

The **AMERICAN
HOME**

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BOOK OF HOUSE PLANS



20 pages in full exciting color . . .

extra complete home planning primer included

Dream homes are not dream castles—sometime, sooner or later, you'll be called upon

to make important decisions, sign important documents. Be prepared.

This homeowner's guide—the first of a series—will insure your getting exactly what you want

Kenneth Duncan

THE AMERICAN HOME *planning* PRIMER



no. 1

THE PLOT

WHAT IS THE "IDEAL" LOT SIZE?

Roughly $\frac{1}{4}$ acre, 100 x 100 feet, or 100 x 150 feet gives you plenty of room for house, lawn, flower garden, vegetable garden, outdoor fireplace and a few fruit trees. It is the ideal to shoot at. Frequently, it must be modified by pocketbook and neighborhood limitations. The modern trend is toward larger plots—better to have plenty of space than too little.

IS A PLOT 25 FEET WIDE BIG ENOUGH?

No. The 25-foot city lot came into being before the days of sidewalks, and before virtually every family owned its own car. A driveway takes up 10 feet of the front footage. It is just about impossible to fit a house on the remaining 15 feet. The 25-foot lot is definitely limited to party-wall row houses. 50 feet is really the practical minimum. Attractive houses have been built on such lots, but only after careful planning. For best results, the garage should be attached to the house and, where the contours allow, it is best located under the house itself. A lot less than 75 feet wide restricts one to a compact house. A rambling Cape Cod cottage may be placed on such a lot if it is put sideways. Remember, a narrow lot results in less privacy, air, and sunshine.

A lot should be 100 feet deep or more. A plot is usually deeper than its width (unless the width is at least 100 feet) in order to provide space for a front yard and important living space at the rear.

WHAT ARE THE POSSIBILITIES OF IRREGULAR-SHAPED LOTS?

Often, more square footage is required if your lot is very irregular in shape. One smart way to approach such a problem is to draw the outlines of such a plot, cut out to scale the house plan you wish to build, and then move this template around the lot to see just where it can best be built, taking into account trees and local setback requirements. "Backage" is less valuable than "frontage", so a pie-shaped plot with the apex on the street is sometimes a good buy.

WHAT IS THE ADVANTAGE, IF ANY, OF A CORNER PLOT?

The house may face either street, and you may select the street you choose to live on. However, the advantage of a corner plot is not as great in residential as in business property, particularly if you have a good-sized plot. But access to a side street may make possible a shorter drive to garage, placed at side of the house.

with a consequent saving in lawn or garden space. There is less privacy for your "back" yard on a corner plot, more sidewalk to keep up (maintenance of sidewalks in most cases is a property owner's responsibility); in northern localities, there's bound to be more snow to shovel in wintertime, and more traffic, with its noise, dust, and hazards.

WHAT IS A ZONING ORDINANCE?

A law, usually local, which restricts the use to which an owner may put his property. It seeks to direct and influence town and city growth; to maintain the character of existing neighborhoods. Zoning establishes minimum plot sizes, restricts business and industry to certain limited areas, and does many other things to protect the majority from the ill-advised action of a single property owner.

One of the principal reasons neighborhoods deteriorate is lack of such zoning ordinances and restrictions. It is a pitiable sight to view the remains of former attractive residential streets, with their recent rows of shoddy little tin-fronted and neon-lighted shops and taverns. Be certain of protection.

WHAT ARE DEED RESTRICTIONS?

Restrictions are conditions and limitations, written into a deed by a seller, which restrict the uses to which the buyer (and the buyer's successors) may put the property. They are usually imposed by the developer of a subdivision to guide its growth. The custom of imposing restrictions is a very old one that antedates the development of town and city zoning. Where there is sound zoning, the need for privately imposed restrictions is greatly lessened.

WHICH TAKES PRECEDENCE, ZONING ORDINANCE OR DEED RESTRICTIONS?

The zoning ordinance. Deed restrictions may further limit property use but cannot permit a more liberal use than authorized by zoning. For instance, deed restrictions may prohibit a store in an area where zoning permits business, but deed restrictions cannot permit business in an area where it is prohibited by zoning.

SHOULD I HAVE MY LOT SURVEYED?

Absolutely. It costs only a few dollars, and gives you a true picture of your plot on paper. The survey actually marks out the plot with corner stakes, stones, or other permanent markers. By all means insist upon permanent markers. Wooden stakes get pulled out and lost. A survey is of permanent value, and the ground

markers should be permanent, too. When you rent or sell, you should be able to point out the *exact* boundaries to your prospect. Frequently, owners' ideas of boundary lines are very hazy. The survey may save you disputes with neighbors, lawsuits, and much worry and loss. It will indicate where you may landscape without inadvertently making a present of a bed of roses to your neighbor; and it shows you exactly where a boundary fence or hedge should go.

An encroachment is any "improvement" that improperly projects from one plot and infringes on the next. Fences and landscaping are most common encroachments. Sometimes parts of buildings, such as porches or overhanging eaves, cause encroachment. Any encroachment will be indicated by a proper survey.

ARE ZONING ORDINANCES AND DEED RESTRICTIONS LEGALLY ENFORCEABLE AGAINST THE PROPERTY OWNER?

They certainly are. Years ago, when downtown Chicago was a rambling village, a piece of land was sold with a restriction that a ten-foot right of way would always be kept open so that the seller would be able to get his family cow from pasture to barn. The seller, the barn, and the cow are all gone—but not forgotten—for when a skyscraper was planned some years ago for this site, it was necessary to leave a ten-foot passage through the building for dear bossy.

BEFORE TAKING TITLE, SHOULD I HAVE TITLE SEARCHED?

By all means. It is wise to have the title searched regardless of the value of the property. You might build a \$10,000 house on an \$800 lot, and your entire investment would be seriously undermined if there were any flaw in the title to the \$800 land.

Searches are made by title and mortgage companies and by many attorneys who specialize in this work. Any attorney will arrange a title search for you, even if he does not, himself, make the search. A lady frantically searching for a place in Florida last winter had a cottage offered her at a reasonable price. She took title immediately. Next day she became a bit piqued when asked how she had had the title searched so quickly. In surprise she replied, "Oh, I had no search made. I know that Mr. Jones (the seller) and he's an honest, upright man." This is a common failing among many home buyers. Social contacts do not always make for good business relationship. Business is business and so should be consummated as such. That attractive partner at tea may have very strange ethics where business is involved. Remember, business is business.

Most title faults are caused not by dishonesty, but by ignorance, care-

lessness, and neglect. Honesty of intention has nothing to do with them. Most are technical matters of law, not always susceptible to common-sense reasoning. Titles should *always* be passed on and approved by experts.

BEFORE I BUY A PLOT SHOULD I GET A COPY OF THE ZONING ORDINANCE? SHOULD I READ FINE PRINT RESTRICTIONS IN THE DEED?

By all means. Ask the Town Clerk for a copy of the zoning ordinance. Read it carefully to see what uses are permitted in zone.

Read every word. Remember Amos and Andy's discussion of the insurance policy? Amos's shrewd comment was, "The big print gives it to you, but the small print takes it away." It is important that you read and understand every condition of your deed, regarding both present occupancy and possible future sale of the property. If puzzled, consult a lawyer.

ARE PREVIOUS RESTRICTIONS IMPOSED BY DEED ENFORCEABLE AGAINST ME, EVEN IF NOT SET FORTH IN FULL IN MY DEED?

Yes. Sometimes restrictions "run with the land" forever. More commonly they expire at a given date. It all depends on how they were originally imposed. In any event, *they affect the land* regardless of changes of ownership. Your lawyer, and the title search, will clarify the situation for you and save future expense.

WHAT ARE "REQUIRED SET-BACKS"?

Zoning ordinances and deed restrictions usually provide that *no* house, yours or your neighbors', may be nearer to property line than some specific distance, which may vary but is usually from 20 to 30 feet.

SHOULD MY PLOT BE ENTIRELY LEVEL?

Not necessarily. A level plot means that all of the area is usable and that you can place the house where you will, consistent with required setbacks, location of trees, and proper orientation of the house. Some variation in levels frequently makes for added interest and attractiveness, but beware of contours that are too steep. A hillside lot frequently has advantages. Usually it is dry. Frequently, it has a better view and more breeze. If the slope is very steep, it probably will require a specially designed house to fit well.

A low, valley lot is less desirable now than in the days before central heat, when locations sheltered from the winds of winter were preferred. Low, sheltered spots may be damp

and warm. Cattails, skunk cabbage, and jack-in-the-pulpit growing on the lot indicate that at certain times it is apt to be covered with water.

A plot that is raised several feet above street level is frequently an advantage. You will very likely have no drainage difficulties, and may have a better view and more breezes. Perhaps you will be able to place the garage under the house and have a short, inexpensive driveway.

With a plot lower than the street you are apt to have trouble with surface water during heavy rains. Heavy surface-water flow may cause erosion of lawns and flower beds even if you can maintain a dry cellar. Perhaps, also, you might have difficulty in connecting the street sewer because the house might be lower than the elevation of the sewer.

WHAT ARE "REQUIRED SIDE YARDS"?

Zoning and restrictions usually provide that no house may be built nearer to the boundary between your lot and your neighbors than a specified number of feet. Usually, the required side yard is not less than 5 feet. Also, usually, the total of *both* of your side yards is greater, not less than 15 feet. In other words, one may be 5 and the other 10 or more, or one may be 7 and the other 8 plus feet.

WHEN IS THE BEST TIME TO INSPECT PLOT? SHOULD I BEWARE OF A "FILLED" PLOT?

When conditions are at their worst—for instance, after an especially heavy three-day rain, such an inspection will show how rapidly surface water leaves *your* site. This is an *important* factor to *you*. In the cold, unflattering light of winter is another excellent time to inspect. Foliage can cover a multitude of sins of view and may hide that unsightly neighbor.

Filled plots require a careful check. The chances are it was probably swampy before filling. It may contain old car bodies, tin cans and burnt garbage. Fill may settle and your newly built house may settle with it.

WHAT MAKES SO MANY CELLARS WET?

Either a permanent high underground water level or a failure of surface water to drain away from the house. High underground water level can and should be ascertained in advance. Have a test boring made or dig a hole down to the bottom of the proposed cellar-floor level. Water will flow into either the boring or the trench up to its underground level. Often a wet basement can be avoided by placing your house high on the lot's slope. The flow of water can be

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*No matter what size or style house you plan,
the neighborhood selected will be a deciding factor
in your future existence—both economic and social*

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NO. 2

THE NEIGHBORHOOD

DO HIGH TAXES AFFECT PROPERTY VALUES?

They do. Property is more salable in communities with low taxes. Moreover, lending institutions are more liberal in the loans they'll make in such communities. A bad, graft-ridden political government tends to force taxes up. A well-governed town is cleaner, healthier, and happier. Its schools, police department, and other public services are sure to be much better. Residents get more value for their money.

SHOULD YOU PIONEER IN A SPARSELY SETTLED NEIGHBORHOOD RATHER THAN BUY IN ONE SUBSTANTIALLY BUILT UP?

It's a risky chance, since hunches don't always turn out as planned. No one can really tell whether a neighborhood will improve or deteriorate. Read what FHA's free literature has to say on that score. A high FHA official warns veterans against the dangerous speculation in buying lots on unproved, raw-land "subdivisions" in their search for permanent shelter. "Price rises," he said, "have been excessive during the past few years. Such a rate of price rise is a danger signal that should be heeded by anyone

considering buying a lot in any subdivision still in the blueprint stage." Take a housing expert's advice—and play safe from the very beginning.

If there is no police force in the community, check on the nearest county police station. This distance is of great importance in an emergency. You may never need police protection—and we certainly hope that you won't—but when it's needed it is usually needed urgently.

HOW CAN A SOUND, STABLE NEIGHBORHOOD BE DISTINGUISHED FROM ONE STARTING ON THE DOWNGRADE?

WHAT DO UNDESIRABLE NEIGHBORS AND POORLY KEPT HOUSES AND YARDS NEAR YOUR PLOT INDICATE?

The condition of its houses and yards should tell you the complete story. Look them over carefully. Are they well kept or run down? Do they show pride of ownership? Look at the owners and, especially, their children; are they neat and orderly? Are they people you want to associate with and have your children play with? Find out whether there's a civic organization interested in preserving the character of the neighborhood. This is usually a good assurance of stability.

Evidence of undesirable neighbors and poorly kept up houses add up to one simple fact—the neighborhood is on the downgrade. So be careful. One of the curious things about real estate is that it changes so slowly, thus often giving the false illusion of being stable and unaltered. Nevertheless, changes for better or worse are always taking place. Naturally where there are no restrictions or zoning laws this makes itself plainly discernible even to the untrained eye. For instance, the fact that stores, gin-mills or manufacturing plants are making appearances is evidence enough that a neighborhood's purely residential days are over. Look for the subtle changes, too. In one generation the transformation of a neighborhood can be dramatic or tragic. Changes, nevertheless, need not always be downhill. Sutton Place, one of New York's desirable East Side addresses was once a slum. Greenwich Village is

a better known, even if less striking example of a successful slum rehabilitation project. There are many others.

SHOULD YOU PURCHASE A PLOT FOR A HOME IN A ZONE WHERE BUSINESS IS PERMITTED?

No, unless you want a gas station or store built next door. The whole purpose of zoning is to provide a pattern for community growth, to limit business to certain convenient shopping areas, to relegate manufacturing and industry to areas close to truck highways and railroads. These are, of course, necessities for the proper carrying on of business, but they make thoroughly undesirable neighbors in a residential district.

WHAT ARE SOME UNDESIRABLE FEATURES TO LOOK FOR WHEN PURCHASING A LOT?

The following neighbors should be avoided like the plague if you wish to enjoy future years in that new home: city dumps, garbage incinerators, mortuaries, high-tension wires, heavy traffic, industrial buildings, railroads and unsupervised playgrounds.

WHAT ARE SOME DESIRABLE FEATURES TO LOOK FOR IN A NEIGHBORHOOD?

Before signing on the dotted line and becoming the proud owner of a piece of property, look around at your neighbors. You are on the right path if you find: well-kept houses and yards, churches, schools (if not too close), parks, country clubs, and even playgrounds if well supervised.

IS FIRE PROTECTION IMPORTANT?

Yes. Insurance rates are lower if there's a fire hydrant within reach of your house and an approved fire department within the area. A usual rate for an approved suburb is 50¢ per \$100 of insurance for 3 years. But in unprotected districts, the insurance rate may go as high as \$1.75 per \$100 for one year only.

HOW FAR AWAY SHOULD SCHOOLS BE?

Children should not have to walk more than one-half mile to an elementary school. High schools may be further away. However, if there's adequate bus service these distances may be lengthened. Check which school your youngsters will attend. Don't take it for granted that it will be the nearest. Often the one close at

hand is in another school district not available for your offspring.

HOW CAN THE QUALITY OF THE SCHOOL BE CHECKED?

By talks with mothers and fathers of children already enrolled at the school. State Boards of Education, while sometimes chary about being too critical, will usually give some indication of the caliber of the schools in the town you have selected. If possible, arrange to stop at the state office and get the information verbally. District supervisors know which schools are excellent, which fair, and which poor. Find out, too, whether the school has an active parent-teacher organization. This is a good indication that both parents and teachers are on their toes and actively conscious of what proper reforms should be adopted. All over the country these organizations are playing a more and more important part in community life. When moving into a new neighborhood, plan on joining immediately. The future education and well-being of your offspring are, to a large degree, determined by the wise guidance of such public-spirited groups. Why not visit the school before buying; make it a point to meet the teacher your child will have and determine from observation and discussion whether he is a leader to whom you could entrust your child?

WHAT SHOULD YOU LOOK FOR IN TRANSPORTATION TO WORK?

The time involved and the cost. Also, the walking distance from the plot to the transportation. Check the timetables to see that there is a convenient train guaranteed not to get you to the office half an hour too early or, worse, just a few minutes late. Don't be a timetable slave.

FACTORS TO INVESTIGATE IN CONNECTION WITH FAMILY SHOPPING. THE ANSWERS SHOULD BE "YES."

Are the local markets within convenient walking distance of the plot? Do they make deliveries or must everything be carried home? Is there a milk delivery route running past the plot? Do the department stores from the near-by larger city make free deliveries in the zone?

WHAT ABOUT PERMANENT OPEN SPACES, SUCH AS PARKS AND PLAYGROUNDS?

These are desirable within convenient walking distance. Perhaps with the neighborhood in a partially built-up stage they do not appear vital, but try to visualize the condition when all building plots have been built upon. Open breathing space is prob-

ably one reason for your wanting to move into a home of your own. Be very certain you will have these open spaces come the day when the neighborhood is fully built up.

The developer of any tract of 50 acres or more should dedicate *in perpetuity* at least 5% of the land for neighborhood recreation use. A community playground *some acres in extent* is an asset even to abutting property, if the area is developed along modern lines. This will include suitable screening and landscaping. Old-fashioned, barren playgrounds, too small for their proper function, can be a nuisance to adjoining residences, and this accounts for what prejudice against proximity to play areas still exists. Reliable creators of modern building developments make certain that such assets are included in their plans.

WHAT OTHER RECREATIONAL AND CIVIC ADVANTAGES SHOULD BE CAREFULLY INVESTIGATED?

Clubs, theaters, public library, community recreation programs, swimming facilities and whatever else appeals to the family's hobby interests. What neighborhood civic association is there? Some neighborhoods are friendly and welcome newcomers; others are "standoffish." It makes a big difference to your family's happiness which you move into.

WILL LOCAL INSTITUTIONS MAKE MORTGAGE LOANS IN THE NEIGHBORHOOD?

There is an excellent indication of neighborhood stability. If they won't, there is some good reason that makes such loans bad risks. If local conditions of any sort make loans a bad risk, surely your purchase is an equally bad risk. Before making that down payment and signing away your life, check with your local bank.

WILL THE FHA INSURE MORTGAGE LOANS IN THE NEIGHBORHOOD OF YOUR CHOICE?

If not, beware. The policy of FHA is to check carefully not only the individual house but the whole neighborhood of which the house is a part. The environs have as much influence on values as does the individual house itself. Keep in mind the story of the bad apple.

"FHA does not accept purely speculative land values," says a statement from a high official, "nor does it insure the financing of homes built in tracts of land which are not carefully planned for community development, and which are not adequately provided with utilities and facilities necessary for a livable community. . . .

The community as well as the house must meet certain standards."

SHOULD YOU BUY THE PLOT OR DESIGN THE HOUSE FIRST?

By all means have a particular plot in mind, even if not actually purchased, before spending money on the house design. Why? Because you can design a proper house for *any* plot, but you cannot put any house on every plot. House design is affected by orientation, by lot contours, and by the many other factors peculiar to a particular plot as well as by the character of the neighboring homes.

One of the chief laments of architects is that clients all too often come to them with a preconceived idea of the architecture they want, and yet they already own a plot that is unsuitable for that style or design of house. It is an excellent idea to let your architect see the plot before you commit yourself to its purchase. A good architect wants to fit the house to the lot. The alternative probably means discomfort and a dissatisfied client, even though it may be a perfectly good house.

NEIGHBORHOOD SUMMARY. CHECK THE FOLLOWING FOR YOURSELF. THE ANSWERS SHOULD BE "YES."

Is there a good pavement around or in front of the property? Is there a good sidewalk and curb? Is there a fire hydrant within 150 feet of the plot, and are electrical lines near enough to be run in? How about street lights—are they near and plentiful enough to be effective? How about telephone service in the neighborhood, do the lines run near the property? Is there a gas main in the street and a storm sewer? What about mail and milk delivery—can you count on them?

These are basic questions, but they are important ones for the happiness and convenience of your family. Many years ago the author bought an old house. It had no electricity but an electric line came up to the home of a neighbor about 150 feet away. It looked like a cinch. But that neighbor, at his own expense, had extended the company line a half mile to reach his house. His permission was an absolute prerequisite to getting electrical service. Fortunately, we wangled it—but only at a price! All of the foregoing precautions are doubly important if you plan to live in a new development or on a plot at the outskirts of a town. Throughout the country there are thousands of developments that never got beyond the first growing pains. These stand, sparsely built on, abandoned by their promoters when the going became tough. As a result, service lines, too, were abandoned. Make very certain that the company selling you a house is a reputable one with substantial backing.

Drawing by Gilbert Bundy



To make sense, the kind of house you build in appearance and plan should reflect your family's

composite personality, fit its living pattern like a glove

Kenneth Duncan

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NO. **3** THE HOUSE

SHOULD YOU FIRST BUY A PLOT AND THEN DESIGN A HOUSE FOR IT OR SHOULD THIS PROCESS BE REVERSED?

By all means have a particular plot in mind, even if not actually purchased, before spending money on the house design. Why? Because you can design a proper house for *any* plot but cannot put any house on every plot. House design is affected by orientation, lot contour and other factors peculiar to a particular plot as well as by the character of neighboring homes. A house, for instance, that was planned for a flat lot would be completely unsuited if it were placed on a piece of land having a decided slope or rolling contours.

WHAT IS THE SOUND ORDER OF PROCEDURE?

Many common errors of home builders would be avoided if the order went something like this: 1. First select the site, at least to the point of considering it seriously, even if the actual signing of the purchase contract be postponed until preliminary house sketches prove it to be *the* plot for your home. 2. Then work out the exact floor plan you want. 3. After this, you can determine just what architectural style best suits your family. Your home should reflect your manner of living.

WHAT FACTORS WILL AFFECT THE PLAN?

High among the influences that will affect the plan of your future home is cost limitation. The less you spend the more restricted is the problem of getting

the ideal plan. Plot contours, the relation of plot to compass points and direction of prevailing winds will affect the arrangement of every room. Climatic conditions, too, directly affect planning. In the South, for instance, we find large rooms with high ceilings. We find more and larger windows with cross ventilation a requirement for every room. We find fewer basements where central heat is not essential. Wide overhangs shade windows and protect the interior from frequent showers.

ARE SOME DESIGNS CHEAPER TO BUILD THAN OTHERS?

The answer is obviously yes. One simple example will show why. A square 30 feet on each side contains 900 square feet. It has 120 feet of perimeter. If we pull the square out into an oblong 60 feet long by 15 feet wide, it will still contain 900 square feet. But the perimeter will have increased to 150 feet, an increase of 25%. If square and oblong represent houses with floor areas that contain the same amount of space, one will have exactly 25% more wall to build than the other.

The most economical six-room house to build is unquestionably the almost square "three over three," a two-story home with three rooms on each floor. If we want a rambling one-story, six-room plan, we will find that we have increased the amount of wall surface necessary to enclose it and have practically doubled the roof area as well. Every dormer window, every change of roof pitch, and every added wall corner adds something to the total building cost.

Few of us want a perfectly square house. They do not offer much scope for architectural interest. Our problem in the planning stage becomes one, therefore, of inevitable compromise. How far will we depart from the more economical, restricted plan for the sake of appearance and style?

WHY IS IT SUGGESTED THAT YOU DEVELOP THE FLOOR PLAN BEFORE DECIDING ON ARCHITECTURAL STYLE?

Because working out the floor plan will force you to deal with the functions of the home rather than with some, perhaps, sentimental idea of what a home should look like. If you first think of your home in terms of living, in relation to cooking, eating, sleeping, working and playing, you will be more apt to avoid many common errors. And you will find that the floor plan, once established, will go a long way toward suggesting the architectural style. Some plans lend themselves to almost any type of architecture. Others do not. If your plan includes corner windows or large picture windows, the style will take on something of the Contemporary.

If the plan is a rambling rather than compact one, traditional or ranch-house styles are more natural.

WHAT IS ARCHITECTURAL STYLE?

Architectural style is what you see when you look at a house. If the basic structure beneath is not logical and structurally sound to start with, all the gilding in the world won't accomplish much except, perhaps, a rather bizarre, unusual effect.

The differences between the various architectural types or styles came about largely because of local methods used in different localities for solving their own unique problems. Present-day methods of building, especially since the adoption of complete insulation, have largely done away with rigid regional rules of design. One of our most important architectural firms now sells clients on the insulating qualities of a snow-packed roof. We are fast approaching a national over-all picture regarding architectural styles and find that a ranch house can be just as comfortable in the White Mountains, if properly constructed, and a Cape-Cod compact plan as workable on the flat lands of Texas.

The builder who has determined upon a sound, functional floor plan should avoid distorting it by trying to force it into a preconceived idea of what a house should look like. If the house is honestly planned, honestly built of good honest materials, the external appearance will almost take care of itself.

WHAT ARE THE POPULAR AMERICAN ARCHITECTURAL STYLES?

Probably nine out of every ten houses planned or built in the last few decades have been influenced by either I, Early Colonial; II, Georgian, (late Colonial); or III, Contemporary architecture. The popularity of the three styles seems to follow the order in which we have listed them. Postwar surveys indicate that the returned veteran and his wife are much more inclined to a Contemporary style in architecture than other home planners.

The qualities that have caused good Colonial and good Georgian architecture to endure were not found in window boxes, in white picket fences, in mounted coach lamps, in wagon wheels covered with roses or in sky-blue wheelbarrows blossoming geraniums. They were found in floor plans adapted to the living conditions of the era, floor plans that were enclosed within exteriors marked by simplicity of line and by lack of artificial ornamentation. These qualities of architectural style are as sound today as they were two hundred years ago, and as appropriate for any floor plan that may logically

be enclosed by exteriors whose doors, windows and wall surfaces met the needs of a departed age.

IF WE SHOULD THINK AND PLAN FLOOR PLANS IN TERMS OF FUNCTIONS, JUST WHAT ARE THE FUNCTIONS OF A HOUSE?

The primary function of homes is to provide shelter against the elements. The igloo of the Eskimo fulfills this fundamental purpose of a house as well, perhaps, as does the most modern Contemporary design. But it lacks convenience and fails to divide the available space logically among the various household activities that have become more complex with advancing civilization.

The chief change in design since Colonial days has been the very decided trend toward smaller houses. This has not been brought about by architects but has been forced by economic factors. As the cost of building has risen, the amount of space that the average family could afford has become smaller.

The average house has now been reduced to the irreducible minimum. It is impossible to squeeze four conventional rooms and bath into a floor area smaller than 24' x 26'. Economy in the future cannot be had by the simple expedient of eliminating rooms and reducing room sizes. It can be accomplished only by more efficient, more functional designing. The total available space must be carefully budgeted in accordance with the several main functions of the house. Very likely double or multiple use must be made of much of the space. These are methods that go to the heart of small house design.

WHAT ARE ESSENTIAL POINTS TO CONSIDER IN PLANNING A LIVING ROOM? IS A SEPARATE DINING ROOM ESSENTIAL?

The living room has developed into the most important room of the home. It combines activities that a few generations ago were divided among the old parlor, sitting room, kitchen, sewing room and often dining room. The living room should be made as large as possible even at the expense of other rooms. In even the smallest of cottages it should contain at least 180 square feet. In a one-story, four-room house a third of the total floor space is not too much to budget to living room. Strive to have the front door open into a small vestibule rather than directly into the living room. Provide a coat closet. A room longer than it is wide has advantages. Furniture arranges better.

There simply is not room enough in the small home with minimum living accommodations for a separate room earmarked for dining alone. Even in much larger houses the trend

is to provide dining space in an L or at one end of the living room so that the extra space may serve to enlarge the living area. Many architects when building their own homes are much more radical than they dare be for clients. They eliminate both dining room and living room and provide one enormous "family room" for all group activities. Then they put a kitchen at one end and sleeping cubicles at the other. "It makes very little difference where they go," said one architect. "The family room is the home and all the other rooms are just necessary evils."

DO BEDROOMS TAKE UP A DISPROPORTIONAL PART OF AVAILABLE SPACE?

They certainly do if their use were to be limited solely to seven or eight hours of sleep each night. In such a case sleeping hours might be provided for in bunk rooms or on sleeping porches. But bedrooms have become individual, personal sitting rooms and working rooms as well for the various members of the family. Moreover, FHA has set certain definite minimum requirements as to bedroom sizes, and problems of financing might develop if you become too radical. Furniture built into bedroom walls permits you to hold to the minimum sizes and still have room enough for beds and helps to create the illusion of spaciousness.

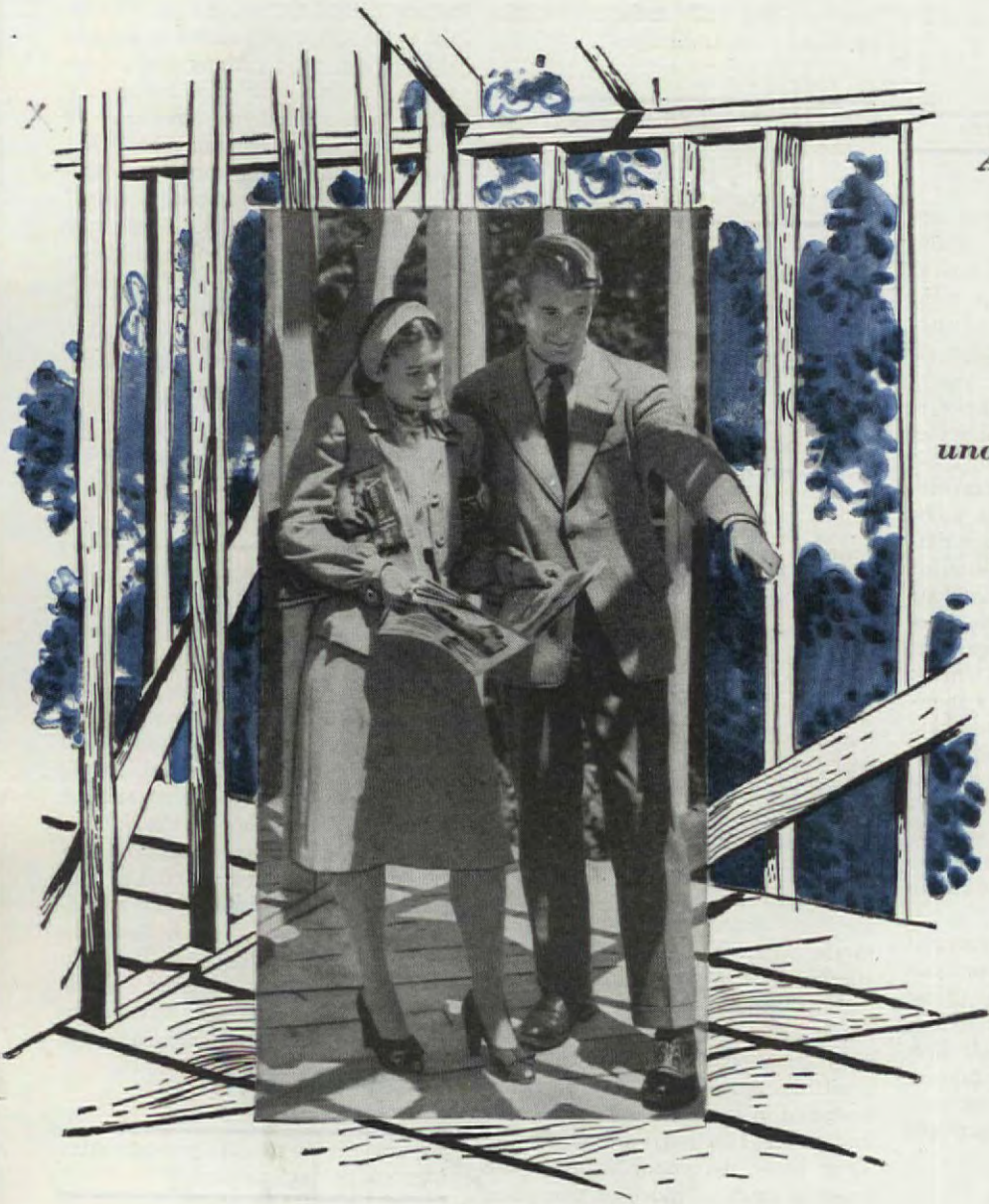
TO WHAT EXTENT SHOULD ECONOMY EXTEND TO THE KITCHEN?

Family habits should enter into the answering of this question. The apartment kitchenette may be adequate for the family that has breakfasts and an occasional dinner in. But the housewife who will day in and day out prepare three square meals needs an efficient kitchen. Fortunately kitchen planners, through liberal use of counter work space and storage cabinets, have made the small kitchen infinitely more workable than was Grandmother's enormous room.

IS THE ELIMINATION OF A BASEMENT A JUSTIFIABLE AND WORTH-WHILE ECONOMY?

In some sections of the country, especially those where little if any central heat is required, the basementless house is the rule rather than the exception. It is perfectly feasible to build a warm, dry house in any area without a cellar. If, however, foundation footings and all pier supports must be carried below frost line, the amount of saving is debatable when the cost of the necessary utility room, laundry and alternate storage space is included. In

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*Architect, builder, and owner—all are partners
in the planning and erection of a house.*

*Each has duties and responsibilities. Proper
understanding of these goes far towards smoothing
path from contract signing to finished house*

Kenneth Duncan

THE AMERICAN HOME

planning PRIMER

NO. 4

CONSTRUCTION

JUST WHAT IS A GENERAL CONTRACTOR?

He is an experienced builder with expert knowledge of how to work from architect's plans and specifications. Reputable contractors take the same pride in the quality of their work as do other reliable business men. They expect to carry out to the letter their agreement with you. But just as there is a certain percentage of unethical operators in other business, some general contractors are to be avoided like the plague. Check records carefully and find out a firm's reputation over a period of years. Make inquiries at your bank and ask questions of your architect. Best of all, talk with owners of houses already built by the contemplated contractor. Find out whether he has left behind a trail of satisfied or dissatisfied customers. When there's doubt, choose another builder.

HOW DOES A CONTRACTOR FINANCE THE BUILDING OF A HOUSE?

The contractor advances money for pay rolls and materials up to the point where your agreement calls for a payment by you or where your bank makes the first payment under the mortgage agreement. Usually during the course of erection, the owner is called upon to make three or four payments. The last payment is made at a specified interval after the architect has given his final approval of the completed work.

WILL THE GENERAL CONTRACTOR DO ALL OR ANY OF THE MANUAL WORK ON A HOUSE?

Being primarily a supervisor, the contractor does not perform all of the manual labor in putting up a house; however, he may do some of it. He brings to you a team of skilled workmen and subcontractors who make up his operating organization—the kind of effective unit you could not hope to weld together yourself for a single

PLEASE TURN TO PAGE 146

Kenneth Duncan

*Fifty per cent of a home's cost goes into its
mechanical working parts without which today's
comfortable, modern living would be impossible*

WHAT ARE THE PRINCIPAL MECHANICAL
"WORKING" PARTS OF A HOUSE?

They are three. First the heating and/or air-conditioning systems to make your personal indoor climate no matter what the weather outside. Second the plumbing, divided in two parts—supplying pure water and carrying away waste water. Third, the electric installation for light, and power for our increasing number of electric appliances.

WHAT PART OF THE COST OF A FINISHED HOUSE
IS REPRESENTED BY THESE MECHANICAL INSTALLATIONS?

It has long been the custom to consider the "shell" or structural part of a house responsible for 50% of its cost; the working mechanical parts account for the other 50%. Naturally, this rule of thumb is flexible and may be influenced by type of construction and number, types, and quality of the mechanical installations throughout.

HOW MANY APPROVED TYPES OF CENTRAL HEATING
SYSTEMS ARE AVAILABLE TODAY?

There are three main types: warm air, steam, and hot water. Tremendous strides have been made recently in all three; each has its ardent advocates. The time to make your selection is during the home *planning* stage.

HOW CAN THE INEXPERIENCED HOME BUILDER
DECIDE WHICH SYSTEM IS BEST SUITED TO HIS NEEDS?

Much material is available from trade institutes, written in lay terms and readily understandable. Among these sources of information are: The Institute of Boiler & Radiator Manufacturers, 60 East 42nd Street, New York 17, N. Y.; National Warm Air Heating & Air Conditioning Association, 145 Public Square, Cleveland 14, Ohio; Copper & Brass Research Association, 420 Lexington Avenue, New York 17, N. Y.; American Iron & Steel Institute, 350 Fifth Ave., New York 1, N. Y. After familiarizing yourself with the several types of heating, discuss with your architect or builder the advantages of each for *your* home. Have him secure



Photograph by F. M. Demarest

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NO. 5 THE MECHANICAL PARTS

cost estimates on the various types because relative costs frequently vary depending upon the style and size of house. Remember, too, that geographic location should be an important consideration in the proper choice of a heating system.

DOES THE ARCHITECT PREPARE DETAILED PLANS FOR A HEATING SYSTEM?

Usually not for the small house; it has become a job for the heating engineer. The chief manufacturers have such specialists who, without cost, will chart the detailed installation from the architect's working drawings and recommend the size of heater and amount of radiation needed for each room. Specifications should call for a system that will heat the house to 70 degrees Fahrenheit in the coldest weather anticipated for your particular location.

WHAT IS RADIANT PANEL HEATING?

The principle behind the old familiar methods of heating was that they warmed and conditioned the air *within* the house. In radiant panel heating, pipes or ducts are laid in the floors and sometimes ceilings or walls to keep a house comfortable by actually warming these contact surfaces. This heat is transmitted by radiation to persons or objects in the room. Surrounded by these warm objects, one is not robbed of body heat and so remains comfortable though the air itself in the room has not been heated to the usual temperature.

ARE FLOOR AND SPACE HEATERS ADEQUATE FOR THE SMALL, COMPACT HOUSE?

This largely depends on design of house and the climate. Both floor and space heaters have been greatly increased in efficiency, and, in many instances, where winters are not too vigorous, they can provide all the heat needed for comfortable living.

IS IT POSSIBLE TO USE THE SUN'S WARMTH AS A SUBSIDIARY HEATER?

Yes, solar heating has been successfully used in hundreds of newly built houses. This has become more prevalent since the advent of large picture windows. The short rays of the winter sun pass through the windows, strike walls and other warm objects and are changed or "re-radiated" into longer waves that actually warm the room instead of passing

back through the glass. Solar windows should face south, the position of the winter sun in northern latitudes. The house should have fairly wide eaves designed so that the rays of the low winter sun may enter, and they should also give protection from the high warm rays of the summer sun. South of the equator solar windows would face to the North.

NEED THE HEATING PLANT BE LOCATED IN THE CELLAR?

Definitely not, except as to a gravity-flow warm-air system. Today more and more of our heating plants are located in the ground-floor utility room. Manufacturers of heating systems have made the cellar obsolete—at least so far as heating installation needs are concerned.

ARE ALL THREE POPULAR FUELS—OIL, COAL, AND GAS—SUITABLE FOR ALL TYPES OF HEATING SYSTEMS?

Yes, and the choice of fuel becomes one of personal preference, influenced by original cost of the installation designed to burn a desired fuel, and by the comparative costs of the fuels, themselves, in the area, which varies from one place to another.

CAN HEATING SYSTEMS THAT BURN ANY OF THE THREE TYPES OF FUEL BE AUTOMATIC?

Certainly. The addition of a stoker to a coal-fired furnace permits thermostatic controls to be installed. The manual operation of tending a coal-fired heater may thus be reduced to the occasional removal of a small ash residue. Oil and gas-fired furnaces have long been automatically controlled, not available with manual controls as standard equipment.

DOES ONE FUEL OR SYSTEM DIRTY UP A HOUSE MORE THAN THE OTHERS?

We doubt it if a system is modern and properly installed. The smudge that appears over radiators and warm-air vents is not the result of the fuel. It develops for the reason that warm air is capable of holding more moisture than cold. That's why cold, clear days are so dry and crisp. The moisture in the air always carries minute particles of house dust. When the warmed air from vent or radiator cools on contact with the colder surface above, some of its dirt content is dropped and, after a time, the dirt becomes

perceptible as smudge. Coal dust in the house is due to poor storage facilities when a stoker is used. Soot from an oil burner is a result of bad equipment or adjustment.

DOES NOT THE DOUBLE FUNCTION OF PLUMBING MAKE EACH STEP NECESSARY FOR ITS INSTALLATION EXTREMELY IMPORTANT?

Most assuredly. For that reason, plumbing codes are the strictest of all building codes. Often they appear too severe to the new home builder, but, when one remembers that every drain in your house has direct outlet to the sewer, surely it is well to guard not only your family but the community's health. If your home is built outside the jurisdiction of some governing code, your specification should call for the nearest town code to govern the plumbing installation. It might be wise to specify compliance with the so-called "Hoover Code" recommended by the U. S. Department of Commerce.

HOW IS DOMESTIC HOT WATER SECURED?

Domestic hot water, always ready in large quantities, is now considered essential in even the most modest homes. Water heaters are either direct or indirect. Indirect hot-water heaters are installed in the house heating plant and can be used only with steam or hot-water heat. Basically they are copper coils set in the boiler and connected to the water line. Direct-fired heaters are made for oil, coal, gas, or electricity. All, except those fired by coal, come in automatic models, but only with gas can one get an instantaneous heater; i.e., one where no hot water is stored. A hot-water knuckle can be placed in a hot-air furnace above the fire for direct water heating in winter only. Locate the heater or tank as near as possible to the points where hot water is used most frequently. Insulate all hot-water pipes to conserve the heat. A relief valve, connected to a drain, should be installed on every pressure unit, such as a hot-water heater, as an extra safety measure.

WHAT IS THE BEST TYPE OF PIPING TO BE USED IN WATER LINES?

Considerable controversy has waged over this question. Before determining the type of pipe to use, consult engineers of the local water-supply company, or the town or city engineer about that pipe which has stood up best with the water to be used. The capacity of pipe is affected by the

deposit of metallic impurities in the water as well as by corrosion and rust. The public has long been sold on brass piping, yet copper tubing gives excellent results, too, and in many instances is more economical to install. Whereas rigid pipe must be cut, threaded and fitted, tubing is simply bent around a corner. Once you decide on the best pipe for your home, stick to one type, don't mix materials. To do so may set up electrolysis and thus hasten corrosion. A different material might be safely used in your heating-system pipes.

WHAT IS THE RECOMMENDED SIZE OF THE PIPE FROM STREET WATER MAIN TO THE HOUSE?

This pipe is often referred to as the "house connection" and should be at least a 1" pipe. Anything less than this may fail to give you adequate pressure. The pipe should always be laid in a trench well below frost line. As a first precaution, the house main and sewer should *not* be placed in the same trench. They should be more than four feet apart and completely separate installations.

ARE THERE MANY GRADES, QUALITIES AND TYPES OF PLUMBING FIXTURES?

There are literally thousands. They come in enameled cast iron and steel and in vitreous china. The latter is the most expensive. Toilet bowls are made only of china. Improvements are constantly being made in all sorts of plumbing fixtures. In one single item, the kitchen sink, there are dozens of models to choose from; for instance, the roll-rim sink, the sink with apron, the flat-rim sink to fit counter top, the combination sink and laundry tub, the sink with built-in dish washer or electric garbage disposer, and other detail variations.

WHAT ARE THE DANGERS THAT LURK IN WASTE DISPOSAL?

The chief danger to be feared is the invasion of your home by possible disease bearing elements from the sewer. It is not pleasant—but the fact must be faced—that every "sanitary" porcelain or enamel fixture in your home must have an outlet to the sewer. The chief problem in plumbing installation is to make sure that the outlet remains a one-way street. Every fixture must have a trap, the familiar "U" bend. The trap furnishes a seal of water that closes the fixture against the invasion of sewer germs, sewer gases, and vermin. Every trap should be vented and the vent stack carried up through the

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THE AMERICAN HOME

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NO. 6 HEATING

Norman Radder and James Cest



To provide maximum comfort at minimum cost, the ideal heating system for your home will be determined by many factors. Here's the first of two heating articles to guide you in that choice

WHY DO THE MANY DIFFERENT HEATING SYSTEMS THAT ARE AVAILABLE PROVIDE SIMILAR HOME COMFORT?

Because heat is transferred from one object or body to another by one or by a combination of two or three basic ways. These are conduction, convection, and radiation. Conduction is the movement of the heat itself, as from one end of a piece of copper or other metal to the other, or by flow between two materials or bodies that are in contact. Convection is the movement of heat by the change of location of the agent conveying the heat. This agent may be either water, steam, or air. Hot air moves, carrying the heat with it, and the same is true of steam and hot water. The water or air is heated by contact with the heat source such as a furnace. Radiation transfers the heat from one object to another without contact being made, and without the air between the objects being heated. Every object with a temperature above absolute zero gives off heat rays which shoot out in a straight line, warming cooler objects. This is true of all bodies, including the sun, a fireplace, a wall, ceiling, or floor. Even human bodies radiate heat.

No one heating system obtains its entire effect by the action of only one of these methods of heat transfer. Radiant heat does not warm the air in a room. True, the air is warmed, but by contact (conduction) with the warm surfaces of the walls, ceiling, floor, or furniture. Convectors, radiators, and panels are all recognized by heating engineers as radiant heating

equipment, but each of these provides both radiant and convection heat, the air being warmed by contact with the heating element. A hot-air or warm-air system is classed as a convection type, but it heats the objects and surfaces in the room by conduction from the warm air, and these objects and surfaces in turn radiate heat to cooler bodies that come into the room, such as the people who have been outside the building.

WHAT IS A COMFORTABLE TEMPERATURE IN THE HOME?

It varies because of differences in people and the factors that contribute to body comfort. The human body continually generates heat, and must dispose of some to remain comfortable. Too much heat loss makes a person feel cold, and not enough heat loss makes one feel hot. Body heat is dissipated by evaporation of perspiration, radiation, and conduction to the air where it is moved away by convection currents.

Heat loss by evaporation varies with the humidity in the air. Radiation losses vary with the temperature of the body and the surrounding wall, ceiling and floor surfaces. Losses by conduction are changed with the air temperature. The amount of clothing will also affect the rate of loss for any of these other factors. Obviously, a variation in one means of releasing heat will require compensating adjustment in the other factors to maintain

a comfortable rate of heat loss.

In addition, people generate and must lose different amounts of heat, and perspire at varying rates. Since humidity and the temperature of the air and surfaces can only be just right for one person, a variation in clothing is in order for the comfort of others.

Conditions that have been found comfortable for the average person, in the average indoor clothing and house, are between 69 degrees with 65 per cent humidity, and 72 degrees with 30 per cent humidity.

WHY MUST THE HOUSE TEMPERATURE BE HIGHER DURING COLD DAYS THAN ON WARM DAYS FOR EQUAL COMFORT?

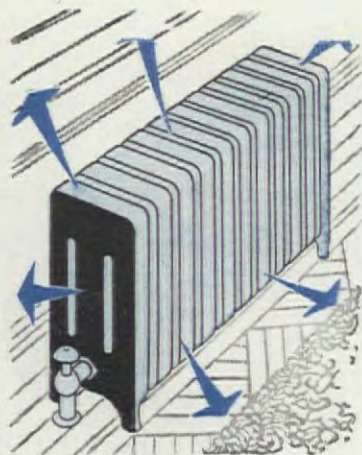
In really cold weather the inside wall surface temperature is lower than during the comparatively warm beginning and ending of the heating season. The body radiates a great deal of heat to the cold wall, and the rate of heat loss to the air must be reduced by a higher air temperature. Warmer winter days leave the walls at a higher temperature, and the heat loss of the body by radiation is reduced as a result. To maintain the desired body comfort, the heat loss to the air must be increased by a lower air temperature. In this way total heat loss is kept even.

HOW DOES A CONVECTOR DIFFER FROM A RADIATOR?

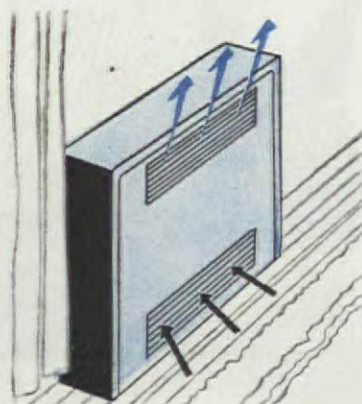
A radiator provides most of its heat by direct radiation, with a small amount distributed by convection. A convector is always within a cover. Air enters the enclosure through an opening at the floor. This air contacts the hot surface of the convector, which may be a steam or hot-water pipe assembly with thin metal fins. The heated air then rises and passes out into the room by way of an opening at the top of the cover. Though the major portion of the heat is provided by convection, a small amount of radiant heat is provided by the warm surface of the enclosure. Convectors are somewhat smaller than radiators for equal heat output, and can be made less conspicuous in a wall recess. When a radiator is enclosed in a cover, it functions as a convector, but not as efficiently.

WHAT IS PANEL HEATING?

The term "panel heating" is often confused with the term "radiant heating." Actually it is just a form of radiant heating which uses a large area as the heating surface. Floor, ceiling, a wall, or a part or combination of these, may act as radiant

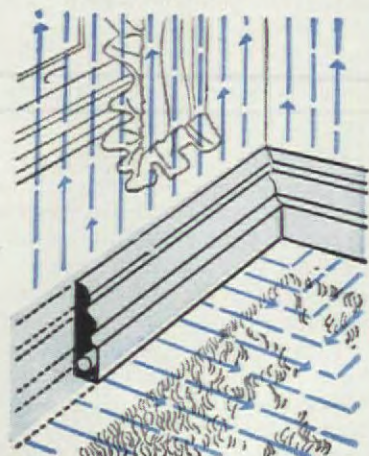


● A radiator provides the greatest portion of its heat by radiant rays



● From a convector, most of the heat is sent out in the moving, warmed air

panel. Such surfaces need not be heated to as high a degree as the conventional radiator or convector to provide adequate heat. The surface temperature of a floor panel should not exceed 85 degrees, a ceiling panel, on the other hand, may be heated to 115 degrees. Thus a given area of ceiling at 115 degrees will provide much more heat than the same floor area at 85 degrees. This favors ceiling panel heat in a building in which there is not sufficient area in the floor to offset the heat loss. According to the Guide of the American Society of Heating and Ventilating Engineers, a ceiling panel will deliver 70% of



● Baseboards heat by radiation and convection, and are inconspicuous

its heat by radiation and 30% by convection; floor panel, 55% by radiation and 45% by convection; and a wall panel, 65% by radiation with 35% by convection.

HOW IS A RADIANT PANEL HEATED?

The two most common methods are hot water in pipes and warm air in ducts. The pipes can be in concrete, 1½ to 3½ inches below the finished floor surface. Under the concrete is insulation and waterproofing on a bed of gravel or crushed stone. The floor can have linoleum, wood, tile, carpet or other covering that will not materially affect the heat output. Pipes can also be between beams in frame construction, or adapted to other structural types. Ceilings and walls can have pipes in plaster or between studs or beams.

IN WHAT WAY IS A PANEL HEATED BY WARM AIR?

Warm air can be used in ducts in the ceiling or floor, with many details possible, for masonry or wood-frame construction. In the usual system the warm air returns directly to the heating unit, but it can be split to provide ventilation and humidification similar to a forced warm-air system by having a portion of the air enter the room. In one design air passes under the floor in ducts, and then enters the room through grills in the window sills. It then crosses the room and returns to the furnace by a ceiling or a high wall opening.

WHAT SPECIAL EQUIPMENT IS NEEDED FOR PANEL HEATING?

Furnaces and controls for panel heating are the same as those in other hot-water and warm-air systems.

IS BASEBOARD HEATING SATISFACTORY?

Yes, if properly installed. Baseboards can be radiators or convectors, and they are used along the base of the wall for a distance sufficient to provide the heat that is necessary for comfort. This may be along one or more walls, depending on the size and shape of the room.

CAN PANEL HEATING BE INSTALLED IN OLD HOUSES?

Due to the location of the pipes and ducts, this type of heating is almost exclusively for new houses.

However, electric ceiling panels are adaptable for old buildings. Baseboard radiators and convectors provide a wall panel effect and can be installed easily in old houses.

WHAT ARE THE PRINCIPAL TYPES OF HEATING SYSTEMS IN COMMON USE TODAY?

They are one pipe steam, two pipe steam or hot water, and hot or forced warm air, sometimes called air conditioning. Where the heating season is short, and the winters mild, a complete central heating plant is not always necessary, and a floor furnace, a unit space heater, or small separate units can provide comfortable heat. In some instances two or more space heaters or floor furnaces will give adequate heat.

HOW DOES A ONE PIPE STEAM SYSTEM WORK?

The steam is supplied to each radiator, and the condensed steam or water returns to the main line and boiler through one pipe. The installation is economical, but heat cannot be controlled enough for complete comfort. There is a long time between the start of the fire and the arrival of heat at the radiator. Radiators near boiler heat up first. Valves must be completely open or shut, resulting in each radiator having all or nothing. These disadvantages can be overcome to some degree by the addition of equipment to create a partial vapor-vacuum system.

WHAT IS A TWO PIPE STEAM SYSTEM?

It has one pipe for the supply of steam to the radiator and another for the return of the condensed steam to the boiler. More pipe is needed in a two pipe system, but pipe can be of a smaller size. The increased cost is warranted by improved control and flexibility. Individual thermostats can be used to control the amount of heat supplied to each room; the house will not overheat as much in mild weather, and there is no hissing from air valves. A house can be too large for adequate heat from a one pipe system, but a two pipe installation will take care of any size home.

ARE ALL HOT-WATER SYSTEMS TWO PIPE?

There are one pipe hot-water systems, but this always refers to the main supply line. Two pipes, supply and return, are necessary for each

radiator or convector in either one or two pipe hot-water systems. In the gravity system the water circulates slowly by the natural tendency of hot water to rise. The water cools in the radiator and returns to the boiler. The slow circulation results in a long delay between a call by the thermostat and the arrival of heat in the radiator. When the furnace is shut off, the water continues to circulate awhile, overheating the rooms.

The positive action of a pump in a forced circulation hot-water system allows the use of smaller pipes, results in rapid supply of heat to the radiators, and eliminates the circulation and excessive heat after the furnace is shut off. Modulation of the heat by thermostats in individual rooms or zones, with control valves for very complete selection of temperatures to suit room requirements, can be arranged. Either open or closed expansion tanks can be used with gravity or forced circulation systems. The water is usually no hotter than 180° with open tanks, but with a closed tank the pressure will allow the use of water at as high as 240° temperature. With the hotter water, radiators and pipes can be smaller.

No. 7

Heating, cont'd

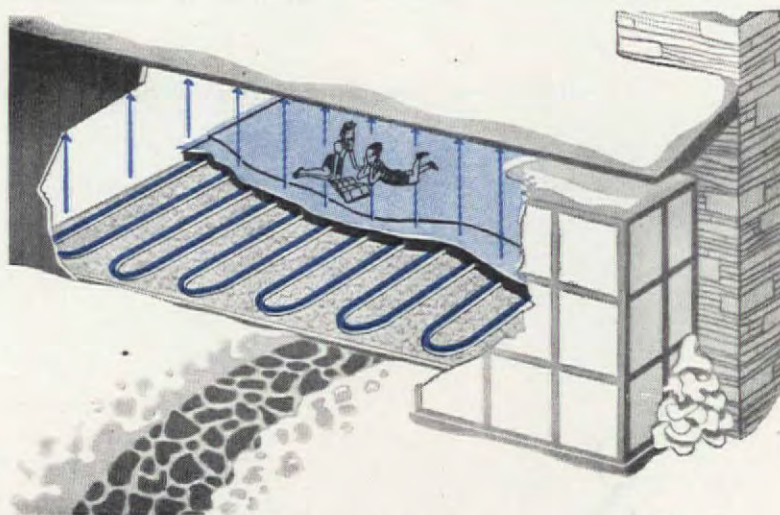
HOW DO HOT-AIR AND FORCED WARM-AIR SYSTEMS DIFFER?

The hot-air system depends on the natural rise of heated air for the circulation. It is not flexible or well controlled, and rooms far from furnace are often not well heated.

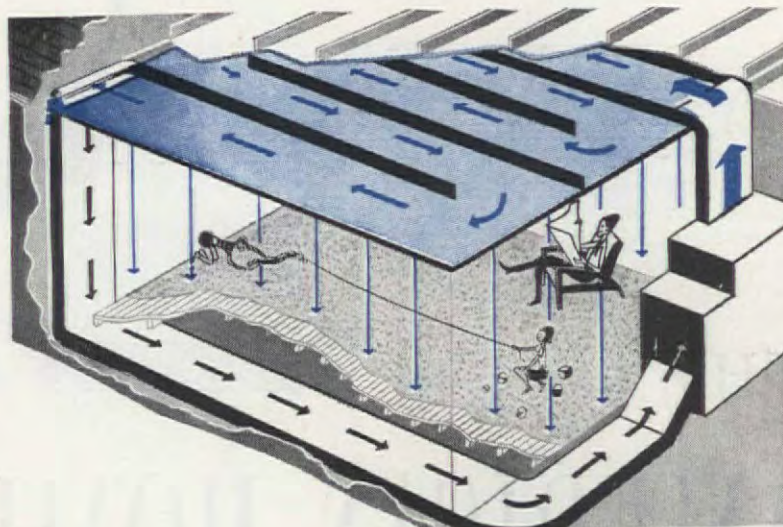
The forced warm-air system is the modern version of the hot-air plants. The air is not heated to such a high degree, and is circulated by a fan which allows for control and flexibility, and the use of smaller ducts. The air can be cleaned and humidified, providing a very comfortable atmosphere in the house.

WHAT ABOUT AIR CONDITIONING?

According to the Federal Trade Commission, the words "air conditioning" signify the simultaneous control, by mechanical device, of various factors affecting both the physical and chemical conditions of the atmosphere within a given structure, such as a room, building, or the like; and said factors include temperature, humidity, and circulation within the structure. A device which does not control each and all of the designated factors is not properly designated an "air conditioner." When a forced warm-air system includes air cleaning and humidification features, it can be correctly called a "winter air conditioner." A "summer air conditioner" cools, dehumidifies, cleans, and distributes the air. A complete "air conditioner" includes both summer and winter treatment and distribution.



● Pipes in concrete slab provide a warm floor which radiates heat to ceiling, walls, objects, people. Pipes could be in walls or ceiling



● Air ducts create warm ceiling or floor panel that radiates heat to all parts of room. System can be split to provide some warm air heat

To select the heating design for your home you must know what choice you have in controls, fuels, and

other details. Answers to many of your questions appear in this, the second of two discussions on heating

WHAT TYPES OF CONTROL EQUIPMENT ARE USUALLY INCLUDED IN AN AUTOMATIC HEATING SYSTEM?

There are two principal categories into which they fall. One, for safety, keeps the furnace and the rest of the heating plant from becoming damaged or too hot, or otherwise causing trouble. The most common safety units are called airstats, aquastats, and pressuretrols. These work from air or water temperature, or from steam pressure. The other category, for maintenance of heat level in the house, is the thermostat which signals the furnace for the supply of heat. The safety units and thermostats turn the fire up or down through a system of devices which may include transformers, relays, motors, weights, springs and other miscellaneous equipment.

TO WHAT EXTENT CAN A HAND-FIRED COAL FURNACE BE AUTOMATIC?

With a gravity hot-air or hot-water system, and with a steam system the thermostat and safety control can be used to operate the check and ash-pit dampers. In a forced warm-air or forced circulation hot-water system, the controls will also start and stop the fan or water pump. This sort of

arrangement is limited in its results, since the fire will still produce some heat, even with the draft shut down, and will not be well controlled on the warm days at the end of the heating season. However, it will save fuel and be a definite improvement over the same type of system without controls. A stoker can be controlled better, with very little unwanted heat being created on the warmer days. The oil or gas-burning furnaces can be shut down completely between calls from the thermostat, and therefore the control is best. The completeness of the automatic features on any heating system can vary within wide limits, depending on the heating equipment and the design of the system that is used, and also on the ever-present item of cost which haunts most home planners today as it has always.

WHERE SHOULD THE THERMOSTAT BE PLACED?

The best location will vary with the individual house and site. The thermostat should be placed where it will not be influenced by a near-by radiator or register, which would cause it to turn off the heat before the whole house is warmed. It should also be in a spot where it will not be cooled by a draft or other condition that will result in a continued call for heat long after the house has reached the desired temperature, and thus cause overheating. A location in the living room, toward the center of

PLEASE TURN TO PAGE 149

That's right . . . there are a number of plumbing decisions you'll

have to make when you plan your new home. Here is the

first of two discussions of the more important questions you'll ask

NO. 8
PLUMBING



THE
AMERICAN HOME *planning* PRIMER

James Oest

WILL THE PLUMBING IN A COUNTRY HOUSE DIFFER FROM THAT IN A CITY HOME?

Where there is no municipal water supply and sewage system, it is necessary for these to be provided, otherwise the plumbing is the same as in town. The water can be pumped from a spring, lake, or one of the various types of wells, to a storage tank and then distributed as desired. Disposal of the sewage is handled by either a septic tank or cesspool. The septic tank will decompose much of the solid matter and purify the water before distributing it to the soil by way of a seepage field of clay or fibre pipe. A cesspool, not usually considered safe or sanitary, just collects the solid matter and lets the foul water seep into the soil around it.

WHAT CAUSES THE SCALE DEPOSIT IN PIPES, WATER TANKS, WASHING MACHINES AND OTHER EQUIPMENT, AND HOW DOES THE SCALE HURT THE PLUMBING SYSTEM?

Carbonates and sulfates of lime and magnesia, which make water hard, and solid matter such as mud or silt, are the principal scale-forming elements. The accumulation of scale in the pipes reduces their effective size and results in lower water pressure at the fixtures. It also acts as insulation between the water and the heat source in water heaters, or steam and hot water boilers, reducing the efficiency of the unit and requiring more fuel to provide the necessary hot water or heat. Hard water is also inefficient and costly for cleaning purposes and undesirable for drinking and cooking.

IS HARD WATER THE CAUSE OF CORROSION IN PIPES AND TANKS?

The chemical agents which cause corrosion are not the same as those which make water hard. They can be present in hard or soft water. The chief corrosive elements in the usual water supply are free oxygen and carbon dioxide or carbonic acid gas. In iron pipe, rust is formed which will reduce the size of the opening and eventually clog it completely, while also forming pits and leaks. The zinc content of brass is dissolved, resulting in leaks and a reduction in the strength of the materials. Red brass, which has a low zinc content, and copper are considered most highly resistant to corrosion, but some of the copper may be dissolved in the water and cause green stains on white fixtures. All metals are subject to deterioration from water that contains corrosive agents, and which type of pipe is best for a particular house depends on the local water conditions, and the water-conditioning equipment that is included in the water supply lines.

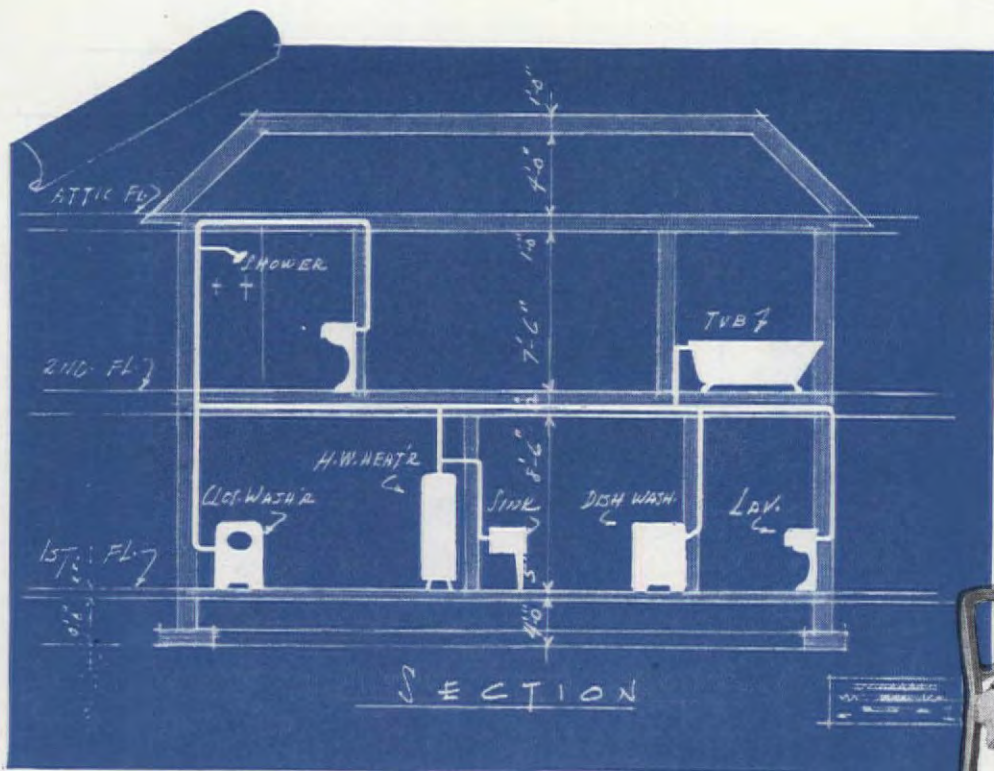
IN WHAT WAY CAN WATER BE CONDITIONED?

Addition of certain chemicals will soften water for cleaning and laundry use, but for good drinking and cooking water it is necessary to use water softening equipment that will precipitate or change the form of the undesirable salts. Water can also be run through neutralizing tanks to counteract the corrosive elements. Filter tanks will strain out foreign particles such as dirt, silt and iron that discolors the water and makes it taste bad.

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Courtesy General Electric

NO. 9 PLUMBING

This second group of plumbing questions shows importance of family needs and habits

WHAT ARE THE MEANS OF PROVIDING THE HOME HOT-WATER SUPPLY?

They can be divided into two basic groups, direct and indirect. The direct type includes those units which have the water heated from an original heat source. There are wood, coal, gas or oil units, some automatic, that heat the water for storage in a separate tank. Others are the instant heaters which require no tank and usually burn gas, and the complete units which are always automatic, consisting of a heating element and tank in one unit, and using gas, oil or electricity to provide the heat. The indirect types use the heat from hot water of the steam or hot-water boiler of home-heating system to warm domestic water supply, either with or without a separate storage tank. These basic items can be modified and supplemented to fit special needs.

HOW LARGE SHOULD HOT-WATER TANK BE?

Different answers to this question have been worked out and developed into simple rules, based on the size of the family, such as a 40 gallon unit for a family of four. Such rules are sometimes correct, but they can be very wrong.

Hot-water needs depend on family habits, as well as size, and can vary considerably for apparently similar situations. The tank size depends on the amount of hot water used and the unit speed of recovery.

WHAT FAMILY ACTIVITIES AFFECT THE HOT-WATER NEEDS?

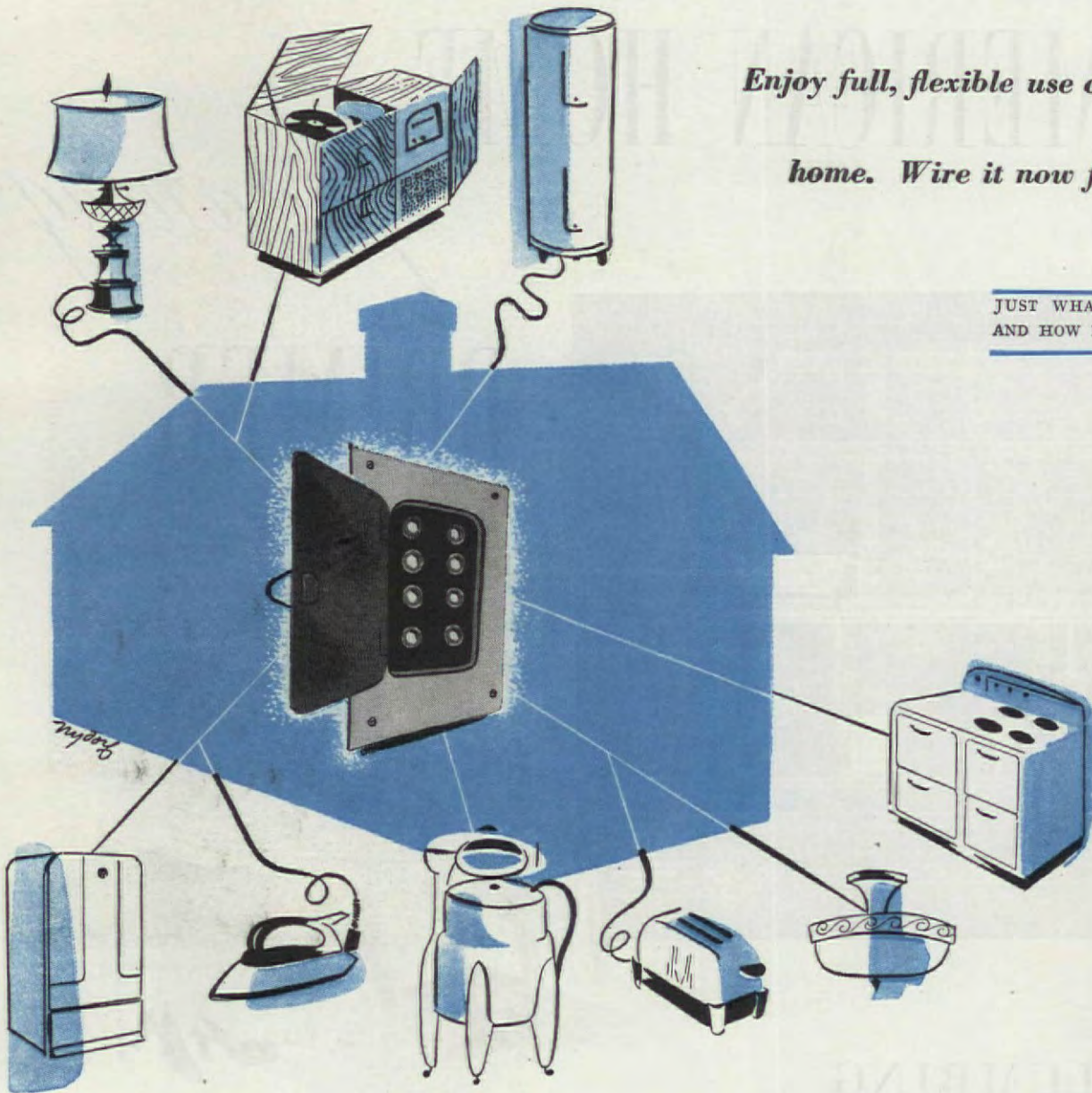
The number of baths, use of laundry service or home laundry equipment, dishwashing methods and equipment, and number of bathrooms, will all affect the amount of hot water used. Typical quantities of water (gallons) that may be drawn are approximately: washing machine 15 to 36, tub bath 12, shower 10, home laundry (not washing machine) 7 per person. These must be accurately checked for a proper study of each family's hot-water needs.

JUST WHAT IS THE RECOVERY RATE OF A WATER HEATER?

Most automatic hot-water units are rated to show how many gallons per hour can be heated to 60 degrees above the temperature at which the water enters

PLEASE TURN TO PAGE 155

Enjoy full, flexible use of electricity in your new home. Wire it now for present and future



JUST WHAT IS "ADEQUATE WIRING"
AND HOW IS IT ACHIEVED?

It is a home wiring system which provides enough outlets to permit use of a lamp or appliance anywhere you want, enough switches so that you don't have to grope in the dark to turn on lights, enough circuits to prevent overloading the system and blowing fuses, and wire large enough to assure fully efficient and economical operation of electrical equipment. In short, it is your one and only guarantee that your electrical servant is a good and inexpensive servant.

To achieve these results, it is first necessary to plan for enough outlets and switches to enable you to use lights and appliances and other electrical equipment where and as you want. Secondly, divide the load into enough branch circuits that are sufficiently restricted to avoid overloading the wire and fuses. Finally be sure that the "service entrance," which connects the house wiring system with the power company's supply lines, is large enough.

HOW MANY OUTLETS ARE NEEDED?

Three types of outlets are required in the adequately wired house: lighting outlets—those to which lighting fixtures are directly connected; convenience outlets for any movable lamp or appliance; and special purpose outlets.

Needless to say, some rooms require more outlets than others. You need light outlets only where you intend to install fixtures, and special purpose outlets where you have special needs to fulfill. But when it comes to convenience outlets, see to it there are plenty.

A good rule is to install twin convenience outlets along the floor line so that no point in any usable wall space, unbroken by a doorway, is more than six feet from an outlet. There should be one additional outlet in every usable wall space at least three feet long. All these should be located near the ends of wall spaces, no more than 18 inches above the floor except for special reasons.

Convenience outlets are available in strips which can be located all around a room, with receptacles at frequent intervals. These can be used in new homes or easily installed in

PLEASE TURN TO PAGE 157

AMERICAN HOME

planning PRIMER

NO. 10 Electric Wiring

KENNETH DUNCAN

ARE THERE ANY MEANS BY WHICH A HOME MAY BE BUILT NOW WITHOUT PAYING TOO HIGH A BONUS IN THE FORM OF COSTS THAT ARE ADMITTEDLY AT AN ALL-TIME HIGH?

The first chance to save is right back in the planning stage. It has been said again and again that economy of construction begins on the architect's drafting board. Some types of houses cost more than others for a comparable amount of living accommodations.

WHAT IS THE CHEAPEST TYPE OF DESIGN TO BUILD?

The more nearly a house approaches a perfect square the lower is its cost. As a house is pulled out lengthways its wall area increases. The trouble is that a perfectly square house often lacks the charm of many other designs. For this reason some compromise between cost and style is usually sought. Generally a six-room, two-story house is cheaper to build than a rambling house with six rooms on one floor. The "three over three" is probably the most economical six-room house. It most nearly approximates a square, requiring least excavation, foundation walls, and roof. It is easier to heat, and the heating and plumbing systems cost less.

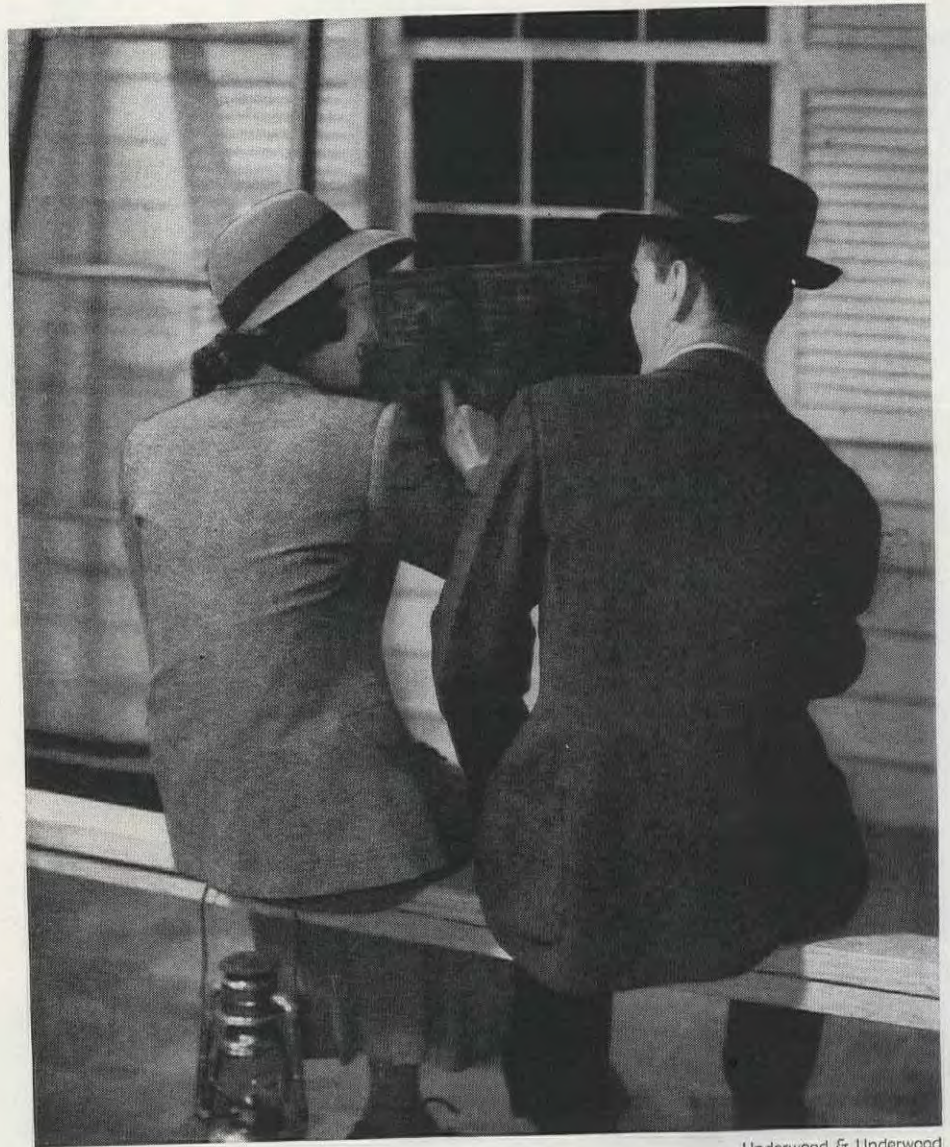
IS THERE AN ADVANTAGE IN THE EXPANDABLE HOUSE ABOUT WHICH SO MUCH HAS BEEN WRITTEN IN RECENT YEARS?

Definitely yes. In the past far more people built homes that turned out to be too large rather than too small. The expandable house is *pre-planned* for one or more future additions if the need for more space actually develops, and in the meantime it provides adequate living accommodations. Pre-planning of the possible additions is important. Otherwise additions may result in wasted space, costly changes in plumbing and an unattractive exterior. The basic idea is to build as little as possible while costs are high, and later, when costs may be lower, to add rooms that were pre-designed to fit attractively and economically onto the initial structure.

IS THERE A SUBSTANTIAL SAVING IN THE ELIMINATION OF THE CONVENTIONAL CELLAR AND CAN A BASEMENTLESS HOUSE BE MADE WARM AND DRY?

To answer the easy part of the question first, a house without a basement will be perfectly warm and dry if properly constructed. As to the saving, much controversy has been waged. In those warm areas where footings do not have to be carried down 3 or 4 feet below the frost line, there is undoubtedly a saving. In colder areas there may be a saving if either rock excavation or a bad sub-surface water condition is encountered. In studies of this question, the usual essential functions of the basement are added to the first floor in new areas provided for the heating plant, laundry trays and storage space. Including this addition to the main plan, a one-story house, in most cases, will effect savings when the basement is eliminated. Two-story houses do not effect

PLEASE TURN TO PAGE 159



Underwood & Underwood

CONCLUDING THE

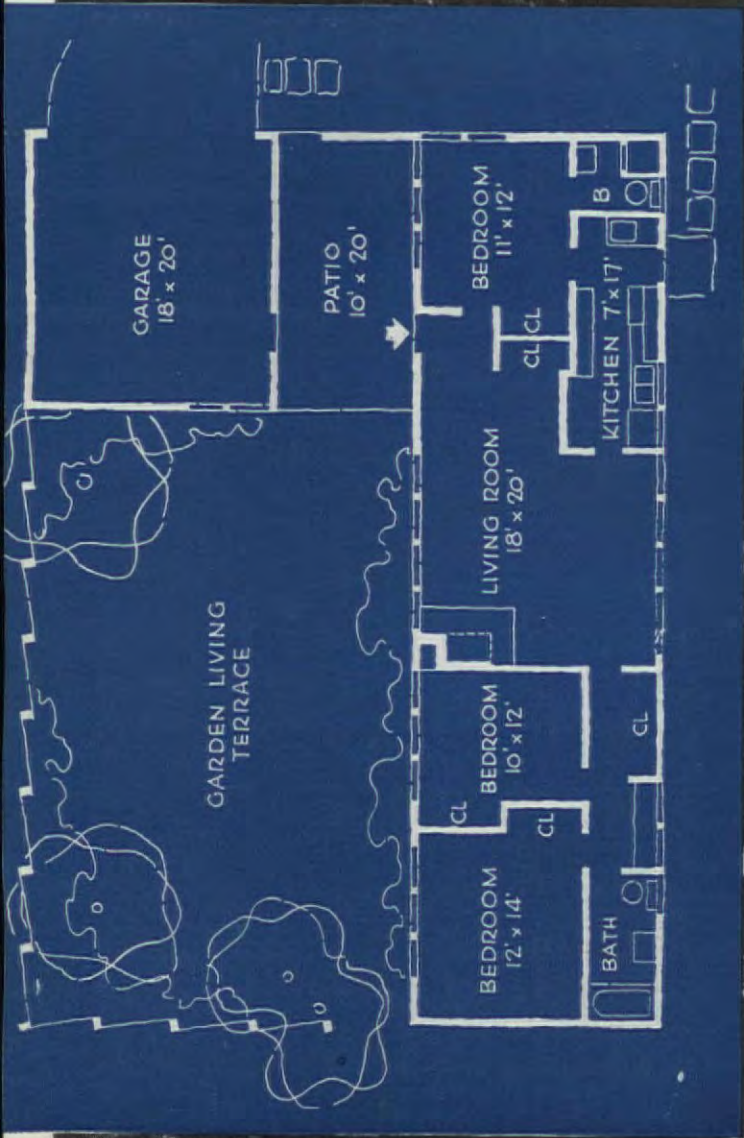
AMERICAN HOME

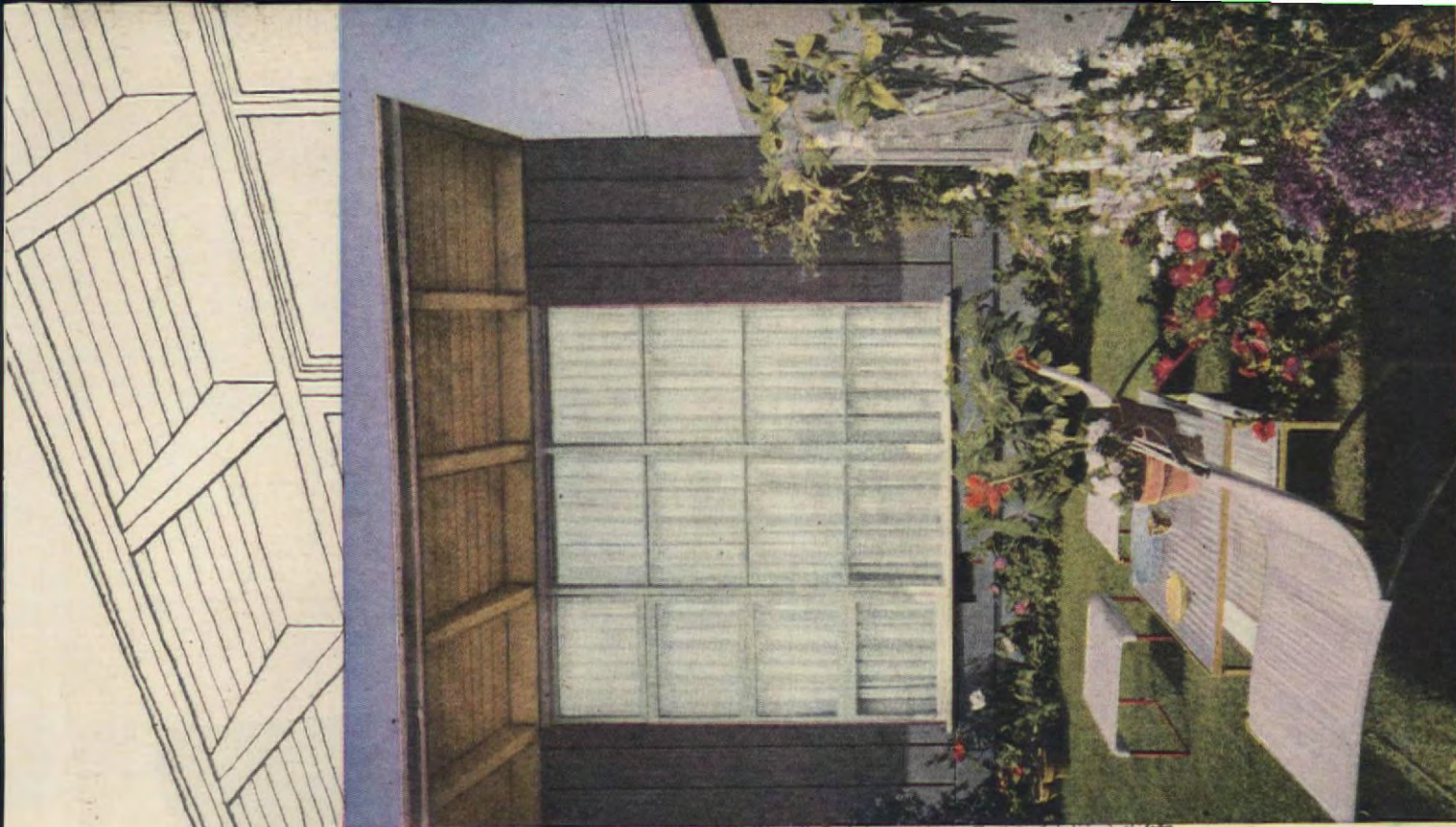
planning

PRIMER

NO. II

Construction Economies





Kenneth Lind, architect
Photographs by
Herbert Matter, Julius Shulman



This is the home of Mr. and Mrs. Melchor Ferrer
in Pacific Palisades, Los Angeles, California



*By turning its back to the wind
house-by-the-sea enjoys sheltered garden.
Safe, too, from sun and glare*

ETHEL McCALL HEAD

The lot was long and narrow, quite ordinary except for the steep incline at its rear. Perched high on a hilltop, it was the butt of strong prevailing sea breezes, a factor which, if uncontrolled, might cause future inhabitants acute discomfort. That's why Kenneth Lind, the architect, decided on placing the house lengthwise, with only the kitchen, bath, and service rooms, with their high, small windows, exposed to the west. He had planned and built the house for an imaginary owner and, for this reason, had treated the problem from an idealistic point of view. By locating the one-room-wide house almost on the property line, space was made for a garden sheltered from the annoying wind and enclosed on two sides by a decorative redwood fence. To gain extra privacy from the street, the garage was placed in front, a short distance from the house, and was connected by a roofed breezeway and the fence. This area has been paved with flagstone and acts as an entryway and terrace. To add unity to the street elevation, the horizontal lines of the terrace fence were repeated in the double garage doors. Redwood battens, running vertically and horizontally, have been used on the exterior walls, given a coat of rubbed white-



wash which gives the walls a weathered driftwood finish. Only the bright-red entrance door was used as color accent. The east wall of the large living-dining room is composed of large, square-paned glass running from floor to exposed sloping ceiling. Thus, one gets an uninterrupted view of the attractive garden beyond. Mr. Lind, in common with present-day modern architects, is forever experimenting with new methods of construction. This all-wood house was erected by using a modular system of semiprefabrication. Though plaster was used in the bedrooms, plywood constitutes the principal interior finish; this, in many cases, was left natural and given a protective surfacing for easy cleaning. Actually, the house is one-room wide, with room following room in railway fashion. One room, facing the street, is used as a many-purpose area for either guest, study, or maid. A narrow kitchen has its own outside entrance directly from the street. Interior walls of living room are a combination driftwood

gray, white, and terra cotta. This latter tone, used as background for a checked stud design on the fireplace walls, is ideal for showing off much-prized modern ceramics and pottery. Floors in most rooms are of oak, though in the living room and bedrooms this has been covered with wall-to-wall straw matting.

Though the house was not planned especially for its present owners, Mr. and Mrs. Melchor Ferrer, they find that it is exactly right for their way of living. Because of their two small children they are especially delighted with the enclosed garden so necessary for that all-important feature—outdoor living—part and parcel of every self-respecting California home. Mr. Ferrer, after a strenuous day as director at the David O. Selznick studio, finds the combination covered terrace plus garden a satisfying medium for entertaining. The staggered plywood fence acts as protective barrier against the steeply graded rear part of the lot and adds warm color background for border planting.

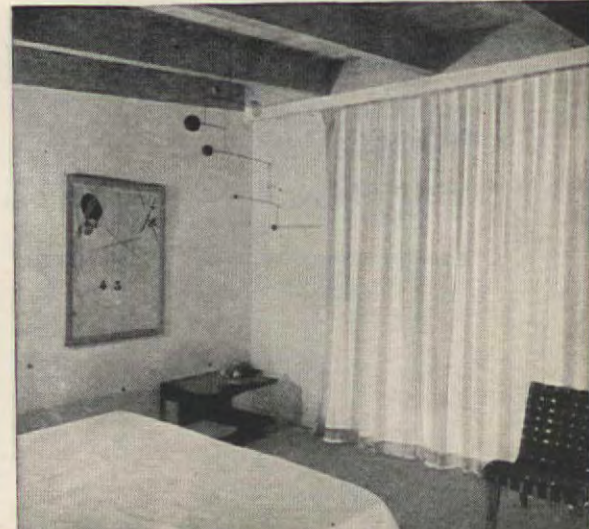
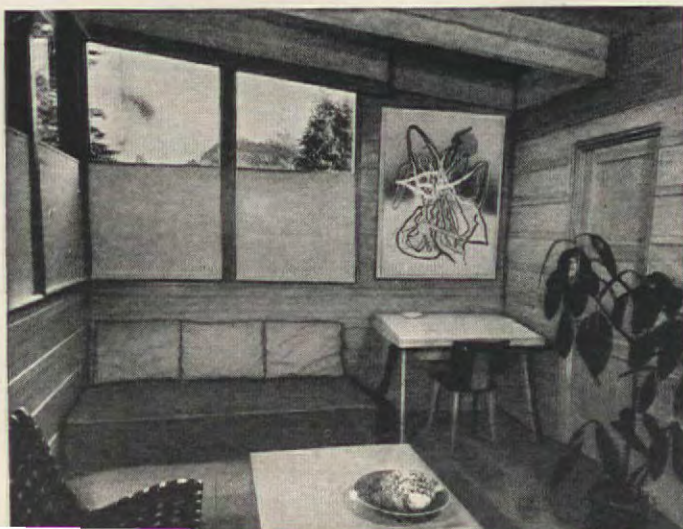
Interiors: Mercedes Matter



● Large window wall overlooks garden, garage, covered terrace. Walls in living-dining room are of driftwood-gray plywood with horizontal battens

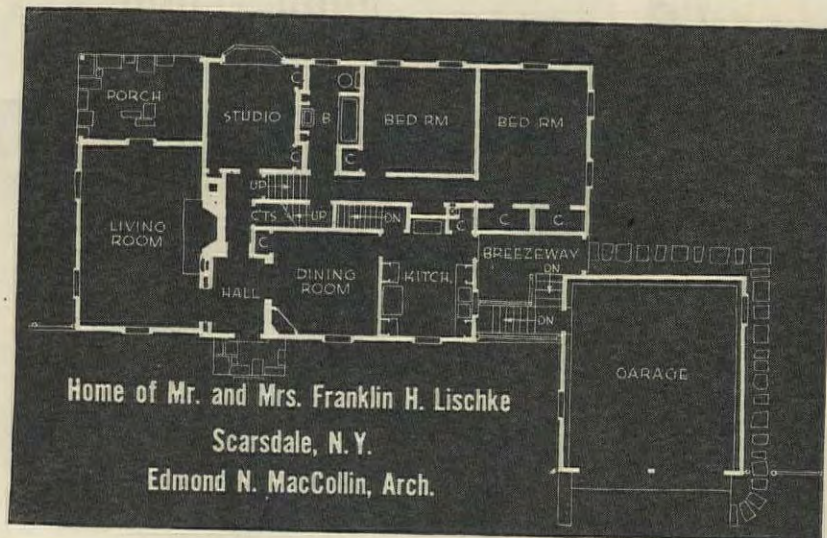
● Decoration by Mercedes Matter has monastic dignity and simplicity. Study, with gray walls and yellow-and-white accents, often substitutes as guest room

● Graceful metal mobile hanging from exposed rafters of master bedroom casts everchanging shadows on walls. Draperies are white with green edging





*Just off a busy parkway
and within half an hour's
drive to New York, here's
a commuter's dream come true*



It's just a half hour's drive from New York City to the charming red and white home of Mr. and Mrs. Franklin H. Lischke, yet upon first sight, one seems miraculously transported to rural New England. The hustle and bustle of the metropolis are left far behind. Here is quiet beauty combined with a warm nostalgic appeal so often associated with our best Early American houses. This is a nation's tradition, intelligently keyed to modern tempo and living.

Homes like this don't just happen, a fact apparent when one studies each detail—the blending of roof lines, judicious use of color and, most of all, the exquisite moldings that even Samuel MacIntyre might well envy. No, this is a house built and planned by owners whose taste and foresight are everywhere apparent. For three years, the Lischkes pored over house plans, selecting and discarding until their future home took the exact form they wanted. An American farmhouse was their choice and so Edmond N. MacCollin, an architect well versed in traditional design was selected. Mr. and Mrs. Lischke were particularly fortunate in finding exactly the right lot for their house. Just off the main highway yet completely hidden from traffic, the picturesquely wooded plot is 100 by 165 feet, ample setting for a building measuring 80 feet long. A low garage topped by an authentic cupola and connected to the main building by covered breezeway, carries the general roof lines sympathetically into the gently curving contours of the land, giving the house a feeling of really belonging to the land.

Narrow siding, covering all walls, has been painted barn red and is crisply accented with white trim and



Farmhouse in the Suburbs

entrance door. This doorway with its full-length shutters and flanking carriage lamp is really a gem of Early American design. The split rail fence, used both to extend the general horizontal feeling of the buildings and to separate the driveway from lawn adds just the right dash of quaintness to the entire composition. There's an ample drying yard behind the garage. The rear of the plot has been informally landscaped for outdoor living. There are plenty of shade trees here to insure comfortable coolness during hot summer barbecues.

