

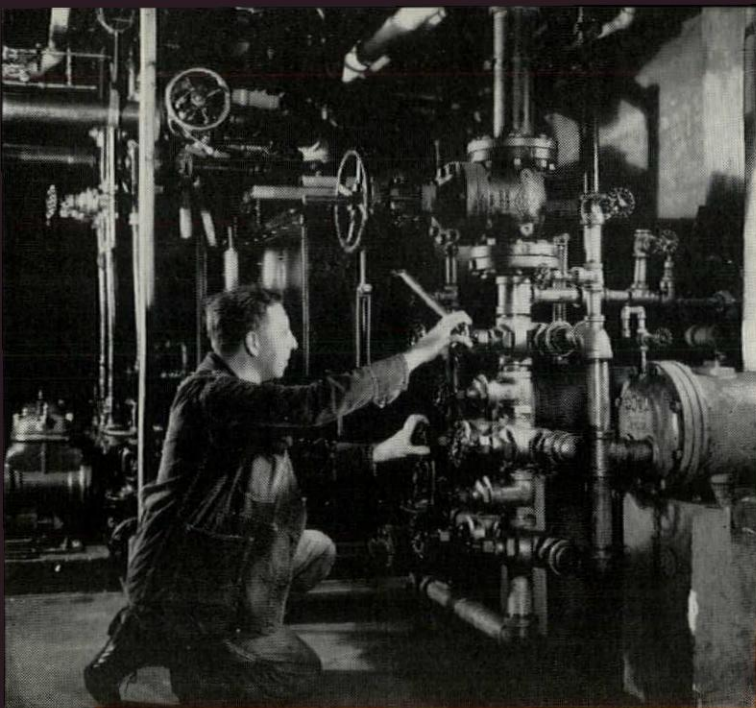
PENCIL POINTS

PROGRESSIVE ARCHITECTURE



February 1945





More than
3,784,320,000
valve-hours
-without a shutdown
due to valve failure

New York Hospital finds Jenkins Valves unequalled for trouble-free operation and low maintenance

A hospital takes no holidays . . . every unit of mechanical equipment must be in service every hour of every day, and the valves that control this equipment must meet exceptional standards.

That is why the men responsible for the efficient operation of the New York Hospital plant chose Jenkins Valves for all except services requiring valves of special design.

Mr. W. W. Downey, Director of Engineering, says, "Jenkins Valves at the New York Hospital have operated 24 hours a day, every day, for the past twelve years without a shutdown due to valve failure". Some 36,000 valves are installed, making a total of over 3,784,320,000 valve-hours of trouble-free service, a record that continues to increase daily.

Low maintenance was another reason for the choice of Jenkins Valves. Because of the Jenkins "family" design, a relatively small number of interchangeable parts needs to be kept to repair a large number of valves. Also, fewer man-hours are required for maintenance, an advantage which proved helpful when personnel was lost to the armed forces.

Service records like this prove that the specification of "Jenkins" assures valves that *cost least in the long run*. There are types, patterns and sizes of Jenkins Valves to completely equip any plant or building.

Jenkins Bros., 80 White St., New York 13; Bridgeport, Conn.; Atlanta; Boston; Philadelphia; Chicago; Jenkins Bros., Ltd., Montreal; London.



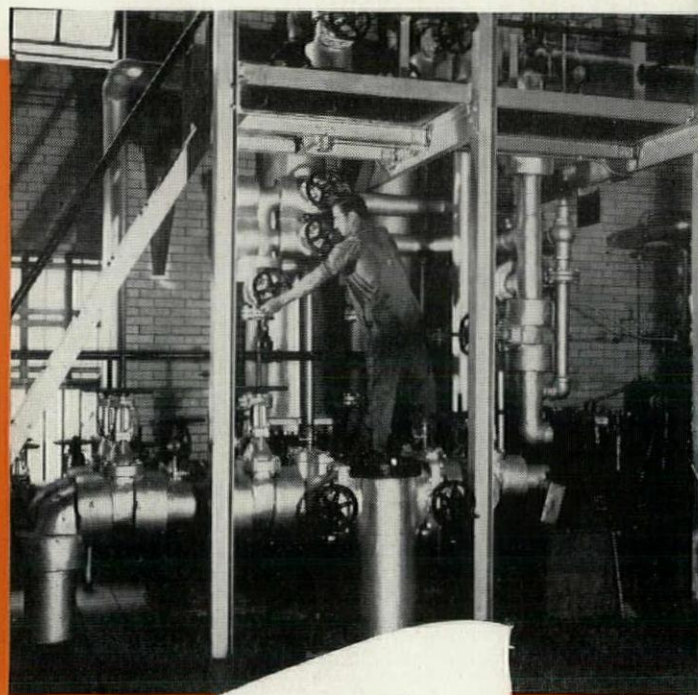
Jenkins Bros.

JENKINS VALVES

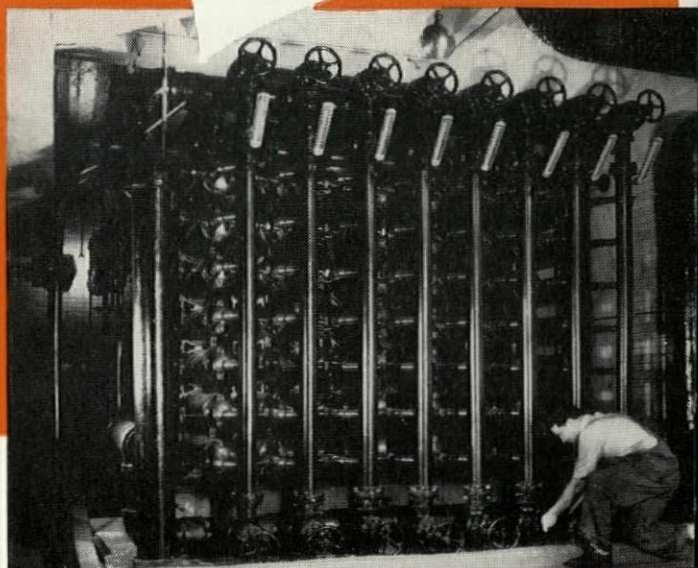
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OVER 36,000
 Jenkins Bronze and Iron Valves
 in Globe, Gate, Check, Needle,
 Angle and Y patterns, from 1/8"
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 operating units and over 110
 miles of pipeline in this
 modern giant medical center.



Again The House

The single dwelling remains the most important architectural problem for the largest number of people. Despite moves toward mass production and standardization, the individually designed and built house will be for many years the object of concentrated thought by millions of prospective home owners and by the thousands of designers who are ready to serve them.

We believe that this country is on the way to developing a better standard of residential design, freer of false and anachronistic detail than prevailed before the war. We believe that more architects than ever are prepared to lay aside their copybooks and to design each house with reference only to the problem itself—the needs of the family, the conditions of the site, and the economic means and methods of construction. With this approach we will get a real and honest architecture.

In this issue we present a number of houses that exemplify, with varying degrees of success, the direct contemporary manner of design. They represent a variety of different regions of the country, from Oregon to Vermont, from Tennessee to Texas. The families that live in them differ widely in their requirements, and the pieces of land upon which they are built involve all sorts of special problems. They are all worthy of study, whether you like them or not.

Three of them were designed by their owners, who happened in two cases to be architects. (The third was for an artist who was aided by an architect friend in expressing his own ideas.) It may be interesting to compare these three, which should theoretically be completely unified in conception, with those in which the clients' insistent whims have to be merged somehow with the designers' analytical objectives to produce what is always more or less a collaboration. Sometimes the collaboration is highly successful, but more often the architects have to shoulder the blame for incongruities against which they have fought a losing battle.

At any rate, we commend these houses to you as examples of the progressive attitude toward design we like to encourage. They are not the ultimate, but they are moving forward. On your next residential job see that you do better!

Kenneth Reed



Photographs by P. A. Dearborn.

Entrance front. The living room corner windows (left) and dining room bay (right, above garage) look out over a widespread view of river valleys

In Portland, Oregon Van Evera Bailey, Architect

The owners, parents of three married sons, wanted a comfortable home for themselves where it would also be easy to have their children and friends come to visit. For a site, they chose the end of a beautiful, wooded ridge high above the city of Portland.

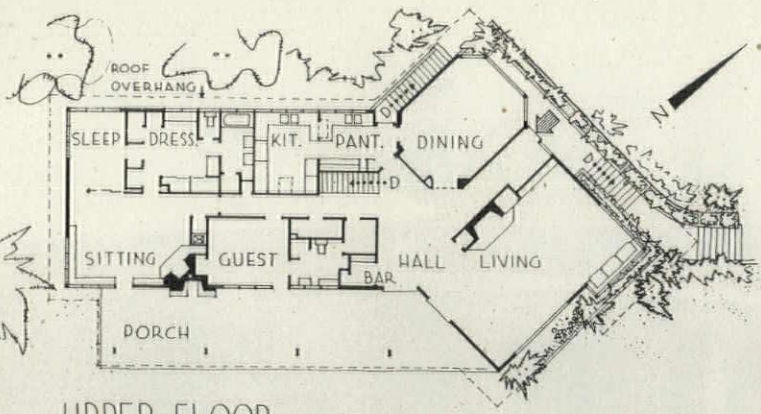
As the ridge was narrow and a living porch facing a lawn was desired, the architect placed the house well back on the site to overhang the ridge, leaving as much of the level portion of the land as possible for the lawn and garden. This also made it feasible at basement level (toward the rear) to provide a full story, where servants' rooms, guest room, and garage are located.

Quite as intelligent as the fitting of the house to its site was the unusual care given to making the most of the dramatic outlook—Mt. Hood, 60 miles straight east, and a broad panorama toward the east and north over the Willamette River Valley at the point where the Willamette joins the Columbia. The huge plate glass window in the living room is centered exactly on Mt. Hood, and the room's corner windows, as well as the broad dining room bay, command the best aspects of the view of the river valleys. The long living porch is on the south to afford maximum sunshine.

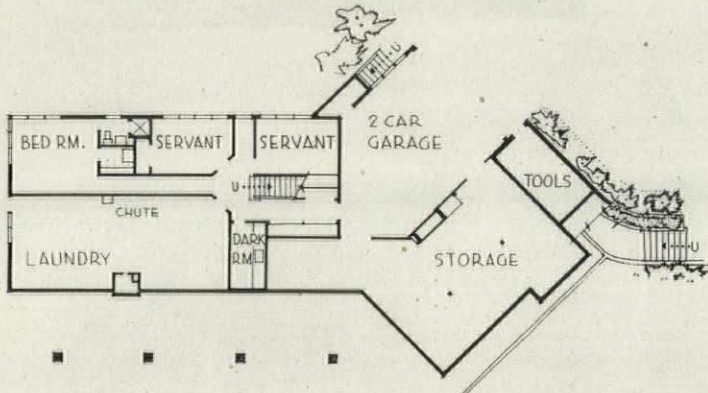
Living accommodations are generous, almost luxurious. The large living and dining rooms, grouped around a wide hallway, off which open the living porch, a small

DESIGN DETERMINANTS

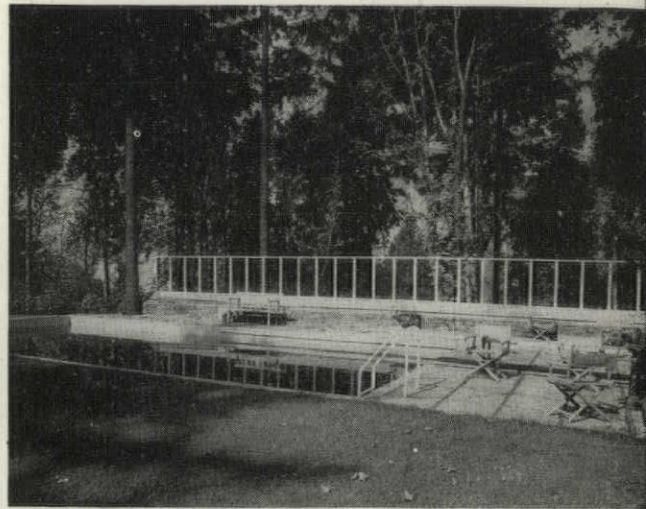
- Needs of a couple whose children have all grown up and married
- Site, the top of a wooded ridge with a superb view
- Comfortable year-round living and informal entertaining, both indoors and out



UPPER FLOOR



LOWER FLOOR



The sheltered swimming pool is reached by a path extending from the end of the living porch

Toward the south is the broad living porch adjoining the lawn and garden





Southeast garden front. Mt. Hood is on axis (60 miles away) with the huge plate glass window in the living room

VAN EVERA BAILEY, A.I.A., ARCHITECT



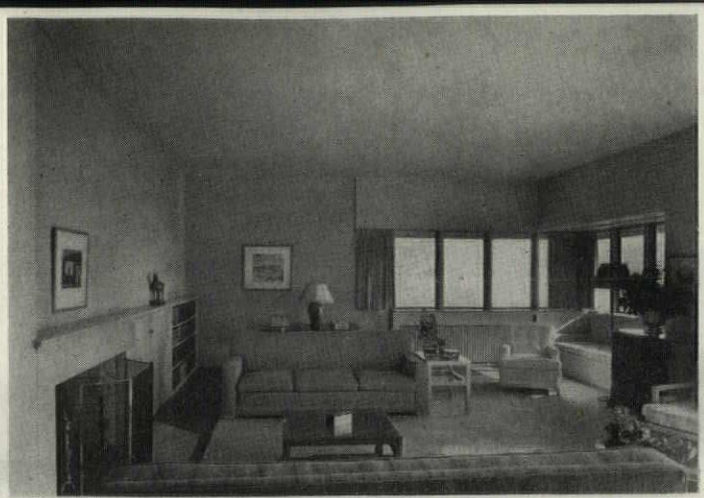
One entire end of the lozenge-shaped dining room is a view bay window

bar, and a door to the pantry and kitchen, are schemed for hospitable entertaining. The master bed-sitting room, with sleeping room separable by means of a sliding partition (see details Page 54), exceptionally equipped dressing room and bath, are splendid facilities more often coveted than realized.

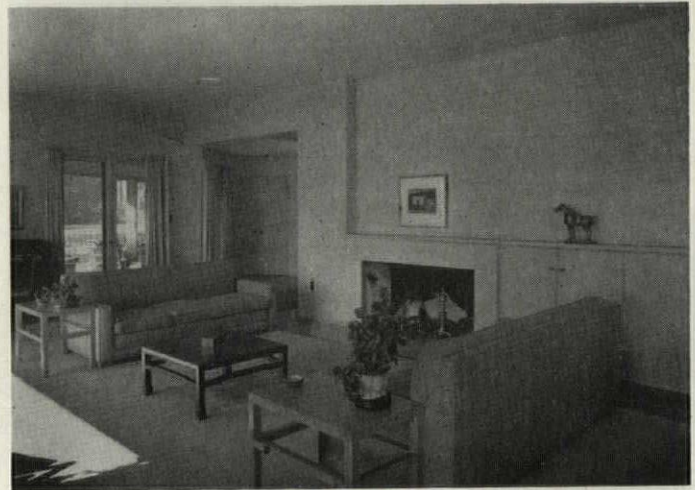
Yet the design and integration of all elements is such that there is an agreeably domestic scale to the whole, and the spacious provisions in no way interfere with achievement of a pleasant, informal character.

Structurally, the house follows standard practice—concrete and brick lower walls, regulation wood frame, finished with cedar siding; shingle roof; plastered and painted (or papered) interior walls, hardwood floors, except in the kitchen and baths where linoleum is used. Heating is by means of a hot-water system.

From the point of view of esthetics, also, the house is more satisfactory than radical. Certain details and elements echo historic tradition, but in the main—the large windows, the contrasting planes of wood surfaces and brick walls, the individual arrangement of rooms—the design reflects the aim of providing a good house rather than any textbook precedent. In a period when matters of identifiable architectural style are likely to produce violent partisanship, the design approach to this Portland home—neither sentimental, on the one hand, nor iconoclastic, on the other—contributes light rather than heat to the argument.

