

# THE 1938 BOOK OF SMALL HOUSES

A NEW AND AUTHORITATIVE GUIDE BOOK  
FOR PROSPECTIVE HOME BUILDERS

SELECTING AN ARCHITECT  
PLANNING AND DESIGNING

BUILDING AND FINANCING  
LANDSCAPING AND DECORATING



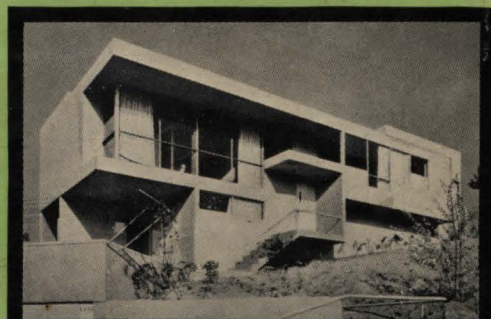
**\$3000.00** (See page 10)

PROBLEM: To design an inexpensive fire-proof house incorporating a two-car garage.



**\$4375.00** (See page 35)

PROBLEM: To provide living accommodations for a small family in a one-story house with provision for a future addition.



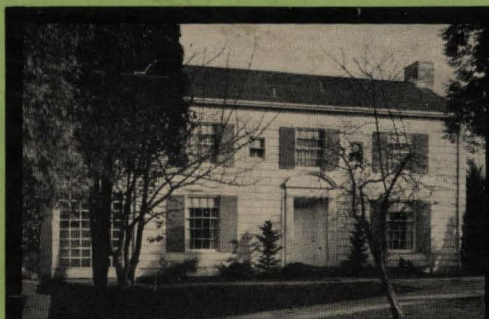
**\$5000.00** (See page 62)

PROBLEM: To design a modest house which takes advantage of views on four sides.



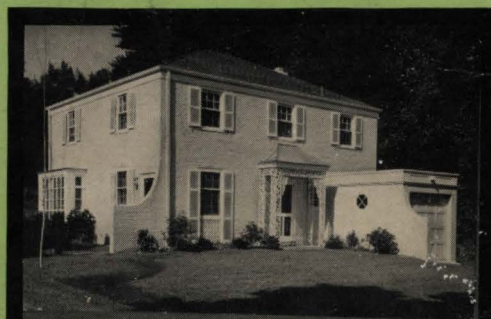
**\$6500.00** (See page 88)

PROBLEM: To incorporate ample outdoor living space in a compact colonial house.



**\$7800.00** (See page 110)

PROBLEM: To build a five-bedroom house on a very limited budget.



**\$9800.00** (See page 138)

PROBLEM: To design a small house on a small lot, with good orientation for main rooms, and maximum outdoor space for the family.

Containing: Plans, Photographs, Specifications, Interiors and Costs of 131 houses.

57 Houses ranging in price from \$1,000 to \$5,000

74 Houses ranging in price from \$5,000 to \$12,000

Including F.H.A. guides to planning, building, and equipping the small house (see inside cover).

BY THE EDITORS OF THE ARCHITECTURAL FORUM



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# SMALL HOUSES

Edited by the Editors of  
THE ARCHITECTURAL FORUM

a completely new guide book for professional home builders. Containing material never before published in book form, it is the successor to our earlier BOOK OF SMALL HOUSES, which appeared over a year ago. It is issued solely because of the demand for a no-nonsense, to-the-minute handbook which answers each and every problem facing the man who plans to build or buy a home in these hard years to come.

THE 1938 BOOK OF SMALL HOUSES is not a book of floor plans. Nor is it a slick paper book of chi-chi exteriors and interiors. Instead, an authoritative guide book for the thousands who want to build their homes with a complete understanding of each step and every expense involved. It covers all the problems which the home owner must meet and solve.

It is rich in stimulating suggestions. It shows the pitfalls along with the joys. It treats its subject to the complete understanding and satisfaction of serious people making the most serious investment in their lives.

## WHAT THIS BOOK CONTAINS

THE BOOK OF SMALL HOUSES has been in the making over a period of many months by the Editors of THE ARCHITECTURAL FORUM. A large part of it is given over to hundreds of photographs, plans, specifications and complete construction details for 131 selected small houses—houses ranging in price from \$1,000 to \$12,500.

In addition, there are many text pages which cover in detail every question asked by the prospective home owner. And in this book for the first time, advice is given and

(Continued on back flap)

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# HOW TO USE THIS BOOK...

This book is replete with a great variety of plans, specifications, cost data, and interior detail. The average prospective homebuilder will find it a constant source of reference and guidance throughout the course of his homebuilding program.

## AN OUTLINE OF SOME OF THE USES OF THIS BOOK:

- 1. Before purchasing the lot:** (SEE PAGE XXXIX) Consult the check list of items in question. It will save you unpleasant surprises and money.
- 2. When deciding on style of architecture:** A review of the examples shown in this book will save you hours of tiresome roaming over the countryside.
- 3. When planning the floor layout:** To guide your architect properly and to save you time and money in the later correction and changing of plans, study carefully the infinite variety of floor layouts shown.
- 4. Specifications:** At this stage, you will find yourself immersed in such perplexing problems as:  
Shall we use wood, brick, concrete or stone?  
Shall we heat with coal, gas, or oil?  
What about air conditioning?  
What about insulation?  
... and myriad similar problems.  
  
A review of the construction outline (specifications) set forth in connection with each house pictured in this book will give you the information that you would get by calling personally on each of the 131 homeowners represented.  
  
It is not to be inferred that these specifications carry any recommendation or endorsement. They are merely the list of products specified for the particular houses shown in this book. Specifications for any house can be properly determined only by your local architect.
- 5. Interior Detail:** Numerous ideas for the handling of walls, and floors, and doors, and fixtures will reward those who review the selections made by the architect and home builders represented.
- 6. Interior Decoration:** Here again the matter of personal taste enters a great deal. You can get a host of suggestions as well as learn what you like and dislike by reviewing the hundreds of pictures of interiors in this volume.
- 7. Landscaping:** How the finished house will look to you and your visitors will depend substantially on the proper placing of shrubs, trees and plants. A review of the book will give you a basis for intelligently guiding your landscape architect or gardener.

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**NOTE:** The figures given as costs refer to the house and include the architect's fee but in no case do they include the cost of land, landscaping or furnishing. It is of the utmost importance to note that there is a wide difference in the cost of the same house in different localities, sometimes even in neighboring towns. Furthermore, costs are now rising while costs shown in this book were figured before the rise began. These costs, therefore, are relative and not the actual cost of the same house in your community. Consult your architect for local cost figures.



AN OUTLINE OF THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and development. It begins with the first settlers who came to the continent, and continues through the years of exploration, settlement, and the struggle for independence. The story is one of a people who have built a great nation from a small group of pioneers.

The first chapter of our history is the story of the early settlers. These were men and women who came to the continent in search of a new life. They found a land of opportunity, and they made the most of it. They built a great nation from a small group of pioneers.

The second chapter of our history is the story of the struggle for independence. This was a time of great hardship and sacrifice. The people of the United States fought for their freedom, and they won it. They built a great nation from a small group of pioneers.

The third chapter of our history is the story of the years of growth and development. This was a time of great achievement. The people of the United States built a great nation from a small group of pioneers.

The fourth chapter of our history is the story of the years of struggle and sacrifice. This was a time of great hardship and sacrifice. The people of the United States fought for their freedom, and they won it. They built a great nation from a small group of pioneers.

The fifth chapter of our history is the story of the years of growth and development. This was a time of great achievement. The people of the United States built a great nation from a small group of pioneers.

The sixth chapter of our history is the story of the years of struggle and sacrifice. This was a time of great hardship and sacrifice. The people of the United States fought for their freedom, and they won it. They built a great nation from a small group of pioneers.

The seventh chapter of our history is the story of the years of growth and development. This was a time of great achievement. The people of the United States built a great nation from a small group of pioneers.

The eighth chapter of our history is the story of the years of struggle and sacrifice. This was a time of great hardship and sacrifice. The people of the United States fought for their freedom, and they won it. They built a great nation from a small group of pioneers.

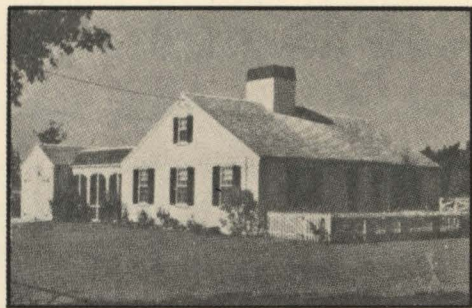
The ninth chapter of our history is the story of the years of growth and development. This was a time of great achievement. The people of the United States built a great nation from a small group of pioneers.

The tenth chapter of our history is the story of the years of struggle and sacrifice. This was a time of great hardship and sacrifice. The people of the United States fought for their freedom, and they won it. They built a great nation from a small group of pioneers.



# **THE 1938 BOOK OF SMALL HOUSES**

**BY THE EDITORS OF  
THE ARCHITECTURAL FORUM**



**NEW YORK**

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**SIMON AND SCHUSTER, INC.**



DEDICATED TO  
THE BEST OF ALL ADVENTURES—  
BUILDING A HOME OF YOUR OWN

—THE EDITORS OF THE ARCHITECTURAL FORUM

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# INTRODUCTION

THIS is a command performance—a command issued by the most inveterate home builders on earth, the U. S. public. Something over a year ago those astute publishers, Simon and Schuster, conspired with the editors of THE ARCHITECTURAL FORUM to produce the first *Book of Small Houses*. This was to be no catalogue of floor plans. Neither was it to be a slick paper brochure of chi-chi exteriors and interiors. If it was to be at all, it must be a competent exploration of *all* the problems which every home builder must solve; it must be rich in suggestion; it must underline the pitfalls along with the joys; and, finally, it must demolish the subject to the complete understanding of serious people undertaking the most serious investment of a lifetime.

To those exacting specifications a book was finally produced which sufficiently satisfied its publishers and editors to justify printing it. How well it satisfied home builders is best told by the records of the booksellers, who disposed of more than 35,000 copies.

Booksellers being what they are, and Simon and Schuster being what they are, the editors were presently approached to try again. So, reluctantly but with undiminished resolve, they foreswore movies, opera, bridge, the Old Gold Contest, and other fun to devote many evenings between issues of THE ARCHITECTURAL FORUM to preparing this text. In one particular, the editors showed greater acumen than when the first edition was turned out—they sought and cheerfully got the collaboration of high authorities in each of the several fields which compose the basic elements of home building, each to discuss the subject which he, better than any other, could treat with finality. To these distinguished contributors go thanks and a well deserved salute.

It is hoped that *The 1938 Book of Small Houses* will definitely and specifically help those who study its pages. Whatever degree of success it achieves is a direct measure of the superlatively good domestic work which architects are today producing in all parts of the country. With a diminishing number of adequate houses available in most communities, with building costs inevitably going higher, with mortgage money abundant on favorable terms, and with the innumerable architectural and technological advances which have been gained in the past few years, this is a good time to undertake the best of all adventures—building a home of your own.

—THE EDITORS



# The Architect

By Walter R. McCornack

Chairman of Housing Committee, American Institute of Architects



WALTER R. MCCORNACK

SINCE the earliest time the professions of architecture, law, and medicine have been serving the human race in their respective fields. At first glance the functions of these professions seem so wide apart in their relationship to mankind that no parallel exists, yet basically all three have similar functions—to safeguard the

health and safety of the people. The function of a member of any of these professions is first, the duty to humanity and second, the duty to self. Because of this relationship to society these groups are recognized by law as agents for building up and administering means for maintaining the health and safety of the people of our country.

To accomplish this the various States require that all who practice architecture, law, or medicine shall be properly qualified to do so by training and that they shall be permitted to practice their professions only after proving their qualifications by an examination by a legally constituted Board of Examiners, and even after being admitted to practice the public is still protected by the power of the Board of Examiners to withdraw the license to practice for cause.

The professions of law and medicine, coming closer to the every day emergencies of life, are more strongly entrenched in the minds of the public than the profession of architecture. In the professions of law and medicine no one not properly qualified is permitted to serve the public professionally. That is even true in the barber, hair dressing, manicuring and undertaking trades, but in architecture unfortunately that is not true to the extent it should be. This deficiency is rapidly being eliminated with the passing of State registration laws for architects (only eight States are without such laws) and the strengthening of laws now in existence. The time will come when all construction will require qualified architectural service. *Not for the protection of the architect but for the protection of the public.*

Under such a law what are the functions of the architect?

**FIRST**—Good neighborhood planning.

**SECOND**—Good home planning.

**THIRD**—Safeguarding health.

**FOURTH**—Providing safety.

**FIFTH**—Providing economy in construction.

**SIXTH**—Safeguarding investments.

Before discussing the architects' functions as set forth in the preceding outline the attention of the home builder is called to the fact that two Government agencies, the Federal Housing Administration and the Home Owners' Loan Corporation, which are both interested in a home building program for this country, are both emphasizing the importance of proper architectural service, consisting of plans, specifications, and *supervision*. Supervision is essential if the owner is to receive full value for his investment, and proper supervision has been lacking in the construction of a vast majority of medium and low priced homes.

It is the duty of the architectural profession to provide proper architectural service to the American people and that is the program now before the profession for solution. It will be solved, to the satisfaction of both the building public and the architectural profession and greatly to the advantage of the home builders of America.

How has the prospective home owner usually secured his plans? In many cases through stock plan service bureaus. While these plans and specifications may be satisfactory and are turned over to a builder to execute, the owner has no assurance whatever that his house will be in accordance with the drawings and specifications. Tens of thousands of home owners have secured homes by this means which have been costly in maintenance and upkeep, and in too many cases has eventually resulted in the loss of the home, through inability of the owner to carry the load. Poor construction of homes has caused high maintenance cost and has been one of the dark spots in American home building.

Then there are types of speculative builders who build without architects' plans. If they do employ an architect it is usually to prepare an attractive perspective for "selling" purposes after which he constructs the building according to his own interpretation of the sketch, without supervision by a disinterested party acting as an impartial judge between owner and builder.

The architect is the only impartial referee standing between the owner and the other elements in the building industry, and his professional duty is to carry out the vari-



ous tasks which are his obligation to perform to the full extent of his ability.

This is a challenge to the architects, and to acquire and maintain the confidence of the public, they must give unstintingly of their time and training in this most important field of architecture—the medium- and low-cost home field.

We will resume the discussion of the functions of the architect by discussing his duties more in detail and in accordance with the above outline.

#### FIRST—*Good Neighborhood Planning.*

The prospective home owner should be sure that the site he selects is in a location fully protected against becoming a “run-down” section and while the architect cannot insure all sections of the city against deterioration he can be of great assistance to the family seeking a proper home site, by making a thorough investigation of various localities and advising as to the best. The architect’s function is to encourage the development of land to its proper use, by zoning and other regulations, thus insuring the home buyer against loss of value in his home, because of the neighborhood becoming blighted, because of the invasion of undesirable types of structures which should not be permitted in a residential section.

#### SECOND—*Good Home Planning.*

This portion of the architect’s work includes the selection of the proper site, once the desirable general locality has been determined, the study of the requirements of the family, the preparation of the working drawings and specifications, and the supervision of the construction.

The selection of the site is important. This duty follows the selection of a proper neighborhood, since the owner may find several sites in the desired section, but they may not be all of equal value or desirability for the type of home to be built.

For instance one site may have rock under the surface, which means a high cost of excavating, or a site may be too low, making the drainage problem difficult, or the shape may not be right for the type of house desired, or the points of the compass may not be so good as some other, or it may be too costly for the cost of the house, thus creating a financial burden which is not justified. The architect should advise on all points of advantage or disadvantage prior to the selection of the site.

Before the site is purchased and drawings begun, the architect should secure from the owner, as nearly as possible, the limit of cost for the entire operation, including lot, building, furnishing, and landscaping, and then proceed with his plans on the basis of the estimated cost. Many families have been placed in serious financial difficulties by over building, and it is the very unpleasant job

of the architect to inform the client that just adding this little feature here, and that little feature there will seriously interfere with his ability to build a home within his means.

The architect should be sufficiently acquainted with cubic foot costs for house construction in his territory to be able to steer the owner away from building beyond his means. However, there are always some architects and builders who claim to be able to build for certain stipulated sums attractive to the prospective home owner. If the cube is approximately the same in both cases, this is not possible unless the quality of the house is sacrificed.

Once the sketches are accepted it becomes the architect’s responsibility to prepare a complete set of working drawings and specifications based on the type of construction, material and equipment suitable to the cost of the house. This he is better qualified to do than any one else because of his continuous contact with all elements in the building industry.

The owner who is not qualified by training is in no position to decide wisely between various kinds of material or equipment to be used for a given purpose and is often led into difficulties by attempting to dispense with competent unbiased technical advice. When the drawings and specifications have been completed the architect must then take bids and, as is sometimes the case, the cost is higher than the owner wishes to pay. At this point the architect’s knowledge is required to advise as to which of the desirable elements may safely be eliminated.

With satisfactory bids received the owner often thinks further architectural advice is unnecessary and relies on the builder for supervision. However honest the builder may be, errors and omissions are bound to occur without proper supervision. In the case of builders who leave out material or supply inferior material for purposes of personal gain the owner is helpless, and the results of such methods are too well evident in homes all over America to require further comment here.

A set of drawings is of little value to an owner unless the building is built according to the *drawings*. The owner cannot be sure of that without *supervision*, and that is an architect’s responsibility. This also means that the architect must know construction thoroughly, and if he does not, he is not entitled to any consideration by the public.

#### THIRD—*Safeguarding Health.*

This is one of the functions recognized as a valid reason for controlling the practice of architecture by law. First it means intelligent planning to provide sunlight around homes. It means dry basements, it means proper sanitation and the proper installation of mechanical equipment to prevent escape of harmful gases. It also means



enough play area around each home to make it unnecessary for small children to play in the streets.

**FOURTH—*Providing Safety.***

This function of the architect has to do largely with planning and construction. It means precautions against structural failure—proper wiring to prevent fires due to defective wiring, properly constructed flues to prevent fires from such source. That these are real hazards is evidenced by the large number of fires occurring from defective wiring and defective flues—fires often resulting in the loss of life. The drawings and specifications may be adequate but careless construction without proper supervision is the chief source of danger, and when the house is completed these defects are hidden.

**SIXTH—*Safeguarding Investments.***

For many years the sentiment "let the buyer beware" has been too often the basis of purchase, but the recent depression has brought about the feeling that any one purchasing stocks, bonds, insurance, clothing, automobiles, and homes is entitled to a fair amount of cooperation from the seller.

There are many shoddy homes built and sold in America yearly. This brings us back to the point of the responsibility of the architect as a professional man.

If a house is poorly constructed and settles, resulting in a yearly maintenance cost for fitting doors and windows; or if the drainage around the outside walls of the house is omitted and water enters the cellar; or if the sewer line from the house to the street sewer is too small, and the sewer line stops up requiring digging up the cellar floor and the lawn; or if the roof leaks and ruins plaster and wall paper; or if the space under the porch floor is not properly ventilated and the porch floor rots out; or if the heating apparatus is not properly designed and the cost of heating the house is excessive; or if other deficiencies develop, then the home owner's investment has not been properly protected by the seller.

The chief function of the architect who designs homes is to safeguard the owner by first designing a house within the means of his client and then making sure that the drawings which he has carefully prepared are carried out in every detail during construction.



# The Builder

By J. C. Nichols

*President of J. C. Nichols Investment Company, Developer of the Country Club District, Kansas City, Missouri*



J. C. NICHOLS

QUALITY rather than quantity home building has always guided the efforts of the outstanding U. S. home builders. At no time has this objective been more determined than today. The home builder of today who intends to remain in business through the years well realizes that substantial construction with consequent lower maintenance cost is the

best advertisement of his product.

Quality home building does not end with substantial construction. Proper adaptation of design to site, use of the site, and the effect of the neighborhood in general are all considerations which cannot be ignored.

A quality home builder gives first consideration to the building restrictions he imposes upon his land. Examples of gigantic losses through investment in areas improperly controlled and restricted are legion. First the home builder should realize that the residential neighborhood, to combat proper land use, must extend over a considerable area. It is impossible to create enduring home values in isolated small areas. Buffers such as golf courses, playgrounds, parks, churches, or school lands are frequently used to protect the boundary lines. Gradual step-ups in the requirements as to minimum house costs and lot sizes, free space, setbacks, etc., are standard methods in making the transition from smaller to larger homes, or smaller to larger lots, so as to avoid abrupt changes in adjacent areas.

Recent years have produced much thought on the duration of restrictions. Farseeing operators are providing self-perpetuating restrictions assuring their renewal from period to period so long as the majority of home owners does not vote to change or abandon them at the end of a given time. There is a current realization among home builders that protection must go far beyond mere municipal zoning, is indeed a fundamental in insuring quality.

With the increased demand for and supply of labor-saving devices the problem has been put today's builder: How include such equipment and still keep the cost of shelter low enough that the buyer will buy, without robbing the structure of its quality?

Faced with this dilemma, builders have stripped their products of frills and ornamentation, and have thus bequeathed them with a dignified simplicity. Gone are the elaborate cornices of the eighties and nineties, gone the roof lines which extended far beyond the body of the house. Ornamental features which invite decay and a dilapidated appearance are rapidly becoming symptoms of the past.

The wise home builder is getting down to a study of good functional architecture and design. Everything which is not essential to comfort and durability is being trimmed away. The days of attracting buyers by an extravagantly decorative front door or flamboyant electric light fixtures are, fortunately, disappearing into the discard. And the shrewd builder has examined the old house with a very revealing microscope. Interior features have been simplified. Over-carved mantels are seldom seen today; the ornamental stairways of a few years ago are as rare as the emu; elaborate trim, wide baseboards, carved woodwork—all are giving way to more essential needs.

The microscope has been turned on the house's shell as well. More thought is being given to footings and foundations, to waterproofing basement walls, to better and more rigid framing, to careful insulation, to more efficient placing of openings, to proper use of mastic materials around window frames, to proper orientation of rooms. The smart operator thinks twice before rolling unnecessary flights of steps over high terraces to reach the home; he is placing living porches on the garden side of the house for greater privacy; he is incorporating the garage in the first floor or basement of the structure, thereby at once saving building costs and giving more lawn space. Rear stairways are frequently omitted.

The old-fashioned large kitchen has been contracted into a compact economical space; the one-time dark and dank basement has evolved into cheerful playrooms, card rooms, or recreation rooms.

Access to the attic is now by way of inexpensive stairs which can be withdrawn. Economies have been effected by giving over a smaller but more sensible space to the bathroom. Closet space has been studied to give greater efficiency in smaller area.

Electric lighting has been arranged to provide proper light intensity at the desired points of each room. The old idea of having the foundation of a home stick several



feet out of the ground, with a burdensome flight of steps in front and rear, has been abandoned. A more intimate relation between the living portion of the home and the living part of the lawn is being obtained. Garden side porches with only one low step to the grass meet more readily the taste of 1937's market. Open terraces on the side of the house which is shady in the late afternoon frequently obviate a porch roof.

Unnecessarily dark hallways on the second floor are largely things of the past. Stairs and halls are now compact and efficiently arranged.

We have found that proper exterior proportions of the house, a well-designed exterior treatment of the front door, and proper grouping of windows can give better architectural effect with less cost than did the elaborate designs of a few years ago. Intelligent use of color is doing much to lend today's home character.

Pleasing views from windows, the treatment of the lawn with elimination of the confusion of flower beds in the open lawn space, accentuation of certain landscape features viewed through the windows—all help to give the feeling of a sensibly integrated house-and-garden.

The study of children's needs is demanding much attention. The plan of the house takes into account recreation and entertainment for both children and adults. Membership in golf clubs and other social organizations where large groups may be entertained more economically has made it possible to decrease the size of dining rooms. The old-fashioned parlor and music room which were so seldom used are disappearing even from some of the very large homes. An unnecessary number of outside doorways are being eliminated. Of course, these additional doorways cost money to install, and certainly make it more difficult to heat or cool the home. To offset the ever-increasing taxes on real estate, the quality home builder is giving more heed to keeping the maintenance cost of his homes low.

The vital points of the structure where expensive trouble is likely to develop are being carefully examined. The life of the roof, the life of the interior and exterior paints and varnishes, the use of more durable materials, bracing to avoid settlement, the use of more carefully cured lumber and trim, the use of steel in the angle joints of the plaster, the more careful fitting of wooden joints, the protection of all points of the house which are subject to rot and decay: all these enter into the creed of the better home builder of today.

Then, too, the wise builder never forgets that good design and a kempt appearance over the years help to maintain the value of surrounding homes. The unsightly backyards—common eyesores in every residential neighbor-

hood a few years ago—have largely disappeared, giving way to trash bins in the basement or periodic removal of garbage by home associations.

Indisputably, long strides have been made in recent years toward better home building in spite of the rise in building costs. More thought and effort is being devoted to better home building in a general way than ever before. The Land Developers and Home Builders Division of the National Association of Real Estate Boards has been very helpful in this work.

With the continued cooperation of the laboratories of building material manufacturers throughout the country, the efforts of the architectural profession particularly in the field of lower priced homes, reduced mortgage interest rates, the efforts of the Government through the FHA to encourage better home building and better neighborhood planning, and the efforts of the better home builders of the country to promote better home construction in general, the high standard evidenced in the modern home will be still further advanced.

The growing spirit of cooperation among architects, bankers, home builders, manufacturers, landscape architects, city planners and municipal authorities, and, last but not least, labor, is the biggest single cause for optimism. More than anything else this will make possible the production of better homes for our people.

#### THE QUALITY HOME BUILDER TODAY IS:

1. Putting drainage tile around the outside and inside of basement walls to make drier basements.
2. Laying thicker concrete floors in basements—three to four inches in contrast to the older and cheaper method of making them two inches thick.
3. Using metal frames in basement windows which were formerly wooden and subject to damp-rot.
4. Building areaways of solid brick or cinder blocks, and tying them into the stone wall of the house to prevent unsightly settlement.
5. Painting areaways white to reflect more light into basements.
6. Using white pine instead of yellow for window frames.
7. Using galvanized shingle nails instead of common wire nails in order to give more life to roofs.
8. Using 40-lb. tin in flashing instead of 20-lb. tin as used by cheaper builders.
9. Using much better material in downspouts, which are so subject to disintegration.
10. Having a double piping system for hot water heat instead of the old-fashioned one-pipe method.
11. Putting in automatic water heaters.
12. Cut-off on all water risers in the house, contrasting with the cheaper method of supplying none.



13. Putting counter flashing on all plumbing vents, in contrast to the old method of using none.
14. Supplying two compartment sinks instead of one compartment.
15. Using chromium-plated fixtures instead of nickel-plated.
16. Running plaster to a straight edge rather than using a floated plaster method.
17. Putting on a much thicker coat of plaster, giving much more durability and less likelihood of cracking.
18. Supplying electric exhaust fans and electric clocks in kitchens.
19. Running vents to all gas mantles.
20. Furring out all walls for plastering in masonry houses in order to give air space between the plaster and the stone or brick wall.
21. Using galvanized screen wire instead of the old-fashioned black screen wire.
22. Screening porches for more livability.
23. Dowling and mortising all woodwork of the screens.
24. Screens with metal frames are being used.
25. Using three coats of exterior paint instead of two.
26. Building garage doors in such a manner that they will not spread and settle.
27. Pointing up both interior and exterior joints of basement walls and using better mixture of cement mortar.
28. Providing higher ceilings in basements so as to make room for recreation rooms.
29. Using factory-built window frames with all joints properly housed instead of simply having them nailed together on the job by carpenters.
30. Using all cast-iron pipe for underground work, giving greatest assurance of long life.
31. Tying flue construction into the wall of the house with steel rods imbedded in the flue in order to eliminate settling away of the chimney from the house.
32. Using a heavy, tarred, dust-proof, and vermin-proof paper between the sub-floor and the finished floor, and also on the outside of the sheeting of the house.
33. Laying fire-brick in chimney in a flat formation to give more solid construction and less danger of fire.
34. Curving the back of the firebox instead of building on diagonal lines, in order to make the draw better.
35. Placing the dimension lumber on 14- and 16-in. centers in order to give greater strength to the structure.
36. Using collar beams to give sounder construction.
37. Using headers over doorways to avoid settlement.
38. Using thicker shingles, vertically grained, of No. 1 red cedar laid 5 inches to the weather, carefully stained in order to give greater life to the roof.
39. Using ultra-violet ray type of glass in windows.
40. Tying concrete porch floors into the masonry of the house by steel rods in order to avoid settlement.
41. Using proper conduits for electrical wiring.
42. Using brass or copper piping or plumbing in order to give greater length of life.
43. Liberal use of stained I-beams throughout the house in order to give greater rigidity.
44. Using metal lathing for plaster because it is more fire resistant and gives better plastered walls.
45. Applying a mastic calking around all window and door openings by pressure guns in order to assure a tight joint between masonry and wood materials.
46. Careful housing of joints in risers of stairways, carefully rabbetted into each other, with wooden wedges dipped in glue on treads to build a strong, solid stairway.
47. The laying of the sub-floor diagonally and renailing it before the finished floor is laid.
48. The use of heavy felt tar paper on subfloorings and the frequent raising of the center of the floor a fraction of an inch in order to take care of any settlement.
49. The building of larger air ducts in so-called air conditioned houses in order to give ample size for later installation of cooling equipment.
50. Automatic controlled heat and hot water tanks.
51. The use of air filters, blowers and humidifiers.
52. Where veneer brick or stone is used, the tying of such material into the frame walls with cut iron nails.
53. Provision of a great many more electrical outlets to meet modern electrical housekeeping needs; more frequent use of floor lamps, etc. Also, the frequent use of three-way switches.
54. The filling, shellacking and waxing of floors instead of the old method of varnishing.
55. Carrying tin decks up underneath sills turned up and fastened to the sill on the inside to prevent leakage.
56. Tying the bathroom fixtures into the frame of the house to avoid unsightly cracks as a result of settlement.
57. Exterior stucco walls are at least three-fourths of an inch thick in order to give proper durability.
58. Employing of heating engineers to study the layout of the heating plants in order to be assured of the proper distribution of heat at minimum cost.
59. Placement of louvres in attic walls to give ventilation.
60. Much greater number of window openings to provide better light and ventilation.
61. Use of cabinet-built cases in pantry and kitchens instead of the old-fashioned method of cabinets nailed together on the job.
62. Use of much more efficient weather-stripping with longer life.



# The Realtor

By Paul E. Stark

*President of National Association of Real Estate Boards*



PAUL E. STARK

THE old conception of a real estate man was a salesman, invariably of the high pressure type, who invariably disappears after having sold some property that is invariably worthless. He is best described by the story, which I suppose I have told to me at least once a week, about the Florida boom operator who wired a customer collect: "Congratulations Stop Have just discovered land on your property." Actually, of course, just as only a few doctors are quacks, only a few real estate men are or were of the sell-and-run variety. The great majority, because of their business interest in the stability of any community, are civic-minded men, who continue to serve you as a property owner long after they have converted you from a prospect into a customer. In nearly every city and town, real estate men are at the forefront of movements for reasonable taxation and civic improvements. It is their business to do so. Naturally, it is that type of real estate man who can be of most help to you in the purchase of a homesite or the building or buying of a home.

Thirty years ago, in an effort to improve the standards of the business, a national association of real estate men was formed—made up of local real estate boards throughout the country. Bound by a code of ethics, they have introduced into real estate practice notable reforms that have earned the confidence of the public at large. Members of the association and only members are permitted to use the term designation "*realtor*"—and, as a first step in negotiating for the purchase of property, it would be advisable to deal with a *realtor*. There are, of course, many estimable real estate men who are not "*realtors*"—but the chances are better that your best possibility is with a man or firm that has allied itself with the best interests of the profession.

There are, of course, many types of real estate men, but there are only two types with whom you would be likely to have any dealings in the building or buying of a home. There are real estate brokers who sell the property of other owners on a commission basis; and there are land developers and builders, who improve and sell their own

property, with or without houses on the lots.

Should you be reasonably unfamiliar with the community in which you intend to live, you will undoubtedly save much time and needless chasing by going directly to a real estate broker. In most cases, he will have listed for sale almost every available piece of property in the locality where you are looking. It is important, of course, to tell him as accurately and as concisely as possible just what type of property you want, because his opportunity to be helpful to you is measured by his ability to show you only those pieces of property that come closest to your needs. It is important, also, to remember that he will show you any or all pieces of property in the community. His percentage commission on all sales is usually the same, so that he has no axe to grind except your own. Although he is paid by the owner of the property, he is actually working for you.

But apart from being simply an aid in showing you available property or houses, the real value of a capable real estate man is in the information and advice he can give you on all phases of property ownership in the community. It is his business to know about taxes, schools, utilities, property restrictions, and the one hundred and one other items that may affect the wisdom of your home purchase. Do not be afraid to give your confidence to a real estate broker in whom you believe such confidence could be placed. His ability to help you find what you want depends upon the degree of cooperation which he receives from you.

Another useful function the broker may serve is to consult with you before you approve the plans. Since his business involves the selling of homes week in, week out, he can recognize the plan that has resale value. While this may not seem important to you in building what you may regard as your "dream house," you must remember that more than likely it is going to have to be somebody else's "dream house" in the future. For in the great majority of cases the first house you build won't be the last one you live in. A change in business location, a growing family, increase or decrease in income, shifting character of the neighborhood—any one of these is likely to arise to change your address. And if and when that time comes, you will want a house that will sell easily and that will bring as high a price as possible. Advice of that nature is the good real estate man's stock in trade.



His opinions on the specifications for your house will also be helpful. His firm will have handled in the past dozens of houses that have been in various states of disrepair—and out of that experience will have grown a knowledge of what makes for permanency in home construction.

If you are going to buy a house and lot, and not simply the lot alone, the good real estate broker can be even more useful. Despite all the books on the construction of homes, no layman can intelligently judge the construction of a house. There are too many hidden elements which even an expert is at some pains to examine, and the broker if he knows his business will be expert enough to tell you whether the house is well or poorly built. Incidentally, one of the best publications on this subject is a ten cent booklet issued by the Superintendent of Documents, Washington, D. C., called "How to Judge a House."

Besides being equipped to give you a sound opinion on the house itself, the broker will have all the available information on the specific facts about the neighborhood that may affect the future value of your property. Most important of these are the deed restrictions not only upon the size and character of the houses that might be built in the future; upon the distances from the lot lines at which the house may be placed; about the location of stores and other commercial buildings in the neighborhood; about the upkeep of the neighborhood. These are facts which the broker knows, and which he, as your agent, will tell you voluntarily, but which the owner himself might possibly hold back.

The second type of real estate man with whom you might deal is the land developer and builder who sells his own property, and who builds either all or many of the houses on his property. Here the character of the real estate man is even more important to you than if he were only a broker. This is true because you are placing the complete responsibility of acquiring a home in his hands. In some cases, you may buy a piece of property from such a developer and have your own architect and contractor build the house. In most cases, however, it is generally best to use the contracting facilities of the developer himself, even though you may have your own architect prepare the plans. This is obviously true, because the developer usually has a number of houses under construction at one time, which enables him to do mass purchasing, and to save considerable time in labor. Moreover, the

developer has a permanent stake in the property surrounding your site, and he has, therefore, much more reason to build a quality home. His business success lies in keeping up property values throughout his development, and a poor house is something like a bad apple in a barrel—it sooner or later affects the others.\*

There are two other functions which the general real estate office supplies — appraisal service and mortgage brokerage. If you are contemplating the purchase of a piece of property or a house directly from an owner it will be worth the fee to have the property or house appraised independently by a real estate man. Unless you do have such an appraisal you are completely at the mercy of your own judgment plus the word of an understandably prejudiced owner.

In making the independent appraisal, the real estate man takes into consideration a dozen or more factors that will not only determine a reasonable price for the property at the time of purchase, but which will also forecast the probable rise or decline of value in the future. The appraiser is a student of trends in value; he knows the forces which send values up in one section and down in another. He knows the selling prices of property around you, and the fee for his estimate of the value of the property you are considering buying is well worth the paying.

The mortgage brokerage facilities of a real estate office are often of great value. The realtor knowing the property, the requirements of lending agencies operating in the area, and the peculiar needs of the borrower, can quickly move towards the solution of the financing problem. He is not interested in making any particular type of loan, understands that interest rates vary with the security and financial responsibility of the borrower, and that amortization charges and maturity dates are frequently as important to his client as the price and terms of the original sale.

Not least among the services extended by the modern realtors organization is that of property management. This service may not always be required by the purchaser or homebuilder but the experience gained in management, in the repair and remodeling of homes and apartments, in leasing and collecting of rents, in the making of budgets for owners and tenants alike, makes him the ideal adviser for those who would undertake the responsibilities of home ownership.

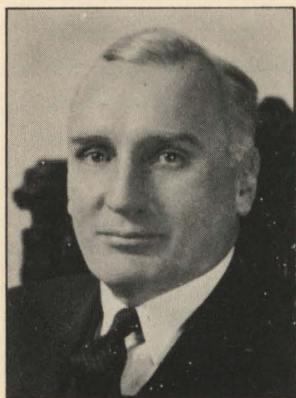
\* See the article by J. C. Nichols, page VIII, for a thorough discussion of good practice in home building.



# The Landscape Architect

By A. D. Taylor

*President of American Society of Landscape Architects*



A. D. TAYLOR

IN its broad application, the profession of landscape architecture aims to plan and develop for human use and convenience the outdoor areas, whether these be parks, estates, or small-home properties. Limitation of space surrounding the small-home makes the planning and building of that area fully as essential as the efficient and distinctive design of the building units. The landscape architect thinks in terms of community planning, of neighborhood groups, and also of isolated homes. He is trained in outdoor design, outdoor construction, and outdoor horticulture. The employment of the landscape architect by the small-home owner should not be considered as a luxury. His advice, and the plot plan which he will evolve in cooperation with the architect, are a necessary part of the modern version of home building which presumes that we want the most for our money as expressed in terms of good taste, good construction, and best use. The satisfactory development of the small-home property results from the use of foresight rather than the regrets of hindsight. If the home owner believes that he cannot afford a complete landscape plan, at least he can afford a "doctor's call" from a professional landscape architect, who can give a measure of fundamental advice and direction on the ground. The idea is to achieve that which is suitable—a scheme that is simple yet interesting, construction that is necessary but not expensive, plantings that will be placed and chosen for permanent effect and minimum maintenance.

In the field of architecture, the preparation of plans and specifications is not enough. Supervision must follow for best results. In the field of landscape design for the small place, it is somewhat different. The plot plan that is prepared before the house is constructed can adjust the house site and the location of terrace or porch accurately to the needs of the driveway, garage turn, existing foliage and the landscape units that will be. Should the owner care to have a part in the outdoor creation, he may execute the details of shrub planting, flower beds, and lawn under his own direction, or by his own hand, if he has a plan

from which to work. When grading has been considered beforehand, the excavation can be carted to its permanent resting-place rather than hinder the building operation by being piled in miniature mountains about the new basement. The plot plan of the landscape architect presents the future design of the entire lot. Further, it functions in preventing mistakes and in guiding the orderly development of the land.

The person who can afford to own a single family home can afford attractive home surroundings. Five per cent of the building cost will go far in creating a front yard and a backyard that become a distinct part of the finished home. Success in creating attractive and appropriate home surroundings is not measured by the quantity and cost but rather by the quality of the development. Not eccentricity, not great elaboration, not a collection of striking evergreens, not overplanting of flowering shrubs, but a conservative feeling of being well dressed is the ideal of the landscape architect.

The outside of the residence becomes a community responsibility that the home owner should recognize. The front yard belongs to the owner, but the public has certain rights and privileges to enjoy its appearance. The picture is an individual unit, but it is a part of a larger panorama. A property naturally divides itself into three important areas:

- a. Public area or front yard,
- b. Private lawns and gardens,
- c. Service unit.

The size, the location, and the desired form of these areas, together with their relationship to the house must be definitely thought out in the general scheme. The detailed plan for these areas will show a practical solution for the location and construction of walks, drives, irrigation, drainage, grading, and planting, adapted to the characteristics of the land and best suited to the desires of the client. One owner may want to indulge in a plant hobby; one may like a very informal arrangement; another may prefer the formal scheme. All factors are correlated in the landscape plan.

The area on a street front usually has little or no privacy. The "open front" policy has been an American tradition. Whatever may be lost in privacy is doubly gained in street effect. Unusual conditions may suggest high hedge or wall, but in general the typical American home can better



follow the tradition of simplicity and openness in this semi-public area. Few people spend much time on the "front porch"; few even have this nineteenth century living unit. The American building lot should be large enough to provide ample living space in rear.

The living lawn and flower garden form the private part and the larger part of the lot area. Unless the garage and drive have been misplaced, this space will be free from obstruction. The backyard has "come of age." It has been transformed from a service area to a living area. It is the center of the home outdoor life. In its simplest form, this area may include only an open and preferably partly shaded lawn enclosed by hedges or shrub borders to protect it partially or entirely from the public gaze. An open porch or terrace at the rear of the house really becomes an outdoor living room overlooking the lawn and flowers. Otherwise the living lawn should be directly related to the living rooms of the house and should be designed to be seen from their openings.

Some of the more common mistakes in connection with the development of the living lawn and flower garden area are as follows:

- a. Developing areas which do not have a definite relationship to the living portions of the house.
- b. Making the paths between the flower beds too narrow for practical use and upkeep.
- c. Making the flower beds too wide, especially when such beds are accessible only from one side.
- d. Planting trees in locations where they will cast injurious shade upon flower and vegetable areas.
- e. Failure to screen out undesirable views by the use of appropriate plantings.
- f. Making plantings of too great variety, without regard to principles of good planting composition.
- g. The introduction of too many garden accessories and garden ornaments in a limited area.
- h. The use of too many horticultural novelties with golden, purple, or variegated leaves.
- i. The failure to provide suitable play space for children.
- j. There is no greater mistake than to have the living lawn or garden area directly connected with the service portion of the house rather than with the living portion. Surely, the most important building material for the development of the small home grounds is the plant material. Contrary to popular opinion, this material is not easy to use. That the materials of landscape are so lovely

in themselves is no excuse for not using them well and the best effect is achieved only by studied arrangement. The groupings of the trees, shrubs, and flowers carry the horizontal plot plan into the vertical plane where we can see the design. Plants have normal size limits and habits of growth; they have definite texture and color of foliage; and they have somewhat definite soil and exposure requirements. To combine and coordinate all these factors in order to create really attractive settings for the house, the lawn, and the gardens is the problem of plant selection and of plant location. To choose so that borders will not be overgrown in a few years, so that each plant will be a healthy and happy part of the whole, is that thing which we call planting design. For these reasons, the plants cannot be chosen by guess for permanent results. Their selection and arrangement is a major factor in creating pleasing and appropriate landscape surroundings.

In order to have an attractive and useful living room, it is necessary to use ample furnishings. It is by the same token necessary to use furnishings on areas devoted to living lawns and flower gardens. These furnishings are in the form of turf, walks, trees, shrubs, flowers, arbors, gateways, pools, fences, and garden accessories. All these details should be used with the utmost simplicity and directness and only to the extent appropriate for any specific property. Accessory features add much to the general landscape effect when properly used. They become disturbing elements when used too freely, or placed inappropriately. The picture of the backyard should be restful but interesting. The architectural accessories help to make and focalize interest, but enough is better than too much.

Is the home to be a real part of the neighborhood; an asset to family life and home pride? Will it possess an atmosphere of distinction, of artistic individuality? Is it to have a character of its own in both architecture and landscape? Will the garden have personality? These questions will be answered only when the home owner realizes that there is more to a home than four walls and a fence around it. Yes! Call in an architect. Call in a landscape architect. It will pay in terms of permanent satisfaction for the small home as well as the large. Efficient and intelligent planning must precede the building of a home.



# The Decorator

By Harold Donaldson Eberlein

*Author of many books on Architecture and Interior Decoration*

THE average owner or occupant of the small house is apt to look askance at the decorator—interior designer, if you prefer the latter term. The decorator seems to be an unnecessary and costly luxury. Oftentimes, indeed, the mere mention of a decorator incurs actual hostility; if he or she is not an obvious necessity to the completion of a house, how can any decorating service be other than an intrusion on domestic privacy or an hindrance to expression of the owner's individual tastes? Even when the small-house owner takes a more intelligent view, there still hovers the spectre of imaginary added expense.

The wise thing for the small-house owner to do is to lay aside prejudice, ascertain and weigh the facts, recognise what the decorator can do, and then appraise the exact value of the decorator's services.

For instance, Mr. and Mrs. A have just built a small house and they are about ready to move into it. Most of the furnishings from their former home they will continue to use. Inevitably, however, because the house is different, some things they will have to discard, they will have to make adjustments, and some new items they will have to purchase. Probably the new windows will be of different sizes from those in the former house, and that will mean getting a number of new curtains. As like as not, some of the chairs and sofas will have to be re-upholstered. The old furniture will all certainly have to be satisfactorily arranged in its new setting. Now, what can the interior decorator do to be helpful at this juncture? Several courses are open. Mr. and Mrs. A can turn the whole affair over to a decorator to have the house ready for occupancy by a certain date, and then dismiss it from their minds. In that case, all the personal element on the owners' part disappears and the decorator charges a lump sum fee in compensation for all the time and trouble saved the owners—only a fair return, as it would be for any other delegated job. No matter how well done the decorator's job may be, Mr. and Mrs. A will never enjoy it as much as they would if they had taken some share in its creation.

But not many Mrs. A's would be so detached about the equipment of their houses. Almost every woman is herself instinctively something of a decorator and wishes to have a determining voice in the furnishing details and arrangement of her home. It is quite likely that Mrs. A may have every inclination to make her home attractive, but the chances are ten to one that she has had little or

no experience in that sort of thing. Situations more or less perplexing will confront her, and in solving these problems she will probably be grateful for advice from someone whose judgment she can trust. It is in exactly such cases that the decorator can render invaluable service. At this point Mrs. A decides to engage a decorator, Mr. X.

Mr. X in a very little while will come to an understanding of Mrs. A's personality and tastes. That is part of his business just as it is an architect's. He will make a survey of all the available furnishings, learn what new purchases or replacements can be made, inform himself of the family's manner of life, study their preferences, and note every detail that will have a bearing on the composition, right down to Mrs. A's favourite colours.

He soon recognises that Mrs. A is not at all a colourless person, but has well-defined likes and dislikes, and merely lacks the practice and experience to translate her likes into visible form to the greatest advantage. In other words, it becomes Mr. X's function tactfully to apply his own experience and trained judgment in helping Mrs. A to "put her best foot forward" with the resources available. Furthermore, in this process of assisting Mrs. A, Mr. X does not try to suppress Mrs. A's individuality and substitute his own. On the contrary, by his timely suggestions and advice, he aids Mrs. A to a fuller and quicker expression of her own individuality than she could achieve by herself without a long and discouraging "trial and error" course of experiments.

In short, the function of the decorator with respect to the interior of the house, is exactly comparable to the offices of the architect for the house's design and structure. If a house is to have any individuality of appearance and, at the same time, is fully to meet all utilitarian requirements efficiently, the necessity for an architect's services is too generally understood to need any defence. Good architecture has abundantly proved that it pays for itself in the long run. It saves money in construction, ensures maximum of fitness to purpose, and has a very real cash value in dollars and cents when it comes to a question of rental or sale. In precisely the same way, the decorator can contribute materially to the comfort, convenience and effectiveness of the interior of the house. The decorator complements the architect's work in making the more intimate and personal functioning of the house correspond



with its structural purpose. Many an architecturally excellent small house fails to give complete inward satisfaction because the occupants feared or ignored the decorator.

Here are some of the concrete particulars in which the decorator can very obviously justify his or her employment by the small-house owner. Mrs. A needs some chairs re-upholstered, but doesn't know a reliable upholsterer. Mr. X does. Mrs. A needs material to cover the chairs or make window hangings; has a general idea of what she wishes and can afford to pay, but doesn't know just where to go for it or what it will cost. Mr. X knows where to get it, what it will cost a yard, how much is needed, and brings a number of kindred samples for Mrs. A to make a choice. When Mrs. A has bought the material, she has paid not a cent more than she would have paid in a shop, and she has been saved all the time and worry she would have spent in going from place to place in quest of it; Mr. X is paid by his specified discount from the wholesale dealer in fabrics who will not sell to retail customers. Again, Mrs. A needs a chair or two, knows what she wants, but doesn't know quite where to look; Mr. X does know and, again, is recompensed by the shop discount without any additional cost above the regular retail price to Mrs. A. Or, perhaps, Mrs. A is in some doubt about colours, fears this or that won't go together, and is open to suggestions. Mr. X is ready to guide with certainty born of long experience. Mrs. A may need curtains. Mr. X will probably suggest something better-looking and less expensive than anything Mrs. A had known about. If a room looks crowded or needs to have its apparent size increased, Mr. X will know at once how to solve the difficulty by rearrangement of furniture, accenting certain lines, manipulation of colour, or the adroit management of pattern—things that Mrs. A would probably have taken a long time to find out for herself and might have learned only by long experiment and at considerable cost.

Whether the commission is only a small one involving two or three downstairs rooms, the rearrangement of furniture already owned, and the making of a few additional purchases, or whether the task means completely furnishing an entire house, with full responsibility for choice and arrangement, it is the decorator's job to co-ordinate and harmonise all the elements to produce a well-considered and satisfying composition. Even when the owners have considerable taste and decorating ability, it rarely happens that they have sufficient technical knowledge to solve quickly and easily the hundred and one questions that necessarily arise in equipping a house. When they lack taste, the decorator's services are a priceless boon. When they have taste, the decorator's co-operation is

both a source of pleasure and a safeguard against vexing slips and errors while achieving the desired coherence and harmony.

So far as actual purchases are concerned, the small-house client pays not one cent more than she would have paid in the shops. The decorator is recompensed by the regular discounts allowed by the shop-keepers and wholesale dealers. For other services—advice and the like—the commission charged by the decorator varies, but under ordinary conditions the cost is slight compared with the time, worry and energy that would otherwise have been spent by the house-owners in reaching results that might not have been as satisfactory. And surely time, worry and energy have appreciable value as well as expert advice. Oftentimes, too, the decorator's suggestions will save a substantial outlay of cost. These considerations are worth bearing in mind because of the too general misconception of the expense of retaining a decorator, and ignorance of the usual procedure.

Time was when many architects and decorators spurned the small house and were interested only in large commissions. That time has passed. They all realise that for many years to come, the small or moderate-sized house is likely to be the dominating factor in domestic building, and their attitude has changed. Without fearing that the intervention of the decorator will hamper the scope of individual expression or obliterate the personal domestic touch, the small-house owner may retain a decorator to assist in equipping the house, confident that in the end the results achieved will justify the trust reposed. The decorator, in fine, regarded in an impersonal light, is one of the time and labour-saving devices of modern life by which we set so much store. The decorator, like the architect, ministers directly to the art of decent and comfortable living. By their experience and fertile invention, both are in a position to render the clients services in the creation of harmonious and comfortable home environment that most amateurs could perform for themselves only in a halting and uncertain way. Decorators, like architects, frequently have certain favourite styles in which they prefer to work. But a decorator's favourite style is not what really matters to the small-house client. What really matters is the trained decorator's ability to apply the fundamental principles of decoration to any problem, regardless of style. Fundamental principles adroitly brought to bear—principles of which the majority of amateurs are unaware—will result in a coherent composition in the outcome. Wherever the furnishing budget is limited, it is often true that the less there is to spend, the greater ultimate economy it will be to engage a decorator.



# The Mortgage Banker

By George Dock, Jr.

*Formerly Adviser to Federal Home Loan Bank Board*



GEORGE DOCK, JR.

**STRIKING** progress has been made in small-home architecture and construction in the past ten years, toward the goal of giving the American family both a longer-lasting and a more attractive dwelling, at a reasonable price. But there is a third dimension in the problem of economical home ownership that is just as vital for people of modest means as a

properly planned living room or an adequate heating plant.

That third factor is home finance.

Unless you are among the fortunate few who can buy a house entirely for cash, you face the necessity of borrowing part of the money with which to pay for it. That is almost invariably done, of course, by placing the property under mortgage to the lender. The task of choosing your lender and the type of mortgage that fits your own circumstances as to maturity, amount, and method of payment calls for good judgment, if the comforts of home are to live up to your expectations in the years to come. Fortunately for the families of reputable credit standing who are building homes today, it is easier to secure a sound form of home loan than ever in the past. Short- and long-term mortgage money is readily available to anyone with good security. Likewise, interest rates on mortgages are practically at their all-time low levels. The exorbitant commission charges and other financial abuses which so often went hand-in-hand with home ownership up to a few years ago have been pretty well abolished. Evolution in the home loan has been almost as great as that of small-home architecture itself. But it is prudent to pause a moment before committing yourself to the purchase of a house, and make certain that the financing is placed in responsible hands and in suitable form.

Before we consider the points that determine what form of mortgage is best adapted to your own case, let us look at your question of buying a home from the other side of the table—from the viewpoint of the lender. That may help you to obtain your own mortgage at somewhat lower ultimate cost and—what is a good deal more important—with less risk of loss of the home by foreclosure in some

unforeseen emergency a few years further along. Those are two major objectives. They can best be assured by arranging the mortgage properly at the very start.

Here, then, is your lender. He is Joe Donahue, aged 45, married, by trade a garage mechanic, earning from \$1,200 to \$1,500 a year, from which he somehow manages to save \$50. It goes into life insurance and a thrift account in a savings bank or building and loan society. He doesn't intend to lose that money. He may need part of it on short notice, to tide him over an idle time or meet some unexpected expenses. And Joe isn't asking you for a 10 per cent return on his money, or even 6 per cent.

Fifty million people like Joe make up the only real mortgage money pool in this country. If it were not for their insurance policies and their bank accounts, the rest of us would have to pay all-cash for our homes or else rent them from someone else. By far the greatest part of the \$17,000,000,000 of small-home loans now outstanding in the United States is in the small savings of small wage-earners in enormous numbers. All they ask is a fair rate of return, and the certainty of getting their money back when they need it.

When you decide to buy a home that costs, say, \$7,000, with a \$4,000 mortgage on it, you would do well to go to Joe. An institution to which a good many men like him are willing to entrust their savings for a small return is likely to give home-owner borrowers a dependable loan service. Joe will be represented by an inquisitive gentleman in a white collar, the loan officer of the local bank or building and loan society, or the representative of one of the life insurance or mortgage companies. It is his business to make certain that you are reasonably well able to meet the interest and principal payments on the mortgage now, and for the full future life of the loan. He must also determine whether the house and lot that you have in mind are likely to provide safe security—through good architectural and construction standards and a desirable location—for the unpaid balance of the loan, in the event that you encounter stormy weather somewhere ahead and are unable to meet the terms of the loan. That is why Joe's money is safe in his care. It also explains why desirable borrowers can get loans on better terms than people of inferior credit position, or applicants who seek too large a mortgage.

There is another kind of lender. He is not so common as



he has been, but there are still too many of his stripe. He is the man you will certainly encounter if your idea of a home is a \$7,000 house with a \$1,000 down-payment and \$6,000 worth of first and second or even third mortgages. Both the idea and the high-pressure lender are to be avoided. A home on a shoe-string is a quick way to the noose of intolerable debt and the disaster of foreclosure. Besides, you won't care for your neighbors if you buy that kind of a house.

Instead, it is much less expensive and much more satisfactory all around to go to some established home loan institution, one where you would be glad to put your own savings for the protection of yourself and your family. In order to get the help you need, you will first have to save up at least 20 per cent, or better still 35 per cent or more, of the whole price of that home you want to own. Once you have done that, the real pleasure of home-ownership is safely within your grasp, and the important thing is to get the type of loan that suits your whole program of living. If you fail in this step, the wrong kind of loan may give you many a headache. You may as well look at the different models now, and see just what fits your own style of driving.

There are only two main forms of home loan. The most familiar, in most parts of the country, is the short-term straight mortgage. On such a loan, a borrower of \$5,000 at 6 per cent interest makes a quarterly interest payment of \$75, or a semi-annual payment of \$150, every three or six months for three to five years, with no other loan charges to meet in the meantime. At the end of that term, he must either pay the original \$5,000 in full, or else get a renewal of all or part of the loan for another period of a few years. Nearly always, there is a commission of 1 per cent or more to pay when the loan is first made, and again at each renewal date, and possibly various service charges as well.

The short-term straight mortgage has been heartily condemned in recent years by many people, especially those who have been concerned with clearing up the depression wreckage of hundreds of thousands of foreclosed homes. It may be heresy to defend the animal, but this type of mortgage does offer certain advantages which commend it to some borrowers. Since it involves no repayment of principal until the loan falls due, it is more economical for a borrower who either is temporarily unable to meet a high current cost on his mortgage or is in a position to earn a higher return on his own investments than he is obliged to pay on his home loan. Not many borrowers are in the latter category.

The second principal type of home loan is the amortized mortgage, of which there are many varieties. It may be

of short or long maturity. In either case, the borrower makes a monthly, quarterly or semi-annual payment which includes a repayment of part of the principal, together with interest on the principal which has not been paid off in previous installments. Thus, a borrower of \$5,000 at 6 per cent interest on a ten-year amortized loan must meet a monthly amortization-and-interest payment of about \$55.50, or a little more than \$165 every three months, as compared with the \$75 quarterly payment of interest on a \$5,000 straight mortgage at 6 per cent.

On the other hand, at the end of three or five years, when the borrower on a straight mortgage is facing the melancholy fact that he must repay or renew the entire \$5,000, the home-owner with an amortized loan is smiling contentedly. He has no large lump sum to pay, and he is safe from default as long as he can keep on meeting his \$55.50 monthly tick. He knows, too, that in another five or seven years, his original \$5,000 loan will have been entirely repaid through such amortization, whereas his neighbor on a straight mortgage still owes part or all of the initial \$5,000 debt, and must continue to wrestle with the worry of renewing it at intervals.

The amortized loan is not new in the United States. Its history here goes back more than a century, to the inception of the building and loan type of thrift association in Pennsylvania. Until the depression, however, it was in common use only among such societies and usually had the undesirable requirement that the borrower in repaying the loans had to buy stock in the society, with which to retire his debt. That practice has been largely abandoned.

More than half of the homes in this country, and about two-thirds of the American home loan debt structure as lately as 1932 rested upon the straight mortgage, as made by the life insurance companies, savings banks, mortgage companies, commercial banks and large and small individual investors and trustees. In Great Britain and most of the nations of continental Europe, however, the amortized form of loan, repayable in cash, has been established for nearly 150 years, and is now employed almost to the exclusion of the straight mortgage.

The amortized loan received its first tremendous impetus in this country in the depression, as a result of the refinancing of more than a million home loans by the HOLC on a 15-year amortization basis, most of them formerly encumbered by straight mortgages which had gone into serious default. Further stimulus to the installment-plan of home ownership was supplied by the activities of the Federal Housing Administration in placing a Government guarantee upon the security of FHA-approved mortgages, ranging in maturity up to 20 years.



An increasing number of lending institutions which once confined themselves to straight mortgages are now offering amortized loans as well, or even exclusively, with insurance depending upon the quality of the loan application.

The first thing for the home-owner to decide, then, is whether he should have a straight or an amortized loan. Unless he has a dependable job, as well as a reserve of liquid securities that will assure his ability to repay the lump sum loan at maturity in case he cannot renew it at that time, he would do well to cast his vote for the installment form of payment. It will give him much greater peace of mind, even though it entails a heavier month-to-month burden of expense. Most important of all, however, the money he pays out each month for reduction of principal is not really a drain on his earnings, but an investment that pays him exactly the same rate of return that he pays in interest on the remainder.