A definite departure from the ac-

cepted traditional plan has been achieved by placing the entrance door off center. This deviation not only adds a certain picturesque quality to the front elevation but helps tremendously in adding variety to the usual central hall pattern. The hall is not overlarge, but a visitor is never aware of any cramped feeling upon entering. In fact, it does its duty efficiently, leading directly into all important rooms. Stature has been gained by the clever staggering of living-and-dining-room doors, a device which eliminates formal balance. Another narrow hall leads to a small

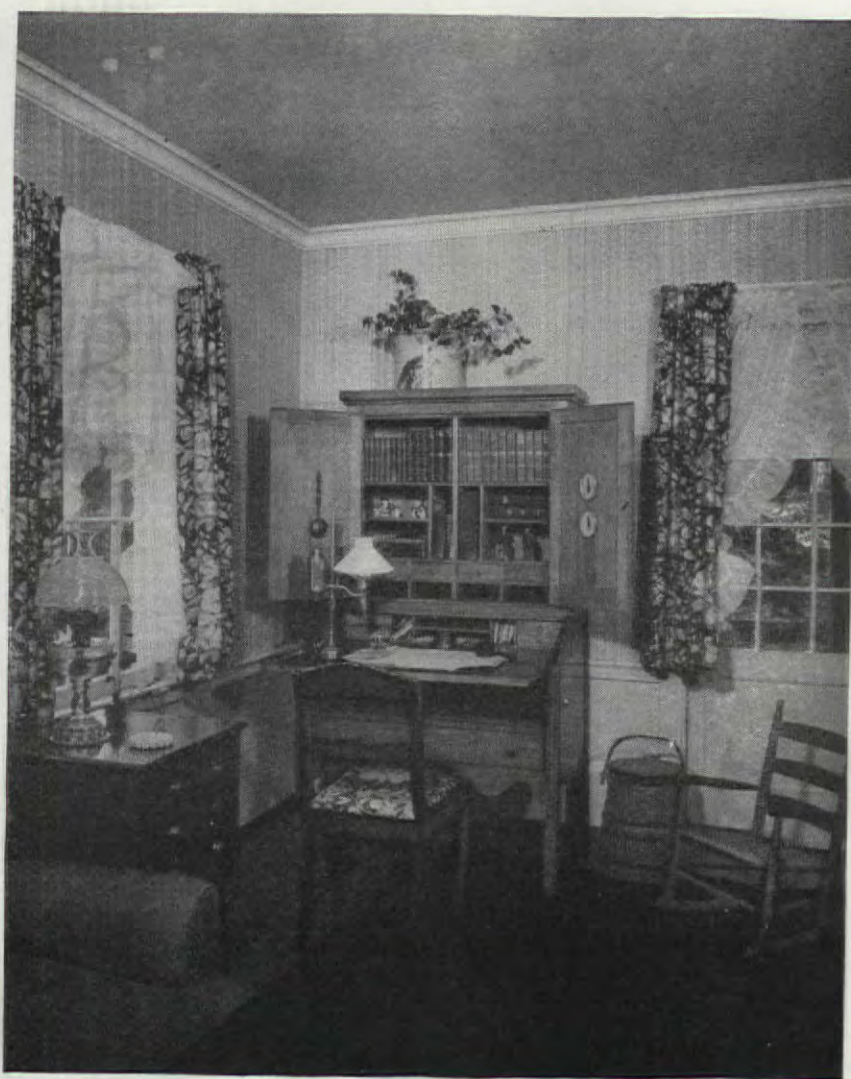
The Franklin H. Lischkes ingeniously

combine the privacy of rural living

with the conveniences of a bustling community

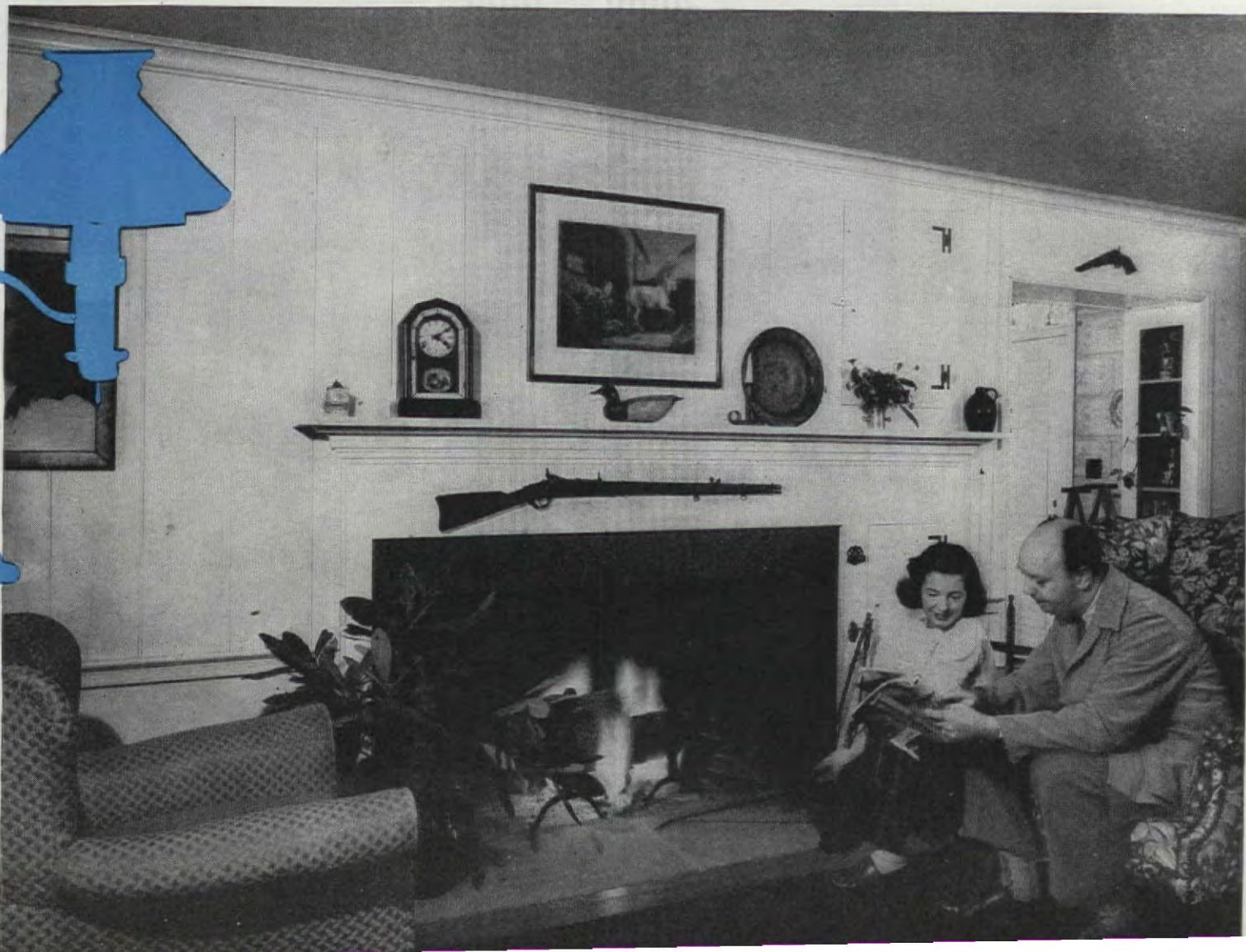


Spacious opening into dining room from the wide hallway gives illusion of space and feeling of gracious hospitality to a small, compact room



Open secretary and other choice pieces of furniture form a dignified accent to one corner of the living room. Lamps add authentic note

Mr. and Mrs. Lischke enjoy the warmth and the charm of a sparkling fire in the attractive living room of their dream house



Photographs by
P. A. Dearborn

den and to the second floor stairway. The kitchen is directly behind the square dining room, and is well ventilated on two exposures.

A short flight of stairs runs up to the bedroom floor. Sleeping quarters on the rear are well planned for wall space and have full ceilings. Rooms on the front, with their sloping ceilings and half windows, are used primarily for storage, though one is often drafted into use as extra guest

space. Making the house low in front helps greatly in keeping it "down to earth." Full height windows here would have necessitated raising the roof lines with resulting accentuated appearance. Since the ground slopes up toward the house, this exaggeration of height would have been unfortunate. The Lischkes were wise in placing important second floor rooms on the rear. The half flight of stairs also gains better headroom and light

into the rear basement without resorting to expensive excavation.

Since Mr. Lischke is a commercial artist and his wife is a student of interior decorating, we were not surprised to find interiors that were at the same time colorful, homelike and completely in the Early American tradition. A small entrance hall efficiently opens into living room, dining room and studio. The former room is well proportioned and lighted

poses. It can either be the intimate background for a small gathering of friends, a game of cards, quiet reading or, when necessary, working quarters for Mr. Lischke. A documentary paper covers these walls and the special feature of the room is the large bay window with shelves of clear glass for displaying odd bits of china and colored glass. Built-in bookshelves are also a feature here. The furniture is comfortable and efficient

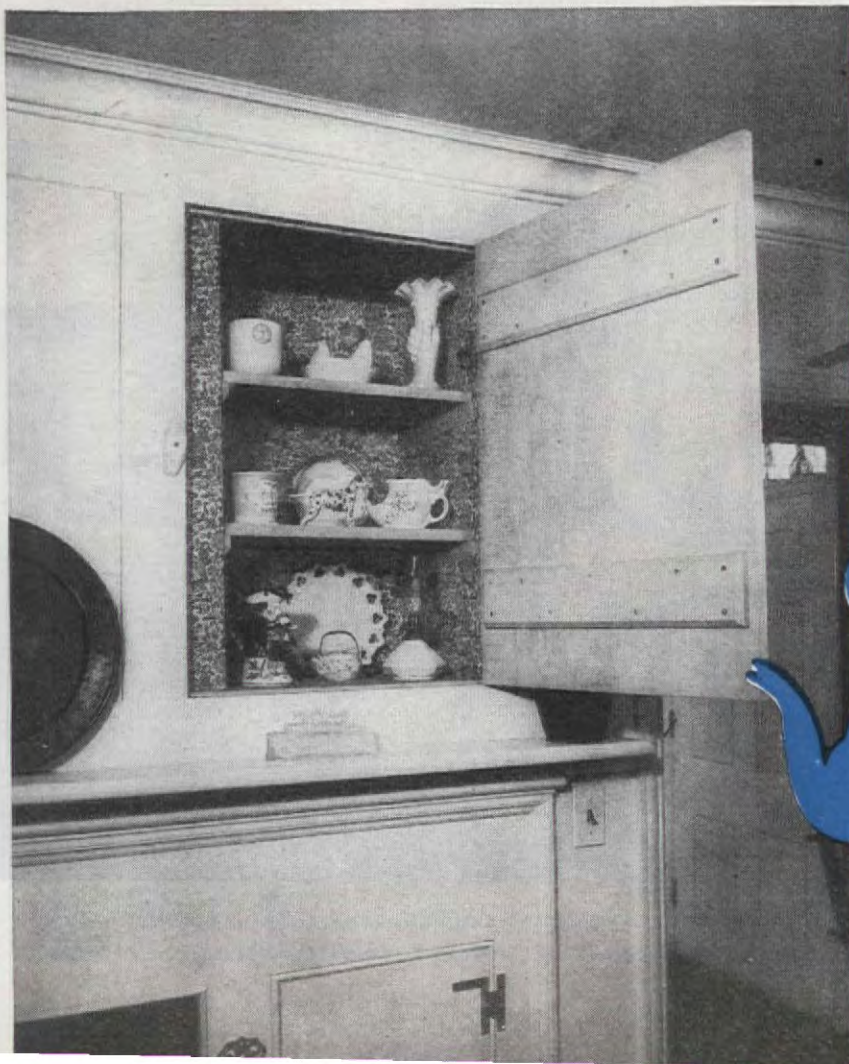


Pleasant bay window with glass collection in studio overlooks rear garden



Here's proof that an efficient kitchen can also have traditional charm

Favorite pieces of china and pottery are shown on the shelves of the so-called "Parson's Cupboard" that has authentic wallpaper lining



on three sides. Its focal point is the large fireplace set in wall of white painted boards running vertically above the wainscot. At one end of this panelling is the parson's cupboard, a feature found in many of our earliest homes. This is lined with colorful wallpaper and displays Mrs. Lischke's collection of antique glass and pottery. The other three walls of the living room are covered in a wallpaper that is an exact reproduction of an original Colonial pattern. The dado and woodwork are painted white matching the fireplace wall. The room is furnished in originals and fine seventeenth century furniture plus a generous number of modern, well-upholstered chairs for informal lounging. The commodious wing chair is covered in the same gay floral cretonne as that used for draperies. This fabric is repeated again in the seat of the little desk chair, thus tying the room together nicely. Perky white ruffled glass curtains are used throughout the Lischke house.

A half-glazed door leads to the screened porch overlooking the informal rear garden. Between the living room and entrance hall, flanking both sides of the opening, are twin sets of open shelves for either books or the display of prized ornaments. The Lischkes find this feature an attractive introduction to the largest room in their house.

The studio, directly opposite the main entrance, is used for several pur-

poses for either leisure or hard work.

The small dining room, just across the hall from the living room, boasts a rare corner cupboard in which Mrs. Lischke houses her treasured collection of antique china and glass. Patterned wallpaper above a dado of white forms a pleasing background for the simple lines of the well-chosen provincial furniture.

It is not easy to achieve the atmosphere of a traditional kitchen with today's streamlined equipment, but the Lischkes' kitchen shows that it can be done as you can see in the picture at top of this page. The walls are finished in stained pine except for the window wall which is covered in a quaint paper—and the brick chimney in back of the very up-to-date white enameled stove. Attached to this brick chimney is an old-fashioned copper hood under which is a ventilating fan. The modern electric refrigerator is recessed in a pine niche and a metal resembling pewter covers the cabinet tops and is used for the sink. A small table and two chairs in front of the window that looks out over the beautiful countryside is a very special place used for eating breakfast and snacks.

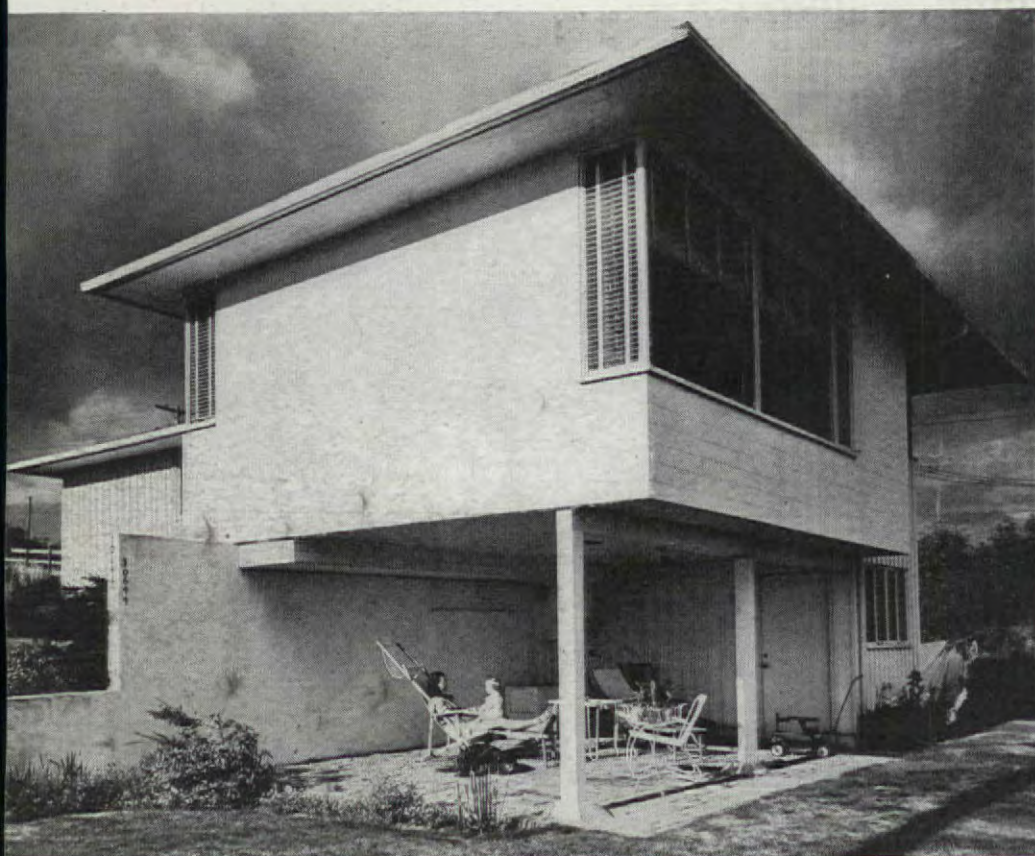
In the master bedroom, a small, all-over floral paper is used on the walls. White ruffled curtains hang at the windows and form the canopy over the maple four-posters. The spreads are white ones dyed green to match the green in the wallpaper.

Washington...

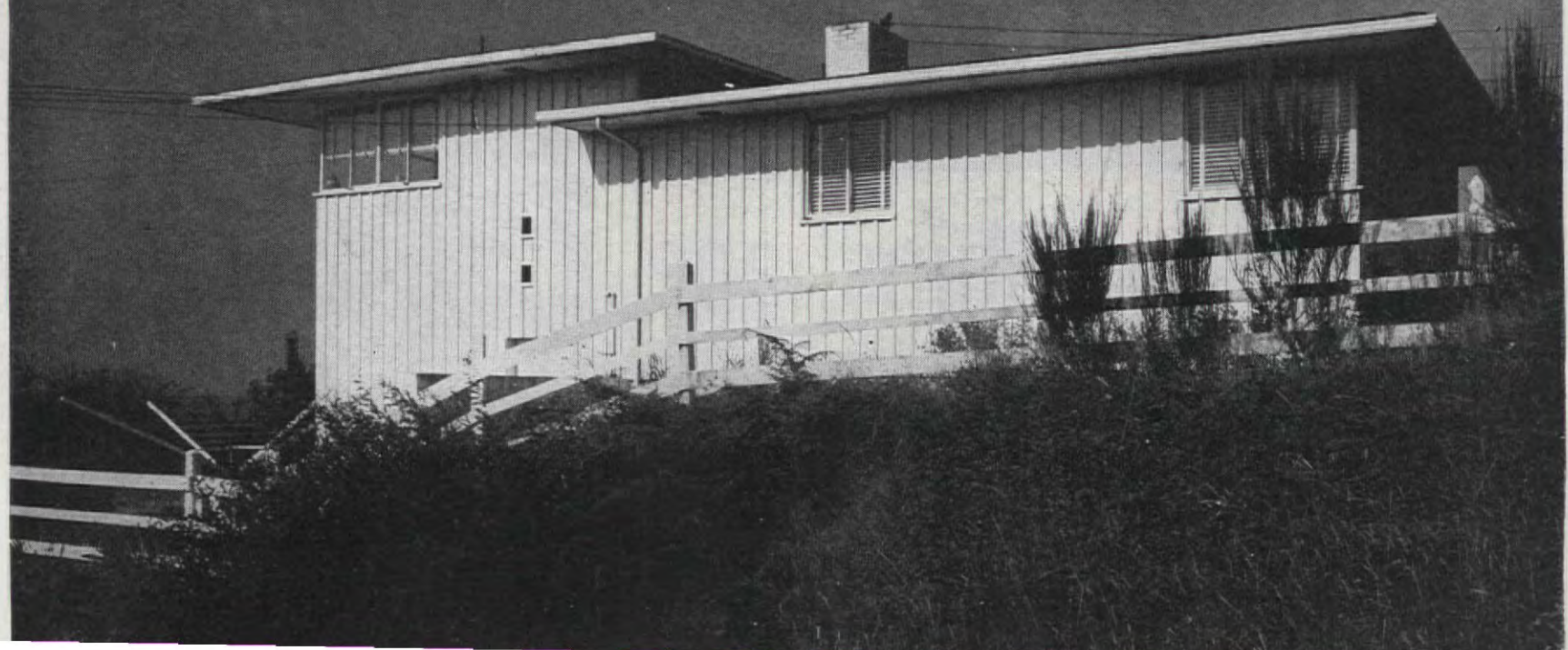
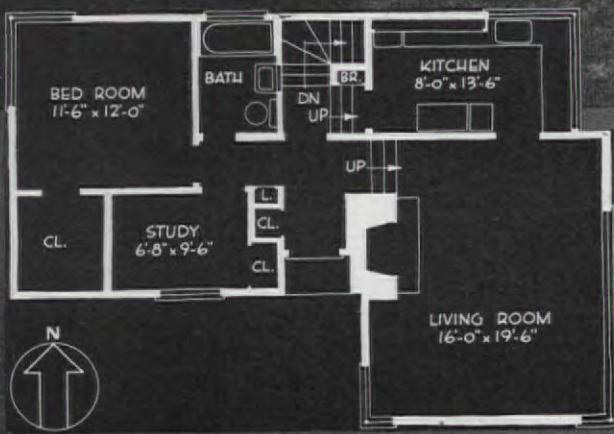
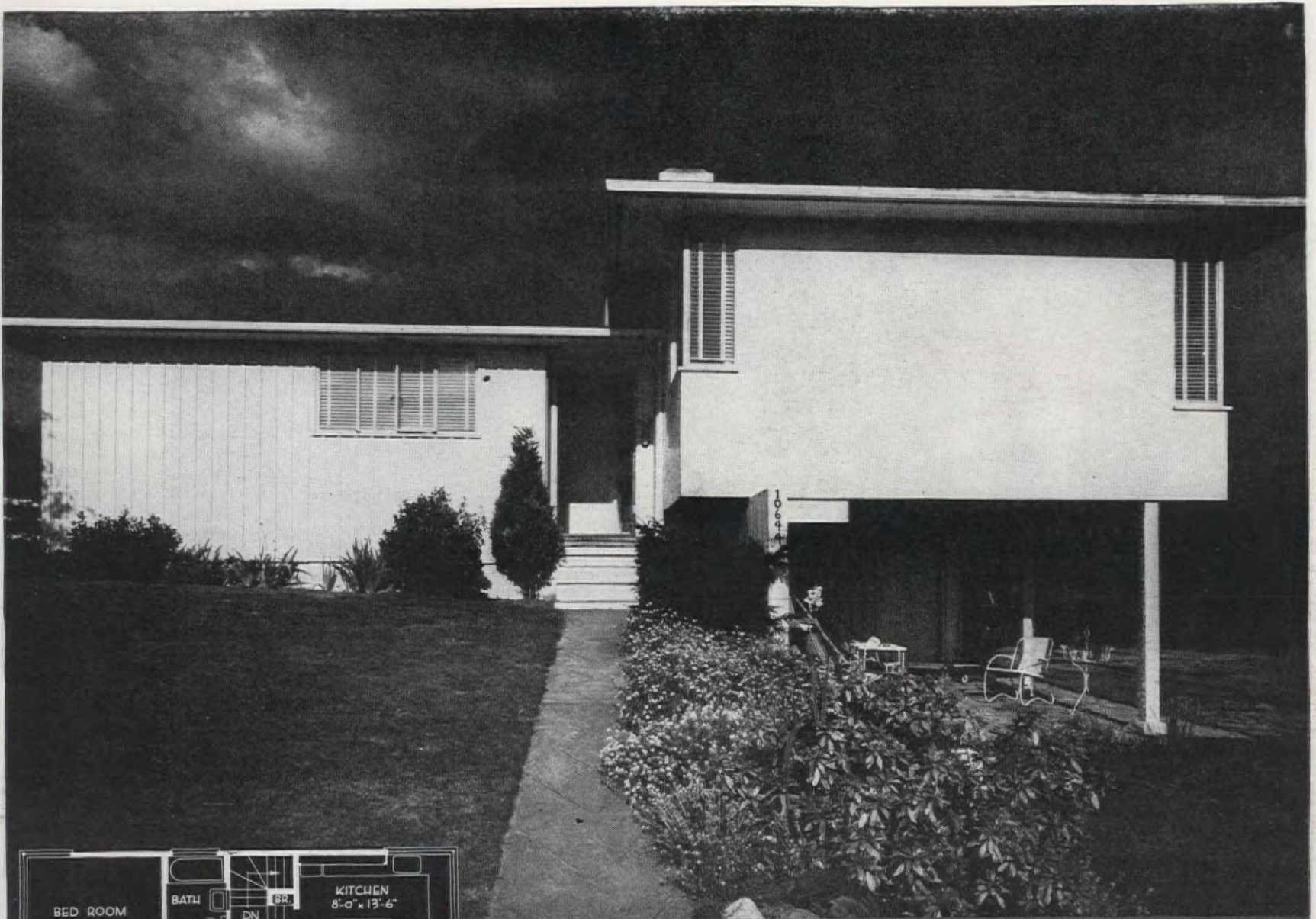
A PARTICULARLY interesting lot, high above Puget Sound, with a broad panorama of salt water, islands, and mountains in the distance, really determined the design of this small, modern house. The architect, John R. Sproule, quick to take advantage of such an exciting setting, elevated the living room and pushed it out beyond the rest of the house, where its large windows command an unobstructed view of the surrounding grandeur. The rest of the house, which consists of bedrooms and bath, was placed at the rear for greater quiet. The kitchen, at living-room level, also takes advantage of the view. The exterior is a pleasant contrast between vertical board-and-batten and horizontal siding, all painted white, even to trim and cornice. The only touch of color on the outside is the red composition roof. Below the projecting living room, a sheltered terrace not only provides welcome shade, but is ideal for rainy day entertaining.

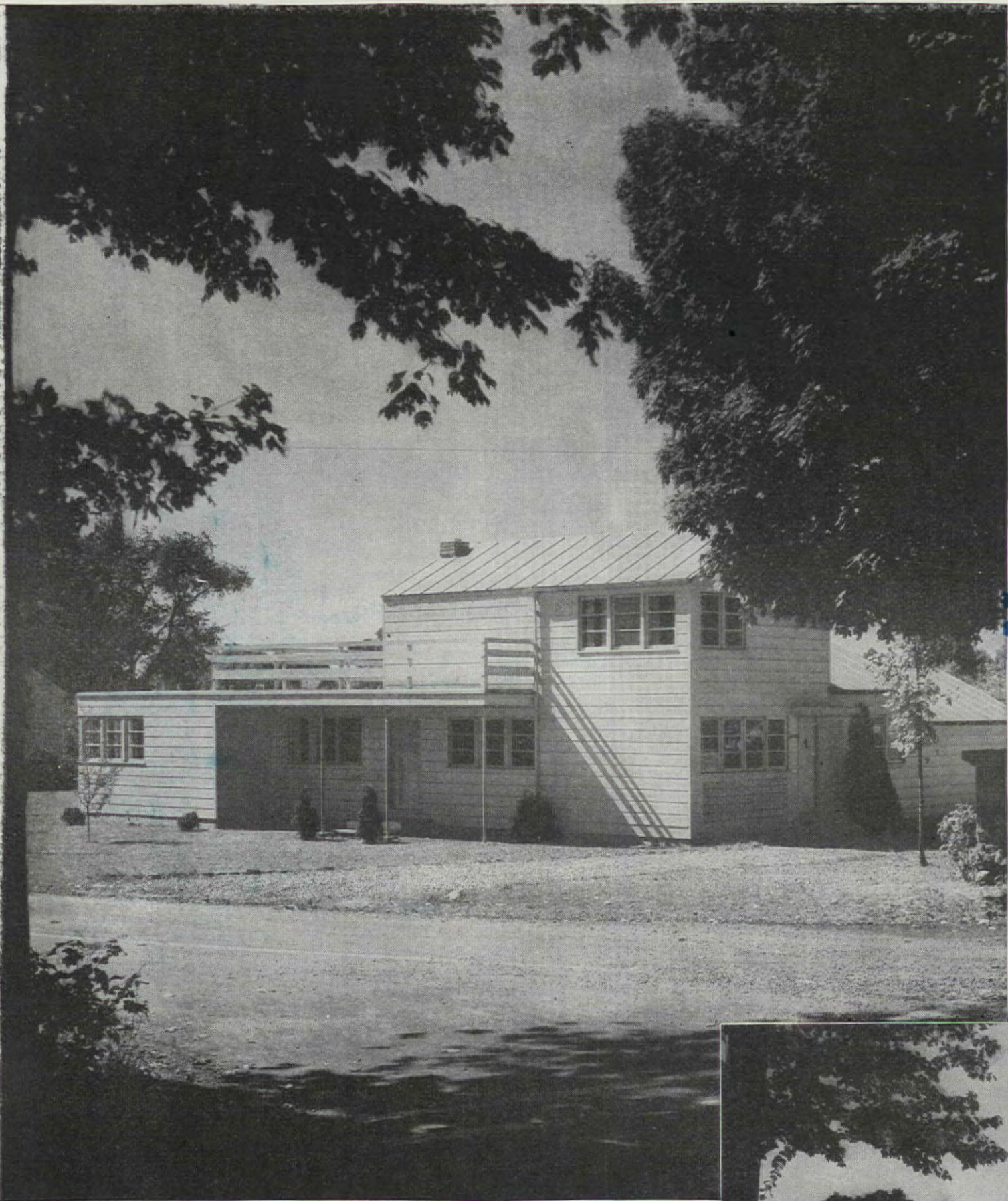
All interiors follow the simple, direct design of the outside. Walls are plastered and floors throughout are hardwood. In the living room, green and white are predominating colors against cream-colored walls, with touches of red and yellow in the draperies for contrast. The smaller bedroom is used as a nursery for tiny daughter, Lisa. The master bedroom has walls of gray cactus green with upholstery accents in chartreuse.

Photographs by P. A. Dearborn



Dramatic view of Puget Sound with islands and mountains in distance seen through living-room windows. Home of Mr. and Mrs. Ralph Shaffer, Seattle—John R. Sproule, architect



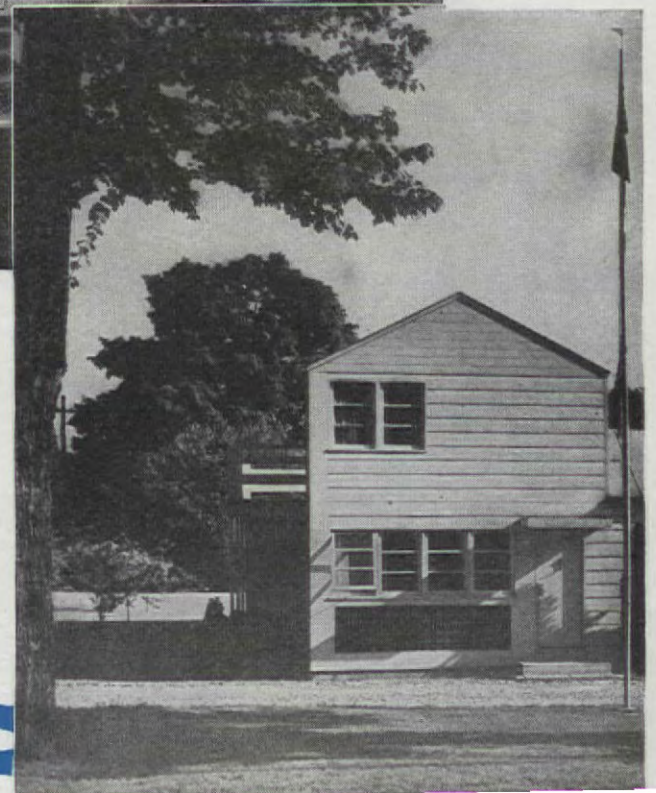


Trim and Shipshape

is the Noroton, Connecticut

Home of Naval Architect John D. Atkin

William W. Atkin



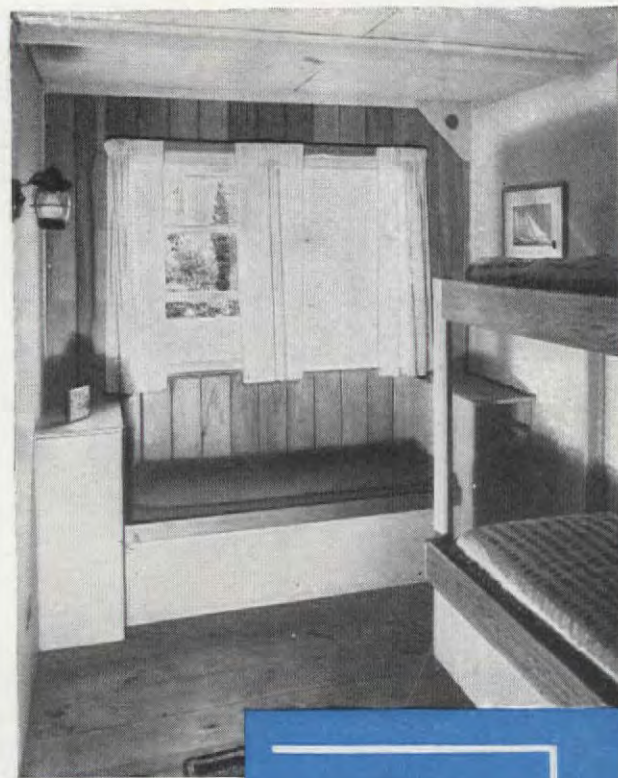
A MODERN house for the nautical-minded is this Connecticut naval architect's home. An unusual combination that results in a comfortable home for living and a cheerful place in which to work. The north side of the house is devoted to the study-drafting room and experimental shop which, until equipped, was used as a storeroom. The white walls, bright red floor and the mellow pine workbench in the shop provide an attractive setting for the more serious work of making test models of yacht hulls as well as for work on Mr. Atkin's hobby, model railroading. The large room on the second floor (not shown on the plans) was especially designed to house the "O" gauge railway system. A special entrance into the study leaves the rest of the house free for family activities.

Front door enters the U-shaped living room which is large enough for entertaining friends and for comfortable and informal living. The living room is finished in yellow painted plywood and natural knotty pine; ceilings are of composition board painted soft blue. The master bedroom has a built-in bureau flanked by closets. A tiny 7'4" by 11' bedroom has built-in cabinets all along the south wall and double-decker bunks are placed on the west wall.

Space-saving, built-in furniture is also used in the living room and the ship's saloon. A comfortable seat, with cushions of foam rubber covered with durable dark red duck material, runs along the west wall of the living room. A similar seat is built around two sides of the unique sea-fixed, white pine table in the ship's saloon. No one need sit with a leg in his lap at this spacious table. Walls in the ship's saloon are of plywood painted soft gray.

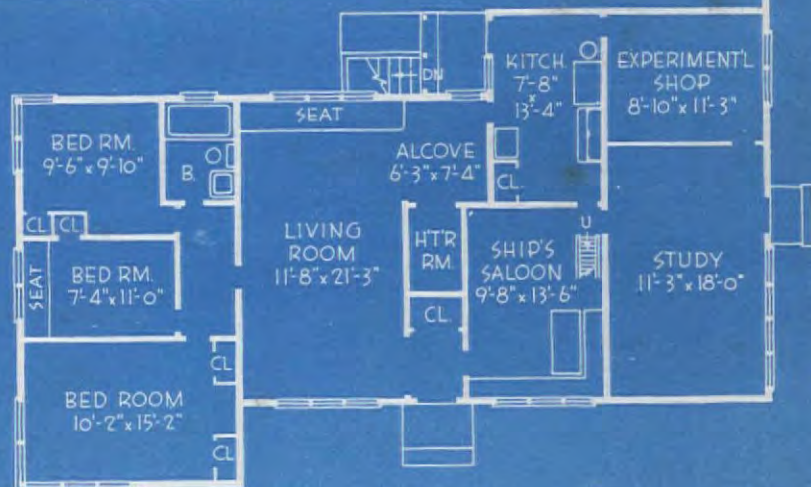
A two-car garage is attached to the west side of the house. Heat is supplied by a hot-air furnace in a partial basement beneath the living room. The house is insulated with reflective type aluminum foil material.

The trim, horizontal lines of the exterior are accentuated by the use of 10" novelty siding. Vertical lines, for balance, are supplied by the delicate pipe supports under sun deck and by vertical batten roof. The many windows are carefully placed to take full advantage of the sun and prevailing breezes. Window treatment is one example of how simplicity in design can reduce building costs. No unnecessary mouldings or trim on these windows; even dust-catching sills have been eliminated. Similar savings were made throughout the house by the honest use of materials.

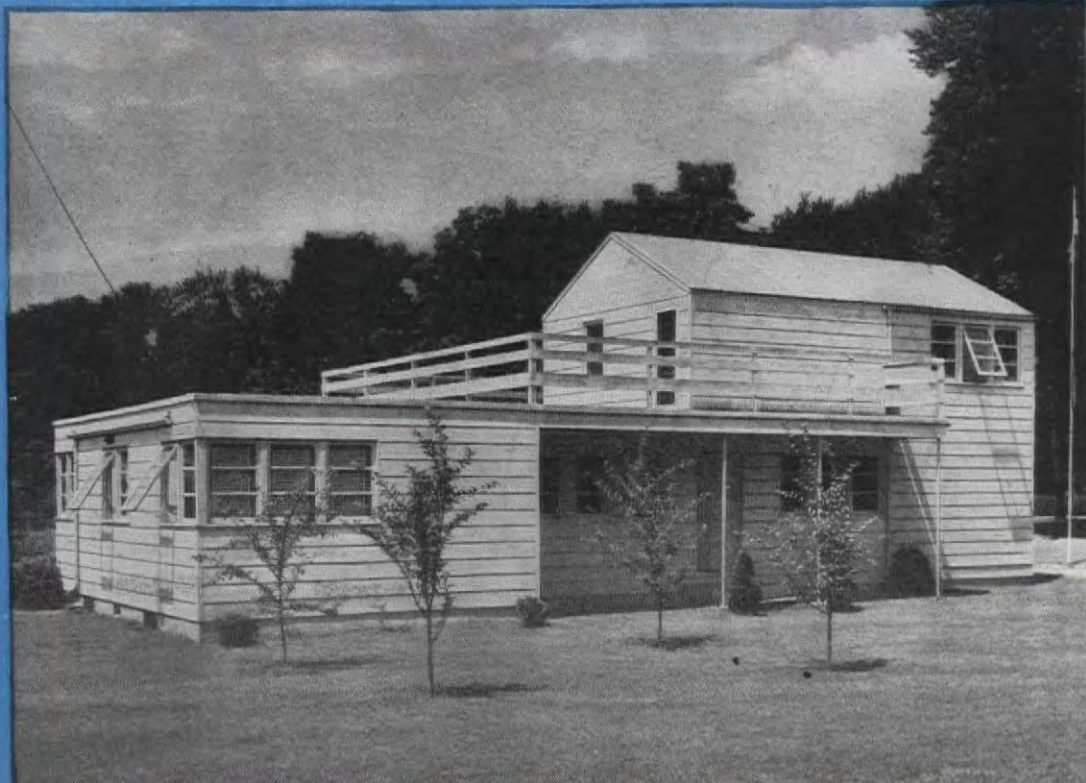


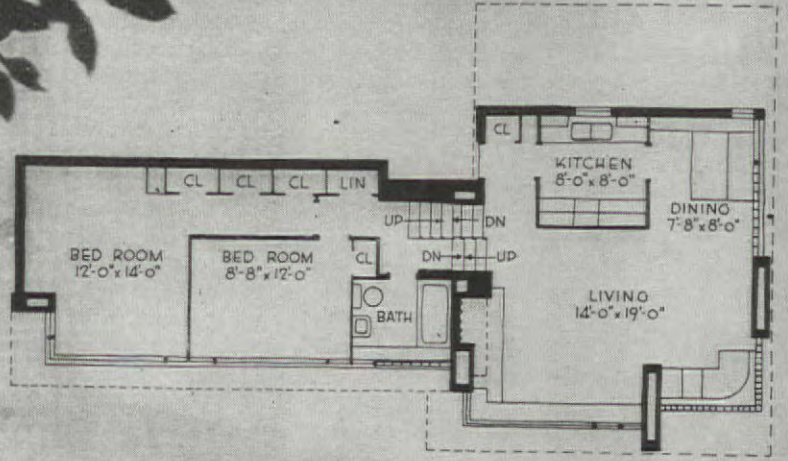
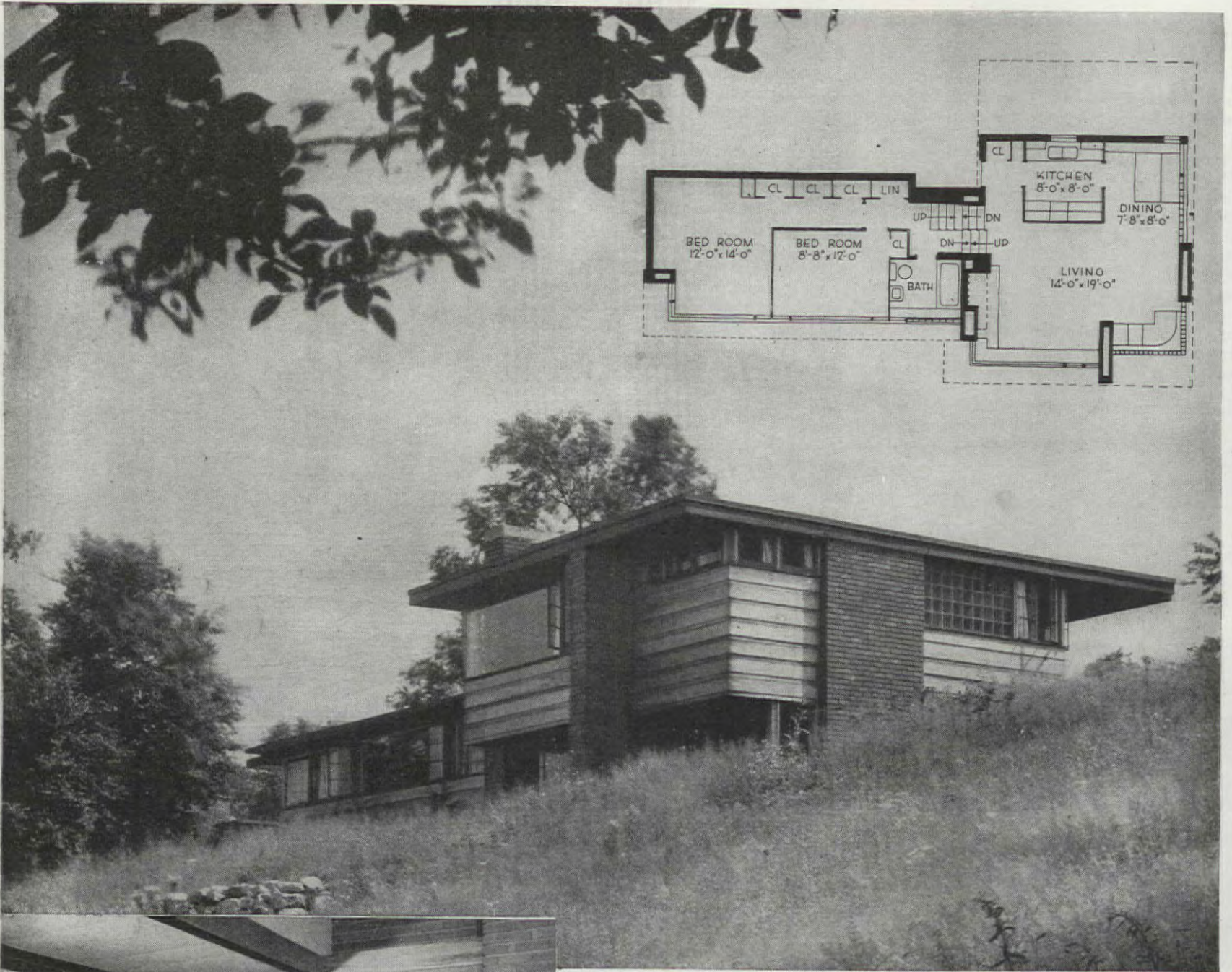
Rodney McKay Morgan

GARAGE
19'-6" x 19'-6"



Designed by Atkin Naval Architecture





Photographs by author

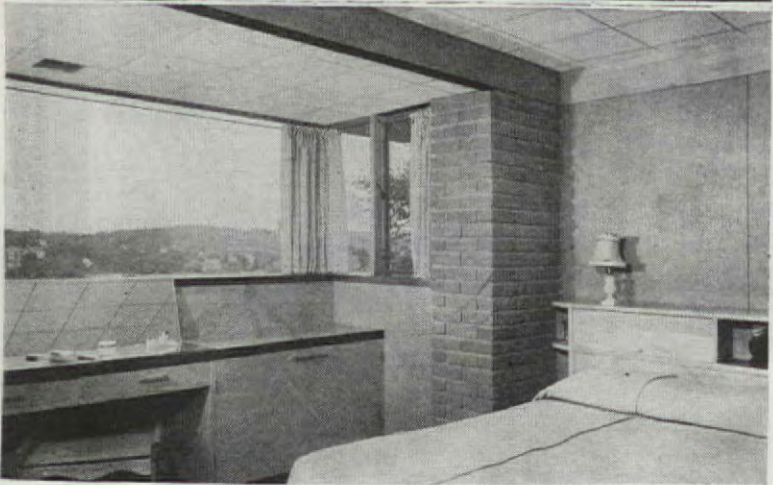
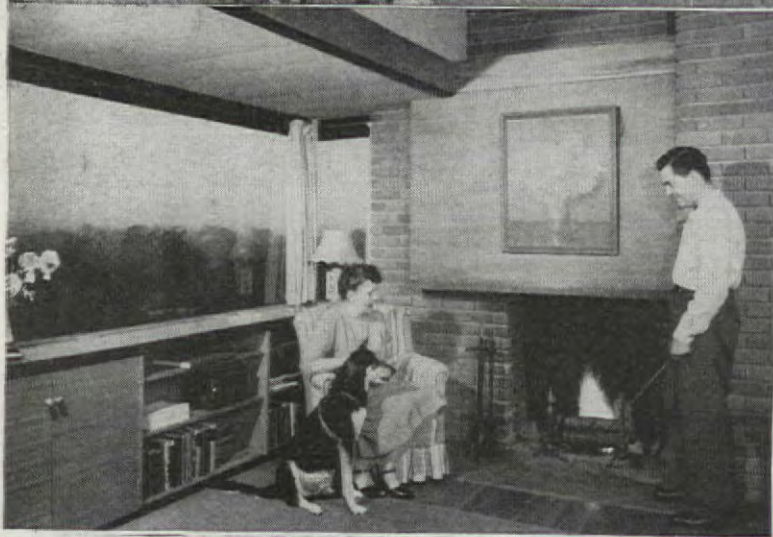
THEY TRIED MODERN

...AND LIKE IT

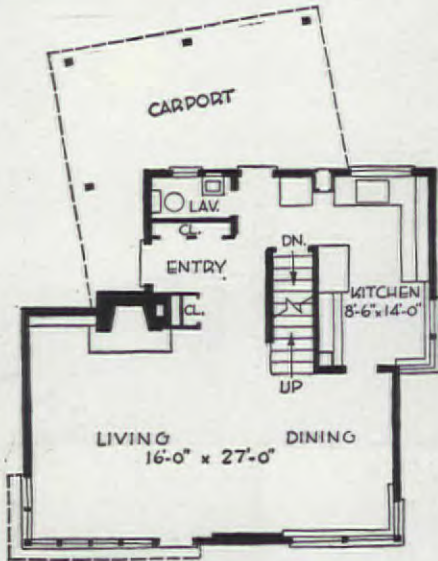
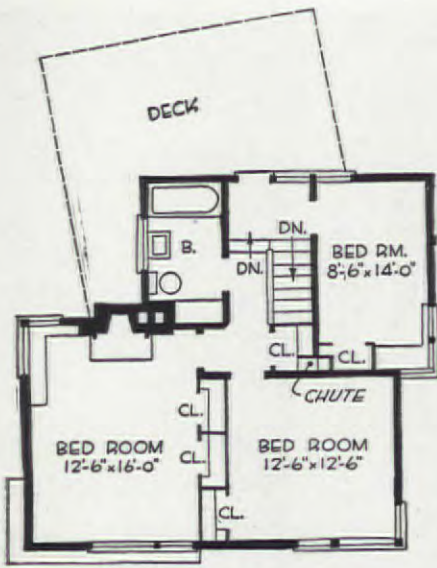
P. A. Dearborn

WHEN war forced Mr. and Mrs. Fred Arndt to leave their Los Angeles home for unfamiliar New London, Connecticut, they never expected to find another hillside, two-story house with bedrooms on the lower floor. This small modern house on Quaker Hill proved how wrong they were. At first the Arndts were a bit hesitant about owning a house of modern design. They had always liked traditional houses, but the magnificent view of rolling pasture land and meadows won them over. Though small and compact, there's plenty of room in the living room where the focal points are a brick fireplace and a small adjoining stairway leading to an ample sun deck. Decorative square poles flank these stairs and form an interesting pattern against the dark brick wall. The dining alcove is located at one end of the living room convenient to the kitchen. All interior wood in the house had been left natural. Interest was gained on the partition between the living room and kitchen by the use of boards and battens, the latter finished in a darker tone. Two bedrooms are located on the lower floor with ample storage space along the entrance corridor. Built-in bedheads and cupboards eliminate the need for movable furniture and give a great deal of livable floor area. Horizontal boards and battens cover most of the outside walls; these are oiled and varnished to preserve the rich wood tones. Sparing use of brick and the pinkish concrete of the main back wall give variety to the picture.

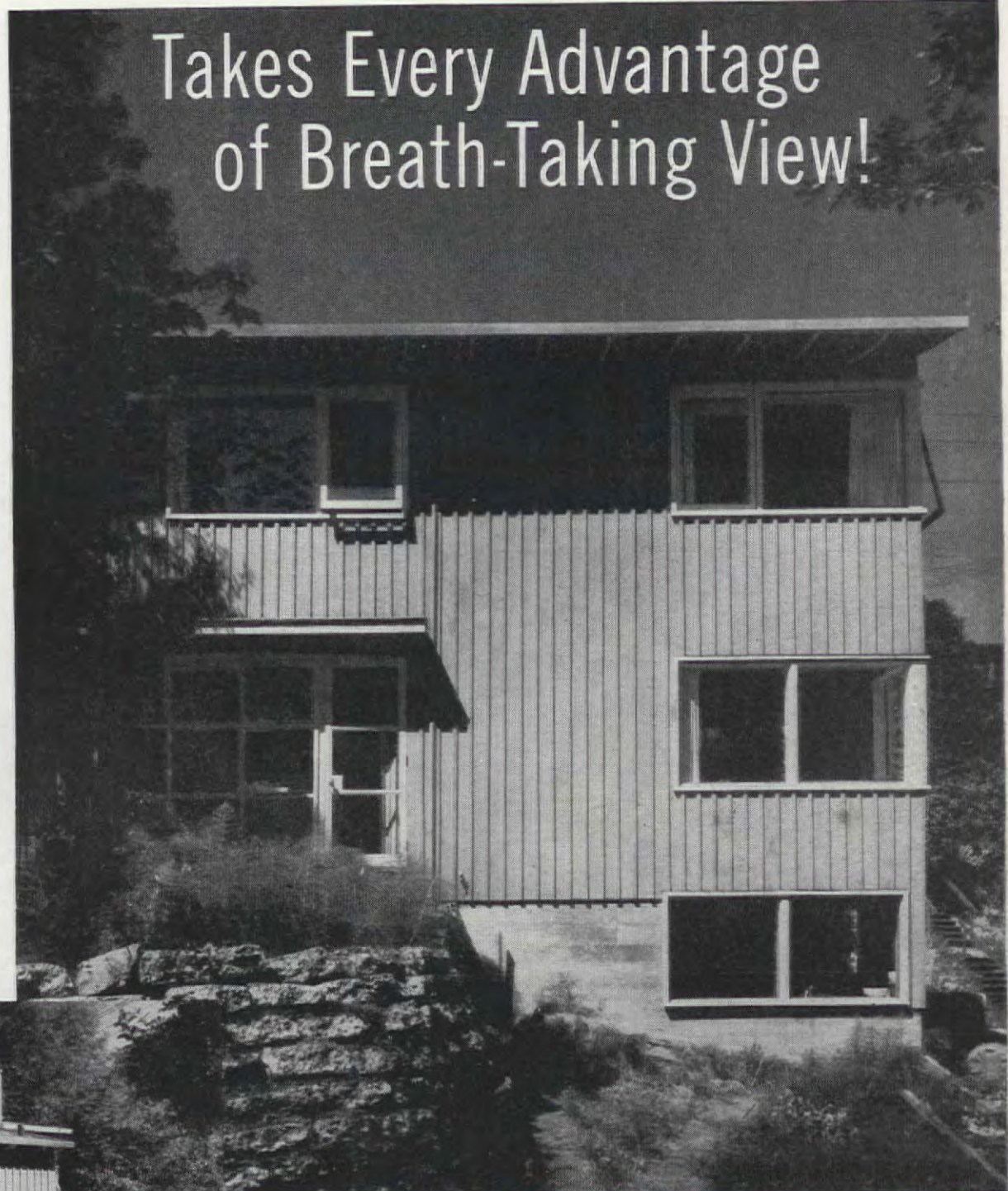
Home of Mr. and Mrs. Fred Arndt, New London, Connecticut. Raymond Viner Hall, Architect



Takes Every Advantage of Breath-Taking View!



John T. Jacobsen, architect



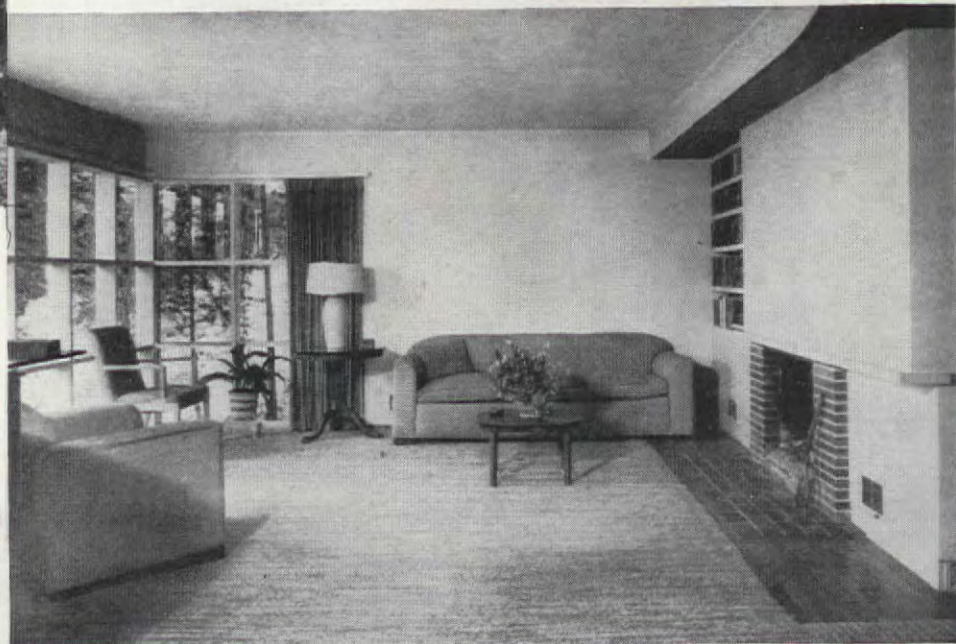
Planned for family of four, Seattle, house uses red-painted board-and-batten walls to emphasize vertical lines . . . important rooms face east, overlook Portage Bay and Cascade Mountains

Compact planning begins with laundry on lowest level from which straight stairs lead, minus landing, to upper floors . . . plywood used throughout, left natural except for slight rubbing of white paint . . . glass door on top level leads onto car-port roof which doubles as sun deck and occasional sleeping porch for two hardy youngsters

P. A. Dearborn, data and photographs

The A. C. Gumbys felt that modern, and only modern, would do justice to their steep wooded plot and its breath-taking bay view

Graceful dropped ceiling soffit in living room is compromise for original curved wall *Washington*



TAG names fill most of us with suspicion. For years, model homes, prize winning designs, and "idea" houses have besieged us with dizzy repetition. Yet every once in a while, there comes to our attention the genuine article—a house not only outstanding in its architectural style, but one which overflows with good, common-sense suggestions. Such is the house shown on these pages—a winner in the National Association of Home Builders' Competition. We know that you'll like its low-roofed, ranch house appearance, but, here, another element has been added to this well-beloved style—a sense of dignified sophistication. The fact that it's not a small house need not cause worry; there's a wealth of inspiration for any prospective home builder, regardless of the kind of house he plans.

Its exterior walls are a combination of white-painted brick and lannon stone, while great delicacy has been added by the wrought-iron grille at the entrance portico. The two-car garage door is of aluminum, painted rust to match the louvered shutters and entrance door. This same color scheme is repeated in the warm tones of the multicolored asphalt shingles which cover the low-pitched roof. A rustic touch, but one which fits quite comfortably into the picture of sophistication, is the rail fence, flanking the entrance walk.

Blue-green walls and bird prints frame the living-room bay



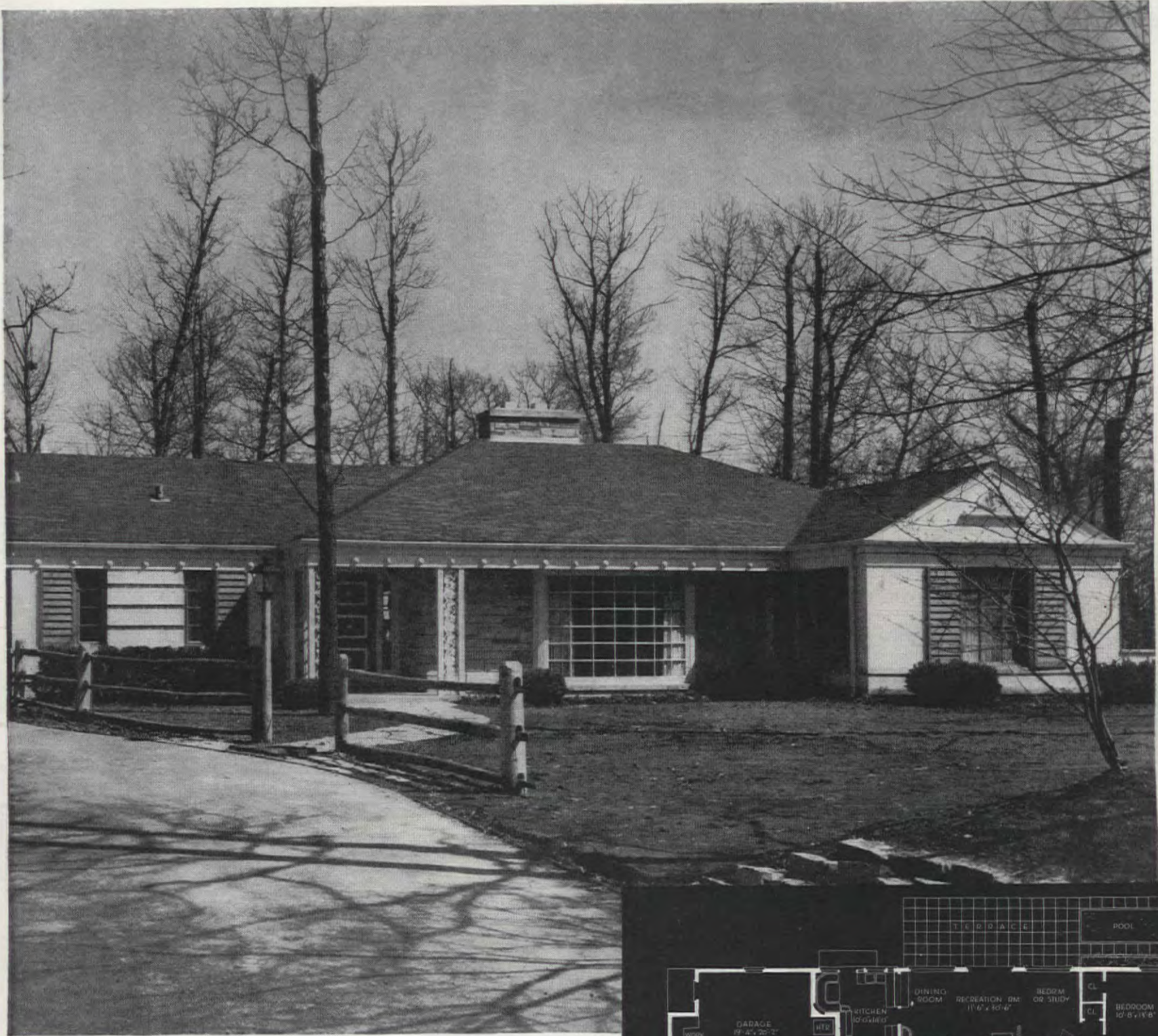
THIS SUBURBAN

An extra guest room is formed by green leather folding screen in the recreation room. Curtains are of red, green, and yellow-striped sailcloth



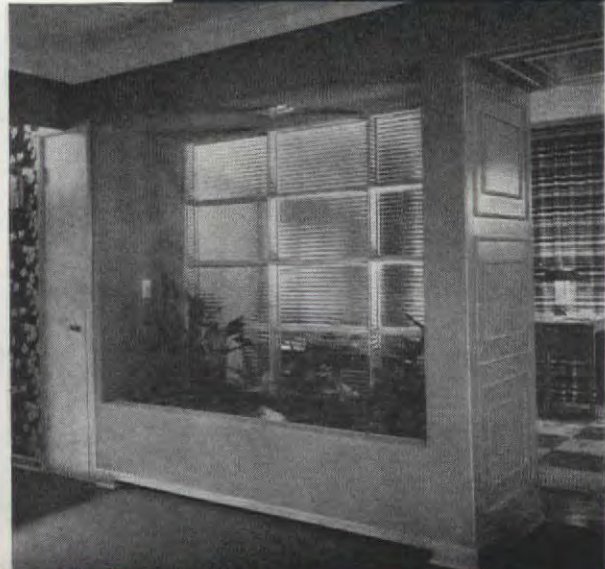
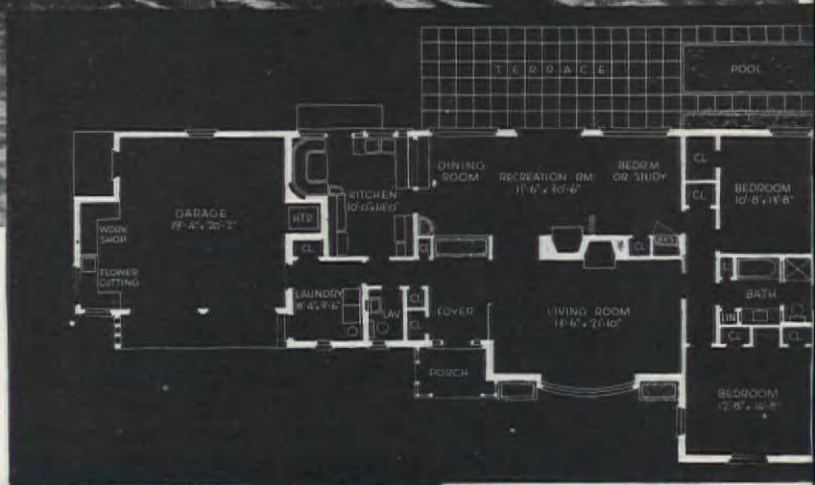
Kitchen dining alcove has red-leather seats, hanging table





HOME WON A PRIZE

Guest-room walls are gun-metal gray. Twin studio beds, placed at right angles, have pale-green twill covers, ruffles of gray, yellow, lime-green chintz



**Charles and Arthur Schreiber,
architects**
**Decorator: Mrs. Billy Bryan-
Burke of Mandel Brothers**

*Louvered glass, used
as a partition in
entrance hall, shields
the dining end of
combination room. A
huge built-in plant box
adds grace to unit*

Photographs by Nowell Ward

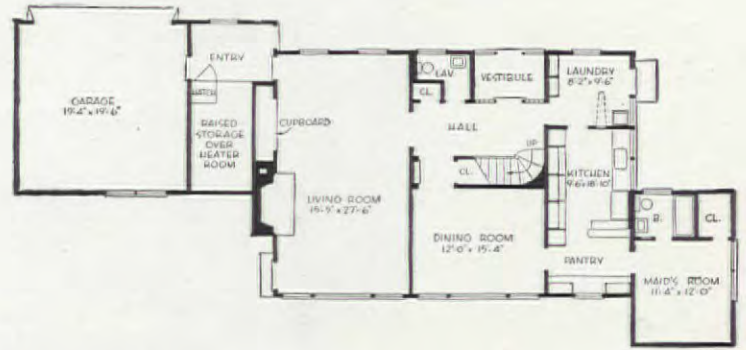
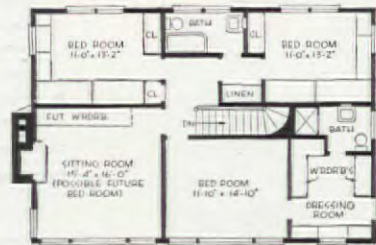


Connecticut

James Irving Raymond, Architect
Livingston Elder, Associate

Darien, Conn. Home of
Mr. and Mrs. Harold F. Clark





If white Christmases were part of your childhood, I'm sure that this bright, snow-clad picture of the Harold F. Clark home will awaken many a nostalgic memory. Somehow the crystal-clear stillness of an early winter morning has been magically captured. No whisper of a breeze disturbs the grove of towering trees, casting their long, horizontal shadows across the snow. It is winter idealized. Yet, to me, there's a strangeness about its old-fashioned appeal since this is not an old house but one definitely contemporary in line and mass. Why then does it fit as naturally into the rural New England setting as any of its Colonial forebears? The answer is obvious. Here we have convincing and heartening proof that good modern design must not be restricted to any specialized background. By proper planning and study good modern design can be made perfectly at home, even amidst the most traditional surroundings.

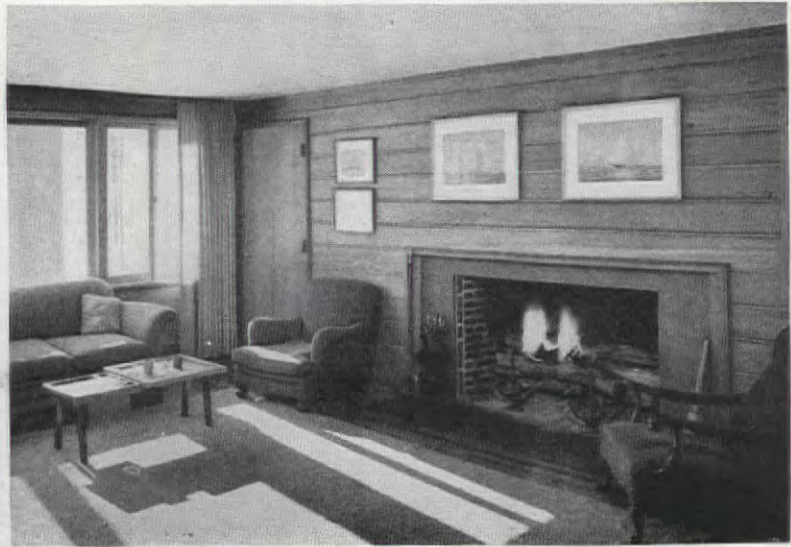
In many ways the Clark house is newsworthy. Modern though it be in appearance, its very construction has been borrowed from other days. It is, in reality, a log cabin brought up-to-date. For the exterior walls, solid square timbers, approximately 10 by 10 have been piled on one another to form a solid wall. Only a preservative to add longevity has been applied to the natural finish. In design it is reminiscent of many Early American farmhouses, with extra-large modern windows added to gain full advantage of the surrounding luxuriant countryside. Living room, dining room, sitting room and master bedroom all face south for maximum sunshine during the long winter months. Windows on this exposure are well shaded by trees during the hot summer and so do not require wide, overhanging eaves for protection. This detail alone helps greatly in maintaining an over-all semitransitional appearance. The living room is large, 15'5" by 27'6", and may be entered through three doorways; two of these lead from outside. The one from the garage is completely protected from the elements and should prove a blessing during the changeable Connecticut weather. The main entrance is simple in design; a single door flanked by a series of small windows. In summer these are replaced

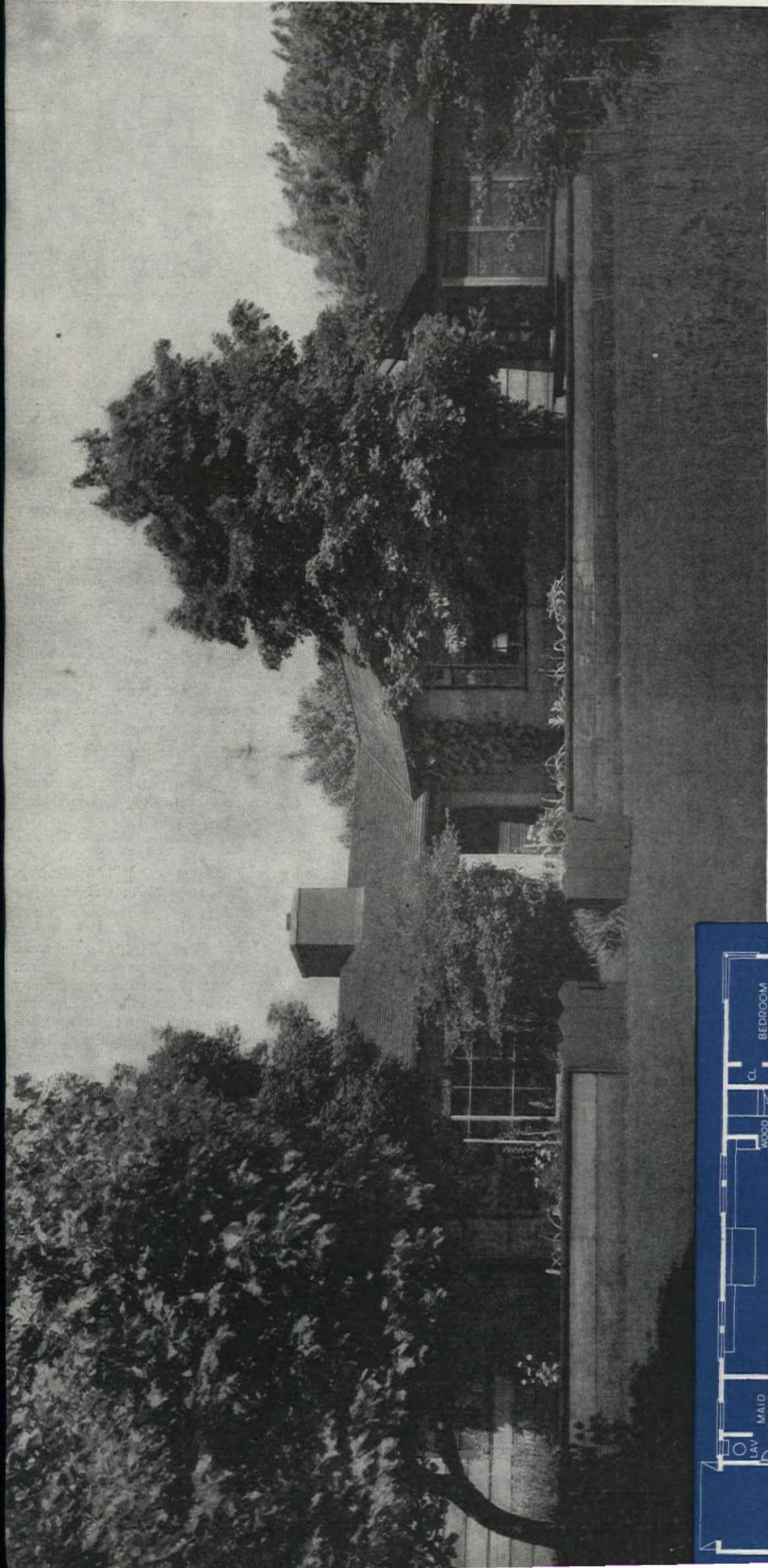
by screens, thus transforming the vestibule into a small screened porch with its resulting welcome ventilation.

The house plan, itself, is a masterpiece of compact directness. A main first-floor hallway, complete with graceful curving stairs, leads directly into living room, dining room, and utility room. Even in many interiors the log construction has been left exposed, a detail adding greatly to the informal atmosphere throughout. In some cases the wood has been stained, in others varnished but, in every case, the natural grain of the wood, itself, was left exposed. Being a sport-loving family, many signs of individual taste are apparent. Mr. and Mrs. Clark are ardent table-tennis players, and their two young sons are fast becoming experts. They decided to have the living room custom-built around this hobby. It is a "family" room, with large fireplace, comfortable furniture, radio-phonograph, built-in bookcases and desk and, in the very middle, a Ping-pong table. Green carpeting further enhances the natural beauty of the woodwork. The dining room is a bit more formal, with soft-stained walls, beige rug, and light natural wood furniture. A large picture window frames a beautiful view of the grove and garden, and is the center of interest for an everchanging picture throughout the year. At one end of the kitchen is a breakfast bar and pantry, exceptionally handy for access to the dining room. Mrs. Clark, who manages the household alone, has found the utility room, with its deep-freeze unit, electric washer and ironer, a great boon to easy housekeeping.

Upstairs, in addition to the master bedroom and the two boys' rooms, there's a small, formal sitting room where the parents can entertain unmolested by the youngsters and their friends on the floor below. Here, too, the small fry may find privacy when grown-up parties are in session. Mrs. Clark finds the room a quiet haven during the day for those jobs which require serious concentration. Neither of the elder Clarks is native to Connecticut; she is a Californian while Mr. Clark was born in the Midwest. However, in selecting their home, they drew inspiration from the Colonial homes around them and have successfully evolved a composite design.

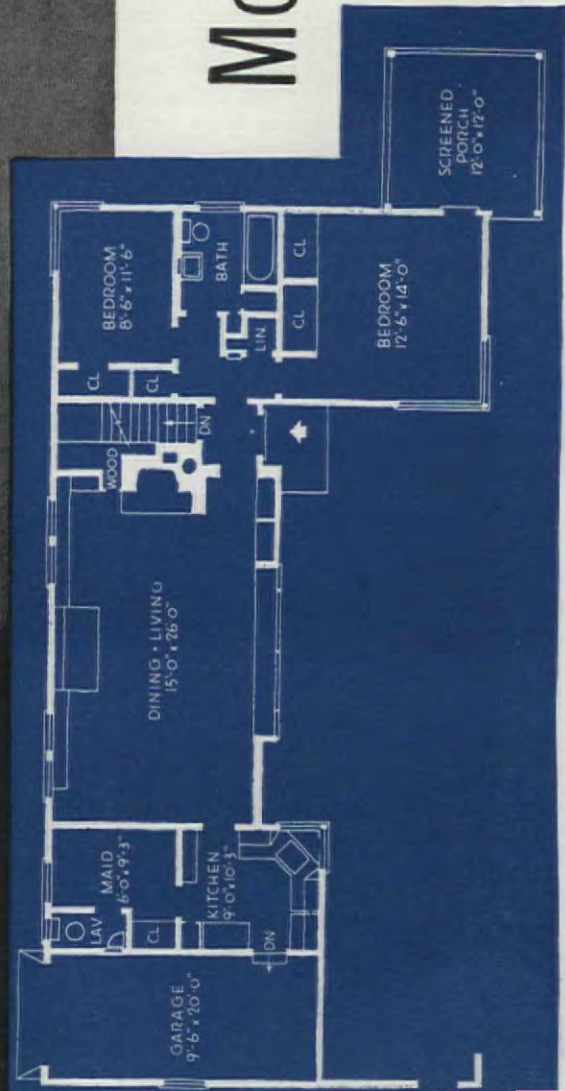
Data and photographs: P. A. Dearborn





Modern Ranch House in Illinois

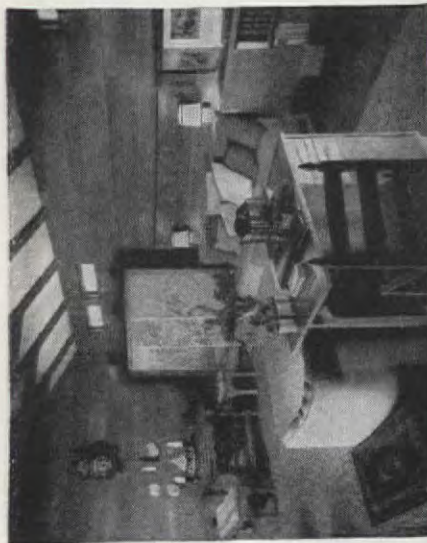
Casual and informal with the rambling effect of an old Western ranch house is the home built by Mr. and Mrs. Malcolm Millard in Deerfield, Illinois. Since they are both natives of California, redwood was a natural selection for both exterior and most of the interior finishes. The designer, James Crabb, stressed no particular style when evolving the ell-shaped plan, but two definite "musts" were uppermost in the owners' minds during the early planning days. One room definitely had to be large enough to serve as book-room and playroom, in addition to being a combination living-dining area. This room, also, had to open into the garden so that outdoors and indoors could become one. A large steel picture win-



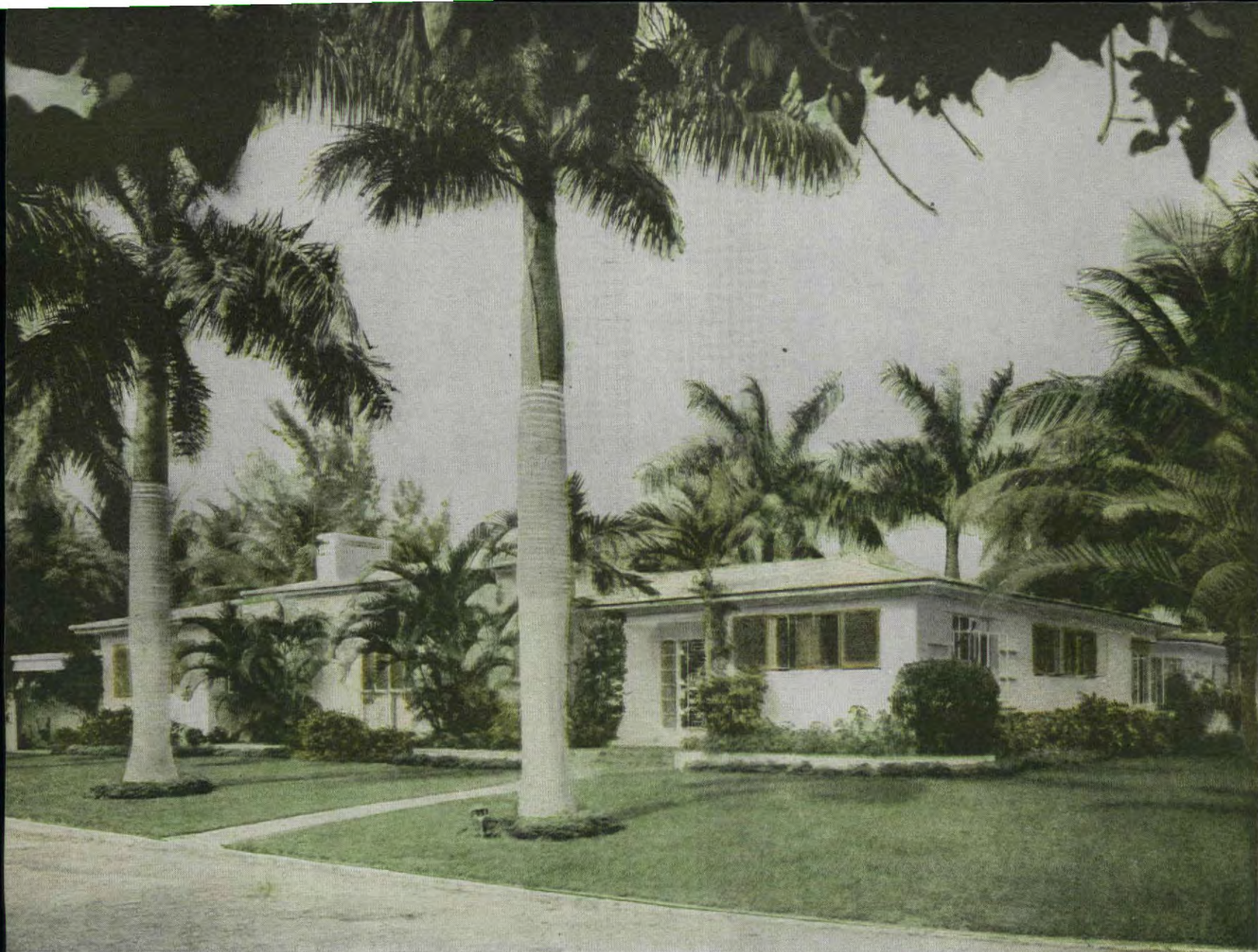
**Home of Mr. and Mrs. Malcolm Millard
Deerfield, Illinois
James Crabb, designer-builder**

dow now does this trick most satisfactorily. The opposite wall, however, is solid in order to give proper space for built-in sofa bed. This wall also is protection against cold winter winds. Throughout this room, oriental accessories accent the modern and traditional furnishings.

In the master bedroom, headboards are made of gold carvings, used at one time as Chinese store fronts. The wall behind the beds is covered in silver teabox paper, and an old Chinese portrait hangs over a single unpainted chest. The Chinese pieces were picked up by Mr. and Mrs. Millard in China and California. Color schemes everywhere are distinctive: in the living room receda green, Imperial yellows, gun-metal grays, combine with vivid reds to complement the redwood walls. In the bedroom, silver, chartreuse and stark white predominate. Outside the low fence provides an excellent background for border gardens, helps keep out inquisitive rabbits, and blends nicely with the horizontal lines of the house.



Data: Ruth W. Lee
Photographs by Nowell Ward



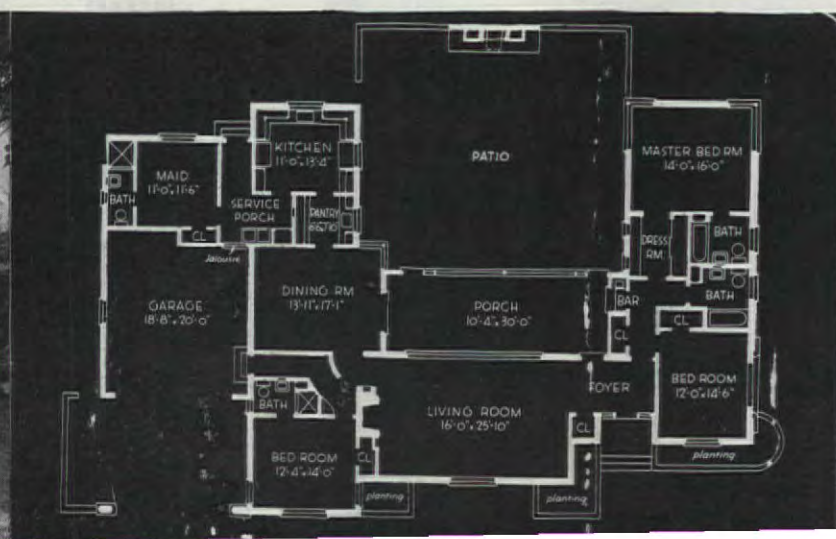
**Home of Mr. and Mrs. Herbert Steiner, Miami Beach
Wahl Snyder, architect**

Florida . . .

Photographs by F. M. Demarest

THOUGH dwarfed by the majesty of the towering royal palms about it, this low-eaved stucco house with its bright lemon-yellow shutters is a complete individual, a happy combination of dignified formality and warm hospitality. It's a rambling house, around a spacious patio, built to take full advantage of the temperate Florida climate. An outdoor fireplace at one end is flanked by low walls—walls which give definition to the patio without being too confining. In the house plan, itself, the living room forms the main focal point. It is reached directly from the small entrance foyer which, with the ample, well-lighted porch, forms the connecting link between the two wings. The foyer, too, leads directly into a bedroom hall from which two rooms, each with private bath, can be reached. The master bedroom is entered through a dressing room which has many convenient built-in features. Another bedroom, also with adjoining bath, is located at the other

end of the living room and is convenient to the side entrance hall. Balancing the bedroom wing, we find the dining room, pantry, and kitchen. The dining room, with its corner window overlooking the patio, may be entered from either living room or porch so that the latter, with its compact, efficient bar, may be drafted into service when entertaining is on a grander scale. A great convenience is the direct approach from the two-car garage into the main quarters of the house, introducing a welcome note for guests during inclement weather. Quarters for one maid, plus a small service porch, complete the plan. Outside, the thin, wide overhang of the eaves and low-pitched roof gives a frank, modern air, while many well-placed casement windows take care of the much desired ventilation. It's a house for good living, fitting naturally into its flat, attractively landscaped plot—a logical reflection of the semitropical location and modern planning.



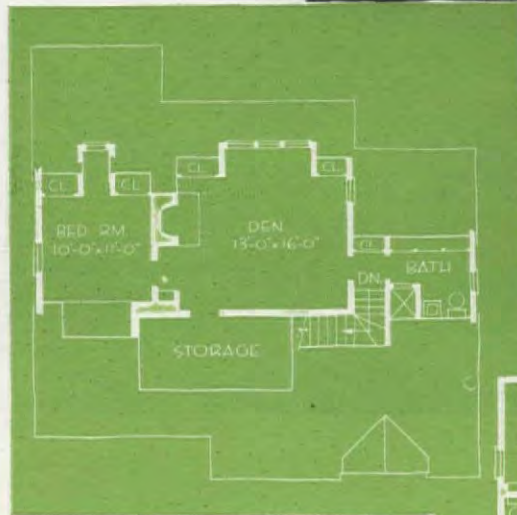
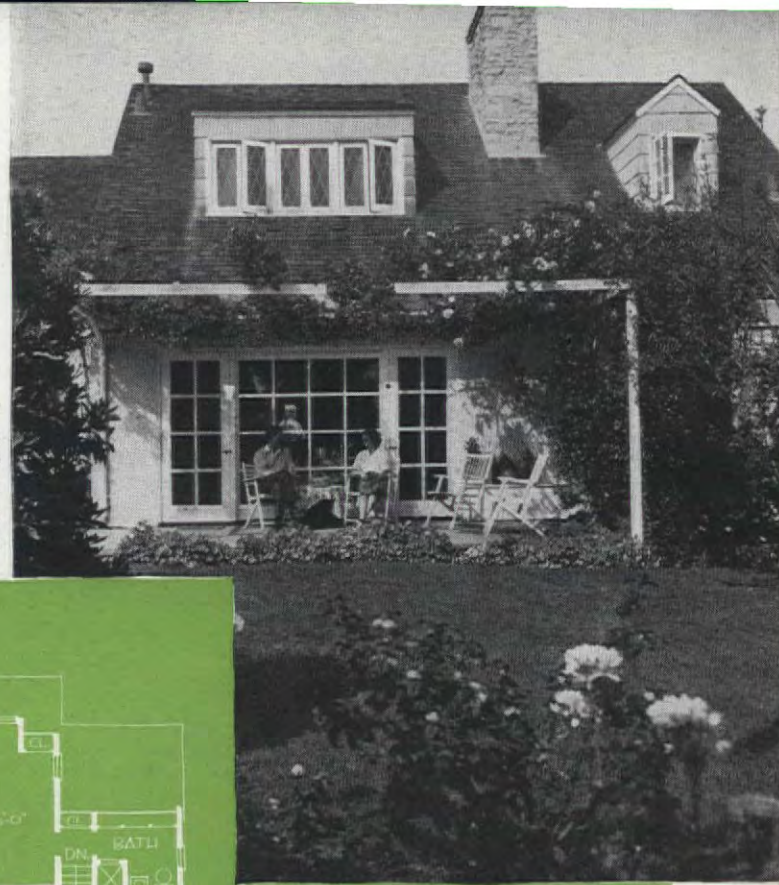
Ethel McCall Head

It's always interesting to find out what kind of a house an architect chooses for himself. Kenneth Swift, for instance, likes Colonial design as a background for the many old pieces of furniture he and his wife have collected over a period of years. Yet, when he built his own house, he believed that many liberties could be taken with the traditional Early American plan to make it better suited to the informal Californian way of living. Therefore, his house turned out to be an excellent example of modification to fit present-day living needs.

Before analyzing the floor plan and its departure from the Colonial norm, let's examine the exterior treatment. The house is located on the west side of a pleasant street which skirts a country club. Because of the street traffic with its resulting noise, only the dining room and one bedroom were located on this side of the house. Natural stone combined with weathered gray shingles were used as wall covering on this elevation whose low eaves practically touch the sloping lawn of English ivy. Facing the street side, the shingle roof was left unbroken and, extended, forms protection for the generous entrance porch.

Now let's step into the entrance hall, a charming little pine-paneled room with wide oak flooring, oval braided rug, and an old marble-topped chest against one wall. To the right is the dining room with its old walnut furniture, yellow wallpaper which contrasts nicely with the plain brown rug, and crisp white lawn curtains which are capped by yellow percale, checked valances. Not a large room, but ample for the Swift family, with its pleasant windows facing east and north. Across the hall is the master bedroom, gay with lush rose-covered wallpaper. The furniture here consists of

Flagstone terrace shadowed by rose-laden trellis overlooks rear grassy lawn and is Swift family's favorite outdoor dining spot



**Home of Mr. and Mrs. Kenneth Swift, Los Angeles
Owner-architect**

Photographs by Bob Cleveland





Home of Mr. and Mrs. Kenneth Swift, Los Angeles, California

Fireplace hearth extends full length of pine-paneled wall in living room . . . furniture, woven rugs and exposed rafters give Early American atmosphere

a four-poster bed with quilted top and ruffled bottom, a handsome curly butternut chest and an old-fashioned rocker. Note on the plan that from this bedroom there's a small hall leading to bath and daughter's room in the rear. In the latter, the footboard of an old bed has been converted into a low headboard for the daughter's bed, which has a boxed bedspread of floral chintz. Scenic wallpaper, crisp Dutch curtains with a band of matching floral chintz, shelves for books and toys, and a low pine rocker made this a colorful room for a small girl.

Now back to the entrance hall and straight ahead to the living room, which is planned with emphasis on Californian living. The entire end is opened by floor-to-ceiling windows with a French door on either side leading to a garden terrace. Everything about the room speaks of informal family living and comfort. On two walls there's cream-and-red wallpaper of an old-fashioned

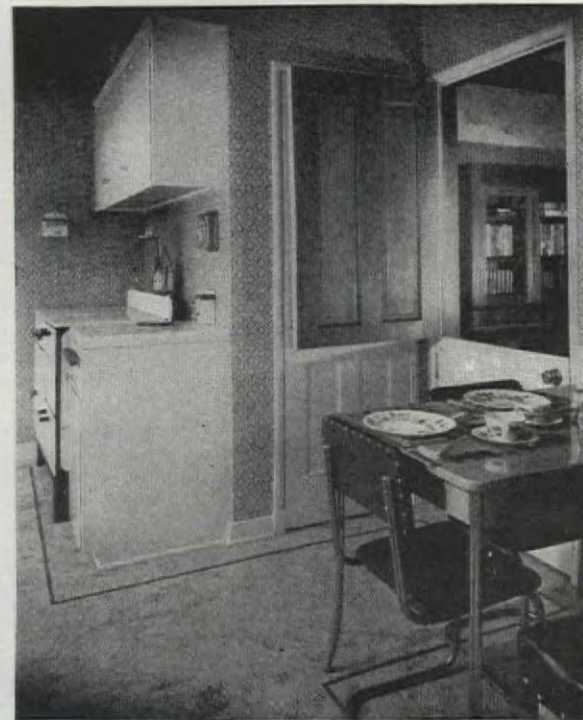
scenic design, while on the fireplace wall we find vertical pine paneling stained a warm honey color. Exposed ceiling beams against the white plaster ceiling give the room a cozy Early American look. A red tile fireplace hearth runs the entire length of the room and gives interesting contrast to the oak flooring and woven rugs in soft tones of red, tan, and yellow. The red in hearth and wallpaper is picked up again in the soft pink-tan draperies. Near the fixed window, a charming furniture arrangement makes an ideal spot for games. The love seat is leaf-green color, warm against the pine background. There is an old pine rocker by the fireplace. Gay pieces of colored china and pottery march across the mantel. Wherever one sits in the room, there's a pleasant vista of either garden or the pine-paneled entrance hall. A small door near the fireplace leads into the bedroom hall and makes for unusually good circulation.

Long desk-counter for study and model-making in boy's cabin room

Glimpse from pine-paneled entrance hall into cozy, informal living room

Unusual is truncated ceiling with exposed beams in small dining room

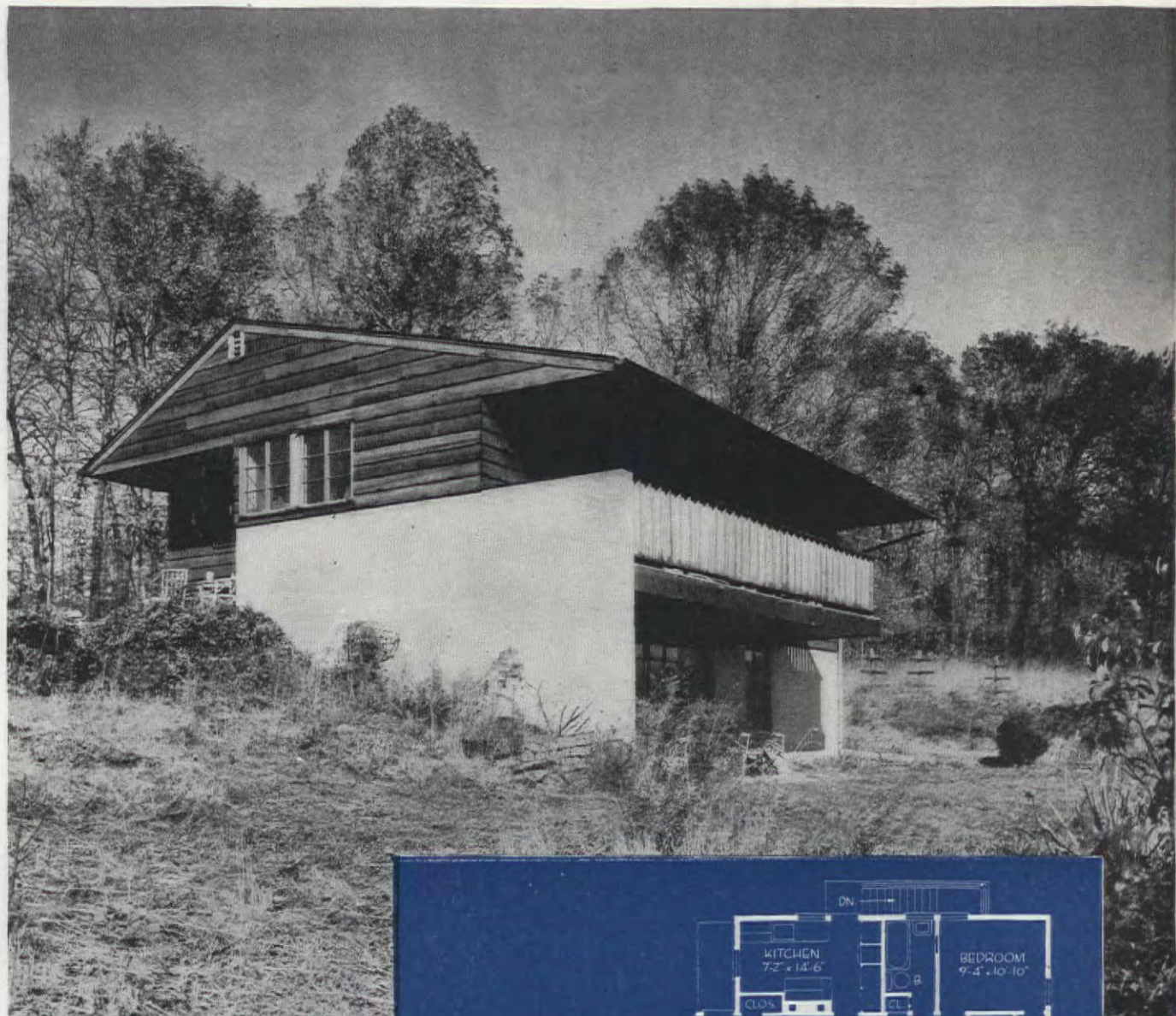
Dutch door leads from small, efficient blue-and-white kitchen to living room



Sloping Lot Can Be Blessing in Disguise— Saving Homeowner Both Time and Money

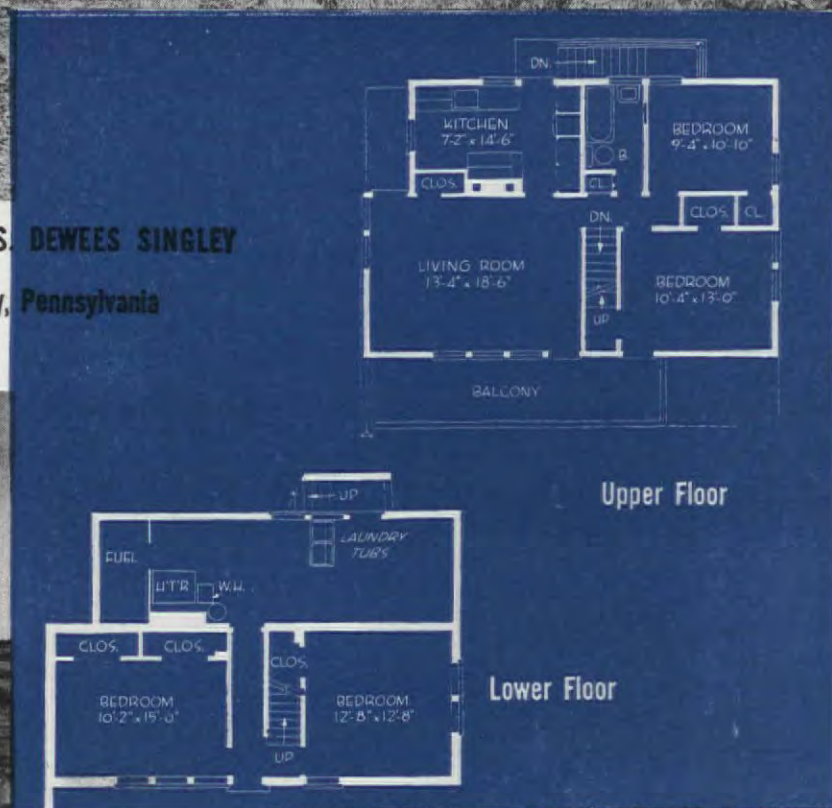
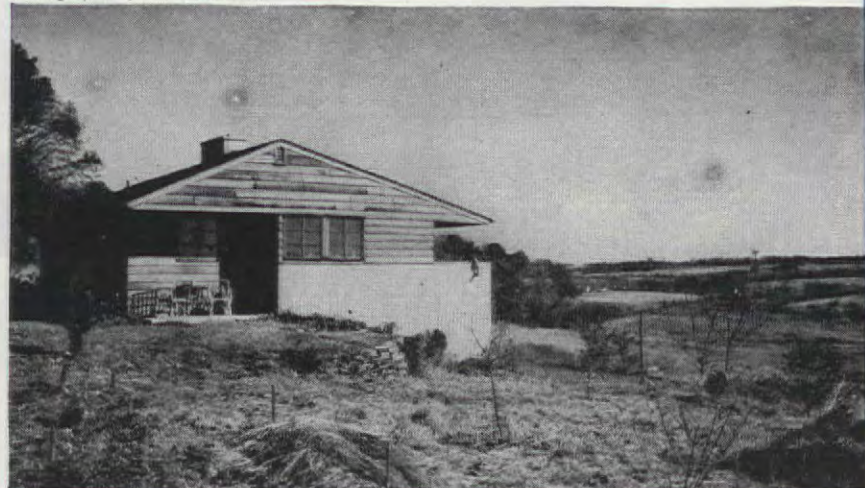
Building on sloping property always offers a challenge, especially for those who prefer a two-story house. One of purely conventional design too often effects an attenuated, rigid look completely alien to the land around it. That's why the Singley house, shown here, should point the way to more functional planning of such houses and, in the long run, save dollars for future owners. For the slope of the lot was drafted into action and helped keep excavation costs down to a minimum.

Horizontal siding and wide overhanging eaves give the Dewees Singley home the appearance of a small modern cottage, yet it surprisingly contains four ample bedrooms. The hillside slopes to the south with easy access to the public highway, so important to the minister owner, from the north. In designing the house, easy maintenance and low cost were guiding factors. Stock lumber sizes were used everywhere. Though flues were installed for a fireplace, this item was left to the indefinite future when the budget is more expansive. On both floors principal rooms face south and are given welcome shade by the wide eave and balcony overhangs. Some exceptional features of its design are the wide balcony and well-protected terrace facing south. These add greatly to the flexibility of plan and make outdoor living an integral part of the house's make-up. Ample closet space, so often neglected in a small house, is found in each and every room. With a minimum of excavation a large utility room was built into the hill itself. These lower walls are of cinder block; solid contrast to the completely insulated frame construction above.