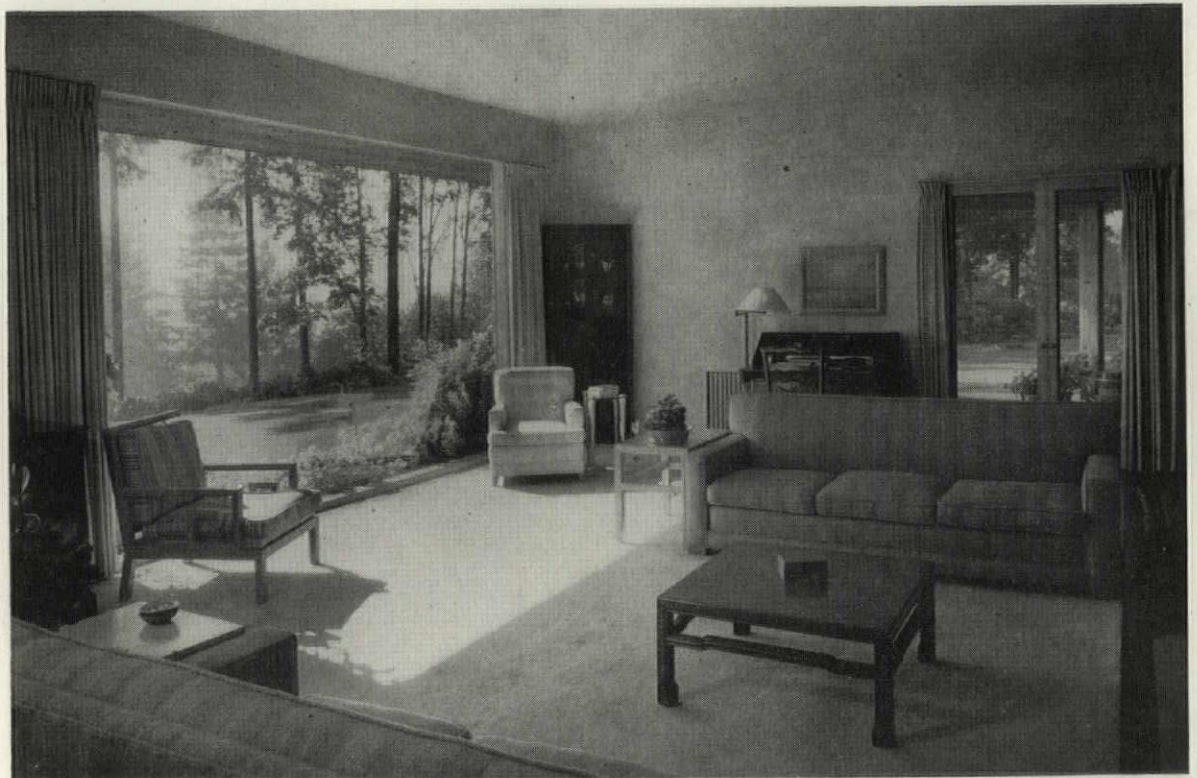


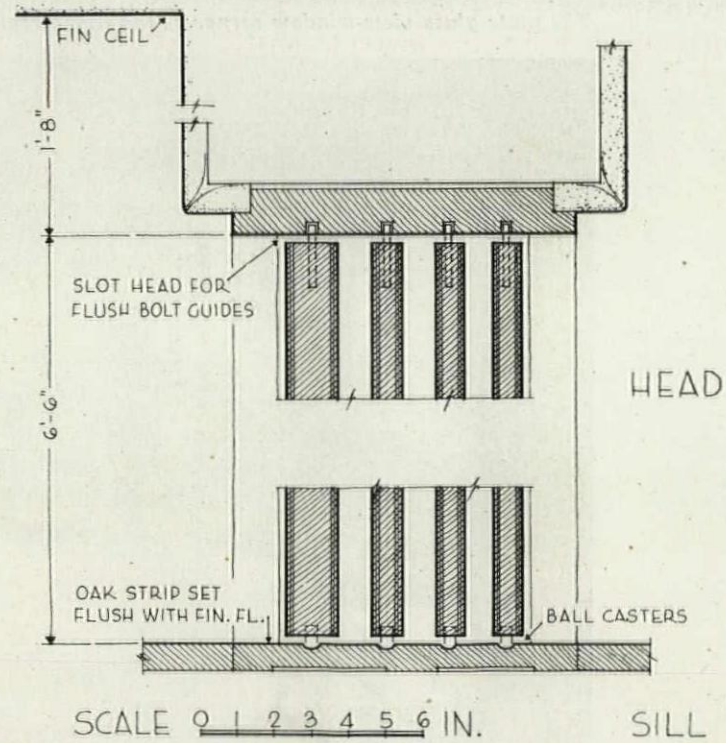
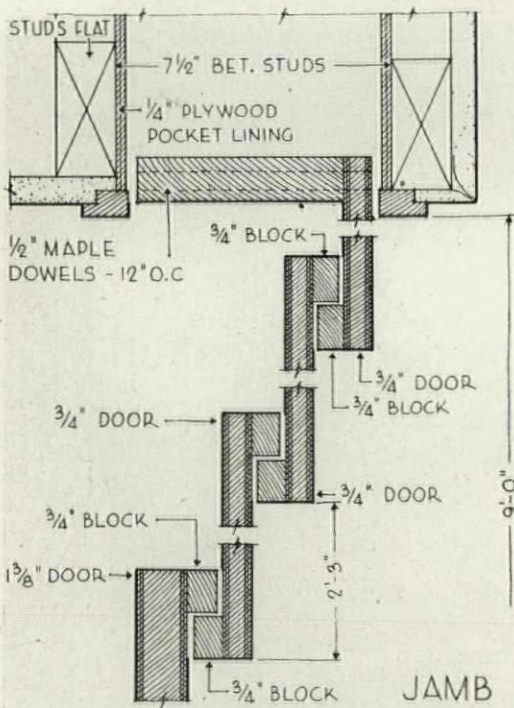
Living room looking toward the northeast



Beyond the fireplace are doors to the hall and living porch

The plate glass view-window corner of the living room





**In Norwich, Vermont Walter Curt Behrendt, Architect
John Spaeth Jr., Associated**

DESIGN DETERMINANTS

- The budget of a Dartmouth professor ● Whose wife is a professional musician ● A rural half-acre bordering a traffic roadway ● Sweeping valley views ● The erratic New England climate





Southern front, showing large window areas and projecting eaves that control amount of sunlight

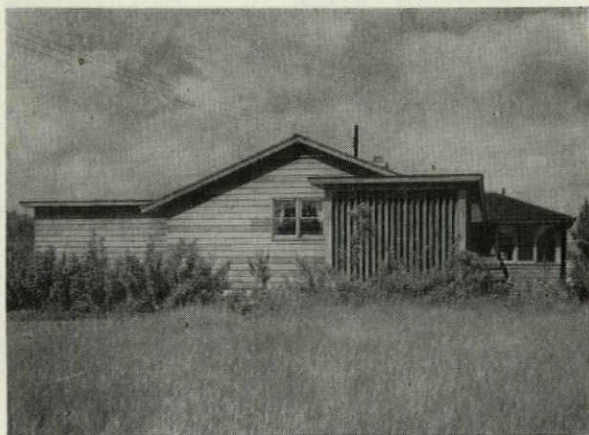
Photographs by P. A. Dearbo

Although basically a very humble structure, the home of Prof. Walter Curt Behrendt of Dartmouth and his musician wife is a stimulating contribution to the field of small-house design. Mannerisms and plagiarisms alike are avoided. The design of the house, planned for a couple who do all their own work, results directly from an honest effort on the part of Professor Behrendt and his associate, John Spaeth, Jr., to develop a scheme that would meet the family's living preferences as simply and fully as possible within a limited budget. As to the success of the effort, Mr. Behrendt modestly tells us: "No disadvantages have been noticed since we have lived in the house."

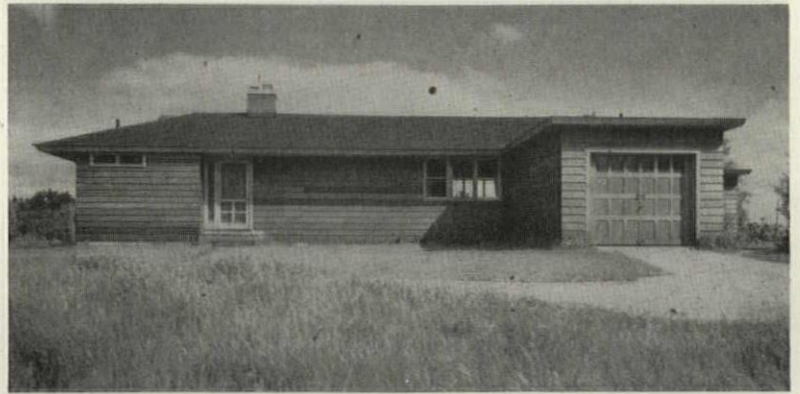
The half-acre lot is on a ridge above the Connecticut River. A nearby road leads down to a bridge which crosses over to Dartmouth College, in Hanover, N. H., the owner's place of work—"only 15 to 20 minutes walking distance." Views open up on every hand—the foothills of the White Mountains to the north, the river valley to the south; toward the east (across the river) the Dartmouth campus, and toward the west, an intimate little valley dotted with old Vermont farmhouses. Although the house is convenient to his work, the architect points out, it is in a wholly rural setting and "grazing cattle may be seen from almost any window."

The house is located near the street both to cut down unnecessary road shoveling in winter and to provide as much space as possible for the lawn and flower garden on the south. Yet a third reason for this location was to eliminate a view of railroad tracks which border the river below.

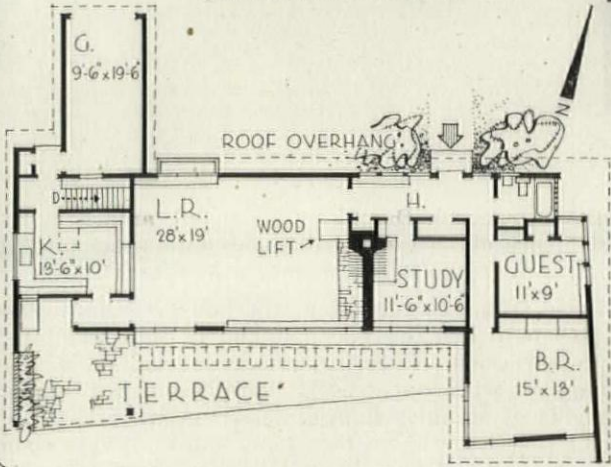
Toward the dining porch from the vegetable garden



WALTER CURT BEHRENDT, ARCHITECT
JOHN SPAETH, JR., ASSOCIATED



The northern front has few and small windows



FLOOR PLAN 0 5 10 15 FT

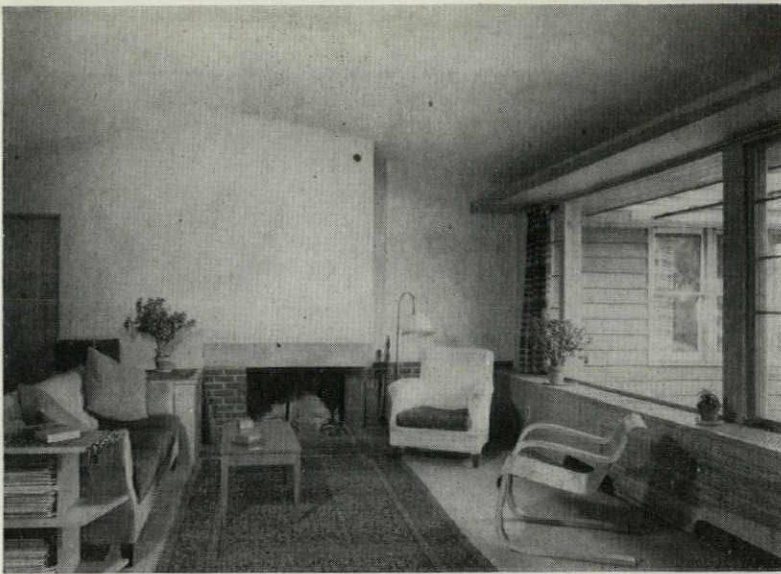
The living-dining room, at the center of the house, has cross light and ventilation. The roof projection over the great windows in the south wall works on the solar principle to exclude sun in summer and admit its warming rays in winter.

Separate functional areas in the room were given careful study. A sofa is placed beside the fireplace facing the window and view. "When a group has formed around the fireplace, newcomers do not cross the area, but enter it from the interior of the room." This easy accommodation of guests is an important factor in the Behrendt house, for not only do college students come to call or hold informal discussions, but groups frequently gather to enjoy Mrs. Behrendt's piano playing. A nice provision of the fireplace area is a wood box with a trap door in its floor through which firewood stored in the basement is readily handled.

The well equipped small kitchen has space for a breakfast table; the garage entrance and stairs to the base-



A pass window from the kitchen simplifies serving of outdoor meals



The fireplace corner, protected from cross traffic by placement of sofa

ment (which extends only under the living room area) are both reached via the back entry without going outdoors. The living-dining porch leads off the dining corner of the living room. Food can be directly served to the porch table through a window opening into the kitchen. To shield the street, yet not exclude the view, the outside end of the porch is made of a screen of vertical boards, which are placed at an angle.

The study-guest room is, according to the architect, a satisfactory combination of functions: "I will not work, anyway, when we have a guest in the house." Closets

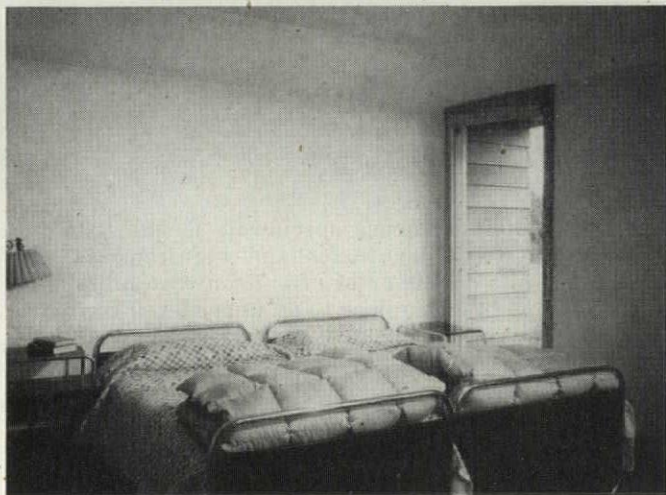
line the entrance hall, and in the master bedroom are several more closets, one arranged with space at the bottom designed to accommodate a sewing machine.

Of simple frame construction, the house is thoroughly insulated with blanket-type material in both walls and roof construction. Exterior siding is California redwood applied with copper nails; trim is clear white pine. Roofing is of shingles impregnated for fire resistance. Interior woodwork is western pine, and the living room has $\frac{1}{4}$ -in. plywood paneling. All other room walls are plastered; floors are oak.





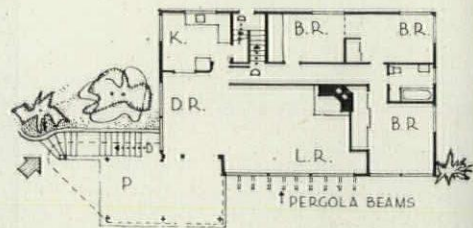
The dining corner of the plywood-paneled living room. Sliding cupboard doors that open through to the kitchen facilitate meal serving. The door at left leads out to the dining porch



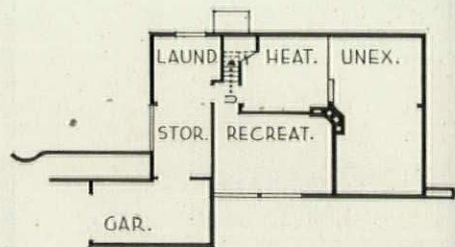
A wall-height clear-glass window brings morning sun and a country view to this corner of the master bedroom. Both walls and ceiling are finished with plaster



The entrance stairs, garage, and porch are topped by a bold projecting roof



FIRST FLOOR



BASEMENT

0 5 10 15 FT.

Photographs by Billy M. Glenn

In Knoxville, Tennessee Designed by Alfred Claus and Jane West Claus

DESIGN DETERMINANTS

- A prominent hilltop site
- Individual and informal living tastes which included
- A desire to reduce housekeeping drudgery to a minimum and
- To take fullest advantage of broad views of the surrounding countryside
- A modest budget

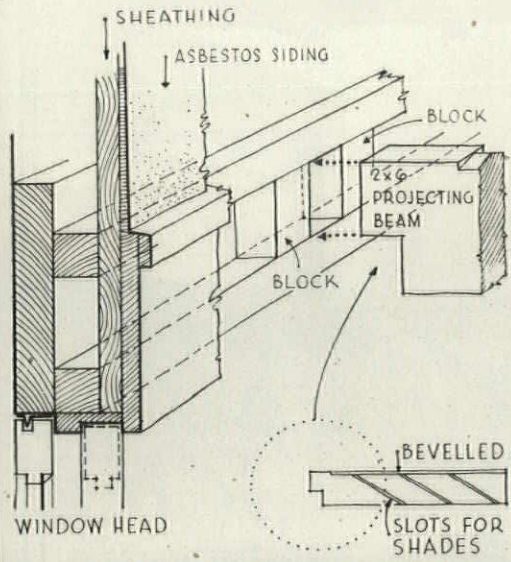
A highly individual house specifically designed to suit the owners' particular tastes and requirements, this small home sits on the crest of a Tennessee hilltop. By raising the main living floor to an upper level, the extraordinary view, which includes three rivers and the distant range of the Great Smoky Mountains, is yet further dramatized.

The meager planting that existed at the time the photographs were made leaves the severely rationalized design

rather in need of some softening element. Something of this is contributed by the variety in color and texture which exists in the wood members, masonry, and other wall surfaces. Still, the house does sit *on* rather than *in* its setting. Whatever the success of the design from this point of view, it is provocative to study a house in which the designer has made a sincere attempt to develop an environment for living sensibly in today's terms.

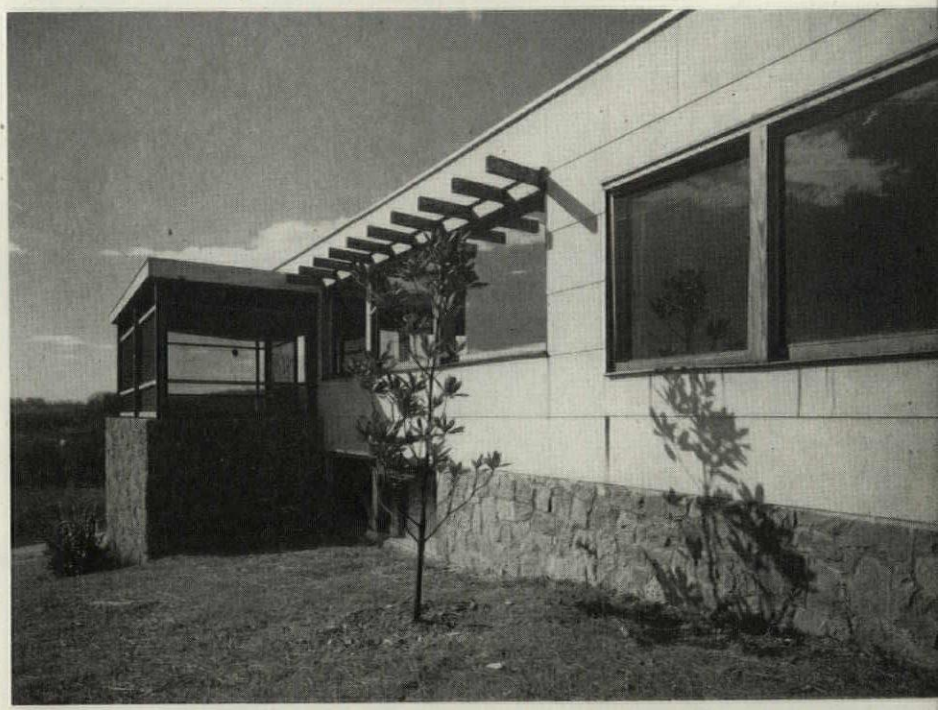
While, objectively, it could be argued that the main entrance might better have been arranged so that it opens less directly into the middle of the living space, the argument is futile in the face of the fact that the owners preferred it as it was planned. Some difficulty was experienced in obtaining a construction loan, the lending agency expressing concern that the house would not sell. It is interesting to learn that when the owner left for the Army and sale became necessary, the house was sold within two days after it was advertised.

