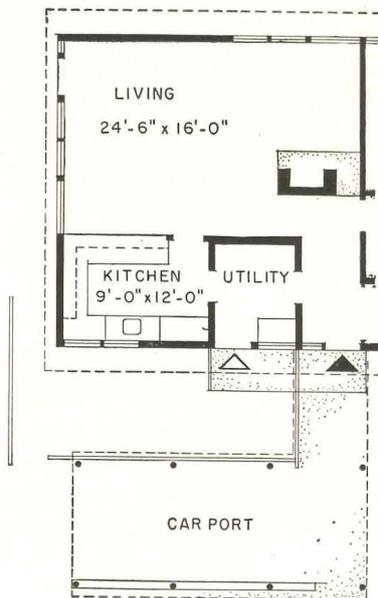
Photos: (above) Wray Studio; (others) Gab

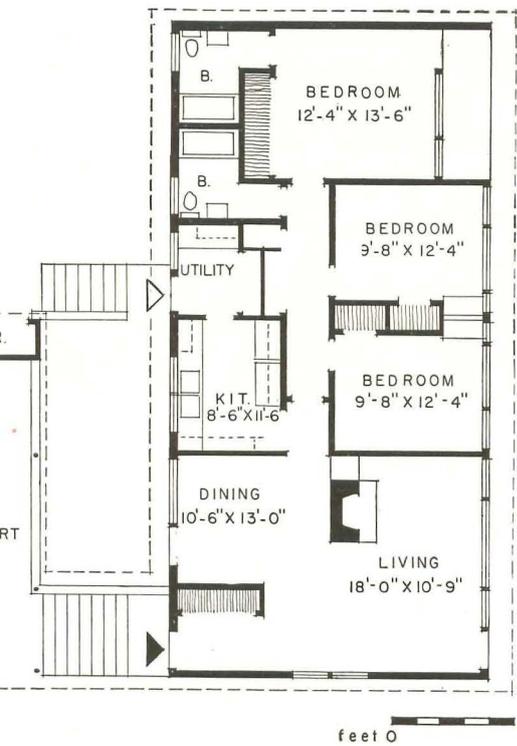
Expensive land, near town and golf course (upper right), narrow 65' x 230' lots that cost up to \$3,000 including improvement. But architects achieved privacy by proper siting and fencing. Variety by alternating, reversing and turning the three plan design permitted alternation of wood siding with five different colors of brick. Foreground: a street of older houses.

Plan No. 2 was faced both in wood, below, and in brick, right. Basic plan has minimum windows on end walls for neighbor privacy, a "through" living-dining room. Variation, below left, has window wall on side terrace, larger living room instead of separate dining alcove, better circulation, a service yard between kitchen and carport.



Low-pitched roof (3 in 12) gives house longer lines, allows roofing that will hold white marble chip to reflect sun.





Typical cost breakdown

Foundations and slabs....	\$1,100	Hardware	150
Masonry	900	Painting	530
Lumber and millwork....	5,000	Labor	3,000
Roofing	475	Landscaping, terraces,	
Cabinet work	500	walls, driveway	900
Aluminum windows	400	Lot cost (unimproved)....	1,800
Glazing	395	Lot improvements	1,000
Plumbing	1,150	Overhead (incl. loan costs)	900
Heating	750	Profit (incl. sales commis-	
Electrical	400	sion)	2,530
Flooring	800	Architect's fee	250
Tile	550		
Plastering	400	Sales price	\$23,900

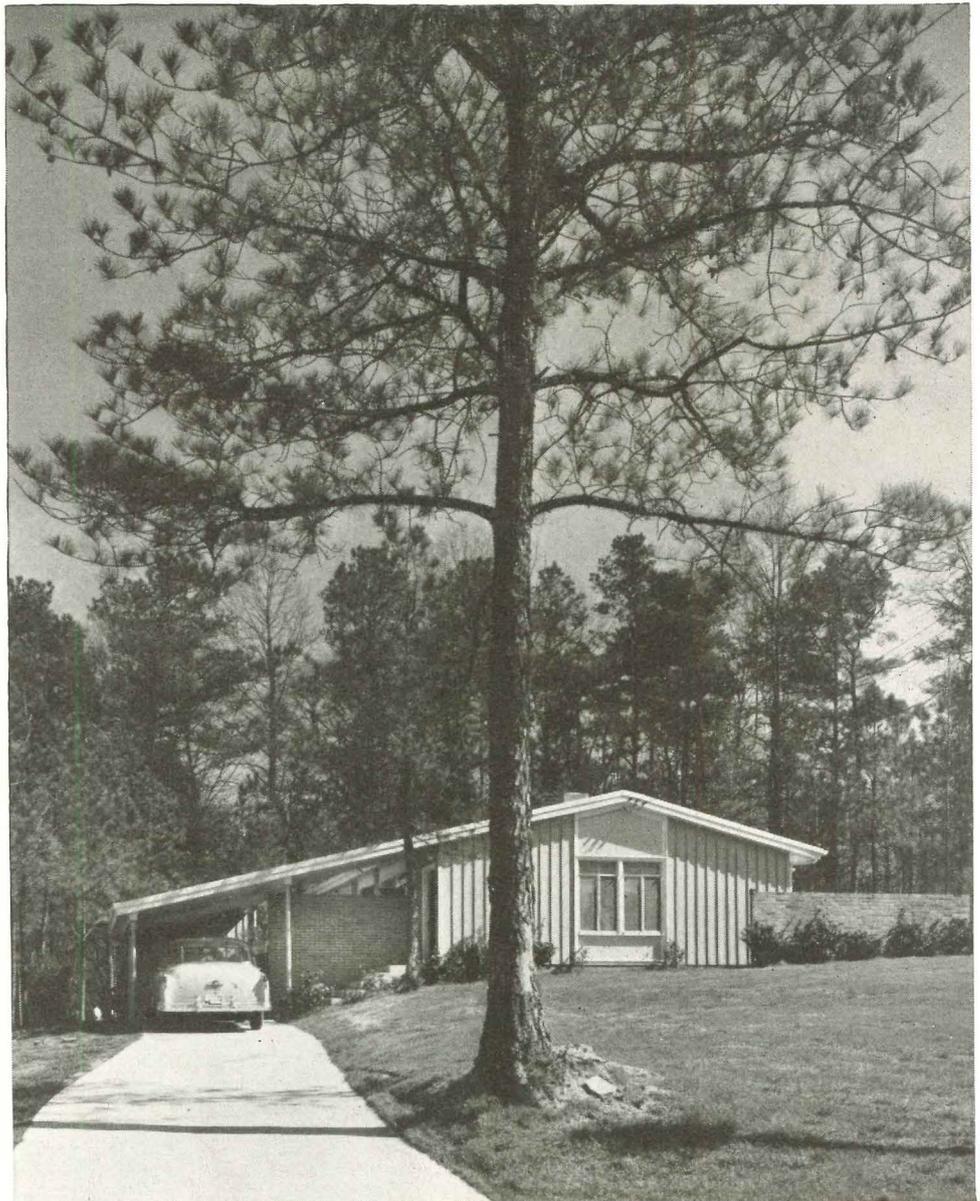
Plan No. 3 has narrow end facing street, with living and bedrooms opening on flagstone terrace shielded from street by brick privacy wall.



adaptable to flat or sloping sites. Single, roof line of house at right gives it a better unified appearance.



roof framing of end windows, with covered asbestos board above and below, dresses up street view of end-on plans.



Shopping strip for a neighborhood; facilities tailor-made

for a local market attract unexpected drive-in busi

LOCATION: Baltimore, Md.

ALEXANDER S. COCHRAN, architect

Edward Yee Wing, job captain

VAN RENSSELAER P. SAXE, engineers

HENRY J. KNOTT, developer

Can commercial land be developed profitably as a part of a medium-sized (308-unit) rental development? The answer is "Yes," if you will adopt the principles that architect and developer built into this 11-store Freedom shopping center, which have kept it 100% rented since it opened in 1951. These principles brought the shops both local and a surprisingly large share of drive-in customers:

The principles

1. Protection from competition. Residential land, a huge municipal park, and an industrial zone enclose a "captive" market of 17,000 persons.
2. Use of front parking to milk maximum extra business from a facing highway. With a front of only 500', shops were set back 72' to make it easy for cars to pull into the parking area. Result: 50% of the customers are drive-ins, an outsize percentage for a neighborhood center without library, bank, restaurant, etc.
3. Willingness to plan the center for a static market, rather than as the nucleus for expansion. A survey showed that the local population could increase only 4,000, therefore the potential of the stores could be estimated closely, overbuilding avoided.

4. Owner-merchant cooperation to build up both center and its small merchants. Large weekly news ads, featuring merchandise of various stores as well as institutional copy for the center. Half of the cost borne by Knott, half prorated to merchants according to square footage. Janitorial service, provided by the center, is billed the same way. Cost of exterior soffit floodlighting is paid by the landlord. Every store furnished air-conditioning equipment, though each pays for service and maintenance.

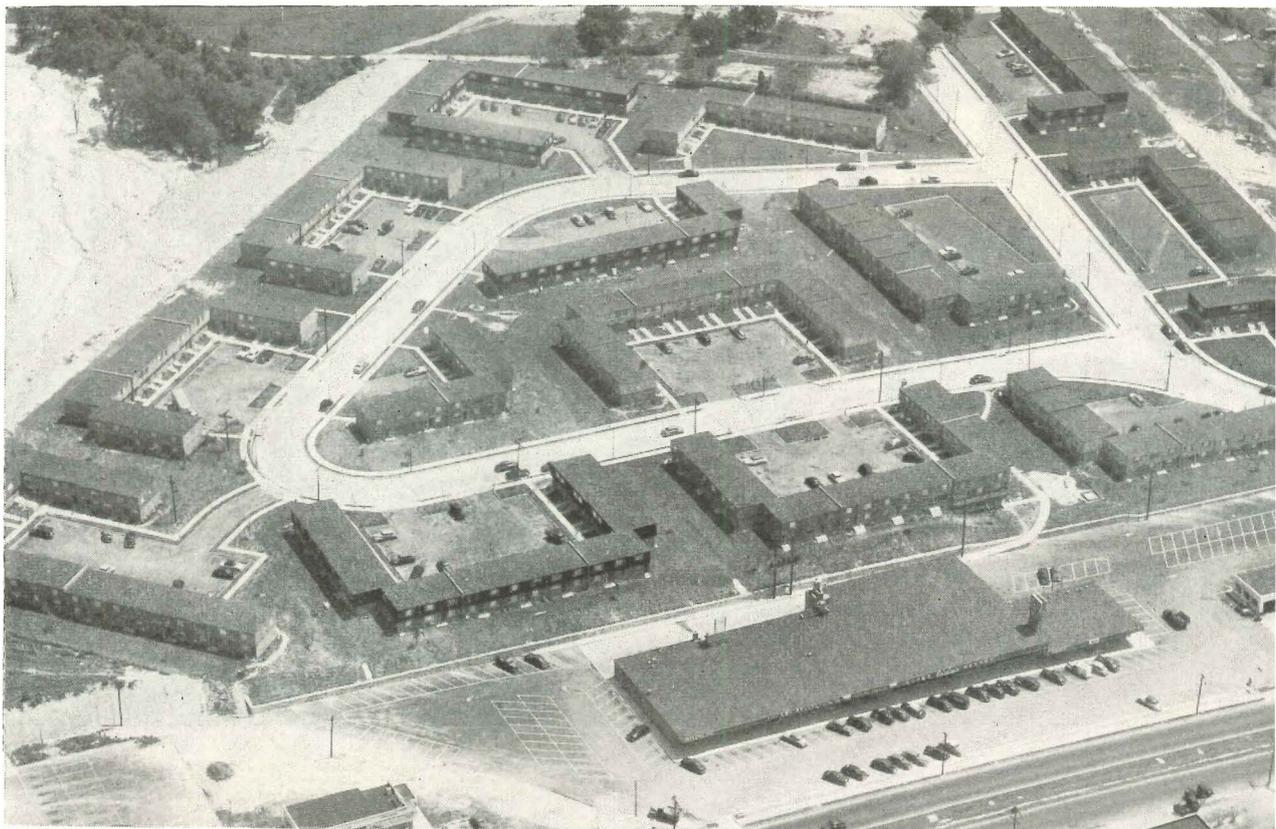
No big chains

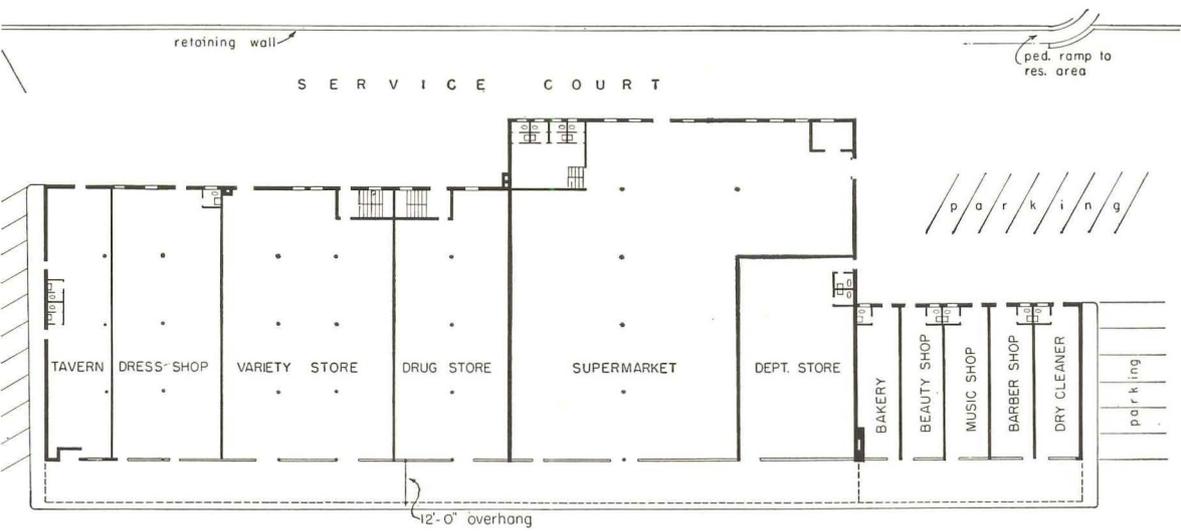
On a basis of population count, national chain stores are uninterested in Freedom. Today they would like to come in; the variety store is doing 400% more business than was estimated, the supermarket expects a \$1 million

Parking means plus business

Emphasis placed on parking facilities draws business from areas outside the primary shopping zone. Space for cars means one space for every 93 sq. ft. of store area. Ratio of parking to store area is generous, between seven to one. This accounts for the high percentage of customers arriving in cars.

Pedestrian ramp (right center) is provided because of grade variation. Vacant area (upper left) is for church and school





and variety stores are only ones with basements. is all in rear court, naturally formed by retaining between stores and apartment site. Management s all janitorial services at a fee, to insure orderliness.

Photos: Robert C. Lautman

Deep 12' overhang provides welcome shelter during bad weather and encourages window shopping. Floodlights and soffit lighting are the owner's responsibility.

illusion of tapering fascia masks steep drop in gives strong horizontal line. Color-dipped redwood de and cement asbestos board panels on soffit will minimum maintenance. Management forbids pro-signs, but does not attempt to dictate form or flat signs. Only desired facility not in center was forbidden by Maryland's state banking commission.



Air conditioning at half price?

Well-water air conditioning

can drastically cut cooling costs

but not all builders are in locations to use it

How abundant is ground water for home cooling?

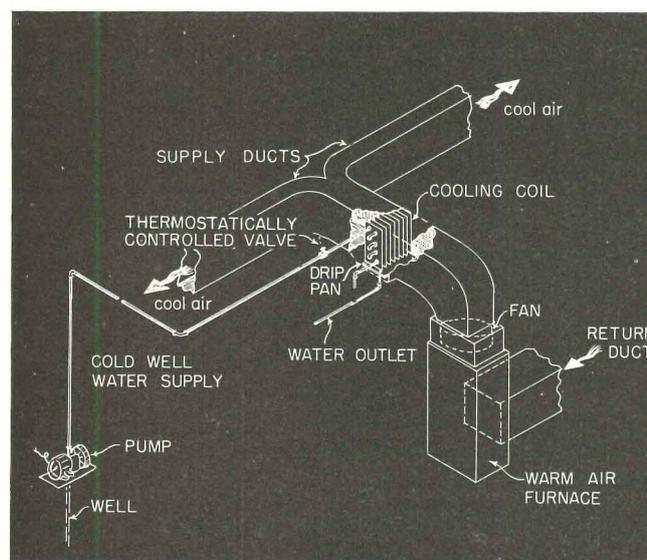
US ground-water resources are enormous. The gushing of almost 30 billion gal. a day from all the wells in the country represents only a fraction of our over-all ground-water reservoir (and less than 15% of our peak daily use) according to the US Geological Survey. Most of the widely publicized shortages stem from outgrown surface facilities such as not enough reservoirs, as in New York City. About 5% of the country, including such areas as Chicago and Los Angeles, suffers from severe ground-water shortages as a result of too many wells. Water is pumped from the ground faster than the hydrologic cycle gets rain water back to the ground. On the whole, however, there is a lot of cold ground water in the North for low-cost home cooling provided builders and architects use it wisely. Builders can usually get water from relatively inexpensive wells in coastal areas and near rivers. The maps on page 152 show where ground water is generally available for home cooling, either for single houses or in the bigger quantities needed for projects.

If you are an architect or a builder in the North in an area where cold water is plentiful, a well-water cooling system can cut your first cost for summer air conditioning in half and operating expense to less than half. But local ground-water conditions are the key to the entire problem. For instance, in the South, where ground water is warm, this system won't work at all. In other areas, well-water cooling raises certain technical problems for project builders.

However, for builders in those areas of the North where there is plenty of cheap, cold water unrestricted by local ordinance, here are the results of a great deal of up-to-date research: an efficient, inexpensive system. And here are the answers for builders and architects who, having learned that well-water air conditioning in commercial installations is both cheap and efficient, have been asking why they could not use it for tract housing and individual houses.

How it works. Cost is low because a mechanical refrigerating unit is not needed. To cool a house, cold water at less than 55° is simply piped to the metal tubes of a finned coil (similar to an automobile radiator). Air blown over the cold tubes is chilled and dehumidified just as if the coil were Freon condenser. Proof that it works: without costly apparatus—compressor, condenser, etc.—cold well water is used to air condition some of the thousands of restaurants, theaters and industrial plants in the North.

For cooling houses you insert the water coil in the supply duct of the forced-air heating system and hook up water as shown in the diagram below. In summer the furnace blower is turned on to circulate cool air. However, well-water cooling depends on these three basic points:



Typical installation: water coil goes in supply duct

* Examples: Long Island's Republic Aircraft, part of Du Pont, Wilmington, Del., and Sunshine Biscuit's Kansas City plant where 90' wells supply 3,000 gal. a minute of 53° water.

Hawthorne Studios; courtesy Byron Jackson Co.

efficient cooling the inlet water temperature should not be above 55°. In the US this limits well-water cooling to roughly south of the 38th parallel. See maps next page. (In the South the water gets progressively warmer.)

The quantity of water needed is proportional to water temperature. At 55° about 3 gal. per min. are needed per ton of cooling. This means you need about 6 gal. per min. for a 1,000 sq. ft. (2-ton) house, 9 gal. per min. for up to 1,800 sq. ft. Less water is needed when the temperature is lower than 55°.

A forced-air heating and ductwork system must be designed properly for both heating and cooling. Above all, the water coil must be selected by an expert; its size depends on the cooling load of the house and on water temperature. Poor coil selection may result in high relative humidities and inadequate cooling.

What work for housing projects?

Depending on your area. There are two chief methods:

Spotted wells. Take any project built where cold ground water is so abundant wells for cooling single houses have been common. By hand, as occurs on Long Island. In such projects, wells can be spotted around a tract at points convenient to groups of houses. From each well pipes fan out underground to houses around it. Such wells are similar to those used in cities for regular water systems only. They are generally installed inconspicuously next to houses or under streets. Their electrical pumping gear also goes underground and requires a minimum amount of service; only a manhole cover marks the spot. One limitation: adjoining wells must be properly spaced so they do not encroach on one another's ground water; space requirements range from 300' to more than 1,000', depending on local conditions. (The same system can sometimes be used for regular water supply.)

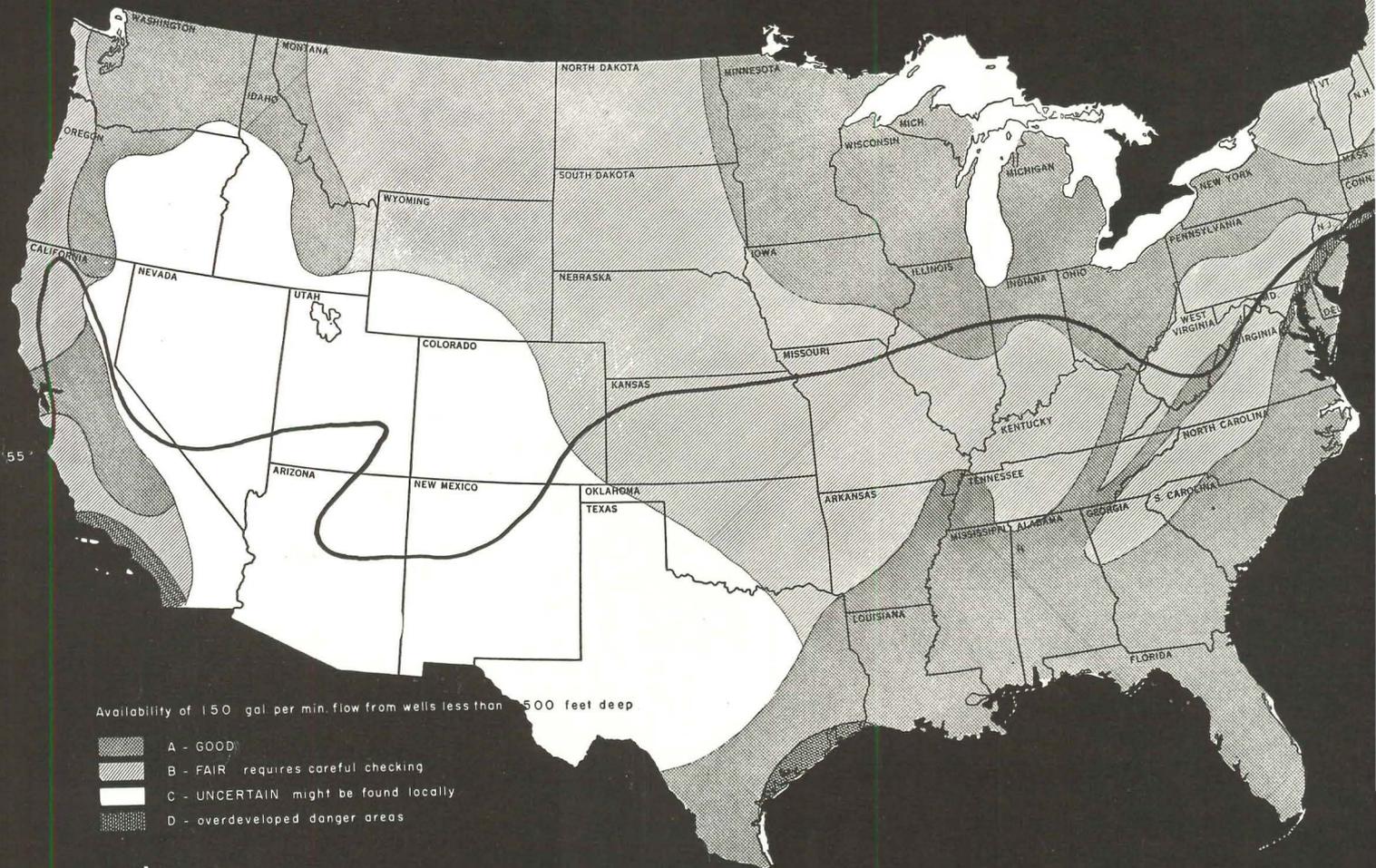
Where plenty of water is obtainable close to the surface in some areas, wells should go down 50'-75'. In summer water near the surface often gets warmer than 55°. Including equipment, a 75' well for delivering enough water to cool 25 houses on Long Island will cost about \$3,000, or \$120 a house. Pipes to houses will cost an estimated \$125 a house and, including volume purchase, the cooling installations inside each house will cost about \$200 more.