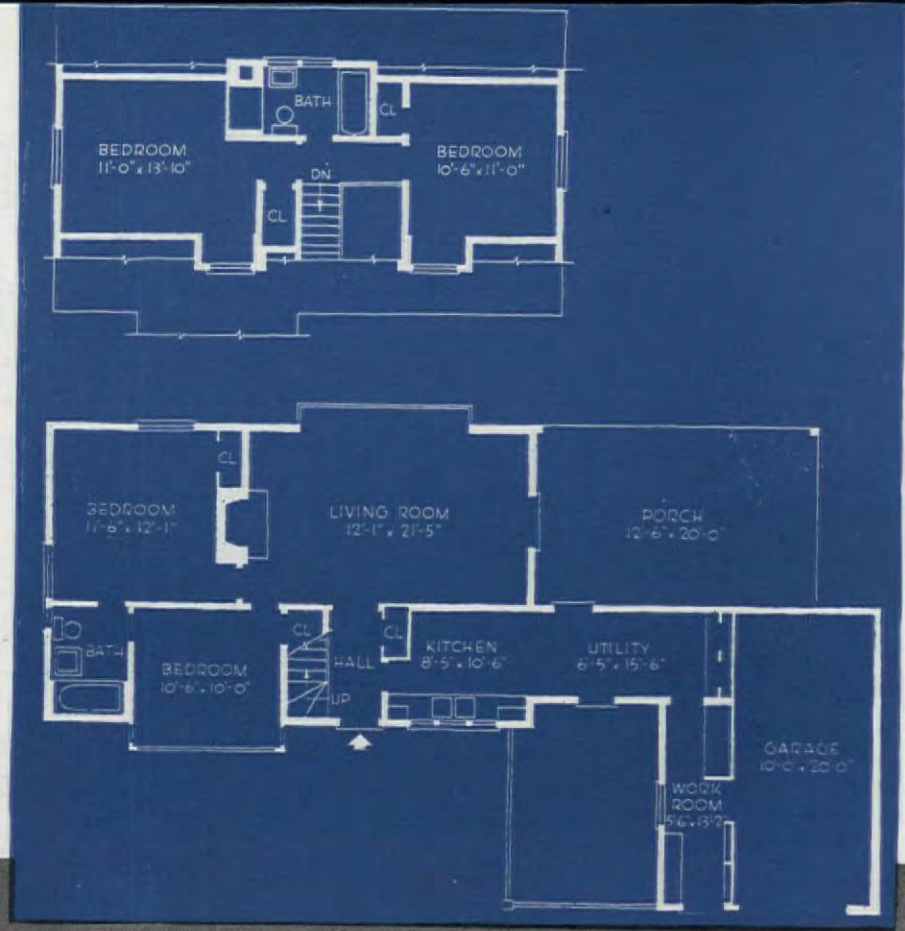
HOME OF MR. AND MRS. DEWEES SINGLEY
Bryn Gweled, Bucks County, Pennsylvania

Photographs by P. A. Dearborn



ROBERT F. BISHOP and PAUL BEIDLER, Architects

Five good Colonial Houses ...all in Illinois



C. E. Blomgren Jr., conscientious and public-spirited builder, is erecting good houses—well designed and built, a nucleus for charming, new neighborhood

This is the home of Mr. and Mrs. Maynard Jackson...

Small Cape Cod street elevation of Stillman home belies amount of compact living within its combination white-painted brick and clapboard walls

FLOOR PLANS ON NEXT PAGE

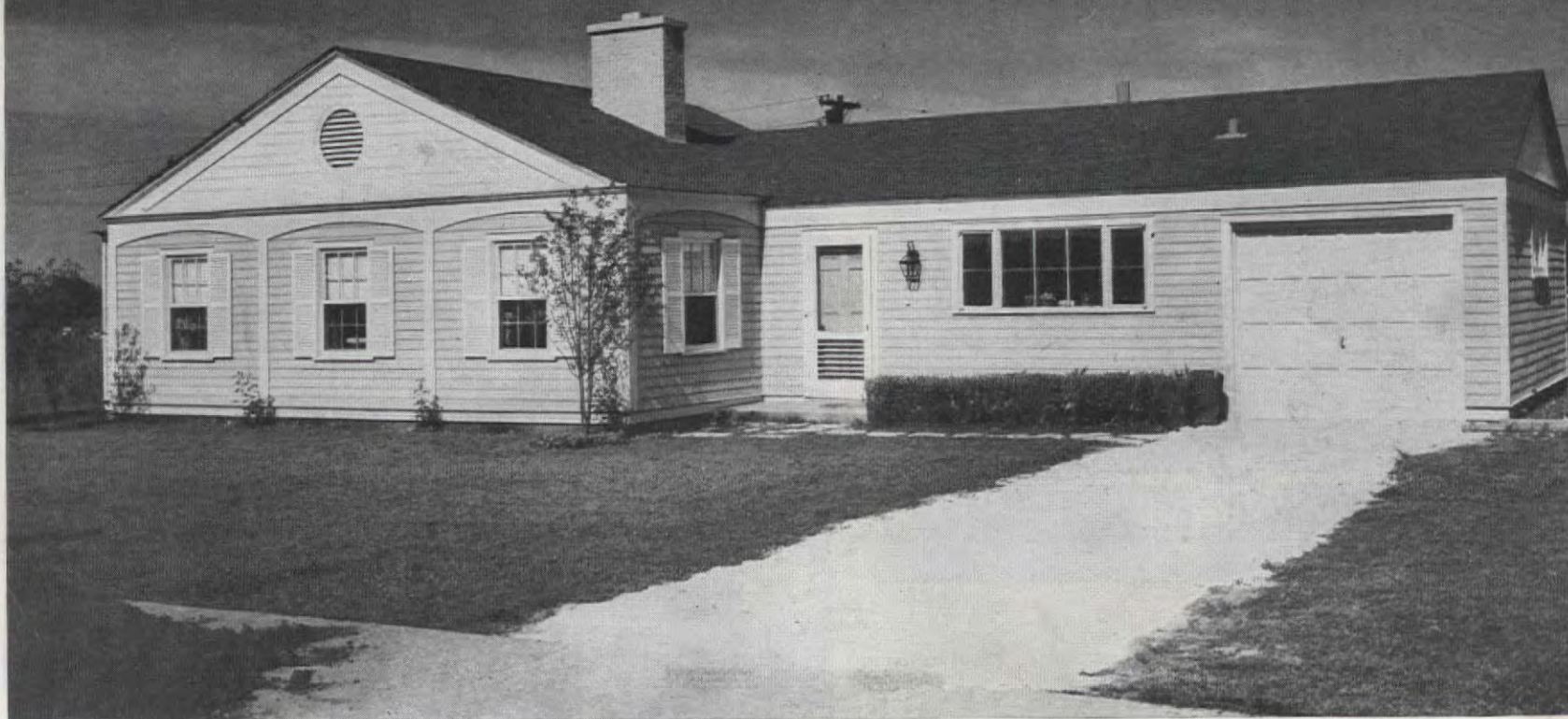
Large living room and screened porch of Mr. Blomgren's own gray clapboard house are located at the rear for more privacy. Bedroom wing, at left, with flat arches, includes three rooms plus bath

*Data from Ruth W. Lee
Photographs by Nowell Ward*



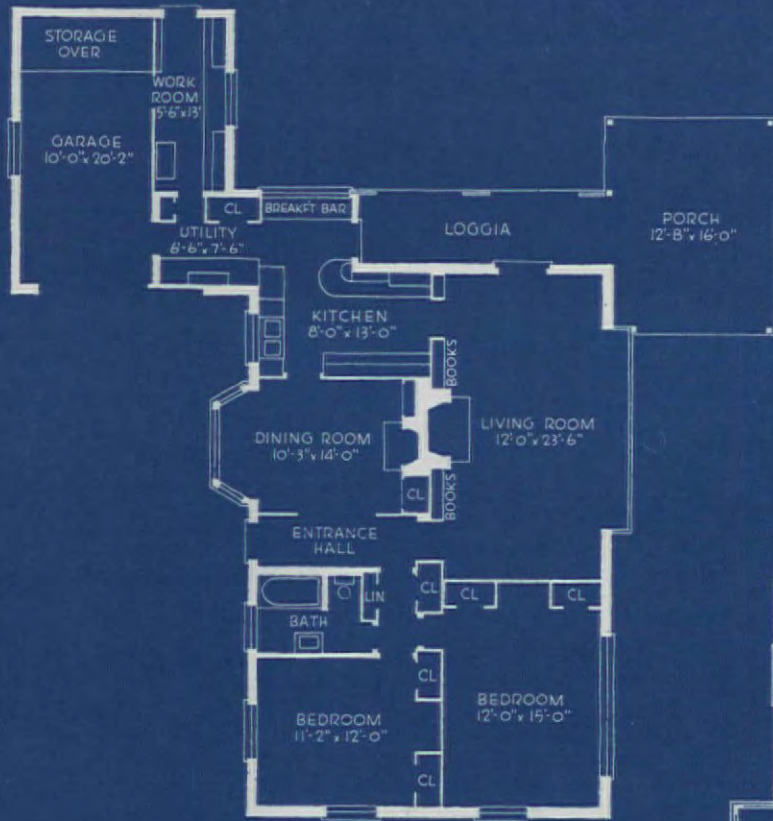
The home of Mr. and Mrs. DeWitt S. Stillman . . .

. . . and the home of Mr. and Mrs. C. E. Blomgren, Jr.

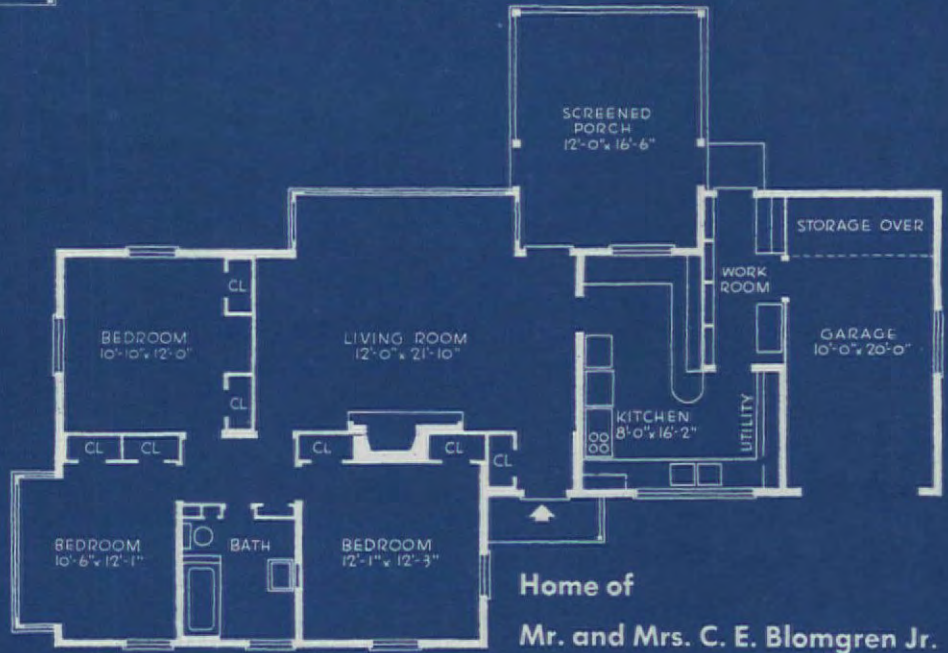


Mr. Blomgren's houses have the happy faculty for flexibility of arrangement on their plots. The Stillman house fits happily with narrow end towards the street, affording privacy to main rooms

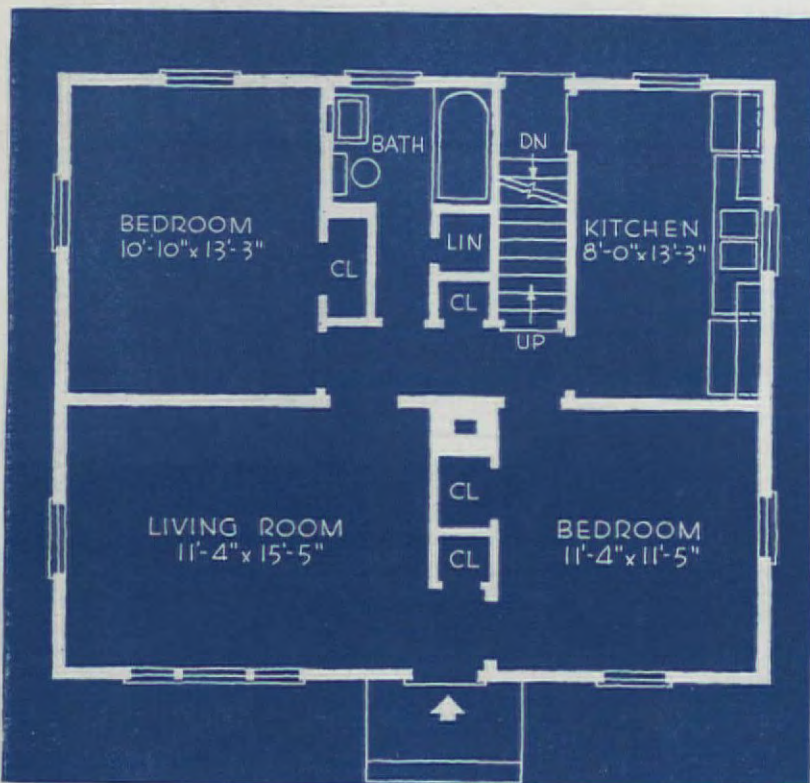
Main living quarters of Blomgren house are at the rear facing garden and view. Garage, kitchen and work room are cleverly integrated into a close knit, functional unit, for efficient housekeeping



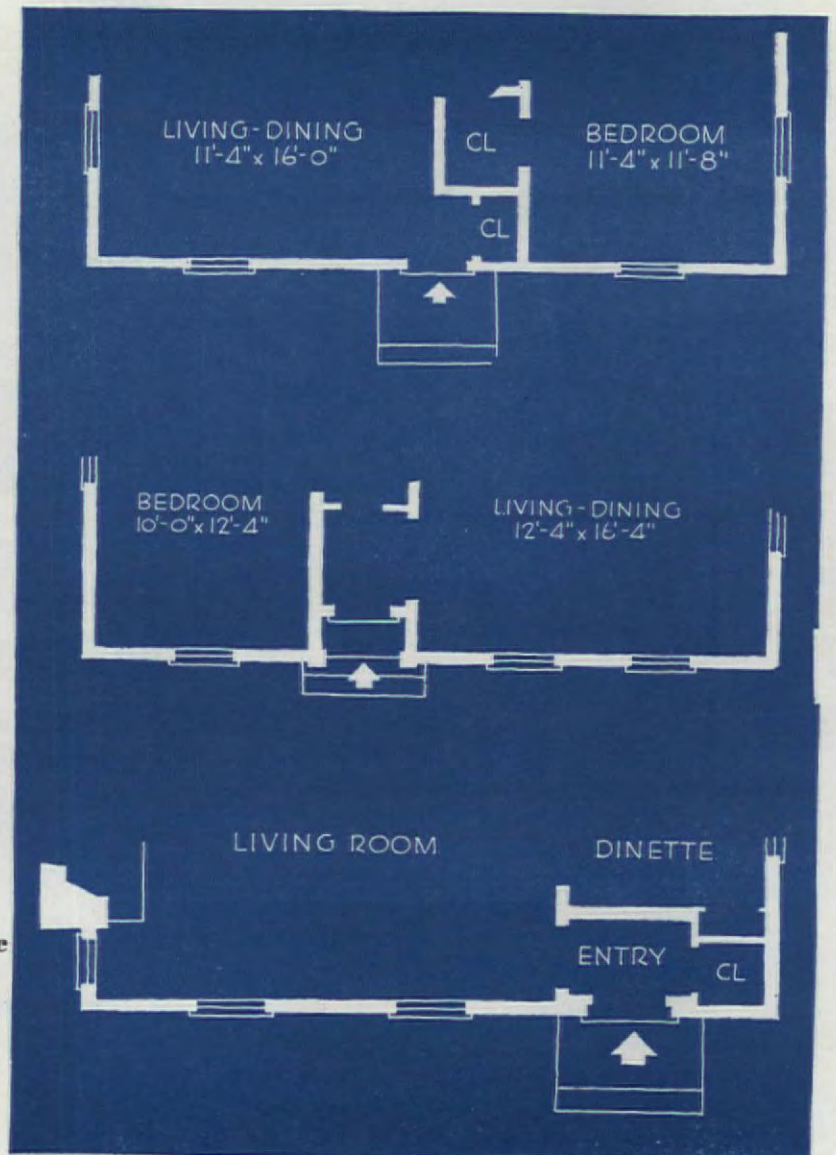
Home of Mr. and Mrs. DeWitt S. Stillman



Home of Mr. and Mrs. C. E. Blomgren Jr.



St. Charles houses on opposite page have one basic plan, many variations of front wall. Plan above belongs to Edward G. Thomas house on page 59





Here is the home of Mr. and Mrs. James A. McKinney . . .

*Data: Ruth W. Lee
Photographs: Nowell Ward*

The McKinney home recalls low-eaved ranch houses of our Southwest. Latticed end pieces help support heavy roof overhang. Clapboards are white, shutters rust red



Classic recessed entrance of Burgess home recalls Greek Revival ancestry. Lines have classic simplicity. Shutters are black, the clapboards white, and roof slate colored

. . . the home of Mr. and Mrs. Robert C. Burgess

How different these development houses are from the monstrosities erected after the first world war. Let's hope that others will be inspired by the work of Mr. McNeill and his associates for, under such guidance, our future housing program is off to a safe, sure start

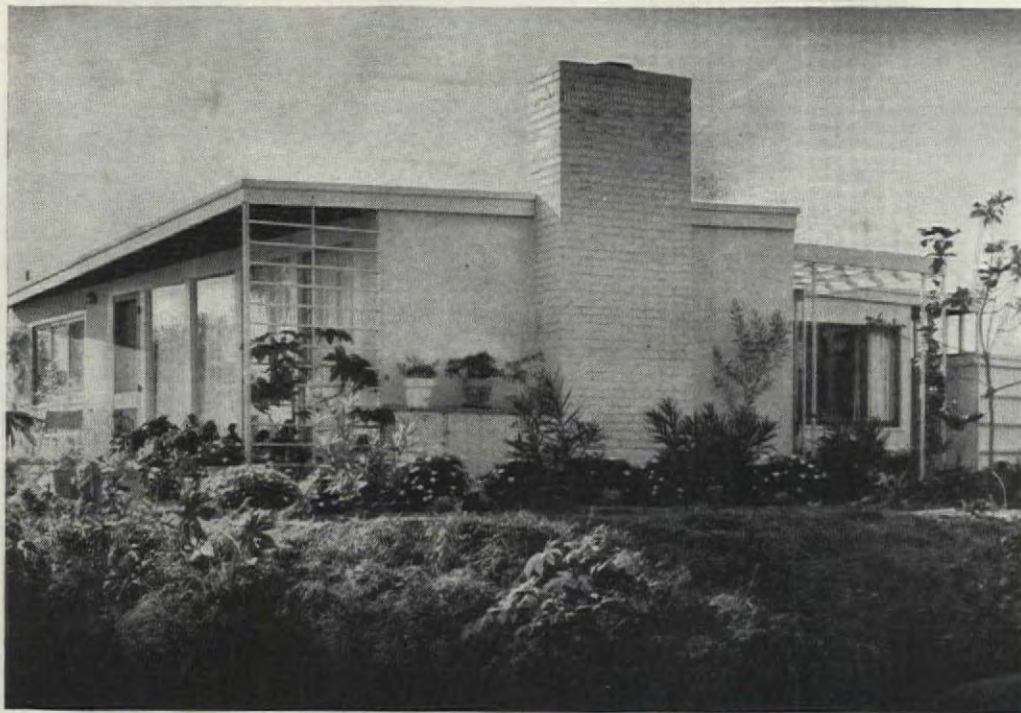
LICKING

*with only 800 square
house overflows*

Photographs by Julius Shulman



Light streams through covered passage to brighten high sash of bedrooms



Large floor-to-ceiling sash in living-dining room overlooks lush rear garden

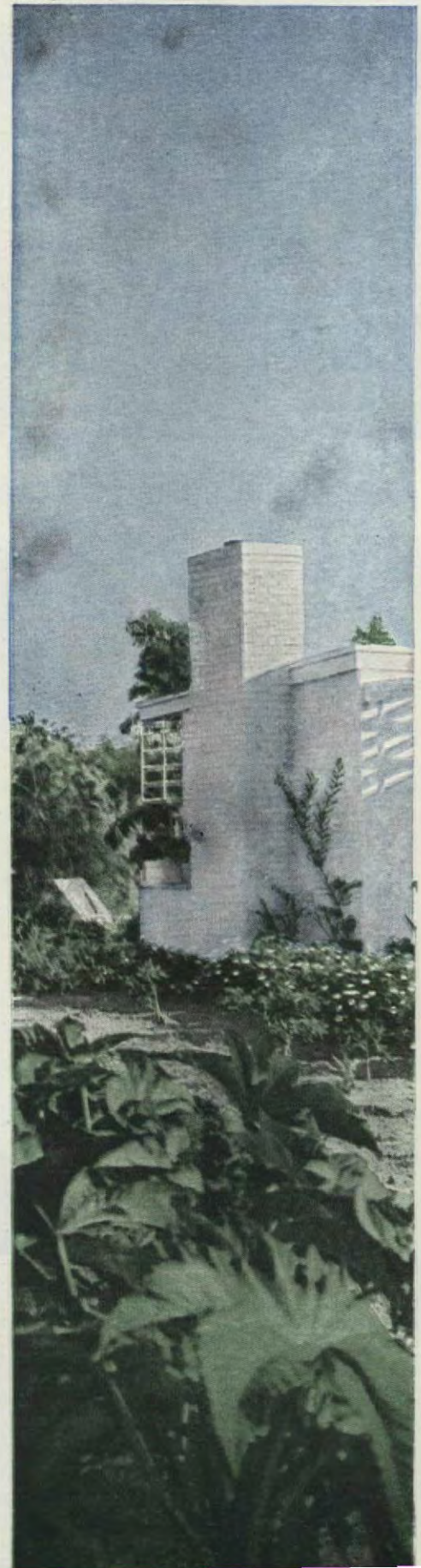
SHARING my life with an architect means, I have discovered, sharing breakfast, lunch, dinner, tea, or any time in between with various and sundry members of the profession who are forever seeking to solve the great problem of perfect living space, a stumper if ever there was one.

How to build efficient modern houses full of beauty and empty of drudgery! (So goes the conversation!) How to conceive houses that suit the individual families and yet are part of the pattern of twentieth-century living! How to create low-cost houses that are sound of limb and still a joy to the eye—which brings us smack up to the problem child of the profession, one that is often shunned by architects like the plague itself, one considered almost intractable, certainly ready for reform—the

really small house, dictated by a limited budget.

I'm not talking about the small house with three modest bedrooms and a couple of baths. No indeed! The problem child I refer to is always coldly labeled the minimum house. There are tremendous possibilities for beauty in really little things, yet the very term minimum house sounds so unattractive, so colorless, and so definitely without glamour. I realize that it's a tough nut to crack, a constant challenge and headache to the architect and designer, but sometimes there's great fun and satisfaction in licking even a problem child. We've tried it and found the experience most salutary.

Like so many things that are good for the soul, we had to be practically pushed into building our minimum house. At the outbreak of the war, we'd

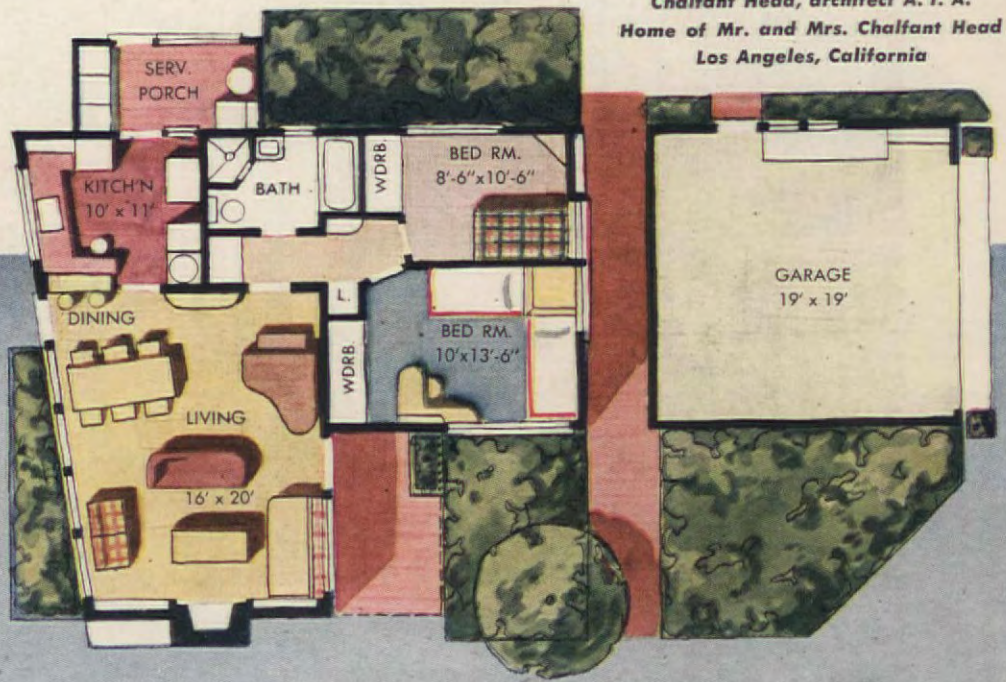


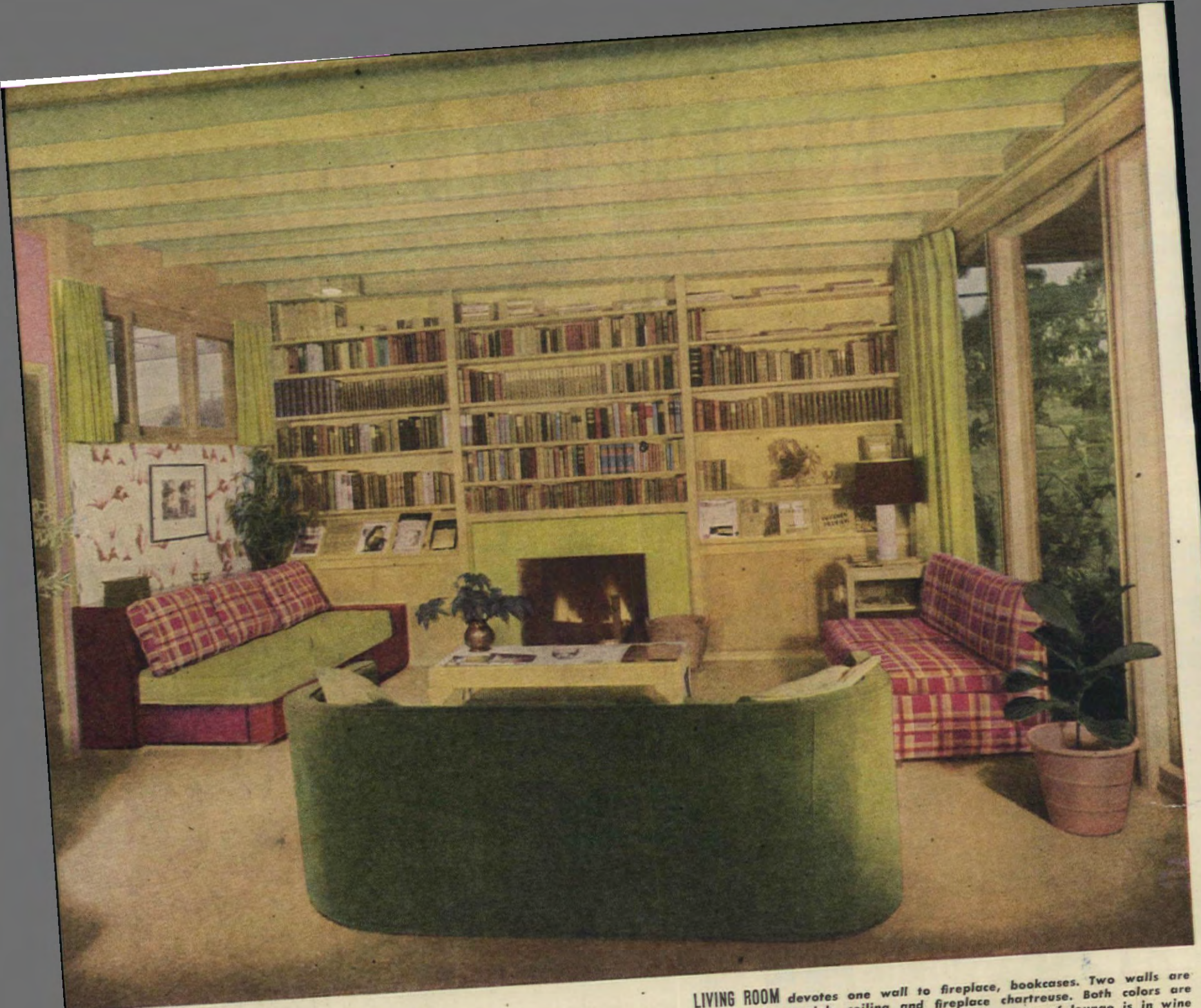
THE PROBLEM CHILD HOUSE

*feet of floor space, a well-planned
with good modern living*

Ethel McCall Head

*Chalfant Head, architect A. I. A.
Home of Mr. and Mrs. Chalfant Head
Los Angeles, California*





LIVING ROOM devotes one wall to fireplace, bookcases. Two walls are dusty pink, ceiling and fireplace chartreuse. Both colors are recalled in upholstery and curtains. Base of lounge is in wine red, a brilliant contrast to biscuit-toned, wall-to-wall carpet



MASTER BEDROOM employs space-saving arrangement of twin beds set at right angles. The beds slide out to facilitate making up. The wallpaper is red, white and gray stripe above a gray dado. Gray raw silk bedspreads have a dust ruffle of wine red

left our own small house with four bedrooms and three baths, rented a house and resigned ourselves to sitting the war out. We'd failed to reckon with the spine-chilling phenomenon called an eviction notice. Despite alluring ads recommending ourselves as ideal tenants, we soon realized that a fourteen-year-old son and a dog were definite handicaps. No one rushed forth to offer us a roof over our heads. Yet we were fortunate in one respect—we did own land in a pleasant residential area. We applied for a priority and waited. Eventually we were given the go-ahead signal

only on condition that our new house be really 'minimum'. That meant living-dining room, two bedrooms, kitchen and bath. It really added up to a three-room house. For a while we dreaded a sudden attack of claustrophobia! Our architect friends shook their heads sadly at our mad decision, but in spite of their gloom, ground was broken in December, 1945.

Architecturally speaking, the bugaboos of the problem child have always been lack of proper closet space, lack of privacy, a cramped floor plan, and lack of any feeling of spaciousness.

All these had to be licked for family comfort. We had picked the hardest time in the world to do it, when priorities allowed us the very minimum of critical materials. Both adults in the family were convinced that a house of modern design was our only hope in creating a sizable living space. We were determined that ours must look like a home rather than a Pullman section. Though it was conceded that both bedrooms had to be small, they must comfortably house twin beds. To meet this latter requirement, most of the house had to be a pleasant living-dining area



The architect and Mrs. Head enjoy spot of lunch on terrace. Flowers in wine red, chartreuse and yellow repeat colors used inside, extend full length of living-room plate glass wall

Extensive view of garden beyond may be seen from living-dining room adding to spacious feeling of small house to a surprising degree. Open structural beams are used for decorative effect



for family living. The garage was placed at the front of the property with a small motor court in front of it. Our street is a rather busy one with plenty of traffic. Hence no part of the house should look out onto the street. For maximum privacy all living quarters were oriented to the rear or side. Incidentally, the garage between house and street serves as a baffle for sound as well as offering seclusion. Both bedrooms were placed at the front, however, with high transom windows for ventilation from the west yet without a street view. The high windows, incidentally, provide ample wall space for more flexibility in bed location and furniture placing.

In the master bedroom, twin beds are placed along the wall, but can be pulled out on a runner for easy making up. There's a spacious desk built into one corner of this room and, with an armchair added, the room is completely furnished. Wardrobes with sliding doors reveal every square inch inside for clothes storage. There are shoe-racks, hatracks, low, built-in trays for clothes storage, and a high storage area ten feet long and two feet deep above the wardrobe. This holds extra bedding, suitcases, and serves as place for little-used clothing. The boy's room has the same type of wardrobe with overhead storage and built-in trays for extra clothes. A diagonal desk, shelves and built-in radio give plenty of room



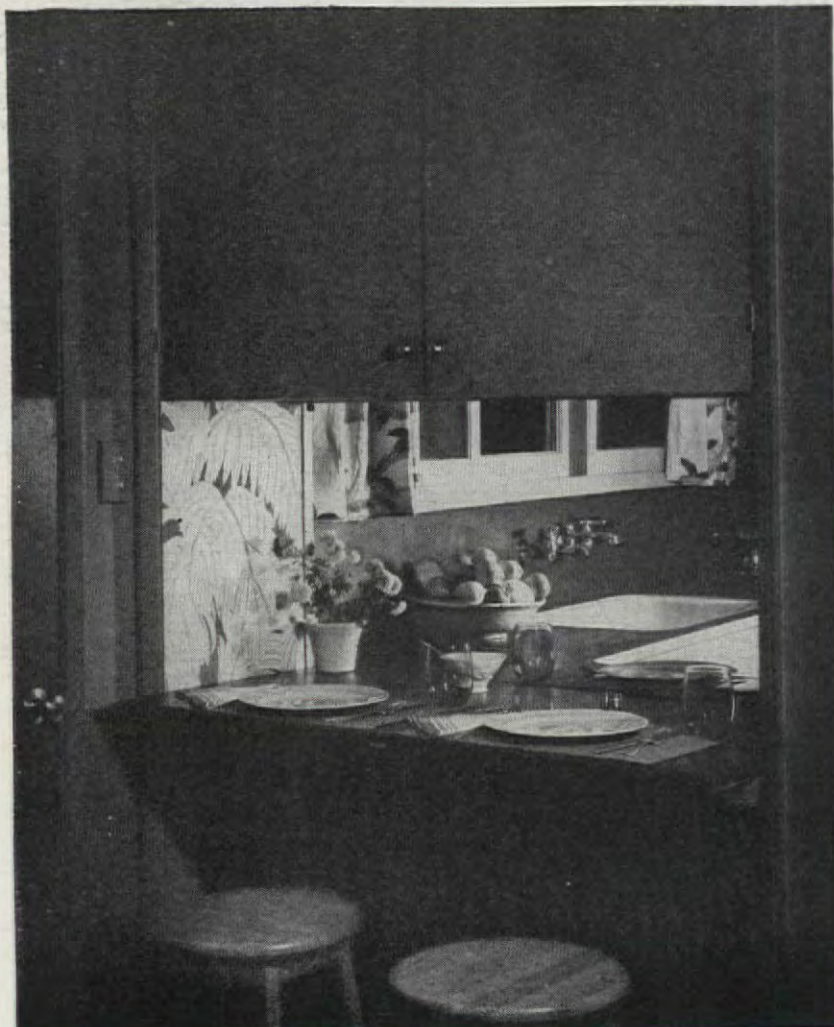
for the oddments dear to that age. A very tiny bedroom hall is large enough to hold a telephone shelf and chair. There's a deep clothes closet here, too, for use of guests or little-used family wearing apparel.

In the living-dining room we have a concentration of space in order to lick that feeling of little isolated areas. Entry is direct from a covered porch. This main room is two and one-half feet wider at the end adjoining the kitchen. Why? For artistic effect? Certainly not, but because at the service end, we needed more width. However, the fireside end needs cozy intimacy—less space. The whole east wall of the living-dining space is plate glass from ceiling to floor overlooking the brick terrace beyond. It's hard to imagine the room being small when one overlooks more than a hundred feet of woodland. The space extends itself to the outside, thus making not only a pleasant relationship between house and garden but also creating a spaciousness necessary in the minimum house.

The north end of living room, since it adjoins neighbors, is windowless with fireplace and bookshelves. Privacy has been accomplished for the main living area by opening the room only to the east where encroachments of traffic, neighbors and unsightly buildings is eliminated. A space-saving trick which minimizes housekeeping is the counter between dining area and kitchen. On the dining side are two stools and when the counter is dropped down to form a table, we have a perfect spot for breakfast or a quick snack. Another trick for stretching the little house is the use of twin-bed box springs and mattresses in the living room, turning the area into a guest room when needed. Double-duty rooms were most necessary.

There is no wood flooring in our house. Carpeting with padding is laid directly on a concrete slab. The main structure is frame with exterior plaster and interior plasterboard. A white asbestos roof allows the structural joists to show in the living room, while ceilings elsewhere are of insulating board over two inches of rock wool insulation. An overhead storage shelf in the garage, placed high enough for a car to drive under, provides plenty of storage space for trunks, golf clubs and those many bulky items without which no home would be complete. The brick passage between house and garage not only acts as light well for bedrooms but increases circulation between both the main and the service entrance.

Kitchen is small but full of space. Range was taken off legs and cased in to provide drawers below. Legs were also taken from refrigerator to provide storage for sugar, bread, flour

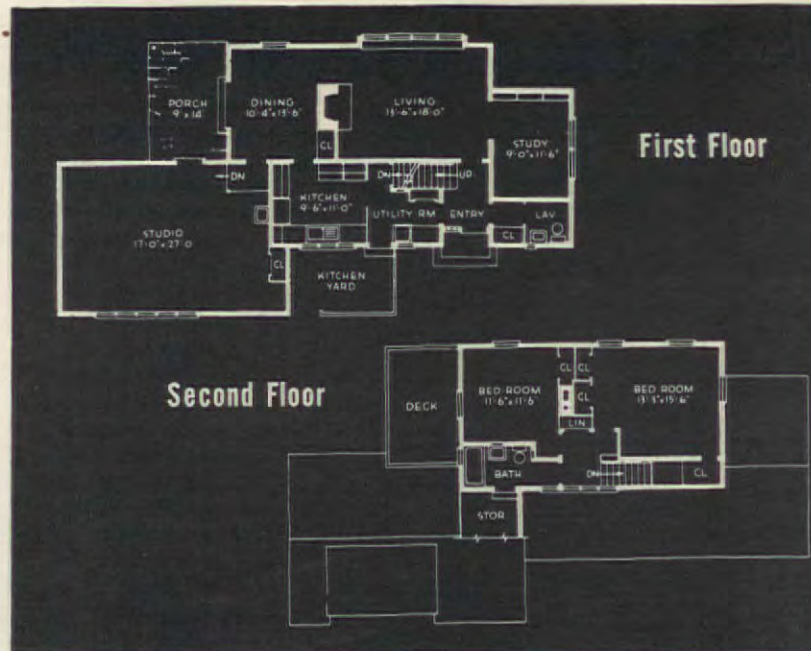


Bright red and white wallpaper lines adjoining panels of snack bar counter Earth-pink walls, blond woodwork and green chair in well-planned boy's room

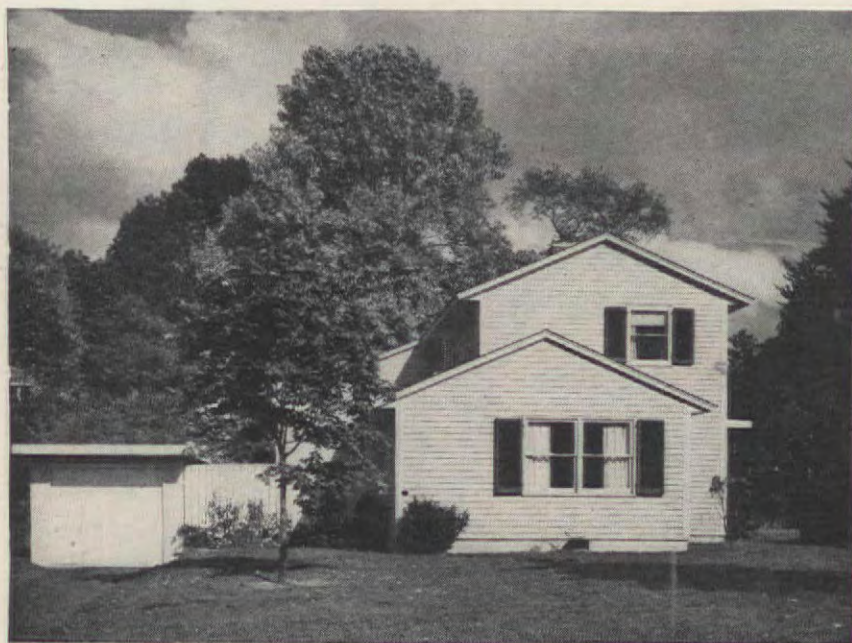
**Home of Mr. and Mrs. Henri Bohenblust
Princeton—Rudolf Mock, architect**

The south wall of living and dining room is continuous, allowing both rooms to flow together with only the projecting fireplace as division. Mrs. Bohenblust is an artist, and so the north-lighted studio is a most necessary feature of the house plan. A study, too, is located on the first floor—a feature that might well be turned into a guest room, since the lavatory is very conveniently located and, with the addition of a connecting door, would afford any privacy desired. Privacy has been added to the drying yard by the happy location of the garage and its connecting, high board fence. This fence, almost self-effacing in its simplicity, forms the background for some interesting ground planting, and becomes an attractive and complementary feature of the front elevation of this charmingly dignified house.

The second floor is very compact, and doesn't cover as much area as the floor below. Here we find two bedrooms, each with cross-ventilation, one bath and plenty of closet space. Directly over the first-floor porch is an open deck which may be used for lounging or sleeping during warm summer nights. Throughout the house, we find wasted space at a minimum; every square inch has been drafted into useful and attractive service.



Photographs: Rodney McCay Morgan



direct lines of Bohenblust house exteriors are definitely Early American in inspiration and of contemporary appeal



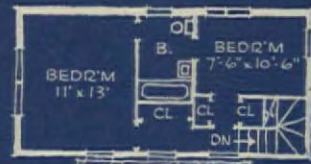
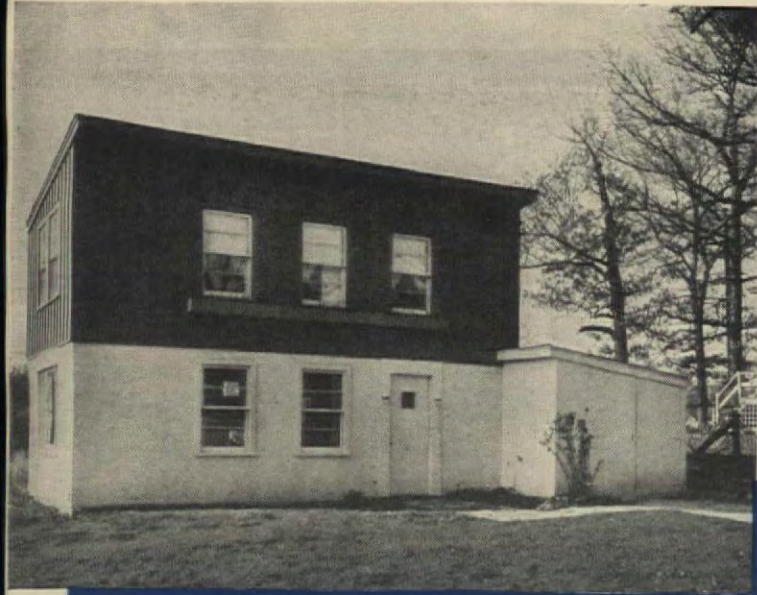
Built-in cabinet is integral part of chimney on the dining-room side . . . cupboards for china, and glassware, the drawers below for silver and linen

NO GROWING PAINS FOR THEM



Young modern architect prepares

basic home for bigger, better things



SECOND FLOOR



FIRST FLOOR



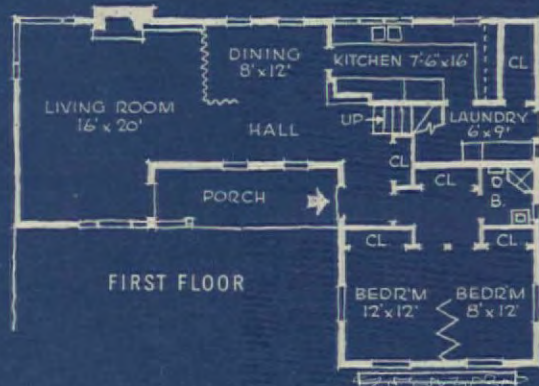
FIRST STAGE



FIRST FLOOR



SECOND STAGE



FIRST FLOOR



THIRD STAGE

Home of Herman H. Lackner, architect, Winnetka, Illinois

It's very easy to see that the two houses shown on this and the following two pages are products of the same architectural thinking. Each is unmistakably stamped with an unusual simplicity of design; each has been planned as the opening chapter in a personal building program. The architect is Herman Lackner, one of the most promising of Chicago's new group of designers, and the house on this page is his own. Until the war, Mr. Lackner and his mother had always lived in a large house. Their new home is definitely basic in its physical limitations, but it provides

ample space for their present homemaking requirements. When the time and need comes, this first unit will be able to grow larger gracefully in two carefully planned steps, though the owners find housekeeping so simple now that expansion is not in their near-future planning.

One fact, however, is certain. Both Lackners are positive that they'll never be happy in any but a modern house. Though their present furniture is traditional, it looks surprisingly well against the new clean-cut background. The combination dining-living room has a living area with

a large picture window facing south and, at the other end, space for dining with a floor-to-ceiling open bookcase treatment that follows through into the stair well. Walls and ceiling are covered in burlap with ceiling beams painted beige. Behind the bookcases, walls are of pine that has been given a toast-colored stain, a tone which, combined with the terra-cotta cement floor, adds a warm feel to the interior. A tiny corridor kitchen boasts a utility closet and outside door. For greater unity in so small a house, the same cement floor color has been carried into this room also.



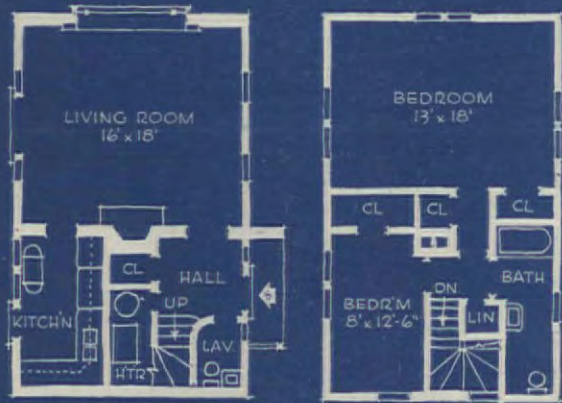
● Combination living-dining room has a large picture window facing south. Most unusual feature of dining area (right) is open floor-to-ceiling shelf unit set against pine wall and following line of stair well. Other walls and ceiling are covered in beige painted burlap



Walls and ceiling, a wood cabinet sink and the built-in cupboards have been painted white. Counter tops are of white marbled linoleum. Upstairs, the two bedrooms are filled with more of the family furnishings which fit as naturally in their new home as they once did in their former, more spacious surroundings. The mother's room is papered in bold green-and-white stripes, while the sloping ceiling in this room is natural ponderosa pine with exposed beams.

Color has been very cleverly used on the exterior and gives the house great distinction in spite of its size. The lower siding matches the white of the painted garage brick. The vertical boards-and-battens of the upper story are an olive green with a long Chinese-red flower box connecting three windows. As the house grows, a large ell will be added to the living room and will balance the present garage wing. In the final chapter, the garage will be converted into two small bedrooms with bath, and the kitchen will become larger to include a utility room. A new garage will be located elsewhere on the property.

When Thomas Boal, a friend of Mr. Lackner, returned from service in the South Pacific he, too, decided to build a home that could grow. The basic unit was finished



FIRST STAGE



PORCH

GARAGE
17' x 20'

SECOND STAGE

...and also designs expandable house for friend



Home of Thomas Boal,
Winnetka, Illinois
Herman H. Lackner,
architect

THIRD STAGE

MORE →

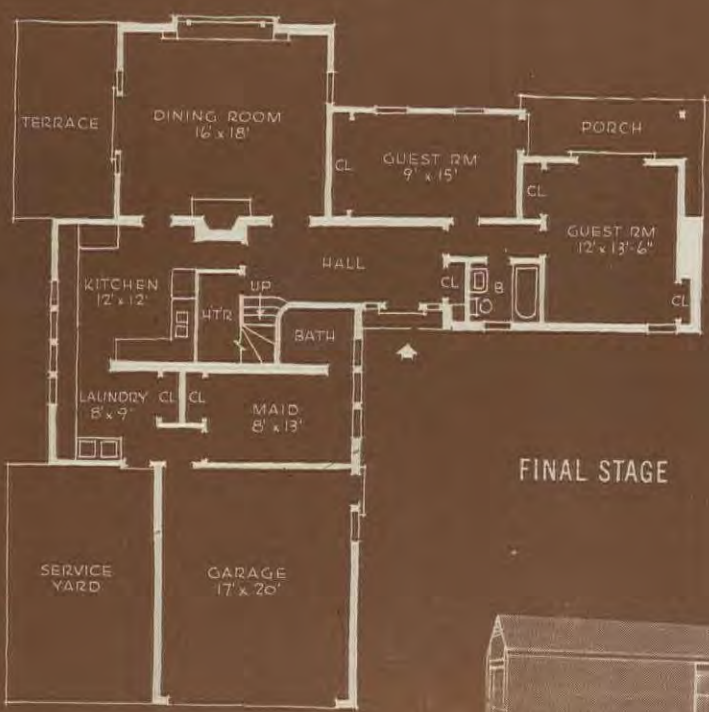




about a year ago and already work is proceeding on step No. 2. Since this is a bachelor's home, ease of maintenance was important but, because Mr. Boal also likes to entertain, quarters couldn't be too cramped. A large living-dining room, kitchen, and powder room were located on the first floor with two bedrooms and bath upstairs. The plan has the same compactness found in the architect's own house. In expanding, a garage will be added along with a utility room and another small bedroom and bath. In the last chapter a south wing will be placed just off the present living-dining room and will include a new second-floor living room, a bedroom, and another bath. The present living room will then be converted into a dining-study.

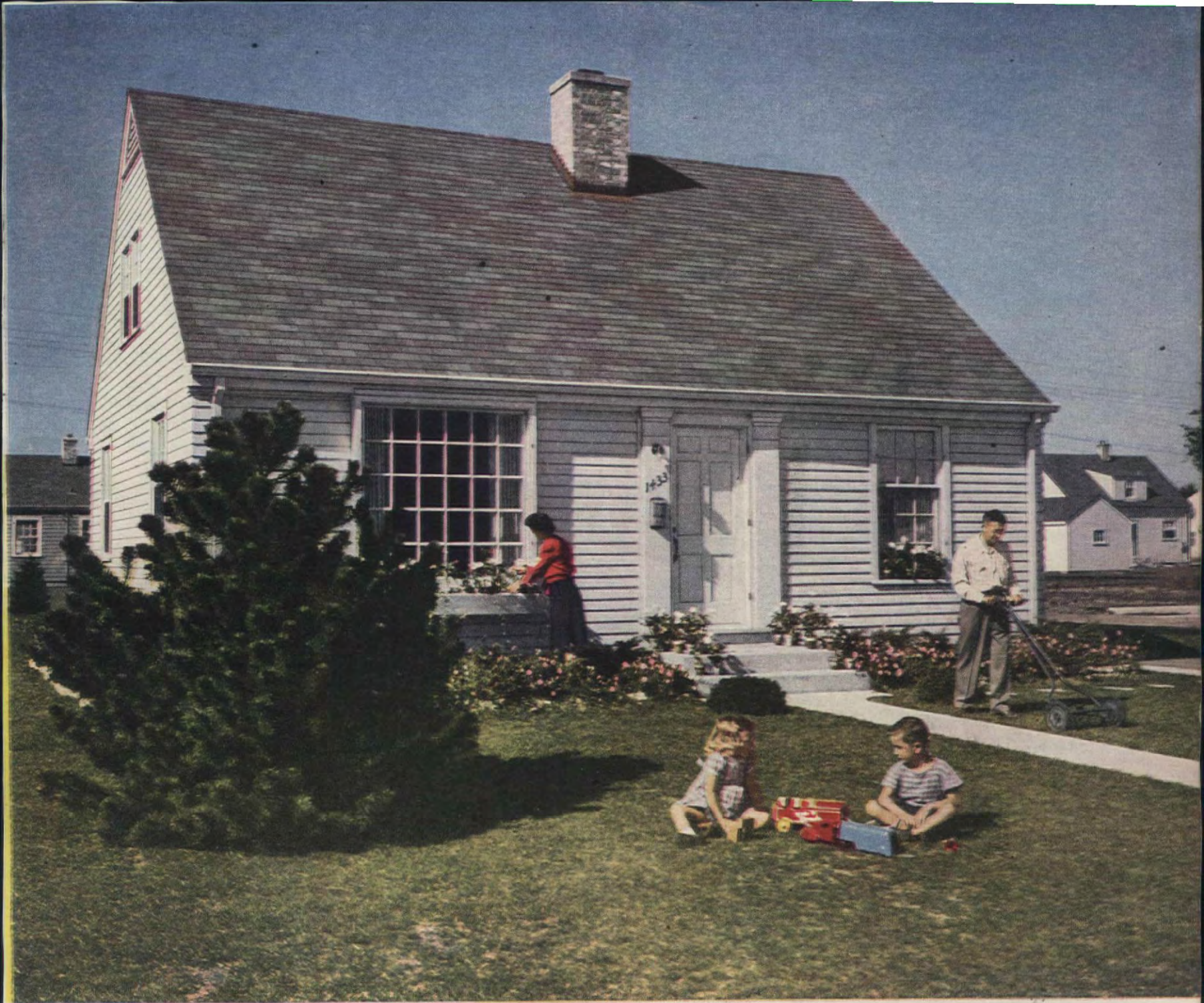
Each addition is planned to enhance the good lines and proportions of the original unit, and no awkward adolescence will rear its unfortunate head in the process. The exterior is a combination of red sheathing and common brick with white trim and black asphalt roofing. A sheltered entrance leads to a white door and into a small olive-green hallway. Three walls in living room are of vertical redwood boards, and the fourth is of common brick.

Data: Ruth W. Lee
Photographs by Nowell Ward



FINAL STAGE

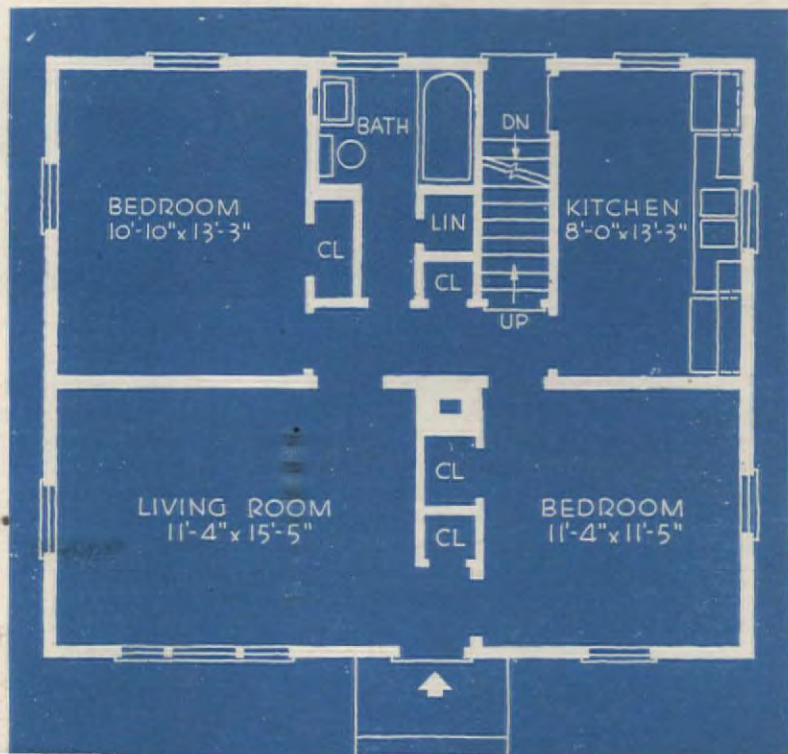




The Home of Mr. and Mrs. Edward G. Thomas, St. Charles, Illinois

The house shown on this page and those illustrated on page 47 were born of necessity and the thoughtfulness of a local business leader, the late C. T. McNeill. Together with managers of eight other St. Charles industries, he realized the acute housing shortage facing the employees of his town. Under his expert guidance and with co-operative financing a plan came into being whereby houses could be built and sold at no profit.

The well known architectural firm of Frazier and Raftery was engaged and seven basic plans decided upon. The variations on these plans were many and interesting since the architects, masters of their craft, injected little subtleties of detail that keep these small houses from looking like so many peas in a pod. More than sixty houses have been built and sold and many more are on the way. Their prices will range from \$9,000 to \$13,000.





MIAMI MODERN — RIGHT DOWN TO THE GROUND!

JANE FISHER



Photographs by Rodney McCay Morgan

Like many houses in Florida, the home of Mr. and Mrs. T. V. Moore, Jr. is built on filled-in land. Its modern design doesn't shut out the sun and wind from the open living room, rather they are controlled by ceiling-to-floor sliding glass walls and draperies. The ceiling reveals the slant of the roof and lights are concealed in a box beneath three clerestory windows. Separating living room from dining area is a plant-filled waist-high partition.

The kitchen is a honey—completely equipped with every convenience and has a breakfast bar

to boot! Sliding panels can be closed to cut off the view into the kitchen when serving formally.

Color has been wisely used throughout the house. For instance in the living room cocoa brown and chartreuse predominate with splashes of scarlet taken, no doubt, from the flaming hibiscus hedge just outside. A fireplace perches—off the floor and almost in the middle of a wall papered in knotty pine: All other walls are chartreuse.

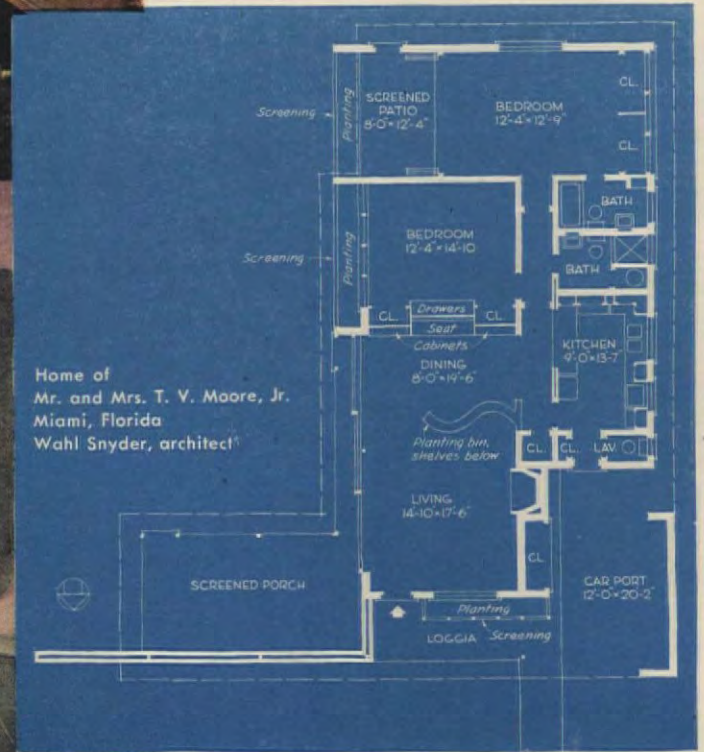
Off the hall is the guest room with walls of dusty pink and French grey. Built-in beds have

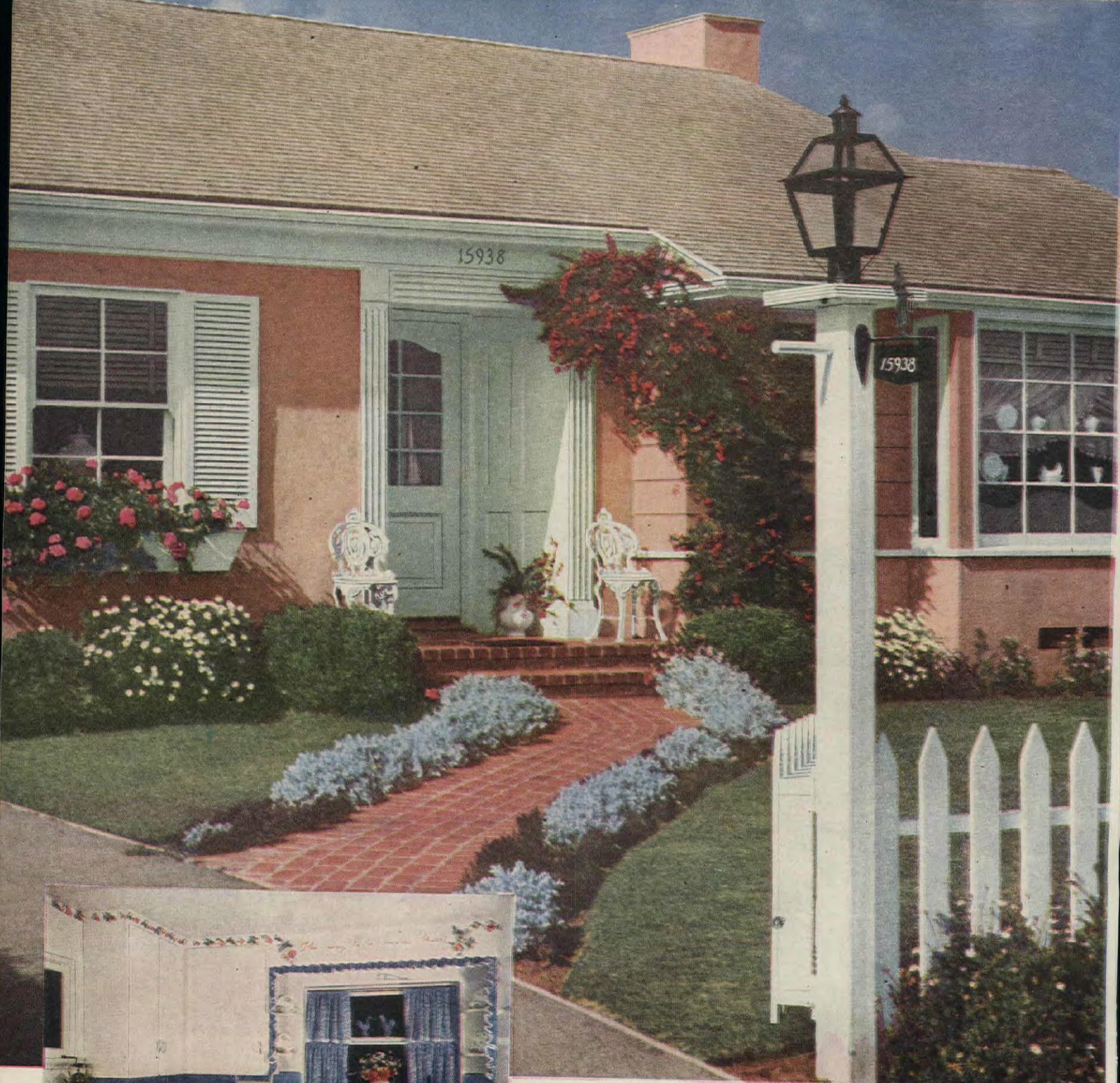
cleverly upholstered, rounded backs and sides. The effect is repeated in frames around the windows and the mirror over a double dressing table between the beds. At the end of the hall is the owners' bedroom. Here the lighting fixtures are concealed in the slanting ceiling and give the room a soft, diffused glow. One wall is devoted to double closets and built-in chests of drawers. On either side of the oversized bed, chests have been used as night tables. Yellow is seen everywhere in this room, though green printed-leaf draperies offer cool contrast.

- The plant-filled partition pleasantly separates the living and dining areas of this spacious room. Clerestory windows and boxed lights provide ample soft light either day or night for the area across from the large sliding doors. A modern raised fire-place accents the simplicity of the rather high wall

- Two comfortable chairs and a cozy banquette insure convenient dining for four, with no person having to wrestle with a table leg. Prized china is displayed in shelves above banquette. Light from the sliding doors and overhead makes the area cheerful

- The guest room has three dusty-pink walls and one gray. Built-in storage is located on the gray wall which appears in the mirror. The gray appears again in the dressing table, and the dusty pink is repeated in the bedspreads. The upholstered frames for the window and mirror are very effective



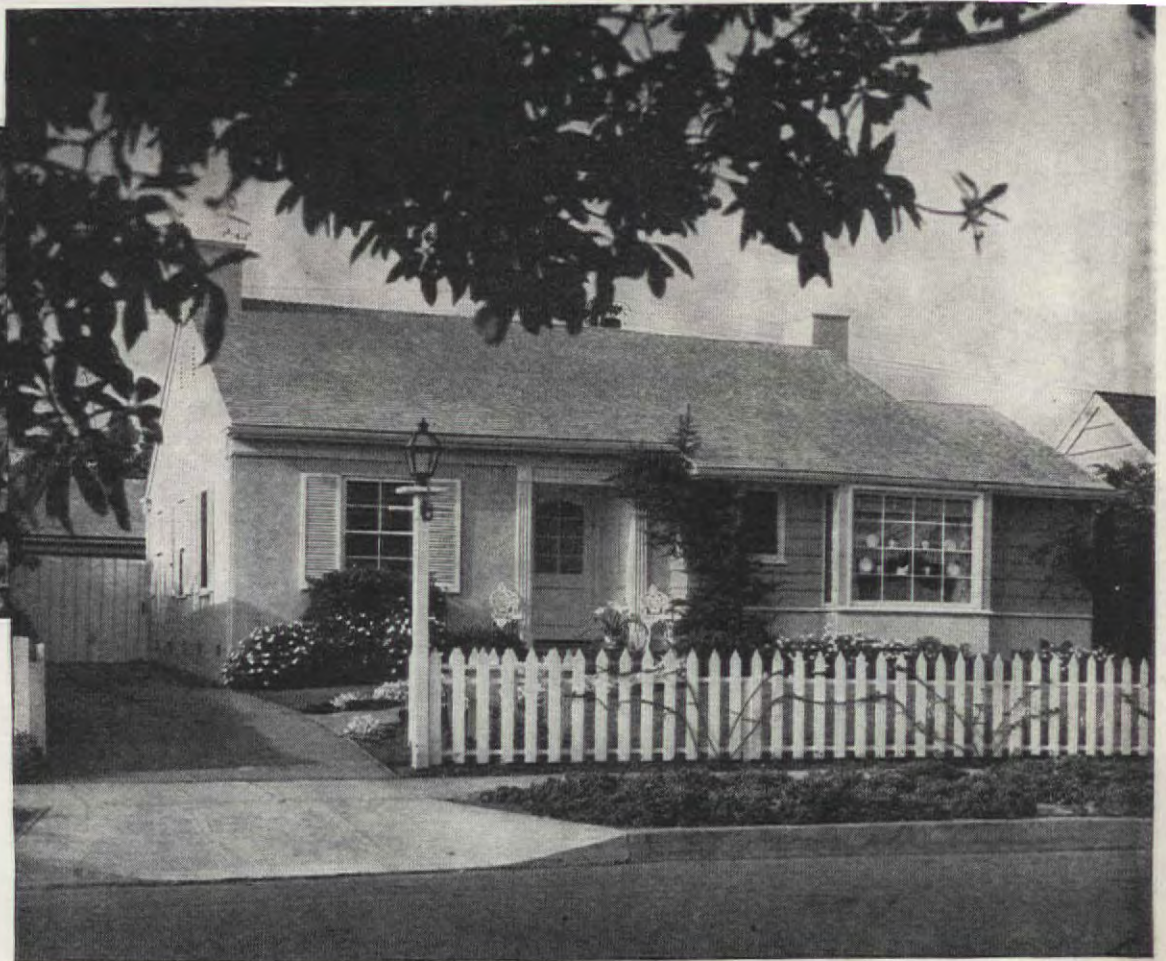


Inviting Entrance to Good Living...

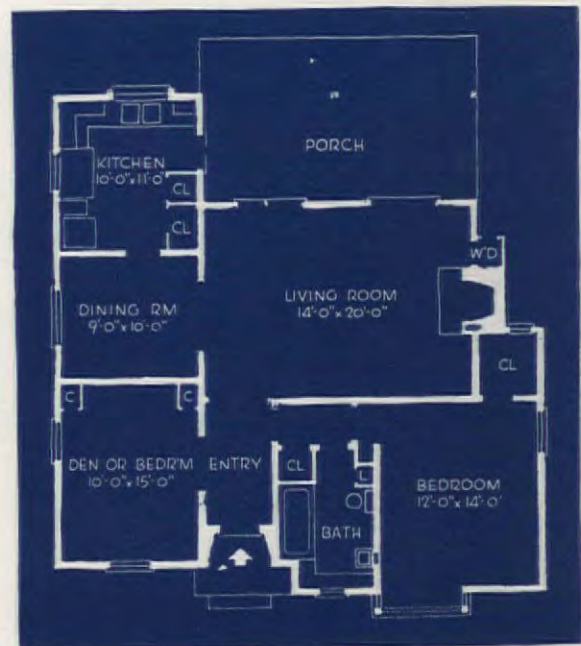
*Home of Mr. and Mrs. Jack Henley
Pacific Palisades, California
P. H. Bevis, designer-builder*



Photographs by author



A. T. Ankeny

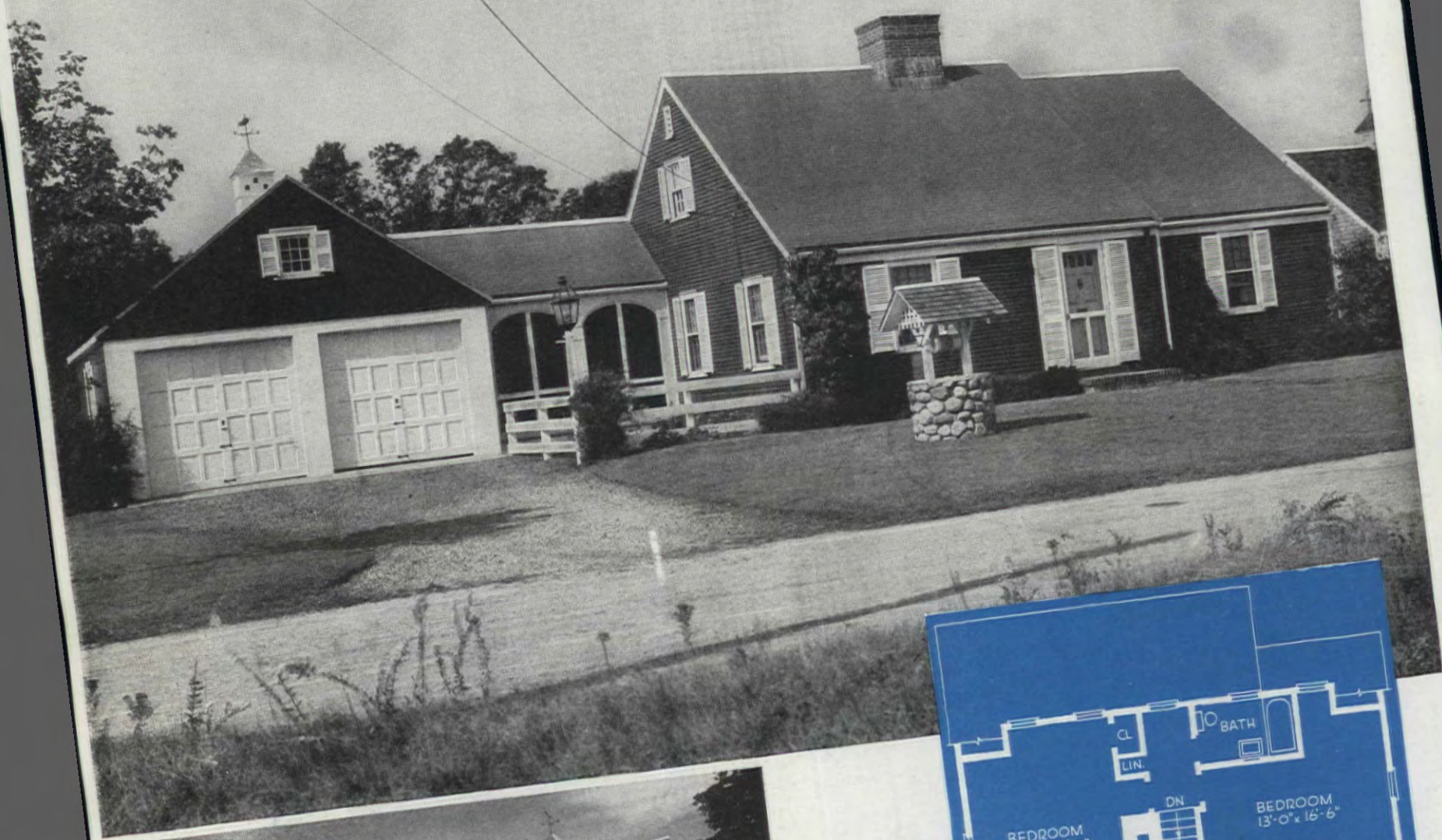


Driving down Temecula Street in the Pacific Palisades, your eyes are sure to be drawn to the quaint charm and loveliness of the little Henley cottage. Like a production in technicolor, it demonstrates how landscaping can be combined with carefully chosen house paint to achieve an almost fairyland mood. Walls are of dusty rose, trim of frosty white, and the surrounding planting has been done in complementary colors. There's dusty miller, interspersed with purple lobelia, flanking the red-brick walk that leads to the front door. This doorway has the simplicity and directness of line found in better examples of Greek Revival architecture. The door itself is recessed, thus giving a strong shadow accent to the front elevation. Pink and red geraniums grow profusely in a window box and, planted beneath, are clusters of shasta daisies and dwarf boxwood. A large, many-paned bay window adds just the right amount of asymmetry to the street side of the house and displays to advantage the owner's collection of old milk glass.

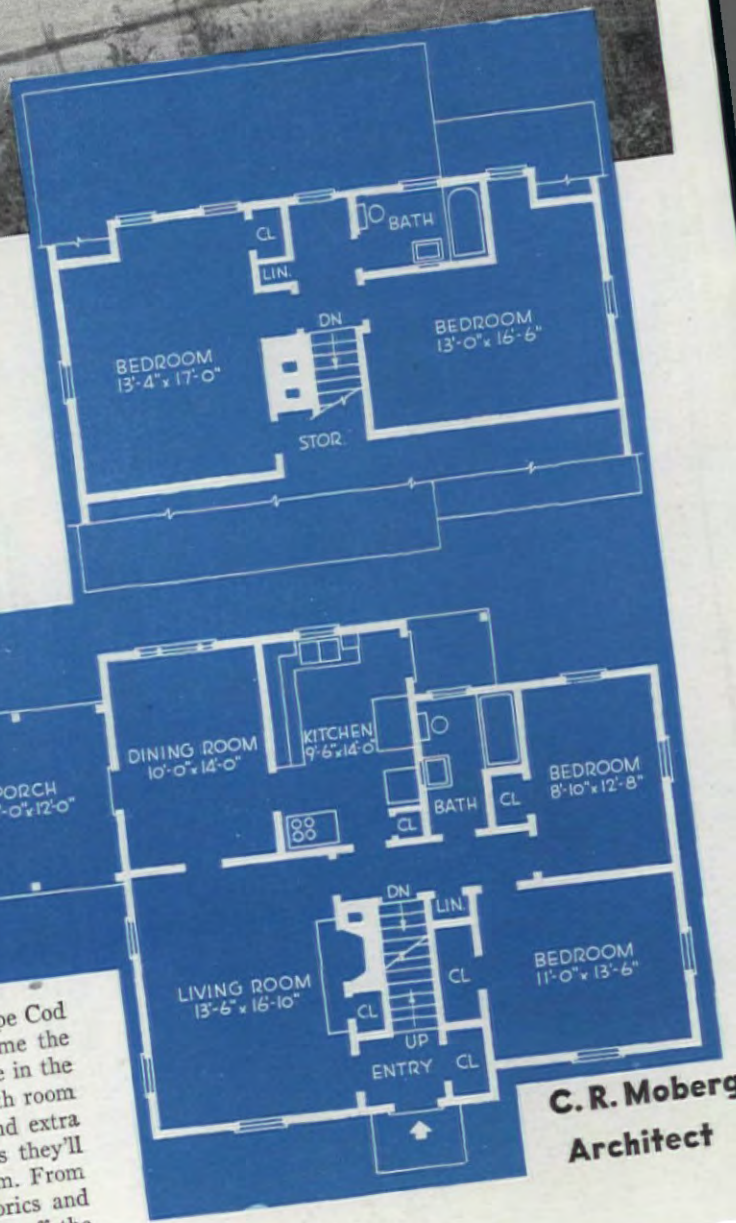
After gazing with admiration at the colorful exterior, it is not surprising to discover, upon entering the home, that the owners have applied the same skill and care throughout each room. Since their little

PLEASE TURN TO PAGE 137

The home of Mr. and Mrs. William C. Dean at Governor Francis Farms in Warwick, Rhode Island



JANE HALE

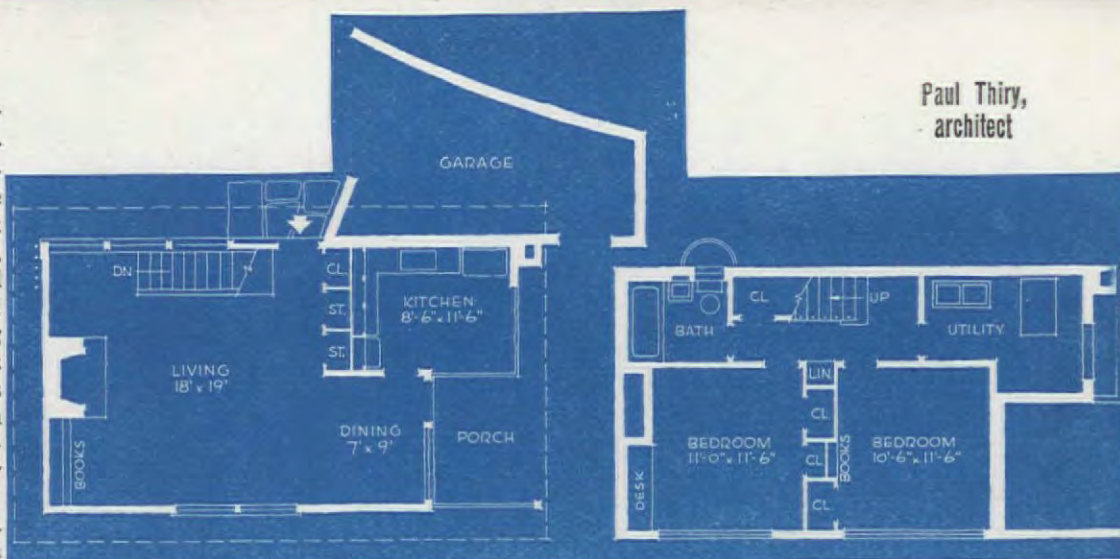


C. R. Moberg
Architect

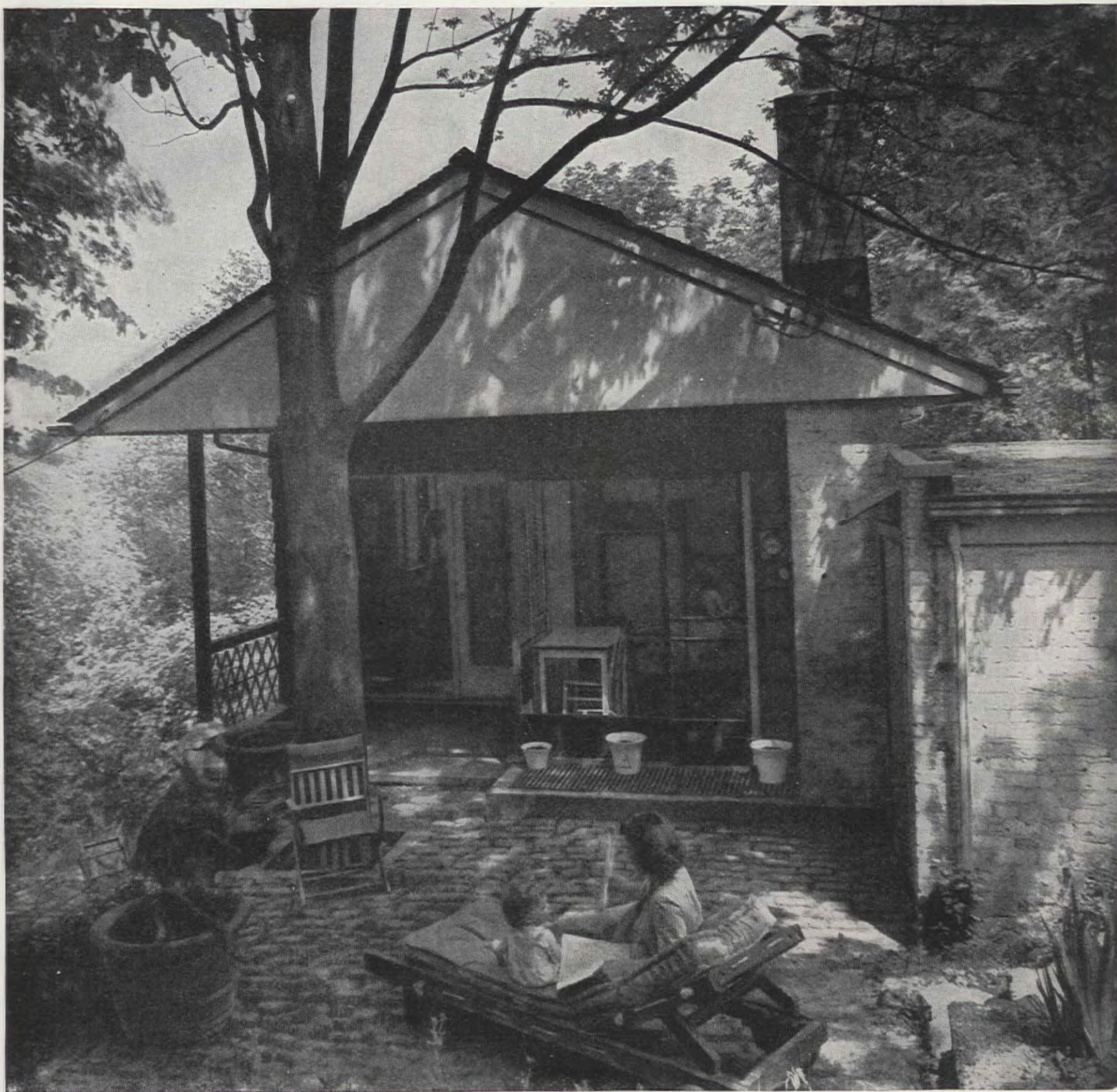
When the William Deans received this attractive red-and-white Cape Cod house as a wedding present from the bride's father, they became the owners of what is, beyond a doubt, the most popular type of house in the country. There are two bedrooms and bath on the ground floor with room for two extra rooms on the floor above. When the time comes and extra sleeping quarters are needed for the two Dean offspring, upstairs they'll go, and their first-floor room will be transformed into a playroom. From the start, Mrs. Dean insisted on minimum upkeep; delicate fabrics and flimsy antiques handicap youthful energies. A screened breezeway off the dining room connects house with garage and acts as a summer dining room.

Designing a really *good* small house presents so many difficulties that even the most stouthearted architects quake when tackling the job. The real problem lies in the fact that no matter what size of a house you plan, there are certain basic pieces of equipment necessary for its proper functioning. Unfortunately, none of this apparatus is plastic enough to be squeezed into areas of smaller dimension. Therein lies the rub! And herein is an example of sound minimum planning produced by one of the West Coast's most important architects, Paul Thiry. We congratulate Mr. Thiry for his ingenious solution in the Huntington home shown on these pages. Here's a house, not ten minutes from downtown Seattle, so cleverly integrated into its steep, deeply wooded plot that there's nary a hint of the big city.

It's a house taking full advantage of its topography. Entrance is on the street level where living-dining room and kitchen are located; two bedrooms, bath, and utility room are on a lower level. Because of the steep slope, the bedrooms receive plenty of light and ventilation.



Home of Mrs. Flora Huntington near Seattle





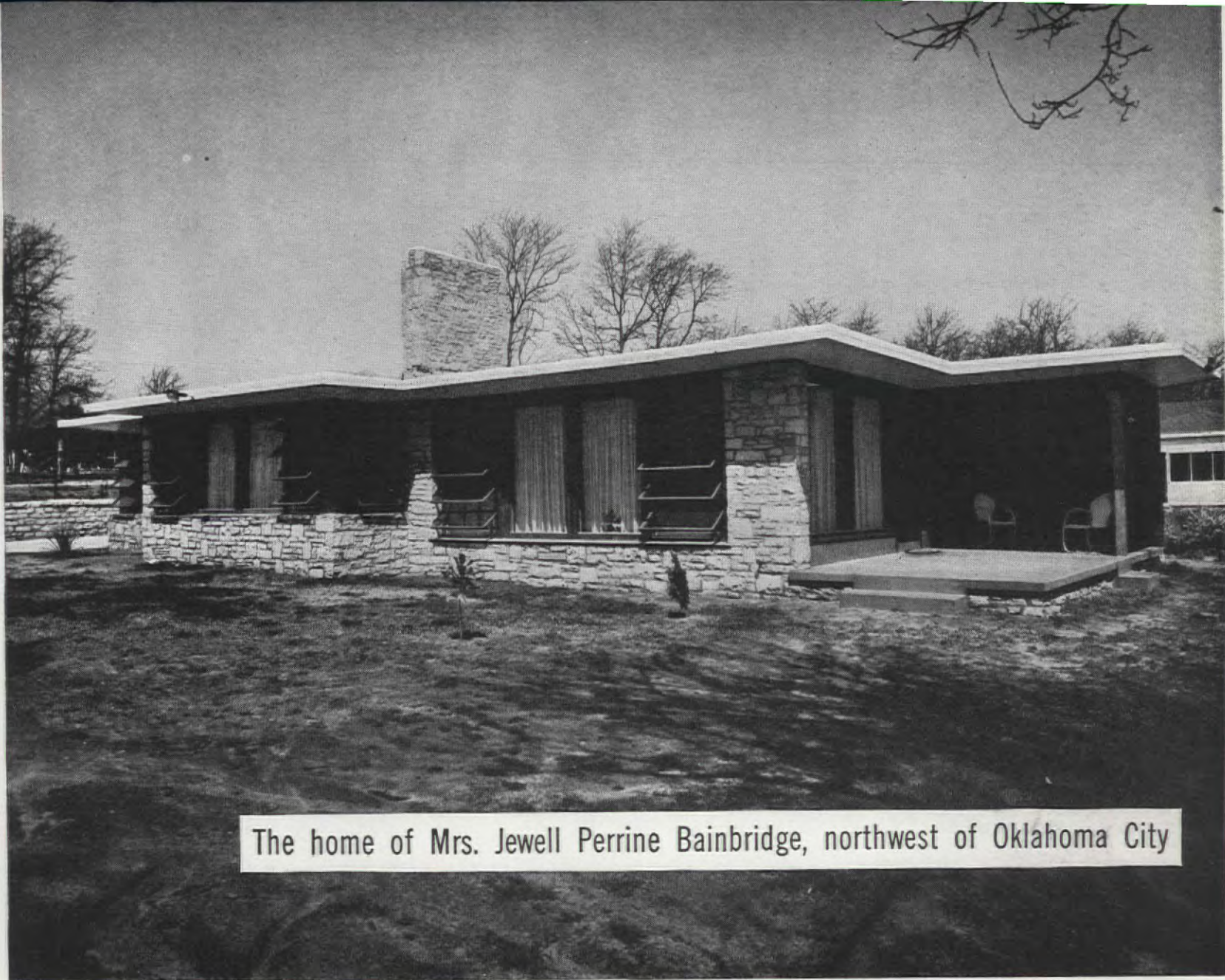
One unusual feature of the house—one of its most attractive details—is the glass-enclosed kitchen which faces the open terrace. With this innovation, supervision of youngsters is an easy matter and, at the same time, the outdoors actually seems to be brought right into the house.

Extremely interesting combinations of material and color are found everywhere. The exterior is partly cedar clapboard, partly white-

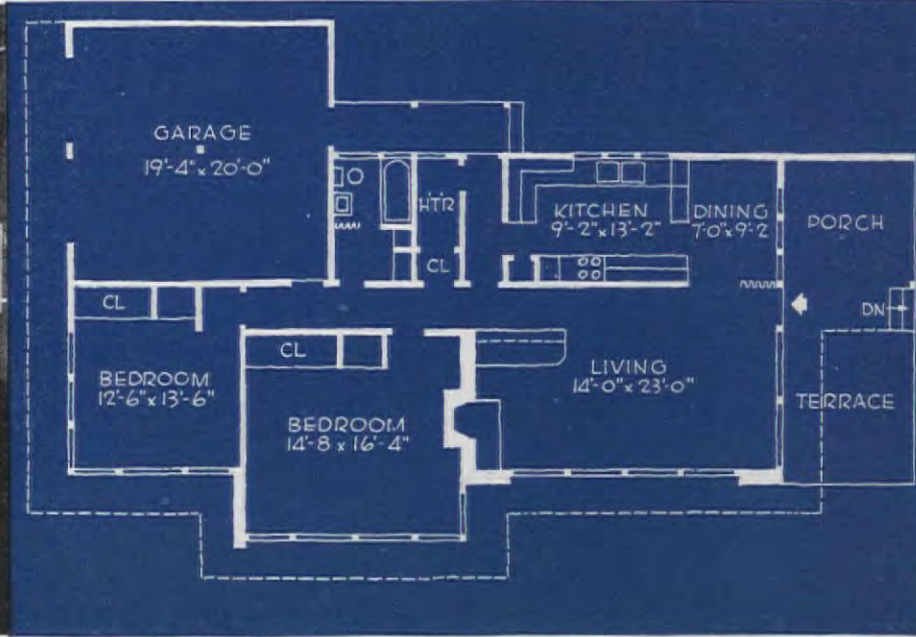
painted brick. Soffits and trim are cream, and there's a gay tile-red entrance door. This bright color finds its way inside, where it is used on the convenient storage wall, running at right angles to the front wall. This unit, most unusual in a house so small, is invaluable for storing such household equipment as vacuum cleaner, brooms, clothing. The living-room walls are of natural Philippine mahogany, and, in this

room, we find special interest focused on the brick fireplace with its adjoining built-in desk and bookcases. The ceiling is of acoustical material, painted blue, the color also found on the kitchen door. All floors are of hardwood, and, except for the wood sash in living-dining room, sashes are of steel, painted tile-red. When checking the plan on page 45, notice the curved garage wall which follows contour of the road.

Photographs and data: P. A. Dearborn



The home of Mrs. Jewell Perrine Bainbridge, northwest of Oklahoma City



Sturdy and low, with its back to the fierce Oklahoma winds, the house of Mrs. Jewell Perrine Bainbridge fits naturally into its wooded acreage. Located northwest of Oklahoma City, the house is an excellent choice for year-round living in that climate. A thirty-eight inch roof overhang shields the main rooms from hot summer sun, a gas-fired Chrysler Airtemp unit warms the air in winter.

Exterior walls of the house are of gray-green Ada limestone with plywood trim. The roof is tar and gravel with metal flashing. Center windows are plate glass, fixed; the

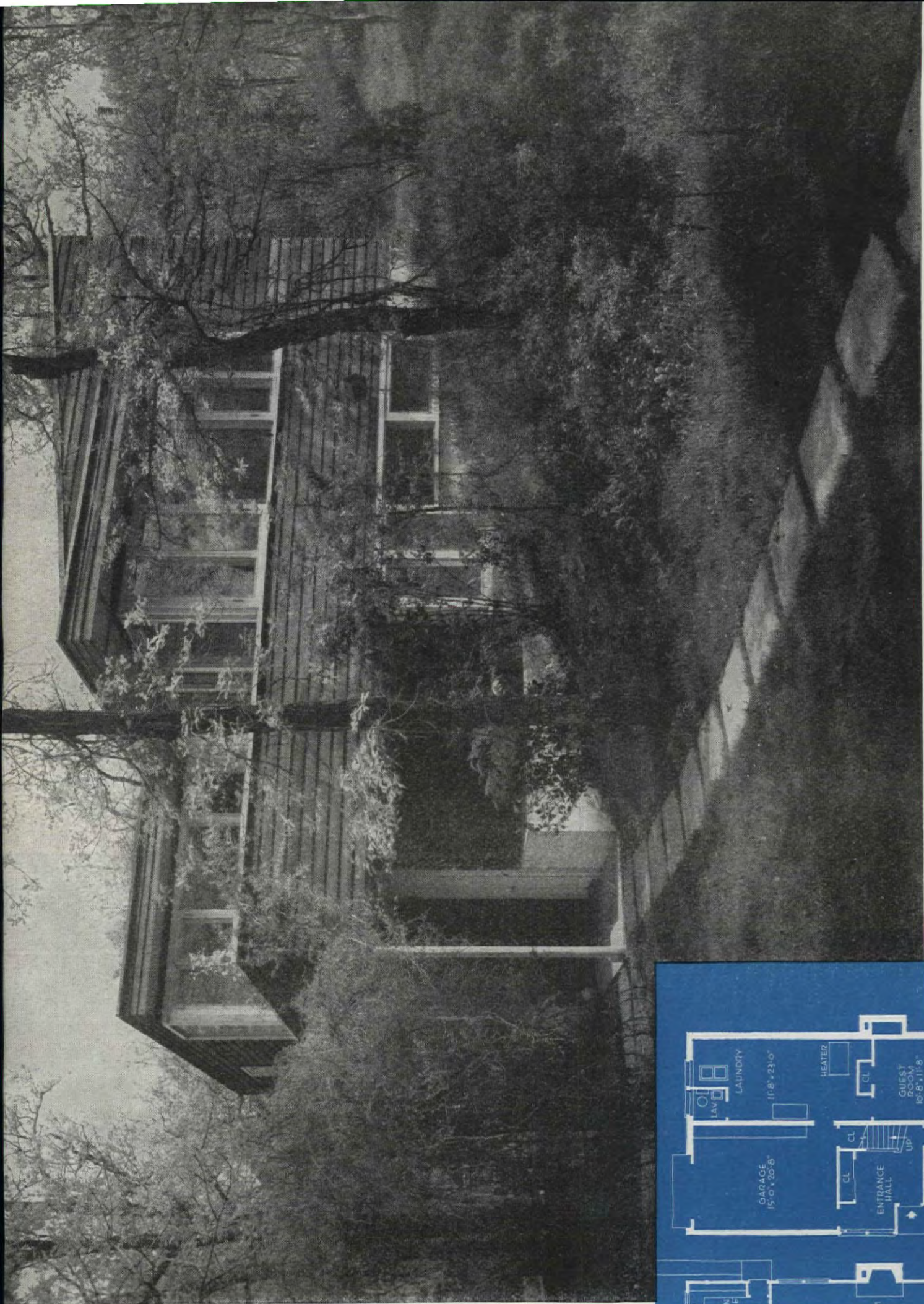
side windows open horizontally. All floors, except the kitchen, are oak; all walls and ceilings are of fir plywood. The living-room ceiling is squared with fir strips.

One wall of the living room, containing the fireplace, is constructed of the same limestone as the exterior. A rose-beige cotton rug and beige draw draperies of Rajah cloth, hung from ceiling to floor, blend with the neutral background colorings. The sofa opposite the windows is blue; two chairs are in red. A simple Oklahoma landscape in blues and tans, with beige mat, hangs above the sofa.