The beauties of the very long-term amortized loan, running 15 or even 20 years, have been somewhat exaggerated by Government apostles and other well-meaning gentry. The fact is that the more quickly a mortgage can be paid off in full, the more money the borrower saves by avoiding unnecessary interest payments. This is readily illustrated. A twenty-year amortized loan of \$10,000 requires a monthly payment of \$71.72, whereas a ten-year amortized loan calls for \$110 monthly, assuming a 6 per cent interest rate in both cases. On the twenty-year loan, the total payments will amount to \$16,208, while the ten-year loan will be completely repaid, with interest, by payments aggregating \$13,320. Thus, in contracting for a 20-year mortgage, the first borrower incurs an ultimate cost \$2,888 above that of the borrower who chooses a ten-year loan period, a difference equal to nearly 30 per cent of the original loan!

Interest rates are another aspect of home finance which has been given an undue share of the limelight during the recent hubbub, again to the injury of many home owners by tending to frighten private capital out of the home financing field at the very time when a heavier volume of mortgage money might have brought an automatic, natural lowering of interest charges.

Emphasis on the virtues of extremely low interest rates may be effective politics, but it is poor economics. In the long run, it may seriously hinder the recovery of residential building, and help to bring about a housing shortage and high-rental crisis which would be much more costly to the potential home-owners of today than a differential of 1 per cent or even 2 per cent in annual interest. To put this into practical form, bear in mind that a ten-year amortized mortgage for \$5,000 calls for a monthly

payment of \$53 when the interest rate is 5 per cent, while precisely the same mortgage at  $6\frac{1}{2}$  per cent interest requires a monthly installment of \$56.80. The difference is *less than \$4 a month on a \$5,000 loan.*

A family which has been living in a rented house or apartment, and now seeks a home of its own would do well not to worry over whether the mortgage interest rate is 5 per cent or  $6\frac{1}{2}$  per cent, but rather give attention to the much more important questions of the character, construction and location of the house under consideration, the relation of its cost to the ability to pay for it, and, closely connected with the latter point, the type of mortgage loan to be chosen.

Assuming that an amortized loan is preferred on grounds of safety for the future, three major factors may help to indicate the solution. One is the home-owner's earning power. If his yearly income is equal, say, to at least half the price of the home, and he can set aside 20 per cent of his income for home-ownership, then he should take a loan on which the amortization period is the *shortest time* in which that 20 per cent would repay the mortgage in full, rather than get a longer loan at lower current cost but greater ultimate expense. If, on the other hand, his home costs more than twice his yearly salary, and he can afford no more than 15 per cent of his earnings for home-ownership, his only practical course is to make a relatively long-term loan, with correspondingly lower monthly charges. But this is not the whole answer in his case. There are two other considerations.

The second question is the home-owner's age. Obviously, the goal should be to get entirely free of home loan debt well before the expected age of retirement. A man of 50 should by all means avoid an extremely long-term loan, whereas a young fellow of 30 may look forward with fair assurance to his ability to meet modest monthly mortgage installments over a term of 15 or 20 years. Here, too, enters the third consideration, that of stability of employment. Some jobs and many industries are subject to seasonal or cyclical ups and downs and occasional unemployment. Some professions, like law and medicine, are highly irregular from month to month in the compensation they provide.

Unless these known elements are taken into account, the mortgage may involve commitments that will be impossible to fulfill at a given time, even though they impose no severe burden over the whole term. A budget plan, for example, may be invaluable in spreading uneven income over an even amortization period, and a reserve built up in years of prosperity to meet the mortgage payments in periods of reduced income or actual unemployment may prove a vital precaution.



Such personal questions as these should be fully discussed with the loan officer of the institution from which you contemplate asking for a loan, even before you make application for a mortgage, just as you would consult your architect on the matter of room arrangement or exterior facing even before the ground is broken. The best way to safeguard your home against the unexpected contingencies is to take them into account now, when you arrange your home financing.

There are many classes of reliable home financing institutions, all in competition for good loans as investments. The choice between savings or commercial banks and trust companies, insurance companies, mortgage companies, building and loan associations, and others must be made by the applicant himself in the light of local conditions and his own personal circumstances.

There is one further good reason for having a thorough discussion with experienced home loan officers, even before you have settled upon the house that you are going to build or buy. They know local real estate values and building costs, and can help you select a suitable location or avoid a neighborhood that is on the down-grade.

That, alone, may save you hundreds of dollars on even a small home in years to come—perhaps even in the original purchase price of the house.

The better managed home-financing institutions are now able to put you in touch with various competent local architects and reliable contractors, in case you wish to have their suggestions in those directions. They recognize that sound plans and good construction protect their own investment in your home, and they realize that architectural service is a personal matter for every home owner—that good homes of distinctive character cannot be built out of blue-prints sold by the gross.

Today, as never in the past, you can carry out your plans for home-ownership in the knowledge that a strong, effective combination is ready to work in your interest—the architects, the home-financing institutions, and the various housing agencies of the Government. They can help you have the type of home that you prefer, if it can be built within your means—and they may be especially useful in bringing that home down to the lowest possible cost, now and for the future.



# The Federal Housing Administration

By Stewart McDonald

*Federal Housing Administrator*



STEWART McDONALD

WHEN the Federal Housing Administration was founded in June, 1934, the mortgage and building fields were still in a chaotic condition, although public confidence in the soundness of other forms of enterprise had been restored, with business already started on its slow climb back to normal conditions.

Foreclosure rates were heavy, and the public was, naturally, unwilling to undertake home ownership when friends and neighbors were losing their homes. Residential construction dropped to its lowest point in 1934 with only 50,000 one- and two-family dwelling units constructed, as against an estimated average for the decade of the 1920's of 700,000 units per year. Mortgage money was available in only a few places, and then at a premium.

The changes which the last three years have brought can be illustrated by a report of the operations of the Federal Housing Administration. In closing its books for the fiscal year ending June 30, the Administration announced that since the beginning of its program it had transacted business amounting to nearly \$1,750,000,000. This included modernization and repair notes insured (this activity ended March 31, 1937), mortgages selected for appraisal and commitments to insure large-scale housing mortgages. The total of mortgages selected for appraisal has now passed the \$1,140,000,000 mark. More than 210,000 individual home mortgages amounting to \$852,775,000 have been accepted for insurance.

Since the Federal Housing Administration lends no money and insures loans made by private lending institutions, it will be seen from this report that ample quantities of mortgage money are now available. Public confidence has been restored, as evidenced by the fact that approximately 2,500 families are being added each week to the list of more than 200,000 families whose mortgages for buying or building homes have already been accepted for insurance. Residential building is well on the road to recovery. It

is estimated that last year 270,000 one- and two-family dwelling units were constructed, and it appears possible that as many as 450,000 units will be built this year, if favorable factors continue to influence the situation.

The rapid improvement in the home building and mortgage situations is due in no small part to the Insured Mortgage System, and to the new concept of home mortgage financing which the Federal Housing Administration has introduced. The insured mortgage is not only a more modern form of mortgage financing, specifically suited to the needs of the vast majority of wage and salary earners, but new safeguards have been introduced into the mortgage transaction. This has restored confidence.

It is significant that what might be termed, broadly, to be the "average" American citizen is coming more and more to buy homes, using insured mortgages. More than 50 per cent of persons obtaining insured mortgages from approved private lending institutions receive incomes of \$2,500 or less per year.

During the past five months of this year, when costs were rising and prices were responding to increased demand, the average new construction mortgage of the Federal Housing Administration decreased in amount by \$280, with the average mortgage accepted at the present time being \$4,613. At the same time the number of individual cases accepted for insurance increased 94 per cent. This is good indication that families of moderate means are again buying homes, using a form of mortgage financing which is eminently fitted to their particular means and needs.

While the average person is prone to forget unpleasant events, it is hardly possible that the American people can have forgotten the evils of the first and second mortgage system, which, with speculative building of shoddy houses, was a major cause of the severity of the last real estate debacle. It is necessary to remember the details of that system if the innovations of the Insured Mortgage System are to be properly understood.

During the last building boom, the short-term, renewable, first and second mortgage was in general use. Because it was possible to obtain second mortgages, down-payments were small, and families tended to borrow mort-



gage funds which were out of proportion to their ability to pay. Interest payments on the two, and sometimes three mortgages were so heavy that many families were unable to make any reduction in the principal amount of the mortgage, and renewed their obligations at their full amount. Heavy renewal fees made it still more difficult to meet principal payments.

The deficiencies of this system did not become apparent, fully, until the last depression. Lending institutions were faced on the one hand with decreased earnings and on the other with demands from depositors for cash. When mortgages fell due, banks were unable to renew them, demanding payment of the mortgage in full. Borrowers who were finding it difficult enough to meet the sizable lump sum interest payments and renewal fees, were unable to meet these demands and were forced to surrender their homes.

Another flaw in the old form of mortgage financing was the lack of a check on the purchase of badly constructed, "jerry-built" houses. The appraisal system used by most lending institutions was not comprehensive enough to act as a check upon the acceptance of loans on poorly constructed houses.

Many families, therefore, purchased undesirable houses which began to deteriorate almost immediately. Because of the faulty construction and the use of poor materials, these houses were a constant source of expense to the owners. Home ownership became a burden to many families. Homes which were neither well built nor attractive did not appear to be worth the sacrifices which many families found it necessary to make. Therefore, many families ceased to make the sacrifices and allowed their homes to be taken by the mortgage lender.

The Insured Mortgage System was devised to eliminate many of these serious defects which contributed to the instability of the mortgage market. The first and second mortgage was eliminated and techniques were devised to curb over-buying, over-borrowing, speculative building and land development.

First, the Insured Mortgage System provides for one single mortgage, carrying a rate of interest of not more than 5 per cent, plus a permissible service charge of one-half of 1 per cent and the mortgage insurance premium of one-half of 1 per cent per annum. The initial service charge is limited to 1 per cent on mortgages on existing structures and  $2\frac{1}{2}$  per cent on those involving new houses. There are no renewal fees.

Secondly, the Insured Mortgage System provides for a long-term, 80 per cent mortgage, which is repayable over periods as long as 20 years. The Federal Housing Administration insures the institutions against loss, but does not

lend the money directly. The insurance makes it possible for the lending institution to make long term loans at the favorable terms provided.

Mortgages insured by the Federal Housing Administration have a third advantage over the old-style mortgage. Provision is made for the repayment of the principal amount of the mortgage in small monthly installments. Interest payments, service charges, and mortgage premiums are also included in the monthly installment. Fire and hazard insurance and taxes are estimated and paid month by month, so that the property is in good standing at all times.

Since the mortgage can run for as long as 20 years, the monthly payments can be small, as small, in many instances, as rent previously paid. At the end of last year, it was found that approximately 60 per cent of families holding insured mortgages were making monthly payments of \$30.00 or less, including taxes, insurance, and mortgage premium. Due to the decrease in the size of the average mortgage during the last six months, the proportion of families paying \$30.00 or less is probably larger at the present time.

From the borrower's point of view, there are other advantages in the insured mortgage. At its simplest, the buying of a home is one of the most involved transactions which any family undertakes. Few people understand the many technical problems inherent in the buying of a home, and unless they are able to employ experts to check the transactions, errors are bound to be made.

The Federal Housing Administration requires that every mortgage insured shall be sound in every detail. In order to assure the acceptance of only sound loans, the Administration has established risk rating and valuation techniques which are applied by technically trained men, thoroughly familiar with the various phases of the mortgage transactions. Borrowers submitting their mortgages for insurance benefit from this additional check on the transaction.

During the last building boom, home buyers were led to spend more for homes than they could well afford. This over-buying almost inevitably resulted, in the end, in foreclosure of the mortgage, the loss of the home, and the loss of the confidence of the family in their ability to purchase a home.

The borrower rating system of the Federal Housing Administration does much to prevent families obtaining insured mortgages from paying more for houses than is justified by their incomes. The borrower rating unit, in each insuring office, is authorized to reject loans in cases where it appears that the house which is being bought is more expensive than the income of the family, and its



other assets, seem to justify.

This insistence that the transaction should be sound in every respect has the further value of giving proper importance to the home buying transaction. Home buying is something more, under present conditions, than a real estate deal.

The same stress is laid upon the soundness of the house and the stability of the neighborhood in which the house is located. The Administration has full power to reject any loan which is not economically sound. When it appears that the house, offered as security, is not well planned, well built, and well suited to the neighborhood in which it is located, the property rating unit of the underwriting staff can recommend the rejection of the loan.

In setting up the Insured Mortgage System, the Federal Housing Administration prepared nation-wide property standards and construction requirements to which every house offered as security must conform. These standards are made effective by the inspection procedure devised by the Administration.

Plans and specifications for new houses are examined by the Administration before the house is started. During the course of construction, inspectors visit the site and thoroughly check the work for conformity to specifications. Thus the house must be as good as originally specified, or it will be rejected.

Existing houses are thoroughly examined, and any deviations from the standards set up by the Administration must be rectified before the mortgage is insured. The

eventual owner of the property is given additional protection by the Administration's insistence that the property is sound.

The Administration also insists that the neighborhood in which the property is located conform to at least minimum standards set up. Neighborhoods must be attractive, stable, and contain all the elements for comfortable living, for the future as well as the present. In the case of new subdivisions, the Administration demands that before loans are insured in a subdivision, the neighborhood must be supplied with public utilities, with streets and sidewalks, with cheap transportation, with stores, schools and the other features necessary for convenient living.

It must be evident that the system of home ownership mentioned above, has eliminated the inequalities and abuses in the old haphazard form of home buying. This greater protection has been recognized by the lending institutions and the buying public, alike. The increase in the mortgage business of the Administration during the last year is sufficient proof of this fact.

The proportionately larger increase in the number and value of mortgages on small houses being received by the Administration is further proof that the base of home ownership is being broadened. More than 50 per cent of persons obtaining mortgages insured by the Federal Housing Administration receive annual incomes of \$2,500 or less. This increase in home ownership among the "average" American citizens is the final proof of the value of the Insured Mortgage System.



# WHAT THE PUBLIC SAYS IT WANTS

When 11,207 people set down in great detail exactly what they want in a house, the importance of these facts to prospective home builders and buyers needs no embellishment. Such a body of facts has now been collected, is presented herewith.

In publishing the results of this unprecedented survey, THE ARCHITECTURAL FORUM pays tribute to the Niagara Hudson System (operating public utility companies which embrace the territory between the Hudson River and Niagara Falls) which initiated and is carrying out this realistic program to define the new standards for today's house. The data published in this issue were compiled from replies to a questionnaire prepared by THE FORUM's editors and distributed to a quarter of a million customers of the Niagara Hudson System.

Accompanying the tabulation of the data, which has been organized by price groups, THE FORUM presents a plan for a composite house in the \$8,500 class. This composite should be viewed as a literal rather than an architectural interpretation of the survey's findings. This is followed by critical comment and, finally, by a portfolio of 131 recently built houses which show a variety of contemporary solutions to many of the problems exposed in the survey.

The survey offers much room for speculation and study. While some of the data undoubtedly reflect purely local preferences, for the most part the findings are of national significance. Two facts stand out most clearly: first, the woman who has been emancipated from the back-breaking drudgery of housework now serves notice that she will insist on even greater conveniences and comforts than in the past; second, advocates of new ideas in planning still have a long way to go to convince the public of the superiority of basic changes from long-accustomed room arrangements. It will probably take a decade of evolution to break down some of these fixed ideas, so deeply rooted in the past are they. This is a challenge which should be met, not by words, but by building houses whose planning is as advanced as the standard of home equipment today.



**11,207**

replies to the questionnaire were received and carefully tabulated. These were first divided according to price class into groups. In the largest group were those who expected to pay between \$7,000 and \$8,500 for the house and lot. These groups were next subdivided into sub-groups showing the amount of cash payment which those answering the questionnaire were prepared to make and the number of years they would want to pay off the balance.

THE replies were also divided into groups of those now renting homes and those who are now home owners and those who do and those who do not expect to build or buy a home within the next two years.

<b>PRICE CLASS</b> [PRICE THEY WILL PAY FOR HOUSE AND LOT]	<b>Not Given</b>	<b>Under \$5,000</b>	<b>\$5,000 -\$6,000</b>	<b>\$6,000 -\$7,000</b>	<b>\$7,000 -\$8,500</b>	<b>\$8,500 -\$10,000</b>	<b>\$10,000 -\$15,000</b>	<b>Over \$15,000</b>	<b>TOTAL</b>	<b>PER CENT OF TOTAL</b>
<b>PERSONS</b>	786	1,917	2,145	1,236	2,264	1,920	705	234	11,207	
<b>PER CENT</b>	7%	17%	19%	11%	20%	17%	7%	2%		100%

**DOWN PAYMENT**

<b>UNDER \$1,000</b>	6	60	28	15	15	10	3	1	138	4%
<b>\$1,000 To \$2,000</b>	14	347	358	172	187	118	13	6	1,215	34%
<b>\$2,000 To \$3,000</b>	5	84	214	129	184	166	25	6	813	23%
<b>\$3,000 To \$4,000</b>	3	48	103	64	142	112	35	2	509	14%
<b>\$4,000 To \$5,000</b>	2	12	24	19	75	67	13	2	214	6%
<b>\$5,000 To \$6,000</b>	8	33	22	15	64	141	79	28	390	11%
<b>\$6,000 and OVER</b>	2	4	31	13	36	70	63	34	253	7%

**YEARS TO PAY**

<b>UNDER 10 YEARS</b>	34	212	227	126	282	258	112	37	1,288	28%
<b>10 TO 15 YEARS</b>	28	317	432	221	349	337	109	23	1,816	40%
<b>15 TO 20 YEARS</b>	27	311	335	176	272	223	77	20	1,441	32%

**RENTERS—HOME OWNERS**

<b>NOW RENT</b>	371	1,190	1,300	696	1,262	955	318	86	6,178	58%
<b>NOW OWN</b>	311	635	780	477	906	883	372	143	4,507	42%
<b>% RENTERS</b>	54%	65%	62%	59%	58%	52%	46%	38%		

**MAY BUILD—WON'T BUILD**

<b>MAY BUILD</b>	62	470	484	222	380	326	125	46	2,115	21%
<b>WON'T BUILD</b>	572	1,270	1,490	903	1,742	1,472	547	172	8,168	79%
<b>% BUILDERS</b>	10%	27%	33%	20%	18%	22%	19%	21%		

**PREFERRED LOCATION.** Overwhelming preference for the outlying residence section was indicated. 95% expressed a desire to live either in an outlying residence section or beyond city limits. Less than 5% chose to live near the main business section.

<b>CLOSE-IN</b>	45	134	89	45	77	60	29	16	495	4½%
<b>RESIDENCE SECTION</b>	366	930	1,271	793	1,495	1,262	447	143	6,707	61%
<b>FURTHER OUT</b>	165	828	774	388	677	587	238	73	3,730	34%

BOLD FACE TYPE IS USED THROUGHOUT TO EMPHASIZE DOMINANT VOTES



**FAMILY SIZE.** The typical family was found to consist of an adult couple having one or two children, if these groups are considered together; but the largest single classification was two adults with no children. Significant was the fact that less than 4% of those in the price class below \$8,500—and only 6% of those below \$10,000—needed a servant's room.

	2 adults no children	2 adults 1 child	2 adults 2 children	2 adults 3 children	2 adults 4 children	TOTAL in these groups	% of grand total
<b>FAMILY GROUPS</b>	<b>2,029</b>	<b>1,226</b>	<b>1,079</b>	<b>357</b>	<b>86</b>	<b>4,777</b>	<b>43%</b>
<b>% OF GRAND TOTAL</b>	<b>18%</b>	<b>11%</b>	<b>10%</b>	<b>3%</b>	<b>.7%</b>		

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
<b>1 ADULT</b>		13	44	36	20	35	41	11	3	203	2%
<b>2 ADULTS</b>		284	1,144	1,232	682	1,137	924	340	133	5,876	52%
<b>3 OR MORE</b>		266	647	819	493	1,046	912	355	96	4,634	41%
<b>1 BOY</b>		111	478	508	301	507	469	179	69	2,622	23%
<b>2 OR MORE</b>		86	325	279	153	303	253	113	51	1,563	14%
<b>1 GIRL</b>		113	478	496	314	524	471	164	51	2,611	23%
<b>2 OR MORE</b>		82	280	285	133	273	243	97	44	1,437	13%
<b>1 SERVANT</b>		50	31	71	64	130	260	209	88	903	8%
<b>2 OR MORE</b>		12	15	16	4	10	33	43	43	180	1½%

**PET PEEVES.** "Not enough closet space," "not enough electrical outlets" and "can't heat rooms evenly" proved to be the pet peeves of most of those answering the questionnaire. Peeves are listed below in their order of importance as determined by the tabulation, each of the voters having named the five worst.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL
<b>1. NOT ENOUGH CLOSET SPACE</b>		372	1,121	1,297	697	1,320	1,109	415	134	6,465
<b>2. NOT ENOUGH ELEC. OUTLETS</b>		349	1,088	1,217	701	1,255	1,006	350	91	6,055
<b>3. CAN'T HEAT ROOMS EVENLY</b>		298	988	1,124	603	1,079	856	319	88	5,355
<b>4. POOR KITCHEN ARRANGEMENT</b>		201	679	741	414	773	630	214	71	3,723
<b>5. HOUSE DRAFTY</b>		181	598	581	304	555	468	159	41	2,887
6. CAN'T ARRANGE FURNITURE		156	444	551	342	644	501	179	46	2,863
7. NOT ENOUGH SUNLIGHT		111	436	449	251	497	421	123	48	2,336
8. NO PLACE TO KEEP TOYS		92	400	441	224	401	322	128	42	2,050
9. POOR HOT WATER HEATER		115	276	386	255	424	369	130	40	1,995
10. GARAGE DOOR DOESN'T WORK		82	203	290	215	377	319	143	47	1,676
11. HOUSE HARD TO CARE FOR		97	315	316	171	358	278	85	26	1,646
12. TOO SMALL REFRIGERATOR		92	235	273	171	307	328	115	57	1,578
13. DRAIN PIPES CLOG		70	218	297	180	333	252	111	43	1,504
14. LIGHTING FIXTURES GLARY		68	218	250	155	269	248	87	34	1,329
15. RAIN WATER FLOODS BASEMENT		81	241	249	144	267	200	96	32	1,310
16. GARAGE TOO SMALL		43	162	191	129	229	221	89	37	1,101
17. PIPES RUST		56	184	196	93	167	276	66	16	1,054
18. DARK HALLS AND STAIRWAYS		43	181	186	116	244	185	55	30	1,040
19. SCREENS RUST		23	99	119	72	97	109	33	12	564
20. WATER FLOWS POORLY		30	89	106	63	108	90	34	17	537



**ARCHITECTURAL SERVICE.** "If you were planning to build a house, whom would you go to first?" 4,752, or 45% answered: "To an architect." The next larger group chose the builder, next the realtor, and so on in the order given below. It is notable that even in the price class below \$5,000 the architect was placed first of all.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
ARCHITECT		245	594	789	510	1,019	1,030	422	143	4,752	45%
%		54%	33%	38%	43%	46%	55%	60%	63%		
BUILDER		52	349	416	221	356	245	77	13	1,729	16%
%		12%	19%	20%	19%	16%	13%	11%	6%		
REALTOR		50	184	258	153	288	287	97	42	1,359	13%
%		11%	10%	13%	13%	13%	15%	14%	19%		
BLDG. & LOAN		53	370	299	160	268	130	32	7	1,319	12%
%		12%	20%	15%	13%	12%	7%	5%	3%		
BANKER		35	188	234	113	216	150	69	19	1,024	10%
%		8%	10%	11%	10%	10%	8%	10%	8%		
SUPPLY DEALER		15	106	56	22	39	16	5	2	261	2½%
%		3%	6%	3%	2%	2%	1%	1%	1%		

**COMMENTS.** Besides the answers to the various questions contained in the questionnaire, more than 2,000 comments were received. These are especially significant in view of the fact that they evidently represent features particularly dear to the heart of the home-buying public. Strangest request was for an Aviary, and foremost in point of numbers was the demand for a fireplace in the living room. Next in this order came open porch, laundry chute, cedar closet and sun porch. Figures for the five commonest comments are given below. Percentage figures are per cent of total comments.

FEATURE DESIRED	NUMBER OF PERSONS	PER CENT
FIREPLACE	531	25%
OPEN PORCH	260	12%
LAUNDRY CHUTE	116	5½%
CEDAR CLOSET	92	4½%
SUN PORCH	78	4%

**THE HOUSE.** The balance of the questionnaire dealt specifically with the house itself. In order to show graphically what the home-buying public thinks it wants—the editors of THE FORUM present a house having all of the features which those answering the questionnaire felt that their home *must* have, and as many of the things which they said they would like to have as seemed even remotely possible within the price range specified by the largest group. To the hypothetical architect or builder who is able to build the public's FIVE STAR house for \$8,500 should come, on the basis of the questionnaire, a hypothetically unlimited amount of business. And to the flesh-and-blood architect or builder who is able to give the buying public a good many of the things which it wants at something like the price it is prepared to pay should come the lion's share of the flesh-and-blood business.

**POSITION ON LOT.** The home-buyer wants, first of all, a house set in the middle of the lot. Less than 20% are prepared to accept a house located at the front of the lot with the living rooms facing the rear. Tabulated returns indicate that this preference is independent of price class division.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
FRONT OF LOT		104	501	441	224	363	298	126	44	2,101	19%
MIDDLE OF LOT		434	1,297	1,565	913	1,739	1,476	517	160	8,101	75%
REAR OF LOT		33	86	100	75	130	115	58	28	625	6%



**BASEMENT.** The majority called for a basement under the entire house, and a basement laundry. Almost 80% wanted a basement recreation room, and 20% of these felt that they must have such a room. The majority also felt that they must have a storage room for fruits and vegetables in the basement.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
<b>FULL BASEMENT</b>		<b>507</b>	<b>1,517</b>	<b>1,721</b>	<b>974</b>	<b>1,822</b>	<b>1,511</b>	<b>564</b>	<b>178</b>	<b>8,794</b>	<b>80%</b>
<b>PARTIAL BASEMENT</b>		<b>79</b>	<b>257</b>	<b>306</b>	<b>200</b>	<b>323</b>	<b>303</b>	<b>109</b>	<b>40</b>	<b>1,617</b>	<b>15%</b>
<b>NO BASEMENT</b>		<b>30</b>	<b>99</b>	<b>91</b>	<b>42</b>	<b>93</b>	<b>84</b>	<b>37</b>	<b>11</b>	<b>487</b>	<b>5%</b>

#### RECREATION ROOM

<b>MUST HAVE</b>	<b>92</b>	<b>208</b>	<b>306</b>	<b>228</b>	<b>453</b>	<b>507</b>	<b>241</b>	<b>91</b>	<b>2,126</b>	<b>20%</b>
<b>WOULD LIKE</b>	<b>355</b>	<b>1,017</b>	<b>1,260</b>	<b>722</b>	<b>1,377</b>	<b>1,114</b>	<b>355</b>	<b>100</b>	<b>6,300</b>	<b>59%</b>
<b>NOT NEEDED</b>	<b>151</b>	<b>598</b>	<b>499</b>	<b>247</b>	<b>383</b>	<b>257</b>	<b>110</b>	<b>35</b>	<b>2,280</b>	<b>21%</b>

#### LAUNDRY

<b>IN BASEMENT</b>	<b>483</b>	<b>1,531</b>	<b>1,726</b>	<b>1,004</b>	<b>1,833</b>	<b>1,556</b>	<b>558</b>	<b>182</b>	<b>8,873</b>	<b>82%</b>
<b>FIRST FLOOR</b>	<b>129</b>	<b>273</b>	<b>330</b>	<b>175</b>	<b>337</b>	<b>283</b>	<b>117</b>	<b>38</b>	<b>1,682</b>	<b>16%</b>
<b>NONE</b>	<b>10</b>	<b>46</b>	<b>38</b>	<b>29</b>	<b>46</b>	<b>40</b>	<b>27</b>	<b>12</b>	<b>248</b>	<b>2%</b>

#### FRUIT & VEGETABLE ROOM

<b>MUST HAVE</b>	<b>294</b>	<b>964</b>	<b>1,136</b>	<b>686</b>	<b>1,224</b>	<b>1,059</b>	<b>393</b>	<b>122</b>	<b>5,878</b>	<b>55%</b>
<b>WOULD LIKE</b>	<b>275</b>	<b>743</b>	<b>787</b>	<b>420</b>	<b>803</b>	<b>643</b>	<b>245</b>	<b>72</b>	<b>3,988</b>	<b>37%</b>
<b>NOT NEEDED</b>	<b>44</b>	<b>124</b>	<b>148</b>	<b>92</b>	<b>162</b>	<b>167</b>	<b>62</b>	<b>34</b>	<b>833</b>	<b>8%</b>

**HEATING.** Besides listing "Can't heat rooms evenly" third among their "pet peeves," most of those answering the question had a good idea of what sort of heating plant they must have in their next home—one which provides thermostatic control and means for circulating the air. In addition, they would like to have other features of air conditioning.

#### THERMOSTATIC CONTROL

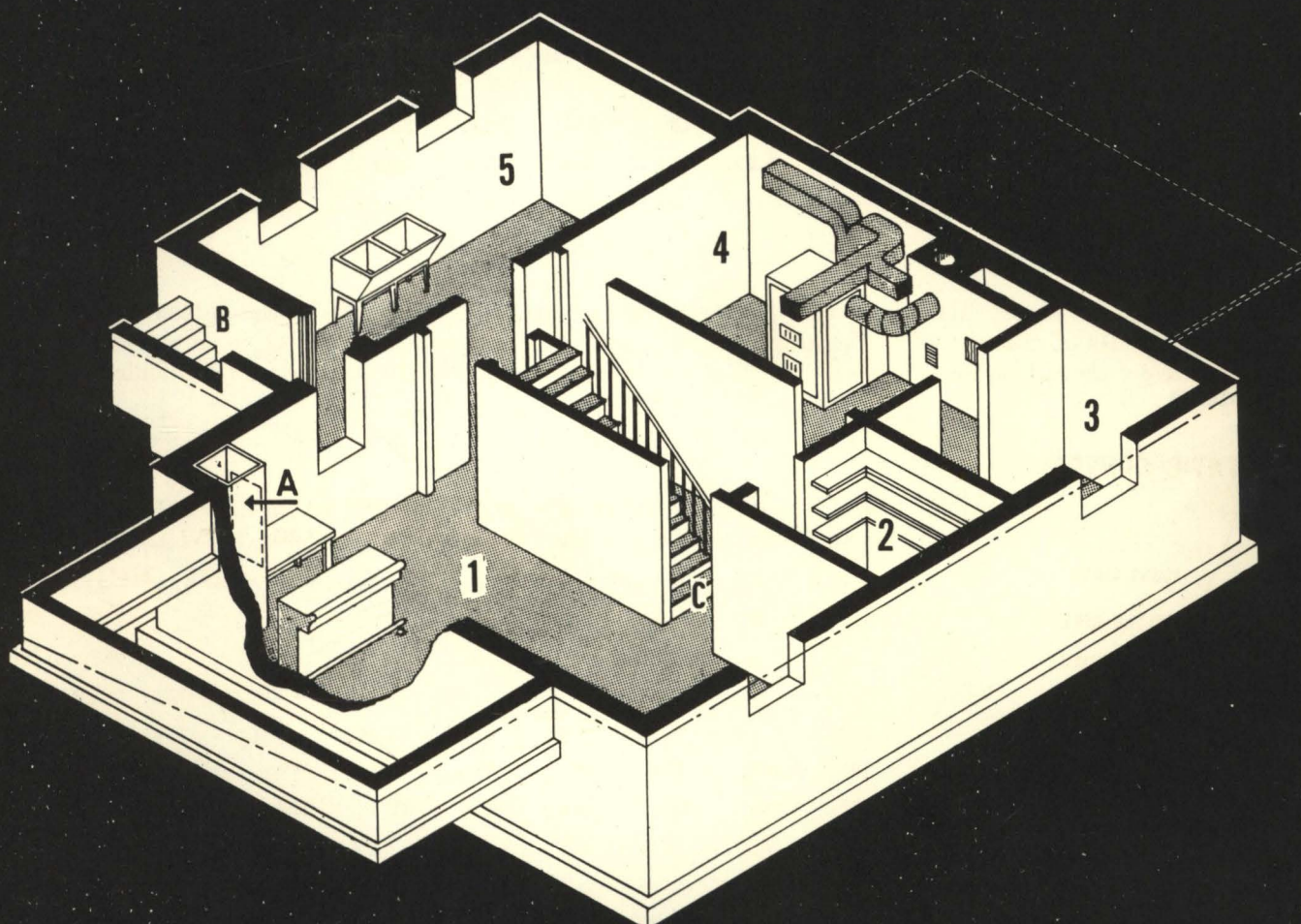
	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
<b>MUST HAVE</b>		<b>270</b>	<b>604</b>	<b>911</b>	<b>633</b>	<b>1,180</b>	<b>1,174</b>	<b>522</b>	<b>177</b>	<b>5,471</b>	<b>50%</b>
<b>WOULD LIKE</b>		<b>409</b>	<b>1,170</b>	<b>1,128</b>	<b>548</b>	<b>995</b>	<b>701</b>	<b>176</b>	<b>48</b>	<b>5,175</b>	<b>47%</b>
<b>NOT NEEDED</b>		<b>30</b>	<b>80</b>	<b>56</b>	<b>25</b>	<b>40</b>	<b>22</b>	<b>12</b>	<b>3</b>	<b>268</b>	<b>3%</b>

#### AIR CONDITIONING

<b>MUST HAVE</b>	<b>148</b>	<b>360</b>	<b>509</b>	<b>331</b>	<b>652</b>	<b>684</b>	<b>314</b>	<b>119</b>	<b>3,117</b>	<b>30%</b>
<b>WOULD LIKE</b>	<b>460</b>	<b>1,291</b>	<b>1,429</b>	<b>788</b>	<b>1,430</b>	<b>1,091</b>	<b>366</b>	<b>92</b>	<b>6,949</b>	<b>65%</b>
<b>NOT NEEDED</b>	<b>34</b>	<b>124</b>	<b>98</b>	<b>56</b>	<b>79</b>	<b>62</b>	<b>14</b>	<b>11</b>	<b>478</b>	<b>5%</b>
<b>1. CIRCULATION</b>	<b>389</b>	<b>1,113</b>	<b>1,225</b>	<b>809</b>	<b>1,307</b>	<b>1,098</b>	<b>408</b>	<b>115</b>	<b>6,464</b>	<b>48%</b>
<b>2. COOLING</b>	<b>198</b>	<b>541</b>	<b>685</b>	<b>319</b>	<b>630</b>	<b>506</b>	<b>172</b>	<b>61</b>	<b>3,112</b>	<b>23%</b>
<b>3. FILTERING</b>	<b>149</b>	<b>445</b>	<b>518</b>	<b>351</b>	<b>638</b>	<b>542</b>	<b>220</b>	<b>65</b>	<b>2,928</b>	<b>22%</b>
<b>4. HUMIDIFYING</b>	<b>49</b>	<b>142</b>	<b>179</b>	<b>94</b>	<b>216</b>	<b>169</b>	<b>61</b>	<b>16</b>	<b>926</b>	<b>7%</b>



- 1. RECREATION ROOM
- 2. FRUIT AND VEGETABLES
- 3. FUEL
- 4. HEATER
- 5. LAUNDRY
- A. DUMBWAITER
- B. AREAWAY
- C. STAIR HALL



#### MANDATORY

BASEMENT UNDER ENTIRE HOUSE  
 RECREATION ROOM  
 BASEMENT LAUNDRY  
 FRUIT AND VEGETABLE STORAGE  
 AUTOMATIC HEATING PLANT WITH  
 PROVISION FOR CIRCULATION OF AIR

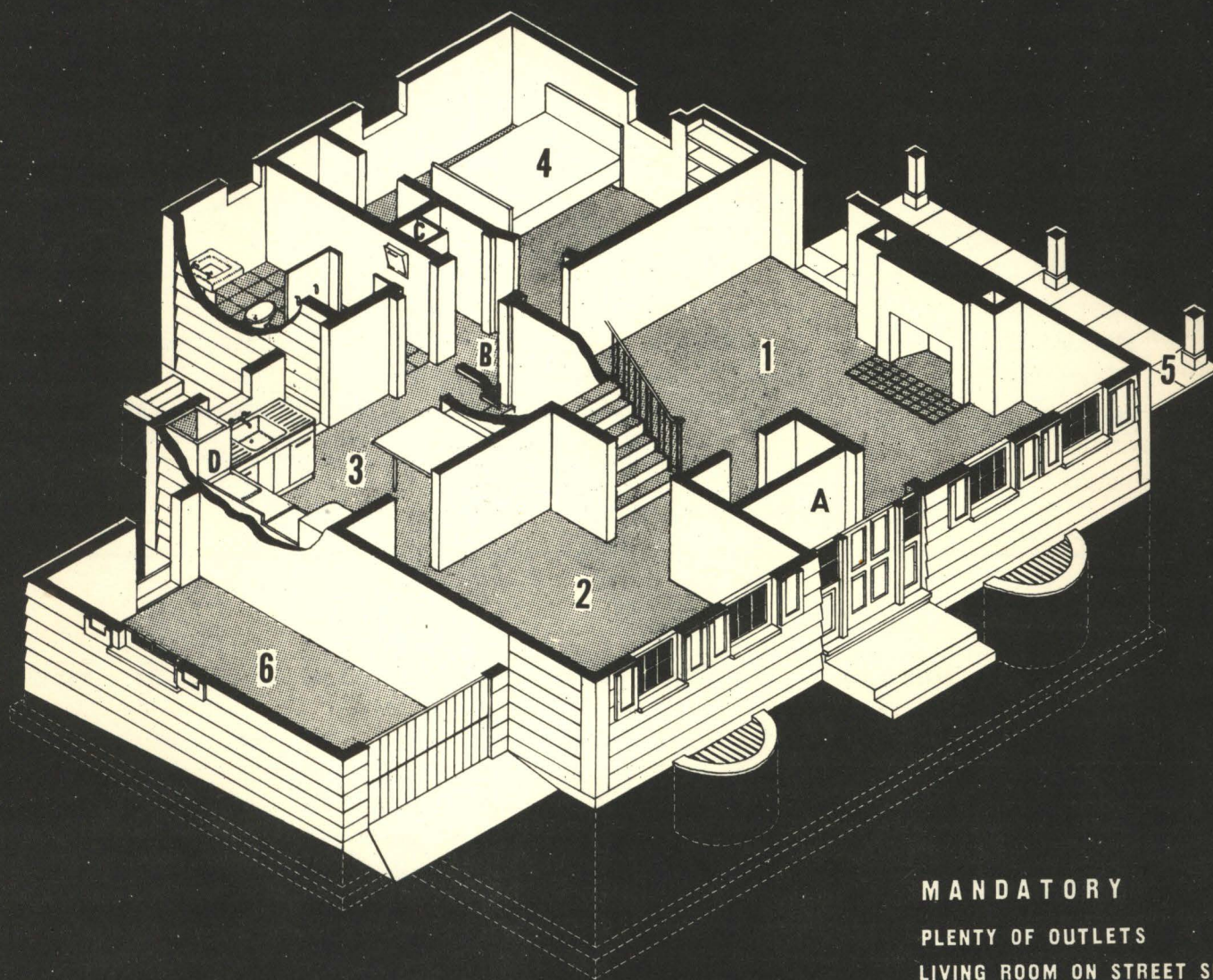


**FIRST FLOOR.** Except that it would like to have a ground floor bedroom or den, the home-buying public still wants a perfectly conventional first floor layout: separate living and dining rooms on the street side of the house; breakfast nook in the kitchen; lavatory and vestibule. On the question of the attached garage they are about evenly divided.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	PER CENT TOTAL OF TOTAL
<b>LIVING ROOMS FACING</b>										
STREET		529	1,598	1,712	1,009	1,832	1,467	510	149	8,806 86%
REAR OF LOT		66	198	208	145	276	303	127	47	1,370 14%
<b>ENTRANCE INTO</b>										
LIVING ROOM		27	161	109	61	94	85	17	9	563 5%
VESTIBULE		332	1,011	1,201	702	1,246	987	377	95	5,951 54%
HALL		282	711	808	462	903	838	320	129	4,453 41%
<b>DINING &amp; LIVING ROOMS</b>										
COMBINED		100	491	429	207	354	223	63	7	1,874 17%
SEPARATE		529	1,374	1,683	1,006	1,883	1,679	646	220	9,020 83%
<b>KITCHEN</b>										
COMPACT		388	1,025	1,310	811	1,471	1,340	511	145	7,001 65%
LARGE		232	812	750	384	721	523	188	86	3,696 35%
<b>BREAKFAST NOOK IN KITCHEN</b>										
YES		510	1,339	1,624	986	1,832	1,592	586	166	8,635 82%
NO		92	463	405	193	328	259	101	57	1,898 18%
<b>LAVATORY</b>										
MUST HAVE		261	785	934	635	1,252	1,188	490	180	5,725 53%
WOULD LIKE		309	812	963	494	835	633	192	46	4,284 40%
NOT NEEDED		50	218	177	70	129	75	28	8	755 7%
<b>GROUND FLOOR BEDROOM</b>										
MUST HAVE		99	532	496	256	427	257	74	37	2,178 21%
WOULD LIKE		261	779	831	418	742	578	183	42	3,834 36%
NOT NEEDED		227	495	706	506	1,014	1,019	440	149	4,556 43%
<b>DEN OR STUDY</b>										
MUST HAVE		118	186	320	213	426	537	254	108	2,162 20%
WOULD LIKE		318	919	1,116	658	1,236	1,023	358	107	5,735 53%
NOT NEEDED		169	737	631	331	552	321	95	18	2,854 27%
<b>GARAGE</b>										
ATTACHED		324	848	1,038	642	1,226	1,013	405	137	5,633 51%
UNATTACHED		386	989	1,053	570	1,006	876	296	95	5,271 48%
NO GARAGE		15	47	28	11	13	15	5	3	137 1%
<b>COVERED PASSAGE TO GARAGE</b>										
MUST HAVE		37	88	99	79	134	147	66	44	694 9%
WOULD LIKE		223	416	474	245	551	454	176	57	2,596 35%
NOT NEEDED		241	795	843	460	756	649	236	60	4,040 55%



- 1. LIVING ROOM
- 2. DINING ROOM
- 3. KITCHEN
- 4. BEDROOM OR DEN
- 5. (OPTIONAL) PORCH
- 6. GARAGE
- A. VESTIBULE
- B. HALL
- C. LAUNDRY CHUTE
- D. DUMBWAITER



## MANDATORY

PLENTY OF OUTLETS  
 LIVING ROOM ON STREET SIDE  
 SEPARATE DINING ROOM  
 DINING NOOK IN KITCHEN  
 GROUND FLOOR BEDROOM OR DEN  
 ENTRANCE VESTIBULE  
 LAVATORY  
 OPTIONAL ATTACHED GARAGE  
 KITCHEN CABINETS  
 KITCHEN VENTILATING FAN



## SECOND FLOOR.

The majority want three bedrooms on the second floor. Two of these must be double bedrooms. There must be two second floor bathrooms in addition to the first floor lavatory, which in the Five Star House [which has a shower in the lavatory on the first floor] makes three bathrooms in all.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
<b>DOUBLE BEDROOMS</b>											
ONE		201	755	847	472	830	620	185	29	3,939	39%
TWO		204	632	849	490	926	825	326	113	4,365	43%
MORE		130	235	278	187	359	395	186	95	1,865	18%
<b>SINGLE BEDROOMS</b>											
ONE		122	494	561	340	574	416	139	51	2,697	28%
TWO		244	727	883	513	925	852	308	77	4,529	47%
MORE		163	421	416	211	512	419	187	59	2,388	25%
<b>BATHROOMS</b>											
ONE		246	1,317	1,272	622	859	464	66	10	4,856	46%
2 OR MORE		338	496	788	548	1,324	1,396	637	218	5,747	54%
NO SHOWER		84	269	221	105	216	167	48	14	1,124	12%
TUB SHOWER		358	1,346	1,496	852	1,478	1,156	348	132	7,166	77%
STALL SHOWER		78	187	190	98	198	164	58	21	994	11%
<b>SERVANTS' ROOMS</b>											
ONE		153	141	277	221	530	862	399	101	2,684	24%
MORE		45	34	50	33	75	118	123	106	584	5%
<b>SLEEPING PORCH</b>											
MUST HAVE		70	146	160	80	228	194	85	44	1,007	9%
WOULD LIKE		368	1,116	1,243	700	1,287	1,075	326	94	6,209	58%
NOT NEEDED		165	588	686	431	711	617	298	93	3,589	33%

## CLOSET AND STORAGE SPACE.

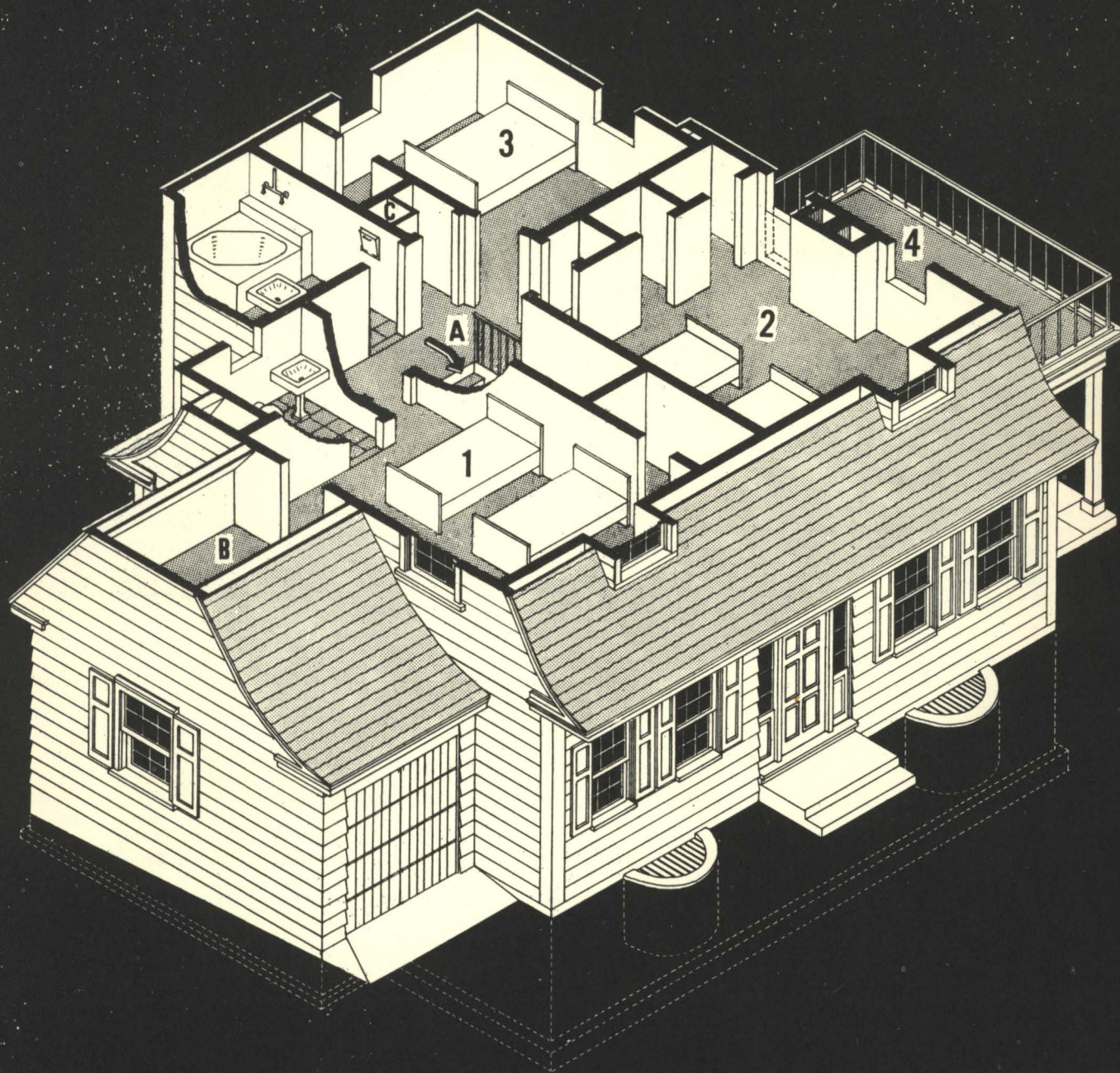
Since 58% of those answering the questionnaire placed "not enough closet space" first among their "pet peeves" another plan requirement is plenty of closet space. This has been interpreted to mean at least one closet per bedroom, two closets or double closet for double bedrooms, linen closet, utility closet and storage space for trunks in houses without attics.

## MATERIALS

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 -\$6,000	\$6,000 -\$7,000	\$7,000 -\$8,500	\$8,500 -\$10,000	\$10,000 -\$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
<b>WALLS</b>											
1. BRICK		292	877	1,053	610	1,098	864	306	107	5,207	46%
2. STONE		74	209	287	180	323	237	109	48	1,557	14%
3. CLAPBOARD		52	271	307	173	281	233	92	30	1,439	13%
4. SHINGLES		61	199	281	157	249	202	78	22	1,249	11%
5. COMBINATION		32	153	156	118	189	194	62	23	927	8%
6. STUCCO		38	151	183	93	175	144	53	17	854	8%
7. CONC. BLOCKS		22	82	79	49	100	93	24	9	458	4%
<b>ROOF</b>											
1. ASBESTOS SHINGLE		227	820	903	468	841	592	190	44	4,085	36%
2. SLATE		106	331	372	255	470	384	136	32	2,086	19%
3. COMPOSITION SHINGLES		74	279	339	243	368	303	126	30	1,762	16%
4. TILE		66	246	291	146	294	214	89	26	1,372	12%
5. WOOD SHINGLES		37	190	252	142	236	209	84	21	1,171	10%
6. METAL		37	129	111	62	136	126	29	13	643	6%











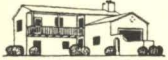

- 1. MASTER BEDROOM
- 2. BEDROOM
- 3. BEDROOM
- 4. SLEEPING PORCH MAY BE ADDED HERE
- A. STAIR HALL
- B. STORAGE
- C. LAUNDRY CHUTE

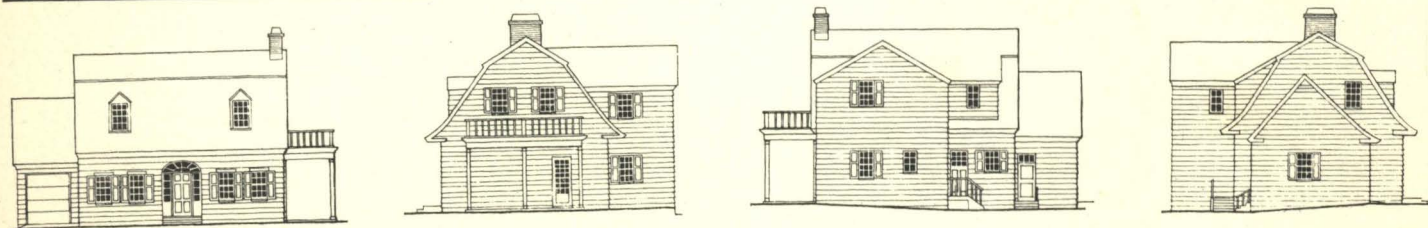


MANDATORY  
 PLENTY OF CLOSET SPACE  
 TWO DOUBLE BEDROOMS  
 TWO SINGLE BEDROOMS  
 (ONE ON GROUND FLOOR)  
 TWO BATHROOMS  
 OPTIONAL SLEEPING PORCH



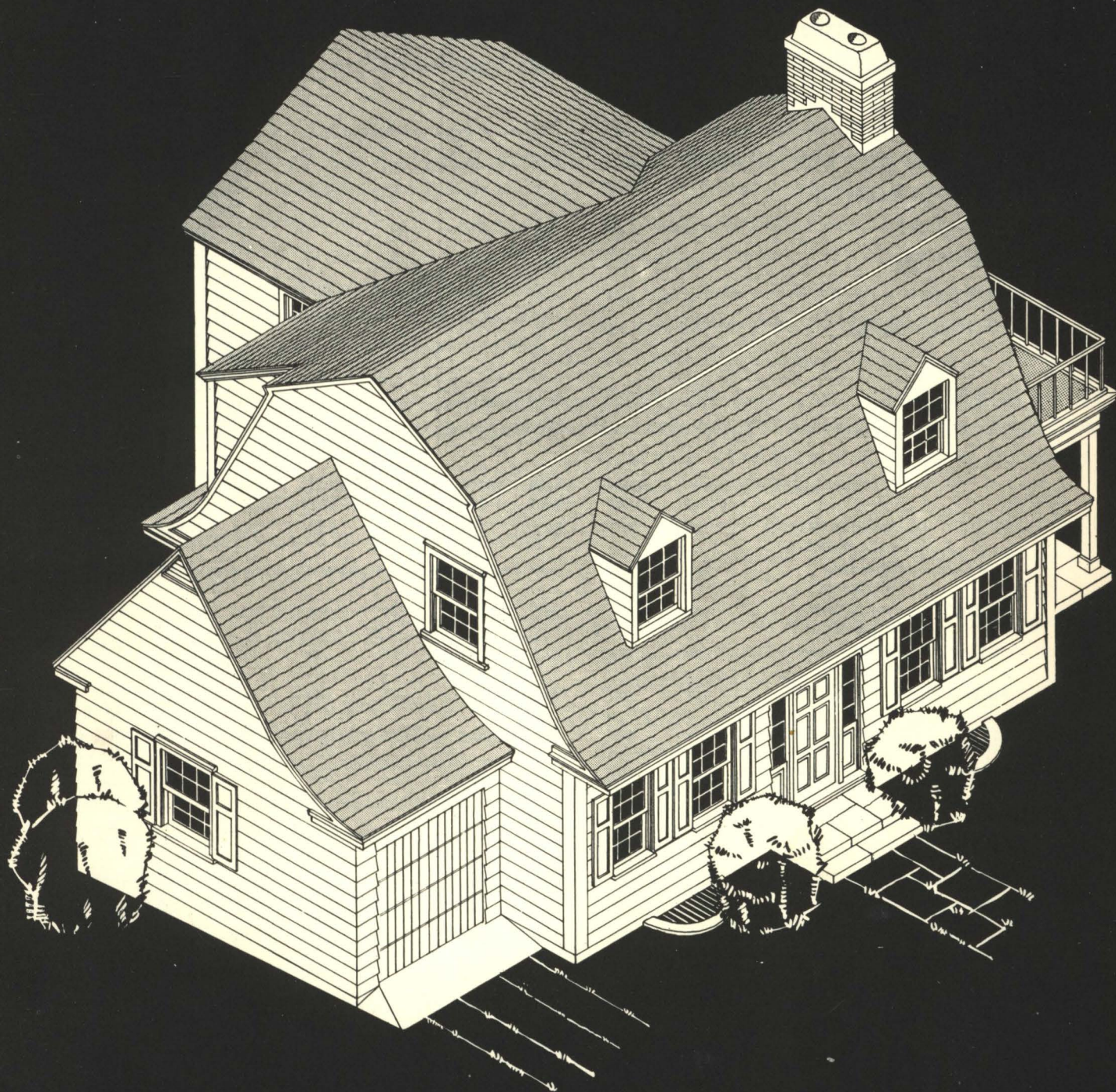
**STYLE.** That the American taste, at least so far as architecture is concerned, still leans heavily toward the conservative, traditional styles was once again demonstrated by the answers to the Five Star Questionnaire. The overwhelming preference was for the various Colonial styles, with Dutch Colonial the most popular of these. Next came English, with 22% of the total vote; followed by Modern, which polled 11%. Practically everyone favored the two story type. Choice was on the basis of the illustrations shown at the left of the figures.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 - \$6,000	\$6,000 - \$7,000	\$7,000 - \$8,500	\$8,500 - \$10,000	\$10,000 - \$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
	ONE STORY	19	104	90	45	73	34	7	1	373	
	TWO STORY	112	257	377	236	416	297	71	27	1,793	
		131	361	467	281	489	331	78	28	2,166	21%
	ONE STORY	29	251	184	81	110	35	7	0	697	
	TWO STORY	40	250	257	136	180	121	30	5	1,019	
		69	501	441	217	290	156	37	5	1,716	17%
	ONE STORY	2	14	15	3	11	9	1	2	57	
	TWO STORY	55	86	128	106	188	191	112	33	899	
		57	100	143	109	199	200	113	35	956	10%
	ONE STORY	7	10	14	11	9	18	4	1	74	
	TWO STORY	52	51	82	42	102	125	79	25	558	
		59	61	96	53	111	143	83	26	632	6%
	ONE STORY	1	42	16	6	9	4	1	1	80	
	TWO STORY	28	93	73	34	73	72	16	9	398	
		29	135	89	40	82	76	17	10	478	5%
<b>TOTAL COLONIAL</b>		<b>345</b>	<b>1,158</b>	<b>1,236</b>	<b>700</b>	<b>1,171</b>	<b>906</b>	<b>328</b>	<b>104</b>	<b>5,948</b>	<b>59%</b>
	ONE STORY	18	58	65	33	58	36	13	2	283	
	TWO STORY	108	189	294	222	450	459	193	64	1,979	
		126	247	359	255	508	495	206	66	2,262	22%
	ONE STORY	10	63	55	31	49	43	5	4	260	
	TWO STORY	45	94	145	84	186	189	72	26	841	
		55	157	200	115	235	232	77	30	1,101	11%
	ONE STORY	6	31	25	10	18	11	2	1	104	
	TWO STORY	16	24	41	20	65	45	20	7	238	
		22	55	66	30	83	56	22	8	342	3%
	ONE STORY	4	14	13	2	15	10	3	1	62	
	TWO STORY	14	17	30	22	37	46	23	8	197	
		18	31	43	24	52	56	26	9	259	3%
	ONE STORY	4	8	14	5	7	6	1	0	45	
	TWO STORY	15	20	20	16	44	39	10	2	166	
		19	28	34	21	51	45	11	2	211	2%



ELEVATIONS OF FIVE STAR HOUSE SHOWN OPPOSITE





MANDATORY  
DUTCH COLONIAL STYLE  
BRICK WALLS\*  
ASBESTOS SHINGLE ROOF  
SEE ALSO PLAN REQUIREMENTS

\*CLAPBOARDS, WHICH WERE THIRD CHOICE, HAVE BEEN SHOWN INSTEAD BECAUSE THIS MATERIAL SEEMED MORE APPROPRIATE TO THE STYLE AND PLAN USED.



## INTERIOR FINISHES

### WALL FINISHES

	LIVING ROOM	DINING ROOM	BED ROOMS	BATH ROOMS	KITCHEN
PAINTED PLASTER	2,866	2,305	3,672	691	3,095
REGULAR WALLPAPER	3,562	2,930	4,273	120	303
WASHABLE WALLPAPER	1,854	1,571	1,981	415	1,202
WOOD PANELING	1,461	2,900	125	16	142
DECORATED WALL BOARD	817	638	483	99	330
GLAZED TILE COLORED	72	68	74	5,942	3,389
GLASS TILE OR SLAB	60	61	47	3,386	1,988

### FLOORING

HARDWOOD WITH RUGS	10,029	9,490	9,021	221	365
SOFTWOOD CARPETED	526	541	1,044	42	63
TILE	33	33	26	7,257	621
RUBBER TILE	155	270	244	2,288	3,774
LINOLEUM	143	363	435	666	5,792
COLORED CEMENT	84	87	51	341	310

**CONVENIENCES.** The relative order of importance which the majority assign to various mechanical conveniences is indicated below. More than 43% placed the automatic hot water heater first.

