March 1953

NEWS

Eisenhower picks new HHFA boss: former Representative Albert Cole of Kansas (p. 140)

Frank Lloyd Wright

Personally conducted tour through a new house by the old master
whose ideas are reflected in 1 million houses a year (below and p. 106)

Secrets House sequel

Builders revise their plans and construction methods
to keep up with its traffic-jam success with house buyers across the country (p. 114)

Builders’ architect

Edward Fickett gives up custom-built practice
to gross $100,000 a year plus, designing for merchant builders (p. 132)

Price to appraisers, part 3

A house is no better than its plan, and a good plan adds value to any house (p. 144)

Expansion attic truss

How to construct and erect the new design which combines clear-span economy
with a big usable attic (p. 156)
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In the Early Pioneers' Homes

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LUDMAN LEADS THE WORLD
A building man hoped the Eisenhower administration would act quickly to revamp US housing policies, perhaps bottle up public housing and begin reducing omnipresent federal influence over private homebuilding. This month, the industry began to realize that only minor changes were likely this year.

The evidence mounted steadily. In his state-of-the-union message, the President proposed creation of a commission to study health and welfare needs, notably including housing. The study would not be completed for 9 to 12 months. Moreover, the chief executive omitted housing from his 11-point legislative program. While White House economists were busy collecting data on housing, there was no full-time adviser on the Eisenhower staff who was really famililar with the subject. The appointment of Albert M. Cole as HHFAdministrator was made with the understanding he would go into office with Presidential orders to study housing with an open mind, before re-huffling his organization.

Even were getting plenty of advice. Almost every corner of the building industry and many a corner out of it. The most noteworthy counsel came from Senate Majority Leader Robert Taft who told his colleagues: "I suggested to the President that we approve someone (for HHFAdministrator) with the understanding he would be housing administrator at all."

What is housing policy? Some clues were in the administration's philosophical approach to government-in-housing might be seen in its forthright determination to attack the New Deal policies in agriculture. Agriculture and construction, the nation's largest industries, have two things in common: 1) management control is widely decentralized, which makes them slow to react to market and technological change, and 2) the federal government has major responsibilities for complete control, has become a significant market influence.

Agriculture Secretary Benson's mind was made up by the time that the farm community could see any way to stabilize its own prices without government aid. Recently, he recommended that the butter industry once set up by the dairy-operated company which he runs in Minnesota and sold butter to stabilize the market. It worked moderately well. Benefactors thought the answer to the problem of farm income was a government out of the farm economy. (pp. 140-141)

In the decades-old struggle to untangle the nation's jungle of building codes, the most promising weapon is the little-known Joint Committee on Building Codes. Since it was founded in February 1949, the committee has managed, in only 14 meetings, to blend from regional building codes already in widest use a sizable chunk of what it hopes may someday become a unified national standard for construction. Written so far are sections on definitions, types of construction, design loads, use and occupancy

Code reform group voted $20,000 by US chamber

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Source: Bureau of Labor Statistics

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classifications, and requirements for steel construction. But there is still much ground to be covered. It includes some of building codes' most controversial items: fire resistance ratings, height and area limitations, wood and masonry construction. And although the committee is composed of top technical men from the nation's nine principal groups involved in code work, speedier progress is hampered by the fact that its representatives from building officials' organizations are shy of funds to attend meetings.

Last month, the US Chamber of Commerce stepped into the breach. Its construction industry advisory council voted the joint committee $10,000 a year for two years, principally to cover the travel expenses of two representatives of each major building officials' group to committee meetings. Explained Manager F. Stuart Fitzpatrick of the chamber's construction department: "Our interest is to see that the joint committee does not collapse because of building officials' travel expenses." Said Technical Director R. G. Kimbell of the National Lumber Manufacturers' Assn.: "The work of the joint committee offers one of the most practical and sanest approaches to code unification devised. The committee has no dictatorial powers. It is persuasive only." The chamber also extended its financial offer to the Southern Building Code Congress, which so far has refused to play on the team with the rest of the nation's code experts.

Policy platform. The construction industry advisory council also reinforced its claim to being one of the impressively cohesive forces in a factionalized industry. Adopting an 11-point plan for sustaining construction activity, it urged:

- Flexible interest rates for FHA and VA mortgages; no federal regulation of consumer credit in housing.
- A restudy of the defense housing program to reduce its cost and weed out areas where it is no longer needed.
- Redrafting of the "burdensome federal tax structure" with more flexibility for depreciation so as to encourage new commercial and industrial building.
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- "Lack of understanding between labor and management." (Rep. Daniel A. Reed [R, N.Y.], chairman of the House Ways & Means Committee, told the meeting he hoped to rewrite the federal tax code completely by January 1954.)
- Improvement of federal statistics on housing starts and dollar outlays for construction "to guide the more intensive efforts which must be undertaken from now on to sustain . . . activity."

Statistics depleted. On construction statistics, the advisory council adopted a bluntly critical report by Economist Walter E. Hoadly Jr.: while construction has swelled to a $40-billion-a-year industry—one tenth of the total national product—"at no time has the government's statistical information about construction been of high dependability and today the quality of figures is poorer than at any time" since World War II.

Hoadly blamed not BLS and the Commerce Dept., which gather the facts, but Congress and businessmen who do not understand how much havoc can be wrought by bad information. Last year, Congress sliced BLS budget for housing starts from $205,000 to $300,000. Hoadly named no figure, but BLS officials think restoring that figure, but BLS officials think restoring that

When Judge Roy F. Campbell ruled in a child custody battle that San Felipe will be permitted to rear a child, "you'll see some fur fly."
The Dow Service found a 5% drop in lumber prices this month, explained it probably resulted from advances in steel and nickel. Specifically decontrolled were the most important industrial materials except for lumber. Steel and nickel. Copper was already below ceiling prices. Nickel was below the ceiling for the first time in 30 years. Prices-Ceiling prices were abolished on all but a handfull of market basket items. In lumber, cement, paint, and some concrete products. The effect of price decontrol would not show for at least another month.

**Materials**—The Defense Production Administration was abolished—so fast that several top DPA men from the old administration had no warning. Dismantling of the Controlled Materials Plan began as Acting ODM Director Arthur Fleming ordered CMP open-ended at once. That meant anyone willing to gamble on getting on a mill schedule could proceed with any kind of construction without federal permission.

The administration had not yet made up its mind what kind of new production controls law to seek from Congress. Sen. Homer Capehart scheduled hearings on his bill to give the President standby CMP powers—a measure Rep. Jesse Wolcott, chairman of the House banking committee branded as "a sword of Damocles" over business. It was a tossup whether the House would pass it.

**GDP maps strategy to end rent control April 30**

Republicans prepared to let federal rent controls expire April 30 except in critical defense areas, as the President had asked. Chairman Jesse P. Wolcott (R, Mich.), who scheduled a House banking and currency committee hearing on the subject early this month, explained it probably could be shown that roughly 80% of the units under federal control are concentrated in only three states, Mass., N. J. and Penn. Said Wolcott: "I don't think there is any
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VA, FHA loans grow scarcer as GOP hesitates at raising interest rates

After six weeks in office, the Republican administration was still fumbling with home-building's most urgent problem.

It had issued new government bonds at higher interest rates, cut stock market margin requirements from 75 to 50%. It had abolished wage controls and scrapped price controls on all but scarcest items.

But it still had not mustered resolve to end price fixing of government mortgage credit. The drive to unfreeze VA and FHA rates had suffered a setback at the hands of bumbling Sen. Homer Capehart (R, Ind.) when he summoned lame-duck VA and HHFA chiefs to testify before his banking committee on the problem. Although VA appraisal requests for December were 19% below December, 1951, VA boss Carl Gray insisted 4% was still plenty to bring out mortgage money. HHF Administrator Foley disagreed. But the hearings thwarted any immediate chance for Congressional pressure to boost the rate.

Freewheeling conventions. This month, House & Home correspondents across the nation reported the result: compared with readily available conventional funds (as low as 4½% in some areas) VA and FHA money was growing scarcer in most places where it was not already nonexistent. In Utah, for instance, builders said VA loans were being discounted 5%, FHA's 2½%. Some lenders admitted "holding back" for higher FHA-VA rates they feel the government cannot postpone much longer. But more often they blamed FHA-VA scarcity on the greater attraction of the conventional market and the fact that interest on other investments has risen.

Builder lifts sales with ad for house at '1.63 a day'

Builder Wellborn C. Phillips took this full-page ad Feb. 22 in the Orlando (Fla.) Sentinel-Star playing up the fact that his two-bedroom home cost a buyer only $1.63 a day. The result: all 5,000 persons inspected his subdivision (five times the usual turnout), bought five of his $8,500 houses.

Typical real estate officers' comment in San Francisco banks: "We don't even discuss VA loans with builders, and we aren't likely to unless the rate moves up considerably." About half of the city's banks and most insurance firms had withdrawn from the FHA market over the past year. Said one builder: "To get an FHA through now we have to agree to sign for an equal amount in conventional loans."

Talk without action. There were two unproductive Washington conferences. An American Legion committee meeting with government and mortgage industry leaders ended with Legion representatives inclined to think any VA rate changes should be based on Congressional action. The reason: Congress had fixed the rate on direct VA loans at 4%. VA officials had no power to raise it to conform if their regular loan rate went up. If the Legion itself intended to recommend a higher VA rate it would have to wait until approval by its national executive committee at its April meeting.

With the long-delayed nomination of a new HHFA administrator out of the way the last normal excuse for continued executive branch inaction was fast disappearing, unless there was to be more buck-passing back to the Treasury, the White House or over to Congress again.
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Vacancies bring cuts in defense housing; relocatables to be tested at five bases

Builder complaints of vacant defense housing (H&H, Feb. '53, News) spurred HHFA to cancel or cut back programs in at least nine areas last month. And Asst Administrator Neal Hardy revealed that Federal National Mortgage Association, which holds the mortgage on most defense housing, was preparing to announce a policy of suspending mortgage payments while defense homes remain unfilled. But unless the mortgage is written for less than the legal 30-year limit, the monthly rate of payment will have to be hiked above the original schedule later, Hardy noted. The law gives FNMA no alternative.

The reason 5% of the nation's 30,046 completed defense housing units still stood vacant (in some spots, vacancies ranged from 50% to 98%) was that nobody had adjusted housing plans to shortfalls and stretch-outs in defense build-up plans. Most of the blame belonged to the Pentagon for oversenecery. The awdiest snafu involved Camp McCoy, Wis. In Nov. '51, HHFA programmed 225 units there, of which 193 were started, 130 completed. Last month, the Army deactivated the post.

It was good news to devotees of better defense housing last month when HHFA at last announced that Ralph Kaul's relocatable housing program (H&H, June '52, News) was starting its biggest test. At five remote military bases, 608 units of relocatable defense housing units still stood vacant (in some spots, vacancies ranged from 50% to 98%) was that nobody had adjusted housing plans to shortfalls and stretch-outs in defense build-up plans. Most of the blame belonged to the Pentagon for oversenecery. The awdiest snafu involved Camp McCoy, Wis. In Nov. '51, HHFA programmed 225 units there, of which 193 were started, 130 completed. Last month, the Army deactivated the post.

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NAHB hires chief of Baltimore slum plan; Ohio court upholds redevelopment law

Homebuilders this month began carrying out their pledge to "crusade" against urban slums (H&H, Feb. '53, News) by hiring one of the best-qualified men in the nation to help them.

Back in 1941, Baltimore's health commission hired an intense young man with a missionary spirit, G. Yates Cook (now 43), as the city's first $1,800-a-year housing code inspector. In the years that followed, Cook as much as any man led Baltimore's pace-setting attack on slum rehabilitation. On March 31, he will quit as the $6,900-a-year director of the housing bureau of the city health department to become head of a new NAHB housing rehabilitation department.

Said Cook: "I will not be a spokesman either for or against public housing. I will set up as a consultant to any city and will evaluate their present services and see how they can be brought to operate efficiently."

The best formula, Cook is convinced after 12 years of wrestling with it, is for slum clearance and housing code enforcement to be given the power of being a separate department reporting directly to the mayor.

While vacationing in Miami, Cook last year helped persuade it to set up the nation's first such department. That example was undoubtedly on his mind when in January he resigned after a head-on clash with Baltimore Health Chief Huntington Williams, who has squelched efforts to put the Baltimore Plan on that basis.

Baltimore's loss was the nation's gain.

Title I upheld. Redevelopment, the other arm of slum clearance, won an important legal victory. Ohio's Supreme Court affirmed last month that "elimination of slum and other conditions of blight and provisions against their recurrence [are] ... conducive to the public welfare and a public purpose."

It ruled 6 to 1 that Cincinnati's balding mayor and finance director must sign notes authorized by the city council to start a $3 million urban redevelopment project with federal Title I aid.

The court overruled objections that 1) a fractional part of the site could not be condemned because it was not unsubstantial, and 2) resale to developers for private operation and profit after being acquired for a "public purpose" would violate constitutional property rights.

Constitutionality of the state's urban redevelopment law, which even some of its proponents regard as having questionable sections, was not pertinent to the case, the court noted, although it observed that "the validity of urban redevelopment projects similar to the project involved ... has been uniformly sustained by the courts of last resort in other states.... Only one [Florida's] has held to the contrary."

Baltimore breaks ground for nation's first redevelopment housing by a local builder

"FHA Sec. 207," insisted FHA Boss Walter L. Greene at January's NAHB convention, "is a workable title for low-rent housing."

Most builders, if they did not disagree flatly, at least viewed his assertion skeptically.

Last month, Baltimore gave Walter Greene corroboration. On Feb. 11, Mayor Thomas D'Alesandro Jr. and his Redevelopment Commissioner broke ground for 321 units of Sec. 207 garden apartments in one of the first Title I slum clearance redevelopment projects involving a local private builder and locally arranged financing. Said D'Alesandro: "This has been a real job of pioneering. I hope other redevelopment projects will follow more easily and quickly now that basic policies and procedures have been worked out." Swinging the deal had taken three years of maddeningly tedious planning and negotiation with the city, HHFA and FHA.

Plan in '49. The idea of rebuilding the 27 block island of slums with federal aid began taking shape early in 1949. It took only a year to negotiate a lease on the land with the city, even less to get a commitment from FHA under the now defunct Sec. 608. In May 1950, Baltimore's board of estimate gave its approval. In July, the city voted to condemn the 197 ramshackle homes (51% Negro occupied, 49% white). But it took HHFA's redevelopment division another ten months to approve the acquisition, and 22 months to come up with a form of contract for the federal grant (for Waverly: $1.1 million) toward site purchase. While the turtle-paced process of acquiring the condemned land dragged on, Sec. 608 died and for awhile the whole
Now . . . for project builders . . . a new and unusual opportunity in prefabrication! Now . . . you can have completely prefabricated homes expertly adapted to your own tried and proven plans. Now . . . you can have the well-established economy of prefabrication, with new exclusive features, more advanced construction techniques plus an entirely new concept of exterior variations that express the same individuality as custom-built homes. As a manufacturer of pace-setting, quality homes for over seven years, it is with a deep sense of pride that we offer Richmond Homes to qualified builders under this unique plan.

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FHA administration rapped; three officials quit after quiz

FHA administration struck more squalls last month:
- Rep. Paul F. Schenk (R, Ohio), a Dayton realtor, told the House "it takes three weeks to get a conditional commitment from the Cincinnati office and that's too long." He said he will ask the new HFA Administrator to investigate why FHA offices everywhere are slow moving.
- When word leaked out that the FBI was investigating FHA's Maryland district office, Commissioner Walter L. Greene announced two resignations: State Director E. Lester Muller, 63, and Chief Architect J. Hamilton Walker. Greene said they quit after FHA's Washington staff asked explanations of "certain personal dealings with individuals having business before the FHA." Muller, with the agency 17 years, insisted he retired solely for his health's sake. Walker's only comment was: "I had 15 years service and was eligible for a pension."
- A Congressional hearing (see p. 41) unearthed the hitherto hushed-up news that Clinton C. Staples, FHA director in Alaska, was permitted to resign a year ago (during Franklin D. Richards' term as commissioner) after investigators accused him of accepting gratuities from a builder, making a trip to Seattle for an operation while telling his superiors it was on business.

Five-year rent guarantee planned to induce foreign builders to house troops overseas

For American servicemen stationed in NATO nations, housing has been a nightmare. As one Air Force officer in eastern France said, "I've got a lovely chateau. Twelve rooms. No bath."

In the touchy relations between the US and its allies it also has been virtually a diplomatic issue. Pressure of their families on local housing markets created local animosities against American troops. Yet gouging foreign landlords sent many a US serviceman home more anti-European than when he came.

Last month a happy solution was crystallizing. It was calculated to please practically everyone: US troops and taxpayers, foreign governments, citizens and builders. If all went well it could provide new apartments for US servicemen in many populous spots overseas (demountable prefabs in remote areas) without costing US taxpayers a dollar except for administrative costs.

Local money, builders. Nob of the plan was to woo local foreign capital into financing the housing. To do it, the US would guarantee foreign builders five years rent at levels high enough to reduce their investment (perhaps by 1/3) to what could be supported by the lower rents local tenants could pay after US servicemen depart. (In France, for example, a general reduction of rent control has left rents as low as $110 a year.)

Congress approved the principle last June when it appropriated $100 million for the rental umbrella. Since then, Defense Dept. officials led by Armed Forces Housing Chief Thomas P. Coogan, a wizard at ways and means, have been developing the details. This month the scheme needed only final approval from Senate armed forces subcommittee before going into action. Two large projects in France and one in Italy were ready for groundbreaking. Four others in France were in advanced planning stages.

Under Coogan's plan, each builder or "sponsoring group" would lease or buy his own land, provide his own plans, obtain his own financing (which in France might cost around 10% interest). To prevent speculation, the US would insist on firm financing commitments before it issues a guarantee, which would not be negotiable. Plans would have to conform to foreign building codes and zoning as well as US specifications. Roughly speaking, FHA standards would apply: 850 sq. ft. minimum for two-bedroom apartments, 1050 ft. for three bedrooms. Construction would be functional, mostly three-story buildings. All materials, including plumbing and lighting fixtures, would be foreign-produced.

Guaranteed rents would range from $165 for two-bedroom apartments to $125 for three bedrooms (unfurnished but with heat and hot water). For France that was an astronomical figure. High paid labor gets $100 to $150 a month, pays rents from $20 to $25. But the rental guarantees conformed neatly to US rental allowances for soldiers. With overseas extras, some enlisted men drew $327 a month for a three-bedroom apartment. A married major is allowed $119 to $150 on his own place. The plan was to pay rent guaranteed for five years by US government on condition that the guaranteed tenant would relinquish occupancy and the property be resold.

Needed: French prefab. For remote French areas where permanent construction was unjustified the Defense Department hoped that the same rent guarantee would produce relocatable homes for about $8,000 each. The amortization on these would be so far in the future that they would not be a drain on the US government.

But the best known, most likely candidate was the American-minded "Europe House," built by French architect Jean Prouve for the French government. After Prouve's death, the French architect Charles P. Corbusier discovered with his Marseilles apartments, French contractors knew little of mass production. Either the US would have to teach them, or France would have to drop trade barriers, let German demountable homes fill the gap.
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PLUMBING AND HEATING
People: Frank W. Cortright to build $8,000 houses in Sacramento; former AIA president James R. Edmunds dies

100 realty and housing leaders at a private dining room in Washington, D.C., last month to toast good fortune of Frank W. Cortright, retiring at 54 as IB executive vice president. Cortright had been a real estate sale manager and homebuilder.

Cortright, a former president of the San Diego Corp. of San Diego, was dropped from court developments in the San Diego real estate area. Cortright, 50, at the time had his home in the suburbs just north of San Francisco. He announced he will move to the Marin area of San Francisco after retirement.

Cortright revealed plans to build some 100 houses a year in Sacramento, Calif. (1,000 sq. ft., $5,000 each, $500 cash down payment) as part of a program for opening its membership to all reputable, qualified architects. He also announced plans for a major development in Tokay, Calif., to be named after the late President Franklin D. Roosevelt.

Cortright and his wife, who have been married 24 years, are expected to be dropped soon from the list of prominent real estate leaders. They have two children, 15 and 12.

Died: James R. Edmunds Jr., 62, whose unassuming but effective leadership while AIA president in 1946 gave impetus to a program for opening its membership to all reputable, qualified architects, Feb. 4.

Died: Luella H. Nelson (present as a eulogist) of the US Savings & Loan Assn. but remains as an aide to his son, who is retiring at 54, a significant comment in what one of the men who know him best thinks of the market. Cortright once called that New Republic one of the three 'immediate Senators' along with NAREB's William Bettles, and woman's rights advocate Edna O. Nelson. Cortright had his son's 52 years in the industry.

Edmunds at various times headed the institute's committee to study atomic blast effects on design, the US Chamber of Commerce's construction advisory council, the Baltimore Housing Authority and Board of Architectural Review. James Carroll Blair, 76, first president of Libby-Owens-Ford, (he retired in 1950), Feb. 1.

Man-made flood from Shasta Dam inundates homes

Last winter, the first time that California's mammoth Shasta Dam was in full operation, the rains were light. Engineers kept the water release into the Sacramento River to about 36,000 sec. ft.—less than half the legal limit. People around Redding eyed the bottom land that went without flood for the first time in memory. Some, despite official warnings, bought lots and built.

When January storms filled the dam close to the brim, officials stepped up the outflow to 70,000 sec. ft. The result: some 30 downstream homes were flooded and the state began hearings to see if Subdivider Nels Tibblisson (whose tract is pictured) or his agents had violated the law.
1. Flexible Storage Wall. Simplicity of construction, adaptability mark this striking fir plywood built-in. Provides compact storage in small space. Box-like drawer, desk and cabinet units are interchangeable. Sections can be altered, added or subtracted to fit wall space. Cost of fir plywood to build unit shown $105.

