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February 1955 house + home

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NEW OFFICERS, posing for first group portralt immediately after their election by NAHB directors, are (I to r): Joseph B. Haverstick of Dayton, Ohio, first vice president; Earl W. Smith of El Cerrito, Calif., president; Carl Mitnick of Merchantsville, N.J., secretary; and Franklin L. Burns of Denver, treasurer. Missing: V. O. Stringfellow of Seattle, second vice president who left the convention early because of illness in his family.

Will NAHB policy change course?

Upset in command makes Earl 'Flat Top' Smith new presi-

dent. He predicts more emphasis on technical aids

A major upset in command thrust Earl W. "Flat Top" Smith into the presidency of NAHB last month.

His election—by a wafer-thin margin of nine votes—apparently signaled the start of several changes in emphasis for the 33,000-member association. Smith (who is nicknamed for the flat roof he has used on some 11,000 homes in northern California) will stress activities like how-to-build-better clinics, faster distribution of new construction techniques, more research, better design.

He indicated he will put less emphasis on legislative lobbying, mortgage finance, opposition to public housing. A major public relations campaign aimed at offsetting the industry-wide black eye from the FHA investigations is out. This was strongly favored by many NAHB leaders close to retiring President R. G. Hughes.

Smith, who ranks as the nation's fourth largest homebuilder (H&H, Jan. '55, News) but still calls himself a "carpenter," defeated a fellow-Californian, Paul Burkhard, former mayor of Glendale, for NAHB's top post. The election ended the most spirited political campaign for national officers that NAHB has seen since 1949 when Rodney Lockwood of Detroit was named president. **New directions.** The day after his election, Flat Top Smith began revealing how he hopes to put "different emphasis" on NAHB activities. Some of his ideas contrasted with those voiced only three days before by retiring President Hughes. Smith told a press conference that he will stress "the programs I have been identified with" (Research Institute, trade secrets conferences, construction techniques) because "that is the primary function of this organization . . . to improve our service to members so they'll do a better job of serving the public." He asserted previous NAHB administrations had been "doing an external job" and thus "haven't had time to do a job of housekeeping." NAHB faces a "relatively minor legislative [i.e. lobbying] job this year," Smith declared. Reason: the 1954 Housing Act is the "best we've ever had."

In rejecting proposals that NAHB fight more actively against slurs on the homebuilding industry arising from 608 windfall charges, Smith said: "Good public relations is something you don't buy; you earn it. . . . Going into a large public relations campaign is not the sort of thing that improves public relations."

Smith's approach to encouraging construction of more housing available to Negroes differed from that of Hughes. The outgoing NAHB chief had reiterated his plea that builders devote 10% of their production, and that lenders set aside 10% of their mortgage money for nonwhite projects. Remarked Smith: "Oh, it's all right to set goals. I don't subscribe to that sort of thing. It becomes a Community Chest approach. The main thing is to get it built.... I hope we can do more than 10%...."

Smith's view on public housing: "I think there's a place for it in the over-all housing picture." The new NAHB leader acknowl-(continued on p. 38)



RIVAL CANDIDATES FOR TOP NAHB JOBS WOOED VOTES WITH THESE POSTERS, PLUS LAPEL BUTTONS, BAGGAGE TAGS, POCKET CARDS

NAHB CONVENTION (continued from p. 37)

edged, in the same breath, that his organization was still opposed to public housing, however. (NAHB's policy declaration called further public housing "unnecessary" and noted that incomes have risen so much in the last decade that more and more projects are facing vacancies.) Smith expressed hope that FHA Secs. 220 and 221 (if amended as NAHB asks) will "make unnecessary any expansion" of public housing.

The race for NAHB president was actually a tricornered affair. Nate Manilow, codeveloper of Chicago's Park Forest, withdrew following a serious abdominal operation. As first vice president, he was the leading candidate, although under fire in some NAHB quarters for 608 involvements. Many Manilow supporters threw their backing to Burkhard, who was last year's second vice president. Smith, a later starter, campaigned on the basis of ending NAHB's "kingmaker" system, under which top officers generally (but not always) move up through a series of national jobs. Third candidate, Joseph Haverstick of Dayton, Ohio, general convention chairman, switched his support to Burkhard at the last minute. Haverstick emerged as first vice president, defeating Prefabber Hamilton Crawford.

So close was the race between Smith and Burkhard that the nominating committee headed by Ex-President Joe Merrion of Chicago presented both names to the directors. Resulting vote: Smith, 164; Burkhard, 155. The secretaryship required a runoff between Carl Mitnick (elected), John D. Harrison of Detroit and E. J Burke of San Antonio.

Curbs on public housing will stay, Wolcott predicts

Top-drawer speakers at convention sessions ranged over the gamut of housing problems. Some of the most noteworthy pronouncements:

HHFAdministrator Albert M. Cole: "We are in danger of building into our suburbs and new growth the same seeds of blight and obsolescence that afflict our older areas. . . . Slums and blight are the homebuilders' worst competition. You can't do business if you have to pay both your own expenses and those of your competitor as well. . . . Blight has not followed the Negro; the Negro has been forced to follow blight. . . . We want to see both the need and the pressure for public housing reduced to the minimum."

▶ Rep. Jesse Wolcott (R, Mich.) minority leader of the House banking committee (in an exclusive interview with HOUSE & HOME): "Congress probably will not change the displacee formula for public housing this year. If you have vacancies in public housing in the same city these should be considered the same as other low-rent housing available to displacees. . . "Wolcott predicted that if housing officials try to jam public housing allocations through on any basis which "ignores" this legal requirement (as they have begun to do), Congress may retaliate by cutting off appropriations next year.

Sen. John J. Sparkman (D, Ala.), No. 2 man on the Senate banking committee: "I do not expect that during this year the banking committee will check into our housing operations along quite the same lines or with the same aim in mind [as Sen. Homer Capehart's FHA scandal probe]."

NAHB's new president: a builder of small homes for small towns on a huge scale

"You've got to learn the kind of a guy I am. I'm not a very spectacular kind of guy and I don't go off half-cocked if I can help it."

Such plain talk is typical of Earl William Smith, 48, a plain man who for years was accused of being half-cockeyed by bankers, realtors and neighbors who thought his \$6,700 flat-top dwellings were God's gift to no one. They were wrong; the houses turned out to be Smith's gift to the working man. Last year Smith started 2,816 of them-the lowest-priced now up to \$7,000-in 30 communities in northern California to take title as the fourth largest builder in the nation. But because everything about his business except volume is small (his staff and his houses, for example) he is not thought of as one of the moguls of building. As one of his two partner-brothers summed up the operation a few months ago: "We like to build little houses for little people in little towns."

Carpentry, portraits, hi-fi. Smith was and is a carpenter and he quit school when he was 14. But he did not quit learning. "He's a remarkably well-educated man," said a close associate recently. "He reads philosophy, reads history, he paints landscapes and portraits and he's a hi-fi fan. He is a really



OUTGOING PRESIDENT Hughes, a 'round-the-clock worker, went over the final draft of his convention address with Joe McGrath, NAHB legislative director, after midnight in the Hilton Hotel lobby. In it, he charged FHA probes have "left a scar upon the industry," and made officials, "Jumpy, afraid to make decisions, afraid to issue proper regulations."



PIPE-PUFFING PRESIDENT Smith came to first press conference flanked by Executive Director John Dickerman. On trends, Smith commented: "More and more people are coming to the conclusion they get more house when you get into contemporary design."

colorful and fabulous guy."

Smith now lives in Berkeley, Calif. in what a visitor has described as "one of those frightful Spanish colonials in vogue in California about 20 years ago". He helped build it with his own hands, and he likes it, but has said that if he moved he would move to a flat-top (he designs all the homes his organization builds). He is married to Adelia Maynard of Oakland (a geranium and Mexican glassware fan), has three children (baseball and birds' nest fans) and two cars-a Cadillac and a Buick station wagon. Asked at the convention why he did not have a private airplane, Smith took his pipe out of his mouth, cracked unsmilingly: "I've got news for you; I'm never going to have one."

Stimulation of research has been one of his big contributions to NAHB. As Len Haeger, Research Institute director, has put it: "Smith was responsible for carrying out the whole concept of the idea that we would have a Research Institute." His interest in the nuts-and-bolts of construction—always toward keeping construction costs at bottom level—has earned him his reputation as a dynamic builder of houses for low-income families.

NEWS



HHFADMINISTRATOR COLE A plea for urban renewal



No money for public housing?



SEN. JOHN J. SPARKMAN A new kind of FHA probe?



DR. ABEL WOLMAN Unsubsidized community facilities?



ARCHITECT HUDDLE: In HOUSE & HOME's hospitality suite, Architects Hugh Stubbins, Neil Connor (FHA director of architectural standards), Ed Fickett and Quincy Jones shared a laugh. Fickett told a convention session that "an all-inclusive contract between architect and builder" was the best possible relationship. Asked what he thought a fair fee, Fickett said his policy was to charge "a fixed fee plus a royalty on a sliding scale."



EX-PRESIDENTS Tom Coogan (I) and Bill Atkinson paused for a corridor chat. Coogan successfully urged NAHB board to pass a resolution urging all closing costs be paid in cash. "No-no down payments," he argued, "are making it so easy to merchandise houses that it's attracting speculative investors and threatening overbuilding. We don't want to face the same thing the auto industry went through last year."



POLICY CHAIRMAN Leonard Frank of Hicksville, L.I. faced diplomat's task of resolving conflicting viewpoints on NAHB official views. Conferring with him: D. A. Belfoy of Tacoma, Wash.



MORTGAGE PANEL LED BY DICK HUGHES HEARD PREDICTIONS OF MONEY-TIGHTENING



GENERAL SESSIONS WERE HELD BEFORE BACKDROP DEPICTING NATIONAL HOUSING CENTER

(continued on next page)

CONVENTION SIDELIGHTS

NAHB to refute charge

The problem of community facilities was even tougher than it looked. NAHB was disturbed over an article in the American Municipal Assn.'s magazine declaring that the homebuilding industry "is launching a new campaign to upset municipal subdivision regulation and control." Commented outgoing Second Vice President Paul Burkhard in the opening session: "It is nothing less than an attack." Burkhard called for effort from all members to refute the claim and stem incipient antagonism between city agents and builders. Added new President Earl Smith: "We ask everybody to help us and we'll help them. There's been a misconception. . . ."

Sick list

Two of NAHB's best-known men were struck down before or during the convention. Ex-president Emanuel Spiegel collapsed while toastmastering a Chicago home builders' dinner just before the convention opened and was still in a hospital when it ended. First Vice President Nathan Manilow was absent recuperating from recent surgery.

Research Village

By mid-April, every man and woman in the country should hear about US Gypsum's Research Village. It will be the most widely publicized group of houses ever built. The six houses in Barrington, Ill. have been a project approved by the NAHB Research Institute for some two years. Now finished, decorated and open to builders, the houses were one of the talking points of the convention. "They're tops in new ideas," said Builder Andy Place, who was moderator of a session on the project. "Many of the ideas you'll see here will be in common use in two or three years."

Designed by six different architects, each of whom worked closely with a builder adviser, the houses also use many materials proven in industrial construction.

'Get out & legislate

"You may say to me, 'I am in the business of building houses, I am not in the business of sponsoring legislation.' I suspect you will have to get in the business of sponsoring legislation, because this problem will not solve itself."

In the convention's most provocative address, Dr. Abel Wolman (cut, p. 39), venerable professor of engineering at Johns Hopkins University, laid down his law for solving the problem of providing community facilities in the nation's fast-growing suburbs: a device to spread the costs "as they should be spread" through pooling resources. Most workable method at hand, he thought, was large metropolitan districts with power to raise money and assess for repayment.

"I'm one of those who believes that a subdivider is not a substitute for a public agency," he said in discussion. "He should not be expected to do those things that society is unable to do through a public agency."

Wolman called state subsidies for community facilities like schools and sewer expansion generally unnecessary and federal subsidies "completely unnecessary" in many instances.

Onward and upward

Membership and money were up for NAHB in 1954. The 33,000 mark in membership goal for the past year—was reached, a 13.4% increase in 12 months. Spike Club membership reached 600. Income from all sources touched \$902,601, nearly \$120,000 over what was anticipated. The breakdown: membership dues—\$575,410; convention proceeds— \$229,829; "Correlator"—\$79,315. Expenses were \$751,890, leaving a surplus of \$150,711. For '55, expected gross income was pegged at \$915.054.

The convention toppled its own records, too. Attendance reached nearly 23,500. There were 544 exhibit spaces for 347 exhibitors, staffed by 3,000 people. Panels had 270 participants.

New mortgage pinch ahead?

"The thing that scares the daylights out of us," said Vice President George Conklin of Guardian Life, "is the construction figures for December."

Conklin recited the figures for the economic panel—starts up 90% over the year before, commercial contract awards up 100%—and took a crack at estimating the money supply for '55. His view: 1.3 million starts could be financed with \$25-26 billion of mortgages; but if builders push it to 1.5 million starts or over they may well end up in a tight money situation, building at a rate they cannot sustain. His general prediction for '55: "A rising trend in the economy; no boom—the economic forces are not there. A slight tightening in the markets and a slight rise in the interest rate."

Dr. Edwin George of Dun & Bradstreet was worried by rising vacancies, growing mortgage debt.

Houses in Air-conditioned Village cooled for average \$21 a month

The 22 guinea pig houses in NAHB's \$400,000 Air-conditioned Village in Austin, Texas have paid off with a wealth of practical information. Findings revealed at the NAHB's convention show chiefly that the best designed houses have rock-bottom operating costs while several dud houses are object lessons in how *not* to install air conditioning.

Total operating cost for cooling the 1,146 to 1,468 sq. ft. houses during last year's scorching summer averaged a respectable \$105 per house although the thermometer zoomed above 100° on 31 days. Over the five-months cooling season the cost amounted to \$21 a month (based on local electricity at $1.6 \notin$ per kwh).* In most US cities, such houses could be cooled even cheaper.

Winners and losers. The five best houses actually came in with total operating costs * Although the cost study did not actually begin until June 15, overall summer bills were obtained by Texas Power & Light Co., whose engineers closely estimated early operation according to Weather Bureau records. of less than \$80 for the season. Half of the 22 houses had total costs under \$100. Almost uniformly these houses Keen Photo Service

uniformly these houses have heavy wall and roof insulation, shading for windows and good orientation.

High cost houses were notable for inadequate insulation, few shading devices and a poor orientation. Said Austin Architect-Builder Ned Cole, project manager for the COLE



research: "Poor orientation is suicide." He disclosed that an accidental shift of only 7° from south to west in one house nullified the shading effect of a 36'' south overhang. The result was that the increased sun pouring through a large window boosted the over-all heat load by 4,200 Btus and lifted the oper-ating cost by more than 15%.

Cole said it is clear that 2-ton units will adequately cool well-designed houses up to 1,350 sq. ft. despite 100° -plus temperatures. "Under actual conditions," he said, "the units maintained an average of 77° indoors at an average outdoor high of 103°." This is a 26° drop whereas at the start some skeptics said that even 20° cooler would never be achieved.

Sound problem. Noisy units were perhaps the biggest problem encountered by Engineer C. W. Nessell, who directed field research. He pointed out that noise was as much due to several poor installations, as to chattering units. Only eight of the 22 families already complained of noise. Other findings:

▶ Poorly installed ductwork was the major cause of inefficiency, especially cool air ducts running through hot attics without adequate insulation.

• Kitchen exhaust fans were not as effective as they should be in removing cooking heat because women forget to turn them on. Needed: automatic controls.

Cooling towers for conserving water were extremely efficient; water costs were reduced to as little as \$2 a house for the whole summer.

FHA black list row flares

Housing agency threatens to blackball 4,000 Sec. 608 sponsors who spurned controversial questionnaire on profits last summer. Industry wangles a delay

For it really doesn't matter whom you place upon the list, For they'll none of them be missed, they'll none of them be missed.

—Ko-Ko in "The Mikado"

A behind-the-scenes storm over FHA's controversial black list of Sec. 608 builders blew up in Washington last month.

Word leaked out that FHA was getting ready to pounce on the 4,000 Sec. 608 sponsors who did not answer its celebrated summer questionnaire on profits—windfall and otherwise. FHA action would probably have amounted to adding the 4,000 to the 308 already black listed (H&H, Nov. '54, News). Prompt intervention by industry leaders only succeeded in persuading FHA to hold up action. Spokesmen argued that, assuming an average of three sponsors per 608 project, such a move could shut 12,000 builders off from the FHA program.

Clearance tangle. The new black list threat arose, ironically enough, while FHA was attempting to persuade the Justice Dept. to let some of the 308 stigmatized builders and lenders off the list. FHA, almost as unhappy as builders about the long hassel, would like to remove the names of builders it can absolve of any criminal acts involving 608 projects even though they may have mortgaged out. In fact, FHA was ready to announce that 25 such builders would be restored to its good graces when Justice officials blocked the move. Reason: they wanted more time to examine the cases.

While FHA General Counsel Frank Meistrell shuttled back and forth between his office and the Justice Dept., the black listing dispute erupted again in Denver, where Garrett-Bromfield & Co. was battling in court to force FHA to process its mortgage applications. The big real estate firm had sued in federal district court last fall for an injunction canceling an FHA order barring it from applying for FHA insurance on new projects. Confronted with the suit, FHA withdrew the ban, but on Dec. 14 reinstated it. Attorneys for Garrett-Bromfield immediately charged "arbitrary, malicious and contemptuous disregard of the FHA's promises and representations to the Court."

Nine days later, after an all-day huddle with US and FHA attorneys, came another "truce" restoring the firm's processing rights. Said Company Attorney Erskine Meyer: "We have what is in effect an injunction against FHA—by stipulation." While it was in force, Garrett-Bromfield hoped to settle the row with FHA authorities in Washington. New orders due. The matter of outstanding importance to the homebuilding industry was whether FHA legal lights would demand positive action against the presently unbranded 608 builders it wants to check. Top FHA men made one thing clear: they will send new instructions to field offices on processing applications from 608 participants not in the clear—which as of the last count still meant all of them. Presumably, this would involve either an expanded black list or case-by-case interrogation as new applications are received.

Industry spokesmen fear this may tie up

Ike asks 'firm' 35,000-unit-a-year program but hints end of public housing in 1958

Did President Eisenhower mean no more public housing would be needed after 1958 or didn't he?

The chief executive's state-of-the-union message last month to Congress touched on the question, but in language equivocal enough so that each side on the public housing issue thought the President had spoken in its behalf. Said Eisenhower:

"As part of our efforts to provide decent, safe and sanitary housing for low-income families, we must carry forward the housing program authorized during the 83d Congress. We must also authorize contracts for a firm program of 35,000 additional public housing units in each of the next two fiscal years. This program will meet the most pressing obligations of the federal government into the 1958 fiscal year for planning and building public housing. By that time the private building industry, aided by the Housing Act of 1954, will have had the opportunity to assume its full role in providing adequate housing for low-income families."

Differing interpretations. Both proand antipublic housers found comfort in Ike's words. Public housers professed to be pleased that the President called for "firm" program of 35,000 units a year (the same program he espoused last year). They felt Eisenhower was asking Congress obliquely to soften or scrap amendments in the present public housing law limiting it to displacees from slum clearance and other public improvements. They contended that in hinting a two-year program was enough, the President was putting private industry on notice that if it could not then take over, there would be more public housing than ever.

Industry pundits read no such meaning into the Presidential remarks. All the President said, they argued, was that after the new aids to private housing take hold, there would be no more need for public housing. They also scoffed at the inference the message criticized the crippling amendments on the present law.

The President's support for 35,000 public housing units a year was expected. Less expected was his state-of-the-union comment that the Housing Act of 1954 had "brought impressive progress in an area fundamental to our economic strength and closed loopholes in the old laws permitting dishonest manipulations."

Four windfallers offer to return \$1 million profit

It looked like a long cold winter ahead for the 608ers after all.

A matter of weeks after Congress changed hands and the Democrats said they would continue to investigate housing but would probably not harp on dead pigeons like 608, FHA General Counsel Frank Meistrell announced that the agency had persuaded four big build-

FHA's program in a never-ending legal snarl. If FHA is determined to bar 608 builders of doubtful innocence from its program, they contend the agency should go about it differently. Instead of requiring proof of their innocence, they argue FHA should take the more charitable (and more American) method of letting them continue to do business with FHA until they are found guilty of something.