	PRICE CLASS	Not Given	Under \$5,000	\$5,000 - \$6,000	\$6,000 - \$7,000	\$7,000 - \$8,500	\$8,500 - \$10,000	\$10,000 - \$15,000	Above \$15,000	TOTAL	PER CENT OF TOTAL
FIRST	—Automatic Hot Water Heater	338	824	841	463	966	875	361	145	4,813	43%
SECOND	—Mechanical Refrigerator	201	490	647	379	720	673	262	107	3,479	31%
THIRD	—Oven Heat Controlled Stove	172	403	531	357	637	604	238	92	3,034	27%
FOURTH	—Kitchen Ventilating Fan	118	294	396	254	483	422	173	53	2,193	20%
FIFTH	—Bathroom Heater	122	340	437	251	450	356	123	34	2,113	19%
SIXTH	—Dishwasher Sink	119	329	427	254	488	397	150	53	2,217	20%
SEVENTH	—Garbage Disposal Unit	149	463	566	301	583	422	157	39	2,680	24%

### KITCHEN CABINETS

ONE SIDE OF KITCHEN	351	1,088	1,076	586	1,040	715	256	56	5,168	47%
TWO SIDES	255	579	801	486	895	887	296	108	4,307	39%
THREE SIDES	86	174	213	132	282	277	142	62	1,368	13%
NO CABINETS	15	37	16	6	14	16	12	6	122	1%

### KITCHEN COUNTER SURFACE

METAL	244	619	789	490	846	835	325	103	4,251	39%
LINOLEUM	134	418	451	263	479	345	132	46	2,268	21%
TILE	230	504	586	322	664	506	174	54	3,040	28%
WOOD	80	302	288	120	236	178	68	22	1,294	12%

**INSULATION (WALL AND CEILING)** The decided demand for insulation is noteworthy.

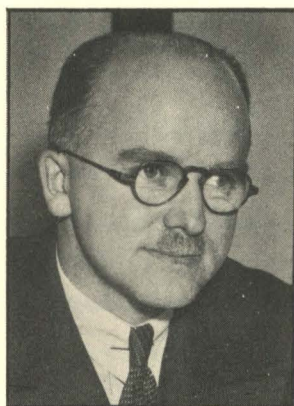
MUST HAVE	262	691	985	634	1,179	1,162	503	171	5,587	51%
WOULD LIKE	412	1,060	1,033	546	997	696	190	52	4,986	46%
NOT NEEDED	31	95	71	29	49	32	16	4	327	3%



# Fifty "Don'ts" for the Prospective Small Home Builder

By Howard Leland Smith

*Chief Architect of Federal Housing Administration*



HOWARD LELAND SMITH

1. Don't plan to spend more than twice the average yearly income of your family for a house and lot.
2. Don't buy a lot without obtaining a clear title and a written guarantee from seller that you will not be burdened with future assessments for paving of roads, sewer installations, or other land improvements.
3. Don't buy a lot which is not served by electricity and a public water system.
4. Don't buy a lot, the location of which makes it subject to damage by floods or other elements of a destructive nature.
5. Don't buy a lot where sub-soil conditions make wet basements a possibility.
6. Don't buy a lot which is not protected by suitable recorded restrictions and which is not in close proximity to transportation lines, schools, churches, streets, etc.
7. Don't buy a lot which, on account of its size, may become burdensome in its proper upkeep.
8. Don't buy a lot, the contours of which will make the location of the house a difficult and costly problem.
9. Don't plan your house without the complete service of a competent architect or when not available a dependable plan service which provides for personal supervision.
10. Don't obtain plans which do not conform to building codes, fire restrictions, and sanitary laws covering the proposed site.
11. Don't locate your house on the lot or determine its floor elevations in relation to finished grade levels without the presence of your architect or his agent.
12. Don't plan your house without giving consideration to the orientation of the living room and cross ventilation for the kitchen and bedrooms.
13. Don't place your house high out of the ground for the sake of natural light for your basement or the possible saving in the cost of excavation.
14. Don't plan half or part basement when a full basement costs no more.
15. Don't build areaways and exterior bulk heads unless adequate drainage for each can be provided.
16. Don't allow finished grading to slope towards foundation walls.
17. Don't locate house close to side lot lines or far back from street when the rear of lot can be attractively developed for gardening.
18. Don't place garage at back of lot when a location nearer the street will save cost of extra driveway and its maintenance.
19. Don't provide for a detached garage when an attached one can be made more serviceable and lend greater breadth to the house.
20. Don't open garage doors to the back or side unless required to by deed restrictions or other regulations.
21. Don't locate garage away from service side of house.
22. Don't make garage so small that it will not provide adequate space for garden tools, lawn mowers, bicycles, etc.
23. Don't design a house, the exterior of which will not be in character with the neighboring houses.
24. Don't plan other than a square or rectangular shaped house unless circumstances make it necessary.
25. Don't design or build false gables.
26. Don't plan for more than one chimney.
27. Don't plan false fire places.
28. Don't locate chimneys in roof valleys.
29. Don't design and build complicated roofs.
30. Don't design long sweeps of roofs with only an exterior false wall to carry the lower portion.



31. Don't build exterior false walls with arches or openings unless they have a real purpose.
32. Don't use a variety of materials on the exterior which increases the cost and tends to make the elevations restless.
33. Don't use different size window sash unless room use demands it.
34. Don't use materials on exterior which do not provide adequate resistance to the elements common to the locality.
35. Don't use a variety of color when painting your house.
36. Don't use unseasoned lumber.
37. Don't use second grade materials.
38. Don't try to save money by buying materials other than through your contractor.
39. Don't allow a complicated floor plan.
40. Don't allow for hall space other than that necessary to obtain privacy in passing from one room to another.
41. Don't cut up wall surfaces with openings so that furniture cannot be suitably located.
42. Don't arrange rooms so that one has to pass from a bedroom through another room to reach the bath.
43. Don't plan your rooms so that unnecessary corners are required.
44. Don't dimension rooms so that you cannot take advantage of standard lengths and stock sizes of structural materials.
45. Don't design your house so that you cannot use stock mill work wherever required.
46. Don't design complicated stairways, but provide direct runs as will tend to simplify floor framing even though it be necessary to use stair winders.
47. Don't start construction work until heating, plumbing and electrical plans have been carefully worked out in conjunction with framing plans.
48. Don't locate plumbing fixtures in a manner as will demand unnecessary runs of pipe.
49. Don't use new materials, new methods of construction or mechanical equipment which have not been approved by a recognized laboratory or which have not proved themselves by continued usage.
50. Don't fail to put into writing all contracts, agreements, or requests for possible changes with your architect, builder, or others connected with the construction of your home.



# A BRIEF CHECK LIST OF QUESTIONS

## TO ASK YOURSELF BEFORE BUILDING A HOME

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### About the Neighborhood

- Has my architect approved my choice of site?
- Is the neighborhood appropriate for my means?
- Are stores convenient?
- Is the school convenient?
- Is the church convenient?
- Are parks and playgrounds convenient?
- Are there facilities for the sports and recreation I am interested in?
- How far removed is the railroad station?
- Are buses or trolleys near at hand? How often do they run? What is the fare?
- Is police protection adequate?
- Is the firehouse reasonably near?
- How expensive is fire insurance in this neighborhood?
- Are the streets well lighted after dark?
- Is this neighborhood restricted so as to keep out ugly buildings?
- Am I protected in this respect for a number of years?
- Is this section improving, deteriorating, or standing still?
- How will my house compare in appearance to others in the neighborhood?

### About the Lot

- Will the lot size, building restrictions, and location of adjoining houses make possible the development of a good indoor and outdoor living arrangement?
- Will the surroundings make possible a correct orientation of rooms without lack of privacy?
- Are there trees or shrubs on the lot?
- Can these be saved?
- Is the lot graded so that surface water will not drain into the cellar?
- Are adjacent lots graded so that they will not drain into mine?
- If there are stone walls, are there "weep" holes in them to facilitate proper drainage?
- Is the back yard suitable for children playing? For hang-

ing out wash? For sitting out back if I want to? For a garden if I want one?

Is the back yard properly separated from neighbors'?

Can I take care of snow removal in winter, or is there so much walk and steps to handle that I may frequently need help, adding to cost?

Does the general situation protect me against undue exposure to the north in winter which may raise my heating bills ten, twenty, or even fifty dollars a winter over some other location?

Is the location cool in summer?

Will the lawn be reasonably easy to mow or must I hire help?

Am I next to a vacant lot full of weeds which will make a good lawn impossible?

Is the lot in keeping with the house? (The lot should be worth about  $\frac{1}{5}$  as much as the house itself. A more expensive lot adds nothing to total value if you are buying.)

Are the lot dimensions as stated by the renter or seller?

### About the House

If there is a view, does the plan take full advantage of it?

Are the main rooms properly oriented in relation to sun and prevailing winds in summer?

If there should be need of future additions does the plan provide for them?

Is the plan sufficiently adaptable to the requirements of an average family so that the house might be readily sold if necessary?

Will the exterior materials require frequent repair or replacement, or are they well suited to local conditions?

Is circulation within the house easy? Is it necessary to pass through the living room to get to the private quarters? Has the guest room sufficient privacy?

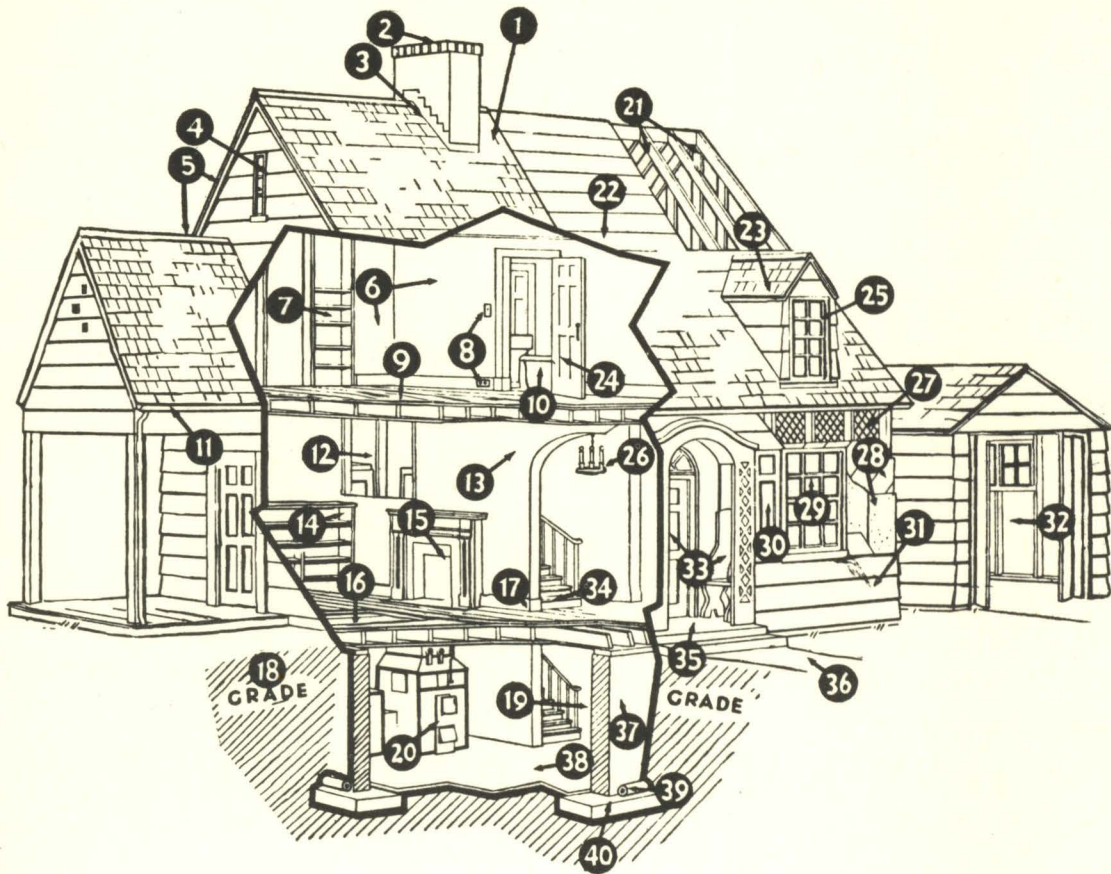
Does the house "furnish" well? Is there ample space for beds, couches, tables, etc?

Is it so unusual in appearance that it will get tiresome though it attracts us today?

Is it compact and without ell's and other projections which may make it costly to heat?



## 40 IMPORTANT POINTS IN HOUSE CONSTRUCTION



- |  |  |
|--|--|
| 1. Roof  | 21. Rafters, studding                        |
| 2. Chimney masonry, cap, etc.                        | 22. Roof sheathing                           |
| 3. Flashing  | 23. Dormers                                  |
| 4. Attic ventilation, attic room                     | 24. Doors and hardware                       |
| 5. Exterior trim                                     | 25. Weather-stripping                        |
| 6. Wall-board, plaster, etc.                         | 26. Electric fixtures                        |
| 7. Closet space, shelves, etc.                       | 27. Lath                                     |
| 8. Outlets and wiring                                | 28. Sheathing and insulation                 |
| 9. Flooring—finished lumber, tile, linoleum, etc.    | 29. Window frames and sash                   |
| 10. Plumbing and fixtures                            | 30. Blinds, shutters                         |
| 11. Gutters, downspouts                              | 31. Exterior walls                           |
| 12. Kitchen equipment                                | 32. Garage—tool space, workshop, etc.        |
| 13. Paint, wallpaper, interior decoration            | 33. Porch—bench, transom, door columns, etc. |
| 14. Built-in book-shelves, cabinets, cupboards, etc. | 34. Stairway—treads, rails, balusters, etc.  |
| 15. Fireplace, mantel, flue, etc.                    | 35. Steps—brick, wood, concrete, tile, etc.  |
| 16. Joists and subflooring                           | 36. Walks and drives                         |
| 17. Interior trim                                    | 37. Foundation walls                         |
| 18. Grading and landscaping                          | 38. Basement floor                           |
| 19. Recreation room, laundry, workshop, etc.         | 39. Drain tile                               |
| 20. Heating plant                                    | 40. Footing                                  |



# 131

## CONTEMPORARY HOUSES

A NATIONAL DEMONSTRATION OF SOUND ARCHITECTURAL PLANNING, DESIGN, CONSTRUCTION, EQUIPMENT AND FURNISHINGS

**T**HE collection which follows shows the best houses being built in the U. S. today. That is so because this is a twice distilled collection. Distilled once and formidably from the hundreds of pictures which pass over the editorial desks of THE ARCHITECTURAL FORUM every month. Distilled once again from those we finally judged good enough for the pages of the magazine. Study these houses. Try living in them. Take a long look at the exterior. Then concentrate on the floor plans, moving slowly and thoughtfully in mind's eye from room to room. Presently you will become aware of the problems of planning in a more professional degree and learn what a talented architect can accomplish within the restriction of four walls. Which is distinctly worth your while. Because talented as the architect may be, his indispensable and chief collaborator is always the client. Turn the page for Lesson One.



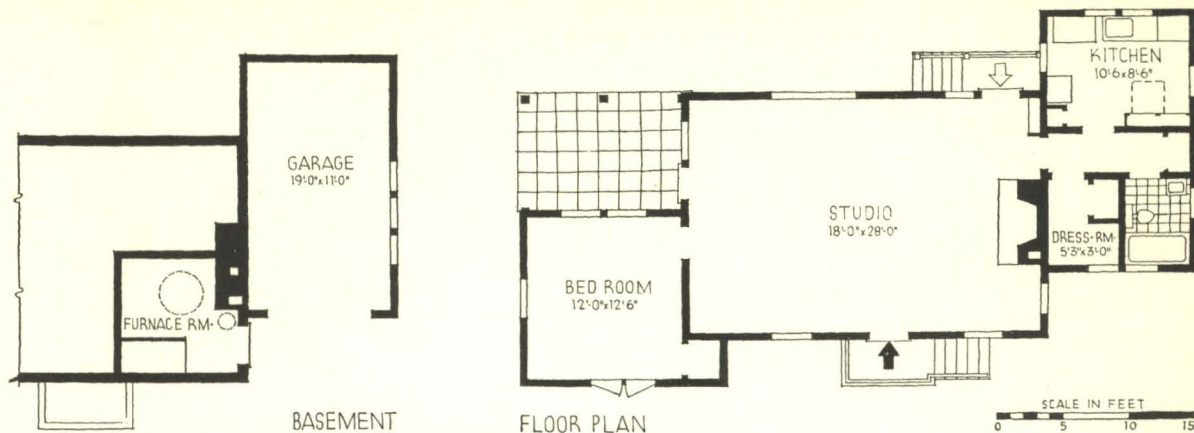
## 1. HOUSE FOR MARIE A. BOYLSTON, LIME ROCK, CONN.



*George H. Van Anda Photos*

The chief defect in much small house design is its failure to achieve the proper scale, a result, possibly, of the persistent tendency to regard the small house as a large house compressed, rather than a special problem with its own peculiar characteristics. This example has successfully solved the problem of scale by treating the details with an appropriate simplicity; there is no deceptively molded cornice, no ornamentation around the entrance save a pair of plain pilasters, and the broad clapboards give a proper effect of small size. Advantage was taken of the hillside to obtain a garage within the house and an unexcavated basement. The plan is uncomplicated, with all the plumbing located at the unexcavated end. Cubage: 15,239. Cost: \$3,900 at about 26 cents per cubic foot.





## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete, continuous. Cellar floor—concrete over cinder fill.

### STRUCTURE

Exterior walls—18 in. Perfection cedar shingles,  $\frac{7}{8}$  in. sheathing, building paper, 2 x 4 in. studs and T. & G. pine boards inside. Interior partitions—2 x 4 in. studs, 16 in. o.c. and sheet rock. Floor construction— $\frac{7}{8}$  in. sub-floor, building paper and 1 x 6 in. T. & G. pine boards.

### ROOF

Sheathing,  $\frac{7}{8}$  in., paper, 18 in. cedar shingles.

### CHIMNEY

Lining—terra cotta. Heatilator Co. unit built-in fireplace.

### SHEET METAL WORK

Flashing, gutters, leaders—galvanized iron.

### WINDOWS

Sash—wood, double hung. Glass—single strength, quality A. Screens—bronze, wood frames.

### FLOORS

Living room, bedrooms, and halls—1 x 6 in. T. & G. pine. Kitchen and bathrooms—linoleum, medium grade, Armstrong Cork Products Co.

### WOODWORK

Trim and cabinets—stock, Morgan Co. Living room—batten doors.

### HARDWARE

Interior and exterior—P. & F. Corbin.

### PAINTING

Interior: Ceilings, trim and sash—3 coats oil paint. Exterior walls—2 coats shingle paint. All paint by Pittsburgh Plate Glass Co.

### ELECTRICAL INSTALLATION

Wiring system and switches—General Electric Co.

### KITCHEN EQUIPMENT

Stove and refrigerator—electric, General Electric Co. Sink—Standard Sanitary Mfg. Co.

### PLUMBING

All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply pipes—copper tubing.

### HEATING

Not included at present.



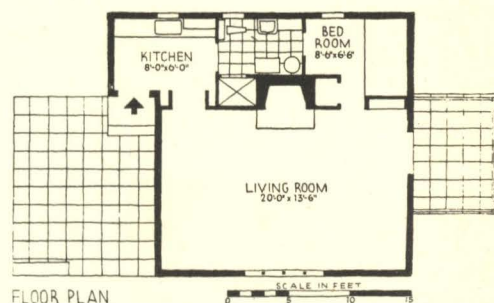
STUDIO



## 2. HOUSE FOR DONALD D. BICKFORD, SEATTLE, WASH.

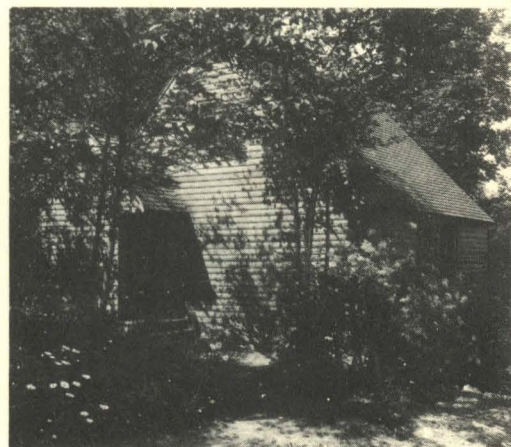


*Linkletter Studio*



*Linkletter Studio*

**LIVING ROOM**



**DONALD D. BICKFORD, ARCHITECT**

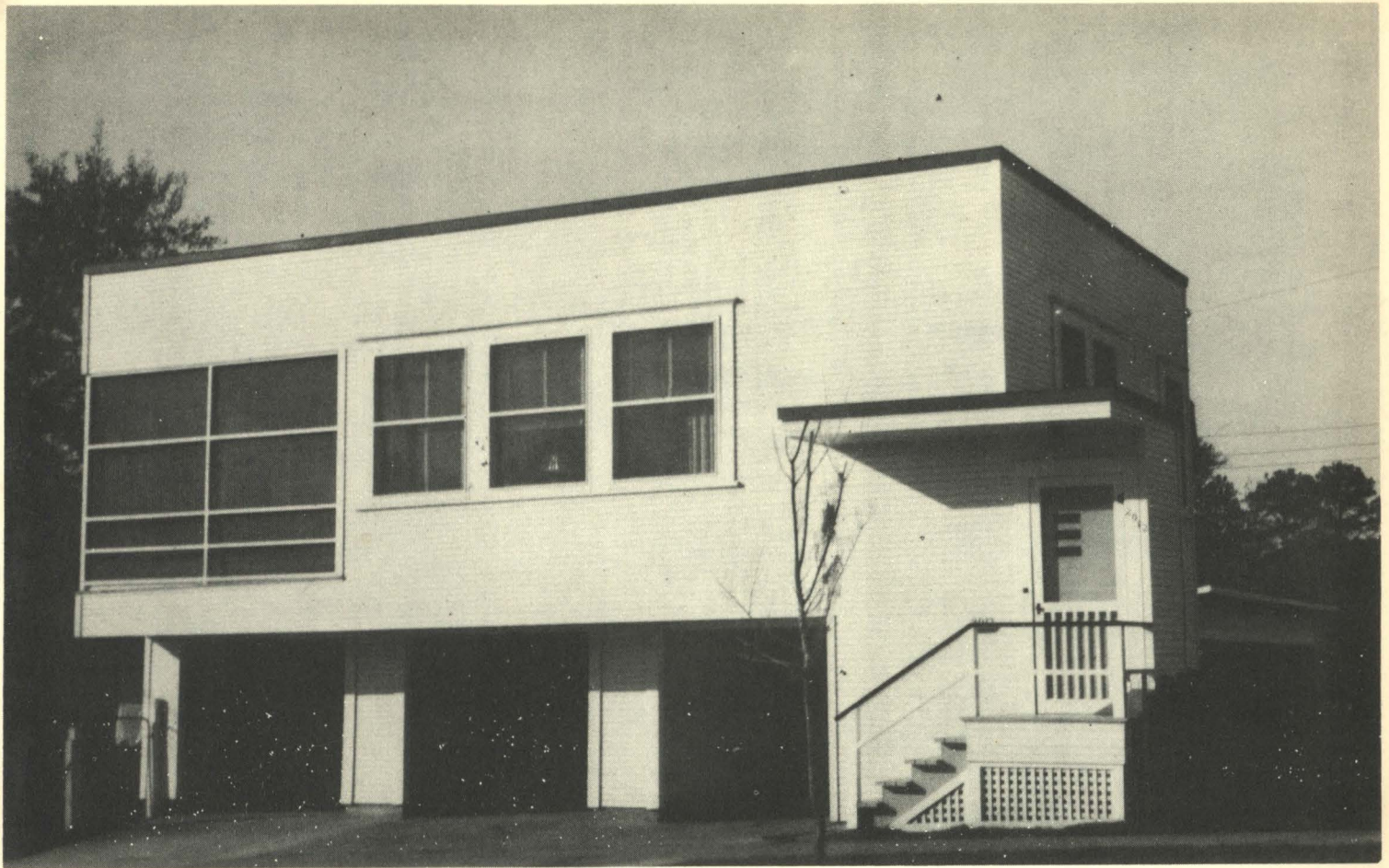
The problem here, to build a dwelling for one person as inexpensively as possible, could hardly be solved for less money than was spent. The living room occupies most of the space, with an interesting arrangement of the other rooms, showing how compact bedroom, kitchen, and bath can be when it is necessary to save space. The bedroom has been planned to hold one bed and a minimum of furniture, but could not be considered cramped. Plain boards take the place of more expensive interior finish. The house was planned for future expansion. Cubage: 8,320. Cost: \$1,000 at 12 cents per cubic foot.

### CONSTRUCTION OUTLINE

**FOUNDATION:** Concrete blocks. Fir posts.  
**STRUCTURE:** Exterior walls—frame, sheathing and paper covered with 6 in. cedar siding. Finish—boiled linseed oil. Interior walls and ceilings—random widths of knotty cedar, finished with wax.  
**ROOF:** Wood rafters, cedar shingles, galvanized iron flashing.  
**MILL WORK:** Casement windows, French doors, cupboards, shelves and door frames—Douglas fir.  
**FLOORS:** Living room—oak. Kitchen, bath and bedrooms—linoleum.  
**ELECTRICAL INSTALLATION:** Wiring and switches—Trumbull Electric Manufacturing Co.  
**PLUMBING:** Fixtures—Standard Sanitary Mfg Co. Shower—galvanized iron and concrete. Pipes—wrought iron.  
**HEATING:** Circulating heater and fireplace.



### 3. APARTMENT AND GARAGE FOR MRS. R. D. RAMSEY, SHREVEPORT, LA.



WILLIAM B. WIENER, ARCHITECT

An interesting experiment in the combining of garage and living facilities. The cantilevered second floor subordinates the garage and relieves the severity of the mass.

*The architect comments:* "This garage apartment was built at the rear of a duplex apartment. The owner now uses this for her living quarters and rents both of the apartments in the duplex."

Cost: \$2,376.

#### CONSTRUCTION OUTLINE

**FOUNDATION:** Brick piers, concrete footings.

**STRUCTURE:** Exterior walls—siding on 2x4 in. studs, 24 in. o.c.; T. & G. shiplap, wallpaper on canvas. Floor construction—oak, 2 x 10 in. joists, 24 in. o.c.

**ROOF:** Construction—sheathing on roof joists, covered with built-up roofing.

**WINDOWS:** Sash—pine, double hung. Glass—double strength, quality A. Screens—copper in wood frames.

**STAIRS:** Treads—oak. Risers—pine.

**FLOORS:** Living room, bedrooms and halls—oak. Kitchen—pine covered with linoleum. Bathrooms—covered with 1/8 in. sheet rubber.

**WOODWORK:** Trim, shelving and cabinets—pine. Interior doors—1 3/8 in. stock. Exterior doors—1 3/4 in. panel.

**HARDWARE:** Interior and exterior—dull nickel.

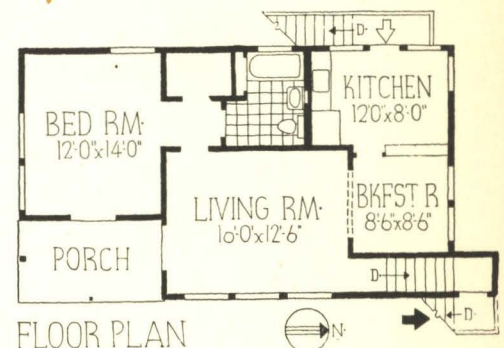
**PAINTING:** All painting—3 coats lead and oil. Floors—3 coats varnish.

**ELECTRICAL INSTALLATION:** Wiring system—knob and tube. Switches—toggle type, Bakelite. Fixtures—flush, built-in.

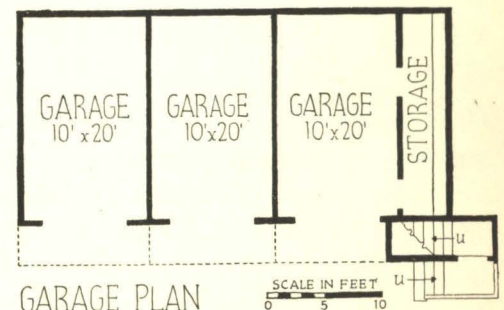
**BATHROOM EQUIPMENT:** Shower and metal cabinet, Henry Weiss Manufacturing Co., Inc. All other fixtures by Standard Sanitary Manufacturing Co.

**PLUMBING:** Pipes—copper tubing.

**HEATING:** Gas outlets in all rooms.



FLOOR PLAN



GARAGE PLAN

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

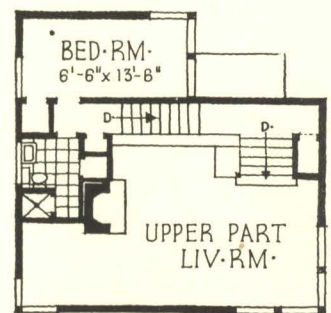


#### 4. GUEST HOUSE FOR PROF. ROBERT TRYON, BERKELEY, CALIF.

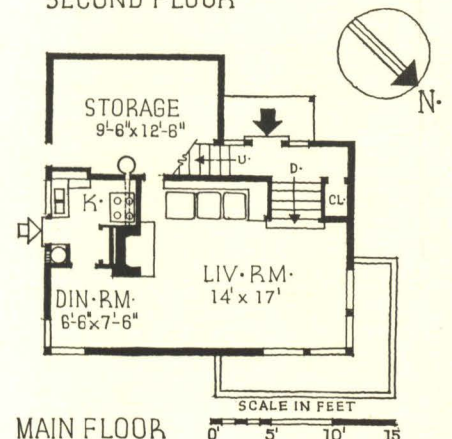


N. Richardson Photos

Making good use of a steeply sloping site, this house is entered at an intermediate landing of the stairs. The high living space, sheathed with mahogany plywood, affords flexible areas for dining and entertaining. Cabinets and coat closet, also treated as cabinet-work, are arranged for maximum convenience. Disciplined by the size of the plywood panels, the exterior is a simple and frank expression of the well ventilated and illuminated interior. The grouping of windows at corners permits of the most advantageous use of wall surface for furniture. Cubage: 9,000. Cost: approximately \$2,900 at 31 cents per cubic foot.



SECOND FLOOR



MAIN FLOOR

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





**LIVING ROOM**

## CONSTRUCTION OUTLINE

### STRUCTURE

Exterior walls— $\frac{1}{4}$  in. Oregon pine plywood, double-kraft building paper, 1 in. Oregon pine sheathing and studding. Interior finish—ribbon-grained mahogany wallboard.

### ROOF

Wood joist covered with diagonal 1 in. Oregon pine sheathing, 4-ply tar and gravel, Paraffine Companies, Inc.

### SHEET METAL WORK

Flashing and leaders—24 gauge galvanized iron, American Rolling Mill Co. Gutters—California redwood.

### WINDOWS

Sash—wood, white pine, awning type. Frame—redwood sill, white pine jambs and head. Glass—single strength, quality B, Libbey-Owens-Ford Glass Co. Blinds—National Venetian Blind Co.

### FLOORS

Living room—salvaged teakwood. Bedrooms and halls—common white oak.

### FLOOR COVERINGS

Kitchen and bathroom—linoleum, Jaspe, grade B, Armstrong Cork Products Co.

### WOODWORK

Trim—white pine. Shelving and cabinets—Oregon pine. Interior doors—pine, single panel. Exterior doors—Rezo flush panel pine, The Paine Lumber Co., Ltd.

### PAINTING

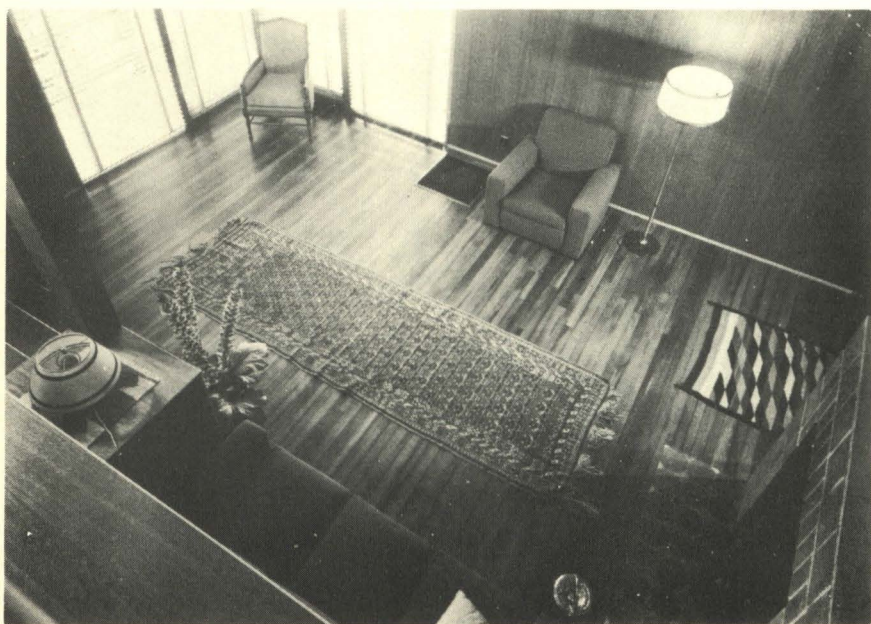
Interior: Walls and ceilings—natural stain. Floors—brown stain, filler, varnish and wax. Sash—painted. Exterior: Walls—Two coats Plyseal. All paints by Sherwin-Williams Co.

### PLUMBING

All fixtures by Standard Sanitary Manufacturing Co. Soil and waste pipes—cast iron. Vent pipes—galvanized iron, Walworth Co. Water supply pipes—cold: wrought iron; hot: copper tubing, sweat fittings—Mueller Co.

### HEATING

Gas burning warm air blower type. Hot water heater—30 gallon galvanized iron tank, automatic storage, National Radiator Corp.



**LIVING ROOM SEEN FROM UPPER STORY**



## 5. HOUSE IN LOUISVILLE, KENTUCKY GUNNISON MAGICHOMES, INC.



*Courtesy, Louisville Courier-Journal*

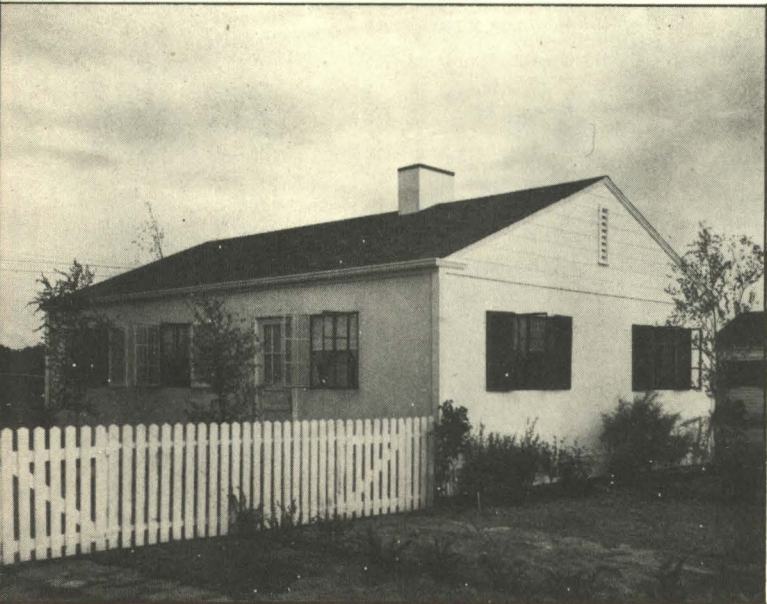
The Gunnison MagicHome is different from other prefabricated houses not only in construction, but also in the exterior treatment. Large and standardized wall units of built-up and insulated veneered wood panels allow for rapid construction. While the simplicity of the typical plan reduces complicated building to a minimum it nevertheless provides ample closet space and a logical sequence of rooms. The absence of entrance hall and separate dining room may be questioned, but these units are not indispensable in the small house located in a comparatively warm climate where the transition from the interior to the out of door may be sudden without discomfort. The exterior treatment is left to local architects, thereby allowing for the introduction, in these prefabricated units, of personal and in this particular case tasteful handling, thus relieving the sameness otherwise unavoidable in large groups of such residences. Cost: \$2,650. Cubage: 10,900 at 24 $\frac{1}{4}$  cents.

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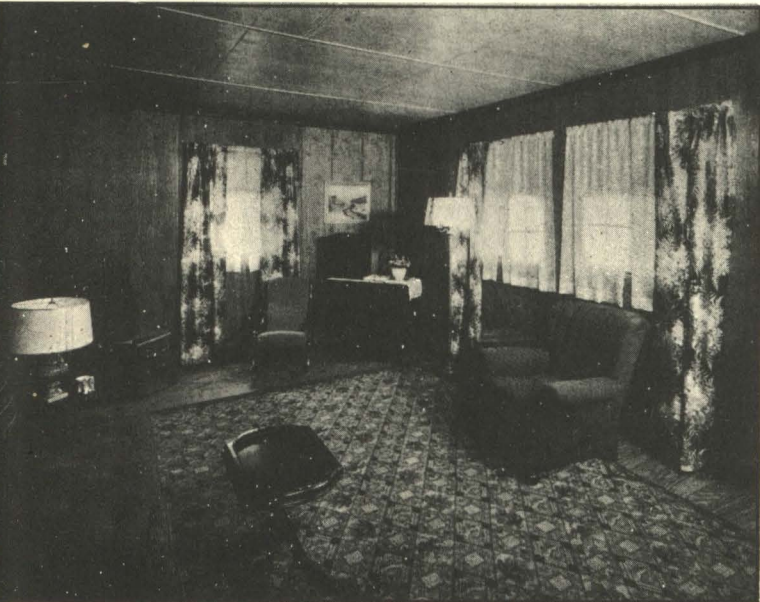




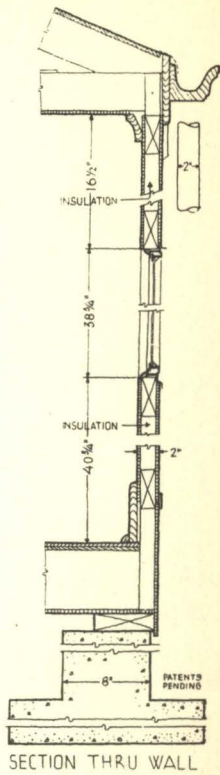
THE DEVELOPMENT



REAR ELEVATION



LIVING ROOM



## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete

### STRUCTURE

Exterior walls—two plywood panels bonded to wood stiffeners, insulation between. Exterior finish—paneled plywood, clapboard or shingle. Interior partitions—same as outside. Interior finish—stained and waxed walnut, mahogany or gum veneer. Floor construction—oak finished plywood bonded to wood joists with insulation between. Ceiling—maple finished plywood bonded to wood joists, insulation between.

### ROOF

Composition shingles over plywood panels bonded to wood rafters.

### CHIMNEY

Painted metal, contains only flue from heater.

### SHEET METAL WORK

Flashing and leaders—copper. Gutters—fir.

### INSULATION

Outside walls, ground and attic floor—2 in. of rock wool.

### WINDOWS

Steel casements, stock sizes. Glass—single strength, quality A.

### FLOORS

Oak plywood, 5/8 in. thick.

### WALL COVERINGS

Living room—walnut plywood. Bedrooms—mahogany and gum plywood. Kitchen and bathrooms—painted.

### PAINTING

Interior walls, ceilings and floors—stained and waxed. Exterior walls—painted, one shop coat—aluminum, 2 job coats—lead and oil.

### ELECTRICAL INSTALLATION

Wiring system—BX. Switches—toggle.

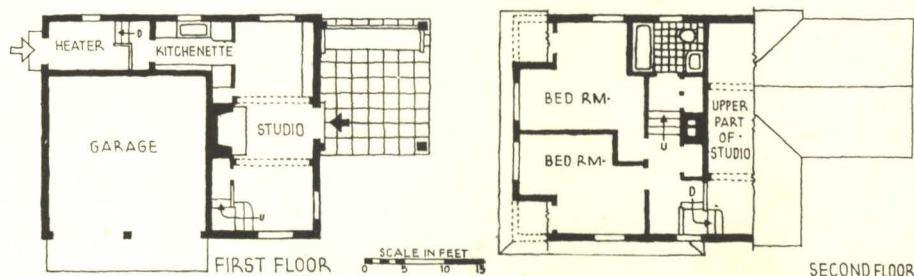
### HEATING

Circulated warm air. Gas fired boiler.





Courtesy, Portland Cement Assn.



The architect has used reinforced concrete honestly not only as a structural material, but as a surface texture pleasing to the eye. The plan shows the difficulty involved by incorporating a large element, such as a two-car garage in a residence of this size. The studio loses much of its importance, although the adjacent porch is instrumental in relieving its narrowness. Furthermore, the use of large steel casements is eminent proof that the scale of window openings need not be brought down in the small house for the sake of appearances. Cost: \$3,000.

## CONSTRUCTION OUTLINE

### STRUCTURE

6 in. concrete masonry, painted with 2 coats Portland cement paint. Interior walls—2 coats Portland cement paint.

### FLOORS

Concrete floor on bar joists, finished in smoothed off concrete.

### ROOF

Wood frame covered with asbestos shingles.

### PLUMBING

All fixtures by Standard Sanitary Mfg. Co.

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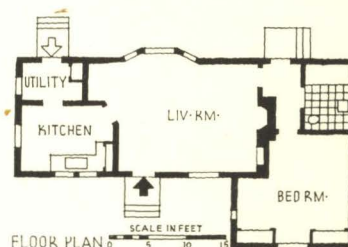


## 7. HOUSE FOR JOHN CARTER BIGGERS, WHITTIER, CALIF.



Mott

HUGHES BROTHERS, ARCHITECTS



### CONSTRUCTION OUTLINE

**STRUCTURE:** All framing lumber No. 1 common Oregon pine, redwood siding. Interior—hardwall plaster over  $\frac{3}{8}$  in. No. 1 Oregon pine lath.

**SHEET METAL WORK:** Flashing, gutters and leaders—28 gauge galvanized iron.

**WINDOWS:** Sash—double hung and casement, California white pine, redwood sills. Frame—vertical grain Douglas fir.

**FLOORS:** Living room and bedrooms—oak. Kitchen—linoleum covered. Bathrooms—tile.

**WOODWORK:** Trim and cabinets—Oregon pine. Doors—white pine.

**PAINTING:** Interior—2 coats flat paint, 1 coat enamel. Exterior—3 coats lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—knob and tube. Switches—toggle.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. All pipes—galvanized iron.

**HEATING:** Warm air, electric heater in bath. Boiler—gas fired.

While its disposition of all the rooms on one floor is in keeping with the present-day trend in California small houses, the emphasis on Colonial precedent, as indicated by the doorway, is something of a departure. Chief element in the plan is the living room, which serves as dining room and circulation to bedroom as well. Its irregular shape provides a dining alcove, and its placing allows cross ventilation. Cross ventilation, it will be noted, is obtained in all rooms, and the bedroom has windows on three exposures. In the latter room the placing of two beds might prove something of a problem. Two entrances are provided on the rear, one to the garden and one for service. Cost: \$3,000.

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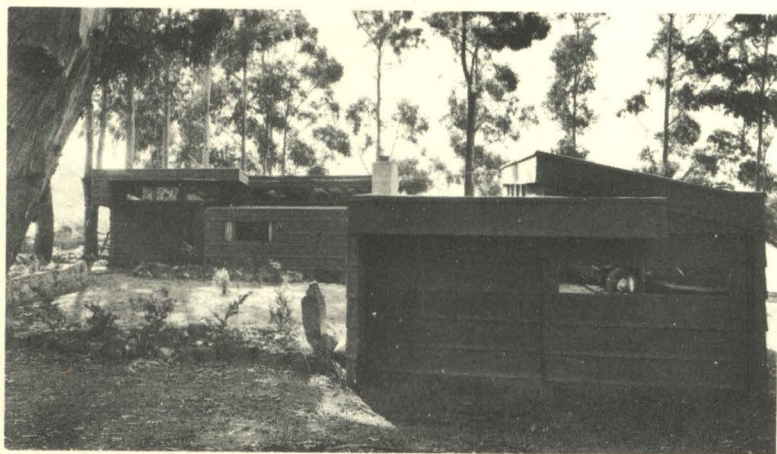


## 8. HOUSE FOR DR. SASHA KAUN, SAN FRANCISCO BAY



A rambling plan, ideally suited for a combination of outdoor and indoor activities in a year-round temperate climate. The large sliding glass doors allow for extreme elasticity and interrelationship between the various elements, thus porches and terraces become ideally integrated with the more enclosed rooms. Through an efficient combination of built-in furniture and cabinets the plan has been rid of numerous partitions, and the relative importance of the living room defines this element as the central core of the residence. Sleeping, dining, and food preparation are considered subservient functions and the minimum necessary cubage is allowed them. The profusion of window area and the large overhang of the roof afford ample protection from inclement weather, while allowing for adequate ventilation. Externally this house follows no stylistic precedent, it is the expression of a thoughtfully designed plan. Cost: \$3,000. Cubage: 7,700 at 40 cents.



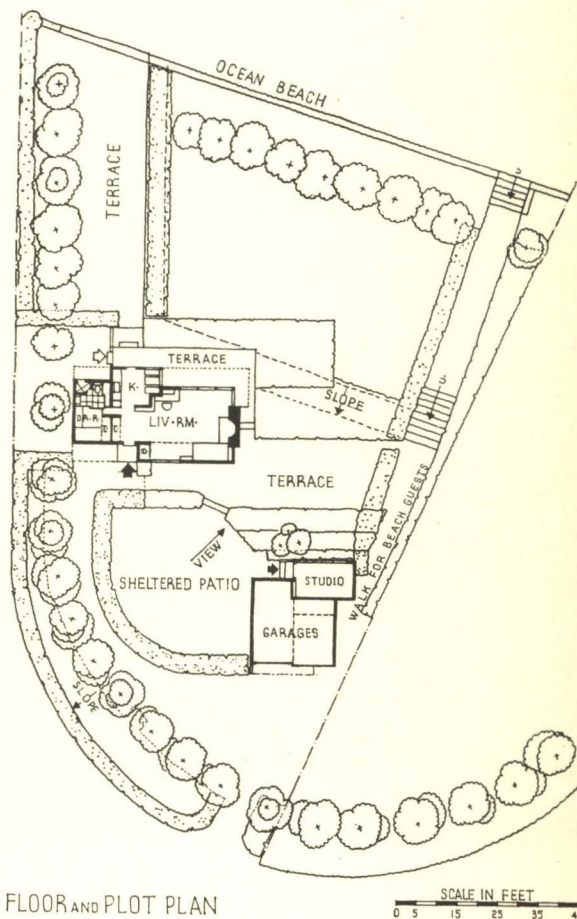


GARAGE AND ENTRANCE



LIVING ROOM

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## CONSTRUCTION OUTLINE

### STRUCTURE

Wood frame, sheathing, outside finish, slate covered roofing felt fastened with horizontal wood strips.

### ROOF

Same roofing felt as on outside walls.

### WINDOWS

Sash—wood, special design. Wood sliding doors in living room.

### WALL COVERINGS

All inside walls covered with plywood which is stained yellow.



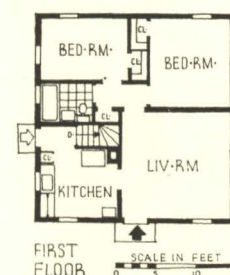
## 9. HOUSE FOR J. T. HARDING, BETHESDA, MARYLAND



Buckingham

NATIONAL LUMBER  
MANUFACTURERS ASSOCIATION  
ELDRED MOWERY, DESIGNER

A minimum house in its shape, exterior treatment, and size of accommodations, this dwelling demonstrates the essential soundness of simplicity in small house design. Its only "architectural" feature is the shelter over the main entrance, an addition amply justified by its usefulness and by its accentuation of the doorway. The only element which detracts from its appearance is the scrubby, unimaginative planting so frequently used with houses of this type. Builders who spend money on landscaping would do well to study the manner in which early American wood houses were related to their surroundings. The plan is exceedingly compact and well laid out. Privacy is obtained for the bedrooms, and the one bath can be conveniently used as a lavatory for guests. Cost \$3,094.



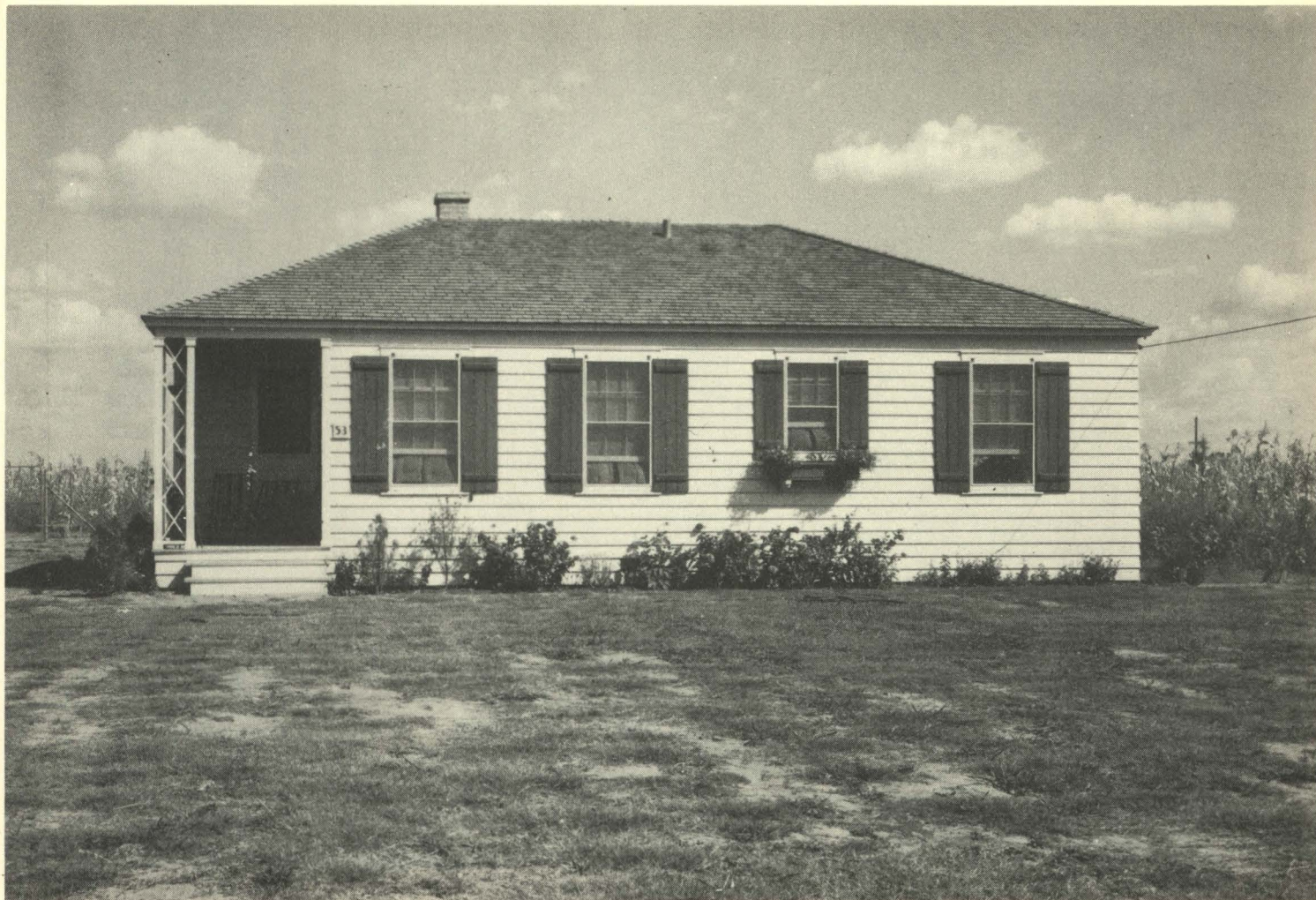
### CONSTRUCTION OUTLINE

**FOUNDATION:** 8 in. cinder blocks.  
**STRUCTURE:** Standard wood frame, 8 in. siding, inside wood lath and plaster.  
**ROOF:** Covered with wood shingles.  
**SHEET METAL WORK:** Galvanized iron.  
**WINDOWS:** Wood, double hung, Curtis stock. Glass—single strength.  
**FLOORS:** All rooms—maple, except bath which has linoleum over pine.  
**WALL COVERINGS:** All rooms—wallpaper, except painted walls in kitchen and bath.  
**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle.  
**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—electric. Sink—rolled rim.  
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply pipes—galvanized iron.  
**HEATING:** Gravity, hot air, coal fired boiler. Hot water heater—Pittsburgh automatic storage.

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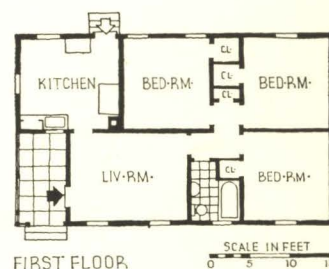


## 10. HOUSE IN WICHITA FALLS, TEXAS



Frank Rogers

VOELCKER & DIXON, INC., ARCHITECTS  
H. F. KUEHNE, SUPERVISING ARCHITECT



The example shown here, known as House No. 53 in a Re-settlement Administration low-cost suburban development which will contain 62 small houses, represents an attempt to provide the maximum of accommodations possible at a low price. All rooms have been placed within a simple rectangle for economy of construction, and many of the refinements frequently demanded in small houses today could not be included at the price. The small living room can be used for dining, but the kitchen is of sufficient size so that meals can be served in it. The house sells for \$3,261.50 on a 40-year payment plan, with the lot included in the purchase price. The lots in the development vary from one and a half to three and a half acres.

### CONSTRUCTION OUTLINE

STRUCTURE: Beveled siding on 2 x 4 in. studs, 16 in. o.c., shiplap sheathing on inside, canvas covered with wallpaper.

ROOF: Wood shingles on shingle lath.

SHEET METAL WORK: 26 gauge galvanized iron.

WINDOWS: Sash—wood, double hung. Glass—single strength, quality B.

FLOORS: All rooms—yellow pine.

WOODWORK: Yellow pine.

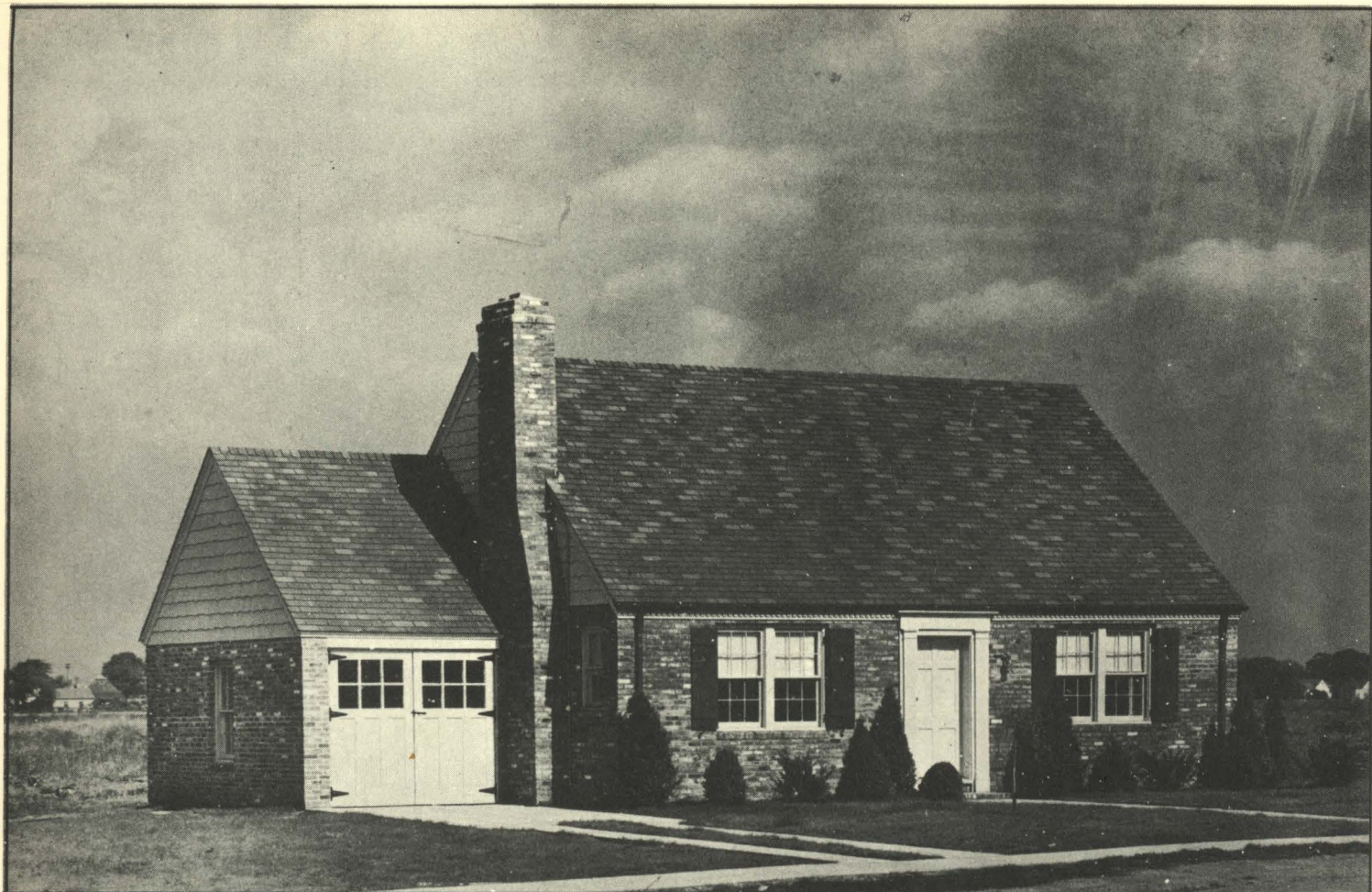
PAINTING: Interior: Floors—stain and oil. Trim and sash—lead and oil. Exterior: Walls, roof and sash—lead and oil.

ELECTRICAL INSTALLATION: Wiring system—BX.

PLUMBING: Standard fixtures. Septic tank.

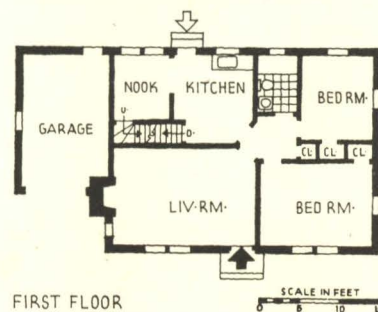


## II. HOUSE IN EAST HEMPSTEAD, LONG ISLAND, N. Y.



Murray M. Peters

JOHN E. CAHILL, ARCHITECT



This is one of several residences, all having similar plans, but each treated differently externally in order to relieve repetition. In this particular example the Cape Cod cottage has been adapted to include the contemporary garage requirement. The cubage has been reduced to a minimum through the absence of entrance hall and dining room. The nook adjoining the kitchen should prove adequate when used for dining space, and the separate service entrance minimizes the functional importance of the front door. The corner circulation arrangement between the main rooms is a perfect illustration of space saving in the almost complete elimination of hall space. Cost: \$3,450. Cubage: 21,000 at 16½ cents.