The last item to consider is disposing of the used cooling water. This water cannot be recirculated with water towers because the water gets too hot. However, used water can be returned to the ground via lawn sprinklers (which use about 2 gal. per min. each). Or used water can be sprayed over a hot surface which radiates less heat than enters the house, so less water is needed for cooling in the first place. For true conservation, recharge wells are dug to diffuse the outlet water into the ground, and some states require these recharge wells.



Slab covers 325 gal. per min. modern well in Inglewood, Calif. Vertical housing, left of slab, contains transformers which local power company wants above surface in this case. Under slab, steps lead to vault, about 8' square which houses well cap, pipes, controls, etc. Pump is below vault floor, inside well casing.

GROUNDWATER AREAS IN THE U.S.



55



g Island such wells have cost \$50 to \$75 a house (where have had to dig them just to dispose of cooling water mechanical air conditioners).

total cost for the water-coil installation and supplying from spotted wells is estimated at \$500 per house. This can be compared to at least \$1,000 first cost (over heater a mechanical air conditioner that comes with a motor, compressor and complete refrigerating apparatus. And it appears that the price of mechanical units will not drop appreciably over several years, at least.

Combination drinking-cooling wells. This is a second source merchant builders can use where new projects are built beyond the range of city water mains. Normally a well is drilled to supply domestic water to all the houses in a project, and another waterworks is born. Thousands of such water systems have sprung up this way.*

Where these wells yield water colder than 55° in the North, the water system can be enlarged for new projects and can supply enough cold water for low-cost air conditioning. Without going into technical details, it is estimated that a waterworks will cost about \$200 a house more than a normal water system. The builder adds only a water-coil inside each house and, including any extras, he gets air conditioning at approximately \$500 a house (in addition to the cost of a good forced-air heating system, of course).

Operating cost. What the home owner pays for summer air conditioning in the above projects naturally depends on prevailing water rates. In the North the average home owner will use about 50,000 gal. of water a summer. (Without a water saver, a house normally need almost as much water for mechanical units.) Water rates in the US average 25¢ per 1,000 gal., well-water air conditioning in projects would then cost \$62.50 a year plus another \$10 for running the fan blower.

Summary. Given plenty of cold ground water, the depth of the well, length of pipes, etc. will vary according to local conditions. Therefore no one can pin down exact cost figures to apply to all houses. The cost figures given are estimates by geologists, engineers and well contractors. In some areas well-water cooling might run more or less than \$500 a house. However, much of the builder's first investment in wells and pipes is paid back to him over the years in water savings whatever arrangements he makes with the new water system. Therefore the net first cost chargeable to the air-conditioning installation is clearly less than \$500 a house.

Water cooling with individual wells

Water air conditioning is an easy choice for the thousands of houses built every year where individual wells have to be dug for domestic water needs. Surprisingly, many merchant builders, especially in the Midwest, dig individual wells for

Geologic maps show where ground water is generally available. Water is generally colder north of 55° line, e.g., Michigan water runs north-south generally indicates favorable areas for getting well water. In some areas, land should be carefully surveyed before drilling. In some areas ground water is scarce.

For maps by M. T. Kozary, geologist. Maps © Rand-McNally

projects. There are also custom houses built beyond city water mains that need their own wells. Since these houses, in the North, start with a ready supply of cold water, adding cooling is relatively simple and inexpensive. The procedure involves:

▶ Supplying both domestic and cooling water from the same well, usually to an all-purpose storage tank. Sometimes the well must go a little deeper to get the additional water needed for cooling compared to the smaller quantities needed for domestic use. Thus a slightly bigger pump is needed, for instance 1/2 hp. instead of 1/3. Extra pump cost: about \$35.

▶ The installation is the same as shown on p. 150; pipes inside the house should be insulated. For health reasons the septic tank is planted downstream from the well and at least 50', preferably 100', away. This is a code requirement in many areas.

▶ Disposing of the water. Since a septic tank disperses no more than 250 gal. of water a day, the cooling water would swamp it. But the warmed-up and used water from the cooling system can be returned to the ground via lawn sprinklers or sprayed over a hot roof.

▶ Total cost for the cooling coil installation varies with the size of the house—from about \$250 up to \$500 (in addition to heating), only a little more for even the biggest houses. These costs compare with prices of \$1,000 to over \$2,000 for mechanical cooling. And people have actually dug wells and added cooling for less than \$500 all told.

Compared with mechanical conditioning another cost advantage of well-water cooling is low upkeep: \$10-15 a summer. Based on actual pumping costs of 2¢ a thousand gal. and electricity at 3¢ a kw. hour, operating cost is small compared with the operating cost of mechanical units. However, in parts of the Midwest where water is hard and corrosive, the cooling coil may require periodic cleaning and flushing.

In the last analysis well-water cooling is like the stock market: the rewards are big but watch out for booby traps. Where ground water is abundant, the well is often the smallest problem. However, if cold ground water is a problem, don't fool around with well-water cooling. Use mechanical units.

How to plan for well-water cooling

1. Consult your local state or US Geological Survey office, which often has detailed ground-water data for your area. Some states like Illinois, West Virginia and Pennsylvania have exceptionally competent and fully staffed bureaus.
2. Get a good well contractor. Many already have air-conditioning experience.
3. Use a capable warm-air heating contractor, preferably one familiar with cooling ductwork. He can also install the cooling coil. A plumber can put in the water piping.

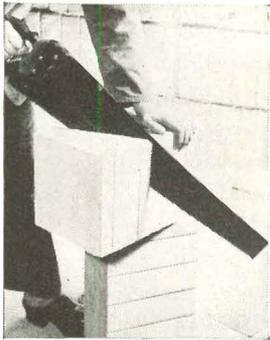
* Examples: a single well for 30 Mt. Kisco, N.Y. houses now abuilding; a 117' well for a 200-unit Exton, Pa. project; and 28 big wells spotted throughout Lakewood Park's 25,000 houses in Long Beach, Calif.

Concrete for Carpenters

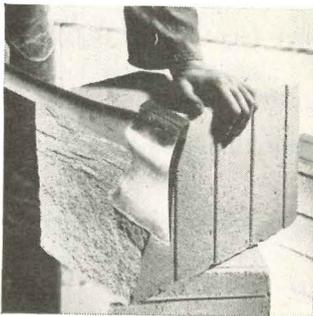
A mineral compound, the multipurpose material can be drilled . . .



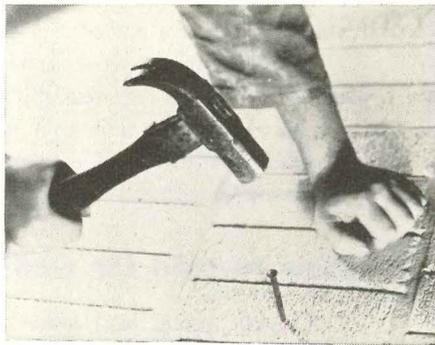
sawed . . .



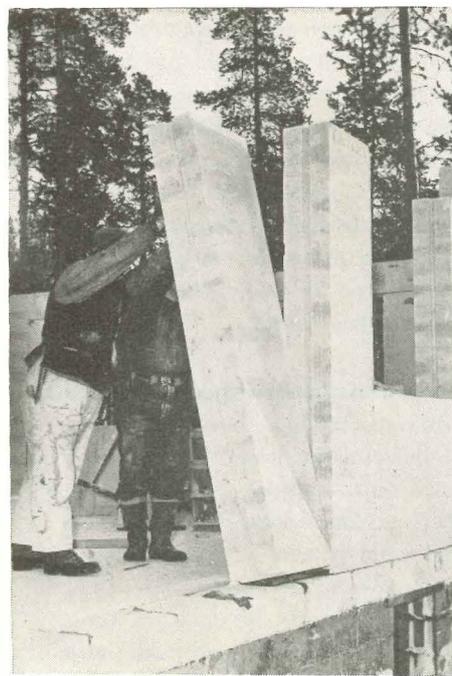
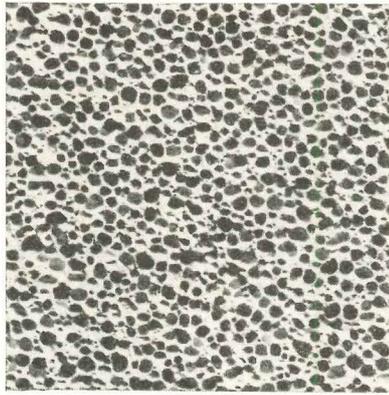
chopped with an ax like wood



nailed . . .



The shelter below was a quick-assembly job for the Olympics. Even in permanent construction, Zeprex may be left as is—or, if wanted, stucco applied on the exterior and one coat of finish plaster on the interior.



Waterproof and verminproof, Zeprex needs no babying on the job. Thick walls (above) are going up for house on the tundra north of the Arctic Circle. Effective insulator and moisture barrier, Zeprex is a complete solution for the outside wall.

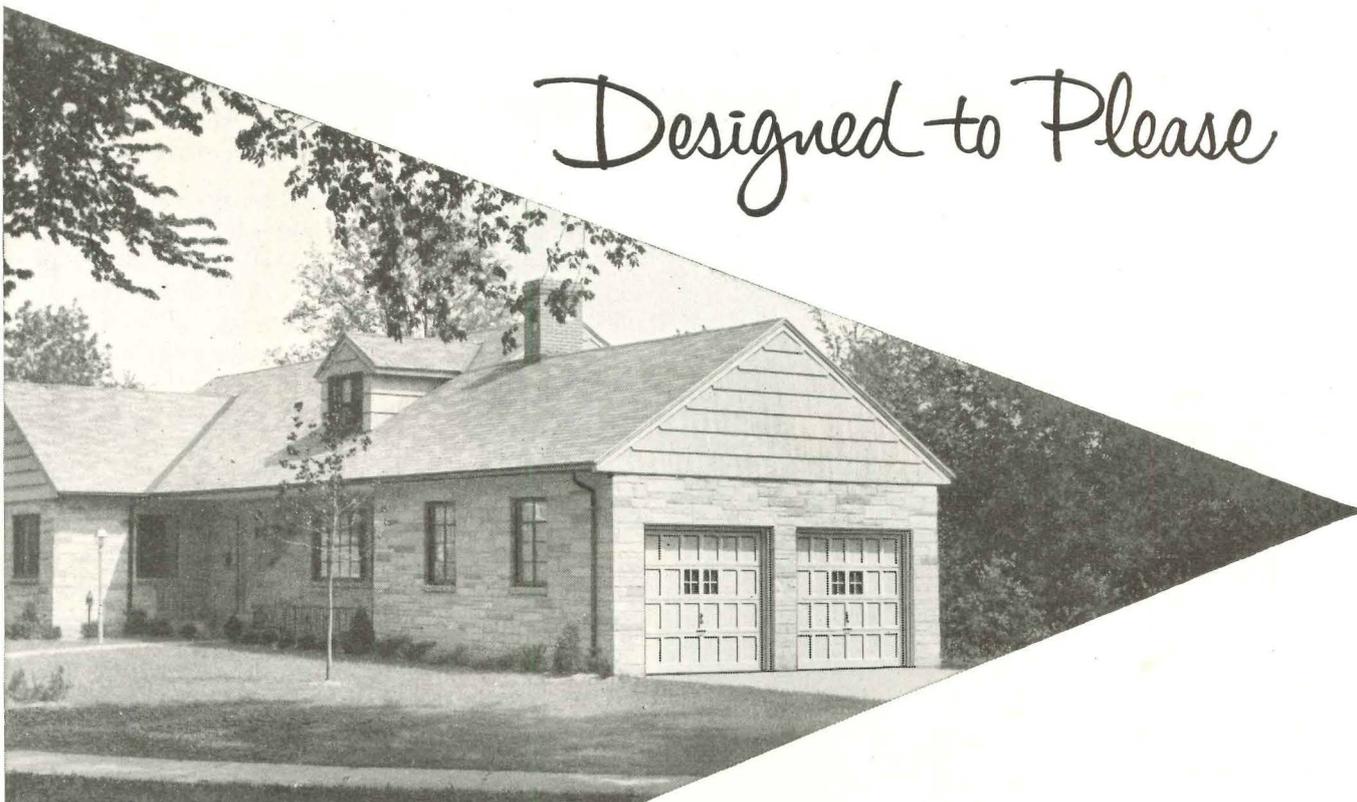
PRESSURE-COOKED CONCRETE handles I

When US Plywood prexy Lawrence Lawrence announced last month the purchase of the business and the rights to manufacture the Sweden-born mineral building material was not straying far from the forest. The lightweight, precast concrete US Plywood will produce late this year, has naturally attracted woodsman Ottinger. Nailable, drillable, sawable, the load-bearing fireproof shelter should draw accolades from the US Plywood industry. (Zeprex already has received favor abroad. Europe annually absorbs 10 million cu. ft. in roof, floor and wall sections in beams and building blocks. In the past years, the amazingly elemental yet sophisticated material has seen service from the Equator to the Arctic Circle in all types of structures—hospitals, factories, homes.

Processed in an autoclave, Zeprex is a cellular material of siliceous material, cement, water, plus "x." Its basic component is calcium silicate, has a compressive strength five times that of concrete, so that even when the compound is expanded to increase its thermal value, Zeprex can more than hold its own structurally. Practical contractors will appreciate its build-ability as warmly as purists who will laud its monolithicness. Color is seashell white, the unicellular mass is finished, inside wall, and insulating material in one.

Manufacturer: US Plywood Corp., World Bldg., New York 36, N. Y.

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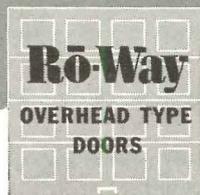
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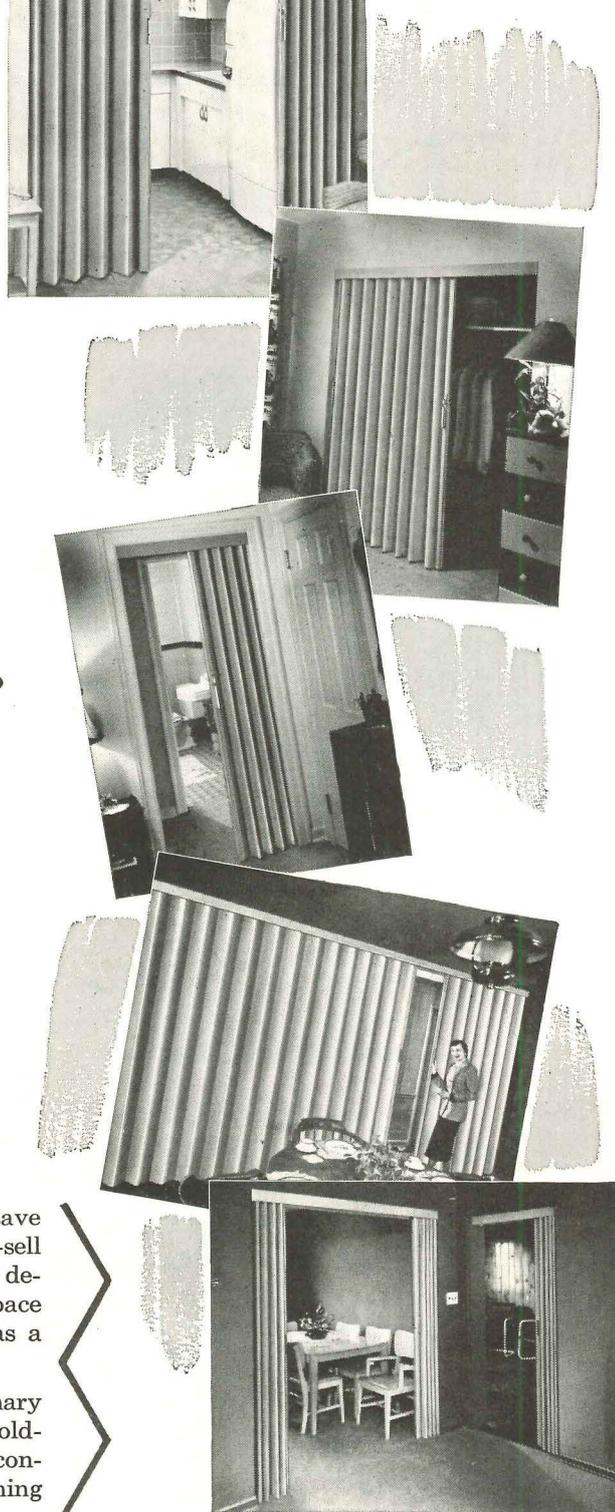
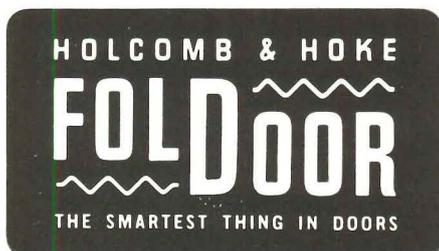
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Mortgage Banking. By Robert H. Pease and V. Cherrington. McGraw-Hill Book Co., 1221 Ave. of the Americas, New York 10020. Sponsoring: Mortgage Bankers Association of America, 458 pp. 6 1/4" x 9 1/4". \$7.50

Don't let the name deceive you: *Banking* is as much a book for the bookshelf as it is for the mortgage banker. Its 19 chapters were written by top executives from all sections of the industry, large and small institutions. The eyes of the mortgage banker everywhere the builder can learn much about his business. Sample: Robert H. Pease's chapter, "Analysis of Shopping Centers." (Mr. Pease is president of the Detroit Mortgage & Real Estate Co., co-editor of the book.) The builder of a sizable subdivision will find the observations excellent working principles.

▶ "It is essential that the term 'shopping center' be broken down into two distinct types: convenience centers and regional centers. Convenience centers serve relatively local areas, and the customers are both walk-in and drive-in residents who are buying for immediate needs. There are a number of one or two supermarkets, a bakery, a drug shop, a hardware store, and a few other stores. The largest store (supermarket) will be about 8,000 to 12,000 sq. ft., and the total store area will average 50,000 to 75,000 sq. ft. Many of these units are and have been very successful. They serve a real need in the community and have become good investments for the owners.

▶ "Is the center needed in the area? The answer lies in shopping centers are successful or not because of their type, but rather because of the problem of providing parking adjacent to shopping and fulfill the need for increased retail units in expanding areas. . . . providing parking is not the panacea of all shopping problems. The success of a shopping center is a combination of many factors, and important among them is the need for additional shopping space. The number of families in the area is related to the number of retail units. A proper evaluation of population growth of the area, family buying habits, and the number of retail stores per family is essential in determining whether or not the need for the proposed center.

▶ "Is the site satisfactory in size, location, and topography? The acceptability of a site is not a matter of total area. A long, narrow strip of land along a street or highway is often as good as a square piece of land of the same total area. Few successful centers have been built on less than 15 to 20 acres. . . . Even though the conveniences of a drive-in shopping center, people are loath to walk more than 500' for their shopping, and even though it is important that the site enable

continues

et

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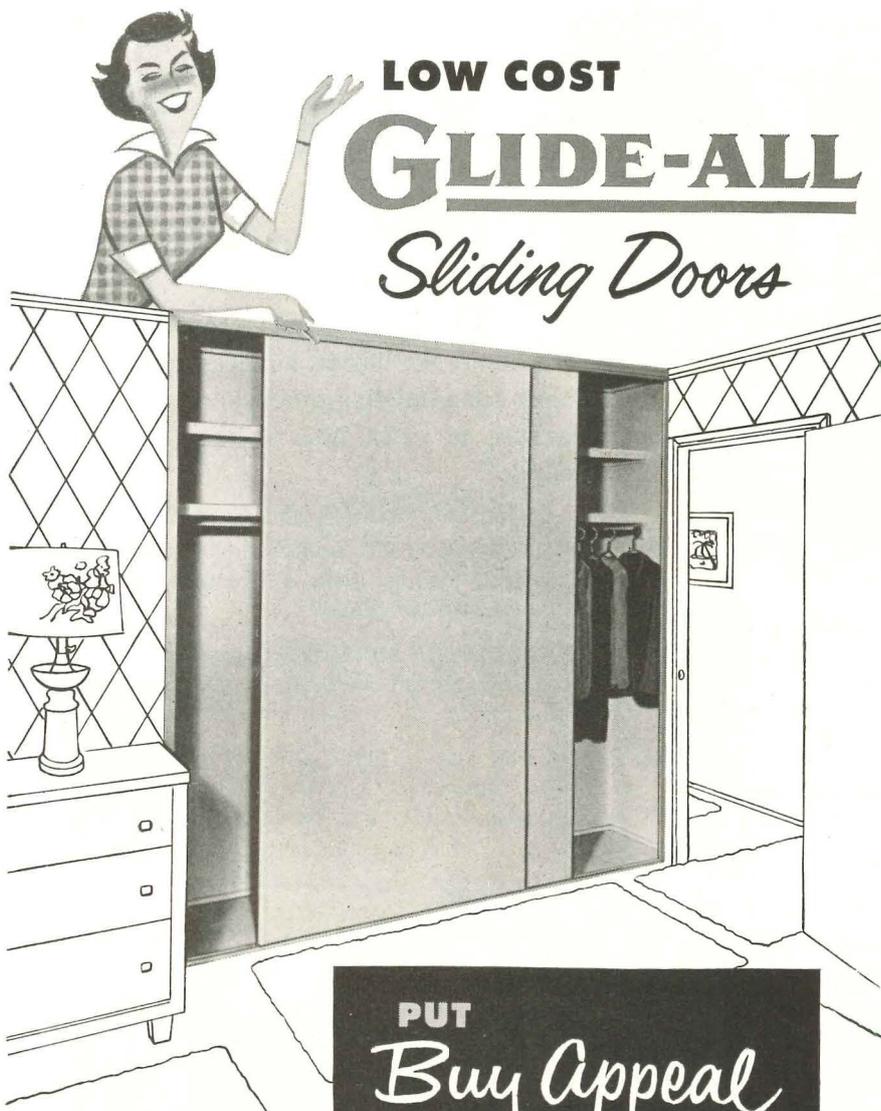
families who are active home-improvers. Just those families who are the busiest builders in America! So when they see a building products ad in BH&G, you can be sure of extra interest that means extra-large sales!