At midmonth, building men were somewhat optimistic over the outcome. They felt they had made some dent in the FHA case for further punishment by their arguments that the questionnaire had been of doubtful legality—that FHA was skating on thin ice when it told 608 builders to reply under oath but that their answers would be subject to audit. Why not, they asked, send out new questionnaires more reasonably worded? Or even better, let FHA ask new applicants if they had ever had any 608 dealings and if so, obtain the particulars.

FHA had not indicated which way it would jump. But officials were still miffed that their request for information had been so widely snubbed. They were still insisting that unless some kind of a reply was received they would have to take disciplinary steps.

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ers to pay back over \$1 million in windfalls. "We have in mind, and in my opinion I

think we have very good grounds, for recovering a substantial amount of this money [windfalls] for the government," Meistrell told the House appropriations committee. "Time, of course, is an important factor. There has been a great deal of publicity given to this whole problem, and I think if we move rapidly and effectively we will be able to recover a substantial sum of money."

He also issued what seemed the most hardheaded dictum builders and FHA employees had yet received: "We have evidence of irregularities that may ultimately constitute fraud in a legal sense. We have evidence of corruption on the part of FHA employees.

"There are many problems of that nature which are strictly legal in their concepts which we hope to investigate and prepare ... so that

if we are not successful in effecting settlements, we will proceed to litigation."

Meantime, a cataloguing of legal progress to date against FHA members and builders showed no sign of indictments (much less convictions) stemming directly from the Congressional investigation. Justice Dept. reports listed fairly extensive action against Title I repair violations during the past two years but almost half of the indictments had occurred before May 1, 1954. Only nine of the other 19 indictments were even dated as having been effected after the probe started and none involved matters discussed by the committee.

In assessing the following chart it should be remembered that a violation of Sec. 1010 of the Criminal Code (which prohibits false loan documents in applications for FHA insurance) is charged in almost all cases. The chart has been adjusted, however, to show in what par-

SIDELIGHTS

First voluntary credit loan

The first exercise of provisions of the voluntary home mortgage credit program—the new Housing Act's answer to buyers and builders in remote areas who cannot obtain FHA or VA mortgages—took place last month in little (pop. 271) Timberville, Va. Assistance under the program is limited to persons living in areas designated by the VHMCP regional committees except in the case of minority groups, who are eligible regardless of where they live. A person wishing to finance a home must show that he has sought a loan from at least two lenders and been turned down; his application is then circulated among lenders by VHMCP.

Builder H. E. Mason of Harrisonburg, Va. named nine lending institutions from which he had been trying unsuccessfully for a year to get financing better than ten years, 40%down. There was a large demand, he said, for housing in the \$8,000-10,000 bracket from persons working in nearby factories, but other local loans were more profitable. Mason's application was referred, alphabetically, to Frederick W. Berens Inc. in Washington and the firm arranged loans on two of Mason's houses with Guardian Life Insurance Co.

Prefabs expanding market

Prefabbers are continuing to grab a bigger and bigger slice of the new housing market. The Prefabricated Home Manufacturers Institute reported that the industry shipped some 71,000 houses during the first 11 months of 1954. Sales of PHMI members climbed 31% over 1953 levels, compared to an 8% gain in housing starts.

Realtors v. lawyers

A district court decision climaxing a fouryear-old test case in Denver cut down the number of real estate documents that realtors there may process. Under the decision (which may be appealed to the state supreme court) the brokers are forbidden to prepare the following: deeds conveying real estate, deeds of trust encumbering real estate, mortgages encumbering real estate, promissory notes secured by trust deeds or mortgages, releases of trust deeds and mortgages, real estate leases, notices of tenancy termination and demands to pay rent or vacate. Title insurance firms were ordered to stop preparing deeds conveying real estate. President Sam G. Russell of the Denver Board of Realtors said the order will mean a minimum of \$20 "and in many instances considerably more" added expense to the principals in the sale of an average mortgaged house.

New high in restrictive zoning

Orinda, Calif., an outer suburb of San Francisco that is fighting to keep the rural atmosphere which caused most people to move there, is adopting the most highly restrictive zoning code in California—and perhaps in the nation. The action has earmarks of being the start of a new trend, reflecting mounting public resentment against the garish ugliness of many a suburban crossroads commercial center. The ordinance, given first passage by the Contra Costa County supervisors in December, would apply to all future shopping centers in one of California's fastest growing suburban counties. It may establish a precedent for the state.

The ordinance bars from "special business districts" (i.e. planned shopping centers) tap rooms, mortuaries, large outdoor signs, amusement centers and theaters. Outdoor advertising is limited to identification of premises. Parking areas must be king size—1½ sq. ft. of parking per ft. of building space. The row arose after the East Bay Municipal Utility District sold 25 acres of vacant lot inside a mushrooming shopping district to Pacific Intermountain Express, which hoped to put up a \$1 million office building, gambled on getting the acreage rezoned. Along with the mortuaries and tap rooms, it lost out. ticular phase of housing those indicted were operating.

BOX SCORE: FHA INVESTIGATION

Title I repair loans	
Persons indicted 20)6
Found guilty 7	78
Sec. 203	
Indicted	2
Found guilty	2
Sec. 608	
Indicted	4
Acquitted*	2
FHA employees charged	
Indicted	4
Found guilty	ī
Slum clearance	
Indicted	4
Miscellaneous	
Indicted	5
Found guilty	1
urce: Justice Dept. *-Long and Carpenter. Puerto Rico.	

Pru borrows to buy mortgages

Mounting mortgage commitments and optlmistic predictions for 1955 housebuilding led Prudential Insurance Co. into a \$350 million mortgage warehousing plan last month, involving 150 commercial banks. Warehousing is not a new technique in the mortgage industry. Three items made this plan a first: 1. It is on a national basis.

2. The term is longer than the usual 90-120 days.

3. The amount involved is the largest ever for insurance company warehousing.

Prudential gives an unconditional commitment to commercial bank participants to repurchase the warehoused loans, even defaulted ones, between next January and June 30, 1956. In addition, explained a Prudential spokesman, "the mortgage loans [FHA and VA only] are closed by Prudential, with Prudential funds, on Prudential paper, and with Prudential's name...." Why was Pru launching this program? "To insure an even flow of Prudential funds into mortgage investments. . . We have bought heavily and we have undertaken this arrangement to be able to participate in what promises to be a big building year."

Pru's plan strongly resembled the experimental warehousing arrangements described in the November '54 HOUSE & HOME (p. 45), and used by Metropolitan Life and a half dozen of its correspondents since early '54. But unlike the Met, Prudential operates largely through branch offices, not mortgage correspondents. Hence the spread between the commercial bank interest rate charged Prudential and the FHA-VA 41/2% rate is profit for Prudential, not correspondents. In Prudential's case, the spread was reported close to 1%. This alone could net Prudential a tidy \$3 million on its borrowed money.

Was Pru actually overcommitted? A spokesman said "not quite." Other mortgage experts close to the picture conjectured that Pru wanted to buy home loans now in anticipation of a dearth of good mortgages later (if, for example, '55 activity fell below expectations) or of a drop in Interest rates in '56. Prudential denied this unequivocally.

continued on p. 45

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Toledo, Ohio

S

Land joint



URBAN RENEWAL BLOCK in Ward I is mixture of aging homes, stores, fourstory flats and vacant lots bounded by broken fences and littered with debris. House at right has no street frontage.



RENEWAL PLAN would remove interior house, substitute L-shaped park over adjacent vacant lots. Most remaining houses need fix-up. State-aided old age housing would go on tax title lot (second from right).

How urban renewal may save a stagnant city



SOMERVILLE PLANNING BOARD

WARD I RENEWAL AREA is neighborhood of 15,000 persons. Map above shows cluttered mixture of stores, deteriorated structures as it is now. Map below indicates city plans for renewal. The block pictured at the top of the page is near upper right on the maps, top left of corner of Perkins and Mt. Vernon Sts.



Somerville, Mass. plans reveal both promise and problems in new housing law

Around Boston, it was cause for polite astonishment last month that the suburb of Somerville (pop. 102,254) had become the second city in the nation to take advantage of the biggest new idea in the 1954 Housing Act: urban renewal.

Somerville is held locally in various regard-mostly unflattering. Brookline socialites are apt to refer to it as a slum town. Some teachers of political science have held it up as a historic example of civic misgovernment. Somerville's current political leaders agree it is a city of industry (but not enough) and "lower middle-class families."

Somerville indeed has an impressive list of drawbacks:

Its families (many of them tenants in two-, three- and four-family frame houses) are packed into the city's 4.1 sq. mi. at a density of 26,000 per sq. mi. This makes Somerville one of the

most densely populated municipalities of its size in the nation. Yet because many of its lots were laid out big enough to permit space between houses, the city does not look as heavily peopled as it is.

Since 1925, new home building has been nil; 1925 was the year the city 1) about ran out of vacant land and 2) passed its first zoning ordinance, thus taking its first firm step against land misuse after land DONOVAN & FOLLIN use was solidly entrenched.



A workable antiblight plan

Fix-up or deteriorate. Today, Somerville wears a tired look. Its best young men and women, growing up and making their own homes, are trending toward the outer suburbs. Somerville's new families tend to come from the worst of Boston's slums (where living conditions are far worse). But the switch does not make Somerville leaders happy. Says Mayor William J. Donovan (a fuel and furniture moving merchant who is probably the antithesis of the political gang that ran the city for so many years): "Unless we build a modern environment for our people they will leave us, neighborhoods will deteriorate and slums will appear. We can slowly deteriorate or we can become an oasis of comfortable living. The objectives are simple, the attainment complex."

The complexity of attainment, which is the urban renewal process, is indeed the reason why so few US cities have yet matched Somerville's progress in laying plans to stem the spread of blight. Somerville was the second city to win HHFA approval of a "work-

(continued on p. 47)

dianced Pesión.

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BRICK BOTTOM REDEVELOPMENT project, adjacent to renewal area, calls for demolition of aged slum housing like the three-story frame structure in the center of photo. Litigation has held up start of work.

(continued from p. 45)

able program" for doing so—a prerequisite to any federal aid for public housing or slum clearance under the 1954 Housing Act. Only others: Clarksville, Tenn. (H&H, Jan. '55, News) and Chicago. Moreover, as Urban Renewal Commissioner James W. Follin observed in handing Mayor Donovan HHFA approval of his "workable program": "Relatively few people realize that the Housing Act of 1954 is the most significant federal step yet taken to aid localities in their fight for better housing, better living conditions and greater community stability."

That Somerville's leaders understand this is probably attributable to a combination of circumstances that occurs often enough to suggest it may be typical of the wellsprings of rehabilitating cities:

1. Somerville underwent a Grade A civic row over its first (and only) redevelopment project under the Housing Act of 1949—a plan to root some of its worst slum housing out of $16\frac{1}{2}$ acres of low-lying "Brick Bottom" land and redevelop it for industrial use. Residents of the area, attached to their ancient dwellings, voted 319-0 against redevelopment; it was only when the rest of Somerville was organized behind the project that the final plans squeaked through the aldermen, six-to-five. Says President Joseph McHugh of the Chamber of Commerce: "Somerville doesn't want another Brick Bottom where the only solution is to convert a residential area into industrial uses."

2. In the persons of Alan McClennen, city planning director, and Ralph Taylor, redevelopment chief for the Somerville Housing Authority, the city had two energetic professional housers who saw the new national policy on urban renewal developing and got to work long before the new housing law was passed. They sold the idea to Mayor Donovan. His support persuaded the inactive Community Council, local Red Feather agency, to back the plan. The Chamber of Commerce, Rotary, Kiwanis, Lions clubs were soon on the bandwagon.

3. With some guidance from the Boston Metropolitan Housing Assn. and other experts, a local neighborhood association took shape in Ward I (where the city expects to carry out its first urban renewal project).

4. Editor George E. Connor of the weekly Somerville *Journal-Press* gave both the Brick Bottom redevelopment plan and urban renewal such detailed and perceptive coverage, backed by editorials, that he won a citation for community service from the Controlled Circulation Newspapers of America. Sample: "The basic issue is whether our people are going to control their physical environment or . . . be conquered by . . . ugliness, congestion and property blight".

Plan for survival. Somerville's officially-approved workable program for urban renewal not only follows the rules laid down by HHFA (H&H, Jan '55, News), but was instrumental in helping Jim Follin's office write them. A housing code has been drafted, a comprehensive overhaul of zoning is under way, land use has been studied and replanned, an urban renewal committee of city department heads has been named to carry out the scheme. Displaced families may go into public housing (HHFA has approved 42 new units and Massachusetts has approved an old-age housing project of 75 units). Luckily, Somerville has no Negro housing problem; its 95 nonwhite families do not dwell in substandard quarters. Yet

(continued on p. 49)



MARKED FOR DEMOLITION in renewal block shown in "before" and "after" photos on p. 45 is the left end of this four-story frame flat. Court has banned new occupants in extreme left bay until owner, 78, repairs it.

PEOPLE LIKE THESE TRY TO MAKE RENEWAL WORK



CITIZENS' LEADERS: Pres. John Griffin of Community Council; Secretary Mrs. Goodwin R. Prentiss and President Francis Burns of E. Somerville Neighborhood Assn.



EDITOR George E. Connor of local "Journal-Press" has given strong support to redevelopment and urban renewal. Somerville lacks the money for complete rebuilding.



SELLING RENEWAL to city aldermen is continuing job for Redevelopment Chief Ralph Taylor (2d from left, back to camera). He cited house pictured at top right of this page as example of what might be torn down. "Would people object to that?" he asked. Predicted pro-redevelopment alderman in light coat: "They'll object."



HUDDLE with Mayor Donovan (I, foreground) brings in (I to r) Secretary Wallace Sinclair, a high school teacher on leave; Planning Director Alan McClennen; Redeveloper Taylor. Much of renewal's success may hinge on Donovan's re-election in Nov. Some likely opponents may capitalize on the emotional appeal of opposing necessary demolition of ancient housing.

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4077 WEST BURNHAM STREET MILWAUKEE 1, WISCONSIN BALTIMORE 5, MD., 5300 Pulaski Highway — BUFFALO 11, N. Y., 64 Rapin St. — CHICAGO 9, ILL., 4301 S. Western Blvd.—CINCINNATI 25, OHIO, 3240 Spring Grove Ave. —CLEVELAND 14, OHIO, 1541 E. 38th St.—DETROIT 2, MICH., 690 Amsterdam Ave.— KANSAS CITY 41, MO., P. O. Box 918—LOS ANGELES 58, CALIF., 4807 E. 49th St. —NEW YORK 17, N. Y., 230 Park Ave. — ST. LOUIS 10, MO., 4215 Clayton Ave. for all their promise, Somerville's plans are only good intentions so far. As Editor Connor says: "Where trouble will come is when you talk of tearing down this house or that house." Even some of the top people behind urban renewal admit it may well take "at least five years" before physical change will be noticeable in the city.

Somerville, sadly, is a town with almost all the handicaps a city could have. Yet the enthusiasm and drive of its two devoted young housing professionals has spread to many of its other leaders in something like a single year. One big remaining question: can renewal be rammed down the throats of the people whose sick real estate is infecting the city? Or can it be sold to them? The observation of a US Public Health Service man who is familiar with rehabilitation problems and prospects throughout New England is probably apt. Said he: "If Somerville can do it, any city can."

PEOPLE: Joe McMurray named New York housing chief, **Charles Abrams rent boss; Oakley Hunter is HHFA counsel**

Joseph P. McMurray, who gave up his position as staff director of the Senate banking committee only last August to become executive director of New



York City's housing au-thority, will probably be named state housing commissioner by Gov. Averell Harriman. The job might mean a pay cut but was regarded as putting able Democrat McMurray in the limelight where his career could grow more. McMurray, father of six, got \$20.-000 a year from the public housing post, would get only \$17,000 in the state

McMURRAY

job, where he succeeds Republican Herman Stichman. There was a possibility that Gerald Carey, who preceded McMurray as executive director of the housing authority and was retained as assistant to the chairman, would step back into his old job. Dr. Robert C. Weaver, 47, chairman of the National Committee Against Discrimination in Housing, was appointed deputy commissioner. He is di-

rector of opportunity fel-lowships for the John Hay Whitney Foundation.



ABRAMS support of Harriman's campaign. The governor

named McMurray and Abrams to a committee to recommend a new, long-range state housing program. Indications were that Harriman favored more housing subsidies for low- and middleincome families-a stand the building industry would dispute.

Thomas J. Sweeney, director of VA's loan policy service, was named acting administrator of loan guarantee after T. B. King left for a vice presi-dency with National Homes Acceptance Corp. Sweeney is 50, was educated at St. Ignatius College in Cleveland and later at Georgetown University. He had a number of jobs before he joined VA in 1944, including time as an attorney for the old HOLC, private mortgage lending, and the OWI. Sweeney's salary is \$10,800 (\$1,000 under what King was getting), no great munificence for a man directing such a body of loan underwriting. Whether he would be officially confirmed as head man of VA's housing branch was doubtful. Disgruntled Democrats had already expressed their suspicion that the administration would bring in a political appointee.

FEBRUARY 1955

Prof. Ernest Fisher, director of Columbia University's Institute for Urban Land Use and Housing Studies, will direct research and publication "Study of FHA Insurance Reserves" made of a possible by a \$40,000 grant from four organizations. The Life Insurance Association of America

T. Wade Harrison, Florida lawyer who has served with the Home Loan Bank Board since 1934, gave up his position as general counsel to become Washington counsel for the US Savings & Loan League. Creation of the new post was a move by the league to expand its headquarters section.

is making up more than half the sum. Other contributors: US Savings & Loan League, the Mort-

gage Bankers Assn. and the National Associa-

tion of Mutual Savings Banks.

Neal J. Hardy, director of NAHB's Washington center, was named by HHFA to head a small group formulating minority housing policy. Hardy's group will carry on lines of action de-veloped at the recent two-day conference held by the agency (H&H, Jan. '55, News) and work at establishing future programs.

Architects Walter Scholer & Associates of Lafayette, Ind. have finished plans for a prefab school for National Homes, a possible answer to growing classroom shortages. The company has already received an order from the town of Lafayette for a 16-room building. Tentative selling price has been estimated by President James **Price** at "perhaps half as much as for an ordinary school."

Rep. Oakley Hunter, 38-year-old lawyer from Fresno, Calif. moved down from Capitol Hill last month and was sworn in as general counsel of HHFA. Democratic critics saw the appointment as a clear case of Republican pressure to get Berchmans T. Fitzpatrick out (H&H, Jan. '55, News) and one of their own men in. Some were even convinced it was the Republican Californian



HUNTER

telligence. He has no background in housing at all, but feels that it is nothing to apologize for since the only lawyers who do are men who have been around Washington for 20 years, developing their patterns of thought under Democratic administrations. He has a solid voting rec-ord against public housing. He explains this somewhat in the manner that Administrator AI-

1940, he worked for a law

firm in Fresno. During the

war he was a special agent

for the FBI until 1944,

then switched to Naval In-

bert M. Cole did when he took over after service as a Kansas representative: while in office a Congressman represents his constituents; if he is named to an office on the national level he carries out his duties with the general public in mind. "Had I represented a Manhattan district," said Hunter recently, "I would have been a sup-porter of public housing." He is a staunch advocate of the policy of extending home ownership to the greatest number of people possible and sees a "great future for urban renewal.

Charles Frederick Chaplin, elected to the Cook County (Ill.) Board of Commissioners in November by a huge plurality, has been appointed chairman of the county's building committee. In his new post, he has already resolved to tackle the county's building codes—no plumbing code now exists, for example, at all—and get some-thing new on the books. Chaplin has an outstanding record as a businessman and adminis-trator, is vice president of the Allied Paper Mills and for the past six years has served without compensation as the mayor of Northbrook, one of the county's fastest-growing communities.

DIED: Lawrence Ottinger, 70, board chairman of US Plywood Corp., which he founded in 1919 with a borrowed \$500 and built into the largest



producer in the field, Dec. 19 in Scarsdale, N. Y.; Francis M. Cutting, 88, veteran realtor of Stockton, Calif., one of six men responsible for passage of the California Real Estate Act, Dec. 24 in Stockton; Barrett Pennell, former vice president of AIA's Philadelphia chapter, responsible for the restoration of many old homes and farmhouses in the area,

Jan. 2 in suburban Wynnewood.

CORPORATE CHANGES: John W. Pease, one of the organizers of the Prefabricated Home Manufacturers' Institute 11 years ago and its second president, elected president of Pease Woodwork Co. to succeed James W. Pease Sr., who became chairman of the board; Edwin J. Schwanhausser, elected president of the Worthington Corp. succeeding Hobart Ramsey, who became chairman; R. B. Crean, elected president of Reflectal Corp. (a Borg-Warner subsidiary) to succeed R. S. Ingersoll, who will devote full time to his duties as administrative vice president of Borg-Warner; Norman M. Cornell, to the presidency of the Gibson-Homans Co. in Cleveland, succeeding Harold Allison, who became chairman.