5. Child's Storage Wall helps sell parents shopping for new home. Unit has ample room for toys, clothes, bedding. Sales feature: tough fir plywood doors and drawers can't be hurt by playing children. Fir plywood to build it costs $80.

2. Under-Eave Storage makes good usually wasted space in expansive second floor of story and a half house can be made to fit any ceiling's plywood to build it costs $105.

5 WAYS to put extra space with low-cost plywood

PLANS AVAILABLE

Here are eight new ideas you can use to build story right into the house. For even the most can be lifted above the ordinary... given extra with low-cost fir plywood built-ins.

Fir plywood built-ins far more than pay for themselves. They sell houses faster—and at better prices. For you pay for fir plywood for each of these built-ins.

And when you plan with plywood, you make the house—exactly! No bothersome juggling. Fir plywood is easy to cut, fit, fasten. Popular modern accents to compliment... or use light stains to feature the real wood.

Get detailed plans for each of these eight built-ins from your local lumber dealer—or from the Fir Plywood Association, Tacoma 2, Wash. order plans by number.

Douglas fir Plywood

This trademark identifies quality-tested PlyP; panel "one-side" grade of Interior fir plywood include "two-side" panels for uses where both will be seen. For outdoor use, specify Exterior EXT-DPFA® on panel edge means 100%.
r's G-E "Young America" Home in Long Hill, Connecticut.

der Wins National Award!

J. M. Snyder & Sons, builders in Long Hill, Conn., won First Prize in the "Small Builder" Group of the recent Annual Merchandising Contest. Read how you, too, can capitalize on this success story in the months to come.

r & Sons is a "small" constructs no more than 2 homes a year. Not only alert in modern design and ... he is also interested merchandising his homes.

Snyder experience an America builders— "small"—have erected trie "Young America" nd all over America me in droves to see glad to work with you with Mr. Snyder.

e of the ways we be-

lieve we can help you sell houses faster and more profitably:

1. Available to you (and shown below) is a folio of 5 new "Young America" House design suggestions by Victor Givkin, AIA. Get full details from your G-E Kitchen-Laundry distributor.

2. Also available are complete promotion plans for the opening of your model house. These provide tested and successful publicity, advertising suggestions for newspapers, radio, television and billboards, and cooperative advertising!

3. Finally, take advantage of the services of your G-E Distributor Builder Specialist who will work with you, and place before you all the builder sales experience of the General Electric Co.

Never before has any manufacturer presented any builder with such a wonderful opportunity. Better get the facts today—and we mean today. Address: Home Bureau, General Electric Company, Louisville 2, Ky.

GENERAL ELECTRIC
for the beauty of fine, fully-finished woods at far less cost!

Dens, recreation rooms, libraries, living rooms, offices, corridors, waiting rooms, bars, lounges, and hundreds of other interiors quickly respond to the practical beauty of Marlite Woodpanel. The high-heat-baked finish is unharmed by alcohol, fruit juices, and boiling water. It cleans with a damp cloth and never requires painting or redecorating. It cuts maintenance costs to the bone. Seven beautiful patterns, authentic reproductions of fine woods, are priced well within the modest budget.

Plan on Marlite Woodpanel. It’s a sure client pleaser for beauty, permanence, and economy. See genuine Marlite at your lumber and building materials dealer. MARSH WALL PRODUCTS, Inc., Dept. 322, Dover, Ohio. Subsidiary of Masonite Corporation.

LETTERS

ROUND TABLE PROGRAM

Sirs:
I hope that some day when the A
tion gets right down to working out want to accomplish, they will get from the comments (H&H, Jan. '53) been made at the conferences as
together by H&H, which both H&H : forwarded to them.

AXEL NIELSEN
The Title Guar
Denver, Col.

Sirs:
I believe that much progress ca
in the broad field of housing thr
discussions.
As to the recommendations, I like them. The puzzling question of if remains unsolved in my opinion. I haps the reason for it is that those the necessity of a higher rate fa t their arguments. For instance, I the claim made repeatedly that th to obtain an active home mortgage through higher interest rates, part GI loans. Yet I know that each ye built a million units or more. Re how hard the money market may h when the final count was taken we the number of units built was abs thought ought to be built in a sin

Bert King of the VA tells me handling about 30,000 GI hom loans each month. Mind you, it done with a 4% rate.
I rather feel that some plan worked out whereby the interest r variable. I was impressed a fe when Bill Clark came up with ! although I think there were som I have not thought it through clea of late I have been wondering if not be some kind of recognition o home mortgages in the open mar count rate which, in effect, would flexibility to meet changing me conditions. Under this plan, of ex rate would remain rigid.

SENATOR JOHN SP
Committee on Fore
Washington, D. C.

FIGHT AGAINST SLUMS

Sirs:
Your article on Chicago’s pac lference on conserving urban a blight (H&H, News, Jan. '53) i tion toward the solution of this most nothing can be done withou ened and aroused citizenry.

BRO
695 V
Glenc

Sirs:
We agree that we seem to be era of city-consciousness.

cont
n individual thermostat in the spacious living area of the Vaner home (heating zone 1) easily compensates for solar radiation on any winter days-without making the rest of the house uncomfortably cool. And the setting can be lowered to insure comfort even when a room is crowded with people at a reception without affecting temperatures in the rest of the house.

A separate thermostat in the upstairs sleeping area (heating zone 3) keeps bedrooms healthfully cool at night. And during the parts of the day when these rooms are not in use, temperatures may be lowered to save fuel-without upsetting the comfort balance in either of the two other zones.

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

Only with Zone Control can you
1. remove wintertime chill from rooms with large glass areas—without overheating the rest of the house.
2. maintain special areas of the home (bedrooms are a good example) at low, fuel-saving temperatures when they're not in use—without underheating living areas.
You can rely on Orangeburg for trouble-free root-proof pipe lines.

Orangeburg is the modern non-metallic pipe—strong, tough, resilient. It resists the acids, alkalies, salts and oils found in soils and sewage waste. It withstands freezing and thawing without cracking or breaking.

The Taperweld® Joints are self-sealing. No cement or compound is required. Joints stay tight, sanitary.

Builders, engineers, architects use Orangeburg root-proof pipe extensively for house to sewer or septic tank; for down spouts, storm drains; tight joint drainage lines; potable water supply (non-pressure)—non-pressure outside uses. More than a hundred million feet in use prove its dependability.

You save time and trouble installing Orangeburg root-proof pipe. The 8 foot lengths are easy to handle—the fittings, 1/4 and 1/2 Bends and Wyes, are made of Orangeburg material and are tooled for easy-to-assemble Taperweld Joints.

Look for the name Orangeburg. Orangeburg is the pioneer—the leader—of this modern type of pipe. Specify it for trouble-free pipe lines.

Send to Dept. HH3 for catalog 306

ORANGEBURG MANUFACTURING CO., INC., ORANGEBURG, N. Y.
Acceptance of Complete Windows Provides Unusual opportunity for Direct Representatives

KENNETH G. NIBLACK

Aluminum windows have won wide acceptance throughout the country and now that they are available, rapid expansion of the Fleetlite line is planned according to Tom Y. Smith, President of Fleet of America, Inc. in New York.

Full time representatives operating from every new home or residential office have been handling most of Fleetlite windows. Due to precision program such opportunities are available in most sections of the country and representatives have proven that opportunities offered by this new line of every new home or residential office are a prospect for a sale average of $1,000. A very extensive national program together with local formation and home office help leads and method of operation. Salesmen works through architects, contractors and owners in development of new homes. No investment in stock is required and shop facilities are necessary. A minimum usually requires the help of engineers.

The Fleetlite double, double hung window was engineered and introduced as the solution to window problems encountered in the construction industry. The Fleetlite double, double hung window has been adopted in all areas because the pile mohair weather stripping filters any air that might be found during dust storms.

With air conditioned apartments and lower prices, we can now offer a complete protection against winter cold, summer heat or dust storms. Block rain, adjust air flow for inside pleasure by centering the two middle sash. Sash easily and quickly removed for washing.

Here's the revolutionary new window you've been hearing so much about ... the window that builders are applauding ... the window home owners are specifying — FLEETLITE Aluminum Windows. They come, packaged and ready for installation, these complete year-round units combine interior and exterior double hung windows in a four-channel extruded aluminum frame. Keep homes warmer in winter and cooler in summer.

When you build — plan for the future, insist on FLEETLITE Windows for the home owners comfort — for protection of resale value — for the added sales advantage — for the extra value added to your home.

It costs no more to have the best. FLEETLITE Windows are the most handsome, most practical windows in America. Get the facts for yourself — today.

WRITE TODAY for complete literature on FLEETLITE Windows.
Rusco Horizontal Slide Windows are available in a range of sizes to fit conventional window openings. The standard unit consists of one horizontal slide glass insert with Lumite screen panel and one fixed light. Also available is a composite unit with fixed picture window and sliding left hand ventilating flanksers illustrated above.

**STANDARD RUSCO HORIZONTAL-SLIDE TYPES AND SIZES**

<table>
<thead>
<tr>
<th>FRAME SIZE</th>
<th>3'-3 1/4&quot;</th>
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<th>6'-7 1/2&quot;</th>
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<td>PH 3321</td>
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<td>3'-9 3/8&quot;</td>
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<td>PH 6739C</td>
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</tr>
</tbody>
</table>

*This size is made to fit all standard wood Thermopane window wall units where a combination of sliding units and fixed lights is desired.*
Russell Company has now applied the engineering principles of its widely-accepted Prime Window to a new line of Horizontal Windows. These Horizontal Slide Windows offer the same exclusive features and benefits. Frame and window members are of rigid, tubular galvanized steel, bonderized and finished with baked-on outdoor enamel. They are supplied as completely finished assemblies and provide the same ease and speed of installation and convenience during construction.

Rusco Horizontal Slide Prime Windows ideally meet design and construction requirements for high window placement, such as in ranch type houses, wherever added usable wall space is desired, and in hard-to-reach places such as over sinks, bathtubs, etc. They assure greater ease of operation at shoulder-high or head levels.

Specifications and Illustrated Catalog, Write
7-MB33 THE F. C. RUSSELL COMPANY • Cleveland 1, Ohio • In Canada: Toronto 13, Ontario
For every building Large or Small

The Newest

GLIDE-ALL
Sliding Doors

Beautiful, Modern

FLUSH PANELS

Smooth, Gliding

OVERHEAD ROLLERS

Here is the Sliding Door that meets all building and budget requirements. Glide-All Sliding Doors are economical enough for the most modest dwelling, yet with modern beauty and quality befitting the finest homes and apartments. The new Flush Panel Glide-All Sliding Doors add sales appeal to buildings at an actual savings in material and construction costs. Glide-All Sliding Doors offer a combination of beauty, economy and performance. Write for a free copy Technical Glide-All Bulletin today!

Glide-All Sliding Doors are a product of

WOODALL INDUSTRIES INC.

DETROIT 34, MICHIGAN

• LOW INITIAL COST
• LOW INSTALLATION COST
• FLOOR-TO-CEILING AND STANDARD HEIGHTS
• DEPENDABLE, LONG-LIFE OPERATION
• DECORATIVE VERSATILITY

SEE SWEET'S CATALOGS FOR DETAILS

For tenance. Wherever prefabricated help accomplish these objectives, to durability requirements of th

nancing period of local houn

bonds, together with low main repair cost exactions, there can
tion to its use in the program.

Actually, prefabricated hous

many years had a place in the ing program, and a number of pe

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built with prefabricated mate

seems to be an increasing ten

t rent defense housing aspects of gram to use prefabrication me

they speed construction, to al

genc y situations.

Construction contracts in the I

are by law awarded to pri

through competitive bidding. O

soms prefabricators, invited to l

housing construction, have been

underbid by contractors in con

struction. The economies, claim

rication manufacturers throng

available to the conventional

not reflected in the prices dea

John A. Ker

New York Field
Public Housing

SPLIT LEVELS

Sirs:

I rather believe you overlook the fundamental reasons for t

split-level house (H&H, Dec. &
culation is so very easy. A ce

hall or area can radiate to al
giving the same advantage i

scribed by real estate dealers

Hall Colonial."

The first-floor lavatory or po

be omitted without hardship as

to object to running up half a

The second half of the flight is

Next, you make the stater

split-level house is least expe

ing ground. In my experience t

Though it may seem paradox: level house does best on level

depth limit for habitable ro

areas). Thus we get a lot of

what otherwise would be baser

room, hobby room, bedrooms, (where it can be deeper if

kitchen-dining area. The viev

garden from slightly b e low is

handled properly, much lit

onto a large flower box. Th e g

very intimate with the interior

But as to cost on lev e l grou

we have to place our foot

con.
Delco-Heat helps sell Oklahoma homes

Delco Conditionairs specified exclusively by Lawton builders

Here's what Andy Crosby, Vice-President and Sales Promotion Director of The Lewis Construction Co., Inc., Lawton, Oklahoma, has to say about Delco-Heat. "Our sales experience indicates Delco-Heat automatic home-heating equipment offers real sales advantages in the homes we build. We are so favorably impressed that we are installing Delco-Heat in all our new homes." Hewett Refrigeration Co. is the Delco-Heat Distributor in Lawton, Okla.

"The home pictured here is typical of the ranch-type, two- and three-bedroom homes we built in 1951," writes Tom Lewis, Jr., President of The Lewis Construction Co., Inc. "In this particular development of 75 homes we used Delco-Heat Gas-Fired Conditionairs exclusively."

Eye-appealing cabinet styling... competitive prices... General Motors dependability... consumer acceptance... a complete range of burners, warm air furnaces and boilers to meet every builder's needs—are just a few of the reasons why so many prominent builders are turning to General Motors Delco-Heat.

Home owner satisfaction proved in thousands of Delco-Heat installations shows that you can't beat Delco for gas- or oil-fired automatic home-heating equipment. Find out, now, how Delco-Heat can fit into your new home-building plans. See or phone your nearest Delco-Heat Distributor listed in the Yellow Pages of your phone book. Or, for complete information, write Dept. HAH, Delco Appliance Division, General Motors Corp., Rochester 1, N. Y.
As fundamental as woodwork finish...

A good plan is always better when it includes symbols for telephone outlets.

Where you use natural woods for color and texture, beauty starts with the finish. And your specifications are sure to include a section on "Finishes."

Raceways contribute to the effect of the finish by keeping telephone wires out of sight. They contribute to convenience by making it possible to locate telephone outlets where they are most needed. They contribute to client satisfaction by adding a lot of extra value for a little extra cost.

It is profitable practice to include built-in telephone raceways in development as well as contract homes. Your Bell Telephone Company will be glad to help. Just call your nearest Business Office.

Bell Telephone System
By hundreds of builders who inspected Bryant's new
"COMMAND-AIRE" TWINS at NAHB Show

...is year 'round home conditioning that's...

% to 35% lower in cost! We're mass producing the "Twins"
bring the price way down—to make it possible for you to offer
a 'round conditioning in moderately priced homes... to mass­
ket buyers! Moreover, you can offer...

ooling initially—or later! The "Twins" are independent,
tched heating and cooling units. You can install and show both
in your model home and offer, in the others, the immediate or
addition of cooling according to the convenience of the buyer.
rm about space because the "Twins" offer...

usually compact design! Using as little as 7½ sq. ft. of floor
ce, you can tuck them away in a closet, alcove, utility room or a
ner of the basement. And you have a wide range of combinations
ose from—gas or oil furnaces ranging from 50,000 to 175,000
/hr and cooling units in 2, 3 and 5-ton capacities.
set complete information on the "Twins" today. And ask about
ant's supporting program to help you sell your homes. Contact
 Bryant Distributor or write: Bryant Heater Division, 17825
Clair Avenue, Cleveland, Ohio.

Bryant means business... better business for builders
Where Else Can You Get This Outstanding Combination?

Exceptional Quality • Conventional Construction and Appearance • Architect Designed Homes • Nationally Advertised Materials and Equipment • Budget Prices • Fast Completion on the Site • Fourteen Models • Five Front Elevations for Every Model • Assistance in Site Planning—Financing — Decorating • Nationally Advertised Homes—FHA and GI Acceptable

Attention Builders

We have openings in a number of localities for qualified builders. If you have sound financial resources and an established reputation for building well-designed, high quality homes, this is an exceptional opportunity for you. Write today on your letterhead.

Owner John Weeks was not worried Eliot Noyes’s design.

Having spent several years at ? Alma Mater, Harvard School of D. at MIT ditto, a summer pushing broom for Carl Koch, I don’t feel I be described as “worried” about it contemporary design. Eliot knew the contract was signed so someone been carried away.

Sirs:

Your “Realty Ads Translated Architects,” (H&H, News, Dec. ’53) and distresses me. I am an edi architect. Yet the definitions of terms which appear under this I unmistakably mine. They were the newsletter of the Cliff Dwell cago club for artists and gentle Louis Sullivan, Howard Van D.

L. Morgan Y
Kenilworth, Ill

WHAT’S GOING ON IN NEW CANADA!

Sirs:

Your excellent article on Ne (H&H, Jan. ’53) has been getting views from many sides of all fenc joyed the coverage on our house b

Owner John Weeks was not worried Eliot Noyes’s design.
THE MODERN WAY TO OPEN GARAGE DOORS

... with your fingertips ...
... from your car

The modern woman, who often has occasion to drive herself home after dark, feels a lot more secure with Barcol "Radio Control"... the modern servant which, by the magic of radio, opens the garage doors at the touch of a button in the car. She never has to get out of the car to open the door. Of all our up-to-date conveniences, Barcol "Radio Control" is one of the most fascinating because it has so many features — it works at any distance up to about 75 feet, it works whether the car is moving or standing still, it works in any weather, it will close the door as well as open it, and it will turn lights on or off inside the garage and along the driveway. Be sure to specify "Radio Control" in the next house you build. Write to BARBER-COLMAN COMPANY, 156 Mill Street, Rockford, Illinois.
New in this generation is the soft gleam of aluminum at eave edges and roof valleys and windows. Yet here the new is also ageless... forever immune to rust, resistant to corrosion, expressing by its modern beauty the virtue of strength with light weight. It is remarkable indeed that the metal for which demand rises so swiftly is still priced no higher than before World War II... offering 100¢ value in these 53¢ times. Beyond the established building products shown here, the ingenuity of builder and architect will discover many further applications of the modern metal: aluminum. Write for literature.

Reynolds Metals Company,
Building Products Division, 2019 So. Ninth St., Louisville 1, Kentucky.

REYNOLDS LIFETIME ALUMINUM GUTTERS AND DOWNSPOUTS offer beauty and rustproof permanence at the lowest cost of any rustproof material. Available in Ogee and Half-Round 5" Residential Gutters, smooth or stipple-embossed finish—also 6" Industrial Half-Round—with downspouts and complete fittings to match.

REYNOLDS LIFETIME ALUMINUM FLASHING is lowest in cost of any rustproof material, easiest to work with...and it looks best, too. Available in 50-foot rolls of 14", 20" and 28" widths; flat sheets 28" by 6', 8', 10', 12'; also in cartons of ten 18" x 48" sheets. All in .019" thickness (26 U. S. Std. Gauge).
Here are a DOZEN (count 'em!) GOOD REASONS...

...WHY you'll build a better fireplace at lowest cost with a Benefire® FIREPLACE UNIT

When you build your fireplace around this famous Bennett unit—you can be sure of lowest possible construction cost—highest customer satisfaction. You can actually guarantee a smokeless fireplace with the Benefire Fireplace Unit! This modern recirculating unit places no restrictions upon exterior fireplace design—lays up faster with standard brick—gives top performance and trouble-free operation under all conditions. Six sizes available... heavy weight boiler plate steel construction throughout—with graduated weights for even heat distribution. Build your next fireplace with Benefire—and build a better fireplace!

Depend upon BENNETT... for every fireplace need...

The amazing

BENNETT STANDARD DAMPERS

The damper that gives you absolute freedom in fireplace design—at moderate cost! Builds any one of six basic fireplace styles including projecting corners, three-sided openings, etc.

See your BENNETT representative or write Dept. B, for catalog.

1. Flue Connection — fits correct size of standard flue tile.
2. Extra Large Smoke Dome — ample capacity for the largest fires.
3. Sure-Seat Throat Damper — stops heat loss or down drafts when fire is out.
4. Simple Damper Controls — either poker-type handle or rotary-control — (exclusive Benefire feature).
5. Opening Width — sized to lay up with standard brick without cutting or filling.
6. Opening Height — higher to give better heat, better view of fire.
7. Opening Depth — proportioned for adequate fuel capacity, draft safety margin, more radiant heat.
8. Sealing Flange — on top and both sides of opening, holds insulation in place behind masonry. Eliminates mortar joint.
9. Cold Air Floor Inlets — permit various possible grille locations. Sized for free circulation.
11. Extra Baffles — conduct incoming cool air to heat center at firebox back wall.
12. Warm Air Outlets — large size for unrestricted flow. Conveniently placed for various grille locations.

and Frank Lloyd Wright helped a half century ago.
There are a number of other architects among my fellow CI I cannot believe that any would filching my stuff for the Chicago, from which you say you too credit to the original source, who would do that would steal his grandmother. May his tools—EVERETTE EIGE
Asst. managing e The World Book Chicago, III.

ARCHITECTS IN THE MAKING

Sirs:
I have been teaching architect for ten years. Every year I have an up-to-date drawing book to t have not found any so have us magazines. H&H has been a life saver. There is only one way to beli of the work a group of youngster

What a group of youngsters can that is to see it. The boys are 7:30 and would stay until 5 o’ were allowed to.

STRONGER STAND

Sirs:
you are to be congratulated torial in the Nov. ‘52 issue of H&H have been much stronger and s considerably on the conservative si has arrived when if the Americi not ready to stand on their own final outcome is only a questio cannot continue to depend on pe andient agenci e s for survival, ai that is appreciated the quicker to new high ground.