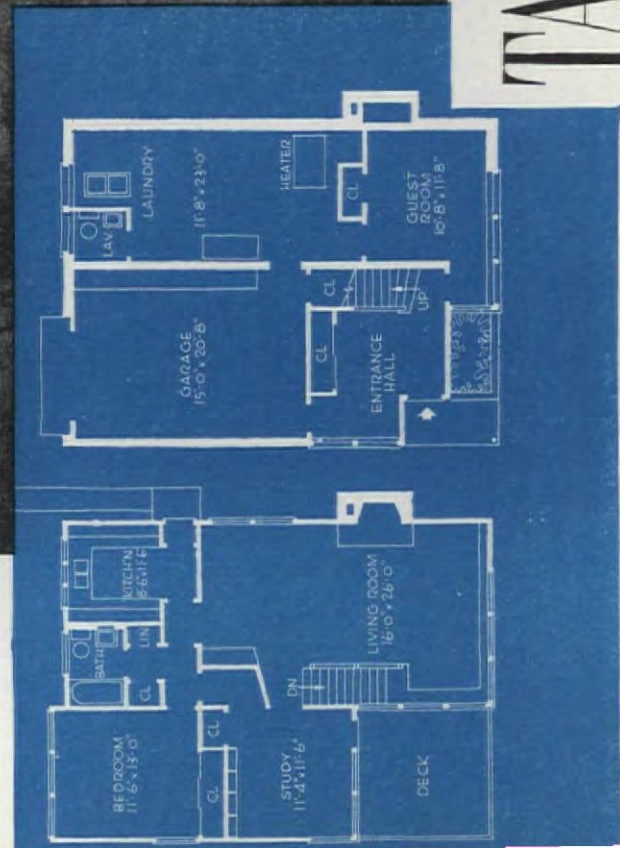
R. Duane Connor,
Designer

EUGENIA WHITE

Photographs by Johnny Melton
A. J. Bullard, interior designer

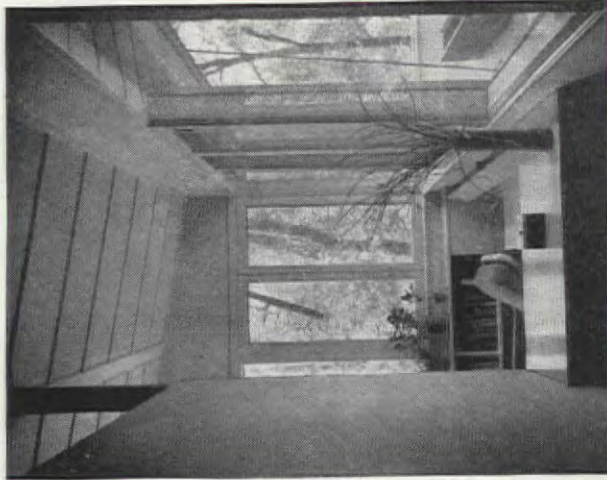


TAILOR-MADE FOR SLOPING PLOT



Elizabeth and Winston Close,
architects

Data: Charles Raymond

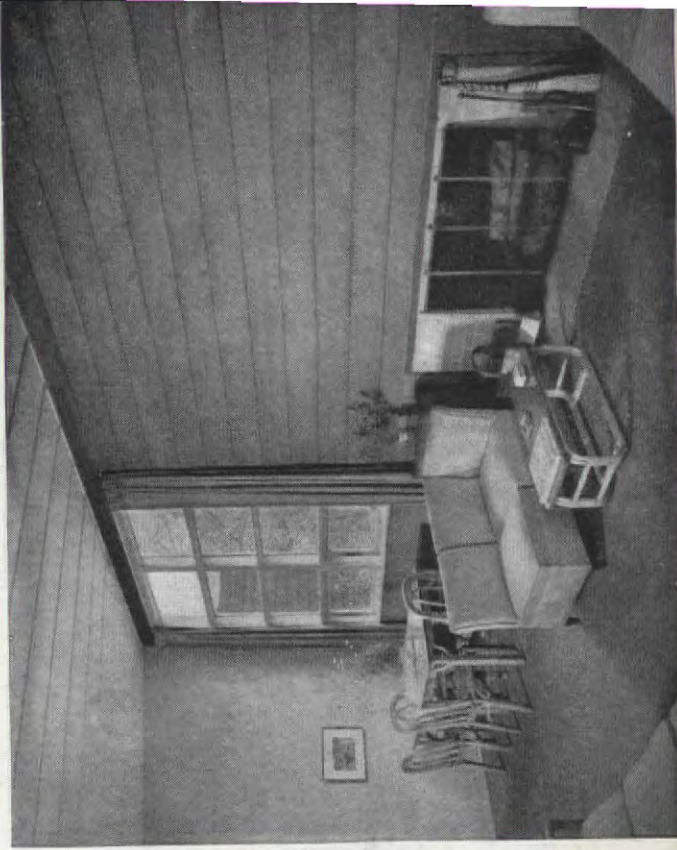


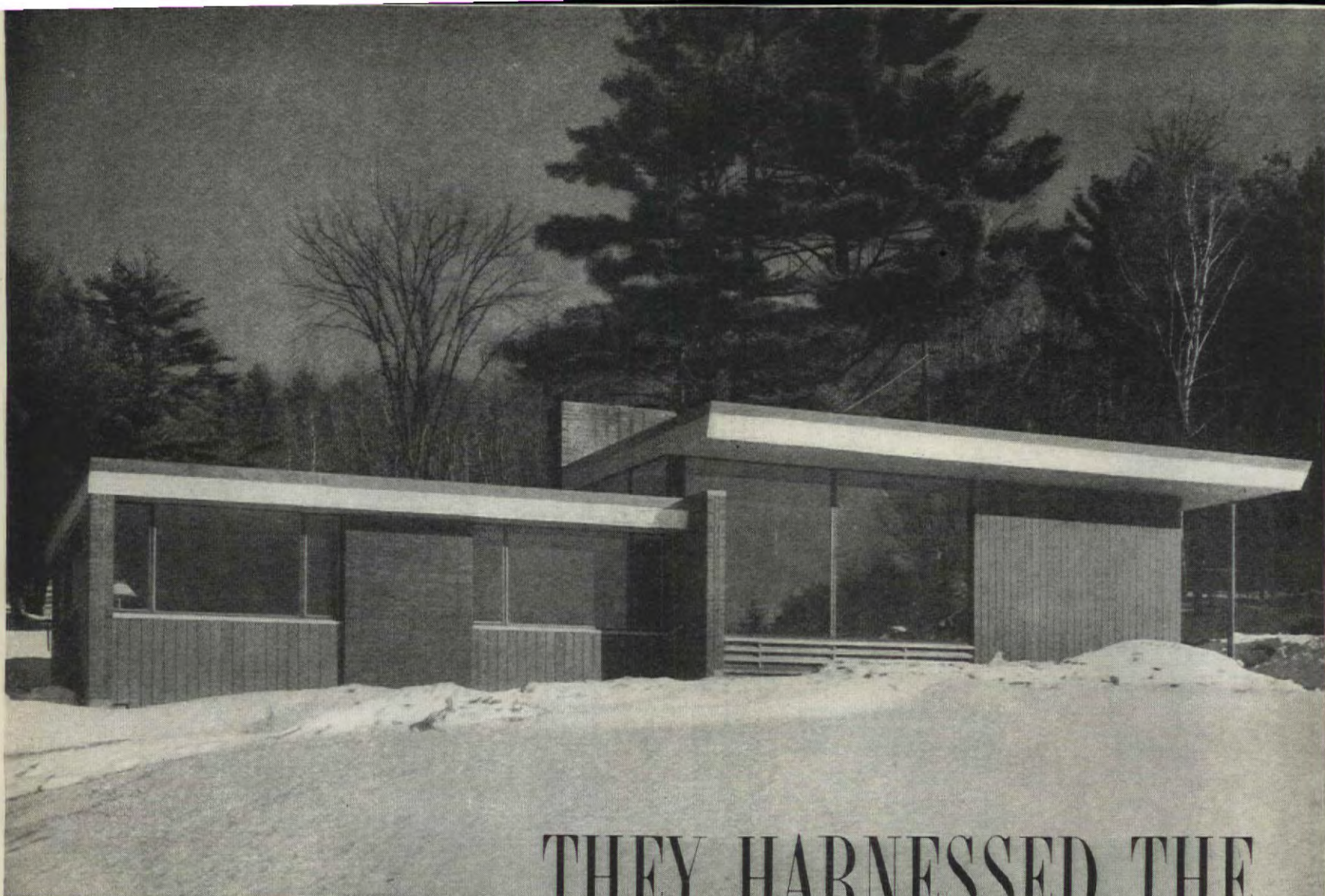
Photographs by Hedrich-Blessing

- Unfinished 6-inch redwood siding covers the frame construction. Light-yellow trim and light ochre of lower concrete block add touch of brightness
- Stairway is cleverly concealed behind door-high screen in living room. Sloping ceiling, large batteries of windows, give open feeling to room
- Dining end of living room is adjacent to horizontal redwood-paneled fireplace. Large multiple sash affords pleasant view of adjacent woodlands

The Hathaway house, shown on these pages, comes from the drafting boards of Elizabeth and Winston Close, one of Minneapolis' leading architectural firms. The owner is a professor of psychology at the near-by university; his wife is a clinical psychologist. Their site, which consisted of two lots, each 40' by 130', covered with scrub oaks, was considered undesirable because of its proximity to an industrial area. But as it was near the university, the Hathaways overlooked this handicap. The neighborhood was an established one, and from the upper lot there was a most pleasant view to the southwest. This factor had a deciding influence on the design of the house and its orientation.

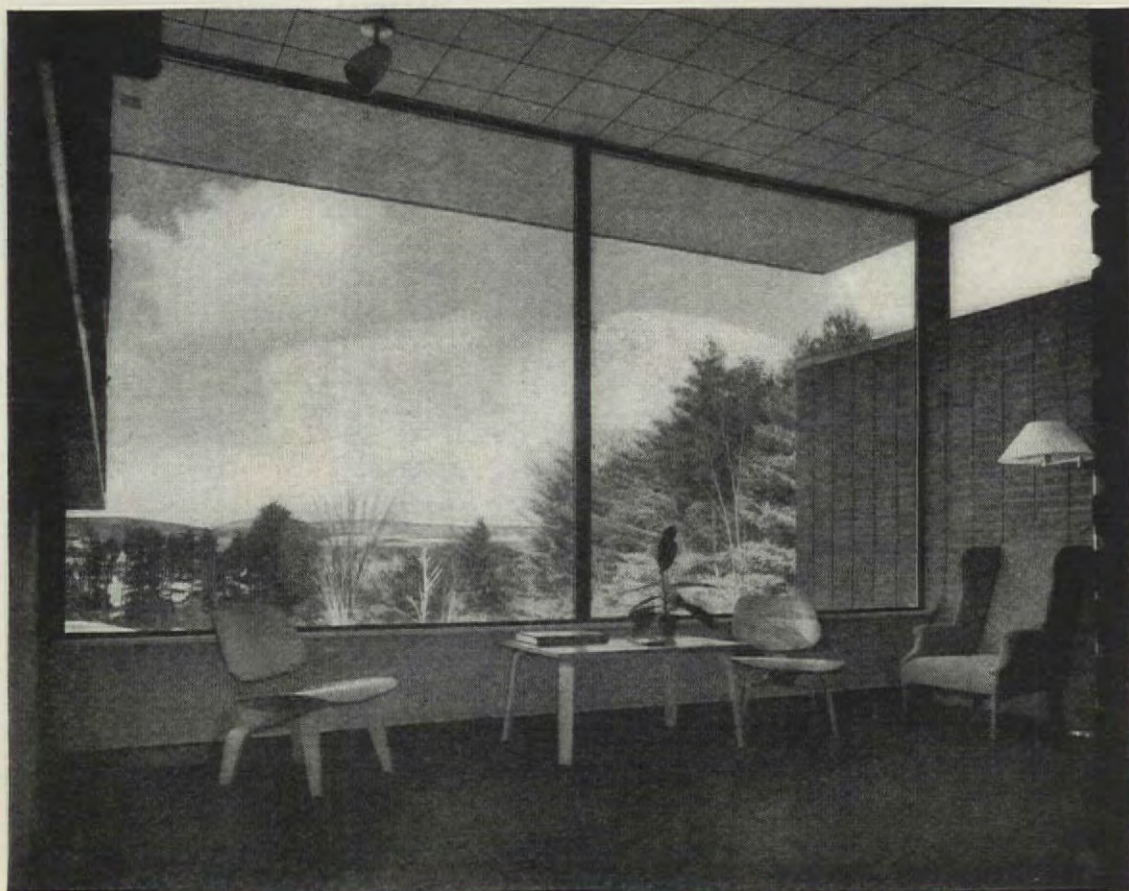
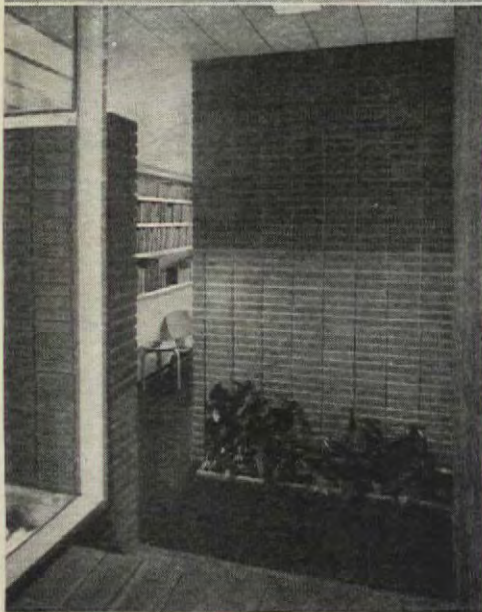
To take advantage of the view, the house was placed on the highest part of the plot. All principal rooms are on the upper floor, while entrance hall, laundry-utility room, an extra guest room, and garage are at street level. Placing the house so involved the cutting down of only one tree. Since the kitchen is on the upper floor, a separate service entrance here saves constant climbing up and down steps. A close study of the floor plans on page 45 will show how the entrance hall was made weatherproof. One enters under a wide overhanging deck, protected from the elements; once inside there's direct access to guest room, garage, and stairs. The hall is only one instance of the clever planning that went into this compact house. The main floor contains a living-dining room, bedroom, an all-important study, and an efficient corner kitchen. The square deck, accessible from the study, overlooks the entrance.





THEY HARNESSSED THE

Prize-winning New Hampshire house
with radiant heating,

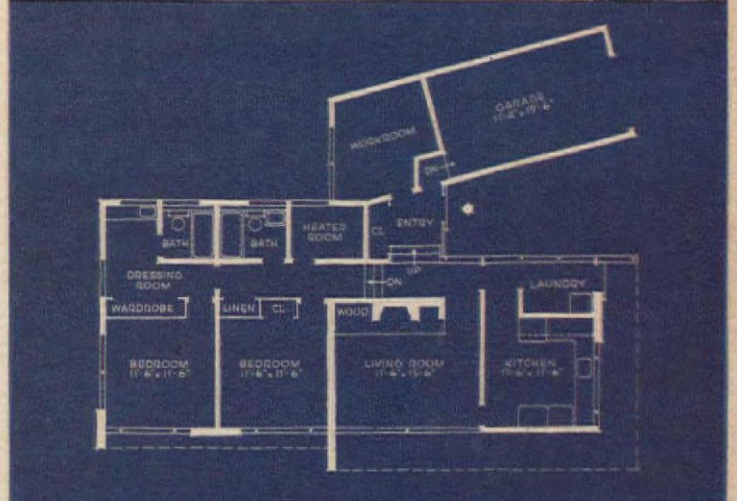
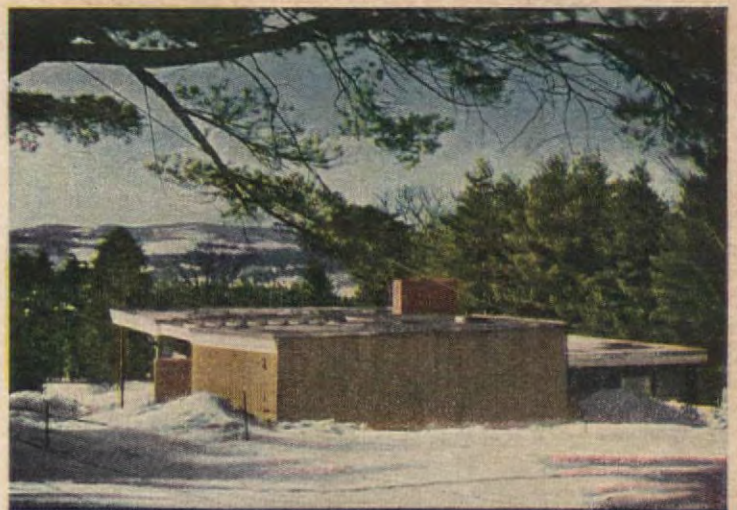


Started when building restriction confined a house to 15,000 square feet, this modern house actually did its expansion during erection because the maximum size was increased 500 square feet during that period. It is the home of a college professor and his wife, who is an expert weaver of modern rugs and fabrics. Therefore, one of the basic requirements was a well-lighted workshop. The two bedrooms were added to the plan during the course of building, although provision had been made at the very beginning. Several things had great bearing on the finished design—first of all, site and program. The plot slopes appreciably from the west and north; dense woodlands and a brook are on the latter exposure. The street of the one-acre lot is to the south; the magnificent view of New England hills to the west.

In order to capture this view, the entire west wall of the house is of glass; in the living room, the fixed sash actually reach from floor to ceiling. Since this room is not over-large and serves as both living and dining room, an attempt was made to achieve a feeling of space that was not actually there. In part, this was done by the large glass areas but, in reality, the greatest contributor to the effect was the use of a small lally column at the juncture of the west wall and the brick abutting wall with its high windows. The effect is really quite startling. The ceiling looks as if it were floating because, in extension, it also becomes the soffit of the wide exterior overhanging eaves. Fire-resisting materials have been used throughout the house. Its framing masonry and lally columns carry light steel beams and open-webbed steel joists. Extending from the fireplace wall at right angles is a brick cavity wall, the brick laid with header joints aligning and extending beyond the west house wall to form a wind-breaking buttress. Where brick is not used, the exterior walls are of vertical cypress siding, stained with a gray preservative. The clear pine trim is also gray.

SUN

meets challenge of New England weather variations
solar control, and summer cooling system on the roof



Photographs by Richard Garrison

E. H. and M. K. Hunter, architects



● Throughout the house the juxtaposition of heavy masonry and light framing was used for wind bracing and esthetic contrast. Red-birch plywood thus vies for focal interest in living room with modular brick wall pattern, and the insulating glass of sash



● House combats variations of New England climate by use of solid brick walls, large glass areas with heavy overhanging eaves for solar control. Roof is flat, built-up; eave flashing provides for one inch of water for summer cooling

We've heard of houses starting from all manner of odds and ends, from chicken coops to abandoned service stations, but, believe it or not, here's a house that started out as a tool shed! It was certainly a meager tool shed, indeed, that the Walter Stamps erected on their few acres of oranges in the San Fernando Valley some three years ago. It's size, 10' x 16', was hardly big enough to store the necessary tools preparatory to starting a five-year program of building. Yes, that was the time limit set by this intrepid family in its search for a home. Now in its third year, the plan has proceeded without a hitch, while the owners work busily on, hoping for their good luck to carry them through the next two important years to the final completion of the house.

When they took over the grove, there was nothing on it but the orange trees. A tool shed was a basic necessity because the family planned on doing most of the work themselves. It would afford a dual usefulness; the cool little interior would give welcome comfort while they ate their picnic lunches. However, small

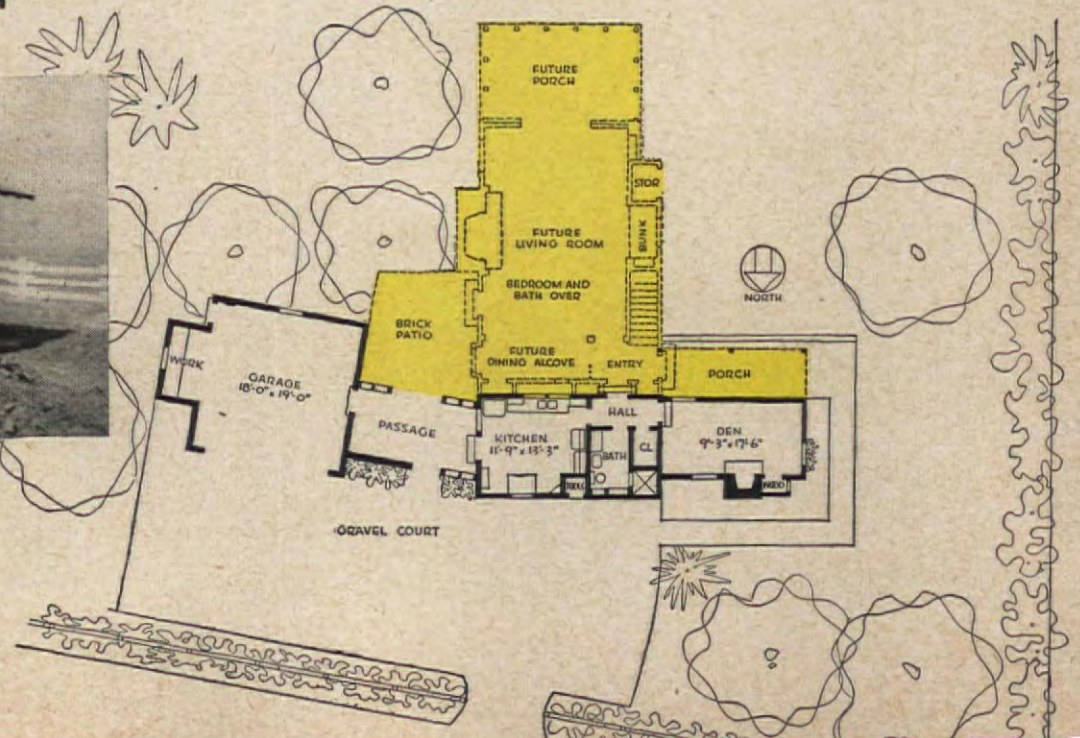


5 YEAR PLAN

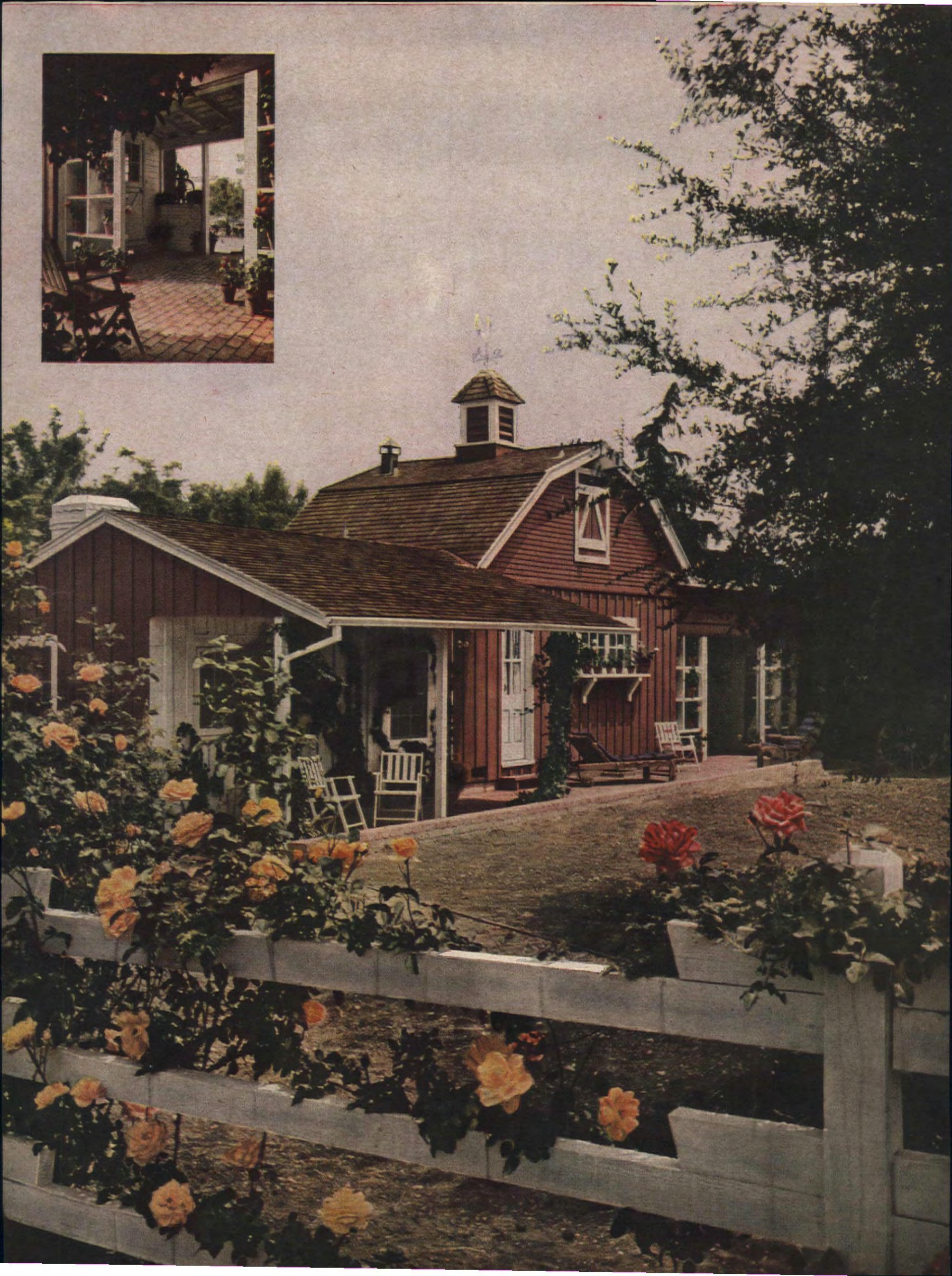
ETHEL McCALL HEAD



Photographs: Robert C. Cleveland



in California





and simple as it seemed, the tool shed was the first building the Stamps had ever attempted. What had seemed easy in the planning stage took on major proportions under the hot summer sun. Besides, the orange grove needed attention, too! So the little shack proved a test case; experiments were attempted and a great deal of important information gained for the more ambitious later building program. A year after the tool shed was built, it became apparent to the Stamps family that the trip back and forth from town was an arduous one. The grove needed more and more attention, and these trips kept them constantly on the road. Therefore, it was decided to turn the tool shed into a living room with a couple of studio couches added to the collection of miscellaneous garden equipment. A tiny bath and kitchen were added, and the second year of the five-year plan was off to a good start.

Now in the third year, we find a garage and workshop added for good measure. At the moment, the ambitious project has come to a halt since building prices seem out of line for the restricted budget. Nevertheless, the Stamps already know where their large, new living room will go. There's to be another sleeping room and bath on the upper floor, too. But everyone is patient and considers the present tiny building, actually all of 480 square feet, so charming and homelike that the waiting years will be contented ones. The next steps forward will be logical ones since the owners sought professional advice soon after the tool shed was built. They know that each step in the five-year plan will add more beauty and comfort.

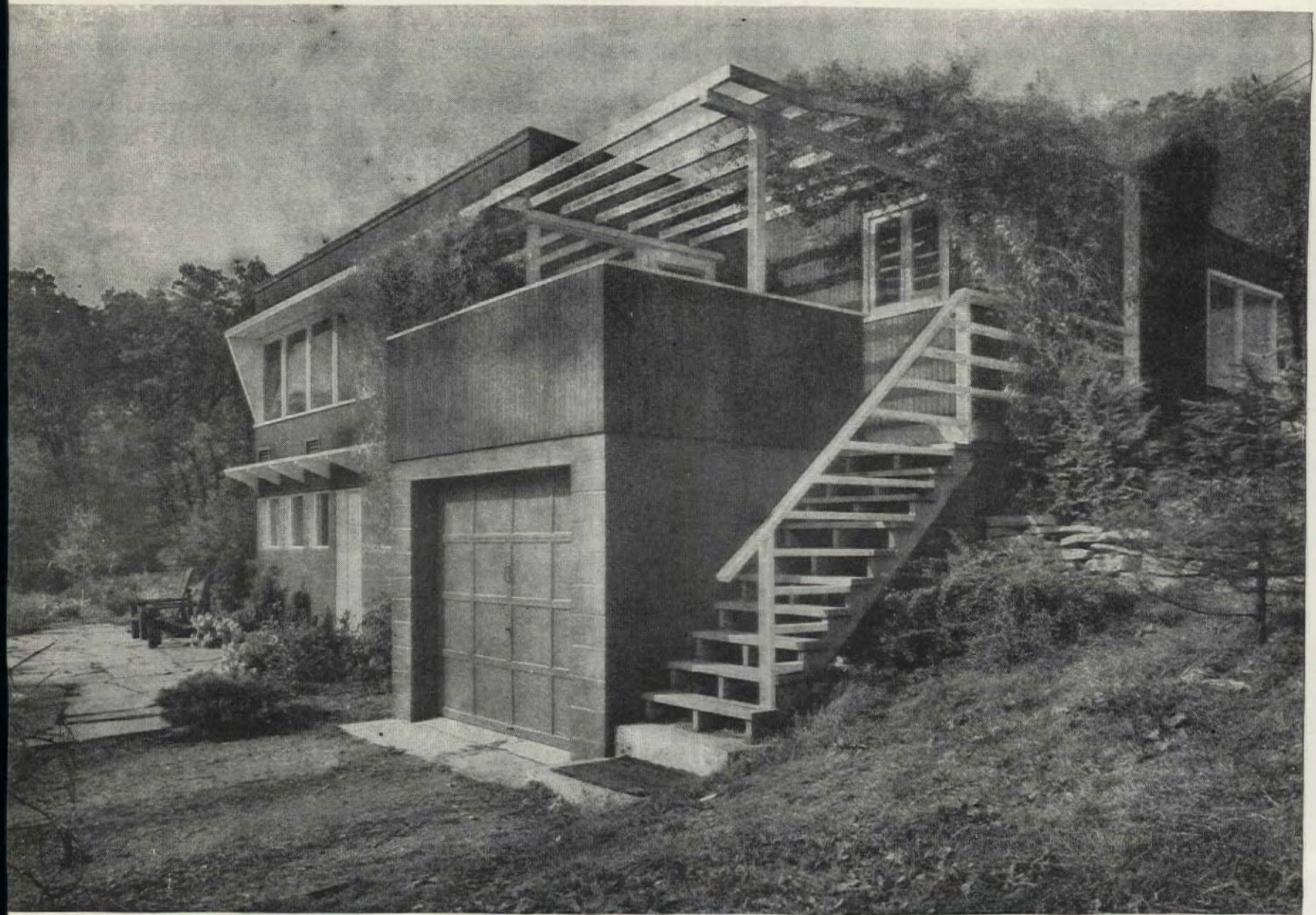
Architect Allen McGill shares credit for this ingenious program of expansion. Taken to the desolate piece of cleared land with its sad, small, lone structure, his imagination helped him to realize the possibilities of both property and the Stamps family's way of life. Mrs. Stamps admits quite frankly that she would have been the happiest person in the world had there been an old barn on the place. But pleasant old barns, painted red, are not easily found in California. As a compromise, she requested the architect to make her a little barn house with plenty of rural character. The tool shed was revamped with a sturdy whitewashed chimney; the bath, closet, tiny hall, and kitchen were added on so that the house became a simple rectangle. The central portion became two story—the barn she so wanted—and the loft became a temporary bedroom reached, in true rustic fashion, by a ladder from the hall.

When the final step takes place, the loft will be made into a spacious bedroom for guests, and the master bedroom will be placed over the new living room. The present tool shed then will be converted into a den. As it is, the Stamps can sleep two persons in their loft and two on the studio couches in the living-room tool shed. This is some sort of a record for such a tiny floor plan. When the garage was added last year, the architect tied it to the house with an attractive roofed breezeway, which serves as both entrance and sheltered patio. The little red barn turns its back on the road and opens largely to the orange grove, garden, and terrace side. A white rail fence encloses the property, and the rose vines have grown rapidly to give shelter from the road.

Once inside the gate, there's a spacious motor court and the "front door" is nothing more than an attractive whitewashed brick wall with red brick steps leading directly into the breezeway.

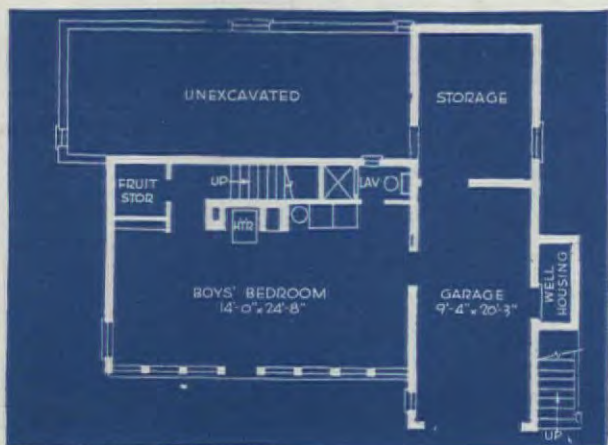


● As "homey" as cranberry sauce and huckleberry pie is this country living room, once removed from a ramshackled tool shed. Vertical boards, painted smoky blue, together with the espalliered tree wallpaper of two walls and yellow brick chimney breast make room fairly sing with gay color. Rare old china, graceful pewter and painted plates show collector's fine touch.



NEVER QUITE "FIRED UPON"

Nevertheless this modern five-room house of the Lloyd Youngs created more than its share of curiosity and criticism

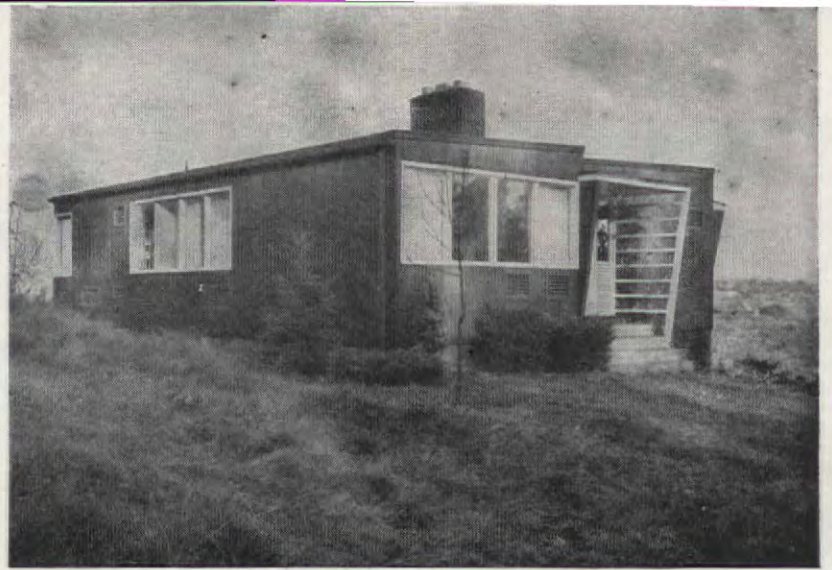
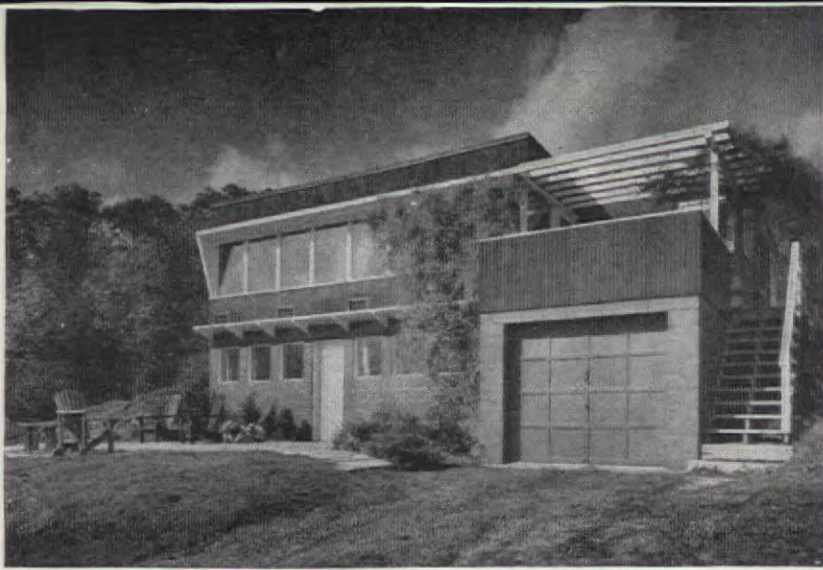


Mitchell and Ritchey, architects

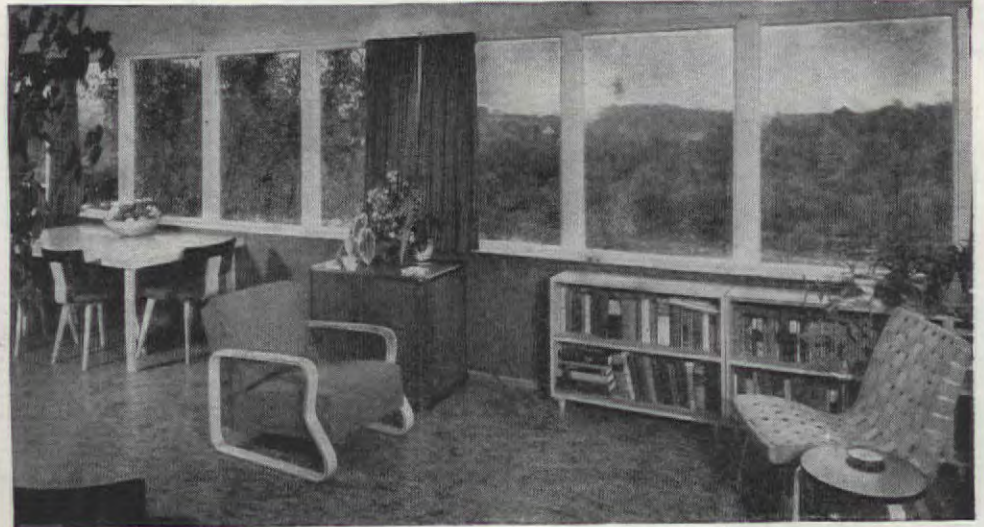
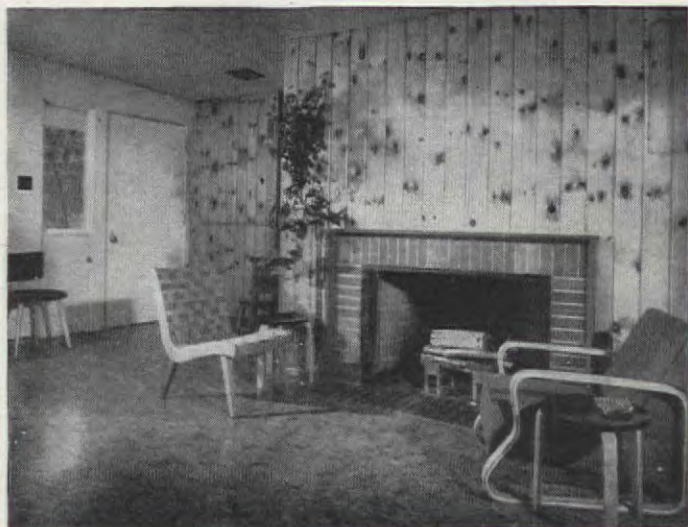
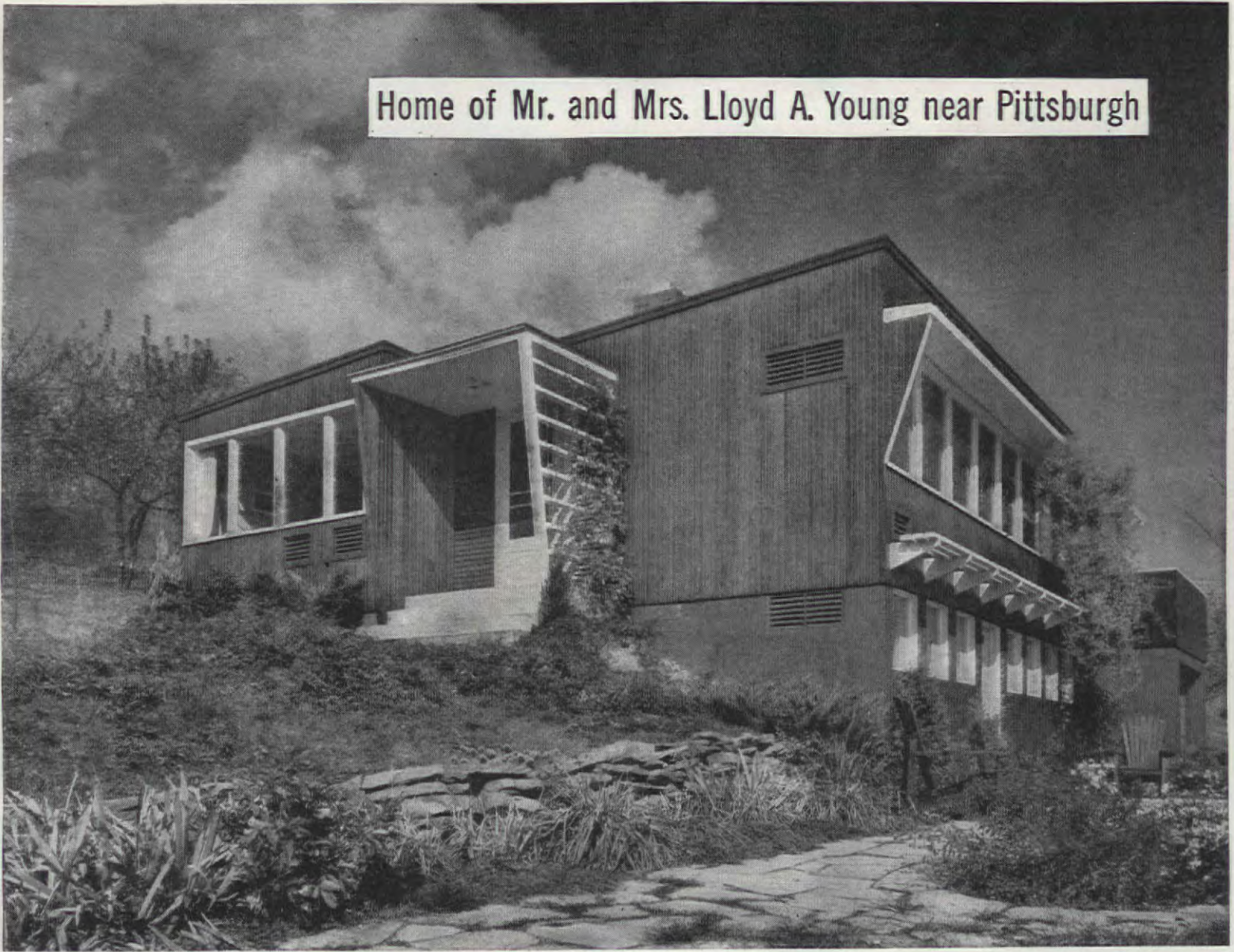
Photographs by Richard Garrison

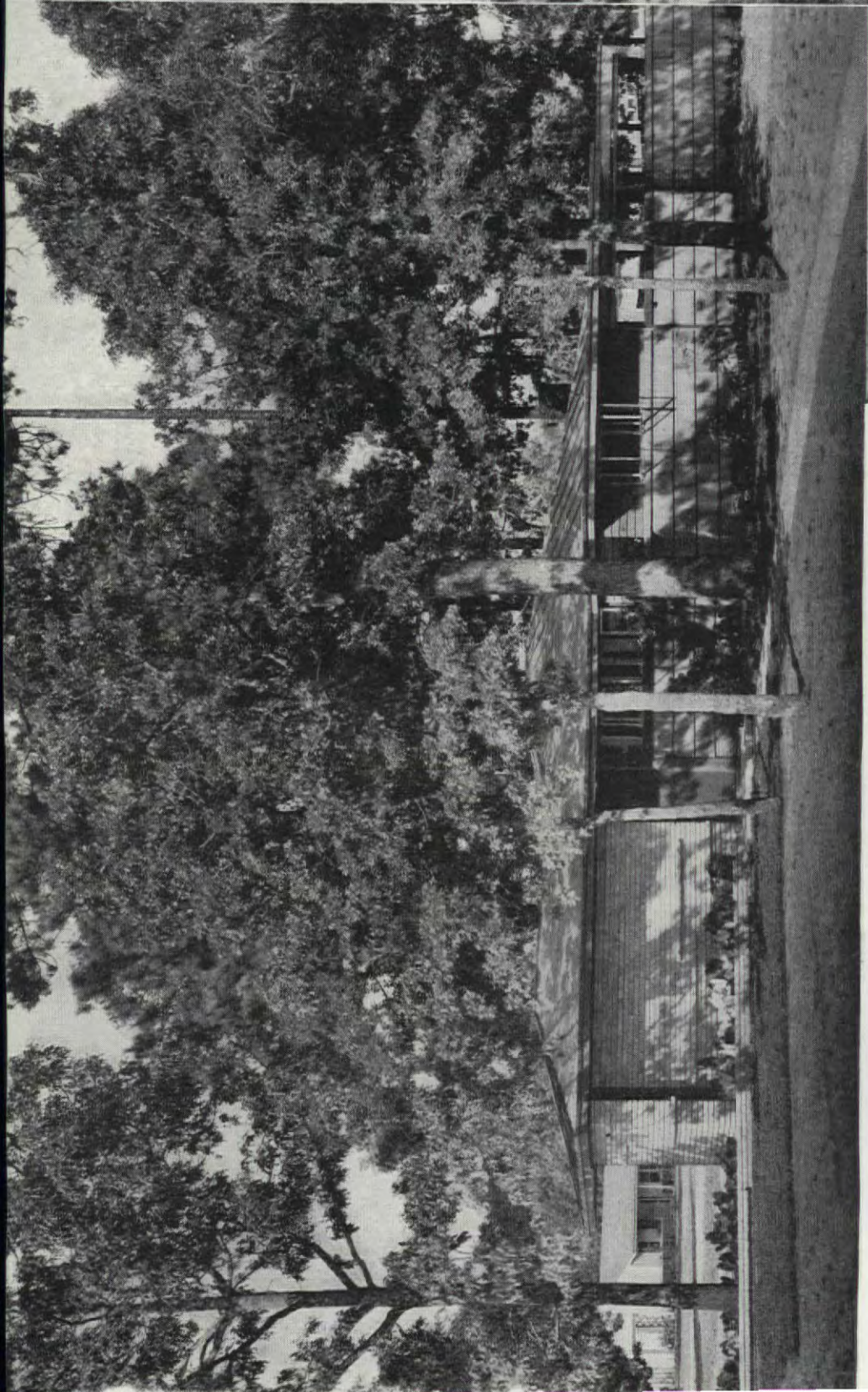
There's no doubt that the Young House is different. Curiosity seekers come from miles around to criticize and stay to admire. And well they might. It is a house definitely contemporary in form, standing proudly among traditional neighbors. Not one inch does it give to them in quality. Mitchell and Ritchey, architects, are experts at giving a house distinction. In the first place they have evolved a colorful house with cinder-block basement walls, painted soft red. The wood upper structure is stained natural in tone, while the angular trim is white. A canary-yellow door adds a bright welcome.

Nor do we leave color outdoors. Walls of brick red may be found underneath living-room windows. Draperies add the further sparkle of apple-green mohair. Natural tones of Ponderosa pine above fireplace contrast with clean white other walls and ceiling. And everywhere there are large windows and a view of softly rolling hills. The windows are fixed; that is, they do not open. Ventilation is gained by means of small openings above or under the sash. These have outside screens and inside flush-paned doors. The basement room with its own outside doorway is now used by the family's two active youngsters.



Home of Mr. and Mrs. Lloyd A. Young near Pittsburgh





Landscape plants furnished by Hans Petersen



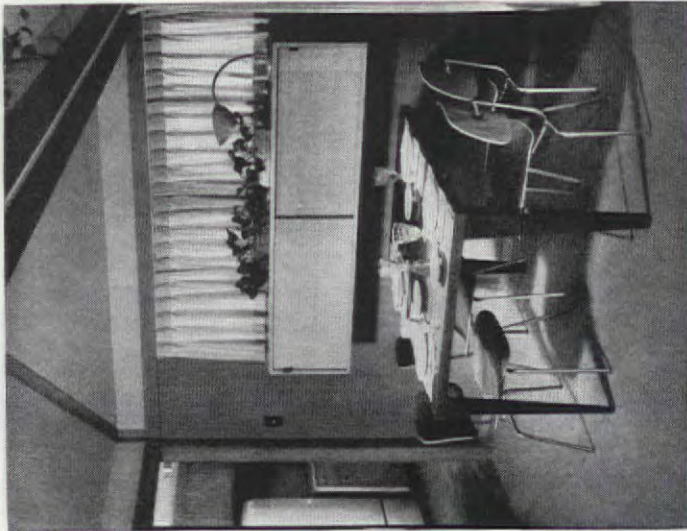
Quality House with plot

\$15,000

It was no accident of fate that MacKie and Kamrath, Houston architects, were asked to build this first of eight houses sponsored by the Revere Quality Institute, organized by Revere Copper and Brass, Inc. in association with the *Architectural Forum* magazine. These houses were to prove once and for all that the average homeowner could be guaranteed a well-designed, well-built house, using nothing but quality products, even at today's skyrocketing prices. Because they had spent years of research in the residential field, the two Texans were "naturals" when a team was selected to represent the Southwestern part of the country. To test the formula, Mr. Kamrath used the problem as the basis for the home he'd like for his own family, Frank W. Sharp, Houston builder, carried out the plans.

The Kamraths are a typical American couple with a definite contemporary outlook on life. Like thousands of other couples, they love sports and gardening and believe it important

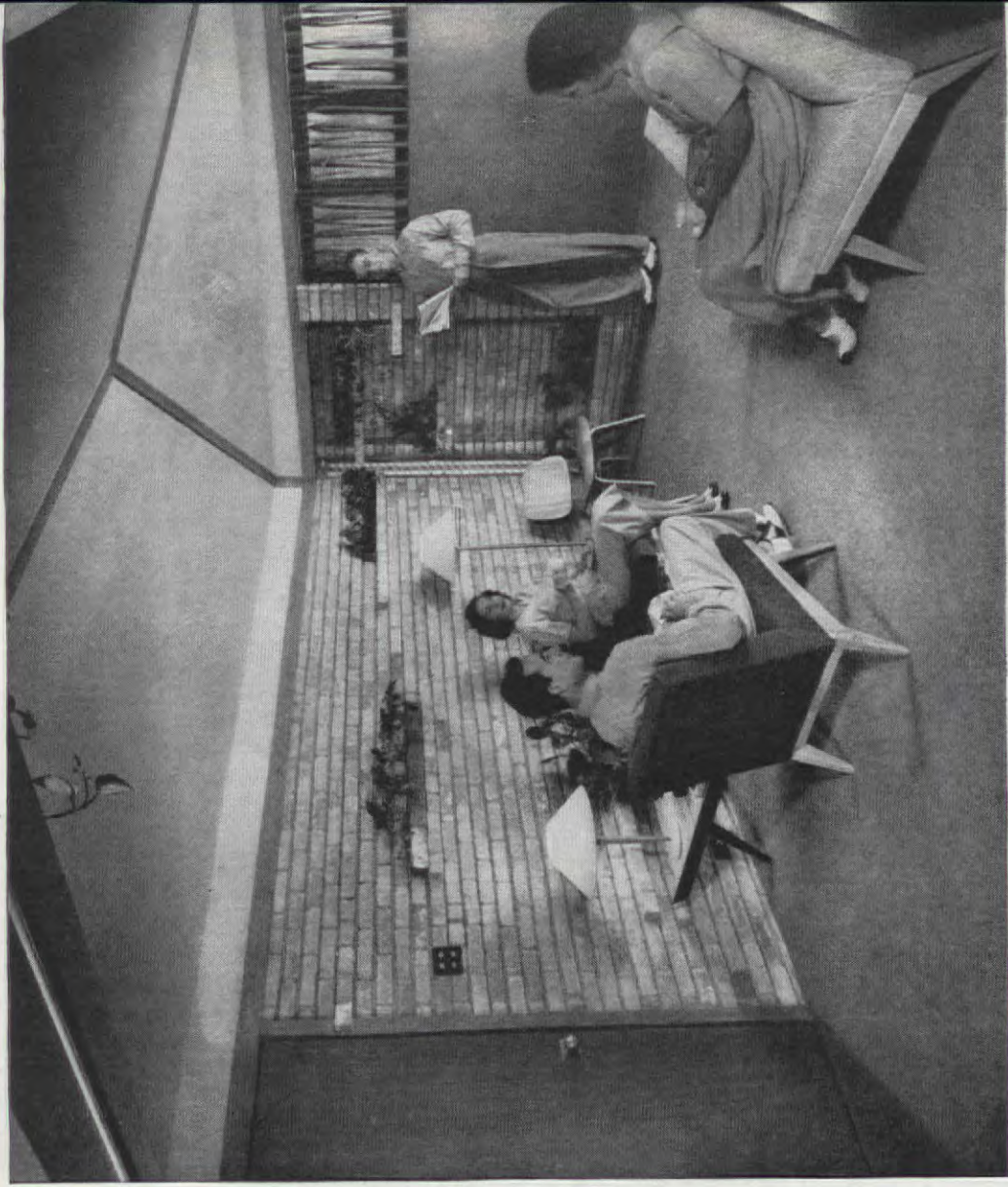
to combine outdoor with indoor living. Therefore, land and house were designed as integral parts of a whole. In the living room an indoor garden overflows with growing plants with a large picture window to help bring the surrounding garden indoors. To further carry out this theme, all interiors closely simulate the exterior colors. Warm-pink adobe brick and wood paneling are complemented with moss-green carpets, leaf-brown or leaf-yellow in draperies. The Mexican adobe brick is repeated on the exteriors, combined picturesquely with redwood siding and cedar shingles on the walls. Roof, flashings, door and window screens are of enduring copper. In fact, materials were selected with an eye to minimum maintenance as well as for weathering qualities. Comfort, too, came in for major consideration in the physical



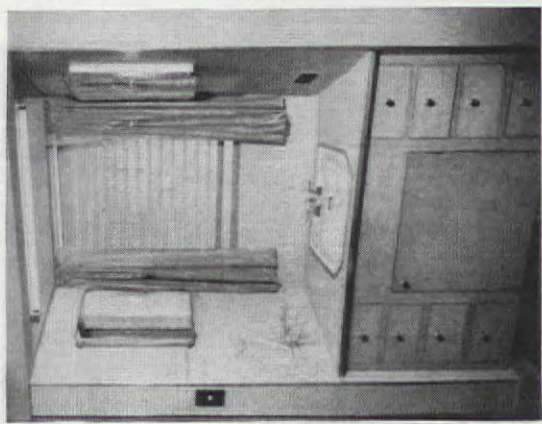
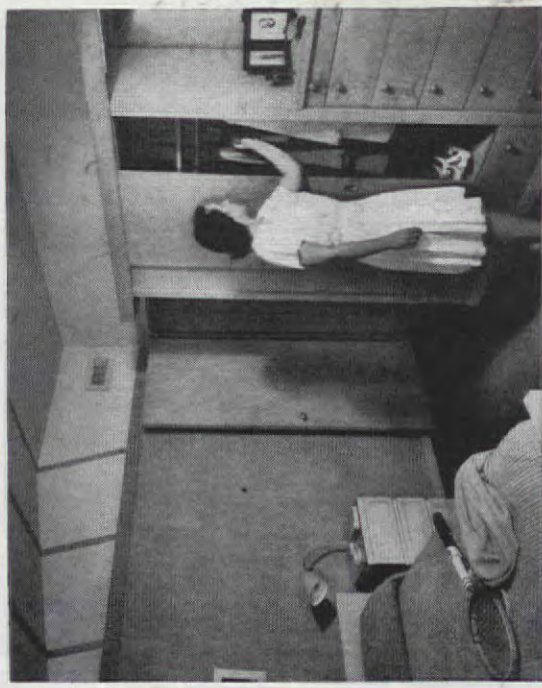
● Dining room can be made part of living room when curtain of yellow casement cloth hung from beam is pulled open. Ceilings follow natural slope of roof and are covered with Textoned Sheelrock; walls are of mahogany plywood. Hanging cupboard has natural linen-crash finish, leather pulls

● Mr. and Mrs. Karl Kamrath entertain friends in modern living room. Pink adobe brick of exterior wall is repeated on interior and, combined with inset plant boxes, gives outdoor atmosphere. Corner plant box has Ventaglass wall, Hans Knoll and Charles Eames furniture used throughout

● Recreation room which may double as extra guest bedroom is separated from living room by Modernfold curtains with sea-spray green Fabricoid covering. Storage wall divides area from bedroom, providing ample closet space on either side. Bedrooms each have built-in dressers of fir



Photographs by Hence Griffith
Data: Dorothy Monroe



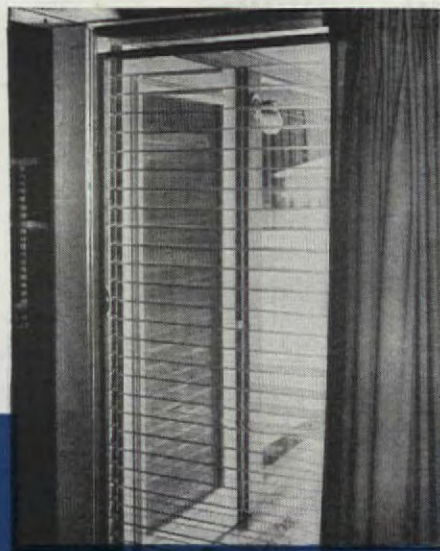
Furniture supplied by Kamin Furniture Co.
Kurt Versen lamps

SUCH GENEROUS STORAGE IS SELDOM FOUND IN SO SMALL A HOUSE

Revere Quality House

Houston, Texas

Mackie and Kamrath, architects



set-up of the house; under the copper roof is a blanket of rock-wool insulation with Sheetrock as added protection against heat and cold. Eaves have sufficient overhang to exclude rays of the summer sun and also to allow windows to remain wide open even during sudden showers. For further comfort, a centrally located attic fan brings coolness in summer while winter chills are dissipated by a warm-air furnace, also in the attic, thermostatically controlled and connected by ducts to all rooms. Like other good housekeepers, Mrs. Kamrath wanted plenty of closet space. Fourteen closets add up to twenty-six lineal feet of storage.



• Revere Quality House is as modern in detail as it is in plan. Opaque Ventaglass assures privacy, at the same time affording maximum ventilation through doors; car-port door slides shut to form wall extension. In plan, outside entrance from garage through kitchen to bathroom makes it ideal for children, saves muddy footmarks in main house; flexible partitions make one room out of three



Home of Mr. and Mrs. Henry H. Quayle

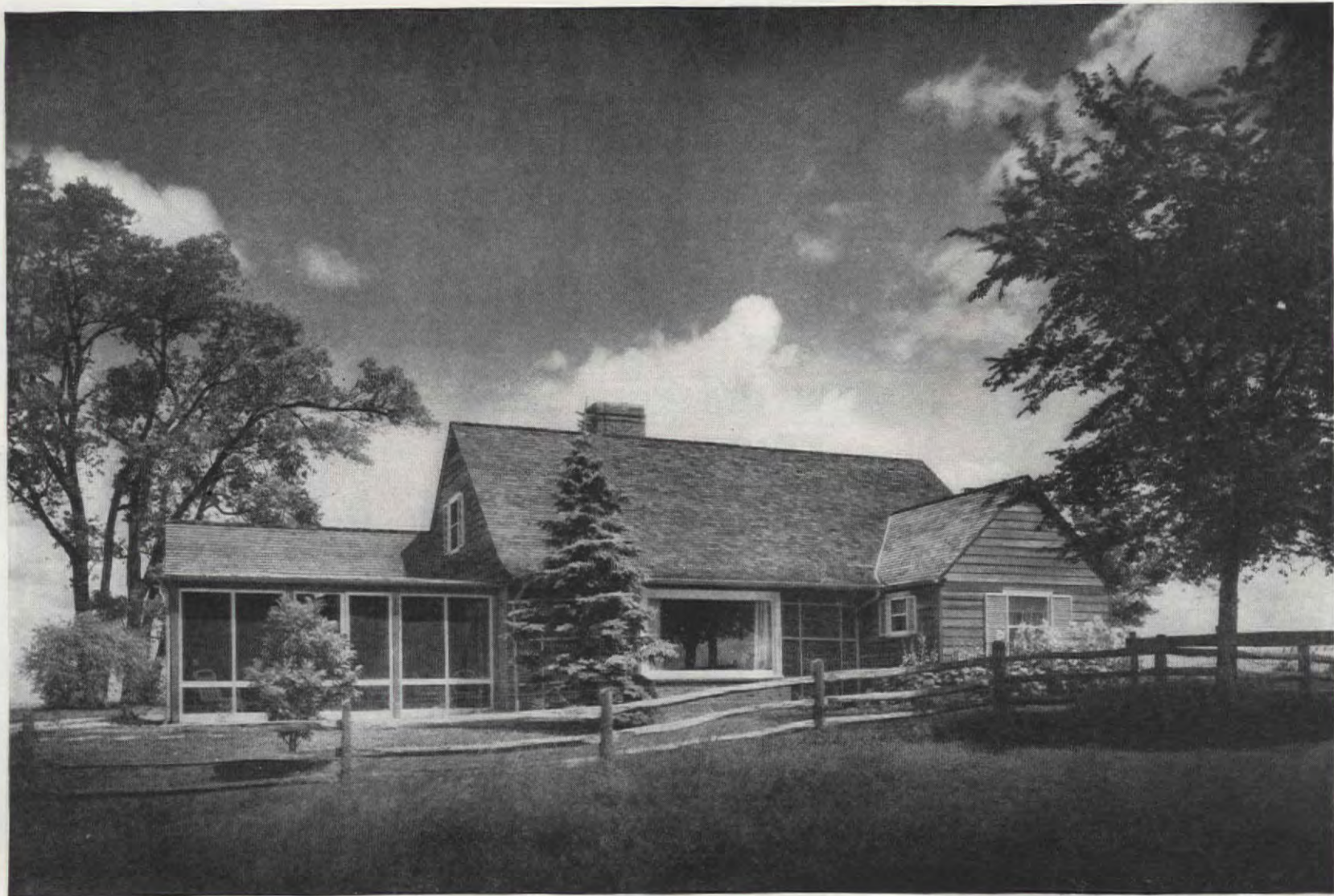
Wayne, Illinois

Montgomery Orr, architect



• The more conventional plan of the Quayle house should appeal to couples with active youngsters. There's plenty of room behind the split-rail fence for the small fry to play, away from the grazing horses in the next field. Rainy day activities may be pursued on the extra-large, screened-in living porch





Photographs by Nowell Ward

Prepared for Bigger Things

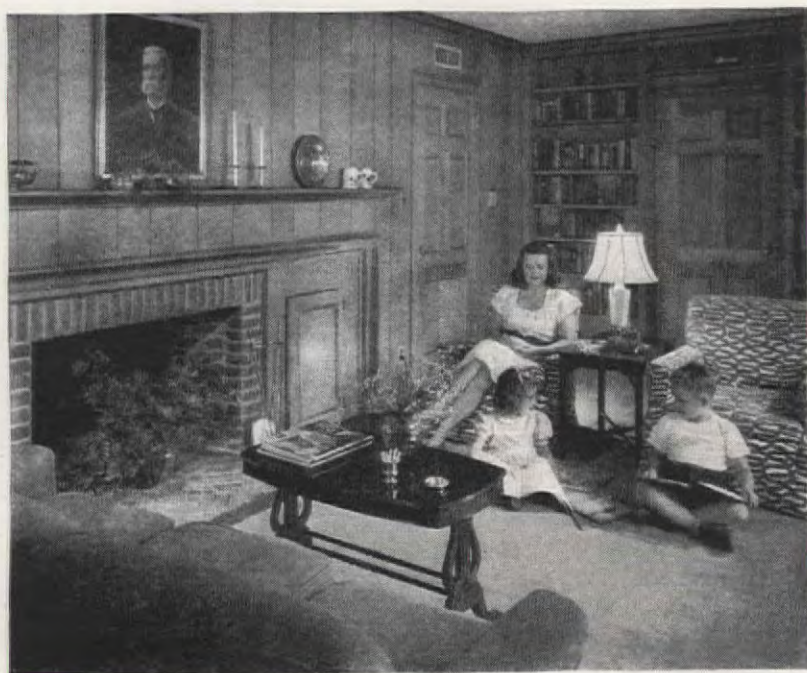
Though it's only four rooms now and plenty

adequate for the Quayle family's needs,

there's room for future expansion on the second floor

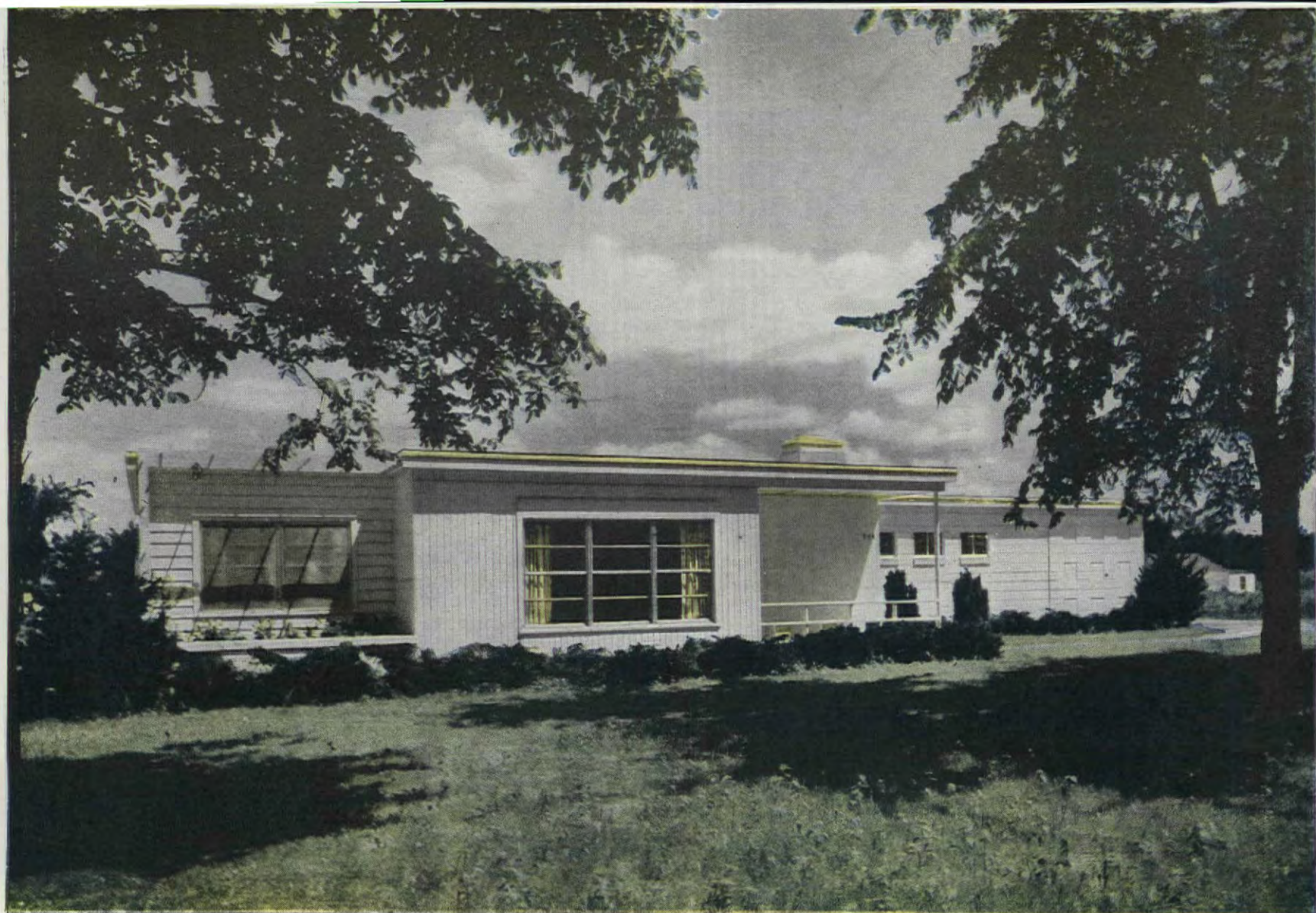
● Mrs. Quayle with Bobby and Mary Jon seen before fireplace in the comfortable pine-paneled living room. In the foreground a red textured sofa faces a pair of green-and-white chintz lounge chairs which match the draperies at windows

RUTH W. LEE



While the children are small, the four-room home of the Henry Quayles is more than adequate for their needs. In fact it was part of a definite plan since the owners are avid gardeners and riding enthusiasts and therefore didn't want to be burdened with a house any larger than necessary. But they realized that children will grow and take on new interests and more friends. That's why two rooms and bath were planned on the upper floor as part of the future expansion program. The stairway is already built, awaiting the day when growing pains are bound to occur.

Meantime, housekeeping is simple with two bedrooms, a combination living-dining room, kitchen, screened porch, and garage. There's much to recommend the house and its plan for a family with growing children. The pleasant exterior of toast-colored brick, combined with natural redwood and white shutters and trim, fits gracefully into the surrounding meadows. A split-rail fence gives the children protected play space while their horses roam and graze in the fields beyond. The large screened porch is located most conveniently for outdoor dining and living. Inside we find the same country-house charm. The pine-paneled living room with flush fireplace and enormous picture window is most informal and, more dear to the housekeeper's heart, proof against finger marks of the small fry. A small hallway leads to the two bedrooms; one now occupied by the two children with ample space for two beds, toys, play table and chests, and within easy earshot of the master bedroom. The large screened porch is at the other end of the house, and kitchen and utility room are both centrally located.



This is the home of Mr. and Mrs. Robert Helser in Lima, Ohio



Photographs and data: Fred Gund

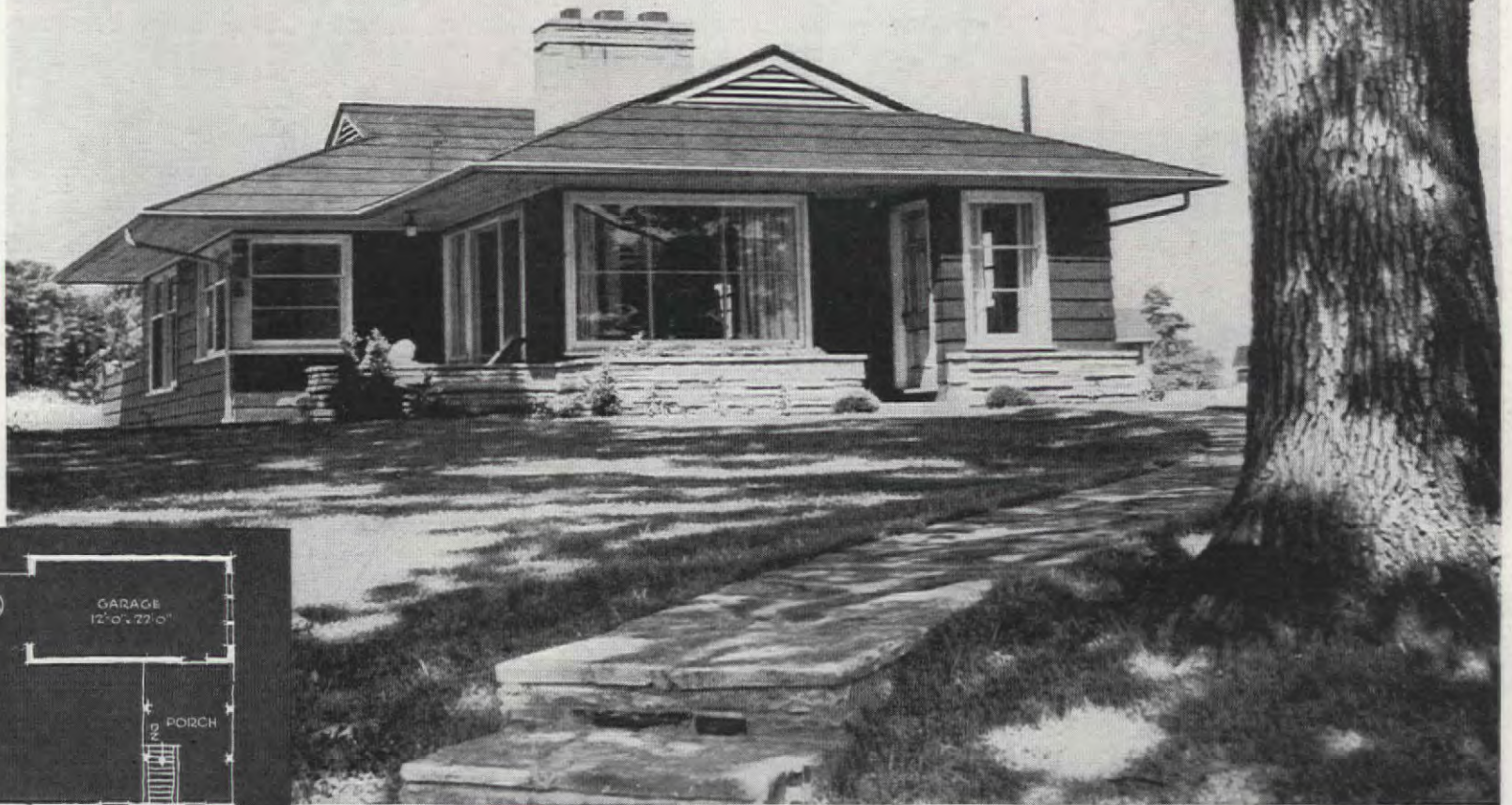
Like Ado Annie in the play *Oklahoma*, most modern architects want all or nothin' when it comes to styling a house. That *all* means modern with a great big "M." Robert Helser, however, thinks otherwise, and his own house is a strong argument in favor of happily combining old and new. Its outside walls are of cement blocks; its extra-large horizontal windows with deep-shadowed overhanging eaves are in the best contemporary manner. Yet instead of flexible, double-purpose areas inside, this architect believes that there's lots to be said for the conventional room-size and shape. A study of the house plan on page 52 shows much justification for his thinking.

Imagine cutting down circulation space so that it's practically non-existent, and yet a single 9-foot hall serves not only living room, but three bedrooms and one bath. The house stands far back on its city lot, so that plenty of light comes through the large sash without loss of privacy. An ample utility-laundry room, placed between garage and kitchen, substitutes for basement. Radiant heating in floor slab is a modern touch.

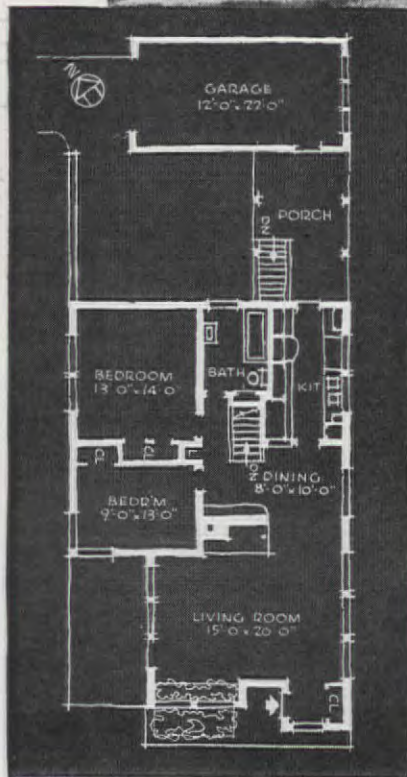
An efficient ell-shaped kitchen not only serves the dining room but is conveniently near the back porch for those outdoor meals so welcome when the summer heat is on. One solid wall of the garage protects this graceful porch from the street.

Access to garage is possible without going out of doors, a boon during stormy weather. The utility-laundry space also comes in handy as a playroom for the Helsers' small child during the winter. Floors throughout the house are either cement or asphalt tile, and the owners find them easy to maintain as well as attractive. The flat roof has a rim around its entire perimeter, and during hot summer days, an inch of water over the entire top acts as extra insulation. This type of cooling system is used very often in our Southern states and has been found to be a most inexpensive way of gaining added comfort. Low ground planting follows the strong horizontal architectural lines.

IT'S SOLAR, IT'S CANADIAN!



E. C. S. Cox, architect



Solar houses have been talked about, written about and built so often in recent years that by now the simple principles involved are pretty familiar to most of us. Still it's always interesting to examine another case history, especially if it involves a sun house as far north as Canada! Here's a family, the Harry Despard, who decided to "live in the sun"—and learned to like it from the start.

Their home is in Thorncrest Village, a uniquely planned community near Toronto, one now universally

recognized as one of the leading community "ideas" on the continent. Amidst its rolling acres and beautiful vistas, the Despard home occupies a choice, commanding corner site with a sweeping and uninterrupted view across the well-designed, principal village park.

True to the best ideas for contemporary planning, this site has dictated the house plan. Main rooms face the view and the sun. The entrance is reduced to a small vestibule at the southern corner and halls were

eliminated as being space wasters. Living and dining room are separated by a massive stone chimney and open-ended fireplace. The owner is an ardent collector of good records and it is not surprising, therefore, to find a radio-player and record cabinet dominating the east wall of the living room. Thus, this end of the room is used in lieu of a hall without the usual effect of through traffic. A rear hall is tiny and serves two purposes. It serves both as communication between bedrooms and bath, and extension to dining area, providing space for a commodious, attractive buffet.

Connecting house with garage is a breezeway, shielding and disguising the service entrance, and an outside stairs to the furnace room in the basement. Thus there is no rear elevation or back yard to the house, one of the features common among other houses in Thorncrest Village. The paying of equal attention to all sides of the houses has contributed much to the great beauty of the community.

Outside walls are finished in Credit Valley ledge stone combined with wood siding. The latter has been stained to simulate California redwood, a commodity unobtainable in this area. Capping the house is a low cedar-shingled roof, and majestic native oak trees near by combine to marry the design to the good earth.

● Here's a plan ideally suited to a very narrow lot. The width is approximately 28', thus allowing plenty of space for driveway at one side and affording an enclosed courtyard for complete privacy

● A massive stone fireplace with open end divides living and dining areas and also recalls rugged look of outside walls dramatically seen through the adjacent glass walls



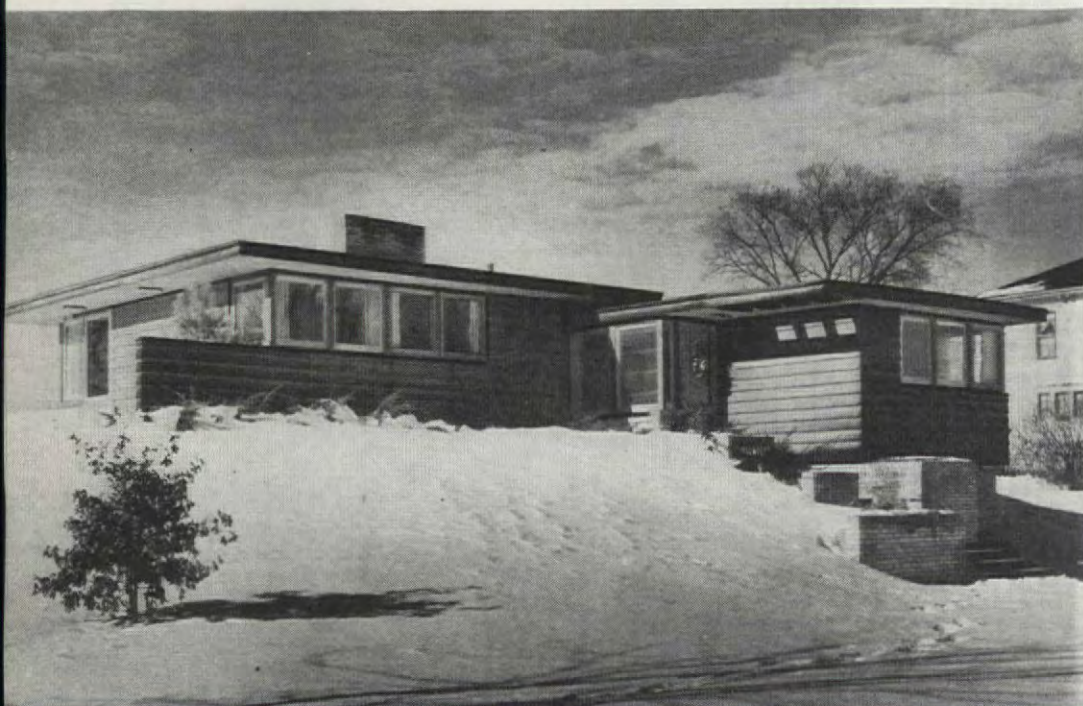
W. J. HENNESSEY

Photographs by Panda

Open Plan Plus Glass Walls

Ethel McCall Head

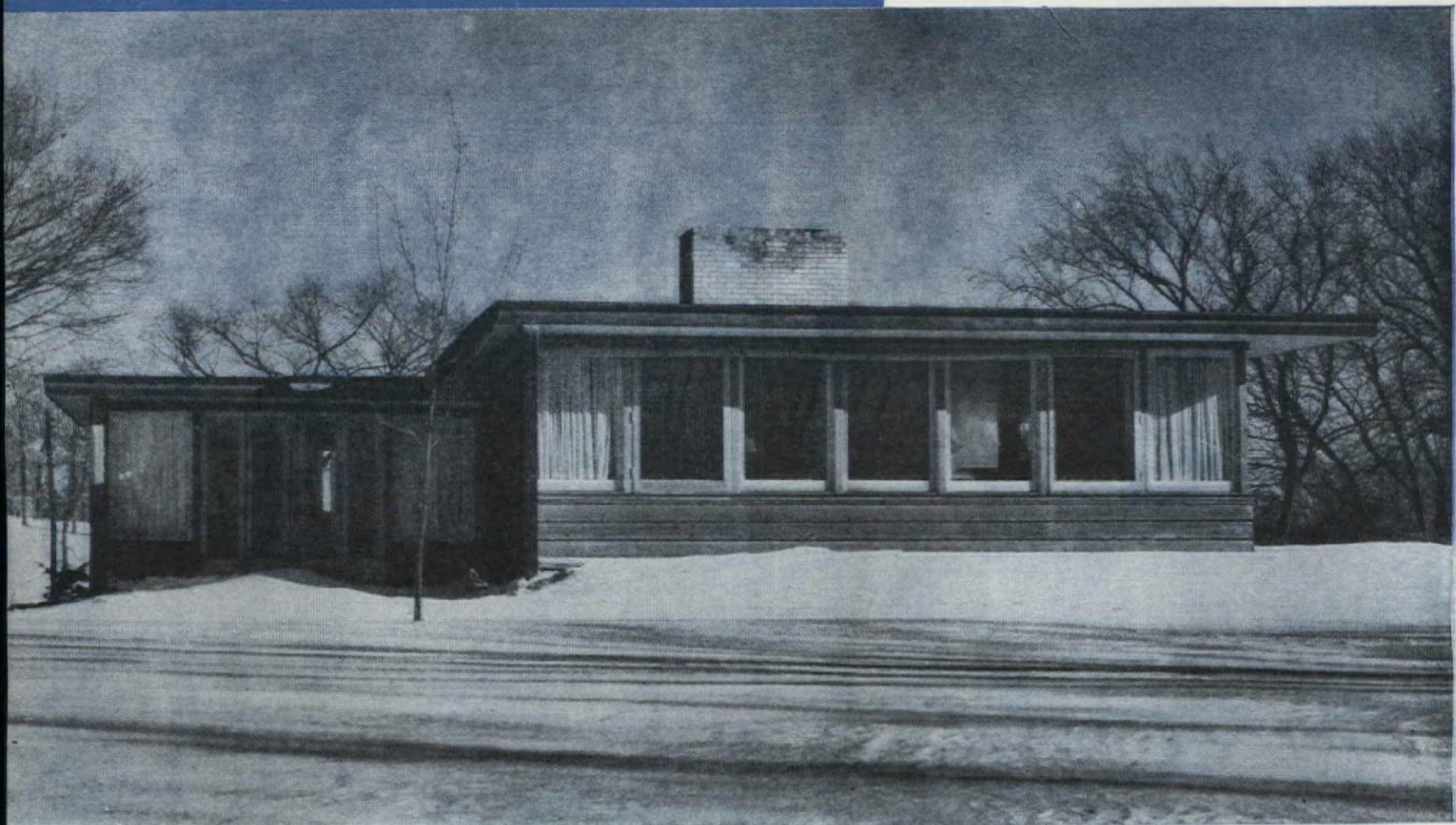
prove practical where snow is heavy and winters are long

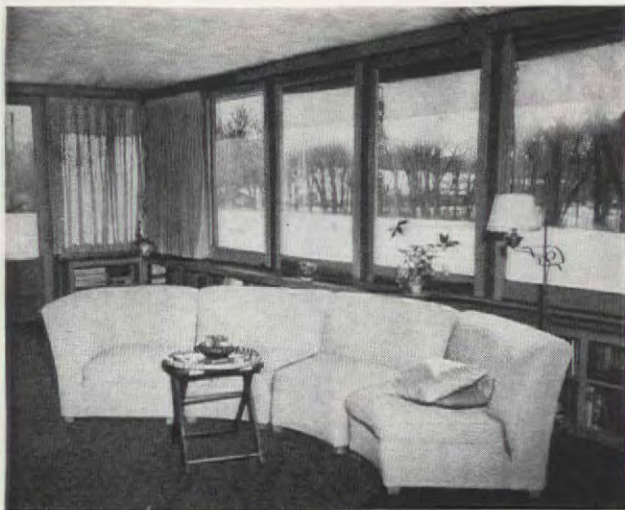


On gently sloping lot, low modern one-story house with horizontal red cedar boarding has garage up front tucked under bedroom wing

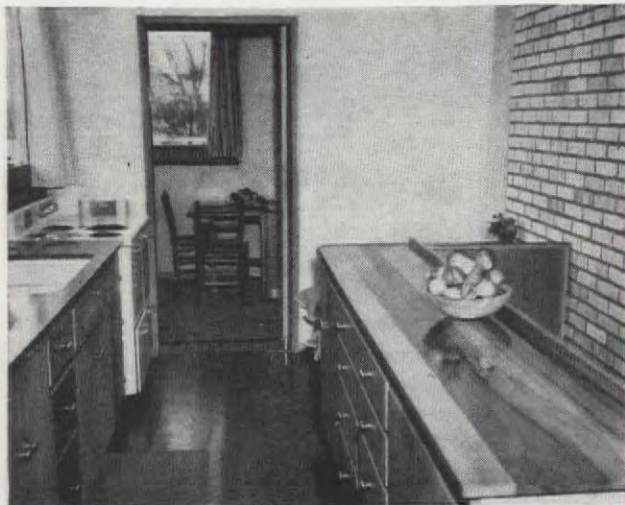
THIS house is in Wisconsin! It has walls of glass, a flat roof, and sits right on the ground with only a very small basement. It is certain proof against the old chestnut—"Oh, modern architecture is excellent, but you can't use it in cold climates." Strange how these beliefs get about. Good planning and modern techniques have never recognized boundary lines; they all add up to an honest, modern American architecture, and there's no good reason why the Far West, California in particular, should have a special priority on this kind of house design. And I speak as a Californian by adoption!

Professor and Mrs. Wells picked a lot of generous proportions which sloped gently upward from the street. This meant that the house could be placed on the crown of the property, with the garage in front inconspicuous under the projecting bedroom wing. Horizontal red cedar boarding has been used on the exterior, plus common brick for retaining walls and for planting pockets which march up the front steps. Wide overhangs extend beyond the flat roof and don't leak, despite the dire prophecies of well-meaning friends. These overhangs protect the large glass areas and control the rays of the sun. There's a small entrance hall with an all-glass south wall for indoor planting. From this hall one may go directly into the long, narrow kitchen, into the bedroom wing, or directly ahead into the living-dining area. The guest bedroom has corner windows to the north and east, which have been placed high to provide for ample





Glass wall in living rooms overlooks lawn. Door leads to paved terrace off dining area

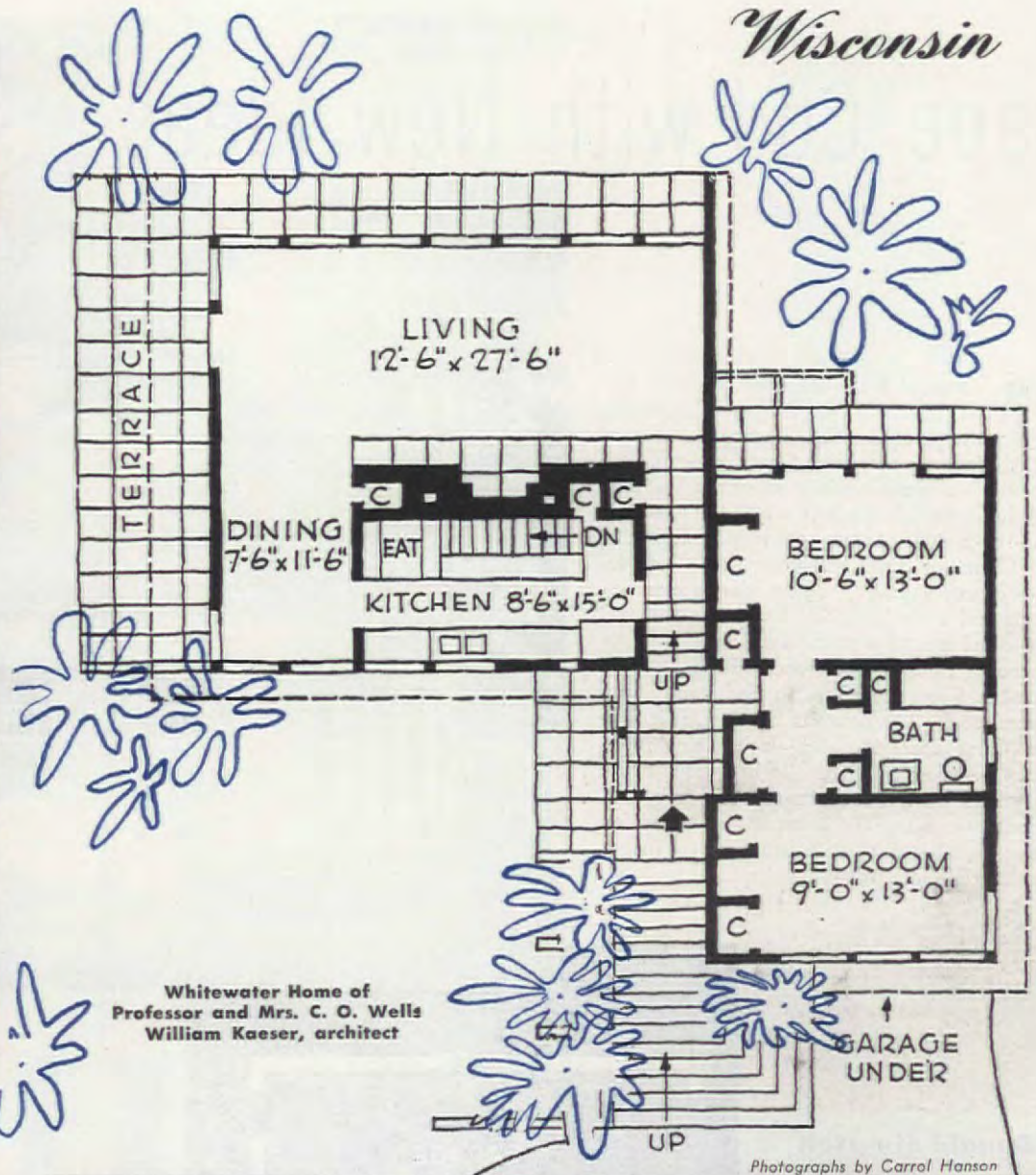


Kitchen combines natural maple woodwork, red linoleum, and brick at fireplace back



Right angle gives the dining area privacy; china storage tucked in behind fireplace

cupboard space below. The master bedroom has a west wall of glass with French doors leading into the garden. Across the entire width of the main house we find the living-dining room, with its continuous wall of glass to the west. The glass has bookcases underneath and a door on the south leading to the terrace. Mr. Wells is amazed at the amount of solar heating the little house gains from the west and south exposures. Since, in Wisconsin, the summers are comparatively short, Mr. Kaeser purposely planned the large glass areas so that the winter sun would not only make the house more cheerful but would, at the same time, give some natural reflected heat. Leading from the kitchen is a convenient sneak stairway to the partially excavated basement.



Photographs by Carrol Hanson



Indirect-lighting trough over living-room fireplace continues to the end of room to create difference in ceiling height at dining area

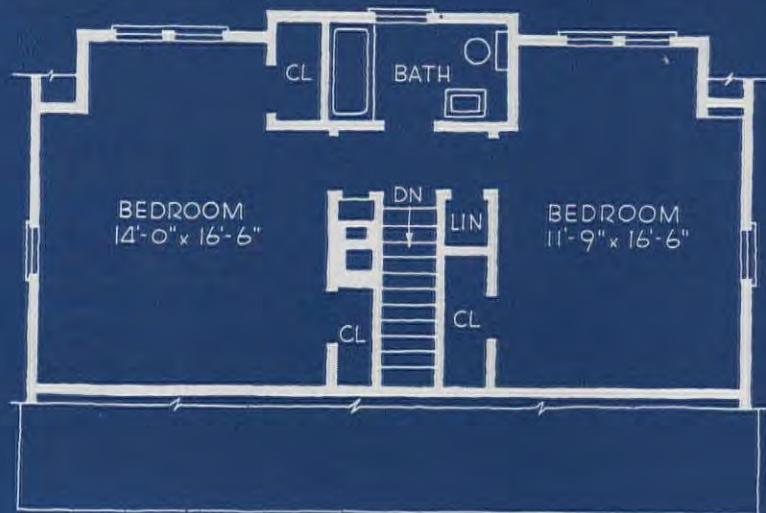
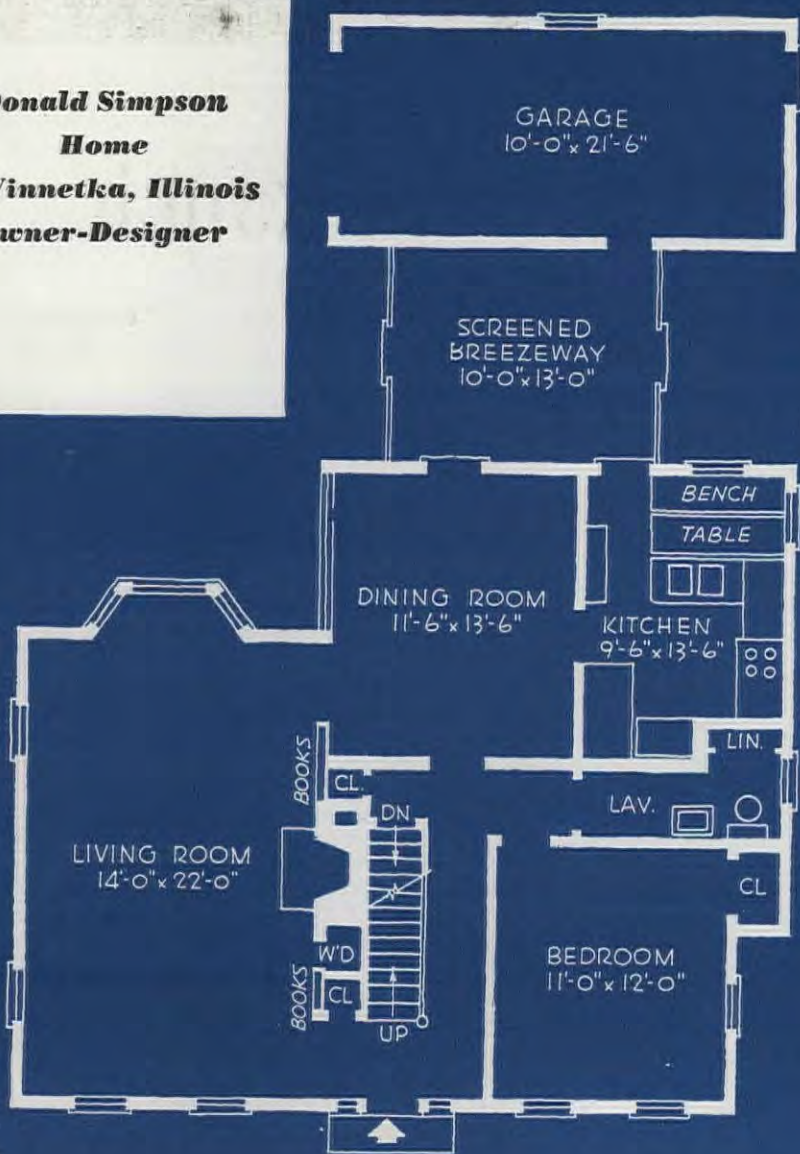
Cape Cod with New Ideas

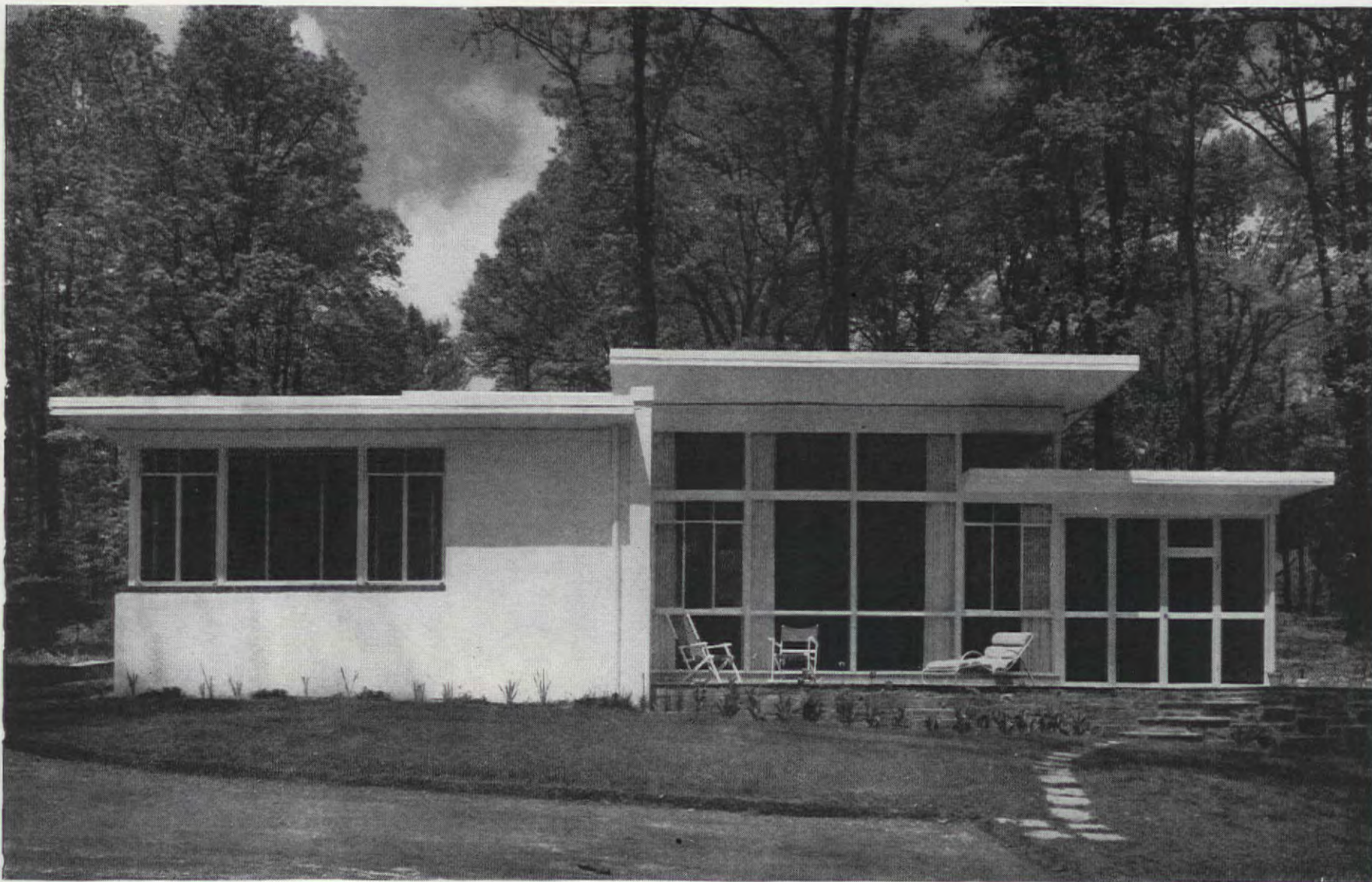


The Donald Simpsons frankly admit that most of the ideas for their charming white-painted brick house came from their favorite magazine (guess which). The result is a house reminiscent of the best tradition, to which has been added the most up-to-the-minute planning for modern living.