Joseph H. Orendorff, former head of HHFA's ill-starred research division-dead for lack of appropriations—landed a new job as head of the agency's division of international housing. Most of the activity in this field is carried on by Harold Stassen's Foreign Operations Administration; HHFA's part of the job is to gather technical material and train men for FOA to send abroad.

NAMED: George P. Shutt, building specialist with TIME and long-time (1932-53) advertising director of Architectural Forum, as director of sales for NAHB's National Housing Center; Realtor Clarence M. Turley, as chairman of a 16-man committee in St. Louis studying the city's longrange housing needs; P. S. Luttrell, former FHA director in Houston, as "Builder of the Year" there by the local home builders' association; Frank E. Oman of San Francisco, as president of the Home Builders Council of California; Albert E. Knorp as executive secretary; Hartford (Conn.) Architect Keith S. Heine, as president of the Connecticut chapter of AIA: Irvin R. Schildein, as president of the Chicago Mortgage Bankers Assn.; Gilbert W. Denges of the Williamson Heater Co., as president of the National Warm Air Heating & Air Conditioning Assn.

(NEWS continued on p. 51)



Thoroughly proved in a coastal area of wind-swept winter rains.

No sash sections to obstruct the view

Glass lifts out to simplify painting or cleaning



The Pierson Sashless Window combines only the essentials of frame, glass and a simple brass lock. It eliminates sash sections for an unobstructed view, and does away with puttying and sash painting. It comes knockdown, in a compact package, and takes only a few minutes to assemble. The four fabricated pieces are so moulded that the trim is complete for wallboard or plaster, inside—and for siding or stucco, outside. The sliding panes of 3/16" crystal glass are not included, but are readily obtainable from any local glazier.

The lower price of the Pierson Sashless Window, combined with the savings in hardware and labor, provide greater economy for both builder and home owner. Available in 22 sizes from 3 to 8 feet long, and from 2 to $3\frac{1}{2}$ feet high. Address inquiries to: Ernest Pierson Co., 4100 Broadway, Eureka, California.

Ideal for window walls and wider distribution of light.

FHA efforts to encourage quality standards produce first MPR changes; more under study

FHA is considering a radical revision of its minimum property requirements to encourage quality construction.

Neil Anthony Connor, 47-year-old Boston architect who became the agency's director of architectural standards last August, revealed the studies in a talk at NAHB's Chicago convention last month. He said:

"Possibly, we can work out a system which will not penalize the builder of the lowest cost house and at the same time give better recognition to better materials, better design and better construction. Perhaps we might end up with two documents—a H&H staff

set of minimums and a set of preferred standards. The minimums might be less stringent and more simple than our present MPRs.

"The preferred standards, on the other hand, might represent our best design thoughts and might encourage some-



thing other than minimums which many feel is the case with our MPRs now."

Only tentative. Any such overhaul of FHA rules, Connor carefully noted, "will take time." The agency so far is not committed definitely to the basic idea. But the fact that Connor broached it, even as a trial balloon, struck many a builder as indicative of the serious re-thinking top FHA officials are willing to give to some of their oldest habits in an effort to boost better housing. It is noteworthy, too, that FHA Commissioner Norman Mason personally read and approved Connor's talk in advance.

Up to now, the actual results of FHA's new emphasis on good design have been less sweeping than such long range plans as a dual set of standards. Even so, thinks Connor, some misconceptions have arisen.

"We want to recognize quality," he said in his Washington office recently. "But people think we're going to make the MPRs stiffer and stiffer to do it. I'm opposed to this." Where FHA may stiffen an MPR, says Connor, the objective will be cheaper maintenance or operating expense, or a more liveable home for little more construction cost.

It was with these items in mind that the agency recently asked the building industry for comment on a possible 10% step up of insulation minima. The method: reduce the allowable heat loss in a house from 60 Btu to 55 Btu per hour per sq. ft. of floor. Some industry sources feared this would penalize or limit large glass areas because they involve too much heat loss. To this, Connor notes that FHA is not yet committed to the proposal, and moreover that he certainly does not intend to penalize glass.

MPR changes recently ordered into effect

involve insulation, concrete work and heating requirements. Their purpose was explained this way by Commissioner Mason: "We are not acting in the best interests of the home owner unless in our appraisal we encourage the installation of equipment with long life and low maintenance costs." The changes:

▶ Insulation must be labeled to permit ready identification by inspectors. Installed batt or blanket insulation must show the manufacturer's or national distributor's name, the material thickness and maximum variations in this. Reflective insulation must show manufacturer's or distributor's name and catalog name and number. If a builder puts loose fill insulation in ceilings, he must attach and sign a card in the attic showing: thickness of the fill, density, that density will maintain at least 90% of the stated thickness, name of the manufacturer and date installed.

> Starting shortly, requirements will be slightly tightened for batching of fine and coarse aggregates. Concrete mixes will require minimum compressive strength of 2,000 psi and cement content of not less than 5 bags per cu. yd. FHA field offices can accept nonconforming mixes and materials if local experience and other evidence in dicates satisfactory results.

▶ New heating requirements adopt extensively the commercial codes and standards set forth by the American Society of Heating and Ventilating Engineers in their ASHVE Guide. Other industry codes—shorter and simpler versions of the Guide —replace long indexes in FHA state and regional MPRs. So complex are these changes that FHA advised architects to compare revisions with their local MPRs to find the differences.

Education, not orders. On the design front, Neil Connor prefers education of appraisers and underwriters across the nation to orders from Washington. It is nearly hopeless, thinks Connor, to write regulations against bad design. His approach: "More freedom for underwriters to discourage it." Connor has ambitious plans to help FHA underwriters in the 75 district offices get "expert advice" on valuing for amenities.

He would like to add 18 top-flight regional experts (6 architects, 6 structural engineers, 6 mechanical engineers) to advise the underwriters. "Liaison between Washington and many insuring offices has been weak," he says.

Should FHA change methods to encourage quality?

FHA should revise its present formula for valuation if it really wants to get results in boosting quality standards.

So says Leonard Haeger, NAHB research and technical director.

Under the present setup, FHA cost allowances are based on averages. If \$250 is the average cost of a furnace, a \$400 heating system would not be credited with \$400 in FHA's evaluation which governs the size of the allimportant down payment. The averages are based on houses considered typical.

To encourage quality equipment, thinks Haeger, FHA instead should base its valuations on the house that ought to be typical, rather than the one that is typical. Says he: "The architectural section should set up goals instead of writing rules. The answer to reflecting better quality is valuation. The clue to how to do it is objectives. Rate the ideal item at 100, and graduate items that are not quite so good from there down."

Anticipating argument on this theory, Haeger explains: "If you don't buy this idea, ask yourself: 'Does FHA's local cost man understand what the extra cost of the better product is?' 'Has the chief underwriter in each insuring office the guts to do something to credit quality?'"

A frank answer to the first question was given HOUSE & HOME by a top FHA official: "FHA's cost analysis system is a good system. But it hasn't worked right in the past because 1) there are not enough people in the insuring offices to carry it out and 2) therefore the long range studies of costs keep getting pushed into the background." Instead, the valuators and cost study men "keep getting sent out to put out fires."

Negro legal drive to force open occupancy in all FHA, VA projects hits Bill Levitt

The nation's biggest homebuilder was abruptly confronted last month with his industry's biggest long range problem: racial discrimination in government-backed housing.

The Natl. Assn. for Advancement of Colored People sued in Philadelphia federal court in an effort to compel William J. Levitt's, Levitt & Sons to sell some of its Levittown, Pa. homes to Negroes. It asked an injunction restraining Levitt from "discriminating" against Negroes "as long as he uses the credit, guarantees, insurance, approval and assistance of the federal government" for his big Bucks County, Pa. development. Also named defendants: FHA Commissioner Mason, VAdministrator Harvey Highley, and local directors of FHA and the VA mortgage division.

The suit asserted Levitt "throughout the years has consistently refused to sell to Negro families homes in any of his projects." It was the eighth local case brought in recent months by NAACP in its legal battle to make compulsory open occupancy the price of federal aid to private housing. Thurgood Marshall, who successfully argued before the US Supreme Court against school segregation, headed the NAACP team of attorneys.

The suit introduced a new contention in racial discrimination litigation. It asked a discrimination injunction on the ground that unincorporated Levittown, Pa. is really a town and that the builder's policy of barring Negroes is tantamount to a city ordinance refusing Negroes residence there. The complaint contended Levitt has a monopoly on all new construction in Levittown and thus is serving as a public utility.

A companion suit was aimed at Olney Gardens, an FHA rental project in North Philadelphia. It was filed on behalf of a Philadelphia couple and other Negroes who said they were refused apartments. NEWS

(continued from p. 51)

HOUSING STATISTICS

Administration asks \$965,000 to improve data on building

Big news for champions of better statistics for the building industry was approval by the Budget Bureau of requests for \$965,000 more for BLS and the Commerce Dept. They now keep track of the \$50 billion industry on \$400,000 a year. The President was to ask Congress for the newly-approved sum in his budget message. Some \$800,000 of the total would go to Commerce (specifically to its Business and Defense Services Administration) and \$165,000 to BLS for the next fiscal year. This is what the new money would buy:

From Commerce:

- 1. Greater accuracy and dependability of the dollar volume of new construction activity.
- 2. Statistics on alterations and improvements for all types of construction (probably to be done by the Census Bureau).
- 3. An annual study of materials requirements for selected types of construction.
- An inventory report, semiannual or annual, of residential vacancies.

From BLS:

- 1. An annual survey of the characteristics of home builders' operations, similar to the 1949 study (see p. 238).
- 2. A survey of size, price, type, etc. of today's homes.

In addition to the \$965,000 described above, the budget will call for \$500,000 for an intercensus housing inventory, to chart the changes since 1950. This would be done on a sample basis and hence would yield information on a national basis and by metropolitan vs. nonmetropolitan areas, for example. It would not break down vacancy rates or other data by state or locality. Such broad statistics have limited use. But with increasing attempts to get a valid estimate of vacancies—as barometer of the health of the housing boom —even national rates would be illuminating.

MORTGAGE MARKET QUOTATIONS

(Originations quoted at net cost, secondary market sales quoted with servicing by seller)

As reported to House & Home the week ending Jan. 14

	FHA	41/2's	5% equity	or more 4 ¹ /2's		4!/2's
City	Origi- nations	Secon- dary	Origi- nations	Secon- dary	Origi- nations	Secon- dary
Boston local	par-101	a	par-101	a	par-101	a
Out-of-state	a	99-par	a	99-par	a	97-99
Chicago	97-99	99-par	97-99	99-par	96-97	98-99
Denver	99-par	99-par	99-par	99-par	99-par	99-par
Detroit	971/2-99	a	971/2-99	a	961/2-97	a
Houston	par	par	991/2-par	991/2-par	971/2-99	971/2-99
Jacksonville†	par	par	par	par	97-98††	97-98††
Kansas City	99-par	par	99-par	par	a	a
Los Angeles	99-991/2	99-991/2	98-981/2	98-981/2	97-971/2	97-971/2
New York	par	par	par	par	par	par
Philadelphia	par	par	par	par	99-par	99-par
San Francisco	par	par	par	par	951/2-98	951/2-98
Washington D.C.	par	par	par	991/2-par	991/2-par	98-par
8 No market				a rear ter terrer		

^a No market. * Probable prices throughout Pacific Northwest.

SOURCES: Boston, Robert M. Morgan, vice pres., Boston Five Cents Savings Bank; Chicago, Maurice A. Pollak, vice pres. & secy., Draper & Kramer Inc.; Denver, C. A. Bacon, vice pres., Mortgage Investments Co.; Detroit, Robert H. Pease, pres., Detroit Mortgage & Realty Co.; Houston, John F. Austin Jr., pres., T. J. Bettes Co.; Jacksonville, John D. Yates, vice pres., Stockton, Whatley, Davin & Co.; Kansas City, Byron T. Shutz, pres.,



Herbert V. Jones & Co.; Los Angeles, John D. Engle, pres., Insurance Funds Mortgage Co.; New York, John Halperin, pres., .. Halperin & Co.: Philadelphia, W. A. Clarke, pres., W. A. Clarke Mortgage Co.; San Francisco, William A. Marcus, senior vice pres., American Trust Co.; Washington, D. C., George W. De Franceaux, pres., Frederick W. Berens, Inc.



Private housing starts for December totaled 89,600, below November's 102,700, but an all-time record for December. First preliminary tallies for 1954 put private starts at 1,196,100, and total nonfarm starts at 1,215,500. This made 1954 second only to 1950 in starts, but first in dollar volume—\$12,035,000,000 for nonfarm new private housing.

BUILDING MATERIALS PRICES



BLS wholesale building materials prices index crept up one-tenth of one point from 121.9 in November to 122.0 in December. Minuscule increases for lumber and wood and for concrete ingredients accounted for the rise.

RESIDENTIAL BUILDING COSTS



E. H. Boeckh & Associates' index of residential building costs rose 0.3 points to an index of 254.7 in December after two months at the level of 254.4. Percentage increase was only 0.1%.



STOP THIS THREAT TO REPUTATION

ON BLOCK:

with masonry finishes bearing this seal---

Paint often is the outward appearance by which the work of architects and builders is judged. Premature failure endangers not only the surface protected, but the reputations of architect and builder. That's why it's important to be informed on paints and their application. This is especially true when it comes to masonry.

Masonry surfaces are difficult to keep painted. The alkalies found in all concrete combine with moisture to attack and destroy conventional paints, in as little as a few months. What is needed is an alkali-resistant finish—one made with PLIOLITE S-5—first and finest of the synthetic rubber resins.

Paints made with PLIOLITE S-5 have thoroughly proved, in almost a decade of extensive tests and wide use, they do a better job longer on all types of masonry. The reasons for their lasting beauty are: 1. Extreme resistance to alkalies. 2. Excellent

weatherability. 3. Good self-cleaning properties. 4. A breathing-type water repellency.



Protect your reputation by learning more about paints and masonry painting. Write for the free booklet, "Paint Magic For Masonry," and a list of more than 200 brand names by leading manufacturers, to: Goodyear, Chemical Division, Akron 16, Ohio

PROTECT THE SURFACE AND YOU PROTECT ALL – including reputation. Premature paint failures such as these can be prevented with masonry finishes based on PLIOLITE S-5.





ON ASBESTOS-CEMENT SHINGLES:



NEWS

(continued from p. 52)



AVERAGE HOME SIZE is growing. BLS finds the percentage of nonfarm, one-family houses over 1,000 sq. ft. has jumped from 35% in 1949 to 60% during the first quarter of last year.

Houses-bigger, costlier

New BLS figures, first in three years, show new, onefamily homes are 5% larger than in 1951; average price is up from \$10,800 to \$12,300

Like US families, US homes are growing bigger and bigger and more and more expensive. Last year, according to the Bureau of Labor Statistics, the average floor area for new nonfarm, one-family houses were 1,140 sq. ft.—about 5% bigger than homes built in 1951. The average price was \$12,300—compared to \$10,800 in 1951, \$10,200 in 1950 and only \$9,700 in 1949.* Some 60% of 1954 homes were basementless, and 82% were of frame construction. More than 77% were going up in metropolitan areas, only 23% elsewhere. The South was building more than the West.

It has been three years since BLS has been able to produce any such report on the kind of house the nation is getting as the one issued Dec. 30: Congress has been too tight fisted with money. For that matter, it still is, although the industry has hopes of improving its statistical status next fiscal year (see p. 52). The 1954 study of housing characteristics. covering 5,000 projects and 30,000 dwellings started in the first quarter, was chiefly financed by three trade associations (Structural Clay Products Institute, Aluminum Window Manufacturers' Assn. and Ponderosa Pine Woodwork Association). Hence BLS delved into only a few characteristics of homes. The resulting statistics, however, break a threeyear drought of solid facts on housing trends.

The survey disclosed significant differences in the average size and price of houses going up in four BLS-devised regions. The South had the biggest houses. Average prices were highest in the Northeast. Statisticians cautioned against drawing direct comparisons between average size and price, however, because the samplings involve different distributions.

 US
 Northtotal
 Northeast
 Northcentral
 South
 West

 1-family homes started..202,000
 36,900
 49,400
 69,000
 46,900

 Median sale price.....\$12,300
 13,600
 13,100
 10,800
 12,600

 Av. floor area (sq. ft.)
 1,140
 1,120
 1,020
 1,220
 1,180

BLS observed that in metropolitan areas, where more than three-fourths of last year's nonfarm units were being built, the median intended sales price of houses was \$12,900. This compares to the national average of \$12,300 and an average of only \$10,100 for houses in nonmetropolitan areas. Across the nation, a quarter of the houses started were priced below \$10,000. Another quarter were priced from \$12,000 to \$14,999. One-tenth were intended for the high-price market above \$20,000.

Five-year trends. How much the average house has recovered from the pinch on size imposed by the postwar housing shortage was pointed up by the BLS study. The percentage of US one-family homes 1,200 sq. ft. or bigger has nearly doubled in the last five years:

1954	36%	1950	20%
1951	29%	1949	17%

Offsetting this good news, however, is the fact that the proportion of too-small houses is rising again. Ten per cent of the '54 one-family houses in BLS' study were less than 700 sq. ft. It was only 4% in 1951. However,



MEDIAN SALE PRICE of nonfarm, one-family houses is also on the rise. BLS' figures show it climbed from \$9,700 in 1949 to \$12,300 last year. the number of homes between 700 and 1,000 sq. ft. is falling (see table, below).

Among comparative materials, BLS found aluminum continuing to gain on other kinds of window frames for the one-family home. But wood appears to have improved its position since 1951.

FIVE-YEAR TRENDS IN CHARACTERISTICS

Window tramas

	1954	1951	1950	1949
Floor area (sq. ft.)	per	centage of	houses	
Less than 700	10	4	5	9
700-799	8	11	14	21
800-999	20	31	35	35
1,000-1,199	24	25	25	18
1,200-1,499	19	n/a	n/a	n/a
1,200-1,599	n/a	18	14	12
1,500-1,799	10	n/a	n/a	n/a
1,600 and over	n/a	11	6	5
1,800 and over	7	n/a	n/a	n/a
n/a—not available. quarter; 1950 covers				

quarter; 1950 covers 2d and 3d quarters; 1949 covers 3d and 4th quarters.

w indoto frames	percenta	ge of nous	53	
Wood	61	57	60	71
Steel	19	28	29	24
Aluminum	18	14	11	5
1954 figures lump	"majority" with	all window	frames o	f each
type; earlier figure ted, hence figures	and the second s		nowns are	omit-

Among '54's first quarter homes, BLS found one of the widest regional differences in the popularity of basements. While 36% of US homes had full basements and 5% partial basements, this was a compound of very few in the South and West against a preponderance of cellars in the Northeast and North Central states.

PERCENTAGE OF	ONE-FAMILY	Номв	s with Basi	EMENTS	
	US total	NE	N Central	South	West
No basement	58	21	44	73	79
Full basement	36	63	53	20	18
Partial basemen	t 5	15	2	4	2
Unknown	1	1	1	3	1

Frame construction predominates. BLS found 82% of one-family homes were frame type. Of these, about 40% also had wood facing, 25% brick facing. In the West, stucco on frame was the prevalent type. It was being used on about half the one-family housing. In the North, asbestos shingle facing was as popular as wood. The two types together accounted for more than two-thirds of the homes under construction.

	US total	NE	NCentral	South	West
Masonry	13.6	7.4	12.4	18.6	12.4
Frame	81.7	88.8	82.0	76.1	82.8
Brick facing	19.5	13.7	22.5	31.3	3.4
Wood facing	31.4	34.1	44.2	25.7	23.8
Asbestos shingle	13.8	34.1	9.0	13.9	2.7
Other	17.0	6.9	6.3	5.2	52.9*

Modular measure savings explained at conference

Savings of 10% in the cost of masonry work, 15% in field labor and 15% in drafting room expense were credited to the use of modular methods at a building industry meeting in Washington sponsored by the Building Research Institute and backed by eight groups including NAHB and AIA.

Contractors, architects and manufacturers gave strong testimonials to the benefits of modular measure, a system for simplifying

^{*} Figures are reasonably comparable. 1954 is median proposed selling price for one-family structures all nonfarm areas; 1951 and earlier figures are median purchase price of homes in 10 metropolitan areas.

on 700 Electronic Comfort homes!