Slope of the land suggested placement of the garage at the front, left-hand corner of the house. The architect capitalized on this out-of-line location by constructing



PROJECTING BEAM & FRAMING

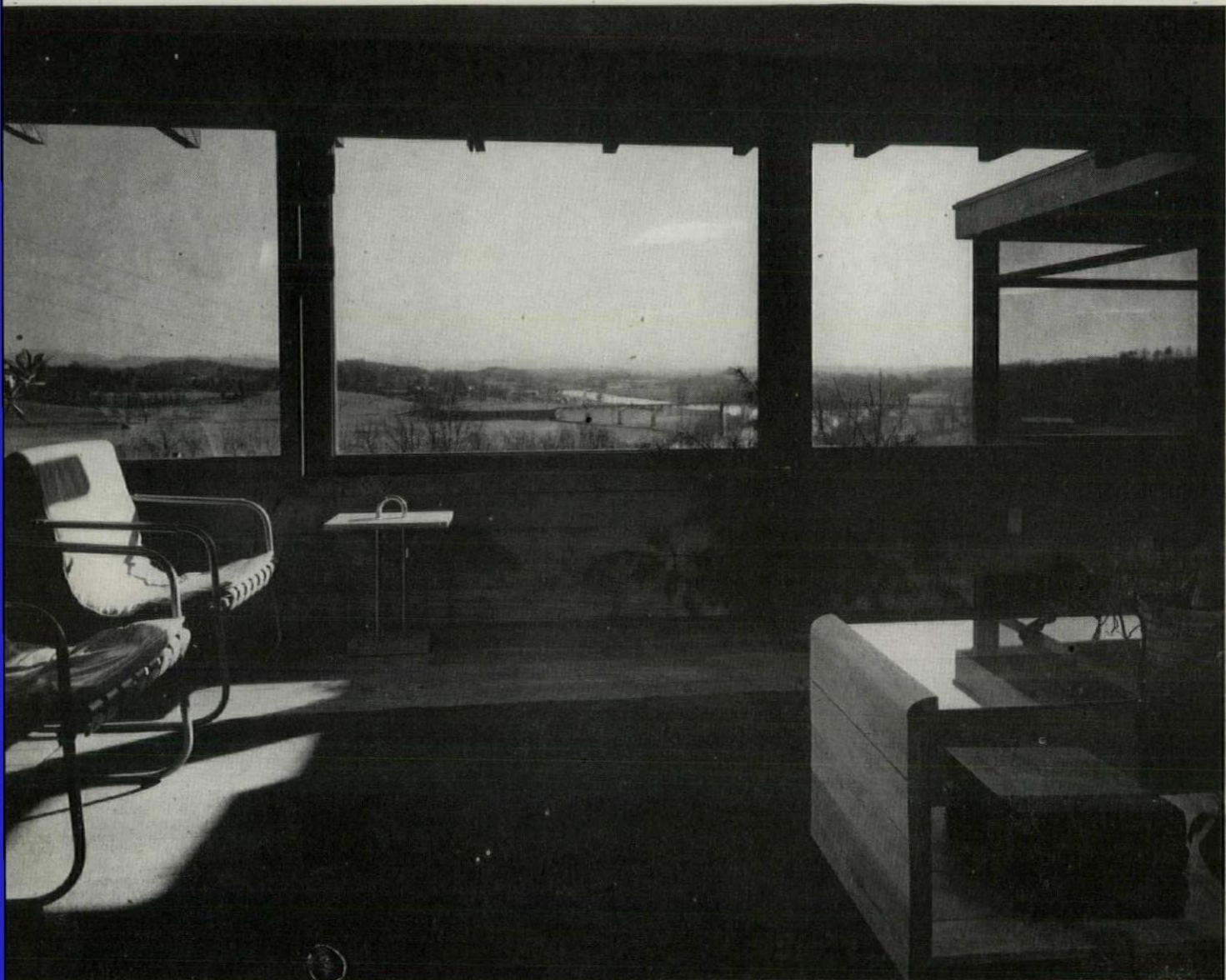
The series of projecting 2 by 6 beams above the living room windows have grooves at either side to receive removable slats that serve as sun shades



Large sliding windows line the walls of rooms on the view side

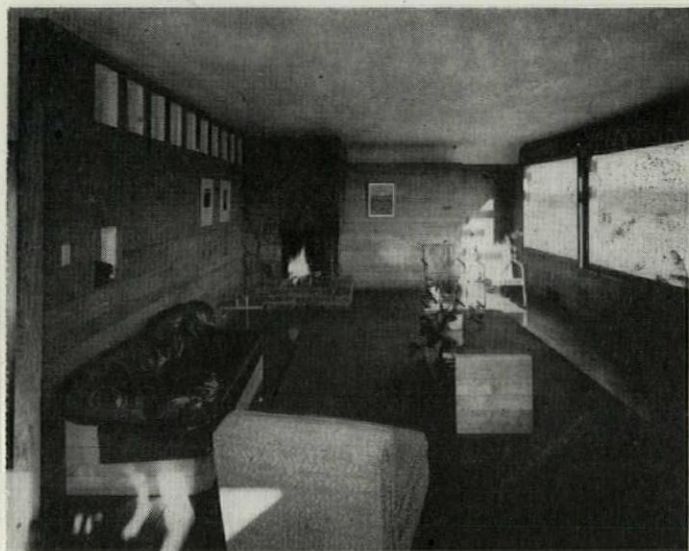
The slope of the site permits garage at grade and good window areas in the downstairs recreation room





South wall of the living room includes a view of three rivers with the Great Smoky Mountains in the distance

DESIGNED BY ALFRED CLAUSS AND JANE WEST CLAUSS



Walls are chestnut surfaced; glazing in partition at left lights the bedroom passage

above it a screened living porch with a bold, rounded overhanging roof. One entire side of the dining space opens up to form a continuous floor area with the porch. The living room wall on the view side contains large, sliding, plate glass windows which, when opened, transform the room into a deep, sheltered living loggia. The opposite partition wall, with panels of glass inset at the top, both screens and lights the passage to the bedrooms.

Below grade, foundation walls are of poured concrete; walls above grade, steps, chimneys, and fireplaces (in both recreation room and living room) are of native stone. The rest of the house is wood-framed, insulated, and surfaced on the outside with large units of asbestos board. Interior walls are of natural chestnut paneling; floors are oak; ceilings are plastered. The house is heated by warm air from an automatically controlled coal-burning furnace which, along with the laundry, storage room, recreation room and garage, is located at the lower level. Tubular lighting installed in ceiling coves is used throughout.



In Claremont, California Millard Sheets, Designer
Benjamin H. Anderson, Associated

DESIGN DETERMINANTS

- A magnificent site in the Padua Hills, about 30 miles from Los Angeles
- The personal tastes of the artist owner
- The needs of a busy family with four children
- Willingness to experiment with materials
- Love of life in the country



The warm earth tones of the exterior are perfect complements to the dusty green of pepper trees, the deeper foliage of

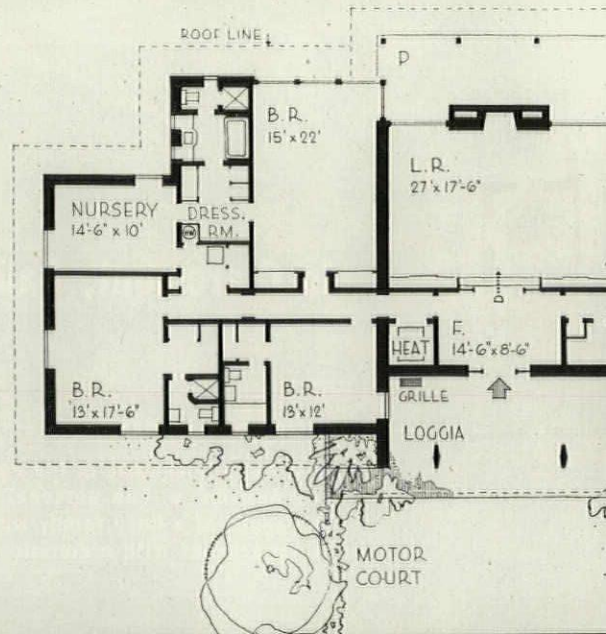
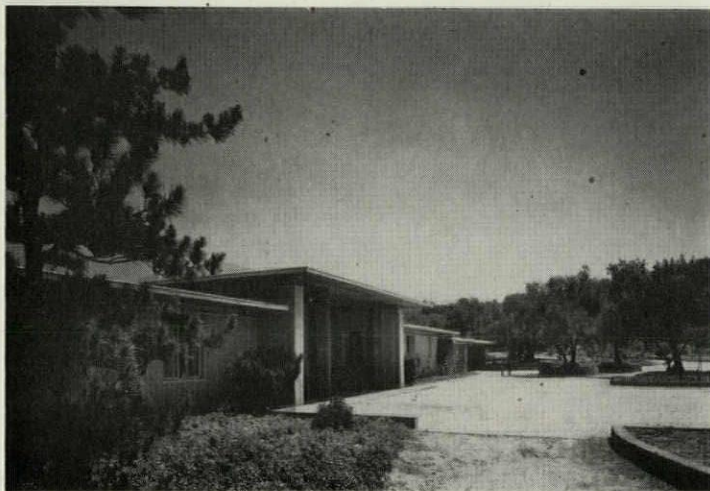
When the well known painter Millard Sheets decided to build a home for his family it is not surprising that it should turn out to be colorful and highly individual. Objectively, it is a strikingly successful alliance between simplicity (in choice of materials) and elegance (in arrangement of spacious rooms and attendant amenities).

We suspect that in these joint characteristics one finds a fairly direct architectural reflection of the owner's

personality. As his painting attests, he admires sincerity, simplicity, and directness; he is also a widely traveled and cultured man who knows and enjoys (and can afford) the refinements of existence. Throughout the house, this admirable combination finds architectural expression.

For example, the main entrance is extremely formal, and beyond the front door, directly on axis, is a rich

Entrance front, looking across the motor court





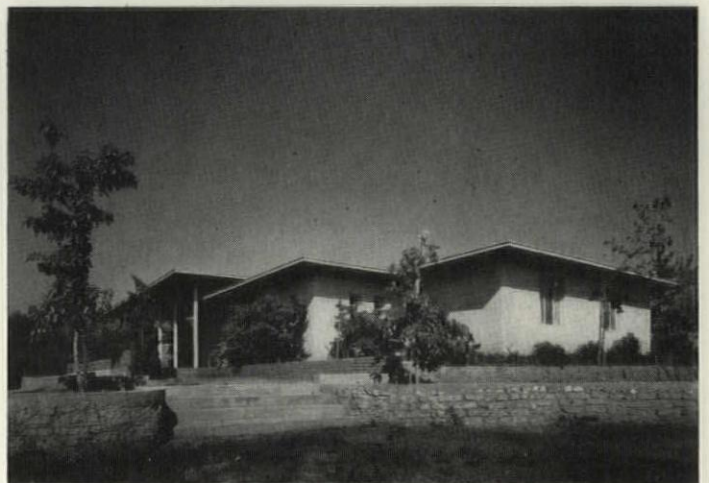
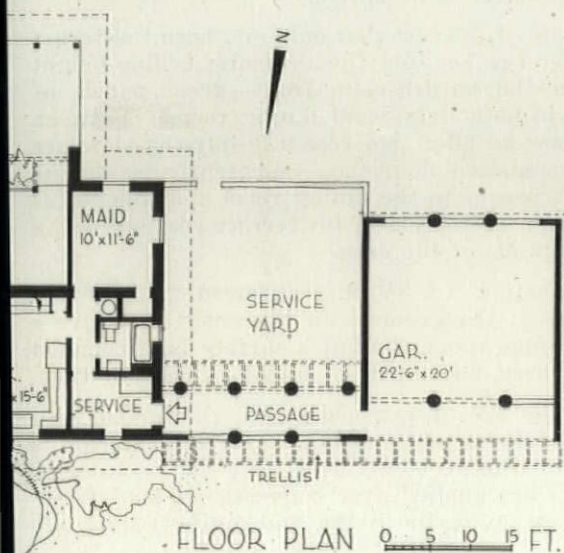
orange trees, and the hazy, cool masses of the surrounding mountain slopes

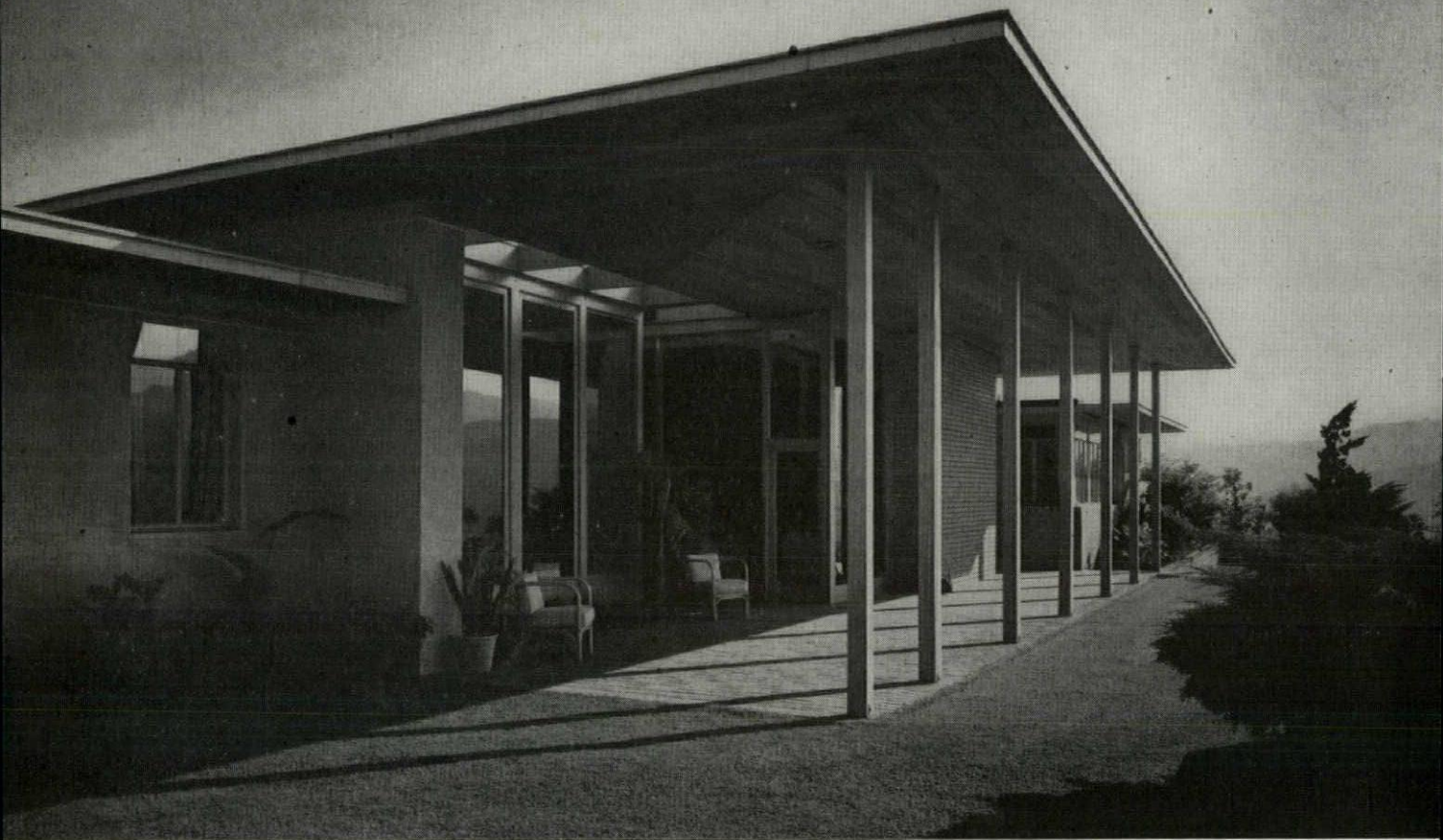
Photographs by Roger Sturtevant

(though simple) pierced oak screen surrounding the living room doors which, in turn, center on the room's fireplace wall. Then, by contrast, one finds solved in the design of the living room itself one of the most common problems of everyday livability. It is usually assumed that in arranging the main conversational group in a living room, one must choose between organizing it around the fireplace *or* some other major element, such

as a view window. The design of the Sheets living room neatly combines the two. The main furniture group is placed around the fireplace, but the flanking window walls allow those enjoying the fire also to look out on the terrace and natural beauty beyond. Furthermore, the large glass areas provide this abundance without the glare that results from walls in which there are several small windows.

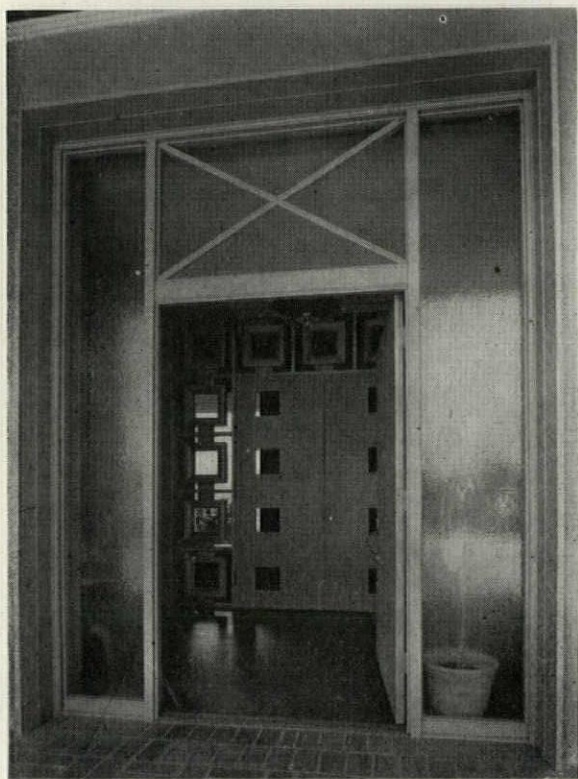
Garden front, with bedroom wing in foreground





The open framing above the dining room and planting recess is clearly shown in this view of the living terrace

Front door, looking through to living room screen



Yet another instance is seen in the luxurious comfort of each bedroom equipped with its own dressing room and bath on the one hand, and on the other, the down-to-earth practicality of the large combined kitchen and breakfast room—a facility that many a housewife with a large family to feed would envy. Obviously, the house was designed for gracious living, but it is also entirely practical, and any appearance of grandeur the photographs may convey is deceptive.

A country site of the sort that only Southern California can offer set the key for the dramatic ceiling-height windows on the garden-view front—great panels of clear glass in both living and dining rooms. Between the two rooms an all-glazed recess is introduced where luxuriant vegetation flourishes—apparently inside the house. Light comes to the dining room and this recess through open construction in the terrace roof bordering the exterior walls of the area.

Floor construction is a 3½-in. reinforced concrete slab laid directly on the ground. In the entry hall, living room, and dining room, the finish surface is of common brick; elsewhere, flooring is of 9-by-9-in. asphalt tile.