ROBERT W. TUR
The City National Council Bluffs, Ia

ERRATUM

Ralph Fournier who codesigned Burton W. Duenke’s Ridgewood (H&H, Feb. ’53) is erroneously “architect.” Mr. Fournier, an school graduate, is not yet a reg t. H&H apologizes for any caused by the error.—Ed.
Next month home buyers will see the home that was the hit at N.A.H.B.

Gunnison Homes' great new Talisman

Just as it caught the eye of 10,000 home builders who saw it at the National Association of Home Builders meeting a few weeks ago, Gunnison Homes' great new Talisman” will soon be the house that America is talking about.

April is the month when the “Talisman” will be introduced to the public... first, in full-page full-color advertising in the leading consumer and home magazines, and, a few days later, in demonstration homes erected by Gunnison Dealers throughout the country.

IF YOU ARE A GUNNISON DEALER... a full-color, full-page advertisement in the April 11 issue of the Saturday Evening Post and full-page advertisements in the April issues of Better Homes & Gardens, Living for Young Homemakers and Household will help you promote your demonstration home.

IF YOU'D LIKE TO BE A GUNNISON DEALER... write on your business letterhead for full information on this successful enterprise. We'll send you complete details on how you can offer your customers the new Gunnison “Talisman” — truly the home of the year.

SUBSIDARY OF UNITED STATES STEEL CORPORATION

Gunnison Dealers RECEIVE
- Advisory financial service
- Interim financing
- FHA-VA eligibility
- Home planning service
- Technical assistance
- Elimination of architectural and material problems
- Full-page national advertising
- Sales promotion catalogs
- Local participation advertising
- Rail or truck shipments
- Prompt delivery
A Special Feature of all-aluminum Miami Awning Window

Turn heavy duty aluminum operator lightly and g. vents glide outward and upward to almost 83°. Energy transmitted evenly from patented operator to torque-shaft which in turn actuates both ends of vent sections the same time. This feature eliminates sticking and allows free and easy operation. Closing is made tight and positive—no extra locking devices are needed.

- Pittsburgh Testing Laboratories Air Infiltration Tests 0.069 C.F per lineal foot of crack perimeter at 25 Ml
Today's homes present scores of new ideas to make living delightfully easy. In design and work-saving features the Cycla-matic Frigidaire provides a new expression of this trend.

The Cycla-matic Frigidaire with the NEW IDEAS—heads great new 1953 line

It's a true food freezer plus a roomy refrigerator—with a new kind of automatic defrosting

All over America housewives have discovered that Cycla-matic—offered only by Frigidaire—means a new kind of food-keeper vastly different from all ordinary refrigerators.

The Cycla-matic Frigidaire is a food freezer plus a refrigerator. With new automatic Levelcold. With an exclusive Refrigo-plate in the refrigerator that defrosts automatically. You've never seen so many ideas as you'll see in this year's ahead Frigidaire—in 4 new Imperial and De Luxe Cycla-matic Models, powered by the famous Meter-Miser.

New ideas in a food freezer! Now store almost 50 pounds of frozen foods in this completely separate food freezer with its own refrigerating system. Food keeps for months—you use it when you choose. Leftovers, instead of being a waste or problem, can be saved. You can even bake and save bread, pies, cakes. And have plenty of ice cubes in Quickule Trays.

New ideas in automatic defrosting! Refrigerator frost is banished before it collects. Cycla-matic defrosting is the safest defrosting known.

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1. Easy-to-clean, smooth top with no dirt-catch handles.
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5. The American Kitchens Roto-Tray Dishwasher, the most modern dishwasher on the market today, washes dishes 3 times cleaner.

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WALLACE EDWARD JOHNSON, 50, was born in Mississippi, educated in its public schools, worked in Mississippi sawmills, was employed in a small Memphis retail lumber yard in 1938 when he decided to start his own business. With his wife, Alma, as partner, he built $3,000 houses. By 1950, Johnson's firm had mushroomed into an 800-employee builder-supplier-dealer organization with an average yearly production of 1,500 dwelling units and a $12½ million payroll. In 1945, Johnson was instrumental in organizing the Memphis Chapter of the National Association of Home Builders, and served as the group's first president. He is currently engaged in another NAHB program, the Trade Secrets House, producing his own regional adaptation (p. 114) of the original design.

DAN KILEY is a landscape designer and architect in Charlotte, N.C., with a combined office and residence on Lake Champlain. His mission he lists as wife, "7½ children, a goat, two sheep, 70 hens," and the combination of family and office he calls "a perfect solution for practising" (p. 150). Kiley is 40. Boston-born and a Harvard alumnus (two years at the Graduate School of Design), in the 1930's he worked for the National Park Service, the Public Buildings Administration and the USAH, and from 1940 to 1942 he was in private practice, doing landscape architecture and site planning. An engineer officer in World War II, Kiley won the Legion of Merit for designing the Nürnberg War Trials courtroom.
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Basket-weave using 8'' x 16'' units

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MODERN MORTGAGES

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

This month
Richard G. Hughes discusses the benefits of the open-end mortg

NAHB leaders give 100% backing to the open-end mortgage

By Richard G. Hughes,
first vice president of the National Association of Home Builders

Leaders of the National Association of Home Builders are 100% in back of the open-end mortgage plan and would like to see every mortgage written with an open-end clause. We believe this would be good for the home owner, good for the homebuilder, and good for the whole economy.

Good for the economy
An important segment of NAHB's over-all housing objective is to preserve and extend the life of the nation's housing inventory.

We have been greatly concerned at the lack of proper maintenance and repair of the nation's structurally sound housing. In rental units, much of this neglect can be attributed to rent control. In owner-occupied units the greatest part can properly be attributed to the fact that the owner does not have immediately available funds with which to do the necessary repairs and maintenance which he knows should be done.

The open-end mortgage would make the needed maintenance funds available to the owner and so contribute to the accomplishment of the objective: to preserve and extend the life of the US housing inventory.

Good for the home owner
Almost everybody knows the many advantages the open-end mortgage plan offers, the most important of which are these:

1. It would permit the home owner to get quick, low-cost credit at any time during the term of his mortgage for the proper maintenance and repair of his house.

2. It would allow him to expand his home—add an additional room (which may be necessitated by the addition of children), add a garage or fix a basement up as a recreation room.

3. It would permit him to add home comforts such as air conditioning, which is now available at reasonable prices for the low-cost house.

4. It would allow him to make all these improvements without overloading himself with short-term, high-rate credit—debts that might impair his ability to meet his normal monthly bills and the payments on his original mortgage, and so might jeopardize the entire equity he has in his house.

Good for the builder
There are also many advantages in the open-end mortgage to the merchant builder.

The open-end mortgage provides sales appeal. The builder who sells a flexible mortgage at the same time he sells his house can point out to the home buyer that the open-end clause provides a ready means of getting additional financing any time he needs it. Such a mortgage should enable the merchant builder to make more sales.

Repeat business
In states where permissible, the open-end mortgage would enable the merchant builder to repeat business. Statistics indicate that approximately four million of the seven million homes built since World War II had only two bedrooms. A major portion of these two-bedroom houses were sold to young couples whose families are expanding rapidly. Thus, there is now a great need for the third and fourth bedrooms. If the merchant builder had originally provided the buyer with the proper type of open-end mortgage, he certainly should be able to sell that buyer on the idea of letting him add those additional rooms.

Promote the general prosperity
Proper use of the open-end mortgage could contribute a great deal to the general prosperity through air conditioning rehabilitation, expansion, modernization and improvement of homes, and thus make a very material contribution toward the maintenance of existing housing.
FRANK LLOYD WRIGHT
and 1,000,000 houses a year

Do you put floor-to-ceiling picture windows in your new houses? Do you sometimes line up all-glass doors to open on a terrace? If you do, you are borrowing an idea started by Frank Lloyd Wright in his Prairie Houses 50 years ago.

Do you give your roofs a lower pitch and wider overhang? If you do, you are following a trend Frank Lloyd Wright pioneered back when Teddy Roosevelt was in the White House.

Do you use the open plan, putting your dining area into an alcove instead of a separate room? That idea may well have started with Frank Lloyd Wright's Glasner house in 1905.

Are you beginning to leave the kitchen open to the living space too, so the maidless hostess will not be cut off from talking with her guests and family? If you are, you are taking up an idea Wright started in his Willey house in 1934.

Do you add carports to your houses? Wright invented the very name and regularly put carports on his "Usonian" houses 20 years ago.

Could you manage a good foundation without the cost of footings? Wright has been doing it so well and so long that now a top-flight homebuilder is financing a major research to make accredited tests for FHA.

Did you ever build a really fine house out of cement block? Before Wright got interested in cement block in 1923 it was used only for icehouses. When he got through he had made it a gentleman, for he demonstrated in the Millard house and many others that concrete block can be decorative as well as dignified. In these and many other ways Frank Lloyd Wright has made an intensely practical contribution to better housing for millions of families.

House & Home is proud to show you another Wright house on the pages that follow. No longer does such a house look strange. Most people will agree that it is beautiful. Some of the practical contributions of this house are noted in the text, but no one can convey the real secret. Once when a famous builder mentioned to Wright how many tricks he had gratefully lifted from the master, Wright cut him short. Said he:

"That is not what matters in the end. What people want, what they desperately need in a house is some communication of the spirit, some quality of the soul. That is what they are hungry for today and what they too seldom get."

Such character can never be achieved by tabulating acceptance statistics or following the crowd. You know integrity, character, individuality in a house as you know it in a man when you meet him. What we give you here is a man.
How much does the modern house owe Frank Lloyd Wright? In the text on the following eight pages, 25 design ideas are underlined. Every one appears in the photographs of this new Wright house. Every one is an idea that Wright first introduced many years ago and that has reappeared in his work ever since. And nearly every one is now common, in one form or another, in the average good house of today.

Almost two decades ago, Wright houses like this one gave architects and builders courage to try a fresh approach, to scrap the stereotypes and mannerisms of the day and venture something new in houses.

Wright, in the lead of the movement, contributed an almost incredible number of things to the house as we know it today. His art is even now an inexhaustible source of lessons that can be discovered and rediscovered... First, because it is a vital art, an art of strength and originality, built of bold forms in powerful repose... Second, because it is one of the arts of a free America, as Wright would put it — the strong, self-reliant, nature-loving America of Sandburg and Whitman, Emerson and Thoreau.

It is an art, however, that sometimes differs bluntly with other schools of art. Where some modernists are intellectual and rational, Wright chimerical kindling deep emotions. Where others erect a tent of colors that might blow apart like a box kite, Wright makes a sheltering cave that neither time nor wind can budge. Where the planes and textures of some formalists are open and rigid, Wright keeps his roof and dynamic, using a variety of planes and textures that change as one moves about. Others have turned to fancy, remains simple. Yet where others have grown cold, Wright is still warm.
WRIGHT HATES CARDBOARD BOXES. He doesn't care whether it's yesterday's box or tomorrow's box—it's still a box. A glance at any of his houses shows how little he believes that a house equals four walls with a lid on top.

Wright builds freehand. First he organizes the ground into a modular grid (4' squares in this case; diamonds, hexagons or circles in others). His building blocks are usually great monoliths of masonry, which he arranges on the grid pattern he has prepared. With them he creates horizontality in the low-lying, heavy outside walls, and vertical counterpoints in the occasional upright mass of a wall pier, a chimney unit, a skylight stock. The masses placed here and there suggest the rooms rather than compartmenting them, and glass fills in the outside gaps to keep out weather and let in light. Finally, he lowers the huge, sheltering planes of an oversize roof on his composition of solids and voids, pulling them together and uniting the whole to the lines of the land.

In the very first glimpse of this house one can see two trademarks of Wright's sculptural art: the masonry chunks and the sweeping roof, in this case lying so low it almost touches the hillside. The composition, has been fitted into the landscape and has become part of it.

Inside this house the Wright principle can be seen wherever one looks: the liberation of space to space. Here Wright the box-hater shows age to free the interior with the op— one great room for living and sometimes play and cooking as well. Here is one of the origin rear living room opening out to and view through floor-to-ceiling panels now known as a wind: and big swinging casements French doors (which, in turn, the great American sport of outdoor living).

On the approach side of the Wright turned his back on the world and gave the house c front, maintaining privacy with mum of openings. Thus he m house two-sided: one side — nature, the other side closed

LIVING ROOM has ceiling of wide boards and batters that slopes out a windows to shield interior from sur glare. Glass door strip, left, keeps din light and open. Room is U-shaped, (left), living and dining spaces wraps masonry mass of central kitchen and Exposed floor slab is sealed and wax

CORNER WINDOW of children's be continuous strip window on side of I early Wright innovations. So was sheltering overhang, which extends outdoor dining porch in background.
US, FREE-SPREADING WESTERN HOUSE ON THE USONIAN PLAN. ALL ROOMS FACE MAIN VIEW OF POND TO SOUTHWEST

PLAN (130') includes later addition of maid and father-in-law. Nearly every room is "destroyed" with glass or jogged eves. By product: good acoustics.
WINGED EAVES cantilever out on stilts overhang carport, left, and living room protective two-way pitch, quips W's introverts'; his soaring roof "for a:

WINTER-SUMMER fireplace has the familiar broad lines and suspended masonry hood, plus a new wrinkle: hearth is sunk 6", has a drain and faucet which trickles water down on plants and fish pond during summer months.

COMPACT WORK SPACE is provided inside kitchen, central but enclosed, through roof to get daylight and ven
A CORNER-KILLER. Long revered the way people were suppressed by every right- ion of two inside walls or a vailing. He realized that the ers of a box do not have to support the roof at points: along the outside walls. In their two sheets of glass, mitered without a corner milleder the roof at points: rner window was born — as often been manhandled by those understand its real purpose. step was to eliminate hori - tors, the solid right angles of glass and ceiling. Wright ornices and moldings, put in glass right up to the eaves to make ceiling-high windows. He started using sloping ceilings to widen the angle beyond 90°, and open-beam ceilings, patterned wood ceilings and board-and-batten surfaces to give the eye big textures to play with. To offset the higher interiors and bring rooms back down to human scale, he added cove decks — contilevered ledges around the walls that were an ideal place for him to introduce cove lighting.

The strip window is another Wright simplification that has been used, wit- tingly or unwittingly, by thousands of architects and builders (e.g. volume house builder Al La Pierre of Seattle, see H&H, Nov. '51, p. 200). A continuous wood frame incorporating several adjacent panels of glass, it can be pre- assembled as one unit less expensively than separate windows, and set on top of a low masonry wall. Wright also brought the clerestory to houses and developed the skylight, both of which allowed him freedom to create and day-light his familiar interior kitchen and interior bath. He threw away, one by one, parts of the house he considered nonessential: the garage became the open carport; the basement turned into a simple floor slab with surface storage; radiators sticking out into a room were replaced by radiant heat pipes hidden in the slab; paint gave way to natural wood surfaces. In the effort to build everything in, such impediments as hanging and standing light fixtures, interior trim, gutters and downspouts gradually disappeared.
THERE IS MUCH TO LEARN, or relearn, from this new house and its old themes. But, as Wright has criticized his predecessors for imitating and his contemporaries for borrowing, he has warned those who would lift parts out of his houses for repetition elsewhere: "Instead of imitating 'effects,' search for the principle that made them original, and own your own effects. An idea, once frozen into an effect, can be too easily transferred... architecture must be the spontaneous reaction of a creative mind to a specific problem, in the nature of materials."

Perhaps this is why Wright has sometimes been emulated, but never well copied.

THE ERIC BROWN HOUSE is Wright houses built in Park-a 50-acre semi-cooperative of 40 circular lots grouped fashion around a pond in meadows of southern Michigan executed the master site plan of his famed "biscuit layout) as well as the house furniture designs.

Like the other four, the Bi is built of two dominant materials and sticking: Honduras mahogany smooth-faced concrete block (12" x 16", 35 lb.) bevel-edged were cast under pressure foundry in special aluminum laid up in a two-way grid of odd blocks (corners, ends, outlets, etc.). The owners act as contractors and part-time laborers with the construction of foundations retained General Contractor for the more complicated rock and wood-finish work.
T'S TUNNEL GALLERY: A DRAMATIC 80' PERSPECTIVE ACCENTED BY NARROWING JOGS, HORIZONTAL TEXTURE LINES
"I predict it will do more to influence future design for modern living in this area than anything that has happened in the past quarter century. People particularly loved the openness and roominess." Robert P. Gerholz, Flint, Mich.

"The Trade Secrets House has attracted the largest single-day crowd in the history of model home opening, and since then, traffic has been very heavy. Practically all the people who like modern design liked our house." Thomas Riskas, Phoenix, Ariz.

"We have thrown out all our plans for future houses and started over. From the Trade Secrets house we are working out a new basic house and variations. The public loved it." Barney McCoal (Wallace E. Johnson, Inc.), Memphis, Tenn.
After hearing the comments of the public, FHA Commissioner Lyon agreed that a doubt that people really like it and that it do them. Frank Zusak, Shreveport, La.

"It confirms our be- a liking for modern design is not confined to es. Our new houses will show the influence so." Wallace E. Arters, Media, Pa.

**NAHB'S TRADE SECRETS HOUSE** is now 60 days old. Here are the answers to the three big questions architects, builders, suppliers and lenders all over the country have been asking:

1. **Do home buyers like it?**

   **Answer:** Indeed they do. The Trade Secrets house has aroused more enthusiasm in more cities than any builder house ever erected. In every city where the house has opened to the public (15 so far), record-breaking crowds poured through it. Huge crowds, long lines and traffic jams are now old stories; so is the almost unanimous approval. People especially liked:

   **Lightness and brightness.** Floor-to-ceiling glass areas were not scorned as possible heat loss spots, but praised for the way they made the house seem bright and cheerful and the rooms larger.

   **Open kitchen.** Somewhat surprisingly, almost universally the women liked the unconfined kitchen (except in the deep South, where servants are still available) and the idea of being part of the household while preparing meals.

   **Storage walls.** Women were wildly enthusiastic about the 90 sq. ft. of storage walls (plus lavish kitchen cabinets and outside storage). Use of every interior partition to provide storage space minimized the usual complaints about slab construction (a strong indication that it is not the basement that people want, but the space it provides). Of the 176 builders who ordered plans of the house, only five requested the basement model.

   **Extra half-bath.** Handy to entrance and kitchen, most liked it, but some would have preferred an extra shower included.

   **Low, long lines.** The built-up, 3' in 12' pitched roof with marble topping and wide eaves was impressive as people approached the house.

   Other features brought some criticism. Main objections:

   **Small bedrooms.** Though storage walls obviated the need for much bedroom furniture, people still felt the rooms inadequate.

   **Window walls in bedrooms.** Sliding glass doors were mentioned as "too much glass" in some areas, though patio off bedroom was not objectionable (a different type of opening might have overcome this).

   **Extreme simplicity of the front elevation.** Oriented to the rear, the house appeared to some people drab and plain from the street side ("Looks like a barn," said one woman), but this feeling usually disappeared when they saw the living-room-patio area.

   **Carport.** Mixed reactions greeted this, especially in areas where garages are common. Most asked if carport could be enclosed.

2. **Can this house really be built for $15,000?**

   **Answer:** Nobody actually knows, for nobody has put the house into quantity production, something the Trade Secrets committee intended to be a prime requisite. One builder, building in a fairly high-cost city in a cold climate, did sell the house for $14,950, but he modified the original plan. (He included the lot, a refrigerator-freezer and washer-dryer in the sales price, and claims this should balance out the things omitted.) Most models were nearer $20,000 and a few with especially expensive land and extra equipment (air conditioning, curtains, carpeting, etc.) ran as high as $25,000.
Any charge that the house was a failure, because it did not hit the cost goal set, has to be qualified by five significant factors:

a. It was built as a custom house, though the price was predicated on mass production. With only one house scheduled, no builder went to the expense of jigs for trusses and wall sections which would have saved money in a larger operation. Materials and equipment were purchased on a single-unit basis, the most expensive method.

b. Subcontracts were given, not bid for. In the frantic race to get the house ready for LIFE presentation, contracts were given to subs who could start “right now,” rather than through a normal bargaining process. And suspicion of new methods led many to overestimate the time their crews would take, so they upped their bids.

c. Whole organizations were thrown into the job. Top-flight supervisors and key workmen were put on the house, with a resulting higher-than-normal overhead. In production, the cost of top personnel would be spread over many units. Overtime, even double time, was common.

d. Materials were often not available locally. One builder went 600 miles for exterior-grade plywood sheathing. Several sets of storage walls were trucked more than 1,500 mi. Marble chips for the roof were rarely found locally.

e. Costs of some components were underestimated. Three sliding glass doors were included when Californian Dave Slipher said his price was $370 (this would have been only $100 more than the same amount of window wall), but by the time the units got to Kansas City, freight and middlemen markup had doubled the cost. Redwood siding varied as much as $200 per M, depending on locality.

One thing sure: The house cannot be built for $15,000 by any builder who sticks to traditional methods and does not take advantage of the construction economies which were planned into the house, like tilt-up construction, with sheathing applied and windows set in on the jig; truss framing; putting in floors, ceiling and walls while the interior is still one big room (see “10 ways to save 10%,” H&H, Jan. ’53). The Trade Secrets house offers every builder a fine chance to check the efficiency of his buying and construction methods.

Open kitchen, below, with capacious cabinets, caught women’s eyes, was No. 1 feature.
Living area (below, seen from study) opens on patio. Size and shape of room makes different furniture groupings possible, and window wall floods entire area with light. Sliding glass doors, objected to in bedrooms (foot of page), were popular in this room.

Small bedrooms were criticized in almost every area. Few people realized that storage walls removed need for much bedroom furniture, could only visualize room crowded with usual pieces. Sliding glass doors in bedrooms were too avant-garde for most visitors.