Clean-cut lines emphasize the simple, good proportions of the exterior; grey shutters and a black asphalt roof bring the well selected ground planting and towering background foliage into focus. Radiant heat makes floors comfortable for two active youngsters. The house is larger than it first appears; there is a full-sized dining room and bedroom suite on the first floor while upstairs we find two more bedrooms with their own bath. The lower room is used for overnight guests and arranged to insure them complete privacy and quiet.

Donald Simpson
Home
Winnetka, Illinois
Owner-Designer





“Oak Hill” – Maryland Chinchilla Ranch

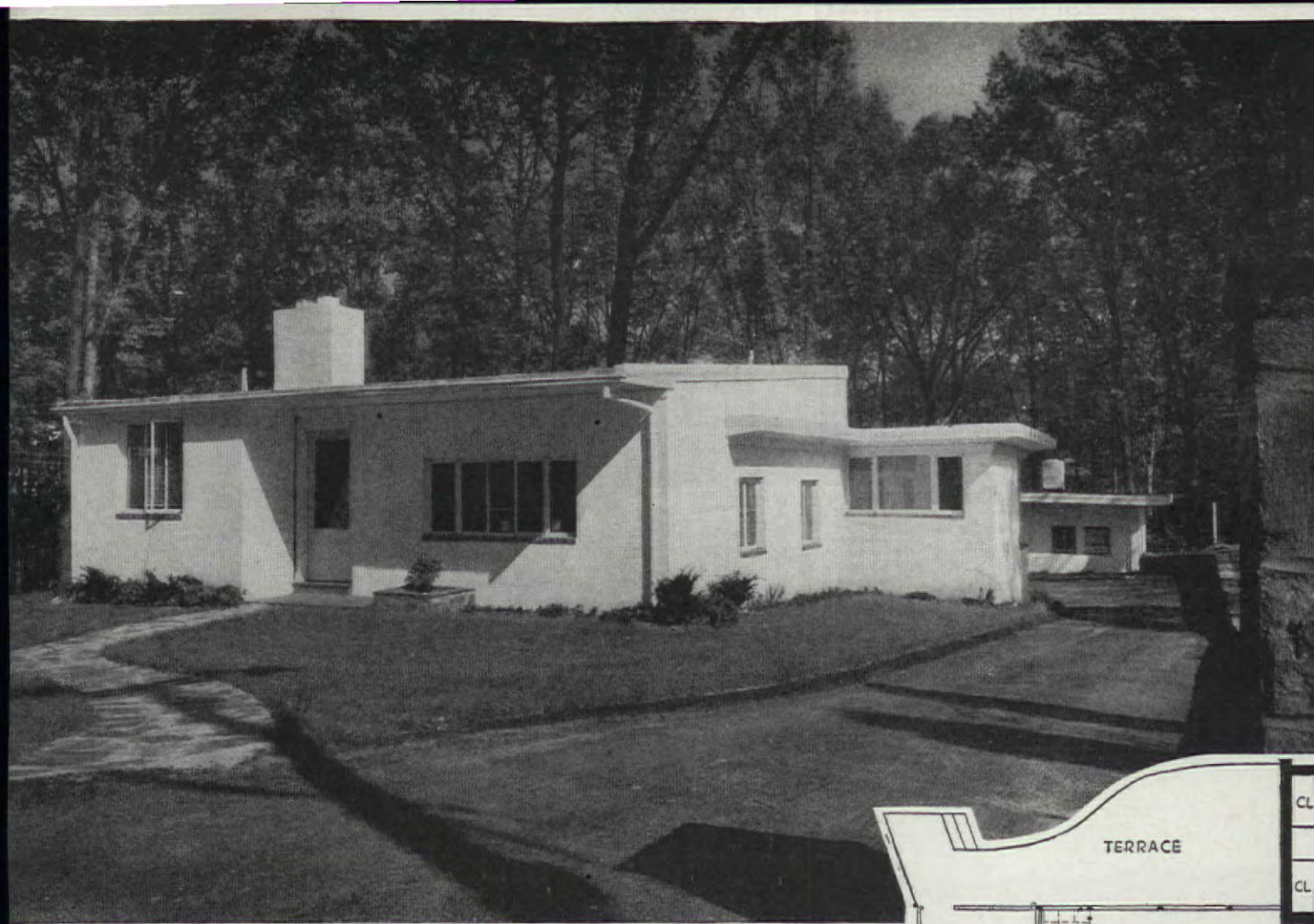
Harper T. Parkinson



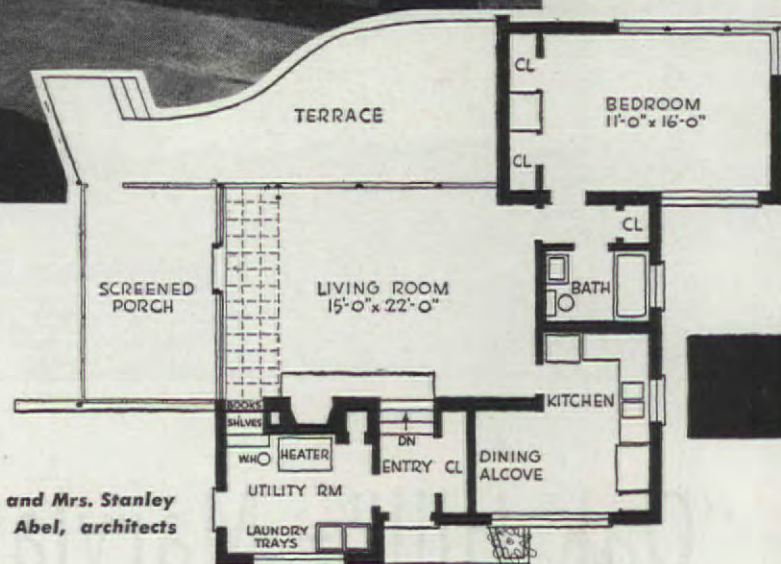
Firmly held by the tail, little chinchilla poses for picture in his clean, well-ventilated home

DURING the war, dreams never were rationed. They were one luxury our soldiers could indulge in, and most of them did. Now many of these G.I.'s are busy making these dreams come true. While in the army, Stanley Pangborn planned not only a nice little home for his wife and family, but also a small ranch for raising chinchillas. By V-J Day he knew almost to the last rafter the kind of home he would build and, too, he'd learned a great deal about the little animals, small rodents to be exact, whose gray fur is dense, soft, lustrous and highly prized by furriers. The property chosen was a beautifully wooded acreage in the fold of the Mohican Hills, at Glen Echo, Maryland. The modern house—it had to have radiant heat and plenty of air and light—was designed by the architectural firm of Berla and Abel, noted for producing contemporary miracles of design. However, the time picked for building the house was not a happy one, being the year 1946 when materials were at a premium, and at times doubts arose as to whether the job ever would be finished. Mr. Pangborn is a painting contractor, since the chinchillas do not take up all of his time and, when the going was tough, he was the one drafted to ferret out the many “couldn't be had” items.

The bedroom, living room, and a large screened porch are located away from the road on the garden side. They look to the southwest, with its view through the trees of the glen below. Leading from the living room and extending past the porch is a stone-paved terrace, raised a bit from the lawn and outlined with a free and easy curve. Windows on both sides and end of the living room are of insulated glass, making possible floor-to-ceiling sash during all seasons. On the long side of the room, the weight of the roof is carried by two thin steel columns. The roof overhangs the terrace so that the hot summer



Since principal service rooms are located on front of house, solid walls, smaller windows give air of privacy



Glen Echo home of Mr. and Mrs. Stanley Pangborn. Berla and Abel, architects



Photographs by Richard Garrison

Clever built-in details seen in bedroom dresser, flush with closet wall, and work desk set in corner of L-shaped kitchen



Materials

- EXTERIOR WALLS—cinder block, plaster
- INTERIOR PAINT—Barreled Sunlight, U. S. Gutta Percha Co.
- ROOF—built up with gravel top, sprayed with Medusa Cement Paint
- GLAZING—Thermopane, Libbey-Owens-Ford Glass Co.
- SASH—Fenestra, Detroit Steel Products Co.
- FLOORS—living room, E. L. Bruce block; utility room, Armstrong Cork Co. asphalt tile; bath, Armstrong Cork Co., linoleum
- LIGHTING FIXTURES—fluorescent
- BLINDS—Flexalum
- PLUMBING FIXTURES—American Standard
- HEATING PIPES—wrought iron, A. M. Byers

sun never enters the living room, yet the sun's low winter rays are welcome to enter at will. Just below the clerestory windows is an open wood baffle for further discouraging the hot summer sun from penetrating the interior. A light trough, starting in this wood baffle and running the length of the room above the fireplace, provides general illumination for a well-planned interior. Indirect light is reflected from the white ceiling. In keeping with the simple directness of the house, the fireplace is of rough stone, its hearth extended to receive the stone steps from the entry. Flanking one side of the fireplace are built-in bookcases with cupboards for wood storage and a speaker for the radio. Incidentally, this radio is piped to other rooms.

There are many other built-in features throughout the house. For instance, the bedroom has a chest of drawers and cupboard space flush with the wall between a pair of closets. Ingeniously built into the kitchen is a housekeeping desk with cupboards alongside wherein lie the controls for the house's many mechanical features. The kitchen, too, has been made large enough to accommodate family dining. The front elevation, which is extremely simple in design, houses the laundry-utility room, kitchen, and entrance. Construction is of cinder block with a stucco finish, and the flat roof has a gravel surface which has been sprayed white with cement paint.

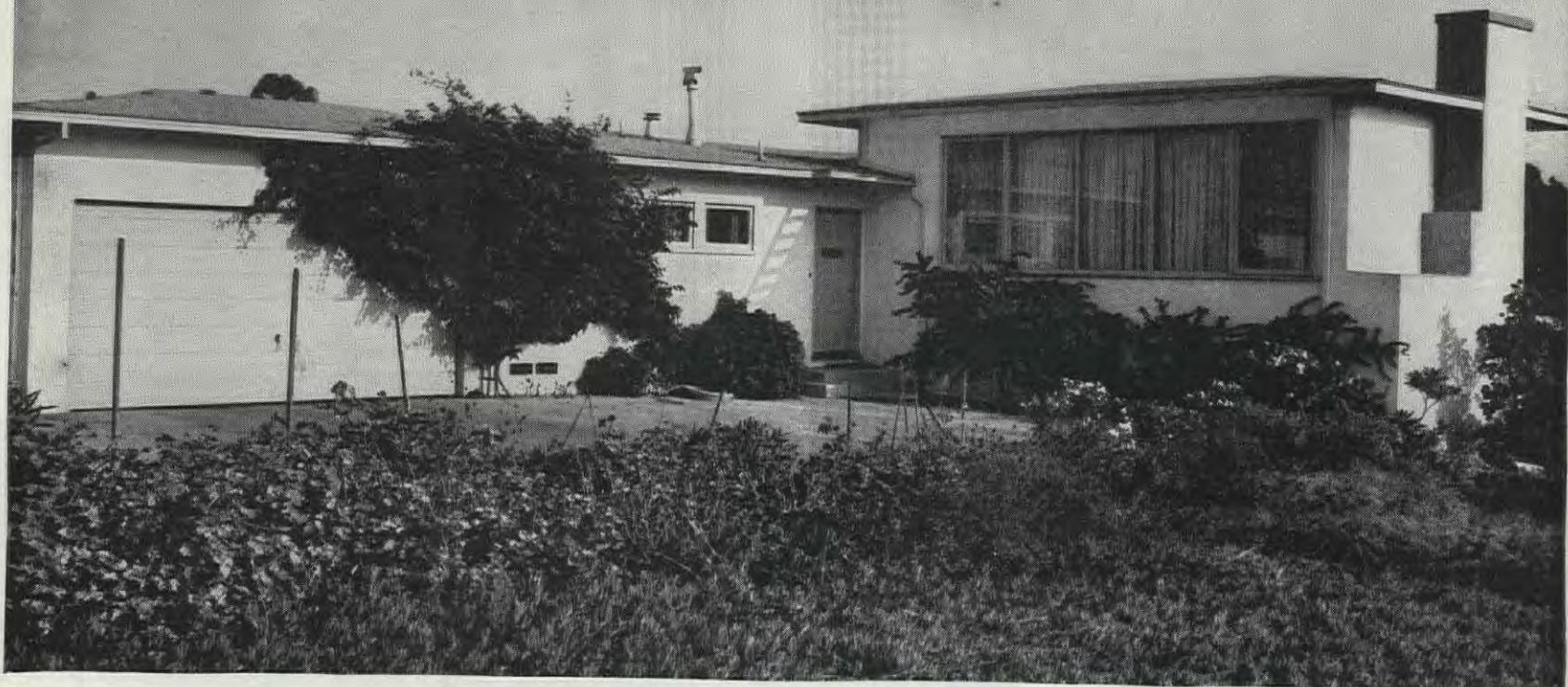
The chinchilla house, matching the owner's in design, is at the end of the entrance drive. In here the animals are kept in separate cages, a pair to a cage, in an atmosphere cooled a little in summer and slightly heated during winter months. Chinchilla are clean little "critters," and though they abhor water, bathe regularly in boxes of Fuller's earth. They are not mean animals to raise like mink, but are quite shy and retiring even though they don't count man as one of their best friends. However, they seem as happy in their own well-ventilated house as their owner and family are in the neighboring dwelling.



Completely modern in its straightforward design, the living room is well lighted by floor-to-ceiling insulated glass sash, and protected from hot summer sun by heavy eaves overhanging the curved terrace



Mrs. Arthur B. Adair's pretty pink home overlooks the blue Pacific



Shedding her Victorian background when she left the Midwest,

Mrs. Adair builds small contemporary home on West Coast—proving not only

the young appreciate modern conveniences

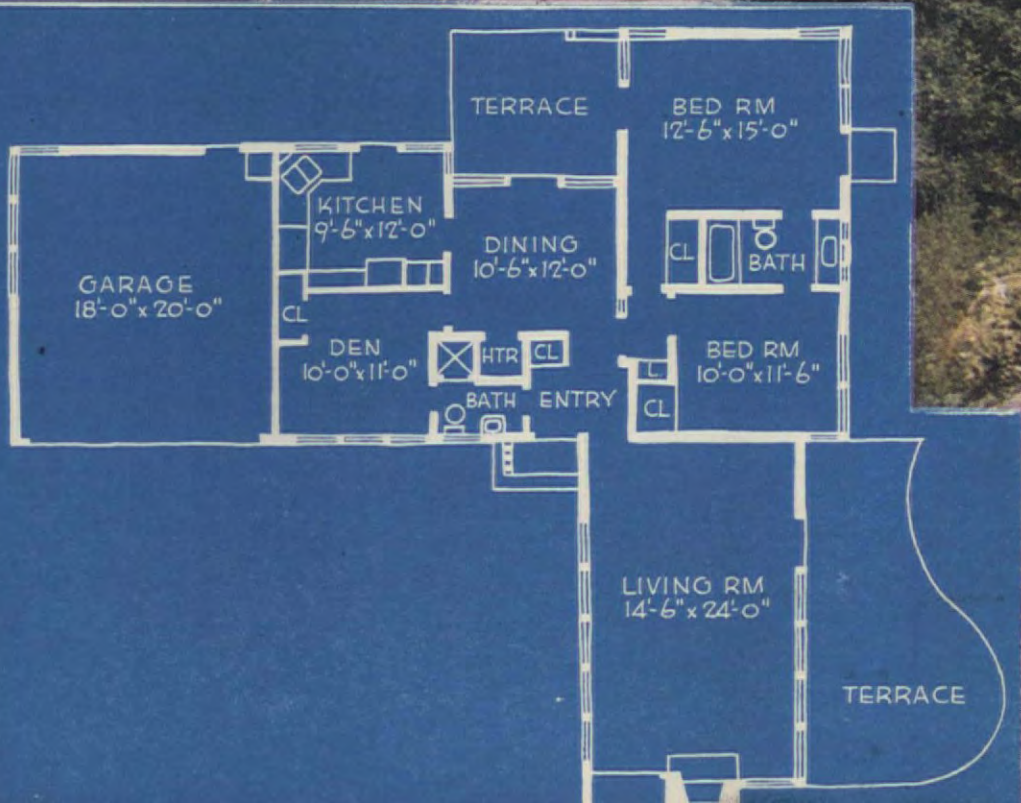
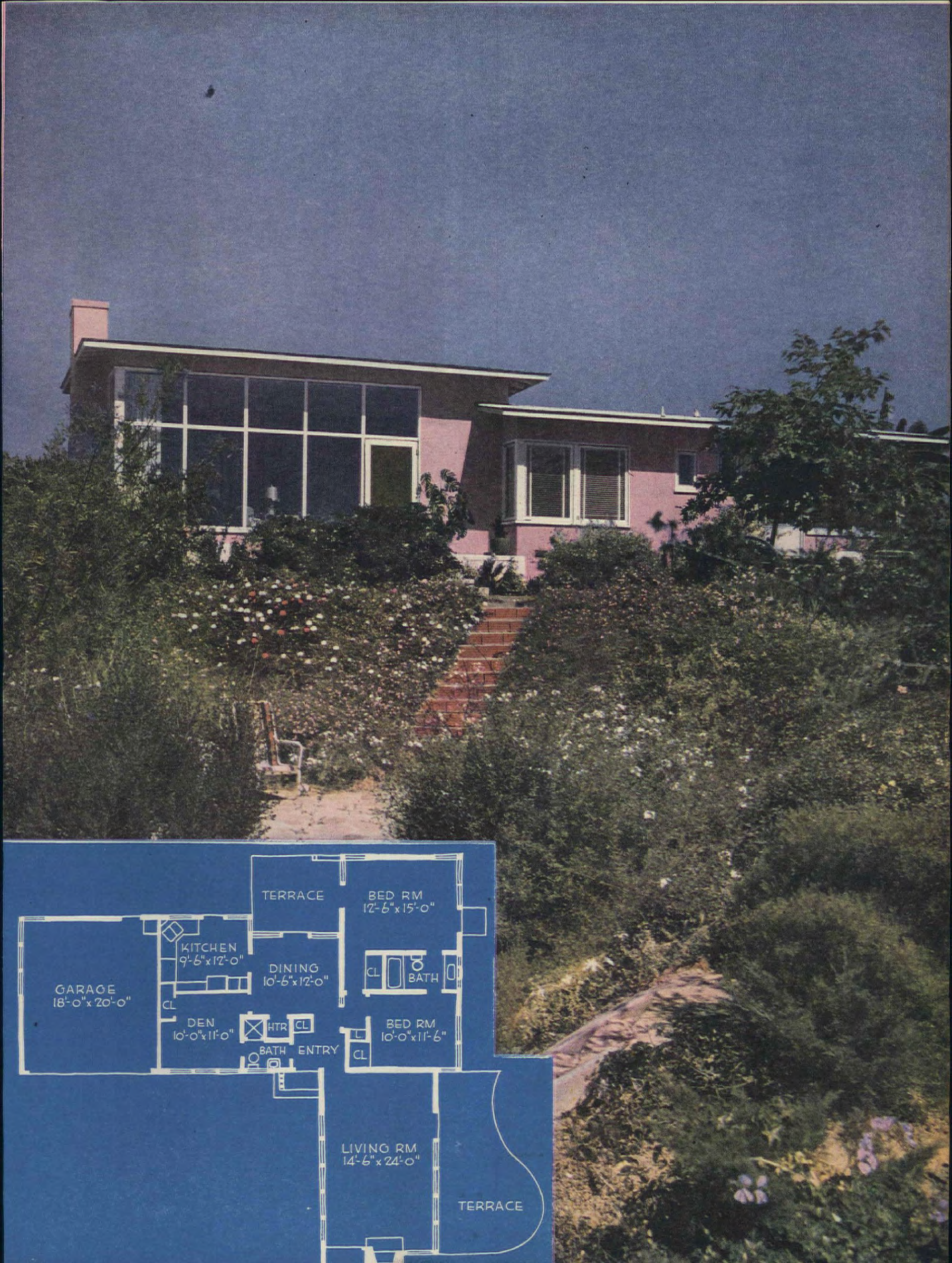
Pink and white and pretty as a picture. That's what the modern home of Mrs. Arthur Adair appears to be—perched high on a hill with its breath-taking views of sea and mountains. But apart from pure eye appeal, here's a house that proves a most interesting point. It proves beyond a doubt that those who have lived in traditional houses during the greater part of their lives CAN become real enthusiasts for good modern design. The owner, mother of three grown children, had lived for many years in a Chicago suburb, and her home there was of conventional design, her decoration and furniture decidedly Victorian. Strange that she should have chosen the contemporary style for her new home in California. "Not at all," says Mrs. Adair, "my modern-minded children convinced me that it was the 'right' kind of a house for this day and age." She now finds her colorful home a most restful background for simple, well-designed modern furniture. Since taking possession, there's not been one pang of nostalgia for the old days.

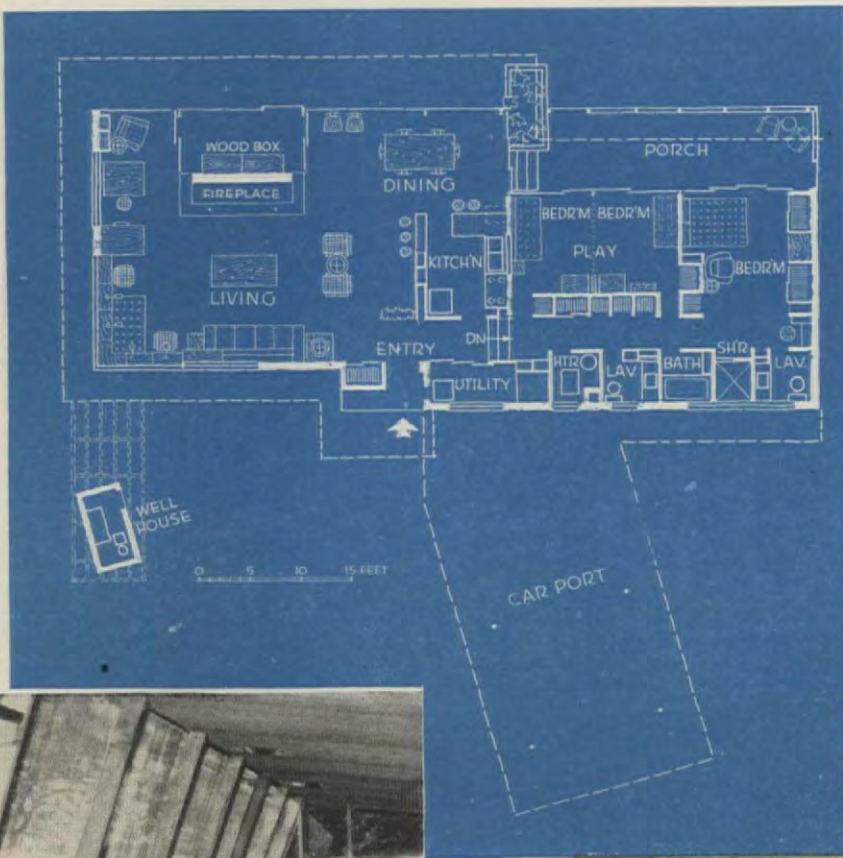
Mrs. Adair is constantly amused at the remarks of her children's friends when they first visit the house. "Of course," one said, "your mother is really a Victorian, but it's wonderful to see how she fits into the modern picture." She takes this backhanded compliment with a smile, for well she knows that only the very young forget that youth has little to do with gay hair. The house was planned to take full advantage of its view of the sea through a V-shaped canyon. All important rooms open onto garden and this sea view. No attempt was made to dress-up the efficient working of the street side. On the sea side, one forgets the simple white plaster facing the street, for here the color changes to soft pink with white trim. The living room is a separate unit; its glass walls, from floor to ceiling, overlook the garden terrace. Two bedrooms with corner windows also open to the lawn, while the master bedroom has an outside door that gives quick passage to a pleasant grouping of garden furniture under a sycamore tree. In all, there are three different terraces on the sea side plus a charming paved court for



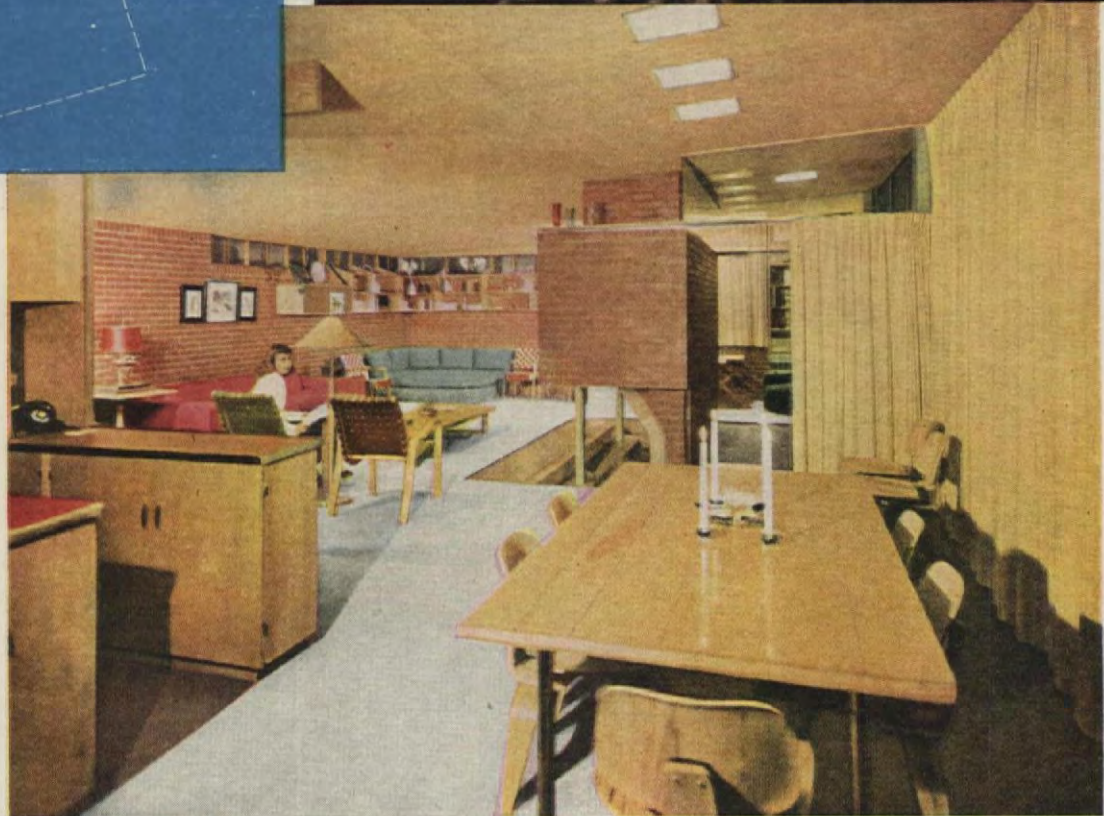
Evans and Reeves, landscape architects; photographs by Robert C. Cleveland

ETHEL McCALL HEAD





● Unusual screened porch with slanting side flanks bedrooms, adjoins dining area, makes roomy play-run for daughter Marcia



● Study, living, dining, kitchen activities are all encompassed in large rectangle with minimum divisions. Oversized fireplace in center of room has two flues, burns 10-foot logs or 2 twin fires

Robert Vahlberg,
owner-architect

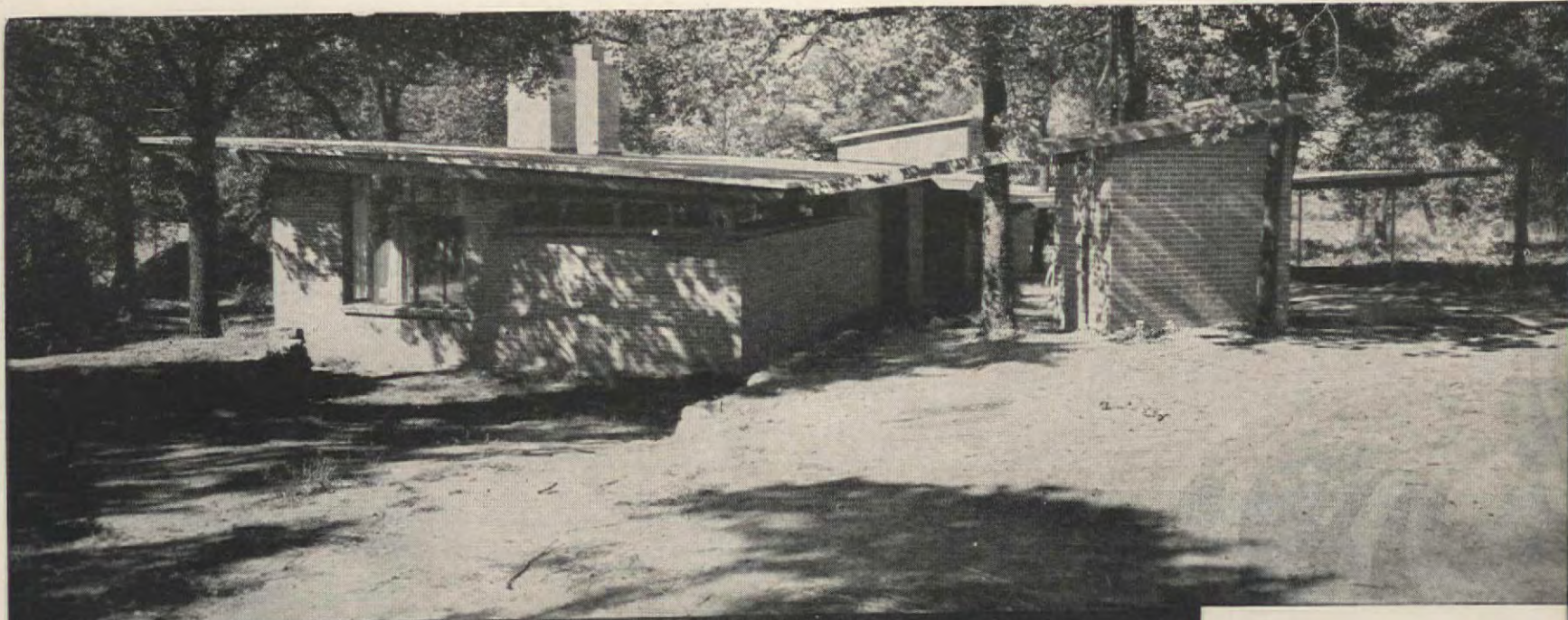
The Robert Vahlberg's Oklahoma house...

It was hard, those first years of married life in a crowded apartment after the Vahlbergs came back to Oklahoma from the East. Bob had been studying architecture at the Massachusetts Institute of Technology, had attained his Master's Degree. It was hard for him to convince Jane that, because nothing the city offered in the way of a home would satisfy him, they should wait until they could build a home of their own. Jane wanted a home right away.

Bob had definite ideas about the house he wanted to build. Patiently he explained to Jane that contemporary thinking in architecture is still in a nebulous stage with the average man and woman, but that modern architecture has captured the imagination and creative drive of the young men in the profession—that what the public sometimes regards as merely “daring” is backed by what these architects term “organic certitude.”

The Vahlbergs feel that their home, at last a reality, offers proof of this. Because the house was designed to have the appearance of springing naturally from its setting, lines and compositions fall easily into place, and it looks valid, not artificial. Indoors, the unobtrusive colors of the decorative scheme, planned by Jane to accent natural textures, contribute to this effect.

The house is a logical expression of their own way of living. They like to



EUGENIA WHITE

a logical expression of their own way of life

be informal, relaxed; they like being together. The open planning fosters this. Even Bob's workshop corner with its drafting board and desk gives him a degree of privacy without sacrificing family unity.

They love the outdoors, swimming, sailing, horseback riding. The house, in a country setting, overlooks a ravine. Its wide expanses of glass across the rear elevation capture sunlight by day, starlight in the evenings.

Maintenance has been made easy by the remarkable unity of the house. The plan is compact; all the space counts. Storage space was planned around the family possessions, carefully inventoried, even to the baby buggy. Small daughter Marcia was given special consideration. The natural wood finishes do not show finger marks, and small matter what she spills on the floors since they are of concrete. Kitchen and dining areas are particularly well integrated.

The conception of a house like the Vahlbergs' is quite new to Oklahoma. Robert Parks, the builder, says that it constituted an educational process for all workmen involved. Now he is so sold on it that his plans for the future include one similar to it for his own family. He and his wife like it from every standpoint. Vahlberg, with his vigorous, new departure from tradition in architecture, may be pioneering a new housing trend in his own home state.



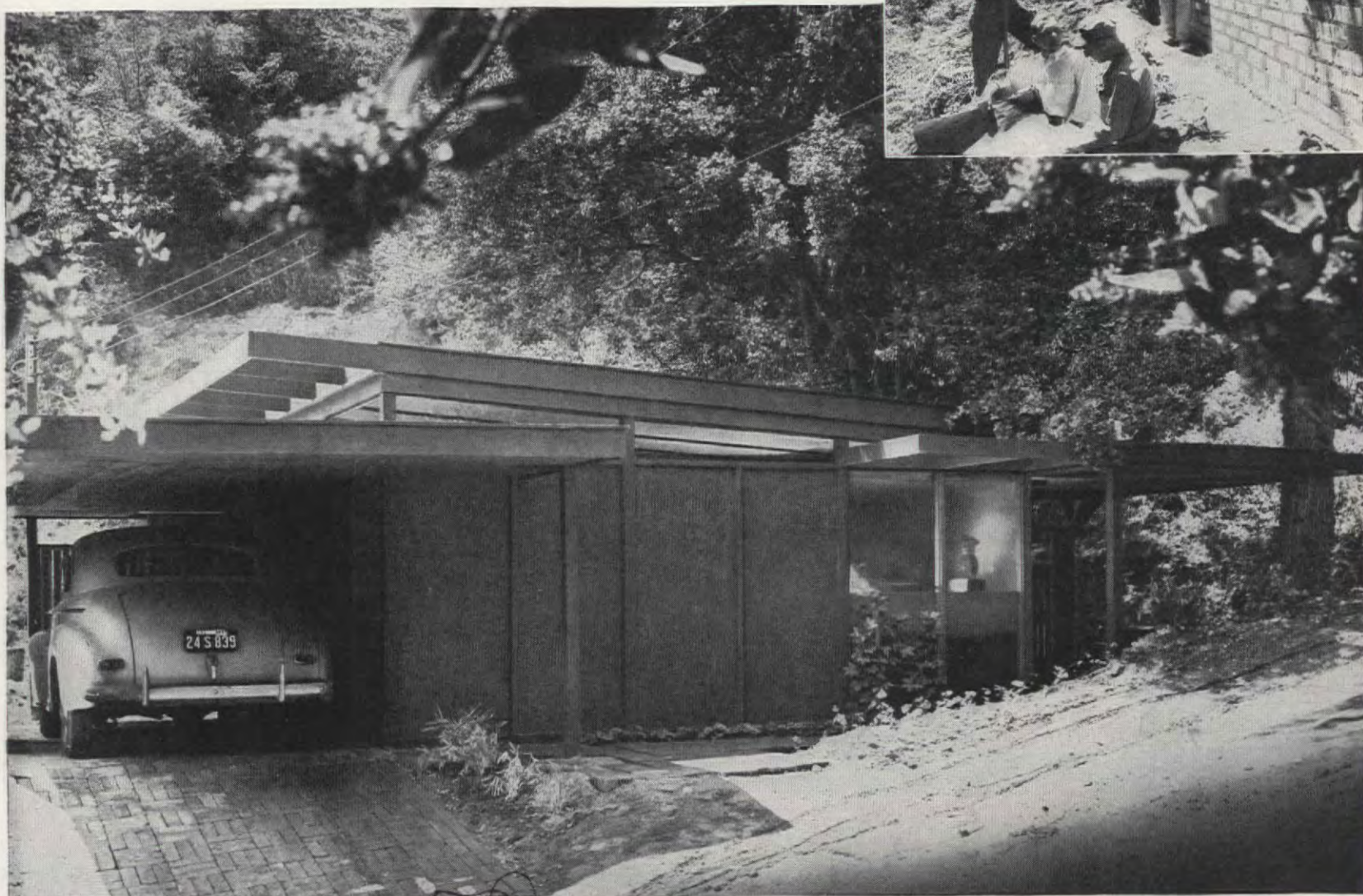
Photographs by Johnny Melton

● House turns its back to road approaches, lies long and low. Roof slopes up toward rear facade which is all glass and screen. Wooded ravine insures privacy, overhang shields window from sun

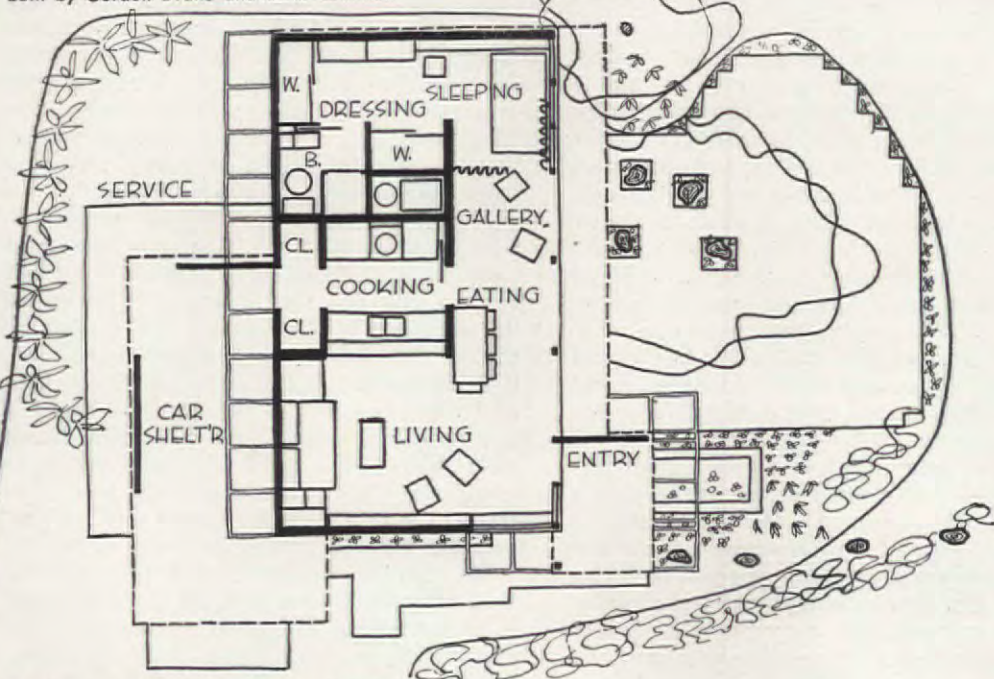
2 Ex-Marines Put an Ideal to Work ...and



Build a \$4500 House



Built by Gordon Drake and Louis Soltanoff



Gordon Drake Home, West Los Angeles, California, owner-designer

THIS is the story of a most heart-warming and inspiring endeavor which resulted in the building of a house—a very wonderful house—with promise of many more to come. First of all, however, it's the story of two young men, capable, intelligent, who are fired with an unselfish desire and determination to help fellow veterans realize that long-anticipated dream of a home of their own. Gordon Drake and Louis Soltanoff are two fellows with a plan. Through their efforts the housing hopes of many discouraged G.I.'s are getting a blood transfusion. Their promises are not those of medicine man or witch doctor. An enthusiasm and firm belief in such a cause is inspirational, especially when compared to an existing philosophy of take-while-and-what-you-can which never ceases to amaze one's more refined sentiments.

Gordon Drake is a graduate architect, and Louis Soltanoff is a graduate mechanical engineer. Both are ex-Marines and fighters. They can take the grief and problems connected with present-day building conditions straight and undiluted; they can stand more beating than thin cream. It was their firm contention that the cost of building houses could be telescoped, one major step being the employing of veteran labor. But now we're getting ahead of our story. Early in the war, Drake heard a great deal of talk among his fellow Marines about the homes they were planning after fighting ceased. Being an architect, he wanted to help them but realized that he needed someone to work with—someone to construct the houses he would

**Dream houses at the right price—
veterans prove it can be done even today**



Lily pool near entrance, plus louvered screen, stop callers from stepping back onto main terrace. This affords greater privacy for owner and guests . . . roof trellis, ingeniously built around tree, was used to preserve natural planting

Gordon Drake and a group of ex-G.I. workers check over the plans of a newly started house . . . many men are building for the first time and so learn a new trade . . . the owner is invited to participate in work on his own house

design. This someone would want to build with the same spirit and should possess engineering ability. He and Soltanoff were in the same battalion, trained to go overseas at San Diego. They had met casually, and were together in the Pacific before their mutual ideals came to light. Many of the men had often discussed the possibility of postwar inflation and its effects on future building. They realized that conditions following any war are as unpredictable as winter weather, and admitted that prices usually had an inclination to caper. Things generally seemed to move but one way, and that was back. Gordon observed Louis' keen deductions in these loose-leaf bull sessions and his interest in talking with men who were laying foundation plans for building with the money they were then saving.

One evening after the rest had left, the two friends recognized in each other a kindred desire to stave off the disappointment of the men about them—not only their own friends and acquaintances, but men in the Service everywhere who would want homes. Each one, they reflected, would return home with only a few thousand dollars saved. Chicken feed this would be, and not very fattening at that, in case of high building costs. They even went so far that night as to discuss the possibility of one individual's contribution to such a large problem. Though he was an engineer, Soltanoff was not content to just sit in an office and draw lines. Actual on-the-job construction work was his meat. Neither Drake nor Soltanoff, however, suggested the possibility of working together on the problem.

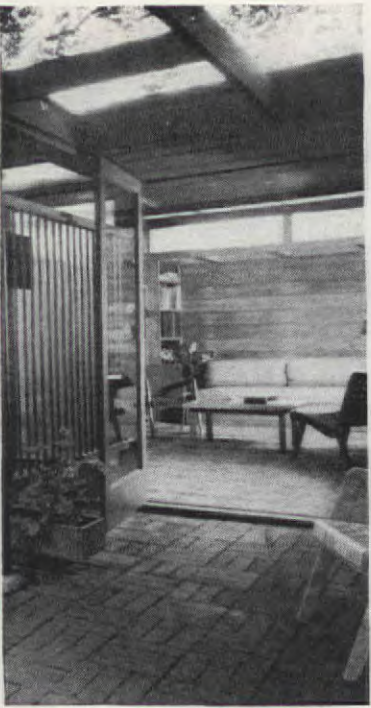
Gordon Drake comes to a boil slowly; Soltanoff weighs matters just as deliberately. They had considerable time on their hands and met often after that. Partly to keep busy, Drake drew a few house plans and showed them to his confidant for criticism. After a few starts, both realized that they were actually getting somewhere. A couple of fellows, they joked, couldn't waste their bosses' time to better advantage. Seriously though, both knew that they were going to build houses together for veterans once war had ended. Before matters had been completely decided, their ways parted. Drake, Captain of an Assault Engineer Company, went to one island. Soltanoff, Major in Amphibian Tractors, was assigned to another. Before they left, though, they came to an agreement and promised their friends that they'd build houses at a reasonable cost and, if inflation reared its ugly head, there'd be a loud, shrill squeak issuing from the better mousetrap.

When the war ended, Soltanoff, on his way home, heard that Gordon Drake was building a theater for servicemen on Maui. He had welcomed the suggestion of a superior officer and accepted the challenge to take his men on a construction job after months spent on destructive explosive problems. The theater had already been started when Drake was asked to take over but, for some reason, work had been interrupted. Since instructions were that the building had to be completed in three weeks, the new supervisor's only request was that he be allowed to continue without interference and be given all men, tractors, and bulldozers needed. Twenty-one days later the

theater was opened and Soltanoff was on hand for the premiere. It was an occasion for honest rejoicing for more reasons than one.

The two friends had but a few hours in which to reaffirm their faith in their former plans, and decided to meet later in California to start building homes. Naturally, a lot, equipment, and building materials were the first realities to be acquired. They decided to build the first house themselves, to prove that they could do it at a reasonable figure. An inexpensive hillside lot was purchased—one that ran straight up and down an embankment of rock foundation. The going was tough from the start. With picks, shovels, and wheelbarrows, plus plenty of brawn, they carried out the equivalent of three freight cars of dirt and rock. It took four months to complete the house, itself, at the amazing cost of \$4,500. This includes all built-in features, so that extra purchases of two occasional chairs, floor mats, four dining-room chairs and a coffee table were enough to furnish the house. These few pieces, plus paintings, sculpture, and fabrics for the sofa, bed, and bedroom curtains, amounted to only \$300.

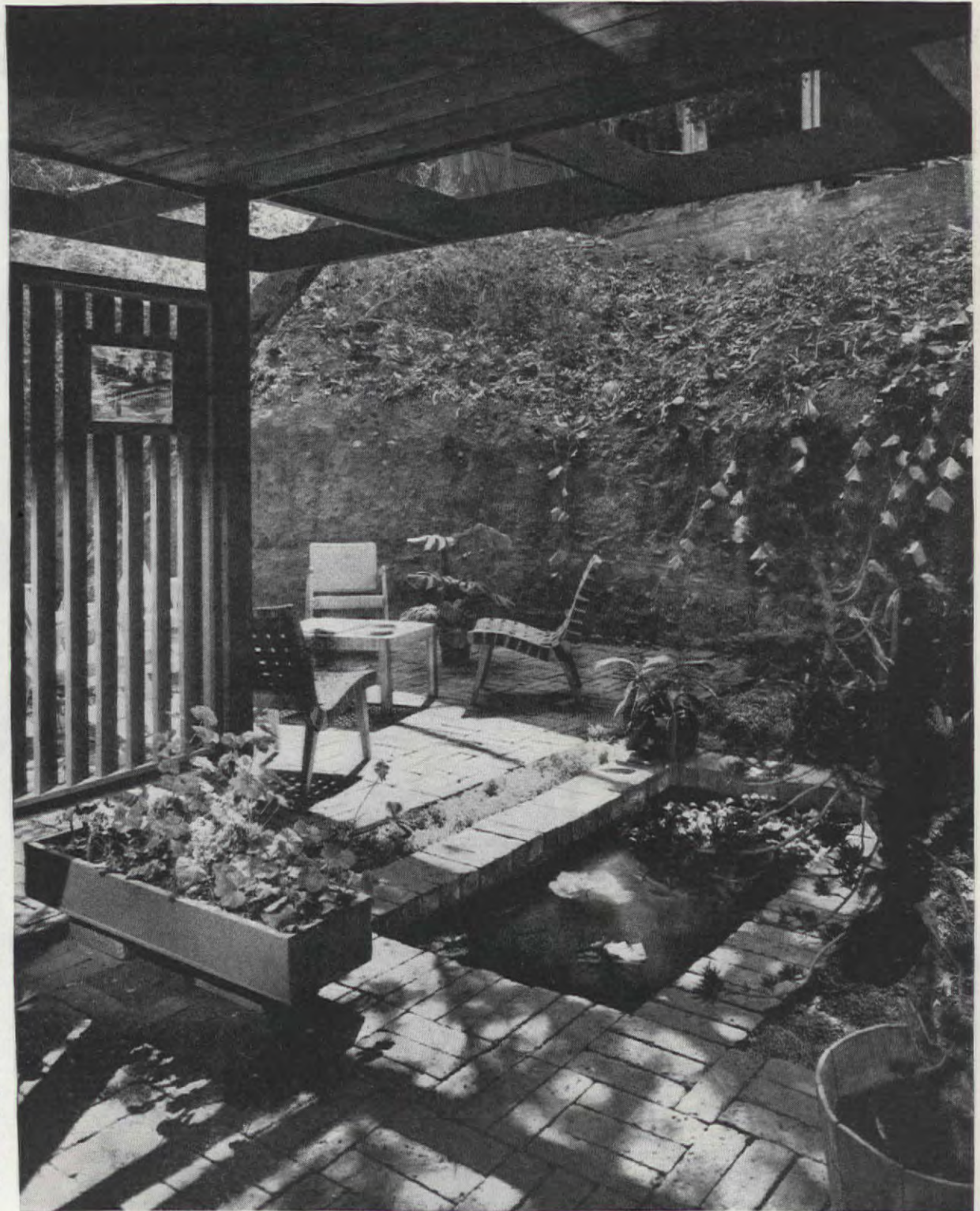
The exterior is covered with plywood, with horizontal wood siding used on all inside walls. It is both simple and charming and, instead of bringing the outdoors inside, seems to reverse the process and take the interiors into the terrace and gardens. A gallery runs along one full side, opening up with seven-foot wide glass doors onto the terrace. Though the living room is but twelve by eighteen, there's a most spacious feeling due to the many vistas which meet the eye



Photographs by Julius Shulman

When the large glass doors are open, interiors and terrace become one . . . solid wood roof of entry continues into living room to form part of ingenious lighting panel . . . at left can be seen a corner of the built-in dining table

View from front door across lily pool showing protective vertical louvered screen . . . callers cannot see through screen onto terrace though guests sitting there can look through it into entry

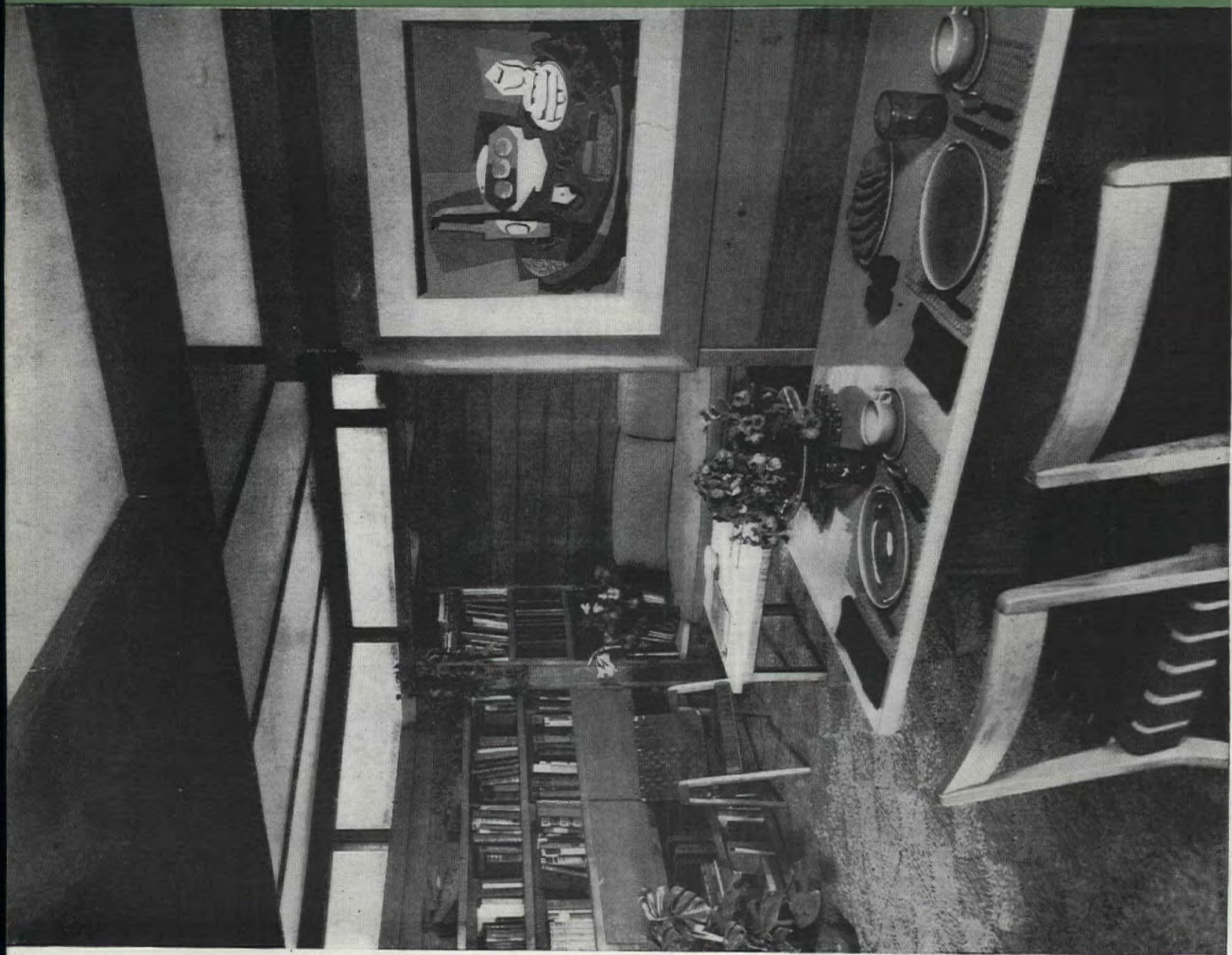


at every turn. The wall between living room and kitchen is a good example of how small dimensions may appear to spread out. Instead of a solid wall, the division is freestanding with a structural grille for easy serving. You can't see into the kitchen when seated in the living room but, instead, look through the grille beyond a kitchen door into the gallery and terrace. Clerestory windows, up at the ceiling line, give an uninterrupted view of the sky, trees, and hills beyond.

The house is built on a concrete slab into which ducts have been ingeniously laid and which carry forced hot air for heating. One large duct runs the length of the house on one side, with smaller ducts leading across the width of the house to another large duct. This, in turn, carries the air, as it cools, back to the centrally located heater. The floor thus remains evenly heated to 85 degrees.

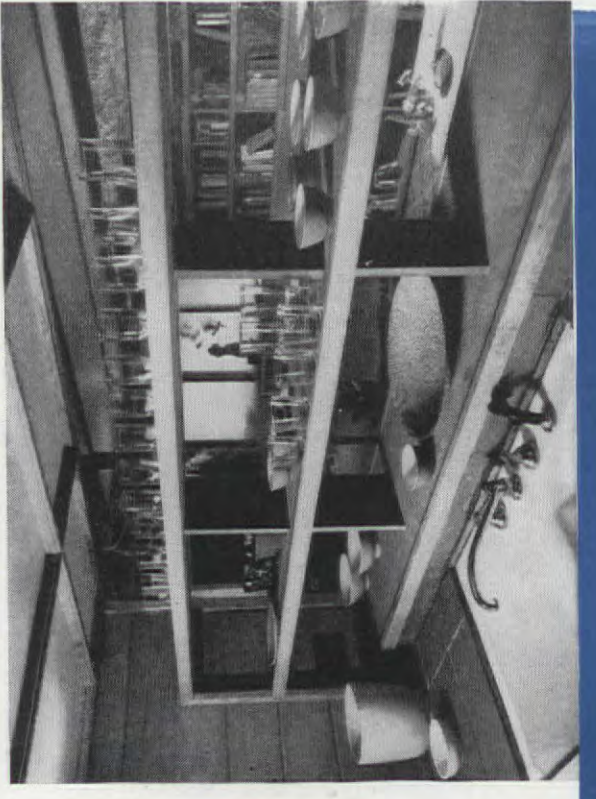
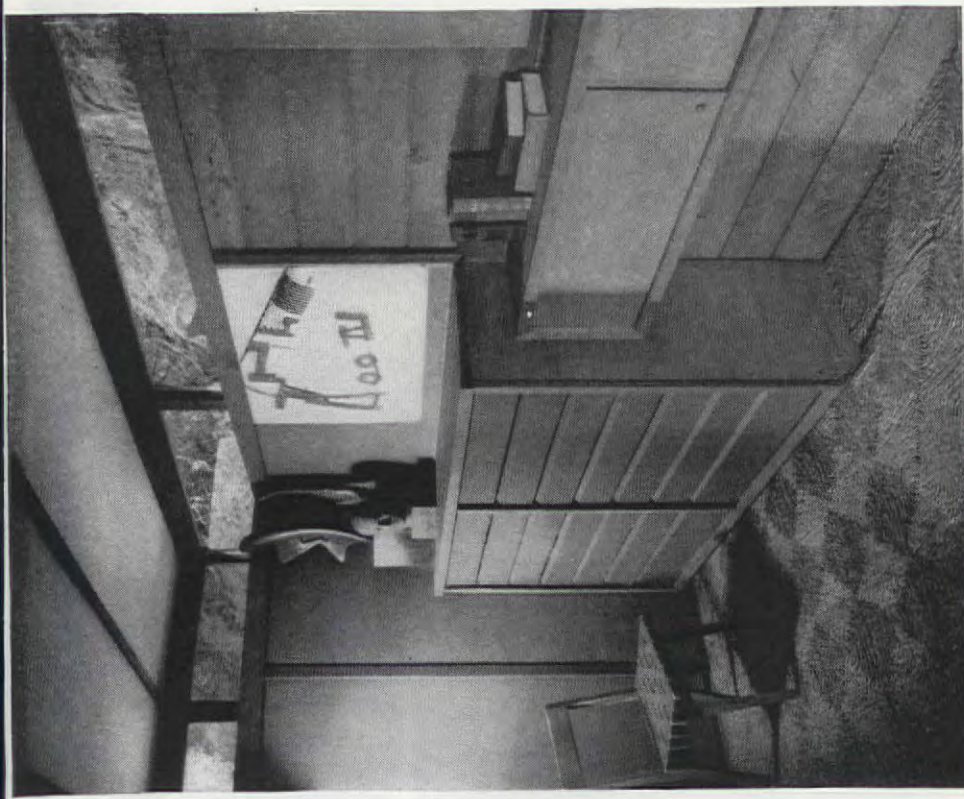
To the two ex-Marines, this house proved that their plan would work. The next step was to build for other veterans. From a long waiting list of veterans eager to join Soltanoff's construction crew, a group was picked to help build this second project. It is finished now and, because it is larger, cost \$6,000. Several others are now under way, ranging from a one room, kitchen and bath job for Mr. Soltanoff, himself, which he estimates will cost \$1,500, to one similar to the first which, though smaller, will have more usable space and is scheduled to cost \$4,000. The spirit behind the project is refreshing.

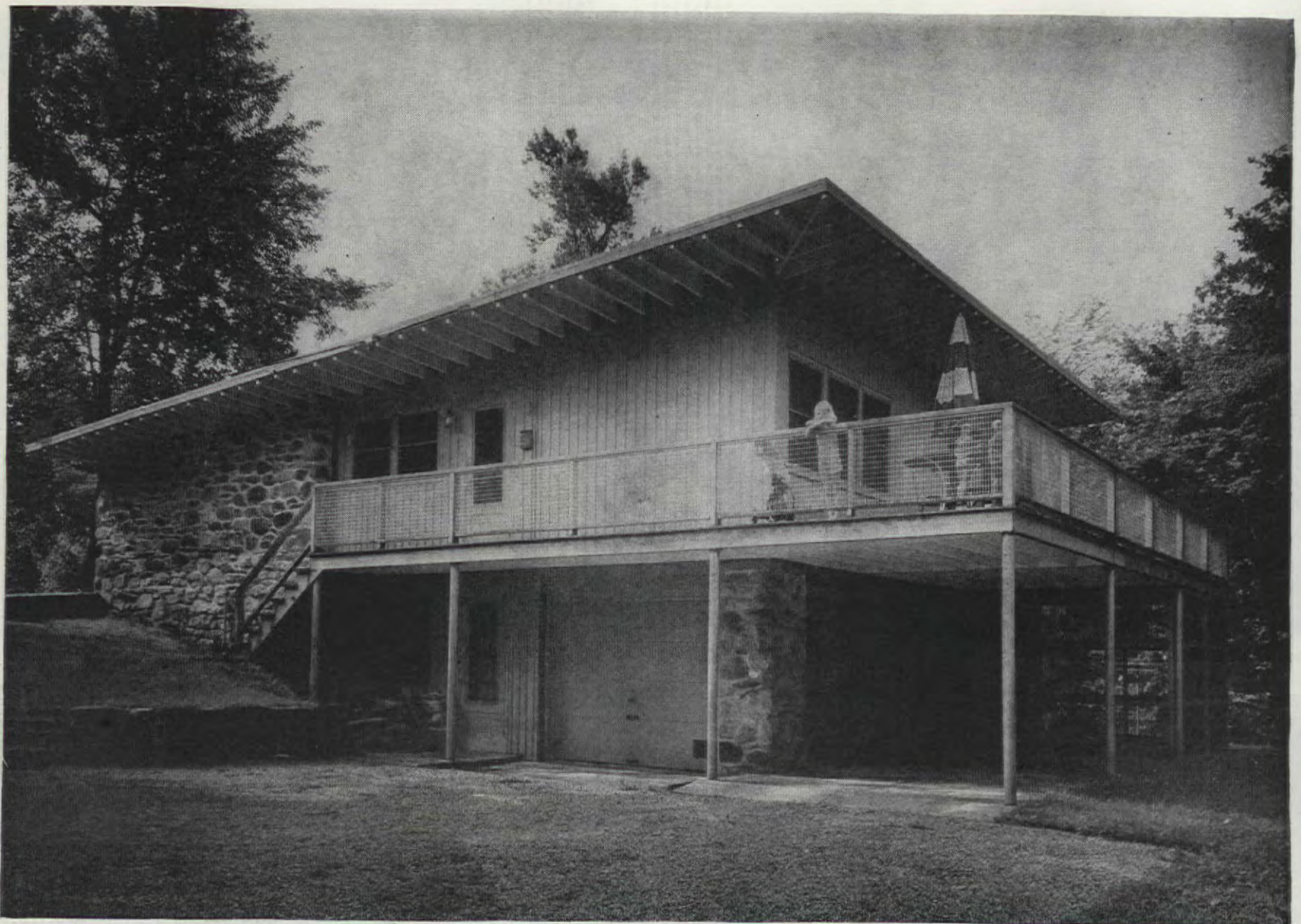
Mr. Drake runs his designing department entirely separate from the Soltanoff setup. Only veterans are employed on the construction crews. None had ever built a house before. Working directly under the head engineer are three former Marines, an Army engineer, and a concert pianist. They are called "phase men," each being trained in the work for which he is best suited. As they build more and more houses, these men will each become supervisors who will then take charge of new groups of veterans. Outstanding workers will then, in turn, be trained as "phase men." Each man is imbued with the spirit that better ways of building must be found and for less money. An owner is encouraged to work on his own house whenever possible; he, therefore, appreciates every board and stone in it since he takes part in its growth. Personal relationships are strong and binding. Each feels that he is building and protecting a man who wants and needs a home. They are also learning a valuable trade. The two pioneers are already looking to more ambitious fields. They feel that houses like these, when machine processed, can be done better and at a much lower cost. In the meantime, however, they realize that at present there's a desperate need for shelter, especially for those who've just returned from overseas duty and are starting life anew. This job is most important. Once over the emergency, there'll be wider fields to tackle and new standards of building established.





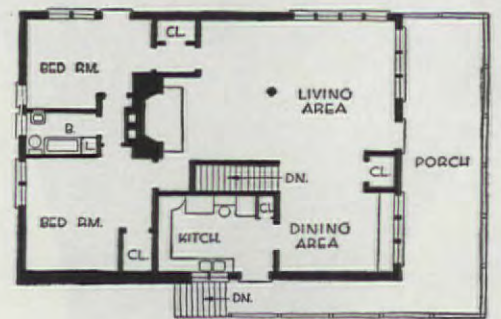
Living-dining room, also shown in color on cover, with walls of natural-wood siding, clerestory windows, and many built-ins. Shelves instead of solid wall divide kitchen from living room . . . light panel above counters provides even, soft lighting



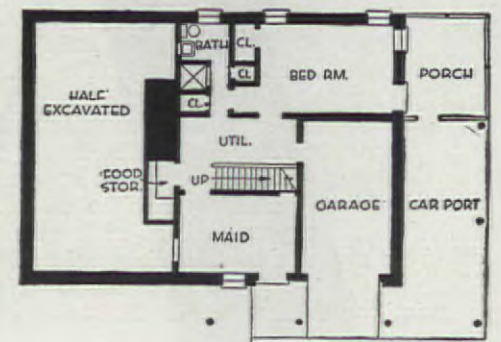


P. A. Dearborn

2 Families Knew What They Wanted



Home of Mr. and Mrs. Raymond Barger,
Stamford, Connecticut



Edith Barger, designer

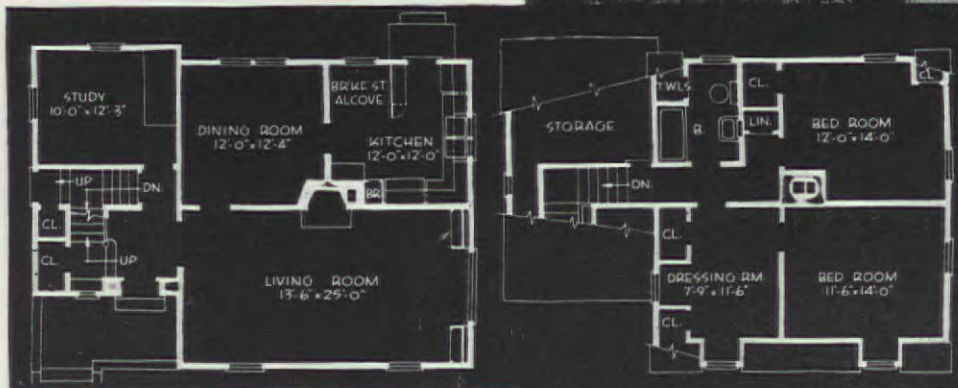


Ezra Stoller

THOUGH completely different in appearance, these two New England houses have about them the rugged simplicity so often associated with our eastern seacoast. One, the Barger home, is an individualist, modern in approach and built to order for a particular family; the Stephens house is traditional, following the long accepted pattern of the best that our colonial heritage has to offer. Both, because of materials used, blend perfectly into their surrounding landscapes. Nothing could be more unpretentious and direct than the heavy rustic stonework and gray painted battens of the Barger house. The wide eaves of its single shed roof exaggerate the low horizontal feeling. Stout mesh around the L-shaped broad porch helps save life and limb of energetic youngsters. This rugged quality carries indoors to form an extra large stone fireplace, just the thing for steak roasts or informal winter gatherings. Plaster has been left stark white; one wall is of ponderosa pine. Clever planning has resulted in a spacious lower floor with garage, two bedrooms, bath and plenty of storage space.

The Stephens house is located in the center of a residential district; but because of its towering pines and hilly site, it might well be far in the country. Split shakes gives the exterior a thoroughly authentic look. Both Mr. and Mrs. Stephens are avid collectors of Vermont antiques, and their home affords a perfect background for their treasures. A large picture window in the living room affords a gorgeous view of the surrounding landscape and is flanked by open bookcases whose backgrounds are painted a deep red. There's a pine panelled study and blue and white dining room on the first floor. This house, too, has been kept low in appearance by the wise use of heavy white painted eaves across its front. Bedrooms above are spacious and well lighted.

Home of Mr. and Mrs. G. D. Stephens
Burlington, Vermont



Freeman, French, Freeman, architects





Photographs by Julius Shulman

The Cliffords —

William J. Hennessey and James W. Wiley

WHEN Mr. K. V. Clifford retired from active business and moved his family to Southern California, his young designer son suggested that it was the logical time to build a home. By this he meant not one house but two separate establishments—one for himself, the other for father and mother. Up to then the family had always lived in apartments. Had it not been for son Ralph's insistence on two roofs over their heads, they probably would have gone right on being soft-boned, slack-fibered apartment dwellers, which they claim is a fairly comprehensive description of their status up to that time.

Like most observing sons, Ralph Clifford knew his father well. He realized that the interest in building a house with, later, a yard to putter in, was absolutely necessary while his father was being weaned from his office. Mr. Clifford may have even acquiesced to the plan of building, but how or why he swung to a house of modern design is another matter. He had never openly discussed his quiescent interest in contemporary design. Both he and Mrs. Clifford will acknowledge now that they often laughingly discussed the architecture of their son's choice. It reminded them of a very good-looking face without eyebrows. Knowing, however, the son's reserve, it would be unfair to accuse him of using undue persuasion, even in capsule form, to swing his family to his side of the chalk line. Instead, his theory, which seems reasonable, is that the elder Cliffords wiped their original opinion off their faces, when they saw for themselves that housekeeping is certainly simplified in a modern house, and that it is easier to make a house of this type more nearly burglar-proof than one of traditional design. This concern about prowlers is understandable, and the demand for good locks on both windows and doors quite logical when, up to this time, these apart-

ment dwellers had always felt secure behind the double protection of locks and building heights. The claim of increased ground-floor safety in a modern house was not a wedge to win a point. The Clifford home is about as antiseptic to uninvited entrance as an airplane "en transit." There is only one ground-floor window at the front of the house, and this is made fool-proof by a strong, ornamental iron grill. At the rear, living and master bedroom, though opening onto the world, with either wide free windows or a bank of collapsible doors, enter directly into a spacious, roofed outdoor-living room, whose one outside wall is guarded by a heavy, ornamental, screened iron grill. Except, then, for tamperproof kitchen windows above the sink, and a single ground-floor window, both safety and ventilation are satisfactorily handled with clerestory sash, set ceiling-wise and resembling wall slits.

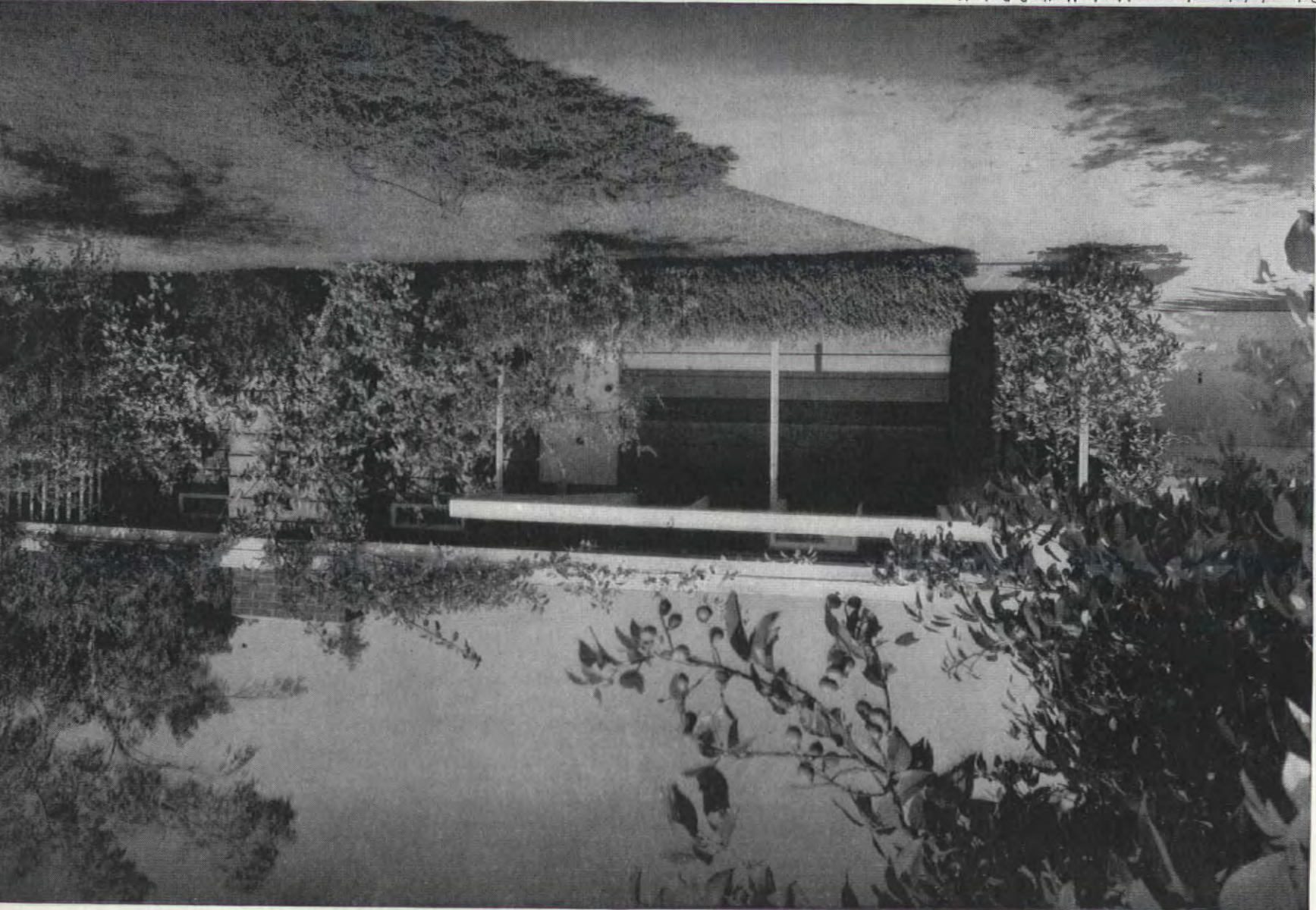
THE plan of the house turns in on itself. Living is at the back, with attention focused on the attractive back yard. What goes on at the front or sides is of no concern to the Clifford family. They neither see nor hear it. Such a house as theirs defies lot location since control of the outlook, concentrated at one side, is completely in the hands of the owners. For instance, all sound and sight of a next-door school are eliminated and never disturb the occupants of the house. An important factor in a house of this character, where large areas of glass are concentrated on one side, is a lot where these oversized windows can take advantage of the prevailing summer breezes. The Clifford house catches the east breeze and turns its



back (really its front) onto the western winter storms and summer sun. The family generally eats in the outdoor-living room with short-cut service through a dining-room window. This, in turn, is no more than a dozen steps from the kitchen. When dining indoors, the drop leaf of a recessed dining-room table is raised, and a meal for three is a simple matter to arrange. Pulling out the table into the room provides seating for eight. When entertaining informally, buffet suppers are set on the recessed table and on two built-in cabinets which line one wall of the dining room. In this way guests may be served conveniently either at tables set in the inside or the outdoor room.

An intriguing fact about this particular house springs from the careful arrangement of floor

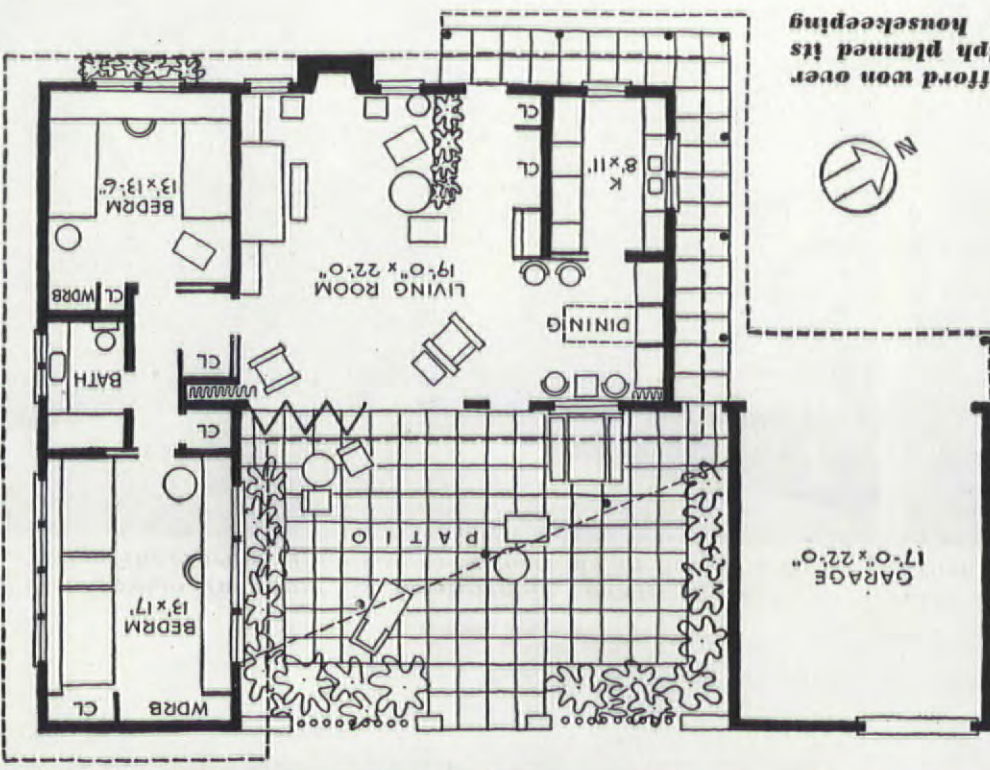
Parents and Son Live Back to Back

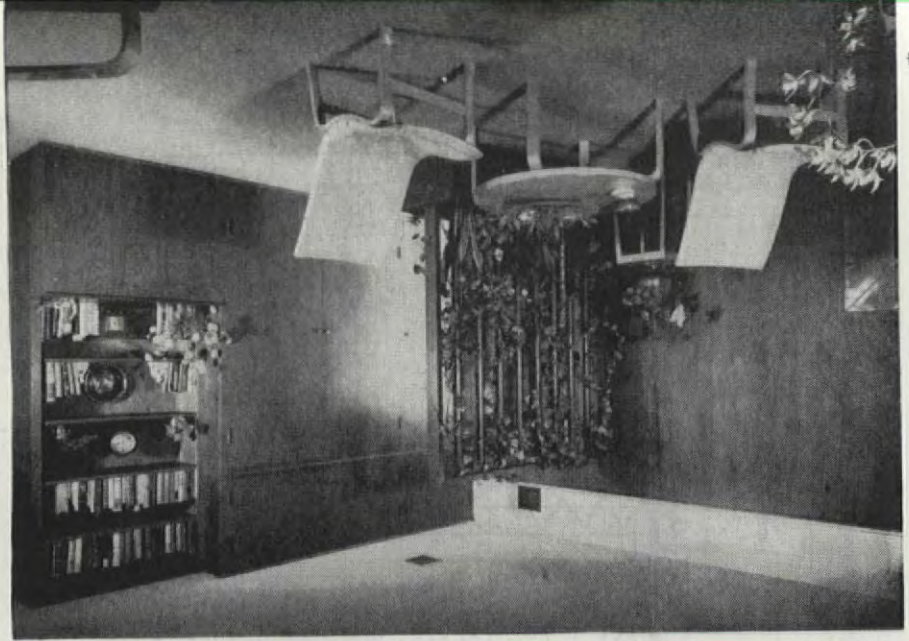


Data and photography supervision by Martha B. Darbyshire

space. It is not a large house in terms of actual footage but, due to the flowing plan and modern decoration, the interiors seem positively spacious. Its exterior is of redwood siding, finished with boiled linseed oil. One wall at the rear is finished in white-painted stucco. All outside trim, including the entrance door and the vertical, ornamental grill which covers the guest-room window, has also been accented with crisp white. The outdoor-living room is half roof and the other half is screened. It has a terra-cotta tile floor which outlines a planting border, gay with begonias, Mexican or chids, geraniums, Bird of Paradise, and fuchsias. The iron grating, which acts as background for this colorful floral display, is also white. The house plan, itself, is completely functional in its simplicity. Entrance is directly into the living room, though a certain amount of privacy results from the use of a redwood grill covered

Low redwood home of Mr. and Mrs. K. V. Clifford won over owners to modern design . . . son Ralph planned its compact layout for flexibility and easy housekeeping

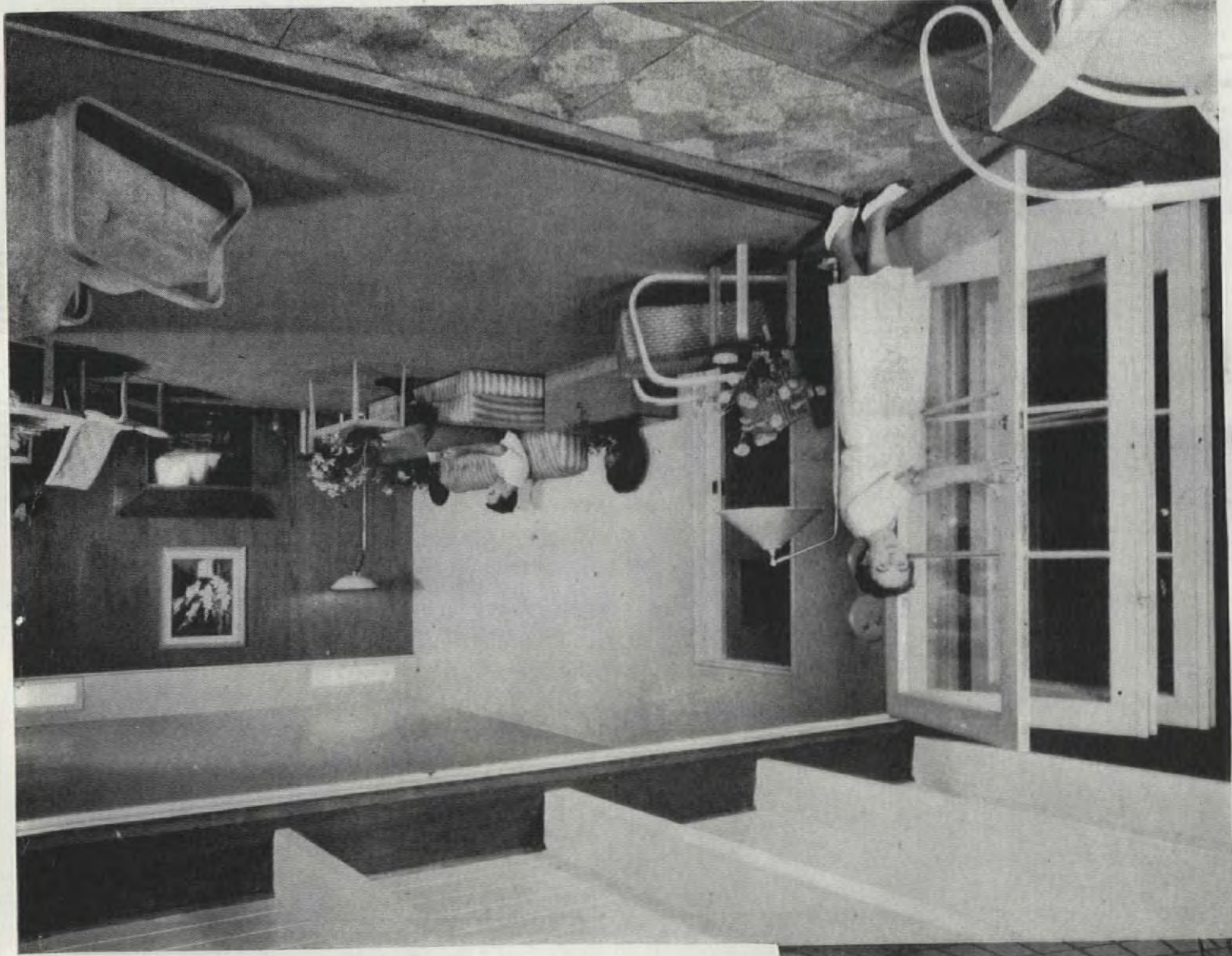




Living-room furniture is comfortable, easily movable. Notice the spray of home-grown orchids at lower left.

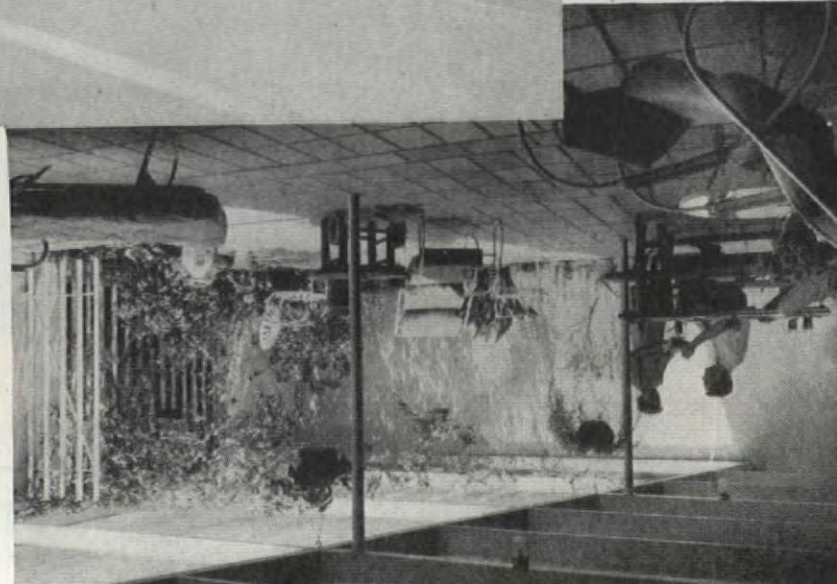


This is the dining area with recessed drop-leaf table, which also doubles as a buffet. Door leads to kitchen.



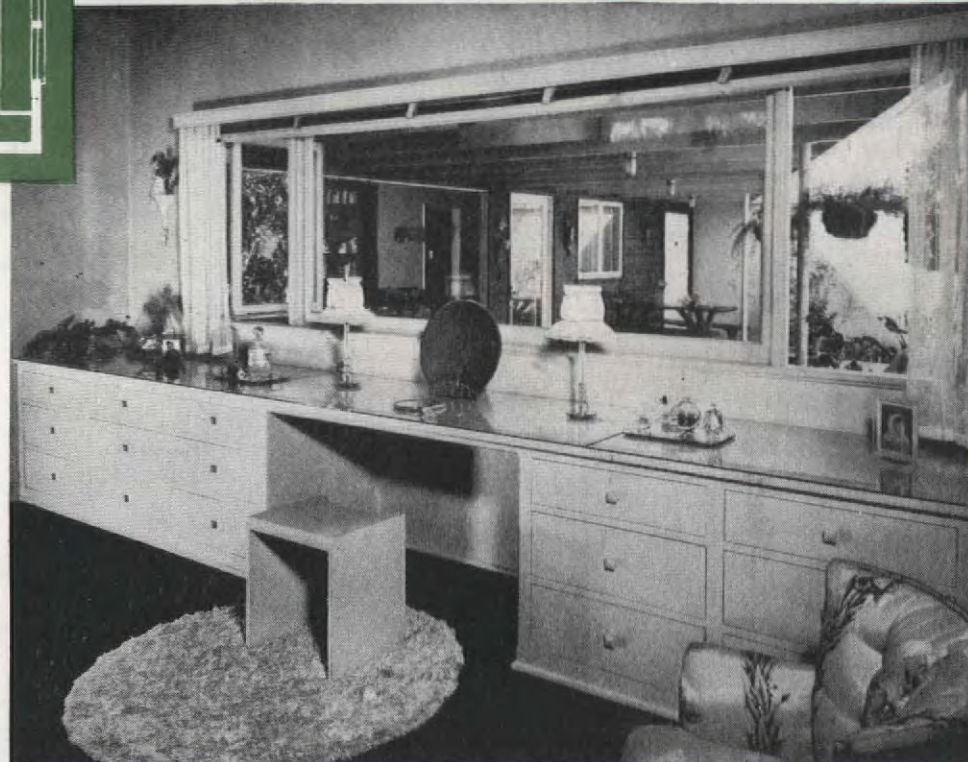
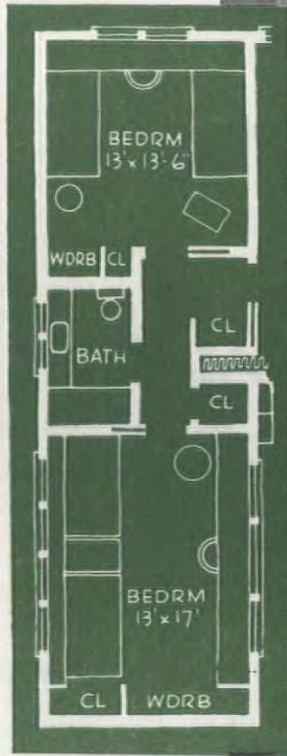
Warm climate through much of the year makes this patio a comfortable extension of the living room. During inclement weather, the large glass doors slide closed on an overhead track. Generous closet space, plus red-wood bookcases, form the other side of this semi-vestibule. The dining area, actually a part of the living room, is adjacent to the compact, efficient kitchen. Two bedrooms and a bath are located at the opposite end of the house. They form a wing which projects into the rear of the plot as one enclosing wall of the outdoor-living space. The garage wall at the other end of the building forms another side of the U-shaped enclosure, and acts as buffer against wind and noise. A covered passageway from the front-entrance door leads to both the garage and the patio. Colors throughout the house have been kept

Warm climate through much of the year makes this patio a comfortable extension of the living room. During inclement weather, the large glass doors slide closed on an overhead track.





This is what a closet should be! No more floor space than average, but infinitely more capacity. The long counter provides desk, dressing table, storage, and headboards



Carpenter-built units, constructed with house, saved considerable money by eliminating much furniture cost

quiet and low in key. The soft color and texture of the redwood paneling on the living-room fireplace wall of the Clifford, Senior's house, finds effective contrast in the plain gray-green of the wall which abuts it. One of the Aalto designed chairs is upholstered in a soft-green textured fabric, another is covered in a hand-loomed cloth of yellow and green. The simple lines of the pale wood furniture are good in the room. The flush fireplace opening is outlined with a twelve-inch facing of copper.

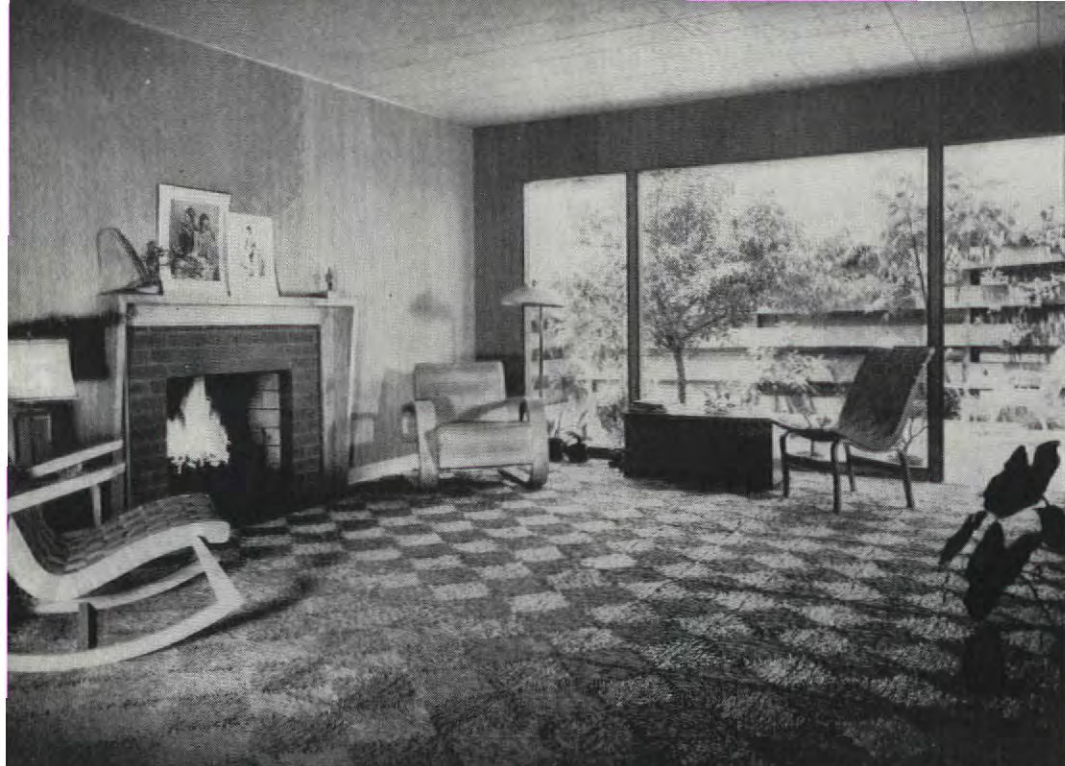
Two armless chairs near the entrance screen are laced with gray webbing. Behind them is a capacious, built-in wardrobe and bookcase, with a lower cabinet for extra storage space. In the photographs at the bottom of pages 28 and 29, notice how neatly the drop-leaf table folds into the space between the two chests. Yet it can easily pull out to accommodate eight.

The guest bedroom, at the top of this page, is flexible in its use as a study or second sitting room. Walls are cream, the ceiling is painted grape red to match the carpet. Two bed-couches have seats of blue-and-cream striped fabric, and bolsters of a solid blue cloth. A fluorescent light fixture is sunk into the ceiling immediately over the desk, and illuminates the counter work area. A deftly planned closet and wardrobe, built into one corner of the room, will accommodate a surprising amount of apparel and accessories in its drawers and cupboards. Space for suitcases is at the top.

A festive table set for six persons in a small space. Curtains draw across windows

Blue-and-gray faille spreads cover the beds which are set along wall, have built-in bookcases, night table between





Mrs. Clifford has used this counter idea with a lavish hand in the master bedroom; the counter runs the length of the room, encompassing a well-lighted dressing table and six chests of drawers. The color scheme is blue and gray.

Here, in the master bedroom, the incredible storage space planned in this house is evident in the wardrobe closets which occupy the entire end of the room. It's a more ample version of the guest-bedroom closet, and has its share of drawers and hanging space, with cupboards above for dead storage.