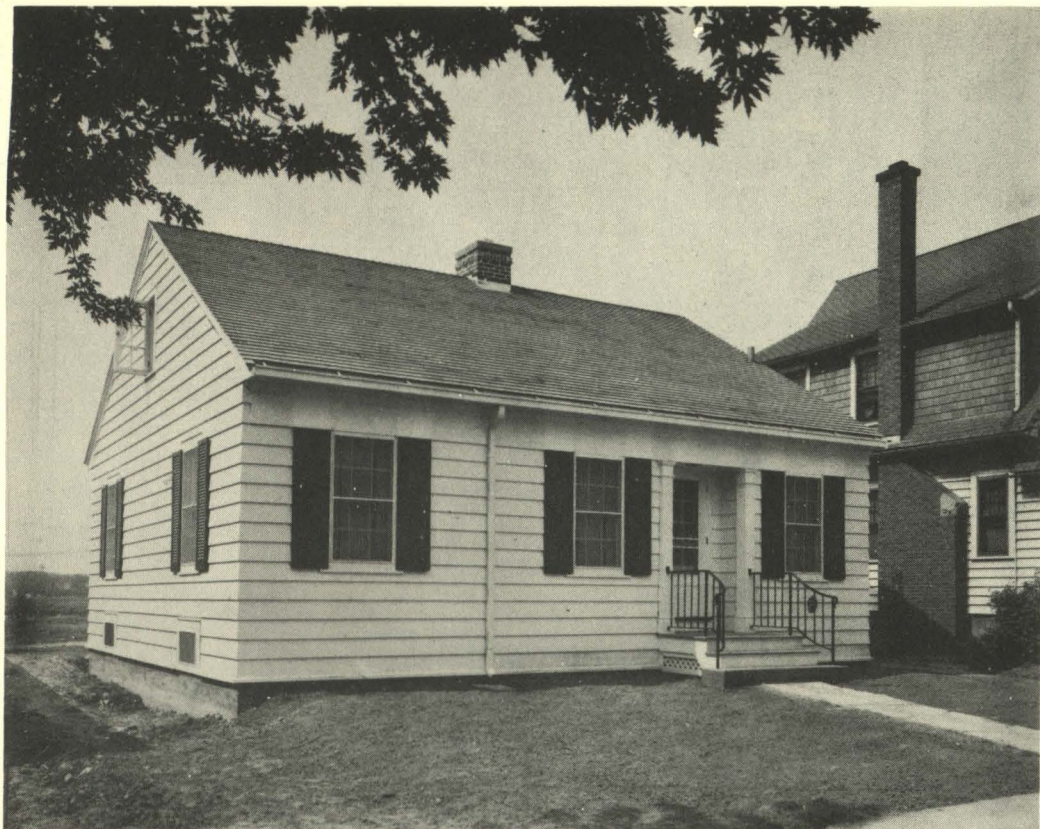
### CONSTRUCTION OUTLINE

STRUCTURE: Wood frame, sheathing and 4 in. brick veneer. Inside—rock lath and plaster.  
 ROOF: U. S. Gypsum asphalt shingles.  
 SHEET METAL WORK: 16 oz. copper.  
 WINDOWS: Wood, double hung, weatherstripped. Glass—double strength, quality B, Libbey-Owens-Ford Glass Co.  
 FLOORS: Living room, bedrooms and halls— $\frac{7}{8}$  x  $2\frac{1}{4}$  in. oak. Kitchen—Sealex linoleum on  $\frac{3}{8}$  x  $2\frac{1}{2}$  in. pine.  
 PAINTING: Interior: Walls—papered. Ceilings—Sunflex cold water paint. Floors—2 coats shellac.  
 ELECTRICAL INSTALLATION: Wiring system—General Electric Co.  
 KITCHEN EQUIPMENT: Refrigerator—General Electric.  
 PLUMBING: All fixtures by Kohler Co. Soil pipes—cast iron. Water supply pipes—copper.  
 HEATING: One pipe, steam. Boiler—Burnham Boiler Corp.

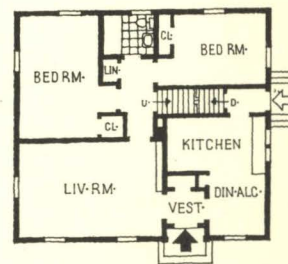
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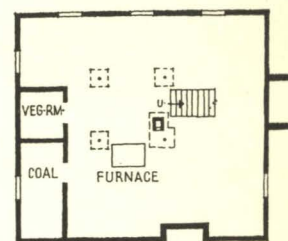
## 12. HOUSE FOR HOWARD ERICKSON, MADISON, WISCONSIN



JOHN J. FLAD  
ARCHITECT



FIRST FLOOR



BASEMENT

SCALE IN FEET  
0 5 10 15

An extremely efficient solution of the space saving square plan, which practically eliminates all waste hall space. Rarely does a house so limited in cubage include: entrance hall, two bedrooms, and such ample closet space. The exterior is pleasantly proportioned, and well climaxed by a carefully designed entrance motif. Cost: \$3,775. Cubage: 17,760 at 22 cents.



KITCHEN-DINETTE

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—siding, sheathing, water-proof paper, 4 x 4 in. studs, 16 in. o. c., balsam wool, gypsum plaster on wood lath.

**ROOF:** 2 x 6 in. rafter, 16 in. o. c., wood shingles.

**SHEET METAL WORK:** Flashing, gutters and leaders—galvanized iron.

**WINDOWS:** Sash—Anderson stock, storm sash. Glass—quality A, single strength, Libbey-Owens-Ford Glass Co.

**FLOORS:** All rooms—2½ in. red oak. Kitchen—linoleum. Bathrooms—vitreous tile.

**ELECTRICAL INSTALLATION:** Wiring system—flexible conduit. Switches—General Electric Co.

**PLUMBING:** Kitchen sink, laundry trays and bathroom fixtures—Kohler Co. Soil and vent pipes—cast iron. Water supply pipe—galvanized iron.

**HEATING:** Warm air.

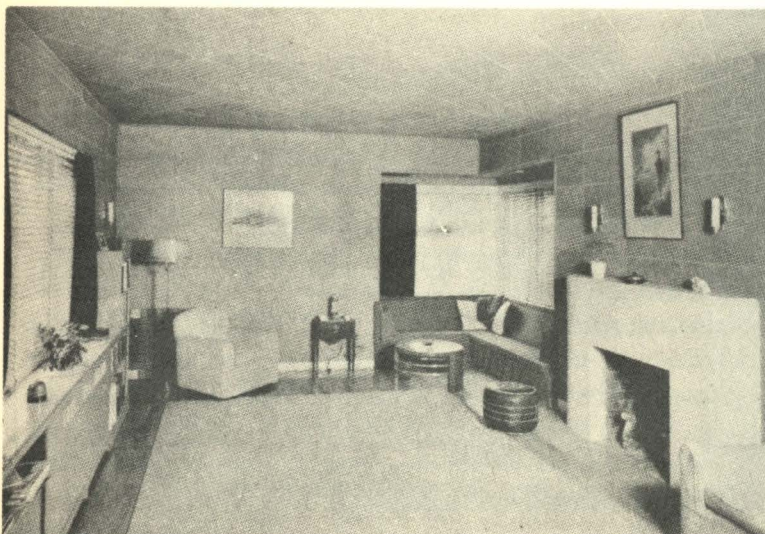
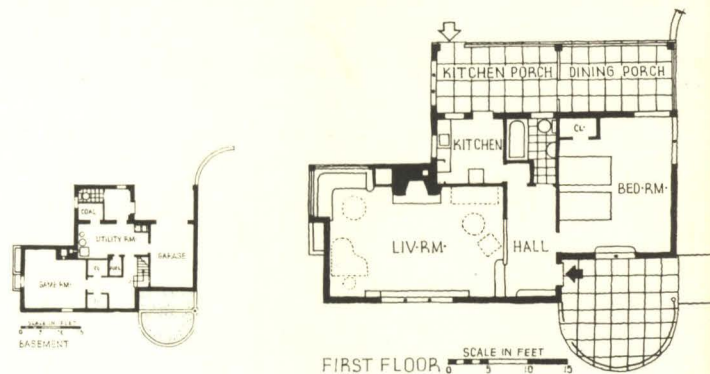


### 13. HOUSE IN ALEXANDRIA, VA. A. K. WATERVAL, DESIGNER



Stewart Bros. Photos

A one-story residence planned for a second floor addition to contain three bedrooms, a bath and a roof terrace. At present the dining room is partitioned off for use as a bedroom and a portion of the kitchen has been closed off to accommodate a temporary bathroom. The cost of the house is given as \$3,618, at 18.8 cents per cubic foot. This phenomenally low price is partially explained by the fact that the architect acted as general contractor, and neither architect's fee nor contractor's profit is included. Union and unskilled labor was used at prevailing local prices.



LIVING ROOM

#### CONSTRUCTION OUTLINE

**STRUCTURE:** 8 in. cinder block, 1 in. stucco. Inside—furring strips, ½ in. Nu-Wood, Wood Conversion Co.  
**ROOF:** Built up composition.

**SHEET METAL WORK:** Flashing—copper. Gutters and leaders—galvanized iron.

**INSULATION:** Outside walls—Nu-wood. Roof—balsam wool, Wood Conversion Co.

**WINDOWS:** Sash—wood casement. Glass—double strength, Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room and halls—maple. Bedrooms, kitchen and bathrooms—pine covered with linoleum.

**KITCHEN EQUIPMENT:** Stove—Magic Chef, Pyro-fax gas.

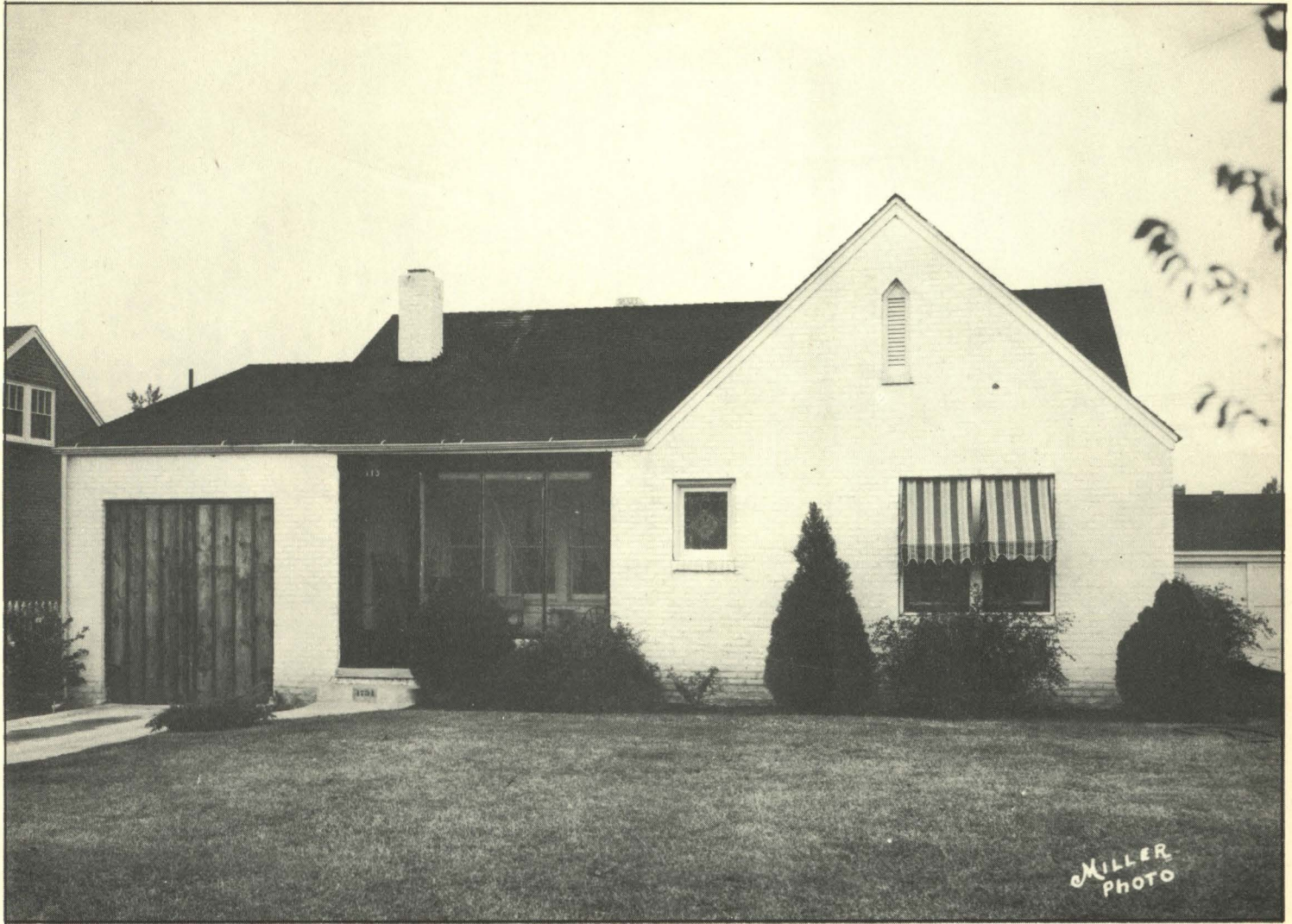
**PLUMBING:** All fixtures by Sears, Roebuck & Co. Septic system.

**HEATING:** Hot water. Boiler—Novus coal fired, and radiators, National Radiator Co.

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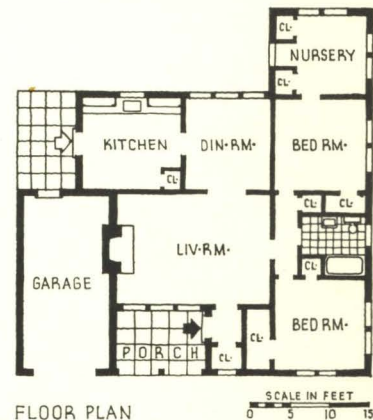


## 14. HOUSE FOR LEON EUGENE SCHROEDER, SR., TULSA, OKLAHOMA



Miller

LEON EUGENE SCHROEDER, SR., DESIGNER



This residence is noteworthy for the compactness of its plan. The living room seems small, inadequately ventilated, and lacking in exterior exposure; however, since it is located in the near tropical zone, the protection offered from direct heat penetration is desirable. The entrance hall has been cleverly incorporated with the porch and coat closet. The exterior is commendable for the integration of the garage in the general design, and the whitewashed expanse of brick wall is pleasantly broken up by brilliantly colored awnings, necessary protection against the sun rays. Exclusive of garage, cost: \$3,980. Cubage: 16,570 at 24 cents.

### CONSTRUCTION OUTLINE

STRUCTURE: 4 in. brick veneer, 1 in. air space, tar felt over 1 x 10 in. sheathing on studs. Plastered inside on wood lath.  
 ROOF: Perfection edge grain shingles.  
 SHEET METAL WORK: Galvanized iron.  
 WINDOWS: Sash—1½ in. white pine. Glass—double strength, quality A.  
 FLOORS: Living room, bedrooms and halls—oak. Kitchen and bathrooms—linoleum.  
 WOODWORK: Trim and doors—white pine.  
 ELECTRICAL INSTALLATION: Wiring system—rigid conduit. Switches—toggle.  
 PLUMBING: Soil and vent pipes—heavy duty cast iron. Water supply pipes—galvanized iron.  
 HEATING: Floor furnace, 45,000 BTU capacity.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## 15. HOUSE FOR THOMAS TROY, NEEDHAM, MASS.



Arthur C. Haskell Photos

**PROBLEM:** To design a house comparable in size and convenience to a small apartment, with building and maintenance costs to equal, as nearly as possible over a long period of time, the rent of an apartment.

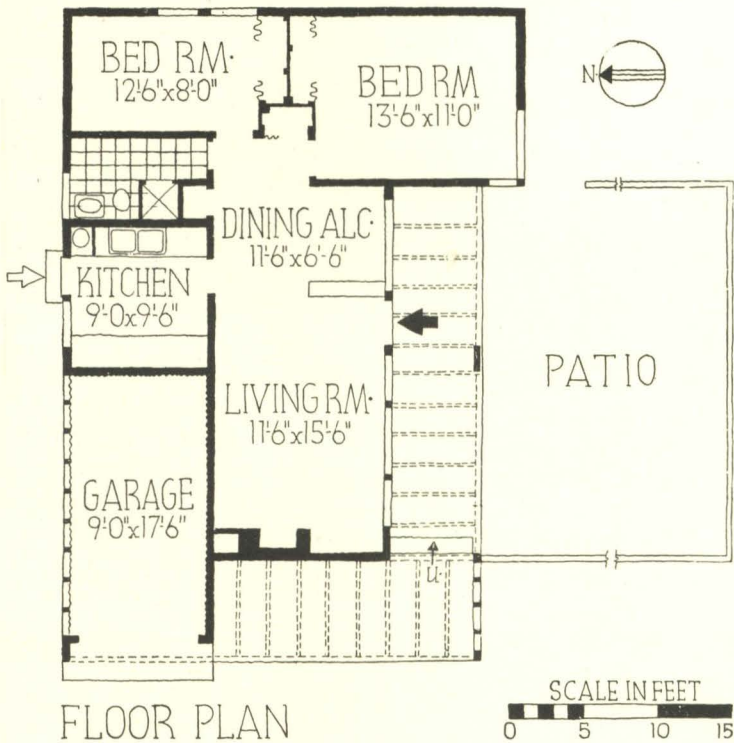
A small modern house, of particular interest because the architect, well-known in the small house field, has previously been identified with work based on New England stylistic precedent. The plan is excellent, and the appearance of the exterior will be greatly improved when the landscaping has been completed.

*The architect comments:* "The plan was influenced by the type of heating system, and, of course, by the orientation of the lot, centralization of plumbing, and convenience of access. The two bedrooms can be closed off by curtain from the rest of the house; the dining room and kitchen can be similarly separated from the living room.

"The roof was built with a slight slope and no drains as an experiment. It was found that this was not too satisfactory, however, and one drain was added at the rear which has proven adequate."

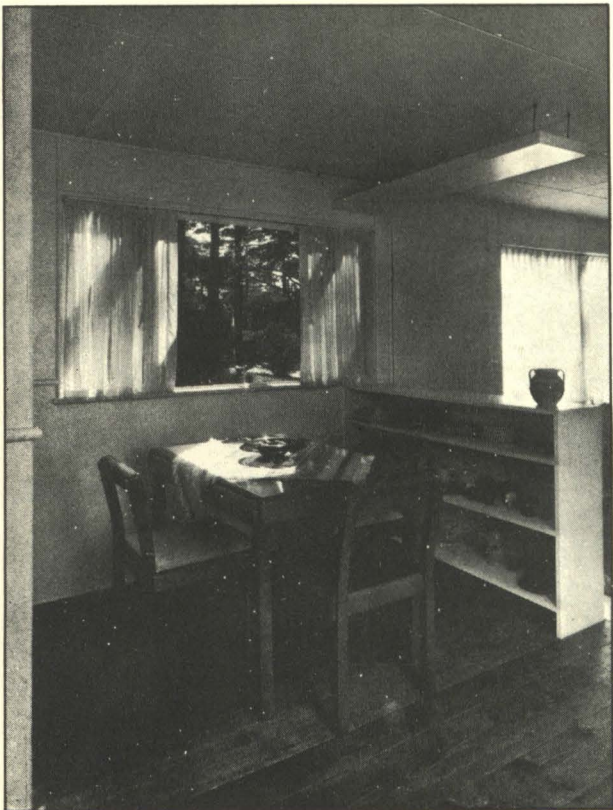
Cubage: 10,240. Cost: \$3,481 at approximately 34 cents a cubic foot.





CONSTRUCTION OUTLINE

- FOUNDATION**  
Walls—concrete, continuous; inside—piers.
- STRUCTURE**  
Exterior walls—matched boards, paper, studs, rock wool, Homasote, Agasote Millboard Co. Interior—paint and Homasote on wood studs. Floor construction—Celotex on wood joists, wood floor.
- ROOF**  
Wood, built-up tar and gravel, Celotex insulation.
- SHEET METAL WORK**  
Flashing—copper.
- WINDOWS**  
Sash—casement, Hope's Windows, Inc. Glass—single strength, quality A, Libbey-Owens-Ford Glass Co.
- FLOORS**  
All wide boards, kitchen and bath covered with linoleum.
- ELECTRICAL INSTALLATION**  
Wiring system—BX. Switches—stock tumbler. Fixtures—indirect, special.
- KITCHEN EQUIPMENT**  
Stove—gas. Refrigerator—Electrolux. Servel, Inc.
- PLUMBING**  
All fixtures by Standard Sanitary Manufacturing Co. Water pipe—copper.
- HEATING**  
Warm air, two gas heaters hung on floor joists, Payne Furnace & Supply Co.



DINING ALCOVE



LIVING ROOM



## 16. HOUSE FOR GUY REID, LAKE WORTH, TEXAS



**PROBLEM:** A small house for a family of two; accommodations for frequent guests. A two-car garage.

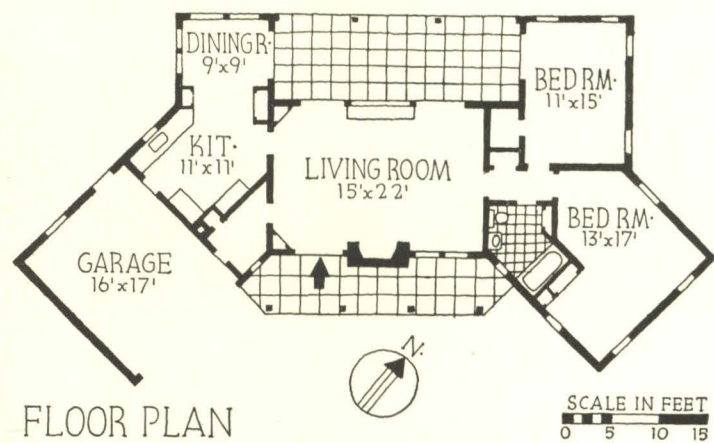
Complete lack of pretentiousness is the most interesting characteristic of this house, the usual shutters and other decorations having been entirely omitted. Dark, wide siding gives an appearance of rugged simplicity, an effect which might have been further emphasized by the use of less prominent window frames.

*The architect comments:* "The owner's desire for informal living, coupled with a lake vista, dictated the open character of the living room, and allowed a dining alcove in connection with the kitchen. All rooms open to the south and east, and protection from the western sun is given by the porch."

Cost: \$3,800 (including all equipment).

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





FLOOR PLAN

PORCH

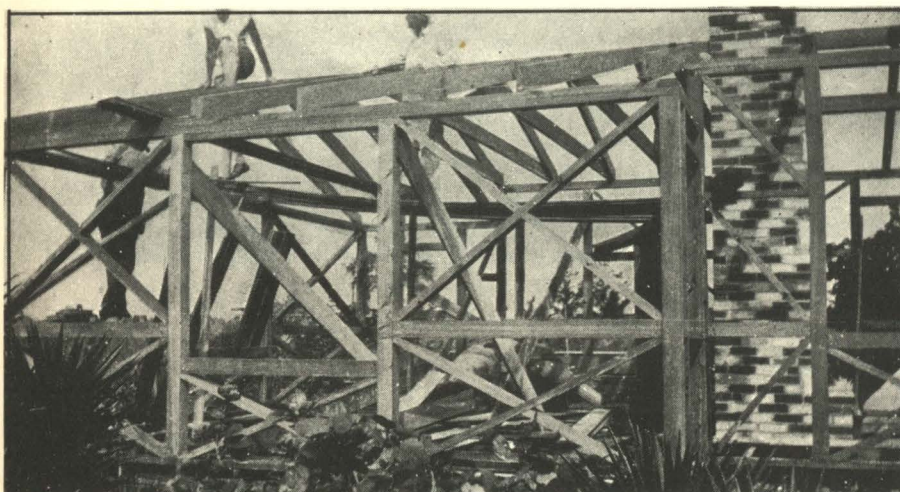
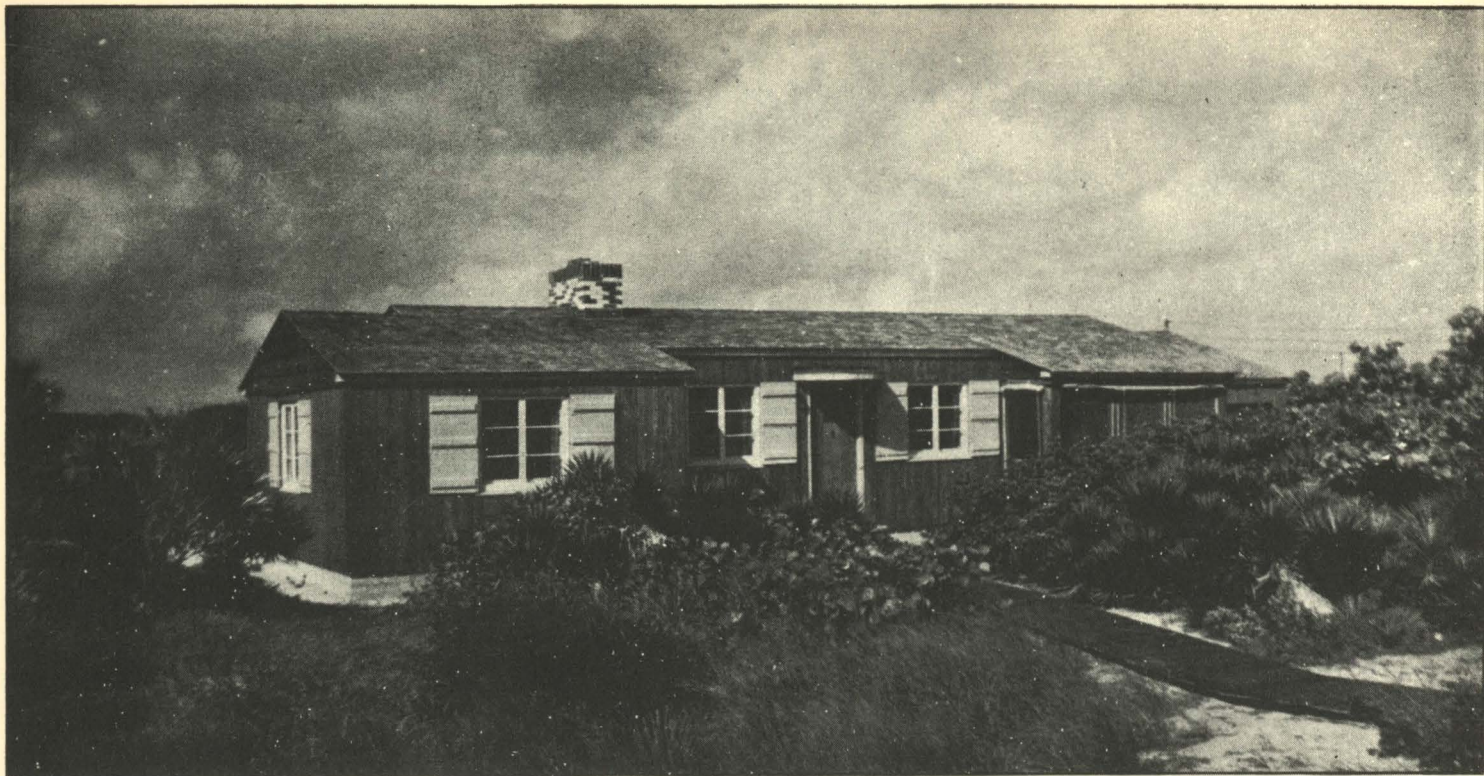


CONSTRUCTION OUTLINE

- FOUNDATION  
Walls—brick, Acme Brick Co.
- STRUCTURE  
Exterior walls—redwood siding, waterproof paper, yellow pine studs. Interior partitions—knotty pine, vertical boarding and Celotex, The Celotex Co.
- ROOF  
Cedar shingles over shingle lath.
- WINDOWS  
Sash—yellow pine. Glass—Pennvernion, Pittsburgh Plate Glass Co.
- FLOORS  
Main rooms—oak. Kitchen and bathrooms—linoleum, Armstrong Cork Products Co.
- WOODWORK  
Doors—yellow pine. Trim—white pine.
- HARDWARE  
Interior and exterior—P. & F. Corbin.
- PAINTING  
Exterior: Roof—natural. Siding, trim and sash—raw linseed oil. Interior—oil color and brushed oil on knotty pine. Paint materials by Pittsburgh Plate Glass Co.
- ELECTRICAL INSTALLATION  
Wiring system—BX conduit. Fixtures—direct, National Co.
- PLUMBING  
All fixtures by Standard Sanitary Manufacturing Co. Septic Tank disposal.
- HEATING  
Bottled gas. Hot water heater—The Standard Electric Stove Co.



## 17. HOUSE FOR WILLARD D. SAULNIER, FORT LAUDERDALE, FLA.



STRUCTURE



BEDROOM

PROBLEM: "To design a bachelor's informal winter quarters in South Florida. The project and its location demanded a hurricane-proof house. The owner desired a house of native materials to blend in with a sub-tropical setting of sea grape, yucca, palmetos, palms, and dune grass.

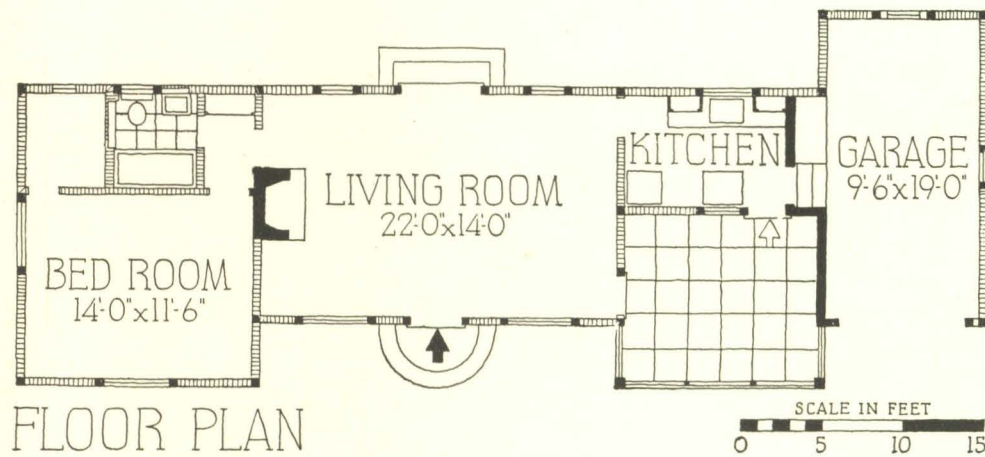
An excellent solution, both in plan and exteriors; harmonious with its surrounding and unpretentious.

*The architect comments:* "The house is approximately 200 ft. from the ocean. Its elongated plan was chosen for view and ventilation. An ample living room, a double bedroom, and a large closet were the only specific room requirements. The owner occupies the house about eight months of the year.

"A fireplace was a necessity and would have been more useful with an auxiliary hot air circulating unit. The kitchen is small but complete, and has 70 cubic feet of storage space. Formal dining space was not considered necessary. Built-in bunks on the porch and in the living room provide overflow accommodations."

Cubage: 12,000. Cost: \$3,450 at 29 cents a cubic foot.



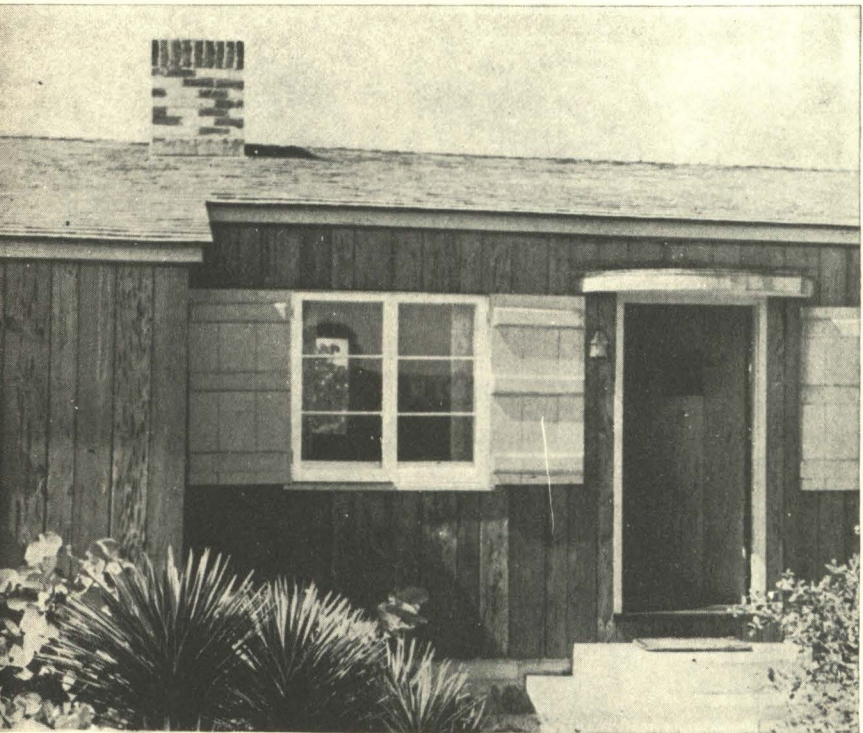


NOTE: "Wind bracing, needed because winds frequently attain hurricane intensity, was simplified by wide stud spacing. The construction was developed for a cypress manufacturer by L. W. Butchart and Robert Hansen to create a market for the manufacturer's 2 in. cypress planks. Pecky cypress, while worm-eaten in appearance, is highly resistant to decay.

"Rafters were anchored to the frame by loops of galvanized plumber's strap iron. The frame is anchored through the concrete block foundation walls to the reinforced concrete footing by  $\frac{5}{8}$  in. round rods spaced about 5 in. on center."

CONSTRUCTION OUTLINE

- STRUCTURE**  
Exterior walls—2 in. pecky cypress board siding over 4 x 4 in. cypress studs, 4 ft. o. c. braced in each panel. Interior partitions—cypress vertical sheathing. Floor construction—2 x 10 in. cypress joists, 1 in. cypress sub-floor, 8 in. pine planks.
- ROOF**  
Cypress rafters and sheathing covered with random red cedar shingles over 30 lb. felt, Weatherbest Corp.
- CHIMNEY**  
Red clay brick with terra cotta flue lining.
- SHEET METAL WORK**  
Flashing—16 oz. copper, American Brass Co.
- WINDOWS**  
Sash and frame—cypress wood, casement, Gate City Sash & Door Co. Glass—double strength, quality B. Screens—No. 18 bronze mesh in removable cypress frames.
- FLOORS**  
All rooms—yellow pine. Kitchen and bathrooms—covered with linoleum, Armstrong Cork Products Co.
- WALL COVERINGS**  
Bathrooms—Marlite wainscot, 4 ft. over tub, Marsh Wall Products Co.
- HARDWARE**  
Interior—Yale & Towne Manufacturing Co., McKinney Manufacturing Co. and Washington Hardware Co. Garage door—overhead type, Frantz Manufacturing Co.
- PAINTING**  
Interior: Trim, sash and bathrooms and kitchen ceilings—white, semi-gloss enamel, Boston Varnish Co. Floors—hot linseed oil and pigment, Old English wax, A. S. Boyle Co. Exterior: Walls—refined creosote and pigment.
- ELECTRICAL INSTALLATION**  
Wiring system—sheathed cable, General Electric Co. Switches—Bakelite Corp. Fixtures—direct and indirect, Studio of Lighting, Inc. and Lightolier Co.
- KITCHEN EQUIPMENT**  
Stove and refrigerator—Westinghouse Electric & Manufacturing Co. Sink—Kohler Co., linoleum covered drainboard, Armstrong Cork Products Co.
- BATHROOM EQUIPMENT**  
Cabinet—Miami Cabinet Div., Philip Carey Co. All other fixtures—Kohler Co.
- PLUMBING**  
Pipes: Soil and waste—cast iron. Water supply—wrought iron, A. M. Byers Co. Water pump—shallow well type and reinforced concrete septic tank, Deming Co.
- HEATING**  
Hot water heater—10 gallon insulated automatic.



ENTRANCE DETAIL

Zimmerman



**18. GUEST HOUSE FOR DAVID MALCOLMSON, SANTA MONICA, CALIFORNIA**



*Luckhaus Photos*

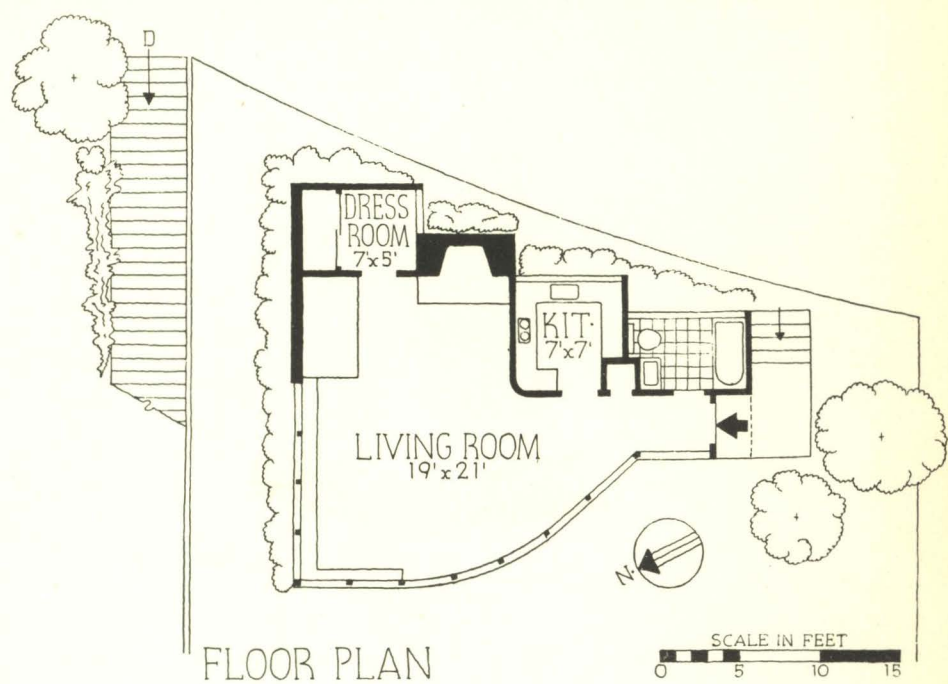
**PROBLEM:** To put a one-room house on a steep hillside, leaving as much space for garden as possible.

To conserve garden area, a portion of the living room was put on stilts. The room is curved to take advantage of the panorama from west to southwest. A roof deck doubles the living space, and takes even greater advantage of the superb view; for economy a ladder is used for access. Interior walls are covered with a prefinished fabric; the bathroom walls are of blue bakelite with aluminum trim.

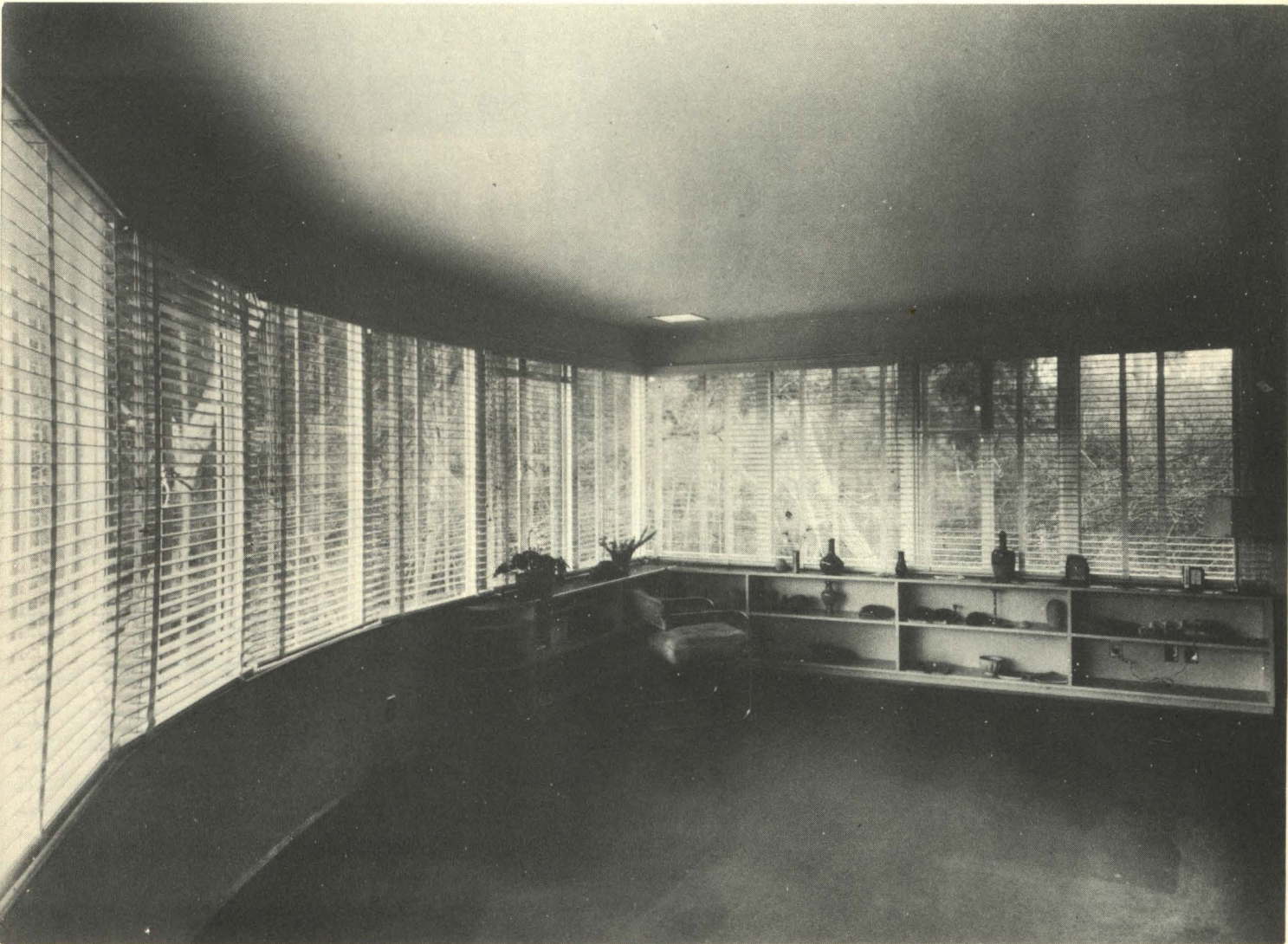
Cost: \$3,500.

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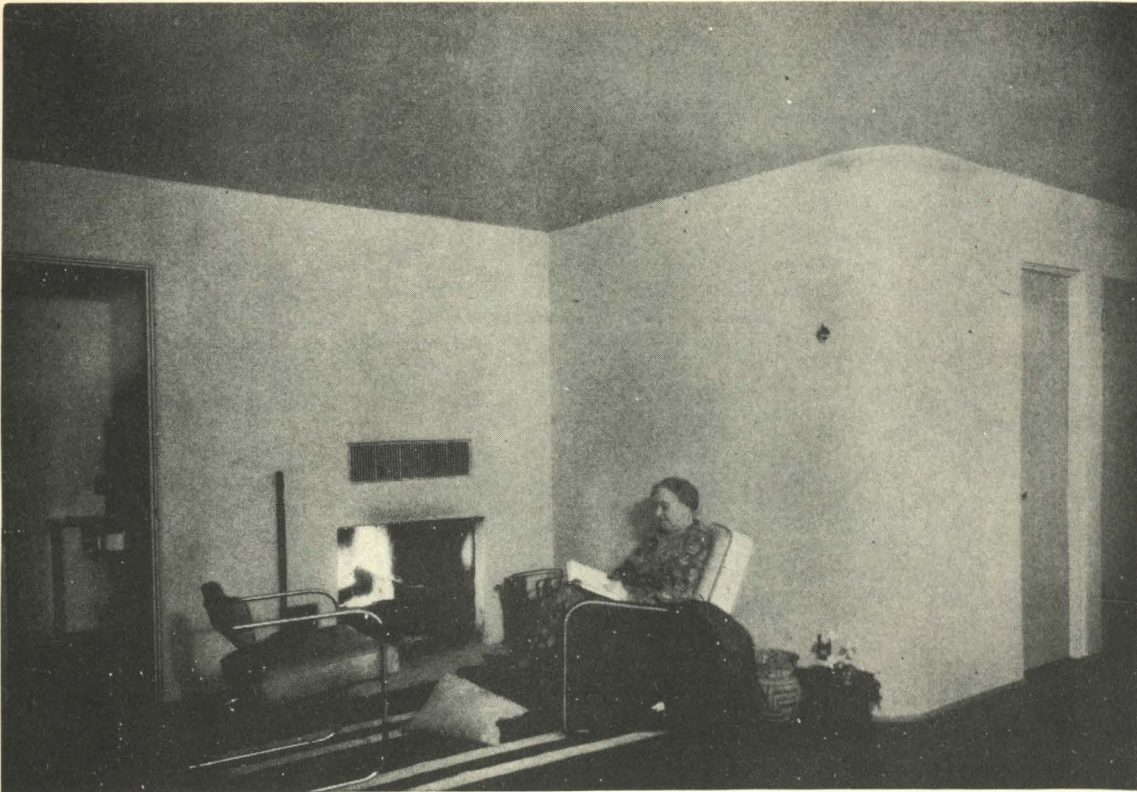


LIVING ROOM





## GUEST HOUSE IN SANTA MONICA, CALIF.



LIVING ROOM

Luckhaus Photos

## VIEW FROM LOWER GARDEN



## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—continuous on east side; piers on west side. Waterproofing—plastic cement.

### STRUCTURE

Exterior walls—metal lath and cement plaster over galvanized sheet steel on a composite chassis of steel and timber. Interior partitions—sheet rock and hard-wall plaster on wood frame partitions. Floor construction—joists on steel girders.

### ROOF

Wood rafters covered with composition roof, Pabco, The Paraffine Companies, Inc. Deck construction—redwood slat grill deck.

### CHIMNEY

Lining—terra cotta. Fireplace—circulating air, Heater Co.

### SHEET METAL WORK

Flashing and gutters—galvanized crimped sheet steel, Armco, American Rolling Mills Co.

### INSULATION

Roof—Celotex, The Celotex Co. Weatherstripping—copper.

### WINDOWS

Sash—steel, Druwhit Co. Glass—double strength, first A, Libbey-Owens-Ford Glass Co. Screens—copper roller automatic tension screen.

### FLOORS

Oregon pine throughout, covered with linoleum, Armstrong Cork Products Co.

### WALL COVERINGS

All walls except bathroom—Sanitas, Standard Textile Products Co. Bathrooms—Marlite Bakelite covered Prestboard, Marsh Wall Products Co.

### WOODWORK

Trim, shelving and cabinets—Oregon pine. Doors—sugar pine, flush panel, Rezo, The Paine Lumber Co.

### PAINTING

Interior: Walls and ceilings—4 coats paint, National Lead Co. Trim and sash—2 coats aluminum Albron, Aluminum Corporation of America. Exterior—waterproof brushcoat.

### ELECTRICAL INSTALLATION

Wiring system—standard conduit. Switches—General Electric Co. Fixtures—Holophane Co.

### KITCHEN EQUIPMENT

Stove and refrigerator—General Electric Co.

### PLUMBING

All fixtures by Crane Co. Pipes: Soil and waste—cast iron. Water supply—wrought iron.

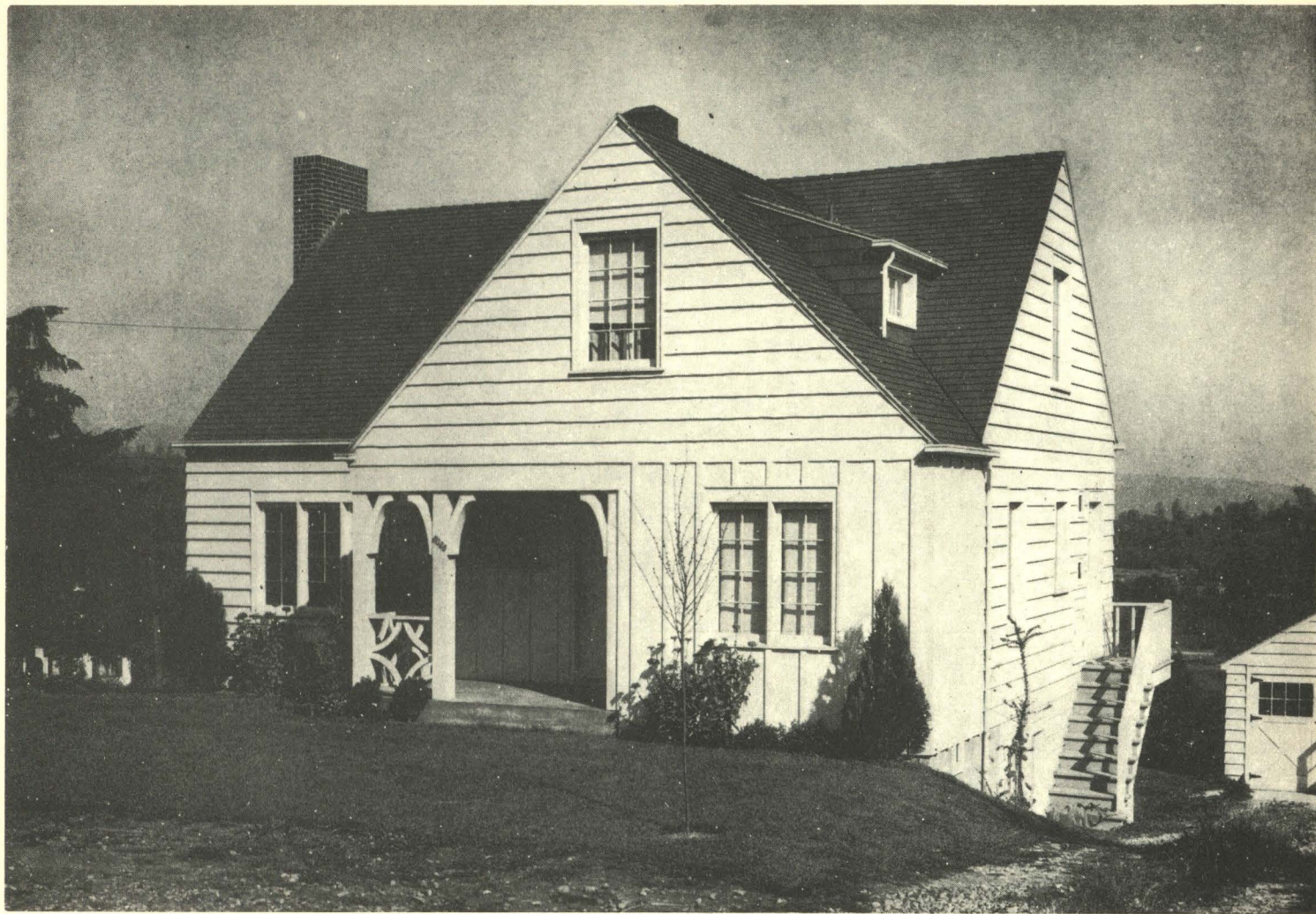
### HEATING

Warm air, electric fan heater. Electric hot water heater. Thermador, Thermador Electrical Manufacturing Co.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

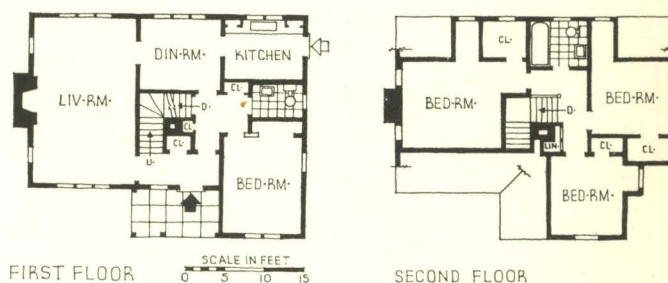


## 19. HOUSE FOR H. E. WERST, SEATTLE, WASH.



Webster & Stevens

HOMES, INC., ARCHITECTS



### CONSTRUCTION OUTLINE

**STRUCTURE:** Frame, bevel siding, 1 x 10 in. T. & G. cedar boards and battens, Celotex plaster base and 2 coat plaster.

**ROOF:** Wood shingles.

**SHEET METAL WORK:** Armco iron.

**WINDOWS:** Sash—casement, cedar sills and frames. Glass—Pennvernon, Pittsburgh Plate Glass Co.

**FLOORS:** Living room, bedrooms and halls—oak. Kitchen and bathrooms—fir, covered with linoleum.

**WALL COVERINGS:** All rooms—wallpaper, except

enameled kitchen and bath.

**HARDWARE:** By Schlage Lock Co.

**ELECTRICAL INSTALLATION:** Wiring system—knob and tube. Switches—tumbler.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co.

**HEATING AND AIR CONDITIONING:** Locally assembled plan, consists of fan and filters and warm air

furnace and duct system, Colcock Furnace Co.

This house is logically built of the material prevalent in the surrounding timber area. The exterior combines ruggedness with charm, and the emphasis placed upon the porch is readily understood upon consideration of the climate. The first floor plan is noteworthy in the inclusion of a guest room, a feature which is becoming more and more popular. Cost: \$4,000. Cubage: 20,500 cubic feet at 20 cents.

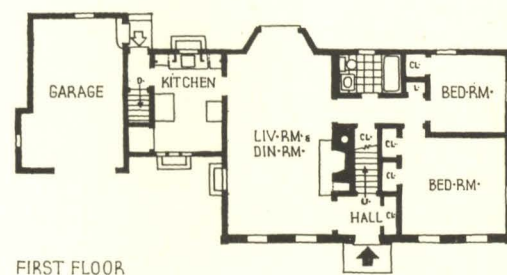
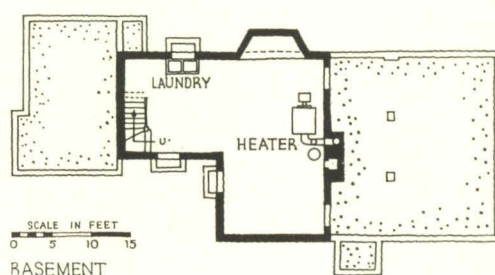
CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## 20. HOUSE FOR HARRY M. SISSON, WESTFIELD, N. J.



V. M. REYNAL, ARCHITECT



The advantages of a well landscaped site are apparent here. The trees are large enough to provide an attractive setting, but are not so thick that they cut off light and air from the main rooms. In contrast with its background the house has been kept simple in form and light in color. All living rooms are on the ground floor; there might be some inconvenience in a plan which provides only one entrance to the bedroom portion, particularly when that entrance is off the living room, but this would depend on the requirements of the occupants. The living room has been made as large as possible, since it serves as dining room also, and the large bay, suitable for use as a dining alcove, can be almost completely opened in good weather. Construction cost: 24 cents per cubic foot.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Front walls—second hand brick, 1 in. air space, 15 lb. paper, sheathing studs, spruce lath and 3 coat plaster. Other exterior walls—same, except 18 in. wood shingles on outside.

**ROOF:** Red cedar shingles on shingle lath.

**SHEET METAL WORK:** 16 oz. copper.

**INSULATION:** Roof—4 in. rock wool.

**WINDOWS:** Double hung, except casements in kitchen. Glass—single strength, quality A.

**FLOORS:** Living room and bedrooms—white oak.

Kitchen—linoleum. Bathrooms—tile.

**WALL COVERINGS:** All rooms—wallpaper, except tile wainscot and paint in bathrooms.

**ELECTRICAL INSTALLATION:** Wiring and switches—General Electric.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply pipes—brass.

**HEATING:** One pipe steam, Master Kraft boiler, Arco convectors.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## 21. HOUSE FOR MISS HELEN L. CRANDALL, OAKLAND, CALIF.



*N. Richardson*

MICHAEL GOODMAN, ARCHITECT

One of the most frequent criticisms of the modern house is that, unless it is located in an urban setting, it is out of keeping with its environment. That form and materials have considerably more bearing on the matter than the less tangible factor called "style" is well borne out by this hillside house whose surroundings are echoed in its use of native redwood. The dark, severe wood box, with its sharp overhangs and white trim, is of a type unfamiliar in the U.S., but common in



## HOUSE FOR MISS HELEN L. CRANDALL, OAKLAND, CALIF.



Photos, N. Richardson

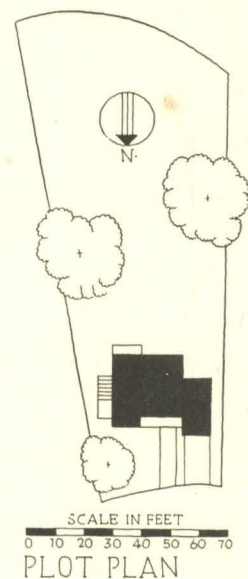
Scandinavia, particularly Norway.

*The architect comments:* "The redwood boards on the exterior were partly surfaced and partly left rough-sawn. The combined effect is interesting.

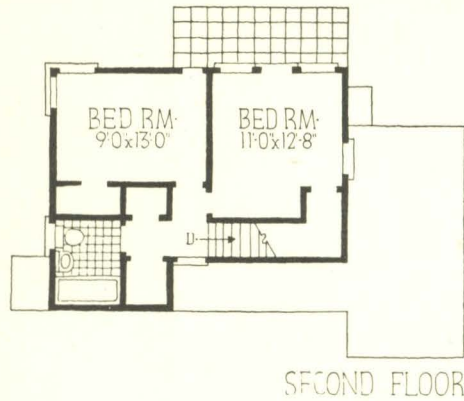
"I find that a discriminating client should plan her own kitchen, which I detail later; this one is a particular joy as a consequence.

"The only disadvantage I had was that the client had been made too function-minded and 'deck-conscious' through reading your magazine. For a small house and the inexpensive materials used, the plan is too involved structurally. However all requirements were fulfilled within the budget limits."

Cubage: 10,500. Cost: \$4,100 at 39 cents per cubic foot.