Exterior walls are of rammed earth, reinforced with form ties 2 feet on centers both ways; the exterior is finished with cement blown over wire mesh. Interior wall finishes are applied over conventional stud framing. Sash, except in the living and dining rooms, are

MILLARD SHEETS, DESIGNER

BENJAMIN H. ANDERSON, ASSOCIATED



*The pierced screen and doors to the entrance hall are of oak **

The fireplace and view window center of the living room, showing planting recess and dining room beyond

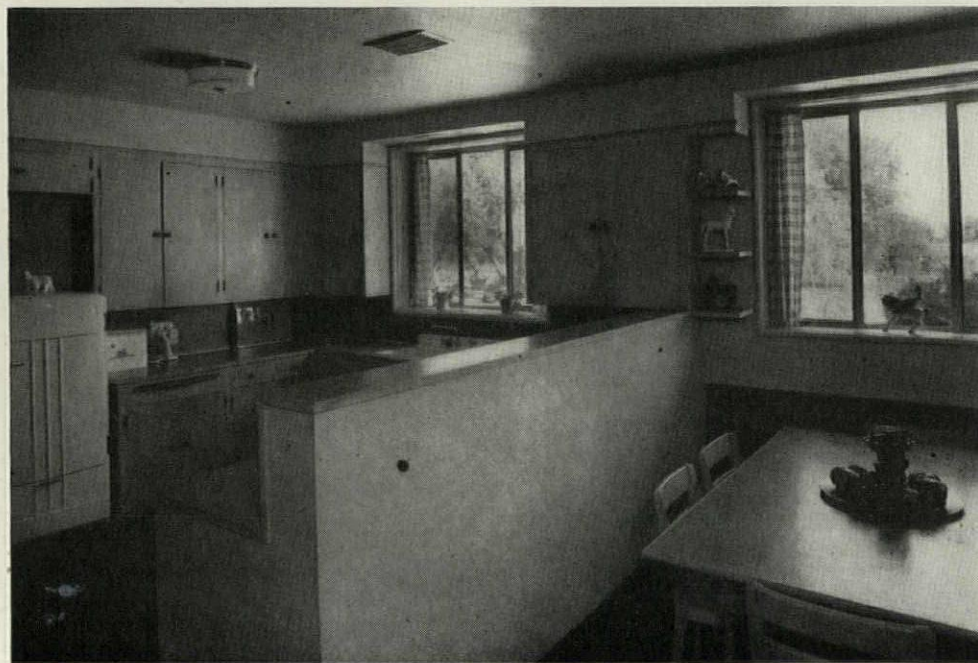




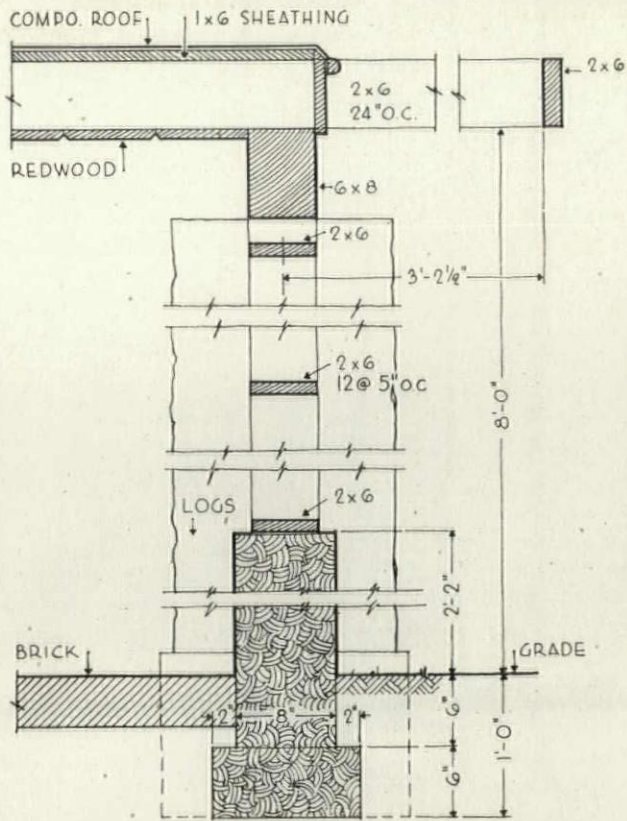
A single carved wood figure decorates the oak-paneled fireplace breast. The tall flanking windows slide back into pockets within the construction.

stock steel casements without muntins. In the main living rooms, the huge windows are of plate glass in special frames.

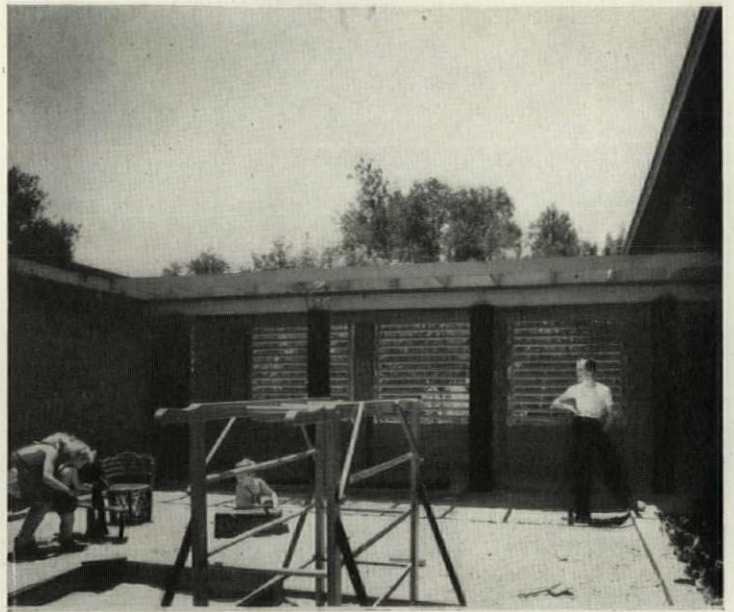
The house is heated by an oil-fired furnace (located in a closet off the main entrance hall) with a fan and duct system, with underfloor return.



In the large combined kitchen and breakfast room, the two functions are separated by a projecting counter. On the kitchen side, this counter-partition provides additional work and storage space. Finishes were chosen for easy maintenance—waxed, natural oak woodwork; floor of asphalt tile.



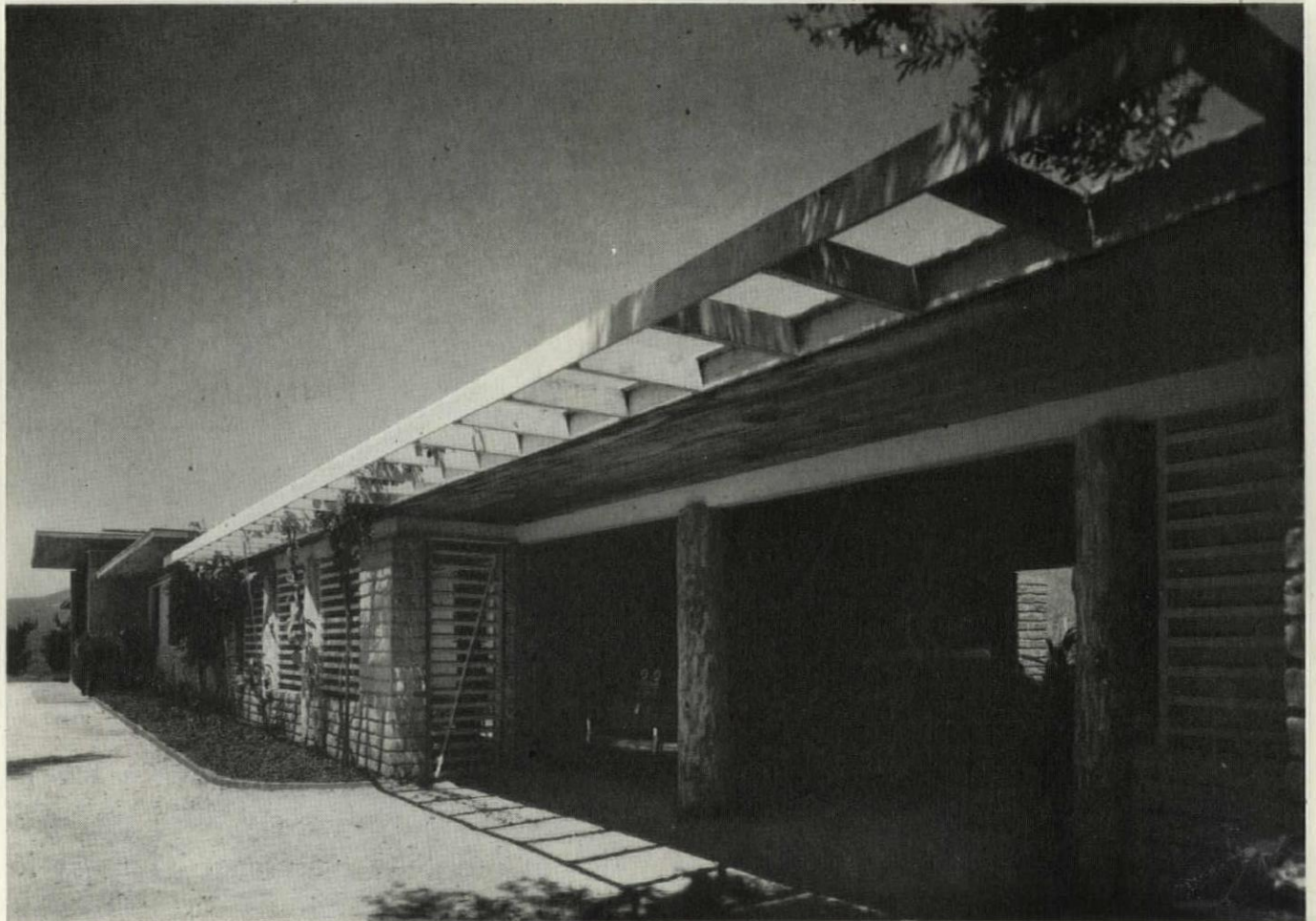
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SERVICE PASSAGE TRELLIS 0 5 10 IN.



Laundry and Play Yard

The space between the kitchen end of the house and the garage is enclosed on the sides by a lattice-screen wall. This courtyard serves as both a drying yard, directly accessible from the laundry-service room, and as a protected play space for the children. The design device of a projecting roof trellis forms a continuous joint between the house, play yard, service, and garage.

From the carport-garage past the screened laundry-play yard to the main house entrance

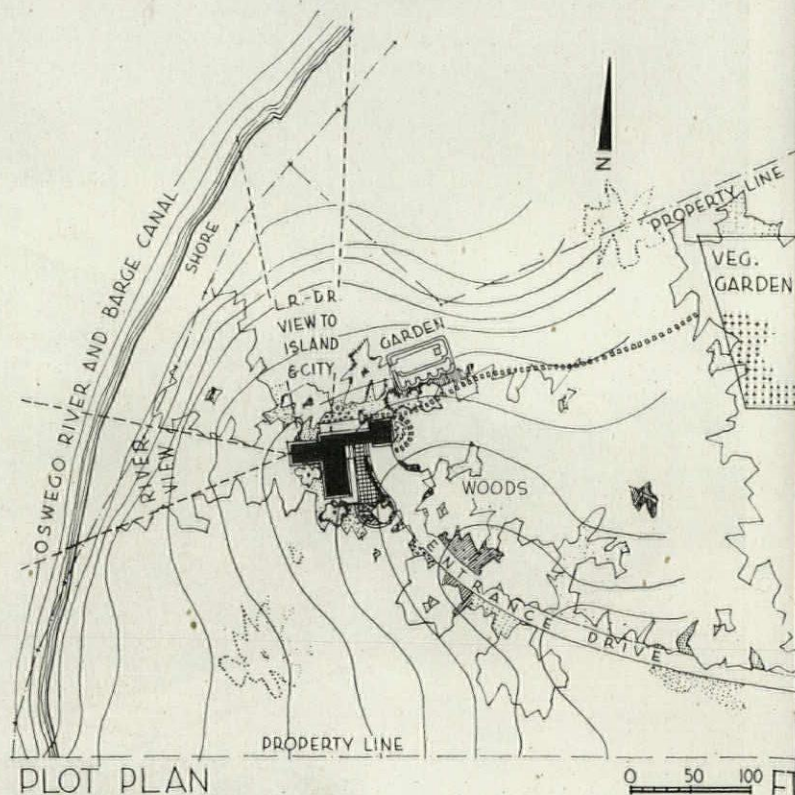




Entrance drive approach; bedroom wing in foreground

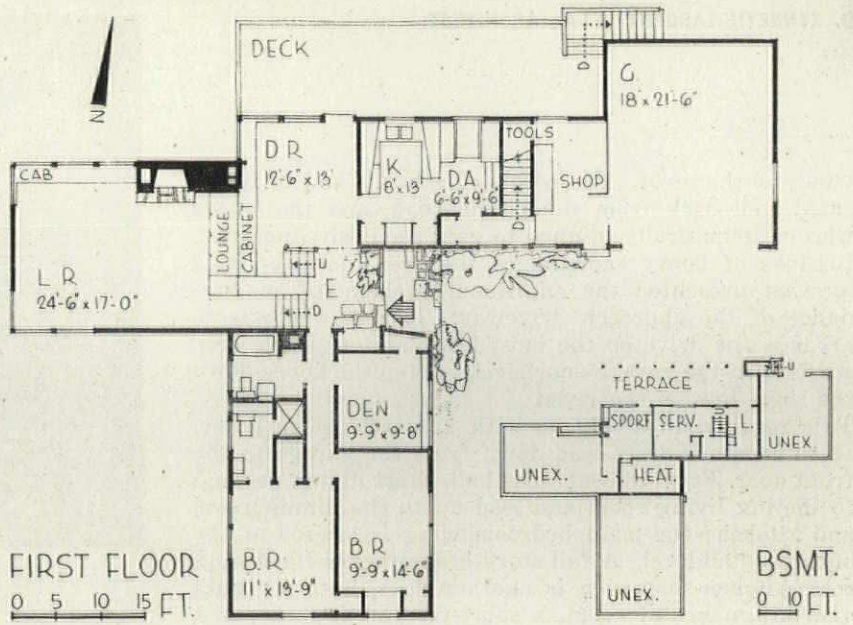
Photographs by Robert J. Arnold

In Fulton, New York D. Kenneth Sargent, A.I.A., Architect



DESIGN DETERMINANTS

A heavily wooded, sloping site bordering a river ● Living requirements of a bachelor owner ● Severe winter climate ● Problems surrounding existing grade conditions and orientation



Designed for a bachelor who employs a man and wife as caretaker and housekeeper, this country home is located at the most advantageous spot on property which rises directly from a bend in the Oswego River. The owner wished to maintain the woodland character of the land, yet so place the house that it would encompass

On the view side of the house, there are two levels of outdoor living rooms

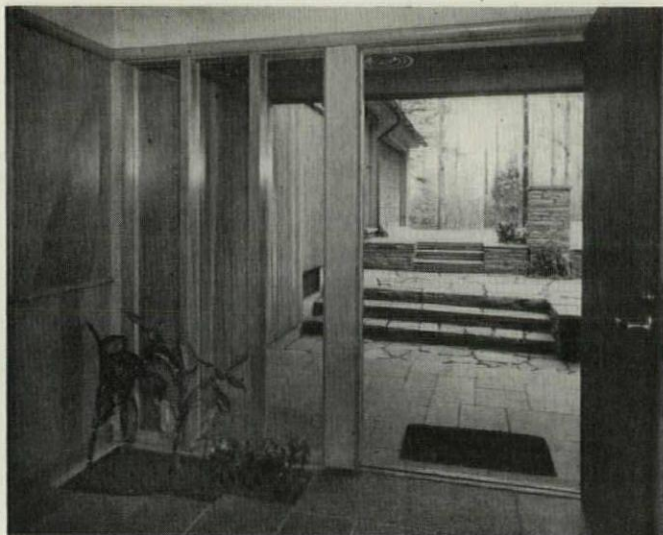


views of the river. To do this, the house had to be located well back from the public road, and the woods were systematically thinned to gain the desired outlook. Because of heavy snowfall in the area, however, this location presented the additional problem of maintenance of the approach driveway. The answer was to arrange the drive on the most level land available and, starting at the garage-door level, to step the house down the slope toward the river.

This resulted in a scheme with numerous floor levels. Slate flagstone steps lead down from the garage to the front door. From the entrance hall, short flights descend to the big living room and lead up to the dining room and kitchen; the main bedroom wing is located at the entrance-hall level. A full story height below the dining room-kitchen-shop area is another floor, with servants quarters, a heater room, a sport-recreation room; and commodious living terrace. Above the terrace is a broad outside living deck, accessible from both the dining room, and from an outdoor stairway. Landscaping of the property was handled by N. A. Rotunno.

Inside the house, much of the cabinet work, built of birch plywood, serves also as partitioning. The two-level unit that separates the living room and dining room consists of storage cabinets for linen and china at the dining room level, a radio cabinet, a bookshelf, and the frame for the fireside davenport in the living room. The radio loudspeaker opening and heating grill are combined in a unit.

In assaying architectural advance, this house would not be way out in front with the work of experimenter-extremists. But when its locale is considered—a region steeped in reverently admired architectural tradition, where those who seek to chart the course of architectural progress infrequently find cairns—this house is an encouraging trail blazer. It avoids the obvious and asserts there are better, contemporary ways of doing things. True, one feels here and there—in the living

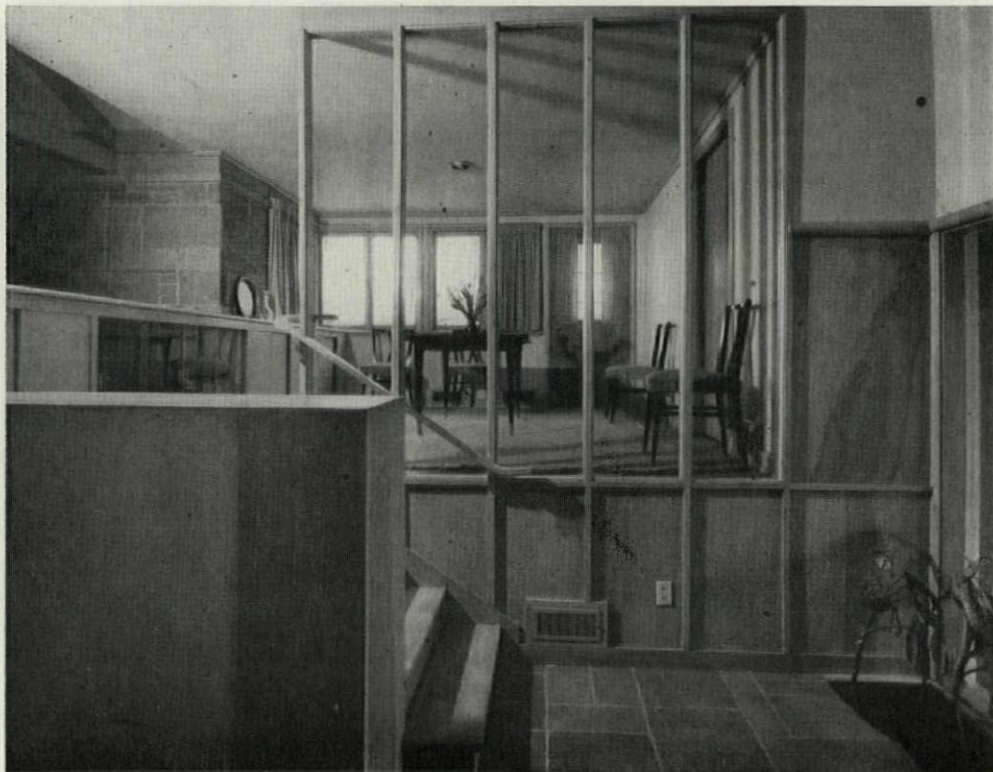


Through the entrance door up flagstone steps to the garage

room for instance—a vague, lingering nostalgia for the Great Hall, for the massive stone fireplace, the open-timbered ceiling of olden days (and we, for one, find this superficial expression the least convincing thing about the design), but the detailing, the intelligent use of plywood, large windows, and built-in furniture all bear witness to an objective concern for providing human comfort through materials and techniques of today.