Franklin L. Burns, Denver home builder,

offers smart, low-cost "Cliff May Magazine Cover Homes"

with Electronic Moduflow comfort

The home-building pace in the Rocky Mountain area continues to increase as the Burns Construction Co. opens its new Harvey Park Subdivision in Denver-a project of 700 electronic comfort homes!

Harvey Park homes will have a variety of seven different styles in the "Cliff May Magazine Cover Homes" design, one of which you see on the opposite page.

These smart looking homes offer a garden and patio distinctively blended into the living area. They range in price from \$11,500 to \$16,000.

Builder Franklin Burns wanted to assure the ultimate in comfort in his houses—in all price ranges. That's why he's standardizing on the Honeywell Electronic Moduflow Temperature Control System.

Electronic Moduflow is the most sensitive and most practical control system available.

Moduflow features an electronic thermostat *outside the house* where the weather is. This outdoor thermostat works with an electronic thermostat in the living room, and *automatically* varies indoor temperatures as the weather changes.

Builder Burns is featuring this *electronic comfort* system in all his advertising-newspaper, radio, television, and on signs and exhibits. Prospects can readily understand and appreciate the *electronic comfort* home!

This is another reason why builders all over the country – with houses for sale in every price range-install Electronic Moduflow as standard equipment. And they're finding how profitable it is to feaure this *electronic comfort* in their advertising and sales promotion.

Franklin L. Burns, a leading Rocky Mountain area builder



Frank Burns is President of the Burns Realty and Trust Co. in Denver, a leading home building and real estate firm there since 1899. The Burns Co. recently completed two large Denver subdivisions – Burns Brentwood (1,200 homes) and Burns Aurora (1,000 homes). The house you see here is one of 700 Harvey Park Subdivision homes – all with Honeywell Electronic Moduflow Temperature Control!

Honeywell backs up your local effort with a dynamic national advertising program in LIFE magazine. It helps create demand for your new homes, and keeps Honeywell Electronic Moduflow as a top sales tool for you!



112 OFFICES ACROSS THE NATION

Electronic Moduflow





Why people need varying indoor temperatures

Tests show that if indoor temperature is merely held constant when outdoor temperature falls, a person inside *feels* uncomfortable. This happens because colder walls "draw" more heat from the body.

With Electronic Moduflow in your homes, the colder it gets outside, the higher the temperature inside becomes. Colder walls are offset by this higher inside temperature.

For example, because of colder outside walls, a person may require 74° to feel comfortable – although he was comfortable previously at 71°. Electronic Moduflow solves this personal comfort problem *automatically* – and gives your homes a wonderful new kind of comfort.

For complete information on Electronic Moduflow for the homes you build, contact your heating contractor, your local Honeywell office, or mail the coupon shown below.

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Zone____State__

Please send me information on Electronic Moduflow.

Name____

Gentlemen:

Firm Name____

Address

City____

Because of Increased Sales & Production





TUB ENCLOSURE NOW at a NEW LOW PRICE!



Beauti-Dor is sold only through distributors Manufactured by:

SHOWER ENCLOSURES, INC.



BUILDERS! OFFER THESE FEATURES

- A custom designed latest style bathroom.
- The convenience and economy of a tub and shower stall in one!
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 More leisure time. BEAUTI-DOR is splash-tight no pools of water to mop—no curtain to launder or replace!
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DEALERS! OFFER TOP QUALITY

- Easiest installation! BEAUTI-DOR is shipped in one carton—COMPLETELY ASSEMBLED AND GLAZED!
- Remove BEAUTI-DOR from the carton and install in 30 minutes or less!
- Heavy thick Aluminum—highly polished, heattreated, rust-proofed!
- Thick 7/32" glass set in rubber-tight channels.
 Exclusive translucent pattern.
- Panels roll on double overhead cadmium plated ball-bearing rollers—open or close at the touch of a feather!
- Height overall 59¹/₄". Shpg. wt. 95 lbs.

P.S. You haven't seen anything until you see the terrific BEAUTI-DOR ADJUSTABLE SHOWER DOOR—IT'S AMAZING! *Prices slightly higher west of the Rockies.

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Please rush me the BEAUTI-DOR st obligation, and all details of America's Enclosure and Shower Doors.	tory, without Leading Tub
I am aBuilderDistributor	Dealer
Name	
Company	
Street	
CityStat	te

NEWS

(continued from p. 58)

dimensions of buildings and standardizing on stock sizes of materials.

Output increased. "Modular coordination does for the construction industry what efficient production methods do for the auto makers," said Contractor James E. Coombs of Morgantown, W. Va. He claimed savings on masonry work up to 10% because masons do not have to cut and fit, use less time in measuring and make fewer errors.

Said Chief Engineer J. P. Caldwell of the J. A. Jones Construction Co. of Charlotte, N.C.: "We've had a taste of modular construction and you'd have a terrible time breaking us of it." His firm found it could get face brick laid for \$42 per M rather than \$81 and field labor costs were cut 10%-15%.

Architect John R. Magney of Magney, Tusler & Setter, Minneapolis, said drafting costs were 15% less since his firm began using modular measure. As evidence that construction costs also were less, he pointed out that after a large school was completed wasted brick pieces were so few they were carried away in a pickup truck.

Inventories sliced. Speaking as a wood millwork manufacturer, C. K. Paine of the Curtis Co. said that using modular measure and standard sizes reduced 1,406 window sizes to 659 and 1,710 sash members to 797. Curtis was able to reduce its machining of wood window parts by 30% and its inventory of stock materials from 3,200 items to 1,200. He said one of the greatest obstacles to standardizing window sizes was regional preference of architects and builders for special widths of wood members, even when glass was identical in size. "The public does not know what special sizes cost," he said. "They wouldn't think of using special size bathtubs and yet they use many special windows."

Builder W. A. Simms of Dayton said that modular measure is a basic factor in the success of building components, for which he predicted a bright future. "In a few years," he said, "all items like the range, refrigerator, laundry and air conditioning will be built in as standard parts. It is evident that the use of components leads to higher quality."

LABOR NOTES

Chicago glaziers hit by antitrust probe

The standard way of installing glass in new homes in the Chicago area is the same oldfashioned, on-the-scene way that glaziers there have used for generations. Spurning the comfort and efficiency of a heated shop, glaziers have insisted on braving scorching sun and freezing blasts to do their work in the building operation. Whatever the advantages of such methods, these disadvantages have been apparent to all Chicago area homebuilders: rigid limits on panes per day to be installed by any one glazier and shortage of

(NEWS continued on p. 66)

Meet 3 newcomers in Worthington's <u>air-cooled</u> line!



WORTHINGTON'S BRAND-NEW AIR-COOLED CONDENSING UNIT. Install it anywhere—outdoors, breezeway, garage, basement. *All electric—no water used.* It'll do an efficient job in even the hottest weather because of powerful condenser air-blowers. 2-, 3- and 5-hp.



COMPANION COOLING COLLS. Worthington's new broad line of Remote Duct Cooling Coils provides you with a wide range of capacities and sizes that will simplify your application and installation problems. Light-weight, easy-to-install unit is available in 2-, 3- and 5-ton capacities.



AIR-COOLED CONDENSERS. These new Worthington units feature over-sized condenser coils; powerful, quiet condenser airblowers; continuous-duty blower motors; weather-proof cabinet. They convert water-cooled air conditioning units to air-cooled operation. 2-, 3- and 5-ton capacities.

Look at these other Worthington residential units!



WORTHINGTON'S COMPACT YEAR-ROUND UNIT measures only 29" deep by 42" wide by 70" high. Ceramic-coated heat exchanger, gas or oil-firing. Completely automatic summer and winter operation.



"ADD-ON" RESIDENTIAL COOL-ING UNITS convert present warm air furnaces to year-round cooling and heating. When additional air delivery is needed. fan section shown on top of unit is used. 3and 5-ton sizes.



WATER-COOLED CONDENSING UNITS. Worthington's packaged water-cooled condensing unit fits anywhere — closet, basement, attic, even in the garage. Compressor, condenser, and controls come in one compact cabinet. Use it with Worthington's Remote Duct Cooling Coil, for existing homes or new construction. Available in 3- and 5-ton capacities.



GAS-FIRED BOILER. Sectional cast iron, AGA approved for all gases. Enclosed in handsome cabinet. Readily suited for use with heating coils in packaged units for year-round application. 54,000 to 378,000 BTU input. Want to know more about Worthington's complete line of residential air conditioning equipment? Contact your nearest Worthington dealer or write to Worthington Corporation, Air Conditioning and Refrigeration Division, Section **4.59**H, Harrison, N. J.



Climate Engineers to Industry, Business and the Home

"Greatest sales tool I've seen yet ... to help move homes faster"



Suburban Gas or Electric "Built-Ins"

In his travels over the nation as chairman of the N. A. H. B. Construction Committee, Martin L. Bartling, prominent builder from Knoxville, Tennessee, states: "I've found that no single item holds more interest among builders than built-in ranges. It's a reflection of the terrific desire on the part of home buyers for modern, convenience-level cooking. In my opinion Suburban, with all its exclusive features, is by far one of the greatest sales tools yet for helping to move homes easier and faster."

EXCLUSIVE—BEST DEAL FOR BUILDERS! Whether your public demands gas or electric, only Suburban offers you easily interchangeable color panels for oven front and surface unit trim. Your prospects may choose from stainless steel, black, white or 4 additional porcelain enamel colors. Suburban is also the only quality-built modular unit priced to sell for less than comparable gas or electric conventional ranges. Easily installed, pre-sold to millions through powerful national advertising. Same size cabinet opening will take either gas or electric ovens.



Dept. DD, Samuel Stamping & Enameling Co., Chattanooga, Tenn. At no obligation to me, please send complete information on GAS ... ELECTRIC Suburban built-in ranges.

NAME	
FIRM	
STREET	
CITY	STATE
	I'm a Builder of New Homes Kitchen Remodular

NEWS

(continued from p. 62)

glaziers during peak glazing seasons such as late autumn.

When one builder last fall was unable to get his homes glazed promptly, he removed the sash, carried them to a union glass shop, had glass installed there, then reinstalled the glazed sash. When prompt retaliation by the glaziers' union threatened to stop his entire production, he removed the newly installed glass panes and arranged to have the work redone by on-the-scene workmen.

Grand jury probe. It was against this sort of background that a special federal grand jury was impanelled Jan. 3 to probe possible antitrust violations in the glass industry.

Nineteen glazing firms were subpoenaed, in Chicago, and on Jan. 4 they began to file into the old US courthouse to give evidence to the jury. Earl Jenkinson, chief of the Chicago antitrust division office, predicted that it may require six months to unfold the complete story of glass union-industry abuses in the Chicago region. But he was confident that he had enough evidence to break up one of the building rackets that has helped make Chicago building costs so high.

Big name witnesses. First witness carried a 9" thick stack of records. He was Michael Shapiro Jr., president of Hamilton Glass Co., a Chicago jobbing firm. Among other firms subpoenaed to appear with their records were Libbey-Owens-Ford Glass Co., Pittsburgh Plate Glass Co., American Window Glass Co., Fourco Glass Co., and Backford Window Glass Co. The first four were defendants in a consent decree in federal district court in Toledo. Oct. 3, 1948 which restrained them from restricting sales or fixing prices.

Already pending before the Chicago district federal court is an antitrust suit against the Employing Lathers' & Employing Plasterers' Assns. of Chicago. These cases, dismissed last July in district court, were reinstated by the US Supreme Court, on the question of whether interstate commerce was involved. The plaster cases are expected to go to trial in April.

Labor to fight against right-to-work laws

Labor unions in the construction industry continued to account for a lion's share of big strikes in 1954. Over-all, fewer workers were idled by 1954 work stoppages than in any year since 1948. Over 28 million man-days were lost in 1953, according to the Labor Dept., against 22 million in 1954. The fact remained, however, that seven of the 18 big strikes last year were involved in the construction industry. Biggest: the three-month strike of 60,000 West Coast lumber workers.

The outlook for this year: a concentrated effort by all unions to win more benefits, including special pressure on state legislatures to repeal right-to-work laws. For building, the probabilities are that this means even

\$136 on homes like

says George DeVries, DeVries Construction Co., Inc., Lexington, Mass.

DeVries Construction Co. stands to save a whopping \$30,600 on their 225-home, 200-acre Sun Valley development with Insulite's approved Shingle-Backer System. And while this Bildrite and Shingle-Backer combination is an effective cost-cutter, it also helps build better homes more bracing strength, greater insulation value, tighter sidewalls and deep, modern shadow-line beauty. That's the nice thing about Bildrite and Shingle-Backer—they help you build better homes *while they cut your costs*. Pictures on these pages show how.



Builds a tighter, stronger wall. Developed by Insulite, this combination makes a strong, tight exterior wall with more than twice the insulation value of wood sheathing, felt and double-course wood shingles combined: (1) Bildrite Sheathing (2) Shingle-Backer (3) Outer-course Shingles (4) Grooved Nail. Withstands 250 M.P.H. winds.



Next, apply Shingle-Backer in half the time reguired for wood under-course shingles. Handy 4' panel produces deep, modern shadow-line. Practically eliminates waste. Adds extra insulation value to sidewall. Can be used or stored anywhere in any weather—it's waterproofed throughout with asphalt.



First, apply Bildrite—cut sheathing time as much as 43%. One carpenter can sheath 1,000 sg. ft. in 8 hours or less. 4' Bildrite has more than twice the bracing strength of horizontal wood sheathing, thus eliminates need for corner-bracing. No building paper required since Bildrite is waterproofed throughout with asphalt.



7 121

Bildrite and Shingle-Backer help save an average of \$136 on Sun Valley homes like this. See how Insulite's approved Shingle-Backer System can help you build better for less on your next job. Free cost-comparison forms and illustrated product data show how. Write Insulite, Minneapolis 2, Minnesota.

INSULITE DIVISION, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota



Choose from the greatest selection of handsome, stainless steel Bilt-in units with seven heat switches; middle griddle; and six models available with Duo-Cook*

* convertible to an extra surface unit



12 cooking tops-2 ovens-warming drawer THERMADOR the Original and the Finest!

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SEVEN LEAGUES AHEAD"	Please send me illu on Bilt-in Ranges		ire
Address			
City	Zor	eState_	1

NEWS

(continued from p. 66)

more work stoppages in 1955. Building faces a boom year. Good business means hot labor negotiations.

The CIO, in its recent convention, expected at least a $1\frac{1}{2}\%$ increase in total production of goods and services this year. The implication: the CIO will be out for more money. With building apparently going into its second biggest year in history, the predominant AFL contingent of the construction trades would plan similar activity for increased benefits.

Right to work. The union's No. 1 plan of action was going to be an all-out effort to amend right-to-work laws in 17 states and to prevent passage of such laws where they did not exist. (A total 44 state legislatures will meet this year.) The right-to-work laws, which outlaw union shops specifying union membership or no job, have spread through the South in the last few years and caught organized labor, in a manner of speaking, napping. This would be the year to fight.

Industry would be out to counter-lobby with a vengeance. Support for the laws, which will be up for consideration in at least half-adozen states, including California and Maryland, had already come in broadsides and editorials from the US Chamber of Commerce and the National Assn. of Manufacturers. But Secretary of Labor James Mitchell had stated in December that he was "categorically opposed" to such laws, a view that was promptly characterized by the administration as only Mitchell's personal view. The split was characteristic of the black-and-white approach to the questions. Neither NAHB nor AGC had officially made a statement on the coming battle, undoubtedly lying low to keep peace with the building trades.

Paint problems. On a more local level. painters—who in the latter months of 1954 had been in the forefront of wage gains among unionized building trades' workers were arguing with contractors and homebuilders in Miami and Washington relative to their welfare funds. The painters' council in Washington called 11 contractors "deliberately delinquent in payment of contributions to the painters' health and welfare fund."

NRLB examiner rules prefab boycott illegal

An NLRB trial examiner in Cleveland last month ruled that AFL carpenters violated the Taft-Hartley Act by boycotting ready-made doors.

The finding set a precedent of great benefit to the prefabricated home industry. It involved a case in which Local 11 refused to handle doors produced by General Millwork Corp. and Haskelite Mfg. Corp., both of Grand Rapids, Mich. on a job in Rocky River, Cleveland suburb, where Erie Building Co. put up 150 prefabs. The doors reached the job site with frame cut, door hung and all hardware installed.

The examiner ordered the union to cease and desist.

.. Choice of Leading Builders Everywhere

The FASCO name, advertised nationally, is recognized by home buyers as representative of quality and reliability. The top-flight builders shown here, and many more like them, are including FASCO Ventilating Fans as standard equipment in the finest homes in the country. Specify FASCO for your new homes . . . in kitchen, bath and utility rooms . . . to meet the growing demand for multiple ventilation.

FASCO OFFERS YOU ...

LOW-COST VENTILATION

Every home, regardless of price range, can have a FASCO 847 or 1047 Ventilating Fan. Volume production brings costs down . . . and these savings are passed on to you.

LOW-COST INSTALLATION .

FASCO 847 and 1047 are engineered as a complete, simple package. No on-the-job fitting or other time consuming problems.

NO SERVICE CALL-BACKS .

FASCO backs up all its ventilating fans with a 5-year guarantee against mechanical and electrical defects. Install them-forget them. With care, they'll last a lifetime.

Write today for catalog and complete information on FASCO-America's most popular ventilating fans.





Associated Builders, Inc., New Orleans, La. "FASCO Vent Fans are plus features which sell my homes quicker."



Walter G. Stackler, Pres. Long Island Home Builders Institute Long Island Home Builders Institute Leonard L. Frank Member Exec. Comm., NAHB Chairman, 1953 NAHB Educational Comm. "Have used FASCO in more than 700 homes in all price ranges."



Charles C. Ervin, Pres. Contraction Co., Inc. Charlotte, N. C. "Ease and simplicity of installation, sat-isfactory service under rigid test sold us on FASCO."



Leonard W. Leeds, Pres. Hearthstone Park, Inc., Stamford, Conn. C. W. Goebel, Vice Pres. "Have used FASCO Ventilating Fans with weaved PASCO Ventilating Fans with unaualified satisfaction.



sliding windows

- Sash glide easily on round-top tracks
- Flexible bronze pressure strip at head has two fold purpose
 1. It is good weatherstrip
 2. It permits easy sash removal
- Extruded sill with adequate weep holes and drip pan, provides quick drainage with no danger of sill rot
- This equipment permits the use of stock windows which eliminates the necessity of having special mill work

Ideal for shoulder high windows . . . in bathrooms, kitchens, bedrooms. Horizontal sliding windows equipped with No. 890 ALL-Glide are E-X-P-A-N-S-I-B-L-E. They can be easily stacked.

ALLWEATHER Balance Strip with FLOCKED COIL SPRINGS

ALLWEATHER Balance Strips No. 490, 90, 810Z and 812Z are furnished with FLOCKED COIL SPRINGS.



Ajustability is built-in. Balance tube with semicantilever action insures weatherstrip contact in all kinds of weather. The base section is always in close contact with jamb insuring stability. FLOCKED COIL SPRINGS are concealed by a functional part of the strip itself.

strip itself. Tests made by the University of Minnesota Institute of Technology Testing laboratory in cooperation with the Weatherstrip Research Institute, show that double-hung wood windows, when metal weatherstripped show an infiltration ratio 6 TIMES LESS than nonweatherstripped windows.



Patent Applied for

SEE OUR CATALOG IN SWEET'S: Architectural File • Light Construction File





(continued from p. 74)

JOINT EFFORT IN MILWAUKEE

NEWS

is priced at \$24,500, including the cooperative services that the team is so interested in promoting—landscaping, interior design and architectural consultation—a ³/₄-acre lot, driveway, well and septic system.

More \$20,000 prefabs

Mel Armbrust, head of Ray-Mel Homes in Columbus, Ohio, is putting steam into his young prefab company by moving into the higher-priced bracket. Average price of his houses: \$20,000. Ray-Mel, in businesss a year, thus follows an industry trend already established by prefabbers like **Don Scholz, Techbuilt** and **National Homes.** (H&H, Dec. '54). The company is up to a time schedule of a house in two-and-a-half days, can push it to one a day if they want. Their practice is to take any set of blueprints that a customer brings in and build the frame to specifications as speedily as possible.

as speedily as possible. "The system is right, it's quick and it's effective," says Armbrust. "And that makes the entire house cheaper. The contractors can sell houses for about 10% less than if the house were built at the lot."