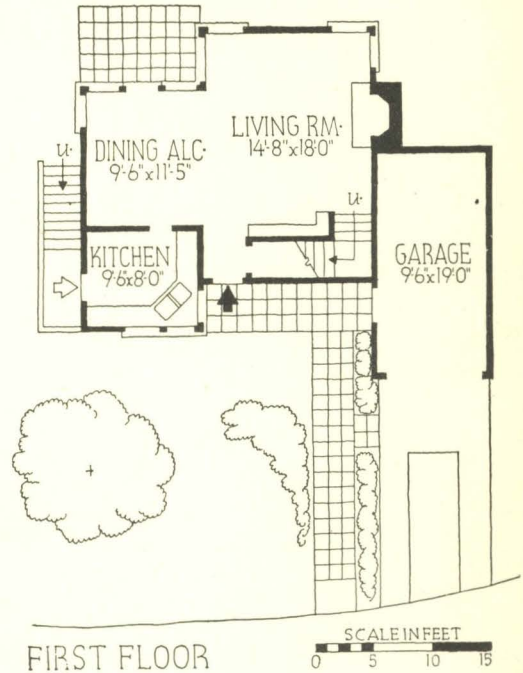
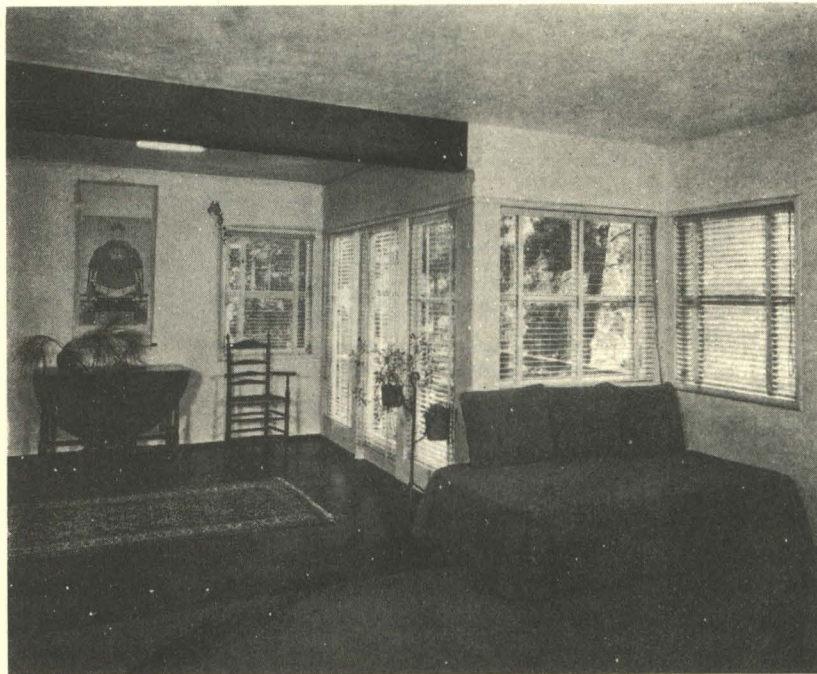


SECOND FLOOR



ENTRANCE

LIVING ROOM—DINING ROOM



FIRST FLOOR

## CONSTRUCTION OUTLINE

### STRUCTURE

Exterior walls— $\frac{7}{8}$  in. redwood boards on double-kraft building paper,  $\frac{7}{8}$  in. Oregon pine diagonal sheathing and studding. Interior finish—California stucco on metal lath.

### ROOF

Construction—Oregon pine wood joist covered with  $\frac{7}{8}$  in. sheathing, covered with 4-ply tar and gravel, Paraffine Companies, Inc. Deck construction—T. & G. Oregon pine sheathing on wood joist, covered with 3-ply tar and felt; finish—giant asphalt shingles set in hot tar, Paraffine Companies, Inc.

### SHEET METAL WORK

Flashing and leaders—No. 26 Armco galvanized iron, The American Rolling Mill Co. Gutters—redwood.

### WINDOWS

Sash—white pine, awning type. Glass—single strength, quality B, Libbey-Owens-Ford Glass Co. Blinds—venetian, National Venetian Blind Co.

### FLOORS

Living room, bedrooms and halls—vertical grain Oregon pine. Kitchen and bathrooms—linoleum, Armstrong Cork Products Co.

### WOODWORK

Doors: First floor—flush panel, Rezo, The Paine Lumber Co., Ltd. Second floor—single panel.

### HARDWARE

Doors—Schlage Lock Co.

### PAINTING

All paint material by W. P. Fuller & Co.

### ELECTRICAL INSTALLATION

Wiring system—knob and tube. Switches—flush tumbler type. Fixtures—Lumeline, General Electric Co.

### KITCHEN EQUIPMENT

Stove—The Tappan Stove Co. Refrigerator—General Electric Co.

### BATHROOM EQUIPMENT

All fixtures by Standard Sanitary Manufacturing Co. Seat—C. F. Church Manufacturing Co.

### PLUMBING

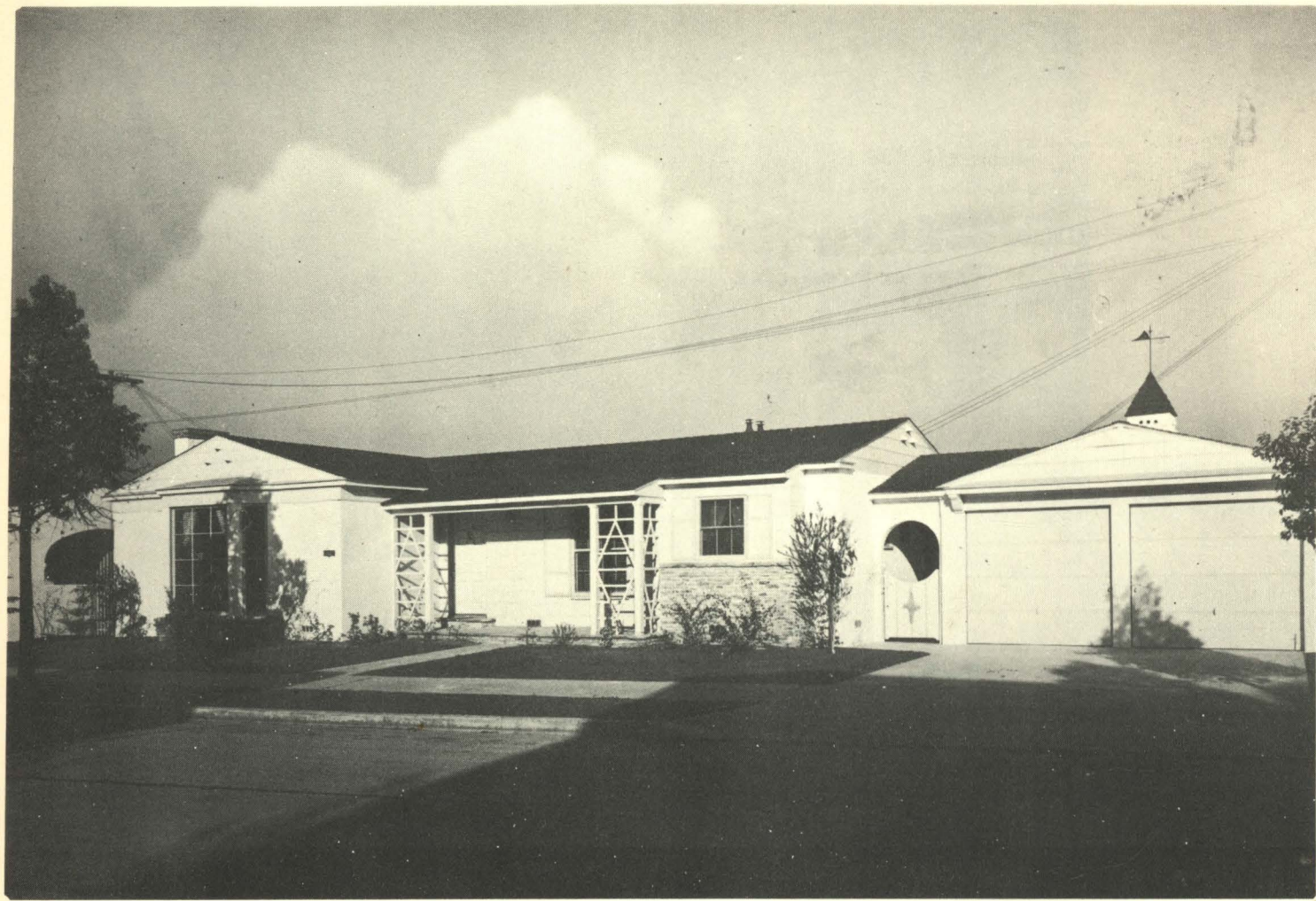
Pipes: Cold water—wrought iron, A. M. Byers Co. Hot water—streamline copper tubing, Mueller Co. Septic tank.

### HEATING

Warm air, gas furnace. Thermostat—electric remote control. Hot water heater—copper tank, Ruud Manufacturing Co.

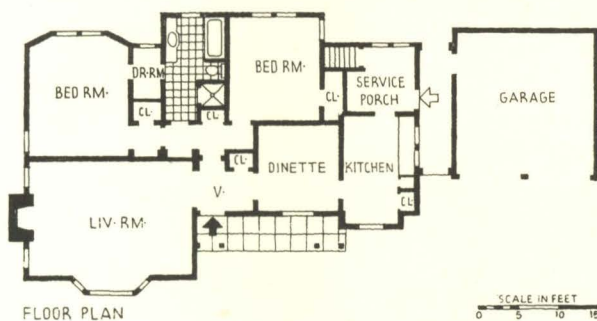


## 22. HOUSE FOR PAUL DONALDSON, LOS ANGELES, CALIF.



Fred R. Dapprich

GORDON J. ROGERS & IRWIN I. FRANTZ,  
DESIGNERS AND BUILDERS



### CONSTRUCTION OUTLINE

**STRUCTURE:** Frame, 3 exterior coats of cement plaster, 2 coats of waterproofing color, Wolmanized joists.

**ROOF:** Wood shingles over sheathing.

**SHEET METAL WORK:** 26 gauge galvanized iron.

**WINDOWS:** Double hung and casement.

**FLOORS:** All rooms—hardwood. Kitchen—linoleum covered. Bathrooms—tile.

**WALL COVERINGS:** Bedrooms and halls—wallpaper. Kitchen and bathrooms—Sanitas, Standard Textile Products Co.

**PAINTING:** Interior: Floors—1 coat filler, 2 coats shellac, 1 coat wax. Trim and sash—3 coats oil paint.

**ELECTRICAL INSTALLATION:** Wiring system—conduit system throughout.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Pipes—galvanized iron.

**HEATING:** Warm Air. Automatic thermostat water heater.

A small residence which follows the trend in present-day California domestic work. All rooms are located on the first floor level, with adequate separation between the living and dining rooms and other portions of the house. The service porch is a useful feature, suitable in a mild climate, such as that of southern California. Only two bedrooms were required for this house, and the one bath has been placed for convenient use as a guest lavatory as well. The exterior is typical in its use of brick, stucco, and wood, and relies for its effectiveness on the long horizontal lines generally adopted in this locality. Cost \$4,125. at \$3 per square foot.

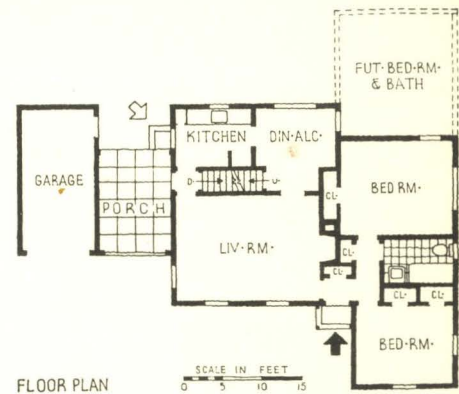


## 23. HOUSE FOR SANFORD WARD, MASSAPEQUA, L. I., NEW YORK



Gustav Anderson Photos

RANDOLPH EVANS,  
ARCHITECT



### CONSTRUCTION OUTLINE

**STRUCTURE:** 18 in. red cedar siding over paper, sheathing, studs, wood lath, plaster.

**ROOF:** Red cedar shingles on 1 x 2 in. purlins.

**SHEET METAL WORK:** 16 oz. copper.

**INSULATION:** Outside walls—2 in. rock wool. Attic floor—4 in. rock wool.

**WINDOWS:** Pine, double hung. Glass—quality B. Screens—aluminum alloy in wood frame.

**FLOORS:** Living room, bedrooms and halls— $\frac{7}{8}$  in. oak. Kitchen—linoleum, Armstrong Cork Products Co. Bathrooms—ceramic tile.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—tumbler.

**KITCHEN EQUIPMENT:** Stove—Detroit Jewel, Detroit Vapor Stove Co. Refrigerator—Frigidaire.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—cast iron. Water pipe—copper.

**HEATING:** Steam. Boiler—Richardson & Boynton, coal fired, with Taco hot water heater.

This rambling small house is admirable in its compactness and pleasantly simple exterior treatment. A future wing may be added to the structure without spoiling the existing continuity of plan and elevation. Interior accessibility to garage, basement, and services is extremely well handled. The ample closet space allowance and the ideal location of the bathroom make this residence mechanically efficient, and the landscaping frames and enhances the architectural design. Cost: \$4,375. Cubage: 17,800 at 24½ cents.



## 24. HOUSE FOR H. H. ROMINGER, EL MONTE, CALIF.



*Louis B. Ziegler Photos*

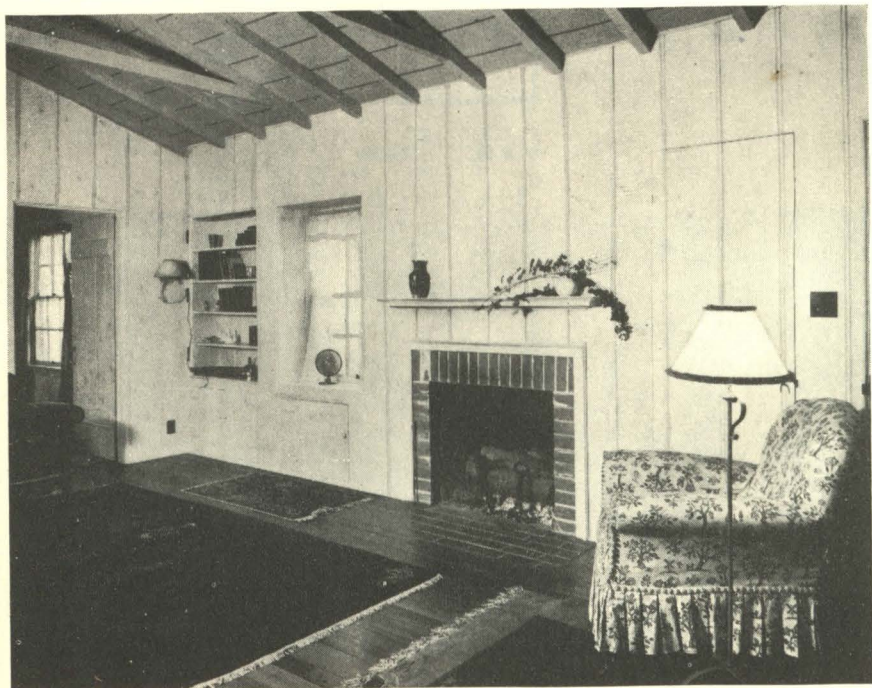
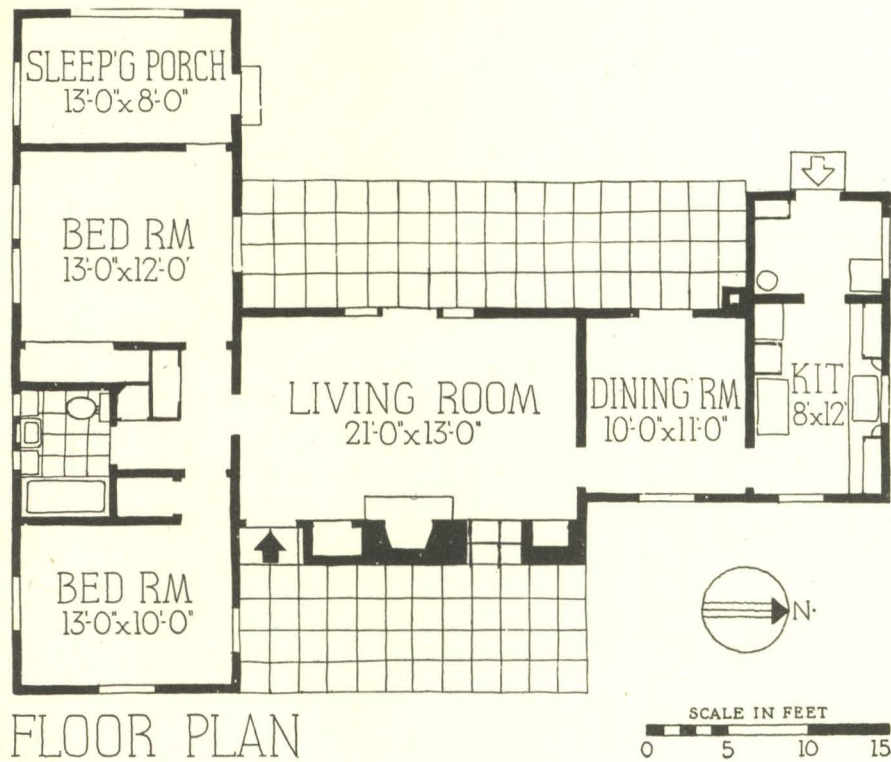
**PROBLEM:** To build an inexpensive house on a one-acre plot for a family of two adults and three children.

The house is situated approximately in the center of the plot with the garage about 75 ft. to the rear. The setting of English walnut trees is an excellent illustration of the effect of surroundings on the appearance of a house. Further evidence of the importance of landscaping is the abruptness of the transition from house to grounds; terraces and planting are not only useful, they also serve to extend the house and to tie it in more closely with the plot on which it is set. The plan is well arranged, and the interiors are appropriately modest, showing the same use of wood as the exterior, and revealing the rafters and ties in the living room.

Cubage: 14,892. Cost: \$4,300 at 29 cents a cubic foot.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete, continuous.

### STRUCTURE

Exterior walls—1 x 12 in. redwood siding over 10 lb. felt, studs, wood lath, integrally colored stucco. Floor construction—2 x 6 in. Douglas fir joists and 1 x 6 in. sub-floor. Ceilings—plank Celotex on exposed rafters, The Celotex Co.

### ROOF

Construction—2 x 4 in. Douglas fir rafters, 1 x 4 in. sheathing, 5/2 cedar shingles.

### CHIMNEY

Brick.

### SHEET METAL WORK

Flashing and gutters—galvanized iron.

### WINDOWS

Sash—double hung. Frame—sugar pine. Glass—Libbey-Owens-Ford Glass Co. Screens—galvanized wire in wood frame. Blinds—sugar pine, fixed slats.

### FLOORS

Living room, bedrooms and halls—mahogany plank. Kitchen—linoleum, Armstrong Cork Products Co.

### WOODWORK

Trim, shelving, cabinets and doors—pine.

### HARDWARE

Interior and exterior—brass.

### PAINTING

Interior: Walls, trim and sash—lead and oil paint and glaze. Floors—stain, fill and shellac. Exterior: Walls and sash—3 coats lead and oil. Roof—oil stain.

### ELECTRICAL INSTALLATION

Wiring system—knob and tube. Switches—Hart & Hegeman toggle type. Fixtures—direct; brackets—brass finish.

### KITCHEN EQUIPMENT

Range—gas. Refrigerator—Electrolux, Servel Sales Inc.

### PLUMBING

All fixtures by Standard Sanitary Manufacturing Co. Soil and waste pipes—cast iron. Water supply pipe—galvanized iron.

### HEATING

Gas, floor furnaces.

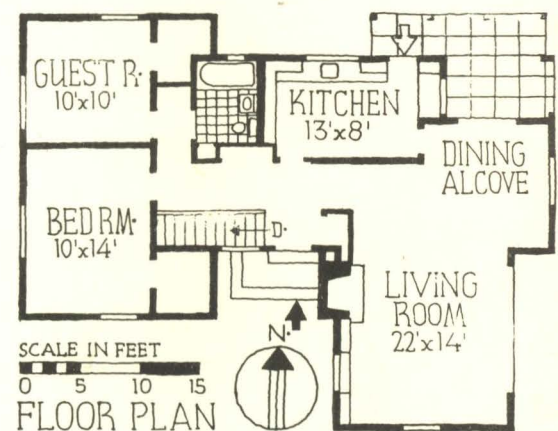


## 25. HOUSE FOR H. OWEN GOSLIN, ST. MARY'S LANE, MICH.



LIVING ROOM

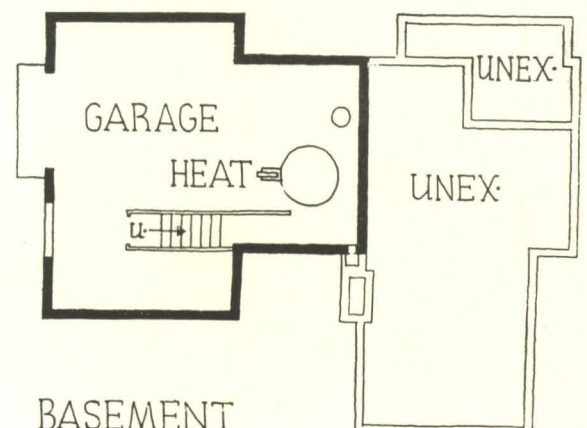
Y. T. Suzuki Photos



The house reflects the owners' simple requirements. The plan is laid out with a minimum of partitions, and the size of the house is no greater than that of a typical servantless apartment. The advantages of the open plan, and the effect of spaciousness it provides in a small house, are well illustrated by the photographs.

*The architect comments:* "The house was built for two young people who expect to occupy it for about 15 years. The plan has been so arranged that another bedroom may be added on the north side if the future size of the family requires it. No arrangement for the accommodation of servants has been made."

Cubage: 18,270. Cost: \$4,310 at 23½ cents a cubic foot.



CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





DINING ALCOVE

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block. Cellar floor—concrete. Water-proofing—Ruberoid Co.

### STRUCTURE

Exterior walls—asbestos shingles and sheathing paper, Ruberoid Co.,  $\frac{3}{4}$  in. yellow pine sheathing, 2 x 4 in. yellow pine studding,  $\frac{1}{2}$  in. Insulite Co., lath and plaster, U.S. Gypsum Co. Interior partitions— $\frac{1}{2}$  in. Insulite lath and plaster on studs.

### ROOF

Asbestos shingles and sheathing paper, insulated with rock wool, Ruberoid Co.

### CHIMNEY

Lining—Robinson Clay Products Co. Fireplace—damper, The Majestic Co.

### SHEET METAL WORK

Flashing, gutters and leaders—Armco galvanized iron, American Rolling Mill Co.

### WINDOWS

Sash—Fenwrought screened casements, Detroit Steel Products Co. Weatherstripping—Chamberlain Metal Weatherstrip Co.

### FLOORS

Living room and halls— $\frac{1}{2}$  in. Insulite board, Insulite Co., carpet, L. C. Chase Co. Bedrooms and bathrooms— $\frac{3}{4}$  x 2 $\frac{1}{4}$  in. third grade red oak. Kitchen— $\frac{1}{2}$  in. Insulite board, Insulite Co., linoleum, Armstrong Cork Products Co.

### WALL FINISH

Walls throughout sand finish plaster tinted.

### WOODWORK

Trim and doors—white pine. Shelving—redwood.

### HARDWARE

Interior and exterior—Russell & Erwin Mfg. Co.

### PAINTING

Interior and exterior—Velour paint, Devoe & Reynolds Co., Inc.

### ELECTRICAL INSTALLATION

Wiring system—armored cable, General Electric Co. Switches—Harvey Hubbell. Fixtures—Chase Brass & Copper Co.

### KITCHEN EQUIPMENT

Stove—A-B Stove Co. Refrigerator—Frigidaire Sales Corp. Sink—double compartment, Standard Sanitary Mfg. Co. Cabinet—Nappanee, Coppes, Inc.

### PLUMBING

All fixtures by Standard Sanitary Mfg. Co. Soil, waste and vent pipes—cast iron, Alabama Pipe Co. Water supply pipe—steel, National Tube Co. Pump—350 gal. per hour capacity, F. E. Myers & Brothers Co.

### HEATING

Warm air—Marshall Furnace Co. Hot water heater—Graybar Electric Co.



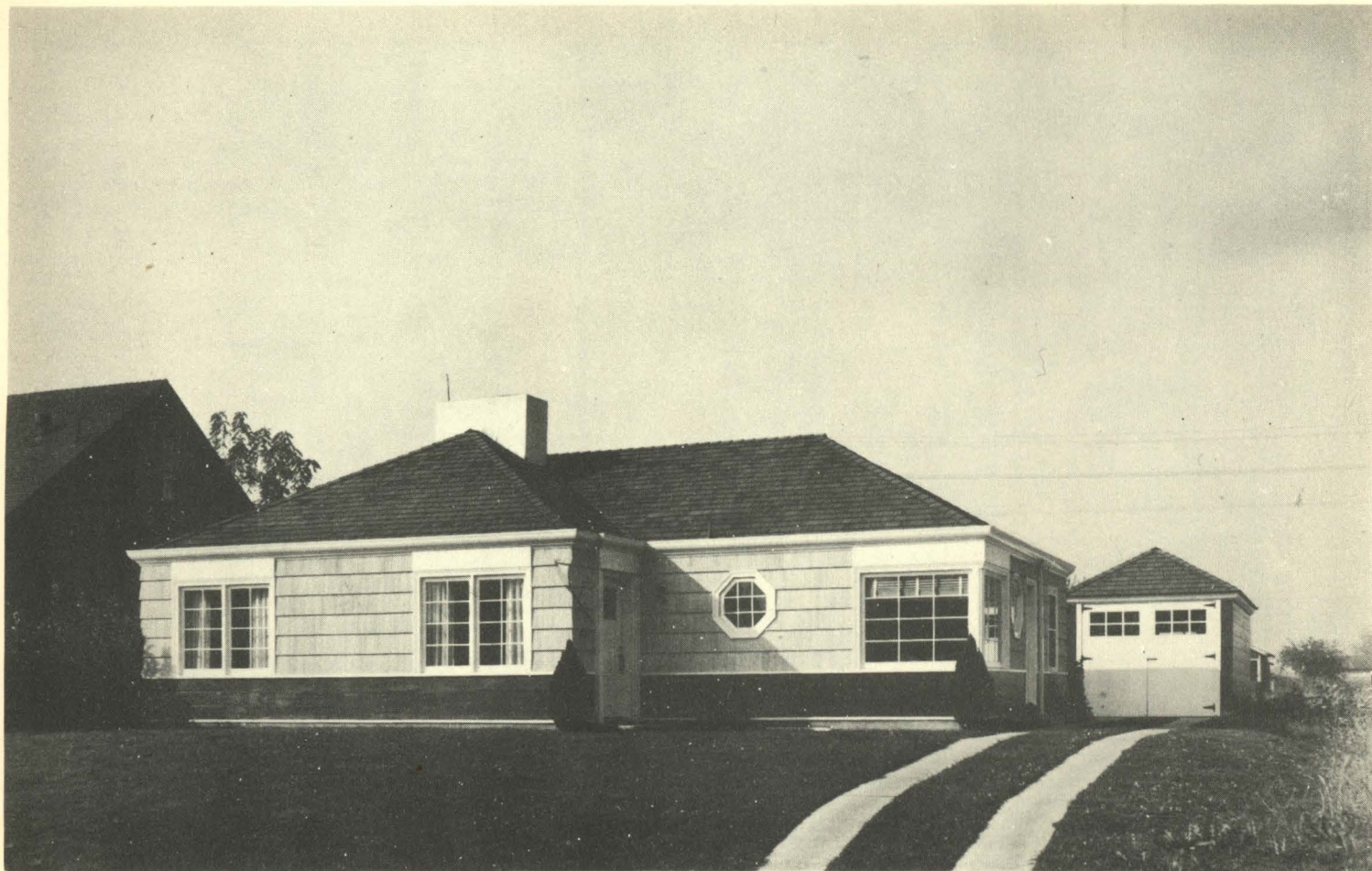
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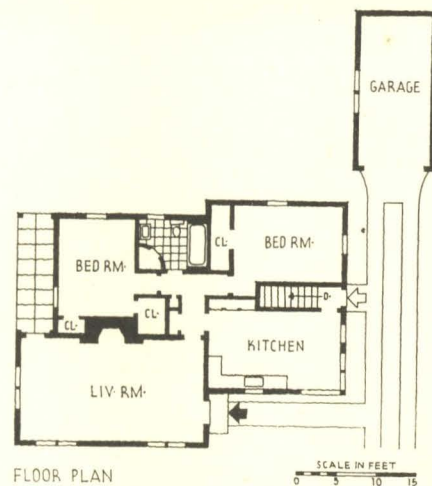
KITCHEN



## 26. HOUSE FOR HART LARSEN, EUGENE, ORE., PETER R. DAMSKOV, ARCHITECT



A novel and original conception of the one-story type of residence. The general lines and details are classical in style, but the treatment of general forms is handled in a refreshing and interesting manner. The plan is well balanced, and the kitchen is so well equipped and designed that the adjacent, amply lighted, dining space does not suffer from the proximity. Closet space is plentiful and the general circulation is economically worked out. Cost: \$4,400. Cubage: 21,714 at 20 $\frac{1}{4}$  cents.



KITCHEN

### CONSTRUCTION OUTLINE

**STRUCTURE:** Cedar shingles, building paper,  $\frac{3}{4}$  in. fir shiplap sheathing, 2 x 4 in. studs, lath and plaster.  
**ROOF:** Royal red cedar shingles.  
**SHEET METAL WORK:** Flashing and gutters—No. 40 Armco roofing tin, American Rolling Mills.  
**WINDOWS:** Sash—Douglas fir casement. Glass—single strength, quality A.  
**FLOORS:** Living room, bedrooms and halls—red oak. Kitchen—linoleum on fir sub-floor. Bathrooms—U. S. quarry tile.  
**WOODWORK:** Trim and doors—Douglas fir.  
**ELECTRICAL INSTALLATION:** Knob and tube.  
**KITCHEN EQUIPMENT:** Electric, Kelvinator.  
**PLUMBING:** All fixtures by Washington Eljer. Soil pipes—cast iron. Water supply pipes—galvanized iron.  
**HEATING:** Warm air, Western Furnace Co., Kelvinator oil burner.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





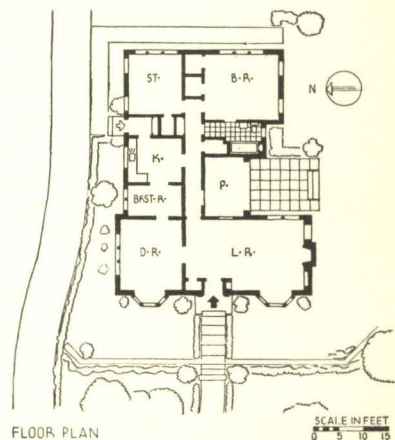
Harvey Patteson Photos



## LIVING ROOM

**PROBLEM:** Accommodations for a family of two, with provisions for expansion of the house. Plan to take advantage of prevailing summer winds.

A strongly horizontal design, well adapted to the location. The house permits the addition of a future bedroom, bath, and game room. The two bays off the dining and living rooms were provided to take advantage of the view over the city. Cost: \$4,750. Cubage: 19,845 at 24 cents.



FLOOR PLAN

## CONSTRUCTION OUTLINE

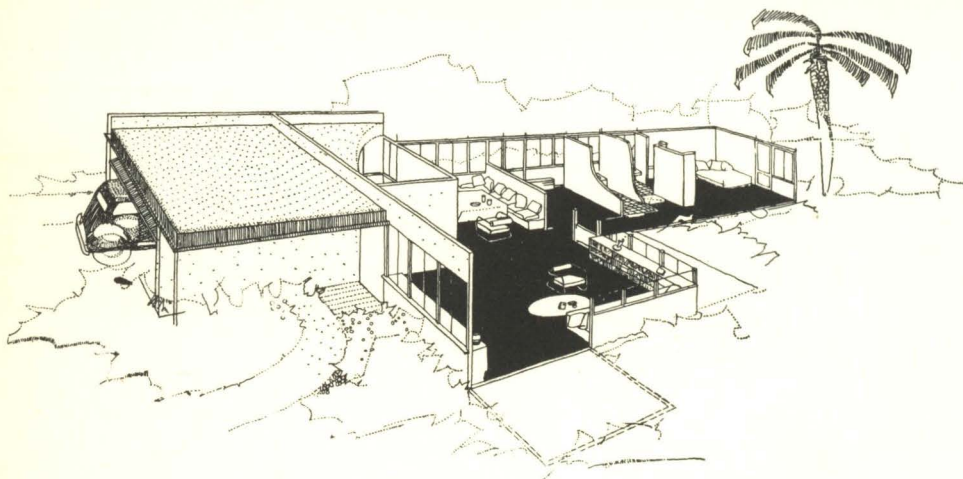
**STRUCTURE:** Common brick veneer on frame.  
**ROOF:** Construction—wood frame, sheathing and felt, covered with blue black strip shingles, Certain-Teed Products Corp.  
**SHEET METAL WORK:** Flashing, gutters and leaders —26 gauge Armco, American Rolling Mill Co.  
**WINDOWS:** Sash—yellow pine, double hung, cypress sills. Glass—single strength, quality A, Libbey-Owens-Ford Glass Co. Screens—pearl wire.  
**FLOORS:** Select white oak. Kitchen—inlaid linoleum, Armstrong Cork Products Corp.  
**ELECTRICAL INSTALLATION:** Wiring system—BX cable. Switches—flush toggle, Hart & Hegeman.  
**KITCHEN EQUIPMENT:** Refrigerator—General Electric Co. Sink—acid resisting, flat rim, Crane Co.  
**PLUMBING:** All fixtures by Crane Co. Soil and vent pipes—cast iron. Water supply pipes—galvanized steel.  
**HEATING:** Gas outlets in each room.



## 28. HOUSE FOR DR. CHARLES RICHTER, PASADENA, CALIF.



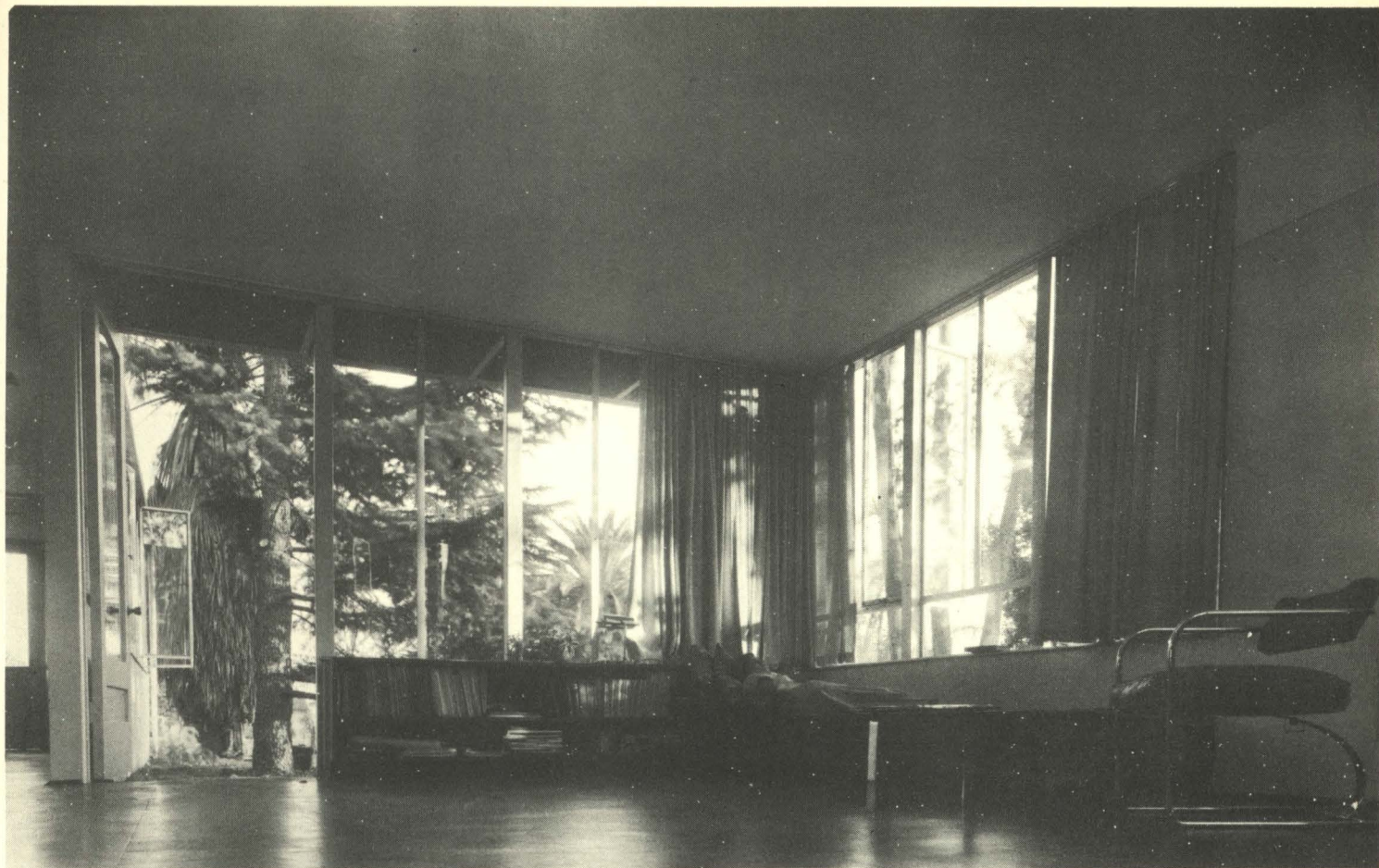
Luckhaus Photos



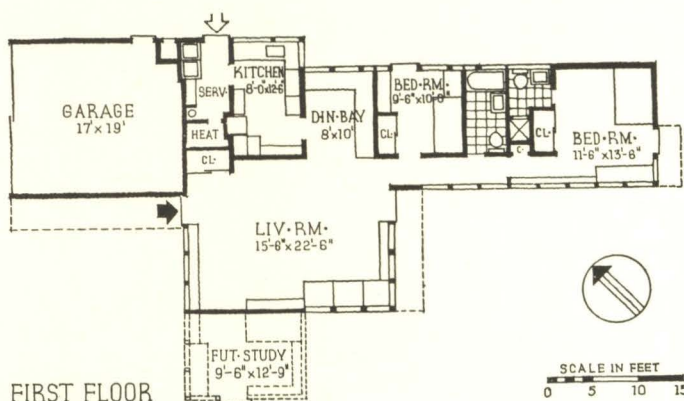
The architect's approach to the problem avoids a common pitfall of small house design. "The level site is richly embellished by magnificently tall trees with which the small residential building is naturally unable to compete in height." The requirements of a professional couple and one child are met by a carefully oriented plan, capable of future expansion. The timber "chassis" rests on an earthquake-proof floor slab. The built-in furniture and easy circulation should reduce housekeeping to a minimum and contribute to the restful atmosphere created by simplified construction and close harmony with the natural environment. Cubage: 14,600. Cost: \$4,700 at 31 cents per cubic foot.







LIVING ROOM



FIRST FLOOR



CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

## CONSTRUCTION OUTLINE

### FOUNDATION

Continuous concrete footings with reinforced concrete slab and integral finish. Waterproofing—Anti-hydro admixture in floor slab, Anti-Hydro Waterproofing Co.

### STRUCTURE

Continuously truss-braced standard wood chassis, milled rabbetted posts spaced 40½ in. Interior—sheet-rock lathing with smooth putty plaster. Exterior—felt, wire netting, ⅝ in. cement stucco. Ceiling—wood construction with Celotex lath.

### ROOF

Covered with 4 layer gravel roof.

### SHEET METAL WORK

Flashing and gutters—24 gauge galvanized iron, Armco, American Rolling Mills Co.

### INSULATION

Roof—insulated with Celotex.

### WINDOWS

Sash—steel casements. Glass—double strength, quality A, Libbey-Owens-Ford Glass Co. Screens—copper roller, automatic tension.

### FLOORS

Accotile, throughout, Armstrong Cork Products Co.

### WALL COVERINGS

Kitchen and bathrooms—Sanitas, Standard Textile Products Co.

### PAINTING

Interior: Walls and trim—2 coats oil paint. Exterior: Walls—waterproofing brush coat.

### ELECTRICAL INSTALLATION

Rigid steel conduits, General Electric Co. Switches—tumbler. Fixtures—built-in with diffusing glass.

### KITCHEN EQUIPMENT

Stove—Magic Chef, American Stove Co. Refrigerator—General Electric Co. Sink—Washington-Eljer Co., linoleum covered drainboard.

### PLUMBING

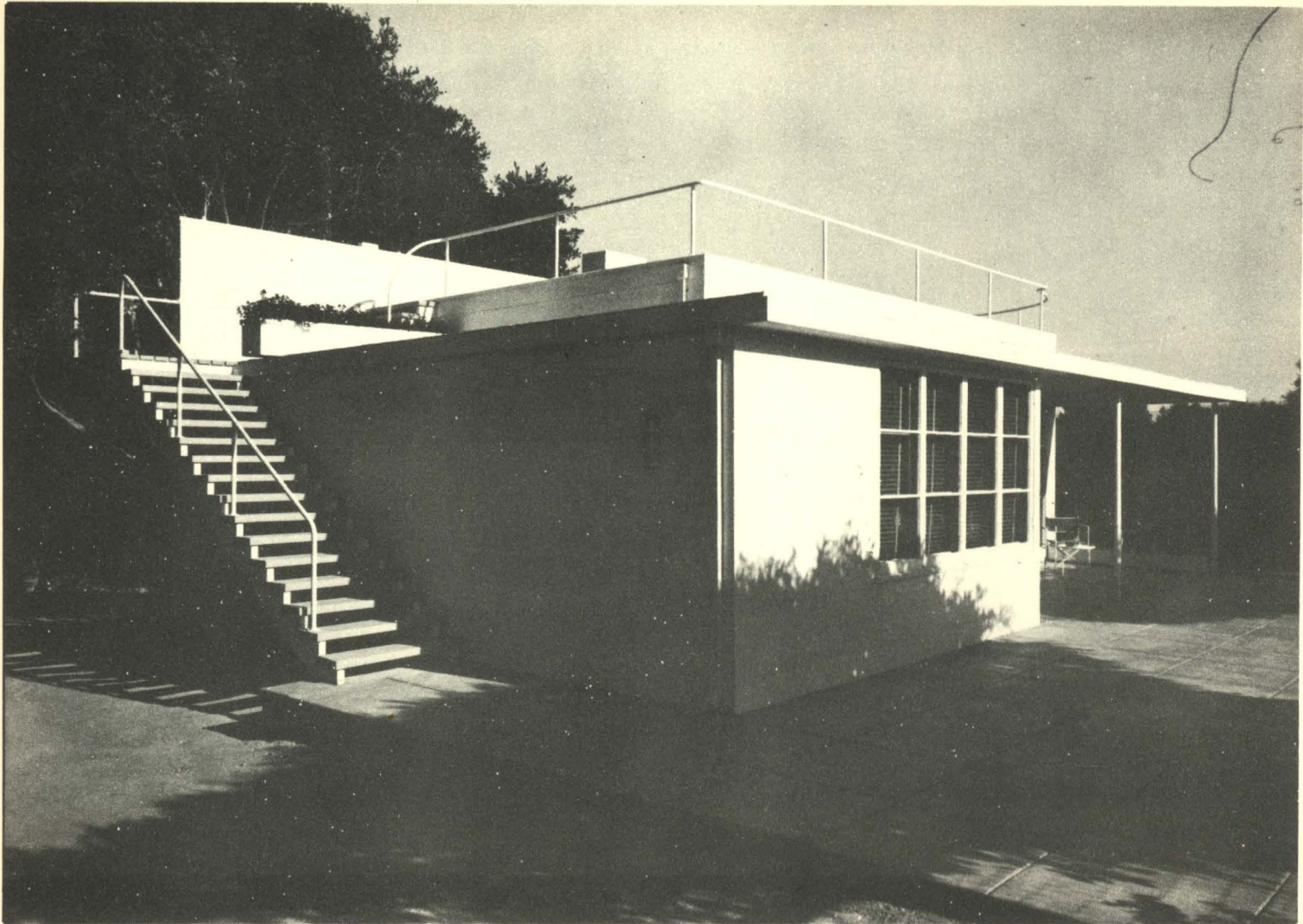
All fixtures—Washington-Eljer Co. Soil and waste pipes—cast iron. Vent and water pipes—wrought iron.

### HEATING

Circulating air, gas wall heaters, with fresh air intake, Andrews Heating Co. Hot water heater—gas fired.



## 29. HOUSE FOR WILLIAM LOWE JR., WOODSIDE, CALIF.

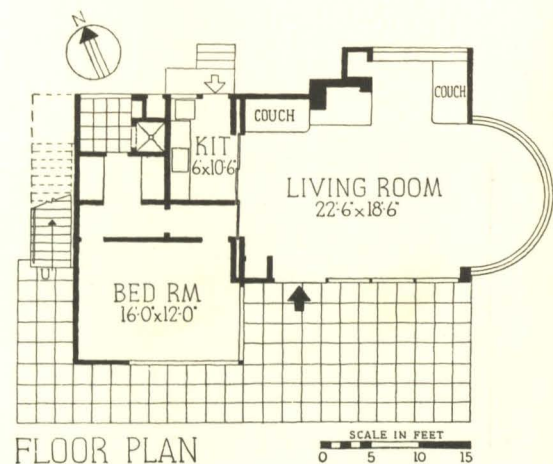


This soundly designed and attractive week-end house was built on a large country estate for the use of the owner's son.

*The architect comments:* "For the country estate a week-end house serves a three-fold purpose: it takes care of the week-end guest, it can be used in the winter by the owner without the trouble of opening the large house, and if placed near a tennis court or swimming pool it serves as a recreation center and provides dressing facilities.

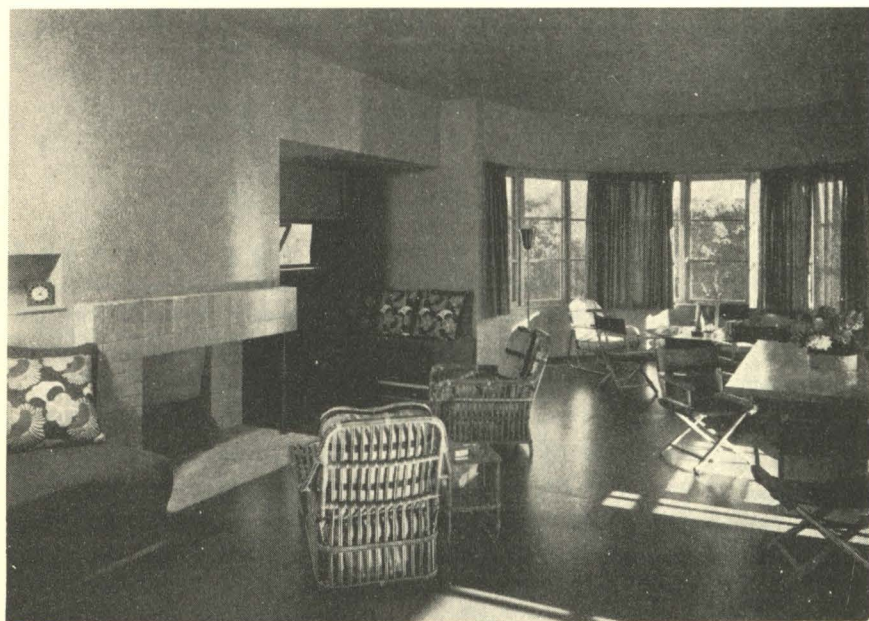
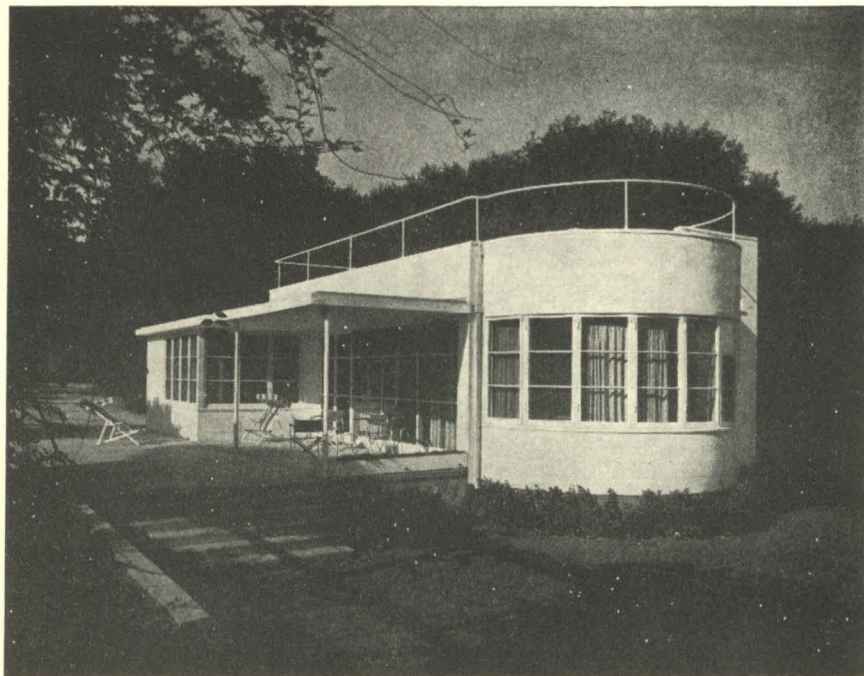
"The living room can be used for living, sleeping, and dining. The built-in sofas are comfortable beds. The sliding doors to the kitchen can be opened for buffet style meals or for drinks, and can be closed when more elaborate meals are prepared. To reduce housekeeping to a minimum almost all furniture is built-in, and floors are linoleum-covered. Complete insulation has greatly added to comfort the year around, and has made it possible to heat the house with one small floor furnace."

Cubage: 10,728. Cost: \$4,800 (exclusive of architect's fee) at about 45 cents a cubic foot.



FLOOR PLAN





LIVING ROOM

NOTE: "A new method was employed in the installation of insulation board for walls and ceiling to eliminate the usual cracks and unevenness when battens are omitted.

Studs were set 2'-0" on centers. To the studs and joists were nailed 4 in. width of  $\frac{1}{4}$  in. tempered hardboard to come exactly where the sheets of insulation board joined. These strips were then buttered with linoleum cement and the wall board was butt-jointed and held in place by temporary nailed wood strips. Twelve hours later, when the cement had set the temporary presses were removed, leaving the walls perfectly flush with no sign of a joint, and leaving the wall boarding monolithic with no possibility of separating.

For protection the walls were then covered with sheeting to receive the paint finish.

This work actually cost less than a first-class job of plastering, and the walls were mechanically straighter and truer than the average plaster wall, and it was done in three weeks' less time than would have been taken by ordinary plastering."

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—reinforced concrete, continuous.

### STRUCTURE

Exterior walls—redwood flush boarding, building paper, Pabcoite by The Paraffine Companies, Inc., diagonal braced sheathing on Douglas spruce framing,  $\frac{1}{4}$  in. tempered Hardboard,  $\frac{3}{4}$  in. Graylite insulation board, The Insulite Co. Floor construction—Douglas spruce joist covered with diagonal sub-floor covered by  $\frac{1}{4}$  in. semi-hard hardboard, The Insulite Co.

### ROOF

Same as floor construction above covered with Pabco Floatline asphalt composition roofing, 30 lb. felt, mineral surfaced composition sheets, The Paraffine Companies, Inc.

### CHIMNEY

Common brick, lined with terra cotta.

### SHEET METAL WORK

Flashing and gutters—galvanized iron.

### INSULATION

Roof— $\frac{1}{4}$  in. semi-hard Hardboard nailed to joist, The Insulite Co. Space below roof—asbestos quilt insulating felt, Pak-Felt, The Paraffine Companies, Inc.

### WINDOWS

Sash—casement, sugar pine. Frame—Douglas spruce. Glass—double strength, quality A, Libbey-Owens-Ford Glass Co. Living room bay window— $\frac{3}{16}$  in. crystal sheet. Screens—copper on wood frames. Venetian blinds—Rolscreen Co.

### FLOORS

All floors— $\frac{1}{4}$  in. semi-hard hardboard, The Insulite Co., covered with linoleum.

### WALL COVERINGS

In all rooms—sheeting over insulation board and painted.

### WOODWORK

Trim, shelving and cabinets—Douglas spruce. Interior doors— $\frac{1}{4}$  in. tempered Hardboard, The Insulite Co., glued to two sides of a Douglas spruce frame made of 1 x 4 in. material.

### HARDWARE

Interior and exterior—Sargent and Co. Sliding door—Pitcher Door Co.

### PAINTING

All paints and finishes by Paraffine Companies, Inc.

### ELECTRICAL INSTALLATION

Wiring system—knob and tube.

### BATHROOM EQUIPMENT

All fixtures by Standard Sanitary Manufacturing Co. Shower floor—cast rubber, Rubberceptor, Inc.

### PLUMBING

Pipes: Cold water—galvanized wrought iron. Hot water—copper tubing.

### HEATING

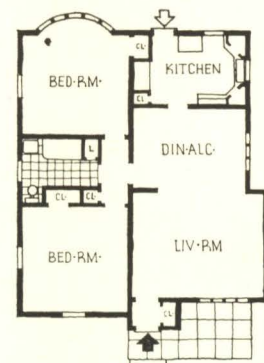
Gas floor furnace. Hot water heater—gas, storage type, Pittsburgh Water Heater Co.



### 30. HOUSE FOR MAX J. DERBES, NEW ORLEANS, LA.



HAROLD W. O'SHEA, ARCHITECT



FLOOR PLAN 0 5 10 15  
SCALE IN FEET

### CONSTRUCTION OUTLINE

**STRUCTURE:** Cedar grooved asbestos shingles on diagonally laid sheathing, 4 in. rock wool insulation, Steel-Tex metal lath and plaster, Johns-Manville, Inc.  
**ROOF:** Asbestos shingles, Johns-Manville, Inc.  
**WINDOWS:** Sash—casement and double hung, Monarch weatherstripping. Glass—double thick, Libbey-Owens-Ford Glass Co.  
**FLOORS:** Living room, bedrooms and halls—oak. Kitchen—linoleum. Bathrooms—tile.  
**WALL COVERINGS:** Kitchen and bathrooms—flex-board, Johns-Manville, Inc.  
**HARDWARE:** By Sargent & Co.  
**PAINTING:** Walls and ceilings—flat oil paint, Sherwin Williams. Floors—shellac and wax.  
**ELECTRICAL INSTALLATION:** Wiring system—knob and tube.  
**PLUMBING:** All fixtures by Kohler Co. Soil pipes—cast iron. Water supply pipes—brass.

A substantial residence in the moderately priced field, thoroughly insulated, and designed to offer an intimate atmosphere. Due to the fact that the view and the greater part of the lot are available from the rear elevation, special emphasis has been placed upon the bay window of the master bedroom. Circulation is direct throughout, and the partition usually separating the dining from the living room has been almost completely eliminated in order to insure a dual purpose in the function of these elements. Cost: \$4,800. Cubage: 15,225 cubic feet at 30 cents.

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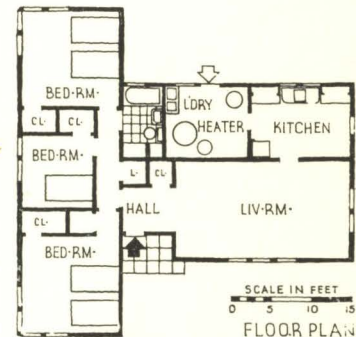
### 31. HOUSE IN LAFAYETTE, IND. PURDUE HOUSING PROJECT



*J. C. Allen & Son*

HOWARD T. FISHER, ARCHITECT  
JOHN A. PRUYN, ASSOCIATE

This and the house on the opposite page were built in a realistic project to explore small house costs. Leading architects furnished the designs, and various industries made available their latest in materials and methods. Designed to accommodate the average family, the specifications fit the physical requirements of the mass of prospective home owners. However, they do not claim to represent the average American standard of living. The Number 2 house, pictured above, is externally covered with asbestos cement board, it is compact and extremely well planned to allow ample closet space; although only the minimum general requirements have been included for the sake of economy. Cost: approximately \$4,800.



#### CONSTRUCTION OUTLINE

**STRUCTURE:** Studs and Joists at panel points, No. 16 gauge copper bearing steel. Wall panels—built up wood frame with stiffeners. Exterior covering— $\frac{1}{4}$  in. asbestos cement board. Interior covering— $\frac{1}{4}$  in. regular fir plywood, painted.

**FLOOR:** Cinder fill, building paper, 4 in. reinforced concrete slab, trowel finish and painted.

**ROOF:** Built up wood frame with stiffeners. Ceiling—plywood,  $\frac{1}{4}$  in. fir. Roof plywood,  $\frac{3}{8}$  in. fir. Roofing—No. 24 gauge galvanized copper bearing steel. Flashing—No. 26 gauge, galvanized copper bearing steel.

**INSULATION:** Two separated sheets of aluminum foil in each panel.

**WINDOWS:** Steel, outswinging casements. Screens—aluminum.

**HARDWARE:** Windows—bronze. General—brass finish.

**PAINTING:** Lead and oil.

**ELECTRICAL INSTALLATION:** BX cable.

**PLUMBING:** Pipes—galvanized steel and cast iron.

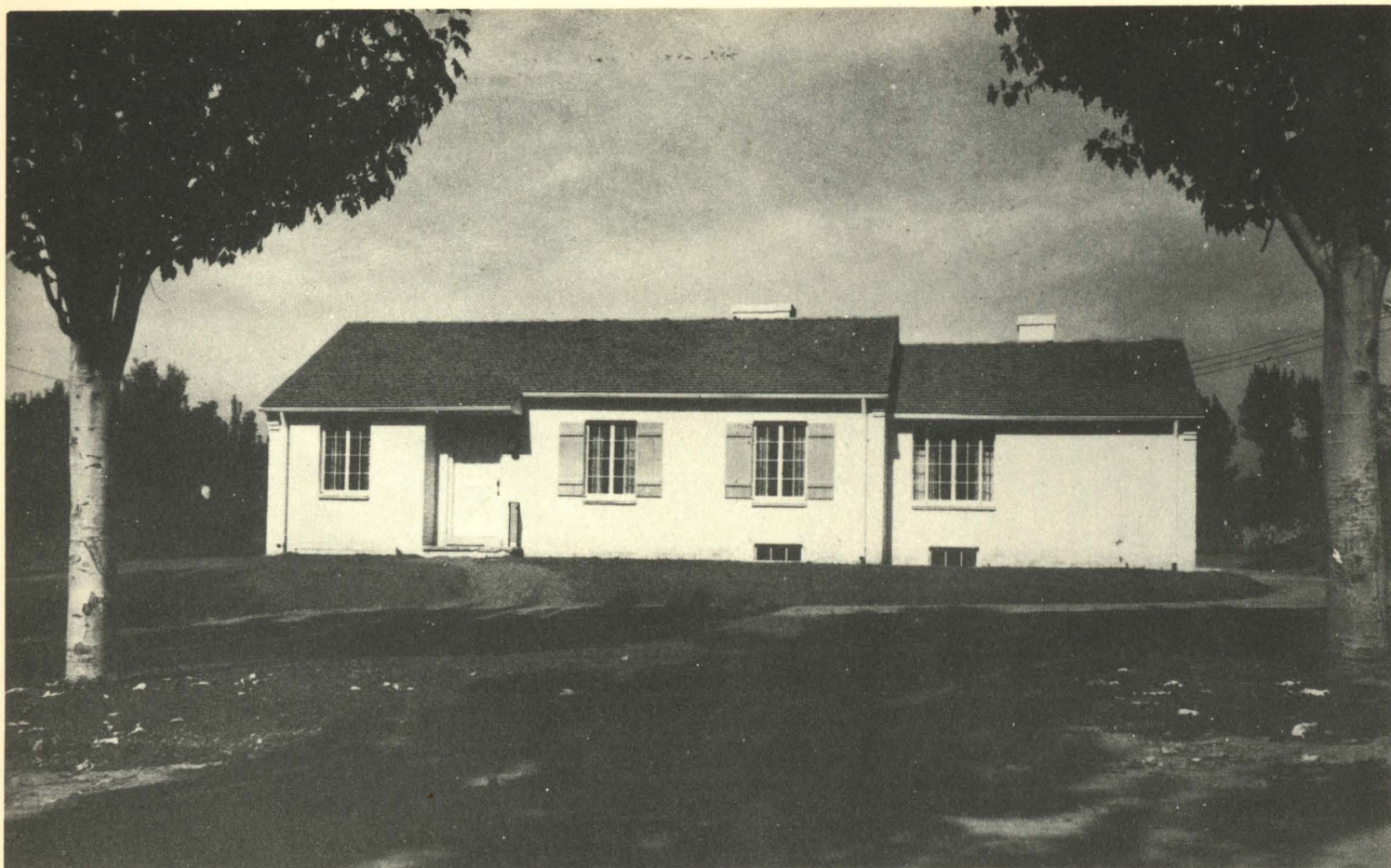
Fixtures—enameled iron.