3. What effect will it have on builders?

Answer: Every builder who built the house is making some changes in his 1953 plans. Some (principally in Texas) who were already using most of the principles are merely emphasizing features that the public especially liked (e.g. open planning). Others, like Tom Riskas in Phoenix, Ariz., and Wallace Arters in Lima, Pa., held up their 1953 houses so they could include the Trade Secrets methods and planning that seemed most applicable. Still others, like Bob Gerholz, in Flint, Mich., and Wallace Johnson, in Memphis, Tenn., completely scrapped their traditional design and operations, began retraining crews and foremen, planned large-scale production of contemporary models.

It is still too early to assay the effect of this house on the hundreds of builders who traveled from all over the US and Canada to see it. Most were impressed (176 sets of plans have been sold); a few were critical (“It's nice, but not the kind of a house you build to make money”). The big effect will come later this year when builders in a score of cities offer less luxurious, production versions of the house at $10,000-$14,000 (pp. 120 to 123). If sales are as good as some builders are betting, doubters will climb aboard in a hurry.

The house is still snowballing. Though only 15 houses are open now, 58 others are in some stage of construction. Builders' shows in five cities are featuring it. The spring building season will see many additional models for public and industry to appraise.

Landmark house. The Trade Secrets house has started a chain reaction that should bring drastic changes in merchant builder methods and design. Though the lessons are not new, this house demonstrates dramatically that they apply to all builders, large and small. The house seems assured of having a widespread effect on the industry for three important reasons:

It comes at a psychologically perfect time. Builders throughout the country are becoming uneasy about repeating the same old traditional house with surface changes. The most common question at NAHB's 1953 convention was: "How can I build a more salable house?" Success stories from those builders who broke out of the mold and introduced "radical" houses into conservative areas were impressive, but most builders still asked how much change the public would take. The Trade Secrets house should answer their question.

It proves the value of modern construction methods. The case and rapidity of construction was an eye-opener to Trade Secrets builders. It's one thing to read about "one-room" assembly, but it's another to watch your own house go up in a fraction of the usual time with no expensive return trips by subcontractors.

It uncovers a hidden market for houses. People are no longer buying strictly from hunger, but when they are offered 1953 design they can still be sold if the price is right. In many consumers the Trade Secrets house rekindled a desire that had been extinguished by rows of Cape Codders and acres of ranch houses.

New models. Robert P. Gerholz, ex-president of NAHB, trying contemporary for the first time with the Trade Secrets house, says:

"In 1949, automakers found that when supply caught up with demand they had to retool completely, change the lines, add new features and new engineering. We builders are in the same boat today. The Trade Secrets house represents the newest tools we have in design, in methods, in engineering and planning. Now we must retool both our industry and our thinking if we are going to realize the full potential of the American family's desire to own a home of its own."

This retooling has already started. On the following pages you will see the effect this one house has had both on the public and on some of the men who built it. Demand for contemporary houses has been demonstrated. It is now up to the builders to supply that demand.
The "one-room" principle. In a famous vaudeville act, the actors, pantomiming building workmen, get in each other's way into doors and create general pandemonium. Audiences roar slapstick. Builders, confronted with practically the same corn on a job, don't laugh so loud—it costs too much money. Carpenters in walls, and plumbers cut them apart. One man builds one of closets, and another cuts and fits flooring around them. We do part of a job, then have to stop while another operation takes place. Straight-line, uninterrupted production is almost unknown.

Yet this turmoil is unnecessary. The Trade Secrets house and its builders that disorganization can be avoided. Walls (with studs installed) and trusses went up in one day, and the entire house was sheathed in. This gave one big room for all the other things to work in (and a platform for the roofers). Heating units were installed right after sheathing to combat any inclement weather. Rough wiring and plumbing were in, dry-wall crews were able from one end of the house to the other, without having to cut huge sheets around interior walls, and taping and priming finished. These men were then completely through, as all interior partitions were factory-made and finished. Flooring was put in the same way, storage walls were in place, all that remained was finish plumbing and electrical fixtures, and a final coat of paint. No expensive and full return trips were needed.

As a result, Trade Secrets builders found that their houses in an unbelievably short time. Wallace Johnson, who costs days as average construction time for his conventional house, has one in 13 days to catch the LIFE story, and says his production will take 30 days instead of 90 from now on. Bob Gerholz builds a house in one month despite the Michigan winter, and said: "I set all records for this area." No builder took longer than five days to complete. Builders, pondering the Trade Secrets house, could ask the question: "How much does every unnecessary construction day cost me?"
One-room principle is illustrated by house just getting trusses installed. As soon as roof sheathing and glazing are complete, the entire interior will be free of any obstructions that might hinder workmen. Dry-wall and flooring operations can proceed from one end to the other.
Hold everything. In Pennsylvania Wallace E. Arters already had his on the drawing board when he built Secrets house. He had already st three-bedroom house on a slab, pla include storage walls, more glass, a b ing and an open kitchen. Sales ps $13,000.

When he opened his Trade Se (from which he learned a lot abo tion methods), Arters and Archit Hay took careful note of the public' The crowds showed such approval model that they decided to scr underway and do an entirely with 19 brand-new features that house hadn't had. While he was sold the NAHB house and three d $21,500, including a full acre site.

Lower priced. Arters is using l the Trade Secrets house as his hi his volume (50 houses in 1952) by the $13,000-$14,000 class in hi Riddlewood subdivision. He desci plan (below, left) as "sort of b ional ideas, Trade Secrets, and D Toledo" (H&H, Jan. '53).

Tilt-up, modular design, dry one-room idea will be used, but were passed up in favor of an ceiling in the living areas of the he feels has a strong customer all-glass gable end will test the c his Trade Secrets house view pressed their liking for the wind.

Costs are still being computer model (provisional three sales ha from the sketch), but Arters ex will be able to hold it in the sam that he originally aimed for.
The Wallace Johnson story. One of the most dramatic Trade Secrets effects was in Memphis, where the Johnson organization was already looking for a new house, having realized that "we have been building 1925 designs." Before their thinking crystallized, the Trade Secrets house appeared and Johnson decided to build it to sample public response and opinion.

Then came the avalanche! By accident, the house was announced as opening on Jan. 1, the same day Tennessee played in the Cotton Bowl. Johnson felt few people could be torn away from their radios and television sets, and only one salesman was assigned to the house. But by midmorning, there was the worst residential traffic jam that Memphis had ever seen. Best estimate of the day's crowd is 10,000. Four weeks later the throng hadn't slowed up much and traffic was so heavy that the house had to be redecorated.

Already convinced. Johnson's amazement had started long before, while the house was being built. With a normal schedule of 90 days for his conventional house, it seemed incredible that this house went together in 13 (with some overtime and extra work to catch the LIFE deadline). Crews who had never seen a truss or an open plan worked so efficiently that Johnson realized that all he had read and heard about new techniques was not just talk, but was applicable to any operation.

Little things added up to big savings. The wide overhangs let men put siding on even on rainy days. Less cutting and taping were required for his dry wall. Plumbers made only three trips, not four. In fact, every trade got in and out faster. Designer Charles Williams said: "It doesn't seem possible to get all the benefits you do from so few changes in design. But you don't have to cut and fit together in all the little places."

1953 model. Johnson, who hopes to build 3,000 houses this year, is revamping his entire procedure to utilize the one-room principle. This means trusses, tilt-up framing and $1,500 worth of storage walls for his interior partitions. With approximately 1,650 sq. ft. of livable space, he plans his three-bedroom house for about $12,000, with $600 extra for the second-bath version. When he cuts his construction time by 66% he expects to save a 'lot of money all along the line. The house will not be a smaller version of the Trade Secrets house, but a completely new house, built with the same principles (see drawing).
A conservative builds the house... promotional possibilities of the Trade Secrets house originally attracted NAHB's President, Robert P. Gerholz, but the positive response in Flint, Mich., convinced people would be even more eager for the same features in a lower-priced house.

For years, the Gerholz product had been a two-bedroom bungalow, with expanses of brick. The Gerholz trademark of the Midwest, were a must, for other builders who slabs often skimped on storage, were in disrepute.

"Building the Trade Secrets House more effective than arguments and articles in illustrating the advantages of the Midwest. Changes that probably would have to the favorable public response in the Midwest."

J. L. Kretschmar, designer.

GERHOLZ COMMUNITY HOMES, builder.

Modern in Michigan. Gerholz house Southgate project abandon... basements, along with the traditions. He will use a trussed roof, lig... storage walls and an.... It is especially significant that Gerholz' stature should be so ardent... real weight with conservative build... and careful study before construct problems are solved on the drawing board rather than in the field. To that end detailed plans of houses, locations and orientation are being prepared. Gerholz organization feels that will show to the favorable public response temporarily begun by the Trade Sec...
Revised plans. In Wichita, Ken Stowell, whose market is the $20,000-and-up house, planned to add 4' to the bedroom wing, 2' on bedrooms and greater width to entrance hall and powder room. He also planned to eliminate the bedroom patio, and to add more utility area, separate from the kitchen. He said: "Almost every homebuilder in this area has been to see this house."

Andy Place, in South Bend, Ind., who was a member of the Trade Secrets committee, will close off the third bedroom and enlarge the others. More utility space will be added, and the carport will be made a garage. Still figuring costs, Place thinks his version of the house will sell for $17,000-$20,000.

One of the most ingenious variations turned up in Phoenix, Ariz., with Tom Riskas offering a 1,450 sq. ft. house (below, left) with two baths and refrigerant cooling for $14,950. The hobby room is set off from living area by a folding door in a curved track. Riskas reports that "other builders all like some portion of the house, and ideas from Trade Secrets are appearing around town."

Air conditioning and a double carport made Frank Zuzak's Trade Secrets model cost $20,300 in Shreveport, La., but the acceptance of the house by the public caused Zuzak to commission a new design in the $12,000 bracket. The three-bedroom house (above, left) will have storage walls throughout, and a patio off the kitchen-dining area suitable for outdoor dining. Open kitchen had to be modified to accommodate preferences of Louisiana buyers.

One dissenting voice. The only negative vote came from Houston, Tex. where Miles Strickland said that people objected to the small bedrooms and the $18,950 price. While he felt that the house would have little influence on the buying public, he admitted that it had drawn "larger crowds than any model house has previously in Houston."

One significant point: every builder who is going into a production version of the house dropped the L shape in favor of a cost-saving rectangle. Only one size truss is then needed, and the steel beam in the original house is eliminated. In addition, cutting the width of the house will make it fit average lots in subdivisions. (One of the price-raising factors in the models has been the fact that the house was usually put on an exceptional, and expensive, site.)
This house revives and reverses an old idea: the veranda. Here, instead of encircling the house, Architects Bassetti & Morse have made the veranda an airy wedge right into the heart of their 1,700 sq. ft. house. It serves alternately as terrace, dining room and playroom, and forms the essential gusset\(^\text{\(\ast\)}\) strip that keeps a small house from popping at the seams.

**Social orientation**

Like a skillful moderator, this pivotal area adds a sense of social ease to a tight situation. It is versatile, agreeable, undemanding and well-connected. After the entrance hall it is the first place where you pause coming indoors. From it you can go quickly to every corner of the house, but it has much to make yo

On the south side, the intimate entrance garden is visible a wall of glass. On the north, you look out to a wide ter Lake Stevens lapping at its edge. The 12' glass wall on may be pushed open to transform the room into a lakeside pavilion in warm weather. But even on rainy airy height and wide clerestory windows tend to lift tl

East and west the space links up with the kitchen and livi forming an expansion joint between them. During a makes a happy overflow area where guests can help ti at the kitchen pass-counter (it's a perfect buffet) or str the terrace to watch the lake traffic. When the kitchen small (the owner has a solid culinary reputation) this ex accommodates cooling jelly glasses and holiday baking, at all it's a relaxing spot for lunch, reading, etc. To reduce the area is paved in stone (which also means you don' watch where you splash when you wash the window wall)

\(\text{A gusset, as every woman knows, is a triangular piece of material inserted in a garment to provide greater width and freedom of movement.}\)
The house is roughly a 60' square, courts let into its perimeter, making it linearly an H-plan. Because it is a compact, m, a clerestory (dotted line) was used to deep space light and ventilation. Garage hed and up front to give a kitchen-drying 'joining the laundry and of the kitchen, turned not to open toward street.

Proper zoning. The three main types of activity—living, sleeping and service—are grouped in three well-defined zones. Putting the formal living room in the bridge of the H provides a useful gradation of activities within the living zone: the center section of the house (cross-hatched) contains all the formal, quiet areas which act as a buffer between sleeping, informal and noisy areas.

Good circulation. From a central entrance hall, there is immediate access to all rooms in house without going through any others. Traffic hugs one wall in nearly every room, stays in a quick, straight line and out of the way of furniture areas. Service entrance is close to street and hidden from main approach. Garage is convenient to kitchen, which has its own lavatory near back door.
1. **Master bedroom** looks out to small formal garden and decorative pool. View is protected by high wall beyond living terrace.

2. **Formal entrance** provides a gradual transition from outdoor areas to closed interior. Front bedroom has blank wall to street.

3. **Formal living space** is between sleeping and not; High clerestory supplies light and cross-vent. Two-way fireplace is faced in tra

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**This is a quiet, introspective house,** one that quite literally looks in on itself instead of out at the rest of the world. Walled Architect Adachi has provided owner Nishi with an en ment of inward, almost Oriental, composure.

On all four sides he has arranged windowless walls and pat fences to exclude sights and sounds. Each indoor room looks through glass to its corresponding outdoor "room," an in paved or planted area partially enclosed by fences and by an of the house itself. Kitchen and breakfast nook, for instance out not on the street or a neighbor's yard, but to a private garden defined by the back wall of the garage and two f Living and master bedrooms share another pocket garden decorative pool; the front bedroom has its own "little view" planted entrance court, and so on for every room in the l Each of these outdoor rooms, besides offering a controlled makes its indoor room seem just that much bigger.
Small areas: play space in foreground can be closed off from dining area by curtain on suspended track.

5. Entry hall is separated from living area by freestanding storage wall of walnut. Terrazzo floors are easy to maintain.

6. Dining space can be near fireplace, or here next to kitchen pass-through. White doors at right conceal a built-in bar.

terrace, below, virtually an outdoor room, e H-plan. Steel framing of indoor living areas spans of glass.
The Fickett formula: good design works both wa

Here is an architect who gets
$100,000-plus a year
from merchant builders alone . . .

. . . and here is his biggest client,
a builder who was willing to pay
as much as $20,000 to get
the best-selling house designs
in Los Angeles

Edward H. Fickett, 36, is the son and grandson of native-born builders. . . . During school summers he worked at various building
his father and in the office of his father's friend, Sumner Spaulding
who urged him to study architecture—which he did, at the Uni
Southern California, working part-time for Spaulding and other archi
widen his experience. He finished his formal training at the Art Cent
Los Angeles. After three war years with the Navy's Civil Engineeri
he formed a partnership with Francis J. Haas, and established his
ice in 1947. Since 1948, 80% of his practice has been designing
merchant builders like Ray Hommes.

Ray Hommes, 52, started building apartments and commercial str
1937, worked on government and military contracts during the war
employed Fickett in 1949 to help him solve a problem of slipping h
today is "completely sold on modern." He has built 2,000 Fickett h
Fickett apartments and commercial buildings in the past year. Says
"A clever architect working closely with a merchant builder ma
beatable combination. An architect with vision, ability and training
something unique, functional and appealing, and through research
ideas in materials and equipment. A builder who doesn't use an o
out of date and won't be able to compete."

Juli
Typical framing is 4" posts 10' o.c. spanned by 4" x 10" beams; above them are 4" x 6" purlins 3'-6" o.c. and roof planking. Total cost: $18,000.

Wide-bay framing gives the house its airy character. The architects are the first to point out, however, that the structural expression possible with this system has not been consistently exploited here.

A porch-dining room is on the centroidal axis of the plan. Internally it connects the two wings of the house; externally it links the two terraces. The lobeside wall, below, forms a 12' sliding door which can be opened wide on mild days.
Personal orientation

The house is especially well suited to the needs of its owner, a lady whose children and grandchildren live nearby and often visit her. She likes to cook for them and the kitchen-dining porch arrangement makes the undertaking pleasant for her in a number of ways. The low counter-partition lets her exchange gossip and dishes freely as she works (it also invites a helping hand). The waist-high fireplace in the dining room makes it possible to serve steaks hot off the coals. And at dinner she can make the room either an intimate one with the curtains drawn and light centering on the table, or an expansive space with lights across the lake extending the panorama. When her grandchildren come over to spend an afternoon, the indoor porch links with the terraces to become a playground that high spirits cannot harm. And from the kitchen she can keep an eye on the youngsters in all three areas.

**Wall of glass, 12' wide, can be pushed open to join the flagstoned indoor porch to a wide flagstoned terrace running toward the lake.**

**Pumice brick wall separates living room and study rest of house. Recess to right of fireplace cuts thru dining room, is accessible to both rooms for stacking.**
The open kitchen, left, is a handsome setting for an accomplished cook. In it, she is never out of the conversation; from it, she has a commanding view in three directions. Panels between roof beams are plastic insulation.

The dining room is like an airy pavilion which sweeps through the middle of the house bringing with it a sense of the wide out-of-doors. Horizontally space flows out to terraces north and south, vertically it swoops skyward through the clerestory, below, and a glass-filled gable end.
A house is as big as its lot

Six inexpensive outdoor "rooms," interlocked in a novel H-plan, double the effective size of this house at little extra cost.

Careful location of indoor rooms, walls and fences shows how to get privacy and outdoor living in the suburbs

In this house one wall of every room is not really on the house itself, but on the far side of an adjacent "pocket" garden. In effect, half of each room is indoors, half is outdoors. Between the two halves is only a glass partition or window. Repeated again and again, this design device yields a handful of little indoor-outdoor spaces that can make any house seem twice as spacious as it really is.

This is a big house, 2,800 sq. ft. It stands on a sizable lot, 100' x 175'. But its combination of privacy with outdoor views might work even better for a smaller house on a smaller lot. If the indoor rooms were too small, their outdoor areas would be doubly welcome. If the lot were too small, the outdoor walls might be still more important to privacy.

This is a private house, in the full sense; a place where the owners can have privacy from the busy street, privacy from neighbors, privacy from each other. Neighbors and passersby can enter it, either visually or physically, at only one point: the front door. At other points around the exterior they are not invited to participate in the owners' family life.

LOCATION: Los Angeles, Calif.
KAZUMI ADACHI, architect;
Dike Nagano, Hideo Takayama, associates
ECKBO, ROYSTON & WILLIAMS, landscape arcl
PARKER, ZENDER & ASSOCIATES, consulting ei
RUSSELL ELAM, contractor
CARROLL SAGAR, decorator

Photos: Julius Schulman
ars ago Ed Fickett was just another young man with a T
ran agile pencil and an urge to go places in architecture.
he heads a ten-man office in the Beverly Hills section of
Blvd, and grosses over $100,000 a year, almost all of it
ource that other architects had scratched off their lists as
ble long ago.
arket Fickett tapped was not an easy one: the big-time
builders who were having no trouble at all selling mile
dicre mile of conventional bungalows. Burgeoning
Los Angeles was so hungry for houses it asked only
have roofs and a little plumbing. At that time phrases
'open planning,' "sales appeal" and "architect-designed"
a necessary part of a builder's working vocabulary,
sh for quantity, the quality of moderate-income housing
y behind Southern California's exciting new individual
commercial architecture.
architect, the market Fickett tapped had the hidden po-
a Los Angeles oil field. But it required patience to drill
to it.
covery came partly by chance: a savings and loan presi-
whom Fickett had designed a commercial structure put
uch with a builder whose house sales were beginning to
accountably. Fickett started drilling. He set about
builder language, studying builder problems, adding to his
itectural training a store of practical knowledge that had
ith summer carpenter jobs for his father and grandfather,
past six years what he has learned has gone into no less
000 houses for a dozen different builder clients, from
derived both a comfortable living and the personal
on of helping 18,000 families who thought they couldn't
 architect. He has found that designing by the dozen is
—so profitable, in fact, that he has all but dropped the
is growing residential and commercial practice."
: his house designs involved "cessions": dolled-up, ranch-
bridges." But these transitional designs bridged the gap
ere the builders stood, architecturally, and where Fickett
em to go. (See pictures, right.) No builder was anxious
verted overnight to a member of an avant-garde, and
less, minority. In the case of Ray Hommes it took
and a canny eye on the market to work up his enthusiasm
arious intermediate Fickett plans to the level of design
ed by the new Sherman Park houses. (It is interesting to
, in the course of those four years with Fickett, Hommes
from an annual production volume of 200 houses to
like 2,000.)
er in their latest tract, Sherman Park, Fickett and Hommes
Southern California a new standard for volume-built
and competitors are vitally interested in how their formula
See builders' comments, p. 137).
see of Fickett's practice: occasional apartments, stores. The only
as he has found time for recently have been residences for his
builder clients—seven of them, ranging up to $150,000 each.
LOCATION: Sherman Park, Reseda, Calif.
EDWARD H. FICKETT, AIA, architect
RAY HOMMES CO., builders
SHERMAN PARK DEVELOPMENT CO., owners; M. A. Smith, pres.
WILLIAM A. MANKER, color consultant
MARTHA WEAVER, decorator for Barker Bros., furnishings
VAN HERRICK'S, landscaping

The Fickett-Hommes subdivision that is being watched most closely by competitors is Sherman Park, 1,000 houses nearing completion in the San Fernando Valley (see photos). The first large-scale tract of all-out contemporary design in the Los Angeles area, it is underselling the market by $1,000 a house, with delivery dates six months after sales. In spite of its considerable distance from central LA (25 miles), it is outselling conventional tracts nearer town, and roughly half its buyers are downtown commuters. When Sherman was started, a nearby tract of conventional houses of comparable size and price had sold 20 out of 200, within two months had sold 70. In two weeks Sherman Park sold out its first unit of 251 houses; the next 315 were not even advertised and as many as 33 were sold on a single week end.