\$7,000 home in Lubbock

What this country needs, in the opinion of many, is a good \$7,000 house. A recent contender for the title comes from Architect **Ridjell Lee** in Lubbock, Texas who, with Associate **E. Paul King**, worked out 960 sq. ft. of floor space for \$7,000. Lee worked with Developer **Ray Pace** and the **E & R Construction Co.** to give low-income families three bedrooms in "a plan that was livable and a design they would be proud to own." The rectangular result is no mansion, but for the price and space offered it shows a simplicity of line not always found in more expensive houses. Lee reports he followed HOUSE & HOME's "Good Design for Production" system (Sept. '54), then worked with his subcontractors for cost-cutting integration all along the line. A minimum of cutting and fitting enables him to put the houses up at a one-a-day rate. Sales record: 106 homes sold the first four days, with 30 orders on the waiting list for the next project.



New York award winner

Simeon Heller, past president of the New York Society of Architects, won the top award in the residence division of the Queens (N. Y.) Chamber of Commerce annual building awards competition for 1954. His house, which he built for himself, is raised 6' above street level to secure garage space and a finished basement room and is set on a 60' x 100' plot. High windows in the bedroom gain privacy on the street side of the house; living room windows face gardens in the rear.



Low-cost CHAMPION

like all products of United States Steel Homes, is color styled by Howard Ketcham for extra eye appeal.



Glamorous WESTERNER

features such sales-boosting extras as built-in bookcases, desk, and vanity. Third bedroom is a dual-purpose den/sleeping room.

Steel Homes helps you sell them

Warranty You get a one year warranty against any defect in workmanship or materials on the products manufactured by United States Steel Homes. This is not only a good selling feature, but it is protection for you, as well. This warranty covers the basic home package which includes assembled wall, roof, and ceiling panels, insulation, trim, windows, doors. You can choose the architectural treatment you want, and you can buy various home appliances and accessories at great savings from United States Steel Homes.

GET THE COMPLETE STORY

SEE THE UNITED STATES STEEL HOUR. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station. **Prestige** When you are a United States Steel Homes Dealer the prestige and backing of United States Steel helps you in everything you do.

United States Steel Homes, Inc. Dept. HH-25, New Albany, Ind.
My organization is capable of building more than 10 con- ventional homes a year. Now I'm interested in what United States Steel Homes has to offer. Send me complete infor- mation, telling me what I will gain by building the prod- ucts of United States Steel Homes, Inc.
Name
Firm Name
Address
Address



the greatest selling asset any kitchen can have ... and at a price every home can afford

A woman's heart is in her kitchen . . . a well-known fact! Then give her her heart's desire — a PREWAY fully automatic Wallchef, electric or gas . . the greatest you've ever seen. Strong language, but true . . for PREWAY Wallchef is a full-size oven — with oven controls at eye level. No more stooping or bending . . . and PREWAY alone has an oven window with push-button oven light that illuminates the interior without need of opening the door! Of course it's exciting – and so are PREWAY Counterchef units, electric or gas, that can be placed anywhere in clusters of two, four, six or more . . . true flexibility of arrangement. Cooking heat in electrics is controlled by 7-speed automatic switches and every element has an indi-vidual, easy-to-clean lift-out aluminum "spill-over" bowl that eliminates messy trays.

And PREWAY has even more good news! Every home can have this happy installation because it costs less than a conventional automatic range — electric or gas. That's the word of a multi-million dollar company which has been making high-quality specialized home appliances since 1923. Think what you can do with this dynamic opportunity! The full facts are yours for the asking. Phone, wire or write today.



Inc. 2255 Second Street North Wisconsin Rapids, Wisconsin

NEWS

(continued from p. 78)

OPINIONS

In recent weeks, the nation's press has delivered itself of the following judgments on housing matters:

FHA INVESTIGATION

At one point in the Senate banking committee's report on the government housing scandals occurs a remark to this effect: If these housing projects can't be handled without creating 'unconscionable profits' for private builders then the government better build the projects itself. The report hastens to say it doesn't actually advocate this course. It is just as well. For it would be like saying the way to cure a hangover is to get drunk, since the government's involvement even on a partial basis was the root of the housing troubles.... There is a ... basic way in which the government is the root of the difficulty. . . . The money the government risks is tax money and if it goes down the drain there will always be more, from more taxes or the printing press. The temptation to irresponsibility is therefore all but unlimited. It will always be so, no matter how careful the policing, so long as the government intrudes into the province of private business." - The Wall Street Iournal.

"In the absence of any interest by the FHA in keeping mortgages to a minimum, so that repayment would be more certain, builders were tempted to pad their costs. When the loan exceeded even these padded expenses, the excess was often siphoned off as a 'windfall.' The mortgage banker had no incentive to care, and no occasion to express himself if he did, since the loan was guaranteed (sic) by FHA. FHA officials knew what was going on, but they had no financial stake; it was taxpayers' money. . . . The whole affair is a warning that, in the present imperfect state of mankind, honesty in business affairs is best assured by the presence of somebody with a financial interest in protecting himself against cheaters."-Chicago Daily News.

"The taxpayer and apartment house renter have to pay for the faults of that program. Dishonest officials and builders took advantage of it. But Congress wrote it. The blame could be spread a little more evenly than the Senate banking committee wished to do. . . .? St. Louis Post-Dispatch.

LABOR RACKETEERS

"The most satisfying part of the Dale and Batman labor racketeering convictions (H&H, Jan. '55, News) is that the St. Louis area at long last seems destined soon to become purged of its reputation for building industry shakedowns. No one can estimate the sums added to the cost, or the new construction lost to the area because contractors and investors feared to take on projects. But certainly they have been great."-St. Louis Globe-Democrat.

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- 120 BUILDERS SELL 1,500 HOUSES A YEAR WITHOUT FHA OR VA Ray Cherry and John Hadley prove that conventional financing can compete with government loans for low-cost houses.

126 DECORATION SOFTENS A GEOMETRIC HOUSE Architect John MacL. Johansen patterns outside walls of a small Greenwich, Conn. house with tiles; uses patterns of nature seen through glass to enrich the inside.

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132 AIA PRIZE-WINNING HOUSE Architects Smith & Williams' custom house at Pasadena uses materials interestingly, is remarkably inexpensive.

134 WHY PAY YOUR ARCHITECT MORE?

Rochester, N. Y.'s Jablonski Homes, Inc. finds that Architect John Highland's \$100-per-house fee saves money and earns money.

140 TWENTY PER CENT COOLER WITHOUT AIR CONDITIONING Architect Richard A. Kuhlman designs a self-cooling house for Yukon, Okla. that should influence the design of next summer's merchant-built houses.

144 IS THE SPLIT LEVEL HERE TO STAY? A survey of the state of this boom house indicates that it is

the best 1,600 sq. ft. house for a small lot.

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160 LUMBER DEALER SELLS HIS ARCHITECT

Charles Wagner, president of Indiana's biggest lumber firm, meets prefab package competition by selling his dealers the services of Architect Fran E. Schroeder.

- 164 THREE EXPERIMENTS IN ONE HOUSE In his own house, Architect Kenneth Kassler of Princeton, N. J. tests ideas of space, construction and materials.
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Cover: Greenwich, Conn. house by Architect John MacL. Johansen, Photo by Ben Schnall, courtesy Tile Council of America



Does modern have to mean plain?

Answer: absolutely not

And this new, tile-faced house by Architect John Johansen is a nice argument in favor of more decoration—in the right place and of the right kind. (For more details on this house, turn to p. 126).







He used stone like a big mosaic in this handsome house he built in France, in 1937

Reacting against this type of frilly nonsense

-demonstrated here in a Newport, R. I., villa of 1874-

pioneers like Le Corbusier built their stark and plain-walled houses of the 1920s

But ten years later, even Le Corbusier had had enough of plainness

Leading modernists have been steering away from excessive plainness ever since

There was a very good reason for plain walls in the 1920s

Photos: Wayne Andrews; Museum of Modern Art; F. Scherschel-LIFE





One incidental reason modern architects changed their minds about plain walls was that the plain walls did not stay very plain This plain wall is only 25 years old -yet it looks about ready to crumble.

> This patterned stone wall, on the other hand, is 700 years old -a monument to Inca craftsmanship.

> > The lesson was not lost upon modern architects

And today, after the initial reaction against Victorian frills, it is time to relax, to experiment, and to have some fun

One way to have fun is to enrich your houses with more textures, more patterns, more applied decoration.

But remember this: do not use decoration like a kind of sauce, poured indiscriminately over everything in sight. That will defeat your own purpose,

Because textures are more effective next to smooth surfaces; patterns stand out more handsomely next to plain walls; and decoration is a lot more decorative when applied in a few places only, with plenty of undecorated space in between.

Having fun does not necessarily cost any more. On the contrary-

a smooth surface calls for more expensive workmanship, more expensive maintenance. Cheap materials can be used cheaply to make rich-looking patterns. For the evidence, please turn the page







1



1. Ornamented concrete block. Frank Lloyd Wright, architect, Photo: P. E. Guerrero.

2. Specially cast block. Some units were made with translucent glass center piece. Wisniewski, Patrick, Cappuccilli & O'Hare, architects. Photo: Morley Baer.

Block

new distinction.

- 3. Standard block used in special pattern for decorative and acoustic reasons. Marcel Breuer, architect. Photo: Ben Schnall.
- Perforated garden fence of standard blocks. Leinweber, Yamasaki & Hellmuth, architects. Photo: © Ezra Stoller.

Cheap materials are a rich source of ornament







Pebbles

They make beautiful slab floors—as the Japanese demonstrated years ago. Technique is simple: mix large pebbles with your slab concrete, then bru.'h the slab with a broom as it begins to settle, until you expose a layer of pebbles. Pebble mosaics are a special art, may have to be mounted on sheets like mosaic tile.

It can be patterned in an inexpensive mold; it can be laid up in many different and decorative courses; its rough texture makes it a good sound absorber; and its many new surfaces (both applied and integral) have given this common building material a

- 5. Pebble mosaic for terrace floor. Yock & Council, landscape architects. Photo: Aplin Dudley (House Beautiful).
- Floor pattern made of pebbles of different sizes. Mario Corbett, architect. Photo: Dean Stone & Hugh Steccati.
- 7. Pebbles mixed into slab concrete. Kenneth Kassler, architect. Photo: Marc Neuhof.





Drainage tile

Laid up in garden walls, this cheap material can produce wonderful fence patterns and grilles. Used that way for years in Latin countries, it is now returning to modern landscape architecture.



- 8. Drainage tiles set in mortar make a terrace rail. Marcel Breuer, architect. Photo: Ben Schnall.
- 9. Terra-cotta drainage tile laid up to make a garden screen. Edward L. Barnes, architect. Photo: Ulric Meisel.
- 10. Tile screen used as sun-control device outside balcony of modern Mexican house. Carrasco & Rossell, architects.

The case for a new kind of ornament

by Frank Lloyd Wright

"In organic architecture there is little or no room for appliqué of any kind. . . . We use nothing applied which tends to eliminate the true character of what is beneath, or which may become a substitute for whatever that may be. Wood is wood, concrete is concrete, stone is stone. We like to have whatever we choose to use demonstrate the beauty of its own character, as itself. . . .

". . . I have used the word 'pattern' instead of the word ornament to avoid confusion or to escape the passing prejudice. But here now ornament is in its place. Ornament meaning not only surface qualified by human imagination but imagination giving natural pattern to structure. . . . integral ornament is the developed sense of the building as a whole, or the manifest abstract pattern of structure itself. Interpreted. Integral ornament is simply structure-pattern made visibly articulate...

> From "The Natural House," Horizon Press, New York





Brick

Its infinitely variable patterns and colors have intrigued builders and architects for centuries. Perforated brick screens, serpentine walls, brick grilles and solid, patterned brick walls can give you many warm, decorative textures.

- 11. Perforated brick wall used to shield a terrace. Marcel Breuer, architect. Photo: Ben Schnall.
- 12. Serpentine brick wall. Edward D. Stone, architect. Photo: Samuel H. Gottscho
- 13. Decorative garden fence. Victor Lundy, architect.
- 14. Exterior wall pattern of standard bricks. William B. Ittner, Inc., architect. Photo: Piaget Studio, courtesy Structural Clay Products Institute.



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- Regularly grooved fir plywood.
 Photo: Richards Studio (Douglas Fir Plywood Assn.).
- 16. Striated redwood boards, with T-shaped battens used to emphasize horizontal joints. Smith & Williams, architects. Photo: Julius Shulman.
- 17. Abstract wood mural. Frank Lloyd Wright, architect. Photo: courtesy Museum of Modern Art.
- Cypress blocks used for floor of screened patio. Twitchell & Rudolph, architects. Photo: © Ezra Stoller.

Traditional materials make modern patterns

- 19. Limestone laid in random ashlar courses. Frank Lloyd W right, architect. Photo: ©Ezra Stoller.
- 20. Local rock, cut into rectangular blocks. Edward L. Barnes, architect, Mary Callery, sculptress. Photo: Ulric Meisel.
- 21. Multicolored marble laid in ashlar courses. Frank Lloyd Wright, architect. Photo: P. E. Guerrero.
- 22. Local fieldstone used in a retaining wall, Marcel Breuer, architect. Photo: Ben Schnall.





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Wood

It became an entirely new material when it was bonded with plastics. Today, plywood is available with its own, integral patterns and textures. Result: no visible surface irregularitics, no visible joints. Even wood in its natural state has been used in unorthodox, decorative ways: e.g. in abstract murals, in log floors, in striated redwood boards (with joints accented by horizontal. T-shaped battens).



Stone

Used in irregular courses, stone can create handsome, rough patterns and wall textures to soften geometric structures. Many different effects are possible: Frank Lloyd Wright often uses very long, very thin courses of stone to accent horizontality in his buildings. Others use mosaic-like stone patterns reminiscent of Pennsylvania Dutch farmhouses. Still others like almost regular, ashlar patterns. Stone from local quarries is often much less expensive than most people think: in some areas cut granite and even marble can be bought at reasonably low prices.







Applied patterns

should be used with restraint

Decorative wallpapers and tile mosaics used to be anathema to modern architects. Today, however, with handsome, abstract patterns available in both media, these applied surfaces are coming back. Caution: in a modern house, walls and partitions tend to be treated as free-standing, slab-like units that direct the *flow* of space. Walls are not meant to wrap around little cubicles. This means that a wallpaper should be applied to a single slab-like surface—not carried around a corner or over onto a ceiling. Each surface in a modern house needs to be clearly differentiated from the next. To cover all with a uniform pattern would turn open spaces into tight little rooms.

- 23. Mosaic tile pattern on a fireplace wall. Photo: Lionel Freedman, courtesy The Mosaic Tile Co.
- 24. Abstract tile mural. Photo: George de Gennaro, courtesy The Mosaic Tile Co.
- 25. Play of light on glazed tile produces many decorative variations. Mario Ciampi, architect. Photo: Thomas Hollyman.
- 26. Wallpaper used on a single wall panel, and contrasted with plain ceiling and sheets of glass. Twitchell & Rudolph, architects. Photo: ©Ezra Stoller.
- 27. Small-scale wallpaper patterns do not compete with other objects (and people and their possessions) in modern room.
 Gropius & Breuer, architects. Photo: ©Ezra Stoller.









- Plastic window sandwich with honeycomb core.
 Different sizes of honeycomb create changing patterns. Kenneth Kassler, architect. Photo: Marc Neuhof.
- Wooden grille acts to control sun and sky glare, doubles as decoration.
 Albert Ely Ives, architect. Photo: Morley Baer.
- 30. Wrought-iron grille in Mexico—a traditional decorative device used in modern, geometric patterns. *Photo: H. P. Harris & T. S. Hardy.*
- **31.** Decorative grilles make patterns out of sunlight. Campbell & Wong, architects. Photo: Morley Baer.



Grilles and screens

break up the light

Most effective "organic" decoration of all is a patterned screen, for it is not only a decorative accent in itself, but also casts everchanging patterns of sunlight on adjoining walls and floors—*if it is placed where the sun can reach it.* Modern uses of this device range all the way from the traditional wrought-iron grilles to a new plastic-sandwich window, invented by Architect Kenneth Kassler (see also pp. 164-169). His window has a paper honeycomb core between sheets of transparent plastic. Result: lovely light patterns inside, varying degrees of transparency depending upon the angle at which you look out, and varying degrees of privacy for the inside depending upon the angle at which anyone looks in.

For examples of modern houses using new decorative devices inside and out, turn to pp. 126, 132 and 164.







FEBRUARY 1955



Four years ago Ray Cherry (left) and John Hadley weren't even homebuilders. Today a big idea has skyrocketed Hadley-Cherry to tenth biggest builder in California, fourteenth biggest in the nation. Here is ...

how these two young builders can sell 1,500 houses a year without FHA or VA

Here is a success story from Los Angeles that may be an eye opener for small builders as well as big. It suggests that many things most builders, most mortgage lenders and most realtors believe, ain't necessarily so. For example—

It ain't necessarily so that conventional financing cannot compete with governmentinsured loans for low-cost houses.

It ain't necessarily so that people who cannot afford a big down payment cannot afford accelerated monthly payments to build up an equity fast.

It ain't necessarily so that you cannot sell houses by the hundreds unless financing is so easy (as is now the common practice in Los Angeles) that only \$1,335 has to be paid off on a \$15,000 house at the end of five years.

It ain't necessarily so that mortgages have to run 30 years.

HADLEY-CHERRY, INC., builders ROLAND LOGAN RUSSELL, architect STANDARD FEDERAL S & L and CALIFORNIA FEDERAL S & L, financing GUARANTY SALES, COVINA REALTY, sales agents

Says J. Howard Edgerton, new president of the US Savings & Loan League and one of Hadley-Cherry's bankers: "We think the kind of financing Hadley-Cherry do is the logical answer for the low-price house." Edgerton's California Federal Savings & Loan Association is now twelfth biggest in the nation.



While competing builders up and down the California coast have been trumpeting no-no-down payment, 30-year VA financing. Ray Cherry and John Hadley have been quietly tapping the big nonveteran market.

They have cracked it wide open by offering a tremendous value (a four-bedroom, two-bath, two-car-garage house for a rock-bottom \$9,250) and a new type of financing that enables them to undercut even the liberalized FHA down payments made possible by the new Housing Act.

This new wrinkle on conventional financing is so good for the builders that they will net almost three times as much per house as they could net after taxes with VA and FHA. It is so attractive to home buyers that they don't balk at paying $6\frac{1}{2}$ % interest (vs. 5% interest and insurance for FHA). They don't balk at having to pay off the mortgage in 20 years (vs. 30 years FHA). They don't balk at a big monthly payment for the first six or eight months (nearly twice as big as with FHA). They don't balk at monthly payments nearly half again as high (\$65 vs. \$47.55 for FHA).

What makes the plan so attractive is that the down payment on a \$9,250 house is only \$395 with no impounds or other closing costs. This is not much more than half the cash that would be required for the same house sold FHA, with \$250 for fees and closing costs on top of a \$500 minimum down payment.

Hadley-Cherry have found their market so big they have had no trouble selling the 1,594 houses they started last year.

Here's how the financing works

Instead of selling their houses outright as FHA would require, they market them with a contract of sale, under which they retain ownership for 20 years (unless the buyers pay off the builders' interest ahead of time). For the tax angle that makes this so profitable, see next page.

The terms of the contract of sale let the builders get their own money out within eight months, but they leave most of their profit in to be paid off over 20 years. For example and specifically:

On the four-bedroom \$9,250 house the savings and loan association puts up \$7,350, based on a \$9,750 appraisal (\$500 more than the selling price). This \$7,350 provides both construction money and permanent financing through a single loan. An essential feature of the plan is that amortization does not start until eight months after the house is completed and sold.

Hadley-Cherry pay 4% for this financing, believe 30-year FHA money would cost them twice as much in fees and discounts.

The buyer pays a delivery price of \$395 and for the first eight months pays \$85 a month. \$35 as rent (which covers interest on the mortgage money) plus \$50 to be applied to build up his equity to a total of \$795 by the end of eight months.

This \$795 equity plus the \$7,350 mortgage cover all but \$1,105 of the sales price. This \$1,105 is a little less than the builders' profit per house. which is another way of saying that at the end of eight months H-C have everything out of their house except the bulk of their profit.

After the first eight months, the buyer pays \$65 a month, which is enough to amortize the unpaid balance at $61/_2$ % interest over 20 years. The mortgage interest is 6%, so this allows H-C half of $1/_2$ % for making the monthly collections for the lender and staying on the note.

H-C retain ownership of the house

They can evict a delinquent occupant in two months at minimum cost, as compared with six to 12 months and \$200 foreclosure cost if they had sold the house. In practice, they have had practically no delinquency problem, partly because their buyers have a substantial equity.