**HEATING:** Forced warm air automatically controlled, automatic oil fired.

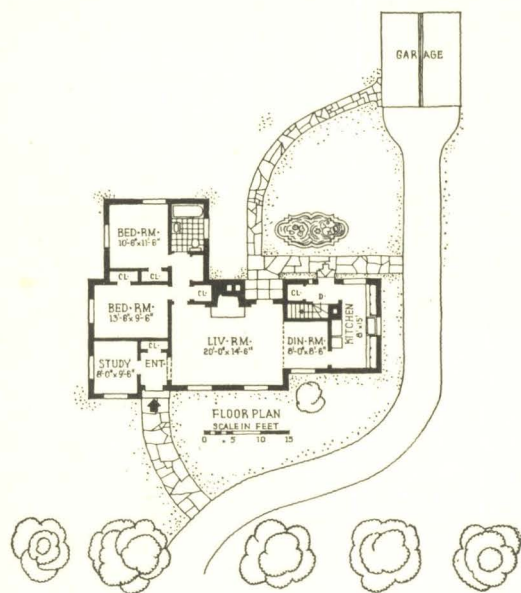
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## 32. HOUSE FOR LLOYD A. SPRINGETT, SALT LAKE CITY, UTAH



A. H. EHLERS, DESIGNER



### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete. Cellar floor—concrete.

#### STRUCTURE

Exterior walls—used brick, plaster inside.

#### FLOORS

Oregon pine joists, 2 x 10 in., 16 in. on center, fir sub-floor, oak finish floor.

#### ROOF

Tile composition.

#### CHIMNEY

Common brick.

#### HEATING

Coal furnace with automatic stoker.

One-story houses are apt to lack privacy within. The arrangement of this house, however, permits of proper segregation of activities with but little sacrifice to light, air and convenience. The walls of painted used brick are treated with directness and freedom from the sentimental designs which this material too often inspires. Cost: \$4,800.

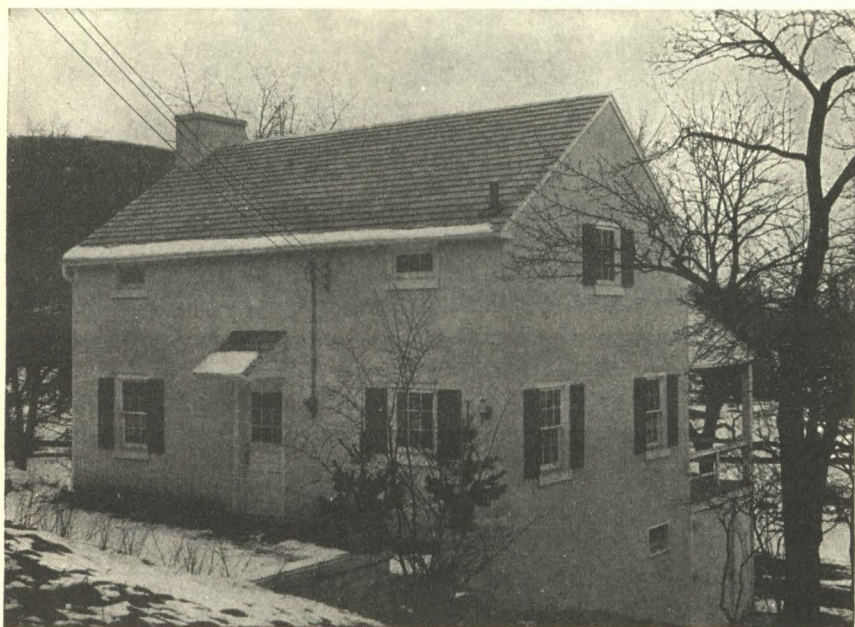
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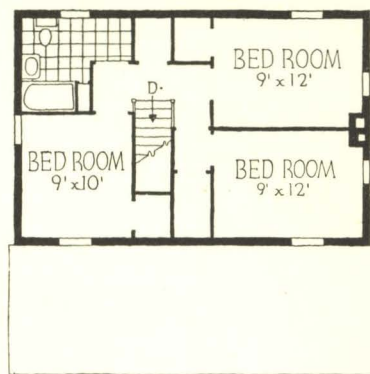
### 33. HOUSE FOR MRS. S. V. BROWN, WILLIAMSPORT, PENNA.



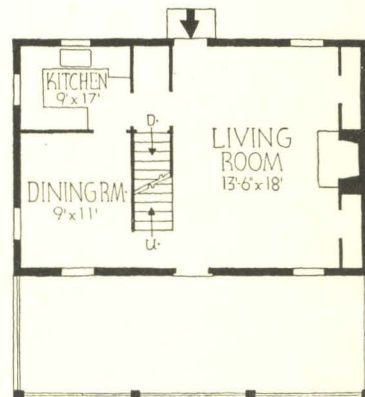
MALCOLM A. CLINGER, ARCHITECT



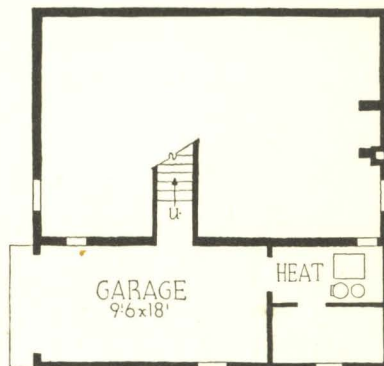
Donald Ross



SECOND FLOOR



FIRST FLOOR



BASEMENT

SCALE IN FEET  
0 5 10

This house is one of a number on an old farm no longer used for agriculture, built to provide the revenue needed to meet increased taxes.

*The architect comments:* "To carry out the note struck by existing old structures rooms are generally small, yet an attempt was made to provide a feeling of space in the first floor arrangement.

"It was also the purpose to utilize the contours, to make no fantastic designs, but to build a quiet colony which would appear to be a natural group, fitting well into the landscape."

Cubage: 18,000. Cost: \$4,888 at 27 cents a cubic foot.

#### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—cinder blocks and Insulite, The Insulite Co. Interior partitions—double thick knotty white pine.

**ROOF:** Covered with cedar shingles.

**CHIMNEY:** Lining—terra cotta. Damper—H. W. Covert Co.

**SHEET METAL WORK:** Flashing—16 oz. copper. Gutters and leaders—Armco, American Rolling Mills Co.

**WINDOWS:** Sash—double hung and casements, wood. Glass single strength, quality A.

**STAIRS:** Treads—yellow pine. Risers and stringers—knotty white pine.

**FLOORS:** Main rooms—yellow pine. Kitchen and bathrooms—linoleum, Armstrong Cork Products Co.

**HARDWARE:** Interior and exterior—McKinney Manufacturing Co.

**PAINTING:** Interior: Main rooms, floors and

trim—Minwax Co. Bathrooms and kitchen—enamel, Sherwin-Williams Co. Exterior: Walls—cement paint; sash—oil paint, both by Sherwin-Williams Co.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—Hart & Hegeman. Fixtures—Chase Brass & Copper Co.

**KITCHEN EQUIPMENT:** Stove and refrigerator—General Electric Co. Sink—Standard Sanitary Manufacturing Co.

**BATHROOM EQUIPMENT:** Lavatory and tub—Standard Sanitary Manufacturing Co. Seat—C. F. Church Manufacturing Co. Shower—Speakman Co.

**PLUMBING:** Pipes: Soil and waste—extra heavy cast iron. Water supply—copper tubing, Chase Brass & Copper Co.

**HEATING:** Hot water system, cold fired boiler—Peerless Manufacturing Corp.





A. Charles Hinkle



While this house was designed for a single occupant, its plan requirements were in no way uncommon. It was built inexpensively of local materials with low maintenance and low first cost as the controlling factors. The owner requested that cross ventilation be provided wherever possible, and the main rooms were laid out with this in mind. A steep slope made possible the use of unexcavated space under the first floor as a garage. The plan is well arranged, with the one bath so placed that it may be used for a guest lavatory as well. Cost: \$4,385. Cubage: 33,218 at about 13 cents.

## CONSTRUCTION OUTLINE

**FOUNDATION:** Continuous walls of natural stone. Boiler room and garage—4 in. reinforced concrete floor.

**STRUCTURE:** Exterior walls—2 x 4 studs, 16 in. on center  $\frac{3}{8}$  in. storm sheathing, waterproof paper. Yellow pine siding outside, plastered inside.

**ROOF:** Covered with asphalt shingles, The Flintkote Co.

**SHEET METAL WORK:** 27 gauge ingot iron.

**WINDOWS:** Double hung windows, Sampson spot cord and iron weights. Glass—double thick, quality B, Libbey-Owens-Ford Glass Co.

**FLOOR:** All rooms have select plain white oak,  $2\frac{1}{4}$  x  $13/16$  in., except bath which has ceramic tile.

**WOODWORK:** Trim, shelving and cabinets—B. & B. yellow pine. Doors, interior and exterior—white pine.

**HARDWARE:** Interior and exterior—colonial brass, P. & F. Corbin.

**PAINTING:** Interior: Floors—all floors sanded, scraped, filled and stained, shellacked and waxed. Trim and sash—4 coats enamel. Exterior walls and sash—3 coats lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—tumbler type. Panel—The Frank Adams Co., standard fixtures.

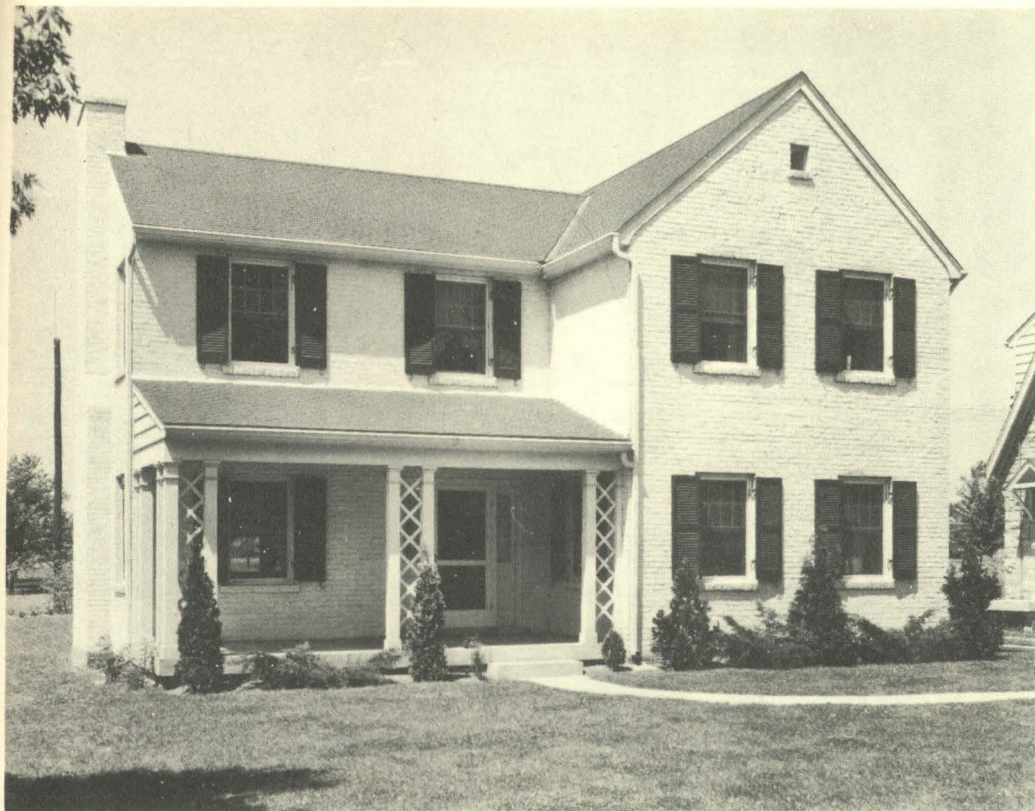
**BATHROOM EQUIPMENT:** All fixtures by Standard Sanitary Mfg. Co.

**PLUMBING:** Soil, waste and vent pipes—cast iron. Water supply pipes—galvanized steel. Septic tank.

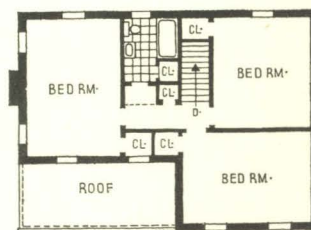
**HEATING:** Warm air—gravity system. Boiler—Weisteel. Furnace and hot water heater—coal-fired.



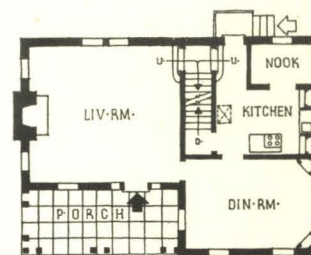
## 35. HOUSE IN LOUISVILLE, KENTUCKY, J. HEYWARD EARHART, DESIGNER



Fischer



SECOND FLOOR



FIRST FLOOR

SCALE IN FEET  
0 5 10 15

This is an imaginative example of the small house plan. The direct entrance into the living room is not objectionable since the covered porch offers ample transition. The stair case giving privacy and control to the second floor, and the inclusion of a small dining alcove overlooking the garden are worthy of note. The exterior is effectively handled in a simple manner. Cost: \$4,955. Cubage: 23,450 at 21¼ cents.



KITCHEN-DINETTE

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—4 in. brick veneer, 1 in. air space, Sisalkraft paper, 2 x 4 in. studs. Inside—rock lath and plaster.

**ROOF:** Wooden rafters, composition shingles on sheathing, Philip Carey Co.

**SHEET METAL WORK:** Galvanized iron.

**INSULATION:** Outside walls—rock lath, U. S. Gypsum Co. Attic floor—Celotex. Weatherstripping—copper.

**WINDOWS:** Sash—wood, double hung, metal casement in basement. Glass—double strength, quality A, Pittsburgh Plate Glass Co.

**FLOORS:** Living room, bedrooms and halls—oak. Kitchen—linoleum. Bathrooms—tile.

**WALL COVERINGS:** Bedrooms and halls—wallpaper. Bathroom—tile wainscot.

**PAINTING:** Floors—filled, stained and shellacked. Trim, doors and sash—3 coats enamel, E. I. Du Pont.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—Bryant Electric Co. Fixtures—direct, Chase Brass & Copper Co.

**PLUMBING:** All fixtures by Crane Co. Pipes—galvanized iron throughout.

**HEATING:** Hot air, Monarch furnace.

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### 36. CALIFORNIA COTTAGE



CALIFORNIA HOUSE AND GARDEN EXHIBITION

*Mott Photos*

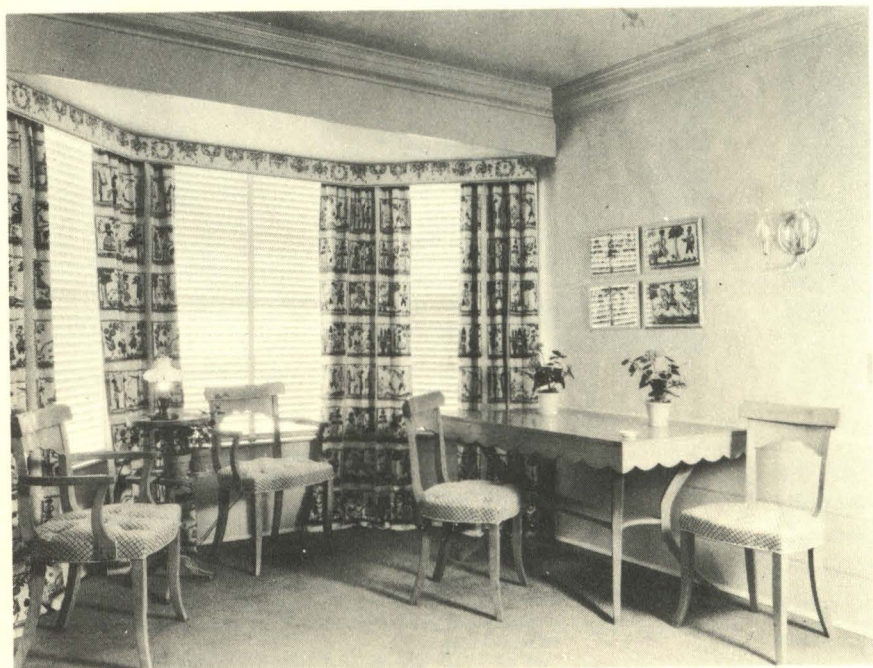
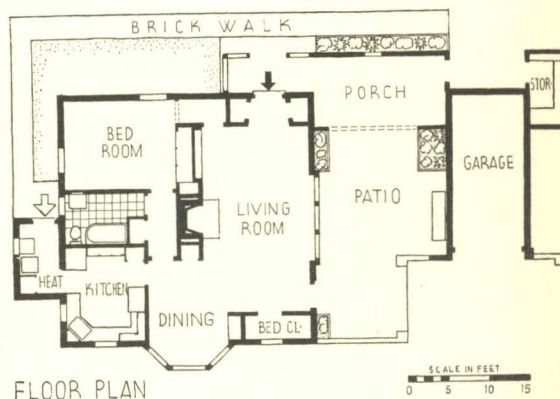
The well-known lines of the typical one-story California house are repeated here. Light color, a rambling plan, simple lines, a gently sloping roof create the pleasant effect common to this type of domestic architecture. The plan is well organized for use, with a compact arrangement of rooms, spacious living room, and a good relation between the house and outdoor living space. The interiors are simple and interestingly detailed.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





LIVING ROOM



DINING ALCOVE

## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—hollow reinforced concrete blocks, Graystone Tile, Inc. Interior partitions—wood frame, lath and plaster. Floor construction—wood joists treated lumber sub-floors and plastered ceiling. ROOF: Clay shingle tile on sheathing, San Valle Tile Kilns.

**WINDOWS:** Wood double hung. Glass—double strength, Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room—clear hardwood blocks, Bruce Flooring Co. Bedrooms—clear plain white oak. Kitchen—rubber tile. Bathrooms—tile, Gladding-McBean & Co.

**WALL COVERINGS:** Living room, bedrooms and hall—wall paper. Kitchen—painted. Bathrooms—tile wainscot, Gladding-McBean & Co.

**HARDWARE:** Interior and exterior—Yale & Towne Mfg. Co.

**PAINTING:** Walls—washable wall paint. Ceilings—solid coat. Trim and sash—silken white enamel. Exterior: Walls—bonding cement paint. Sash—Pioneer lead. All paint by W. P. Fuller & Co.

**ELECTRICAL INSTALLATION:** Wiring system—conduit.

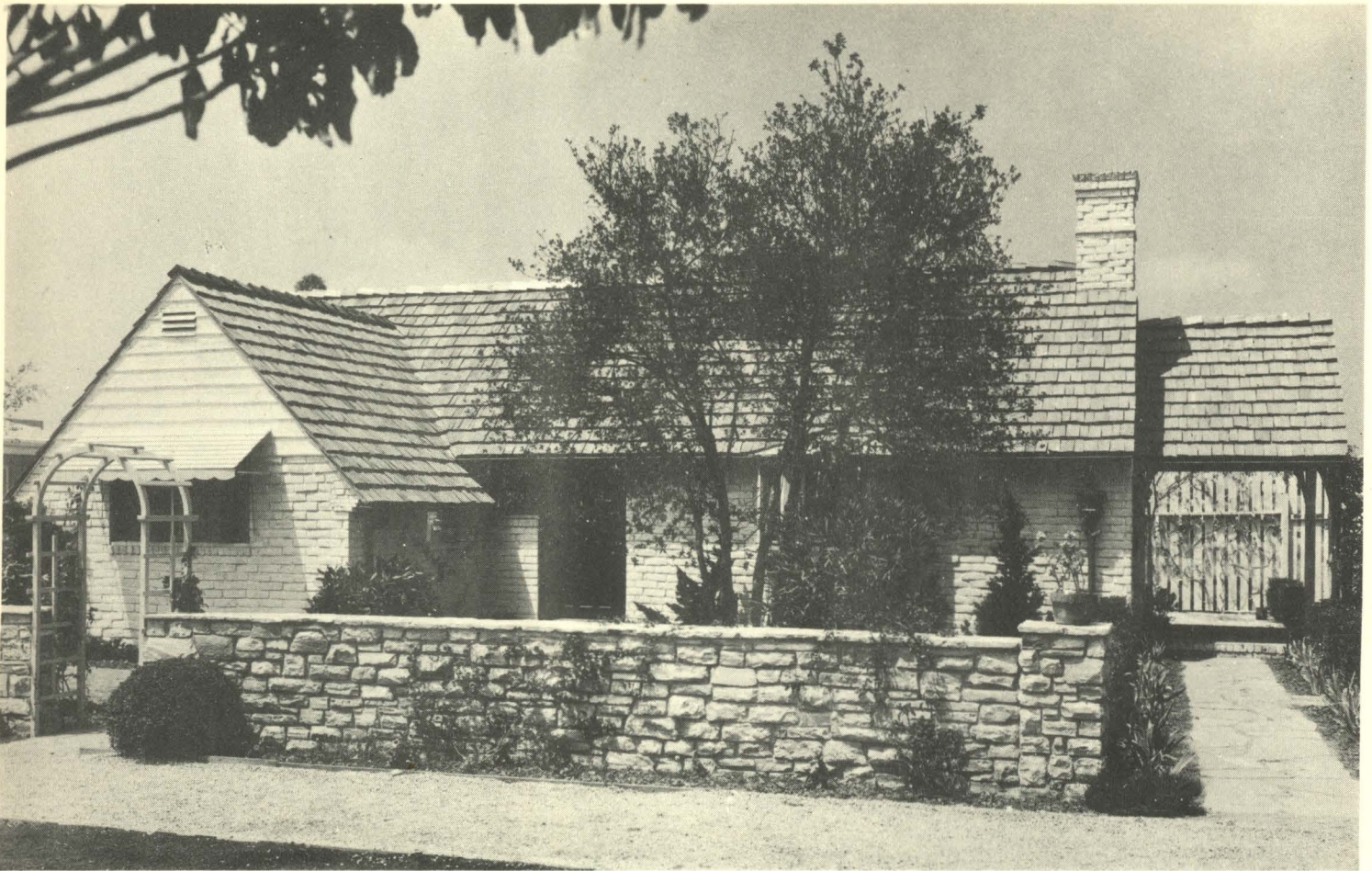
**KITCHEN EQUIPMENT:** Stove—Wedgewood automatic gas. Refrigerator—gas, Electrolux. Sink—Monel metal, International Nickel Co.

**PLUMBING FIXTURES:** All by Washington-Eljer.

**HEATING:** Warm air, gas fired furnace, Payne Furnace & Supply Co.



### 37. ENGLISH COTTAGE, ARTHUR KELLY & JOE ESTEP, ARCHITECTS



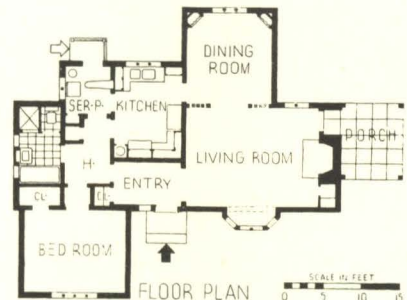
CALIFORNIA HOUSE AND GARDEN EXHIBITION

Mott Photos



LIVING ROOM

The English type residence has never been overwhelmingly popular in California, but requirements of exhibition demanded that style be included, and among the visitors there will doubtless be some who will find the interior shown above to their taste. It is interesting to note the variation in space between this house and the others, although all had the same price limitations.



#### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—reinforced Groutlock brick masonry, Simons Brick Co., Los Angeles. Floor construction—junior steel beams.

**ROOF:** Construction—wood frame covered with split cedar shakes.

**SHEET METAL WORK:** Flashing, gutters and leaders—Leadclad, H. E. McGowan Co.

**WINDOWS:** Steel casements, Lustra glass, American Window Glass Co.

**FLOORS:** Living room—oak plank. Kitchen and bathrooms—linoleum.

**WALL COVERINGS:** Living room—brick whitewashed. Bedrooms—papered. Halls—paneled. Kitchen—tile.

**BATHROOMS:** linoleum.

**WOODWORK:** Trim—western red cedar. Shelving and cabinets—sugar pine.

**RANGE:** American Stove Co.

**REFRIGERATOR:** Gas, Electrolux.

**PLUMBING:** Fixtures by Washington-Eljer. Soil, waste and vent pipes—cast iron. Water supply—galvanized steel.

**HEATING:** Warm air, gas fired furnace, Pacific Gas Heating Co.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



### 38. NEW ORLEANS COTTAGE, JOHN BYERS, ARCHITECT; EDLA MUIR, ASSOCIATE

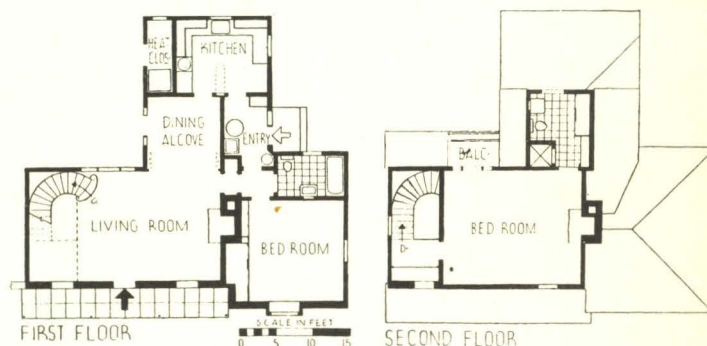


CALIFORNIA HOUSE AND GARDEN EXHIBITION

Mott Photos



LIVING ROOM



#### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—brick veneer, Simons Brick Co. sheathing, studs, grip lath and plaster. Floors—pine, oak finish.

**ROOF:** Covered with 5 in 2 in. Perfection wood shingles.

**SHEET METAL WORK:**—galvanized sheet iron.

**WINDOWS:** Sash—double hung wood. Glass—double strength, quality A.

**FLOOR COVERINGS:** Living room—carpet. Kitchen and bath—linoleum.

**WALL COVERINGS:** Rooms—wallpaper. Kitchen—Sanitas. Bathrooms—structural glass wainscot, Sani-Rox, McClarin & Taylor.

**PAINTING:** Floors—1 coat filler, 2 coats shellac and 1 coat wax. Trim and sash—4 coats paint and enamel.

**ELECTRICAL INSTALLATION:** Steel tube, toggle switches.

**KITCHEN EQUIPMENT:** Stove—gas, Tappan Stove Co. Refrigerator—gas, Electrolux.

**PLUMBING FIXTURES:** All by Washington-Eljer.

**PLUMBING:** Soil, waste and vent pipes—cast iron. Water supply—steel pipe.

**HEATING:** Gas blower heater, Pacific Gas Heating Co.

As in the French cottage, the New Orleans touches are fairly inconspicuous, although those that remain are by no means without charm. The intimate scale of the exterior is pleasing and the interior is distinguished by a graceful stair, located in an unusual position. The plan is well organized, with good separation of its various parts.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



### 39. THE "BETTER-HOME" COTTAGE



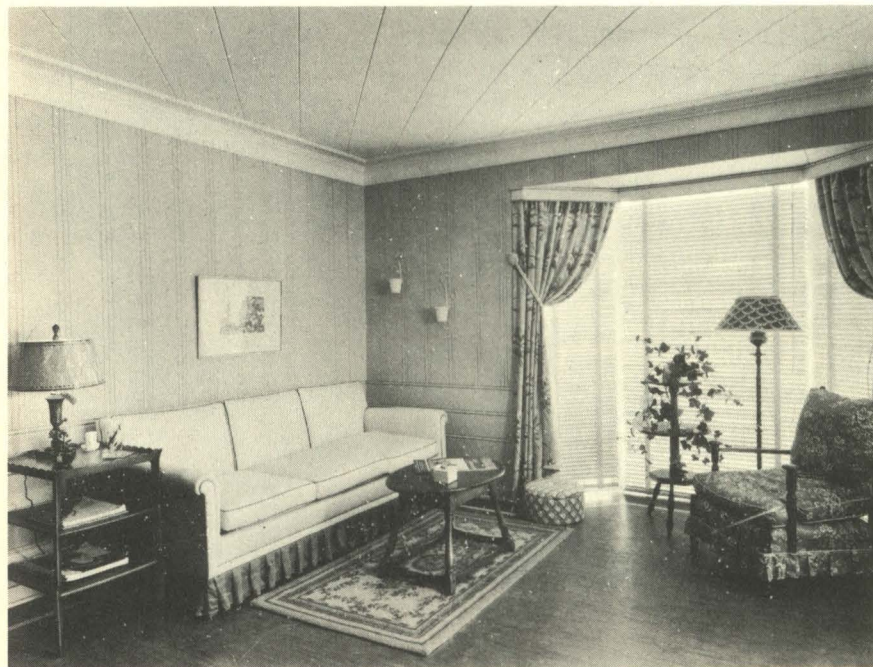
CALIFORNIA HOUSE AND GARDEN EXHIBITION

*Mott Photos*

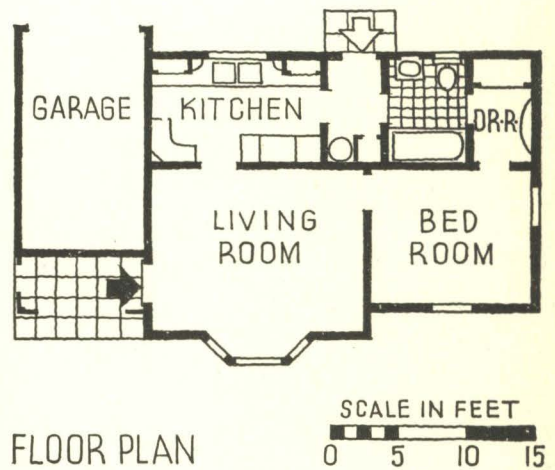
Where exteriors are treated in a very simple manner, success depends on proportion and the location of structural elements. This house gains the effect of unity through the use of metal siding and metal roofing. Special considerations of exhibition circulation probably influenced the plan. A more convenient arrangement would shift the entry to the left of the kitchen giving direct access to the garage. More storage space would have resulted through better planning of the dressing room.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





LIVING ROOM



KITCHEN

## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—steel frame with metal siding over Celotex, inside, decorative Celotex paneling. Interior partitions—Lea stud system covered with decorative Celotex. Floor construction—concrete of Lea channel Joists, Celotex ceiling, W. C. Lea-Better Homes Foundation Co.

**ROOF:** Construction—Lea system steel frame covered with Thermax and metal roofing.

**SHEET METAL WORK:** Armco and Toncan galvanized iron.

**WINDOWS:** Steel casements, W. C. Lea-Better Homes Foundation Co. Glass—double thick, quality A, Libbey-Owens-Ford Glass Co. Roller screens.

**FLOOR COVERINGS:** All rooms covered with rubber.

**WOODWORK:** Shelving, cabinets and doors—white pine. Garage doors—sugar pine, overhead type, Holmes Mfg. Co.

**HARDWARE:** Interior and exterior—polished brass, Yale & Towne Mfg. Co.

**PAINTING:** All paint by W. P. Fuller & Co.

**ELECTRICAL INSTALLATION:** Wiring system—conduit. Switches—toggle type.

**KITCHEN EQUIPMENT:** Stove—gas, American Stove Co. Refrigerator—gas, Electrolux.

**BATHROOM EQUIPMENT:** All fixtures by Washington-Eljer.

**PLUMBING:** Soil pipes—cast iron. Waste, vent and water supply pipes—galvanized wrought iron.

**HEATING AND AIR CONDITIONING:** Wat-Air Corporation.

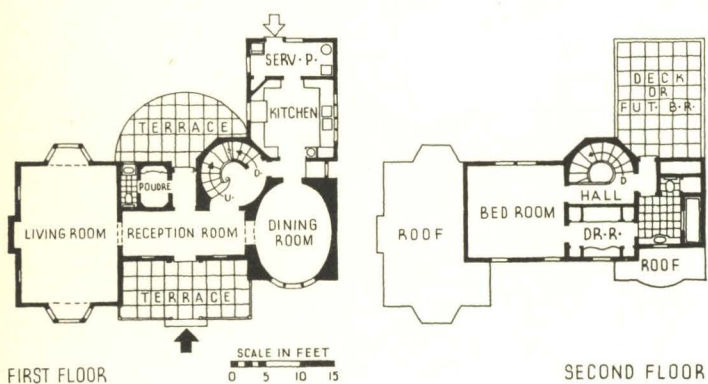


## 40. FRENCH COTTAGE, PAUL R. WILLIAMS, ARCHITECT



CALIFORNIA HOUSE AND GARDEN EXHIBITION

Mott



The effect of the California climate on imported styles is well demonstrated by the French cottage, "French" only in its vaguely reminiscent roof and the potted trees by the door. The plan, with its circular stair, elliptical dining room, and splayed kitchen is perhaps more characteristic of chateau than of cottage architecture.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls and partitions—Emsco system steel frame, Sisalkraft building paper. Inside and outside finish—copper bearing metal lath and plaster, Emsco Derrick & Equipment Co. Floor construction—Junior I-beams. Ceiling—plaster on metal lath, Truscon Steel Co.

**ROOF:** Construction—Emsco system steel frame covered with wood sheathing and San Valle Tile Kilns' clay shingles. Deck covered with wood sheathing and El Rey composition walking deck, El Rey Roofing Co.

**SHEET METAL WORK:** Armco and Toncan galvanized iron.

**INSULATION:** Outside walls—Raylite insulating stucco sand, Raylite Aggregates, Inc. Weatherstripping—Securitee bronze weatherstripping.

**WINDOWS:** Sash—double hung and casement. Glass—double thick, quality A, Libbey-Owens-Ford Glass Co. Screens—roller screens, Disappearing Roller Screen Co.

**STAIRS:** Main stair—Emsco system steel stringers, oak risers and treads.

**FLOORS:** Living room and bedrooms—oak. Kitchen—Douglas fir covered with linoleum. Bath—clay tile.

**WALL COVERINGS:** Bedrooms—decorative wall paper. Bathrooms—clay tile.

**WOODWORK:** Trim, cabinets and doors—white pine. **HARDWARE:** Interior and exterior—aged brass, Yale & Towne Mfg. Co.

**PAINTING:** All paint by W. P. Fuller & Co.

**ELECTRICAL SYSTEM:** Wiring system: conduit. Switches—Arrow toggle.

**KITCHEN EQUIPMENT:** Stove—American Stove Co. Refrigerator—gas, Electrolux.

**PLUMBING FIXTURES:** All by Washington-Eljer.

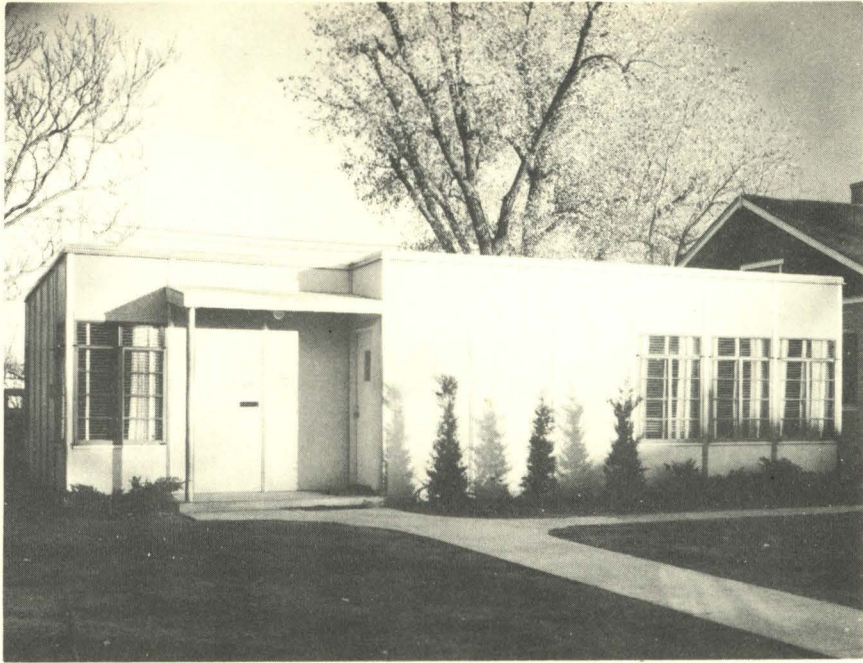
**PLUMBING:** Soil pipes—cast iron. Water supply—galvanized wrought iron.

**HEATING AND AIR CONDITIONING:** Forced air, gas fired, Payne Furnace & Supply Co. Air cooling and ventilating, H. F. Haldeman, Inc.

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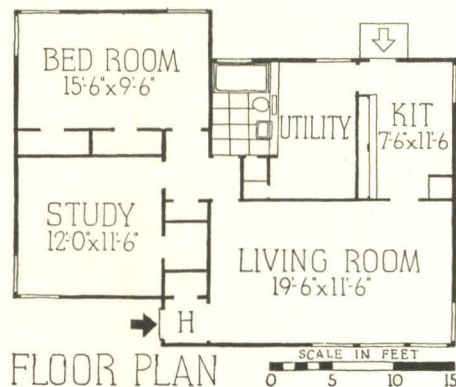


## 41. HOUSE FOR MRS. BERTHA K. HAMMOND, WICHITA, KANSAS



MELTON P. JOHNS, ARCHITECT

**PROBLEM:** To provide a fireproof, air conditioned house in the \$5,000 class for a widow living alone. Adequate guest accommodations were a requirement.



A solution here was found in a prefabricated house made by American Houses, Inc. The desired guest facilities are obtained by using the study and living room for sleeping. A ground floor utility room replaces the basement.

Cost: about \$5,000.



### CONSTRUCTION OUTLINE

#### STRUCTURE

Exterior walls—steel joists, studs, Pyrestos insulated wall panels, American Houses, Inc. Interior partitions—solid reinforced gypsum planks, American Cyanamid & Chemical Corp. (Structural Gypsum Div.).

#### ROOF

Built-up felt and asphalt covered with flint gravel top over gypsum planks.

#### SHEET METAL WORK

Aluminum cornice.

#### INSULATION

Floors and roof—mineral wool, U. S. Gypsum Co.

#### WINDOWS

Steel casement, weatherstripping by American Houses, Inc.

#### FLOORS

Main rooms—reinforced gypsum planks covered with Broadfelt carpeting, Clinton Carpet Co. Kitchen and bath—inlaid linoleum, Armstrong Cork Products Co.

#### KITCHEN EQUIPMENT

Sink and cabinets—Crane Co. Stove—Hot Point, Edison General Electric Appliance Corp.

#### PLUMBING

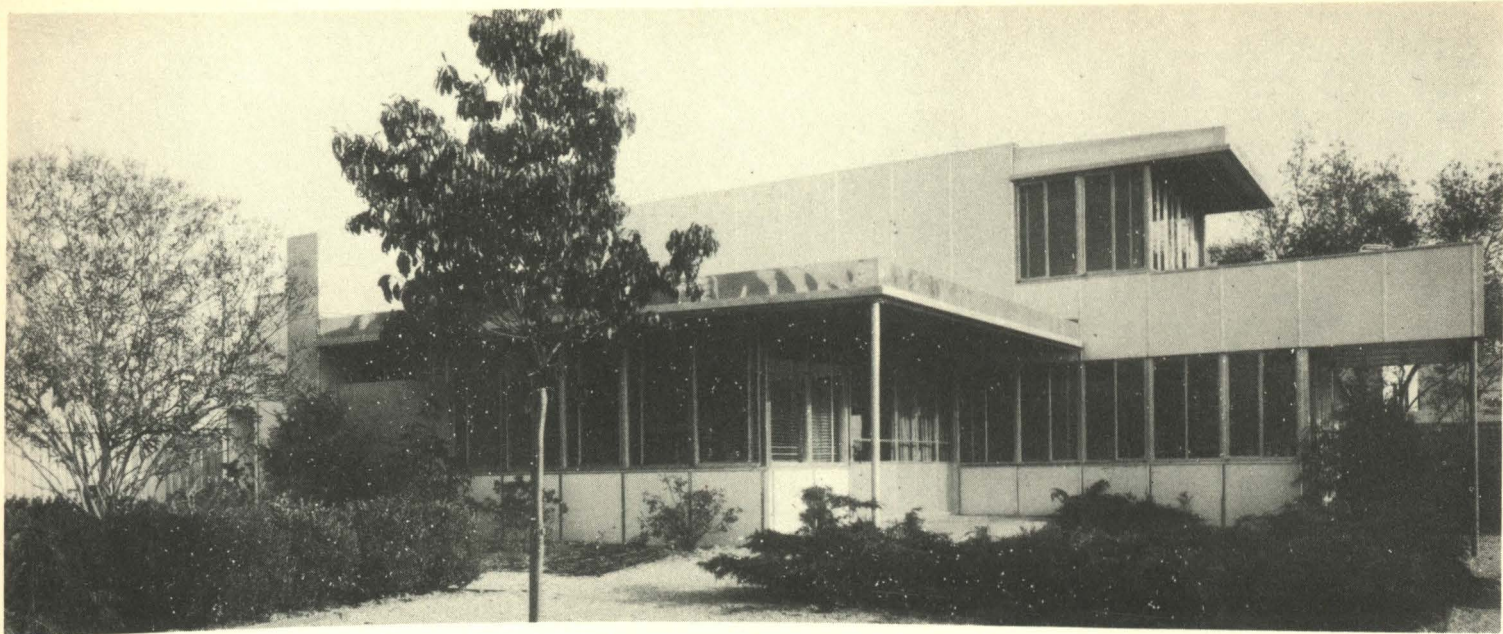
All fixtures by Standard Sanitary Manufacturing Co. Arcode built-in sections by Accessories Co. Pipes—copper.

#### HEATING AND AIR CONDITIONING

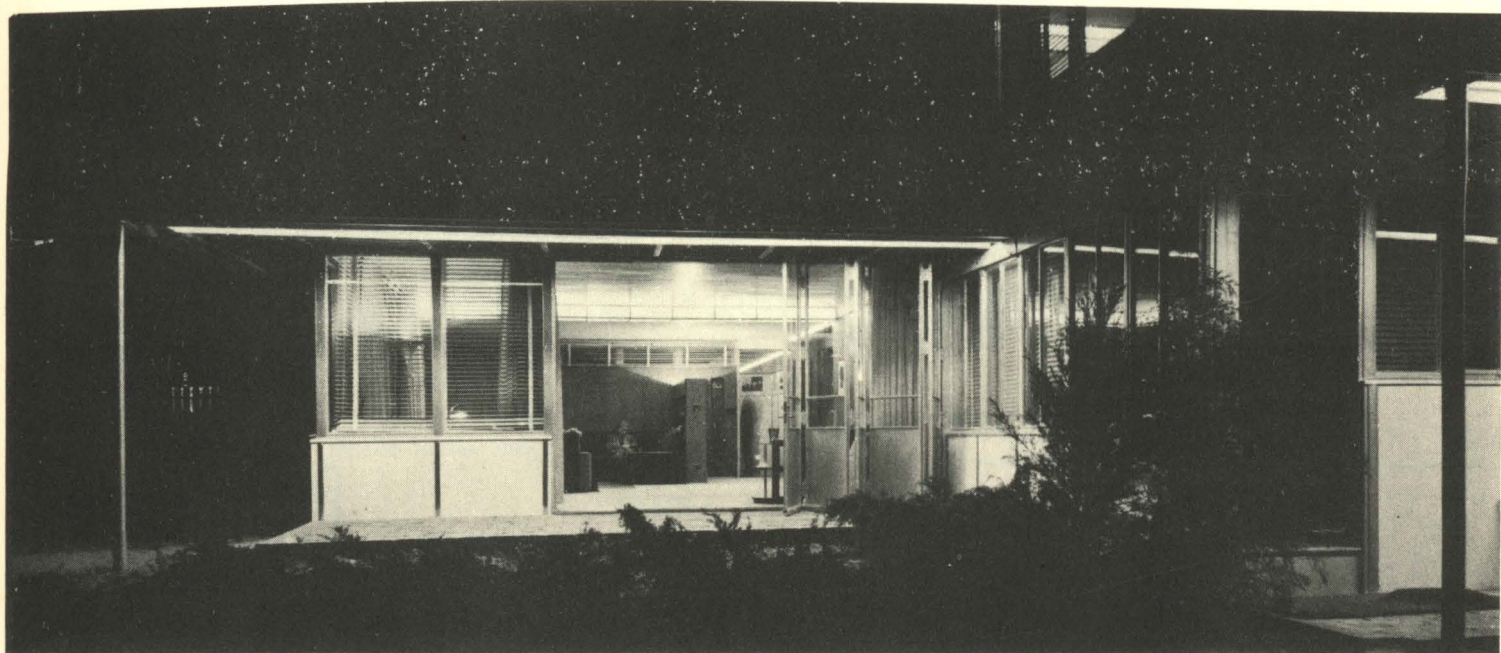
Direct gas fired heater, Bryant Heater Co., forced air circulation, Modine cooling plant with private wells beneath house, Modine Manufacturing Co. Thermostat and humidistat—Minneapolis-Honeywell Regulator Co.



## 42. PLYWOOD HOUSE



*Luckhaus Photos*



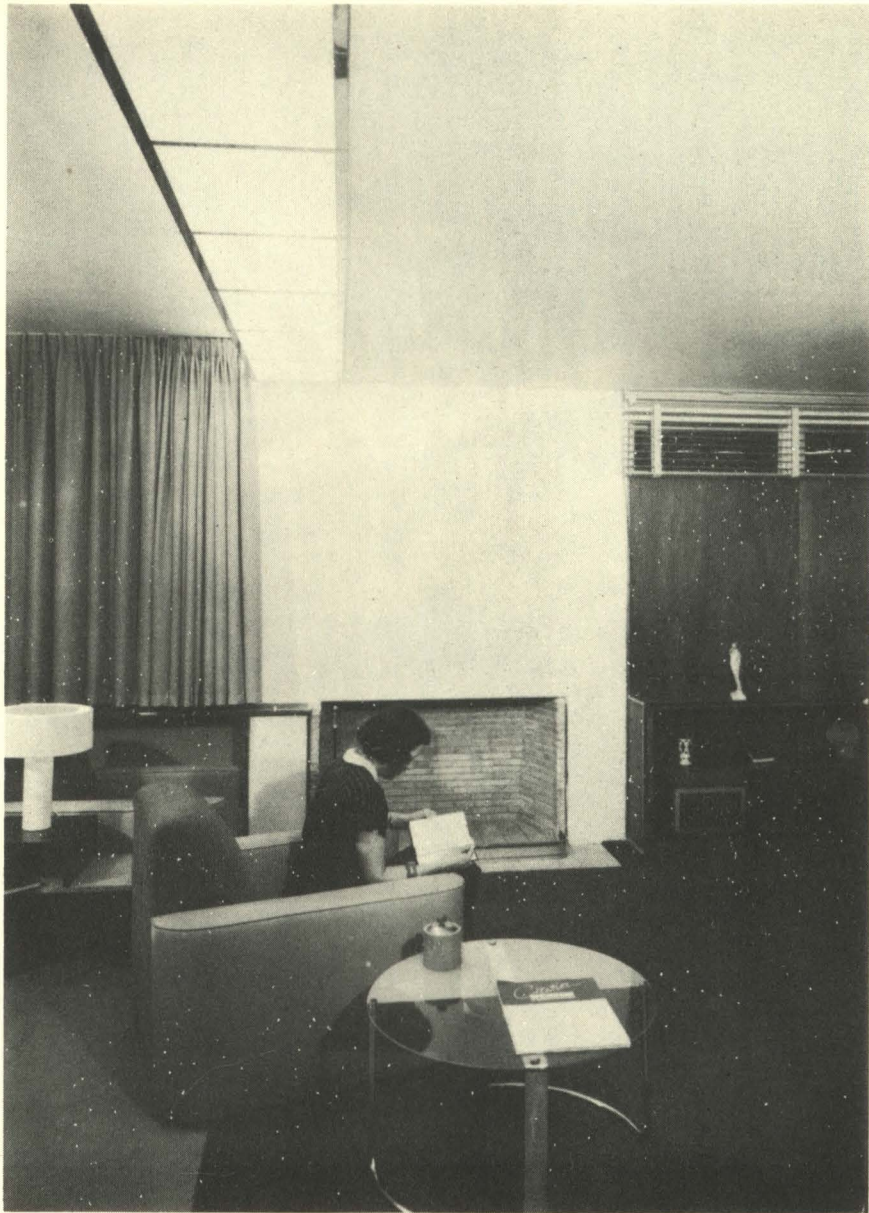
CALIFORNIA HOUSE AND GARDEN EXHIBITION

In the past three years the office of Richard Neutra has built almost twenty houses costing under \$5,000. All are characterized by a generous use of windows, an open plan, and a skeleton chassis of standard members. The exhibition house shown here is a reduced version of the house which won second prize in the General Electric Small House Competition last year and is finished inside and out with plywood. The plan is notable for the relatively large area allotted to the living room, and the luxurious quality of the interiors due to this spaciousness. The unusual soffit lighting in the overhangs is an innovation introduced by the architect a number of years ago.

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# RICHARD J. NEUTRA, ARCHITECT



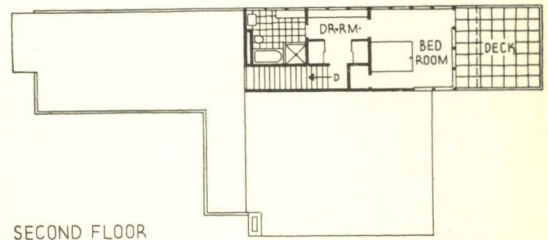
LIVING ROOM

Shulman

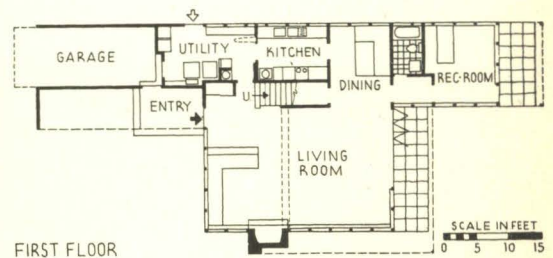


KITCHEN

Mott



SECOND FLOOR



FIRST FLOOR

## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—timber chassis covered with Thermax and faced with weatherproof superplywood outside and  $\frac{3}{4}$  in. mahogany plywood inside. Interior partitions—plywood on wooden studs. Floor construction—wood joists and T. & G. floor. **ROOF:** Wood joists, Thermax insulated, covered with El Rey compo roofing with aluminum coated, artificially oxidized granulated iron top sheet, El Rey Products Co. Decks—covered with canvas.

**SHEET METAL WORK:** Aluminum for eave aprons and aluminum covered molding protecting plywood joists, Aluminum Co. of America.

**WINDOWS:** Swing steel sash, Druwhit Metal Products Co. Glass—double strength, quality A, American Window Glass Co. copper roller screens.

**STAIRS:** Wood covered with linoleum, Armstrong Cork Products Co., aluminum nosings.

**FLOORS:** Living room and bedrooms—carpet. Halls—linoleum. Kitchen—vitrified tile. Bathrooms—linoleum, Armstrong Cork Products Co.

**WALL COVERINGS:** Bedrooms—Sanitas, Standard Textile Mfg. Co. Kitchen—tile. Bathrooms—downstairs, linoleum; upstairs, Sani-Rox structural glass, McClarin & Taylor.

**TRIM:** snap-on stainless steel, Superior Metal Trim Corp.

**HARDWARE:** Locks—chromium plated, Schlage Lock Co.

**PAINTING:** Interior—woodwork stained and waxed. Exterior—walls, roof and sash, 3 coats Alcoa Albron, Aluminum Company of America.

**LIGHTING FIXTURES:** Lumiline tubes in light trough and recess ceiling lights. Exterior overhang—Soffit lighting.

**KITCHEN EQUIPMENT:**—all General Electric.

**BATHROOM EQUIPMENT:**—all Washington Eljer. **HEATING, Air Conditioning and Hot Water Heater:**—all General Electric.



### 43. HOUSE FOR W. E. OLIVER, LOS ANGELES, CALIFORNIA



WEST ELEVATION

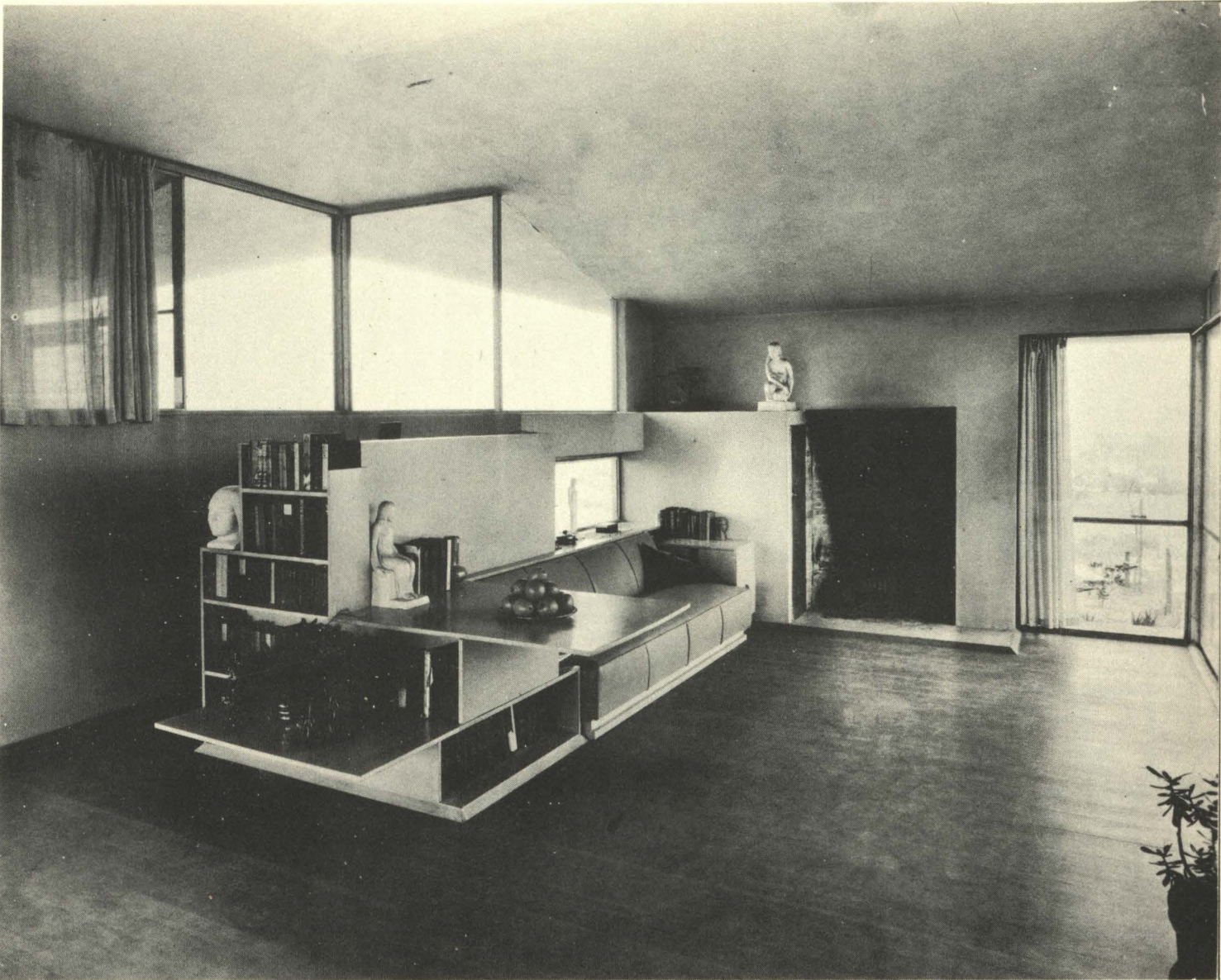
Axel Fog Photos

That the modern house need not be a stereotyped affair can well be demonstrated by many of Mr. Schindler's West Coast residences. The Oliver house, one of the most recent of his works, is interesting not only as a highly individual solution, but because of a number of factors which influenced the design. The deed to the property, for example, called for a sloping roof. This requirement was fulfilled, but in a way hardly anticipated by whoever originally made this stipulation. The lot is a rather small one, and the house was placed at an angle to the lot lines to preserve the four important views. To save the crest of the hill for a patio, the house was built on the slope below it, with the garage on the lowest level. The use of heavy overhangs is interesting: not only do they protect the large windows from the sun, but they completely eliminate any boxlike appearance, at the same time accentuating the domestic scale of the composition. This same character is echoed in the interior, particularly in the built-in furniture consisting of projecting slabs of wood. Windows reaching to the ceiling add to the apparent height of the rooms. Cost: \$5,000.

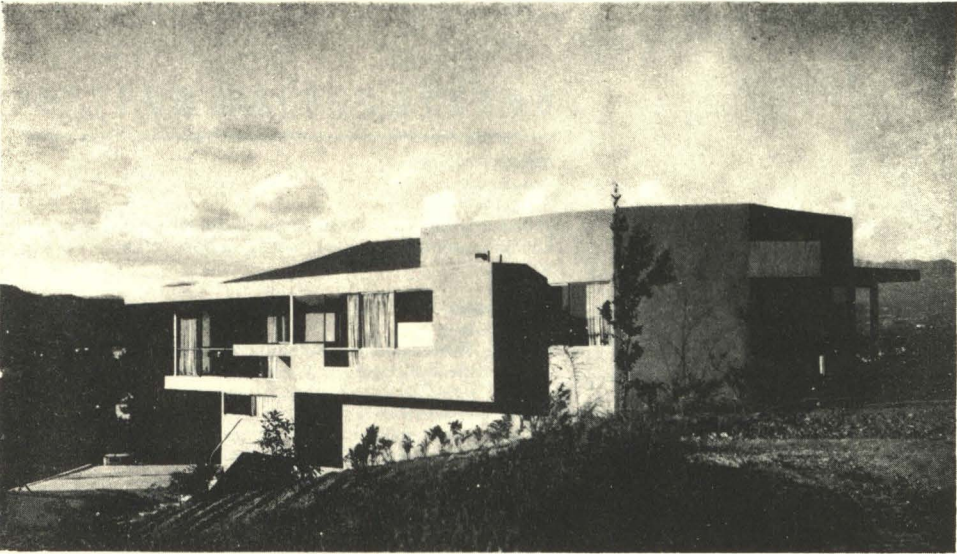
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R. M. SCHINDLER, ARCHITECT



LIVING ROOM



VIEW FROM TOP OF RIDGE

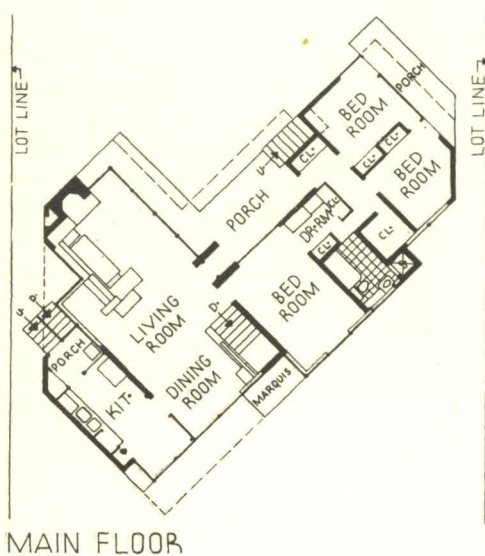
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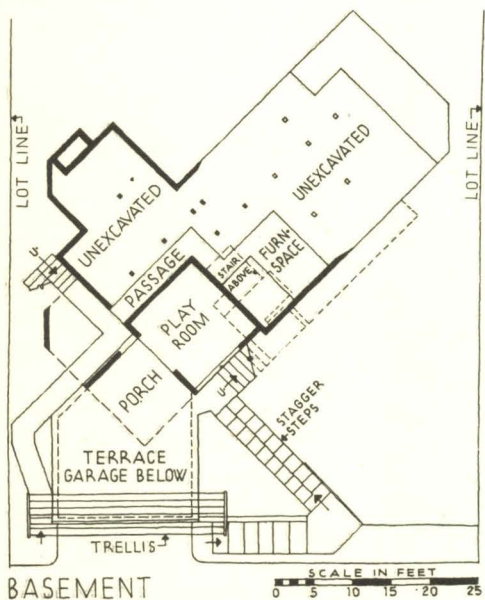
## 44. HOUSE FOR W. E. OLIVER



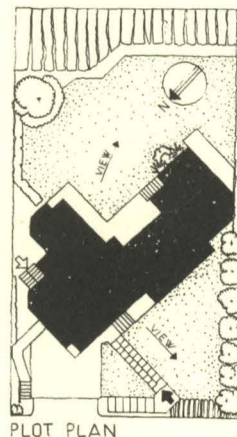
EAST ELEVATION



MAIN FLOOR



BASEMENT



PLOT PLAN

### PLAN

An open plan, with glass above door height in all partitions to increase the feeling of spaciousness. Remarkably compact in spite of apparent size. Playroom uses garage roof as a terrace.