Typical of remarks heard in Fickett's model houses: "great feeling of light and air inside, and no frilly moldings to clean. It's what we've been reading about in the magazines for so many years, but never could afford to buy." (Hommes promptly began plugging "Magazine Story Homes" in his ads.) Among the buyers have been some 20 architects and draftsmen, no small tribute to the soundness of the design.

Some professional observers feel, however, that Sherman Park buyers are younger and better educated than the average, and wonder how many houses like these can be built in the LA area before the market among this type of buyer will run out.

What NAHB says about Sherman

In a recent judging, NAHB conferred two Merit on the Sherman Park tract. The citation for the 9½ entry: "Well-designed for families with children large amount of storage space and an excellentment of porch and carports. Also commendable is that the carport may be put to other uses easi1,145 sq. ft. entry: "Good styling of porch . . . roofing system. There is too much traffic circulation the living room, but this is offset by the fact that rooms are well-separated from the living area." jury: Builders Leonard Frank, Earl Smith, Irvin Blie ructs Morgan Yost and Richard Bennett.
Space divider of cedar-chip board shields kitchen and breakfast bar

What sells the houses?

Hommes attributes his fast sales to the contemporary design, the spacious feeling that open planning and high beam ceilings give the interiors, and the patio living and color styling.

Here are some of the lessons of the Sherman Park designs:

*Keep it clean*—low exterior lines and orderly elevations have appeal in themselves without adding "decorative" gadgetry.

*Use one roof line*, or two at most—not a dozen hips, gables and dormers—to unify the appearance of the whole house.

*Show the roof*—Fickett pitches his roofs just enough (1 in 12 to 2 in 12) so that the top, with its texture of gray-green crushed rock, can be seen.

*Make the plan convenient*—people like a separate entry, or at least an entry area; bedrooms and a kitchen that are easily accessible; inside bulk storage space; carport near kitchen.

*Open the plan up*—living, dining and kitchen space can be continuous and spacious-looking with minimum space dividers. Floor-to-ceiling glass walls can open up a rear living room to a back patio.

*Keep the ceilings high*—when the underside of the sloping roof deck is left exposed to become the "ceiling," the room height averages a couple of feet more than it would under a flat ceiling especially furred down. Big beams are a proved sales feature.

*Use shadows*—wide overhangs give a deep shadow line which accents the roof and breaks up the flat plane of the exterior. Fickett uses "shadow boxes" (protruding wood surrounds) to unify a pair of front windows and cast another shadow on the wall.

*Use textures*—staggered-board siding and fences outside, striated plank ceilings and textured cedar-chip board inside prevent a cold, flat look.

*Use soft colors*—earthy browns and greens, distinctive yet muted, have much more universal appeal than brighter colors, about which buyers are bound to disagree.
What kept the price down?

Fickett designed into the Sherman Park houses at least ten new and old cost-cutting techniques:

1. **Rectangular plans**—floor plans are simple rectangles, with entrances, porches, carports integrated to eliminate expensive corners, jigs and jogs.

2. **Post-and-beam construction**—a semimodular system of widely spaced 4" x 4" and 4" x 6" posts carries the entire roof load down to round concrete piers; shallow slab beams under interior walls save $50 per house. (See details, p. 135.)

3. **Slab floor**—instead of a more expensive wood floor on joists. Greater moisture protection was achieved by pouring the slab in two layers with a membrane of emulsified asphalt between.

4. **Deck roof**—4" x 6" and 4" x 8" ceiling beams, topped with 2" x 6" T&G decking, ½" fiberboard and built-up roofing instead of joists and plastered ceiling. Ripping the underside of each 2" x 6" with five grooves gave a decorative ceiling pattern that also conceals defects in the cheaper, lower-grade lumber used.

5. **Carports**—instead of garages, saved $50 a house (clear saving over the added cost of a 40-70 sq. ft. inside storage room to replace the usual garage storage).

6. **Less trim**—by using extruded metal corner beads in special wood-frame details around doors and windows, $25 was saved in labor required to trim out each house, and a cleaner appearance was achieved. (See detail, p. 138.)

7. **Dry wall**—4' x 12' sheets of plasterboard, well joined, have done away with the plaster troubles of drying time, thickness variations, curing time between coats and interior cleanup. Plasterboard is a relatively new technique for Los Angeles.

8. **Asphalt tile finish floors**—Fickett and color consultant Manker felt the colors and patterns of stock asphalt tile were unacceptable. By working with tile manufacturers, they obtained a special clear-colored gray-green tile, at “C” quality tile prices, that looks as good as more expensive floor coverings. They believe this is even cheaper than leaving the slab exposed and trying to get a smooth finish and satisfactory color in it.

9. **Louver windows**—adjustable glass jalousies imported from Australia cost the same as standard sash, are sales feature.

10. **Chipboard**—an unusual, deep-textured wallboard of pressed cedar chips is effective and popular in the living room and costs only 20¢ per sq. ft.
corner living room, enclosed dining porch and traffic pattern. See plan opposite

What Los Angeles says about Sherman Park

Paul Burkhardt, NAHB treasurer: "As a result of the interest aroused in the Fickett houses at the recent NAHB convention, I went out to look at the tract; I had to park two blocks away. Sherman Park is something for Fickett and Hommes to be proud of; they have mighty good ideas, including the way they avoided monotony in the entire tract. I'd like to try something like Sherman Park one of these days."

Dave Slipher, of the Fritz Burns organization, builders: "The Fickett-Hommes success in Sherman Park gives us heart to speed up our own contemporary styling. What they are doing is confirmation that, if you go contemporary, go all the way! It is a forward step and deserves looking into by builders, although not too many have had to face it yet."

Biltmore Homes, builders: "Fickett did a very good job. Certain features of contemporary design will be incorporated from now on; all the houses coming off the drafting boards will have a new look inside and out, just like the new cars."

Milt Brock, past president of NAHB: "Most builders will be conservative, considering the financing problem, among others. But we need those builders who are willing to take a chance on contemporary."

Robert Cran, editor and publisher, Associated Architectural Publications: "Fickett has opened a new field for architects here. Hitherto, most architects have waited for the builder of medium-priced tracts to come to them. Fickett approached the builder, and sold him on putting up a tract of really contemporary homes. He has been articulate in transferring good design to the mass home; somebody had to get into the building field in Southern California and bring it up to date—and he did it. The Sherman Park houses have attracted public attention, including national awards; and since the public itself likes the Fickett-Hommes product, it disturbs other builders because they know they'll have to get going and cater to the desires of the market."
"E" plan, 1,131 sq. ft. has large formal entrance porch, up-front carport shielded by staggered-bow fence. Note front-to-back living room, dining porch near the kitchen.

The architect's role

On retainer, Architect Fickett provides the services listed opposite. He stresses to builder prospects that he is selling individually tailored professional services, not selling house plans out of a file drawer. But cut-rate plan services and unlicensed designers, working for less than $25 per house, are numerous in Los Angeles. As a result, only one builder out of ten who walks into Fickett’s office walks out with a contract; most of them still think in terms of $10-per-house royalties and talking won’t change their ideas.

Yet, for the past three years, enough builders have agreed with Fickett’s formula to pay in a yearly gross of $100,000. He believes “great strides have been made in the past four years. It’s just something that can’t be pushed.”

Corner beads of extruded aluminum, fitted into specially milled sections around doors and windows, eliminated much interior trim. System gives plasterboard clean corners.
sales techniques recently won him a national award.

"The furnished models always sell the fastest," he says. "If one model is going slowly, we simply furnish it and it sells." Landscaping helps, too. All four Sherman Park houses are attractively planted, and in four new models at Woodlark Park nearby, Hommes has gone all the way, using Landscape Architects Eckbo, Royston & Williams to plan the full landscaping front and back, with fencing, paved sandboxes, shrubs and trees.

Hommes, understandably, is enthusiastic about contemporary design—"I wouldn't go back to his older Cape Cod, Colonial and Spanish Revival, which he likens to "old-fashioned autos." His newspaper ads for the "Post-and-beam" construction of interior is reflected in porch and carport. House colors by William Manker are earthy browns, greens and yellows on exteriors and interiors.

steps to a better house:

1. **Pre-planning**—Fickett supplies drawings for typical plots (any odd-shaped plots) which show relation of house to lot: fences, sidewalks, utilities, trees, general orientation.

2. **Preliminary FHA and VA approval**—Fickett "runs interference" for his builders by taking preliminary schemes to FHA and VA, then making changes recommended by them and building.

3. **Contractors' conference**—at an early stage, the electrical, plumbing subcontractor, the mill superintendent and the carpenter, the foreman are called in for a conference in the architect's office to collaborate on the planning, and to suggest changes.

4. **Working drawings**—a complete set for each house-type (those for custom or commercial work. Typical examples: 10-house tract with three basic floor plans Fickett supplied 20 and blueprint sheets plus a master site plan; on a proposed houses in the $14,000 bracket now under construction with basic plans, he delivered 60 sheets of working drawings, including foundation plans, two-and-one-half exterior variations per set, detailing, and a master site plan.

5. **Submission of drawings to agencies**—Fickett is available to interpret the drawings to the building department, FHA, VA, the lending institution, to fight for and obtain variances from FHA, incorporate required changes. Fickett also fills out FHA Description of Materials forms for his builders.

6. **Partial supervision**—Fickett pays from 10 to 25 visits to the job, depending on the size of the job, to acquaint construction with his designs, follow the first four or five houses (usually 10 or five different display models) to completion.

7. **Color coordination**—Fickett sells as part of his service, or records for separate contract, the services of a color stylist at $10 per house.

continued on p. 172
IN THIS MONTH’S NEWS:
(see pp. 37 through 49)

The mortgage money shortage grows worse and worse as the government delays a decision on hiking frozen VA and FHA interest rates.

Practically everybody gets into the debate on housing policy, but no action is likely before sometime next year.

Code unification, voluntary style, gets a big boost as the US Chamber of Commerce votes $20,000 to speed studies.

After four years of struggle against red tape, Baltimore gets a pace-making FHA commitment for urban redevelopment.

Congress begins a fresh series of housing investigations, but the focus is on official errors instead of industry shortcomings.

Eisenhower finally picks new boss for HHFA: former Rep. Albert Cole

For Albert MacDonald Cole, the biggest day of 1953 fell on Wednesday, Feb. 25.

His only son, Will, 20, was inducted into the Army at Camp Crowder, Mo. His daughter, Mrs. Mary Kaul, who works at the Library of Congress to help put her husband, Kenneth, through George Washington Law School, celebrated her 23rd birthday. And Cole himself was nominated by President Eisenhower as HHFA administrator to succeed Raymond Michael Foley, who has headed the nation’s top housing agency since it was created in 1947.

The nomination came as no surprise to either Cole or the building industry. Cole, an articulate country lawyer from Holton, Kan., had been a patronage staffer for the Republican National Committee since losing his bid for re-election to Congress last fall. For over a month, insiders had known Al Cole was front runner in a field of some nine contenders, willing and unwilling, for the $17,500 job. Yet the delay in his appointment, in no small way, epitomized the new administration’s wary approach to US housing problems. How would an industry of such diverse and often conflicting interests react? NAB, back in mid-January, had put itself on record as applauding. Realtors, who had come to look upon Al Cole during his four terms in the House (1945-52) as a champion of their viewpoint, hardly needed to say a word (and didn’t). Mortgage bankers had no audible objections, particularly after Cole flew to Denver for a long talk with Eisenhower’s old friend, Mortgage Banker Aksel Nielsen, whom he had not previously met. Then there was the FBI clearance, which took 10 days.

Anti-public houser. That left the thorniest question of all: Cole’s congressional record as a foe of public housing—a program which would become one of his major responsibilities as HHFA chief. As a member of the House banking committee (where he helped shape much of the housing law he will now administer), and on the floor of the lower chamber, Cole consistently voted against public housing. So when Colemen not only cleared the appointment with Kansas senators but with Sen. Irving Ives (R, N.Y.), a pro-public houser who is chairman of the Senate subcommittee on housing and rent control.

While Ives apparently approved, most of the nation’s public housers were quick to howl. The loudest cry came from the CIO housing committee. Chairman G. Thimmes, who is vice president CIO Steelworkers, wired President hower that Cole’s appointment was “ridiculous and harmful.” At the banking committee hearing on confirmation, opposition was questioned him sharply on his fit run a program he did not believe in. But even his opponents conceded it would win confirmation, although p not unanimously.

Too much temptation. As is his Al Cole explains his opposition to housing with refreshing forthrightness can—I don’t say that it has—be a vehicle through which hungry bureaucrats can take from c their rights. That temptation is too for any political party. We must sti local communities to meet the ne welfare housing themselves. Who provide the subsidy—federal, state c governments? I’ve no objection three if it is outside the framew federal control.”

As Cole sees it, another fundamental pction to public housing is that it “d inates” in favor of the lucky few get in, while doing nothing for the t of more eligible low-income famil thus pay taxes to support a favor But Cole draws a sharp line betw opinion of public housing and his course of action supervising it. Says believe I can honestly administer a p though some phases of it may not be able to me personally. I am not go scuttle public housing by indirect m
must be coordinated with the entire government economic program. But he hoped a decision would be forthcoming "in maybe a month." On March 23, when the House ways and means committee is scheduled to begin hearings on the Independent Offices Appropriation Bill, Cole may well have to recommend how many public housing units be built in fiscal 1953-54. And he must decide whether to keep or replace the men in policy-making jobs under him in HHFA and its constituent agencies. All Cole is saying is: "People in policy-making positions should agree with the top administration.

But well-informed building men predict he will oust almost all of Ray Foley's chief aides. One possible exception: FHA Commissioner Walter Greene, whose retention is being urged by some builders.

* Mentioned so far in industry circles as prospective FHA Commissioners: Lumberman Norman Mason of North Chelmsford, Mass.; Newton Farr, Chicago realtor and former NAREB president; Mortgage Banker Don Hedlund of Seattle.

** Cole the man—an able country lawyer **

While the views of HHFA nominee Albert Cole on housing and building problems have been emphasized by his votes in Congress, they have been shaped by long acquaintance. As a lawyer, Cole for 13 years represented the Holton (Kan.) Savings and Loan Association. "Cole believes in private ownership of homes and that they should be made as widely available as possible," says W. L. Hamilton, president of Topeka's City Home Savings & Loan Association from which Cole recently resigned as a director, "He has a good fundamental knowledge of the problems of the home owner and of the need for rentals for an increasing transient population."

Cole's father, a Baptist minister in Topeka where young Al grew up, built a four-bedroom house "all by himself" there in 1915 to shelter his family of four. Al Cole was then 14, having been born Oct. 13, 1901 in Moberly, Mo. and well remembers helping drive nails. Two years after he worked his way through Topeka's Washburn College as a bookstore clerk and through a law course at the University of Chicago by waiting on tables, Al married Emily Corbin of Kansas City, daughter of a subdivider and builder of low-priced bungalows—about 100 a year.

At golf, a duffer. At 51, medium-sized (5' 7", 160 lbs.) Al Cole looks and acts like a man considerably younger. He has a notably nonreceding hairline, not a gray hair among the reddish-brown, and an almost-boyish smile. The secret, perhaps, is relaxation. Al and Emily Cole lead a quiet life in a one-bedroom Georgetown apartment, having sold their old three-bedroom house in Holton to cut expenses, Cole often reads in the evenings—biography, historical novels, history and whodunits. When Mrs. Cole goes sailing on the Potomac in her 11' penguin class boat, landlubber Cole usually repairs to a golf course where he says "I work hard at breaking 100."

One Cole trait is sure to make a hit with Congress: he speaks briefly and pointedly. Another should help him weather the critical tempests that seem to swirl around almost anyone who holds the nation's No. 1 housing job: Cole has a philosopher's unconcern over brickbats. As President Hamilton of the Topeka City Home Savings & Loan says: "In the critical situations in campaigning, he was calmer than any of his advisers. Attacks he accepted as part of the game. I've never known him to display a vindictive attitude."
Look what's selling fast in Kansas

Four-bedroom, two-bath houses at less than $10 a sq. ft.
turn a sales tide for a Kansas builder,
and offer a housing solution to the multichild family.

Public acceptance of new design converts FHA and mortgage lenders

When a builder finds a soggy market for his houses, what steps should he take? Here's how young (26) Jack Sargent, vice president of his family's building firm in Topeka, Kan., reversed a declining demand:

► Decided his two-bedroom, 708 sq. ft. house was the bottleneck—and scrapped it.
► Visited progressive builders in other cities to study new methods and ideas he could use to give more house for the money.
► Hired an architect with merchant-building know-how, and with him worked out a big house with two full baths.
► Learned assembly-line techniques and parlayed them into a square-foot sales cost of $10, as against his previous $13.27.

Young man with a problem

When the last 25 houses in his 183-house 1951-52 program met with heavy buyer resistance, Sargent decided that he needed not sales promotion, but a new house. Ideas for that house came from successful builders throughout the Midwest who volunteered proved short cuts and methods to Sargent as a Trade Secret. Andy Place suggested that he consider the fourth bath and the extra bath (H&H, Jan, '52), and gave experienced on perimeter heated slabs. In Denver, Sargent learned from Carey's production techniques (Dec, '51 issue). From Texas low roof lines and high windows. From two years with the FHA office came Architect Jim Cushing, anxious to demo the dollars-and-cents value of design for the merchant built.

Behind the wooden curtain

Two model houses (one three-bedroom and one four) were behind an 8' plywood fence which encircled the sites, Publicity mounted and it became necessary to protect the fence overeager Topekans who wanted a preview. The fence came the night before the opening and the next morning's rush ca traffic jam. A steady stream of people went through the and 70 sales were recorded in ten days. This record was significant in view of the previous slow house market. Most mon buyer reaction: "We've been waiting a long time to house like this."
Building in jig time

Sargent builds all of his wall framing sections in 15 different jigs, mounting windows at the same time. Sheathing is not put on until the walls are up because he found the rigidity of plywood made even slightly off-dimension sections too hard to join. Essentially, both houses have the same floor plan, with the hallway to the fourth bedroom replacing an oversized dressing room in the smaller house plan, so interior walls are alike for every house.

Doubting Thomases

FHA, suspicious of the unfamiliar lines, high windows, perimeter warm-air heated slab, and what looked like a too-low price, would at first guarantee mortgages only on the first 25 houses of the project, and gave conditional commitments on the remaining 118. There were other doubters, too. Some competing builders scoffed at the price set, and predicted bankruptcy. Jack's father, John Sr., head of the firm, questioned whether their customers were ready for such advanced design.

Ninety-eight house sales later, the picture has changed. FHA has committed the entire project, and last month raised the loan guarantee $500 on the four-bedroom model (to $10,100). And Architect Cushing is being besieged with jobs from the builders who, a year ago, could see no reason for an architect's services.

Not satisfied yet

Neither builder nor architect feel that they want to stand pat on this year's model. They are already planning changes, want to drop the roof to a 3" in 12' pitch and open up the planning, are thinking of using storage walls. Dining space, insufficient in this plan, will be added and the present traffic pattern restudied. Sargent's mortgage source assures him that more advanced design and features will be no drawback to lending, because "sales of this house have been excellent, while other sales in Topeka have fallen off."

Shape of things to come

Jack Sargent typifies a rapidly growing segment of the building industry. Often the second generation in the business, this group wants to break out of the mold that their fathers set. They want to experiment with new methods and new designs. They give and borrow ideas freely. They are trying to build better looking, better living, houses. They read, they travel, they ask questions. Each year their houses are likely to be better than the year before.
This is the third in a series of articles which began in the April, '52, issue of House & Home. Their purpose is to supplement the FHA Underwriting Manual, the professional bible of FHA appraisers.

It has been obvious for some time that this manual is neither adequate nor up-to-date in discussing the design qualities of a typical contemporary house, whether built by a merchant builder for sale or by an individual family for its own use. In our first article, entitled "The Banana Split," we therefore discussed the use of different materials on a house facade; the second article, "The Horizontal Look," (July, '52) described several devices that can make a small house appear considerably larger and a dumpy house considerably more elegant.

In the following article the editors of House & Home take you in through the front door to discuss what it is that makes a plan for a small, one-story house good.

THE PLAN'S THE THING

... or how to live at home and like it

Few things are as difficult for laymen to understand as the plans of a house. Unless he sees a completely furnished model house, and can visualize that house will function when in actual use, the average home buyer has no idea whether he is looking at a real design for good or whether this highly advertised ranch (on a 60' lot) is going to be left after the first two weeks of domestic bliss.

Nor is the layman alone in this. The average merchant builder, some not-so-average ones) does not always catch a bad plan before it is too late. For example, one of the most famous US builders is selling $13,000 houses whose living rooms have no less than 11 windows. Now this may be a reasonable plan to produce the kind of traffic you want in Grand Central Station, N. Y., on a late Friday night, but few families would consider the atmosphere of Grand Central ideal for home life, and some even like to have furniture in their living room. (For living, use the garage.)

Lest this particular builder house appear to be an extreme case, we have tried to analyze a number of other, commonly used builder plans. The houses in which these plans can be found are often modern in the outside; but what architects mean by a modern house is a lot of glass under a flat (or low-slung) roof; it is first and foremost above all a new kind of plan. And it is this new kind of plan that home buyers are beginning to demand, and that the FHA appraisers have to learn to appraise.

There are probably not more than half a dozen different one-story house plans used by US merchant builders today. Some of them are very good, others are very bad. Some variations on a good plan can make it better, some variations on a bad plan can make it at least workable. These five most common builder plans, and here are the variations and improvements on each:
**MINIMUM PLAN**—once the most common builder house, it is now inadequate for all but a few families

- Low cost (due to tight periphery, concentrated services)
- Little waste space
- Its narrow lot or row-house development can be turned around or flopped over for best orientation
- Too minimal for families with children (two bedrooms inadequate)
- Difficult to expand (but makes good "core" for bigger plans—see below)
- Inadequate storage
- No suggestion of entrance foyer
- Full street pattern when several are used

**ABOVE:** variation (by Robert Little, architect). At little extra cost, this variation on the basic plan gives you a real entrance foyer and a better relation of kitchen, dining and living areas to the lot. Living room always faces garden; kitchen always faces street. Service and storage facilities in garage wing make this a much more workable plan.