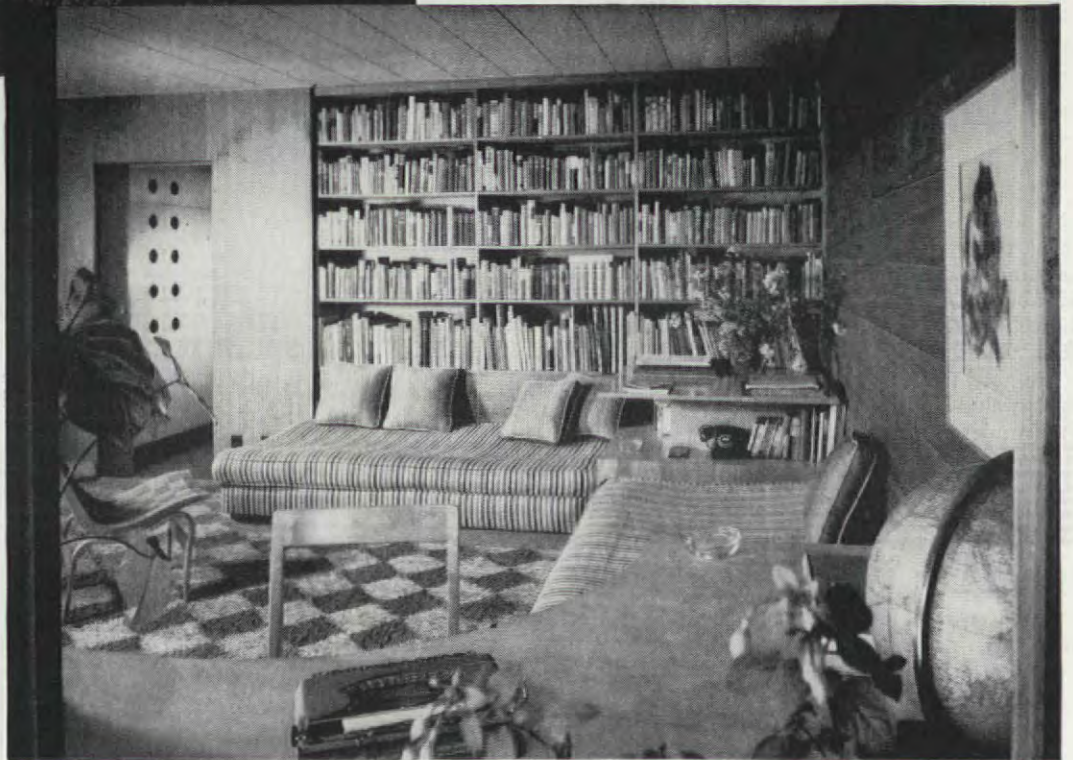
Judging from a casual remark dropped during my visit with the Cliffords, it must have been the distaff side of the family who first weakened in favor of modern design. Their former apartment had been filled with antiques, many of them family heirlooms. It is easy to understand the surprise and consternation of family and friends when one day she suddenly telephoned an auctioneer to come immediately. When he arrived, every one of the prized collection was sold. It was her personal bridge burning! She was determined that the new house was going to be modern, and that no time should be lost in getting off to a thoroughly fresh start. So chalk up victory No. 1 for Ralph.

It was shortly after the family had moved into their new home that the wisdom of the younger Clifford became again apparent. Active all his life, the father didn't take to sitting around doing nothing. At times he was even tempted to start once again in business. A chance remark from his wife opened up new vistas and saved the day. "Why not garden?" A fine idea, but this former city dweller knew very little about plant-

Slanting fireplace molding is set against combed plywood wall. Celotex ceiling is a soft-green tint. Rush squares cover floor



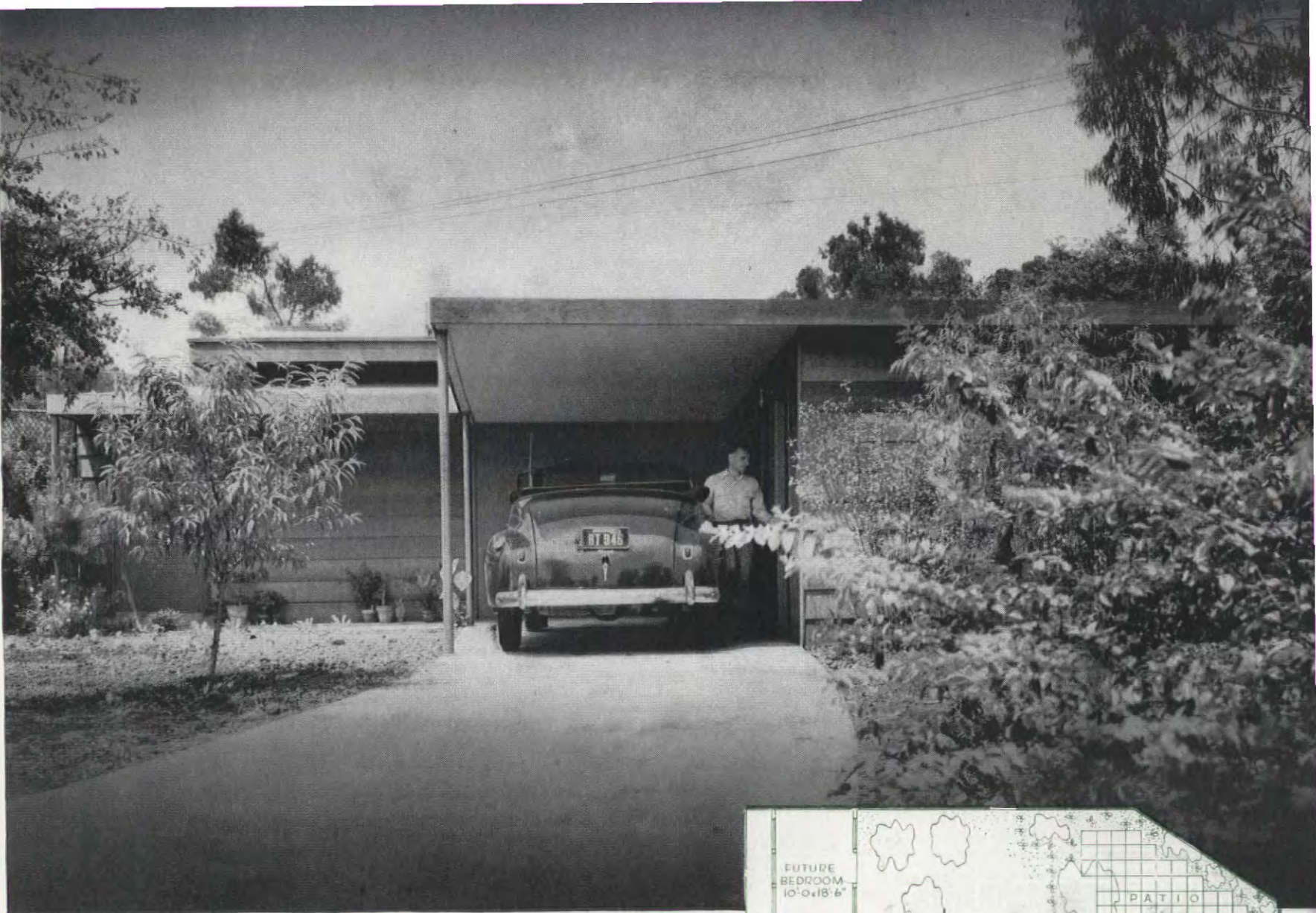
This sleek kitchen has yellow walls, red linoleum, cream-painted cabinets



Superb bath-dressing room has closets in two entire walls; galaxy of drawers for bath and table linens



Simple desk fills corner across from bookcases, has view of entrance through window (see plan)



ing or any other phase of horticulture. Nevertheless, there was plenty of land—clear from the back yard over to the next street. The temptation was great; all around him neighbors were busily gardening. And so it started. The ground was fertile and everything seemed to grow without too much coaxing. Finally the Clifford family found itself giving away vegetables to friends and neighbors—one market basket to anyone who would call for it, every Tuesday and Friday.

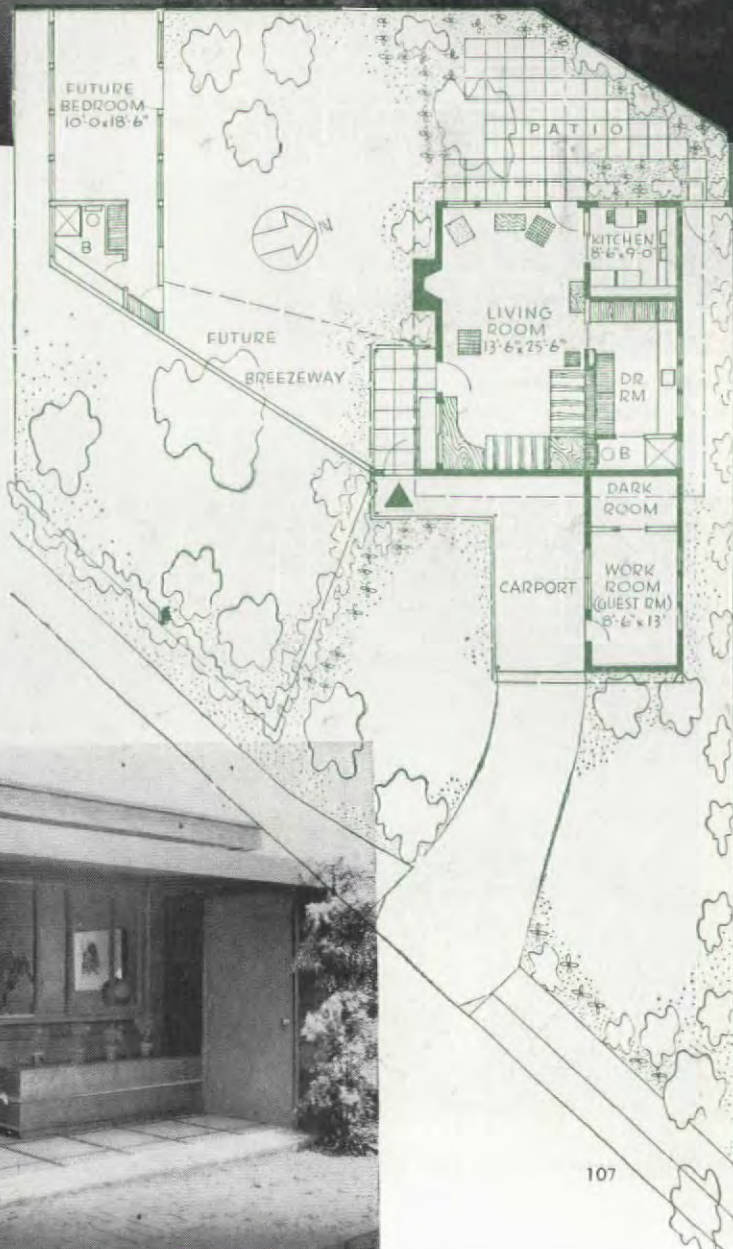
From vegetables Mr. Clifford became interested in raising flowers—not flowers in general, one flower in particular. He raises cymbidiums, a type of orchid that will grow outdoors, under cover of a shade house. This hobby, which has put all of his others in complete eclipse, has developed by leaps and bounds. The shade house now covers all of the area from the boundary line of the back yard through to the rear of the lot almost back to the next street. It's a lot of territory but, with over 5,000 cym-

bidium plants, it is needed.

HAVING lived so long in apartments, lost to the serene pleasure and gratification of owning your own home and piece of ground, it is not surprising that the Cliffords have sunk fathoms deep in joy at their new possessions. There's so much to do, so much to be interested in. Their mimeographed laughter about modern architecture has changed to indexed pride which, for all of their calm, is branded on their foreheads in twelve-point stars.

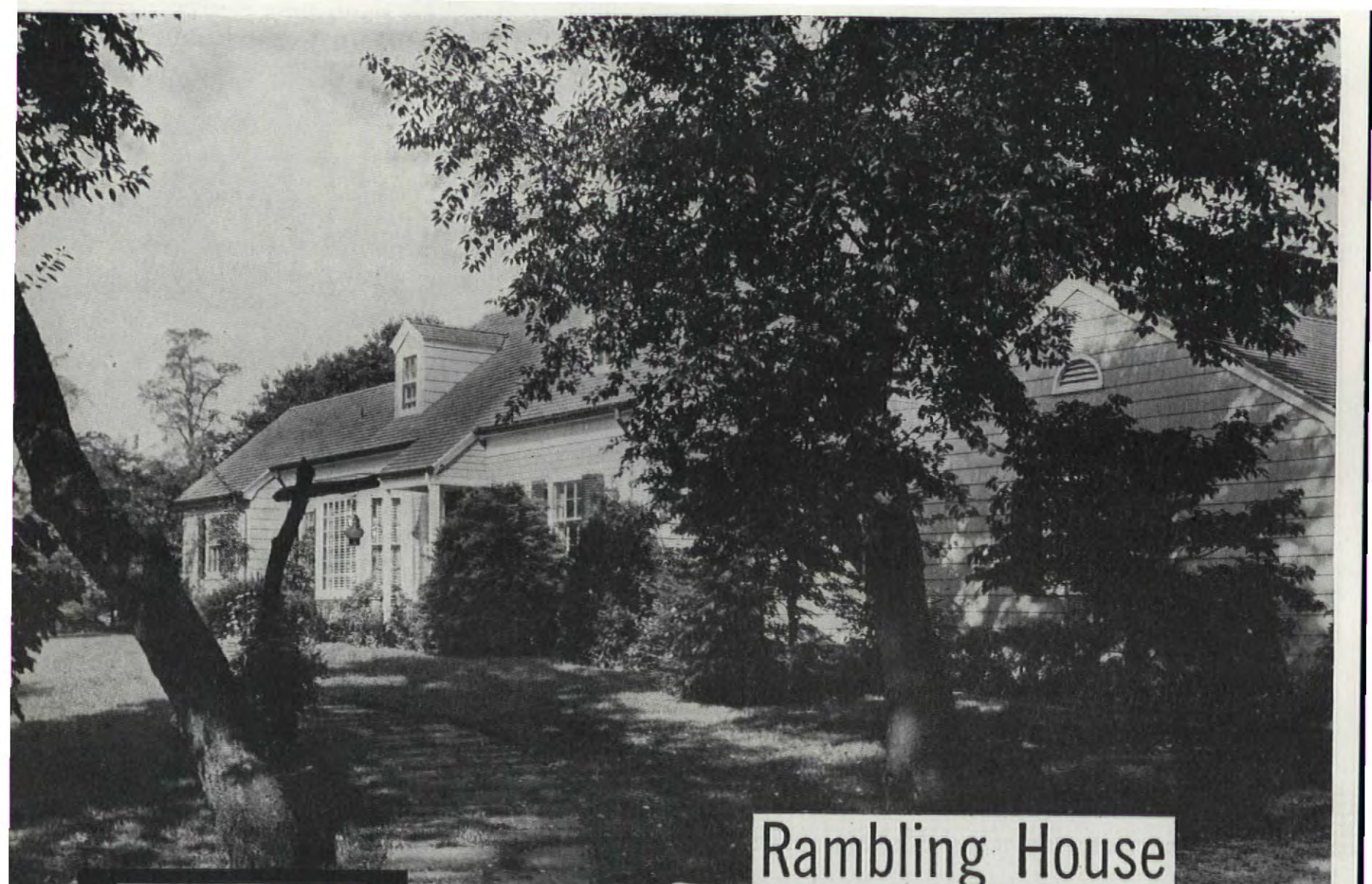
After getting his parents safely established in a new house, Ralph Clifford built his own home facing the next street over. His house is small, a fraction of a house reduced al-

CONT. ON PAGE 137



Ralph Clifford's own one-room house follows exterior pattern of his parents', with redwood siding; trim is deep gray-green instead of white. Covered porch has useful storage chest for garden tools and full view of attractive living room through the oversized windows





Rambling House

on Long Island

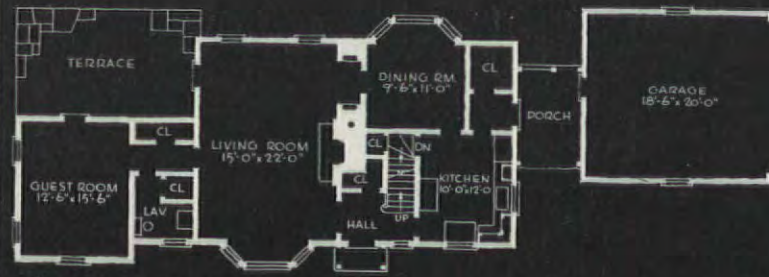
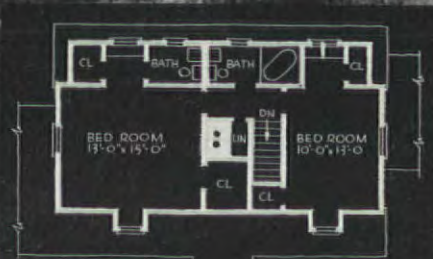
Photographs by Fred Gund

New York

Fred Gund

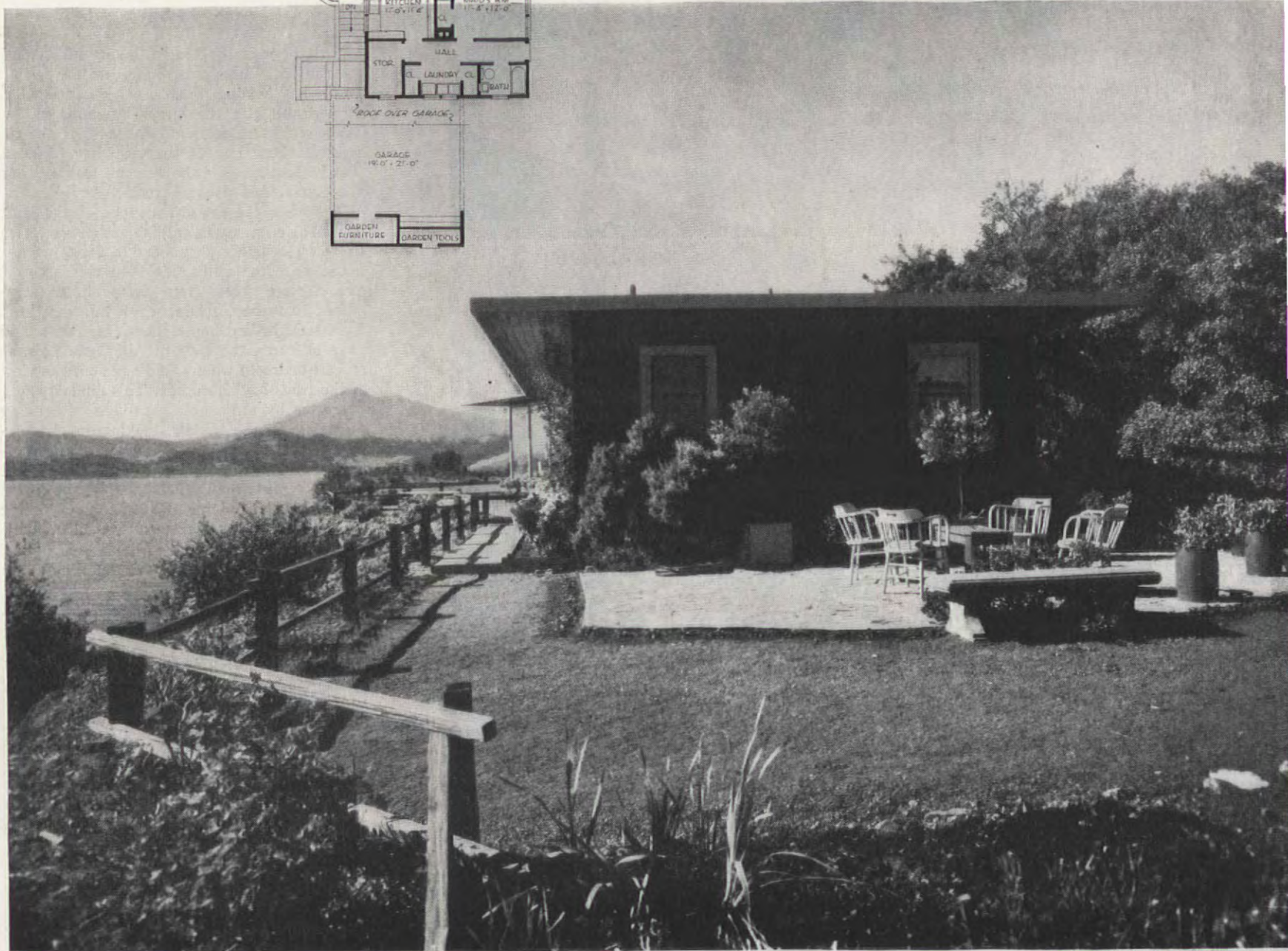
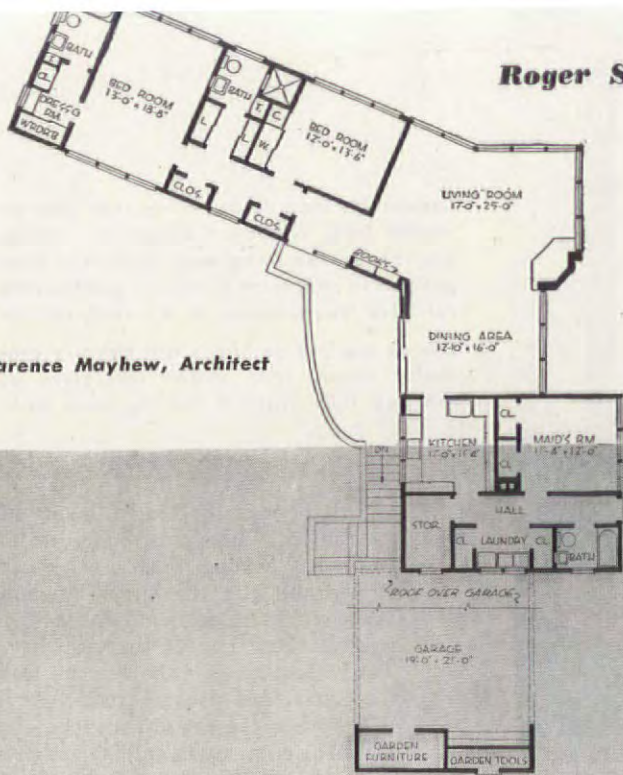
HERE is a long, low, rambling house that is surprisingly compact in plan. Located on Long Island, within easy commuting distance of New York City, the house was built shortly before the war for its present owner by Walter Uhl, builder, who is also the designer. The house is painted gray with green shutters. Because of its excellent lines, it seems to fit right into its setting in the rolling Long Island countryside. The builder provided a beautiful lawn, surrounded by a white picket fence to the rear of the house. This lawn also provides a run for the owner's two cocker spaniels. A flagstone terrace, handy to the kitchen, may be used for serving meals in fine summer weather.

Once inside, we find a spacious living room with a large fireplace and, beyond that, a study which doubles as a guest room. The bath in the study also doubles as downstairs powder room. The living room has a large bay window on the south side and two large windows to the north, making it a sunny, cheerful room at all times of the year. The kitchen, connected to the garage by a breezeway, is located on the opposite side of the entrance hall from the living room. A pantry of unusual proportions is used for the storage of food and equipment, and also serves as a built-in doghouse. Actually, the two cocker spaniels have the run of the house and grounds; two doors, of proper dog size, are located in the pantry, one swings in, for incoming spaniels and the other swings out. A continuous dormer across the rear of the house and two single dormers on the front, make room for two 13' by 22' bedrooms on the second floor. Each bedroom has a large closet. There is a linen closet and bath on this floor as well.



Roger Sturtevant

Clarence Mayhew, Architect



Photographs by Roger Sturtevant

IN a region abounding with spectacular vistas, the Shingles acquired a particularly spectacular one—a headland on a point jutting into the blue waters of San Francisco Bay. In Marin County, near San Rafael, it is only forty minutes by way of the Golden Gate Bridge to downtown San Francisco. It is difficult to say when it is most attractive. Comfortably furnished in neutral tones, the interior offers little competition to the spectacular view outside. Some prefer it when the sun is sparkling on the water, setting off the panorama against a deep blue sky. Some like it best on a rainy, winter afternoon, when one seems to be floating in a world of gray sky and water, and when the crackling wood, blazing in the fireplace, is an invitation to easy conversation and quiet reading. But at all times it is magnificent!

On the bay side of the property a sheer cliff drops sixty feet to the water. On the shore side, a thickly wooded slope rises steeply from the mainland. From the edge of the cliff is an arc of unobstructed panorama

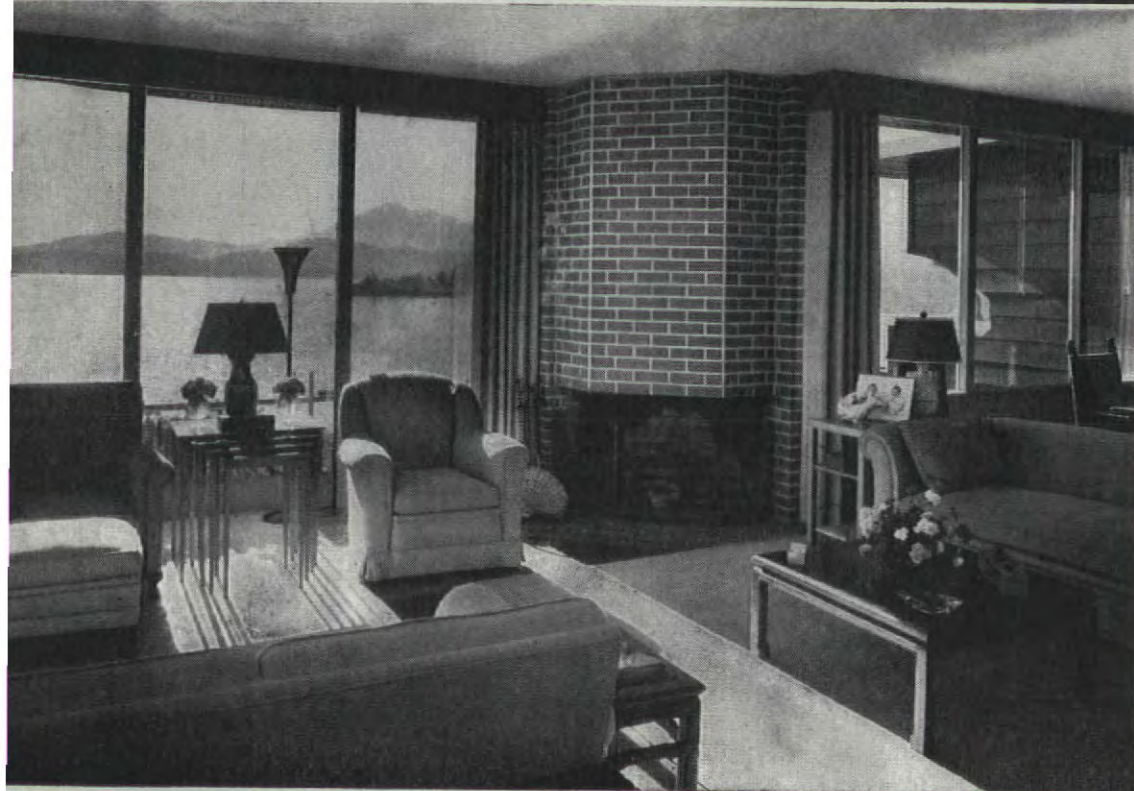
“Bent” in the Middle for Bay and Mountain Views

Home of Mr. and Mrs. Fred Shingle
San Francisco, California



Spectacular view from dining area may be caught from wherever diner sits. Warm, neutral tones in living area offer little competition to panorama outdoors. Comfortable furniture was intended to be used, and is!

Woven reed roller blinds are cleverly concealed coves; they soften the glare of reflected light without making room dark



and to the west the Marin County hills culminate in Mt. Tamalpais. South are the islands of the bay beyond which can be seen the Bay Bridge and also the larger buildings of San Francisco itself, while to the east is the attractive shore line of the trans-bay counties. To the southwest is the channel leading from the San Rafael yacht harbor.

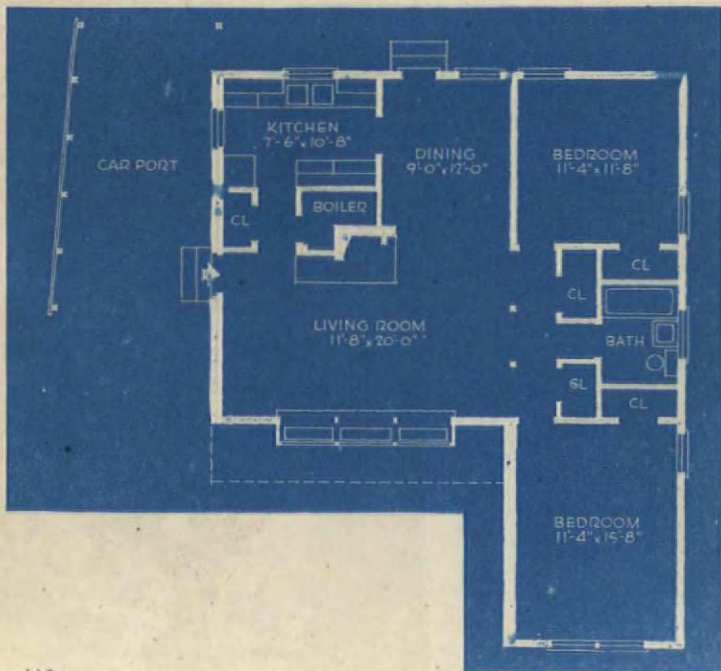
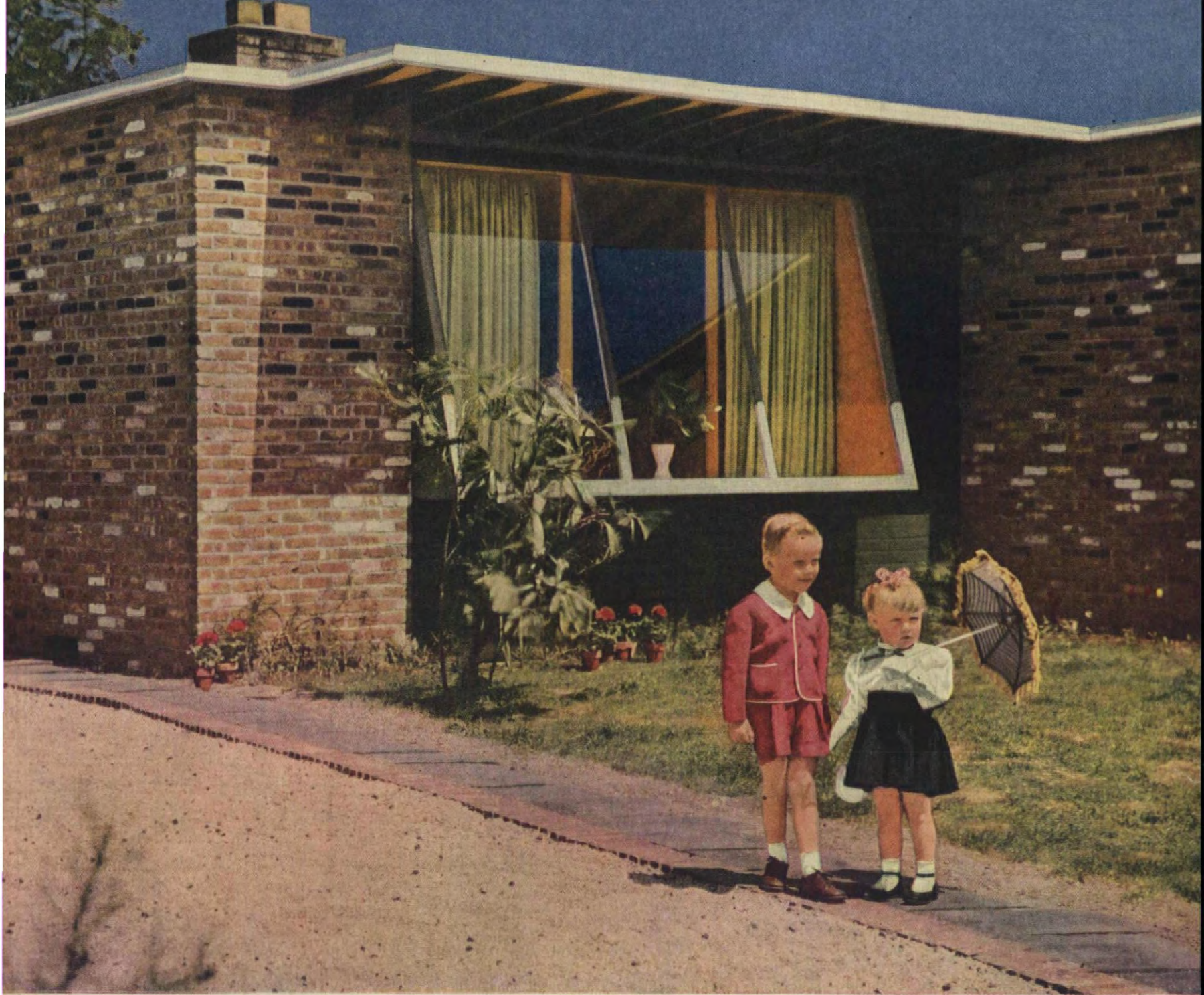
The view, the shape and slope of the land, as well as economy in grading and preservation of trees, together demanded a long, narrow house near the cliff's edge, on an east-west axis. Service access from the public road required that the kitchen be on the west end. In a straight-line house, however, this would have obscured the view of Mt. Tamalpais, as an east bedroom wing would have cut the view of the trans-bay shore line. This difficulty was overcome by the simple expedient of bending the house in the middle, making an observatory of the living-dining room. From the combination room can be seen practically the full sweep of view that existed before the house was built. Heightening this effect is a sliding window wall at the dining end which seems to bring the woods on the northern side of the house inside. The view is so well caught, in fact, that a diner, no matter where he sits at the table, can absorb great slices of beautiful scenery along with his food.

Bending the house was proved advantageous in two other ways. It provided space near the kitchen for an outside sitting and dining area and the bend gives many degrees of shelter from the cool summer trade winds. Architecturally, the simplicity of the house is out of conscious respect for its site. On the bay side, its flat roof, clean wide eaves, and horizontal siding stained a dark brown, unobtrusively parallel the cliff top. The soft green trim of window frames and eaves is a mere echo of the simple planting of the lawn and garden. From the land side, there isn't any house at all—just a hint of roof line through the trees from which the garage protrudes into a driveway.



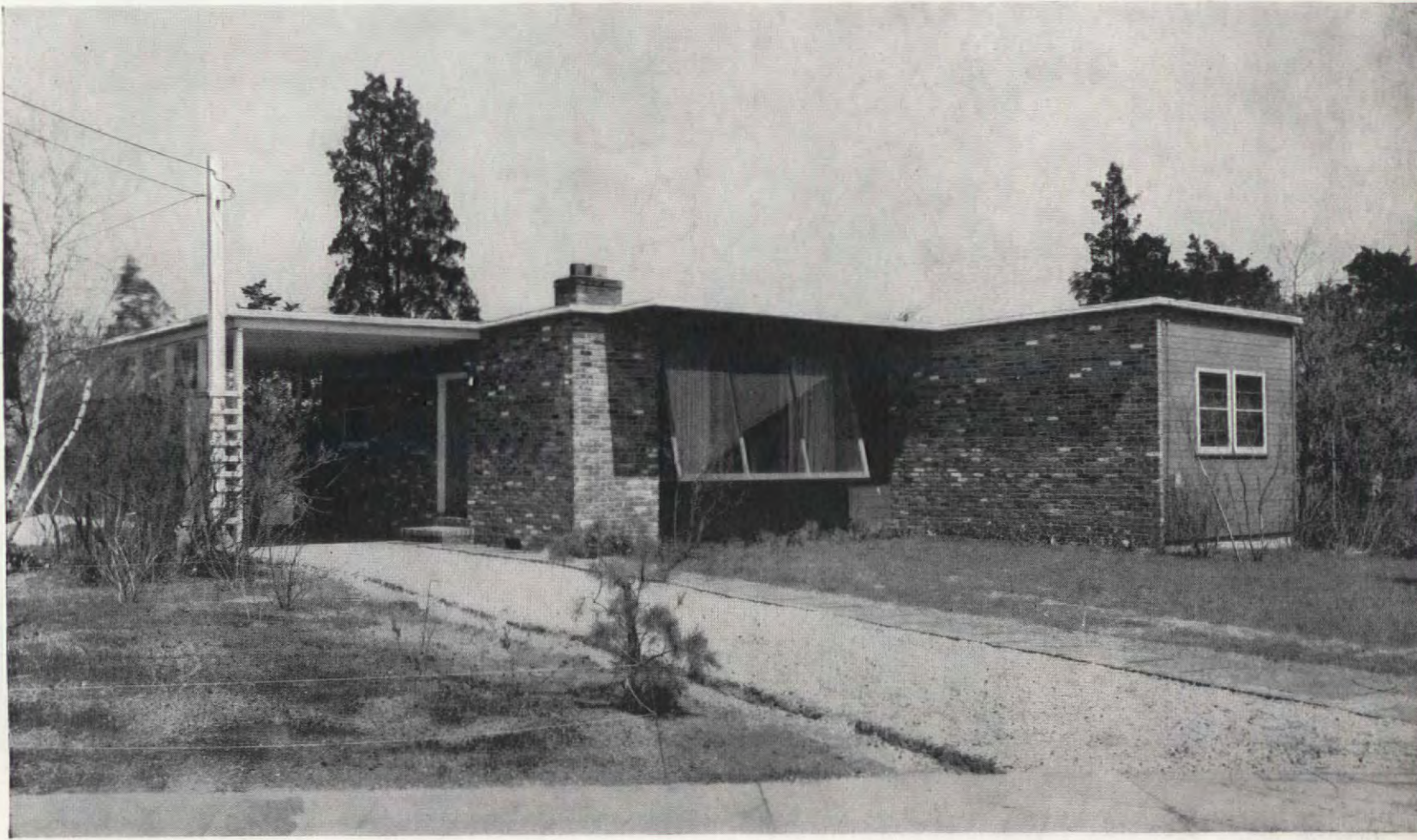
Garage is actually a porte-cochere with overhead doors at each end. A car can be conveniently driven in from either direction, driven out the way it is headed





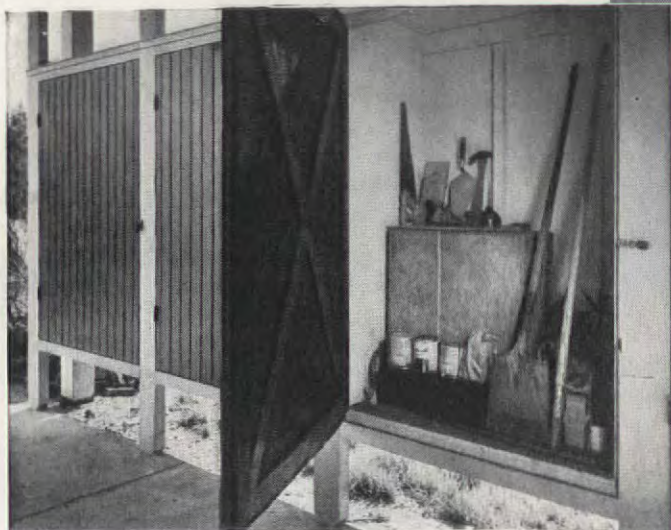
2-Bedroom House for a Slim Budget

*The Long Island home of
Mr. and Mrs. Donald L. Kline
Caleb Hornbostel, architect
Jean P. Trouchaud, designer*

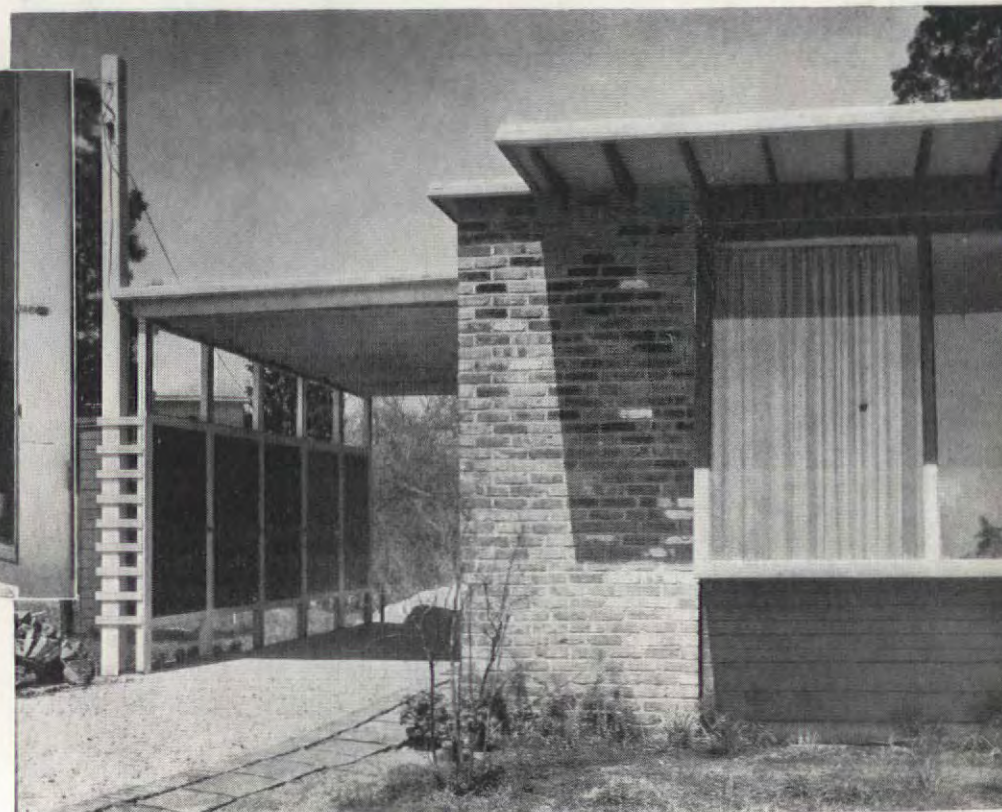


**No mass production here, yet this house,
plus land, sold for less than \$12,000 in 1947.**

In these days of stratospheric building prices, it does our hearts good to find a house, well designed and custom built, that doesn't do a "Jesse James" on the average family budget. Thanks for this must go to architect Caleb Hornbostel and designer Jean P. Trouchaud, who not only drew the plans but also bought the land and supervised the project from bulldozer to final push button. The price is really newsworthy since modern design has always been considered a luxury item. Nevertheless, this house sold for less than did thousands of traditional houses of the same size in surrounding neighborhoods. No one got rich on the job, profits were slim, but, in spite of temptations to skimp, no compromises were made. The satisfaction of honestly licking a tough prob-

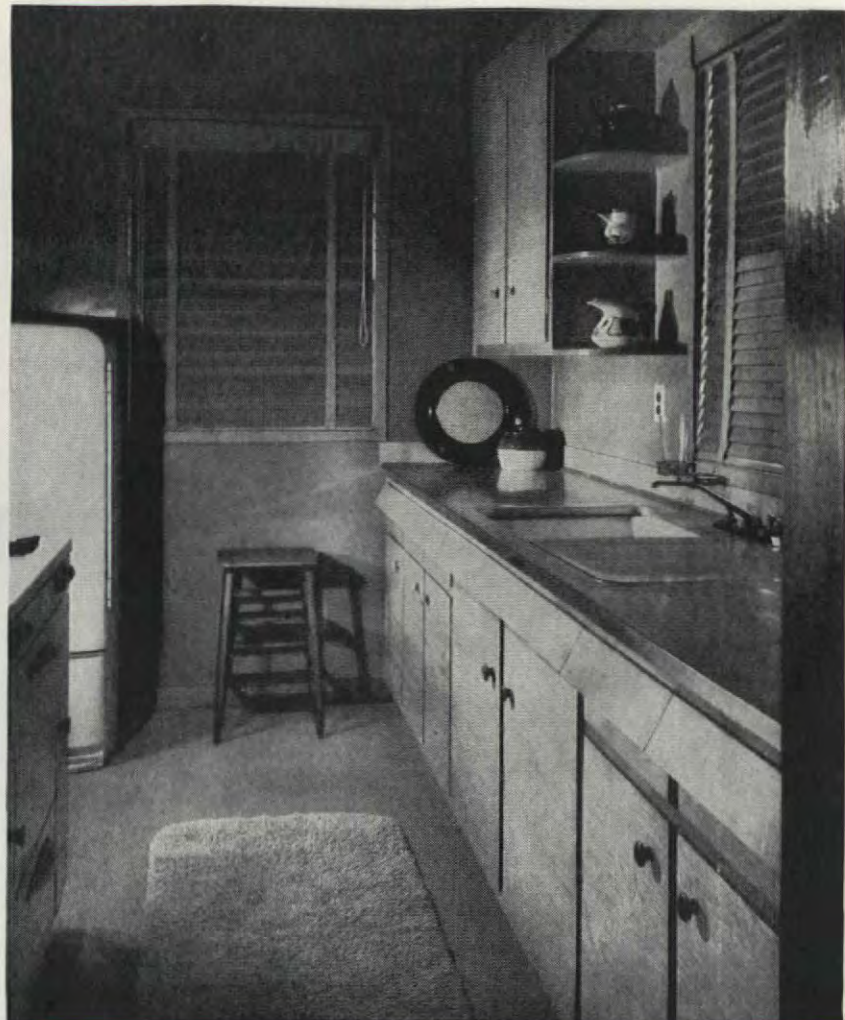


● Two distinctive exterior features are carport with row of hanging tool-storage closets and sloping window with wide overhanging eaves to cut sun's glare from living room





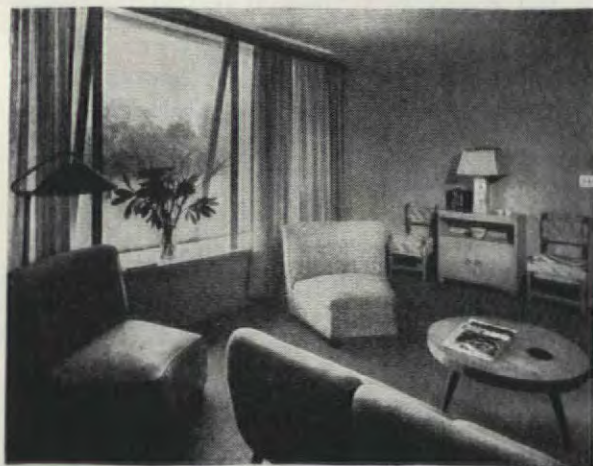
● Corner fireplace serves both living and dining rooms and has breast of concrete brick set with prominent vertical joints, blond wood mantel shelf blends naturally into built-in bookcase



Data: Mrs. Donald L. Kline. Photographs by F. M. Demarest

● In the bright kitchen, natural birch plywood cupboards, built on job, glow against the turquoise plaster walls, yellow linoleum on floor and counter tops

● Master bedroom, lower right, is warm with rich brown draperies and bed spread. Three walls painted apple green, one papered in complementary meadow design



for a great many of the built-ins and is especially proud of the low modern bookcase of Finnish birch that divides the two main rooms. This lack of partition gives more spaciousness and flow to the two rooms. Geometric panelling along one wall of the dining room is of the same birch, in natural finish, and complements nicely the light, blond oak furniture used throughout the house.

A small room which houses the winter air conditioning-heating system is directly behind the fireplace and adjoins the kitchen. Two bedrooms, a bath, and an astonishing number of really usable closets comprise the rest of the house. Both sleeping rooms have ample wall space for the proper placing of beds and also cross ventilation to catch the welcome sea breezes. Another outside entrance leading into the dining area helps reduce delivery traffic into corner kitchen.

lem was reward enough for these two pioneers. Mr. Hornbostel is now going it alone and expects to achieve even more surprising results along this line in the near future.

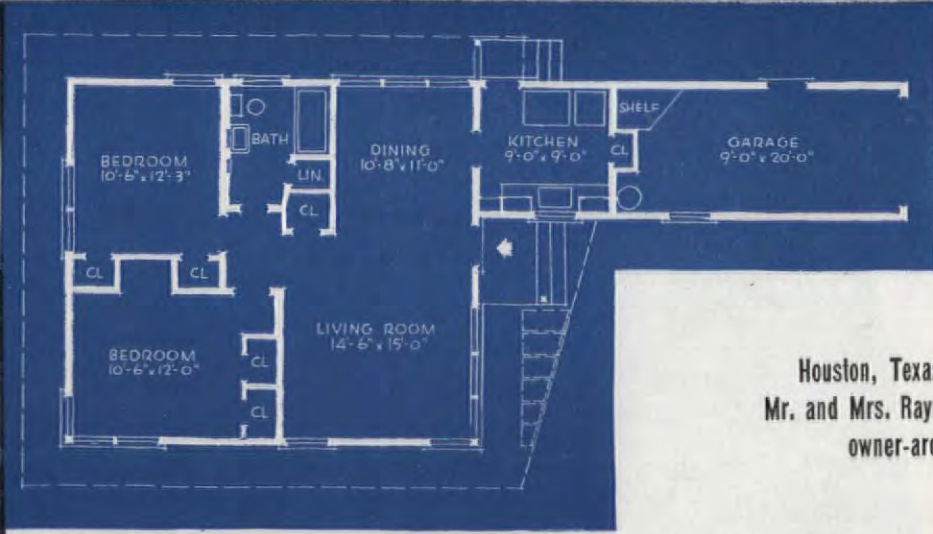
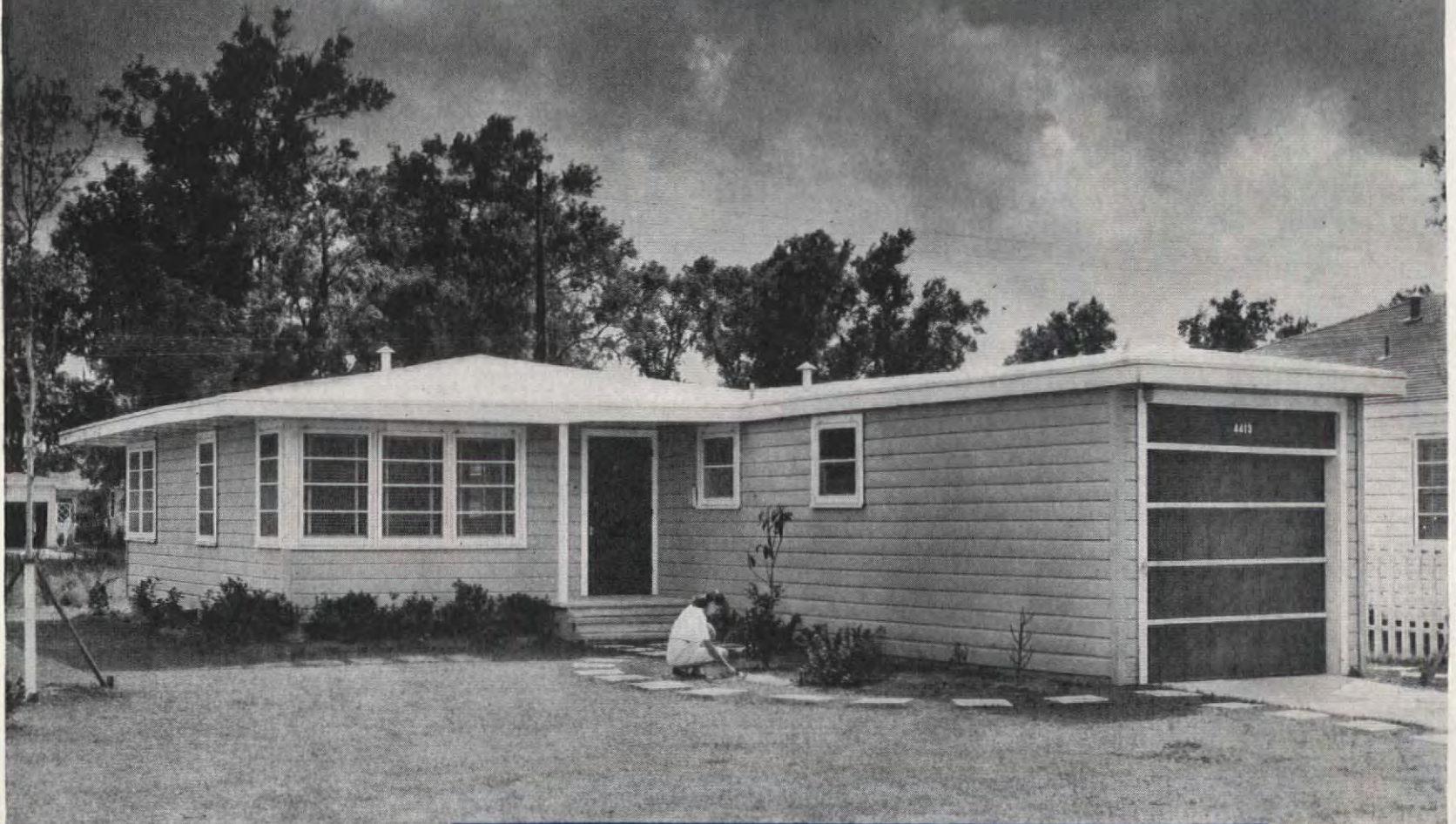
The Kline house, backing on a picturesque canal, is of brick and flush boarding with tight-clipped eave lines which give it a rather perky look. An open carport, unique in the locality, has been most successful even through last winter's severe test. A string of hanging cupboards along the carport's outer wall affords loads of usable storage space for garden equipment and also acts as a buffer against the elements. Looking across the gently curving entrance drive, the large, slanting living-room window at once becomes the focal point.

This sash has been especially designed to keep the sun's glare from the interior. Its wide sill affords space for the decorative arrangement of plants or for displaying magazines and books.

Entering the bright-orange door, we find ourselves in the living room with its soft-gray walls and touches of cool chartreuse on chairs and draperies. The corner fireplace, placed at the intersection of living and dining rooms, is of concrete brick, ranging from true mauve tones to deep rose. Mr. Kline is responsible



\$6,900 Texas home of Raymond Brogniez won national blue ribbon



**Houston, Texas, home of
Mr. and Mrs. Raymond Brogniez,
owner-architect**

DOROTHY MONROE

Photographs by Hencé Griffith

Being a resident of Houston, Texas, Raymond Brogniez knew exactly the kind of house that would bring him the greatest amount of comfort there on a limited budget. Since old Sol beams down most of the year, a wide overhanging roof was planned to shut out glare and heat. Four vents were placed on the underside of the eaves so that a suction fan can draw out any hot air in the attic space. Windows were carefully placed, with emphasis on cross ventila-

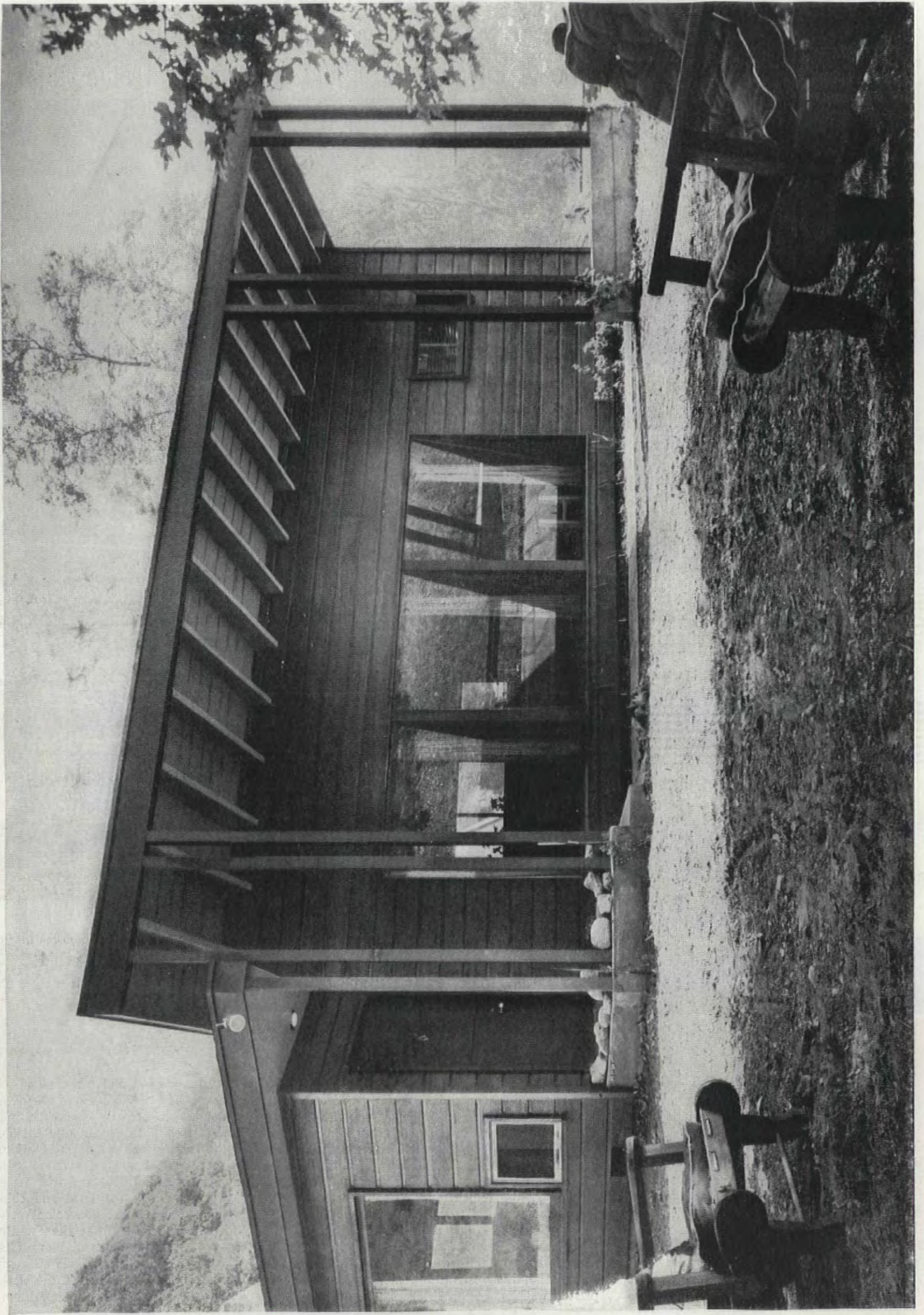
tion, to snare every vagrant breeze. For further heat protection and relief during sudden cold spells, the roof was fully insulated with rock wool and plaster applied on inside wallboard.

In addition to being an architect, the owner is also a student of the psychology of color, line, and texture. Therefore, sketches were made of all interiors before color schemes were chosen. Furniture, too, was selected in proportion to the size of the house in order to avoid any feeling of overcrowding. It is not surprising that in such a hot climate cool tones have been used in every room. The living room, for example, has gray plaster walls, gray-green carpet and accents of

yellow, gray, coral and white on upholstery and draperies. Though living and dining rooms are one, subtle differences give each individuality. Three thin columns, placed adjacent the entrance, help with furniture arrangement while one dining room wall has been given a coat of dark gray-green. A built-in cupboard under a bank of windows allows for linen and china storage. Its top forms a most convenient serving table. Kitchen and garage form the front wing with plenty of working space at rear of latter. Two bedrooms, bath, and lots of closets complete plan. Its blue ribbon was earned in the National Association of Home Builders competition.

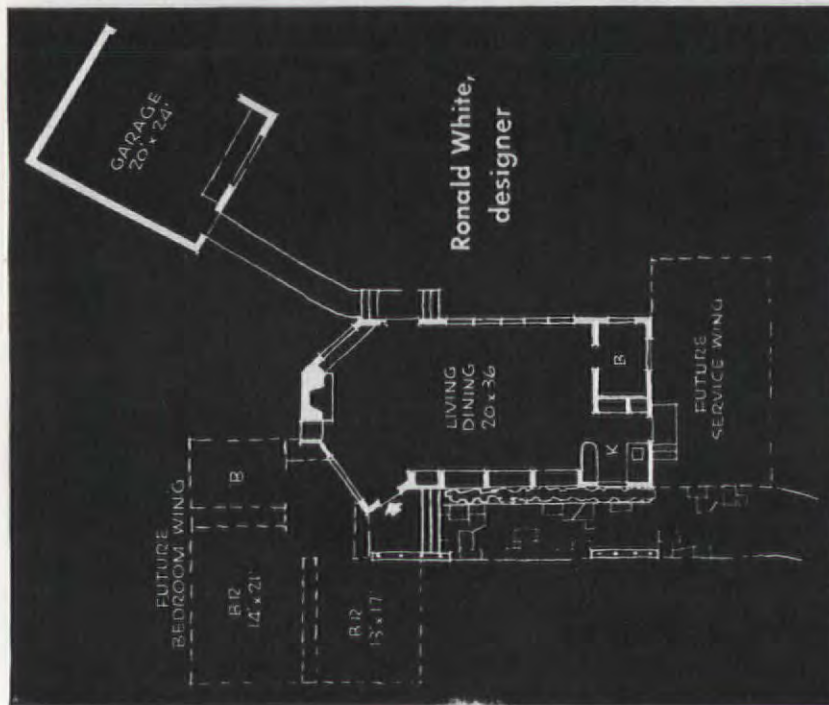
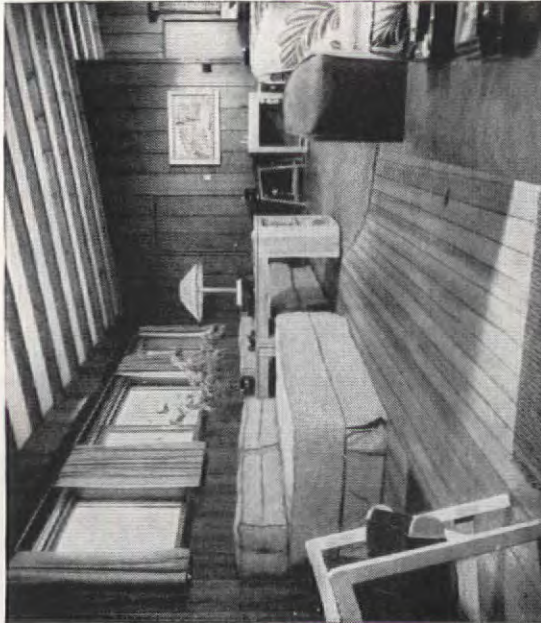
David Mellinkoff's one-room home HAS A FUTURE

Ethel McCall Head



When young David Mellinkoff returned from active duty overseas, his one dream, after getting a car, was to build a house that would naturally grow with his needs. Together with Ronald White, a designer friend, such a house was planned.

The house they built consists of only one room, a very large room, small kitchen, and bath. But, and this is a very large BUT, every part of the house can grow logically. The modest kitchenette will increase in size by the removal of a very short wall, while the bath may be opened easily to service porch and maid's room. At the fireplace end of the living room, a large sheet of glass was placed in an opening designed to give access later to a hall which will lead to the new bedrooms. Acting as a dramatic entrance detail is the heavy overhanging eave, sheltering the slanted, fixed-glass window. Chartreuse used on its underside adds life and relieves the darkness of the redwood which has been used as both exterior and interior finish. Inside, a rounded counter can be used as buffet table and is a fine spot for quick meals.



Photographs by Julius Shulman

RUN OF THE MILL, BUT NOT FOR LONG



Young career couple on slim budget transform

packaged house themselves and learn

half dozen trades doing the trick!



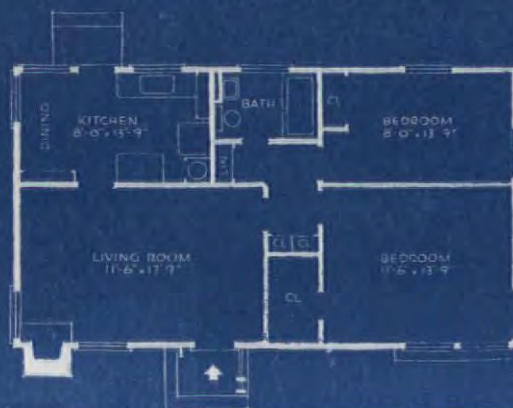
chest for the bedroom, and a cherry drop-leaf table, desk, and mahogany chest for the living room. In his spare time, Mr. Robbins wired all the lamps; Mrs. Robbins made the shades and, at odd moments, improvised a canopy above their beds. This was made of strips of molding and a candlewick bedspread.

On the exterior they made a successful job of disguising their drab wall-flower. Around the large corner window an interesting scroll forms a most picturesque frame, a frame now being softened by delicate, clinging vines. On the terrace side of the house, attesting to their labor and skill, there's a trellis hung ingeniously with flower pots. In place of the ordinary door that came with the house, they have substituted one of Dutch design with the upper half glazed in small panes. Color, too, did its bit towards transforming the house—walls are of dark gray, trim a crisp contrasting white with a bright yellow door to smile "Welcome" on the visitor. Landscaping was the last item tackled but this, too, shows the individual stamp of the enterprising couple. A flagstone terrace gains interest because of its free-flowing form, a feature that helps tremendously towards accentuating the beauty of the ground planting. Last of all but lots of fun for these moral millionaires was building a barbecue. Surely they deserved plenty of fun after their project.

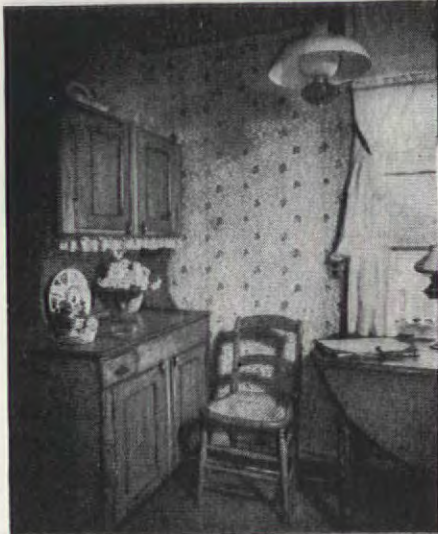
Being young and vigorous, the Lloyd Robbins didn't mind the fact that their newly acquired lot was in Long Beach, a good hour and fifteen minutes away from work. At least the lot was one of the few that had fitted their budget. What did worry them was the unpretentious, little prefabricated house they had to buy because high labor and material prices put every other type out of reach. The house looked like many other houses—it was neither bad nor good—just ordinary.

But this pea-in-a-pod existence didn't last too long. Soon they were both busy adding personality and charm to their nonentity. Tile was needed for the kitchen counter and sink. A shortage of metal drawer pulls was another obstacle to be hurdled. Rather than settle for a compromise, Mrs. Robbins suggested making their own. A kiln was too expensive to buy, so they rigged up a homemade one out of three firebricks and 2600 watt resistance coils bought at the dime store. The electric iron cord was used for a connection. All for 96 cents, but it worked, judging by the attractive tile seen around the kitchen sink and the porcelain hardware on kitchen cupboard drawers and doors. Proud of this achievement, the Robbins tackled other fields.

Upholsterers and furniture finishers were extravagances they could not afford. It would take longer to finish the house, but they again decided to do the work themselves. Mrs. Robbins made all the curtains, sewing an hour each evening and on week ends, and her husband did the upholstering. This included such professional tasks as tufting and buttoning the Victorian sofa and chairs. Together they refinished a pine cupboard, table and chairs for the kitchen, a walnut commode and

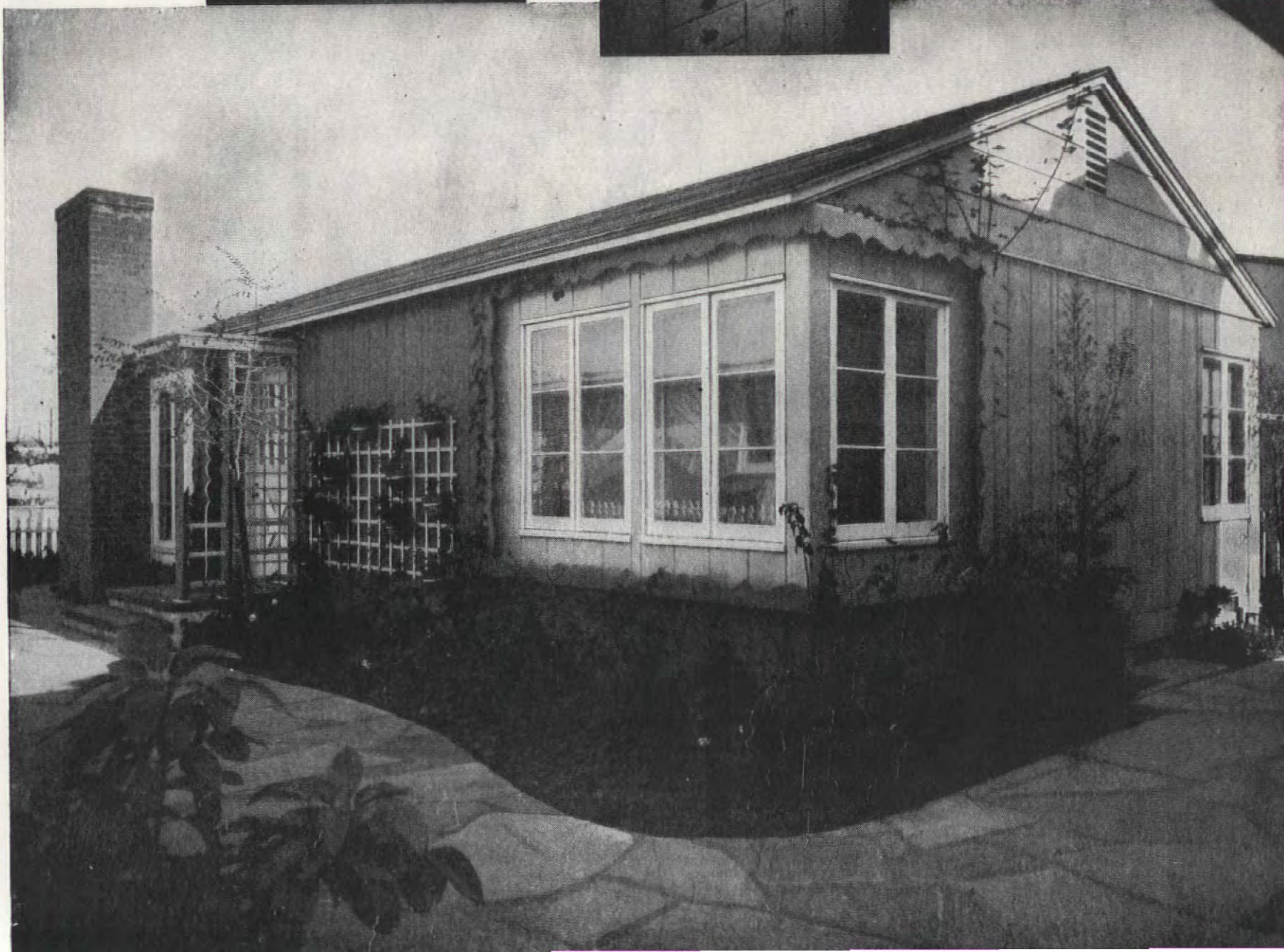


Home of
Mr. and Mrs. Lloyd C. Robbins,
Long Beach,
California

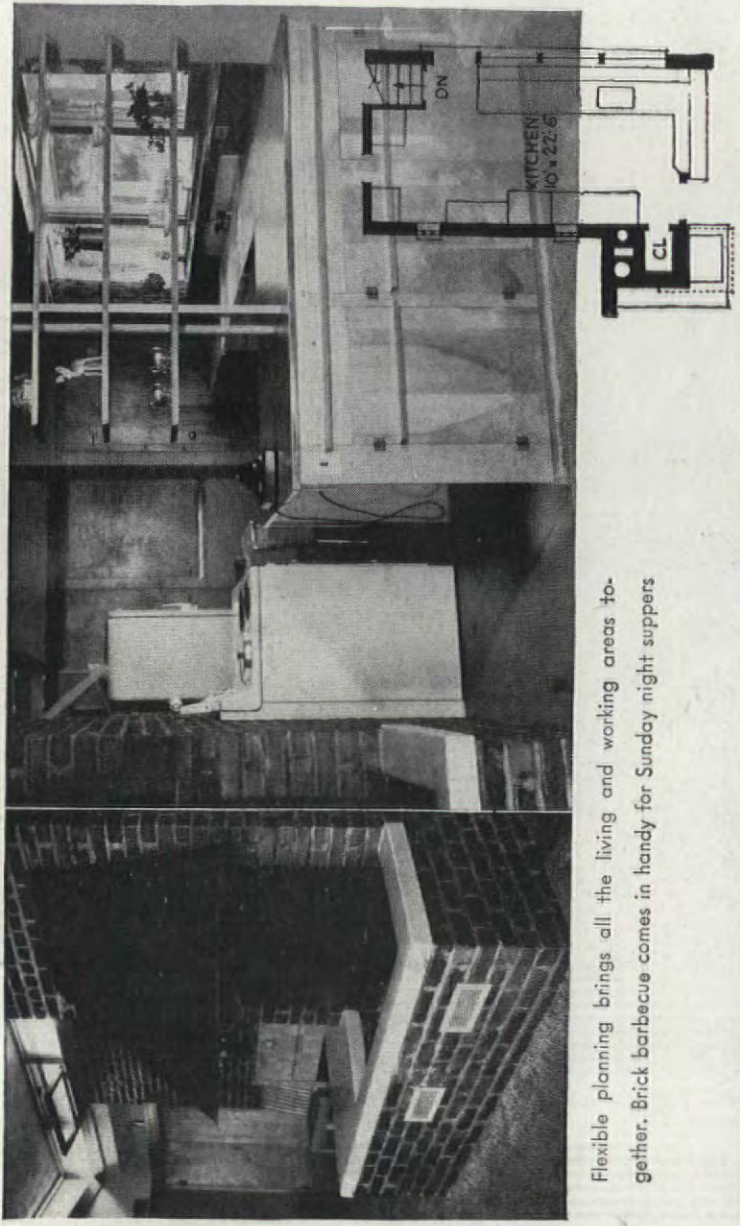
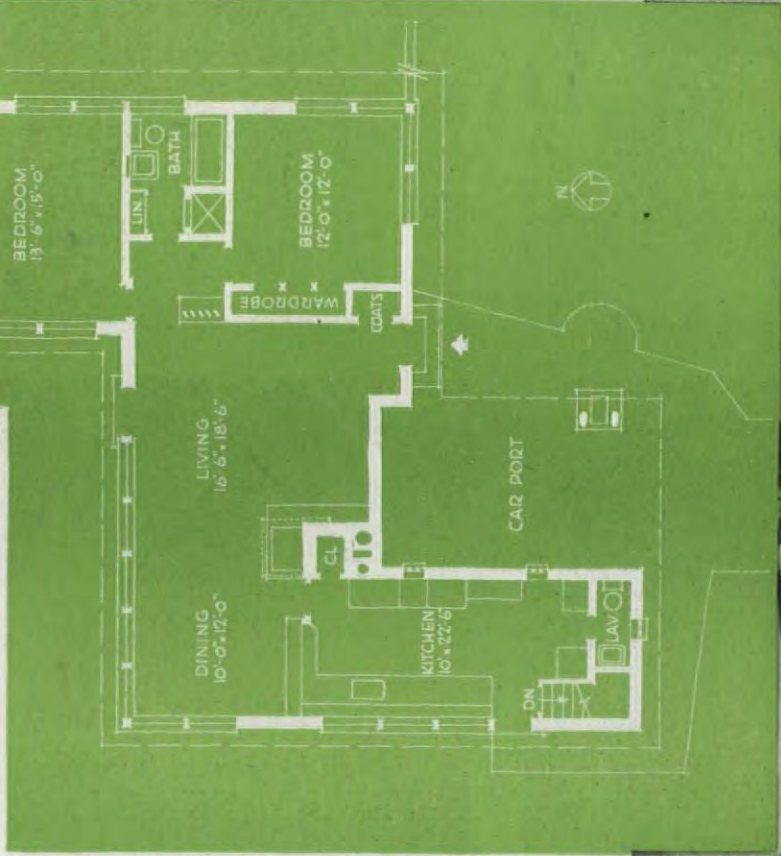


● Valance above living-room window has cutouts of leaves from wallpaper used on two walls. Other walls, ceiling painted gray green

● Open shelves, organdy curtains frame kitchen window. Tile on and above counter, drawer pulls made in owners' homemade kiln

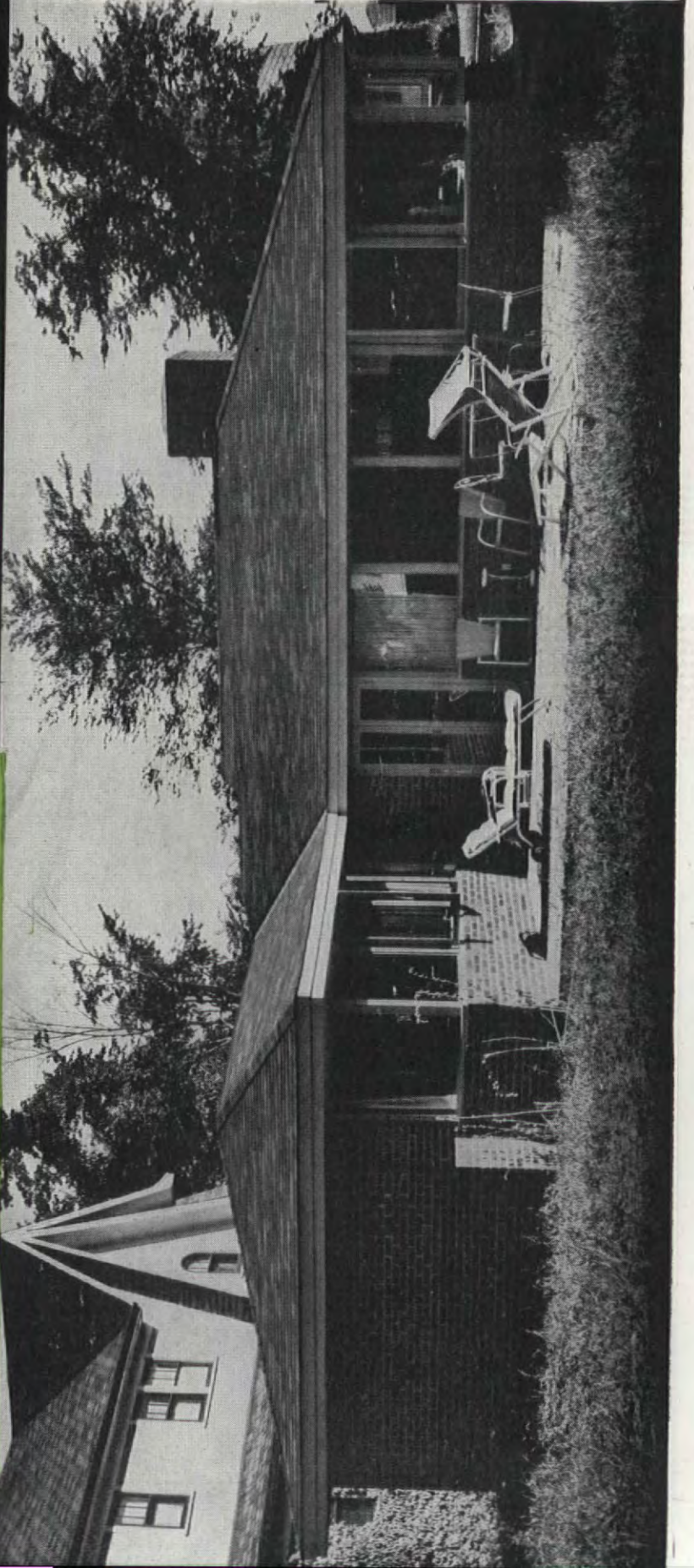


Edgar A. Tefel, architect
Robert C. Albert, builder



Flexible planning brings all the living and working areas together. Brick barbecue comes in handy for Sunday night suppers.

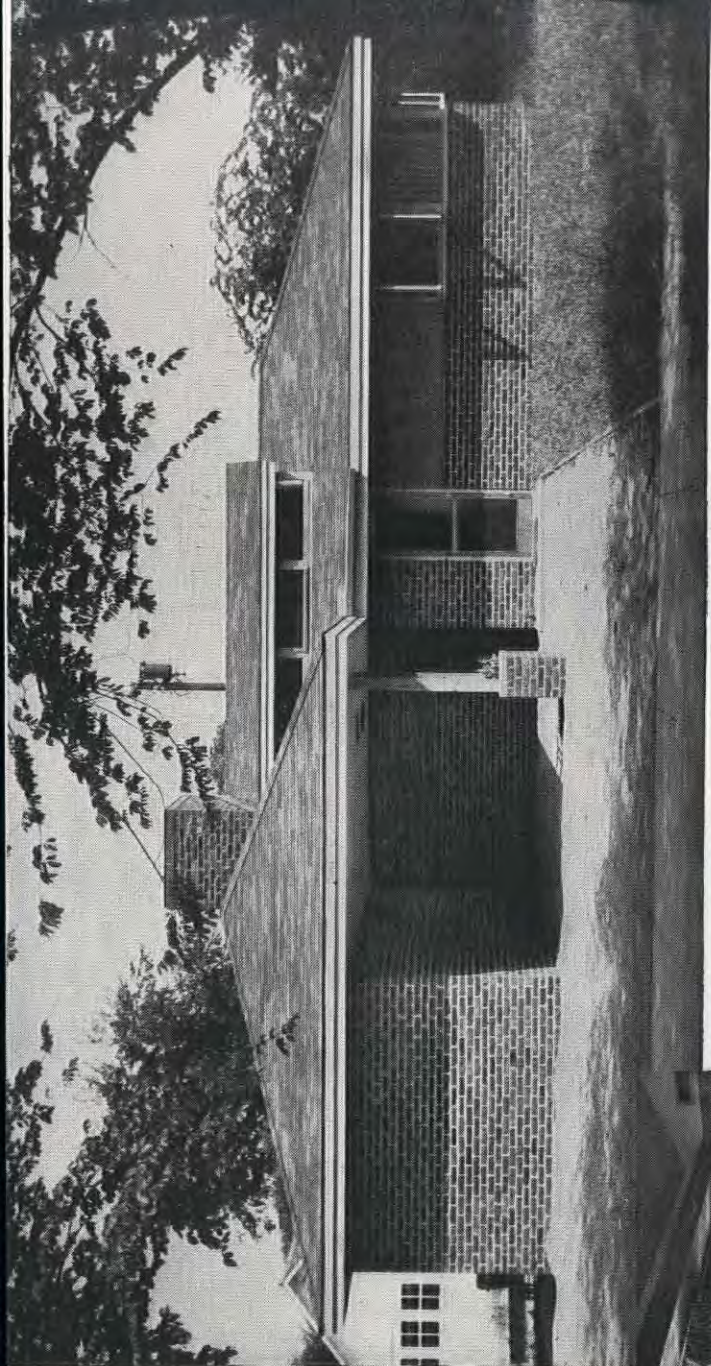
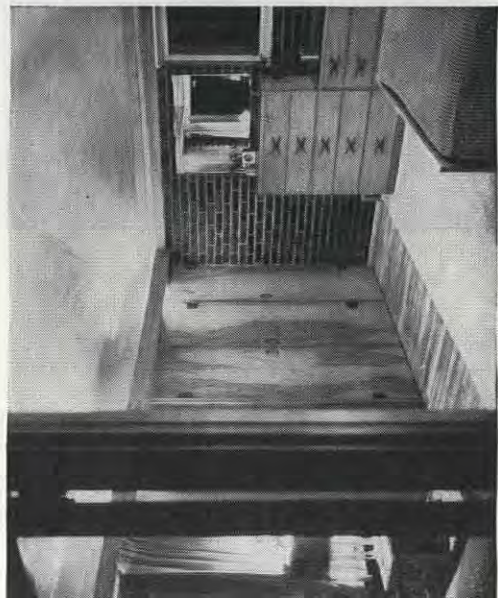
Living, dining, kitchen areas are one in this Racine, Wisconsin home



With elimination of all interior partitions except in bedroom wing, Meyer Gottlieb home assumes airy spaciousness much beyond its actual single floor area

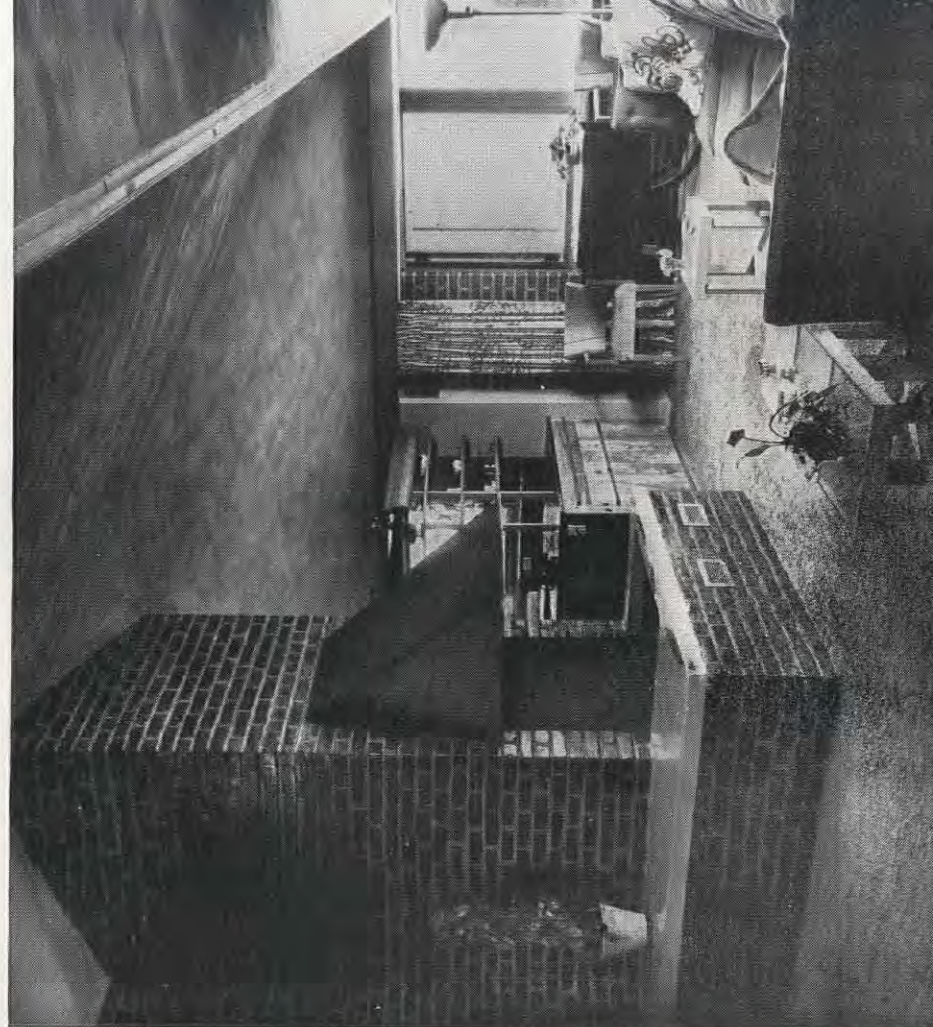
Though the battle wage hot and heavy between our traditional and modern homeowners, one thing is certain. The fireplace is here to stay! Witness, for instance, the Meyer Gottlieb home in Wisconsin, as contemporary a job as you'd wish to see with its open, flexible plan and wise use of today's materials. Yet a corner fireplace dominates every important room and is as integral a part of the structure as any Early American chimney. Naturally there's a difference in the design for it's the counterpart of our outdoor barbecues brought inside as a reflection of an informal way of life. The corner position where living room, dining area, and kitchen blend into one, makes it a focal point in each. A raised hearth eliminates backbreaking stoops, vents afford more efficient heat, and a decorative copper hood takes care of smoke and annoying gases. The illusion of a picnic background is further enhanced by the large glass areas which abound in every room and bring the outdoors right up to the hearthside. Even the hollow chimney has been utilized as storage space in the kitchen for this is a house with no nonsense about it. Every square inch earns its keep. In each bedroom, a series of flush birch doors conceals much larger than average wardrobe space, and an unusually compact bath manages to incorporate linen storage, a shower, and a regulation-sized bathtub.

Photographs by Guerrero



● Open carport casts deep shadow against the dark-red paving-brick walls. Clerestory sash adds cross ventilation in living room

● Walls in living room are cool green with overhanging soffit painted salmon buff. Brick recalls dark red of exterior

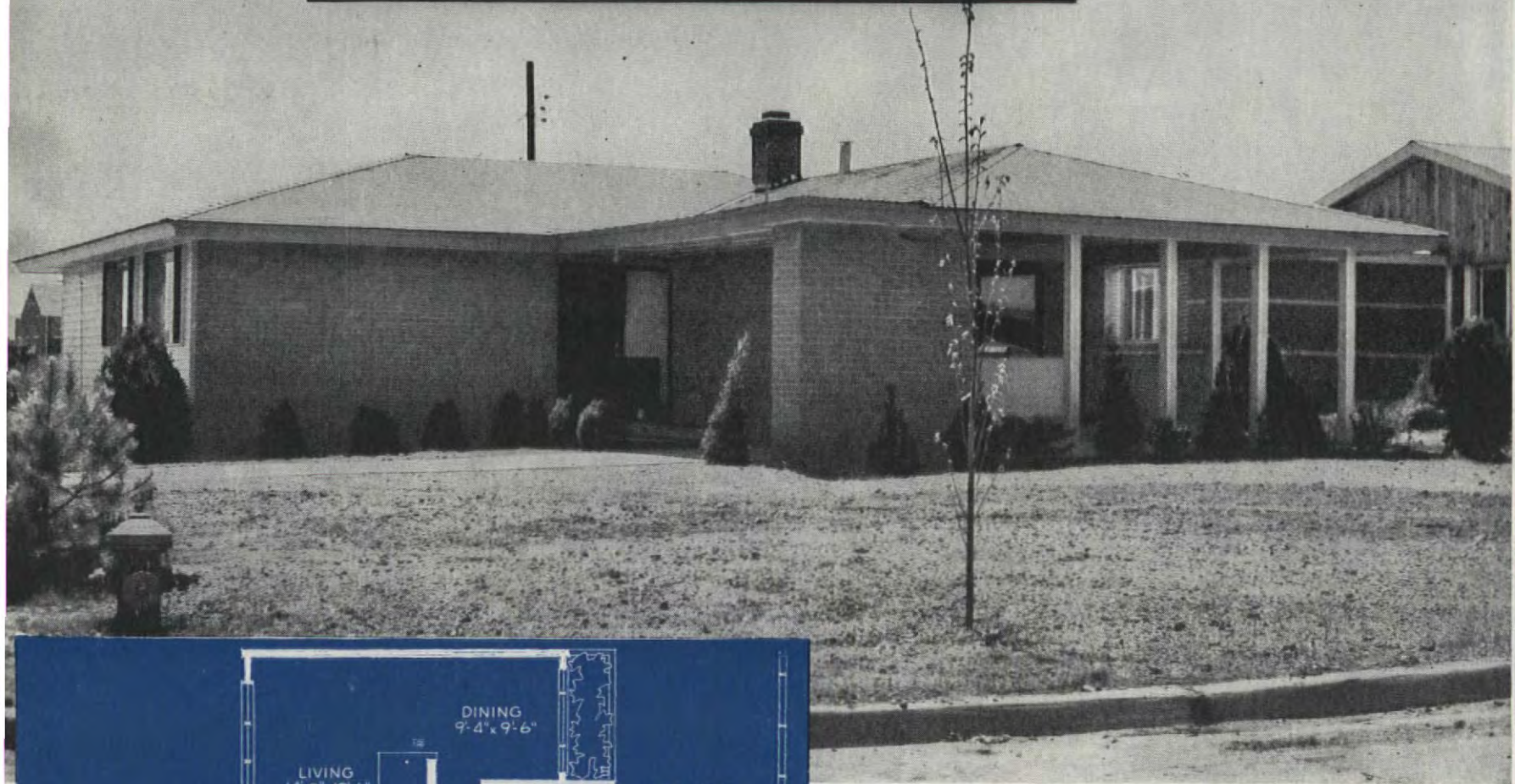




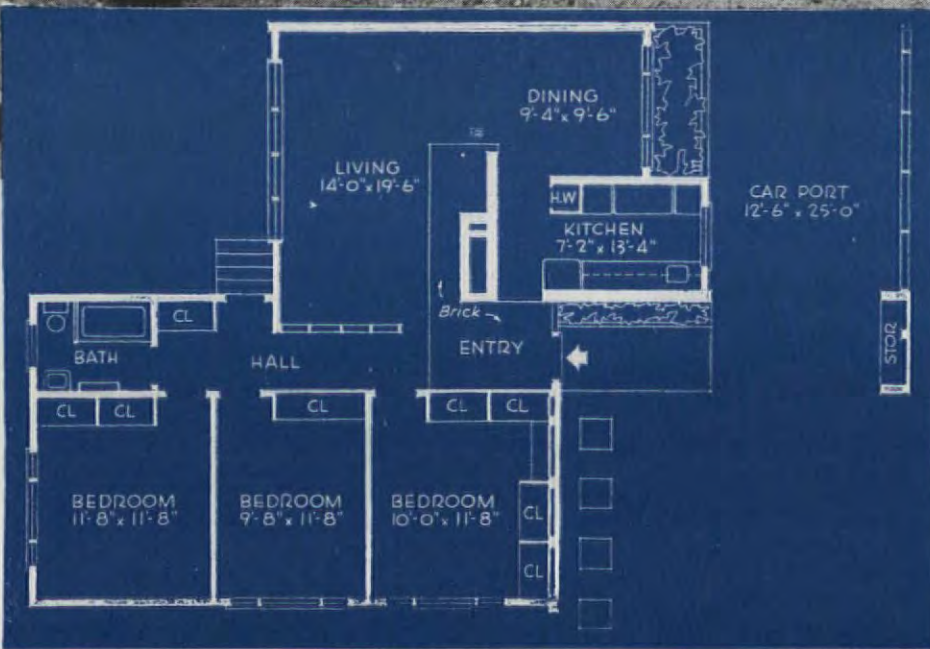
Builders, Warr-Built Homes Company
 Interior Decoration, Harbour-Longmire
 Data from Eugenia White
 Story by James M. Wiley

Photographs by Johnny Melton

Oklahoma builder shows it can be done!



William W. Caudill and John M. Rowlett,
 architects



Mayfair Heights, a suburb of Oklahoma City, is a new community of contemporary homes of an architectural style relatively unknown in this state. A "builder's development," the project is the brain child of Messrs. C. B. Warr, Gene Warr and Clark X. Pace. As evidence that this simple modern conception of what a house should be has gained wide acceptance here, one has only to perceive the "Sold" sign which is usually erected soon after the concrete slab for a new house has been poured.

The Warr-Built Homes Company, long a part of the Oklahoma scene, built some of the first brick bungalows in the community, later built and sold the popular studio-type house. When they first opened Mayfair Heights, the company built a hundred and fifty conventional, boxlike two-story houses. They sensed in the comments of buyers a new trend in the minds of their home-buying public. In the face of their own serious doubts, they decided to experiment with a more modern type of architecture.

The resulting houses are a product of close co-operation between architects and builders. William W. Caudill and John M. Rowlett, professors of architecture at Texas A. & M. College, designed the homes.

Of brick veneer, the houses rest on concrete slabs, have a combination of interior brick and lath-and-plaster walls. Interior brick walls are often left natural, occasionally painted to suit the owner's tastes. Windows are a combination of fixed sash and movable louvers. Roofs are shingled. Most houses are heated by wall-type electric heaters. Generous wardrobe closets in the bedrooms are equipped with sliding doors. Each house is supplied with an attic fan, a washing machine, and carpeting in all major rooms;

California

2 Brothers Build Own Postwar Homes

Ethel McCall Head



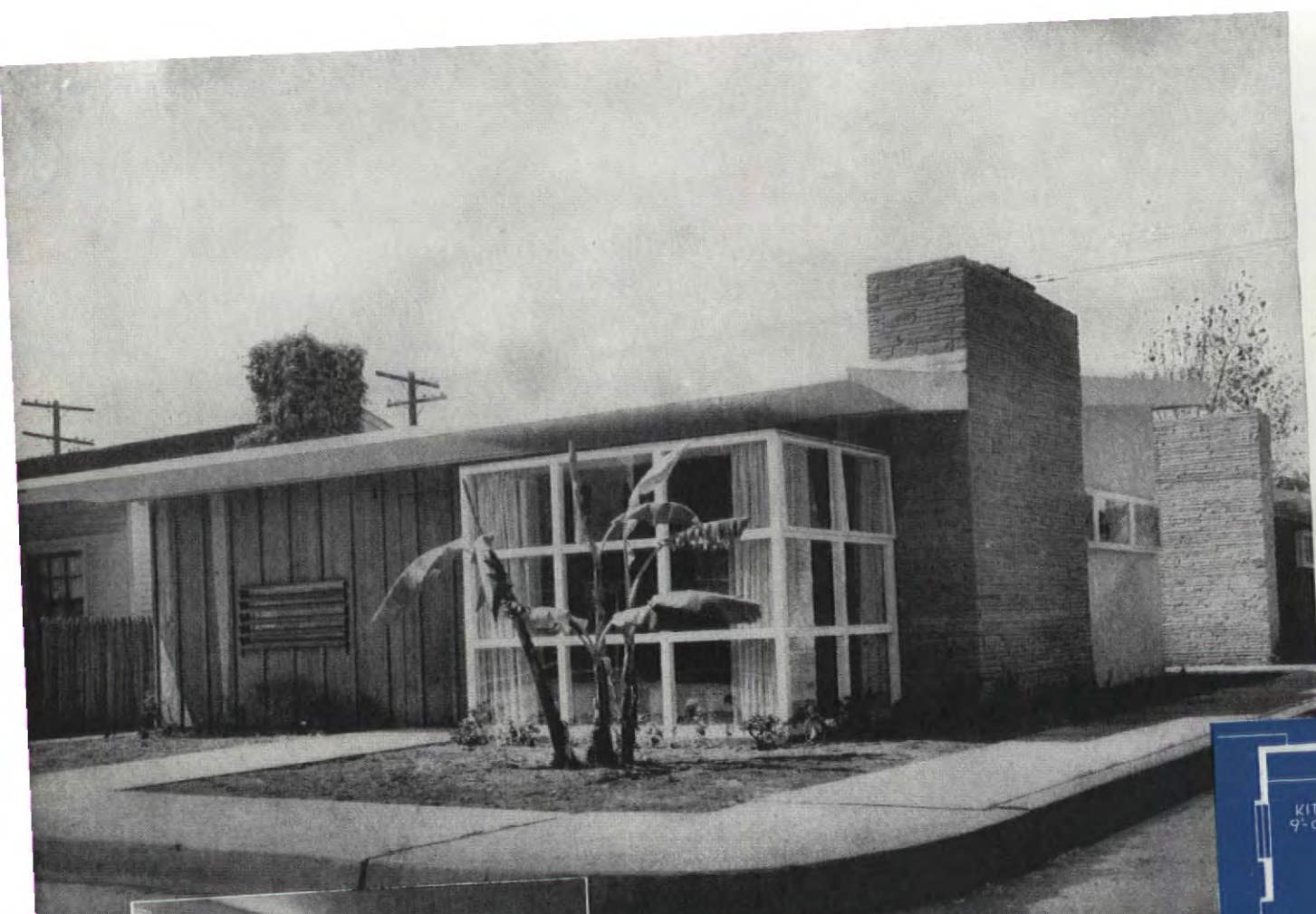
HERE'S the story about the houses that Jack and his brother, Bob, built! It's really the story, too, of two enterprising G.I.'s who just wouldn't take "no" for an answer.