Of both masonry and wood-frame construction, the house has wood exterior surfaces of vertical, matched redwood, natural weathered and oil finished, except for the entrance trim, which is painted yellow. Exterior trim is of pine, weathered to blend with the redwood. The stone is from a local quarry; asphalt shingles are used on the roof.

Except in the living room, sash are all of a standard, sliding type; in the living room, double-glazed fixed glass is used above sliding units. The house is heated by an oil-fired warm-air furnace and by heat-distributing units built into the fireplace.

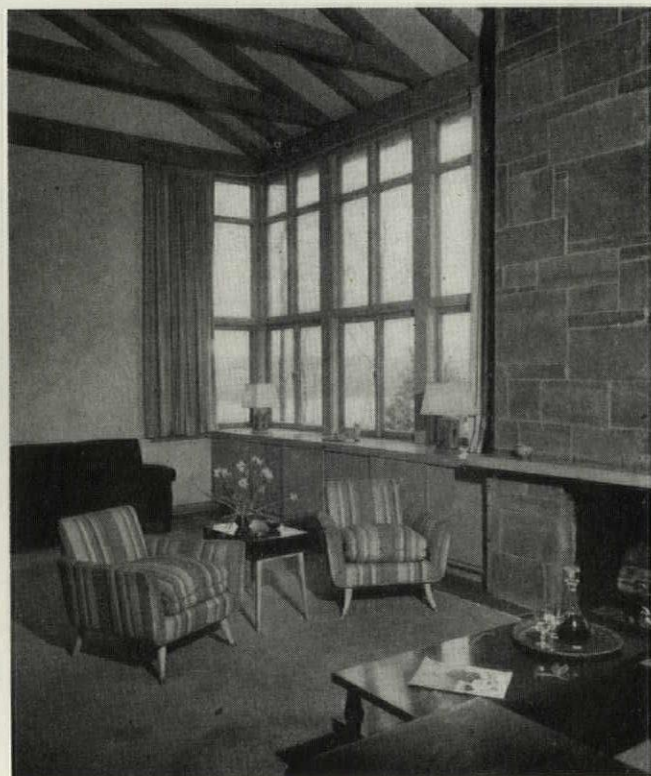


Entrance hall looking toward the dining room, a few steps above

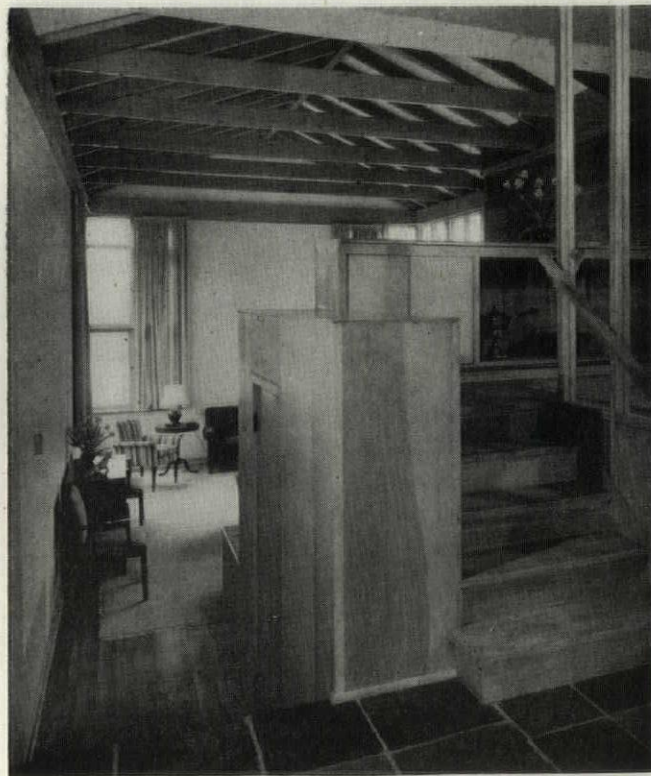


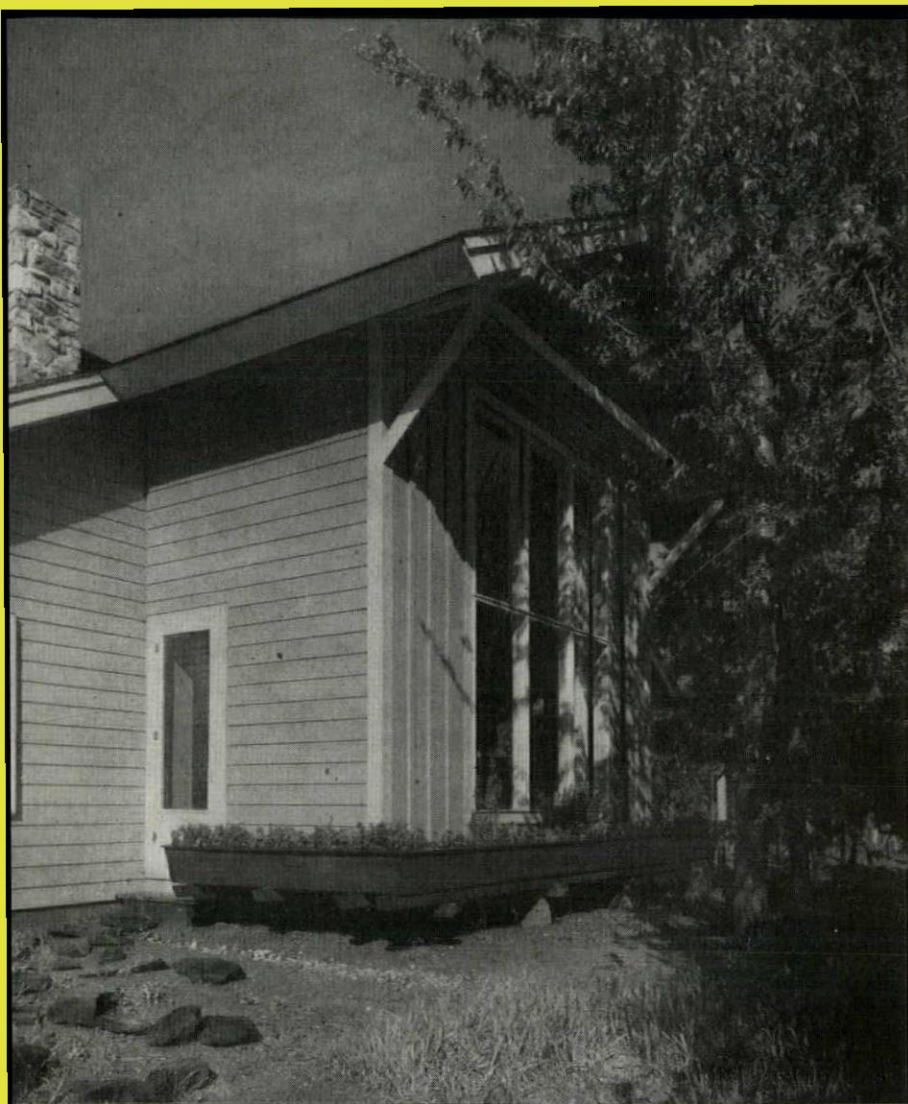
General view of living room showing (at far end) the multipurpose partition and steps up to the entrance hall

Large corner windows are of fixed sash above sliding units



Steps (at right) lead up to the dining room and (straight ahead) down to the living room





Photographs by Esther Born

The owner desired a low-cost, vacation home that would be compact and easy to maintain, yet sufficiently adaptable to accommodate week-end guests. The site is a gently sloping northern hillside in an old orchard, with pleasant views to the north and northeast. Rather violent seasonal changes in the weather, ranging from extreme summer heat to heavy snow in winter, were additional factors in the design. The solution consists of a large central living space that combines the functions of dining, music studio, and lounging space. Sleeping and service areas are kept to a workable minimum.

The main axis of the living room is north and south, with the tall north window providing both excellent light for music reading and the most advantageous view. Windows at the fireplace end of the room welcome the southern sun. For summer use, there is a terrace on the northeast; another, on the south, is used in winter.

Guest accommodations are located in the bunk-room balcony above the southern end of the living room. The balcony is also used for seating at informal musicals.

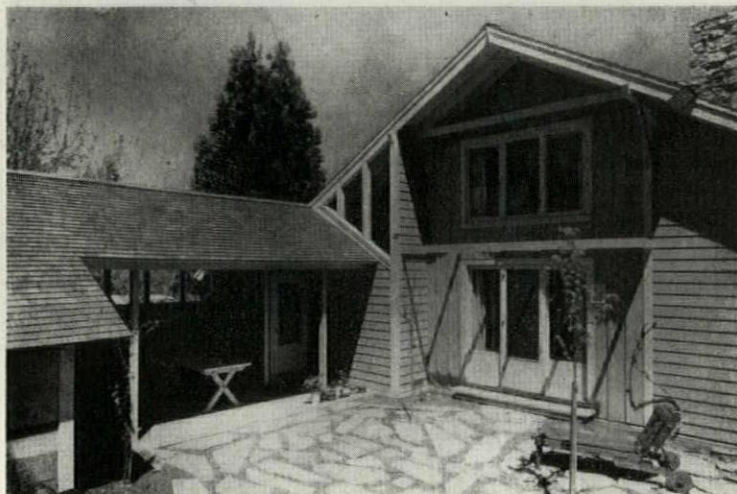
The house is of wood-frame construction built on concrete foundations. For economy, structural framing was left exposed wherever possible. Exterior walls are of pine beveled siding painted a warm gray; the trim is neutral white; roof overhangs and exposed frame members are yellow.

Oiled cedar shingles are used on the roof, and the roof structure is insulated with 1/2-in. insulation board laid over sheathing exposed on the interior.

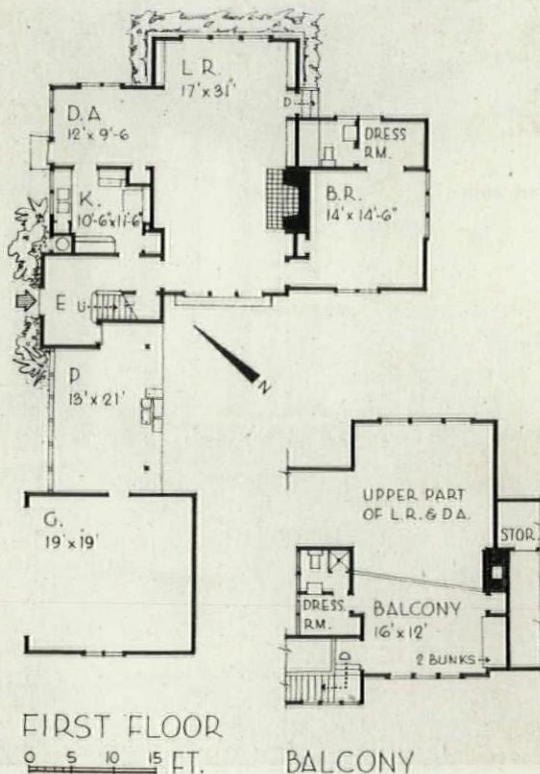
In Dutch Flat, California Bolton White, Architect

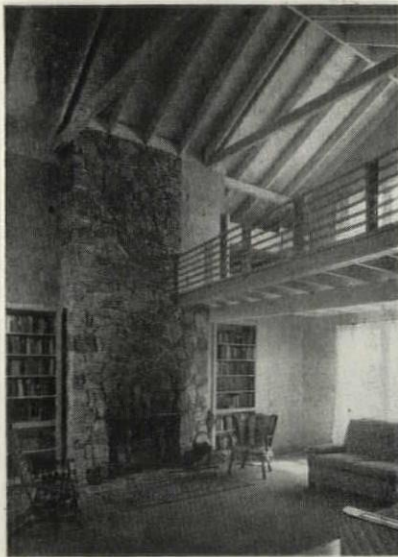
DESIGN DETERMINANTS

A vacation home for a couple with one college-age son • Owner, a concert musician • Easy maintenance • Week-end entertaining • Year-round occupancy, a possibility



The covered porch adjoining the southern terrace serves as a protected passage to the garage, a shield against prevailing west winds, and a pleasant, shaded outdoor dining room. All sash, trim, and doors were made on the site by local carpenters





Southern end of the living room, with bunk-balcony above



The dining space is an alcove off the main room

Interior walls are finished with white pine shiplap, treated with a warm gray glaze that allows the grain to show through

The kitchen and baths are finished in plywood and have linoleum flooring. Kitchen and entry floors are 12-by-12-in. quarry tile; all other floors are surfaced with 6-in. oak planks

The chimney is built of local stone. In the fireplace construction, a patent fire-box was included, with heating ducts opening into the living room, the bedroom, and the bath. This, together with a combination wood and gas kitchen range, supplies ample heat for normal use. For extreme weather, however, there is also a gas floor furnace installed under the living room

Bedroom



View of north window from the balcony





Photographs by Jean St. Thomas

In Charleston, West Virginia Martens and Son, Architects



DESIGN DETERMINANTS

Steep hillside site • Family; father, mother, two children • Owner's hobby; photography • Delight in informal entertaining

Practically precipitous slopes rise from the banks of the Kanawha River in Charleston. While they offer impressive views of the valley, the city, and the hills beyond, they are also a sizable poser to the residential architect. The architects of the house shown here had just such a site to cope with.

Near the top of one of the high hills that offer a panorama of the surrounding countryside, the site is both rugged and irregular. The family—parents and two small children—wanted a home that would not only supply proper facilities for each member but that would make much of the splendid views, simplify the business of entertaining, and provide a well equipped darkroom to serve the owner's hobby of photography. Analysis of the plans shows how well the architects solved the problem.

General organization of window areas provides great openness in all major rooms on the downhill view side. On the upper slope, where there is no view and from which direction stormy weather usually approaches, windows are smaller in area and kept well above the floor for better ventilation. This high location also leaves maximum wall space for furniture placement.

Walter F. Martens, A.I.A.
Robert E. Martens, A.I.A.

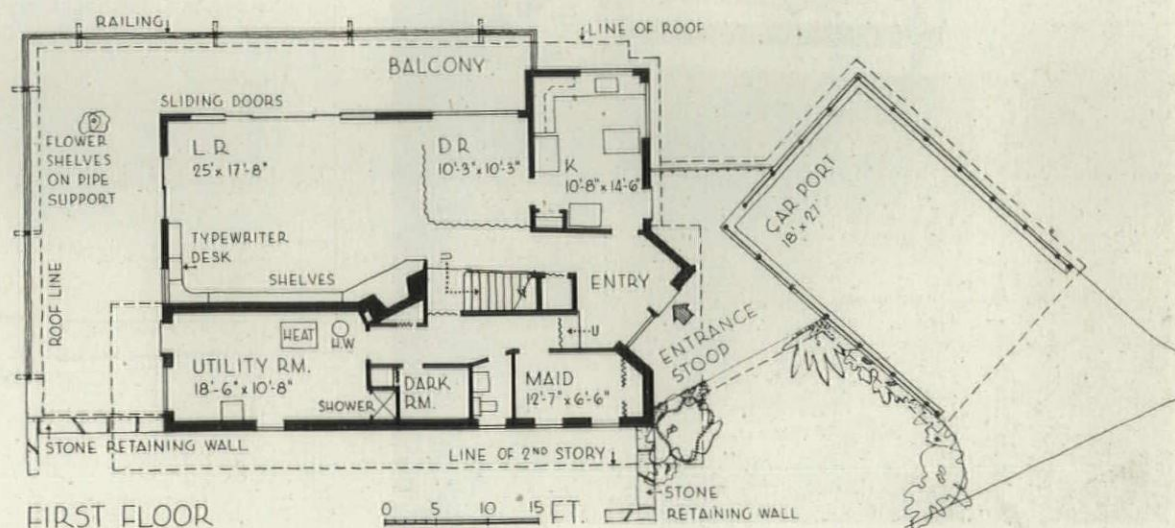
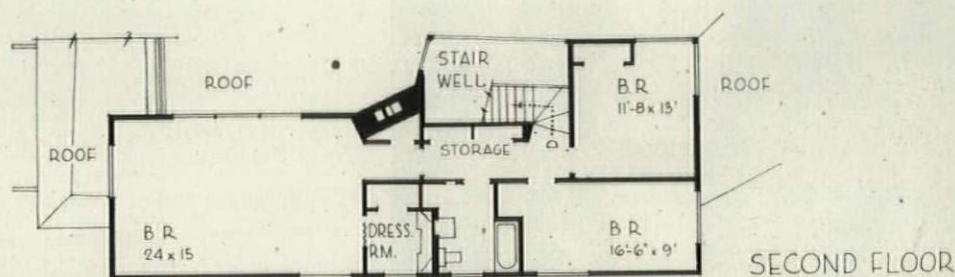


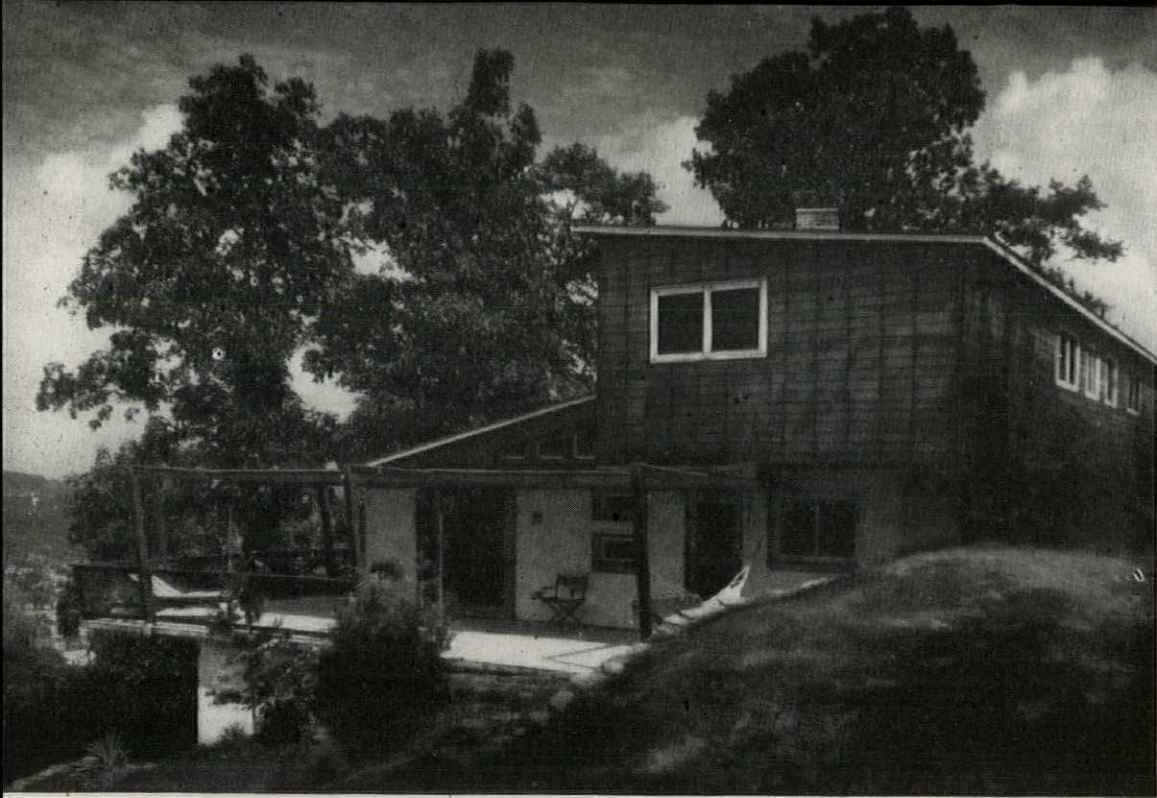
Main entrance, service entrance, and carport are concentrated to open off the main roadway level

The open plan of the first floor—with the dining space separated from the living room and entrance by only a curtain (when drawn)—was specifically planned to make entertaining as simple as possible. Sliding glazed doors open this general area out to the cantilevered balcony, in effect forming a single, large indoor-outdoor room that is equally accessible for entry, departure, and service.