The H-C arrangement involves minimum red tape for builder and customer, no transfer costs or title searches (since title does not pass), no FHA approvals. It lets the builder out of FHA requirements in excess of local codes, including greater kitchen cupboard space (but H-C's natural birch cabinets are one of their biggest sales plugs), street planting (but H-C save trees on their site) sidewalks and a hotly debated type of slab construction.

Other builders are now using this type of financing, including former NAHB President Fritz Burns on nearly a third of his Westchester houses and Ed Kriste on 500 houses near Hadley-Cherry.

How to triple your profits by a better tax deal

The tax angle on the Hadley-Cherry operation is a dandy.

Explained hypothetically, it would go something like this: if they made \$1,100 apiece on 1,500 houses, their profit would total \$1,650,000. If they sold their houses outright, their corporate tax tab on the sum at 56% (52% federal, 4% state) would amount to a whopping \$924,000, leaving Hadley-Cherry, Inc. with \$726,000.

Presumably, the government could require the corporation to pay half that sum in dividends. If most of this went to Ray K. Cherry and John H. Hadley as individuals, their personal income tax would amount to upwards of \$250,000. Thus, at the end of a year in which they had actually sold 1,500 houses, all they would have left of their \$1,650,000 profit would be \$363,000 in the corporate treasury (half of \$726,000), plus a little over \$100,000 the government had left them out of their dividends.

Under a contract of sale, though, Hadley-Cherry do not have to report any of their \$1,100-per-house profit as profit until it is amortized. And the amortization is very slow at the start. For example, on a $6\frac{1}{2}\%$ 20-year straight-payment loan. . . only \$25.27 of each \$1,000 gets paid off the first year;

. . . only \$26.95 the second year;

. . . only \$28.77 the third year for a total of \$80.99 in three years. "Built-in annuities" is what Cherry calls these.

Stating this another way, instead of handing over more than \$1,200,000 of their \$1,650,000 building profit to the government the first year, they would pay taxes the first year of, say, \$25,000 on a realized profit of \$41,695.50 and would still be owners of \$1,625,000 invested at the handsome yield of $6\frac{1}{2}\%$ interest.

At the end of the second year they would still have in the treasury close to \$1,600,000 invested at $6\frac{1}{2}\%$.

At the end of the third year they would have close to \$1,575,000. By the end of the third year it would be safe to sell out their interest in their corporation. This should be a very attractive deal for someone looking for a high-yield investment. If the builders sold out at this point, they would pay only the capital gains tax. Thus, instead of paying the government three-fourths of their profit the first year, they could keep three-fourths of it permanently.



Truck-mounted power shovel digs one septic tank cavity per hour. Such power equipment helps Hadley-Cherry deliver houses from <u>90</u> to 100 days after starts.

Skilled operator can make shovel swing over wider arc by using equipment like hydraulic jack under truck's rear wheels, saves time and speed digging.



Plumbing shop, set up in shed near construction site, is manned by union plumbers who completely assemble plumbing trees so they need not be packaged for delivery to site.



Plumbing tree prepositioned by template is last foundation installation before slab is poured. Venting must meet stiff local codes. Organization of every conceivable step in building operation allows builders to lower their costs (and price).

Speed of construction is key to low cost

H&H staff photo



Door sill, recessed in slab which is poured around it, "gives much better effect than concrete sill," says Cherry. Both he and Hadley are keen on construction techniques, were contractors for 20 years before joining forces to build houses.

"One of the best buys in California." That's what Frank R. Hart, general sales manager of Walker & Lee, state's biggest realty sales agent calls Hadley-Cherry houses____



Local lumber yards supply Hadley-Cherry with all precut lumber except for 2"-thick white fir used on plankand-beam sloping ceilings. Builders

find they can lower costs by buying fir in 14' to 18' lengths (60% at desirable 16' lengths) and cutting it in place with portable electric power saws.



Typical scene on a Hadley-Cherry development is a dozen or more slabs readied in advance of rough framing. Builders often complete as many as 100 houses before opening tract to public, generally have sold 12 to 20 houses before that time.



Builders stay minimum of ten houses ahead in grading, pouring slabs and setting plumbing in foundations, break rough framing into nine separate operations, finish into five to control costs on daily basis. SALES WITHOUT FHA OR VA



Fast pace was set a year ago by Hadley-Cherry's fast-selling Valinda Park, a 274 house development. Three-bedroom houses sold for \$7,850 at move-in charge of \$295, monthly payments as low as \$57. The builders' biggest trade secret: daily cost control.



Three-bedroom bargain is

Double-hung windows in tandem run almost to floor to form economical window wall (below). Architect neatly lined up heads with door, made door rail line up with window rail. Builders find double-hungs sell women ("easy to curtain"), think these are most economical, satisfactory window on market. Ceilings throughout are beveled-edge planks over 6"x14" exposed beams. Note handsome brick patio (left).







Photos: Julius Shulman



All display houses are landscaped, furnished with "upholstered or wroughtiron modern pieces," rattan, maple, 18th Century: "furnished model is single most important merchandising item; we will furnish 12 houses in new tract."



Eleven different floor plans, variety of elevations are offered in Foothill Park. Builders use modified grid pattern, "partly to save trees" (site is in orchard), "partly to keep costs down on pipe runs," add interest by varying setbacks 20' to 30'. Lots avergae 60'x110'. Sales record here: 280 in four weeks.

\$7,850, four bedrooms at a rock-bottom \$9,250

One-third of sales in new Foothill Park development (below) are four-bedroom houses



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Clay tile pattern, designed by the architect, consists of black 2" squares alternating with lighter 1" squares. Lighter colors include sand gray, sand buff, sand brown and slate (see also cover). Sheets of tiles measure 12" x 24".

Decoration softens this geometric house

On the outside: patterns

of clay tile—

on the inside: patterns

of nature, seen through glass



Glass-walled living room faces southeast, is shielded on both sides by projecting wings of H-plan house. These wings create protected patio.

"We are becoming aware of the need for decoration," says Architect John Johansen. "Man has always felt a need for patterns and textures to bridge the gap between his own dimensions and the bigger scale of architecture." In this small and pretty house, Johansen has tried to show new ways of using decorative patterns to soften the formal geometry of modern building. *On the outside*, he has applied sheets of small-scale clay tiles. The material is handsome, easy to maintain, costs only \$1.45 per sq. ft. installed.

On the inside, he has used a more subtle decorative medium: the patterns found in nature. For each glass wall is, in effect, a floor-to-ceiling, room-width picture of a pleasant wooded landscape. Our ability to use large, uninterrupted sheets of glass now permit us to see "pictures" of *real*, rather than painted landscapes on our walls. Undecorated stucco walls contrast effectively with rich "nature-painting" beyond the glass. **Glass-walled bedroom** (below) is similarly protected on one side by shape of plan. Thus small rooms are able to borrow plenty of space from the outdoors.





Basic plan has three bedrooms, two baths, 2,100 sq. ft. under cover Expanded plan adds bedroom, bath, playroom, study, carport, totals 2,800 sq. ft.

H-plan is expandable, formal, self-protecting

LOCATION: Greenwich, Conn. JOHN MACL. JOHANSEN, architect EMIL TOIKKA, general contractor THE NEW STORE, interior design This H-plan does three things, and does them well: first, it separates sleeping areas, living areas and utility areas in three clearly differentiated wings. Secondly, it puts the living area in the middle where it belongs, without turning it into a thoroughfare (solution: a freestanding storage wall that serves as an entrance-baffle and screens a passageway). And, third, the plan uses the sleeping and utility wings as giant blinders on either side of the all-glass living area, so that the living room has a great deal of privacy (plus semienclosed patios in front and in back). Glassy bedrooms are similarly protected. Although this house was built on a generous site, this kind of plan might make a good deal of sense on a 75' wide suburban lot. On such a lot, the window openings in the side walls might have to be reduced in the interests of privacy.

Making the house expandable was one of the plan requirements: the walls for a playroom next to the kitchen and a study beyond the utility room were built together with the basic house. These two roofed-over spaces serve as outdoor storage areas for the present. In the final expansion of the house, one bedroom will be added on the northeast side, and a carport and outdoor storage cabinet on the southwest side. The flat roof makes such extension simple.



Indoor decoration consists largely of huge "murals" of wooded landscape behind glass. This concept of using landscapes to decorate walls is entirely traditional. Modern twist, of course, is that the landscapes are real rather than painted. Photo (above) shows view from living-dining area (see also below, right). Below (left) is view from bedroom into patio.





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3

NEWS

How much will the boom cost?

No question that 1955 will set a new record for dollar volume with starts close behind. But materials prices and pinches are matters to watch

Builders and lenders were taking no chances at underestimating the housing year 1955. As if to compensate for the bearishness that proved so many of them wrong in their calculations for the year just past, last month's predictions were nearly unanimously in favor of the second biggest year, in starts, and the biggest ever, in cash outlay.

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How urban renewal may pep up tired cities is revealed by Somerville, Mass., second city to win US approval of its plans. pp. 45 47

PEOPLE: Oakley Hunter, lame duck Congressman, named HHFA general counsel; Joe Mc-Murray is NY state housing chief....p. 47

Houses are getting bigger and costlier, a new BLS survey shows. Figures are first in 3 years on house characteristics.p. 58

LABOR NOTES: Federal antitrust suit tries to crack high cost of glazing in Chicago; prefab boycott held illegal by NLRB.p. 66

Other NEWS on pp. 37, 38, 39, 40, 41, 43, 45, 47, 49, 51, 52, 58, 62, 66, 70, 74, 78, 82. It was easy to see why. Admittedly the first half of 1954 was no great shakes as a boom year and there was more talk about the extent of the business dip than there was about broken records. But in the second half of the year construction records toppled. Easy money and the new Housing Act had combined to boom building into its sixth straight year over the million starts mark and almost everybody saw the boom continuing. The big new question was: would the building boom in which housing bulked so large outstrip the supply of some materials and, as in 1950, inflate costs? This will bear close watching.

Pay your money. The year 1954, according to the preliminary, subject-to-revision estimate by the Commerce and Labor Departments ended with 1,215,500 starts. The official BLS prediction for 1955: 1.3 million. NAHB President Hughes had forecast 100,000 higher: 1.4 million. HOUSE & HOME's own estimate of 1.2 million, as evolved by Economist Miles Colean, was admittedly a minimum. But Colean, although joining with the experts who had no doubt that 1955 would be the second best year ever, did not see total starts in 1955 passing 1.3 million.

The great bulk of '55's housing would again be concentrated in metropolitan areas, which were still experiencing an unprecedented migration from the nation's farms. The Census Bureau last month found that 77% of new one-family homes now go up in metropolitan areas (see p. 58). And the Minneapolis Federal Reserve Bank reported that the market for new homes in many smaller towns in its five-state region has "reached saturation." Reason: "an almost static population since 1940." In many towns, said the bank, "practically the only demand comes from retiring farmers."

On the expenditures end of things, the government estimated cash outlay for nonfarm residential construction last year at \$13.3 billion, a 22% rise over 1953. For 1955, Commerce and Labor saw another rise—of close to 13%—to a total \$15 billion. It therefore seemed sure that in terms of dollar volume 1955 would be the biggest in history. It would certainly top 1950's \$12.6 billion, the highest until last year.

How much credit? Speculation as to how long mortgage money would be plentiful varied slightly by region, but the consensus

among lenders was that there would not be a tightening before autumn. One opinion: "If we keep on with the present rate of municipal issues, the present rate of homebuilding and of industrial construction, it seems likely there will be a tightening, but it will be a tightening at a high rate of activity. For example, it might keep us from going from 1.35 million units to 1.4 million." A few people were worried that the Federal Reserve might curtail mortgage credit. Again, it seemed unlikely. The Fed can change the general credit picture in only two ways-by selling bonds in the open market or Lutting up another longterm issue-and for the time being, at least, those in touch were doubtful that it would. They did think, however, that if the market tightened of itself, the Fed would not step in to ease it.

One mortgage man said he expected some tightening by August. "Why? There will be less money because so much will have been put out by then to finance the high level of activity. Also, I do not think the Treasury will help much."

The cost picture. Wholesale prices of building materials were rising. But HHFA's phrase that they were rising "slowly but steadily" was to the point. Since 1954's low-point last June, the price index—according to E. H. Boeckh—had risen less than 3%. The South was still the area where dry wall was in short supply (H&H, Jan. '55, News), obviously because builders use more of it there than elsewhere. A "gray market" in gypsum lath was reported in Florida and Georgia. In other areas, it was still hard to get a fixed delivery date for some wall materials.

The President's highway program of \$101 billion had set off expansion in the cement industry, but demands of the program would not be felt in 1955. No serious shortages of cement were expected. As one industry leader phrased it: "There will undoubtedly be spotty, localized, seasonal shortages."

Reynolds Metals, the nation's No. 2 aluminum producer, upped primary metal 1e a lb. Alcoa and Kaiser were expected to do the same. Copper producers expressed doubt that they would be able to keep present prices.

Lumber prices were picking up in the Pacific Northwest and promised to go higher in the face of an expected shortage. Serious transportation problems had developed, cutting available ship space for intercoastal trade and forcing lumber shipments onto the railroads. The latter were already crowded in the general business upswing and freight car shortages were expected by summer. Chances of a further rise in lumber prices also seemed logical after the 84-day strike. involving 100,000 lumber men, brought about a recommended $7\frac{1}{2}\phi$ an hour pay boost retroactive to Jan, 1.

Big Builder William J. Levitt jumped prices on his Levittown, Pa. Country Clubber (threebedrooms, two baths) \$500, to \$17,500. He boosted the price of two smaller homes by \$200 (to \$9,250 and \$11,250) for houses delivered after April 1. Competition, meantime, was driving prices of a few house components down. Armstrong Cork and Congoleum-Nairn sliced vinyl-asbestos floor tile around 10%. Chrysler's Airtemp Division shaved \$30 to \$108 per unit off its prices for 1955 room air conditioners.

Bigger and better. The trend toward a bigger home (see p. 58) seemed more than likely to continue in 1955. And with more and better equipment going into the bigger home it was doubtful that the selling price would drop. As the industry moved into the new year, these influences were also noted:

▶ VA 100% loans were still very strong in certain sections. The fact that the volume

of nothing-down loans had stabilized and even fallen off in certain areas was offset by the feeling of some lenders that there would be a rush to VAs this year before the legislation, for most veterans, expires in 1957.

▶ Older homes were expected to play a greater part in the home market this year than last. Their price-down 10-15% last year compared to 1953 and showing signs of stabilizing was a major reason. And favorable terms of the new Housing Act had pushed up the number of existing houses insured under FHA and the dollar volume of insurance written. In the first three months the act became operative, application on existing construction amounted to 49% of total home applications.

Census reveals half of \$7 billion fix-up market is do-it-yourself

The paint-up and fix-up market is not just bigger than anyone realized; it is also very different from what many people thought.

Biggest surprise revealed by the detailed report just issued on the Census Bureau's first scientific sampling of it is this: more than half the \$7.2 billions homeowners spent last year to maintain and improve their homes was do-ityourself--\$3.8 billion of it to be precise. Professional contractors (and the materials they provided) accounted for only \$3.4 billion.

The Census estimate of \$7.2 billion covered owner-occupied one- to four-family units only. Whether that figure could be projected upwards to \$12 billion to maintain and improve all kinds of housing units (i.e., including rental units) was doubtful, for most rental units are in old and often blighted areas where poor maintenance is notorious.

Details that count. Census had announced its new totals on owner fix-up in September (H&H, Oct. '54 News). But the final mid-December report revealed far more meaningful details about the characteristics of fix-up expenditures. Items:

About 70% of the 25 million US homeowners spent some money for fix-up or major alterations during the January-May survey period. But the average outlay was only \$61.

> Surprisingly few houses get any substantial fix-up work. Only a tenth of the nation's homeowners who spent anything spent more than \$500 in the five-month span of the study; they accounted for half of the total outlays.

• Older homes tend to get little more than essential repairs.

> People are most apt to spend fix-up money just after they have bought a new or old house—in other words just after they have been doing business with a builder, a realtor or an architect.

▶ While 62% of homeowners spent money for repairs, the average outlay (median) was only \$30. And that includes items like paint and wallpaper, replacement fences or bathtubs. ▶ Nearly a third of the \$3 billion that apparently went into repairs for the whole year may have been paint and wallpaper. The Do-It-Yourself Information Bureau claims do-ityourselfers spent \$940 million for these two items during 1954.

> Only one-third of homeowners spent anything at all for alterations during the fivemonth survey. Average outlay: \$56. Alterations covers items like insulating an attic, building a retaining wall or a den in the basement.

• Only 3% of owners spent money for additions, but the median outlay was \$165.

▶ The do-it-yourselfer spent only 5% of his money on tools. But he invested 25% of his estimated \$3.8 billion-a-year outlay on items like refrigerators, freezers, clothes washers, driers and stoves. (Census included appliances as part of expenditures for fix-up materials.) Involved: some \$950 million a year.

The new Census report has led some sources to theorize that the total housing fix-up market may reach \$12 billion a year (compared to the \$13.5 billion new housing market). The \$12 billion figure, of course, is based on the proportion of owner-occupied vs. rented units. But otherwise it is largely guesswork.

SHAPE OF THE HOMEOWNER FIX-UP MARKET

THE NEW FIGURES

Millions of dollars: 0	DUTLAY IN 5 MONTHS	expanded to 12 months
Alterations and improvements Additions		\$3,384 799
Repairs and replacement		3,033
Total	. \$3,007	\$7,216

How the homeowner spends this money:

Contract north fifthere	\$1,410	\$3,384
To buy materials (do-it-yourself)	1,596	3,830
Source: Census Bureau; 12-mont. cally by House & Home.	h figures	expanded arithmeti-

Potential untapped. Through the welter of statistics, one big fact sticks out: the building industry is not yet geared up to making a real business of fix-up on any wide scale. The do-it-yourself market would probably be smaller if it were not so hard to get fix-up work done at the right price by professionals.

How to project the industry into the fix-up market is obviously a tough problem, but it is one which smart builders, manufacturers and distributors seem about ready to tackle.





Part Californian, part oriental,

This little hillside house is the only residential entry in the recent southern California AIA competition to win an honorable mention from the judges.

The house was singled out for several reasons:

▶ First, because it seemed to be an unusually subtle blend of the oriental tradition adopted by early California architects (in its scale, its balance and in its decoration) with the efficient gadgetry of modern American living.

▶ Second, because it seemed such an excellent solution of a very difficult site problem—a *common* site problem, nowadays, since steep hillsides are being used more and more all over the US by land-hungry builders.

And, finally, because its details and its sparing use of bright colors showed how much an imaginative firm of architects can do even within a tight budget.

To many observers, this charming little house may seem just another example of the wholesome influence of oriental architecture upon California living. But to the AIA jury it was a fine example of the give-and-take of ideas between entirely different cultures that goes on constantly in a free society. Result: a happy unity of modern practicality and ancient art. The construction cost is only \$11 per sq. ft.



Site is very steep, very narrow. By raising part of house on posts, architects created useful carport under porch (see photograph and elevation above). Exterior walls are random-length, striated redwood boards with joints deliberately emphasized by thin horizontal battens.



Interior patterns are very decorative, geometric, reminiscent of both Japanese design and Mondrian's paintings. Note occasional use of translucent glass panel next to clear glass, oriental touches in prints and sliding panels. Exposed lintel between ends of roof rafters was stained in different bright colors by owner (a Technicolor expert) —in effective contrast with the natural wood used in roof planks.

Photos: Julius Shulman



entirely modern

LOCATION: Pasadena, Calif. SMITH & WILLIAMS, architects EUGENE GRAHAM, general contractor





Dining area is on grade at uphill end of the house. Excellent siting of small structure turned the steep plot into a distinct asset, yet kept the plan of the small (1,400 sq. ft.) house all on one level.

Occasional Americanisms, like glass gable end in the kitchen and the plastic sky dome over center of house, were handled with grace and restraint to blend with the oriental feeling of the rest of the house. The vertical slot window at far end of living room (see also exterior, opposite) is a fine device for preventing dark corners, for making small rooms seem bigger, and for getting sunlight on the walls.

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Architect John Highland of Buffalo is one of the country's most successful specialists in design for builders, although half his big practice is on nonresidential construction. He has had a prominent role in AIA and NAHB committees.



COULD YOU SAVE MONEY AND MAKE MORE MONEY IF YOU PAID YOUR ARCHITECT MORE?

Some builders pay \$10 a house for stock plans. For this they get nothing but pieces of paper that may or may not fit the local climate, the local way of building, the changing local taste, the changing local market, and the particular site where the house is to be built.