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- FOLLOWING FIRST APPEARANCE of Heating Manufacturer's ad in March, 1952, issue of BH&G, inquiries came in every business day thereafter throughout the year.

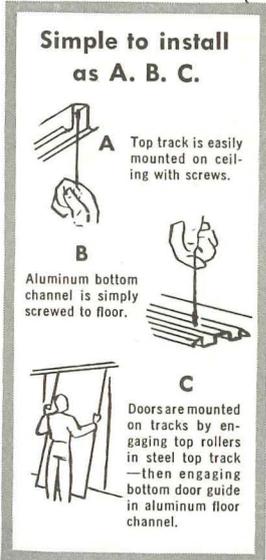
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to be relatively close to the store ing. The majority of shopping centers located at intersections, and the size of the site should enable it to have and exits to each street or highway

► "Will the parking area be adequately properly situated for easy entrance from stores, and is the traffic flow project satisfactory? The site should be enough to provide initial parking space of at least three feet. A ratio of four to one is better. It is desirable to have room for some future expansion of parking facilities. The size and shape of the site, especially if it is a corner piece, are important. . . . Almost a cardinal rule is that the entrance into oncoming traffic should be near any entrance or exit. There is no standard pattern for the parking area or for the location on a particular site. There has not been sufficient time properly to test and evaluate many different layouts that have been tried. There is evidence, however, that a certain amount of parking should be available in front of the site. One of the main reasons shopping centers have to sell is adequate and convenient parking. If the shopper can see the store, he has an initial incentive to use it.

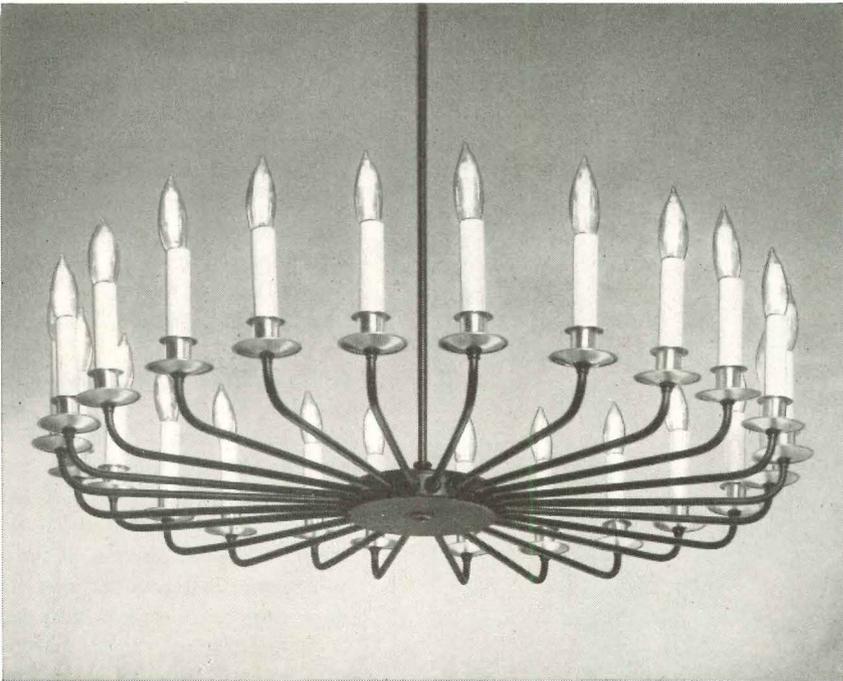
► "Are the buildings well designed? Are the stores of proper size both in width and depth? The eye appeal of a center is important, and any new center should give careful attention to developing a pleasing and attractive exterior appearance. This can be accomplished both by the design of the building and by the materials used. The center should be uniform in its type of architecture. Such centers have been outstanding in their appearance. The needs of the tenants should be carefully analyzed in determining the width and depth of the center. Maximum rentals can be obtained through careful planning for store requirements including width, depth, basement, elevators, facilities, lighting, and windows. It is important that the walks around the buildings be covered so as to protect them from weather shopping. Summer air conditioning for all the stores, certainly in the center, should be required.

"Of particular importance to the success of the entire project is a convenient and efficient method of delivering merchandise and supplies to the stores. Many types of store delivery systems are used, some by tunnel, some by side entrance. The success or failure of a center is of prime importance to the project. This problem should be carefully studied by the mortgage banker.

► "Will the area maintain its present and financial stability? The stability of the general area must be carefully analyzed unless it can maintain, in the future, the stability, as to both the character

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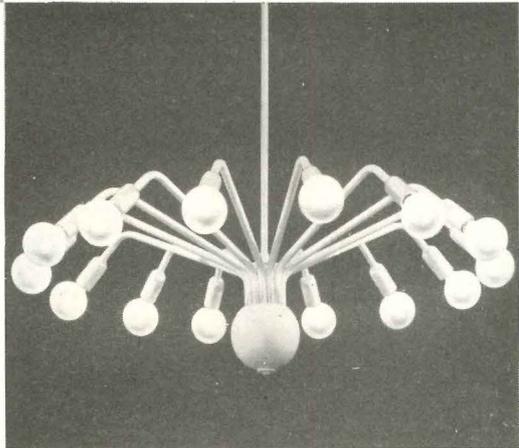


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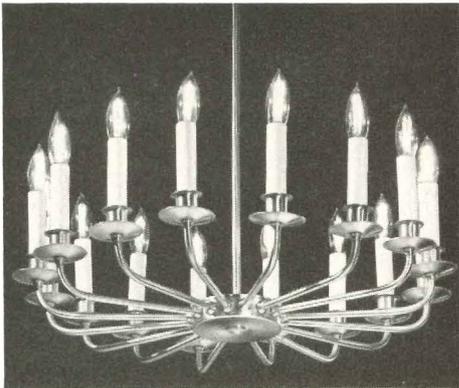
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lation and the level of income, the term success of the project would be Shopping centers in single-industry dangerous because of the complete d of the retail volume in that area financial fortunes of one type of bus direction of the general growth of either toward or away from the sub as well as the trend of income characteristics, should be analyzed.

► "How will long-run traffic and sup plans of the city affect the proje cities are seeking to alleviate their gestion through long-range traffic and control. These plans will bring changes in the flow of traffic with itself. Since the success of the dri ping center is dependent upon its al duce shoppers to come to it by car, a in the highway pattern are extremely to a proper evaluation of the long-r of any center.

" . . . The first step is to estimate lation within the trading area. T done by taking the latest census dat ing to it the increased population buildings after proper allowances ished and vacated units. The incr estimate above the existing census also be checked with statistics obt electric-light and water-meter in In order to estimate the actual ret it is necessary to coordinate the figures with the income levels to total family income and distribut income in the trading area. Th figures can be, in some cases, obt local surveys or can be correlat basis of rentals paid and value of ho Income-tax figures and sales-tax valuable in checking these estima project is large enough, original advisable on both population and i

► "Make estimates of total retail the individual stores in the project be impossible, even with an attr shopping center, for more than a sn tion of the total business in the attracted to it. The downtown sho will continue to exert strong pres shopper's money, and many famili tinue to trade at their neighbor This estimate of the amount of bu will be done by each store is the b termining the gross income of the p sequently it must be as accurate

► "Determine the attractiveness of as a long-term investment. It is in remember that a drive-in shopping seldom only fairly successful. I either is very successful or is a

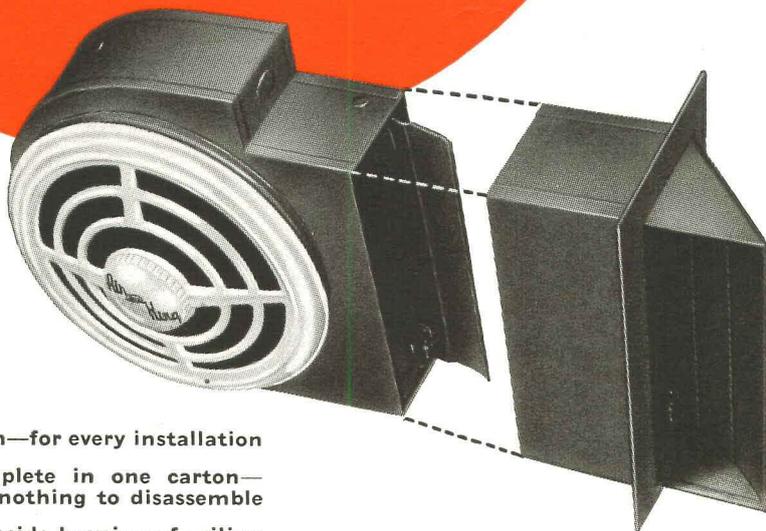
" . . . Drive-in shopping centers m come the outstanding type of reta ment."



Air Berns King

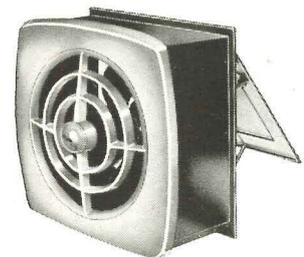
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 Eliminate wall switch installation cost. Built to resist wear and weather with rubber lined outside frames to keep out wind, wet and cold. Economical, highly efficient models every home can afford—for every wall thickness. In white or chrome. U.L. Approved. KF8" models and KF10" models. List as low as . . . **\$27.55**

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SYRACUSE MARVELS AT Hotpoint



Designed in the modern trend, this Hotpoint House of the 50's, built in Syracuse, N. Y. by Joseph A. Cicci, incorporates simplicity, beauty, and extreme livability. It's built for the modern homemaker who demands comfort and convenience at her fingertips—everywhere in the home. No compromise has been made with quality. Named in honor of their luxurious Hotpoint Kitchens and Home Laundries, this "home of the future" exemplifies modern living at its best—electrically.

Progress in the field of home building is of prime importance to Hotpoint. Modern Electric Kitchens and Home Laundries are among the first points of interest to prospective home buyers.

Homes so equipped are more salable, and permit more families to own the most modern conveniences for a smaller increase in their monthly payments. Hotpoint appliances in homes strengthen the builder's reputation, enhance his sales, and broaden his market. We believe that the home building industry and Hotpoint can mutually profit through cooperation aimed at better value for our customers.

Join the builders who stand out above the rest. Their homes offer *more* . . . with complete Hotpoint Electric Kitchens and Home Laundries.

Hotpoint

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DISHWASHERS • DISPOSALS® • WATER HEATERS

ALTH OF LIVABILITY IN THIS...

House of the 50's



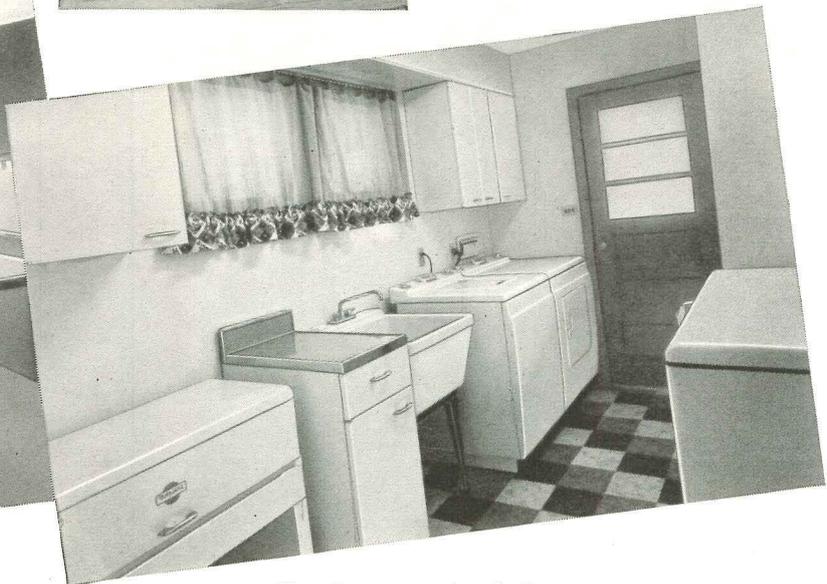
Joseph A. Cicci, Fayetteville, N. Y., the Builder

Joseph A. Cicci says this about his Hotpoint House of the 50's: "I have long known that Hotpoint Appliances are the finest in terms of styling, efficiency, and durability—that's the reason I chose Hotpoint All-Electric Kitchens and Home Laundries for my house. I feel that the thousands of visitors who specifically admired the unique, attractive, and efficient kitchen and laundry proved the wisdom of my decision."

Joseph A. Cicci



Civic interest in the development of better community living, as exemplified by the Hotpoint House of the 50's, is demonstrated in this ribbon-cutting ceremony performed by Mayor Corcoran of Syracuse in the presence of those interested in the home's construction.



The kitchen in this Cicci-built Hotpoint House of the 50's is the last word in luxury-living. No convenience has been omitted. Equipped with Hotpoint Electric Range, Refrigerator, Dishwasher and garbage Disposall®, this kitchen would delight any homemaker.

Here is an example of efficient Home Laundry arrangement that provides maximum benefits of allotted floor space. Equipped with Hotpoint's Automatic Washer and Dryer, Rotary Ironer, and handy cabinets, this compact work-center makes laundry a joy instead of a job. The Hotpoint Food Freezer is within a few feet of the kitchen.

Icebreaker of Progress!

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Important new booklet reports the latest findings on the moisture problem

The causes, effects, and prevention of condensation in houses is covered in a new 72-page booklet published by the National Mineral Wool Association. Entitled *How to Control Moisture in Houses*, the booklet summarizes much of the pooled information that came out of last year's conference in Washington sponsored by the Building Research Advisory Board (BRAB) of the National Research Council. At the same time this booklet updates practically all available data on condensation.

According to the NMWA, the entire moisture problem in houses can be controlled by three major methods:

1. Elimination of moisture at its source. In newly built houses, where most troubles occur, excess water vapor is generated in the kitchen, laundry, and bathroom. This vapor should be removed by means of exhaust fans or vents. Of equal importance to builders and architects is to stop outside moisture before it can enter the house. For instance, the building site should be well drained, exposed earth under a crawl-space house should be covered with waterproofed concrete or by heavy roll roofing paper. Other sources of moisture should be similarly eliminated.

2. Isolation is necessary because it is often practical or impossible to eliminate all water vapor at its source. Vapor barriers isolate or trap moisture before costly damage is caused (such as peeling paint, blister or rot). Even if insulation is not used, vapor barriers are mandatory in new construction. They *must* be carefully installed or they are worthless. For instance, all barriers should be applied without holes or rips to form a continuous seal around the house. Otherwise vapor may push through openings. Various types of barriers are illustrated in the booklet.

3. Ventilation. This third method of controlling moisture assumes that a certain amount of water vapor inside houses is inevitable and can build up and create dangerously high humidity. However, the exchange of humid indoor air with drier, outside air by ventilation in winter should be considered whether or not the two above methods are employed. Here again, an exhaust fan is effective provided it is supplemented with suitable insulation openings. When warm-air heat is used, another ventilation method is to connect a small outside air duct to the furnace. Dry outside air is pushed into the house by the furnace fan; the constant interchange of air will maintain safe humidity limits inside the house.

* Obtainable for 25¢ mailed to the NMWA, 2906 R. Building, New York City 20, N. Y.

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NEW, SPACE-SAVING

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COMPACT AUTOMATIC WASHER

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Add the proven sales appeal of an automatic washer to every small home and apartment you design and build with the new WHIRLPOOL Compact Automatic Washer. It gives *big performance in a small space* at a *record low price!*

Designed for installation in small quarters, the WHIRLPOOL Compact occupies a floor area of *only 24 1/4" by 24 3/4"* . . . and it *does not* fasten to the floor. What's more, it is a *full-size, 8-lb.* automatic washer with WHIRLPOOL quality throughout. It has famous Suds-

Miser, seven rinses, agiflow washing action, completely flexible operation and many other features beyond comparison. It's the kind of value that only WHIRLPOOL . . . largest manufacturer in the industry . . . can give you.

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*note to architects
and builders*

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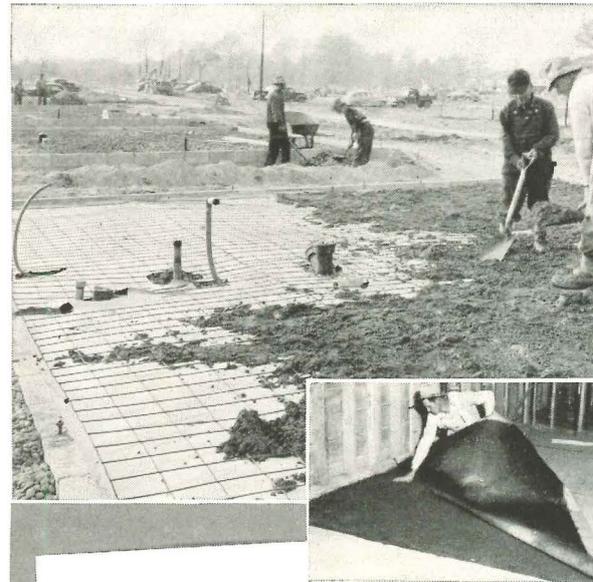
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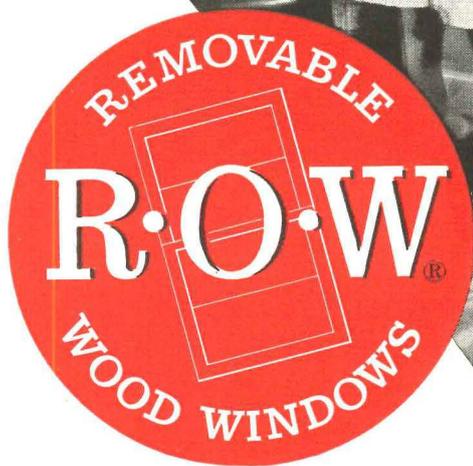
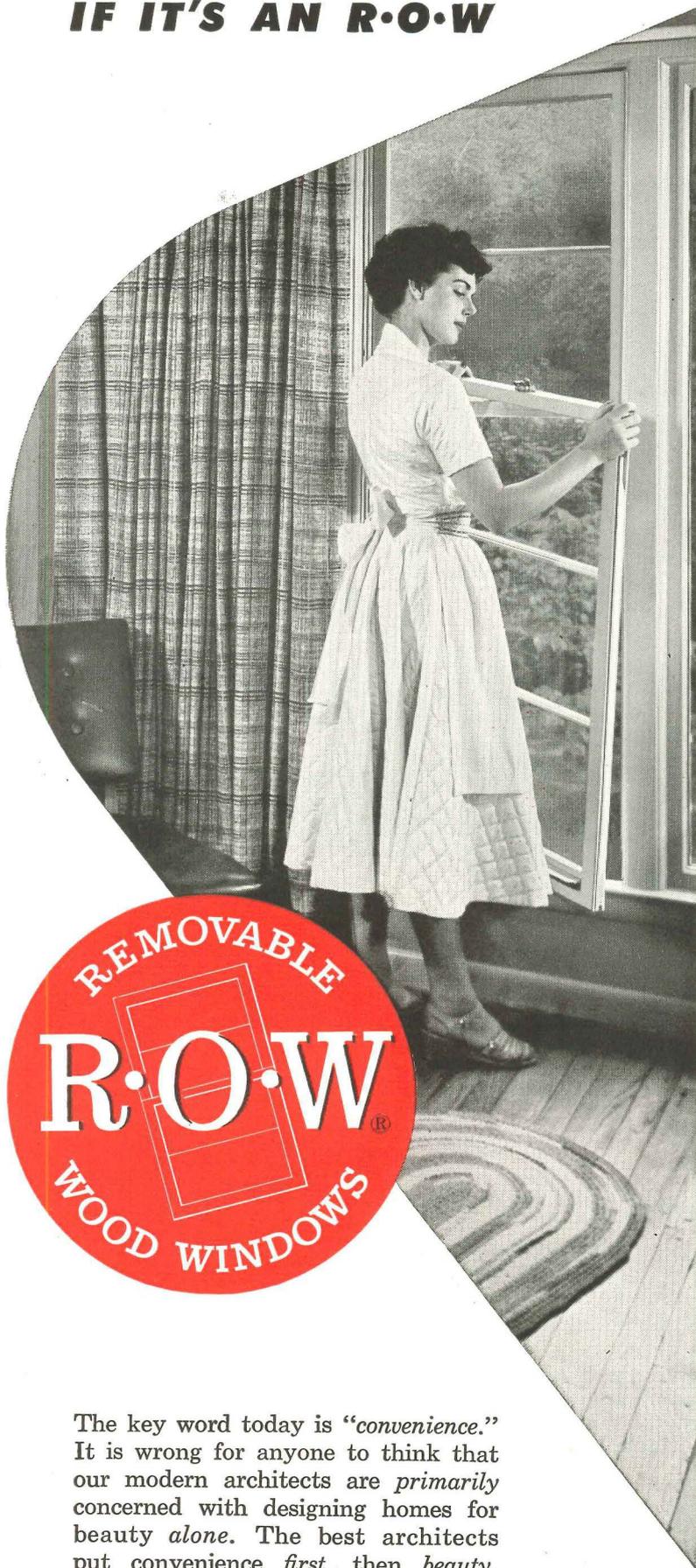
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at the name!

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you can lift it out entirely

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The key word today is "convenience." It is wrong for anyone to think that our modern architects are primarily concerned with designing homes for beauty alone. The best architects put convenience first, then beauty. Architects prefer R·O·Ws by 2 to 1.

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HOME AIR CONDITIONING WITH

A new kind of cooling unit debuts in Island houses, promises to extend the of air conditioning into areas out-of-k for electrical and gas systems

Builders are using oil-operated air-conditioning units for the first time. The new units use the oil burner to cool in summer that heats in winter. Unlike conventional units there is no motor compressor and fuel costs for cooling are surprisingly mild—less than \$40 a summer in the North (including the cost of water). Heating costs are the same as for any oil-fired furnace.