In a house that is basically so simply schemed, the objective analyst cannot but wonder about the position of the living room fireplace. The angular arrangement, alongside the area that would normally be used for entrance and exit, seems something of an anachronism. Close furniture placement would block the direct line of traffic; more distant placement would appear to impair the purpose of a fireplace.

The carport, front door, and service entrance are sensibly located at the end where no particular view exists

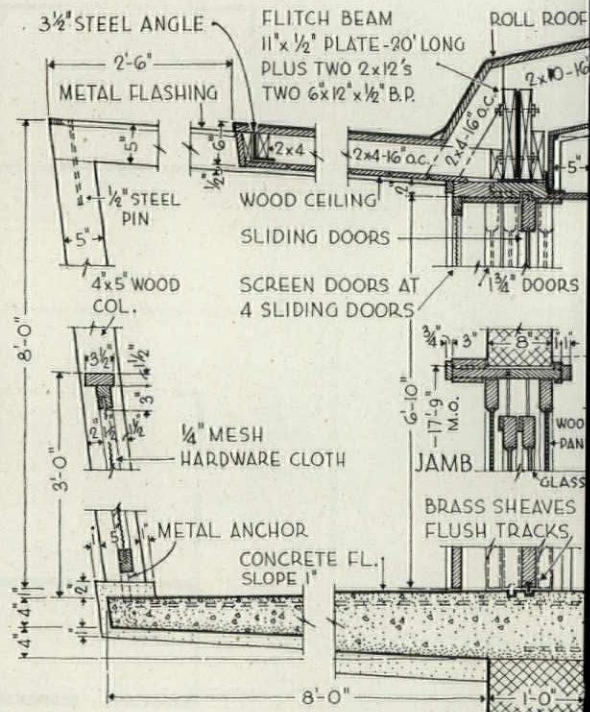
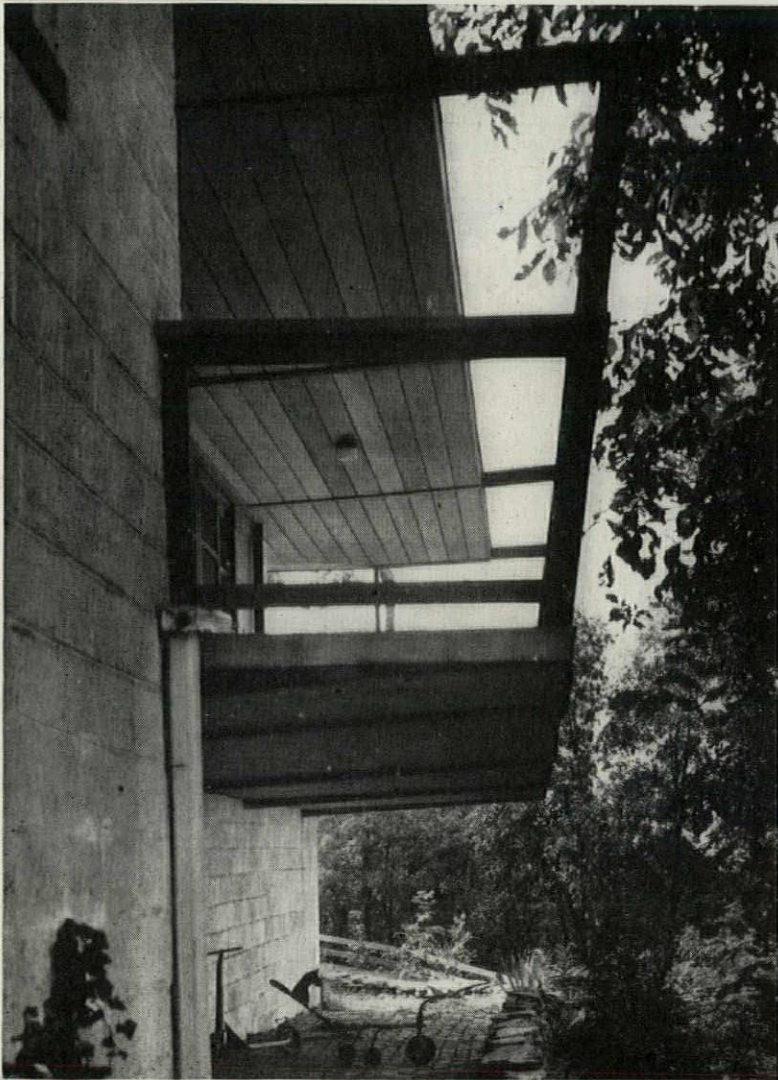




Cinder block below; wood frame above; organization of masses and cantilever deck suggests a direct solution to a problem in physics

MARTENS AND SON,
ARCHITECTS

Below the cantilevered balcony is a sheltered play terrace



DETAIL OF BALCONY
& SLIDING DOORS

0 12

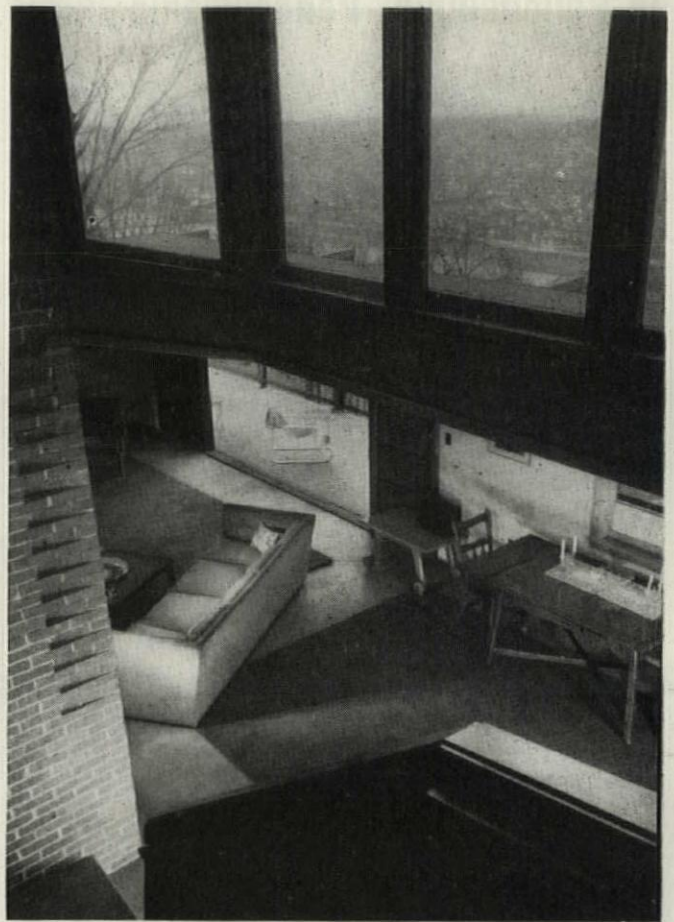
and which is also the brief point where the adjacent public road is at lot level.

Because of site contour, a basement was inadvisable, and the utility room serves as heater room for the gas-fired warm-air furnace as well as for a laundry, with direct access outdoors. The darkroom alongside is fully equipped to cater to the owner's serious interest in camera work. A further provision in this line is the photographic display panel, beside the fireplace in the living room, for exhibit of photographic enlargements.

Roof lines are so sloped that practically no metal gutters and conductors were required. The house is built on cinder block foundations with the same material used for exterior walls of the first story and the center bearing wall; exterior surfaces are cement finished. The second story is of standard studding and sheathing, with redwood exterior siding finished in oil and light creosote stain. Insulation is installed between the studs. Exterior trim, doors, sash, and frames are light ivory.

No interior plaster was used; masonry units are painted with casein paint; stud walls and partitions are faced with natural finish $\frac{3}{8}$ -in. Philippine mahogany plywood nailed flush with V-groove joints. Ceilings are covered with $\frac{1}{2}$ -in. insulating board painted ivory. Interior trim is natural finished redwood.

The first-story floor is a waterproofed and paneled reinforced concrete slab, continued in a cantilever to form the living room balcony. Large carpets are used in the living room. Second-story floors of main rooms are of stained white oak; in the bath, linoleum is the floor covering. All windows, except in the service area, are wood sliding sash. Roofing is roll-type prepared roofing.



Looking down into the living room from the stair landing

From left to right: dining area, entrance passage, stairway, and living room fireplace



The architect discovered a fine 1850 house on an exceptional city lot that extends the full depth between two streets. The front of the house was three stories in height; the rear, four. Furthermore, story heights of the front portion were greater than those in the rear. Inevitably this led to floor plans with different levels—a situation which the architect turned to advantage. By devoting the entire first floor to his professional activities, easily accessible from the street, he was able to make use of the levels above in such a way as to keep stair climbing to a minimum. From the living room level, the dining room-kitchen floor is but a half flight down, and the master-bedroom wing is a half flight up. The other two bedrooms are another half flight

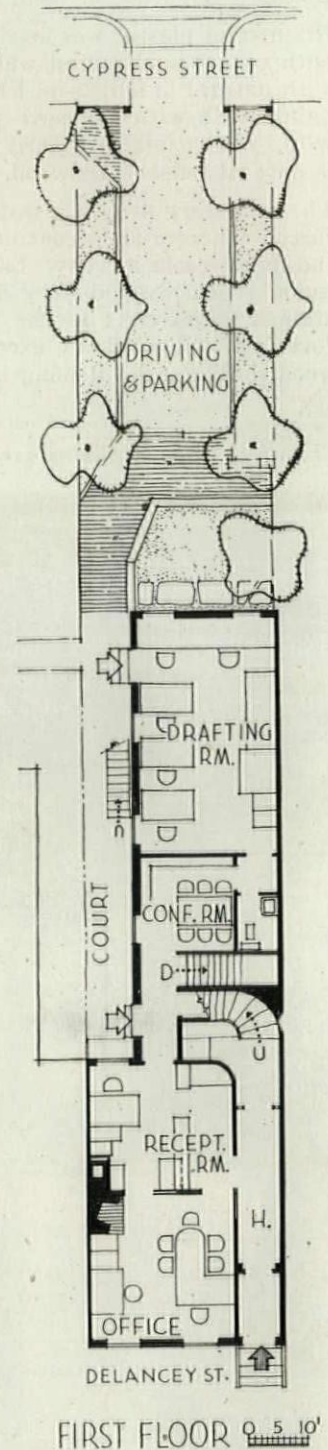
DESIGN DETERMINANTS

The needs of the architect for his own office and home ● an 1850 original, with higher floors at the front than at the rear ● Desire for more sun and a touch of nature

White marble surfaces the lower floor; corrugated asbestos, the base of the living room bay

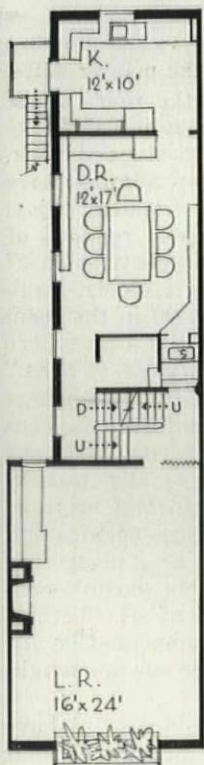


Photographs by Gottscho-Schleisner

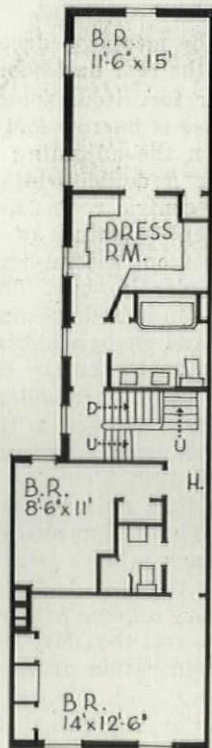




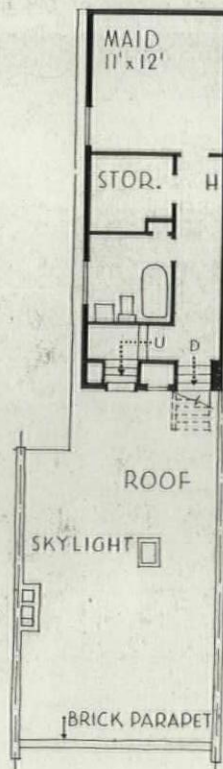
The wide planting bay enlivens and brightens the living room



2ND FLOOR



3RD FLOOR



4TH FLOOR

Using all seven levels of the old house, the architect worked out an efficient plan for his own home and offices. In most cases, no more than one half flight separates immediately related functions

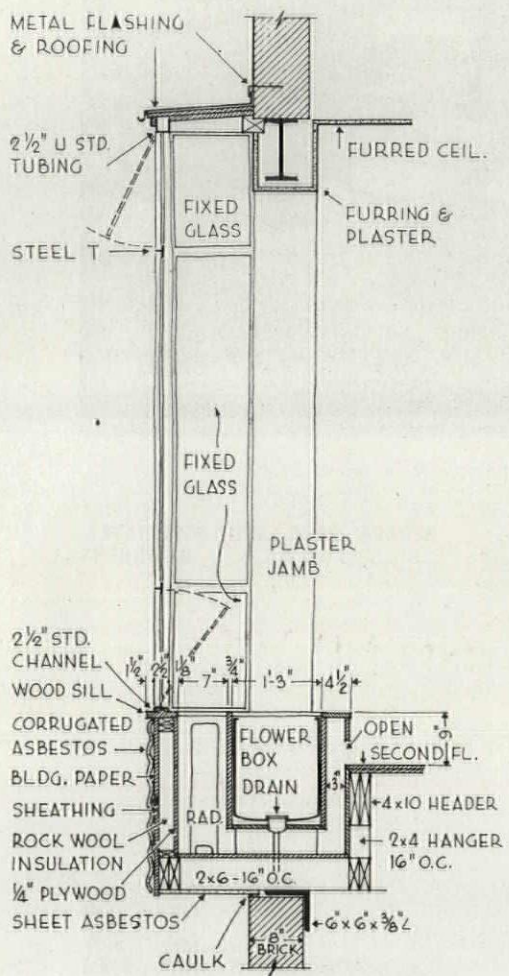


*Neutral white walls, walnut paneling, golden-rod yellow sofa, gold pleated paper lampshade, cattail brown carpet
Work desk and bookshelves in the rear corner of the living room*

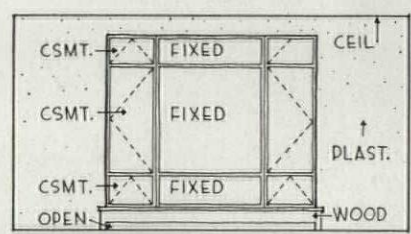


above the master bedroom level, and servants quarters occupy the rear half floor directly over the master suite. Another fortuitous factor was that at the rear, where the house is narrow and windows occur at the side, the house on the adjoining property is also stepped back, creating a double-width courtyard that admits more light to central rooms than most city row houses enjoy. A particular feature of the remodeling was removal of the two front second-floor windows and substitution of a broad planting bay. This was worked out, as Mr. Daub puts it, "to introduce some growing interest in the room and to add enough natural humidity to the atmosphere to compensate for the dryness in the winter months." Actually, it does considerably more than that. It brings added light and sun to the room; it transforms the conventional, orderly, but uncompromising formality of the original 19th Century facade to an equally orderly scheme that reflects the more open, informal ways of today. The design also eliminates a useless cornice and substitutes a brick parapet that serves as a protecting wall for the roof deck. In developing this sensible contemporary scheme within the framework of an old structure, we feel that Mr. Daub deserves commendation for his consideration of the basic character of the neighborhood.

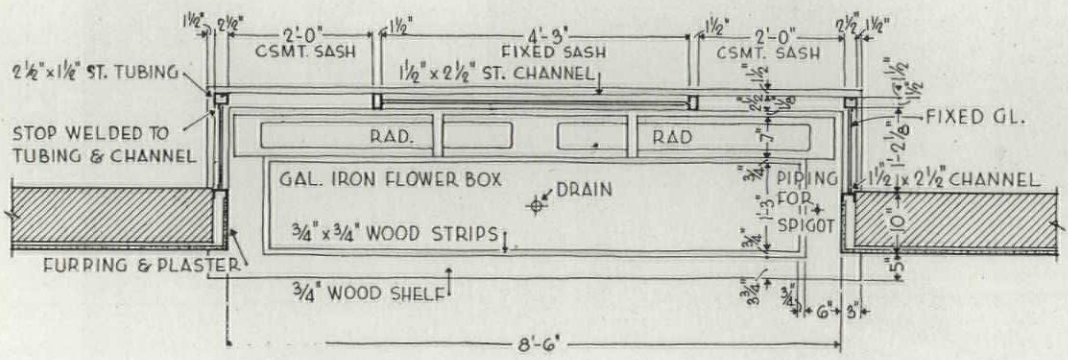
Interior arrangement of space seems likewise to have been made from the point of view of providing what was wanted rather than what might be "expected." In the architect's offices, lined in a functional layout, the conference room appears somewhat cramped, but this is due to space limitations, rather than a fault in design.