It all started when Jack, the elder and married one, returned from service in the Navy, and Bob finished his stint in the Army Air Corps. They were like a million other veterans who wanted to get jobs, settle down in civilian life and *have a home!* They began making inquiries about G.I. house loans; they talked to contractors and listened grimly to tales of other fellow veterans who had waited month after month only to move, finally, into poorly built, overpriced houses. Everywhere they met a picture of discouragement. Time passed and nothing happened. Contractors promised much but delivered little.

"That's that," the brothers finally said. "We'll build our own houses; then we'll know just what's going into them. Our homes will be on a strictly pay-as-you-go basis. No loans for us!"

Exactly one year later, these two attractive little modern houses were completed. It had not been easy. Both Bob and Jack admit it took long hours of hard work. To start with, though both had saved some money during their years in Service, neither had any to squander. The sale of a mountain-resort lot did help a bit but, nevertheless, every penny had to count. The lot they chose for their future homes was 30 x 85, and they decided to place one house on the corner, the other on the side street. Each house is actually only 635 square feet in area! Yet each has a living room with fireplace, a modern kitchen with dining corner, two bedrooms and bath. This adds up to no mean accomplishment.

Jack drew the plans; Bob sketched the exteriors. Then, with the help of a designer friend, they co-ordinated their ideas. With such elemental floor plans and sketches, they were ready to go to work. Jack returned to his old job and spent only week ends working on the houses, which, to make things harder, are located 70 miles away from his place of work. Bob spent every day for one year working steadily on the two buildings. He slept in a tar-papered corner of one house. He found it much worse than a foxhole for comfort, but he survived. During a three-week summer vacation, Jack was on deck every day, but his contribution was largely week-end labor, plus every cent he could spare from his salary. The women of the household, too, did their share. Young Mrs. Jack Ingram refused to take "no" for an answer when she tried to rent a ton-and-a-half truck to haul siding the boys had located some hundred miles away. The owner of the truck was amazed when an attractive, slight young woman appeared to hire a truck for the day. She finally convinced him that she could well handle such an assignment, and from that day on was a more or less steady customer. Cement mixers and plumbing fittings, garnered in junk yards, sheeting and asphalt tile, were all trucked to the Balboa Island lot. Meanwhile, Mrs. Ingram, Senior, did the footwork in town, hunting cotton drapery materials and other odds and ends necessary for furnishing the houses. Not to be outdone, "Aunty" stayed at home in Los Angeles so, when the weary Jack Ingrams returned to the city Sunday nights, there would be a hearty meal awaiting them. Here we have an outstanding example of co-operative family teamwork. Everyone worked and planned and



House No. 1 is located on corner



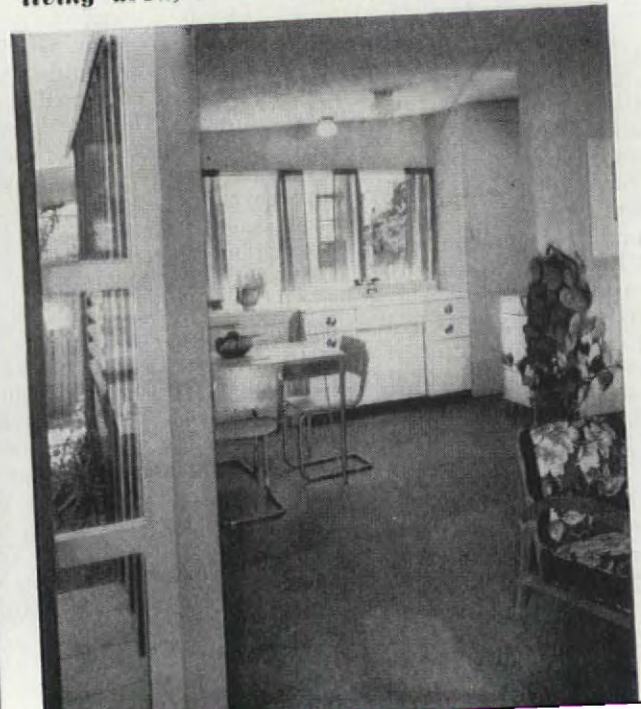
Red bands on pink curtains recall bedspread color, walls are beige

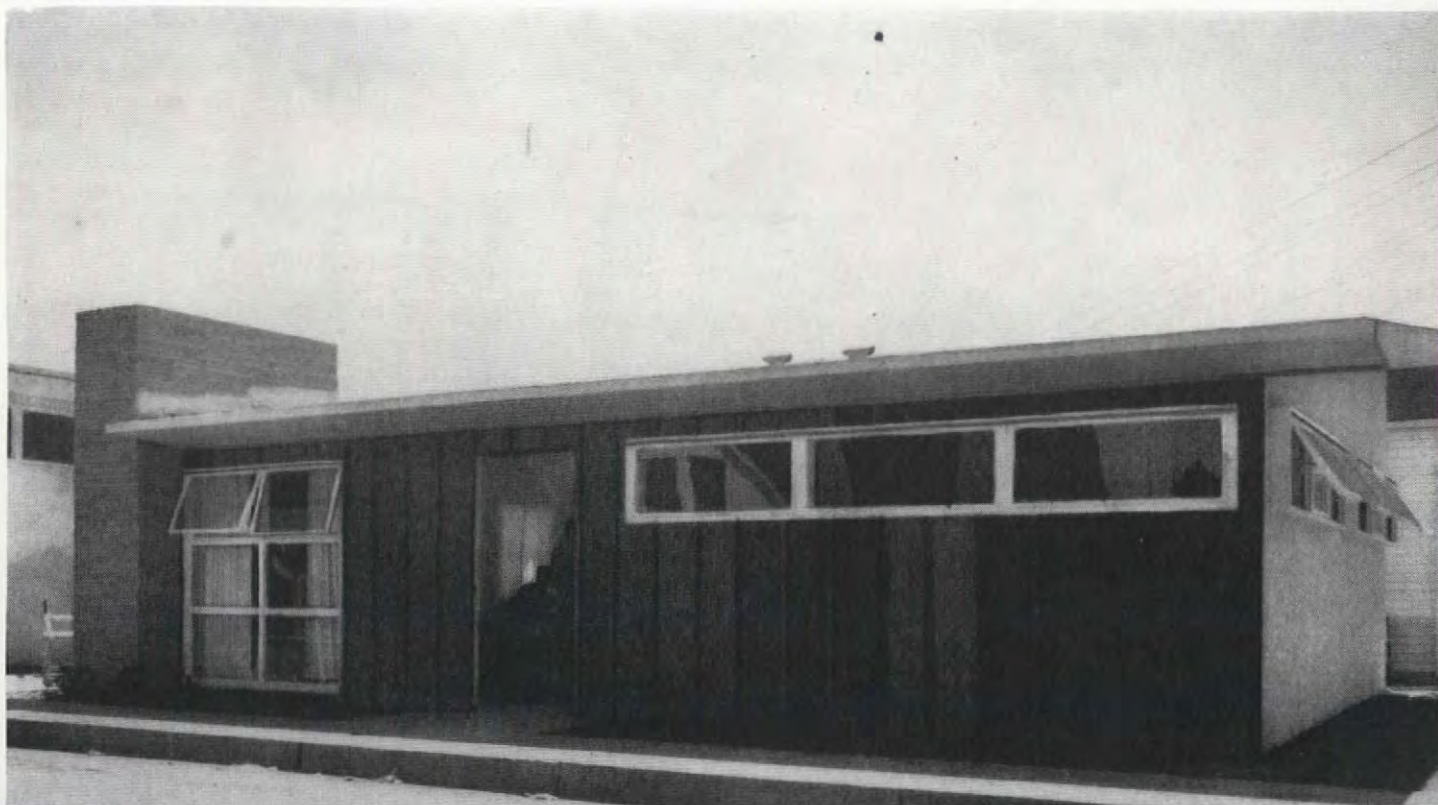
schemed to find the necessary money to supply Jack with the much-needed building materials. It's important to point out that neither of these brothers is a trained carpenter, plasterer, or plumber. Young Mrs. Ingram tells, with a twinkle in her eyes, of the many days she packed a lunch box for her brother-in-law before he'd set out to become a "sidewalk superintendent" in order to study the work of skilled craftsmen. Workmen on various jobs became used to seeing the young man with lunch box surveying their labors, and soon began to impart all sorts of professional information and tricks of the trade to the ex-flyer. Bob tells how one day while working he was approached by an eager young man selling magazine subscriptions. Not being in the market for magazines, he asked the salesman whether he'd like a job. For three days, the new friend worked

until a particularly difficult piece of mechanical installation was completed, and then took up his brief case once again and started on his way ringing doorbells. The Ingrams admit that they needed some professional labor on the plumbing and fireplaces, but the major portion they, themselves, completed. The houses are quite similar in construction, having concrete slab foundation and normal frame superstructures. Redwood board-and-batten was used for the front of each house, while the other three walls were finished in

Oversized window in living room turns corner . . . walls are pink-beige . . . carpet is gray, fabric, tropical cotton

Open plan shows kitchen leading into living area, with resulting spacious air





House No. 2 is placed on side street

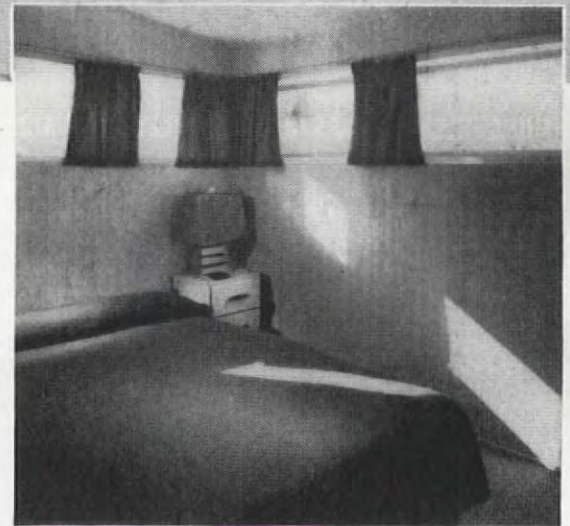


Photographs by Robert C. Cleveland

qua-colored plaster. The simple shed roofs are of white, crushed tile on a mopped asphalt base and the fireplaces and chimneys are of flagstone. Generous 9-foot stretches of this handsome masonry give character to the living-room interiors and a bold sense of strength on the exteriors.

Inside, the young builders used striated plywood with its interesting combed finish. This material, coming in large sheets, was an effective method of eliminating the usual interior wall section mess, and was easy for inexperienced

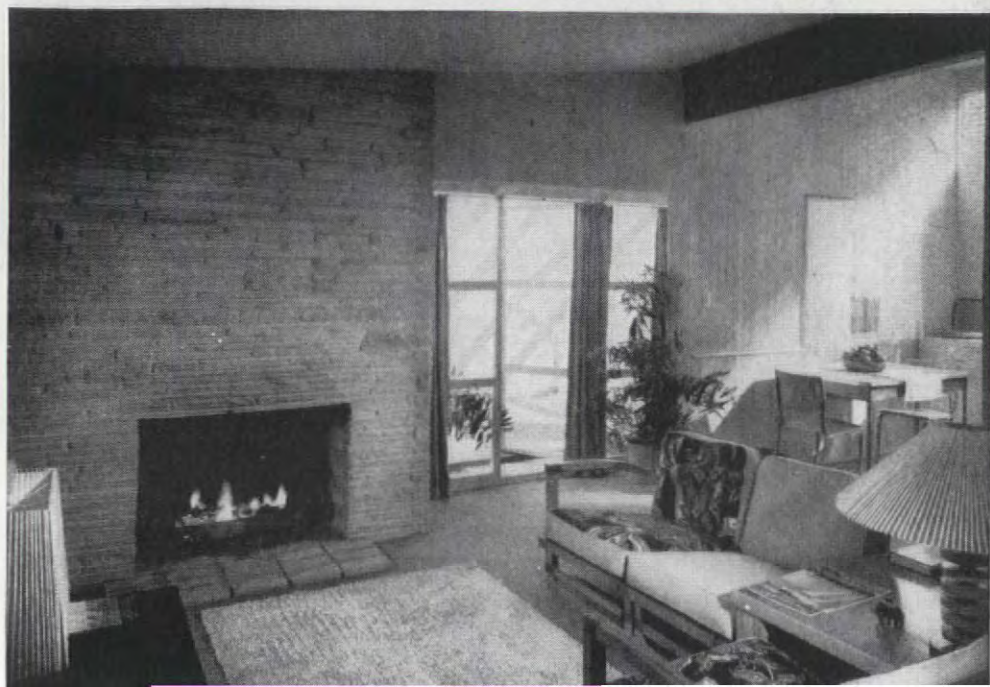
hands to handle. A single, thin coloring coat was applied to combine with the tones of the decoration decided on by the two women of the households. To avoid floor laying, heavy felt carpeting was applied directly to the concrete slab and, laid wall to wall, gives an air of elegance. Asphalt tile fits in logically as bathroom and kitchen flooring. Transom windows for bedrooms was intelligent planning, since these exposures opened onto street or neighboring houses. Both Jack and Bob like the honest simplicity of modern design, and saw no objection in placing the kitchen exposed at right angles to the living room. They simplified kitchen casework by installing a manufactured sink, drainboard, and metal cabinet unit, adding only an additional cabinet with counter top. Old beds were modernized, and a plywood coffee table, homemade, is Jack's pride and joy.



Red corduroy draperies, bedspread contrast with the gray-blue walls

Kitchen has brown asphalt-tile floor, corrugated obscure glass over sink

Walls and carpeting are gray . . . upholstery, chartreuse, red, green, brown tropical crash . . . draperies, soft yellow





LIFE AMONG THE TREETOPS HAS COMPLETE PRIVACY EVEN THOUGH WINDOWS ARE OVERSIZE AND HOUSE IS BUT A FEW MINUTES FROM TOWN

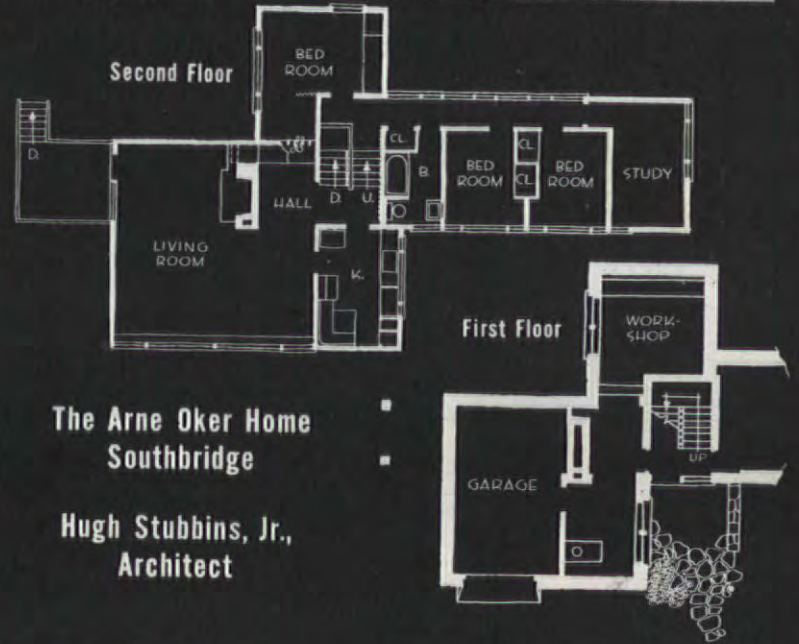


Massachusetts...

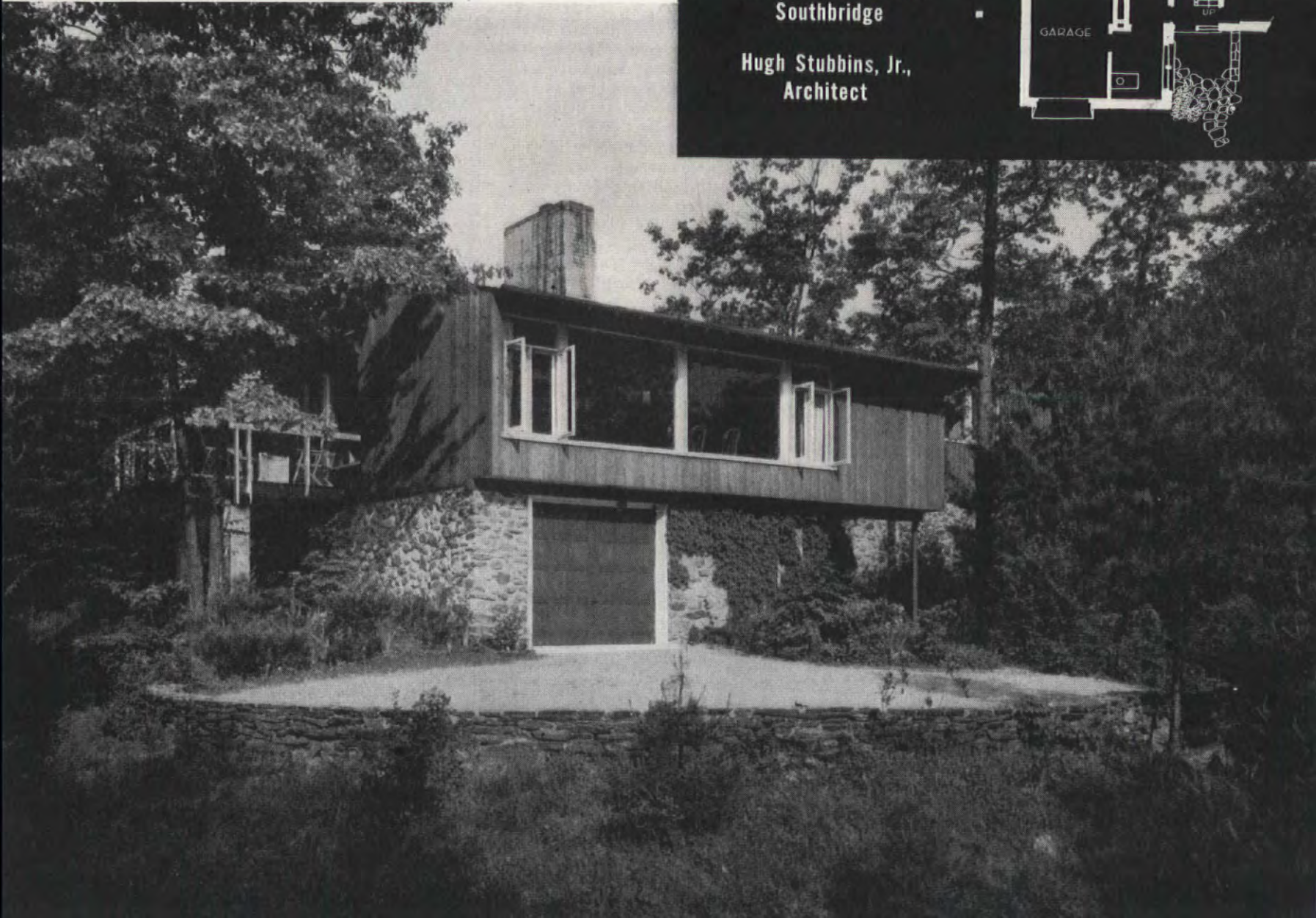
P. A. Dearborn

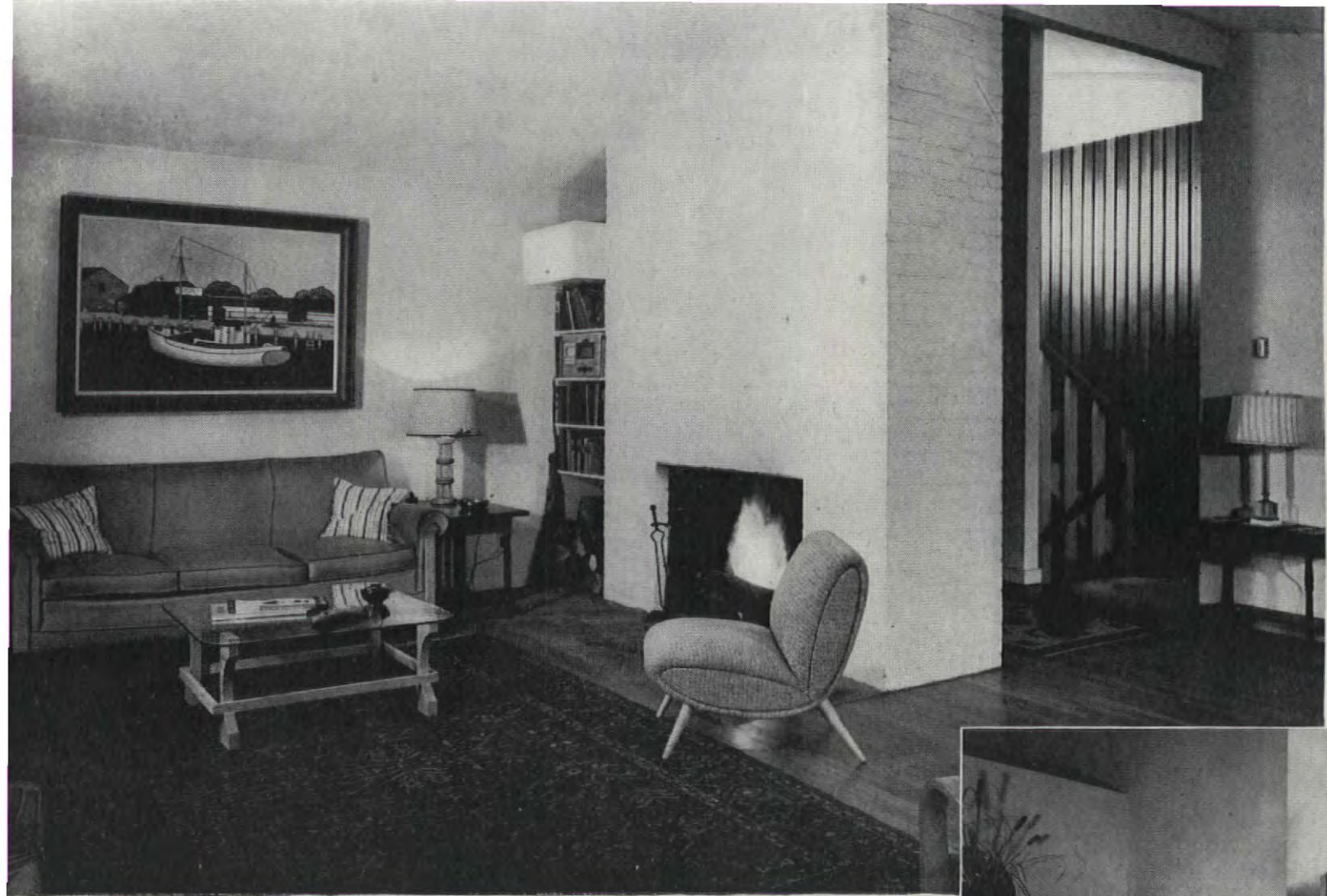
Most of us run pretty true to form when it comes to building a new home. We thoroughly enjoy the preliminary planning and thrill at the finished product—but the actual time spent erecting the structure fills us with impatience and trepidations. Not so the Arne Oker family! They had such a good time during the building of their modern home on Hillside Road that Mr. Oker would like to build a new house every two years. This, of course, is a great tribute to their architect, Hugh Stubbins, Jr. From the very start—from preliminary sketches until finished product—a close, pleasant relationship existed between owner and designer. In fact, some of the on-the-site supervision was undertaken by Mr. Oker when wartime gasoline shortages made periodic visits by Mr. Stubbins impossible. The property itself is rugged and thickly wooded. In order to better understand the relationship of the proposed house to its site contours, a small clay model was first made. It was decided that the house should rest on solid rock and so a ledge was blasted down about eight feet. The blasted out rock was used as fill for the parking space and driveway while field stone for the foundations was taken from old walls in the area. Actually, the house seems to grow out of the ledge and surrounding pines; its redwood color contrasts beautifully with the greenery about it. Looking out of the long banks of windows in the bedrooms, kitchen, study, and living room, one might well be living in the treetops. Even though the house is located but a few minutes from town, there's an atmosphere of the mountains in the many rocky ledges, the small natural pool in a boulder, and ground, deep-carpeted in pine needles. Before the pine siding was nailed in place as exterior finish, it was first stained so that no subsequent shrinkage would show light-colored cracks.

Photographs by author



**The Arne Oker Home
Southbridge
Hugh Stubbins, Jr.,
Architect**





The specially designed windows are framed in white-painted trim, which adds a welcome horizontal contrast to the vertical siding. By using heavy, overhanging eaves on the low-pitched roof, the rays of the sun are controlled, and so add greater comfort to the interiors during all seasons.

The extra large sash also gives each room an outdoor feeling, with the thick surrounding foliage adding a constantly changing color note to the decorative scheme. Since the living-room ceiling follows the roof's pitch, we find an extra note of spaciousness added to this attractive room. Interiors throughout have been finished in cream-colored plaster, and much of the furniture, including sideboard, dining table, and coffee table, are the design and

handiwork of the owner. Since Mr. Oker is also a painter by profession, it follows that many of his pictures have been used throughout the house to add their bit to the general interior design.

Due to its position on the rocky ledge, we find a most ingenious split-floor plan. The bedrooms, bath, and small study are located one-half story above the kitchen and living room, with the entrance and garage on still another level.

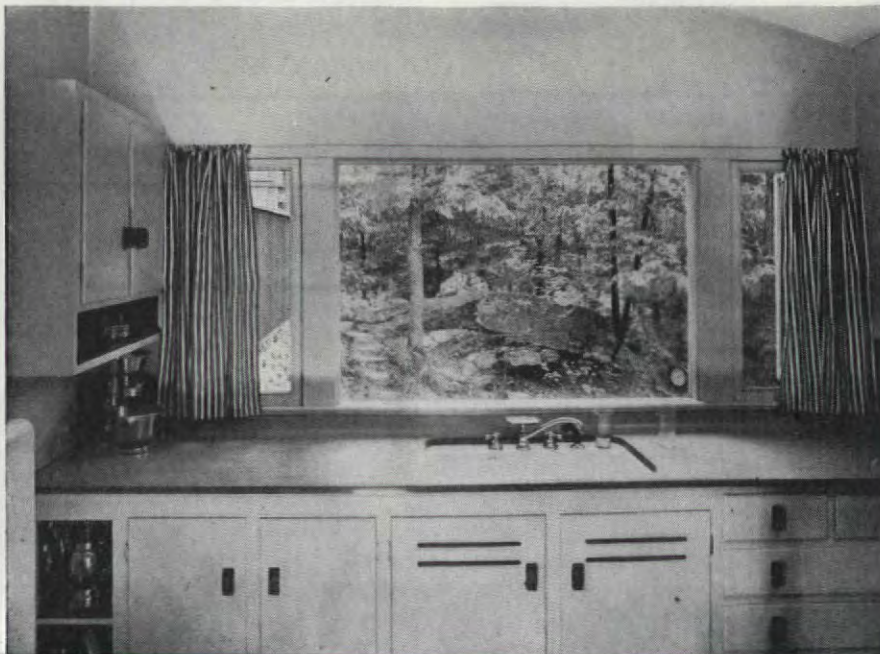
Mr. Oker's special delight is the natural landscaping which so helps to blend house and lot into one. Formality in any form was avoided; shrubs, pine, laurel and blueberries were transplanted to positions near the house, while colorful flowers are much in evidence all around the attractive terrace.



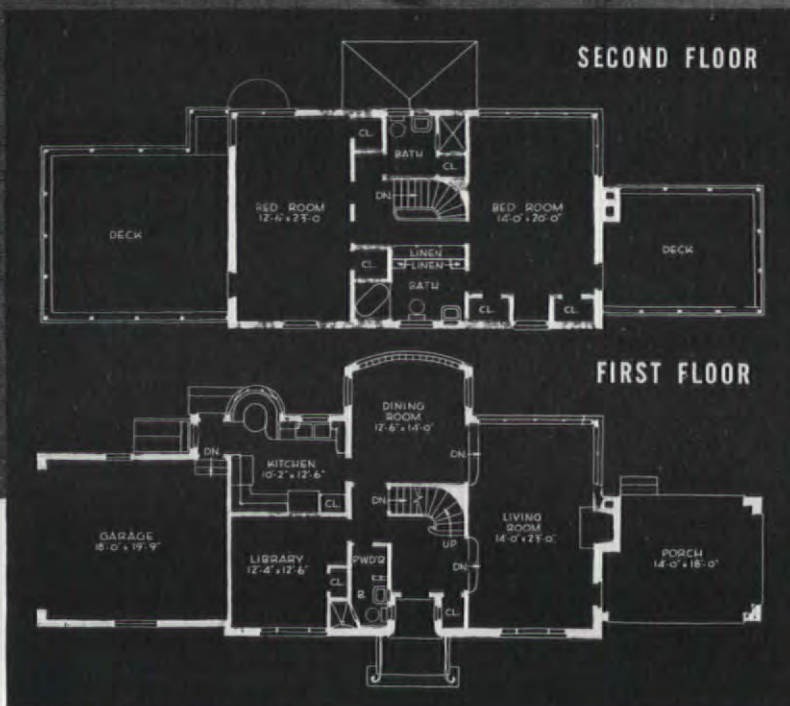
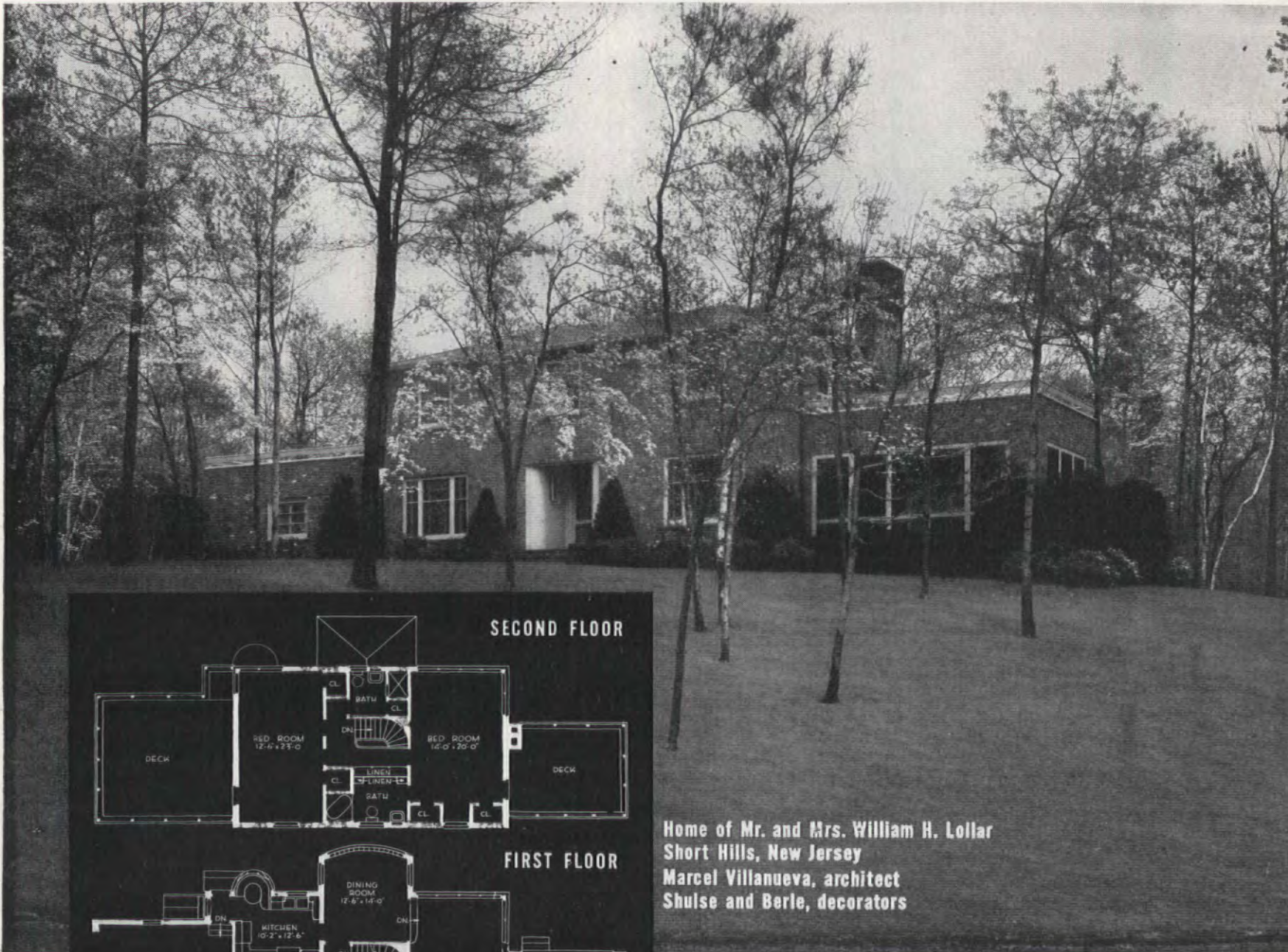
Photographs by author

Clean, straight lines and simple wall areas in all rooms form ideal background for modern furniture, much of which is owner's design and handiwork . . . vertical clapboard lines stair hall from living room to bedroom corridor

Picture window above kitchen counter brings natural beauty of surrounding foliage directly into room and forms everchanging, colorful mural, thus combating the monotony of routine housework



6 Good Homes from 6 Different States



Home of Mr. and Mrs. William H. Lollar
Short Hills, New Jersey
Marcel Villanueva, architect
Shulse and Berle, decorators

Photographs by F. M. Demarest

New Jersey

Data: Anne Brockey

IN an age when tag names are the fashion for easy identification—when all sorts of phenomena appear bearing labels of “Typical This” or “Typical That”—no one has yet had the temerity to select one particular style of house as “The Typical American Home.” As far as pure physical appearance goes, it just can’t be done. An examination of the six houses shown on the following pages will go far to prove this point. Each is as American as apple pan dowdy; each is completely native to this country. Yet they are different as can be in appearance. Early ancestry, environment, and climate conditions have left their marks on each and every one,

bestowing upon them a unique individuality. Yet, in scratching beneath the surface, we do find a similarity, a characteristic that might well be called typically American. We find that each is definitely designed for modern living, taking full advantage of the many technical and psychological advances offered today by science and designing skill for that better, more comfortable and efficient way of life we all desire.

Advanced methods of manufacture, better equipment and new materials are bound to have tremendous effect upon our future way of living. For instance, up until a few years ago, certain styles of houses were practical only in restricted

sections of the country. The open, rambling plan, so dear to most of our hearts, required a warm, even climate. Not so today! More efficient methods of heating and the widespread use of insulated glass have seen to that. Anyone of the houses illustrated here would be perfectly at home in any part of this country. This is bound to give a more unified appearance to our landscapes and at the same time allow homeowners and designers great scope in planning future dwellings. Perhaps out of this will be evolved a typical American house, but until then, most of us are thoroughly satisfied with the best we see about us today. Americans are, above all things, individ-



Large window areas plus built-ins which continue uninterrupted from living room into dining room, add flexibility and spaciousness

ualists, it is part of our make-up and heritage.

The William H. Lollar home, though located among the soft-rolling hills of New Jersey, could be perfectly happy in any other state in the Union. Its ancestry is Georgian, but Marcel Villanueva, the architect, has given it a definitely modern look. Good form has not been sacrificed to a new emphasis on utility, rather the two have been combined into a harmonious whole. There's beauty and dignity in its red brick walls, wide windows and broad porches. Here we find the same sense of good line and balance which all good building has possessed from early Grecian times. Here's the perfect house for those who crave a certain amount of formal dignity

in their living. The same quiet charm, so evident on the outside, is reflected throughout the interiors. Cool white, black and turquoise marbled flooring, in the stair hall, complement the pale green carpeting of the graceful curving stair. Walls are of light plum and oyster-white striped paper, colors reflected also in many of the downstairs rooms. Sectional furniture and built-ins in both living and dining rooms are of bleached mahogany and, because of similarity of design, afford great flexibility in entertaining. One ingenious touch, and a space saver to boot, is the built-in desk, telephone table and bookcase arrangement in the living room. This unit continues unbroken to form storage cupboards for silver

and linen in the dining area. When entertaining is on a large scale, the rose-colored leather chairs in the latter room can be easily drafted into service. Draperies in both of these rooms are of spun glass, horizontally striped in chartreuse and oyster white, over ivory Venetian blinds.

Color, too, is apparent in the kitchen where we find a breakfast nook in burgundy and white leather. An entrance, direct from the garage, saves wear and tear. At the head of the graceful stairway one entire wall of the second floor hall is completely devoted to storage cabinets. Their doors give the appearance of a completely paneled wall. Naturally, a southern exposure was selected for the baby's room in order to take





There's indirect lighting, radio and telephone in built-in patent-leather headboard below green-tinted mirror of master bedroom

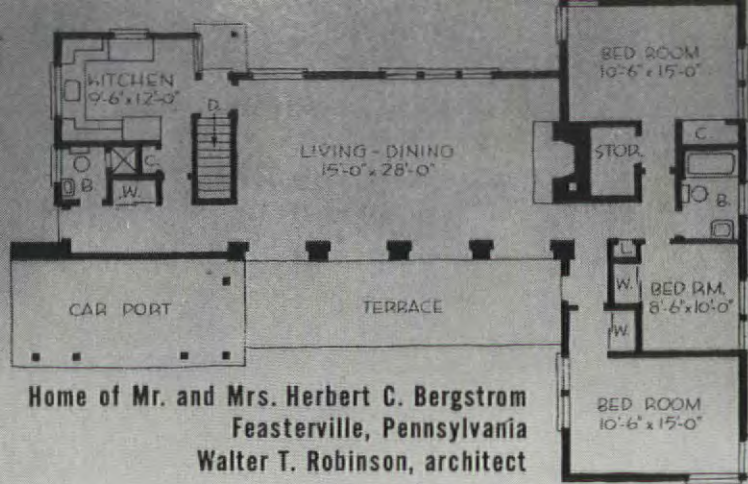


advantage of every available ray of sunshine. Appropriate, too, are this room's appointments in pink and white, made gay by many multi-colored animals. The feeling of spaciousness felt throughout the house is perhaps most apparent in the large master room with adjoining bath and sun deck. Here mirrored walls have been used to repeat the reflections seen through the extra large windows. These outdoor colors have also been used in the furnishings of soft greens, browns and grays. A green-tinted mirror stands behind the twin beds, unified by a running headboard of tufted oyster-white patent leather. Indirect lighting is concealed in this headboard where also we find built-in radio and telephone

cabinet. On the opposite wall is another built-in unit, double mahogany chests on leather bases, crowned by an enormous mirror. Hand-painted spreads in green and white with dark green corduroy flounces cover the beds. The little vanity below the dressing table consists entirely of mirrors and its accompanying stool matches the bed benches of raspberry twill. There's a definitely modern feeling both indoors and out, reflecting good living everywhere. Set in its dogwood-studded lawn, blending harmoniously with its surroundings, we have a good contemporary house, proof that a new architecture, like a young child, can be brought into rich maturity by the proper guidance and integrity of its designers.

From New Jersey we now travel south to visit the Herbert C. Bergstroms of Bryn Gweled, Pennsylvania. Their home is contemporary in design with little recall of any previous architectural style. Only in early western ranch houses do we find any comparison. Materials are used honestly and simply with no attempt at camouflaging their natural beauty. Its one-story exterior walls are of unfinished siding, eaves are wide and overhanging with rugged, exposed stone accents. An open car port, adjacent to the front entrance, can easily substitute for a covered porch, made doubly useful in combination with the living-room terrace. This is a home for two grownups and a school-age child. Two large





Photographs by P. A. Dearborn

Pennsylvania

bedrooms plus one small sleeping room are adequate to take care of the family's needs.

Since the most favored exposure is to the south, a living-room wall of glazed doors on this side brings in magnificent views of surrounding

rolling hills. The living room also takes care of the bulk of the traffic—clever planning of doorways has restricted this traffic to one side. There's a separate entrance into the well-lighted kitchen, though this room can be reached, too, from the front hallway. Extra overnight guests, who might draft the living room as sleeping quarters, will find the entrance hall bathroom a convenient asset for privacy. In the basement, reached by stairs from either kitchen or living room, we find a root cellar, storage and heater room. The large living room also serves as eating quarters.

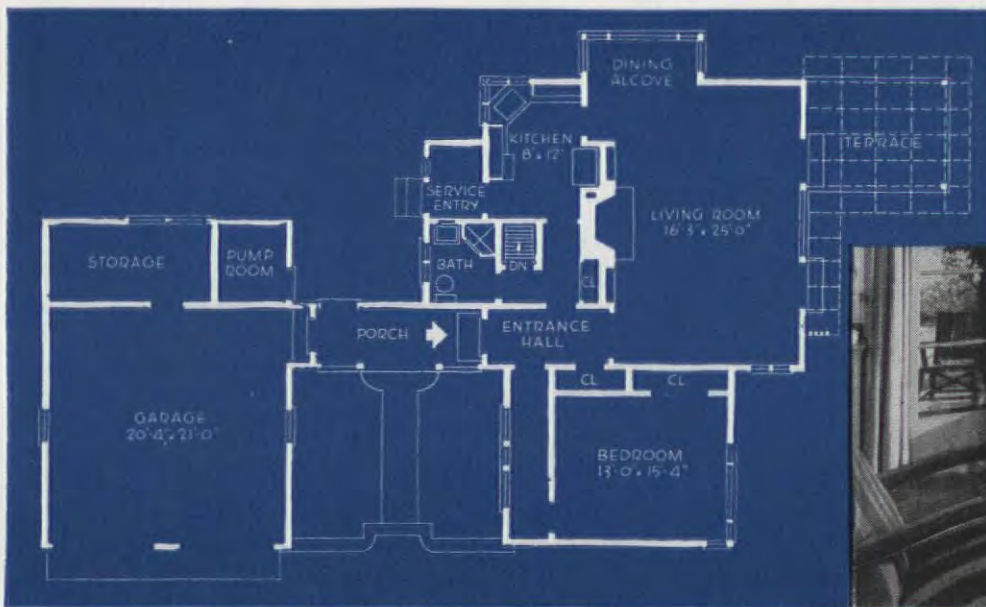
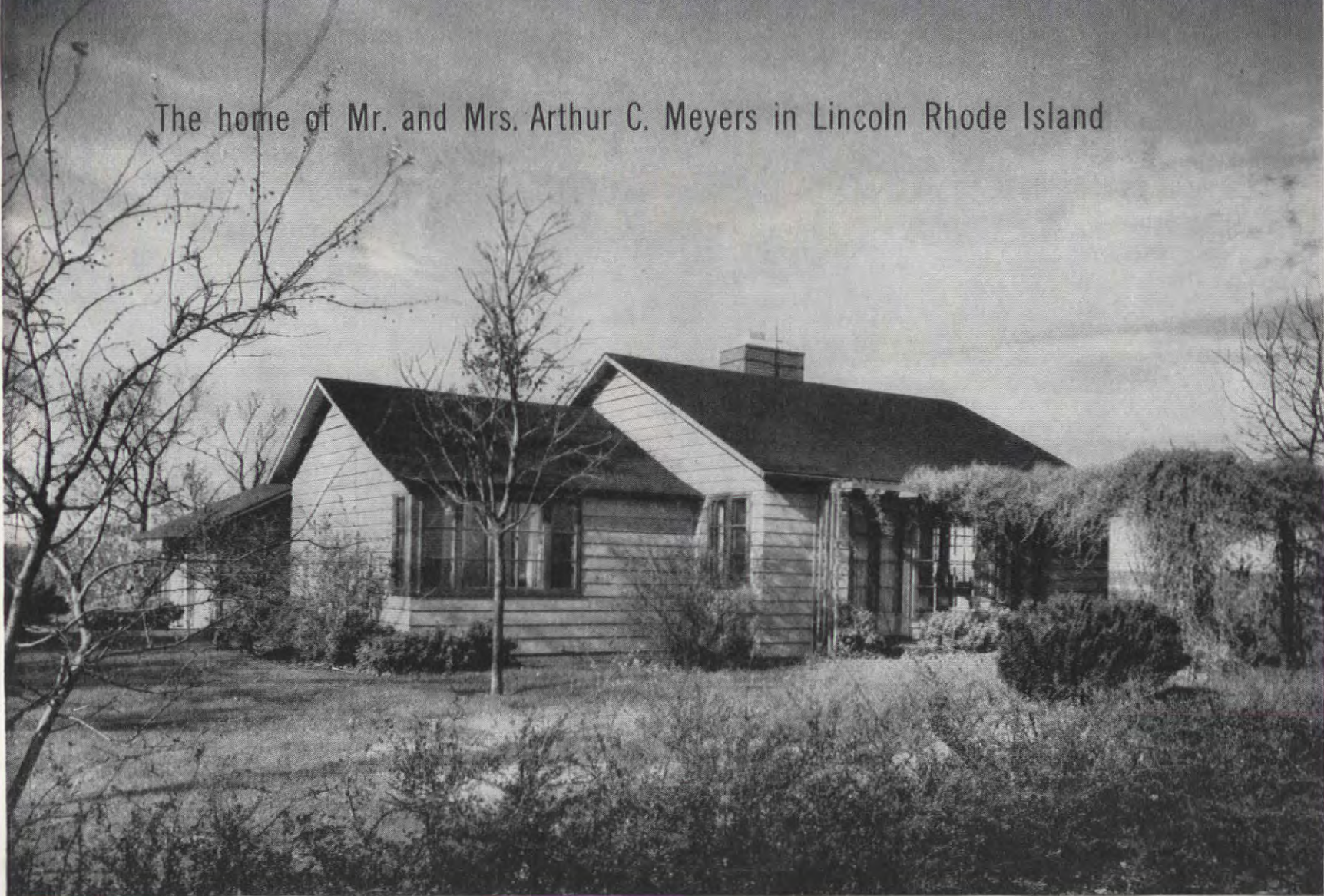
In fact, every square inch of this compact plan has been utilized in spite of the general rambling effect one gains upon first approaching the house.

This contemporary house is one of a group, built as a co-operative unit. Each house is different though materials are similar for better uniformity. These young couples and their families discovered that by pooling some of their resources, many advantages which as individuals they were not able to afford were theirs. Get-togethers on weekends provide a large part of the social life while craft projects help furnish the houses.

Honest use of natural, unfinished materials, used both inside and out, help blend Bergstrom house into hillside setting



The home of Mr. and Mrs. Arthur C. Meyers in Lincoln Rhode Island



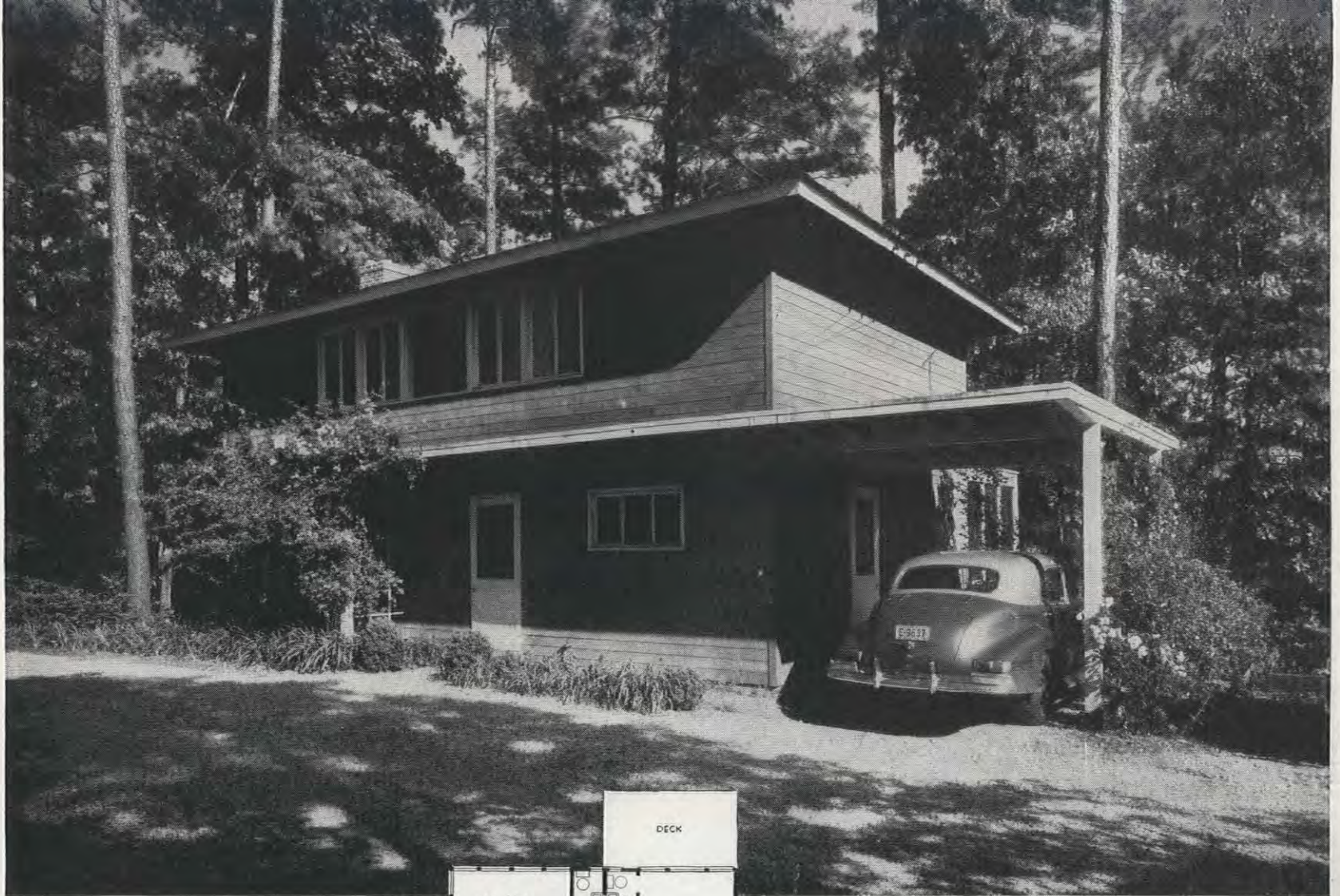
***“Don’t fence me in” keynote
of New England house with
its magnificent river valley views***

Albert Harkness, architect

Photographs by Richard Garrison
Data: Harper T. Parkinson

Many years spent as a scientist in Persia, where trees are scarce and views are uninterrupted, convinced C. Arthur Meyers that his new home shouldn't be hemmed in by overpowering foliage. He selected five acres overlooking the Blackstone River Valley where in every direction the view was the "thing." The house is small, as can be noted from the plan on page 45, but it has been carefully planned by Albert Harkness, the architect, for expansion without harm to the basic design. Its exterior frame is covered with rough-sawed cedar clapboards now weathered to a warm gray.

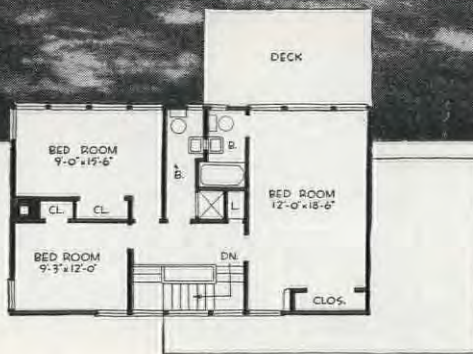
The twenty-five-foot living room is only partially separated from the dining area, the line of demarcation being shown by a dropped ceiling in the latter. Whenever privacy is necessary, curtains may be drawn around the exposed two sides. On either side of the fireplace attractive cabinets can be used either for books or the display of prized bibelots. Opposite this wall, is one almost entirely of glass with double French doors opening onto a square paved terrace. Here summer meals can be enjoyed 'midst the view of distant rolling hills. Living room radiators are enclosed by mesh doors under open bookcases.



vantage of the heavily wooded countryside, give the interiors a feeling of great spaciousness. The exterior is of stained-wood siding with steel-casement windows and a heavy overhanging cornice which controls the rays of the sun, bringing welcome warmth in winter and cool shade during the hot summer months. The open car port located next to the kitchen entrance, allows for adequate protection during inclement weather. Though open planning could not be utilized to its fullest extent, living room and dining room have been separated only by a glass-topped storage partition which adds to the flexibility of both rooms. Three bedrooms, each with cross ventilation, and two baths, are located on the second floor. Stair hall is small and well lighted.

Returning to California we come upon another very little house, located on a busy street and on a typical city lot which, by clever planning, has all the advantages of the country—a lovely garden, giving privacy and growing things to look at and eat. It is the Otto Schreier residence, lo-

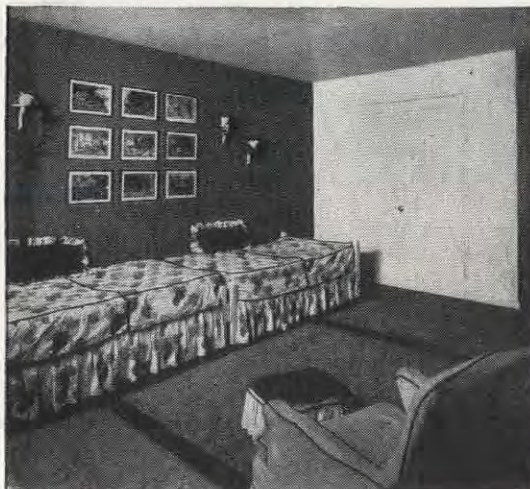
Photographs by F. S. Lincoln



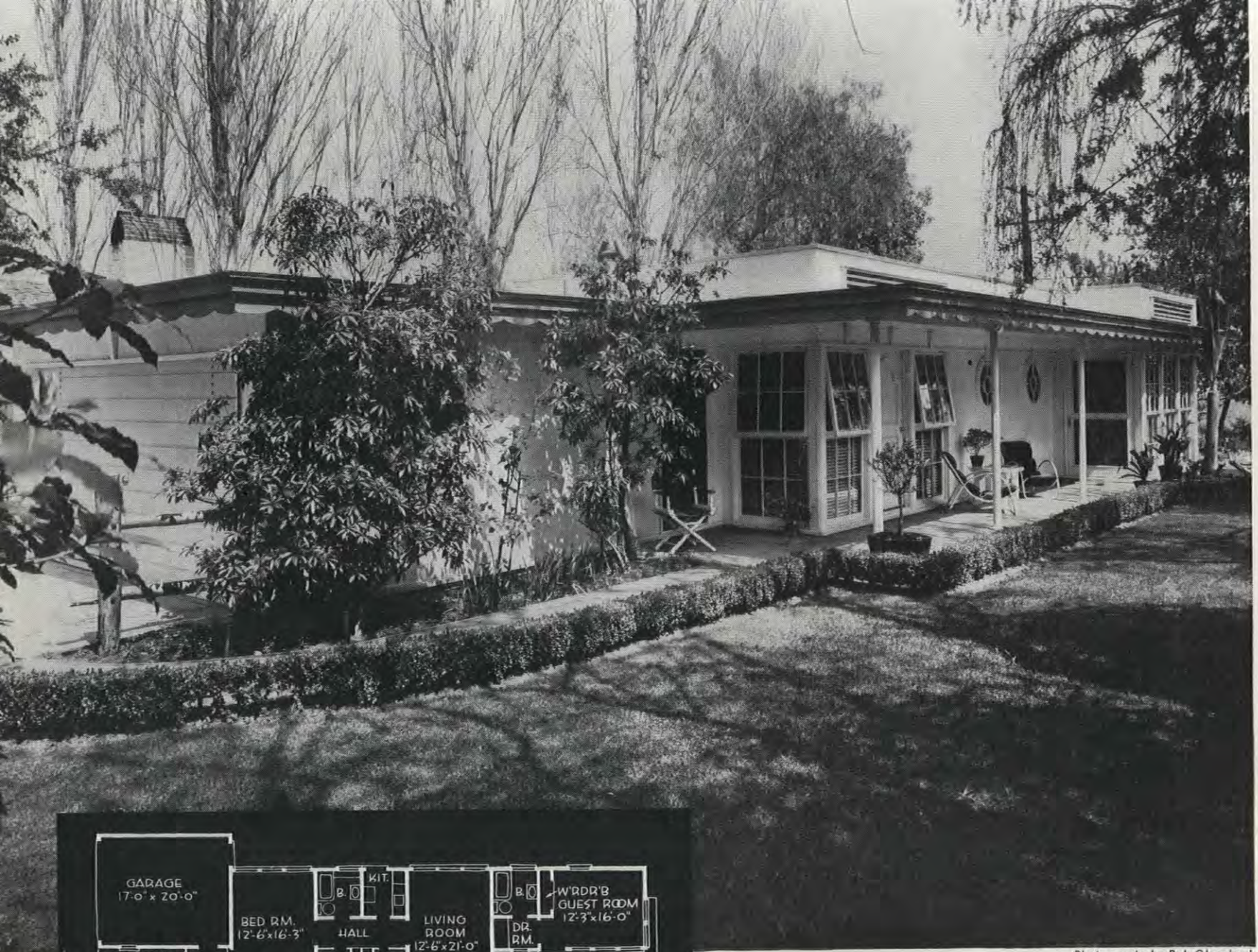
Home of Mr. and Mrs. Harold R. Cavanaugh
Atlanta, Georgia



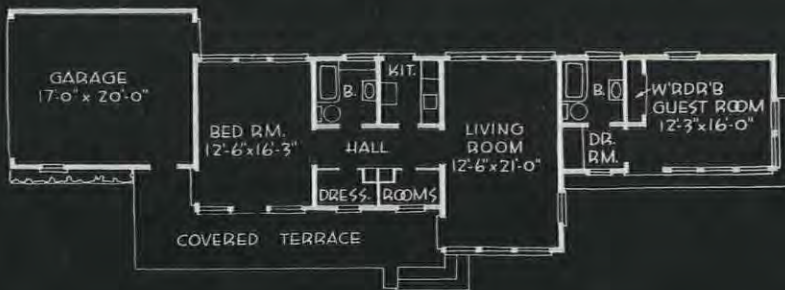
Georgia



Burge and Stevens
architects
James R. Wilkinson
associate



Photographs by Bob Cleveland



Home of Mr. and Mrs. Otto K. Schreier
North Hollywood, California

Ernest Fegte, designer

California

Data: Ethel McCall Head

cated in North Hollywood. The property had nothing special to recommend it, being just another narrow lot with houses on either side, but the designer, Ernest Fegte, is gifted with more than a fair share of imagination. He saw immediately the house had to be placed at the north line of the property in order to save the entire south for garden. This meant stringing the house, one room wide, all the way back. Because of such an arrangement the garage was placed right up front. When passing along the street, one sees nothing except a mass of heavy planting, a small paved driveway and the two-car garage. The result is absolute privacy.

The house itself is long and low with pale yellow plaster walls, clean white trim and a dark green cornice edging the flat-topped terrace roof. Delicate metal poles, painted white, support the extra wide overhang protecting the walk from garage to front entrance door. Above are vents which keep the roof of the house cool. The result is a pleasant feeling of horizontal lines broken only by dark green scallops. Low cropped hedges guide the visitor and are in keeping with the general low look of the house.

Going in the front door directly to the living room is like stepping into a cool, colorful house in the tropics. The walls are a quiet shade of smokey emerald green, contrasted by a white ceiling and soft white draperies at banks of windows at two ends of the room. The room, itself, is not large, though its furniture arrangement makes it seem spacious and uncluttered. There's a comfortable big couch in dark green cotton, upholstered with cushions gay with tropical flowers and vines in green and red. The same red is picked up in a man-sized chair by the window and in the modern lacquered coffee table. A couple of occasional chairs make for flexible





Slender white posts support green-scalloped terrace roof



Chintz ruffle on walls adds gaiety to plum and white bedroom

When open, sliding mirror bedroom door reveals cool glimpse of emerald green and white living room



Before bank of living-room windows, black lacquer dining table and chairs, covered in yellow and gray



grouping and are covered in nubby yellow-green fabric. In front of one window bank, we find a simple black lacquered drop-leaf dining table with chairs of the same color, seats covered with a yellow and gray striped cotton. This table can seat six people and, when closed, doubles as an attractive, out-of-the-way piece of furniture.

Adjoining the dining corner is a serving counter covered in red leather with valance of the same color, edged in white wood. This counter makes for easy serving and, being movable, may be swung back against the wall. A trick of this comfortable little room is the use of a wide opening into the bedroom hall with its sliding mirror door. Either opened or closed, this door presents a fascinating outlook and makes the reflected interior appear larger than it is. A similar sliding door is located at the opposite end of the bedroom hall.

This wide central hallway through the middle of the house is most unusual. It leads to kitchen and bath on the north side and directly into two separate dressing rooms on the opposite wall. These small, efficient rooms are complete with built-in wardrobes and chests of drawers, and are lighted by round windows opening on the terrace. Between the two dressing rooms is a spacious linen closet. At the end of the hall is the master bedroom with huge windows at either end. A separate door leads directly on the terrace. Because all wardrobes and storage space has been taken care of outside the bedroom, the floor area is much more usable. It really becomes a second small living room when the owners so desire.

Also unusual and extremely practical in this small house is the overall use of the same types of windows, extending from floor to ceiling and giving a feeling of continuity to all rooms. Since doors and windows are also of the same size, shifting around of these units is possible when and if wanted. The second bedroom or guest room adjoins the living room, though there is no connecting door. This allows the family and their guests complete privacy. The guest walks through the garden to his own quarters which consist of a many-windowed room, bath, and spacious wardrobe. However, the Schreiers have an amusing communication system between these two parts of their home. An electric bell sends out code messages to the guest. One ring means "Soup's on": two rings means "Telephone!" And there are infinite variations on the social themes of, "How about a cup of tea," or "Want to go to a movie tonight?" Too, a connecting door can be cut through whenever it is desired.

As you see it's really a small house—three rooms in all—living-dining room, master bedroom, and guest room, yet there's a marked degree of openness, a feeling of great stature and dignity. It captures the very essence of a little house in the country, unconcerned with surrounding houses, passing cars and noisy boulevards.

Henley House

Begins on page 63

house covers only 1200 square feet, they've used the clever decorator's trick of creating an illusion of expansiveness by overflowing colors from one room to the other. Roses have been discreetly used as a motif everywhere in this house, both inside and out. We find them clinging to the front picket fence, as accents in many rooms, and finally blossoming against the rear garden wall. The mint-green walls of the entrance hall combined with a clean white dado are cool relief after the brilliance of the outdoor sunshine. Here we come onto the first example of color flow, for these same tones are picked up in the living room. They act as perfect foils for the beautifully grained woods of the owner's fine antiques. On either side of the fireplace are Victorian chairs upholstered in red velvet, and facing each other on the side walls are flesh-pink chintz davenport in rose and green-leaf design. The green matches the wall colors.

Everywhere there's a feeling of tranquillity and repose, perfect complement to Mrs. Henley's subtle approach to her decorating problems. Highlighting the room is an old marble-topped table, cut down to coffee-table proportions. Further quaintness may be found in the delicate Dresden mantel clock and a corner whatnot with its display of hand-painted plates. The carpet, running from wall to wall, is of soft rose and is partially covered by a large hand-crocheted oval rug.

This same rose-toned carpeting is carried into the adjoining dining room where walls are papered in white with pink roses. The wide ceiling molding here picks up the mint green of hall and living room. Butcher's linen draperies of rose with swag of red velvet also echo the colors used at the far end of the living room. A collection of Sevres plates over the window, an old fashioned hanging lamp, a whatnot, and little Victorian chairs in blue tufted velvet complete the turn-of-the-century atmosphere which keys all interiors.

Passing the bath with its tiny red and pink rose-covered paper, we come upon the bedroom where a similar pattern is repeated in the calico trim of the four-postered bed. This room is actually treated like a sitting-room bedroom. A red velvet Victorian chair, an 1812 settee, and a 125-year-old English tea service are focal points along with the calico-trimmed criss-cross curtain and the milk glass display. In keeping with the traditional sitting-room motif, Mrs. Henley uses a Governor Winthrop secretary as substitute for a dressing table.

Clifford House

(Begins on page 102)

most to its lowest terms. It includes space comparable to a small apartment for one person, but is planned for future enlargement. Actually, the present house is capable of taking care of one emergency guest. Living, dining and sleeping area have been placed in one large rectangle. In addition, there's a kitchen and bath plus an ample dressing room. A workroom, entirely cut off from the living quarters, includes a small darkroom, drafting space and accommodation for an occasional guest.

Like all designers and architects, Ralph Clifford had a wonderful time building this home in miniature. Early in the business, his imagination was captured by the possibility of wood as a means of architectural expression. Naturally, when building his own house, free from the whims, needs and hobbies of a client, he felt that the psychological moment had arrived to let himself go—and he did! In keeping with his earlier design, the house was finished in redwood siding, treated with boiled linseed oil. However, instead of white, all trim and plaster was painted a deep grey-green. A carport offers protection from the elements and leads, by means of a covered passage, to the entrance gate. Once inside this gate, the visitor finds himself immediately under the simple, attractive entrance porch with its built-in storage chest for garden tools. A large window offers a glimpse of the sleeping end of the living room. In order to differentiate between the various duties of this room, Mr. Clifford has paneled the wall of the sleeping area with polished redwood siding, while the walls of the living-dining areas are of striated plywood. The surfaces are similar both inside and out. For instance, the grey-green of the living room ceiling carries through to the porch ceiling. This indoor-outdoor relation repeats the design of the living room rush mats by means of two-inch redwood strips set into the dark grey concrete of the adjoining outdoor living terrace.

Besides the custom-made niceties of his house, Mr. Clifford has made it practical. "That's important," he says, "my house leads a double life—its own and mine. It has to be practical. There must be as little nonusable space as possible, with simplicity of upkeep a prime consideration." He has great respect for the built-in, modern-design house and a quiet, clear, reassuring way of logically packaging its attributes. There's contagion, too, in his logic; you see his house as a comparison between the fussy, beribboned girl of yesteryear whose intricate hairdo required the services of a personal maid and the present-day girl who'll have nothing to do with all that primping and bother. Your deduction is that this young man likes his girls natural and his houses simple and direct for today's living.



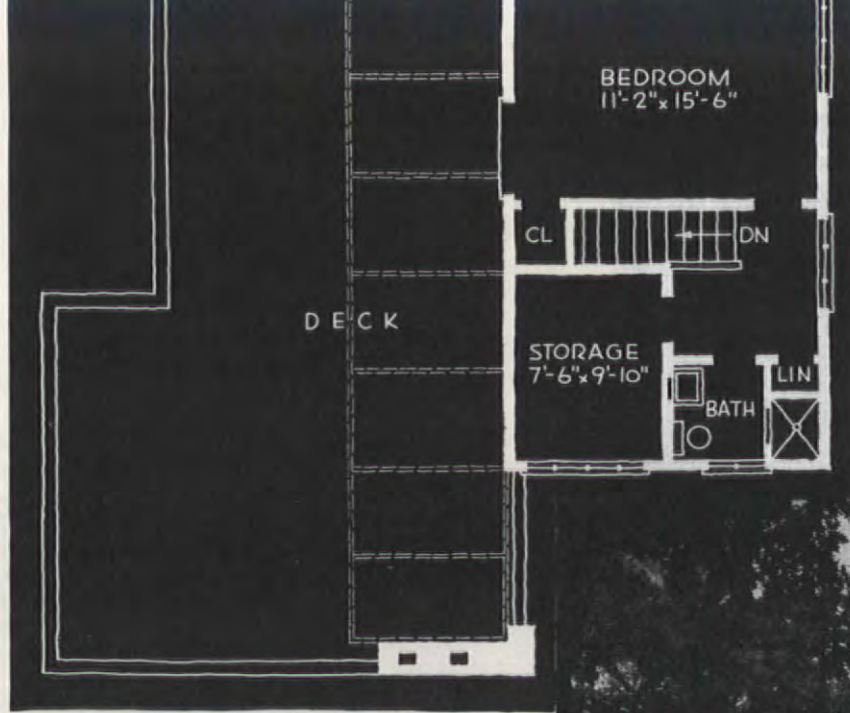
Expandable for Growing Needs in Alexandria

WHEN Mr. and Mrs. Peyton Armstrong Kerr were offered their choice of sixteen or more plans for a new home, they unhesitatingly chose this well-designed, modern house. In doing so, they were also gaining the services of one of Washington's most progressive architectural firms. In the past, we've been proud to show our readers other good designs from the drafting boards of Berla and Abel, and we congratulate the real-estate developers who were farsighted enough to engage this talented pair of architects.

In selecting a home, everyone is influenced by small details, and the Kerrs were no exception. They are especially fond of enclosed stairs and found this fact, coupled with a very workable expandable floor plan, completely in line with their thinking. When it becomes less difficult to build, they intend adding two new bedrooms and another bath on the second floor. Even then there'll be enough deck space for much-desired outdoor living. The house, in spite of its small appearance, is large enough for the owners, their four children, and there's space in the basement for another room and bath.

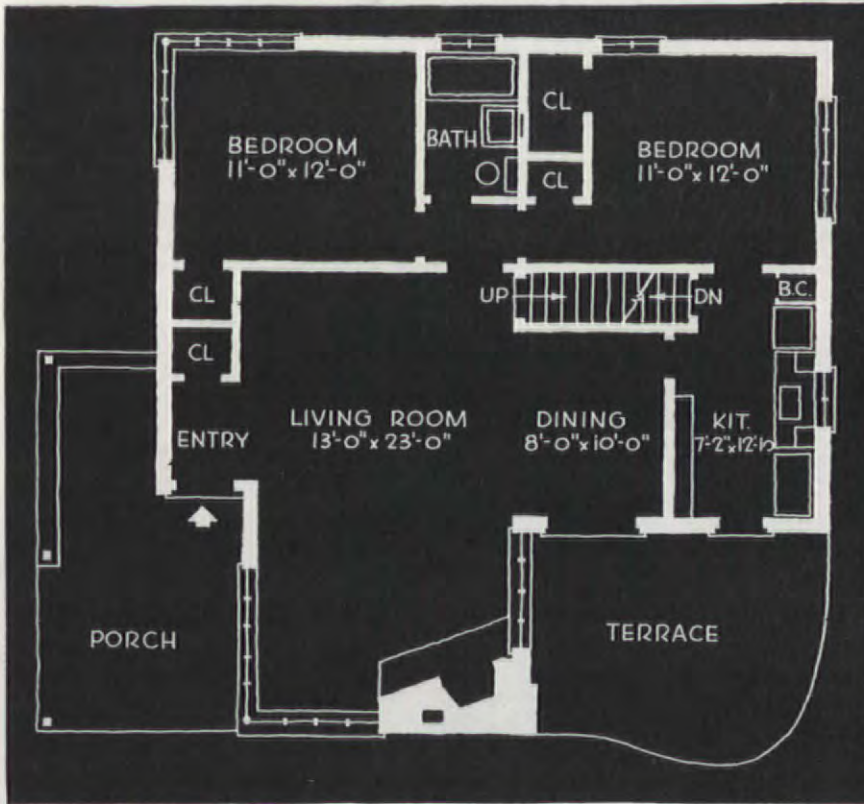


Seen from dining end, green-carpeted living room with oversized corner windows has bright, spacious appearance.



Separate bedroom suite on upper floor insures privacy and quiet. Sun deck, partially covered by trellis, offers view of surrounding countryside

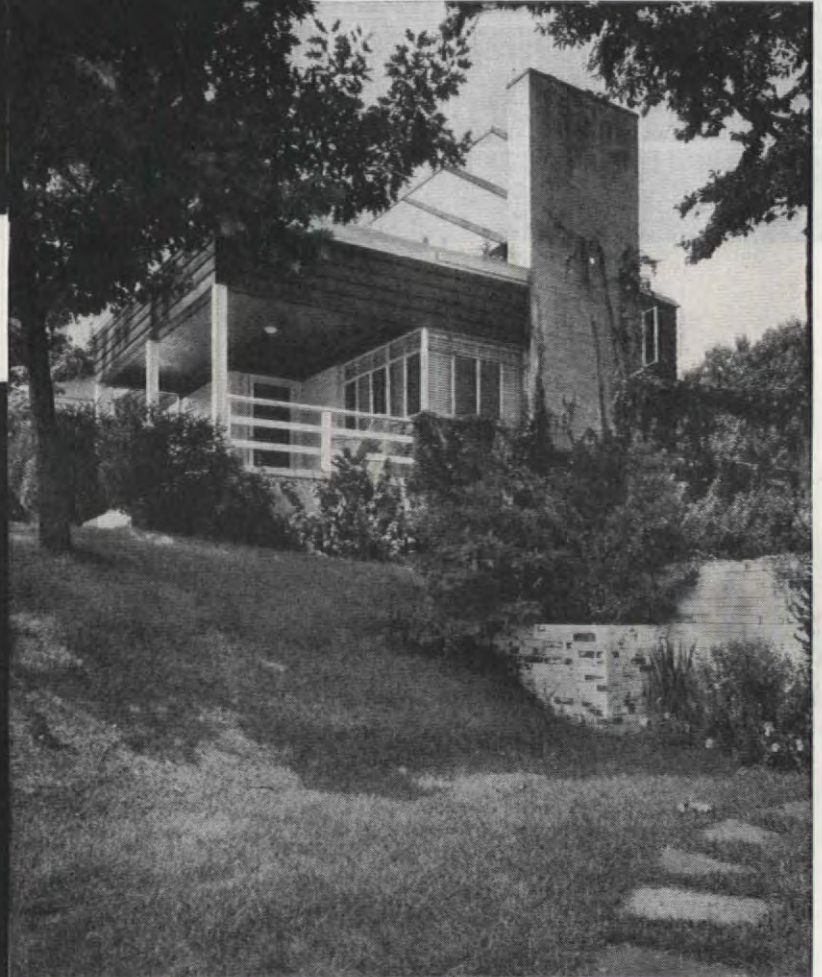
Compact first floor plan with two bedrooms and bath while basement offers chance for extra sleeping quarters when time and need occur



Home of Mr. and Mrs. P. A. Kerr
Berla and Abel, architects

Mrs. Kerr is a pianist and is most pleased with the excellent acoustics of the living room. She doesn't know exactly why this should be, but is most grateful since many recordings are made at home. Long batteries of casement windows brighten this charming room with its simple off-angle fireplace breast. The windows are high enough so that two sofas with many comfortable pillows have been placed beneath them to afford

an ideal lounging spot. Walls in this dual-purpose room are of soft gray. Cross-ventilation is a feature of all three bedrooms, while an ample storage room on the second floor adequately accommodates the numerous odds and ends always collected by a family of this size. The basement includes a recreation room, laundry, trunk room, and other storage space, in addition to the space allotted for the proposed sleeping quarters.

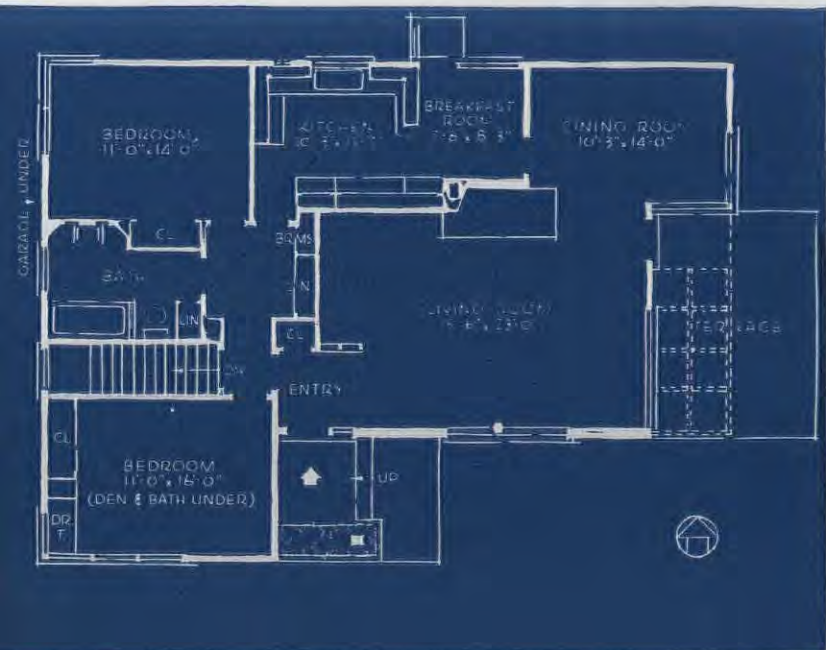


Well-planned ground planting and retaining walls on the street side soften steep grade of the 60 x 100 foot lot



Pair of glass doors lead directly from the dining alcove onto the terrace for easy serving of summer outdoor meals

When Mr. and Mrs. Ross Kinney returned after many years spent in Alaska, they brought back with them not only a valuable collection from our northernmost state but also a strong nostalgia for its atmosphere. Needless to say the house they built, with the valuable assistance of Paul Kirk, one of our most promising young architects, though in keeping with best modern trends, affords the visitor many glimpses of a more primitive civilization. Note, for instance, the amusing totem pole which not only adds a decorative note to the sheltered entrance porch but does structural duty at the same time. Natural brick



Life in Alaska inspired Washington home of Ross Kinneys

Commanding a magnificent view of Lake Washington and Mercer Island, definitely modern-minded house in Enatai provides attractive background for owner's prized Alaskan collection

Paul Kirk, A.I.A., architect





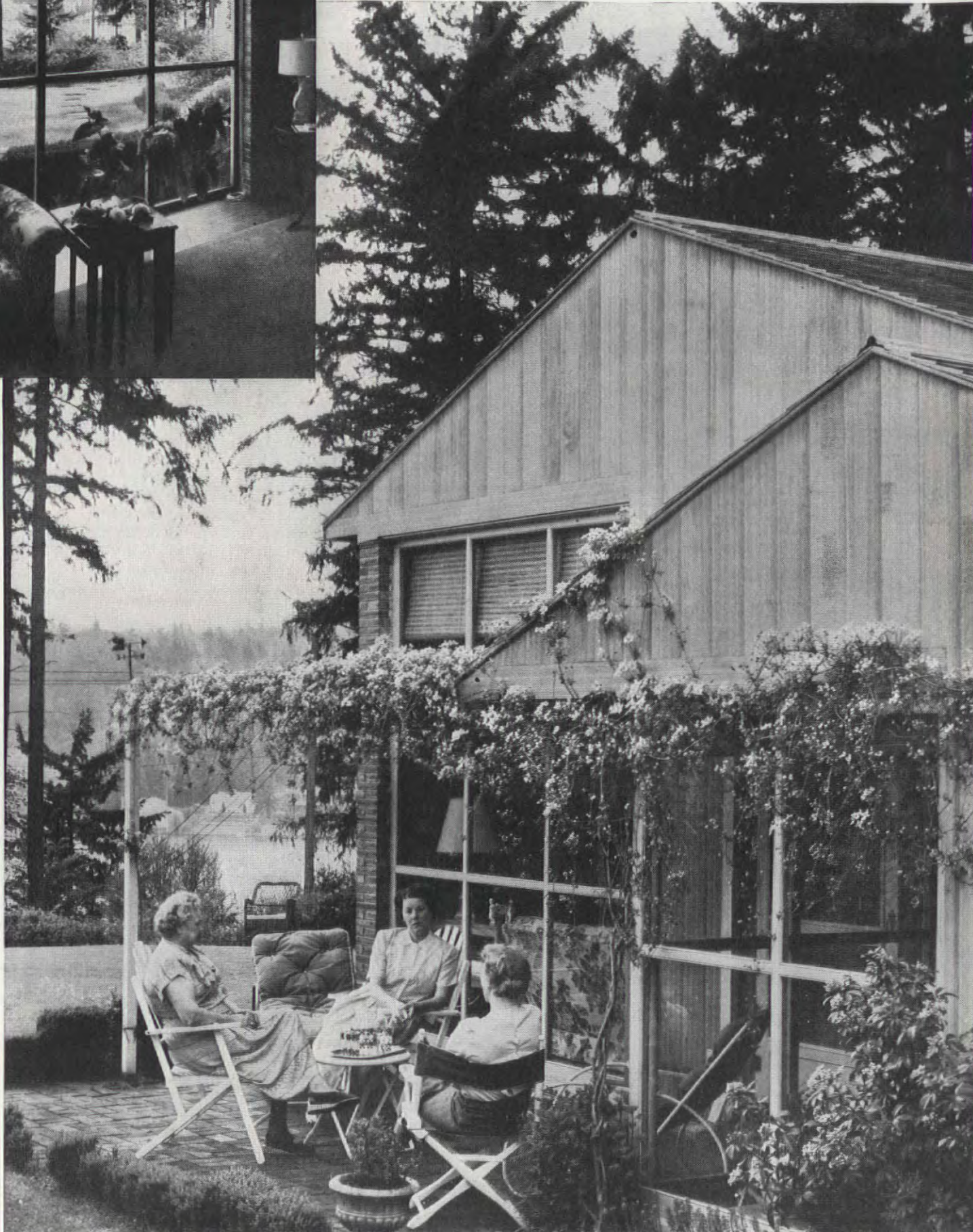
and flush cedar siding, stained driftwood-gray, cover the exterior walls while the restrained, delicate trim is painted pale blue. In order to catch every view of the exciting landscape, windows have been made extra large, reaching from floor to eaves. To overcome any grossness, the architect has broken them wisely into nearly square panes. Entry, living room, and dining space are one, giving an airy spaciousness to that end of the house, though the bedroom quarters have a definite compactness with minimum circulation. Plywood walls, stained beige pink, complement the subtle gray, rose and chartreuse upholstery and draperies.

- Acting as a constantly changing mural, large picture window in living room, framed in pink beige plywood, brings blue waters of Lake Washington right up to the Ross Kinney house front doorstep

- Clematis-covered trellis at east end of house has been cleverly integrated into delicate design of trim and window muntins. Corner sash in foreground helps dining room share thrilling lake views

- Slight rise in contours of plot directed most important rooms to lake side. Greenery of background is perfect foil for cool weathered gray of vertical cedar siding used on east wall adjacent terrace

Data: Adrienne Baker
Photographs by
Howard Staples





● Interior details were cleverly thought out with Alaskan collection in mind. Shelf over built-in couch near entry has flush lighting in soffit making this ideal place for lounging with good book. Fireplace shelf runs around corner into dining area. Walls are striated plywood stained pink beige; pressed pulp ceiling in rectangular pattern is gray pink

Planning Primer

... Plot (Begins on page 2)

broken, too, by proper grading after a house is built. In any case, a wet lot will mean a complete waterproofing job. You can dig a hole yourself or ask the town engineer to have a boring made. First, get the owner's permission if you have not already bought. Otherwise, he's sure to object.

WHAT MAY ROCK OUT-CROPPINGS INDICATE?

That there is ledge rock within 2 or 3 feet of the surface which will probably add greatly to the cost of excavating and to the cost of the trenches to connect your house with water, gas, and sewer. Bad rock conditions may add literally thousands of dollars to the cost of a house. If in any doubt, make a few test borings.

ARE TREES VALUABLE ASSETS ON A PLOT? AND HOW MUCH IS A VIEW ACTUALLY WORTH?

Trees are very definite assets if they are located near the plot edges so that they will not have to be cut down to make room for the house. A good view frequently adds to the value of a plot. But be sure that the view will not be cut off by future building. If your property is barren of trees, or if, in the process of building, any trees have been uprooted or destroyed, call in a landscape architect at the beginning and get his advice about getting an ideal planting scheme.

WHAT IS THE AVERAGE STREET WIDTH?

Fifty feet or more. Fifty feet is general in residential neighborhoods, although some main avenues with much traffic may be wider. Most towns now refuse to accept as public streets anything less than 50 feet in width. Local conditions may vary.

There may be very real disadvantages to plots on a privately owned street. Someone must maintain a street if it is to continue to give you safe, convenient access to your home. Developers may keep streets in good condition until their land is all sold. But what happens after that is a matter of vital concern to the residents. Publicly owned streets are the only ones on which you can be reasonably sure of maintenance, public utilities, ash, garbage, and snow removal.

The best type of paving for a street depends on the neighborhood and the traffic. Concrete and bituminous-bound macadam are good, the latter being preferred for suburban neighborhoods. Old-fashioned water-bound macadam without special top covering will not stand up under automo-

bile usage, no matter how installed.

The paving does not cover the entire 50 feet of street width. A pavement 50 feet wide would look silly in a residential area. Paving 20 feet wide is perfectly adequate for residential communities. Paving from curb to curb (usually 30 feet) makes for a better looking neighborhood. Within these 50 ft. of street area are included sidewalks, curbs, and parking strips between curb and sidewalk.

WHAT IS THE DIFFERENCE BETWEEN SANITARY AND STORM SEWER?

ARE SEWERS AN ABSOLUTE REQUIREMENT? ARE SUCH INDIVIDUAL SYSTEMS SAFE?

A sanitary sewer carries away house waste. A storm sewer is designed to avoid surface flooding by rapidly carrying off rain water. Storm sewers are not necessary where natural drainage and soil absorption will take care of the surface water. If your plot slopes away from the street, you can find out from the town engineer if the sanitary sewer is deep enough to take a house connection from your proposed house. Before installing laundry tubs or other drains in the cellar, be sure that there is sufficient pitch from the fixtures to the street sewer to permit them to function. Remember, it is possible that even though street improvements (sewers, water mains, pavings) are already installed, the costs may still be assessed against the property benefited. There's nothing wrong about this method of financing improvements but it is wise to check such matters by asking the tax collector.

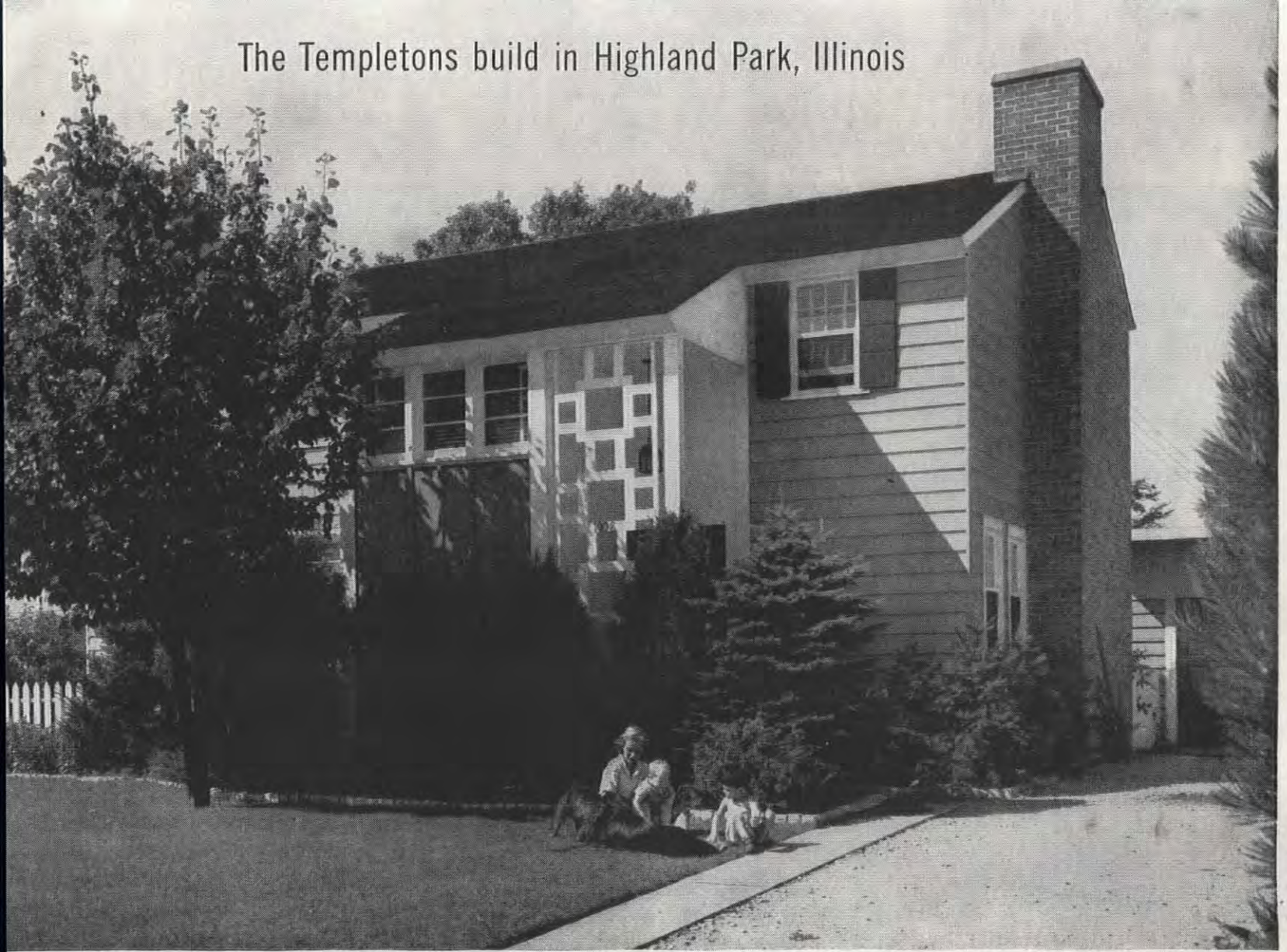
There is no doubt sewers are very desirable. Many attractive, outlying residential neighborhoods depend upon individual sewage-disposal systems. These usually consist of two main parts, a metal or concrete septic tank and a tile drainage field. Consult an expert for the size you'll require.

Individual systems are safe, if properly installed for your type of soil. Heavy clay and wet land is most difficult. The opinion of a good sanitary engineer is recommended.

NOT ALL OUTLYING STREETS GET PUBLIC SNOW-REMOVAL SERVICE, GARBAGE AND ASH COLLECTION. HOW CAN THESE BE CHECKED?

Visit the plot in the winter when snow is on the ground. Ask the superintendent of public works at the town hall. Also question some of the neighboring residents about the quality of services rendered and cost, if any, for it is the policy of some towns and municipalities to charge homeowners for ash and garbage removal.

The Templetons build in Highland Park, Illinois

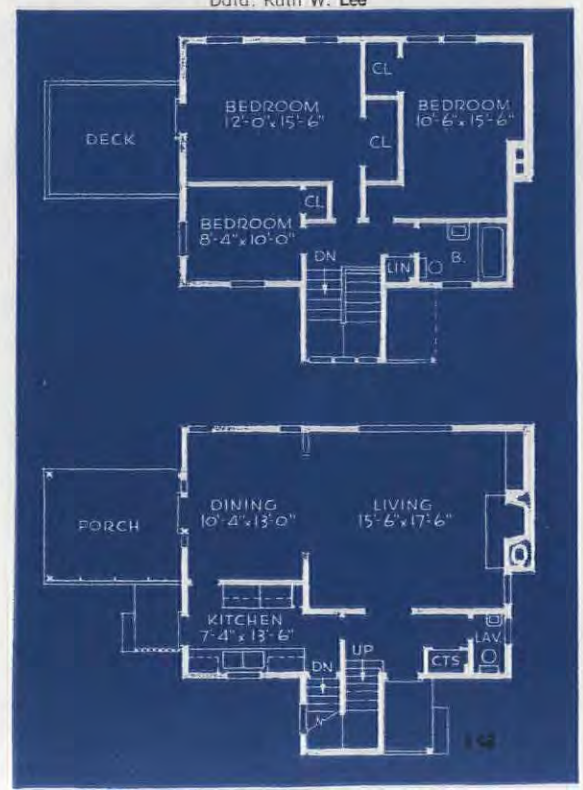


For those who don't hold with extreme modernists yet aren't quite satisfied with tradition for tradition's sake, this gray clapboard house, with its spanking white trim, dark-green shutters, nostalgic flavor of Early American farmhouses, should have a definite appeal. The over-size trellis, flanking the projecting stair hall at the entrance, adds a certain zest to the street elevation and is in keeping with the clean cut restraint found both indoors and out. Notice the living-room fireplace, almost devoid of detail, yet adding welcome contrast to the scalloped book-cases. Lime green on walls of this room combines handsomely with the rose, green and white floral chintz of the draperies. All the woodwork has been left natural birch. Upstairs, a light, minimum stair hall leads directly to the bedrooms, nursery, bath, and linen closet.

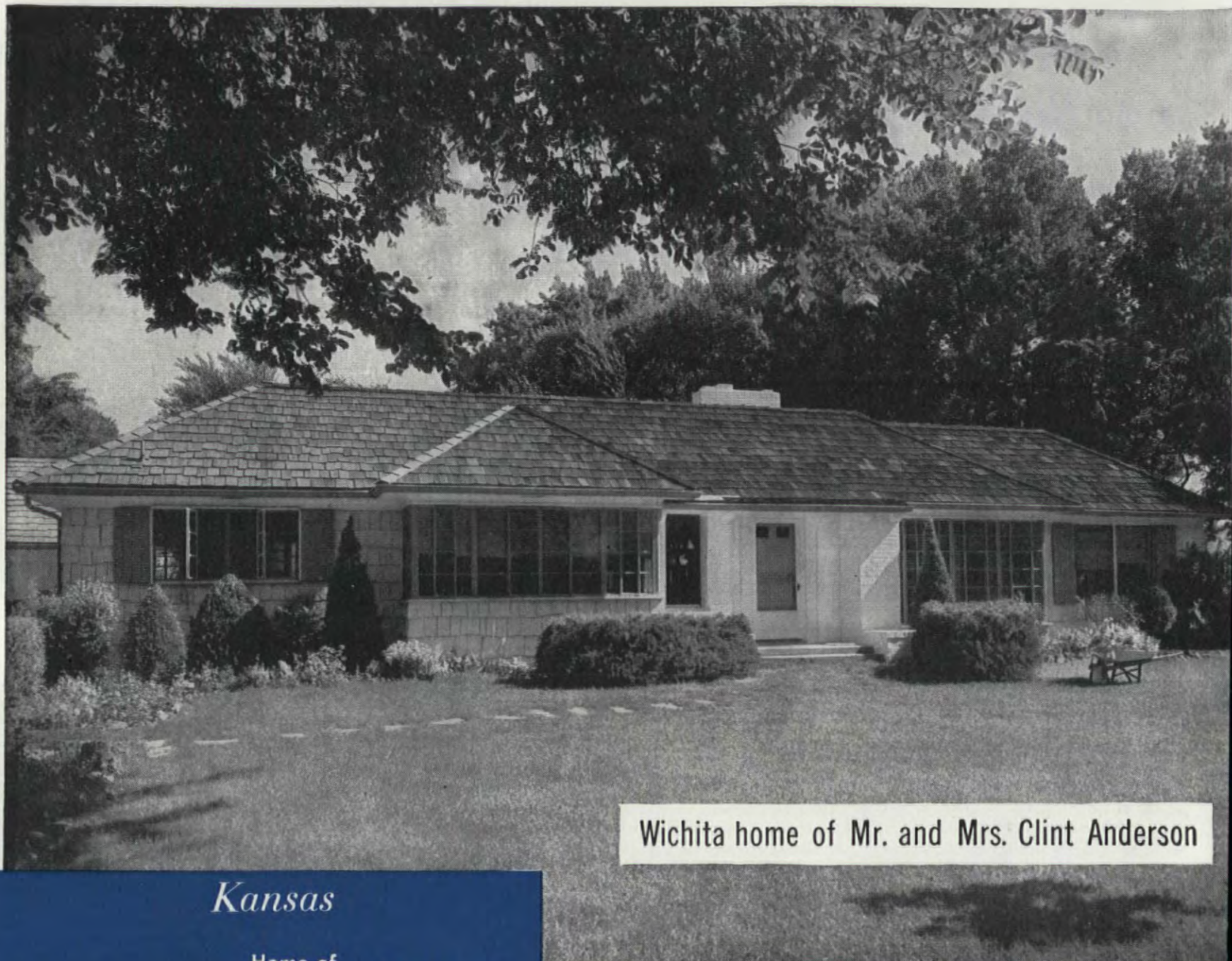
Two-story entrance trellis plus simple roof extension bring farmhouse-type design right in step with the times

L. Morgan Yost, architect

Photographs by Nowell Ward
Data: Ruth W. Lee



Low white study in SHAKES and PAINTED BRICK

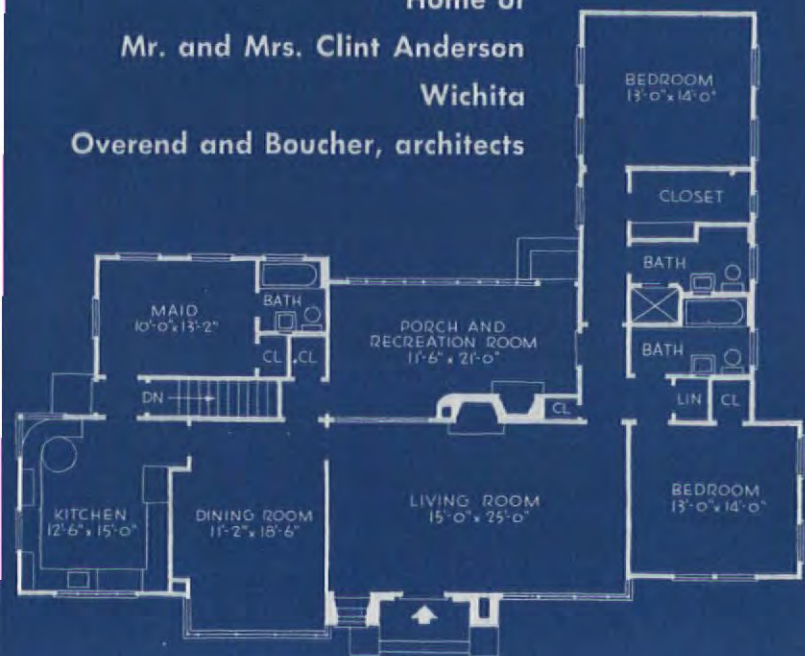


Wichita home of Mr. and Mrs. Clint Anderson

Photographs by author

Kansas

Home of
Mr. and Mrs. Clint Anderson
Wichita
Overend and Boucher, architects



Fred Gund

When the Clint Andersons started looking around for a homesite, they had one definite requisite in mind. They wanted trees and plenty of them. Though finding a deeply wooded plot in Kansas is not the easiest thing in the world, patience rewarded their quest, and soon they were busy with architects and plans, putting their dream house into shape. The architects Overend and Boucher knew immediately the kind of house best suited to the site and, without hesitation, produced one that was homely and comfortable, without too much emphasis on any particular style. It's a low-eaved house, part brick, part shakes painted white, and held down to its site by a low-pitched gray roof. Alongside the entrance, target of all eyes, is a white wheelbarrow, gay with bright-colored petunias.