These oil units, pioneered by Long Island Builders Albini & Raddock, will have a major impact on home cooling because:

▶ Air conditioning is now much easier to install in thousands of houses where architects and builders would be confronted with costly electrical headaches if standard cooling units were used. For instance, most utility companies tell the builder that special three-phase electrical power in houses where large cooling units are installed. (Normally a single-phase circuit is ample for houses.) However, three-phase power is sometimes completely unavailable, or else the builder may have to foot the bill to bring in a special three-phase line from the street to each house. Three-phase power is not necessary for oil-operated units.

▶ Though builders can avoid electrical problems with the use of year-round gas-operated units, air conditioning is also now here for houses where gas is restricted or unavailable, and where electricity is a parallel problem for builders.

How they work

The new oil air conditioners were only recently introduced into production by Servel, Inc. of Evansville, Ind., the only firm, to date, that makes them. The new units work on the absorption principle like a gas refrigerator. But instead of burning gas, they burn No. 2 grade oil—the same oil normally used for house heating.

Since oil consumption varies from .53 gal. per hour for cooling up to 3.0 gal. for peak winter demands, the unit needs a special low-pressure type oil burner. This type of burner is highly efficient and the home owner need only move a switch to change over from summer to winter operation.

One of the new units has a cooling capacity of 3.3 tons (40,000 Btu's). The second model provides 5.4 tons (65,000 Btu's). For heating both models are rated at 96,000 Btu's.

House details

Builders Albini & Raddock are putting the new units in 35 houses with garages, full basements and an acre plot, priced at \$38,000 to \$55,000. Floor

wash both sides indoors

IF IT'S AN R·O·W

From 2,100 to 2,370 sq. ft. Because of air conditioning the builders are insulating all outside walls by laying 4" of insulation over the attic floor. Also the houses contain no special design features required just for cooling.

How air is circulated

In the house the builders are putting the air conditioning in the basement and ductwork is designed the same as for conventional systems. The main duct rises vertically through the floor and goes inside an interior partition. At the ceiling, the duct feeders fan out overhead to registers high inside walls of each room. Return air is drawn back to the furnace through baseboard registers in outside walls.

For approximately 16,000 cu. ft. of house volume, a fan blower will push 1,600 cu. ft. of warm air through the ducts every minute. Therefore, the air in the house is "changed" every 10 min., or six times an hour. (Regardless of the type of unit, engineers say that all home air-conditioning systems should be similarly designed for at least six air changes an hour.)

Installation cost

According to the builders, the year-round air-conditioning system costs 8% of house price—\$3,000 for a 3.3 ton oil unit installed in the houses. Heating alone would cost \$1,500 in the same houses. Included in the air-conditioning cost is \$250 for a 55 gal. oil tank buried in the ground outside the house. About 300 gal. of oil will normally be used for the summer cooling in the North, so the size of the oil tank is determined by heating demand. But the bigger the tank the less the oil cost because of bulk purchases.

Operating costs

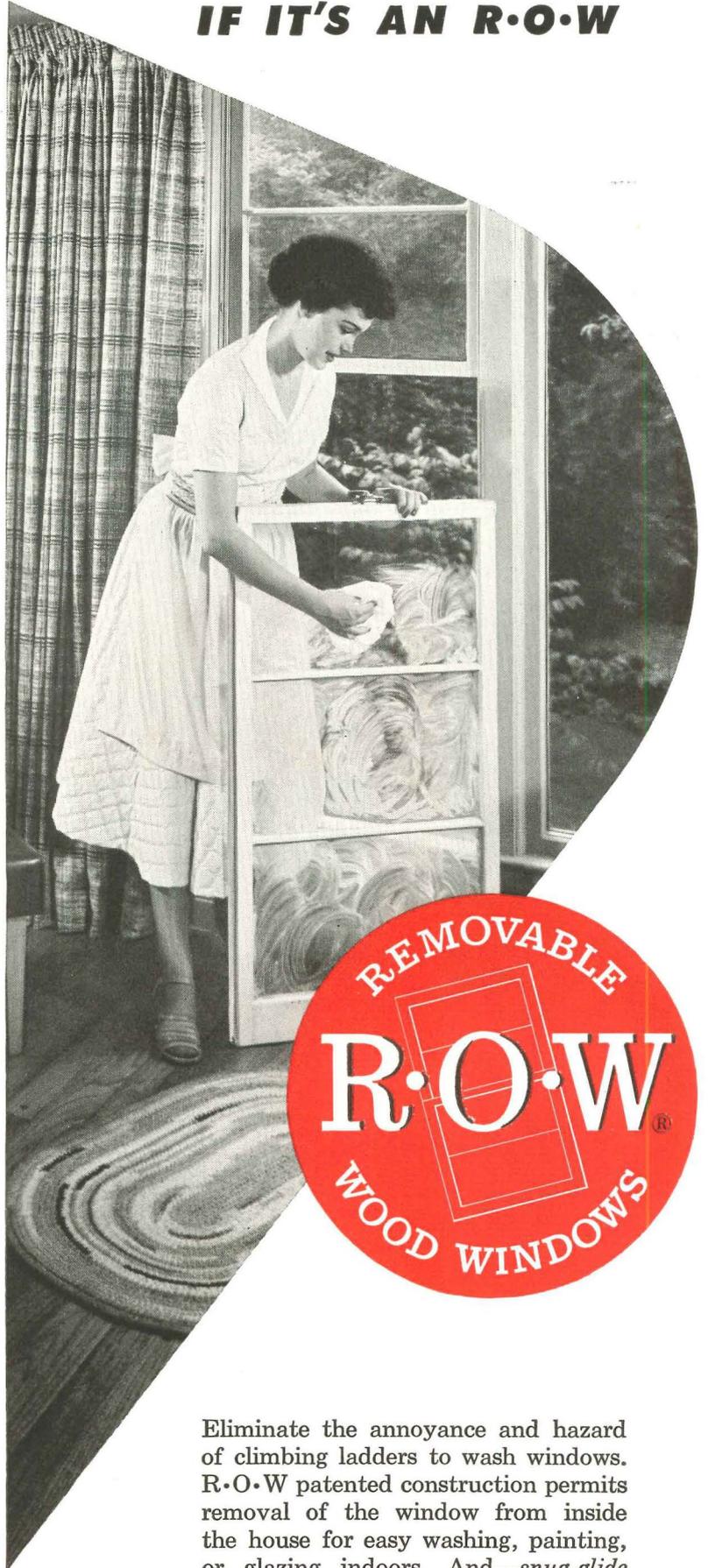
Engineers estimate that a 3.3 ton unit will cost the Albini & Raddock houses for \$105 a summer. This figure is based on past experiences in the New York City area where home-cooling units average an annual 500 hrs. of operation. The operating cost is broken down as follows:

1 gal. of 13.3¢ oil.....	\$35
100 gal. of (60°) water*.....	60
1 phase electricity for the fan motor....	10

\$105

In addition, an estimated 1,500 gal. of heating oil will be consumed, based on New York City's average of 5,000 degree days in winter. Total operating cost for year-round air conditioning: \$315. In other parts of the country, operating costs will vary according to local oil and water rates, the number of degree days for heating. This information is available from your weather bureau office.

*A cooling tower is not used and this figure is based on average local water rate of 40¢ per 1,000 gal.

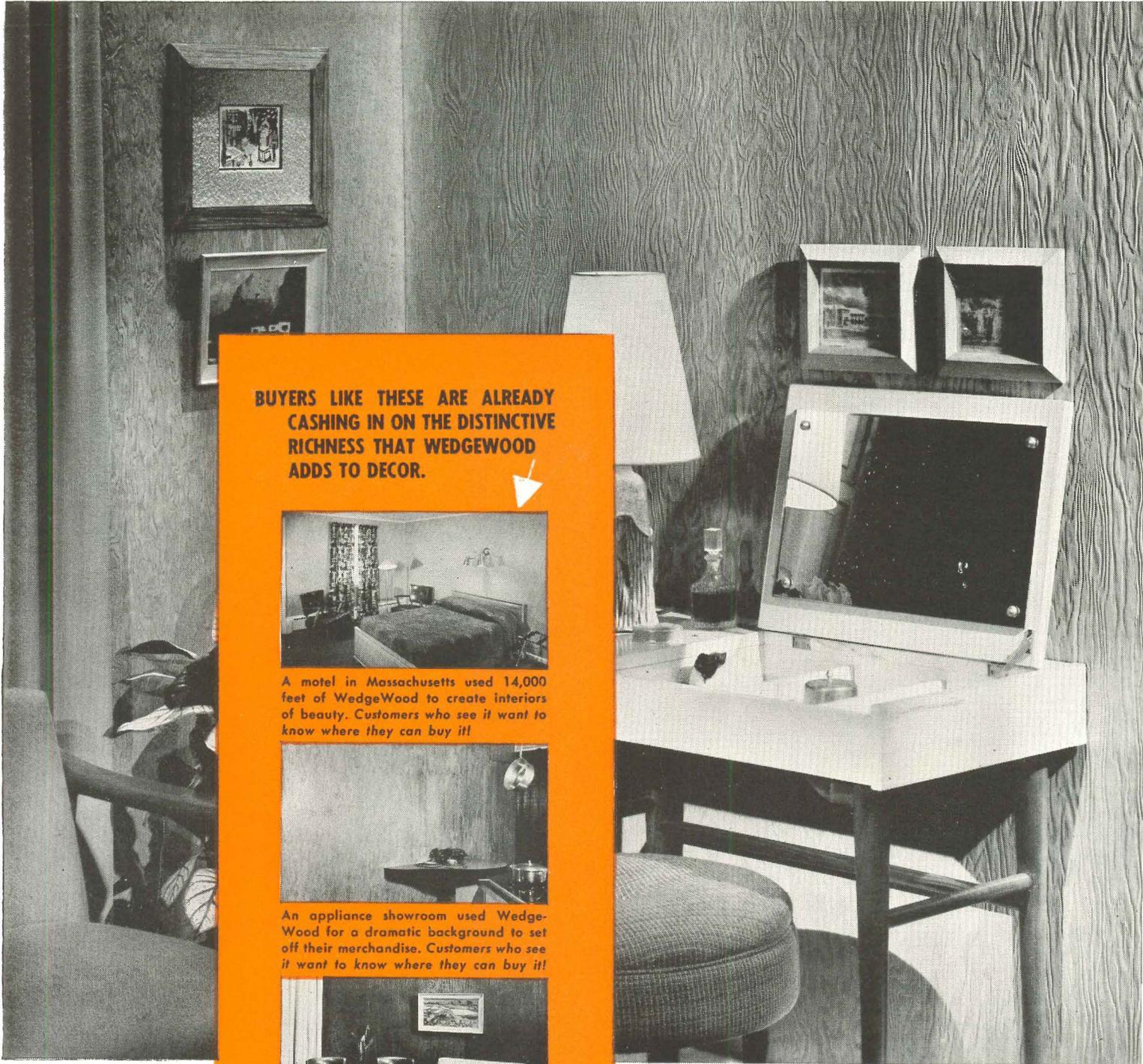


Eliminate the annoyance and hazard of climbing ladders to wash windows. R·O·W patented construction permits removal of the window from inside the house for easy washing, painting, or glazing indoors. And—*snug-glide* construction is an R·O·W exclusive.

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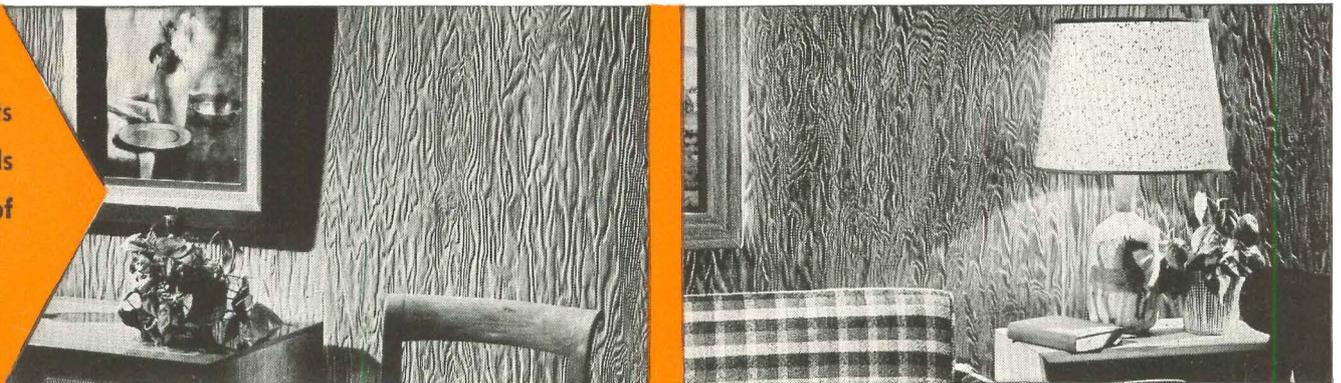
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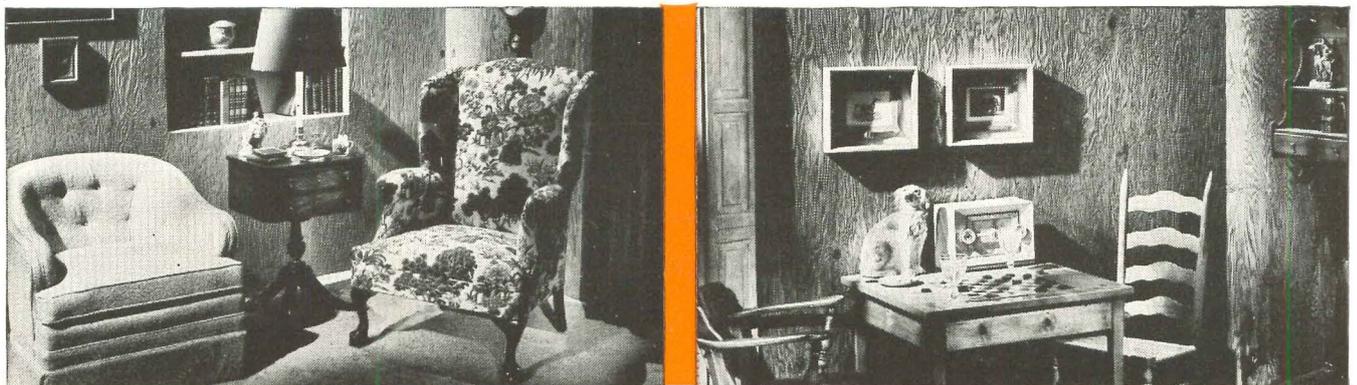
WedgeWood creates new beauty . . . new texture . . . new design . . . for your homes that spells *SELL* in any kind of styling. Excitingly effective in full room treatment . . . dramatic when used occasionally . . . WedgeWood has created new buyer interest, appreciation and *desire* wherever it has been used. With WedgeWood all the elegance and charm of fine wood paneling is yours at low, low cost.

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The experience gained from 58 years as home specialists in residential comfort has gone into the designing and manufacture of All Season Lennox Air Conditioning. The result is equipment that is amazingly silent...equipment that provides continuous humidity control...equipment that is economical to operate and so quickly and easily serviced that owners enjoy *uninterrupted* service.

As a strong selling feature for your homes, you can install the complete

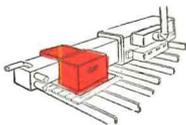
Lennox All Season Aire-Flo, less the cooling mechanism, which can be added later whenever desired. Completely serviceable from the front—only simple adjustments required. Home builders find that homes equipped in this way for air conditioning are *easier* to sell.

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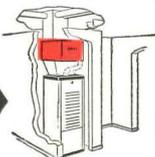
In warm air heating—
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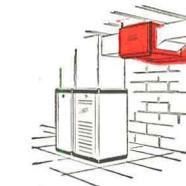
Can be installed with any central forced warm air heating system!



← The Lennox "Stowaway" air conditioner installed in an attic with a LENNOX "Stowaway" gas furnace. These units can also be adapted to "crawl-space" homes.



→ The "Flat Top" air conditioner installed over a Hi-Boy furnace in a closet.



← The "Stowaway" air conditioner installed in a basement with a LO-Boy furnace. The air conditioner is resiliently mounted in a frame that is suspended from the joists.



→ Here the "Flat Top" air conditioner is installed beneath a reverse flow Hi-Boy in a utility room.

Lennox "Stowaway" and "Flat Top" cooling units are made in two sizes—2 and 3 ton, single compressors, hermetically-sealed. They carry a five year warranty on the refrigeration unit.

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Glass lifts out for cleaning or when window is best described as "only sliding in a redwood frame"—no handle, an inside latch, which also locks perfectly.



To speed production, the Pierson Sashless Window may be assembled in wall sections. It is a compact bundle of precision-cut pieces, except for the glass obtainable at any glass shop. Window comes in 23 sizes, and, because of its simplicity, is one of the lowest cost units.

an "all-glass" window

The above pictures show the first really new window in the world. It is sashless—no sash around or between glass. The assembly combines only the glass, the redwood frame and the lock. It eliminates weights, balances, putty and painting—thus reduces maintenance to practically nothing. The window was designed by a home builder. In the past six years has installed over 4000 units in a coastal area, wind-lashed winter rains. The Pierson Sashless Window is manufactured by Ernest Pierson Company, 4100 Broadway, Eugene, Oregon. Inquiries invited from distributors and dealers.

B & G *Hydro-Flo** Heating OFFERS ALL THESE

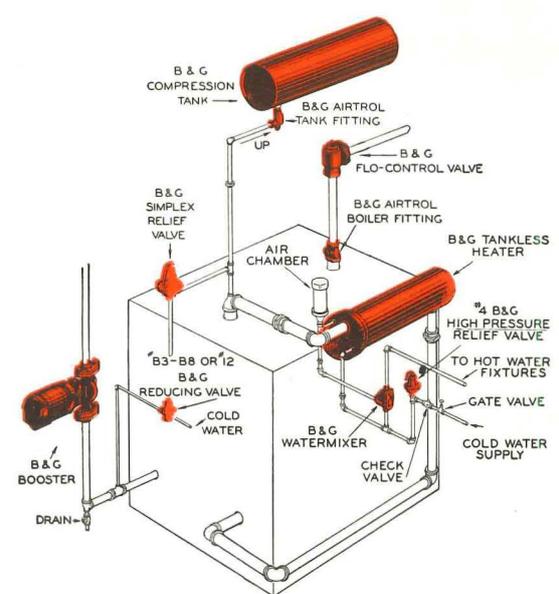
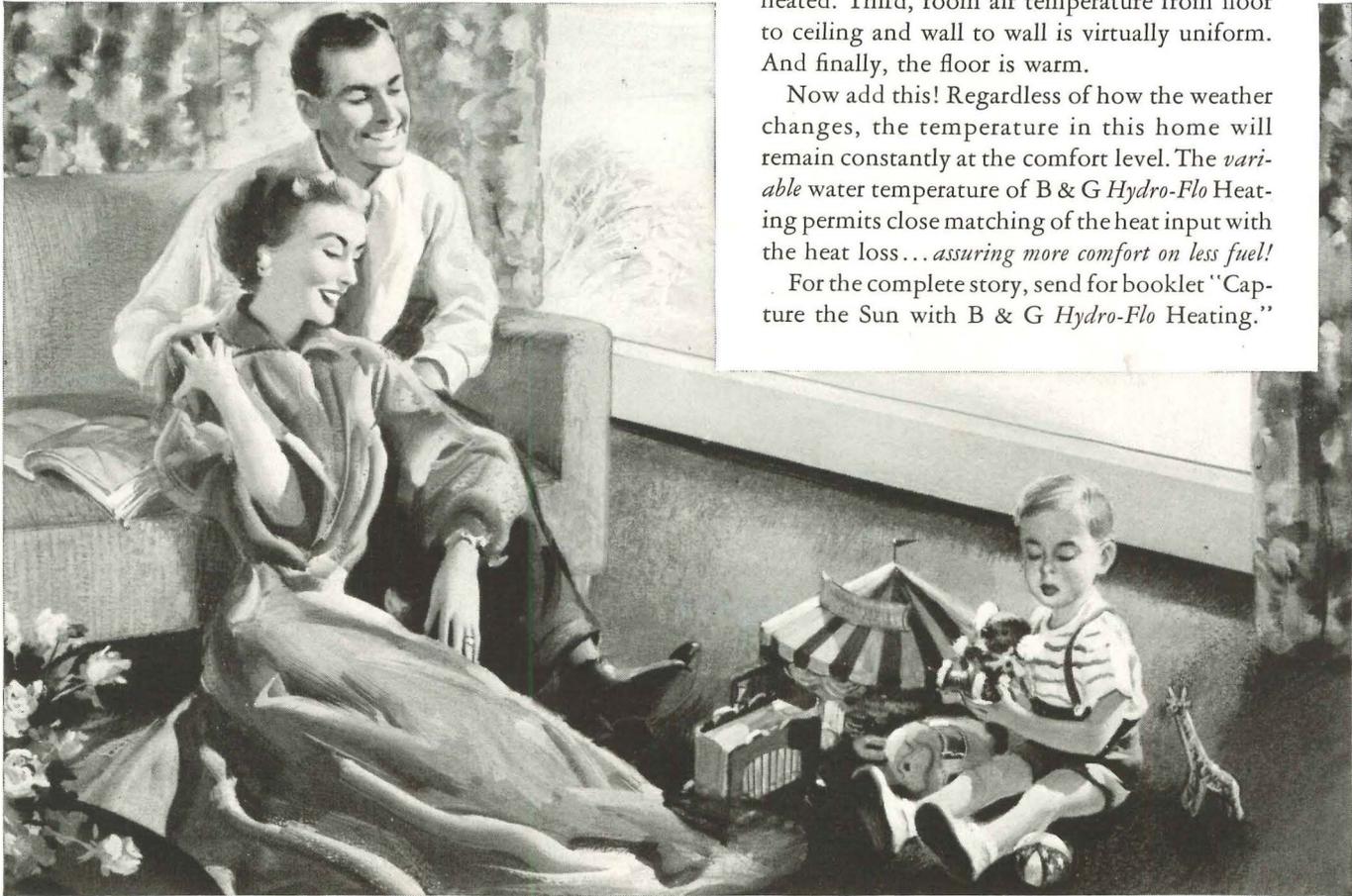
Extra Advantages

The family in this illustration is enjoying four comfort advantages of B & G *Hydro-Flo* Forced Hot Water Heating.

First, *radiant* sunny warmth! Second, the area around the low picture window is comfortably heated. Third, room air temperature from floor to ceiling and wall to wall is virtually uniform. And finally, the floor is warm.