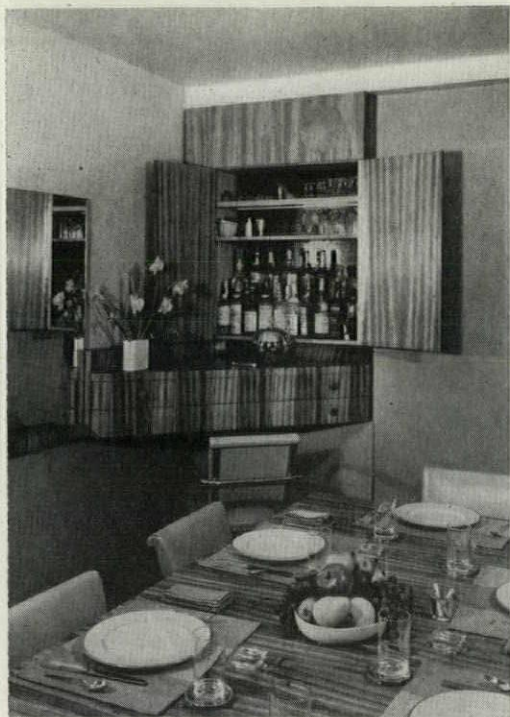
SECTION SCALE $\frac{3}{8}'' = 1'-0''$



INTERIOR ELEV. $\frac{1}{8}'' = 1'-0''$



PLAN SCALE $\frac{3}{8}'' = 1'-0''$



Dining room side of through-wall, multipurpose cabinet



Dining room woodwork is zebra veneer

Beside the living room fireplace, there is a specially designed sofa, constructed at an angle. This not only brings it into pleasing relation to the hearth but widens the approach to the well ordered desk and bookcase unit in the rear corner of the room.

Between the hall and dining room is a through-wall cabinet, with doors opening into each room. The unit includes a small bar, storage shelves, a sink (used for both bar serving and for flower arranging), and built-in radio with speaker outlet into the dining room.

**GEORGE DAUB AND ASSOCIATES,
DESIGNERS**

Bedroom at the front of the third floor





The generous living porch, used the year round, is the pivotal element of the first-floor plan

Photographs by Jean St. Thomas

In Dallas, Texas Howard R. Meyer, A.I.A., Architect

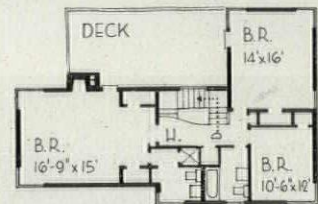
DESIGN DETERMINANTS

- A young-in-spirit couple with three married children
- A year-round living porch, a "must"
- Large corner city lot with fine elm trees

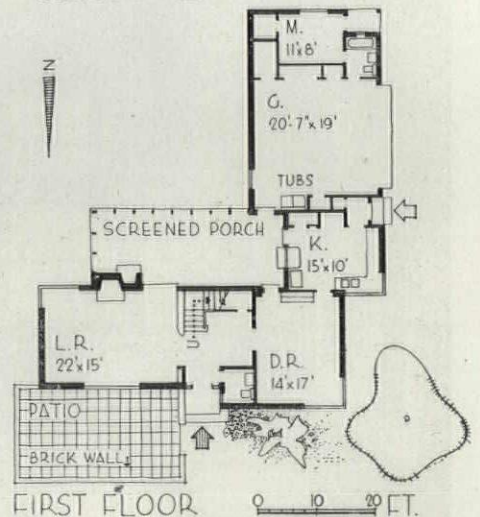
The clients, a couple in their early sixties, wished not only a comfortable home for themselves but a place large enough to accommodate frequent visits from their three married children and their six grandchildren. Both are also hobbyists—she, a collector of china and costume dolls; he, an amateur woodworker. In addition, they are enthusiastic gardeners.

The site is a corner lot 75 by 145 feet with the streets on the north and west—the two less desirable exposures. The adopted scheme for the house, an L-shape with the legs of the L bordering the streets, provides privacy and protection for the garden and living porch on the southeast.

The living porch—for use in both summer and winter—was one of the most important "musts" in the owners' list of requirements. In the first-floor plan, the architect has made it the pivotal element—directly accessible from the living room, dining room, kitchen, and garage. Used for both living and dining, it is equipped with its own fireplace and a ceiling fan to stir the air on sultry evenings. Although it is also used for circulation—



SECOND FL.



FIRST FLOOR



The garage wing (left) and house proper shield the living porch and garden from street view and noise. Construction is of wood frame, built on reinforced concrete piers and grade beams. Brick veneer surfaces the ground floor. Above, V-joint redwood shiplap is used. The roofing is black slate



The living porch. During the winter, the porch is enclosed with glazed panels that in summer are stored in special closets in the garage



Fireplace wall of living room paneled in plywood

from garage to house, for instance—it is so placed that traffic is restricted to one end.

In general aspect, the owners wanted a house of contemporary design, but also one in which they might use their old furniture without unhappy results. On the interior, this seems to have worked out well from all points of view. On the exterior, it appears that the attempt to reach a stylistic compromise resulted in a somewhat dated modernism of the period when a corner window was a novelty. There can be no quarrel with the corner-window device when it achieves a specific goal, and it may be that in this house there is good

logic behind all nine of them; but a superficial impression suggests that the "motif" has been employed as a repeating design element rather than as a clear solution to living needs.

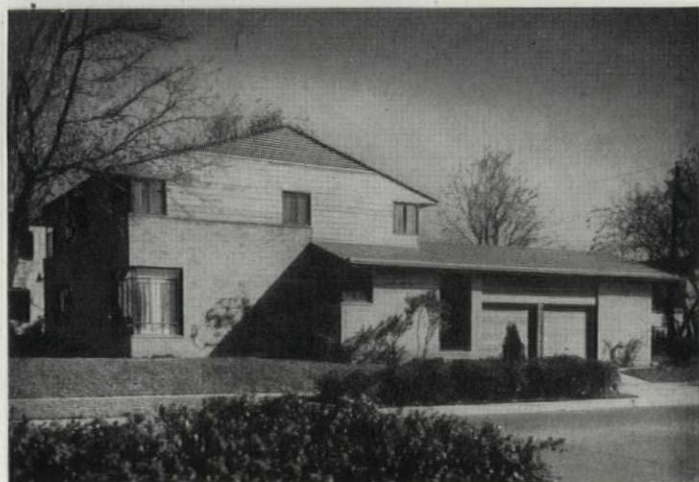
Interior walls are plastered with light-stained pine trim; doors are birch or pine plywood slab-type units; floors are of red oak. The porch flooring is 12-in.-square split hollow wall tile. Details of the main stairway are shown on Page 83.

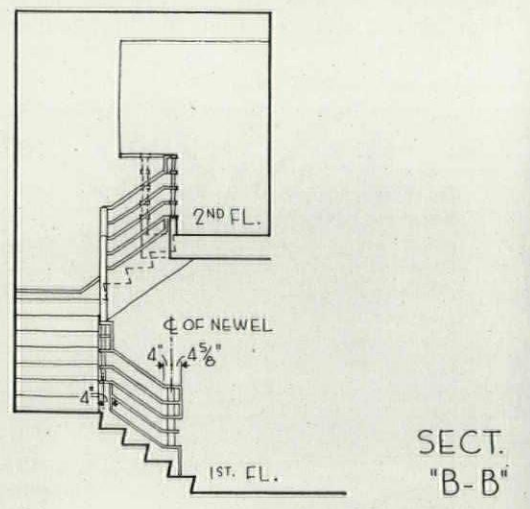
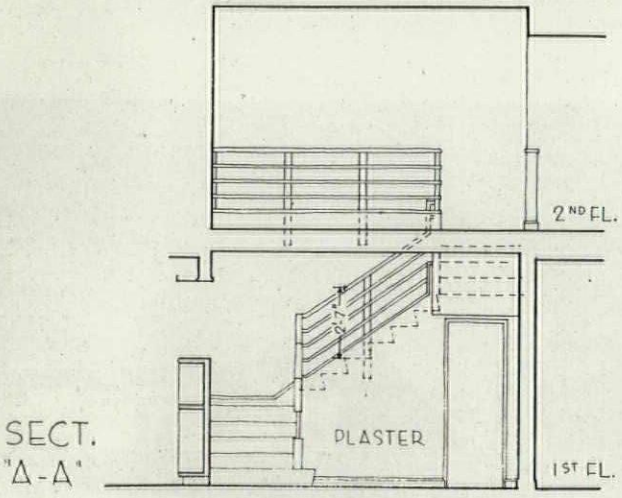
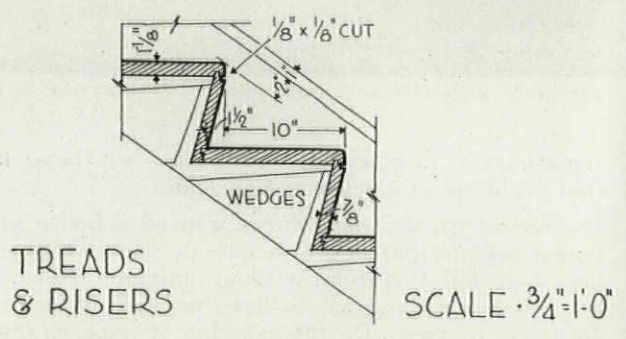
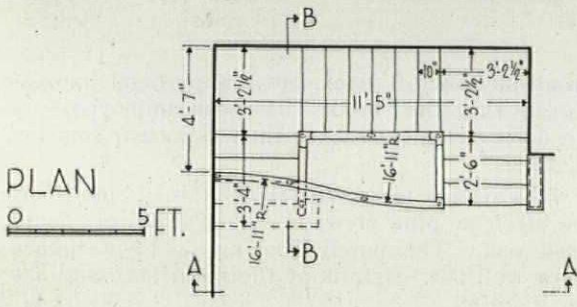
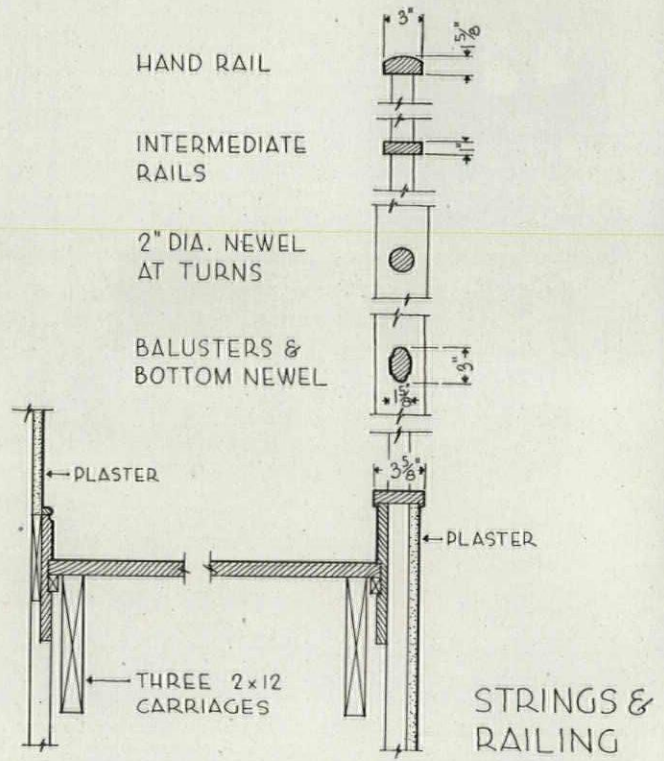
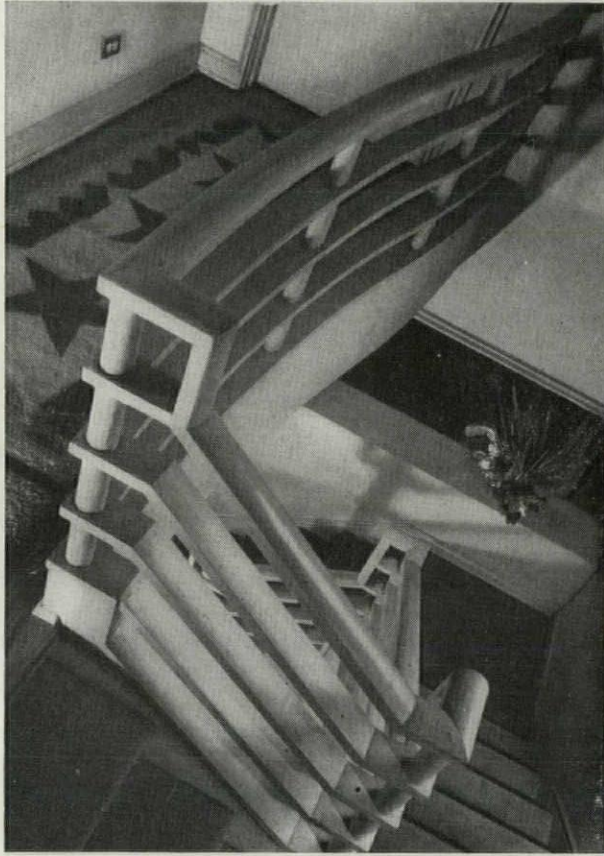
Heating is done by individual units—gas floor furnace for the main rooms; electric wall heaters in the bathrooms.

Garage and service wing



Streetfront of house





The fluorescent principle was used in a lamp, in 1896, by Thomas Edison, but it did not become a commercially practical source of illumination until shortly before World War II. Seldom has it been successfully used in house design, particularly in houses of moderate cost, yet its potentialities are great. The following article was prepared with the assistance of lighting engineers.

FLUORESCENT LIGHTING for HOUSES

by FRANK G. LOPEZ

Fluorescent lighting has been generally available for only a few years. Much of that time we have been at war; as one result of this unnatural state, industrial applications of the new medium are now commonplace. This is logical considering that it offers, for such applications, relatively high light output combined with relatively low current consumption, and that its low surface-brightness makes possible the use of simplified fixtures in which critical metals are almost non-existent.

Also, due to certain characteristics—probably, in part, to its novelty as well—fluorescent lighting had made great headway in commercial fields in the few short years before the war. But what about residential work? There it has never been used very freely; but now, with every promise of a boom in house construction as soon as times permit, we are hearing something about fluorescent lighting for the home. Can it be successfully used there? Yes. However, if it is an improved light source for some purposes, it is also more complicated, though not at all difficult

Photo by George Van Anda

In this early application the ceiling fixtures, simple in design, are placed over the spot most natural for furniture grouping: before the fireplace. (Vahan Hagopian, architect.) The surface-mounted fixtures allow light to "spill" out the sides so that part of the ceiling is illuminated; there is little glaring contrast between the light source and the ceiling surface. Fluorescent lamps produce a diffuse light in comparison to the incandescent's "point" source, yet even though the lamp thus has a lower surface brightness, it is preferably not used bare. Some later types of fixtures incorporate directional reflectors.



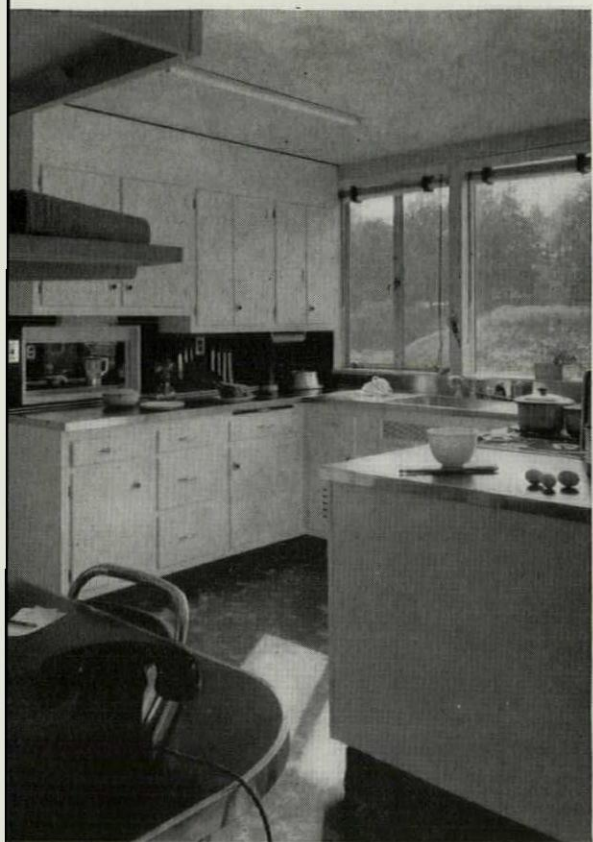


Photo by Ezra Stoller

to employ properly. In order to design well with it, and to provide for it properly, its characteristics must be explored.

Natural vs. Artificial Light

We've all heard the common statements about natural light. North light is shadowless; the quantity of light, even in the shade of an apple tree, on a sunny summer afternoon is far too great for any artificial means to approach in intensity, and so on. We have heard that colors can be matched accurately only in daylight. We know these things—but do we? There is truth in them, but they are also misleading.

For instance, north light is not always shadowless; not if a reflecting surface mirrors the light without further diffusing it. The light level under the apple tree is high, but it is also glareless unless it is directly contrasted with the sun, the brilliant sky, or some other strongly reflective surface. As for matching colors—well, how does a woman apply make-up? The knowing one uses color more freely, in brighter shades, for evening wear than she does for daytime; she applies it under artificial light when she is going to be seen under artificial light.

Sun light is light produced by combustion, and so has a warm color, rich in reds and yellows. That might be called its "natural" state; the degree of clarity of the sky affects its color. Seen from the highest window in a city skyscraper, it has been filtered through smoke, dust, and mist, which again change its color. Closer to the street level, the color of sunlight is yet again altered; at the seashore it is one thing; in the green country it is still another. All these are obvious facts. They are repeated to emphasize the point that the quality of light, in a very real sense, depends upon its color; it is almost true that light *is* color. (Color, of course, is visible only as certain rays of light are reflected, others absorbed, by the object viewed.)