**BELOW:** expansion (by Hugh Stubbins, architect). Program dictated retention of basic two-bedroom core. This meant that additional bedroom was an emergency measure only, helped underscore basic awkwardness of plan: bath too far from third bedroom. Screened passage further reduces minimal living area.

**LEFT:** expansion No. 2 (by Richard Neutra, architect). This custom-built house uses basic square plan for its core, shoots out wings in two directions. Solution retains economies of concentrated plumbing and minimal circulation space, adds expansive living, sheltered terrace and entrance areas, better cross-ventilation and orientation.
THREE-BEDROOM PLAN—one of the layouts most popular with builders,
it falls short of first-rate planning

PROS: Economical to build
Few windows face adjoining lots

CONS: Living-room picture window faces street
Access to garden through kitchen dining area
Large portion of living room is circulation space, cannot be furnished without turning back on "view"
No entrance control from kitchen

LEFT: expansion (by W. A. Wollander, designer, for Builder Albert LaPierre). Scheme recognizes inherent weaknesses of basic plan a) by adding to usable living space, and b) closely relating "family room" to rear garden.

RIGHT: variation (by Ralph Rapson, architect). Although this plan is several times removed from the basic scheme, it incorporates all the advantages of both the original and of the LaPierre version, plus a few of its own. For example: it has all utilities concentrated at the center; it allows direct access from kitchen to rear garden (and, thus, supervision of children); it has few windows facing adjoining lots; it has a cross-ventilated living area. In addition, it has the family room of the LaPierre house, but it is a more useful room since it adjoins the bedroom wing and it uses the garage and fences to screen the living area from the street. It also uses the utility core to form a little entrance lobby. (See also H-plan, opposite.)
STYLE PLAN—the darling of many a builder, this house requires a major surgery job to make it fit for human occupancy.

- enough, this plan needs only one drastic revision to it good: it needs to be torn in half. For if you separate bedroom wing of this house from its living-dining wing (kitchen), keep the entrance where it is, make kitchen and part of the link (just as they are now), you will get a famous H-plan long admired by architects from coast to coast. The H-plan (see below) is one of the best solutions for a relatively narrow lot, and it need not be expensive—ally in warm climates.

- stages of the H-plan (shown diagrammatically):
  - sets two patios with plenty of privacy;
  - sets similar privacy for daytime and nighttime areas;
  - sets cross-ventilation in all rooms;
  - bridge differences in grade (the link can be a ramp);
  - be planned with minimal plumbing runs;
  - produce a good-looking house;
  - have higher ceilings in living area;
  - be turned and twisted to make the best use of any lot, and orientation;
  - sets of three simple rectangles that are easy and inex- se to frame.

PROS: Bedroom wing is sound-insulated
CONS: Living-room picture window on street
Living room is part corridor, tough to furnish
Access to garden through kitchen-dining area
Circulation areas snarled
Complicated and costly to build (many irregular breaks in exterior walls, roof line)
All bedrooms face neighbor’s garage
Bad entrance control from kitchen
Street facade overly complicated, garden facade dreary and dull
Bedroom wing works only with second bath, long plumbing runs
LEVITT LANDIA PLAN—a good adaptation of earlier architect designs, this layout can be varied to achieve greater in

PROS: Compact, easy and inexpensive to build
Excellent circulation
Services face street, living areas face rear gar
Excellent entrance control from kitchen
One bedroom can be thrown into living area, ability produces sense of spaciousness inside
Entire plan can be cross-ventilated
Front and rear facades can be equally handled different in character
Bedrooms are sound-insulated

CONS: Fireplace is badly located
Dining area too close to entrance

ABOVE: prototype (by Richard Neutra, architect) more than a dozen years ago, this Neutra plan elements of the Landia house, plus a more useful Note also Neutra’s skillful placing of garage to monotony, interesting rear fenestration design monotony of identical garden views. Fireplace is is i
tion, but dining area is perhaps a little tricky.

ABOVE: variation No. 1 (by Bruce Walker, designer). Similar in principle to the basic Levitt plan, this house has a better entrance foyer, better location of fireplace and of dining area (which is more effectively screened from entrance), less compactly planned utilities.

ABOVE: variation (by Ned Cole, architect). The Trade Secrets house, close variation on Bruce Walker’s theme (above left), has all the advantages of the latter, plus a family room in back of the kitchen and a better concentration of utilities. Walker’s plan, however, boasts three bedrooms, plus an emergency sleeping area in the living room. (Plan here is reversed.)
N-LINE PLAN—a fine house whose potentialities have yet to be fully explored

- Easy to construct on regular frame
- Good circulation (but long corridor)
- Concentration of services
- Easy expansion (or alteration to turn last bedroom into teen-ager's private "apartment")
- Good entrance control from kitchen
- All views identical
- Requires an exceptionally wide lot

Potentialities of the in-line plan have not yet been loved—for this house can be a two-story house as a combination of the two types can make a fine unit, especially on a sloping site. Here is how: the le of each street could use the two-story type (with storage and entrance in the partly exposed "base-" while the one-story type, facing the same way, could along the downhill side of the street. That way both the street could have good views and good orientation, sides would have equal privacy (since the two-story up room is sufficiently high up in the air). For a sug-how this could work, see sketch below.

Here, then, are five basic plans. Almost any builder house put up today is a variation on one of them, or a combination of two or three. Generally, the best results are achieved when an architect does the varying, adapting or combining.

One more point: most builders have only one plan for any given development. This is inherently wrong, for a plan that makes sense on the north side of a street cannot make sense on the south side, and vice versa. The above analyses do not deal in detail with the problem of orientation; but of all the problems faced by builders of communities, that one is the trickiest and the most serious.
LOCATION: Franconia, New Hampshire
DAN KILEY, architect
JAMES J. VIETTE, general contractor

Architect and overhang. Kiley stands on north porch of the house he designed, outside large living room. Below is outdoor sheltered terrace, with fireplace and chimney in rugged masonry wall. Overhang is supported on pair of strong steel sections which were painted and left exposed. House is entered at the lower level (see plans, p. 153).
tens, boulders and glass

*New England dwelling is amassed of old barn timbers*

*summer vacation home and winter ski lodge as rugged as New England White Mountains around it. The architect, Dan who is quite a rugged New Englander himself (see picture signed it after fire had destroyed a house he had just re-for the same owner. It is built with timber salvaged from on the place so, since he got it for nothing, he used the stantly.*

*3' x 3' framing members are erected into a solid wall in the new ed up and exposed on the interior, papered and batten-boarded on ar. Also available were beams and planks for the floors, as well as cellaneous lumber. This explains the very grainy character of the use. It also explains the handsome timber trusses which were left the long living room.*

*house the sometimes overpowering effect of so much wood is offset nt partitions and planes of composition board painted in bright the living room the ceiling is blue, elsewhere white. Large glazed carefully built-in lighting also help to keep the atmosphere cheerful.*
Exposed timber in living room (wall right) is honest. This wall is as strong and solid as the wood trusses overhead.

Northwest wall of living room is glass, with wide overhang sloping down to shade it. Glass is single thickness (¼" plate), with floor registers to curtain it with forced warm air.

**LARGE MATERIALS AND LARGE AREAS**

Entertaining calls for big spaces and this house has two levels. The entire downstairs area can be opened into space; a large sliding door opens from entrance hall to terrace, and another folding door opens on an adjacent which leads to a swimming pool. Upstairs is spacious too; sliding door opens out to the balcony on the east and doors from the living room and kitchen to a slate-surface to the south. Sliding plastic panels separate the kitchen-dining-living room and when these are opened the total length of this whole area is 55′.

The amount of glass in the living room walls also e boundaries of this room out over the slope; to the south inhabited view of Lafayette and Cannon Mountains, and north and west are views of distant mountains with Fre the foreground.

Buttressing all this space at each end of the house flanking rubble stone walls which appear to run through the house, setting it permanently into the hill. The house sq. ft. (figuring one-half usable area for the basement $35,000, excluding land and fees but including retaining grading. The saving on timber was figured at not more per sq. ft., and the solid wall was not easy to put up.
A LONG OPEN SPACE FOR ENTERTAINING

1. Dining area continues living-room space. Kitchen counter slides open.

2. Reverse view of above, looking from the working side of the kitchen.

AN INGENIOUS, ADAPTABLE WINDO

Combination sliding sash and fixed glass is repeated throughout custom detail, it alternates sheets of fixed glass with side-sliding When ventilation is desired, the framed glass can be shifted over insulating glass. Outside, screening continues the line of the fixed glass over the horizontal sliding sash.

A NOOK WITH A VIEW

Dressing table is built into each bedroom to lengthen window wall, avoiding a waste of exterior periphery on closet-ends. Change in floor level (above) saves ceiling height for bedrooms under long slope of roof.
Boxcar dimensions are evident in section above. Reason: rapidly sloping site had only small flat shelf.
Here are details on the University of Illinois Small Council's open-hearted truss, which will allow housebuilders to combine two advantages:

1. **Clear-span structure**, from exterior wall to eave wall on the main floor of houses, without interior interior members.

2. **Expansion-attic cubage**, on the "attic floor. Space exists in all houses built today with trussed roofs, but is unusable because it is slashed by truss members.

But now the alternatives—trusses or expansion attic—have been combined into a new possibility: trusses and an attic. This significant development in house design has been discussed, and pleaded for (AF, Feb. '51), and viewed last summer (H&H exclusive, Sept. '52). And on these six pages, here's how:

**What is different about this truss?**
*Answer:* It permits use of the attic space that other trusses cut up.

**How do you get the truss into the house?**
*Answer:* In framing, one end wall until the roof framing is complete, so it can be carried in the open end.

**How many men are needed to place the trusses?**
*Answer:* Four. Two laborers work ground and two carpenters on the wall than needed to handle most conventional. Reason: the new truss is better balance.
What is the procedure?

**Answer:** See pictures. The groundmen carry the truss from the stack to the open-ended buildings where they swing one rafter tail up over the plates. The other end is then handed up and the men above take over, leaving the ground men to carry another truss. The truss, still upside down, is positioned so that it will clear the trusses already in place as it is rotated. With a short back-swing, the men push down on the joist and rotate the truss into the vertical position. Then they slide it along the plates so that the rafter bears over the studs, which are 2' on center (to set studs directly under the ends of the truss).

Timing works out well in this operation: there is a necessary lag in placing trusses, because they are first placed upside down and must be spun, so they must be placed one by one. But by the time the two groundmen have gone back to the stack to return with the next truss, the space is clear again. The trusses could be transported in trucks and stacked in them at the site, but the same wait between the placing of each one would be necessary unless a crane was used.

After the truss is properly placed, toenailing suffices to hold it in place until the framing anchors are set.

Spacer boards, which are nailed to the rafters, can be premarked with 2' spacing as a check.

After all the trusses are in place the outriggers are nailed to the rafter joist and wall stud. After the trusses are complete the end wall of the building is framed and tipped into place.

**Is this a true truss?**

**Answer:** It is what is known technically as an indeterminate trussed frame.

**How strong is this truss?**

**Answer:** Spaced 2' on center, it was designed for a roof load of 20 lbs. per sq. ft. and a floor load of 30 lbs. per sq. ft. The slope of the truss is either 8 on 12 or 9 on 12, depending on the span (see table, p. 160). This design is completed and details are available from the University of Illinois Small Homes Council for spans of 22', 24', 26' and 28'. Under test in Urbana for a period of 134 consecutive days, the greatest amount of deflection under floor, roof, or eccentric loading was 1 1/4". Of this deflection approximately half was in joists, half in the truss itself.

**What size joists should be used?**

**Answer:** 1) If the room built in the expansion attic is to be used only as a bedroom, and if a dry plasterboard ceiling is used, the truss will be satisfactory with No. 1 grade, 2" x 8" joists; 2) if the expansion attic is to include a bathroom or if the first-floor ceiling is wet plastered, No. 2 or better joists should be used. This extra strength is to guard against excessive deflection and stiffen the floor.

With the exception of the joist, the design of this frame was based on the use of 1,100 psi or better-stress grade lumber with the grading provisions applied throughout the length of the members. Yard grades (No. 2 or better) of some species of wood meet these specifications while others do not.
What kind of wall should be used with this truss?

These trusses were designed to sit on 5h stud wall. Reasons: this height allows several connections, allows the joists to be taken more directly by the wall, and provides some bracing of end walls against wind loads, since the wall-to-some degree—acts as a knee brace.

What about bracing during construction?

Since only one truss at a time is hung, and the notches of the other trusses hold the open-ended walls in, bracing is less than for a single-story truss erected all at once. But it is important that the open building be braced strongly to a solid

How much material is in the truss?

For a 24'-8" span outside wall to outside wall, one truss contains 97.5 board feet of 2 lb. of 10d nails, six 2½" split rings and washers.

How much time should it take to place a truss?

At the University of Illinois the actual time on the operation was clocked at min. for erecting and bracing the truss, nin. for placing the outriggers.

How much does a truss cost?

The estimate by the Small Homes C one truss in place is $20.78. This is se quantities, however, and larger vol- be expected to reduce this cost.

Are there any special precautions to be observed?

One or two. This type of construction low the laxness of conventional fram- essential that members of the truss not or drilled to pass plumbing or wiring the truss must be carefully loaded in the space between the wall verticals is dead space and the construction needs to carry storage in this area.

What about stairways?

They must parallel the trusses, whose changed to open up a slot for the stair pacing: 2'-6", 3'-6", and then back to 2'. This pattern uses one extra truss, necessary additional stiffness at stair maintains the 2' ceiling module.

What about concentrated loading, like bathtubs?

Don’t place them so they occur in the joist span, and try to place them so advantage of extra strength built air opening. The trusses which carry loads should have extra nailing (see p. 160). Water heaters or other ex- should not be placed on the trusses.
### Table: Members and Sizes for Four Spans

<table>
<thead>
<tr>
<th>Span Out to Out</th>
<th>Slope</th>
<th>Rafter</th>
<th>Collar Beam</th>
<th>Vertical</th>
<th>Diagonal</th>
<th>Out-Rigger</th>
<th>Joist</th>
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</thead>
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<td>9/12</td>
<td>2&quot; x 6&quot; x 20&quot;</td>
<td>2&quot; x 4&quot; x 8&quot;</td>
<td>2&quot; x 4&quot; x 7&quot;</td>
<td>2&quot; x 4&quot; x 9&quot;</td>
<td>2&quot; x 8&quot; x 14&quot;</td>
<td></td>
</tr>
<tr>
<td>24'-8&quot;</td>
<td>8/12</td>
<td>2&quot; x 5&quot; x 20&quot;</td>
<td>2&quot; x 4&quot; x 8&quot;</td>
<td>2&quot; x 4&quot; x 7&quot;</td>
<td>2&quot; x 4&quot; x 10&quot;</td>
<td>2&quot; x 8&quot; x 14&quot;</td>
<td></td>
</tr>
<tr>
<td>26'-8&quot;</td>
<td>8/12</td>
<td>2&quot; x 6&quot; x 22&quot;</td>
<td>2&quot; x 4&quot; x 10&quot;</td>
<td>2&quot; x 4&quot; x 7&quot;</td>
<td>2&quot; x 4&quot; x 12&quot;</td>
<td>2&quot; x 8&quot; x 14&quot;</td>
<td></td>
</tr>
<tr>
<td>28'-8&quot;</td>
<td>8/12</td>
<td>2&quot; x 6&quot; x 22&quot;</td>
<td>2&quot; x 4&quot; x 12&quot;</td>
<td>2&quot; x 4&quot; x 7&quot;</td>
<td>2&quot; x 4&quot; x 12&quot;</td>
<td>2&quot; x 8&quot; x 14&quot;</td>
<td></td>
</tr>
</tbody>
</table>

This table lists the members and sizes for four spans of this trussed frame, using 1,100 psi stress grade lumber (grading provisions to be applied to entire length). Collar beams for the two wider spans should be braced laterally at the center with 1" board or solid 2" blocking between members. Joists should be 2" x 8" at 1,450 psi grade, or 2" x 10". All gussets should be 2" x 6". In all members knots or other defects should not occur at sections which are notched or drilled for rings.

---

1. Check that rafters are in tight bearing at ridge, snug against blocks as notches. Mark intersection of center line of collar beam and rafter. Drill 9/16" hole at intersection to mark rafter. Mark bevel cut on collar beam. Mark side of members that receive ring.

2. Precut members for one truss.

9. Place joist assembly again ceiling line as shown and on centerline of truss. Swing up until they clear jig base. Tack diagonals to rafters, joint may be drilled later.

10. Place verticals on wall lines as shown. Tack verticals to rafters to hold and mark square cut on verticals. Place 2" x 6" gusset and mark necessary length. Check that there is sufficient area for five nails each side of joint.

11. Mark intersection of diagonal and top-chord center lines. Intersection should occur approximately on center line of vertical block. Drill 9/16" hole to mark point on top chord. Again: check constantly that drill is vertical. Mark side of members that receive ring.

12. Mark a horizontal cut and a plumb cut 35/6" long on rafters.

13. Place whatever blocks a quick assembly of truss. Remove and disassemble these as patterns, cut, members for remaining truss.

14. Caution: rafters and diagonals cut, drilled and routed pairs, left and right. Rem. may be assembled in same.
assembly, use table (1) to proper slope, member sizes, for out-to-out span. Then:
- 6" rafters.

4 Drilled one end of two diagonals for 2½" split rings. Drill both ends of 14'-0" joist for 2½" split rings. Complete one subassembly by inserting rings and bolting diagonals to joists.

5 Jig for 24' truss may be laid out on 30' x 24' floor space as shown in plan above, allowing for material storage and working room. End wall is open, for removal of truss.

- 2'-0" o.c. so that rafter over stud. Fasten to plates framing anchors.

- trusses are erected, run for fascia. Place outrigger as pattern to clear bolt at dy. Outriggers are structural and must be placed before erected to load.

- How to frame the stairwell:

A. Start at closed end of building. Erect trusses with verticals and diagonals facing closed end until stairwell is reached.

B. Substitute rafter assembly for next truss (center of stairwell).

C. Erect remaining trusses with diagonals and verticals facing open end of building.

D. Place outriggers on all trusses; place joists on stairwell trusses with continuous members as deep as joists. Spike together throughout length.

E. Install headers of joist depth at head of stairs. Place doubled 2" x 4"s at opposite end.

F. Place doubled outriggers at rafter assembly and brace diagonally with 2" x 4" laid flat.

G. The 4 o.c. spacing of stairwell trusses is based on dry-wall module. Lesser spacing may be used.
Adhesives pave way for tile econom

Thin-set adhesives for ceramic tile are doing to the tile setting what dry-wall construction did to the plasterers: they are breaking the monopoly that one craft has had in the building industry.

Use of thin-setting bed adhesives for tile has done more than just cut its installation cost; it has brought competition to the thin men who charge as much as $3.50 per sq. ft. for tile setting, or whatever the traffic would bear. In a Nov. 1950 article, Architectural Forum noted the economies and advantages of adhesives. Many builders and tile setters were quick to see a way of getting or setting more tile at lower cost; other tile men grudgingly used adhesives; still others were and still are holdouts. But today few have an excuse not to use adhesives (a commercial standard for its manufacture was established last July by the Department of Commerce), and many are being pressed by healthy competition to adopt it (to compete with tile setters who now use the method and other crafts that need no knowledge of the art of mixing and troweling mortar to set tile).

"We weren't going to touch adhesives at first, but then we found out we were losing business to the linoleum layers." That comment from a New Jersey tile setter is typical of the growing attitude among tile men. Many builders know tile can be set a third cheaper by adhesives. Often the cost of finishing a bath tile alternates is based competitively on the cost of mortar-set tile, the substitute being pegged at 25¢ per sq. ft. cheaper.

"It was not until a new tile company came to town and started to set tile by adhesives that we felt we were getting a fair price on tilework," says Don Scholz, Toledo builder. "Competitive prices are the greatest incentive to more extensive use of tile because every builder is convinced of its advantages."

Variation in the installed price of tile is greater than for any other item that goes into a house, says James T. Lendrum, director of the University of Illinois Small Homes Council. In some cities in the Midwest costs run well above $3 per sq. ft. In Philadelphia costs run from $1.75 to $2 per sq. ft. when tile is set in mortar, about $1.50 when set in adhesive. In-place cost in the New York metropolitan area where competition is keenest is as low as $1 per sq. ft. for adhesive setting, is generally close to $1.25 per sq. ft.

A rule-of-thumb method builders can use to determine how much tile setting should cost in their areas is to deduct about 20% from the cost of a mortar-set job. Since a mechanic's helper is not needed for adhesive setting, an immediate economy is possible. In areas where tile setting is not controlled by a tile-setting monopoly, carpenters, masons, plasterers—even the builders’ own crews—are doing the job. But many union and nonunion tile setters have read the handwriting on the bathroom wall and are now setting tile at a price almost any builder can afford to pay.

Tom Dolan, a tile setter who has used adhesive since 1949, is one contractor who has done an excellent job. His St. Louis County Tile Co. set over 1,000,000 sq. ft., saved builders almost $300,000.

More tile for your money

Builders can cash in on the economies brought on by more competition and put more tile in the bathroom where it will last as long as a house and never cost the home owner another penny. Here are five ways to cut corners or get more tile for you.

1. Use seconds instead of standard tile. Prices of (which vary only slightly from standards in shade or "p" are several cents a sq. ft. cheaper. Many contractors use se standards because variations are so slight.

2. Set tile at the same height from the floor on walls. Tile men can thus eliminate the time-consuming job of making special parts and fitting extra corners or caps as when tile is set in mortar. The cost of running a tile from 4½" over the tub to 4½" from the floor or basin is as low as $1 per sq. ft. cheaper.