Other builders retain an architect but balk at paying him more than \$25 a house. For that \$25 they get a reversible floor plan, three or four suggested front variations, a rendering that makes the house look bigger than it will be and two or three suggestions to catch the woman home buyer's eye.

A few builders try to take full advantage of their architect's long training and experience with other builders and on scores of customdesigned houses. For this they pay \$100 or more a house—more than FHA will allow them credit for in its appraisal—because they want to make it well worth while for the architect to give them his very best effort.

Before you decide it is cheaper or more profitable to get along with a plan book at \$10 or to be satisfied with an architect's off-the-cuff effort at \$25, you might like to know more about the services for which 38 builders in ten states pay Architect John Highland of Buffalo \$100 or more per house.

George L. Wetzel



Before Highland began designing in Rochester this style of house was built by Jablonski in 1946. Colonial is still popular with other builders. Now Jablonski builds Highland designs, top of page.



Marc Neuhof

What a builder gets

Two ideas are basic to all John Highland's work with builders:

Idea No. 1—Success or failure of a new house design will be decided by work the architect and builder do together before the architect touches pencil to paper.

Idea No. 2—Good timing is essential. Try to plan your models three years ahead, so your public will be ready for something better by the time you put it on the market. The architect can and should suggest many new ways to make houses more livable, but he had better not get too far ahead of the market.

To make sure his timing is right, here is Highland's schedule.

Stage I

1. Talk with the sales staff or the real estate firm which will sell the houses to get suggestions and to make sure they understand and approve the house the architect and builder are trying to develop. Salesmen can't or won't sell what they don't understand and, if lukewarm, are too ready to agree with the potential buyer's prejudices instead of explaining advantages of new features.

2. Talk with the local VA and FHA to see how far they will go in approving new ideas and to make sure they will not penalize the new designs in their valuations.

3. Analyze the local market: changing income levels, changing competition, changing availability of existing houses in different price ranges.

4. Study local preferences, which may be quite different from preferences in other areas. Do buyers have strong prejudices as to sizes and locations of bedrooms, sizes of doors and windows, pref-



White Village, designed by Highland, built by Jablonski Homes, Inc. of Rochester, N.Y.

from an architect for \$100 a house

erences for basement, crawl-space or slab construction, front or rear living rooms, open planning, beamed ceiling, low roof lines?

5. Learn the appraisers' attitudes on all these points and study the degree of rigor mortis in banks and lending institutions. The first man who must be sold a new design or a new material is the man who must put up the money.

6. Get to know the builder's organization. Study its strong points to take advantage of special skills. If the builder has skilled cabinet workers, built-ins will be more economical.

Stage II

7. Analyze the prospective building site: contours, soil conditions, drainage, utilities, trees, approaches.

8. Make preliminary plan studies, roof elevation studies.

9. Show FHA, VA and lending institution preliminary plans.

10. Confer with builder and with manufacturers concerning parts and materials such as new windows, new cabinets, etc.

11. Negotiate with manufacturers on costs of new parts. (The time to choose windows, cabinets, materials, etc. is when salesmen are persuading you to use their products, not after parts have been committed in finished drawings.)

12. Finish detailed drawings and specifications for the prototype house in collaboration with builder.

13. Make preliminary studies on all modifications, pivot versions, alternate expandable plans.

Stage III

14. After prototype house is finished, redraw plans to make sure the drawings reflect any changes made in construction. This includes a review and study of prototype house during construction and its acceptance by lending and insuring agencies.

15. Make working drawings and specifications for the balance of all houses to be built, incorporating experience gained from prototype. (A dimension change in a bedroom, for example, may make considerable difference in sales acceptance.)

16. Schedule colors and materials, inside and outside, including painting and such materials as tiles, counter tops, prefinished panels, lighting fixtures, wallpaper.

17. Make a study of each individual lot and plot the location of the house, paying attention to the relation between each house and its neighbors.

18. Suggest landscape treatment for each basic type of house. If builder does not include landscaping, work out a plan which may be given free to buyers.

19. Give all possible help with sales exhibits, including color renderings, slides of renderings, assistance in setting up visual exhibits for model houses or sales offices, conferences with advertising and sales organizations. Some architects help write the advertising copy, prepare radio or TV shows, advise salesmen on advantages of the houses.

20. Drink martinis and consume hors d'oeuvres with the builder on opening day. Study public reaction.

WHAT A BUILDER GETS FROM AN ARCHITECT FOR \$100 A HOUSE

These factors, Highland says, make a good house

A good neighborhood: growing out of the architect's intelligent use and understanding of the whole property and its character.

Sun and breeze are free, should be carefully considered



Master bedroom should have a private patio





Kitchen is the pivot area of the entire house



Open kitchen gives wife view and supervision



Chassis plan provides economies

Best orientation: with each house placed on its lot for best use of sunlight, views and breeze. Proper orientation and study of climatic factors may eliminate need for air conditioning, or will materially reduce the operating costs of the air-conditioning system if one is used.

Patios: planned to supply more than one big outdoor living area. with a separate bedroom patio for adults for reading, sunbathing, etc., which is away from a general patio for youngsters, family use and guests. Patios can be kept private and be brought "into the house" if they are properly fenced for privacy. While house building costs run from \$8 to \$14 per sq. ft., patios can serve as excellent living areas for 40¢ per sq. ft.

Central kitchen: serving as the pivot around which the whole floor plan of the house is designed. Its location relates to the entrance hall, garage, dining room or dining area, living room, family room. The kitchen is part of the activity area and should be open to it and "furnished" with tailored cabinets and appliances in harmonious colors. A woman working in her kitchen should have a view of the family room to supervise her children, watch TV, and to talk with her guests. Ideally she should also be able to see small children at play outside.

Family room: in many houses now included in the living area and frequently taking the form of a farm kitchen or large living kitchen. Ideally it has large windows and faces a patio. It is not in the basement. It has a "martiniproof" floor and hard-to-hurt surfaces so that host and hostess can enjoy their own parties. When the family room is also the TV room it should be kept in mind that kids watching TV are usually horizontal and always eating.

Chassis plan: best defined as one whose basic chassis permits a variety of interior arrangements, number of bedrooms, addition of family room, etc. without disturbing framing panels, trusses, precut roof beams and other standard parts.

Pivot plan: one which turns four or six ways on the lot, retains basic economies and takes best advantage of its particular lot. Carport or garage and patio can be shifted about the house. It is better to get variety this way than to depend on decoration and forms of "smorgasbord" to make each house look different from its neighbors.

Good circulation: have all rooms, if possible, accessible without going through another room. However, the use of either dining room or family room for circulation purpose is acceptable. In some plans the bedroom hall has been made part of the family room area.



Basic plan should pivot four to six ways



Every house needs to have a quiet area

Noise reduction: take into account today's frequent comment "We need a room to get away from TV." A home is more than a place for community living, it must also provide private areas where each member of the family can live his own life with a minimum of friction. The open plan gives a highly desirable sense of space but it lets noise travel easily. Acoustical design, long recognized as important in offices, is just as important to preserve the nerves of families at home.

Color: have colors better controlled to blend in open-planned houses. Houses should not have a yellow room, green room, rose room. There should be correlated colors. It is possible to establish a color "vocabulary" which uses a major color through the interior. This unity adds spaciousness. Many builders use a color consultant if the architect's staff does not include a color specialist.

Storage: for more and more possessions acquired by modern families, possessions of all kinds which require ample space. A livable house has well planned storage space.

Laundry: the location should get careful study. Laundry should be related to bedroom and bathrooms, should not automatically be put in kitchen or basement. In a two-story house consider putting it on the second floor where space is not so valuable. Consider special areas, too, space for hobbies and a "mud room" where kids can leave overshoes and outdoor clothing.



Storage should include jumbo closet off living room



Laundry must house washer, drier, ironer or mangle, linen



Laundry works well close to bedrooms and bath

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WHAT A BUILDER GETS FOR \$100 A HOUSE

Builder Theodore Jablonski and his son, Ted Jr. of Rochester, N. Y. have been clients of John Highland since 1947. They build from 30 to 40 houses a year including five to ten Highland-designed custom houses which sell in the \$30,000-\$40,000 range.

They are Highland fans because year after year he gives them houses that sell well. "A good architect will make money for his builders," says Ted Jr. "Every year we try to do something new and better. I'd say our houses sell faster than the competition and we have to do almost no advertising."

Their White Village project, shown here, has 36 houses which sold at \$16,500 to \$27,000. About 80% of sales have been ahead of construction. These were the first houses in town which had low, marble chip roofs, open beamed ceilings, open plans and 100' lots in this price range. They were planned originally as slab houses but the lenders insisted on basements.

In this price class buyers don't want "look alike" houses, so Highland gives the Jablonskis nine variations to offer. There are front or back living rooms, a variation of dining room-family room, a third bedroom that can be enclosed or opened to the living room, several ways of handling the nonheated storage areas and a variety of garage or carport locations. This year there will be even more variations.

To the Jablonskis, Architect Highland brings his valuable knowledge of what is selling well with his clients in more than a dozen states including prefabricator Midwest Homes, for whom he is also chief architect.



Most contemporary house in Rochester, this \$16,500 model has 1,100 sq. ft. plus full basement. Exteriors are redwood or stained shingles. White roofs and 3' overhangs keep houses 10° cooler in summer than unprotected houses. Some fencing is included. Plan and interior views are below.

Photos: Marc Neuhof



Open planning, corner fireplace and beamed ceilings are among the features which make these White Village houses stand out in Rochester. Last year's models have separate dining room but 1955 models will offer a combination family room-dining room which may outsell the earlier version.



Highland designs keep Builder





Jablonski ahead in Rochester



Guest room above is separated from family room-dining room by folding door, but two-thirds of buyers wanted third bedroom enclosed. Highland usually puts family room next to kitchen (below). The 1955 models will have larger kitchen-family area.



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1. Combination family room-dining room behind fireplace in photo above, and plan below of large, semicustom house. Opening dining room to kitchen and calling it a family room encourages multipurpose use.



2. Kitchen is wide open to family room but cannot be seen from living room. In 1955 models appliance colors will harmonize with backgrounds, be less conspicuous than they are here.



Your houses for next summer can be

20% cooler without air conditioning

LOCATION: Yukon, Okla. RICHARD A. KUHLMAN, architect DR. D. S. HARRIS, owner Consumers first saw this house in House Beautiful

All photographs and drawings courtesy of House Beautiful Photographs by Maynard L. Parker Drawings by Sigman-Ward Last summer when the outdoor temperature of Yukon, Oklahoma was a scorching 105° the indoor temperature of this house—without air conditioning—was only 85° . This spectacular performance is based on the fact that Architect Richard Kuhlman designed the house to work *with* the climate instead of against it.

A house like this which makes its own climate demonstrates two major points to architects and builders:

1. a hot-climate house *without air conditioning* can be kept reasonably cool if it is designed right;

2. an *air-conditioned* house can be cooled cheaper and more efficiently if the designer uses climatewise ideas.

Architect Kuhlman uses a whole bag of tricks, some as old as the Bible, some as new as tomorrow. Oldest trick: leave a hole in the roof to let the hot air escape and to create a flue action—a principle still used in hotels and houses in the tropics that are built around an open court. Photographs and drawings illustrate other ideas, including a venturi blow-through, air scoops, a ventilated roof and even a make-it-yourself breeze.



Wind control, both winter and summer, is a key element in design and siting. This facade faces northwest and is almost closed to keep off winter winds. Plan (opposite) shows how trees shade house and how pleasant summer breezes blow through the wide-open plan.



Ventilated roof is of prime importance in keeping house cool. Air space between roof and joists is ventilated, which is an important cooling device whether a house is air conditioned or not. A series of louvers (which also show in photograph) keeps air moving along ceilings. Heat is reflected from roof's surface. A third important factor: insulation.



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Botanical proof that this house constitutes a cool oasis in the midst of a hot Oklahoma climate is that these plants thrive here. Water alone would not make such plants grow as caladium, fern, dicentra, alocasia, fig and ginger. Hot air rising through openings in roof helps draw in cooler air from outside.

20% COOLER

Open house all summer is kept by owner, Dr. D. S. Harris, because he has 65' of wall wide open to pleasant summer breezes. The design of his house embodies what aeronautical engineers call the venturi principle: taking air in through big openings and funneling it out through small openings speeds up air movement, gets more cooling value out of mild breezes.

The Harris home has been called the only house in town with a breeze because it is so designed and located that it actually creates a breeze where apparently none had existed. How such a breeze operates is well-known to pilots of motorless sailplanes or gliders, whose success in soaring depends on finding rising currents of air. It would be no surprise to them that on summer afternoons as the hot air in the Harris house rises through the roof opening, it is replaced by cooler air that flows in from a shaded area of the lawn (as the upper drawing at the right illustrates). Trees shade house as well as lawn, begin to cool it down in late afternoon.

Lessons for the air-conditioned house

At first glance there may seem to be no design lessons here for the architect of an air-conditioned house, whose purpose is to shut out all outside air. But the owner of many an air-conditioned house would be happy if he could operate his equipment for two months a summer rather than four and if it ran for fewer hours per day during the hot weather. Architect Kuhlman shows him how to do it.

A house designed properly for its climate, as this one is, would use mechanical cooling for fewer days per summer: starting later in the spring and shutting down earlier in the autumn. This house also shows the benefits of utilizing trees for shading the house, for cooling surrounding areas and for creating cool breezes. Of great importance also is the ventilated roof which demonstrates one way of creating an air space through which natural ventilation can flow.

A house can make its own climate



In summer wind control consists of shutting off the hot southwest breezes but in welcoming the cooler winds from the southeast, which flow through the open house (as shown here). Ground slopes up from left to right, and angle at which the roof meets the breeze acts as an air scoop. Descending roof helps to squeeze the wind through the house, speeding it up through roof and window openings.



"Believe it or not" feature of this house is the way it creates a breeze when none exists. As hot air rises through the roof opening, it creates a suction and hot air is replaced by ground-level air that has been cooled by trees and shady lawn. Houses with open courts and roof ventilation are common in tropical countries.



Living room, as seen from study, with garden room beyond. Large rooms and the open plan suit the Harris family, who have entertained as many as 80 people in comfort.



Open planning not only opens the house visually but is important in letting summer breezes blow through. Yet in winter, garden and garden room can be shut off.



House is expandable in summer when big glass walls are shoved back into pockets and living room is furnished to include the garden room (seen here at the far left). Sloping ceiling results from fact that house is built on two levels which follow the contours of the land. The bedroom wing (to the left of the rooms shown here) is several feet higher than the rest of the house and is reached by means of a ramp.

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The Architects Collaborative, architects and builders

Here are the four commonest splits



The split-level idea has been with us for centuries

What's so good about splits?

They sell like hot cakes but do they make sense?

Split levels sell. In fact, after three years they sell better than ever. They sell when they are ugly (as most of them are). They sell when they are handsome (as they sometimes can be). They sell when they make sense. They sell almost as well when they make no sense at all.

The reasons they sell are simple: (1) they are different, and people are ready for something different, (2) they are bigger, and people want something bigger. It's almost impossible to do even a bad split with less than 1,000 sq. ft. plus the built-in garage. It's almost impossible to do a good split with less than 1,650 sq. ft. plus the built-in garage.

The one most important thing to understand clearly before you plan a split is this: the split is a difficult, costly, and often ugly way to build a small house, but it is a good way to build a house that is just too big on one level to work well on a small lot.

There are lots of things buyers don't like about the splits they live in. Most of them add up to the same thing—the split they bought is too small to be good.

To hear what they dislike and what they like, turn the page.

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The offset side split—still the most common type and apt to be the ugliest. Usually the lowest level holds the garage and recreation room.



The continuous side split—a simpler roof line generally looks better.



The front-to-back split—often quite handsome, usually deep and narrow, with living room on the middle level and recreation room below.



The hillside split—to take advantage of gently sloping ground. There are also side-to-side hillside splits.



Nobody said much about economy

-proving again that economy is not a major factor in the split level boom.

Some builders say the split is economical only on ground that slopes too much for a ranch house and too little for a true hillside house. Others say the split is economical only on flat ground, to take advantage of stem walls that have to go down 3', anyhow. But buyers buy them either way.

What people don't like about splits ...

The drawing visualizes the most frequent complaints registered when HOUSE & HOME made a door-to-door canvass to talk to the owners of many splits in different tracts.

1. "It's so ugly!" Chopped rooflines and awkward elevations mark the split level streetscape.

2. "We have trouble with water and drainage." Water stands in yards, runs into garage, seeps into basement, said 50% of owners. Planting and cutting grass are difficult on mounds. surrounding house.

3. "We don't use our recreation room." This is especially true when it is long and narrow, as it has to be in a small split. Often it is only half of a two-car garage, no more pleasant than the old basement "playroom." People don't want to go down to a dark room to play games or drink.

4. "The floor of our recreation room is cold—so cold the children don't want to play there." Many families try carpeting. One family bought hassocks for each member of the family, so that they could keep their feet high and warm above the recreation room floor.

5. "The bedroom over the garage is cold." Unheated garage drains heat from the bedroom above.

6. "Stairs are troublesome." They are often too steep in order to save space when splits are small. Too many levels confuse the stair climber too. Some splits have five or six levels.

7. "Our heating system isn't well balanced." Recreation room is chilly, bedrooms fiercely hot (except over garage).

8. "The kitchen is too far from recreation room and patio for easy serving of food to either." One owner installed a complete "summer kitchen" off the recreation room.

9. "The one or two steps into the sunken living room are dangerous." Many owners report these caused accidents.

But 90% would buy another split.

What people do like...

1. "It is so spacious." The second living room and more open planning appealed strongly to former apartment dwellers and former ranch house owners.

2."Our bedrooms are wonderfully private." The half-level-higher bedrooms seem to be much more remote from the noise and traffic of the rest of the house than in a one-story house. Window peepers would have a difficult job.

3. "The short stair runs are much easier than stairs in a twostory house." Here are the advantages of the two-story house without the long stairs to climb.

4. "They look larger outside." Owners feel they look more substantial than the ranch house, and have greater prestige value.

5. "It's nice to have something new." The few who feel this way will probably not affect the future of the split.

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Margin ton 1



This is no easy task. In the house at left, Architect Morris Lapidus has used the same materials throughout the house, and closely related roofs. Notice how quiet the lines are, as a result of avoiding architectural tricks. Unnecessary corners and roof breaks cost more, can agonize the facades.

1. Make the two halves fit together harmoniously.

Dearborn-Massar



2. Continue the roof of the higher portion of the house over the lower. Architect Paul Kirk here proves that one continuous line is much more peaceful than two unrelated ones. The roof gives the house an informal and domestic feeling. And it is easier to frame and flash. Interiors are spacious because ceilings follow the roof. Tie beams are not necessary because thrust of roof is taken by full-height interior partitions.



3. The offset split is one way to achieve a good relationship between the two masses. Architects E. & A. Kramer have emphasized the two halves in this offset plan. Only the masses are allowed to contrast: the materials are sensibly carried around the house. In this house a two-car garage is possible without sacrificing the recreation room (which is behind the garage).

Dimitri Wolkonski



4. Use a front-to-back split. This example, planned by Designer D. S. Oman shows some of the advantages. It has a simple gable roof. This design permits better elevations, lighter and airier recreation rooms. Many builders think this is a better kind of split: that more of these will be built than any other type. (See also the house by Architect Hugh Stubbins Jr., p. 153.)

How to make your split level look better

A cardinal rule for designing split-level houses

The multilevel house is not economically feasible when it has less than 1,600 sq. ft. plus inside garage. Some builders may question such an arbitrary figure, but based on the experience of eastern builders it serves as a minimum. The 1,600 sq. ft. figure takes into account:

1. Split-level stairs gobble up too much space in relation to the total area if it is less than 1,600 sq. ft.

2. The house can hardly look well when smaller than that. It is already complicated by the split levels, and must have some long lines to relieve the high, complicated masses.

Hire a good architect

No question about it—the split-level house is a knotty problem in design. These houses require the hand of a skillful architect. Buyers want better design, as HOUSE & HOME's survey showed. Builders can hardly afford to be satisfied with hasty or expedient solutions.

Architect Bertram Lee Whinston's 2,451 sq. ft. offset split shows the advantage of size in design



SPLIT LEVEL



How to make your split level work better

Edgar Tafel, architect

To make the recreation room usable

Place it at the back of the house or on the low side, where it can have large windows and doors opening onto a terrace. Make it a bright and cheerful room, inviting both by day and by night.