One of the attributes of the contemporary house, in which much of the wall area is glass, is the penetration to its interior of great quantities of diffused natural light. While artificial lighting cannot hope to equal the natural in quantity, it can in purpose and to an extent in quality if we wish. That is, we can suffuse the interior of a house with artificial light. That could be done with incandescent lamps; it can be done better, probably, with fluorescent; but will the result prove acceptable? We are accustomed to certain things in our artificial lighting, and much as we find some types of lighting desirable in factories for efficiency's and safety's sakes, we have not yet accepted them for use in the home.

What Light Are We Used To?

Until the advent of fluorescent lighting all the artificial light commonly used in houses was the product of combustion; that is, of heat. So is sunlight. The fact doesn't mean much to us. What does it matter as long as we *do* have artificial light? Just this: We have been conditioned for centuries to expect a certain color in our artificial light. From simple firelight through the wick dipped in tallow, whale oil, or kerosene, through the candle and the gas mantle, even through the "incandescent" lamp, the actual heating of the wood, wick, mantle, or filament produced the light, a warm, yellowish-reddish light.

Habit thus leads us to expect all artificial light to be warm, warmer than natural light. We buy rugs, draperies, upholstered furniture, evening clothes with that in mind, unconsciously, perhaps; we paint or paper the interiors of our houses with that in mind.

Fluorescent light is produced by the reaction of certain fluorescent materials (called *phosphors*) in the presence of an electrical discharge. Fluorescent light is never an intense red unless a filtering medium is added. The fluorescent lamp generates little radiant heat compared to the incandescent. The color of fluorescent light, depending upon what phosphors, or combinations of them, are used, may be blue, blue-white, green, yellow-white, or pinkish—to repeat, never deep red.

If light is color—or color, light—do you understand what happens when a fluorescent source supplants an incandescent? Suppose a wall to be covered with green paper of a certain hue. It may be fairly bright under natural light, which always retains sufficient warmth of color to affect the green wallpaper. Under the quite warm incandescent light the green

The bare fluorescent lamp used as a ceiling fixture in this house by Carl Koch is probably, esthetically speaking, a better piece of design than the average commercially available fixture. However, it might prove to be unsatisfactory unless the ceiling is so perfect a reflector that the line of light merges into its background without causing glare. Note the local light over the pass-window to the dining room, at left of photograph.

would be even more subdued. But under fluorescent, particularly in certain colors, the green paper would be disturbingly vibrant, or at least more brilliant.

Research has been under way for some time, to a greater or less degree as war exigencies have permitted, on phosphors to generate a reddish light. They may some day be found; meanwhile, by using special glass for the lamp tubing or employing actual pigments it is possible to add some reddish tone to fluorescent light.

The wallpaper example should not be regarded as condemning the use of fluorescent lighting in houses. The reaction noted will occur only when the wallpaper color approximates the peculiar yellow-green which is strongest in the fluorescent spectrum; other greens can be used with entire satisfaction. On the other hand, color can now be used in home décor exactly as it comes from the light source, without color-filters (which always decrease the source's efficiency), but in other respects just as stage designers have used colored light ever since the development of modern theater lighting equipment. It can be made to enhance a mood, point up a composition, make a room restful or joyous, feminine or masculine. In this field our home lighting experts have almost no experience. They can tell us *how much* light is necessary for reading, sewing, cooking, and kindred household activities, but the artist will have to fit the *kind* and *color* of light to its purpose. This is being corrected.

Just What Is Fluorescent Light?

The tubular fluorescent lamp is familiar by now, although if we are to believe manufacturers it will take on strange guises postwar. But even an outline comparison will show that the fluorescent lamp is enormously more complex than the incandescent. Briefly, in an incandescent lamp current passes through a resistance, or filament, which "incandesces," producing heat and light.

In the fluorescent lamp, to put it un-academically, the current is carried by a gas, not a wire. Electrons are discharged by a cathode at one end of the lamp, and in the course of their travels to the anode at the other end they cause radiations. Of these a few are visible as light, but the majority are invisible ultraviolet and produce light by exciting the phosphor with which the inside of the tube is coated. A very small portion

The inexpensive house shown at the left, Francis Joseph McCarthy, architect, has the contemporary wall of glass which admits floods of light in daytime. For night lighting only portable incandescent lamps are provided. The paradox seems illogical; but cost was extremely important and fixtures, wiring, etc., to provide comparable artificial light just could not be obtained within the budget. This is one difficulty as far as low-cost residential design is concerned.

On the other hand, tailor-made fluorescent installations such as that in the Executives' Dining Room, United Carbon Building, right, (Martens and Son, Architects) are possible in infinite variation.



Photo by Roger Sturtevant



Photo by Jean St. Thomas

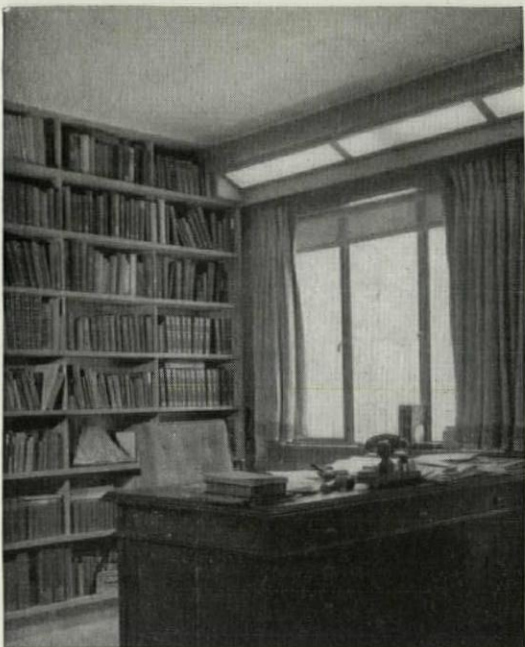


Photo by George Van Anda

In this study, designed by Vahan Hagopian, A.I.A., a fluorescent trough over the window delivers light directly to the desk beneath, at approximately the same angle as daylight entering through the window. Seldom is such close approximation of natural by artificial light achieved.

(in comparison with incandescent lamps) of the radiant energy becomes perceptible as heat. There are a cathode and an anode at each end of the lamp tube; on alternating current the cathodes at either end alternate in originating the flow of electrons. Hot materials generate electrons more successfully at lower voltages than cold, so in the most common type of fluorescent lamp part of the starting current is used, by an automatic device, to preheat the cathode. This is the so-called *hot cathode* lamp.

High voltage can also be used to start the discharge; since this method destroys the ordinary cathode fairly soon, a special resistant metal forms the cathode in this type, which is called *cold cathode*.

Preheating formerly took some small amount of time; now there has been developed the *instant-start* lamp, which reduces starting time to considerably less than a second. The fluorescent lamp requires a constant current, and to insure proper input, as well as accomplish other results, each lamp must have a *ballast* (in simple terms, a choke coil) to regulate current flow. Ballasts have been developed to work with paired lamps.

These are some of the differences, the visible, easily comprehended ones, between fluorescent and incandescent lamps. There are many others, including the necessity for precise manufacturing conditions.

Types of Fluorescent Lamps Available

At present few types of fluorescent lamps, even in comparison with the number on the prewar market, are commercially available. The war has stimulated development, for military purposes, of many more types, and manufacturers have perfected in their laboratories several new types which have little military significance and so cannot be put into production yet.

When peace comes we will be able to buy hot cathode fluorescent lamps ranging in size from a few inches long and a fraction of an inch in diameter to 96 inches in length and an inch in diameter; or to the standard industrial 100-watt size which is greater in diameter. The small lamps are tiny enough to be used at present for airplane instrument lights; the long, thin ones, called *Slimline*, are laboratory developments, practical, but not in commercial production. These will come 42, 64, 72, and 96 inches in (nominal) length, the first two $\frac{3}{4}$ -inch in diameter, the latter two, 1 inch. Slimline lamps will be instant starting and will probably be considerably more efficient than the standard fluorescent lamp. They can be operated either singly or in multiple with ballast, or in series circuits (like old-fashioned Christmas tree lights) with a high-voltage transformer. Most important, as far as technical data are concerned, Slimline lamps can be operated at more than one wattage and current value. This is not true of standard fluorescents.

Another postwar development which is being advertised is the *Circline* lamp—a fluorescent lamp formed into a circle, which is to be available in three over-all diameters, 8½, 12¼, and 16 inches. It seems as if this were an attempt to produce a fluorescent lamp of shape suitable for manufacturers of conventional portable lamps. If this is the case, it's rather like putting the cart before the horse. More logical would be design of portable lamps suited to the most simple, efficient, inexpensive fluorescent lamp—and the straight tube appears to be at least more inexpensive to manufacture.

It will be possible, of course, to obtain special fluorescent lamps in curved, spiral, and other shapes if cost is no object; but these, having no steady market, will have to be made to order.

Cold cathode lighting is nothing new; it has been used by sign makers for some time. To date it has been tailor made to individual job specifications, and it seems likely to continue in that category for some time. It can be used perhaps most successfully in series, although the lamps can also be installed in parallel. The chief difficulty in using cold cathode lamps lies in the necessity for large wire sizes, adequate insulation, and safety precautions due to the high voltage required for operation.

No type of lamp is any better than its fixture. While the brightness of the surface of a fluorescent lamp tube is considerably lower than that of an incandescent lamp bulb, it can still cause glare if it is improperly

The dining alcove below, in a San Francisco house designed by William Wilson Wurster for an interior lot, has no window. The skylight functions during the day and is illuminated with incandescent lamps at night. Although the area of the diffuse light source is large, notice the contrast between it and the surrounding ceiling. Projecting the bottom of the skylight below the ceiling surface and using translucent material for the vertical sides would have eliminated this difficulty.

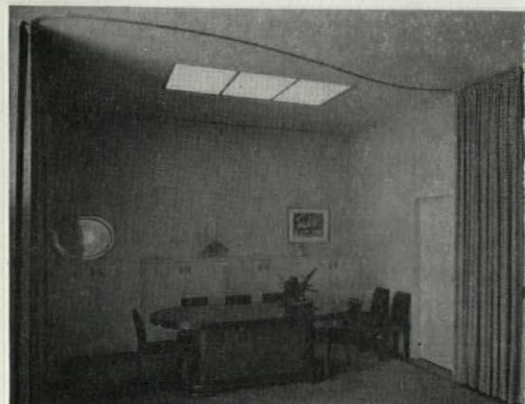


Photo by Roger Sturtevant

used. Reflectors which help to diffuse the light, diffusing media of glass, plastics, or other material, and above all, design of the lighting to avoid unnecessary brightness contrasts, are means of combating glare.

Lighting and House Design

The glass wall of a contemporary house, because it is a large daylight source, does not cause the glare which develops when a small window pierces an otherwise dark wall. By admitting more light, by giving the inhabitants' eyes distant horizons for an occasional restful glance, and by eliminating glare, the glass wall does its share of improving our physical environment. But this is daytime design only, unless the house has artificial lighting designed to achieve the same purpose by night.

To achieve it, some measure of general illumination is necessary, so that the ratio between the brightness of the object viewed and of its surroundings is not greater than 10 to 1. Spotty lighting, such as that produced by using only the common types of portable lamps in a living room, may produce brightness contrasts as high as 100 to 1. The incandescent lamp by its very nature produces this effect when unwisely used. It is, however, an ideal source for building up high intensities of light in small areas to care for exacting visual tasks. It can, it is true, be used in great numbers for cove lighting or some similar means of producing low-level general illumination; but how much simpler it is to use a tubular light source for this purpose! Slimline tubes were developed to fill needs of this type.

Use of fluorescent lamps will probably entail many changes in our conceptions of how lighting fixtures should look. The traditional fixture was designed for a point source of light—kerosene lamp, gas flame, or incandescent lamp. Fluorescent lamps provide a line of light; the fixture will have to change in design. Perhaps it will become a true *lighting unit*, to be selected on the basis of its efficiency and comfort as a light source rather than its ornamentation!

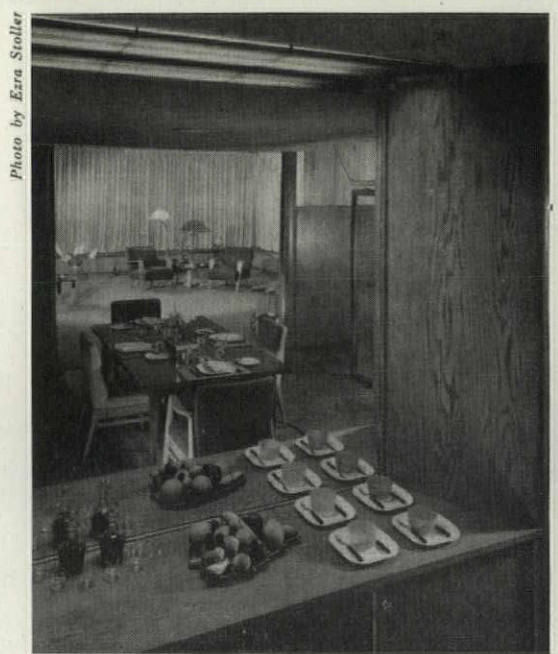
Built-in lighting is fairly expensive for the low-cost house; in addition, built-in ceiling lighting, particularly if the lens or diffusing medium is flush with the ceiling, creates bright pools of light without relieving the ceiling's darkness—thus creating the very type of contrast which it would seem desirable to avoid. A ceiling lighting unit, therefore, would seem to be better if mounted on the surface and so designed that light spills through its sides to illuminate a ceiling area appreciably larger than the unit itself.

Built-in lighting for built-in furniture, however, seems a natural combination. Here the light source can be completely concealed, and used to illuminate bookshelves, kitchen cupboards, counter tops, desks, cabinets, closets, and so on.

The effect of light on color and vice versa has been discussed previously. There are other ways in which use of fluorescent lighting may affect house design. In large factory installations the heat emitted by incandescent lamps has created a substantial cooling load for air conditioning systems. Use of fluorescent lighting has appreciably reduced these loads; but in house design, so few lamps are used that the change is not likely to be perceptible. However, in small enclosed spaces, if these are brightly lighted, the difference might be readily felt.

As to wiring, we have already spoken of the heavier wire and other precautions necessary if cold cathode lighting is employed. Other than this, wiring for fluorescent lighting is no different than conventional house wiring. There are some precautions to be taken. Occasionally a radio may receive interference from a nearby fluorescent lamp. With the modern, shielded radio this should amount to little; but it is just as well to separate the radio aerial and the fluorescent lamp if this is practical. Eight to ten feet should be ample.

Then, too, frequent turning on and off decreases the life of fluorescent lamps because each start destroys a minute portion of the cathode. It was believed that the converse was true, and experience in war plants which operate on 2 and 3 shifts daily has confirmed the belief. A 20-watt fluorescent lamp, rated at a life of 2500 hours if burned only 3 hours each time it is started, is now rated at 6000 hours if it "burns" 12 hours at a time! Moreover, all fluorescent lamps depreciate in light output continuously throughout their life. The same 20-watt lamp, at



Fluorescent lamps can be used to provide both directional and general lighting, as in this lowered built-in ceiling fixture over a buffet (Carl Koch, architect). Louvers consist of long thin slats of wood and cut off direct light rays which might be disturbing to diners at the nearby table. At the same time, a high spot of light is created for compositional effect, and the full-wall mirror, adjacent to a large window (see photo below), picks up the reflected light to make it useful for general illumination. This carefully studied residential detail, however, could only be used in a fairly expensive house.

Fluorescent ceiling trough provides general lighting in the living room of the same house shown above. Local lighting is provided by incandescent portable and fixed lights.



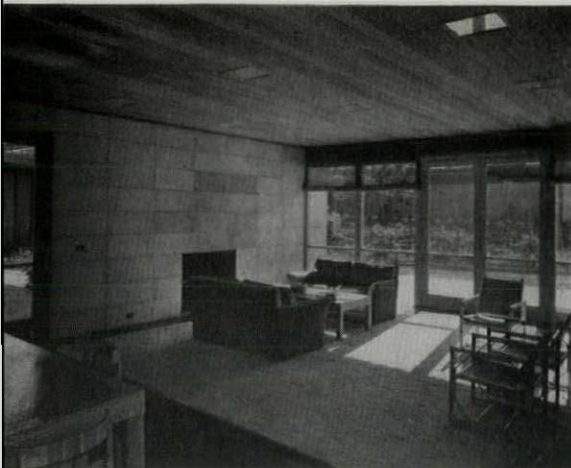


Photo by Roger Sturtevant

Flexibility in lighting layout can be achieved at a price, even with built-in fixtures, as in this house by William Wilson Wurster, A.I.A. As part of the modular layout, recessed incandescent lights are placed in the ceiling throughout the house at regular intervals. Several switches control groups of lights. In addition to being costly, flush lights when used for general illumination produce contrasty light spots in the darker ceiling.

70% of its rated life, delivers from 70 to 84% of the light it did when it was brand new.

Portable Lamps

It is perfectly possible to design acceptable, inexpensive, portable fluorescent lamps. Ballasts, etc., need not be part of the lamp housing, as may be understood by examining some outdoor installations where the lamps can be up to 50 feet from the ballasts (these must be protected from weather). Thus a floor or table lamp can be designed with the ballast in the base, or a "pin-up" wall lamp, similar to those popularized for incandescent lamps, can be constructed with a ballast which fastens to the base board near the convenience outlet. We have already spoken of the Circline lamp, which is intended to make manufacture of conventional portable lamps easier.

How Does the Public Like Fluorescent?

A recent survey leads to some surprising conclusions. It was concerned primarily with those who have existing homes in which lighting is to be modernized. Many were outright in favor of fluorescent lighting; of these, approximately 30% wanted it in their kitchens first, about 25% in bathrooms, 15% in living rooms. Much more surprising, however, was the emphasis on built-in lighting. Well over half those who wanted fluorescent lighting, and almost the same proportion of those who wanted some new lighting but weren't sure what kind, wanted their lighting built-in. If such a preference is general, it makes for public acceptance of the gentle-flood-of-light idea. Even if those who indicated such a preference merely meant to imply that they wanted more of the fixtures which it is the current fashion to eliminate in favor of "base plugs," that it is a reversal of what we have considered an accepted trend. The survey also indicated, as might be expected, that fluorescent lighting is encountered most frequently in single-family homes, least in two- and three-family houses, with apartments in between.

Below, specially designed fluorescent fixtures for office lighting, in the United Carbon Building, Martens and Son, Architects. This is the fluorescent counterpart of the residential scheme shown above, but for a commercial structure. One manufacturer of suspended fluorescent fixtures has recently introduced a commercial-industrial fixture suspended by detachable chains with a plug-in cord for inserting into a standard convenience outlet placed in the ceiling. Such an approach to the problem might make possible true flexibility in residential lighting using ceiling fixtures, without undue expense.

Photo by Jean St. Thomas