Now add this! Regardless of how the weather changes, the temperature in this home will remain constantly at the comfort level. The *variable* water temperature of B & G *Hydro-Flo* Heating permits close matching of the heat input with the heat loss... *assuring more comfort on less fuel!*

For the complete story, send for booklet "Capture the Sun with B & G *Hydro-Flo* Heating."



Typical B & G *Hydro-Flo* Forced Hot Water Heating installation with tankless domestic water heater.



Another extra advantage— snow melting!

The home or building with B & G *Hydro-Flo* Heating can be equipped with an auxiliary snow melting installation. Hot water from a heat exchanger connected to the boiler is pumped through pipe coils under the sidewalks, melting snow as fast as it falls. Another back-breaking job eliminated!

Plus year 'round hot water

The heavy domestic hot water load imposed by modern automatic clothes and dish washers is easily handled by a B & G *Hydro-Flo* Heating System. The Water Heater unit, heated by the same boiler that heats the house, provides ample quantities at low cost—24 hours a day—winter and summer.



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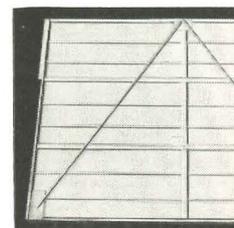
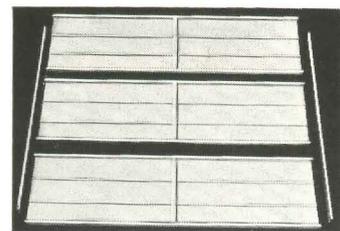
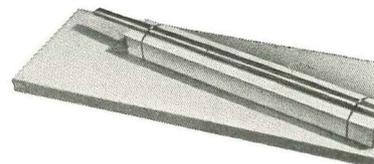
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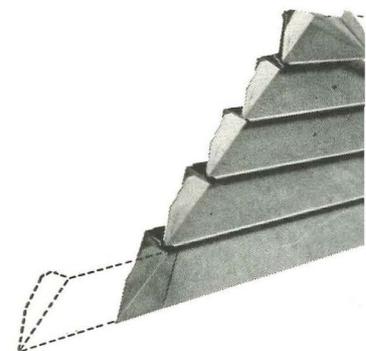


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Storing and handling cumbersome metal garage doors often present p... the mass contractor as well as t... supply dealer. So, K-D Garage Door... divided an 8' x 7' door into three... hardware) that can be assembled o... site. Moderately priced at \$36.75... troy, the Taylor-Made K-D panel... can be bolted together in about 1... unit's framing members are 16 g. s... face is 25 g. galvanized, rust-res... No primer is required, the manu... ports, just one coat of regular ho...
Manufacturer: K-D Garage Door S... Fitzpatrick St., Detroit 28, Mich.

ALUMINUM GABLE LOUVERS slide o...
ferent roof pitches

The tighter a house and the better... the more important it is to avoid c... with 1) good vapor barriers, a... quate ventilation. Leslie adjusta...



provide a simple means of assuri... air flow along gable peaks. Made o... the louver blades telescope to fit ar... from 4 to 12 up through 12 on 12... reinforced so that even when ex...

continu

Rheem Automatic Storage Water Heaters

make up the most complete line in the field—come in all sizes, all types—gas, electric and oil.

Rheem Winter Air Conditioners

provide safe, care-free, economical heating—automatically.



*Tips on Selling Homes...
remember—Men Are Lazy!*

Show him comfort—and the man is yours. Show him the automatic Rheem Gas Furnace and Rheem Water Heater—and you can prove he'll have all the comfort he wants—with none of the work.

He'll be convinced when you tell him how Rheem Furnaces are Fire-Tested at the factory—how

Rheem Water Heaters are Pressure-Proved—how this scientific pre-testing assures him of the best, most trouble-free service possible.

Let Rheem help you keep the lazy male in your homes. See your Rheem contractors today. They can prove to you that Rheem is the best buy for builders.

You can rely on



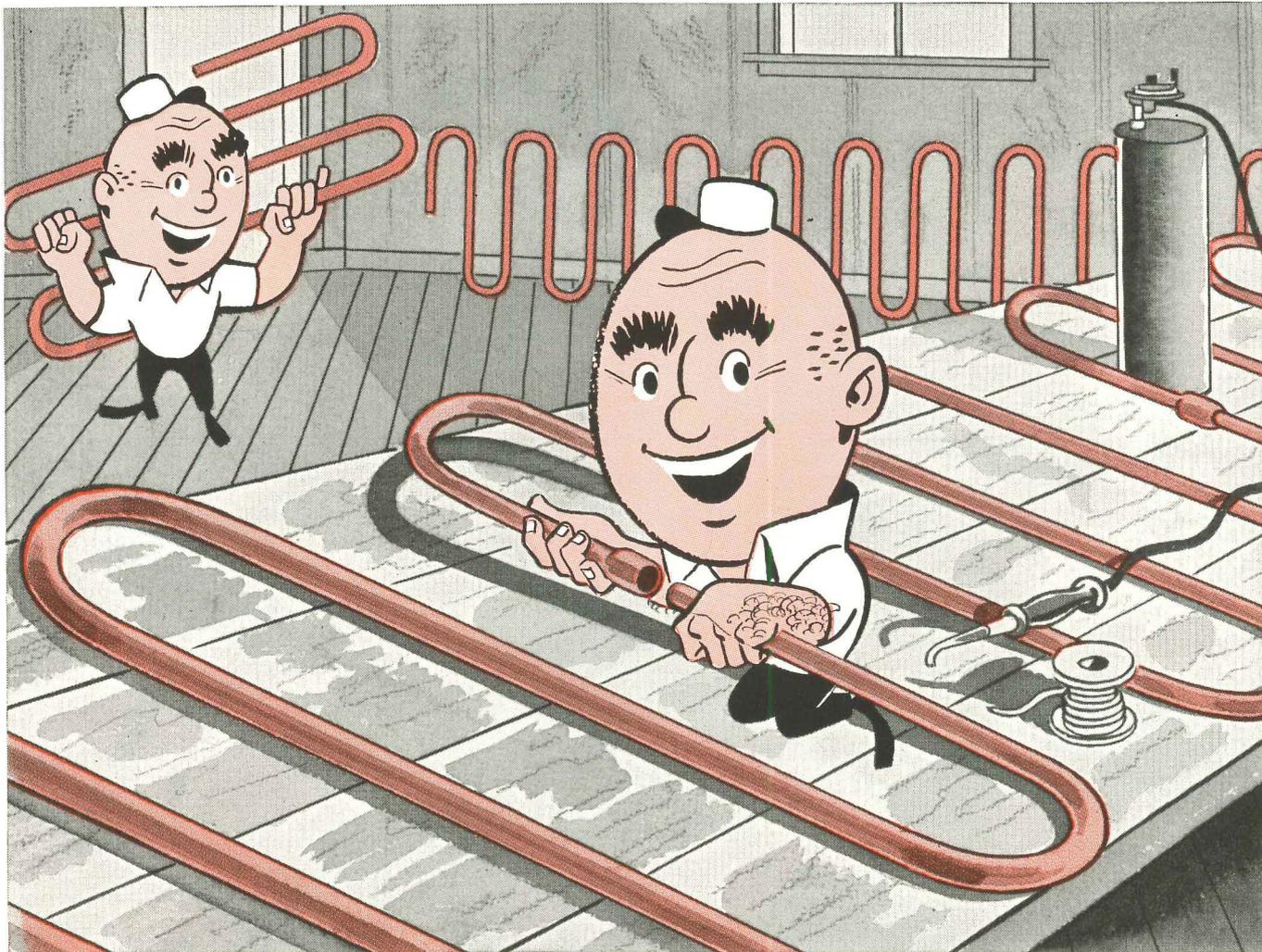
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RHEEM

MANUFACTURING COMPANY

Manufacturing Plants in 22 Cities Around the World



SIZES UP
TO 3/8" O.D.

Key to Low Cost

Bundyweld is the only tubing double-walled from a single strip, copper-brazed through 360° of wall contact. It's leak-proof, thinner-walled, yet stronger. It transmits heat quickly, has high bursting strength. It saves on material costs and installation time.

Standard 20' lengths of Bundyweld are easily formed into coils in shop or on job site. Expanded ends (furnished when specified) are quickly soldered into leakproof union. Joined, lightweight coils are easily mounted onto ceiling, quickly plastered over.

Beat the bandwagon . . . Offer Bundyweld Ceiling Radiant Heating NOW

Remember yesterday . . . when sleek, modern kitchens and colorful bathrooms sold houses for you? Everybody got on that bandwagon. So today you need a new clincher.

And here's the answer . . . Bundyweld Ceiling Radiant Heating. It's the bandwagon of tomorrow, and you can get the jump on it today!

Now you can offer a house where every room has the clean, refreshing, *all-over* warmth of a day in May. You can promise a tested, trouble-free heating system that practically brings the sun indoors, yet costs less to run. That's sales appeal!

You won't have to sell your prospects

on this wonderful new system. Bundy ads have already done that. Millions of people have read them in *Better Homes and Gardens*, *American Home*, *Small Homes Guide*, and *House Beautiful*. Requests for literature are pouring in. Buyers everywhere are writing for the names of architects and builders who handle Bundyweld Ceiling Radiant Heating in their areas. Start now to cash in on this terrific public interest. Send for your Bundy literature today.

Radiant Heating Division
BUNDY TUBING COMPANY
Detroit 14, Michigan

SEND FOR
FREE →
LITERATURE!



Bundyweld
Ceiling Radiant Heating

Radiant Heating Division, Dept. HH-453
Bundy Tubing Company, Detroit 14, Mich.

- Send free 20-page nontechnical brochure explaining Bundyweld Ceiling Radiant Heating.
- Send Bundy technical radiant heating pamphlet.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

COMPARE the
P-QUALITY FEATURES
LOW COST of the New

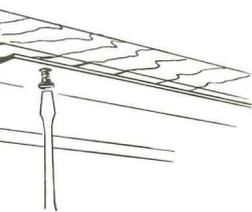
R-VEY
ING-DOOR
RDWARE

of the New CHALLENGER Series
 your needs for doors to 70 lbs.



Aluminum
 Track
 Oilite
 Bearings
 Adjustable

er Installation



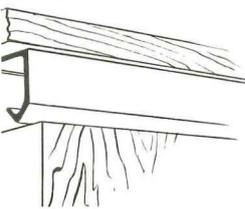
mounted Challenger track
 readily installed, requires
 no drilling.

Smoother Rolling



- V-groove track eliminates chattering
- Oilite bearings are self-lubricating
- RUSTPROOF Aluminum Track
- Durable Nylon Rollers

s Headroom



headroom is only 1"-1 1/4"
 IM track serves as trim—
 no painting necessary

More Convenience

Challenger sets
 (hardware and track)
 come completely
 packaged



—in sizes
 for standard
 door widths.
 Saves time in
 buying and handling.

Typical low delivered price only \$2.70 list
 —for completely packaged set for 2' pocket door,
 including track, hangers, flush door pull, screws.

Get all the facts from your supplier, or write Dept. H

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Western Div. (Calmetco, Inc.) • 609 S. Anderson, Los Angeles

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Helping the Architect design
 new, low-cost masonry structures
 of enduring beauty

DUR-O-WAL

WITH TRUSSED

Design



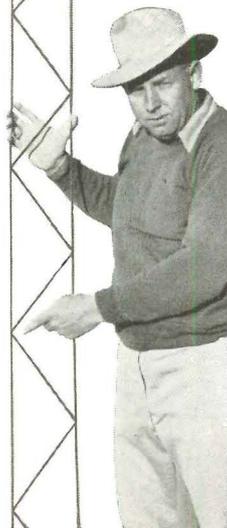
Dur-O-wal is available in
 both lap and butt weld to
 assure tight joints for every
 type of masonry wall.

**NOW, Block, Brick or Tile Walls
 are being Reinforced with steel
 STRONGER - FASTER - AT LESS COST**

ALERT builders throughout the
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 custom-designed Dur-O-wal to
 give masonry walls a backbone of
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 vides both vertical and horizontal rein-
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There's double economy in time-tested
 Dur-O-wal . . . low first cost and ease
 of handling cuts construction time.
 The trend toward greater wall expanse
 and exposed masonry demands the
 finest in steel reinforcing. Find out
 now why

Butt-Weld
 means tight
 Good-Looking
 Joints



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 Cedar Rapids Block Co.
 Cedar Rapids, Iowa

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 Syracuse 1, New York

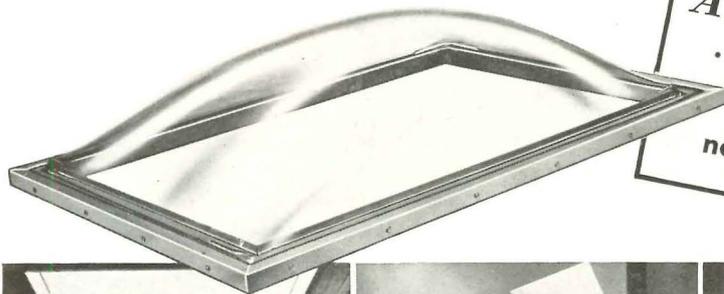
BRIGHT IDEAS

to make homes LIGHTER and BRIGHTER

... with DRAMATIC WINDOWS TO THE SKY!

For more practical use of inside rooms, more pleasant use of any rooms — put Wascolite Skydomes overhead. Genuine Wascolite Skydomes, with “the dome that floats in its frame”, are weather-proof, shatter-resistant, maintenance-free . . . come in 17 economically-priced stock sizes . . . square, rectangular or circular shapes . . . with clear colorless or white translucent acrylic domes. For new construction or modernization, on flat or

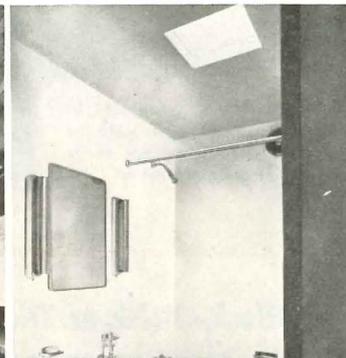
pitched roofs, wherever cheerful daylight is desired, easily-installed pre-assembled Wascolite Skydomes are the natural daylighting choice. See Sweets' 19a or write for new residential folder.



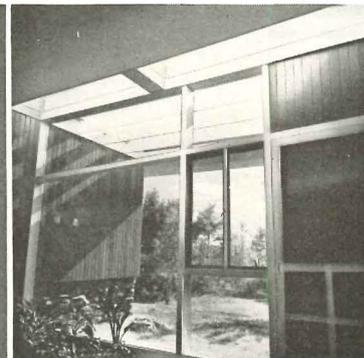
EXCLUSIVE!
frames of
**EXTRUDED
ALUMINUM**
... a big advance in
appearance and
performance ... at
no advance in price!



Never a “dull” moment in this kitchen—a Skydome sends floods of cheery daylight to every corner.



Plenty of bright daylight for shaving or make-up in this inside bathroom—there's a Wascolite overhead.



Sunlight an indoor garden with Wascolite Skydomes. Bright idea for sunporch, too.



Two Wascolites sunflood inside rooms here, make windowless spaces bright as all outdoors.



By day or night the light is right—fluorescent fixtures can be built into the Skydome “well”.

WASCOLITE SKYDOMES

U.S. PAT. 2610593



Other patents pending

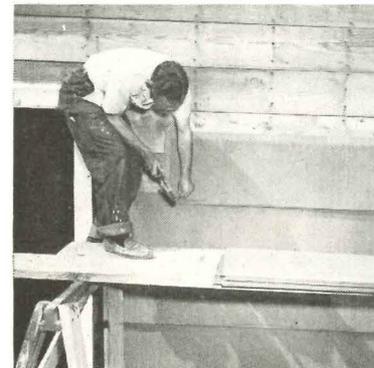
WASCO FLASHING COMPANY, 88 FAWCETT ST., CAMBRIDGE 38, MASS.

width they will not sag or rattle. also adjustable, is furnished for beneath the bottom vane. The lo with aluminum screen in five, six, vane units. Prices run from \$5.80 t

Manufacturer: Leslie Welding Co. Carroll Ave., Chicago, Ill.

CEDAR SHAKE AND BACKER bonded put on side wall in single step

Shingle fore and insulation board. Shakertown Glumac should save r carpentry on the job. This pr building material consists of an l cedar shake electronically glued waterproofed backer board. A w



plying the Glumac units actual two operations in one as he nai finished side wall and undercourse sheathing (or nailing strip) an paper. Even if his craftsmanship l man foaming, the carpenter can fi board around openings with master



because he cuts and saws through simultaneously. Packaged 11 unit (enough to cover 50 sq. ft. with 4 Shakertown Glumacs cost about per sq. ft., in place. The shingles grooved, and are tapered to pro shadowline in single-course applic are available in nine factory-staine Manufacturer: The Perma Produc Broadway, Cleveland 27, Ohio.

SEEING-EYE RANGE watches o'er cookery

“Just-marrieds” make up a good new home prospects, and what l bait can a house offer than a ra refuses to burn foods? Even experi makers will recognize the attri

continues

Here's why

Gold Bond ASBESTONE Roofing & Siding Products

mean satisfied clients for you!



Attractive appearance . . . freedom from upkeep . . . durability—these are some of the many reasons why Gold Bond Asbestone roofing and siding materials are so much in demand and so widely used.

When you specify Gold Bond Asbestone, you get lifetime protection and lifetime beauty. Asbestos-cement products will not rust, rot, corrode or burn. They are weatherproof, termite-proof and rodent-proof. Requiring no painting or maintenance, they are economical, too—actually cost less over the years than other types of exterior finishes.

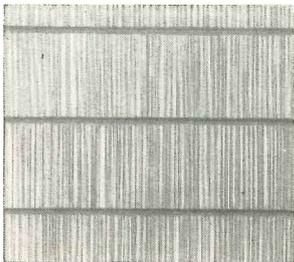
You will find Gold Bond Asbestone products adapta-

ble to many construction needs—residential, farm, commercial and industrial. They are easy to install. Your clients will like the distinctive designs and modern colors.

Gold Bond Asbestone is the newest group of products backed by Gold Bond's "undivided responsibility" guarantee. This assures you that the responsibility for performance, durability and firesafe qualities rests with one reputable manufacturer — National Gypsum Company.

Write today for *full* information. We'll be glad to send it to you.

An asbestos product for every building need



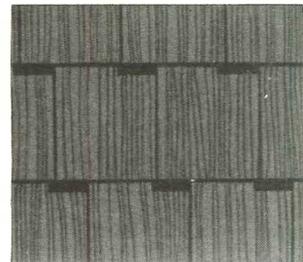
CHROMA-TEX SIDING SHINGLES
America's most beautiful home exterior. Rich texture rivals costly wood shakes.



WOOD-GRAIN SIDING SHINGLES (Straight Edge)
Beauty of natural wood-grain finish, permanence of asbestos-cement.



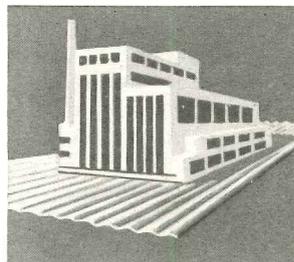
WOOD-GRAIN SIDING SHINGLES (Wavy Edge)
Same as the shingle shown at the left, except that bottom edge is wavy.



DUTCH-LAP ROOFING SHINGLES
Square-cut, wood-grain textured shingle for traditional straight line roof treatment.



HEXAGONAL ROOFING SHINGLES
A smooth-finished asbestos-cement shingle, applied in a diamond pattern.



STANDARD "400" CORRUGATED
An ideal material for heavy industry. Used for both roofing and siding.



ECONOMY "250" CORRUGATED
For light steel or wood framed industrial, commercial and farm buildings.



WALLBOARD. Flat sheets of asbestos-cement for interior and exterior use in buildings of all kinds. Flexible and utility types.

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Fireproof Wallboards • Decorative Insulation Boards • Lath • Plaster • Lime • Sheathing • Roofing • Sidings
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You'll build or
remodel better with
Gold Bond

The current threat to the next American

"Something is rotten in the state of design... After watching it for several years, after meeting it with silence, HOUSE BEAUTIFUL has decided to speak out.

"Two ways of life stretch before us. One leads to the richness of variety, to comfort and beauty. The other, the one we want fully to expose to you, retreats to poverty and unlivability."

So begins our Editor's challenging article in the April issue (on newsstands March 18). It tells how a small but influential clique would lead a Cult of Austerity with the slogan of "Less is more." It shows how this clique is foreign to native design and hostile to the reasonable desire for comfort and convenience in the American home. It proves the real and present danger of this threat to the rich promise of our expanding industry.

The April issue is important to you because your business is providing comfort and convenience, because you design and produce the objects that enrich our lives. The clique that HOUSE BEAUTIFUL openly opposes is aimed directly at you, as damaging to you as it is harmful to the people you are trying to serve.

HOUSE BEAUTIFUL believes that a high standard of living is our greatest contribution to the history of man. It recognizes that the American industry has made this possible. It is dedicated to raising the standard of American life even higher, not cutting back to the bare wall and empty floor.

The April issue of HOUSE BEAUTIFUL is the most important in our 57 years of publishing. We urge you to read it.

- delivers most sales action per copy
- sells both sides of the counter

House Beautiful

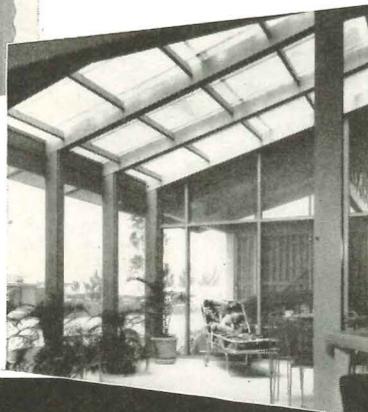
572 Madison Avenue, New York 22, N. Y.

COLOR · LINES · BEAUTY ·

with RESOLITE Shatterproof Glazing



Shatterproof Resolite is durable and safe for partitioning in home or office. Color and corrugations adaptable to any decorative plan. Resolite needs no refinishing, easily wipes clean.



Home patios are beautiful and protected with a canopy of colorful, translucent Resolite — easily installed on metal or wood framing.

Treat your clientele to the glamour of color and translucency... the economy of permanent finish... the safety of shatterproof, crackproof glazing.

For decorative or utility partitioning in homes, office or commercial buildings, Resolite's wide variety of beautiful colors makes it the ideal paneling material. Unusual lighting effects are easily achieved because of its translucency. Its corrugations are useful in obtaining special effects of height or breadth. Patio canopies of colorful translucent Resolite afford protection from sun and rain yet avoid the gloom of solid coverings.

Resolite is made of polyester resins, reinforced for strength and rigidity with an interwoven mat of glass fibers. It is unaffected by weather extremes of heat, cold or moisture. Resolite needs no surface treatment or refinishing; its beautiful glossy surface easily wipes clean.