Leo L. Fischer, architect

A long, narrow recreation room lends itself to few recreations, and is not very pleasant to be in. Along with good proportions, give your split-level recreation room some extras. People like a lavatory in this area for guests and for the children coming in from play. Many buyers want fireplaces in the recreation room, and many would like to have some cooking facilities there.

To balance the heating system

- 1. Provide adequate heat on the lower levels.
- 2. Have zone control on each level.
- 3. Prevent hot air from rising to bedrooms by using
- a large return (for warm-air systems).

To keep the recreation room warm

- 1. Insulate and waterproof stem walls and wall between recreation room and garage.
- 2. Use effective vapor barrier under the slab.
- 3. Install perimeter heating under the floor.

To solve the stairs problem

Keep steps within the "preferred angle range" (30 to 35° from horizontal). Make them broad enough for two people. And certainly finish them well, so they don't look like the old basement stairs. Note: these provisions can be made without difficulty in a split of over 1,600 sq. ft.



Donald Olsen, architect

Photos:Lionel Freedman; Ben Schnall; Rondal Partridge; Robert C. Lautman Make the kitchen big enough. This is possible only if the house is big enough. It is quite impossible in a minimum split, where the living-kitchen area may be only 20' x 20'.

Put the kitchen in the inside corner. It will be handy to the recreation room and accessible to the stairs to the garage. Have a pass-through window to the recreation area so the mother can watch the children and serve meals or snacks there on occasion.



Leo L. Fischer, architect



Charles M. Goodman & Associates, architects

Have a good patio off the recreation room. Some builders offer the patio as an optional extra, which buyers usually take advantage of. With a good outdoor terrace, the recreation room becomes much more usable in the summer months. A flagstone terrace or a concrete slab need not cost much, can give a house a distinct advantage over one not having either. On usual builders' lots the patio will have more privacy at the back than at the side, as in the house above.

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Separate living area for children allows parents complete privacy on their own floor. Only common area is the dining room and kitchen, which opens into the children's living room for supervision of play. Sliding panels close off these areas when greater privacy is required by the adults. Kitchen is well located for serving food to playroom and for outdoor dining. Perimeter heating and large glass areas make the playroom comfortable and cheerful. Laundry location gives access to drying yard.



Architect: Paul H. Kirk





New variations on



Architects: Alpers & Berliner

Bedrooms on lower level make this an unusual plan. While there is no recreation room, the large dining room and kitchen tend to take its place. By using a simple gable roof over the entire house, and allowing the ceilings to follow the roof, the living room becomes a spacious story-and-one-half high. Although lowest bedroom has drawn criticism for being dark and too far removed from bath, having the bedrooms below is an interesting possibility. Good-sized kitchen would appeal to many women. Despite certain faults in the plan, house has remarkably clean lines and several new ideas.





Part in the


Architects: Edwin & Allen Kramer

Built-in porch was chosen by many buyers when offered optionally, even though it subtracted expensive space from the living room. Although section is similar to Kirk house (opposite), plan is very different, showing how different splits can be. Some observers feel that the large basement is unnecessary with the laundry beside the recreation room. Actually the deeper excavation required defeats the original economy of the split, which should take advantage of the 3' foundation walls for the lower level. Just the same, this is a good looking split-level house. (See photo, p. 148)



the split-level idea





Architect: Hugh Stubbins Jr.

Small living room of this house gains spaciousness from its tall ceiling, (12') and by opening into lower dining area. Master bedroom above has sliding panels opening to living room, resulting in a balcony effect. Recreation room connecting with the kitchen allows convenient serving for parties. Significant difference in this plan is the detached carport. Many owners prefer a carport, permitting the more expensive space in the house proper to be used as living area. Exterior has a charming simplicity, should appeal to buyers who do not want extreme design.

SPLIT LEVEL

But, before you switch to splits, consider...



... the advantages of a hillside house if your land is sloping. House at left is good looking because of its continuous floor levels and roof. Built by Luria Bros., the architects were Keyes, Smith & Satterlee, Francis D. Lethbridge, associate. Another builder tried splits in Philadelphia, switched back to hillside houses when he discovered he could not make a profit.



... a two-story house which can be built with the entrance halfway between floors to minimize stairclimbing. Some houses are turning up with two-story wings instead of split levels. Many builders think there is a trend toward the two-story house. Split-level builders who have built two-story houses might heave a hopeful sigh. Probably they remember best the clean-cut construction methods. Designer: Cyril Farny (see p. 156).





... a better one-story house with many of the advantages of the split. These can be introduced into the ranch house through skillful planning, and the advantages of onestory living are obvious. There are no stairs to climb and grading is easier. Bedrooms can be made more private; a good recreation room can be provided on grade. Architects, Finch & Barnes; builders, Northcutt & Sanders. Builders Meltzer and Lewis built these contemporary splits in Englewood, N. J., sold all without publicity. Laurence R. Moon, architect



Are split levels here to stay?

We think split levels are too well imbedded in the builder's book to pass over as a fad. But less than ten years ago many people said that they would never climb stairs again. The split could fade fast.

The long-range answer: suit the house type to circumstances. For example, the one-story house makes good sense in Florida and Phoenix. A mixture of houses adds variety and personality to a development. A two-story house next to a one-story house tends to make an interesting streetscape, handled properly. The split might fit best into such a scheme, where it is not one of many, all alike.





Better planned than most splits,

this two-story house

looks long and low

After the war it seemed that stair climbing was on the way out. Two-story houses gave way to the demand for one-story living and low elevations. But buyers have begun to find that a one-story house large enough to be livable stretches out enough to be expensive. So in many areas there is a trend toward splits and hillside designs and even to two-story houses. The smash hit success of the split (p. 144) shows that climbing stairs is not such a bugaboo after all. On these pages is an interesting new variation of the two-story house that packs a lot of livability and year-round comfort into its 1,920 sq. ft.

Last year when Carl Koch introduced his Techbuilt prefab, its widespread publicity (H&H, Feb. '54) helped to bring him many dealers. In addition some builders who thought his two-story house made sense adapted his theories to their own needs. Among them was Cyril Farny of Morris Plains, N. J., who has opened a 500-acre development with a two-story house with the lines of a one-story house. Where Koch's Techbuilt is $3\frac{1}{2}$ below grade level along one side, Farny's High Country house is 4' below grade along two sides. Above ground this house is $1\frac{1}{2}$ higher than the Techbuilt. Farny made many other changes, as shown in the photographs on these pages.

"I wanted a close indoor-outdoor relationship achieved by large areas of movable, insulated plate glass," Farny explains. "But I did not want to break too much with tradition and scare the people who play safe by asking for colonial or some adaptation of it." Both ends of the house are open from slab to roof, and sliding doors permit breezes to pass straight through the house on hot summer days. For colder weather, a \$2,500 high-pressure steam heating system provides zoned heat for each room. Cost of house: \$39,500, plus about \$6,000 for one-acre lot.



Photos: © Ezra Stoller



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Low appearance of the Farny house as seen from south side (looking uphill) is partly due to fact that house sits 4' below grade level lengthwise, partly because wide eave extends over the long front porch. This side is faced by old brick; others have cedar clapboard siding. House is 24' wide and 40' long. Screened porch at right is 10' x 24'. Along eaves is special gutter which cannot be seen from below.

Front porch extends length of house, almost to garage. Short walk from porch to garage is covered. Sliding front door and the windows are hung from top and double weatherstripped. Objection might be made to heavy brick porch columns; rough hewn wood columns might better have been used along full length. Later Farny houses will not be exact copies of this first one. This two-story house attempts to strike a balance between contemporary design and 'traditional country living' In some respects, Farny's custom house is a transition house because he hopes to improve on several of its details when he builds more houses this year. As he points out, it combines old and new materials and ideas in a way that "Thomas Jefferson himself would like." Farny does not hesitate to use old brick and aluminum side by side. He uses much glass, yet his house is as well protected against cold as many tiny-windowed houses of earlier days. The High Country house, Farny believes, will suit the needs of people who want a comfortable home suited to demands of climate, topography and traditional country living. He has borrowed freely from Architect Koch's Techbuilt plans but more often than not has modified what he studied.

Included in the \$39,500 price of this 1,920 sq. ft. house are \$2,000 of landscaping, a \$2,500 heating plant, a kitchen full of appliances, plus a large two-car garage with a rear room usable as a workshop Additional cost of the improved land will average \$6,000 an acre. All lots are on high hilly land about an hour's drive from New York City.



Porch, off kitchen and dining room, at south end of house, has brick-paved floor 4' below grade level. Porch is one of five outdoor living areas and is particularly suited for small children whom mother can watch through wide windows and glass doors. Top soil of sloping lawn above is laid on gravel base, thus on even the rainiest days soaks up water before it reaches porch. Crossbeam under roof would seem to obstruct view from upper windows.



Dining room is large and well lighted. Sliding insulated door (left) opens to sunken porch. Kitchen may be entered from either end of the wall between it and dining room. In kitchen can be seen unusual double-glazed electrically operated window which can be lowered and replaced by bronze screen. The screen unrolls from top as glass plate disappears below into wall behind sink. Window operates by motor installed in unit at its top.



Screens need not be unsightly, Farny says, and proves his point with 8' high, 24' wide screen extending across wide porch at north end of house. It has no vertical or horizontal supporting pieces to obstruct view. This screen and those at sides of porch are held taut by heavy metal weights to which they are clamped at bottom. Upstairs sun deck off master bedroom is copied from Koch design which was more successful.



Living room of Farny house is separated from screened porch and patio beyond solely by one wide window and sliding door. These areas are tied together visually by cedar plank ceiling. Fireplace below is exact copy of Koch design. Small panel doors center, below open to bar which also can serve as projection room or temporary workshop. A folding door makes a guest room of half of living room but still leaves access to outdoors.





Lumber Dealer Charles Wagner says, "We're not out of the woods till our products are used the best way they can be used."

To meet prefab package competition

This lumber dealer

Indiana's biggest lumber merchant has decided the answer to the out-of-town prefabricator's package is to tie a local architect's service into his own package.

The plan is working and—more significant—it is working smack in the heart of prefab country—Indianapolis. The dealer who worked it out, Charles Wagner, president of Burnet-Binford Lumber Co., says: "We found some of our best customers starting to buy panels and prefab packages. We knew they weren't getting their materials any cheaper—no one can beat our price—so we reasoned that builders wanted to buy an idea as well as materials. The idea was design. We were forced into design defensively." B-B now merchandises the plans of two architects, Dick Bishop and Fran Schroeder, one with traditional plans, the second with contemporary.

Says Wagner, "Everybody in the building industry can advertise his services or wares. Architects can't be hard-nosed about selling. We can. Merchandising is our business. We sell their plans on an installment basis."

Builders who buy from B-B get plans, precut lumber or panels and millwork at a package price. Cost of plans: \$100 each. Greatest strength of this plan: it uses local architects, "who know the local market—a plan service is definitely not the answer."

Lumberman Wagner has little doubt about the lumber dealer's place in building. With a major millwork plant but no retail store (75% of the company's business is with builders), no land development scheme ("Our business is being a good lumber merchant") nor a financing plan ("Mortgage brokers can do their business better than we can"), B-B is dedicated to the small builder ("A fellow isn't stupid because he's small").



 \Rightarrow

To excite imagination of builders before they ever saw one of his houses, Schroeder had miniature scale models built, now shows prospects the models or professional photographs of them. "We had something to sell," says he, "but we had to educate builders to want what we had to sell. The models or photographs do something that flat elevations or renderings can't do for the builder." Fencing details, exact colors on models display Schroeder's design ideas, site planning, merchandising skill.

Contraction of the second seco

sells his architect

and designs like these



Architect Fran Schroeder has waged an almost single-handed struggle to get upto-date design in merchant-built houses in Indianapolis. His payoff: out-of-town as well as local builders are now engaging him. The lumber dealer has no exclusive on his design. Several builders have tried to copy Schroeder's plans.



LUMBER DEALER



Woman builder, Mrs. Ted Marbaugh "can't see sense in putting money in a house in 1954 that was designed for 1930," uses full architectural services. Architect Schroeder made a believer out of me," says she. Now building 20 houses a year, she hopes to step up to 35, "no more."



All-brick house with three bedrooms and attached or detached carport with storage shed, sells for \$14,675. After slow start, builder switched to sales agent sold on modern, commissioned Schroeder to do third block of nine houses.

Designs like these at \$100 a house

boost sales for architect, builders

and lumber dealer, alike





BEFORE

Streetscape of earlier houses Mrs. Marbaugh built before she retained Schroeder to do her site planning presented a hodgepodge of false gables, varied roof pitches and elevations, "lacked organization."

AFTER

Once architect sold her on siting as well as on house design, Builder Marbaugh's streetscape took on smoother rhythm from low pitches of roofs, got variation from color, fences, shifts in house orientations.





House and three more like it were sold before roof was on. It serves as the model for 20 houses Wirsching will build on a tract with two other builders who take alternate lots around him. Wirsching never thought prefabrication was a threat until recently: "too many of them lacked good design and sound variation," but believes he gets best shake from lumber dealer over the long pull: "B-B is local and I can get all sorts of flexibility from the architect or lumber dealer." Examples: substitution of brick wall for a panel, shifting closets, open ceilings. From the lumber dealer he also gets precut lumber, panels, design and a package price. "Prefabbers can't beat it," says he.



Bob Wirsching, Purdue graduate engineer, started business in 1946 on \$1,600 capital. Though progressive, he has kept his business small (normally he does 20 houses a year) because he likes to have time to hunt and fish. He uses plastic vapor barrier, has tied in with an air-conditioning manufacturer on promotion, is sold on building with panels.







Circular living room, 26' in diameter, has a cone-shaped ceiling sprayed with sound-absorbing plaster. Plastic skylight forms apex of cone; smaller, square skylights are spotted around its surface. This is the principal high-ceiling area in the house—appropriately so because this is the principal

room. Approaches to it are under 7' high, natural wood ceilings more closely related to human scale, and, incidentally, to the height of stock doors. Window seat (barely visible at right) has low ceiling above it to suggest greater intimacy. Floor is a pebble surface, integral with the slab.

LOCATION: Princeton, N. J. KENNETH KASSLER, architect L. C. BOWERS & SONS, general contractor NORMAN SOLLENBERGER, engineer for concrete cone KRAEMER LUKS, heating engineer DON WHEELER (Union Bag & Paper Co.), research on honeycomb core





South side of house faces garden. Plastic skylight at apex of living room cone is surrounded by ring of small electric bulbs which create charming starlight effects at night. Note low (7') roof line around perimeter of house— an effort to achieve a human scale at entrances.

Three experiments in one house ...

an experiment in space

an experiment in structure

and an experiment in materials

Too often good architects have to try out their most daring new ideas on their own homes, as Architect Kenneth Kassler did in his new concrete house at Princeton N. J. His house is interesting in several respects, and *particularly* interesting in three:

First, as an experiment in the use of space. Kassler develops his interior spaces much in the manner of Frank Lloyd Wright—i.e. he shapes them by changing floor and ceiling levels, not by walls and screens alone. Second, this house is a fascinating experiment in the use of concrete. The cone-shaped roof over the circular living room was cast on the ground (and formed on a pile of earth), then lifted up by a crane and placed on the walls. And, third, this house contains some advanced experiments with plastic windows—each consisting of two or three skins of transparent plastic separated by a paper honeycomb.

For details on these three points and others, please turn the page.



Experiment in space includes a 26' diameter circular living room (see also large photograph).



Experiment in structure includes concrete cone, poured on the ground and lifted into place (see p. 168).



Experiment in materials includes new plastic window. (see p. 169).



Street facade on the north is low-slung, hugs the ground. Thin, curved slab (right) bridges a gully to reach main entrance. Carport and kitchen are at left, bedrooms at far right.



Low soffit over entrance approach is inviting, suggests shelter. Floor is pebble-

surfaced concrete. Note decorative treatment of block courses at sharp corner.

Changes in ceiling height mold the space

The "little ceiling" and "big ceiling" principle demonstrated in this house has many practical and esthetic advantages.

The little ceiling is like a low hat brim that extends all around the periphery of the house. It is about 7' high (Frank Lloyd Wright makes his little ceiling a bit lower than that) so that stock doors can be used under it without costly above-head framing. The little ceiling extends out into all roof overhangs, makes the exterior lines of the house low and inviting. As you walk into the house under the little ceiling, you get a real sense of coming into a shelter. Inside you are drawn, quite naturally, to an important area like the living room because it is emphasized with a big ceiling—here cone-shaped.

These changes in ceiling height—with their attendant changes in atmosphere from intimacy to formality—result in a number of ceiling breaks that make ideal pockets for indirect lighting, and occasional skylights.



Gas kitchen uses stainless-steel restaurant appliances. All equipment was placed on 2" high base to raise counter height to 38", which Kassler considers much more practical (especially for the sink) than stock 36" height. (Neither Mr. nor Mrs. Kassler is unusually tall.) Kitchen also accommodates a generous dining area.

Photos: Marc Neuhof



High ceiling over living room is dramatized by contrast with low ceilings throughout rest of house (see plan, above). Note the circular ceiling-shelf at 7' level: it contains indirect light fixtures, can carry plants and knickknacks. Furniture was specially designed to follow curvature of walls.



EXPERIMENTAL HOUSE



2









Section through living room shows 2l/2'' thick concrete cone in place. The structural design for the cone was done by Engineer Norman Sollenberger.

Concrete cone was cast on the ground

The 26' diameter concrete cone that forms the roof over Architect Kassler's living room is an experiment in thin-shell construction. Here is how the cone was built:

First, a form was made of earth, topped off with mortar (1). Next, the reinforcing rods were placed across the form, openings for skylights were roughed in, and the concrete was poured over the mold (2). When it had hardened, a small crane was moved into position, cables were attached to bolts set in concrete, and the cone was lifted off the ground (3). Its total weight: about 25,000 lb. Its thickness: only $2\frac{1}{2}$ ". If the same roof had been built of an ordinary, flat concrete slab, the weight would have been doubled. Next, the crane deposited its load on block walls and piers (4). Finally the outside surface of the cone was finished off with insulation and roofing, and the inside surface was sprayed with asbestos plaster. Plastic skylights completed the structure (see below).





Two types of plastic windows, seen head-on above. At left, a standard sandwich; at right, a "tripledecker" with translucent plastic in the middle, two types of honeycomb. Seen at an angle (below), window offers privacy, reduces glare, presents decorative patterns. Right: honeycomb units used in a sliding door.



Plastic window is decorative, breaks up the light

All the windows in this house were specially made by Kassler of a plastic and paper honeycomb sandwich: the exterior skins are of a transparent methyl methacrylate; the core is of paper honeycomb in different patterns. Some window sandwiches have two layers of plastic, one layer of honeycomb. Others have three layers (the central one is sometimes translucent only) and two of honeycomb—with two different patterns made to overlap for special effects.

These windows are better insulators than equivalent double or triple glazing units. They also have further advantages: first, sky glare is reduced by the paper honeycomb; second, there is a degree of privacy—people cannot look into the house at an angle; and, third, the windows have a decorative quality similar to that of a grille which breaks up the light, casts patterned shadows, and suggests changing degrees of transparency as you look through it from different angles. All windows lift out of their frames to turn rooms into breezeways if desired.



NEW PRODUCTS

A disappearing range and a built-in refrigerator





Freed counter space is immediately usable when cooking units tilt back. Center opening oven doors are new.



Cooking space converts instantly into extra work surface with Frigidaire's new surface units that rest on the counter top when in use, and fold up into a wall panel when not needed, leaving the counter unobstructed.

Each stainless-steel section contains one 6" and one 8" heating element, controlled by a sliding indicator handle on the back panel. When folded away, the units switch off automatically, and a baffle at the top of the panel diverts residual heat from the wall. Units may be mounted side-by-side or separated, and any combination of burners can be in use or folded away.

Companion to the dual cooking units is the built-in wall oven, with its center-opening "French doors." Controls and switches are located high out of reach of children. Dimensions: 17'' wide, 18'' high, and $20\frac{1}{2}''$ deep.

Price: cooking units, \$86; oven, \$182.95

Feature of Hotpoint's built-in line of kitchen appliances is their brushed-chrome finished refrigerator, which comes complete with a matching frame, ready to be built into a wall opening. A grille at the top of the frame serves as a heat exhaust vent.

Price: 11.5 cu. ft., \$599.95; frame, \$49.95

Manufacturers: Frigidaire Div.

General Motors Corp., Dayton, Ohio Hotpoint, Inc.

5600 W. Taylor St., Chicago 44, Ill.

Electrical connection may be made from bottom or back. Ladder-like side control adjusts temperatures.

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