The plan is a rambling one, with emphasis on the living room and recreation room, which are placed back to back and share the same chimney. This allows each to enjoy its own fireplace. Walls in the living room are soft green with plum-colored fish nets draping window heads; the recreation room, on the other hand, is warm with yellow walls, green asphalt floor. Since nights are often very warm in Wichita, the Andersons insisted that all sleeping rooms have cross ventilation. A feature of the master wing is a separate entrance from the hall which, when closed, forms a suite and gives added privacy to bath and extra-large dressing closet.

Primer . . . House

(Begins on page 6)

northern areas it is advisable to find out the attitude of mortgage institutions toward the basementless house before deciding upon one.

HOW MUCH CLOSET AND STORAGE SPACE SHOULD BE PROVIDED?

Did you ever see a house with too much closet and storage space? Nothing adds so much to the convenience of housekeeping as a whole-hearted compliance with the old adage about a place for everything and everything in its place. Make a list of everything you have to store and keep in its place and plan in advance.

SHOULD PLANNING STOP AT THE HOUSE WALLS?

By no means. The plot is just as much a part of the home as any room in the house. The trend toward outdoor living has made tremendous strides in the last two decades. Plan porches, terrace and garden to expand living and dining areas in pleasant weather or, put the other way round, so that the attractive features of your plot may be brought figuratively into the house.

DO THE MATERIALS OF WHICH A HOUSE IS BUILT AFFECT ITS COST?

Design and planning probably cannot of themselves hold the cost of small houses down to the levels that the great bulk of those needing and wanting them can afford. Outmoded tradition must be cast aside not only in the design of small houses but in the use of materials and methods of construction. Almost every architectural style that has developed through the ages sprang from the use of materials that were cheap and conveniently near. In countries with an ample supply of forests, wood was the cheap and logical material. Where stone could be quarried close by, stone was used. Where neither wood nor stone was to be had, brick or adobe was the choice. Wood shingle, slate and tile were the roof materials in their respective areas for the same reasons. We are now living in the machine age when new factory-made products of plastic, gypsum, asbestos, asphalt, light metals, paper, sea weed, soy bean, coal, paper, even milk, may well take the place of the traditional natural materials—and come to cost much less. In the light of the history of home building, such development is the logical one to expect. We do not continue to use the candles and oil lamps of our grandfathers just because tallow and kerosene are still available. Why should we continue to insist on their designs, building materials, and construction methods if better and cheaper ones may be had?

GOOD LIVING—Inside and Out

Arthur T. Brown and
Richard A. Morse, architects

TUCSON, ARIZONA, HOME OF MR. AND MRS. E. H. PETTY

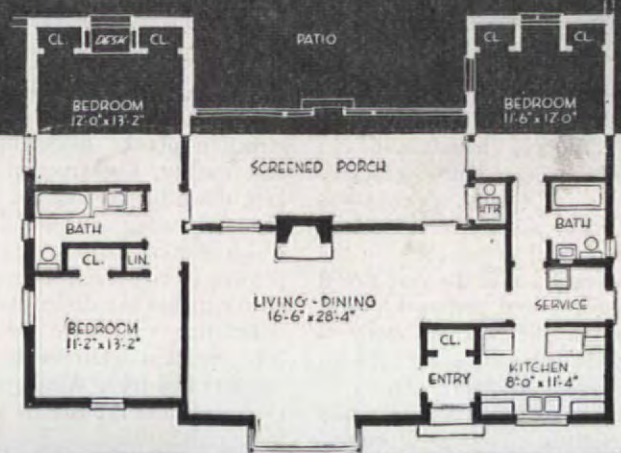


Maynard L. Parker

Ruth W. Lee

THERE is nothing regional about good design; it makes sense anywhere. The design of the E. H. Petty house, for example, would be as appropriate in Maine as it is in Arizona. It is a house that offers large scale comfort at low cost. The Pettys had their architects, Arthur T. Brown and Richard A. Morse, design this house to incorporate many ideas and details which appealed to them in other houses they had seen. Noteworthy in a small house plan is the east wing which includes master bedroom, a room for the daughter of the family and a guest room. A feature Mrs. Petty particularly likes is that of having the living-room bay window and the kitchen on the north front. In this way, both rooms in which she spends most of her time during the day face the mountains. She has found, also, that the car port on the west is both convenient to the kitchen and helps keep out the hot afternoon sun.

Another example of intelligent use of space in planning is the small dining room with built-in buffet. The room is large enough only for a



White brick wall of house is continued to the rear to provide privacy for porch terrace. Attractive awning keeps summer sun out of house

Planning Primer... Construction

(Begins on page 8)



Off-white walls in living room furnish neutral background for green, rose and blue tones in draperies and furniture. The living-room carpet is green

simple, modern table and chairs. By cutting the size of the room, however, the Pettys have additional space for a living room of generous proportions and a porch which serves as an outdoor sitting room most of the year. A wall of windows on the porch makes it useful the year round as a sunroom and screened porch. Facing south, the porch is sunny in winter, while the awning over garden terrace keeps it cool in summer.

The walled patio at the rear, which is characteristic of southwest homes, gives privacy for outdoor living.

Though house and lot are small, there is a spacious feeling plus flex-

ibility and comfort for family living.

The materials used in the construction of the house are of the best quality. Construction cost was kept down by keeping the lines simple and using an unbroken roof which eliminated valleys, always expensive to construct. This same simplicity makes the design outstanding.

Exterior walls are of common brick painted white with burgundy shutters and trim. Windows are steel casements and the roof is of sixteen-inch cedar shingles. The low patio wall and the outdoor fireplace at the rear are built of common brick and painted white the same as the house.



Outdoor fireplace, dining table and built-in benches in far corner of patio. Here the Pettys and their college-age daughter entertain their many friends

building job. Moreover, he furnishes the various types of equipment needed in a building operation. Often the caliber of a contracting firm may be determined by the caliber of the men and subcontractors it uses or has used over a long period of time. Good workmen like working for an honest, sincere boss, and those in the building trades are no exceptions to the rule. Those workmen who take a real pride in their craft usually prove to be the men of highest quality. They will be both honest and efficient.

WHAT FACTORS MAKE FOR A HAPPY RELATIONSHIP BETWEEN OWNER AND GENERAL CONTRACTOR?

Remember that a contractor has agreed to do a job for you, usually at a fixed price and in accordance with the plans and specifications of your architect. Of course, you can hold him to that agreement—by law if need be—but houses are not built by legal writ or court decisions. You, as owner, have certain responsibilities also. To avoid trouble, here are a few points to keep in mind. Let your architect be your contact man with the builder. Don't haggle with the builder and never argue with his crew. Don't raise objections about delayed deliveries. The dealers want to supply you, and the delays cost the contractor money.

Don't worry the contractor or yourself about workmen or subcontractors; it costs him more than it costs you when they are not on the job. Rising costs when the job is underway, come out of the contractor's pocket not yours. If he's smart, he'll get the job done as quickly as possible. Your contractor wishes, even more than you do, that he could control the weather. Another thing to keep in mind: you are entitled to performance in accordance with drawings and specifications—nothing more—except as an extra.

WHAT ARE THE FUNCTIONS OF THE ARCHITECT DURING THE BUILDING OF THE HOUSE?

Before construction starts, he has already drawn complete working drawings and specifications. If that

were his only contribution to the successful building of your home, his fee might be considered exorbitant. Actually, the plans and specifications are only the beginning of the architect's services. He not only suggests reliable contractors, but makes up the instructions to bidders, explains the plans to them, and obtains their proposals in standard form.

The specifications drawn by the architect are one of your principal safeguards. They specify the materials the builder must use and how he must use them. They should be complete in every detail, clear and unambiguous. Specifications for even a small house may run into 50 typewritten pages. To the architect, they are the difference between a good job and a poor one, and it is his responsibility to see that the contractor lives up to them. During the course of erection, the architect will make periodic inspection visits to the site. In this way, he is constantly in touch with the workmanship and quality of materials being used. Furthermore, he instructs you when to make payments and also what amounts to pay. He represents you in any disputes with the builder. At the end of the job, he certifies to the owner's final acceptance of the house after which claims against the contractor cannot be legally enforced.

HOW IS A HOUSE CORRECTLY LOCATED ON ITS PLOT?

The conscientious builder will stake out the house with "batter boards" at every corner. Then, in order to establish the proper elevation for the top of the foundation wall, he will place several grade stakes. At this time the architect should be on hand to check location and elevation. Often grades established on blueprints need adjustment when the building is first staked out.

WHAT SHOULD HAPPEN TO TOPSOIL DURING EXCAVATION?

The topsoil should be carefully removed and placed where it will be available for the later laying out of a good lawn. Topsoil is valuable. The builder who carelessly mixes it

up with the lower strata of hardpan, sand, and gravel, saves a few dollars, but thereby he indicates too great an inclination to skimp. He will probably bear watching later on.

HOW CAN A GOOD EXCAVATION JOB BE IDENTIFIED?

A good excavation job should have clean, straight edges. These edges should be as close to the outside of the foundation as possible. Backfill is never as solid and as impervious to water as the original soil. An irregular, overlarge excavation that requires a lot of backfill is often an invitation to a future wet cellar.

WHAT ARE FOOTINGS? WHY ARE THEY IMPORTANT?

Footings constitute the base on which the house rests. Properly installed, they are assurance against settlement. Footings are placed under the foundation walls and may be of concrete, stone, or solid rock. In any case, they project beyond the width of the foundation walls on both sides. In ordinary soil they are at least twice the width of the walls and range from 6" to 1'0" thick. They are important to any kind of house since settlement causes cracks in plaster, sticking windows, sagging doors and floors, and countless other house ailments. If of concrete, the mix must be a good one. A standard mix is one part cement, 2½ parts of washed sand, and 3½ parts of gravel.

HOW IS A GOOD CELLAR FLOOR LAID?

As a foundation for your cellar floor, a good builder will carefully level 6" of cinders or gravel. Then over this base, he will lay a *waterproof* layer of tar paper, being careful to tar all joints. Then the concrete floor will be poured on top of this waterproof paper. In most cases this concrete slab is 3" or 4" thick and finished with a 1" finishing coat of waterproof cement. Joints will be tarred between floor slab and foundation walls because this is where water troubles develop in cellars.

WHAT ARE THE BEST FOUNDATION WALL MATERIALS?

To a great extent, this depends upon soil conditions. Cinder block is cheap, and, if sub-surface water is not a problem, it is safe to use this material. However, if there are indications of water in the soil, cinder block, because of its porosity, is not

the satisfactory answer. Concrete block or poured concrete of good mix with waterproofing compound added are your best bet for wet locations. An outside coating of waterproof cement, about 1" thick, is added guarantee for a dry cellar. This coating should run from the top of footings to at least 6" above the finished grade. Whatever materials are used, always make certain that the top of the foundation walls are absolutely level.

IS A FOUNDATION DRAIN ESSENTIAL?

Only in locations where sub-surface drainage is quite slow. If you are in any doubt, however, install foundation or footing drains. It is much more economical to install the drains when the foundation is being put in. After backfill is in place, re-excavating becomes a major endeavor. The purpose of foundation drains is to lead water below and away from the foundation walls and also from under the cellar floor.

CAN BACKFILLING GIVE ANY CLUES TO A BUILDER'S CHARACTER?

Yes. A careless builder will use the operation as a means of getting rid of debris. Backfill should be carefully done to make the filled area as impervious to water as the surrounding earth. Good solid earth should be shoveled in a foot at a time, tamped, wet down, and again tamped.

Poorly packed fill will allow rain water to seep down along the outside of the foundation and leak in through very slight cracks or unavoidable porous spots in the masonry which would otherwise never be noticed. Deep wet spots are also excellent locations for termite colonies. It will also settle to some extent and require additional filling with soil in the future. Of course rubbish in the form of tin cans and odd bits of lumber will rust and rot until they collapse and add to the problem of settling. Since the water will drain through it very quickly, there will not be enough residual moisture to adequately feed shrubs planted next to the house, and thus it will prevent the development of an attractive landscaping treatment.

When properly done, with a good bed of top-soil for the last foot or so, there will be a moist bed of soil for planting, and the rest of the water will drain away from the building where it will do no harm.

IS IT NECESSARY TO HAVE A SEPARATE FLUE FOR EACH FURNACE, FIREPLACE, OR STOVE THAT USES THE CHIMNEY?

Yes. While in some instances several units on one chimney flue

seem to be functioning properly, the operation efficiency is reduced, resulting in greater fuel consumption. There is also the strong possibility of back drafts, and of partially consumed gasses entering the building through the connections of the heating units that are not in use.

WHERE IS IT BEST TO PLACE THE CHIMNEY?

When placed well toward the center of a house, the chimney will operate better and often last longer. The heat from the chimney is not lost to the outside, but is added to that in the house. When the oil or gas fire is off, or the coal fire is low, the chimney does not get as cold as one that is exposed to the outside on one or more sides. Such a cold outside chimney causes a back pressure in very cold weather when the fire first starts, often resulting in soot and gasses leaking into the house.

WHAT IS A SILL? WHAT IS ITS PROPER FUNCTION?

The sill is the point where the house and foundation meet. It is a piece of timber securely anchored to the foundation by bolts that, sunk into the foundation wall, project far enough up to pass through the sill and be capped by washer and nut. The main reason why the foundation wall must be level is to enable the sill to rest evenly without the jerry-practice of shimming it into place with shingles. The tie-bolts, often left out in cheap work, should be set about 8'-0" apart. The underside of the wood sill should be given a good coat of waterproofing.

WHAT IS A PLATE AND ITS FUNCTION?

The plate is a wood member resting on top of the outside studs. Roof rafters extend from this plate to the ridge board that forms the peak of the house. The plate end of each rafter is cut to sit firmly on the plate, angle of cuts depending on pitch of roof. At least 3" of rafter should rest on the plate. The peak end of each rafter is cut, fitting flush against the ridge board. Be certain that all timber is of thickness and width called for by drawings and specs.

WHAT ARE STUDS AND HOW SHOULD THEY BE PROPERLY SET?

Studs, usually 2" by 4", are the vertical members that rise from

the sill to form the framework for inside and outside walls. They should be set 16" apart from center of one stud to center of the next. They are usually doubled at door and window openings and tripled at corners. Framing details are available for the three main types of residential construction: platform, balloon and braced. Whichever is called for in your specifications should be followed throughout the entire job.

SHOULD STUDS BE BRACED FOR EXTRA STRENGTH?

Regardless of the type of construction, a quantity of bracing and bridging is required. The absence of diagonal bracing in the frame and of crisscross bridging between floor joists, is something to query the architect about. Do so before the outside sheathing hides the fault.

HOW SHOULD OUTSIDE SHEATHING BE APPLIED TO STUDS?

Shiplap or other sheathing should be applied diagonally for better bracing. Recently, various kinds of wallboard and plywood have come into common use as sheathing. These may be applied in large sheets and save a great deal of labor. Between sheathing and outside finish goes a layer of roll felt or heavy building paper to prevent entrance of moisture.

WHAT STRUCTURAL DEFECTS CAUSE FLOOR TROUBLES LATER ON?

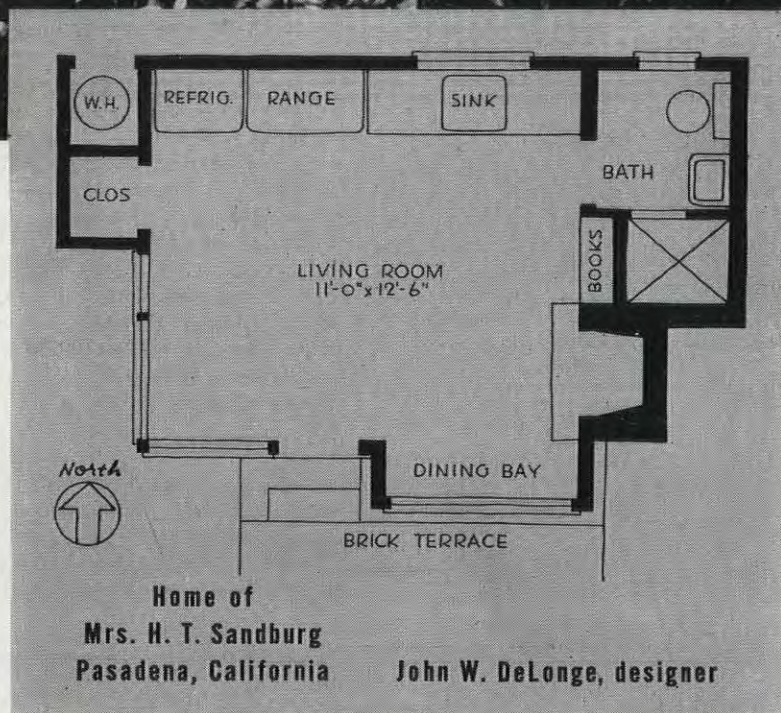
Common floor troubles may develop from undersized joists, lack of cross bridging between them, and from inadequate nailing. Check all three during construction. The sub-floor should be laid diagonally, each board taking two nails into each joist. Every board of finished floor should be nailed to every joist. Skimping on this will cause buckling, squeaks, and looseness, later on, plus discomfort and expense.

DOES A CONTRACTOR HAVE ANY RESPONSIBILITY REGARDING GRADING?

This depends on your contract. Most agreements provide that the contractor will "rough grade" after removing debris of building. Unless agreement specifically states that he shall do it, "finished grading" is not his job. Building debris should be removed from site or buried deep under surface. Remember a good lawn requires at least 6" of topsoil and improperly buried matter will often interfere with this growth.



Photographs by Maynard L. Park



Mrs. H. T. Sandburg and teen-age daughter discover that compact modern planning can mean comfort aplenty

Accordion Pleated Comfort —in a one-room home

Martha B. Darbyshire

Too little attention has been given to the one-room house during this housing shortage. It is such a sane, logical solution to the great problem, especially for young couples. Besides the obvious savings that are effected in construction costs, think of the advantages to contractors. The smaller the house, the shorter the time required for construction, and this means a lot to builders these days. The suppliers, too, must be very thankful to Mr. DeLonge, the designer, and Mrs. Sandburg for using a minimum amount of building materials, thus giving them a chance to build up their sadly depleted inventories.

On top of all this, Mrs. Sandburg and her daughter have a house that has many advantages. Housekeeping chores are cut to the bone in a house so small, yet the house has all the comforts of many of its large prototypes. The kitchen is at the north end, and is complete. Refrigerator and range are concealed by a screen when not in use, and a wooden panel covers the sink so that it becomes a handsome cabinet.

Oriented to the sun, the little house is provided with a paved, open side terrace for warm weather. The terrace is screened with lattice, which is painted the same olive-green color as the rest of the house.

Planning Primer

... Mechanical Parts (Begins on page 9)

roof. The main house trap should be installed in the cellar on the main drain. This main drain must have a fresh-air inlet inside the main trap.

IS A PRIVATE SEWAGE DISPOSAL SYSTEM ADEQUATE AND SAFE?

Yes, if soil conditions are reasonably normal, if the system is properly installed, and if the plot is large enough to provide a drain field. The latter is a most essential part of any system. The system starts with a septic tank in which the sewage disintegrates through bacterial action (the old-fashioned cesspool is inexcusable). From the tank the liquids are discharged into the tile disposal field, placed from 15" to 18" beneath the ground surface and gradually absorbed by the soil. Soil bacterial action and air render them harmless in a short while.

WHAT DOES THE TERM ADEQUATE WIRING MEAN?

Adequate wiring includes: (a) an adequate electric service entrance, that is, having enough wire to bring as much electricity as your home may need at any time; (b) enough cir-

cuits, with large enough wires to carry electricity, at full power, for all the needs of the house; (c) enough convenience outlets, in the right locations to permit convenient and efficient use of all appliances, lamps, radios, etc., without having to resort to unsightly tangles of extension cords which are also a fire hazard.

WHAT ARE THE SIGNS OF INADEQUATE WIRING?

They are many. Blinking lights, sluggish operation of appliances, too few lighting fixtures, outlets and switches, unsightly, unsafe tangles of extension cords, frequent blowing out of fuses and opening of breakers are among the common danger signals.

HOW IS ELECTRICAL CURRENT BROUGHT INTO THE HOUSE FOR DISTRIBUTION?

Voltage in the street line is stepped down by a transformer to the proper domestic voltage at the pole from which your house line is fed. The electric company usually runs the feed line to the house at the point where the current is metered, and the fuse box is located for the circuits.

Planning Primer

... No. 7 Heating (Begins on page 13)

the house is often found to be quite suitable. Place the control approximately four feet high from the floor.

WHAT IS THE CAUSE OF UNEVEN HEAT IN AUTOMATIC SYSTEMS?

Aside from the impossibility of consistently maintaining even heat throughout the house with a single thermostat, it is also difficult to maintain a steady temperature at the location of the control, due to a number of factors. One is the lag in the arrival of heat after a call by the thermostat. The other important item is the fact that there is a differential of approximately two degrees in the

temperatures for the control to turn the heat on or off, in most equipment. In addition a bit of delay in the halting of the heat distribution, when the fire is turned off, sometimes causes a bit of overheating.

A constant flow of the heating medium, with the temperature under control, will provide excellent, even heat with warm-air and hot-water systems. The temperature of the continually flowing air or water can be controlled by mixing dampers or valves. Outdoor-indoor controls can also be used very effectively with this type of heating system. Continuous flow of heat reduces or eliminates stratification of the air temperatures which usually results from the heated air rising to the ceiling in the periods between active supply of heat in a

system that is going on and off.

Reduction of the lag in steam systems can be effected by the use of vapor-vacuum controls and valves. In addition, thermostats have been developed to increase the sensitivity and reduce the range of action or differential to a fraction of a degree. One of these operates by the change in the electrical conductivity that occurs in wire, due to a change in temperature, a new use for an old fact.

WHY IS ZONE CONTROL NECESSARY, AND HOW IS IT ACCOMPLISHED?

During the day it is not usually desirable to maintain the bedrooms of a home at as high a temperature as the rooms that are in use, since there is a waste of heat and fuel involved. Despite insulation, weatherstripping, storm windows, and sound construction, the location of the greatest heat loss varies with changes in the wind and with the time of day due to heat from the sun, making one part of a house colder than another from time to time. A single thermostat cannot make adjustments to overcome the variations that will occur. Correction can be effected to some degree by shutting off registers or radiators, and by closing the doors of certain rooms, but the result is not always satisfactory, and is certainly not convenient. Thermostatically operated registers and radiator valves can be had to provide single room control with warm-air and steam systems and thus improve the situation somewhat.

By dividing the total area that is to be heated into two or more zones, and having a thermostat for each zone, the different areas can be kept at individual and more even heat levels. This can be worked out to provide special control of temperatures in single rooms, if desired. Such a system of zone control or modulated heating requires a very complete design that includes valves and dampers for mixing heated and cool water or air, and controlled pump or fan pressures. It amounts to an individual heating system for each zone, with all the heat coming from one warm-air furnace or hot-water boiler for the combined systems.

HOW DOES AN OUTDOOR-INDOOR CONTROL WORK?

It anticipates the heat loss for the house due to changes in the outside temperature, and starts to supply the right amount of heat before the inside temperature has changed sufficiently to cause a room thermostat to call for heat. The thermostat is located outdoors and controls the temperature and sometimes the flow of the heating medium by a mixing damper or valve and a temperature controller, in a continuous flow heat-

ing system. An indoor thermostat can be used for additional correction, compensating for indoor changes, or controlling individual room or area requirements in a multiple zone system.

WHICH OF THE COMMON HEATING FUELS IS BEST, AND WITH WHICH HEATING SYSTEMS CAN EACH BE USED?

Any one of the fuels, coal, oil or gas, will provide excellent heat when used with a properly designed furnace. The chief difference between them is economy. The matter of control has already been discussed. When coal and ashes are handled properly and with care, and when an oil burner is well adjusted, there is no difference as far as cleanliness is concerned.

The various heating systems can use any one of these fuels satisfactorily. Once the fire is started in a furnace of the right design, the warm air, hot water or steam will distribute the warmth through the house regardless of the fuel that is used.

WHICH FUEL IS THE CHEAPEST?

The comparison of fuel costs varies a great deal from one locality to another. After the architect, builder, or heating contractor has calculated the probable heat loss of any particular building in British Thermal Units, B. T. U., the seasonal requirements for each fuel can be determined.

Next the heat value of the available fuels must be considered. The number of B. T. U. in gas varies from a low of 500 to a high of 1,100 per cubic foot. Fuel oil contains approximately 140,000 B. T. U. per gallon. Coal and coke vary from 10,000 to 14,000 B. T. U. per pound.

After determining the heat value of the various fuels that are available locally, divide the seasonal requirements by the unit B. T. U. values for the cubic feet of gas, gallons of oil, or pounds of coal or coke needed. Applying local prices to quantities will give the estimate for each type.

In coal country, such as Pennsylvania, coal is apt to be the most economical. Where gas is cheap, because it comes from local wells, it should be the least costly. The same is true for oil. Where none of these is a local product, the costs may provide a negligible basis for economical choice.

IS FUEL COST THE ONLY FACTOR IN SELECTION FOR ECONOMY?

No. Costs also vary for the equipment, and the products of various manufacturers will differ in price and estimated life. Dividing the installed price of the heating unit by the num-

Primer . . . No. 7 Heating (Begins on page 13)

ber of years of service that is expected, will give the yearly cost of the initial investment. Different types of equipment also require varying amounts of yearly maintenance and cleaning, which will have to be considered for a complete study of economy. The total of the yearly equipment, maintenance, and fuel estimates will provide a figure on which the economical selection of fuel and furnace can be based.

CAN ELECTRICITY BE USED?

Where electric power is cheap, as in the Tennessee Valley area, heat can be produced by electricity very economically and practically by several systems. One, ceiling panels that are warmed by electricity, will give radiant panel heat as was mentioned last month. An electrically conductive rubber panel of this type is already on the market, and a radiant glass panel has recently appeared. Standard types of furnaces have been adapted to the use of electric heat units. The heat pump is another means of providing heat by electrically operated equipment. Numerous small electric units are available which are either portable or can be built-in. These provide radiant or convection heat for individual rooms or areas.

WHAT IS THE HEAT PUMP?

It is also called the Reverse Refrigeration Cycle, and is an application of the operation of the electric refrigerator, reversed. The refrigerator extracts heat from the storage compartment, dissipating it through a radiator or convector to the air in the room. Similarly extracting heat from the outside air, the ground, a stream, well water, or other fairly stable heat source, and dissipating it within the house, the home can be heated. By a heat exchanger or other equipment, the heat is transferred to one of the usual systems for distribution throughout the building.

Development of this type of heating unit has been going on for a number of years, some residential installations are in operation, and a few manufacturers have units on the market. The equipment is readily adaptable to reversing in the summer, cooling the house instead of heating it, with a forced-air system.

CAN THE HOUSE BE HEATED BY THE WARMTH OF THE SUN'S RAYS ALONE?

Experiments have been made to develop a system of storing heat from the sun and using it to heat the home, but so far no such equipment

is on the market. However, advantage can be taken of the heat from the sun to supplement the efforts of the heating plant as mentioned in the 5th installment of "THE AMERICAN HOME Planning Primer," page 10.

CAN AN OLD COAL FURNACE BE CONVERTED TO BURN OIL OR GAS, AND VICE VERSA?

The most efficient result in consumption of any fuel is effected in a furnace that is designed with that particular fuel in mind. However, many coal furnaces can be satisfactorily switched to the use of oil or gas by the installation of conversion equipment. Most of the modern oil- or gas-burning units are not susceptible to conversion to another type of fuel, though there are some furnaces that are designed for comparatively efficient use of any one of the three fuels—when using proper burners.

WILL INSULATION AFFECT THE INITIAL COST OF THE HEATING PLANT AND THE COST OF OPERATION?

Very definitely yes. The size of furnace or boiler, the size and number of registers, radiators, convectors or panels, and pipes or ducts, and the amount of fuel consumed are determined by the amount of heat lost by the house. Insulation, storm windows and weatherstripping all reduce the loss, and the amount of heat that must be produced and distributed by the heating system. This permits the use of a smaller and less costly initial installation, and reduces fuel consumption considerably.

DOES THE USE OF EQUIPMENT AND MATERIALS OF RELIABLE MANUFACTURERS INSURE SATISFACTORY HEAT?

No. While the quality of the equipment is important, the designer and installer are equally important. No one manufacturer makes everything required for installation, therefore the designer must be skilled in determining the needs of the project, and assembling the components.

The installer is also important because the work, and adjustments must be right or the best materials and design will not provide satisfactory heat.

Another very important item which must be considered in getting the best results from the heating system is the periodical and emergency service. Even the best installation requires annual cleaning and adjustment, and occasional repair. A good service man will have a stock of parts so you will not be without heat long while repairs are made.

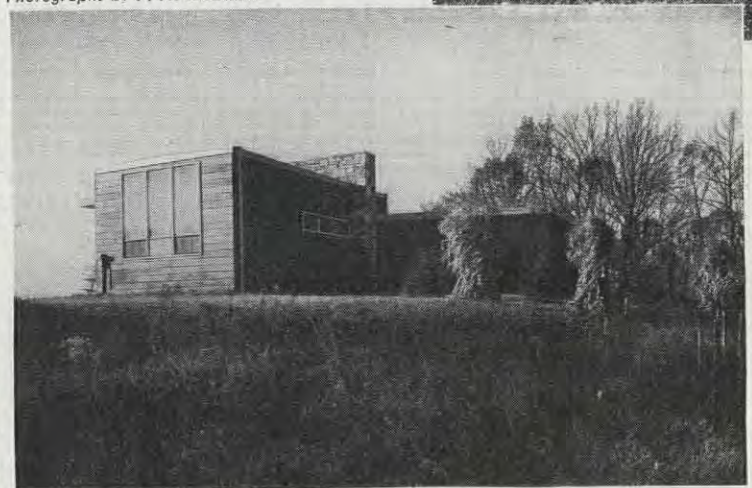
PENNSYLVANIA MODERN on two acres

William J. Hennessey

An attractive modern house in a rustic setting is the home of the Joseph Diano family. The Dianos built their house in a co-operative community called Bryn Gweled about 20 miles northeast of Philadelphia. It is one of twelve houses so far completed in the 240-acre tract the community bought back in 1940. Like the other houses in Bryn Gweled, the Diano house is on two acres of fields and woodland.

The large windows in the studio-

Photographs by P. A. Dearborn

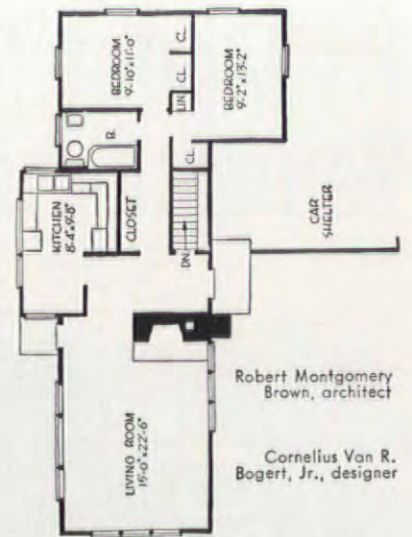


North light captured by the oversized sash in studio-living room of the Joseph Diano house





The Dianos leased two acres of living space on which to build their spacious and bright modern house. Heavy overhanging eaves bring in winter's sun and provide shade in summer



living room are on the north side of the house. This room was practically built around the large north window since it also doubles as a studio for Mr. Diano who is a stained glass artisan. Mrs. Diano and the wives of the other Bryn Gweleders frequently use the room also when the sewing circle meets. Ceilings in the studio-living room are 10 feet high, adding greatly to the spaciousness of the room. Large glass areas on the east and south sides of the house are provided with overhang to utilize heat from the sun in winter and to keep the sun out in summer. These windows afford a good view of Bryn Gweled's rolling countryside.

The Dianos, like many of their friends and neighbors in the community, did much of the work on their house themselves. A contractor erected the framework and sheathed the house and then the Dianos took over the work from there on. They installed the steel sash, put on the siding and did all the finish work on the interiors. By doing so much of the work themselves, they were able to get much more house for the money they had to invest. There is no paint or varnish on the exterior and the interiors are natural wood also, but varnished. Fireplace, forming one wall of entry, is of fieldstone.

The kitchen is U-shaped with ample dining area at the north end. One of the fine features of this plan is that the kitchen is easily accessible to the car shelter and also to the basement stairs. The basement extends under the living room, entrance hall and kitchen. There is only crawling space under the bedroom wing.

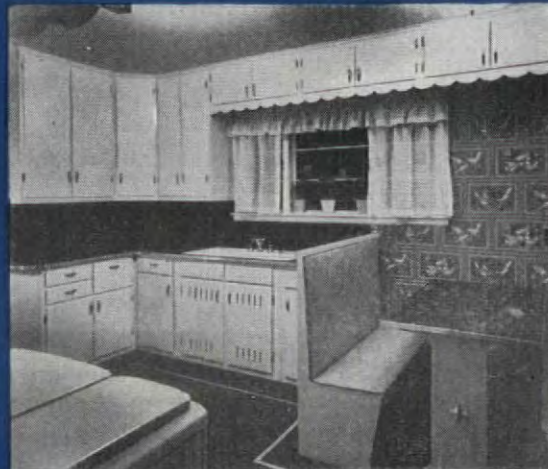
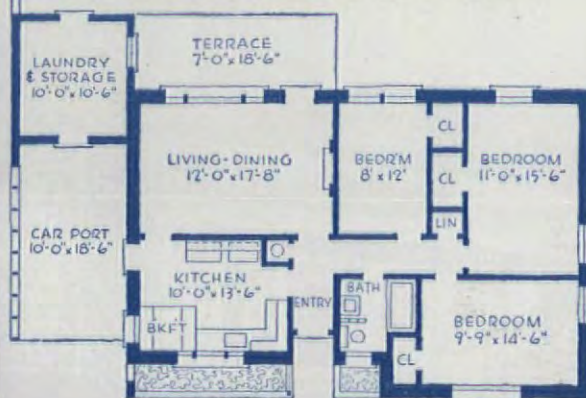
The Dianos do not own the land on which their house is built. Like the other homesteaders who live in Bryn Gweled community, they lease the land from the community on a long term lease. This arrangement was agreed upon before the houses were built so that it would be possible to have the community retain its character and principles. Otherwise, it was felt, some of the property might be willed or sold to persons who did not have a genuine interest in co-operative living, therefore losing the whole purpose and spirit of the original venture.

Model for Young Living

Photographs by Cathey's Studio



Turner and Johnson, designers and builders



Milton and Gwen Atkinson

CRAMMED into this ranch-type house, built as one of a group at Tulsa's Model Home Show, are a number of bright ideas which should appeal to any young couple with growing children. The car port, for instance, can double as a play area, and the spacious utility room just beyond is placed for adult supervision while mother attends to the laundry. A door opening onto the brick terrace leads to a drying yard at the rear.

The center of family activity is bound to be the small den-guest room with its gay Chinese-red ceiling, a color echoed in the plaid upholstery of the sofa bed and the tapes of the Venetian blind. Rich-brown "Streets of Paris" wallpaper adds an interesting background for the many activities provided, activities which include sewing, writing, or plain old-fashioned loafing. In the well-lighted living room, the fireplace wall is of striated plywood painted soft moss green. At the dining end of this double-purpose room a large indirectly lighted mirror adds much to the spacious appearance. Rose-colored draperies, rich-wine table lamps, and lounge chair are well-selected accents for just the right informal dignity.

There's a well-planned, U-shaped work area in the kitchen, well supplied with mill-made wood cabinets, and gaiety is provided by the yellow of the leather upholstery on breakfast alcove benches and the yellow-and-aqua hand-blocked wallpaper.

Oklahoma



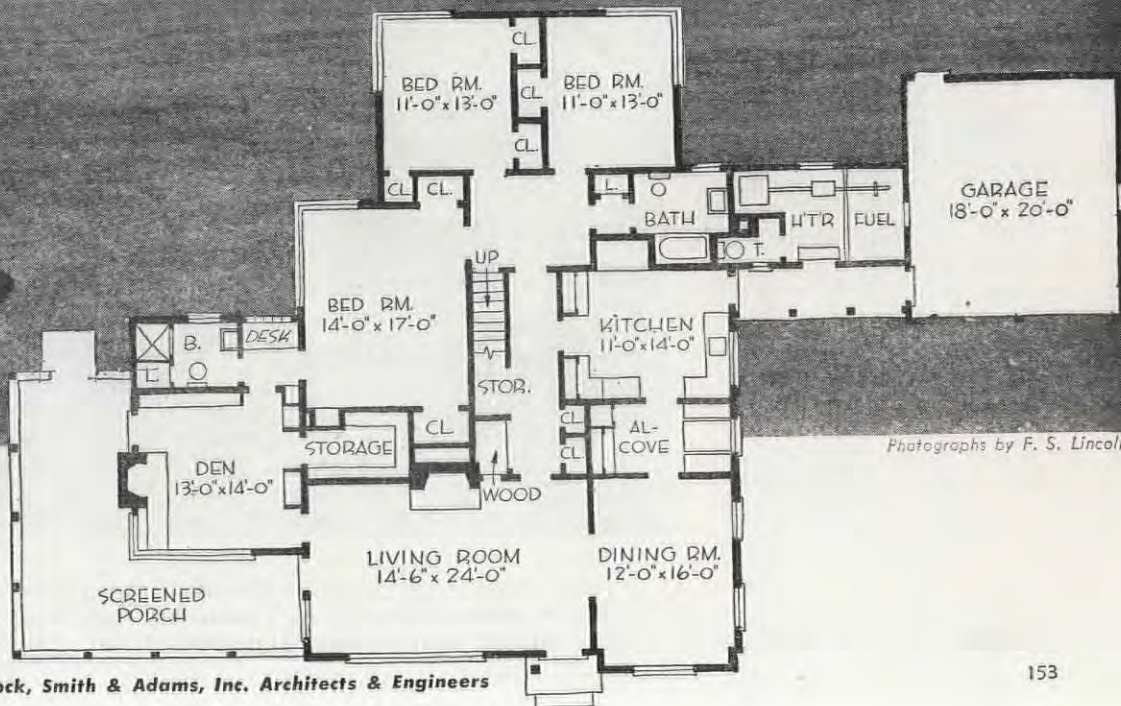
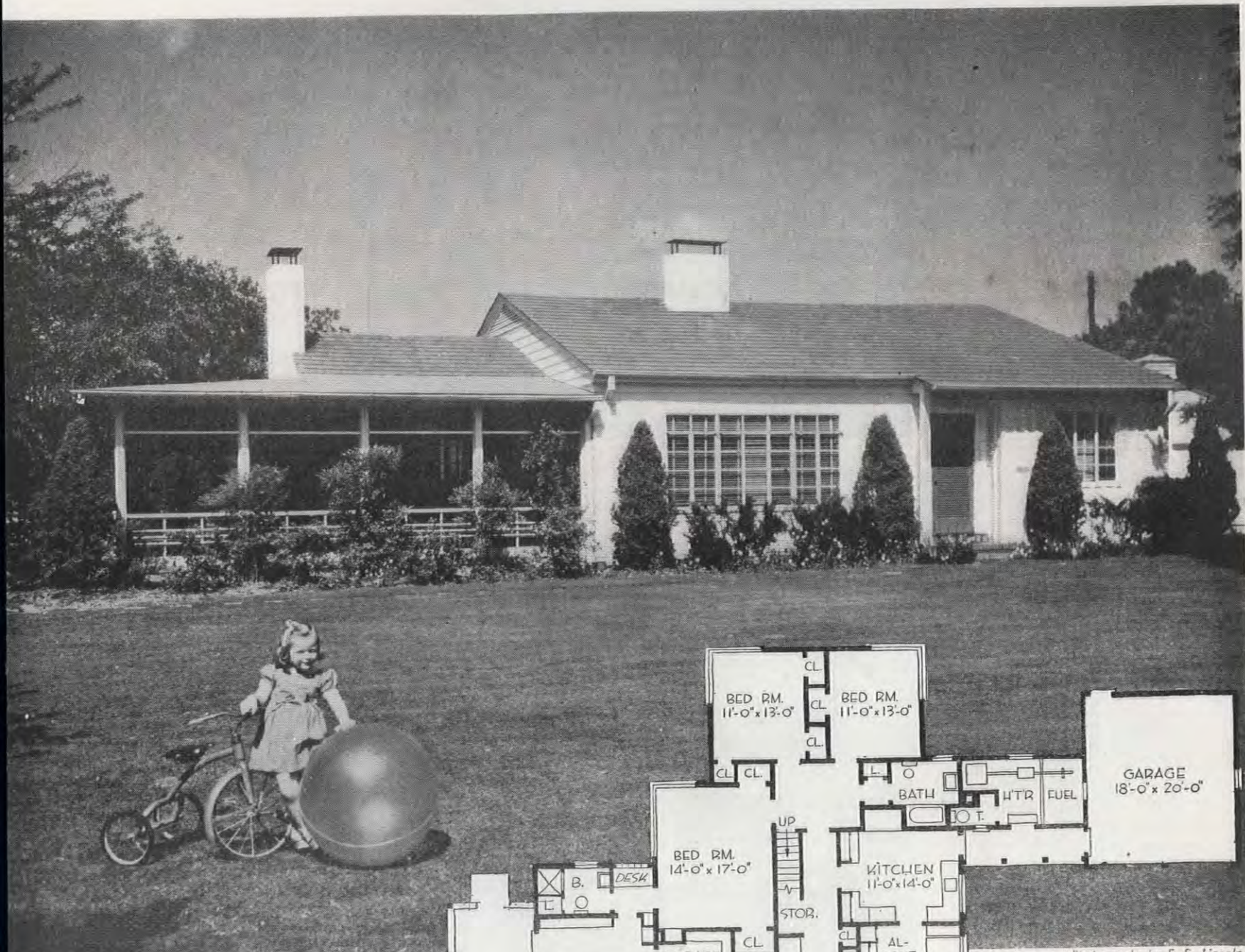
Recessed concrete block entrance wall provides spot for gay planting and adequate weather protection

Alabama

WHEN an architect designs his own home, it's always an occasion for sitting up and taking notice. In this book we show many such examples. Chalfant Head, whose home appears on page 48, offers an excellent sample of a really expandable house. Moreland Griffith Smith built his home all at one time. He had plenty of land and so, a more expansive, rambling plan seemed a proper choice. All rooms are on one floor; all rooms have been arranged for maximum privacy. This has been accomplished by a series of small interior hallways which cut circulation into certain set patterns. For instance, access from the master bedroom to kitchen can be accomplished without disturbing the occupants of the living room. The adults may use the den and master bedroom without interfering with the youngsters entertaining in the living room. The den, too, may be drafted into service as an extra guest room, since it has been placed conveniently near a private bath. It is a large house, one designed for hospitality and expansive family living. In addition to a well-proportioned dining room, we find a breakfast room which

Design for

Complete Privacy



Photographs by F. S. Lincoln

The Home of Mr. and Mrs. ' Moreland Griffith Smith, Montgomery, Alabama

Planning Primer . . .

No. 8 Plumbing

(Begins on page 14)

Since the scale from hard water protects the pipe from corrosion to some extent, the conditioning should be planned to fit the particular water and plumbing system involved.


HOW IS CORROSION PREVENTED IN THE HOT WATER TANK?

The use of non-corrosive or corrosion resistant materials, such as galvanized steel, copper, bronze, monel metal; and glass, porcelain enamel, or stone lining for the tank is the most common precaution against corrosion. Also, a magnesium rod can be installed in a galvanized iron or steel tank to reverse the electrolytic action. The rod disintegrates, instead of the tank walls, and a protective coating is deposited on the walls. In addition, pipe corrosion is reduced since the action of the rod neutralizes some of the acid in the water. Water conditioners that eliminate corrosion of the pipe lines will also protect the water tank, of course.

IS IT WORTH WHILE TO INSULATE THE HOT AND COLD WATER PIPES?

Uninsulated hot water pipes lose a lot of heat, resulting in the use of more fuel to maintain the desired supply. In addition, when the water in the pipe becomes cold, all the water between the fixture and the tank must be drawn off before hot water arrives at the faucet. This wastes a surprising amount of water, an important item where the water is metered or supplied by an individual home system. The amount of water wasted this way can also be reduced by having the hot water unit as near as possible to the location of the fixtures, keeping the pipe lines short. The savings in fuel and water, and the convenience of a quick supply of hot water at the fixtures makes insulation definitely worth while.

Insulation on cold water pipes serves an entirely different purpose. It keeps the moisture in the warm and humid air, during the summer, from contacting the cold metal surface and condensing. The wet and dripping pipes that result from such condensation are very unpleasant, especially if the basement is to be used as a recreation room, laundry, shop or other area where summer dampness would be undesirable.



Gayly patterned wallpaper flanks simple yet dignified fireplace arrangement in living room . . . cactus green with accents of walnut brown are predominating colors . . . door leads into main hallway

may also serve as pantry, since it is located right next to the kitchen. A clever innovation is the hobby storage room off the den, where games and card tables may be neatly stacked out of sight. This is always a problem, especially in a home where there are children. Toys are usually bulky, cumbersome affairs at best, and are not provided for in house plans.

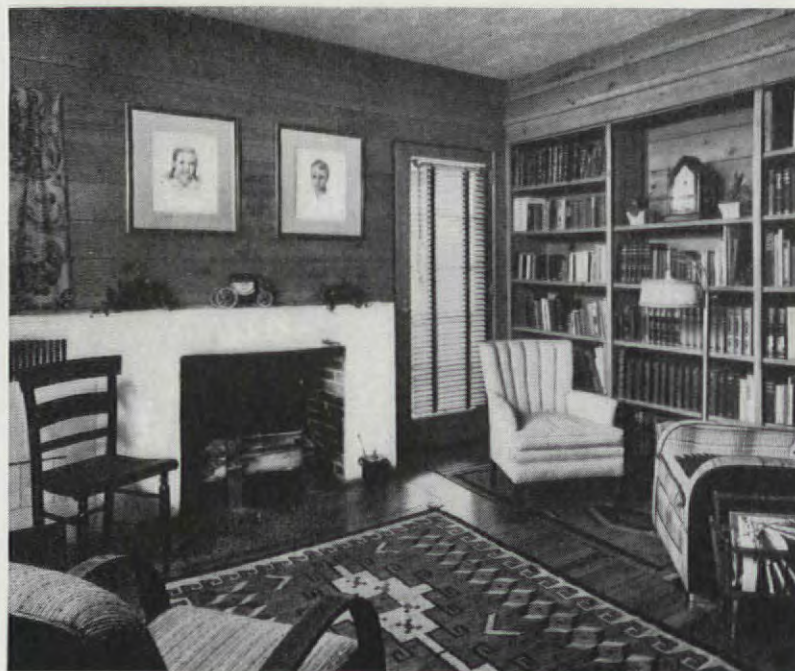
The exterior of this charming, low-eaved house is of siding, painted white and accented by a brilliant red door. The roof is of metal shingles. Because a porch can be used the year round in this part of the country, we find an ample, L-shaped screened one forming an important part of the front elevation. Its roof, lower than that of the main building, does much to settle the house low into its level plot. In fact, horizontal lines have been stressed everywhere on the exterior. A two-car garage, connected with the main portion of the house by a heater room and service porch, adds to the sprawly effect.

Entrance to the house is directly into the living room, where, looking straight ahead, one sees a graceful fireplace surmounted by a large mirror which reaches to the ceiling. Cactus green is the predominating color in this room, with accents of walnut brown. The color, plus furniture arrangement, creates an atmosphere at once modern and homelike. Floors of main living rooms are oak.

The den, with its built-in bookcases and distinctive fireplace arrangement, has natural cypress-paneled walls. Here's a room for quiet study or for enjoying the companionship of a few intimate friends. It is not large, and it is convenient to porch, living room, and master bedroom. In the dining room we find an unusual, yet exciting use of color. As contrast to the clear white wall, the ceiling has been painted red. A blond wood table and black Hitchcock chairs add further to the unconventional, colorful effect. A built-in cabinet under the window stores silver and linens.



Unusual color scheme adds great distinction to dining room . . . walls are clear white, ceiling bright red. Blond table contrasts nicely with black Hitchcock chairs



Den serves for small, informal gatherings or a quiet game of cards . . . paneling and bookcases in this attractive room of natural-finished cypress

Planning Primer No. 8...Plumbing

WHY IS IT BETTER TO HAVE THE PLUMBING PIPES LOCATED IN INTERIOR PARTITIONS RATHER THAN IN EXTERIOR WALLS?

During severe cold weather, plumbing in exterior walls, especially cold water pipes, may freeze. However, pipes that are located in interior partitions are warm as long as the house is heated, and cannot freeze. If the plan dictates an exterior wall location for the plumbing, and there is no reasonable way of changing it, freezing can usually be prevented by including extra insulation between the pipes and the outside of the wall.

HOW CAN WATER HAMMER IN THE WATER PIPES BE PREVENTED?

When water is flowing under the usual pressure and is suddenly stopped by the closing of a faucet, the inertia of the water builds up the pressure still higher and sometimes causes a noisy vibration. The way to prevent the extra pressure is to have a cushion in the plumbing system to absorb the shock and actually stop the movement of the water more slowly. An air pocket forms such a cushion, and there are special units that can be used. Water hammer is bad for the plumbing system, strains joints, and piping, and sometimes results in burst lines in old and corroded piping systems.

CAN ECONOMIES BE EFFECTED BY KEEPING ALL THE PLUMBING IN ONE PART OF THE HOUSE?

With the main plumbing work in one small area, you can have short supply lines which will save in the cost of installation and reduce the loss of heat from the hot water lines. Such centralization also reduces the labor and materials for the waste lines and vent. Bathrooms, kitchens, and laundries can be located back to back or in line vertically to get this sort of economical result in some plans.

Prefabricated units can be obtained that include the hot water tank, heating system, bathroom and kitchen plumbing all in one compact space. This sort of assembly provides short runs of all pipes and gives quick response when hot water faucets are

turned on. They are excellent for small houses where the kitchen and bathroom will be on the same floor.

WHAT MATERIALS ARE USED IN THE STANDARD, GOOD QUALITY BATHROOM PLUMBING FIXTURES?

Faucets, valve handles, visible drain traps and strainers, shower heads and other finished metal items are usually red brass with chromium plating. Toilet bowls and flush tanks are almost exclusively of vitreous china. Washbasins and bathtubs are made of porcelain-enameled steel and cast iron, and vitreous china, with some units made of other materials. The manufacturers are continually improving the materials for greater wear and resistance to staining, cracking, and other possible damage.

ARE THERE ANY OUTSTANDING DESIGN DEVELOPMENTS?

Manufacturers are continually improving details to provide greater sanitation, easier cleaning, more convenience, simplified maintenance, and better appearance. One of the principal trends is to have more flat space. Bathtubs have flat rims that can be used as a seat for the bather or for setting out toilet articles. Some washbasins have the area next to the wall raised, with the faucets on the face of the raised portion thus leaving clear space for toilet articles. Bath-tub heights are gradually being lowered for convenience and safety in entering and leaving the tub. In addition to the 5 and the $5\frac{1}{2}$ foot tubs, which are standard, there are now tubs, for use in a smaller space. One model is approximately 4 feet square with the bathing compartment placed on a diagonal across the square, and other variations are also available. Faucets and valves are being improved also for easy operation, maintenance and cleaning. Shower heads are available with variable sprays, and shower mixing valves can be had which dependably control the water temperature.

IS THERE ANY CHOICE OF TOILET BOWL DESIGNS?

There are three major types of toilet bowls: siphon jet, reverse trap, and wash down. These differ in regard to the depth of the water seal, the size of the water area, the flushing action, and appearance. The siphon jet, the best, has the deepest seal, largest water area, and most positive flushing action. The reverse trap has a shallower seal, smaller water area and different flushing action and is considered excellent, but not the best. The oldest, and most economical type is the wash down which has a shallow seal, smallest water area and simplest flushing action. Any of these can be used with flush tanks or flush valves. The flush valve works directly from the water pressure in the supply line, measuring out the amount of water flow by a metering device. The flush tank works by emptying into the bowl, and then refilling for the next use. The older flush tanks were located high above the toilet bowl, but the modern units are just behind the bowl, or combined very closely with it. Some toilet bowls and flush tanks are of one-piece design and construction.

The American Home Planning Primer No. 9...concluding Plumbing

(Begins on page 15)

the tank. Thus, in a tank with a recovery rate of 40 gallons per hour, and the cold supply temperature 60 degrees, the unit can heat 40 gallons to 120 degrees in an hour.

IS THE TOTAL VOLUME OF WATER THAT THE HOT-WATER TANK WILL HOLD USABLE?

No. When a large quantity of hot water is drawn from a tank, cold water rushes in, mixes with and lowers the temperature of that portion of the heated water which is at or near the bottom of the tank when the withdrawal is started. For figuring the size of tank needed, it is best to assume that two-thirds of the volume is available at the tank temperature setting. Thus, for a total withdrawal of 20 gallons, a 30 gallon tank is needed for really satisfactory results.

HOW ARE THESE FACTORS FITTED TOGETHER IN DETERMINING THE SIZE OF HOT-WATER UNIT TO BE USED?

First study the family habits, working out a timetable for baths, laundry, dishwashing, and other large uses of hot water. Starting with the assumed figures of 35 gallons for the tank capacity and 40 gallons per hour for recovery, or the actual figures for some particular tank that is being considered, subtract the amount of water used in the first withdrawal. Calculate how much water will be heated before the next batch of hot water is drawn. Add the recovery to what was left previously, repeat the figuring for the next withdrawal. Repeating this process through the complete day will show whether or not the tank always has adequate water heated for your needs. If the withdrawals at any time in the

period studied are more than two-thirds the amount of hot water that is ready, use the capacity of a larger tank as a basis and refigure the supply.

HOW HOT SHOULD THE WATER BE FOR BEST LAUNDRY RESULTS?

A detailed study of this question has indicated that the water at the point of washing laundry in a machine should be from 145 to 150 degrees (laundering by hand dictates a lower water temperature). Assuming a drop of 10 or 15 degrees due to the cooling effect of the materials to be laundered, a water temperature of approximately 160 degrees at the faucet is needed. There will be a drop in the water temperature due to the travel from the tank to the faucet, which will vary with the distance between these points. The tank setting will have to be still higher, depending,

of course, on each particular situation, and possibly as high as 170 degrees.

WHAT WATER TEMPERATURE IS NECESSARY FOR OPERATION OF AN AUTOMATIC DISHWASHER?

For best results the water should be at 160 degrees during the actual washing operation. Allowing for the cooling effect of the dishes, and the loss of heat in the run from the tank to the washer, it is usually necessary to have the water tank set for at least 180 degrees. Since this is somewhat above the temperature necessary for laundry and other household hot-water uses, and is also above the best temperature for operation of the water heaters, a booster tank for the dishwashing water is excellent.

WHICH IS THE BEST FUEL FOR WATER HEATERS?

For automatic units, the choice boils down to which is cheapest in any particular neighborhood, a comparison that can only be made on a basis of local unit prices. Electricity, oil, and gas are all excellent. Coal and wood are the most economical fuels, but they cannot be automatic. However, safety control can be effected by thermostat damper operation.

WHAT HAVE BEEN THE LATEST DEVELOPMENTS IN WATER-HEATING UNITS?

Aside from the corrosion-resistant features mentioned previously, the manufacturers are improving the efficiency of heating elements, and the appearance of the units. An attractive tank can be placed in a basement recreation room without being an eyesore, or it can be in the kitchen without being obnoxious. A number of manufacturers have kitchen models that can be used as a counter for work space, and have short runs from the tank to the faucets which will reduce the heat loss and waste less water than long pipe runs will.

IS IT ADVISABLE AT TIMES TO USE TWO SMALL HOT-WATER TANKS INSTEAD OF ONE LARGE UNIT?

In a home that requires a really large supply of hot water, the best service can be obtained by using two tanks instead of one. The initial cost for the equipment and installation will be somewhat greater, but the cost of operation will not be increased at all. In fact, the operation cost can be reduced somewhat, by placing the two

tanks so that they are close to the bathroom, kitchen or laundry where the hot water is used, thus wasting less water before the hot water flows from the faucet, and losing less heat in the pipes since there will be less hot water sitting there between uses of the supply. One tank could be near the bathroom, and another could be of the counter type in the kitchen. The bathroom hot water could be kept at the comparatively low temperature of 125 degrees so that children would not be accidentally scalded, and the kitchen supply can be kept at the high temperature that is best for laundry and dishwashing.

WITH AN AUTOMATIC WASHING MACHINE, IS IT NECESSARY TO HAVE A LAUNDRY TRAY?

Not for the washing operation. But for starching, bleaching or special treatment the tray is most desirable. Of course, the double laundry tray is necessary for use with the conventional washing machine which does not rinse the wash automatically.

WHAT SPECIAL PLUMBING CONNECTIONS ARE NECESSARY FOR A WASHING MACHINE?

The water supply and drain can be handled by an adjacent laundry tray, but it is much more convenient to have a direct supply and drain for the machine, especially with an automatic washing machine. When having the plumbing work done on a new home, it is a good idea to include piping for the supply and drain of any future automatic washer. These connections can be capped or used for a conventional washing machine.

ARE DOUBLE KITCHEN SINKS DESIRABLE?

The double sink is especially necessary for convenient dishwashing when there is no dishwasher used and when there is no drainboard which can be used for spraying the cleaned dishes. The second sink also is very convenient for preparation of food and occasional small laundry work of one or two items that doesn't warrant the use of a washing machine or the laundry trays and other equipment.

WHAT FEATURES CAN BE HAD ON MODERN SINKS?

The sinks can be of the flat rim type for use with linoleum or other flat counter-tops. They are also available with integral drainboards for use with or without cabinets.

Stainless metal and porcelain-enameled cast iron and steel sinks can be had. In the porcelain-enameled units, there is a standard good quality which is customarily used, and manufacturers make acid-resistant units, which can be had for very little more cost than the standard quality. The extra stain resistance is particularly desirable since the acids of fruits and vegetables will often stain the standard quality enamel quite badly.

Many sinks have a spray attachment, or a plugged opening in which a spray can be installed in the future.

The drain should be at least 3½ inches in diameter to permit the use of a garbage disposer. Some manufacturers make complete sink units—a single bowl sink with a garbage disposal unit and a dishwasher.

WHAT IS A GARBAGE DISPOSER?

It is an electrically operated appliance which is located between the sink drain and the trap to shred the garbage and flush it out through the sewage pipes. Such a unit can be installed in any sink that has a drain opening that is at least 3½ inches wide, and it involves no additional plumbing. Before purchasing such a unit, it is wise to check the local ordinances since some localities do not permit the use of this sort of equipment for garbage disposal.

CAN A GARBAGE DISPOSER BE USED WHERE THE SEWAGE IS HANDLED BY A SEPTIC TANK OR CESSPOOL?

Yes. However, the fact that there is more solid material run down the drain than normally will accelerate the filling of the tank or pool, resulting in a need for more frequent cleaning. The tank should have a minimum capacity of 500 gallons, and the drain lines should have a steeper pitch than the accepted minimum. Additional cleaning will not be serious, unless the tank or pool is really too small for normal requirements of the house in the first place.

WHAT DISHWASHER MODELS ARE AVAILABLE?

There are portable units which need no special plumbing connections, using the sink water supply and drain, and automatic models that require their own plumbing connections. The automatic units can be had in cabinets that may be located anywhere in the kitchen, and are also available unmounted, so that they can be built into existing or new base cabinets, in the counter top or front. Dishwashers use hotter water than any other

housekeeping operations require, but they don't use more water than most manual techniques; in fact, less than many that are in common use.

IS THERE MUCH CHOICE IN DESIGNS OF KITCHEN AND LAUNDRY VALVES AND FAUCETS?

As in the bathroom faucets, the materials are usually brass with chromium finish for the kitchen. The designs have not been changed to include any radical features, however, there is continuous development, and there is some difference in quality. The better quality equipment has easier operation of the valves and longer life for the washers and valve seats. Some faucets can be fitted with attachments to reduce splash and add air to the water for easier washing. In many models the lines have been made more modern. Mixing valves are most frequently used, with a swinging spout to reach most of a single sink or into both parts of a double sink. These can all be had for installation in the counter top behind the bowl or directly in the sink itself, depending on the type sink used. The valve handles are metal, finished like the rest of the unit, rather than china which is subject to breakage.

Laundry faucets are also brass, but can be had with a rough brass or nickel finish as well as a smooth chromium finish. They can be separate valves or the mixing type with a swinging spout to serve two adjacent laundry trays. They can be threaded so that the washing machine or garden hose can be connected securely and easily when needed.

Sprays can be installed at the kitchen sink for rinsing dishes. These can be had as part of the faucet set. There are also attachments which mix soap or a detergent with the water as it comes from the spray, thus easing the hand-dishwashing chore.

WHERE CAN LITERATURE BE OBTAINED FOR FURTHER DISCUSSION OF THESE AND OTHER PLUMBING PROBLEMS?

Interesting booklets on the subject can be obtained from the Plumbing and Heating Industries Bureau, 35 East Wacker Drive, Chicago 1, Illinois, and from many manufacturers of plumbing fixtures and equipment. Numerous circulars and bulletins are available for a small charge from the Small Homes Council, Mumford House, University of Illinois, Urbana, Illinois; and the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Those from the latter source are prepared by the U. S. Department of Agriculture as Farmers Bulletins, and by numerous other government agencies that are interested in housing and home problems.

Planning Primer...Electric Wiring

(Begins on page 16)

old houses to supply the outlets needed for easy furniture arrangement, and lamp and appliance use.

WHAT SPECIAL PURPOSE OUTLETS ARE REQUIRED?

Your needs in this respect are based on your manner of living and the way you've planned your home. There are many special types of outlets in addition to those required for the use of 230 volt appliances.

For a wall clock, there's a special outlet with a hook which supports the clock so the wires are invisible. The fan hanger outlet will support the weight even of an oscillating fan. A radio outlet has a receptacle for the antenna and ground connections, and one for the electric cord. There are weatherproof outdoor outlets.

A safety unit, if you own a washing machine, is the three-wire outlet which minimizes danger of shock by providing a permanent ground connection for the washer. In some localities, this outlet is required.

WHERE SHOULD SWITCHES BE INSTALLED?

Wherever you go in the house, you should be able to light the path ahead, to prevent many a fall or barked shin. Just inside each door into every room and hall there should be a switch controlling at least one lighting outlet or one convenience outlet which could serve a lamp.

Besides light switches, there should be in certain rooms—notably the kitchen—switches that control certain convenience outlets. Then you can turn on small appliances without entering or crossing the room.

DON'T SUCH RECOMMENDATIONS CALL FOR MORE SWITCHES THAN THE AVERAGE HOUSE USUALLY PROVIDES?

They do indeed. Most new homes provide enough convenience outlets, but switches are usually overlooked. Perhaps for economy.

But there is a solution to this problem. It's called remote control wiring, and it makes complicated multiple switching possible at modest cost. The large, expensive switches used conventionally are replaced by small inexpensive switches. The expensive cable that usually connects the switch to the outlet is replaced by a tiny, low-voltage wire. A trans-

former and relays are also installed, but the cost of the equipment and installation for a complete house is still less than the usual system.

WHICH TYPES OF CONVENTIONAL SWITCHES ARE NEEDED IF REMOTE CONTROL WIRING IS NOT USED?

The most common conventional switch is the single-pole type. But it unfortunately is useful only in rooms with one entrance. If a room has two or more entrances, you must use three- or four-way switches to be able to turn a light on and off at more than one doorway. In addition, there are many special switch models.

In place of the ordinary switch, you might very well have the silent mercury type. This is just what the name implies: a perfectly silent switch that you can flick on and off without the usual loud snap.

For use at the head of the basement stairs, there's the switch and pilot light combination. The pilot glows if the cellar light is on. If you have forgotten the light completely, the pilot will jog your memory.

For the light in a dark closet, you can use a door switch which is located on the door jamb. For outdoor locations there is a weatherproof switch, protected against moisture.

And for use with small, portable appliances you can install a combination switch and outlet.

WHAT KIND OF CIRCUITS, AND HOW MANY ARE REQUIRED IN A HOUSE?

If all the lights and outlets in the house were protected by a single fuse or circuit breaker, the entire home would be in darkness, and all electrical or electrically controlled equipment would cease to operate in the event of overload from one light or piece of electrical equipment. To avoid this situation, and also to reduce the size of wire required for efficiency and safety, outlets are divided into groups, or branch circuits. Each branch circuit is protected by its fuse or circuit breaker, and the whole system is further protected by a master disconnect box against possible failure of the branch overload protection. With plenty of branch circuits, the flexibility of the system is greater, the possibility of the circuits being overloaded is reduced, and the drop in electrical pressure is less, which results in brighter lights and more efficient operation of appliances. Branch circuits are classified as: 1) general purpose, 2) appliance,

and 3) individual or special circuits.

There should be enough 15 ampere, general purpose circuits to take care of all lighting and small portable appliance outlets. A good preliminary estimate rule is one circuit for each 500 square feet of floor space.

Your utility area—kitchen, laundry, and dining room—should be served by as many 20 ampere, appliance circuits as are necessary for the equipment that needs no special circuits.

There should also be special circuits for 230 volt appliances and certain other equipment, such as electric ranges, water heaters, water pumps, laundry equipment and electrically controlled heating plants.

The fuses and circuit breakers for the various circuits are usually located in a group near the meter. However, when there are a great number of circuits, they can be divided into two or more groups which are located in different parts of the house, with a separate control center away from the meter and the master fuse or circuit breaker box. The electricity would reach these separate disconnect boxes by way of feeder lines from the main control center. The separate control centers can be located in convenient spots on the first, or even second floor, eliminating trips to the basement when a fuse blows or a circuit breaker opens.

WHICH TYPE OF WIRE SHOULD BE USED IN THE BRANCH AND FEEDER CIRCUITS?

Two things govern your selection of wire for the house circuits. One is the local or state laws, which tell you whether you should use BX cable, non-metallic sheathed cable, rigid conduit, or knob-and-tube wiring. The other is your electrical needs.

Actually, it doesn't make a great deal of difference which type of wiring you prefer. You must do whatever local ordinances stipulate. But when it comes to deciding which size wire you should install, there is just one answer. For lights and appliances to operate at top efficiency, don't use anything smaller than a No. 12 conductor. For some special and all feeder circuits, you will need a larger wire because of the greater load.

WHICH ARE BETTER, FUSES OR CIRCUIT BREAKERS?

They both do the same thing of course—protect your home against fire when a circuit is overloaded.

The fuse box is the old standby, and even today is installed in the vast majority of houses, probably because the standard fuse box is slightly cheaper. But the circuit breaker is coming up fast because it eliminates one nagging headache! You don't have to hunt for and replace fuses when a circuit is overloaded. Instead, you merely flip a switch on the breaker and the current is on again until the next overload occurs.

HOW DOES ELECTRICITY ENTER THE HOUSE?

A house is served from the power company's wires by two or three service entrance conductors which are connected inside the house at the main fuse box or circuit breaker. The meter is located somewhere between the main switch at the disconnect box and the outside power lines. Commonly the entrance conductors are strung overhead; but wherever appearance is important, underground cable can be used.

Although the custom in the past has been to install a two-wire service entrance, adequate wiring today requires three-wire service. The difference in cost is slight; but in performance, great. With a two-wire service you can run only that equipment rated at 115 volts. With a three-wire service, you can also operate all 230 volt appliances—an electric range, dryer, or water heater.

It's quite possible, of course, that you don't intend to use any of this heavy-duty equipment right away. But the day may come when you'll change your mind. Then you'll find that it will cost a considerable sum to have a three-wire service installed, if you don't have it already.

WHAT WIRING IS NEEDED OTHER THAN FOR ELECTRIC SERVICE?

Of course, there will be the lightweight wire for the door bells or chimes. This will require a small transformer, a button at each door and the bells or chimes, arranged so that the doors can be easily identified by the sound of the signal.

Don't forget the telephone. While it is not installed by the electrician, provision should be made for easy running of the wires when the installation man comes around. Channels located in the walls will keep all wires out of sight. Consult telephone company and plan for possible future phones while house is being built to prevent costly alterations.

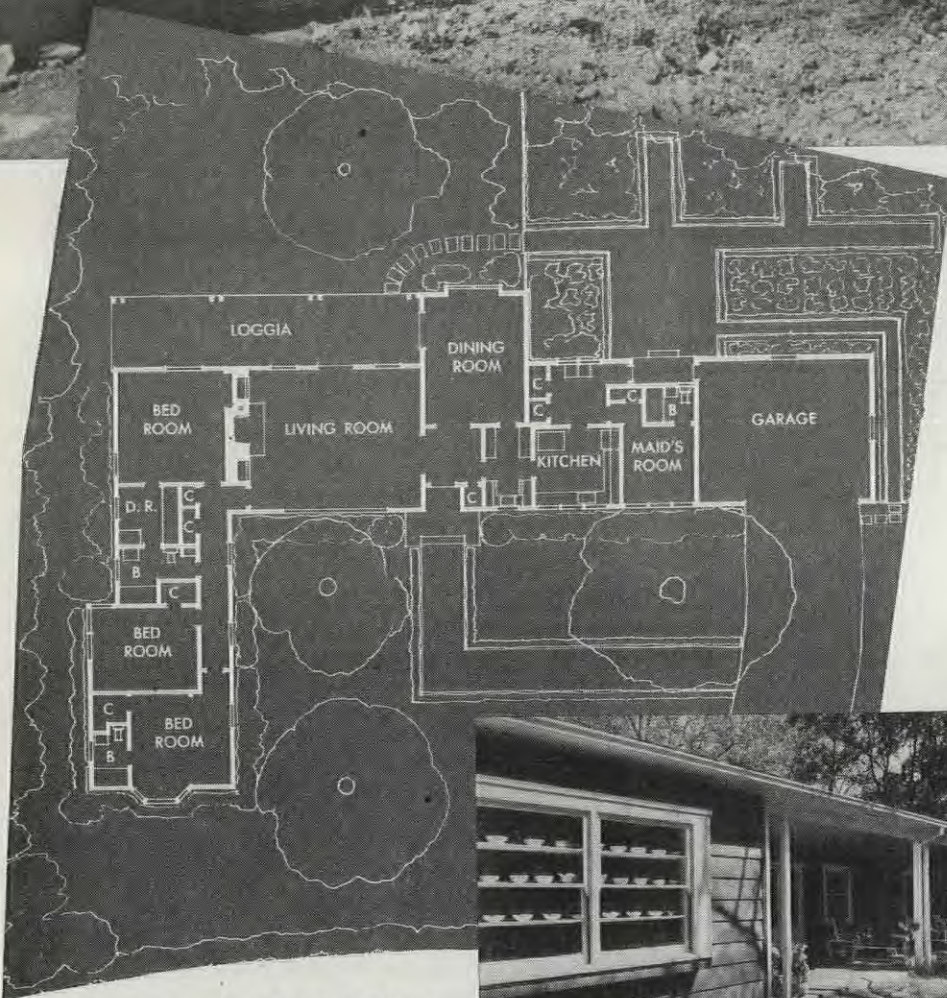


Photographs by Roger Sturtevant

Home Port for Capt. Perkins

Roger Sturtevant

THE idea of a "home port" after retirement is close to the hearts of most Navy men, Captain Perkins was no exception to the rule. However, a tour around the world with Mrs. Perkins came first, and it was during this trip that many ideas and furnishings were collected for their new home. The lot selected, part of a subdivided estate in San Mateo, California, was ideal for the house they had in mind. Low and rambling best describes it, accented by three linden trees and a huge black oak towering above in the front yard. Mrs. Perkins, who says she never held a spade in her hand before, pitched right in and helped lay out the simple yet decorative garden, designed by landscape architect, George Gilbert. In the planting strip against the rich brown of the house are pink hydrangeas and daphne with white bouvardia and begonias. The front garden is pink and white, too, with an ivy lawn. Colors in the almost square living room strikingly complement both gardens. Soft greens and plum are the dominant notes, with yellow gauze draperies as a bright accent. The many oriental objets d'art, collected on that memorable trip, are seen to advantage. Rare porcelain bowls, snuff bottles, and carved jade ornaments are displayed against mahogany and rosewood Victorian pieces, some family heirlooms, others especially bought for the house.



Chester H. Treichel, architect

Home of Captain and Mrs. Frederick King Perkins, San Mateo, California



Planning Primer . . . Construction Economies

(Begins on page 17)

savings as frequently, since the amount of excavation and basement construction is so much less in the first place than for a one-floor home of equal room area. However, the possibilities are well worth the time and trouble of making comparative sketches, material lists, and estimates.

DOES THE USE OF CONSTRUCTION BOARD FOR SHEATHING EFFECT A SAVING AND DOES IT RESULT IN SOUND CONSTRUCTION?

Yes is the answer to both parts of the question. The saving is greater in labor than in the cost of the material. The use of construction board makes sheathing a rapid operation. It goes on in large, easily handled sheets, whereas wood sheathing must be laid board by board, and requires much sawing. Adequate nailing to each stud is essential in either case for structural strength. Tests have shown that the large sheathing boards, when properly applied, provide more than the necessary strength for the usual strains and stresses in frame or masonry veneer exterior wall construction.

IS THERE A PRICE ADVANTAGE IN DRY-WALL CONSTRUCTION OF INTERIOR WALLS AND ROOM PARTITIONS?

The same saving in labor applies to the use of wall boards for interior wall surfaces as is the case with construction board for sheathing. While lath and plaster remain probably the most satisfactory finish for interior walls and ceilings, an increasing number of houses are being built, with satisfactory results, with some of the many varieties of wall board now on the market. Great improvements have been made in the methods of treating joints, the phase of wall-board construction that caused the most difficulty in its pioneer days. Wall board goes up in one operation, whereas plastering involves four operations, one by the carpenters to install lath and then three coats of plaster by the plasterers, with time to dry in between each coat. There is still another factor in the picture beside the economy feature. A plastering job involves the use of a tremendous amount of water, much of which is absorbed by the previously dry structural lumber which swells and subsequently must shrink as it dries out. The drying takes quite a while, sometimes as much as two years, and is the cause of the many plaster cracks that appear in new homes. Wall boards are installed without the

swelling and subsequent shrinking of the framing, thus eliminating much of the usual cause for wall cracks.

WHAT SAVINGS ARE POSSIBLE ON FLOORS?

The price of hardwood flooring skyrocketed during the war. Its cost is still out of reason. It is well to ask yourself whether you really need hardwood flooring at all, especially in those rooms that you might carpet from wall to wall or cover with linoleum. In more than one instance, thrifty home builders have laid heavy building paper over their sub-floors, placed their rugs on this and are happily and comfortably enjoying their new homes—postponing the finished floor until hoped-for price reductions become a reality.

TRIM CALLS FOR THE MOST EXPENSIVE, WELL-SEASONED, FINISHED LUMBER. CAN ANYTHING BE DONE ABOUT IT?

Do not economize by using inferior grades. Trim sizes may often be reduced, however. The amount and size of trim suitable for large rooms and high ceilings becomes overpowering in small houses. By scaling the trim to your room sizes, you may not only effect a saving but produce a more pleasant effect as well. The trend in contemporary interiors is to eliminate trim almost entirely.

HOW CAN THE INEVITABLE WASTE OF MATERIALS BE HELD TO A MINIMUM?

Waste is an important contribution to building cost—in some cases running as high as 10%. The place to begin to eliminate waste is in the planning stage. Room dimensions and roof pitch that call for even timber lengths not only prevent wastage of discarded ends but the labor of cutting each timber as well. It is reported that recent experiments show startling savings on a house built according to the modular system.

ARE THERE SAVINGS TO BE HAD FROM PRE-CUTTING OR PREFABRICATION?

Certain parts of the house have been prefabricated for years. Doors, windows, door and window frames, and kitchen cabinets, for instance, have

been made in specialized factories and sold complete, ready to install for less than the carpenter on the erection job could make them. Before the war some lumber dealers, using power saws, would deliver roof rafters angle-cut at one end to fit properly and snugly against the ridge and notched at the other end to rest on the plate. Such methods create definite savings. The National Retail Lumber Dealers Association and the Small Homes Council, University of Illinois, have been studying this sort of thing and promoting the availability of ready-cut framing lumber in standard sizes that are coordinated with the usual dimensions of other building materials. Investigate the possibilities in your area. Perhaps also as prefabricated houses are produced under factory conditions in greater quantity, there will be more price advantage, than has yet developed, to buying the entire shell of the house from a manufacturer.

IS IT NECESSARY THAT HOME BUILDING BE THE ONLY GREAT INDUSTRY WITH MOST OPERATIONS MANUAL AND WITH TOOLS NOT MUCH CHANGED IN 75 YEARS?

It certainly doesn't seem reasonable. The operative builder erecting a group of houses makes use of power saws, drills and other tools that speed up his operation and thus reduce his labor cost. He effects a considerable saving. While the builder of individual houses cannot take full advantage of production-line methods, he can save by the use of power tools. A great many contractors have increased their efficiency in this way, and in all probability more of them will take the step to meet competitive prices and still have the profit necessary to make it worth while to build houses or stay in business.

CAN THE BUILDING BUDGET DOLLAR BE STRETCHED IN THE SELECTION OF THE WORKING PARTS OF THE HOUSE?

Roughly 50% of the cost represents the shell. The other half represents working parts and equipment that go into it. In this latter half lies a wide field for savings. The home equipment now considered necessary has increased tremendously. It is all very desirable, too, if we can afford it. The thing to remember is that many items can be added later, while others must be included initially. Items like an extra bathroom, a laundry, the most expensive plumb-

ing and electric fixtures, can be installed in the future without extra cost and undue trouble if the necessary pipes and wiring have been run during the original construction. But a decision must be made on certain larger integral items, as between the latest developments in complete air-conditioning and the less costly older systems that have proved themselves. It all depends on which items and standards are considered most essential in your own family, and on what the budget will allow.

ARE THERE ANY MEANS BY WHICH THE RELATIVELY EXPENSIVE PLUMBING AND HEATING ITEMS MAY BE HELD DOWN?

Again the answer goes back to planning. In a one-story home, kitchen and bath should be located side by side or back to back. In a two-story house the bath should be over the kitchen. This means shorter lines and a considerable saving. The heating plant, except for some very good reason to the contrary, should be centrally located so that a minimum amount of pipes or ducts will serve to reach all rooms. For the small, compact house, it will pay to consider a utility package, or "working core," that contains all necessary plumbing and heating already hooked up and ready to be rolled in as a unit. Compare the cost of such a unit for your home with estimates for conventional plumbing and heating installations. There may be a saving.

IS THERE ANY HARM IN POSTPONING THE INSTALLATION OF GUTTERS AND LEADERS?

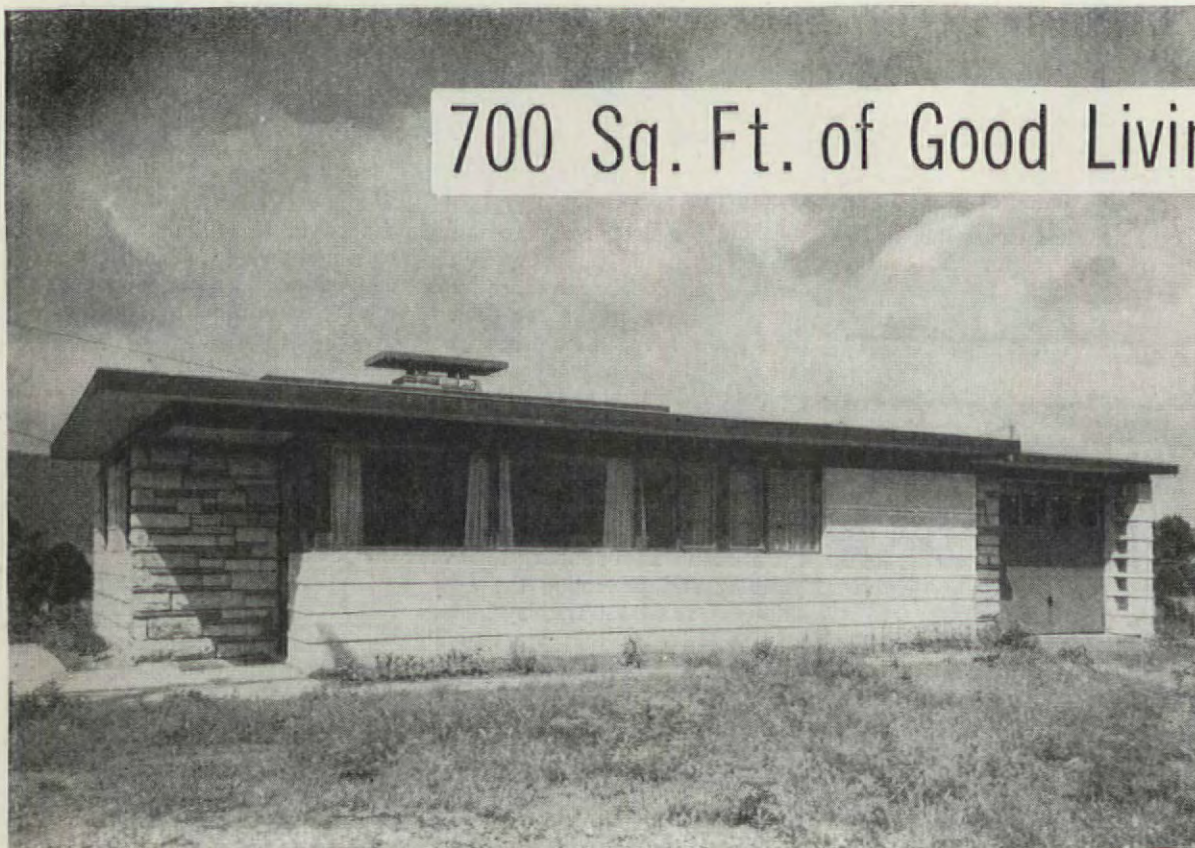
With most houses, no. The drip may interfere a little with your landscaping, but with shed, hipped or pitched roofs, no damage will be done to the house. It seems better to postpone their installation than to use inferior and cheap materials.

IF A HOUSE IS NO BETTER THAN ITS ROOF IS IT ADVISABLE TO SEEK ANY ROOF ECONOMIES?

Almost all roofings, including the cheapest, are warranted to last 20 years. There is a wide variation in the cost of different roofings. The roll roofings are generally the cheapest, but most of them are not very attractive. There is a great variety of

PLEASE TURN TO PAGE 161

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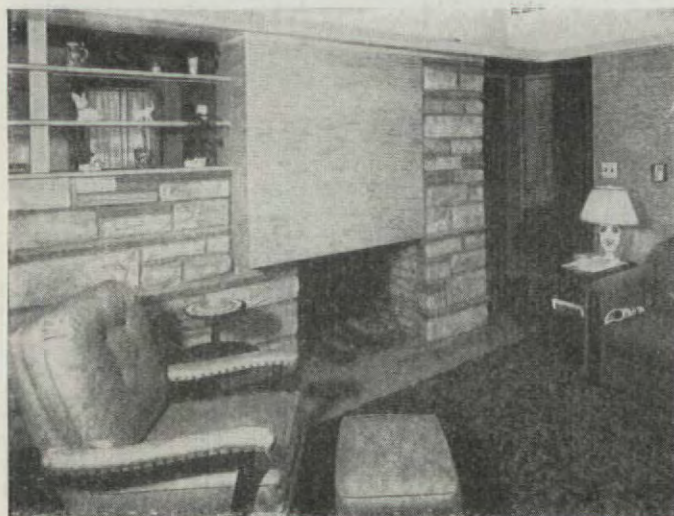
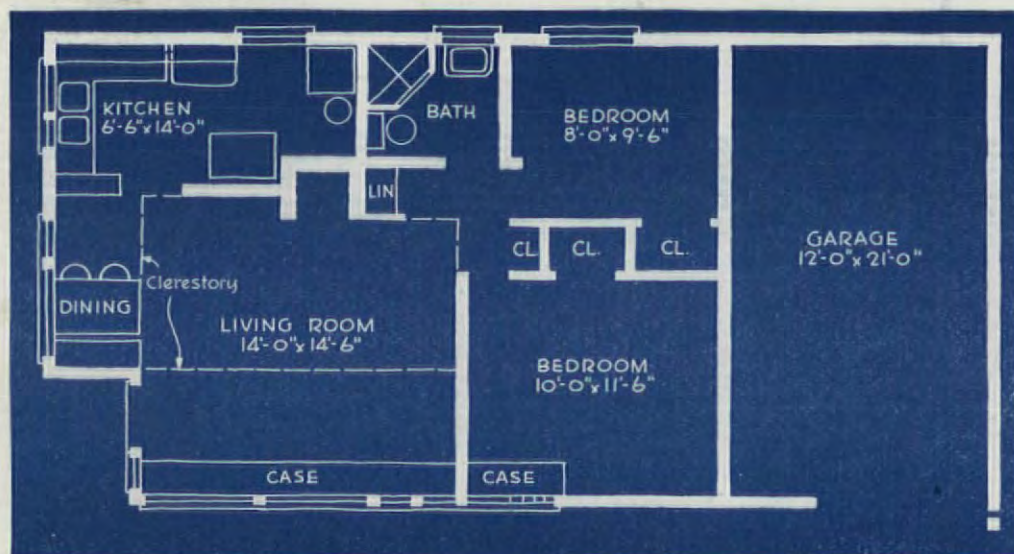
Fred Gund

As modern as tomorrow is this low, rectangular house built of Pennsylvania sandstone and painted cement block. It measures 22 x 32 feet, which may be record-setting since the plan includes two bedrooms and a more than ample garage. Here is a house suitable for the average small family; a house so much in demand today by our ex-GI's.

For such a small house, there are a number of pleasant surprises in its make-up. For instance, the cement blocks are insulated internally with vermiculite—a fact that resulted in heating bills of only \$5 a month during the coldest winter weather. Heat, incidentally, is provided by a gas-fired hot-water system consisting of pipes buried in the cement floor. Because of well-designed built-ins, furniture was kept at a minimum. The Conrad family found that one sofa, one easy chair, four straight chairs, and a couple of small tables were all that were needed to set up housekeeping.

Typical of architect Raymond Viner Hall's designs is the plentiful use of large glass areas in the principal rooms. One living-room wall is almost entirely of glass, with continuous storage space beneath. The roof is flat, well insulated, and covered with five layers of asphalt-impregnated felt paper.

The Home of Mr. & Mrs. Robert W. Conrad



Living room and kitchen of Robert W. Conrad home, Port Allegany, have wall finish of stone



(begins on page 17)

other materials suited for different types of roofs and architecture, and varying a great deal in price. Among these are: shingles of wood, asphalt and asbestos; metal such as copper, aluminum and galvanized iron; and "built-ups" of roofing paper and asphalt or pitch. If cost is the main obstacle to your moving in under your own roof, consider the possibility of putting on a cheap roll roofing first with the idea of covering it with a more attractive or suitable roof in the future when costs may be lower—and your financial situation improved.

IS THERE ANY ADVANTAGE TO POSTPONING DECORATING A NEW HOUSE?

There is a definite advantage. Of course, all wood and metal exterior should be painted to protect it. But inside, it is another story. In fact in thriftier times it was the custom to live in a new house a year before painting or decorating. This gave time for all settling to take place. Then the house was decorated with the reasonable assurance that no more cracks would develop to ruin the job. If you don't fancy living with plain white walls for a year—and few do—color can be applied quickly, easily and economically with any one of the several good resin emulsion "water" paints. At the end of the waiting period, wallpaper, oil paint or the same good water paint can go right over the first job, after cracks have been patched.

IS THERE ANY SOUND CHEAPEST MATERIAL TODAY TO BEAT THE HIGH COST OF MOST MATERIALS?

Nationwide the answer is probably No. It depends largely on location. Transportation influences the cost of materials greatly. It is wise to select materials that are available locally in considerable quantity and that are, for that reason, advantageously priced. In one area this material might be locally-cut lumber, in another brick, in still another stone. Since the war an increasing number of houses have been built of cement cinder block. Shortages of other materials and in some instances a price advantage have given this very interesting product an opportunity to prove itself. Before deciding on the material for your new house, it is wise to shop the available market carefully. Compare the costs not only of the materials themselves but of the labor involved in their use. Then if cost is the paramount factor, be guided accordingly.

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(continued from page 90)



● Black living-room fireplace is set off by warm yellow grass-cloth wall, adjoining gray-green chest and white ceiling. Couch and draperies, on circular track, are of rose-and-green stripes. The chairs are of green and mulberry for color unity and comfort



Bob Cleveland

alfresco meals adjacent to the dining room. A small entrance hall gives privacy and creates excellent circulation to all other parts of the house without having to cross other rooms. From this hall, there's direct passage to a bath and small den, sometimes used as guest room, and access to the living room and to the small bedroom hall and bath. A glance at the plan will show that little space was wasted on halls. The dining room is small but gives a sense of spaciousness due to its glass wall at one end. The kitchen is small, but it is compact and efficient, even having a breakfast nook under the corner window. Though the long, narrow living room has more than its share of glass, windows on the street side have been placed high, thus providing plenty of wall space for furniture arrangement. The fireplace is on the north wall with but a single window adjacent. Thus by concentrating large glass areas on the south, the room is rescued from the intense glare of the afternoon west sunshine, without shielding the room with draperies.

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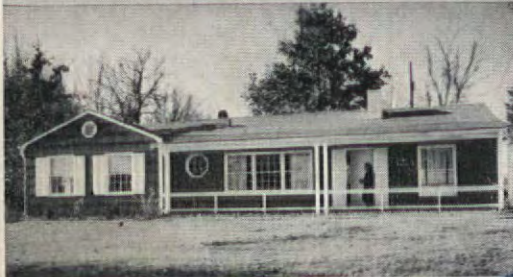
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HOUSE NO. 5—Informal all-wood house with two bedrooms, large living-dining combination



HOUSE NO. 6—Modern ranch house with living-dining room, two bedrooms, attached garage, entrance porch



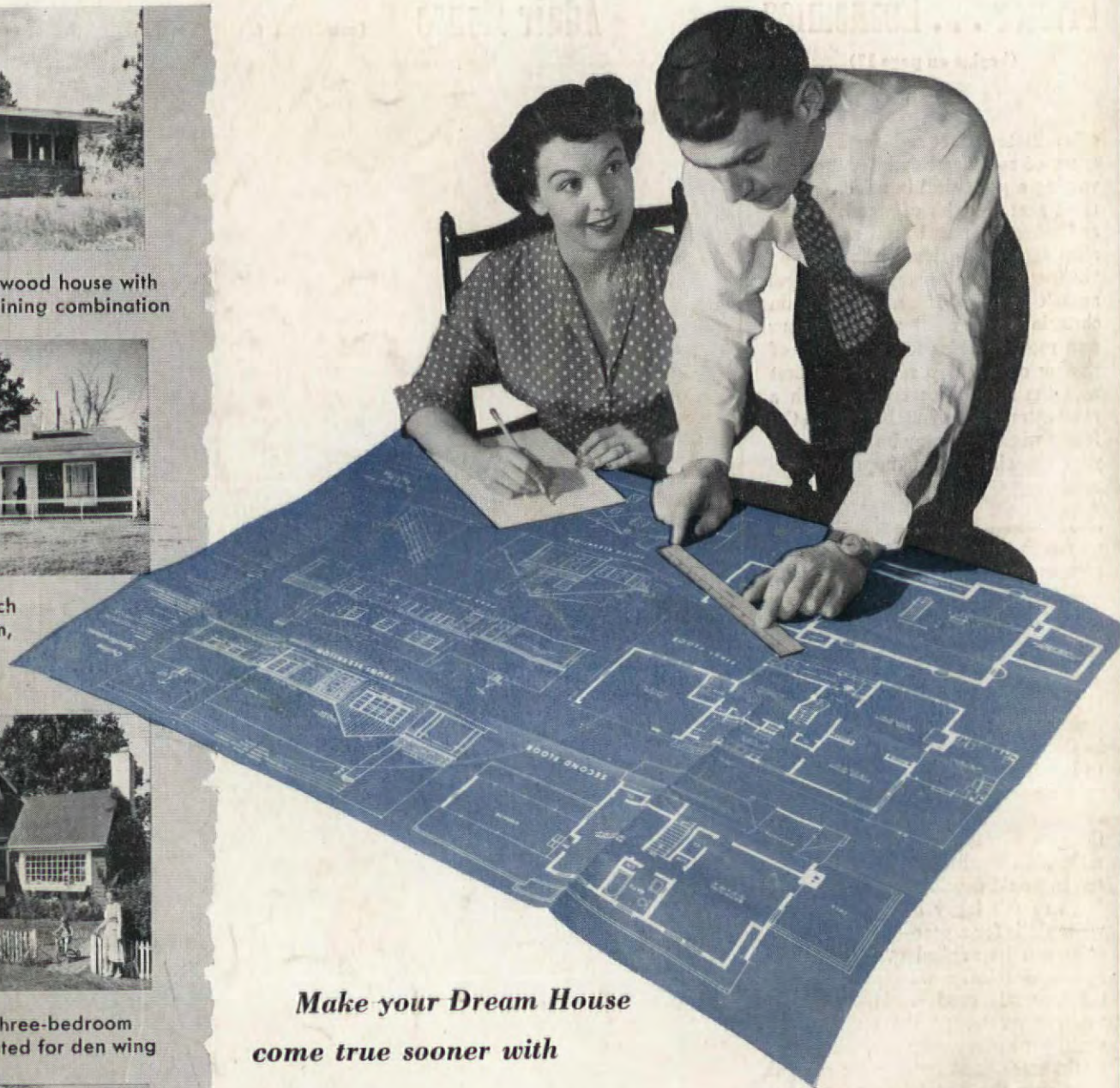
HOUSE NO. 7—Traditional three-bedroom design, garage easily substituted for den wing



HOUSE NO. 8—One floor, three bedrooms, separate dining room, two-car garage



HOUSE NO. 9—Picturesque design, three bedrooms, two-car garage, ideal for narrow lot



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