For complete information on Resolite, including sheet specifications, colors and installation methods, and name of your nearest distributor, write

RESOLITE
CORPORATION
P. O. BOX 506
ZELIENOPLE, PA.

SMALL OR SUMPTUOUS —they're alike in one respect...

THEY HAVE ELECTRIC RANGES!

One house shown here sold for under \$10,000. The other was in the upper-income class. But both had what all types of home buyers want—*Electric Ranges* in the kitchen. They've learned that cooking electrically is both economical and easy, and assures a clean, cool kitchen. No matter what the size or cost of *your* houses, one item of equipment that will really help you make them sell is the *Electric Range*!

According to Mr. Joseph P. Lenny, who built this small home in Runnemede, N. J. (he sold 25 the day he opened his model house)—“In my experience, most home buyers can't resist an all-electric kitchen. And the kitchen can't be all-electric without an *Electric Range*. Although my homes are moderately priced, I offer this plus item and it helps me stay ahead of the field.”



Mr. Harry LeVelle, builder of this large home in Chevy Chase, Md., says, “90% of my home sales are to women who love the all-electric kitchen. They want to work in such a kitchen, although you might think that homemakers in such families would not be doing their own work.”

Among the appliances that help the homemaker to achieve gracious living in the Chevy Chase home is the modern, automatic range, and—of course, it's **ELECTRIC!** Mr. LeVelle, the builder, is convinced that the electric kitchen is his greatest sales factor.



More Builders Every Day
are Installing

**ELECTRIC
RANGES**



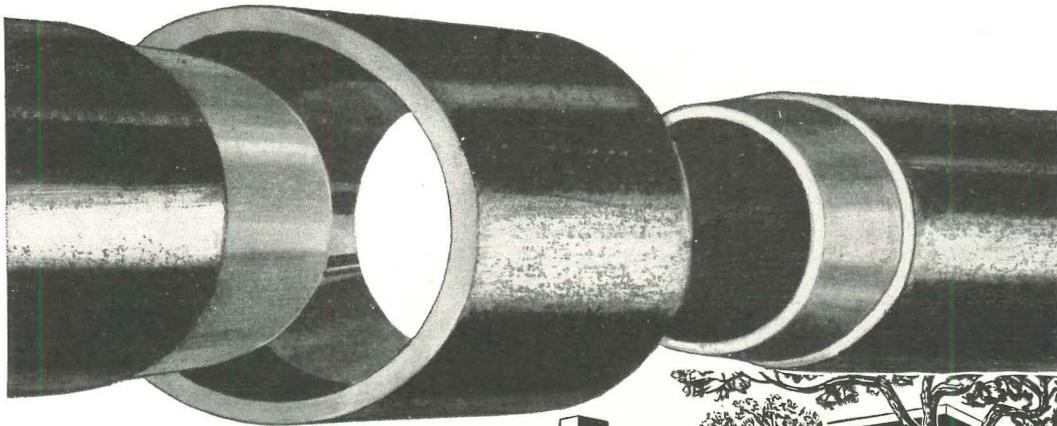
ELECTRIC RANGE SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • COOLERATOR • CROSLY • DEEFPREEZE
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WESTINGHOUSE

JOINTS STAY TIGHT!

ORANGEBURG®

ROOT-PROOF PIPE



Builders, engineers and architects rely more and more on Orangeburg Root-Proof Pipe and Fittings for trouble-free pipelines.



Time has established the quality of Orangeburg Pipe. Installations of 50 years or more prove that Orangeburg Pipe—installed with Taperweld® Joints—remains root-proof and trouble-free indefinitely underground. More than a million installations prove its dependability. Use Orangeburg Pipe and Fittings for House-to-Sewer (or Septic Tank) Connections, Down-Spout and Storm Drain Lines—other non-pressure outside uses.

Reasons for Orangeburg's Time-Defying Quality

The Plumbing Industry has sponsored Orangeburg for years because of its many modern features and advantages. It is *non-metallic*—strong, tough, resilient. It resists the acids, alkalis, salts and oils found in soils and sewage waste. It withstands freezing and thawing without cracking or breaking. The Taperweld® Joints are self-sealing. No cement or compound required. Joints stay tight, sanitary. Very low friction losses.

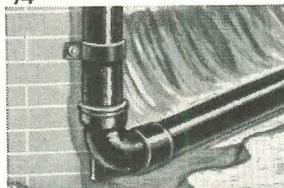
Orangeburg—The Leader

Orangeburg has pioneered this modern type of pipe. Specify it for trouble-free pipelines *always*. Look for the name—Orangeburg—on the pipe and fittings. The Orangeburg trademark is *your* guarantee that they are *genuine* Orangeburg products.

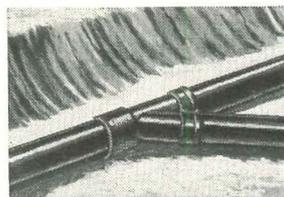
Send to Dept. HH-43 for catalog 306

ORANGEBURG MANUFACTURING CO., INC., ORANGEBURG, N. Y.

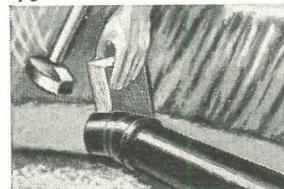
1/4 Bend



WYE

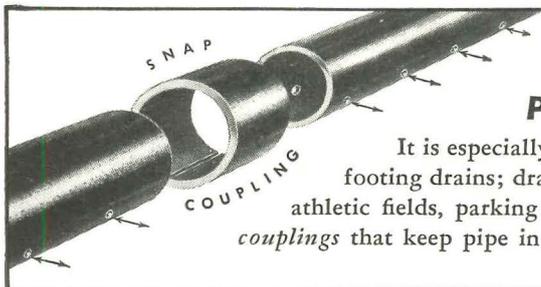


1/8 Bend



Less Work—Less Trouble

Eight-foot lengths—fewer to handle—fewer joints and other advantages speed the installation. So do Orangeburg Fittings.



Use the Perforated Pipe for These Installations

It is especially designed for septic tank beds; foundation footing drains; draining wet spots in lawns, drive-in theatres, athletic fields, parking lots, airports. Joints are made with *snap couplings* that keep pipe in line and prevent silting.



electronically controlled *Command* controls are marked for three cooking zones—warm, boil, and fry—these is subdivided into low, medium, Food temperature is maintained heat. Should the water boil away stew too long, the current is turned automatically. This luxury double-oven carries a luxury price: \$469.95. In the the manufacturer is also introducing spectacular, but no less good-looking and double-oven ranges retailing for to \$399.95.

Manufacturer: Westinghouse Electric Appliance Div., Mansfield

CLOTHES DRIER designed for fuss-free

Unlike most electric driers which V wiring, the new *Filtra-matic* can into any 120 V 20 amp. appliance needs no special plumbing or outside does not discharge moisture into Circulating room air keeps clothes tubes in the bottom of the cabinet the air from the revolving clothes laden moist air condenses on these drains into a porcelain tray below (a flexible hose may be attached to collect water to a floor drain, or to be emptied by hand.) An ozone



Products Designed to Cut the Cost of Building... FROM CELLAR TO ROOF!

IT IS POSSIBLE TO BUILD BETTER and SAVE MONEY at the same time

• Architect, Designer or Builder . . . we invite the opportunity to prove to you that the products and materials here shown—and others in addition—are among the soundest purchases you can specify or make.

Our claim to your attention is based upon three factors . . .

(1) We have been selling building materials for the past 43 years—in all parts of the United States—serving, and in continuous contact with, thousands of architects, designers and builders. We know something about your problems.

(2) In one period of our history, we spent more than half a million dollars on pure research—covering a good many problems the average builder or architect has never had the time to explore.

(3) At another period, we were responsible for the construction of thousands of houses—in the fastest time ever accomplished, at the most economical cost.

As a result, each product here offered has been specifically designed and manufactured to be (at least) competitive in installed cost; to be unusually economical in maintenance costs; to outlast and outservice competitive products; to increase the investment value of the house—for mortgage or resale purposes; to add materially to the appearance of the house.

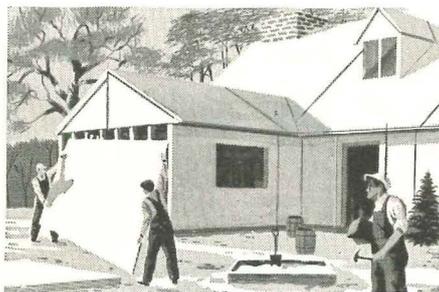
Through our representatives—soundly trained—you draw upon tested methods for exterior and interior design, for the scheduling of all construction operations, for setting up either site or factory fabrication, for the coordination of any or all operations. Equally important, you profit further by buying many products and materials from one dependable source.

Currently in *American Builder* there is appearing a series of articles by Griffith S. Clark of our firm—dealing with many of the most difficult problems currently encountered in the field of home construction. The principles there presented are applicable to residences in every price group.

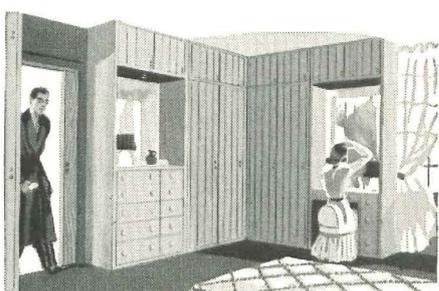
The coupon below will bring you illustrated, specification material on all Homasote and Nova Products. You entertain no obligation by sending in the coupon.



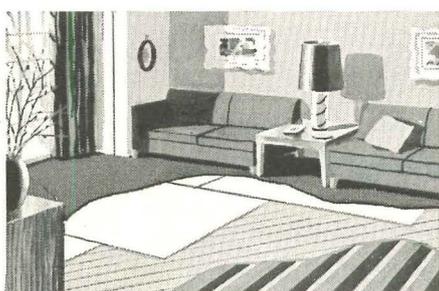
• Nova-Vita Horizontal-Sliding Windows are revolutionary—offer new advantages for every room.



• Homasote Big Sheets (up to 8' x 14') save time and labor in the sheathing of roofs and exterior walls.



• Nova Wall and Furniture Units—of many types—give more usable space in less total space.



• Homasote Underlayment is nailed directly to the rough flooring. No felt or pad is needed.



• Nova Roller Doors—for closets and passageways—are installed in less than 30 minutes.



• Sheathe and shingle in one operation with Nova Sidewalls and Roofs. Top quality: maximum economy.

HOMASOTE COMPANY

NOVA SALES
Co. Trenton 3, N. J.



HOMASOTE COMPANY, Trenton 3, N. J., Department 66C

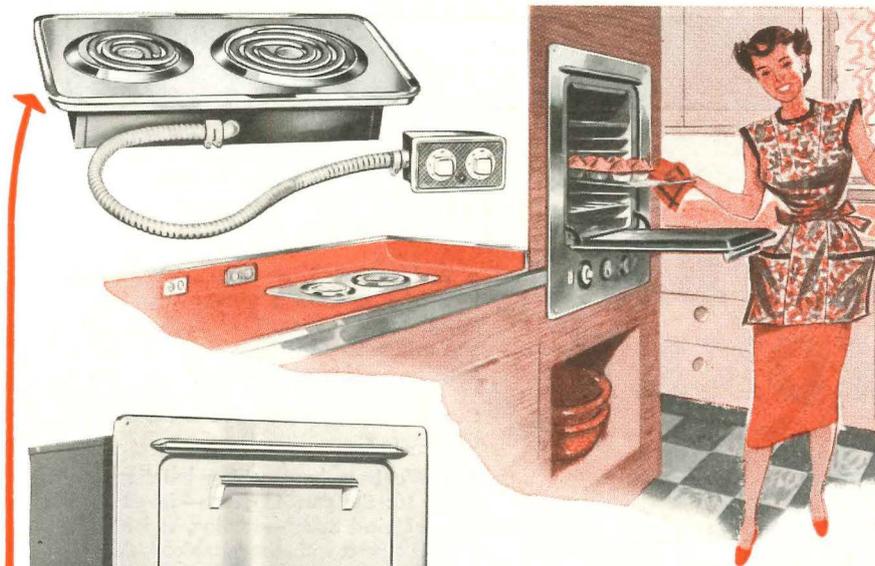
- Send detailed, illustrated literature on all Homasote-Nova products
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City & Zone.....State.....

My lumber dealer is.....



For that "custom-built"
Sales Appeal
 that sells homes!



Custom-Bilt
**BUILT-IN ELECTRIC
 RANGE COMPONENTS**

Custom-Bilt OVEN

Completely self-contained, with all controls in steel outer shell for cabinet or wall installation. Front and door of stainless steel. Oven chamber is one-piece construction, porcelain enameled both sides. Automatic temperature and time controls. Oven-vent concealed at front. Improved Infra-Red broiling unit.

Custom-Bilt SURFACE UNIT

Available in multiples of two, each consisting of one giant and one regular Monotube single-coil heating unit. Stainless steel top designed for flush mounting in cabinet, bar, or table. Controlled by seven-heat switches with signal light. Supplied with flexible conduit and wiring for remote-control location.

L&H Electric Range Components make it easy to incorporate the potent advantages of an appealing, custom-designed and decorated kitchen in your homes. A good sales feature in any price class is usually worth more than its costs — and the big news, the big swing in home-building today is to the custom installation of appliances. Write today for the facts on L&H Ranges and Oven Components — made by one of America's pioneer electric range manufacturers. Learn how they can help you build extra "sell" into every new or remodeled home.

A. J. Lindemann & Hoverson Co.
 605 W. Cleveland Ave.
 Milwaukee 15, Wisconsin
 Oldest American Range Manufacturer Under
 Continuous Ownership — Established 1875

B-2

Electric Ranges • Water Heaters • Refrigerators • Home Freezers

drum gives the clothes a dried-in-
 and thick glass-fiber insulation on
 the *Filtra-matic* keeps the heat
 drier. Over-all dimensions of the
 are 30" wide, 36" high (plus 5"
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 Manufacturer: Frigidaire Div.,
 tors Co., Dayton 1, Ohio

PRETTY PLASTIC-FACED HARDBOARD
 rugged duty on walls and ceilings

Developed as a protective finish for
 battleship decks, melamine has pla



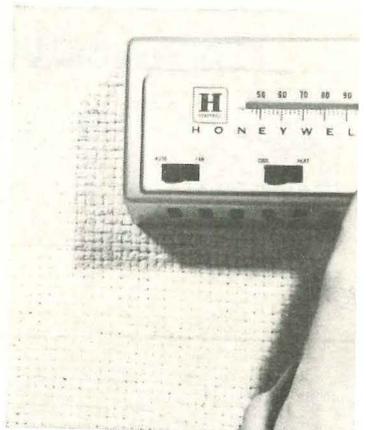
role in establishing a good nam
 tics." Soon after the hard-as-nails
 peared on the commercial marke
 topping, consumers brought it h
 the kitchen sink. Its price, in wo
 nesses, kept it from climbing u
 Now Barclay Mfg. Co. is makin
 paneling with a laminated venee
 trous melamine and selling it for 3
 retail. The panels are manufactur
 up to 4' and lengths up to 12'. Fo
 waterproof installations, metal m
 (aluminum or matching colors)
 are used to cover the beveled s
 colors available in the new pane
 ceptionally good.

Manufacturer: Barclay Mfg. Co.
 Gerard Ave., New York 51, N. Y.

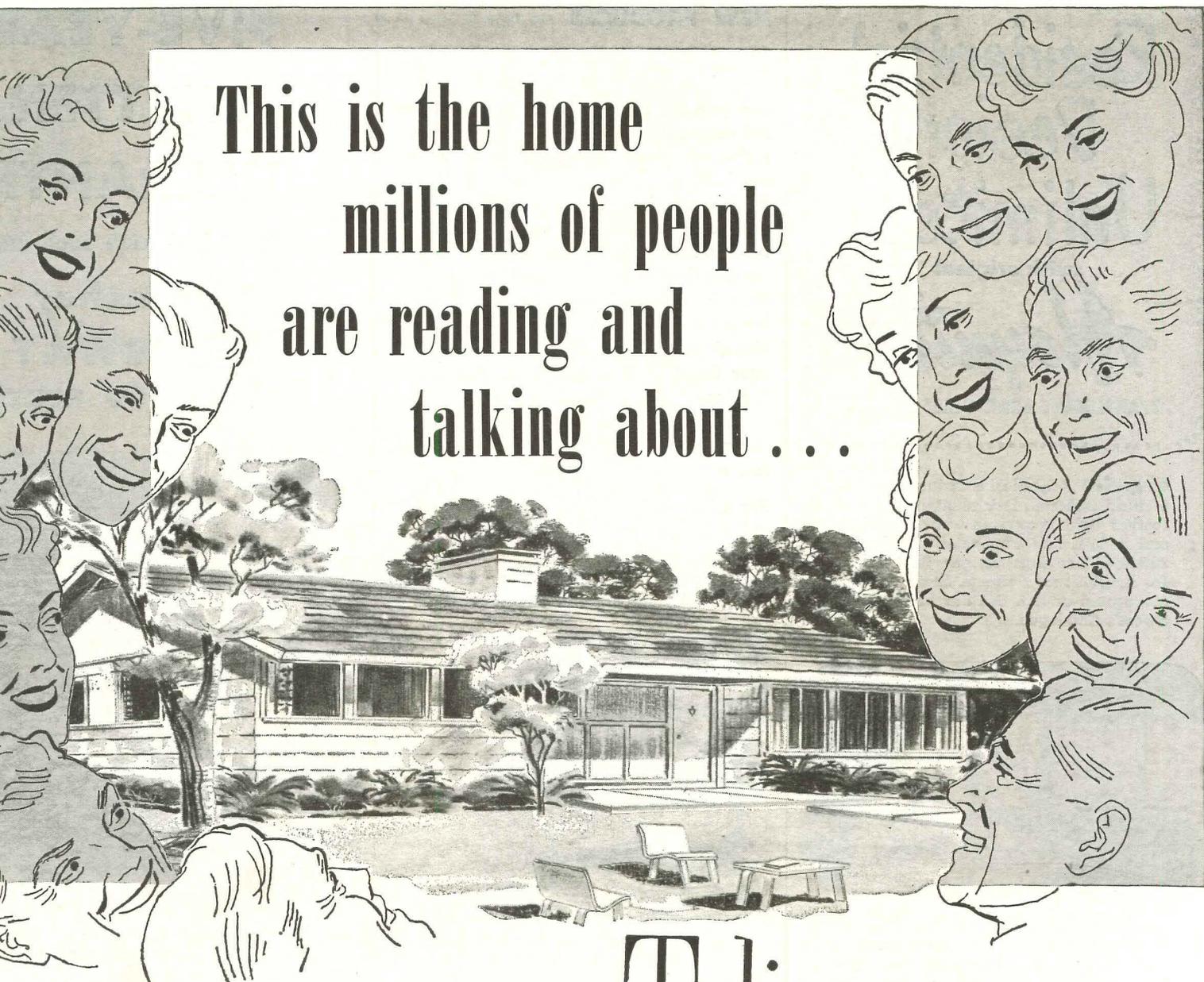
TRIPLE-DUTY THERMOSTAT engineer
 round air conditioning

Home heating and cooling needs
 trolled with the new M-H combin
 stat. Developed to keep pace wi
 residential applications of cooling
 new instrument eliminates the r
 arate-control switch plates, thus
 installation for the contractor.

contin



This is the home
 millions of people
 are reading and
 talking about . . .



Gunnison's great new

Talisman

...ked by a tremendous national advertising program reaching millions of people. Gunnison Dealers throughout the country are displaying demonstration "Talisman" homes beginning April 12—just in time for the spring home-buying season reaching its peak. This advertising appearing in full-color on April 11 *Saturday Evening Post* and April issues of *Better Homes & Gardens*, *Household* and *Living for Young Housewives*—tells readers about the exciting new "Talisman" and the features that make this home in a class by itself. Features

that include Carrier air conditioning, Hotpoint electric kitchen and laundry equipment, perimeter heating and many more.

Just as it caught the eye of more than 10,000 people at the Chicago convention of the National Association of Home Builders, the Gunnison "Talisman" will soon be the home millions are talking about.

If you'd like information on this successful enterprise, write on your business letterhead. We'll send you complete information on the "Talisman" and the other fine homes in the Gunnison line—72 elevations in all.

GUNNISON DEALERS RECEIVE

- Advisory financial service
- Interim financing
- Home planning service
- Technical assistance
- Elimination of architectural and material problems
- Full-page national advertising
- Sales promotion catalogs
- Local participation advertising
- Rail or truck shipments
- Prompt delivery

Gunnison Homes

Manufactured by Gunnison Homes, Inc., New Albany, Indiana

"Gunnison" and "Talisman"
 —trade-marks of Gunnison Homes, Inc.

Residential Design Unlimited!

with original

Alsynite

TRANSLUCENT FIBER GLASS PANELS

alsynite is the ideal translucent architectural material. It is shatterproof and feather-light. It can be sawed and nailed, and installs like corrugated metal with 30% to 80% savings. Design with Alsynite for brilliant new effects. Seven colors, corrugated or flat. See our brochure in Sweet's Catalogue.



in the brilliant design above, Raphael Soriano has utilized Alsynite to provide complete privacy without sacrificing daylight. Because of its light weight, Alsynite requires minimum supports. The photo below indicates the unlimited possibilities of Alsynite as a roof or ceiling material.



homes ... for skylights, window walls, patio roofs, awnings, shower stalls ...
commercial ... for store fronts, office partitions, luminous ceilings, signs ...
industrial ... for unlimited daylighting ... skylights, side walls, etc. No framing needed.

ALSYNITE COMPANY OF AMERICA

Dept. HH-1, 4670 DeSoto St., San Diego 9, Cal.

Please send me illustrated folder on Alsynite without obligation.

Name _____

Company _____

Address _____

City _____ State _____

Plants in California and Ohio. Distributors in Principal Cities

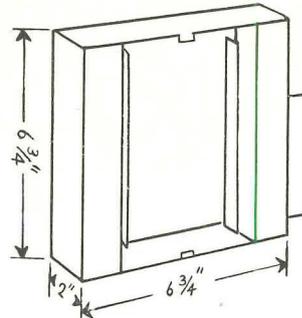
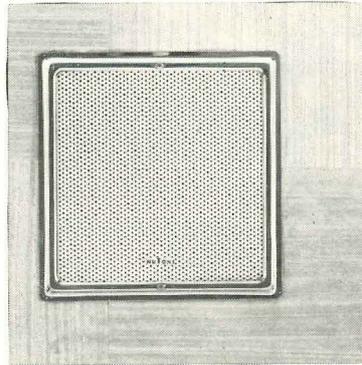
NEW PRODUCTS continued

also presents a neat control package to set before potential home purchasers.) Three slide-type selector switches operate the air-conditioning system; one turns it on and off; the second selects heating or cooling; and the third chooses continuous or intermittent fan breezes. Alas, the switches are not attuned to metaphysical impulses; one still has to exert fingertip pressure. The new stat will cost around \$30.