3. Add an additional 1' or 1¼' to the height tiling. Since most tile men restrict themselves to one bath a day, they can do the additional area with no great effort. A tile contractor says: "I would take the tile up another 1½' the cost of the tile. My men will do only one room a day, and there is more tile in the room, they will still get it done in a day."

4. Set tile all the way to the ceiling. By using adhesive tile on dry wall, you can get an entire bathroom (about 150 sq. ft.) tiled at the same price as it would cost if you were to use wood and tile set in mortar. When a ceiling is uneven, as is the case, tile may accent the flaw. Solution: stop the tile setting 1½' from the ceiling to allow for the excess. In this case, tile may accent the flaw. Solution: stop the tile setting 1½' from the ceiling to allow for the excess.

5. Use a thinner tile. Although it is no cheaper for it will be cheaper at the point of use because of a decrease in freight costs. A carton of ordinary-thickness tile (from 5/16" thick) weighs about 55 lbs. and contains 15 sq. ft. A carton of 9/16" thick) weighs 53 lbs., contains 20 sq. ft. In freight costs should be passed along to the builder. I tile contractor says: "I would take the tile up another 1½' the cost of the tile. My men will do only one room a day, and there is more tile in the room, they will still get it done in a day."

Lower overhead. The adhesive method can cut building overhead: the usual three- to four-day cycle for mortar setting is reduced to one day; more pieces of thinner tile (8 vs. 5) can be held by the building contractor who has done an excellent job. His St. Louis County Tile Co. set over 1,000,000 sq. ft., saved builders almost $300,000.

Adventages of the thin-set method

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Method of applying thin-set gypsum board is done by who uses a notched trowel.

Tile is quickly set in place after adhesive dries slightly.

Installation cost (all costs except tile itself) can be cut 42% by the adhesive method, as this comparative cost from one union and one nonunion contractor in the area indicates.

<table>
<thead>
<tr>
<th>Method</th>
<th>Materials</th>
<th>Labor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortar</td>
<td>d. or 500#) .... $1.50</td>
<td>3% per hr., 8 hrs.) 24.00</td>
<td>$102.30</td>
</tr>
<tr>
<td></td>
<td>bags or 300#) ... 3.60</td>
<td>$2.50 per hr.) 20.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>t. or 200#) ... 3.20</td>
<td>Mechanic ($3 per hr., 8 hrs.) 24.00</td>
<td>$80.00</td>
</tr>
<tr>
<td></td>
<td>q. ft. at 50¢ per Tile (100 sq. ft. at 50¢ per sq. ft.) 50.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adhesive</td>
<td>Adhesive (2 paks.) .... $6.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tile (100 sq. ft. at 50¢ per sq. ft.) 50.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$102.30 Total</td>
<td>$80.00</td>
</tr>
</tbody>
</table>

Costs to the subcontractor and should not be confused to builders since these figures do not include overhead.

Dry wall can be used behind adhesives without fear of wall rotting or the tile falling off. The new Hartford baths will get adhesive-set tile because the management decided it will get better waterproofing from adhesives than mortar. Adhesive can be used on almost any surface.

Since tile setters can be in and out of the bathroom in 8 hours every inch of space counts when thin-set tile is used instead of full-thick mortar setting. (Almost 1 sq. ft. of space is added for each 11.3 lin. ft. of wall.)

Adhesives bearing Commerce Dept. hallmark, left, can be used perfectly safely near stove ducts or around heat registers.

Cove tile for joining two planes was designed with 90° flat back to encourage use of cove, make it easier to install with adhesives.
NEW PRODUCTS

THE WELL-STACKED HOUSE: modular panels pile up prettily in limitless patterns

Solar Air Flo has grown up. First introduced three years ago as a window for fixed glazing with separate wood louvers for ventilation, it now has been moduled and modified to become a complete interior-exterior wall. Glazing, ventilating, and insulated plywood sections comprise the system. The 4' wide units each can take a 2,400 lb. load. They stack one over the other and are grooved to interlock on sides, top, and bottom. Wood splines strengthen the connections and act as weather seals. Vertical joints are masked by 1 5/16" x 1 1/16" trim strips. Sub-sills, 2" x 6" headers and doors finish the job. Two types of solid sections are available: one has an insulating board core and sells for $7.60 for the 14" high, $9.85 for the 28" high; the other, a lamination of plywood and fiberboard, costs $13.50 for the 14", $22.10 for the 28". Vent sections are made with louvers on the outside and an adjustable panel on the inside. Supplied with a removable built-in screen, a 4' x 14" vent sells for $25.60; a 2' x 14" for $17. A fixed window frame for a stock size (45 1/2" x 25 1/2") double glazing unit costs $8.50 (un-glazed), and $23 for an operating sash for a double light 42 1/2" x 22 1/2". Units also may be purchased for single glazing. The sub-sill sells for 50¢ per lin. ft. and the trim for 12¢. In all, outside walls for a 1,000 sq. ft. house would cost, sans glass, less than $1,000.

Manufacturer: Solar Air Flo, Inc., Elkhart, Ind.

continued on p. 188
The life of any product depends on many things. The way it’s designed and engineered. The quality of its material. How it’s made.

Every Ro-Way garage door is designed, engineered and built of fine quality materials—for a long life of dependable, useful, trouble-free service.

Take Ro-Way features, for example. Friction-Reducing Taper-Tite track... Seal-A-Matic hinges... ball bearing Double-Thick tread rollers... Power-Metered springs matched to the weight of each door... all working together for smooth, easy up-and-down operation.

Take Ro-Way construction... mortise and tenon joints both glued and steel doweled... sections rabbeted for weather-tight joints... millwork both drum and hand sanded... hardware both Parkerized and painted for maximum protection.

And Ro-Way materials. Fine west coast lumber carefully selected for quality. Heavy gauge steel hardware completely designed and fabricated on special machines in the Ro-Way plant.

Ro-Way built is—built to last. For a long, long life of satisfying service, specify Ro-Way Overhead Type Doors for all garages.

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Home-buyers are looking for plus values, today, even in inexpensive homes—and are finding what they want in floors of Fremont Rubber Tile and Vinacove Base Trim. This lasting combination—installed in one room or more—sells homes faster and costs amazingly little! It provides a lifetime floor, that requires a minimum of care to look its best in any of the endless design combinations available. Fremont Rubber Tile and Vinacove Base Trim look well together—and attract buyers—whether used in the kitchen, recreation room, hall or bath.
Robert Metrick, of Child's Garden Apartments, rural Park, Long Island

100% rentals and sharply reduced tenant turnover? Follow Bob Metrick's example and offer Fedders Room Air Conditioning—the most wanted modern feature! "Fedders units help me enjoy living without luxury rents," says Metrick. The handsome, compact Fedders Room Air Conditioner installed in living rooms and bedrooms supply healthfully dry, mellow, no matter how blazing hot and outdoors. Ventilate and circulate with never a draft. Extra large size Fedders filters capture dust, dirt and pollen... help relieve hay fever and keep apartments cleaner. Units fit into pre-formed wall apertures, giving full use to windows when desired.

Fedders Room Air Conditioners in the Child's Garden Apartments eliminate the trial system and its necessary ductwork. Living space only is cooled. The efficient, economical Fedders unit has 56 years of heat transfer experience built into it.

Fedders pioneered a new method of providing steady, even heat! The principle of carrying heat through thousands of tiny fins has resulted in a new and modern method of home heating. Because they distribute heat so well from floor to ceiling, Fedders Convectors and Baseboard Radiation installations are economical as well as efficient.

Amazing feature of the all-new 1953 Fedders unit is the Built-In Weather Bureau, which gives the weather you want with the flick of a button. Ventilates or removes stale air without cooling. Fedders offers more exclusive important comfort features than any other room air conditioner. Write for complete information on these outstanding units. Fedders-Quigan Corp., Dept. HH-2, Buffalo 7, N. Y.

Fedders works wonders with HEAT and COLD.
Houses usually sell faster and frequently sell for more money when they are equipped with STREAMLINE copper drainage as well as supply lines. Prospective home owners recognize that such a system will give them a lifetime of leak-proof, trouble-free service. STREAMLINE all copper plumbing won't rust...resists corrosion...can't be loosened by vibration and is clog resistant.

Because STREAMLINE Copper Tube and Solder-Type Fittings are so much easier to install, the savings in installation cost offsets the slight additional cost of the materials. They are made with unusual care and accuracy and have an attractive appearance that home-buyers notice.

Specify STREAMLINE copper plumbing throughout every house you build and you can be sure that you are providing a good looking, permanently reliable system that will out-last the building itself.

Write us today for latest catalog describing our complete line of Streamline Copper Tube and Solder-Type Fittings.
More Room... All Through the House

the difference between success and failure of a modern housing development is often in the designer’s ability to make the most of limited space allotments. Architect Donald Kromer, Parma Heights, Ohio, uses “Modernfold” doors on all interior openings to achieve an award-winning design for builders Maurice J. Fishman and Fred H. Kromer in their nationally acclaimed Ridgewood Park homes. View here is from the nursery of the Norman Shibley home looking into the hall. Note how “Modernfold” doors leave every inch of floor and wall space available for living.

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You’re sure to keep clients happy when you specify “Modernfold”—the original folding door. Why? Because no other folding door anywhere equals “Modernfold” for quality of design... for quality and strength of materials.

Your clients will like space-saving “Modernfold” doors because they last longer, look better, operate easier. You’ll like specifying “Modernfold”—because the line is complete. You can get exactly what you need in a “Modernfold” door for every closure or space division problem.

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NEW CASTLE PRODUCTS, NEW CASTLE, INDIANA

In Canada:
Modernfold Doors, 1215 Greene Avenue, Montreal

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We cut water heaters in half to prove to you that Permaglas is your best buy.

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This is my soft touch!

Ruthless Rust

I keep rust out!

Half of ordinary tank
Half of glass-surfac ed steel tank

A.O. Smith Permaglas automatic water heater

glass-surfac ed steel tank fully protects against rust

Specify A. O. Smith Permaglas Water Heaters and you give assurance of all the sparkling clean hot water needed. You also make sure replacement won't be required in a few years!

the only water heater with Four B.I. protection
(A. O. Smith's Four Basic Improvements)

1. Glass-surfac ed steel tank can't rust because glass can't rust!
2. Absence of dissimilar metals inside tank!
3. Interior tank fittings shielded from electrolytic action... the cause of all corrosion.
4. "Neutralizer"... the anti-corrosion stand-by protector!

COST NO MORE than ordinary water heaters

For complete information, write A. O. Smith Corporation, Permaglas-Heating Division, Dept. HH-353, Kankakee, Ill. International Division: Milwaukee, Wis. In Canada: John Inglis Co., Ltd.

Bilt-Well Superior Windows give homeowners twice the protection against air-leakage as set forth in *AWWI's specification. Partial tests bear out this point!

Its superiority is, of course, a patented feature...the exclusive jamb-liner...facilitates snug-fitting at all times...also insures finger tip lift. "Superiors" are counter-balanced with overhead spring balances, guaranteed to last the life of the building. "Superiors" require only one-tenth (1/10) the lifting effort of most other windows.

And that's not all..."Superiors" are made of kiln-dried Ponderosa Pine—and as you know wood is by far the best natural insulation. Add the fact that "Superiors" are water-repellent preservative treated in strict accordance with *NWMA standards, the result...the outstanding weathertight window that will last a lifetime!

**ACT NOW...** specify Bilt-Well Superior Windows on your next job and every job thereafter!

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Louvers & Gable Sash • Corner China Cabinets • Ironing Board Cabinets • Mantels • Telephone Cabinets • Stair Parts
Modern Service-way makes basement more useful... storage convenient. Saves hundreds of steps. Simplifies dozens of household jobs.

The new Heatilator* Service-way is one of the most desirable convenience features you can add to modern homes. This improved service entry makes it easy to get things in and out of the basement quickly, without going through the house.

The Service-way makes basements convenient for storage. Lawnmowers, garden tools, bicycles, screens and storm windows can be kept in basement... easily taken in and out when needed.

Extra-wide Service-way opening permits installation of bulky equipment. Plenty of clearance for freezers, pingpong tables, hobby shop equipment, etc.

The Service-way is made of heavy-gauge steel, structurally reinforced. Overlapping flanges assure snug fit—keep out rain, snow and wind. Slide bolts lock door securely from inside.

The Service-way adds to property values... worth many times its moderate cost. See it right away at leading lumber and building supply dealers. Made by the makers of famous Heatilator Fireplace. Mail coupon today for folder and specifications on the new Service-way.

*Heatilator is reg. trademark of Heatilator, Inc.

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Address

Architect

Builder

Dealer

City

State

What price design?

A higher level of design obviously has to come at slightly higher price than “$10 a plan,” because of time required for its preparation. The figures show how sizable Fickett’s fees are—yet how small percentage they are of the total investment in the tract.

On Sherman Park, for example, two of his design staff, with Fickett supervising, worked a total of 10 days on paper and on scale models to develop engineer designs for 20 different floor plans, from which Builder Homrnes picked six for production. The fee: $3,500 that retained to develop the final drawings, plus a royalty of $35 per house built—a total of $16,450 by the time the first 370 houses had been completed. The contract actually signed specified $20 per house on 160 houses at Macbrigt Co. built at $75 per house on 160 houses in La Habra, C (which the leader said added $1,000 to their sales (H&H, Jan. ’52).

Sherman Park has won Fickett commissions for four new builder tracts in the Los Angeles area.
He is designing 85 houses similar in character to German Park at a flat fee of $5,000 plus $35 per use. Total fee: $8,000. On another 120-house development, he is charging $650 each for four basic plans $2,600—plus $30 per house. Total fee: $6,200.

And he has just signed another contract with Ray Mimes to design, as a package, 1,000 houses and in the $7,000 class to meet a market they believe shifting to the low-cost brackets. Fee schedule: 300 retainer for research, working drawings and planning; $50 per house royalty for the first 500 uses; $25 per house for the second group of 500. Total fee: $45,500.

Fickett: "I have always felt that the architect should not expect to clear a profit on the preparation drawings, but derive all his profit from royalties on each time the house is repeated."

**e-man crusade**

vinced that better design has a demonstrable cash value, Fickett has led the fight for more competent and better-paid architectural services. At one meeting of Los Angeles' Joint AIA-NAHB Committee (of which he is AIA chairman), he made effort to see how many builders were building a mid-average house, or attempting other than normal grid site plan. "I found to my surprise," he reports, "not a single house or site plan of any real merit. Are these men just talking the language... Il of our time spent in phony 'peace talks' or are the men builders, architects, engineers, bankers and the rest of us just working together for a better product?"

he builders want local architects to standardize their flat fee of $30 per house plan. Fickett junked the 'jedigook of the architects' recommendations and slashed it into dollars-and-cents language. Here are recommendations for:

<table>
<thead>
<tr>
<th>Standard Fees</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor plan, foundation plan, alternate elevations</td>
<td>$750</td>
</tr>
<tr>
<td>Elevation, all details and any other drawings</td>
<td>$100</td>
</tr>
<tr>
<td>for a complete and self-explanatory set:</td>
<td></td>
</tr>
<tr>
<td>1 basic house type (max: 1,500 sq. ft.)</td>
<td>$50</td>
</tr>
<tr>
<td>per house, for houses Nos. 1-50...</td>
<td>75</td>
</tr>
<tr>
<td>51-100......</td>
<td>50</td>
</tr>
<tr>
<td>101-200......</td>
<td>35</td>
</tr>
<tr>
<td>201-1,000......</td>
<td>25</td>
</tr>
<tr>
<td>1,001-2,000......</td>
<td>20</td>
</tr>
</tbody>
</table>

the last three years," says Fickett, "the one worthwhile thing we have accomplished as a committee is convincing the local FHA and VA to consider portions of their codes to meet low-cost building problems and local conditions.

specifically, VA and FHA have agreed to: 1) use concrete pads to take concentrated roof loads, inserting interior bearing footings; 2) use of expanded metal trim in lieu of interior wood casing; 3) higher stresses than normally permitted in Minimum Property Requirements, provided the architect builder show calculations for each specific condition; whether it be foundation or structural frame.

've have also sold them on the idea of contemporary design, the role of the architect in merchant building, and higher commitments which reflect the more architectural services.

---

**Protect yourself against Fireplace grief!**

Heatilator unit assures correct fireplace operation, won't smoke!

No complaints when you specify a Heatilator* Fireplace. It eliminates common causes of smoking because correct design is **built into the heavy steel form.**

**The Heatilator Fireplace** is a complete unit, from floor to chimney flue, including scientifically designed firebox, throat, down-draft shelf, damper and smoke dome. Comes ready to install. Simplifies and standardizes fireplace construction, protecting you against rule-of-thumb building methods.

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Offer your clients this valuable extra feature at low cost. Specify a Heatilator Fireplace. Proved in 26 years use, it's America's leading Fireplace. Mail coupon for A.I.A. folder and specifications.

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**HEATILATOR FIREPLACE**

Heatilator, Inc.
613 E. Brighton Ave.
Syracuse 5, N. Y.

Please send me your new A.I.A. folder with full details and specifications on Heatilator Fireplace units.

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Goes up as fast as wallpaper: using special U.S.G. spreader apply PERF-A-TAPE* Cement on back of panels, press into place, and presto—they’re up to stay...on old plastered walls, or over regular SHEETROCK Wallboard in new construction.
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When walls are up the decorating’s done, too—providing the interest and beauty of real wood paneling.

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Subtle surface scorings help create the effect of straight-grain wood paneling—at only a fraction of the cost.

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All the famous SHEETROCK advantages, plus:
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Only 16” wide, an 8’ panel weighs but 16 lbs. Easy to maneuver around corners, in narrow places—simplifies finishing hard-to-get-at

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Today more than ever, as costs squeeze both builder and buyer, Prefabrication deserves your attention. Through the economies and efficiency of Prefabrication you can do three things: deliver your customer a better house, sell it to him at a price that gives him more for his money, protect yourself on your own profit. Get the facts about today's big swing to Prefabrication. Write for the free book, "Build Better, Build Sooner."

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935 20th St. N.W. • Washington 6, D.C.
In the hard selling, competitive days ahead "quality built" homes will sell faster... keep your speculative inventory low. And there's no better way to prove quality than to build with wanted features.

To meet this more demanding market we at Ceco have developed a new product that says quality at a glance—it's the new Ceco-Sterling Aluminum Window.

Here is something every homeowner will want on sight... a window unit that takes all the work out of summer screening and winter storm windowing... self-storing screens and storm windows do the trick... changing is a mere matter of raising and lowering from the inside... there are no ladders to climb.

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Why Home Owners and Builders Will Prefer the Ceco-Sterling Window

1. The Ceco-Sterling Window is the strongest Prime Window with sash balances and stainless steel weather stripping plus combination screen and storm panels offered as a unit.
2. Exclusive permanent weather seal, nothing make-shift, nothing to deteriorate, wear out or replace. No window can match it in preventing air and cold infiltration.
3. Self-storing storm window and screen changed as easy as raising an arm.
4. Easy to install... no fitting or trimming of Prime Window... anchoring hardware comes with the unit.
5. Built as a unit... sold as a unit with price including all hardware, sash balances, lock, pull down, screws, closures, channels and weather seal.
6. All welded frame and sash in the Prime Window.
Nationally Advertised

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CONTROLS

Known to Millions
of Your Best Building Prospects
Through the Powerful Pages
of BETTER HOMES & GARDENS
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Yes, your best building prospects—over 5 million of them—are reading regularly about dependable, economical DETROIT Heating Controls in two of America's top advertising mediums—Better Homes & Gardens and Time magazine! These are people who have the means to buy and who know, look for and buy better things. That's why they'll want DETROIT Controls. And that's why you can make your houses easier to sell, more comfortable to live in by specifying DETROIT Controls throughout. Remember, only DETROIT gives you the exclusive Timed Cycling thermostat—the "thermostat with a brain" that controls temperature to a fraction of a degree, eliminating over and under heating. So why not cash in on this overwhelming product superiority and the powerful advertising support that goes with it. Always be sure to specify DETROIT Controls!

If you're not already familiar with the DETROIT Timed Cycling Thermostat write today for Form No. 1545-A.

Positive Protection Against Wasteful Over and Under Heating!

Right now, while you're planning that future castle, is the time to make sure of season after season of convenient, care-free heating comfort. Have your architect, builder or heating contractor select a heating unit equipped with dependable, economical DETROIT Controls. For only DETROIT gives you the exclusive "thermostat with a brain"—the built-in device that "thinks" ahead, senses temperature changes long before you can, and keeps room temperature just right for health, comfort and fuel economy. Remember, the finest heating equipment can be no better than its automatic controls, so get the best—insist on DETROIT Controls.

These questions are not posed in an effort to discourage exhibitions, jects or publications on useful or unim reasons. The present one—these exhibitions—especially when prepare this one—have served to raise the public taste and to increase pub good modern design invaluable trouble is that a large segment now stands in such awe of the critic. But that it seems only fair to point critics are often critical, their often uneven and their choices v to year.

Since furniture is such a trend design category in itself, the edi shifters of Idea 53 have publis book devoted exclusively to "New Furnitures, however, does ceedingly serious questions so f and their rights are concerned, feely frank about this: just ab fequential except the architect an is protected by elaborate legisla...
BIGGEST NEWS IN WOOD WINDOW HISTORY

...New, U. S. Approved Commercial Standard!

Many windows of Ponderosa Pine, as made by various manufacturers, have established outstanding records of performance and endurance. But today there's even greater assurance of quality and value—the new commercial standard (CS 190-53) for stock double-hung wood window units, approved by the Commodities Standards Division, U.S. Department of Commerce! Here are some of the quality features you'll find in Ponderosa Pine windows manufactured in accordance with this standard:

**PRESERVATIVE WATER-REPELLENT TREATMENT!**

All wood parts are water-repellent preservative treated after cutting, in accordance with the NWMA minimum standards which require an average penetration of the end grain of 1/4 inches.