## CONSTRUCTION OUTLINE

### FOUNDATION

Concrete.

### STRUCTURE

Wood frame with Wolmanized underpinning. Exterior surface—stucco on wire mesh. Inside—plaster on grip lath.

### ROOF

Composition roofing, slate surfaced.

### WINDOWS

Frames and sash—metal, sash top-hung sliding. Doors—wood. Glass— $\frac{3}{16}$  in. thick window glass. Screens—copper mesh in sliding metal frames.

### INTERIOR WOODWORK

Floors—pine covered with carpet or linoleum. Trim, five ply pine veneer, stained and waxed.

### ELECTRICAL INSTALLATION

Wiring system—conduit, indirect fixtures.

### PLUMBING

Pipes—steel. Fixtures—Washington Iron Works.

### HEATING

Gas furnace.

### CHIMNEY

Brick.

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45. HOUSE IN INDIANAPOLIS, INDIANA

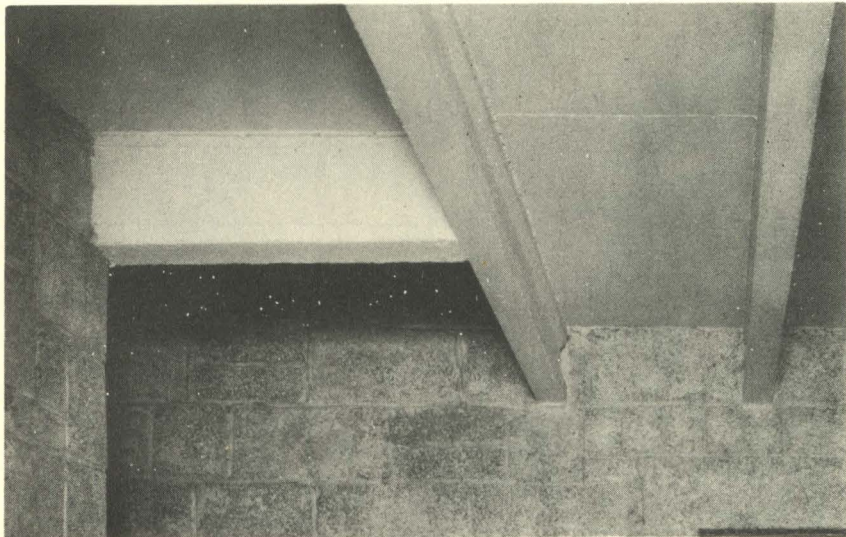
R. W. MILLER, ARCHITECT



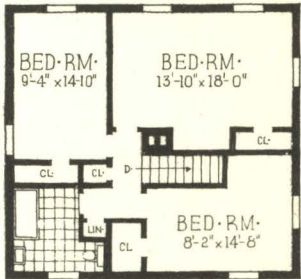
Courtesy, Portland Cement Assn.



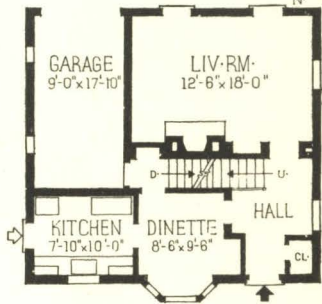
KITCHEN



INTERIOR WALL AND CEILING DETAIL



SECOND FLOOR



FIRST FLOOR

CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—cinder block with re-enforcing rods every second course. Exterior finish—Masonoc paint, Arco Co. Interior finish: First floor—Wallhide, directly on block, Pittsburgh Plate Glass Co. Second floor—plaster and wallpaper. Floor construction—reinforced concrete with precast concrete joists, left exposed, Cinder Block and Material Co. Second floor ceiling—plaster on Ecod fabric and wood joists, Reynolds Metals Co., Inc.

**ROOF:** Asphalt shingles, Certain-teed Products Corp.

**WINDOWS:** Sash—steel casements and screens, Fenestra, Detroit Steel Products Corp.

**FLOOR COVERINGS:** Living room, bedrooms and kitchen—linoleum, Armstrong Cork Products Co. Halls—Tile-tex, The Tile-Tex Co. Bathrooms—tile, U. S. Encaustic Tile Co.

**PLUMBING:** All fixtures and piping by Crane Co.

**HEATING:** Warm air, Fox Furnace Co.

Cinder block gives a pleasant texture to both the exterior and interior of this house of French type. The compact plan and simple construction showed their merits in the budget. Precast concrete joists were left exposed, providing logical ornament for otherwise bare reinforced concrete ceiling slabs. The small “dinette” is adequate for family meals. The house is all of fireproof construction except for a wood-frame roof. Cubage: 18,000. Cost: \$5,000 at about 36 cents per cubic foot.

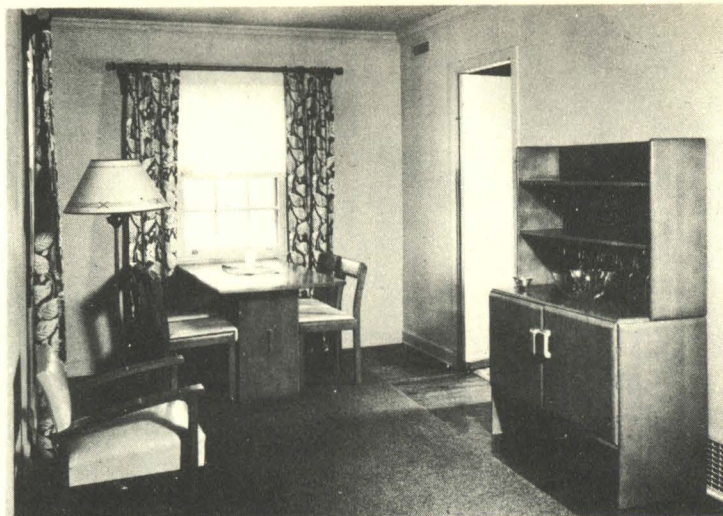
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## 46. HOUSE IN LAFAYETTE, IND. PURDUE HOUSING PROJECT

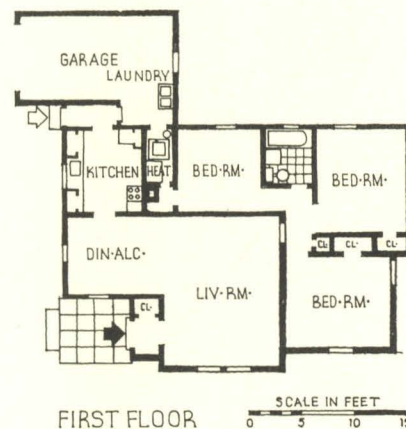
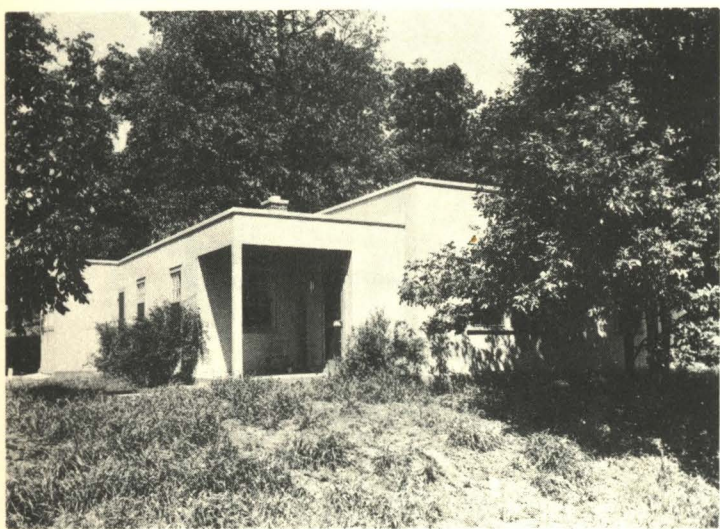


LIVING ROOM



DINING ALCOVE

*J. C. Allen & Son Photos*



INSULATED STEEL CONSTRUCTION CO.  
DESIGNERS AND BUILDERS

Steel has been used almost exclusively in the construction of this residence. The arrangement including the increased height of the living room area interrupts the exterior wall surfaces sufficiently to avoid the appearance of a "shoe box." The plan is unusually compact and economical in space arrangement, the three outstanding features being the elimination of waste space in the hall; the small space required for the heating equipment; and the additional use of the garage for laundry purposes. Cost: approximately \$5,000.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Walls—frameless steel sections, painted. Sections filled with insulating material. Walls and ceilings—plastic paint finish. Exterior trim—cypress.  
**ROOF:** Cellular steel construction, 1 in. rigid insulation board, standard type built up roofing, No. 26 gauge iron flashing.  
**WINDOWS:** Wood, double hung.  
**FLOORS:** Concrete, 1:2:4, troweled finish 1:2, on fill; 13/16 in. hardwood laid on 2 x 4 in. creosoted sleepers. Kitchen and bathroom—linoleum.  
**ELECTRICAL INSTALLATION:** BX cable.  
**PLUMBING:** Pipes—cast, galvanized and black iron. Water heater—30 gal. range boiler with thermostat. Fixtures—enameled iron.  
**HEATING:** Forced warm air, gas fired furnace, automatically regulated.

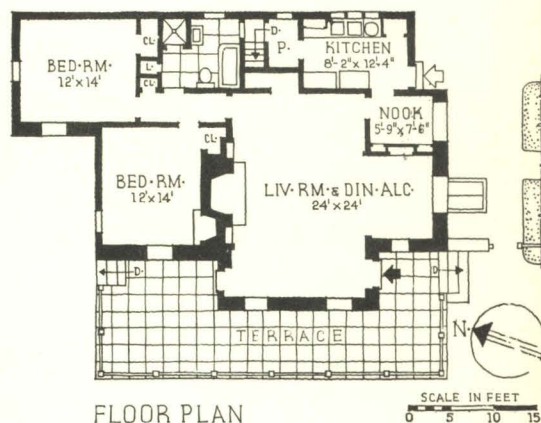
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## 47. HOUSE FOR WILLIAM ELLIOTT, GULF MILLS, PENNSYLVANIA



Ph. B. Wallace Photos



LIVING ROOM

J. LINERD CONARROE, ARCHITECT

The plan is ingeniously oriented to obtain east and south exposure for the living rooms, as well as a view of Gulph Creek, running about 50 ft. in front of the house. Painted masonry and clapboard walls are combined in an interesting manner. A masonry retaining wall surrounding the terrace provides an effective, if not economical, base for the house, and is given good scale by the contrasting lightness of a picket fence. Beams from a demolished barn and half-timbered walls are appropriate to the rugged informality of the interiors. In view of the excavation and filling required, the incorporation of the garage with the house might have been economically accomplished. Cubage: 21,735. Cost: approximately 24 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—stone, cement mortar.

#### STRUCTURE

Exterior walls—stone painted with Bondex, Reardon Co. Interior partitions—rock lath finished in textured plaster. Large old beams in living room section taken from a demolished barn. Attic floor—unfinished, provision made for two rooms and bath.

#### ROOF

Covered with Royal wood shingles.

#### SHEET METAL WORK

Flashing, gutter and leaders—16 oz. copper.

#### INSULATION

Outside walls and ceiling of second floor— $\frac{1}{2}$  in. Arborite, Atlantic Gypsum Products Co. Weatherstripping—zinc and spring.

#### WINDOWS

Sash—double hung wood. Glass—double thick, quality A. Screens—full length wood frames with copper mesh.

#### FLOORS

Living rooms—random width white oak, pegged. Bedrooms and halls— $2\frac{1}{4}$  in. face, oak,  $\frac{3}{8}$  in. thick. Kitchen—pine, covered with linoleum. Bathrooms—tile.

#### WOODWORK

Living room and dining alcove—knotty pine paneling. Interior doors—pine, special design. Garage doors—overhead type.

#### PAINTING

Interior: Floors—stained and waxed. Trim and sash—stained in living room, painted in remainder of house.

#### ELECTRICAL INSTALLATION

Wiring system—BX.

#### KITCHEN EQUIPMENT

Stove and refrigerator—electric, General Electric Co. Sink—built-in dishwasher and washing machine, The Conover Co.

#### PLUMBING

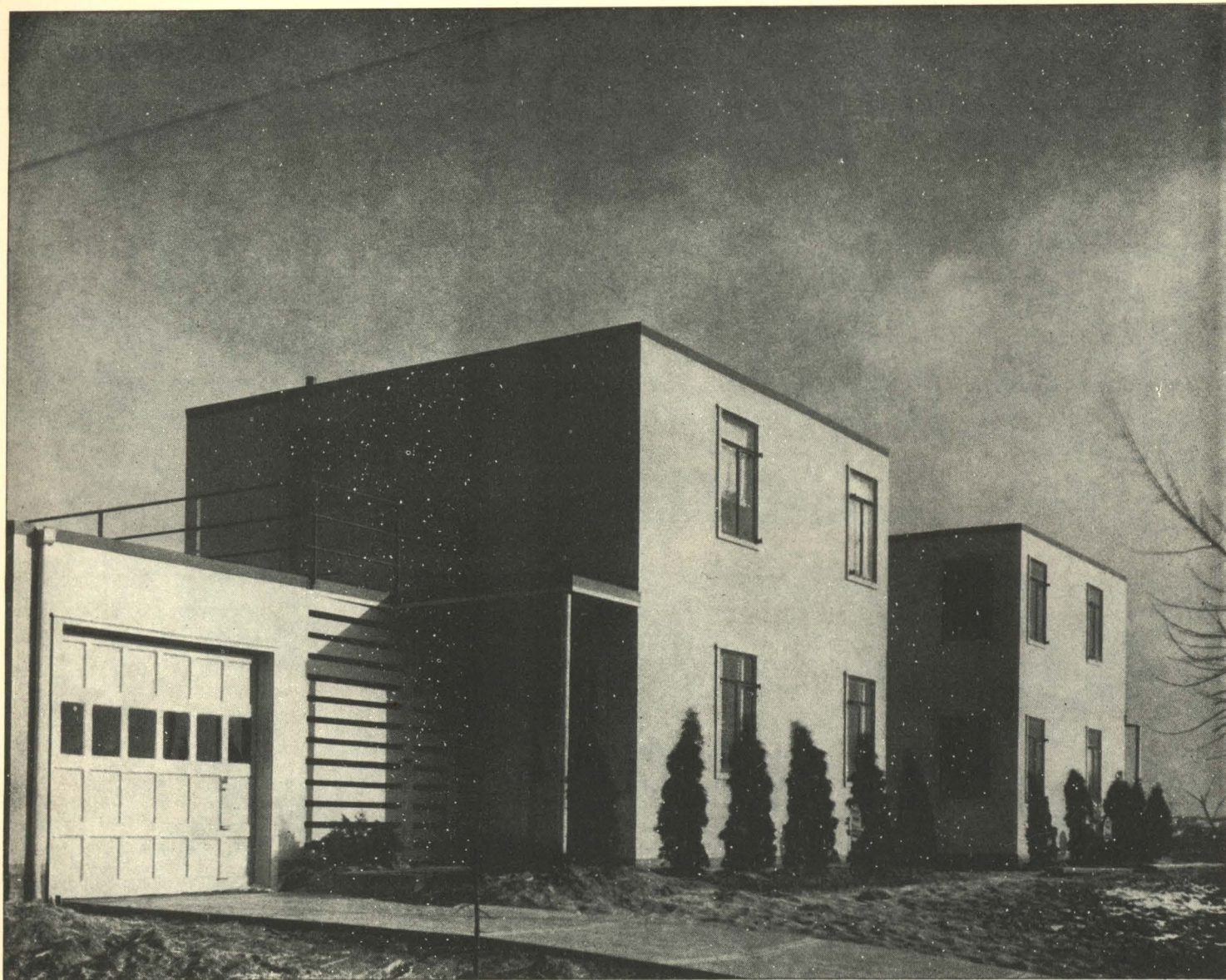
All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply pipes—copper.

#### HEATING

Hot water system, oil fired boiler, thermostat controlled. Radiators—convector type. Hot water heater—electric.



## 48. HOUSE GROUP IN CLEVELAND, OHIO



Carl F. Waite

These houses, the first of a contemplated group, are built of frameless steel panels, a method of construction developed in collaboration with Mills G. Clark, who has studied the possibilities of prefabrication in steel for a number of years.

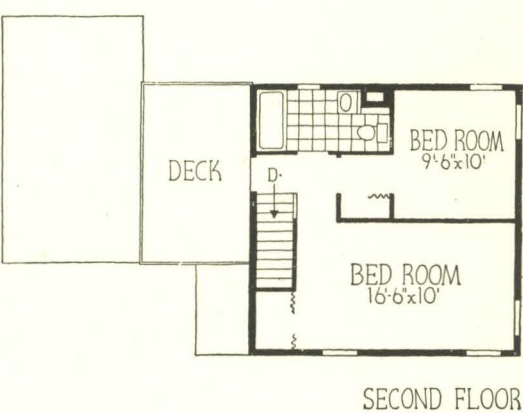
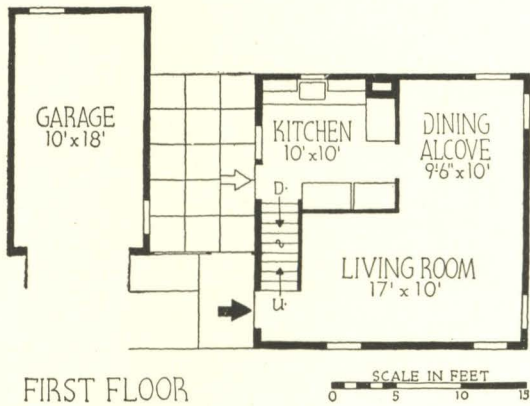
*The architects comment:* "The houses permitted study in field operation and erection practices. The method of assembly presents continuous smooth steel surfaces on both the exterior and interior walls without visible screws or butted edges.

"The solution of the basic stock plan permits the use of prefabricated houses, individually or in groups, with complete flexibility for orientation. Group arrangements are possible without apparent repetition.

"The accompanying plot plan shows the block on which the final test houses have been erected. The other houses on the plot are the new stock units which will be placed as shown."

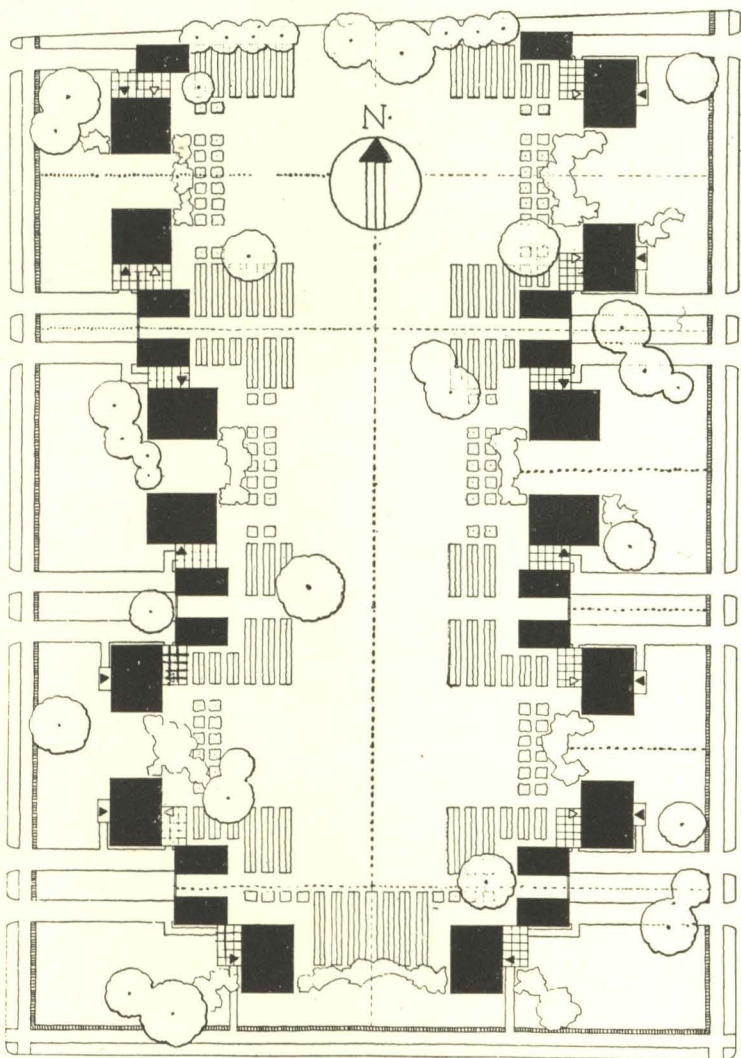
Cost per unit: approximately \$5,000.





### CONSTRUCTION OUTLINE

- FOUNDATION**  
Walls—Haydite concrete block, continuous. Water-proofing—waterproof cement and asphalt.
- STRUCTURE**  
Steel sheets, 18 gauge, bent into units which form wall surface and integral studs. Interior and exterior units identically spaced apart without metallic contact through panel. Finished wall 4 in. flat steel surface on both sides.
- ROOF**  
Same as walls but covered with 4-ply Barber asphalt roofing, Barber Asphalt Cement Co. Deck construction—covered with 4-ply Barber Asphalt Co.'s deck surfacing.
- CHIMNEY**  
Lining—tile.
- SHEET METAL WORK**  
Flashing and gutters—galvanized iron.
- INSULATION**  
Outside walls and roof—4 in. rock wool, General Insulating & Manufacturing Co. Weatherstripping—copper and bronze thresholds.
- WINDOWS**  
Casement with wood frame, Vento Steel Sash Co. Glass—Pennvernion, Pittsburgh Plate Glass Co. Screens—copper in Vento hinged metal frame, Vento Steel Sash Co.
- STAIRS**  
All 14 gauge steel.
- FLOORS**  
All rooms—plywood. Kitchen and bathrooms—covered with linoleum, Armstrong Cork Products Co.
- WALL COVERINGS**  
Living room, bedrooms and halls—wallpaper.
- WOODWORK**  
Trim, shelving and cabinets—white pine. Garage doors—overhead type, Crawford Door Co.
- HARDWARE**  
Interior and exterior—P. & F. Corbin.
- PAINTING**  
Exterior walls—Sherwin-Williams Co.'s shop-baked prime and cement paint.
- ELECTRICAL INSTALLATION**  
Wiring system—flexible conduit. Switches—General Electric Co. Fixtures—semi-direct.
- KITCHEN EQUIPMENT**  
Stove and refrigerator—Sears, Roebuck & Co. Sink, dishwasher and cabinet—complete unit, The Kitchen Maid Corp.
- LAUNDRY EQUIPMENT**  
Sink—Kohler Co.
- BATHROOM EQUIPMENT**  
Fixtures by Briggs Manufacturing Co.
- PLUMBING**  
Pipes: Soil and waste—cast iron. Water supply—brass, Mueller Co.
- HEATING AND AIR CONDITIONING**  
Warm air, gas furnace, Rudy Furnace Co. Air conditioning—humidified.

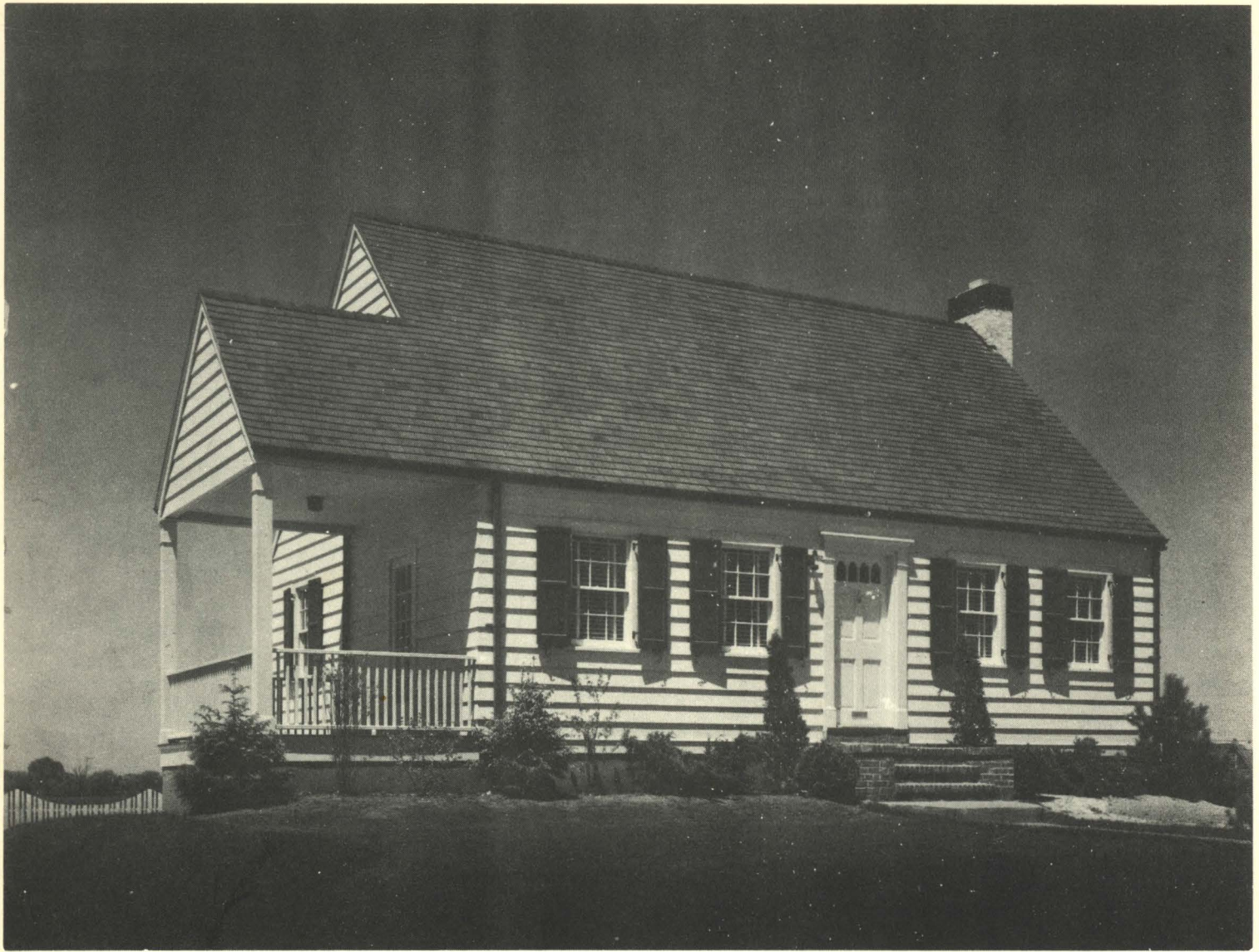


BLOCK PLAN

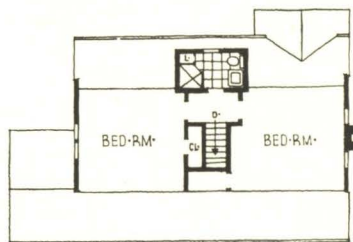
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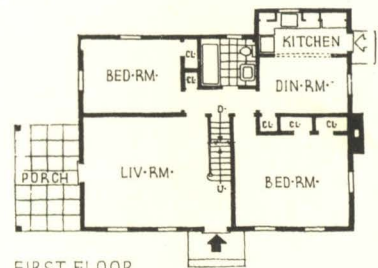
## 49-50. HOUSES IN HEWLETT POINT PARK, LONG ISLAND, N. Y.



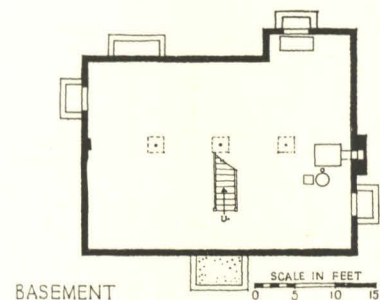
Charles E. Knell Photos



SECOND FLOOR



FIRST FLOOR

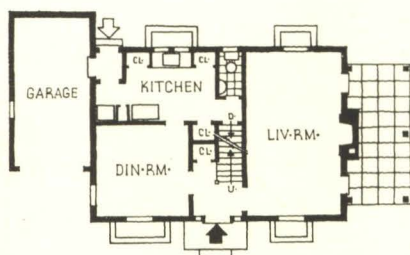


BASEMENT

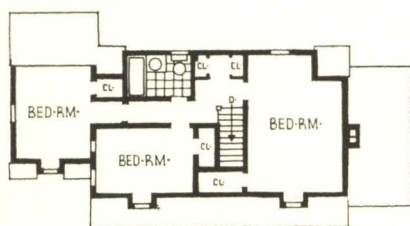
These two houses, having basically similar plans, are selected from various architect-designed homes, erected by a large realty company, follow similar general schemes, and are so arranged that expansion is available without detracting from the original charm. The Cape Cod and Dutch Colonial styles are prevalent, since they are quite economical and require for their only ornamentation a refined handling of entrance and cornice motives. The plan shows no entrance hall; however this is compensated by the proximity of the stair case, and ample closet space. The kitchen is ideally located and can be cross ventilated. There may be justifiable criticism in the tight circulation between dining and living rooms, which is further complicated by the surrounding chamber and baths area. Cost: \$5,200. Cubage: 24,200 at 22 cents.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

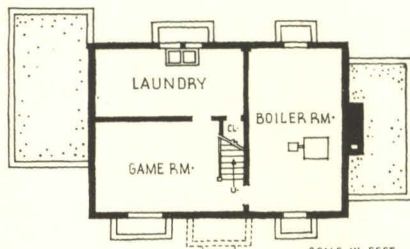




FIRST FLOOR



SECOND FLOOR



BASEMENT

SCALE IN FEET  
0 5 10 15

## CONSTRUCTION OUTLINE

**STRUCTURE:**  $\frac{7}{8}$  in. beveled siding, waterproof paper,  $\frac{7}{8}$  in. sheathing, 2 x 4 in. wood studs, wood lath and plaster.

**ROOF:** Wood shingles and slate.

**SHEET METAL WORK:** Flashing, gutters and leaders—copper.

**WINDOWS:** Sash— $1\frac{3}{8}$  in. stock, double hung, wood, weatherstripped. Glass—double strength.

**FLOORS:** Living room, bedrooms and halls— $\frac{7}{8}$  in. oak. Kitchen—linoleum. Bathrooms—tile.

**WALL COVERINGS:** All rooms—wallpaper, Richard E. Thibaut, Inc. Bathrooms—tile.

**WOODWORK:** Trim, cabinets and doors—white pine.

**PAINTING:** Interior—2 coats lead and oil, 1 coat enamel. Floors—shellacked. Exterior—3 coats lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—BX flexible cable. Switches—tumbler, Harvey Hubbell, Inc. **KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—electric.

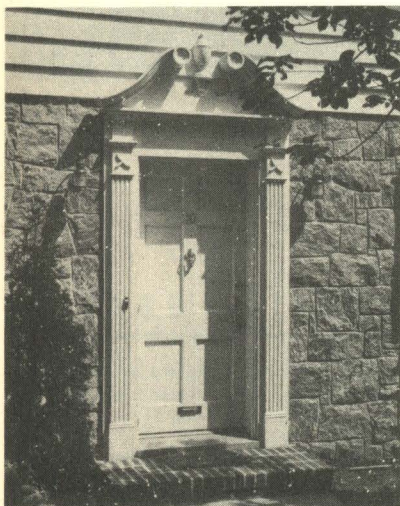
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipe—extra heavy cast iron. Water supply—brass.

**HEATING:** Steam. Boiler—oil fired; radiators—American Radiator Co. Valves—Jenkins Bros., Inc.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



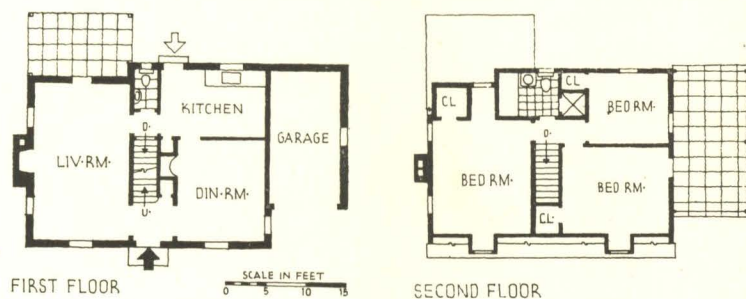
## 51. HOUSE IN WEST HEMPSTEAD, LONG ISLAND, N. Y.



*Gustav Anderson Photos*

In comparatively few instances is the combined use of ashlar and frame construction successfully handled: this example is outstanding in this respect, and in the preservation of the intimate scale mandatory in the architecture of the small house. The front entrance has been handled with a refinement which bespeaks the knowledge of its designer in molding silhouettes. This house is amply equipped with baths and adequate closet space while the treatment of the central portions of the plan allows for additional storage and entrance hall facilities. Cost: \$5,500. Cubage: 18,289 at 29½ cents.

M. R. JOHNKE, ARCHITECT, W. F. McCULLOCH, ASSOCIATE



### CONSTRUCTION OUTLINE

**STRUCTURE:** Frame with stone veneer on front. Brick veneer on sides and rear. Second story—Colonial siding, 8 in. to weather.

**ROOF:** Sheathing, felt and slate.

**SHEET METAL WORK:** 16 oz. copper.

**INSULATION:** Second floor ceiling—Celotex.

**WINDOWS:** White pine stock, double hung. Glass—single strength, Pennvernon, Pittsburgh Plate Glass Co. Screens—copper mesh.

**FLOORS:** Living room, bedrooms and halls—red oak. Kitchen—linoleum. Bathrooms—tile.

**WOODWORK:** Trim and doors—white pine.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle type.

**PLUMBING:** All fixtures by Kohler Co. Soil and vent pipes—cast iron and galvanized iron. Water supply—copper tubing, Chase Brass & Copper Co.

**HEATING:** One pipe steam. Boiler—oil fired.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



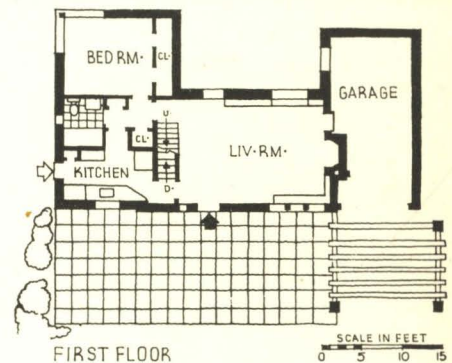
## 52. HOUSE FOR JOHN LA GATTA, PORT WASHINGTON, LONG ISLAND, N. Y.



Murray M. Peters Photos

THEODORE WHITEHEAD DAVIS, ARCHITECT

This house boasts a great deal of charm and personality. The stiffness of continuous straight lines has been eliminated by using a wavy shingle pattern and spill joints between brick courses. The rather whimsical dormer directly above the front entrance is a matter of personal taste, and the plan with its one bedroom and absence of dining room amplifies the fact that this is a residence especially designed for the owner. Cost: \$5,500. Cubage: 18,750 at 29 cents.



LIVING ROOM

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

### CONSTRUCTION OUTLINE

**STRUCTURE:** Brick veneer, air space, studding and sheathing. Interior finish— $\frac{3}{8}$  in. plywood and sheet rock.

**SHEET METAL WORK:** Flashing—14 oz. sheet copper.

**INSULATION:** Roof— $\frac{1}{2}$  in. balsam wool.

**WINDOWS:** Fenestra steel casement with screens.

**FLOORS:** All rooms red oak strips; kitchen and bath—linoleum covered.

**WALL COVERINGS:** All rooms are wallpapered, except kitchen and bath which are painted.

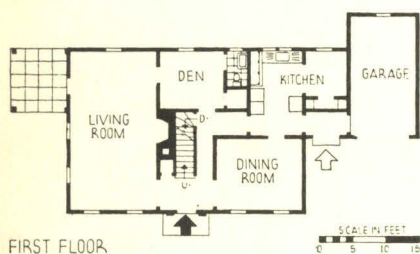
**PAINTING:** Exterior: Walls—whitewash on brick. Roof—shingles, 1 coat unrefined creosote, 1 coat red barn paint.

**ELECTRIC INSTALLATION:** Wiring system—3 wire BX cable. Switches—tumbler.

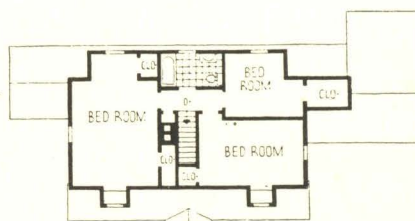
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—cast iron. Water supply pipe—brass.

**HEATING:** Warm air. Boiler—gas fired, The Bryant Heater Co. Hot water heater—Ruud Co.





FIRST FLOOR



SECOND FLOOR

There is little doubt that the Colonial house appears to best advantage in the less densely populated regions of New England. Ample building sites and a life free from the complexities of city living have combined to produce houses which differ in few respects from their prototypes. The lack of contrast between the house and its white surroundings brings up the question of color, for which there is excellent precedent; the early houses, painted green, brown, red, or weathered gray, offer a solution which might be more widely used today. The example here, a simple rectangular form with two projecting wings, is pleasant in general appearance and convenient in arrangement. Cost: \$5,550. Cubage: 27,000 at about 25 cents.

## CONSTRUCTION OUTLINE

**FOUNDATION:** Walls—continuous concrete. Cellar floor—concrete on gravel fill.

**STRUCTURE:** Exterior walls—shingles, roofing paper, rough boards, 2 x 4 in. studs, Johns-Manville insulation lath, plaster. Interior partitions—2 coat plaster on Gold Bond wallboard.

**ROOF:** Roofing paper on rough boards and asphalt shingles, Bird & Son, Inc.

**SHEET METAL WORK:** Flashing—copper and lead. **WINDOWS:** Sash—wood double hung. Glass—single strength, quality B. Screens—copper mesh.

**FLOORS:** All rooms have oak floors, except kitchen which has fir. Bath and kitchen—covered with linoleum.

**WALL COVERINGS:** Living room—wall paper and knotty pine paneling; balance—wall paper.

**PAINTING:** Floors—stained and waxed. Trim and sash—4 coats flat finish. Exterior walls—stained white, Samuel Cabot, Inc.

**KITCHEN EQUIPMENT:** Stove—Hotpoint, General Electric. Refrigerator—Kelvinator Sales Corp. Sink—Monel metal.

**PLUMBING:** Supply pipes—brass. Soil, waste and vent pipes—wrought iron.

**HEATING AND AIR CONDITIONING:** Boiler—Peerless Mfg. Corp. Oil burner—Timken Silent Automatic Co.

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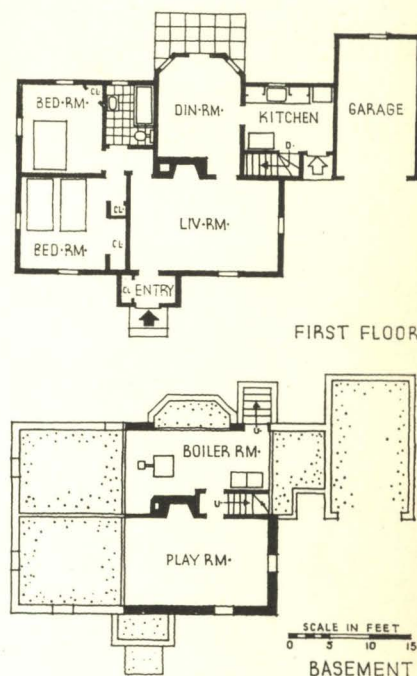
## 54. HOUSE IN COOLIDGE PARK, WAKEFIELD, MASS.



Benjamin Morse Photos

EARL C. DAVIS,  
ARCHITECT

Simply designed and well built, this example is entirely lacking in the pretentiousness which mars so many small houses. Shutters and the simple porch railing are not only economical, but add materially to the interest of the exterior. The plan is extremely compact and so designed that the basement becomes available as recreational area. Cost: \$5,600.



REAR ELEVATION

### CONSTRUCTION OUTLINE

**FOUNDATION:** 12 in. concrete.  
**STRUCTURE:** Wood shingles, building paper, sheathing, frame. Inside—lath and plaster.  
**ROOF:** Wood shingles.  
**SHEET METAL WORK:** Copper throughout, gutters—fir.  
**WINDOWS:** Wood, double hung.  
**FLOORS:** Hardwood, oak.  
**WOODWORK:** Paneling in dining room—knotty pine. Trim, shelves and cabinets—pine.  
**WALL COVERINGS:** Wallpaper in living room and bedrooms. Tile wainscot in kitchen and bath, oil paint above.  
**KITCHEN EQUIPMENT:** Electric refrigerator and range. Cabinets—wood, linoleum covered counters.  
**ELECTRICAL INSTALLATION:** BX, 3 wire.  
**PLUMBING:** Soil pipes—cast iron. Cold water pipes—galvanized iron.

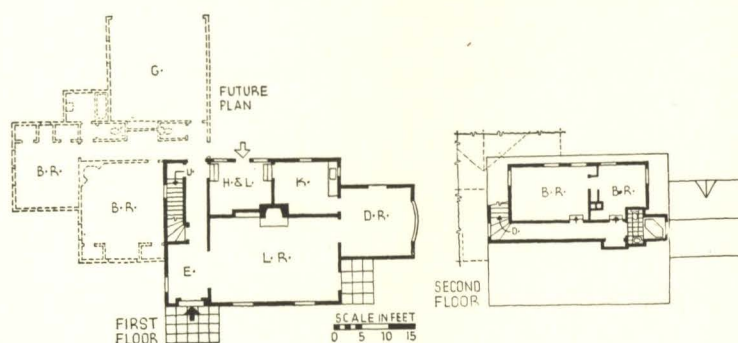




LIVING ROOM

**PROBLEM:** To build about \$5,000 worth of house for a young couple with one child. House to be planned so that it can be increased.

The present house is compactly arranged to provide a required minimum of accommodation within the stated budget. A heater room is combined with the laundry, and is used for a service entrance as well. The placing of the dining room is an excellent solution for the small house: opening off the living room it increases the spaciousness of the interior, while the location of the door from the kitchen is completely concealed. The future extension has been planned so as to create a minimum of disturbance to the existing house. Cost: \$5,800.



## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—frame construction, wood lath and plaster.

**ROOF:** Cedar shingles over shiplap-sheathed rafters.

**INSULATION:** Roof—Quilt, 3-ply, Samuel Cabot, Inc.

**WINDOWS:** Double hung on first floor, casement on second floor. Glass—single strength, No. 1 Pennvernon, Pittsburgh Plate Glass Co.

**FLOORS:** Living room, dining room and halls—white pine, pegged. Bedrooms—hemlock. Kitchen and bathrooms—linoleum.

**ELECTRICAL INSTALLATION:** Wiring system—knob and tube. Switches—Hart & Hegeman.

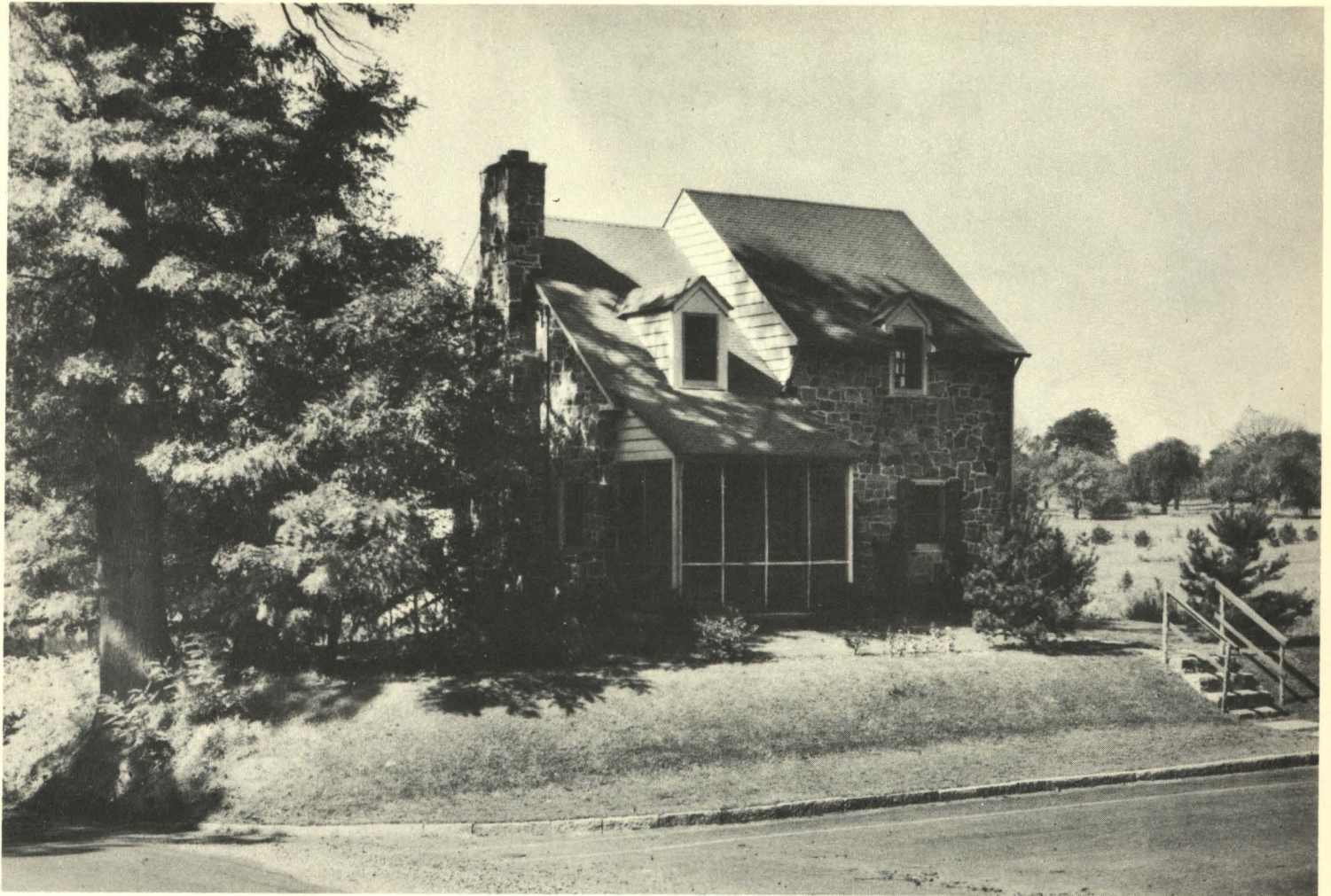
**KITCHEN EQUIPMENT:** Stove—electric Monarch, Malleable Iron Range Co. Refrigerator—electric, Fairbanks-Morse.

**PLUMBING:** All plumbing fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—cast iron. Water supply pipes—galvanized iron.

**HEATING AND AIR CONDITIONING:** Hot air, oil fired, thermostat controlled, filters, tank humidifier.

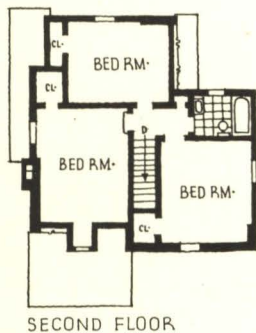
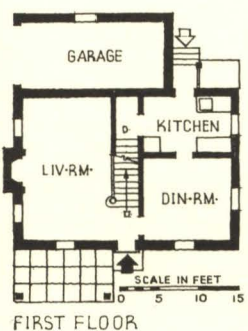


## 56. HOUSE IN ROSEMONT, PA.



Philip B. Wallace

FLANIGEN & FLANIGEN, INC., DESIGNERS



The severity of the stone work is agreeably relieved by small areas of wooden siding; the treatment of the dormer windows is especially successful. There is, however, a noticeable vertical break in the roof line not altogether pleasant, since it occurs practically in the middle of the composition. The plan is ideally suited for the corner lot, and the garage is so located that it does not detract from the interest of the main entrance. Cost: \$6,000. Cubage: 25,000 at 24 cents.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Stone veneer on 2 x 4 in. studs, wall sheathed with 6 in. roofers covered with felt, plaster on wood lath.

**ROOF:** Asphalt shingles.

**SHEET METAL WORK:** Flashing—tin. Gutters—galvanized iron.

**WINDOWS:** Double hung, Curtis Silentite. Glass—single strength, quality A.

**FLOORS:** Living room—oak. Bedrooms—pine. Kitchen—linoleum. Bathrooms—rubber tile.

**WALL COVERINGS:** Wallpaper throughout, except painted bathroom.

**WOODWORK:** Curtis stock.

**HARDWARE:** By P. & F. Corbin.

**PAINTING:** Floors—shellac. Trim and sash—lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle.

**KITCHEN EQUIPMENT:** Stove—gas, Quality. Cement laundry trays.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply pipes—galvanized iron.

**HEATING:** Hot water. Boiler—Barco coal fired.

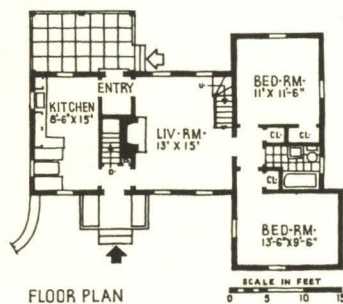
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## 57. HOUSE FOR VERNON F. BROWN, GLENBROOK, CONN.



WALTER BRADNEE KIRBY, ARCHITECT



An unusual site adds to the effectiveness of the small house shown above. There is a sufficient drop in level from front to back of the house for a basement completely above ground. Save in this one feature, however, the plan does not recognize the irregular site, being a simple four-room layout similar to one designed for a more regular piece of ground. With the exception of the kitchen, where room for a dining alcove has been provided, the rooms approach minimum size. Cost: \$6,000.

### CONSTRUCTION OUTLINE

**FOUNDATION:** Walls—concrete. Cellar floor—4 in. concrete. Waterproofing—Anti-Hydro Waterproofing Co.

**STRUCTURE:** Exterior walls—24 in. Royal shingles, Douglas fir frame, Truscon metal lath, Best Brothers' Keene's Cement Co. plaster.

**ROOF:** Wood shingles on shingle lath, 18 in. Perfection. **SHEET METAL WORK:** Flashing, gutters and leaders—copper.

**INSULATION:** Roof—rock wool, U. S. Gypsum Co.

**WINDOWS:** Sash—double hung, wood. Glass—American Window Glass Co.

**WOODWORK:** Trim and cabinets and doors—Curtis Companies and Morgan Co. Garage doors—Curtis stock.

**HARDWARE:** Yale & Towne Mfg. Co.

**PAINTING:** Exterior: Walls—brush stained. Trim and sash—priming and finish coat. All paint materials by Sherwin-Williams Paint Co.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—Bryant Electric Co.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co.

**HEATING:** Oil burner, Petroleum Heat and Power Co. Boiler and radiators—American Radiator Co.

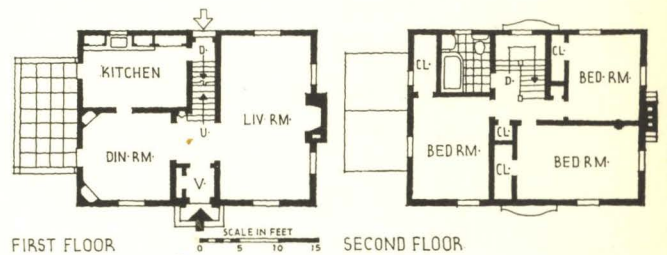
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## 58. HOUSE FOR J. C. KUHLMAN, MINNEAPOLIS, MINNESOTA



JULIAN FARNAM, ARCHITECT



A wood Colonial house, typical in its essentials of the two-story, three-bedroom residence in the moderate price class. The plan, with the stairway separating the living room from the dining room and kitchen, is one of the few possible arrangements of these elements which satisfactorily meets the requirements. The use of arched openings instead of doors between the main first-floor rooms increases the spaciousness of the interior. A porch is well placed for use as an outdoor dining space, and cuts off a minimum of light from either dining room or kitchen. The second floor is compact, with only one bathroom, and with ample wall space for furniture in all three bedrooms. The stair hall, being placed at the rear, has ample light, and provides for a small service vestibule off the kitchen. Cost, including a detached one-car garage: \$6,000, at about 30 cents.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—10 in. siding, 15 lb. felt, shiplap on 2 x 4 in. studs, 16 in. o. c.  $\frac{1}{2}$  in. balsam wool between studs, plaster on wood lath.

**ROOF:** 16 in. stained cedar shingles over 15 lb. tar felt.

**SHEET METAL WORK:** Flashing, gutters, leaders—galvanized iron.

**INSULATION:** Outside walls and attic floor— $\frac{1}{2}$  in. balsam wool.

**WINDOWS:** Sash—double hung, wood. Glass—double strength, quality A.

**FLOORS:** Living room, bedrooms, and halls—oak. Kitchen—linoleum. Bathrooms—tile.

**PAINTING:** Interior: Kitchen and bath—oil paint, balance is unfinished plaster. Floor—varnish and wax. Trim and sash—4 coats enamel.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle.

**KITCHEN EQUIPMENT:** Stove and refrigerator—electric. Sink—flat rim, enameled iron.

**HEATING:** Warm air.



## 59. HOUSE IN BATTLE CREEK, MICHIGAN

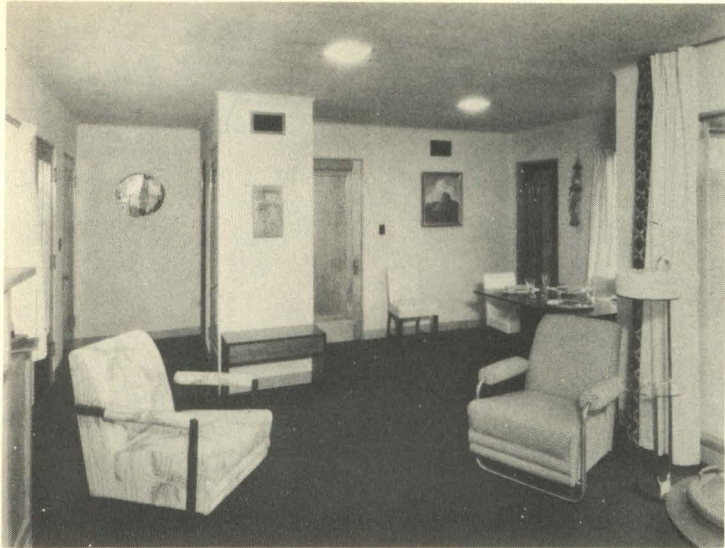


*Owl Photo Service Photos*

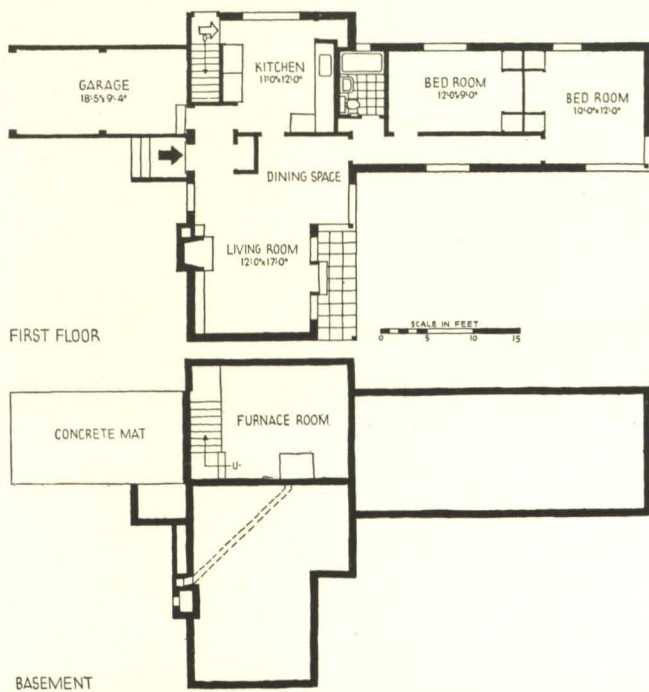
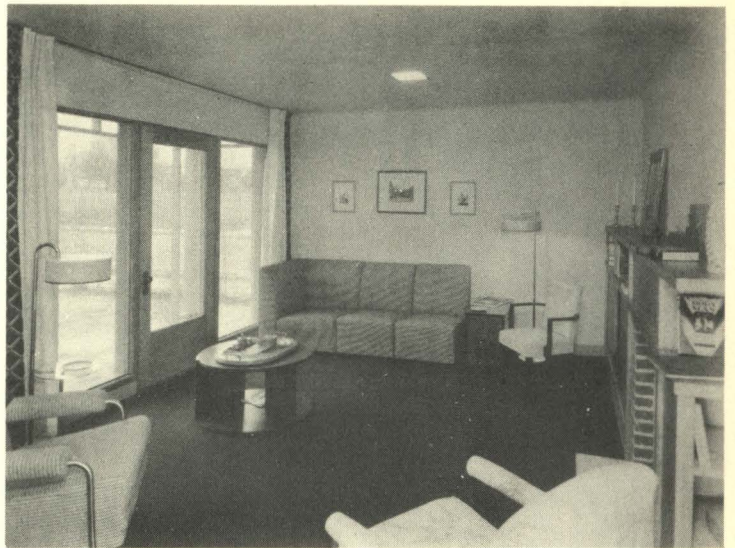
The small house shown here was built for sale. It represents a complete departure from the conventional type of speculative residence and shows a number of innovations in small house planning and construction. Living room and dining room are combined, with a small alcove with windows on both walls receiving the table. The garage opens into an entry at the end of the living room, and bedrooms and kitchen are placed in the extension of this wing. The house is constructed of two four-inch thicknesses of cinder concrete blocks which are separated by two inches of mineral wool. Interior walls are gypsum tile; floors are concrete on bar joists. Except for the roof construction the house is fireproof. Cubage: 18,165. Cost: \$6,150 at about 32 cents per cubic foot.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





LIVING ROOM



## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block, continuous. Cellar floor—3½ in. concrete. Waterproofing, outside of walls—Barrett Co.