Manufacturer: Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.

GRACIOUS DOOR CHIME boxed for flush or surface mounting on wall or ceiling

For a home-selling pitch, door chimes might strike just the right note of welcome to impressionable house-browsers. Set in a simple, shallow box, Nutone's K-15 is one door-chime unit that is both tasteful and unpretentious.



No gilded clefs nor birdies adorn its perforated metal face. And, as further token of its modest purpose, the K-15 can be set with its 7" square grille flush-to-wall or ceiling surface, and then painted over to merge with the room-scape. Its 2"-deep box may be nailed directly to a wall stud or suspended between studs or ceiling rafters with hangers; no plaster ring is needed. Its power unit is completely enclosed to protect the mechanism from soot and dust. The chimes bong-bong for front door, bong for rear, and retail for \$9.95.

Manufacturer: Nutone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

CORROSIONPROOF WATER HEATER has copper core encased in steel shell

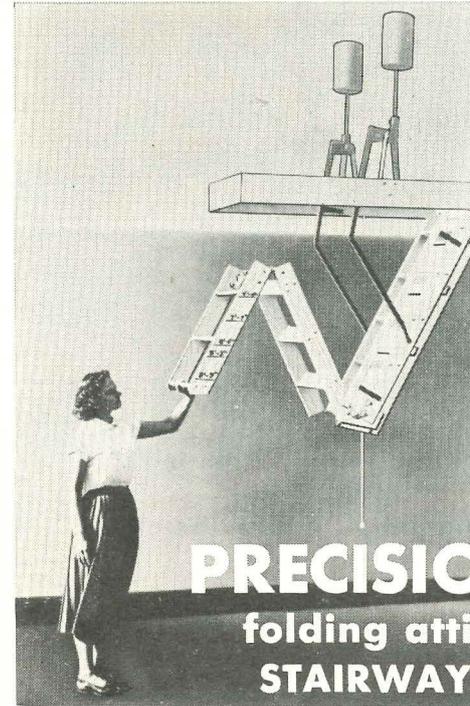
Trageser has exhibited its 103 years of copper-smithing in diverse products—from sacristy

continued on p. 194

FIVE-YEAR WRITTEN GUARANTEE

furnished with each unit

No other STAIRWAY offers so much



5 exclusive features

1. Actuated by counterweights.
2. Operates on roller bearing which makes raising and lowering practically effortless.
3. Insulated door panel to prevent heat loss to attic.
4. Full width safety treads.
5. Finest grade lumber and aluminum construction. All parts secured by bolts and screws.

Easy to handle -- Easy to install. Ship package assembled. Requires no attic work. No adjustments, no springs. Fits all openings from 7 feet to 9 feet 9 inches. (Ruler graduated, all you do is measure from floor to finished ceiling and saw off rungs to desired height.) Accepted by F.H.A. in U.S. Sweets. Specified by leading architects by more than 12,000 dealers in U.S. and Canada.

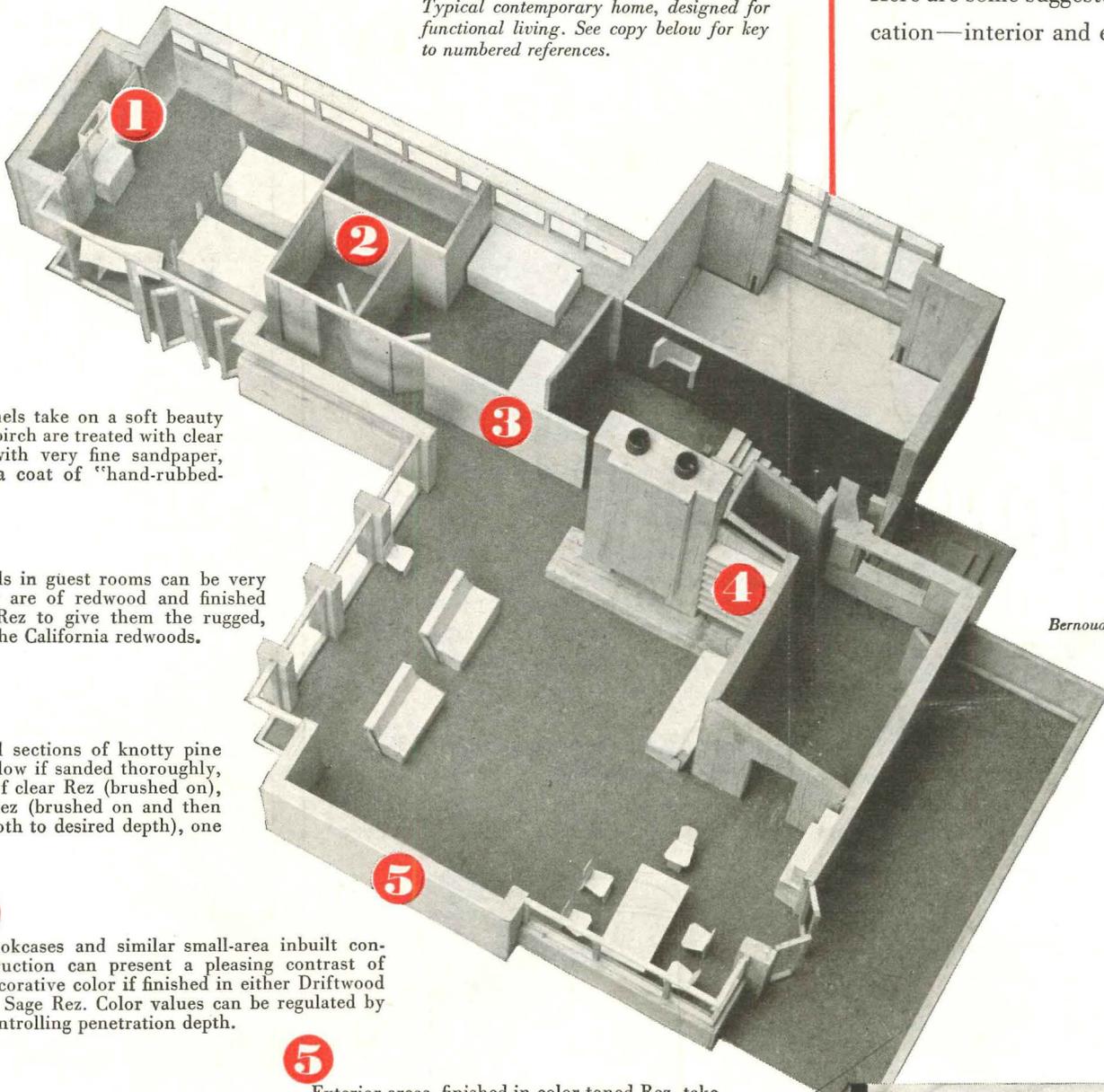
Contact Precision Jobber for attractive price

PRECISION PARTS CORPORATION
 400 North 1st St. Nashville 7, Tenn.

QUALITY, PROTECTION AND ADDED SALABILITY

Many architects, designers and builders are combining the beauty and protective properties of Rez—clear and color-toned—to add distinction and sales appeal to their contemporary homes. Here are some suggested areas of application—interior and exterior:

Typical contemporary home, designed for functional living. See copy below for key to numbered references.



Bernoudy-Muttrux, Architects

...s and panels take on a soft beauty ... woods as birch are treated with clear ... down with very fine sandpaper, ... ed with a coat of "hand-rubbed- ... ish.

...faced walls in guest rooms can be very ... e if they are of redwood and finished ... edwood Rez to give them the rugged, ... color of the California redwoods.

...ls or wall sections of knotty pine ... a soft glow if sanded thoroughly, ... ne coat of clear Rez (brushed on), ... White Rez (brushed on and then ... h soft cloth to desired depth), one ... nish.

4

Bookcases and similar small-area inbuilt construction can present a pleasing contrast of decorative color if finished in either Driftwood or Sage Rez. Color values can be regulated by controlling penetration depth.

5

Exterior areas, finished in color-toned Rez, take on the rich colors and tones of the Northwest forests, the desert, the seashore, the prairie. These beautiful tones have lasting values because Rez becomes part of the wood itself—penetrates and seals the pores. This affords protection against sun, rain, snow, ice, discoloration, fading and streaking.

THE REZ LINE ::: Clear Rez sealer and primer has a penetrating and sealing effect . . . White Rez for one-coat bleached effects . . . Redwood Rez—the rugged, ruddy color of the California redwoods . . . Sage Rez—a soft, dry green that captures the color of desert sagebrush . . . Driftwood Rez—smoky gray, with the color of bleached driftwood . . . Cedar Rez—warm cedar brown, colored like sherry aged in the cask . . . Mahogany Rez—a rich wine red, with the deep tone of saddle leather. These color tones are not to be confused with ordinary stains.

Get literature and color samples from paint, hardware or lumber dealers. Or, write MONSANTO CHEMICAL COMPANY, Merchandising Division, 1700 South Second Street, St. Louis 4, Missouri. In Canada, Monsanto Canada Limited, Montreal, Toronto, Vancouver.

Laux Rez: Reg. U. S. Pat. Off.

Nationally known . . .
Nationally preferred



THE

2127

NATIONAL *food waste* DISPOSER

Builders from Maine to California are finding that installing a NATIONAL Food Waste DISPOSER in the kitchen sink is a mark of quality-construction that the buyer instantly connects with the entire value of the house. For the NATIONAL is nationally known—nationally preferred.

Compare disposers side by side. No others can approach National's package of time-proven features. Only the National has the "split-ring" construction and the exclusive simple sink attachment that makes installation so quick, easy and inexpensive. Only the NATIONAL has the patented one-piece safety LOK-TOP cover. The NATIONAL is extra powerful—extra rugged. Its 1/3 h.p. motor grinds *all* food wastes; its special alloy lifetime grinding elements never need sharpening. No wonder the NATIONAL is proud to call itself "the lifetime disposer". It's built that way—to stay that way.

The NATIONAL costs no more to buy—less to install.

On that next home project specify NATIONAL—insist on NATIONAL. Send the coupon below for quick up-to-the-minute data on the NATIONAL DISPOSER.

NATIONAL DISPOSERS

A Product of
NATIONAL RUBBER MACHINERY CO.
AKRON 8, OHIO

Send me more detailed information on the Model NATIONAL DISPOSER checked below:

Dept. Model 35CS—Safety Lok-Top Cover
HH 453 Model NC-45—"Continuous Feed"

Builder's Name _____

Address _____

NEW PRODUCTS *continued*

basins and four-story-high brewery kettles to Maxim silencers for army tanks. Now the company is turning its talents to a quality item for the construction industry—a rust-

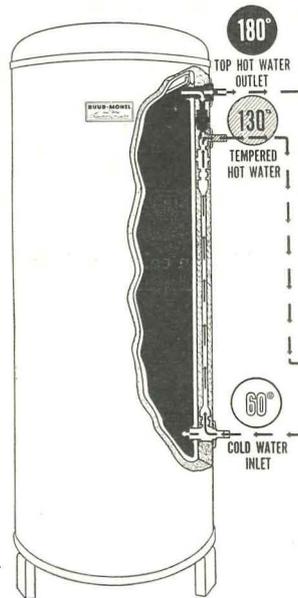


proof water heater with unalloyed copper innards in a heavy-gauge steel casing. Tagged *Copper Core*, the heater can withstand pressure up to 350 psi. Its gas control is fully automatic and its working parts are concealed. Prices run from \$200 for the 30 gal. size up to \$550 for the 80 gal., not installed.

Manufacturer: Trageser Copper Works, Inc., Maspeth, N. Y.

WATER HEATER supplies water at two temperatures from single tank

Water heated to the right temperature for clothes and dishwashing machines is down-



right dangerous if tapped undiluted for hand-washing or shower. The *Duo-Temp Laundry-master* offers a sensible solution to varying hot-water needs for general home use by providing water at two temperatures. It channels water heated to 180° F. to an automatic clothes

continued on p. 196

WEATHERSTRIPPED DOUBLE-HUNG WOOD WINDOW show infiltration rate **6** TIMES LESS

. . . than non-weatherstripped windows by actual test of weatherstripping manufactured by members of the Weatherstrip Research Institute. (University of Minnesota Institute of Technology Testing Laboratory.) Effectiveness is greater than 6 for average or poorly fitted windows.

Reduction in Air Infiltration Through Windows Due to Weatherstripping (Unlocked—no storm sash)

Type of Fit	Par Infiltration* cfh/ft. of Crack		
	Weather-stripped	Non-Weather-stripped	Weather Effective
Well	14.2	61	4.30
Average	16.7	104	6.24
Poorly	23.8	163	6.85

*At a pressure of 0.20 inch of water (20.4 wind velocity).

†Ratio of non-weatherstripped to weatherstripped par-infiltration.

The above facts, plus the complete story on weatherstripping is presented in Bulletin No. 35—"Air Infiltration Through Weatherstripped and Non-Weatherstripped Windows," published by the University of Minnesota Institute of Technology. The figures showing the economic value of weatherstripping are based on over-all results of climatic conditions in 12 selected cities in the U.S. covering a full range of weather conditions.

THE SYMBOL INSTITUTE MEANS

WEATHERSTRIP Research INSTITUTE

OFFICE OF THE SECRETARY
BOX 101 - RIVERSIDE, ILLINOIS
DEPT. OF AGRICULTURE

Please send my FREE Copy of the 47 page, illustrated Bulletin No. 35.

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____



...and it's OPEN!

ZIP...and it's CLOSED!

Pre-packaged, Ready-to-Install
NOVOPLY* SLIDING DOOR UNITS
 assure permanently trouble-free service!

Novoply Sliding Doors are s-m-o-o-t-h, e-a-s-y *gliding* doors! An adult can push 'em back and forth with a finger...and even a little child can always work them without any trouble at all!

These *precision-built* units are very simple to install, easy to adjust. Made of the flattest paneling ever produced — beautiful 3/4" thick Novoply — they are *guaranteed* not to warp more than 1/8", if properly installed.

They come pre-packaged, with pre-cut jambs and leader as well as all necessary hardware, including full-bearing top guide rollers and overhead track.

Ideal for closets and non-loading bearing partitions between rooms. Novoply Sliding Doors are wanted for new and remodeled homes... office buildings... apartment houses... hospitals, schools, motels and trailers. A *tremendously* profitable market you can't afford to miss!

See these Novoply Sliding Door Units right away. Our warehouses have them in stock and will give you complete details. Or, use coupon below.

M. Reg., Patented; other patents pending



UNITED STATES PLYWOOD CORPORATION

World's Largest Plywood Organization
 West 44th Street, New York 36, N. Y.

HH-4-53

Please send me further information, dimensions, etc., on Novoply Sliding Door Units.

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 dress _____
 y _____ Zone _____ State _____



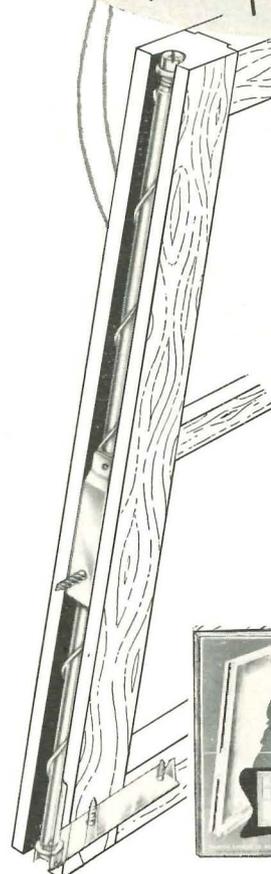
"Of course, it will have the **best** of everything!"

"That means those **wonderfully s-m-o-o-t-h**, so easy-to-open **HIDALIFT** fitted windows."



HIDALIFT

the completely modern sash balance



enthusiastically endorsed by
 leading architects, builders, and
 homeowners everywhere

That's because this streamlined, modern sash balance has everything. Completely concealed, it boasts positive lifting power provided by the highest quality coil spring. Its smooth-as-silk operation insures positive gliding action and perfect window balance at all times. Tension may be readily applied DURING installation on the "L" type attaching bracket; or AFTER installation on both the "L" and "Cup" types.

Hidalift is backed by aggressive sales-building advertising and merchandising campaigns—offers alert dealers, builders and contractors unlimited profit possibilities.

QUALITY PRODUCTS FOR OVER A CENTURY



HIDALIFT DIVISION

The Turner & Seymour Mfg. Co.,
 Torrington, Conn.

Send complete literature and prices on Hidalift.

Please check Dealer Builder
 Arch.tect Contractor

NAME

ADDRESS

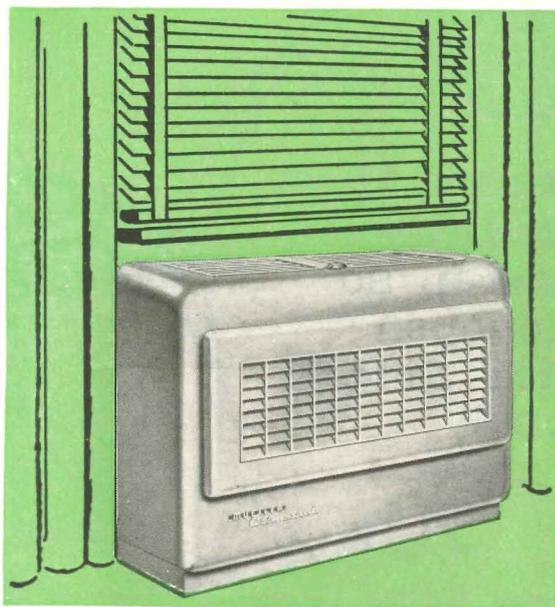
CITYZONE.....STATE.....



NEW PRINCIPLE in Home Cooling!

Makes the Homes You Build

SELL FASTER!

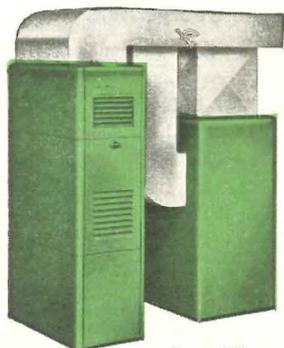


Mueller Climatrol

Type 910 Recessed Summer Conditioner

**Low Cost — Built into the Wall —
Fits between Standard Studdings —
Air-Cooled — No Plumbing.**

*for all-season
comfort*



Type 110-80
Winter Air
Conditioner

Type 903
Self-Contained
Cooling Unit

Type 903 Mueller Climatrol — a self-contained cooling unit for installation with any forced warm air heating unit. Available in 2, 3, 5, and 7½ ton capacities. Ideal for installation with high-boy, lowboy, horizontal or counter-flow winter air conditioners. Types 901 and 904 air-conditioning units, also available in wide range of sizes.

Any house you build with an integral cooling system sells faster than one without. That's why the new Mueller Climatrol Type 910 is made to order for small-homes builders. Inexpensive — neat, attractive, efficient. Home buyers find the built-in cooling element attractive — they like the way it's included in the mortgage. This unit is also ideal for motels, garden apartments, offices, etc.

No plumbing required, no drain or water connections — the new Mueller Type 910 is air-cooled and simply slides in between standard studdings. You build extra comfort, extra saleability into every home you put up when you include Mueller Climatrol Type 910 Recessed Summer Conditioners.



For descriptive folder, write the
L. J. MUELLER FURNACE CO.,
2020D W. Oklahoma Ave.,
Milwaukee 15, Wisconsin

L. J. MUELLER FURNACE CO.,
2020D W. Oklahoma Ave., Milwaukee 15, Wis.
Please send me the free descriptive folder on Mueller Climatrol.

- Type 910 Recessed Summer Conditioner Complete line of heating and air-conditioning equipment

Name..... Title.....

Company Name

Company Address

City.....(.) State.....

washer and dishwasher and direct water supply, premixed to a mod 130°, to household faucets. Duo-T is constructed of rustproof monel, a copper alloy. Prices range from \$ the 25 gal. size to \$400 for the 67 g Manufacturer: Ruud Mfg. Co., Pitts



STACKED BRICK precast into wall panels

A prefabricated masonry wall section, or *brico* panel can cut hours of costly brick laying. The sections, made of brick in a stacked bond, are 2½" thick and available in sizes up to 4'-6" wide by 8'-2" high. Steel reinforcement runs through the vertical and horizontal joints, making the panel strong enough to be used as a load-bearing wall in two-story construction. The back surface has a textured cement finish. On order, bolts, ties and wood blocks will be cast into the panels wherever necessary to facilitate attachment to other materials. Six colors of face



brick are available. Price of *Silbrico* is 65¢ per sq. ft., F.O.B. plant. Compared in the Chicago area cost around \$1.00 per sq. ft.—about 50¢ to 80¢ less than conventional brick wall. The firm is also manufacturing precast patio slabs and an outdoor fireplace that can be bolted together with a monkey wrench; no mortar is necessary. Manufacturer: Silbrico Corp., 5901 Chicago 38, Ill.

Technical Publication.

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Plus Value For Your Homes . . .

...ing green lawn helps make any house a
 With today's emphasis on outdoor living, large
 areas, etc., thick, velvety Scott lawns provide
 perfect setting. Their outstanding beauty is a
 of perfection recognized everywhere. Best
 your homes can have the distinction of Scotts
 very little, if any more, than ordinary lawns.

...y this plus value and resulting enthusiastic
 satisfaction by always specifying and using
 Seed and Turf Builder. Write at once for
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 requirements.

...ott & SONS CO, 106 Spring St, Marysville, O
 also Palo Alto, California



FREE Lawn Care BULLETIN SERVICE

Keep up to date on lawn building developments along with practical tips on soil conditioning, grading, feeding, drainage, seeding, sprinkling, etc. Life-time subscription to Lawn Care and digest of 100 back issues is yours for the asking.

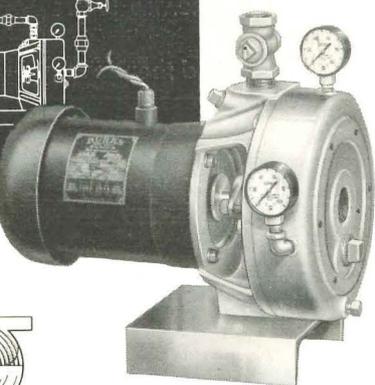


...S TO SPECIFY *Scott's* LAWN PERFECTION

Ready...NOW!

THE NEW BURKS IHV SERIES PUMPS FOR AIR CONDITIONING APPLICATIONS

Here they are—the great new Burks IHV Series Centrifugal pumps! Designed especially for air conditioning use—and engineered for highest possible efficiency.



PATENTED "KAM-ACTION"

...ve Burks impeller design with
 e volute. Increases efficiency, per-
 capacity.