**EFFICIENT WEATHER-STRIPPING!**

All units are weather-stripped to allow a predetermined minimum of air infiltration. That means real protection from heat, cold and dust.

**EASY OPERATION!**

Units have balances permitting easy operation of both sash upward and downward, capable of holding either sash stationary in any position. Balances may be spring, spiral, pulley and cord or pressure weather-strip.

**QUALITY GLAZING!**

All glass in 1½-inch sash is bedded in putty or glazing compound or, in lieu thereof, putty glaze using a secondary putty rabbet on reverse side. All windows are face puttied.

**PLUS...**

Quality standards specifying grade of lumber used—thickness of lumber, nailing of joints, and many other construction advantages.

For complete information about the new Commercial Standard, write

Ponderosa Pine
WOODWORK
38 South Dearborn Street
Chicago 3, Illinois

The American Wood Window Institute Seal of Approval appearing on double-hung wood windows means that the wood window unit that bears it equals or exceeds the new U. S. approved Commercial Standard in all respects.
the foundation is Figurework

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

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Company______________________

Address______________________

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just about every other artist. B and trademarks can be copyrighted copyrights can be made to stick tects and designers may be copiers there is very little they can do abe

Take this book, for example: a discloses at least 11 designs (cred men) which were, to put it much strongly influenced by the remolded plywood chair designed Eames. But the book lists no da

Which came first—the Eiermann or designs, and illustrates Mr. Ear contribution well after his imitation shown. The result is that an univr would think that it was Mr was copying Mr. Eiermann (G example, rather than vice versa.

Take another case: there are illustrations in this book showing copies of original designs by suvar Aalto, Marcel Breuer and (Mies van der Rohe is representa picture of the Barcelona chair); no pictures of early Aalto bentw pictures of Breuer's tubular stee furniture, no pictures of Le Corl and tables and cabinets, no pic van der Rohe's tables and cabi these men are still alive and kic the function of a serious wor furniture—and, especially, of a as this one—to point out, for current Thonet chairs are almos of Breuer's designs for the sam 1928; that Mies van der Rohe d almost 30 years ago that were (but somewhat better than) son made by certain US manufac There is no stigma attached to many of the younger designer; improve upon an earlier, pione if they merely copy it and help' it, then that should be stated ch of this sort.

After all, every movie is pu credit line to the original auth Is it asking too much to have designers show the same respect inspired them?

conti
A Guide to Selecting the Right Floor

KNOW THE SPECIFIC USES OF THE DIFFERENT TYPES OF BRUCE BLOCKS

You are likely familiar with the modern beauty and lifetime durability of Bruce Block Hardwood Floors. There are now four distinct types, each developed for a specific purpose. In addition to those described here, Bruce also makes a heavy-duty industrial block for installation over concrete. Write us for literature on Bruce Block Floors or for advice on unusual floor problems.

E. L. BRUCE CO., MEMPHIS 1, TENN.

See our Catalog in Sweet's File

MINATED OAK—For use over concrete, this laminated 3-ply oak block gives maximum stability and moisture resistance. No membrane-waterproofing is required unlessrostatic pressure exists. No expansion spaces or joints need. Bruce Laminated Oak Blocks can be used over radiant heat. Thickness: 1/2". Prefinished.

SOLID OAK—Over 100 million feet of this original Bruce Unit-Wood Block have been used in homes, apartments and other areas. It can be nailed over wood subfloor or old wood floors, or laid in mastic over concrete slab. Blocks 1/2" or 25/32" thick have individual slats with interlocking tongues and grooves. Prefinished or unfinished.

BLENDWOOD—This is a new, economy priced Bruce Unit-Wood Block of selected mixed hardwoods. Installed in mastic over concrete, it produces a modern floor of unusual grain and coloring. Bruce Blendwood Blocks are one of the most durable of all floorings, being made of heavy hardwoods, 25/32" thick. Prefinished.

Bruce also makes Strip and Plank Floors
By night, the entranceway glows with a light that radiates welcome to friends. By day, inside rooms are flooded with natural daylight. This random clear panel retains all of the doorway's colonial charm. The subtle variation in the block face is reminiscent of old handmade glass.

GLASS BLOCK "GOES" WITH ANY ARCHITECTURE

Whether a home is traditional or modern, it can have the advantages of Insulux Glass Block®. Block patterns are available in a wide variety of face designs that "go" with any architectural design.

What other material offers you the opportunities to create such interesting, new architectural effects that are so decorative...so useful...yet so practical?

For information, write to Insulux Glass Block Division, Kimble Glass Company, Dept. MB-3, Box 1035, Toledo 1, Ohio.

KIMBLE GLASS COMPANY
Toledo 1, Ohio

Subsidiary of Owens-Illinois Glass Company
In any electric water heater, there are 4 important construction features:

1. **TANK**
   - The tank is where the water is stored.
2. **SPUDS**
   - These are the points that support the tank and the units that connect to it. They are critical for the stability of the heater.
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   - These are the heating elements that warm the water.
4. **THERMOSTATS**
   - These control the heating process to ensure the water is heated efficiently.

These components determine the length of life and the amount of servicing required after the heater has been installed.

The leading manufacturer of these features is General Electric, ensuring durability and efficiency.

**MORE LIVING SPACE**
Compact designs, 22" x 22" and up, top flue outlets, front accessibility to all parts, close clearances - mean more living space in smaller homes.

**GREATER BEAUTY**
Gleaming white baked enamel finish, streamlined design, match the smart, clean beauty of other utility room appliances.

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Factory assembled, factory wired, fire-tested, for quick installation, meeting today's high speed, streamlined erection schedules.

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Soon year 'round air conditioning will be available in a smart Ranchief "4-Seasons" unit - compact, beautiful, efficient.

**DEPENDABILITY**
Finest quality in the merchant built price range assures trouble-free performance, fuel economy, complete satisfaction for your home buyers.

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The compactness, the quality "look" of Conco-Ranchiefs helps sell your homes.

There's a Conco Ranchief for every size home, every home design — slab floor, crawl space, basement — perimeter and conventional heating, ideal for small pipe installation. Write for complete information.

More living space... call your G-E wholesale distributor!
How builder Herbert Gold adds "SELL" to his homes...

"I find people today are most receptive to those things which add greatly to their home living comfort. Robbins & Myers Attic Fans are a 'must' in homes where better living is desired."

Herbert Gold, President
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You too can sell more homes by using Mr. Gold’s strategy! Build your sales talk right into each home by installing an R & M "Package" Attic Fan. It’s a complete, dependable home-cooling system. On hot summer days and nights it drives out hot, humid air... pulls in fresh, cooling breezes. An R & M Attic Fan is the extra value, the extra comfort today’s home-buyer demands. It means years of cool summer comfort. And for the "sell" it adds, its cost is low indeed!

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No other attic fan can be installed as quickly and cheaply! Fan simply sets over roughly framed opening.

No Extras Needed. No bolts, screws, ceiling grille, trap door or vent box. Fan simply sets over ceiling opening; requires no springs or canvas connection.

Everything you need arrives on the job in a complete package. Priced from $139.95* retail, including automatic ceiling shutter.

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*Prices subject to change without notice.

fits low attics and all standard hallways. The smallest unit needs only 16" of attic clearance; the largest but 18". Perfect for "moderns" with limited attic clearance. Quiet, too. Moving parts are rubber-mounted, sound-insulated. Fan and motor have factory-lubricated, sealed ball bearings. Fan guaranteed five years: motor and shutter, one year. Certified air deliveries are 5000 and 7000 CFM. 10500 and 16000 CFM sizes are also available. Send the coupon for details.

ARCHITECTURAL DETAILING, By Calet and Elmer A. Bennett. Reinhold Corp., 330 W. 42nd St., New York, N.Y. 9" x 12"; Illus. $10

This is an extremely well-presented organized reference book that she of architectural details (165 of the will not find in standard references). This fact gives the book its principal to students of architecture; it all for some of its weaknesses.

It is probably fair to say that a good architect by the detailing of his buildings. His detailing is in the architect's personal handwri plans, facades and ideas about sp and mass. In fact, after the first building upon the onlooker has w the detail of a railing here or a w lion there which will continue to an est and testify to the designer's and competence.

Now, this means that the "hand" can find in an architect's detail personal thing—just as personal handwriting. A special detail (such as sliding wall, for example) is there a special piece of installation; it very special design solution in it each individual architect. Nobody better than Architect Richard Neutra written a stimulating foreword to his own file of stock details i as it is distinctively "Neutra." In it was compiled to fit into a buildi by Richard Neutra; it would ney building designed by Frank Lh say, or by Carl Koch.

The details collected by Messers & Bennett are, therefore, fascin means of different people's architect writing. This means that many s original designers will not find the lar, highly personal details directl to their own work.

This is not to say that there are details in the book; there are, large, the details are special and fiable with one particular design doing things.

The book is organized in two s

First comes a discussion of ening types (offices, labs, banks, schools, auditoriums, residences laenous small structures). In en some fairly typical problems a gether with the details used by diects to solve them.

Second is a section on basic d relating to sun control, ventilati signs, bathrooms, kitchens, stair doors and windows). Through a photograph of the finished job the detail drawings.
GREATEST ADVANCE IN A DECADE IN COMMERCIAL BOILER DESIGN

SPENCER'S LOW-WATERLINE BOILER

**Flattened out** to solve low-headroom and excavation problems!
**Divided** into two watertight sections for easier entrance through narrow doorways!

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**Unique warp-proof door frames**—no gas leakage, since these door frames are precision-ground and extensions of the water walls.

**Exclusive peaked fireboxes**—clean, smokeless, efficient, because of extra-high combustion chamber.

**Special staggered boiler tubes**—more rapid water circulation, quicker heat absorption.

**Interchangeable base panels**—front and rear permit quick installation of brickwork.

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“C” SERIES: 9 sizes—from 700 to 3,000 sq. ft., steam. Available with standard or extended beauty jackets and service water coils.

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ENOUGH LUMITE SCREENING FOR ONE DOUBLE-HUNG WINDOW

PROVE IT TO YOURSELF! Screen just one standard-size window (2'-0" x 3'-2")—then leave it up all year long. You'll agree Lumite outlasts all other screenings... won't rust, won't corrode.

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I am a member of the home building industry and am interested in Lumite screening. Please send me enough Lumite to screen one (1) double-hung, standard window, 2’0” x 3’2”, and the new specification brochure.
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MAYFAIR SUMMER AIR CONDITIONER. This self-contained residential cooling unit mechanically cools and dehumidifies the air... quietly, uniformly, economically. It is designed for easy connection to forced warm air heating system (using same ductwork) to form a year-round home air conditioning installation.

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

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

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e & Garden's reader-owner-builder, of course... the fellow who can raise a roof without raising a mortgage.*

What a roof he's raising! It starts with shingles and nails, doesn't end until it covers a whole houseful of purchases; plate glass to paint, cement to air conditioning!

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20%—$25,000 or over...30%—$15,000 or over...55%—$10,000 or over

dé Nast Publication, 420 Lexington Avenue, New York 17, N. Y. for the owner-builder market
The Talk of the
CAN BE THE TALK OF YOUR TOWN

HERE IT IS—the new, all-new, really small G-E Year-Round Air Conditioner—exactly as seen by the thousands of enthusiastic home-builders who throned the G-E exhibit at the recent NAHB Show in Chicago. Builder after builder told G-E representative it's just what the industry ordered! Heating and Cooling for single, small packaged unit they can locate anywhere.

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G.E.'s new Year-Round Air Conditioner uses as little as 3.2 sq. ft. of floor space—with over 190 model choices—the sensation of NAHB's recent Chicago convention!

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Furnished complete with a 11 or 1 hp Ejecto Jr. electric water pump used with any well up to 40 feet deep. Use with any well can be placed underwater and is reasonably priced at $100 to $120. The system may at any time from shallow to deep simply by changing one thread. Manufacturer: E. E. Myers and Ashland, Ohio.
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One unit heats in winter...
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The boom in home air conditioning is on—and you can get in on the ground floor with Typhoon. One compact unit that gives complete indoor control of temperature, humidity, circulation. It means year-round comfort and other important advantages for your customers. It means easier, smoother selling for you. Give the next homes you build the sales magic of year-round air conditioning.

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WITH ONE CENTRAL UNIT
FULLY AUTOMATIC

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ONLY TYPHOON has one-button control—summer or winter, a touch of a button brings cool air or warm... automatically!

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SIMPLE TO INSTALL—Just a few quick connections and within hours your Typhoon unit is ready to function.

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AIR CONDITIONING CO. INC., 794 Union Street, Brooklyn 15, N. Y.
Specialists in Air Conditioning Since 1909.
Pittsburgh Glass

can help you get handshake
instead of headaches

CARRARA GLASS on the walls and ceiling of a bathroom can create an exciting, glamorous look. Builders put up more on homes having this high quality, beautiful veneer material in renovating jobs, they please homeowners no end. Where the use of Carrara Glass is wanted at minimum cost, Pittsburgh offers its available Ready-Built Carrara Panels for use as tub and shower enclosures, as well as for stove backings in kitchens. Carrara Glass, time, is easy to keep clean and sparkling. It's not affected by chemicals, grease or pencil marks. Ten attractive colors to choose from.

A TRIPLE-MIRROR arrangement is sure to please prospective home buyers or persons interested in modernizing their present homes. Two doors in the bedroom—fairly close together—a third full-length Pittsburgh door mirror on the wall between, will do the trick. But we supply Pittsburgh door mirrors. They're made from Pittsburgh Glass ... are really full-length—68 inches high. Sizes are available to fit more than 90% of all interior millwork doors—16, 18, or 24 inches wide.

Every Nickel you spend on glass shows. And the results will weigh the cost.
TWINDOW multi-units create a window wall which admits an abundance of natural daylight, while keeping interiors more comfortable. Occupants have a clear view of the outside from inside the home. In new building or remodeling, you can't offer a more-appreciated feature than Twindow—"the window with built-in insulation." And this is possible even in average-size homes, like the one shown here. Photo, courtesy of National Homes Corporation, Lafayette, Indiana.

SOLEX-TWINDOW. Where protection against solar heat and sun glare is required, there's nothing like Solex-Twindow. The inside light is regular Plate Glass... the outside pane is green-tint Solex, "the best glass under the sun!" This combination gives the double advantages of Twindow's high insulating properties, plus the solar-heat-absorbing, sun-glare-reducing advantages of Solex. The entire unit is enclosed by a stainless steel frame—to protect the seal and glass edges and to make handling easy, quick and safe.

Build it better with Pittsburgh Glass

See Sweet's Builders Catalog for detailed information on Pittsburgh Plate Glass Company products.

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PITTSBURGH PLATE GLASS COMPANY
with this popular TACO CIRCULATOR

EVEN LOW BUDGET HOMES CAN NOW HAVE THESE LUXURY ADVANTAGES

RADIANT WARMTH · DRAFTLESS WARMTH · CONTROLLED WARMTH

MORE HOT WATER FOR KITCHEN, BATH AND LAUNDRY

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Three other famous TACO PRODUCTS for houses

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Better Heating—Better with Taco

TACO HEATERS, INCORPORATED · 127 SOUTH STREET · PROVIDENCE 3, R. I.
"Because we have a reputation for quality work to uphold, we can’t afford to take chances and use inferior materials. In addition, Copper Water Tube is so easy to bend, so easy to work with in the tightest spaces and requires no thread cutting so that it saves us a lot of installation time. We have also found that we can place the utmost faith in the fittings when using Copper Water Tube."

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Retail price for the combinat
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Daylight plays an interesting role in the decor of the living quarters of the residence of Mrs. Bruce Crow, Mesa, Ariz. Photo by Frank L. Gaynor, Tucson, Ariz.

This friendly partition of softened, diffused light creates an unusual manner to this cheerful room. Beautiful Pluralite pattern creates an effective backdrop for furnishings and decorations, while this lovely decor glass by Mississippi separates living areas of the home without destroying a feeling of unity and spaciousness.

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Manufacturer: Daystrom, Inc.,

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This neat set of three Viko stack stools modestly in a corner, come out to sit on or eat from. Wood topper legged, the set retails for only $8.95. The stools are used wherever convenience and comfort are needed.

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Raymond Loewy Associates have done Mengel—and themselves—proud with this attractive, low-priced furniture. Space and color conscious, the new pieces should find a large market among the current crop of small-home buyers. One suite, Accent, caters to those who like metal legged furniture; another, First Edition, to all-wood devotees; and Spectrum to those with continental leanings. Colors are used boldly and well throughout the lines and the wood finishes are, refreshingly, warm and spicy. Many of the pieces do double duty. The chest (below) houses a desk. It retails for $136.50. The triple dresser (bottom), priced at $161, reveals a mirrored vanity. The screen of translucent plastic in a wood folding frame above is useful as a room divider. It stands 70” high, 80” wide extended, and sells for $72.

Manufacturer: The Mengel Co., Cabinet Div., Louisville 1, Ky. Technical Pub. on p. 216
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BUILDING MATERIALS. Flintkote Br ianet. Flintkote Co., 30 Rockefeller York 20, N. Y. 12 pp. $5/0 x 11"

The catalogue contains color close kote roofing and siding; and detai on the asphalt shingles, ash products, insulation materials, in ning, and built-up and roll roofing

CONDENSATION. How to Control Homes. National Mineral Wall As Building, Rockefeller Center, New York 72 pp. 4 x 8" 25¢

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FLOOR MAINTENANCE. Modern Me Care, S. C. Johnson & Son, Inc., E Ws. 16 pp. $5/0 x 11"

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to compute heat loss. No sleight of hand was
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be pegged into one of 16 groups of structural
characteristics. (For houses of unique con-
struction or shape, or with extreme exposure
or excessive ventilation, the company suggests
this brochure. Specifications and an illustra-
ted list of sizes and types are also included.
HEATING. A Simplified Design Procedure for
Residential Panel Heating. Revere Copper and
Brass, Inc., 230 Park Ave., New York 17, N. Y.
28 pp. 8 1/2" x 11"

Incredibly as it may seem, Revere has worked
out an accurate method for designing residential
hot-water panel heating systems which does not require the engineer or contractor
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be pegged into one of 16 groups of structural
characteristics. (For houses of unique con-
struction or shape, or with extreme exposure
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using its A Graphical Design Procedure for
Radiant Panel Heating.) These basic groups,
listed on the first page of the booklet, were
determined by various combinations of three
factors: whether a room is insulated, amount
of glazing, and whether the space above or
below is to be heated. Once classified, almost
any room can be engineered for the right size
panel and water temperature to heat it com-
fortably through some simple-to-use tabular
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handbook is descriptive material on forming
and positioning coils, use of bending tools,
and making solder joints.

continued on p. 226
EXPERIENCED BUILDER REPORTS:

"SCR brick* builds warm, dry walls at minimum cost"

One of builder Howard's "SCR brick" homes in the middle-price range. Architect: H. J. McComb

There's one reason why the demand for "SCR brick" is booming from coast-to-coast. Here are some others—reported by home-builder Vane R. Howard of Hammond, Indiana:

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CONDENSATION. Man's Necessity — Enemy of the Home — Water. Steel Window Institute, 806 Rowland Road, Cheltenham, Pa. 12 pp. 8 1/2" x 11"

Prepared as an educational service for home-builders and buyers, this neatly illustrated booklet simply and graphically defines condensation, explains its causes and how to ward off detrimental effects.

HARDWARE. Beauty and Security for Your Home. Sargent & Co., Dept. 85, New Haven 9, Conn. 8 pp. 8 1/2" x 11"

Mechanical and installation features of the Integralock residential entrance lock are described in this booklet, which also illustrates the manufacturer's 4500 line of interior locks and latches, and points out appropriate sets for various rooms.

TOILET SEATS. Olsonite Solid Seats. Swedish Crucible Steel Co., Plastic Division, 6641 Butler Ave., Detroit 11, Mich. 64 pp. 8 1/2" x 11"

Spiral-bound and divided into six sections for quick thumb-through, this detailed catalogue is a handy reference for purchasers and specifiers of bathroom equipment.

DOORS. Latest Color Style News. Ponderosa Pine Woodwork, 38 S. Dearborn St., Chicago 3, Ill. 24 pp. 8 1/2" x 11"

Colorful illustrations suggest how the Rancho, a new 3-panelled pine door and other panelled units, may be stained, painted or treated with appliqués for unusual decorative effects.

MACHINERY. Three New Plaster-Mortar Mixers. Koehring Co., Milwaukee 16, Wisc. 4 pp. 8 1/2" x 11"

This brochure features a data table comparing dimensions, capacities and advantages of three plaster-mortar mixers. Photos illustrate the two 6 cu. ft. models and one 3 cu. ft. unit. 

continued on p. 228
Mr. William A. Zeh, builder of this house at Los Angeles, Cal., says, "No builder nowadays would think of installing anything but automatic heat and electric refrigerators in his new houses. And just as people take those things for granted, they're looking for automatic electric cooking equipment."

"'Modern' is the theme of our development," says Mr. Noble S. Clay, builder of this house at Shaler Township in Pennsylvania—and we find that most home buyers go for contemporary design. The Electric Range is a definite part of it. It's really modern cooking equipment. Everybody wants the electric convenience features."

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This is a kitchen of a Shaler Township house. Builder Clay practiced electrical engineering for 16 years before entering the building field. His background helped him to choose what home buyers want, so the range—of course, it's ELECTRIC!
TECHNICAL PUBLICATIONS cont'd


Beneath the formal phraseology in this research paper, homebuilders and designers can find some revealing data on the weatherability of wood-frame construction. Dealing with a continuing experiment on the durability of different types of wood-frame walls, the publication outlines a unique study set up and summarizes results so far. A one-story enclosure 26' x 16' x 8' was erected on the roof of the thermal lab at Pennsylvania State College and exposed, on the outside, to actual climatic conditions and, on the inside, to temperature and humidity levels representative of the region. The test shell consists of 22 removable wall assemblies utilizing typical construction materials. Although

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TECHNICAL PUBLICATIONS

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