...ite—today—for full details
BURKS PUMP COMPANY
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- Can be used either horizontally or vertically—without any mechanical changes.
- Patented "Kam-Action" impeller-volute combinations.
- Full length solid stainless steel shaft. Assures perfect alignment of motor, shaft and impeller.
- Balanced bronze impeller means smooth, quiet operation.
- Available in sizes from 1/4 hp. through 5 hp.—single and 3-phase.
- Heads to 195 feet—capacities to 110 gallons per minute.
- Equipped with supply and discharge pressure gauges, and control valve for adjusting to the most efficient pressure for each installation.

NEW LAUNDRY AIDS give Kitchen Maid Kitchens



Greater Buy Appeal

Ironette (above). Now, for the first time, an ironing board that stores neatly out of the way yet doesn't have to be folded, hung up or moved. It slides easily into firm working position on hardwood guides and slides. Can be used from either standing or sitting position. Requires very little space. No legs or other obstacles to hamper and annoy. Cabinet accommodates conventional countertop and provides large storage area underneath. Electric outlet is located in cabinet, within easy reach of ironing board.

Hide-a-rack

The handy drying rack folds neatly within standard wall units, out of sight, no obstruction. Will not interfere with dishes or other contents of cabinet. When pulled out, it provides head-high rack for drying personal laundry or for hanging freshly ironed clothing such as blouses, skirts, etc. Rack is aluminum, fits four standard cabinets.



Laundry Cart



This multi-purpose Laundry Cart with built-in hamper simplifies handling of soiled clothes and linens. Is also valuable as a portable unit for serving food, beverages, etc., or for entertaining when extra counter or cabinet space is needed. Unit has storage area at back for starch, laundry-soap and accessories. Mounted on ball bearing, rubber-tired casters, cart can be moved easily. Cart slides into opening under permanent countertop, or may be placed at end of counter.

Never before have accessories like these been offered in standard, factory-built kitchen cabinets. They give greater buy appeal to Kitchen Maid Kitchens and in combination with other well known Kitchen Maid features—Flo-Line styling, fine hardwood construction, solid safety shelves, aluminum drawers, guaranteed warp-proof doors, six colors, white, or Natural Finish—they mean faster home sales to builders featuring Kitchen Maid Kitchens. Write for literature.

KITCHEN MAID

FIRST AND BEST IN KITCHENS

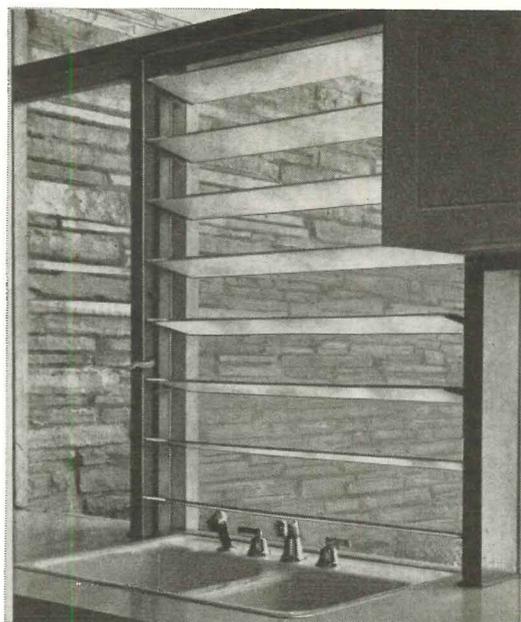
Approved for "Trade Secrets" Houses

THE KITCHEN MAID CORPORATION, 434 Snowden Street, Andrews, Indiana
 Please send booklet containing new kitchen layouts, planning suggestions and details of the Kitchen Maid line. I am an Architect Builder Dealer.

Name _____
 Street _____
 City _____ State _____

SUN-SASH

air-controlled louvred windows



America's Largest Selling Lowest Cost Louvred Window



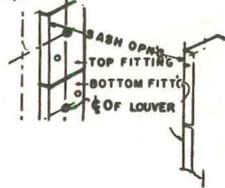
- SUN-SASH Features:**
- Automatic locking
 - Inside cleaning
 - One-finger operation
 - Fits any size opening
 - Draftless ventilation
 - Screens or storm sash can be fitted to the opening
 - Can be installed vertically or horizontally.

SUN-SASH . . . a louvred window that is designed specifically to meet your building needs. Sun-Sash is perfect for new construction or remodeling . . . for kitchen windows . . . porches . . . breezeways . . . interior partitions . . . bathrooms . . . attic ventilators and cellars. Specify Sun-Sash air-controlled louvred windows. — America's largest selling louvred window.

MULLIONS

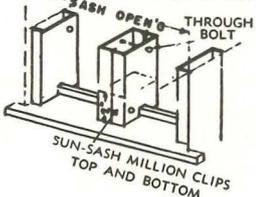
DOUBLE HEIGHT

With jamb fittings butted over each other. Cut 15/16" from bottom of top Sun-Sash to provide glass overlap.



DOUBLE WIDTH

WITH CENTER MULLION OF 2 JAMB FITTINGS FASTENED BACK TO BACK.



INSTALLATION IS EASY AND INEXPENSIVE



Screw on Sun-Sash fittings to side of window frames.



Slide glass louvres in to rattle-proof spring clip holders.



Close end of clips over glass to hold blades firmly in position.

MAIL THIS COUPON FOR FREE CATALOG

SUN-SASH COMPANY
38 PARK ROW, N. Y. 38, N. Y.

HH 1

NAME.....
ADDRESS.....
CITY..... STATE.....

TECHNICAL PUBLICATIONS

GLASS. Mississippi Glass Catalogue No. 53, Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo. 16 pp. 8 1/2" x 11"

Prepared to help architects, contractors, and decorators select the right kind of patterned glass for particular applications, the catalogue gives valuable technical data on *Cool-ite*, Mississippi's heat-absorbing and glare-reducing glass, and describes the essential features of the firm's other rolled, figured, and wired glass products. Close-up photos illustrate the various patterns, and tables give information on sizes available, and light-transmission characteristics.

MERCHANDISING. House Selling Hints. Mullins Mfg. Corp., Warren, Ohio. 4 pp. 8 1/2" x 11"

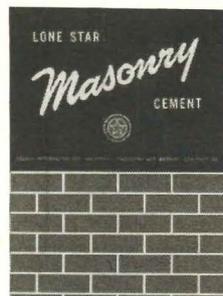
Based on tried-and-true merchandising practice, the booklet suggests a guided-tour approach to selling a house. It points out that the builder-salesman's job is to make prospects aware of the home's construction features and the products and materials used.

WATER SYSTEMS. F & W Water Systems, Catalogue No. 210. Flint & Walling Mfg. Co., Inc., Kendallville, Ind. 52 pp. 8 1/2" x 11"

F & W's complete line of pumps and water systems, including several new shallow and deep well models, are described in detail and illustrated in this new three-color catalogue. Pump-construction details, sectional views, selection tables, water-requirement charts, and pipe-friction tables are included.

MORTAR. Lone Star Masonry Cement. Lone Star Cement Corp., 100 Park Ave., New York 17, N. Y. 16 pp. 8 1/2" x 11"

Following an outline of advantages for the company's masonry cement, such as uniformity, low absorption, and high water repel-



lency, the booklet goes on to explain in easy-to-read graphs the effects of mix proportions and mixing time on the mortar's water retention, strength, and absorption.

SIDING. Colorbestos Siding Sheets. Johns-Manville, 22 E. 40th St., New York 16, N. Y. 8 pp. 8 1/2" x 11"

Illustrated with striking full-color photos, the brochure presents information on J-M's ribbed and colored asbestos-siding sheets.

continued on p. 204

Ask the man behind the

Coated optics give you this — not this

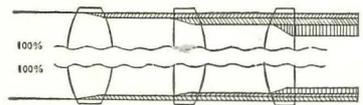


Model 3000, \$185.00*, complete with

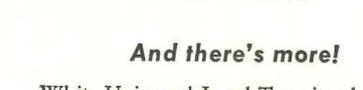
with a White Universal Level-Transit

HERE'S what coated optics do for you. You can put in a full day of work without eyestrain or headache. There's less glare for a mis-reading. You get a clear, sharp sight — not a fuzzy image. What's more, you get your reading in far less time. Check this diagram. See for yourself. Coated optics pass through up to 90% more light, provide a clearer image.

PASSAGE OF LIGHT THROUGH UNCOATED LENSES



PASSAGE OF LIGHT THROUGH COATED LENSES



And there's more!

White Universal Level-Transits also feature internal focusing, guarded view arc and ball bearing race which insure smooth operation, even in sub-zero temperatures. Check one out on your next trip. You'll soon be convinced a White can make your work faster, easier, more accurate . . . Write for Bulletin 1000, DAVID WHITE Co., 314 W. Court Street, Milwaukee 12, Wisconsin.



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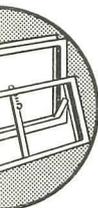
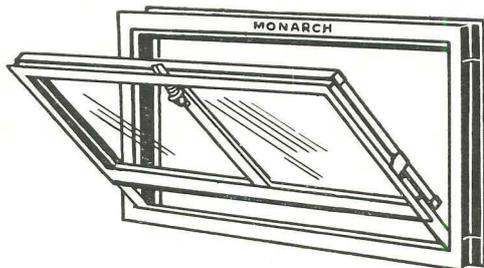
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- In-A-Slides have maximum strength and rigidity. Have spot welded, reinforced corners—Stand alone, which makes for easy installation.
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- Doubly weather tight, against wind, rain or snow—Perfect fit of sash eliminates return trips for refitting.
- All windows, screens and storm sash bonded and finished in baked enamel.

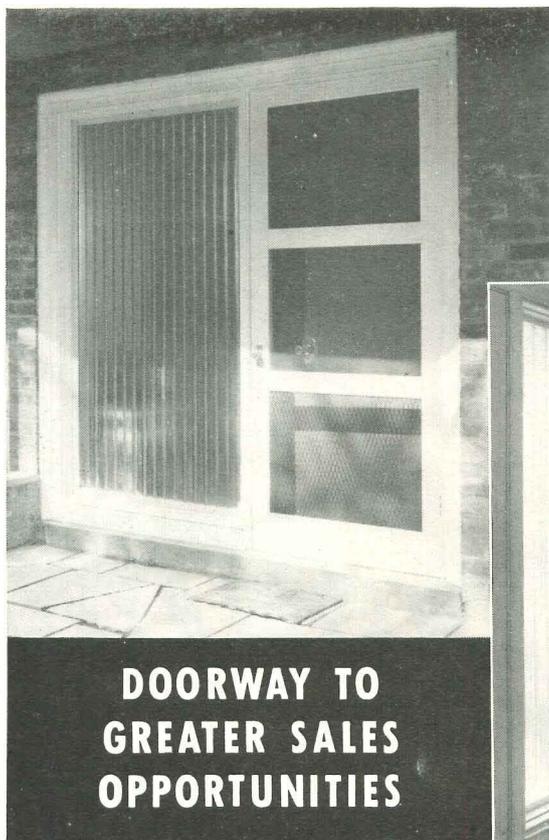
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Give Your Homes a Brighter Look ... Add Eye-Appeal and Buy-Appeal with Structural Corrugated Glass

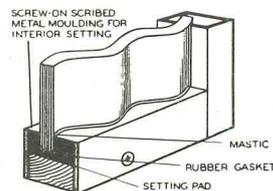
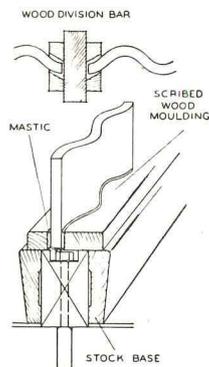
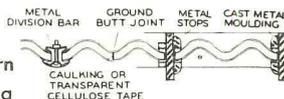
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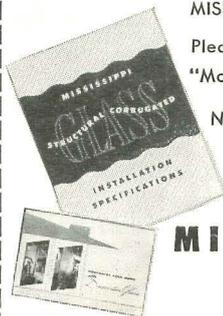
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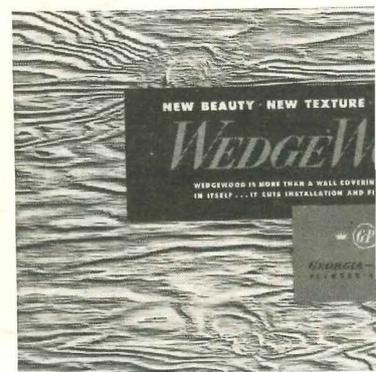


PROTECTIVE COATING. Monsanto F
Paint Preservation, Bulletin 11652 F
Chemical Co., Organic Chemicals I
Louis 4, Mo. 4 pp. 8½" x 11"

Chemicals for protecting paint a
surfaces against mildew and m
viewed in this bulletin. Ways and
suggested for utilizing Monsanto
to preserve water-base paints, late
emulsion paints, and oil paints
exteriors and interiors.

WOOD PANELING. WedgeWood W
Georgia-Pacific Plywood Co., 270 Pa
York 17, N. Y. 16 pp. 9" x 12"

Five photos of attractive rooms sl
applications of *WedgeWood*, a gr
plywood. The paneling is describ
easy to apply and finish. It is al



to be inexpensive. The reader is
a comparative cost-sheet page, to
stalled costs of various decorative
ing materials.

SWIMMING POOLS. Landon, Inc.—
—Equipment—Service—Supplies. L
5920 Sepulveda Blvd., Van Nuys,
8½" x 11"

Two booklets, *How to Build A
Pool and Public Pool Bulletin*
cluded in this portfolio comple
tects and builders. The kit a
typical plans for poured-in-for
concrete, and concrete-block poo
a Landon equipment catalogue a
and cost-estimating forms.

LUMBER. Where to Buy Douglas Fi
Hemlock, Sitka Spruce, Western
West Coast Lumbermen's Assn
Morrison St., Portland 5, Ore. 46 p

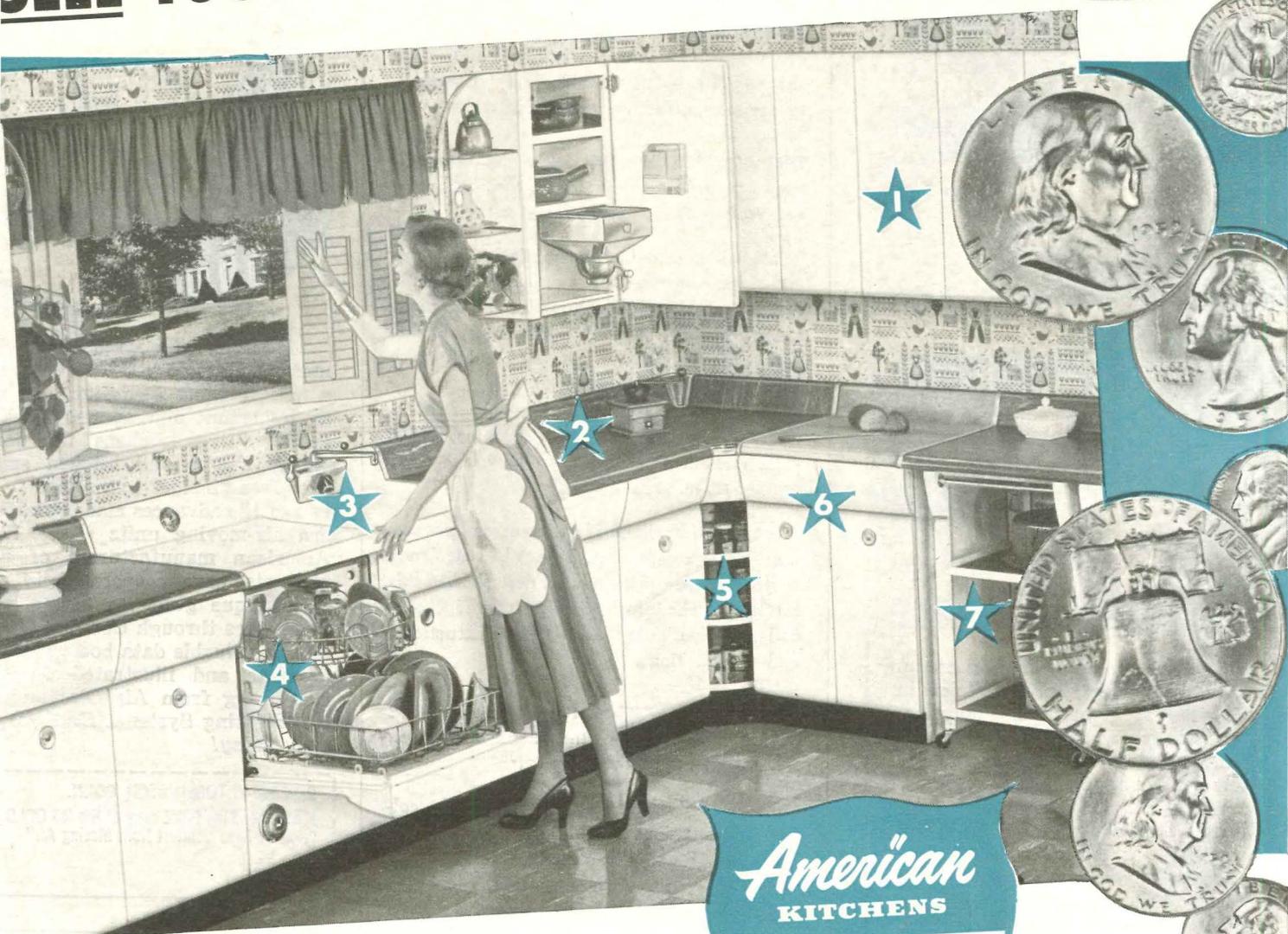
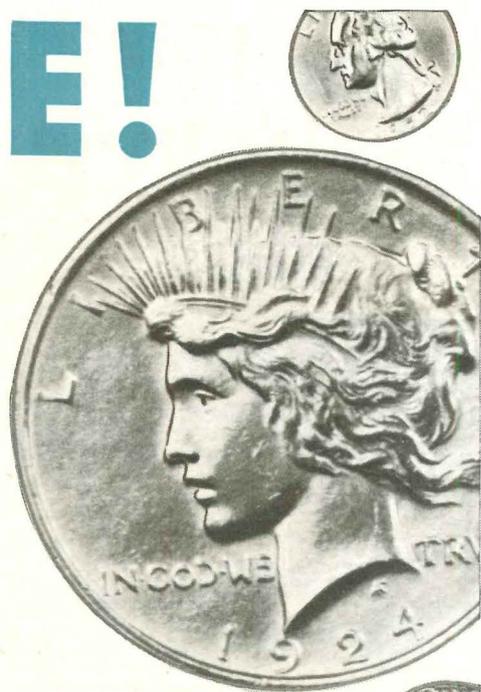
The latest edition of *Where to B*
to-date personnel and addresses o
produce the major portion of lu
West Coast area. The listing i
mills, fabricators, glue-laminating,
wood-preservation plants. Deta
given on plant facilities, equipm
cial services, species and lumber
factured. Also noted are maxim
rough and surfaced timber colu

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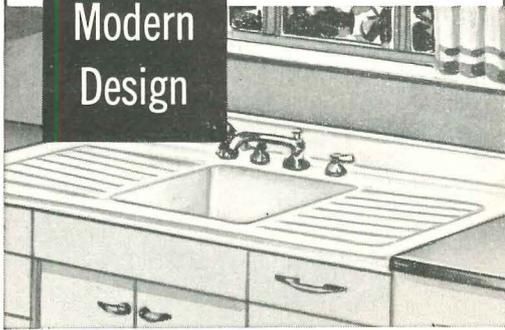
American Kitchens Division, AVCO Manufacturing Corporation
 Connersville, Indiana. Dept. No. HH-4
 Please send me complete information about American
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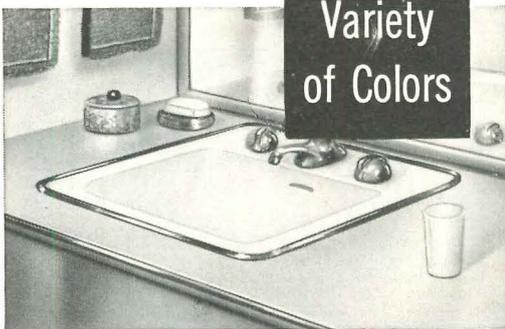


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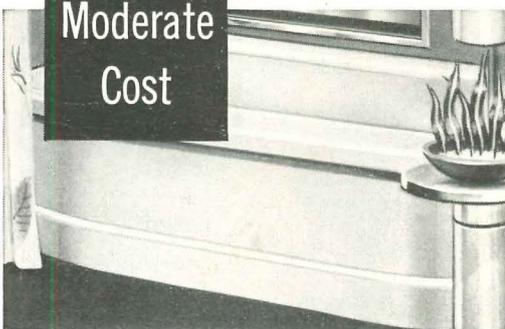
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Armco Steel Corporation



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WINDOWS. The New Outlook—A Book of New Ponderosa Pine Window Ideas. Ponderosa Pine Woodwork, 38 S. Dearborn St., Chicago 3, Ill. 20 pp. 8½" x 11"

Fourteen architectural renderings show imaginative yet practical applications of stock wood



window units. Available through lumber dealers, the simple wood windows can be arranged, this booklet convincingly illustrates, to produce attractive, modern interiors.

PREFABRICATED HOUSES. New 1953 Admiral Dream Homes. Admiral Homes, Inc., 149 Water St., West Newton, Pa. 8 pp. 8½" x 11"

The booklet contains five renderings of two- and three-bedroom homes designed by Architect Joseph Hoover for Admiral. Floor plans are shown, and over-all dimensions, livable floor area in square feet, and cubage are noted next to each sketch.

HEATING. Kritzer Baseboard Heating, Form B752. Radiant Coils, Inc., 2901 Lawrence Ave., Chicago 25, Ill. 16 pp. 8½" x 11"

Five types of baseboard heating assemblies and accessories comprising the newly redesigned Kritzer line are pictured and described in this catalogue. The information presented includes coil selection data, installation instructions, and specifications.

BUSINESS MACHINES. 10 Keys. Booklet No. RE 8500. Remington Rand, Inc., 315 Fourth Ave., New York 10, N. Y. 4 pp. 8½" x 11"

The folder describes a fast way to do columnar tabulations for billing and statistical work with Remington's electric 10-key tabulator typewriter. According to the publication, a typist can tabulate accurately from one column to another without removing her hands from the keyboard.

COPYING PROCESS. Hundreds of Uses for Ozalid. Ozalid, Div. of General Aniline & Film Corp., Johnson City, N. Y. 48 pp. 5" x 8½"

A process for duplicating working drawings and records from originals prepared on translucent paper is described in this booklet. Specific advantages for small as well as large firms are cited for the *Ozalid* process.

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