### STRUCTURE

Exterior walls—double wall of 3½ in. cinder concrete blocks, connected by wall ties, 2 in. space between filled with mineral wool. Interior partitions—3 in. gypsum tile, plastered both sides, U. S. Gypsum Co. Floors—steel joists, 2½ in. concrete slab, Gabriel Steel Co. Ceilings—metal lath, U. S. Gypsum Co.

### ROOF

No. 1 yellow pine rafters and sheathing, covered with slate coated asphalt shingles, Globe Mfg. Co., Chicago, Ill.

### CHIMNEY

Damper—Donley Bros. Co.

### SHEET METAL WORK

Flashing, gutters and leaders—galvanized iron, Milcor Steel Co.

### INSULATION

Outside walls—2 in.; and attic floor 4 in. mineral wool, Johns-Manville, Inc. Weatherstripping—Accurate Metal Weatherstrip Co.

### WINDOWS

Sash—steel casement, frames, storm sash and screens Detroit Steel Products Co. Glass—double strength, quality B., Libbey-Owens-Ford Glass Co.

### FLOOR

Living room, bedrooms, and halls—concrete covered with cow hair carpet. Kitchen and bathrooms—linoleum, Congoleum-Nairn, Inc.

### WALL COVERINGS

Bathrooms—linoleum, Congoleum-Nairn, Inc.

### WOODWORK

Trim, cabinets and doors—white pine, made to detail. Garage doors—Overhead Door Co.

### HARDWARE

Russwin, Russell & Erwin Mfg. Co.

### PAINTING

All paint material by E. I. duPont de Nemours & Co., Inc. Exterior walls—Kantex, Tamms Silica Co.

### ELECTRICAL INSTALLATION

Wiring system—General Electric Co. Switches—Hart & Hegeman. Fixtures—built-in, Kent Lighting Fixture Co.

### KITCHEN EQUIPMENT

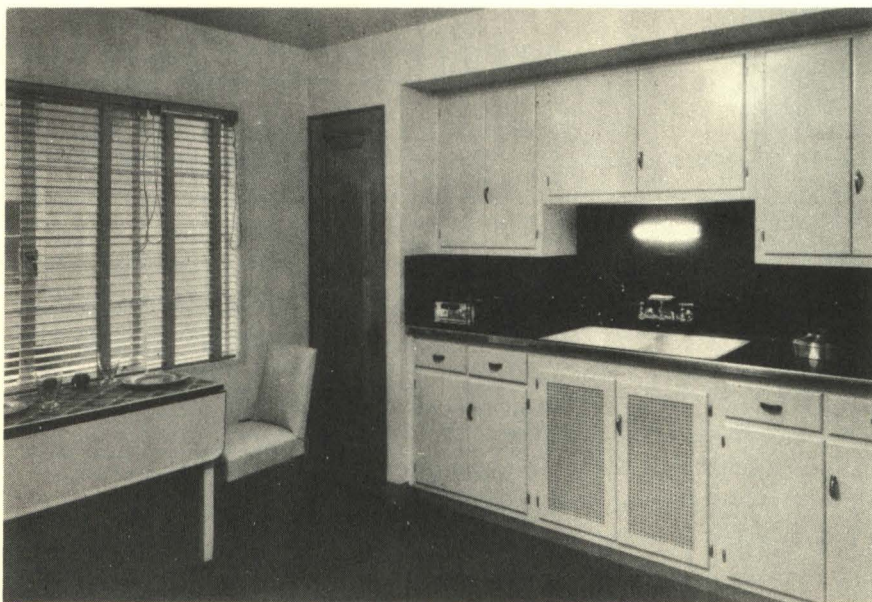
Stove—gas, A. B. Stove Co. Refrigerator—Electrolux, Servel Sales, Inc.

### PLUMBING

All fixtures by Kohler Co. Soil and vent pipes—Alabama Pipe Co. Water supply pipes—National Tube Co.

### HEATING AND AIR CONDITIONING

Superfex, filtering and humidifying system, Perfection Stove Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—Ruud Mfg. Co.



KITCHEN

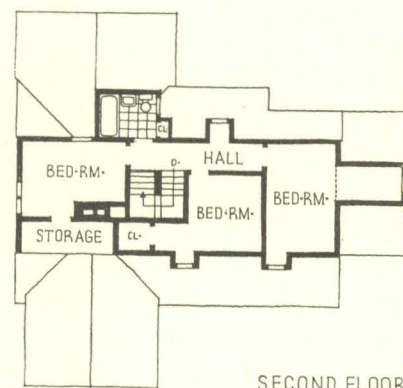


## 60. HOUSE FOR ELLIOTT DE FORREST, SEATTLE, WASHINGTON

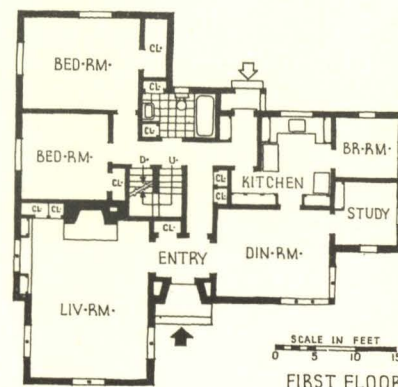
HOMES, INC., ARCHITECTS



Webster & Stevens Photos



SECOND FLOOR



FIRST FLOOR

An intelligent use of materials showing special ingenuity in the handling of brick details. The large window areas are pleasantly subordinated to the wall surfaces. The central portion of the plan shows corners and waste hall space, which are almost unavoidable in a rambling plan of this type. The small study adjoining the dining room, the separate service entrance, and the economical correlation of bathrooms are notable adjuncts of this residence. Cost: \$6,193.



KITCHEN

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—4 x 4 x 16 in. insulation tile, hollow core, 3/4 in. air space; saturated asphalt building paper, 1/2 in. Celotex; 2 x 4 in. studding; Celotex plaster base and 2 coat plaster. All framing lumber is Weyerhaeuser's 4-square.

**ROOF:** Wood shingles.

**SHEET METAL WORK:** Armco galvanized iron, American Rolling Mills Co.

**WINDOWS:** Casement sash, cedar sill frames. Glass—double strength, Pennvern.

**FLOORS:** Living room, bedrooms and halls—oak. Kitchen and bathrooms—linoleum covered.

**PAINTING:** Interior—wall coverings, enamels and fillers used throughout, General Paint Corp. Exterior: Walls—cement paint. Roof—Cabot stain.

**ELECTRICAL INSTALLATION:** Wiring system—knob and tube. Switches—tumbler type. Fixtures—Lightolier and Chase Brass & Copper Co.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. **HEATING AND AIR CONDITIONING:** Partially air conditioned, fan and filters, Montag Stove & Furnace Works. Hot Water heater—electric.

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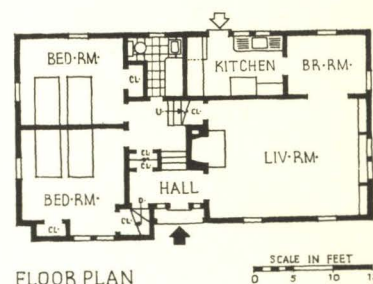


## 61. HOUSE FOR V. R. HARDING, PORT WASHINGTON, LONG ISLAND, N. Y.



Murray M. Peters

THEODORE WHITEHEAD DAVIS, ARCHITECT



A shift in levels made possible some interesting variations in this house plan. Living room, breakfast room and kitchen are located on one level, and the two bedrooms and bath are placed four steps above. One result of the arrangement is to effect a distinct separation between the two parts of the house, with a consequent increase of privacy for each part. Another is to permit the placing of stairs and closets on staggered levels, allowing a maximum utilization of storage space. Indirect circulation has resulted from the change in levels: for example, the only access to the kitchen from the sleeping quarters is through the hall, down the steps, and through living room and breakfast room; whether this is a serious inconvenience in a house of this size and type is, however, questionable. The exterior is a simple design using stock materials. Cost: \$6,500, at about 33 cents.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Wood frame, 2 x 4 in. studs, 1 in. sheathing, building paper, 24 in. Royal shingles. Inside—hard white plaster on wood lath.

**ROOF:** 18 in. Perfection shingles.

**SHEET METAL WORK:** Copper throughout.

**INSULATION:** Roof—Balsam wool, ½ in.

**WINDOWS:** Double hung wood, 1½ in. Glass—single strength. Screens—full length, copper in wood frames.

**FLOORS:** All rooms—oak, except tile in bathroom and linoleum in kitchen.

**WOODWORK:** All white pine.

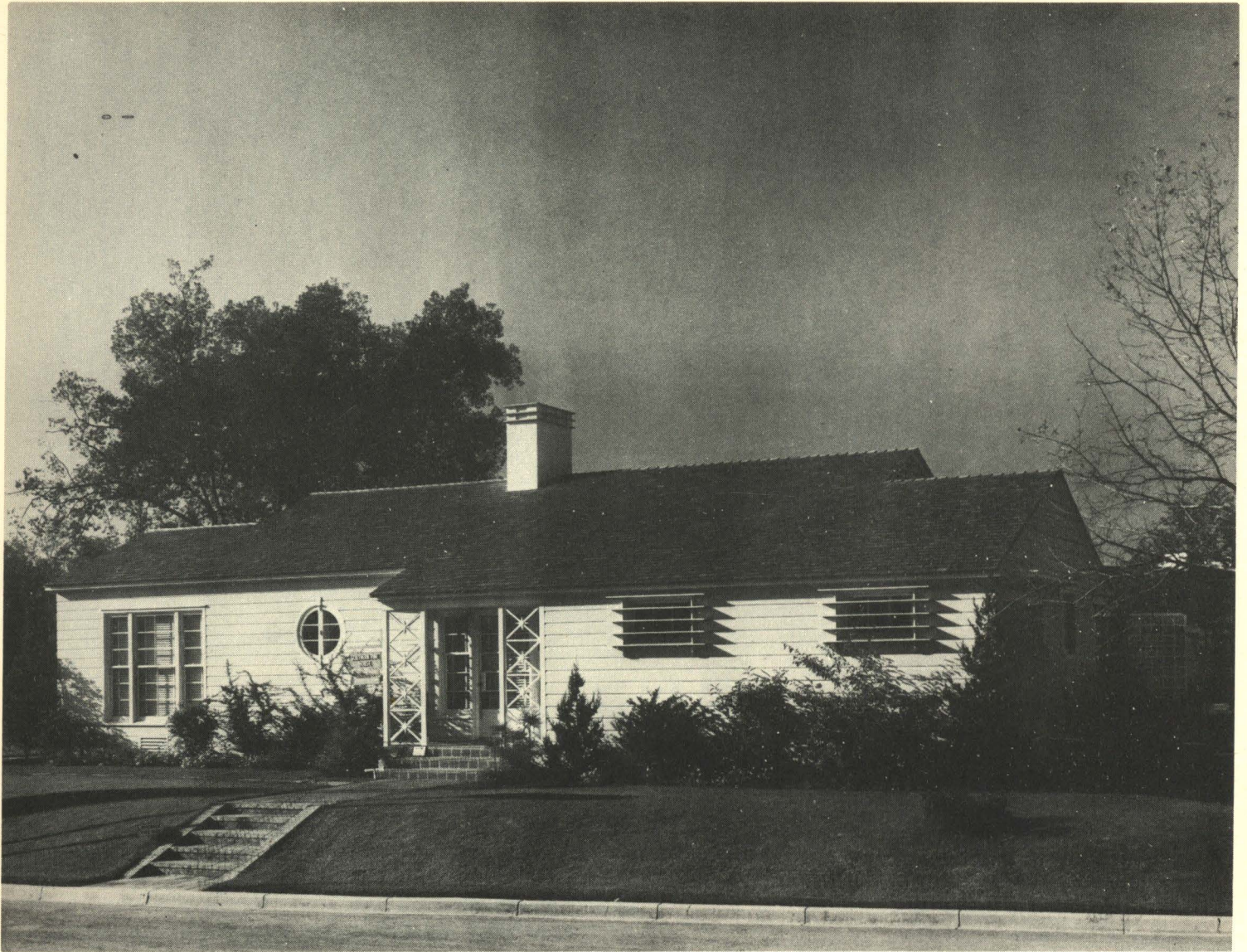
**ELECTRICAL INSTALLATION:** Wiring system—3 wire BX cable. Switches—tumble.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply—brass.

**HEATING:** Steam, boiler—Kewanee, with oil burner. Radiators—American Radiator Co. Thermostat—Minneapolis-Honeywell Regulator Co. Hot water heater—Taco.



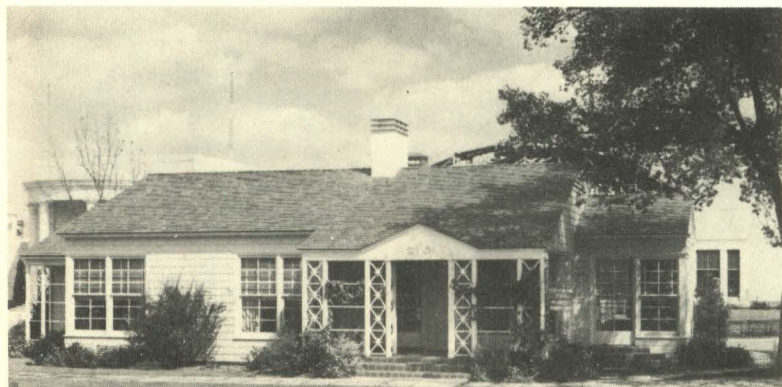
## 62. SOUTHERN PINE MODEL HOME, TEXAS CENTENNIAL EXPOSITION



*Paul R. Clegg*

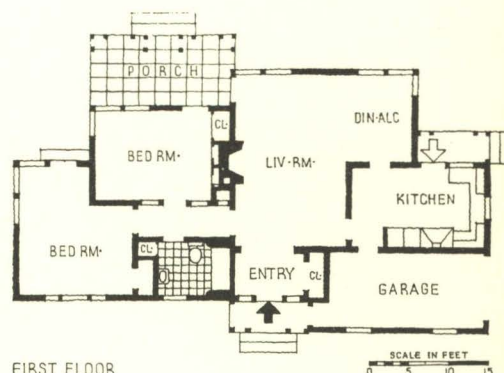
The "dry built" contemporary house, constructed entirely of wood, is an outstanding exhibit in the Texas Centennial Exposition. Primarily a model home, it has charm and an air of permanence. The plan permits the outdoors to be seen from any point within the house through large windows and openings. Cross ventilation, abundance of sunlight, and arrangement of interior furnishings have been carefully provided. The decorative scheme is original and simple, giving a pleasant external appearance. The architects designed this home as a demonstration for the moderately priced residential field; as such it includes garage, two bedrooms, and ample porch area. Cost: \$6,500. Cubage: 21,000 at 30½ cents.



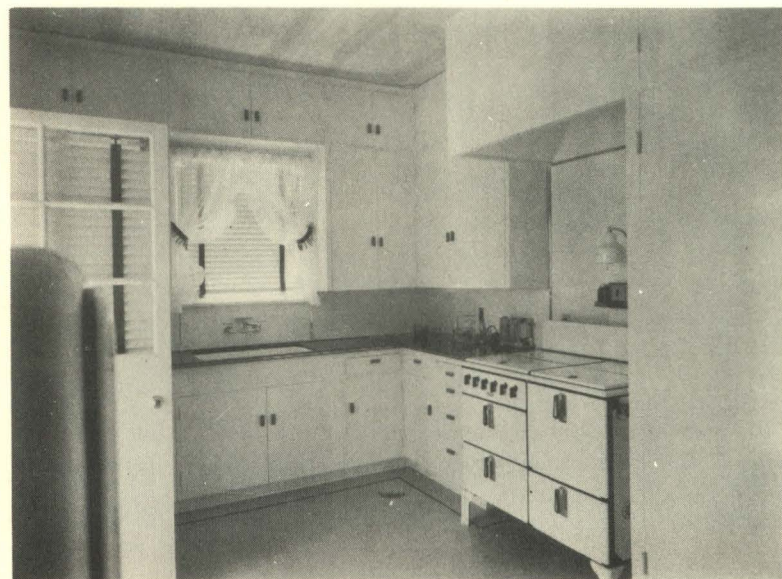


ENTRANCE

Paul R. Clegg



FIRST FLOOR



KITCHEN

F. A. McDaniels



BEDROOM

F. A. McDaniels

## CONSTRUCTION OUTLINE

### FOUNDATION

Reinforced concrete, grade beam, 8 x 20 in., 10 in. concrete piers to rock, wood girders over concrete piers.

### STRUCTURE

Exterior walls—yellow pine siding, 30 lb. asphalt felt over 1 x 8 in. shiplap, 2 x 4 in. studs. Inside: 1 x 8 in. shiplap where canvas and paper occur. Finish: horizontal boarding nailed directly to studs, vertical boarding over 1 x 4 in. stripping. Floor construction—continuous galvanized iron metal termite shields under all plates and around all pipes, etc., 2 x 10 in. joists, 16 in. o. c., 1 x 6 in. sub-floor, 15 lb. asphalt felt, 1 x 4 in. B&B edge grain pine flooring.

### ROOF

Construction—2 x 4 in. rafters, 16 in. o. c., 2 x 4 in. collar beams every fourth rafter. Covered with 1 x 4 in. shingle lath, 18 in. cypress shingles, Burton Swartz Cypress Co., Florida.

### SHEET METAL WORK

Flashing—galvanized iron, painted both sides with red lead.

### WINDOWS

Sash—B&B yellow pine, double hung. Glass—quality A, double strength, Libbey-Owens-Ford Glass Co. Screens—full length, top hinged, B&B yellow pine, galvanized iron.

### FLOORS

Living room, bedrooms and halls—1 x 4 in. edge grain yellow pine. Kitchen—linoleum, Congoleum-Nairn, Inc. Bathrooms—ceramic tile, U. S. Quarry Tile Co.

### WALL COVERINGS

Kitchen—Formica and Masonite Presdwood. Bathrooms—tile tub alcove, U. S. Quarry Tile Co. Walls and ceiling—yellow pine veneer, stainless steel moldings, Pyramid Metals Co.

### WOODWORK

All B&B yellow pine.

### HARDWARE

Interior and exterior—Schlage Lock Co.

### PAINTING

Interior: Paneling and floors—stain and wax. Trim and sash—lead and oil. Exterior: Walls and sash—lead and oil. All paint by Pittsburgh Paint Co.

### ELECTRICAL INSTALLATION

Wiring system—flexible steel conduits. Switches—Hart & Hegeman.

### KITCHEN EQUIPMENT

Stove—American Stove Co. Refrigerator—Norge Corp.

Sink—Crane Co.

### BATHROOM EQUIPMENT

All fixtures by Crane Co.

### PLUMBING

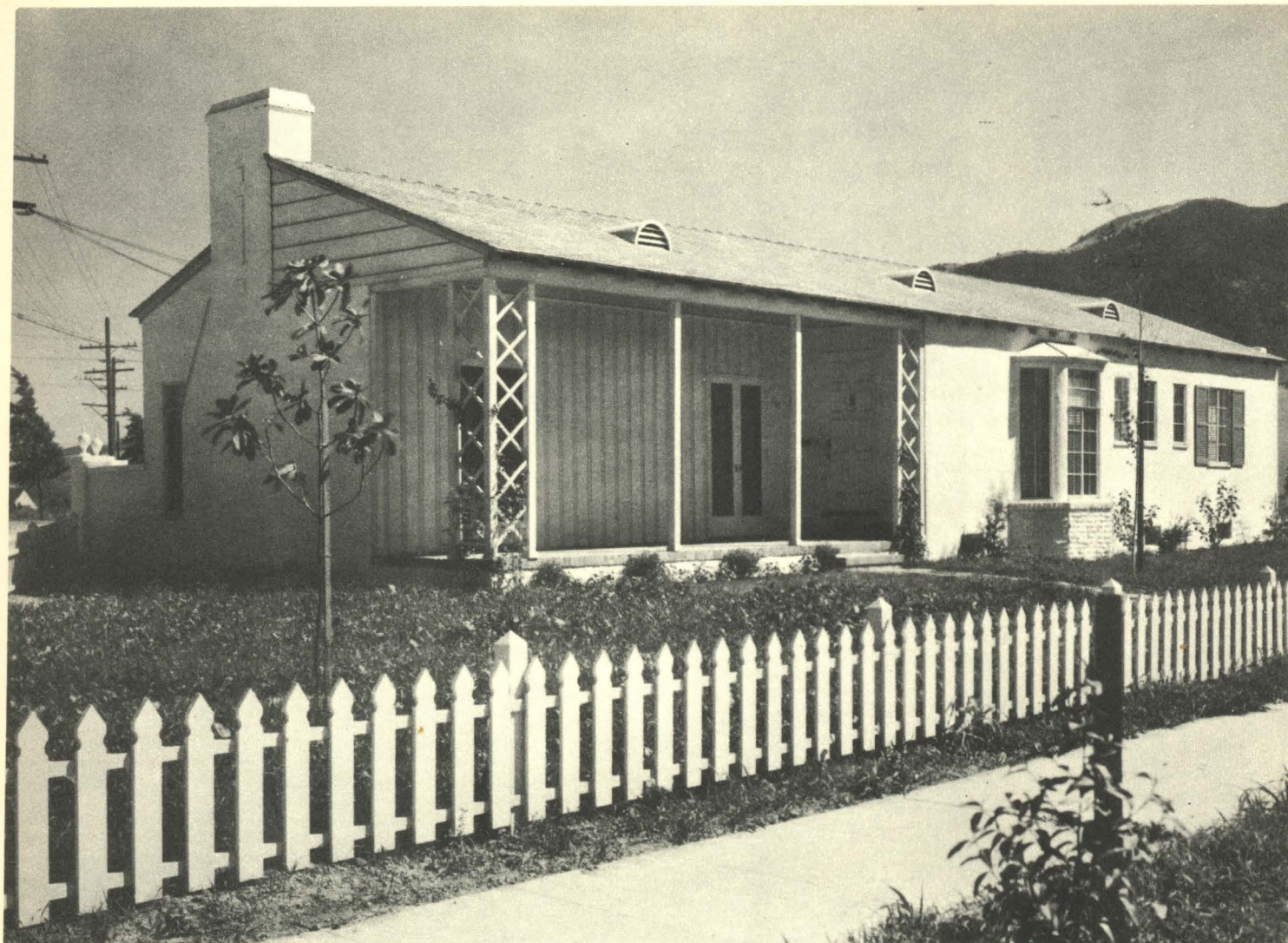
Soil and vent pipes—cast iron. Water supply pipes—galvanized steel, National Tube Co.

### HEATING

Gas outlets only. Hot water heater and bathroom wall heaters, Crane Co.



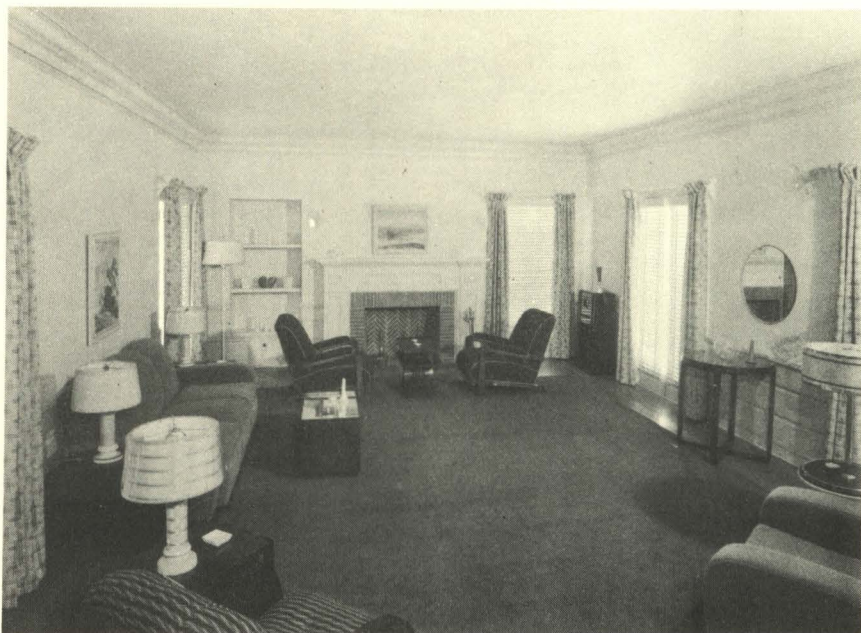
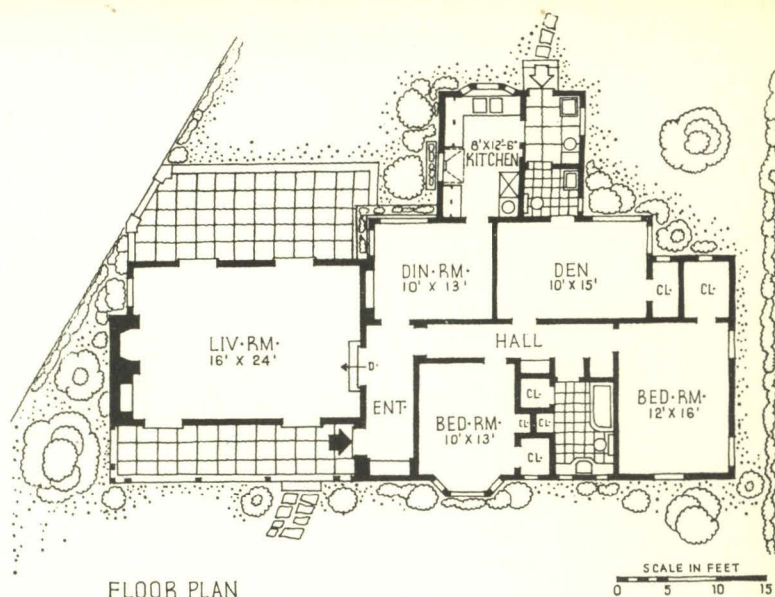
### 63. HOUSE FOR JOHN H. BRAGG, LOS ANGELES, CALIF.



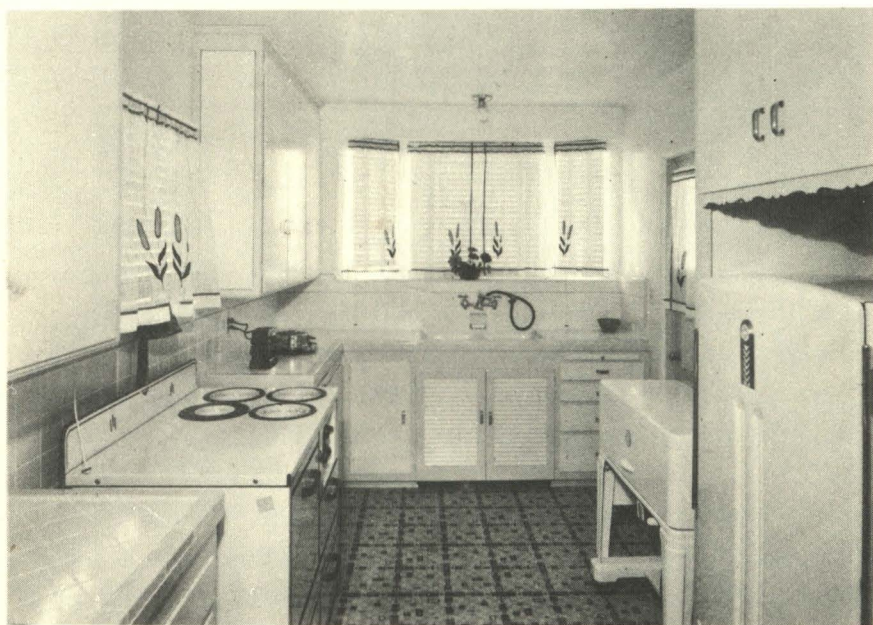
*Dick Whittington Photos*

The emergence of a distinct type of house in California becomes increasingly apparent. Its lines are long and low, one story is the rule, symmetry is more or less disregarded, and materials are employed in a simple manner. The Spanish, New England, "ranch," and modern influences are tending to blend more and more into a suitable style which is not an obvious derivation. This house is to some extent typical of the trend. While its use of materials and forms would seem to be dictated by fancy more than by exigencies of construction, it does exhibit the characteristics enumerated above, and it has, in addition, a plan in which rooms are widely spread out with a tropical disregard for the economics of heating. Cost: \$6,500 at about 30 cents per cubic foot.





LIVING ROOM



KITCHEN

## CONSTRUCTION OUTLINE

### FOUNDATION

Continuous concrete.

### STRUCTURE

Exterior walls—Douglas fir wood frame. Floor construction—10 in. Douglas fir joists and 1 in. sub-floor.

### ROOF

Wood frame, clear cedar shingles.

### CHIMNEY

Brick with terra cotta flue, Superior fireplace friction damper.

### SHEET METAL WORK

Flashing—Armco iron, American Rolling Mills Co.

### INSULATION

Roof—Silvercoat reflective paper insulation.

### WINDOWS

Sash—steel sash out-swing casements, trough screen crank operators. Glass—quality B, Libbey-Owens-Ford Glass Co. Screens—Nu-frame flat screens, Roll Away Window Screen Co., Ltd.

### FLOORS

Living room, bedrooms and halls—clear  $\frac{1}{2}$  x  $1\frac{1}{2}$  oak. Kitchen—Douglas fir, covered with Armstrong linoleum. Bathrooms—Romany tile.

### WALL COVERINGS

Living room—California interior stucco. Bedrooms—wallpaper. Kitchen and bathrooms—Sanitas, Standard Textile Products Co.

### WOODWORK

Trim and cabinets—Douglas fir. Doors—sugar pine. Garage doors—Overhead door.

### HARDWARE

Locks—Schlage Lock Co.

### PAINTING

All paint material by W. P. Fuller & Co.

### ELECTRICAL INSTALLATION

Wiring system—conduit.

### KITCHEN EQUIPMENT

Sink—acid resisting, enamel, Standard Sanitary Manufacturing Co.

### BATHROOM EQUIPMENT

All fixtures by Standard Sanitary. Seat—C. F. Church Mfg. Co.

### PLUMBING

Pipes—galvanized iron and Mueller pressure valve, Dayton coupling.

### HEATING

Individual Thermador electric wall heaters, fan type throughout. Hot water heater—40 gal. Thermador electric heater.



## 64. HOUSE FOR FRED A. BEALS, EGYPT, MASS.

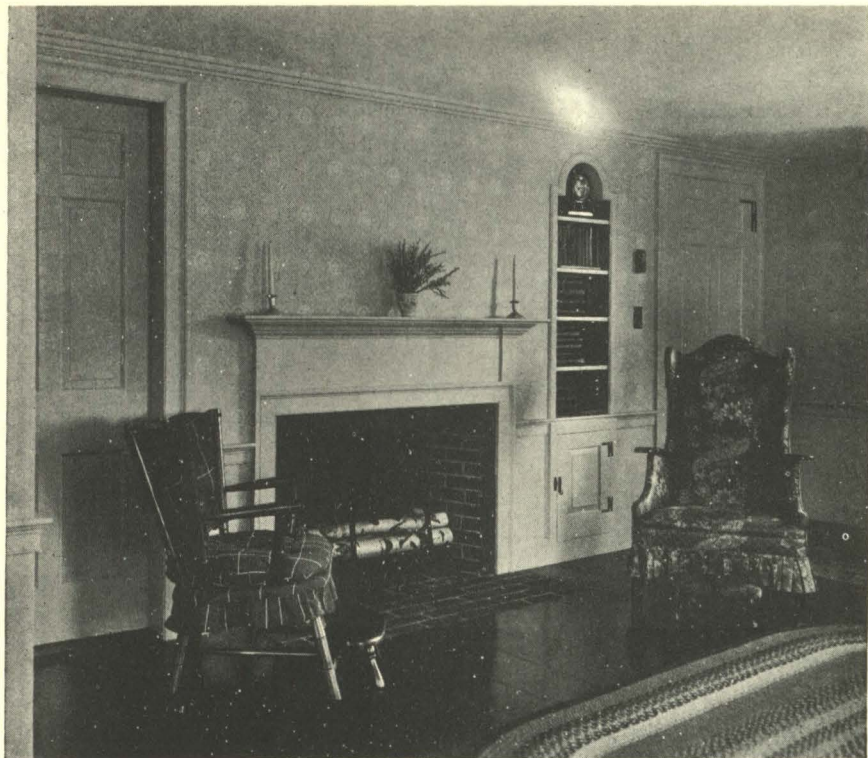


Arthur C. Haskell Photos

The essence of the successful small house is informality, close relation to its surroundings, and small scale. The example here exhibits all three characteristics. Note that the house is essentially a square, symmetrical box with central chimney and stair, and that it is the picket fence and the extension to the garage which produce the rambling, informal appearance which is so typical of earlier houses in this manner. The romantic quality of the exterior does not extend to the plan, which is a completely realistic solution of the problem. Living room and dining room are one, giving a maximum of space, kitchen and bathroom are back to back, and the bedrooms are well related in size to the total space. The cost, \$6,500 at about 40 cents per cubic foot, was somewhat higher than it would have been in another location. One item which increased the cost was waterproofing for the entire basement.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

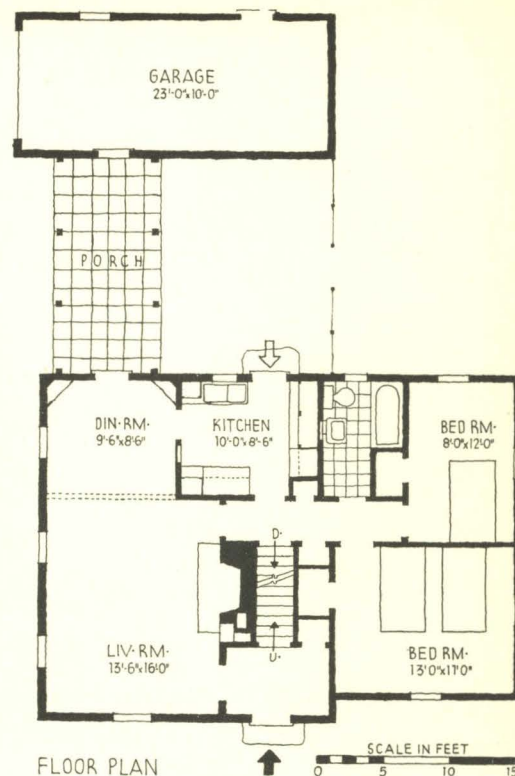




LIVING ROOM



ENTRANCE



## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—poured concrete, continuous. Cellar floor—cinder concrete. All walls waterproofed, Western Waterproofing Co.

### STRUCTURE

Exterior walls—clapboards and shingles, paper, boarding, studs, Celotex lath and plaster. Interior—plaster on rock lath, U. S. Gypsum Co. Floor construction—pine. Ceiling—plaster.

### ROOF

Rafters, 2 x 6 in., boarding and cedar shingles.

### SHEET METAL WORK

Flashing—copper. Gutters—wood. Leaders and downspouts—Toncan metal, 2 in. round.

### INSULATION

Outside walls and attic floor—Celotex lath.

### WINDOWS

Sash—No. 1 pine, double hung. Glass—single strength, quality A.

### FLOORS

Living room, bedrooms and halls—wide soft pine. Kitchen and bathrooms—slash fir, covered with linoleum, Armstrong Cork Products Co.

### WALL COVERINGS

All rooms except kitchen and bath covered with wall-paper, Strahan.

### WOODWORK

Trim and cabinets—pine. All doors—white pine.

### HARDWARE

Interior—some wrought iron hinges, latches, etc. Exterior—stock, P. & F. Corbin.

### PAINTING

Interior: Ceilings—calcimine. Floors—3 coats spattered. Trim and sash—3 coats ivory enamel. Exterior—Cabot's double white. Sash—Old Process lead and oil.

### KITCHEN EQUIPMENT

Stove—electric, General Electric Co. Refrigerator—Kelvinator Corp.

### BATHROOM EQUIPMENT

Douglas fixtures.

### PLUMBING

Soil pipes—cast iron. Water supply—copper.

### HEATING

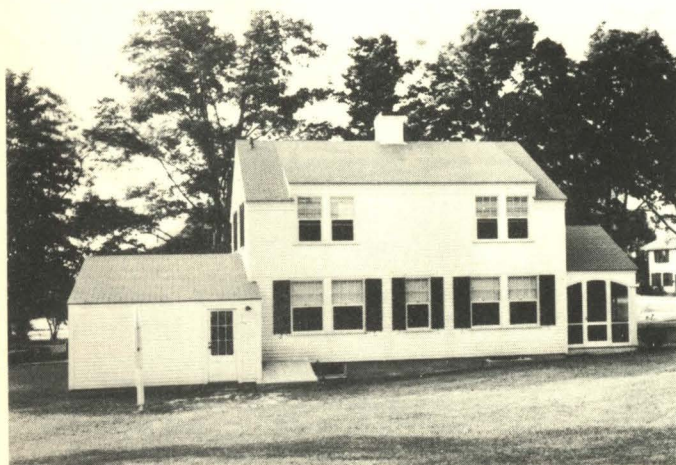
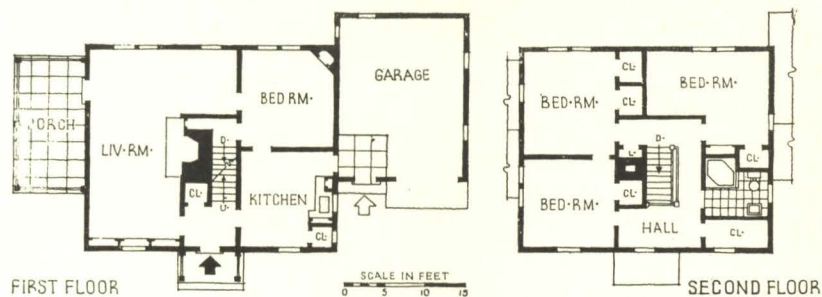
Boiler—jacketed sectional, Burnham Boiler Corp. Fuel—oil, Petro-Nokol, Petroleum Heat & Power Co. Radiators—Burnham narrow type, Hoffman valves. Hot water heater—built-in, indirect, galvanized tank, 30 gal.





Currier Photos

A contemporary development in the Early American style. The plan follows its prototypes in that it evolves about the heavy central chimney and the boxed-in staircase. The living room offers great possibilities as a general purpose room, and the side entrance correlated with the garage and adjacent work space is an original as well as useful feature. Cost: \$6,650. Cubage: 25,360 at 26 cents.



REAR ELEVATION

## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—6 in. clapboards, Ponderosa pine, Sisalkraft paper, diagonal sheathing, 4 in. hemlock studs, ½ in. Celotex, 2 coats plaster, Atlantic Gypsum Co.

**ROOF:** Asphalt shingles, Ruberoid Co.

**SHEET METAL WORK:** Flashing—galvanized iron.

**INSULATION:** Outside walls—½ in. Celotex. Attic floor—4 in. Thermofill between joists.

**WINDOWS:** Sash—pine stock, double hung. Glass—quality B, Libbey-Owens-Ford Glass Co.

**FLOORS:** All rooms—25/32 in. oak, 2½ in. wide.

**WOODWORK:** Trim—white pine, stock. Shelving and cabinets—Morgan Woodworking Co., Oshkosh, Wis.

**ELECTRICAL INSTALLATION:** Cable—BX. Switches—toggle. Fixtures—Chase Brass & Copper Co.

**KITCHEN EQUIPMENT:** Stove—Westinghouse Electric & Mfg. Co. Refrigerator—Coldspot, Sears Roebuck Co.

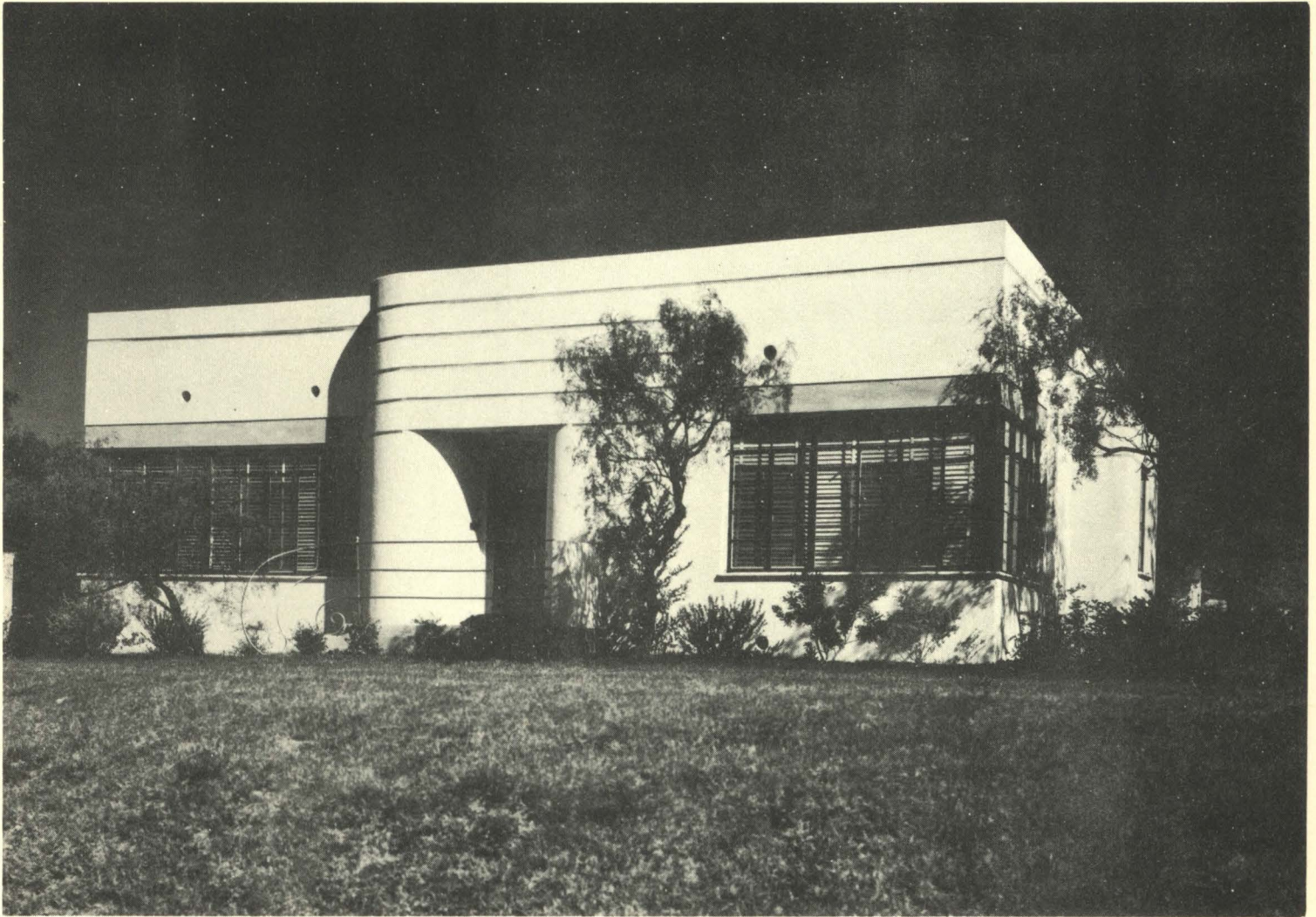
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—wrought iron, A. M. Byers Co. Water supply pipes—brass.

**HEATING:** One pipe steam. Boiler and radiators—Arco, American Radiator Co.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

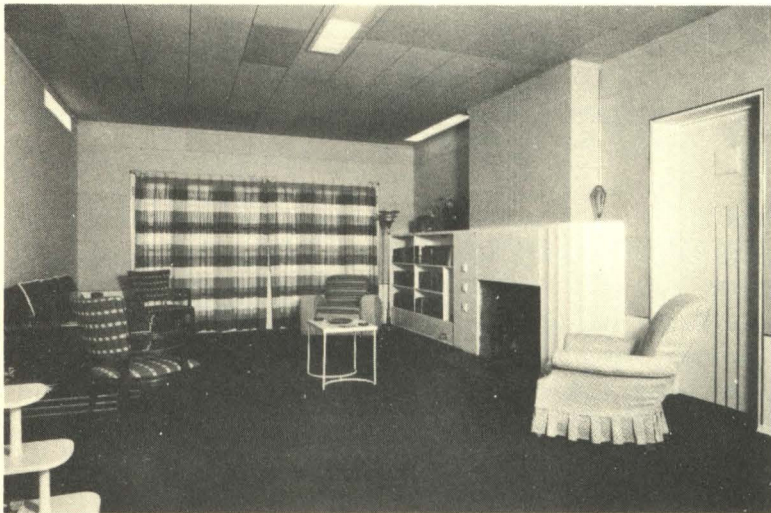
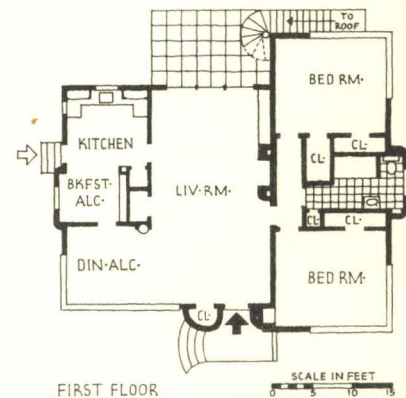


## 66. HOUSE FOR D. BERRYHILL, SAN ANTONIO, TEXAS, ADAMS & ADAMS, ARCHITECTS



A. S. Masterson Photos

The plan of this stucco house combines living and dining rooms, and, in addition, a breakfast alcove. The placing of the large windows leaves uninterrupted wall spaces for furniture; the advantages of this type of planning are especially noticeable in the bedrooms. The roof of the house has been finished for use as a garden terrace, with access by means of an outside stair. Lighting fixtures are indirect or recessed. Mechanical equipment includes a cooling plant. Cost: \$6,741.



LIVING ROOM

### CONSTRUCTION OUTLINE

STRUCTURE: 2 x 4 in. studs with diagonal bracing, 15 lb. asphalt felt, lath and stucco outside; fiber board inside, Certain-teed Products Corp.

ROOF: Barrett specification built up tar and gravel on Certain-teed fiber board.

SHEET METAL WORK: Galvanized iron.

WINDOWS: Sash—Fenestra steel casement and screens, Detroit Steel Products Co. Glass—double strength, quality A.

FLOORS: Living room, bedrooms and halls—oak. Kitchen—linoleum. Bathrooms—tile.

KITCHEN EQUIPMENT: Stove—gas. Refrigerator—electric. Sink—2-compartment.

PLUMBING: All fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—cast iron and galvanized steel. Water supply pipe—galvanized iron.

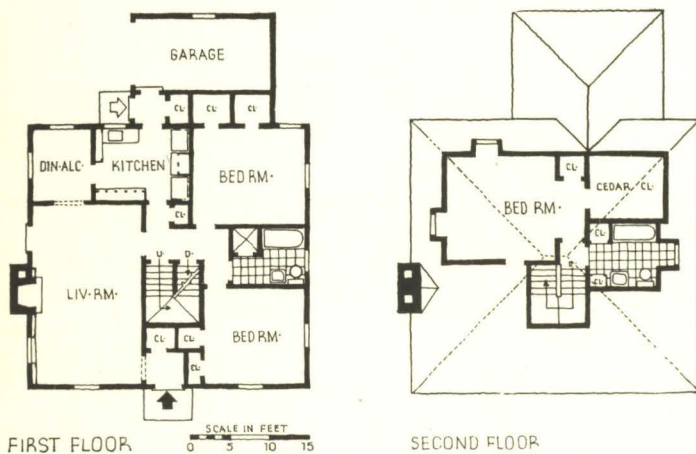
HEATING AND AIR CONDITIONING: Provision is made for future installation.



## 67. HOUSE FOR STANLEY MacGOVERN, MALVERNE, L. I.



Murray M. Peters



A square plan, with a garage addition, here resulted in good accommodations at a moderate cost. The house is essentially of the one-story type, with an additional bedroom and storage space in the attic. The plan permits cross ventilation in all major rooms, and it has been well studied to provide easy circulation, privacy for the bedrooms, and wall space for the convenient placing of furniture. A combination of service and garage entrances allows for easy access with a minimum of space. Both exterior and interiors show restraint and an intelligent striving for simplicity in design. Cost: \$6,800.

FRANK M. CREIGHTON, ARCHITECT

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—2 x 4 in. studs,  $\frac{3}{8}$  in. sheathing, paper, Clinton wire cloth and stucco; inside—wire lath and plaster.

**ROOF:** Wood shingles on shingle lath.

**SHEET METAL WORK:** Flashing and leaders—copper. Gutters—cypress wood.

**INSULATION:** Roof—rock wool over occupied portions of second floor.

**WINDOWS:** Sash—wood, except steel in kitchen and basement. Storm sash on north and west sides. Glass—double strength, quality A.

**FLOORS:** Living room and halls—oak. Bedrooms: No. 1—oak. No. 2—pine and linoleum. No. 3—pine. Kitchen—pine and linoleum. One bathroom tile, the other linoleum over pine.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle.

**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—electric.

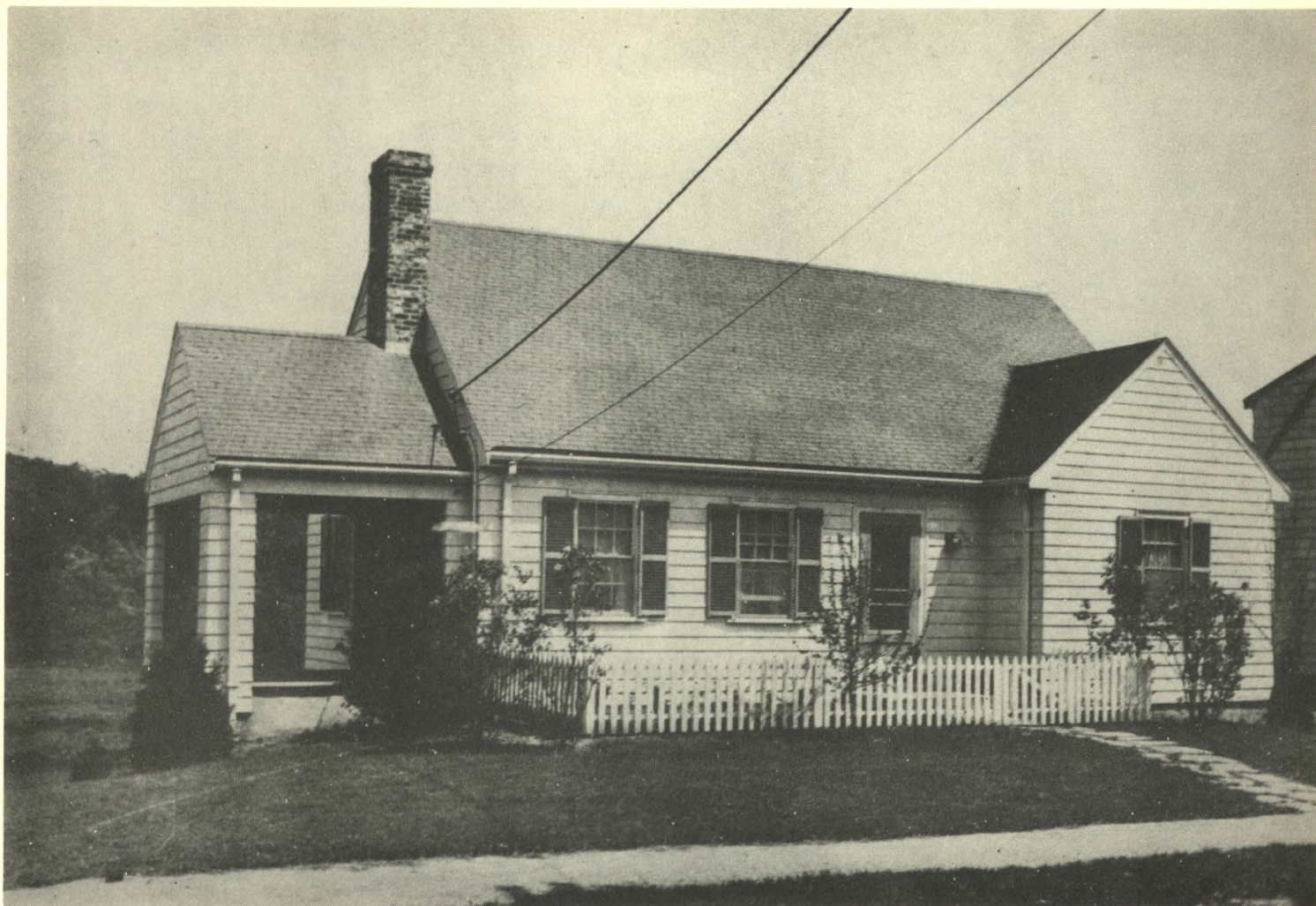
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—cast and galvanized iron. Water supply pipes—copper tubing.

**HEATING:** Steam, one pipe gravity return. Hot water heater—Taco unit with aquastat for summer, Monel metal tank.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

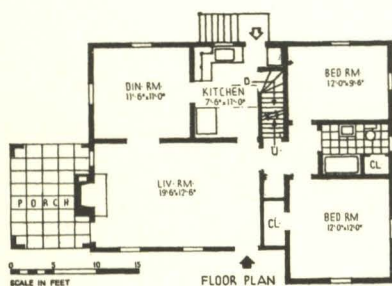


## 68. HOUSE IN NEWTON HIGHLANDS, MASS.



Russell B. Harding

EARL C. DAVIS, ARCHITECT



This speculatively built house is one of a number recently built and sold in a small residential community. The houses are far superior to the usual efforts of this kind, are simple and solid in appearance, and are attractively designed. Here the living room is entered directly from the outdoors, a rather questionable way of saving space where winters are not mild. Bedrooms are small but adequate. The house was sold for \$7,250 including land, electric refrigerator, and electric stove.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—18 in. cedar shingles, asphalt felt, hemlock studs,  $\frac{3}{8}$  in. sheathing, rock lath and plaster.

**ROOF:** Asphalt shingles.

**SHEET METAL WORK:** Flashing and gutters—copper. Leaders—Toncan iron, Republic Steel Corp.

**INSULATION:** Outside walls—4 in. rock wool, U. S. Gypsum Co. Space between first floor and garage ceiling insulated with rock wool. Attic floor—6 in. rock wool.

**WINDOWS:** Sash—double hung, pine.

**FLOORS:** Living room, bedrooms and halls—oak. Kitchen—oak covered with linoleum. Bathrooms—tile.

**WALL COVERINGS:** Living room—paneled with native pine. Bedrooms—wallpaper, Richard E. Thibaut, Inc.

**WOODWORK:** Trim—pine, painted. Doors, interior—vener 6-panel pine.

**HARDWARE:** Interior and exterior—Russell & Erwin Mfg. Co.

**PAINTING:** Floors—filler, 2 coats white shellac and wax. Trim and sash—3 coats paint. Exterior: Walls and sash—2 coats outside white.

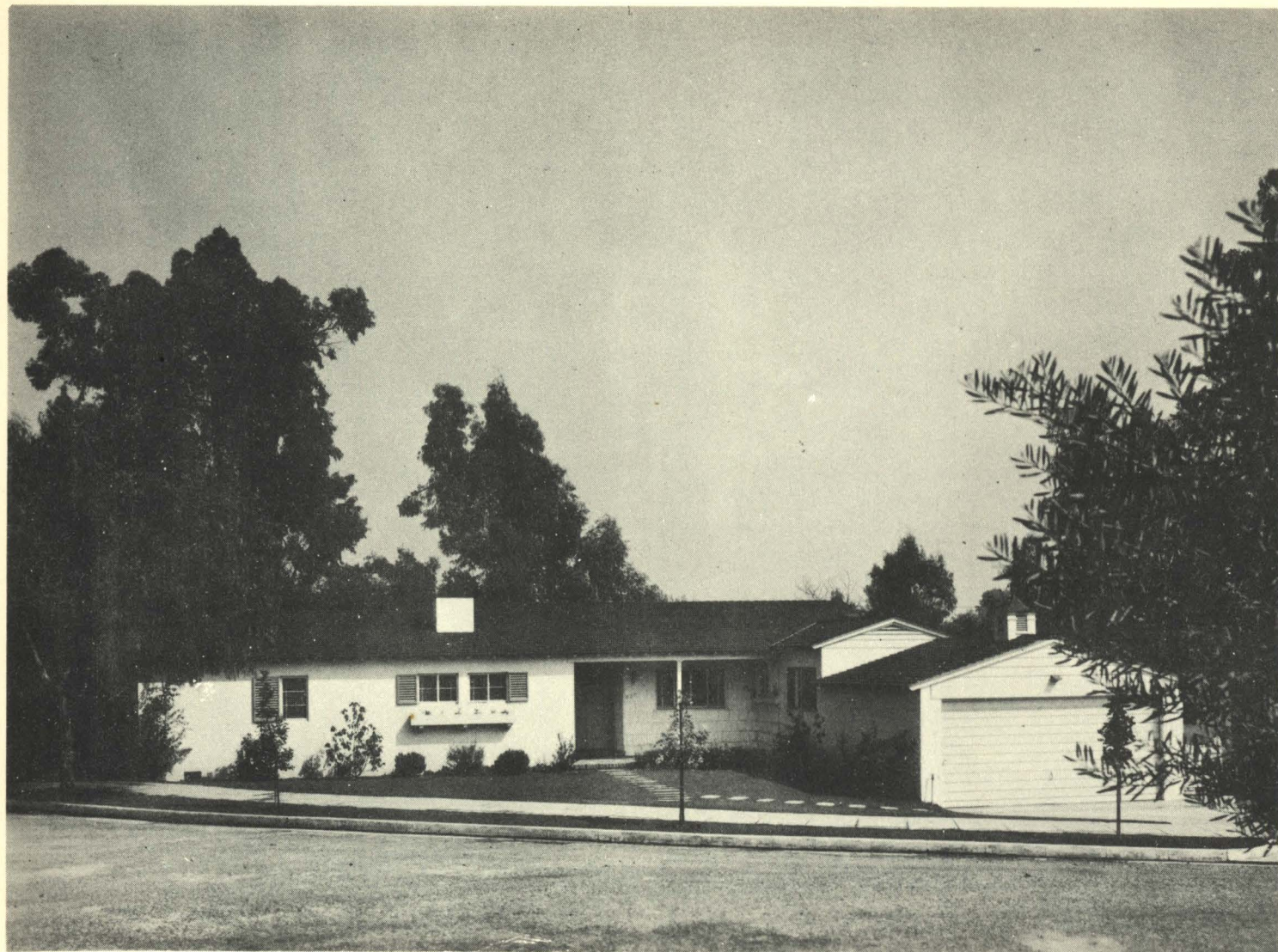
**KITCHEN EQUIPMENT:** Stove—Hot Point and refrigerator—Edison General Electric Appliance Co. Sink and cabinet—Kitchen Maid Corp.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Water pipes—copper.

**HEATING:** Steam. Boiler—American Radiator Co. Radiators—concealed throughout. Valves—Vent Rite, Anderson Mfg. Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—copper, 40 gal., Taco Heaters, Inc.



## 69. HOUSE FOR RICHARD R. TOWNLEY, SAN MARINO, CALIF.



Miles Berne Photo

Much of the attractiveness of California domestic work may be attributed to the placing of all rooms on one floor and the consequent long, low lines. The exterior, rambling plan, and the attached garage of the house shown here are all typical of the locality.

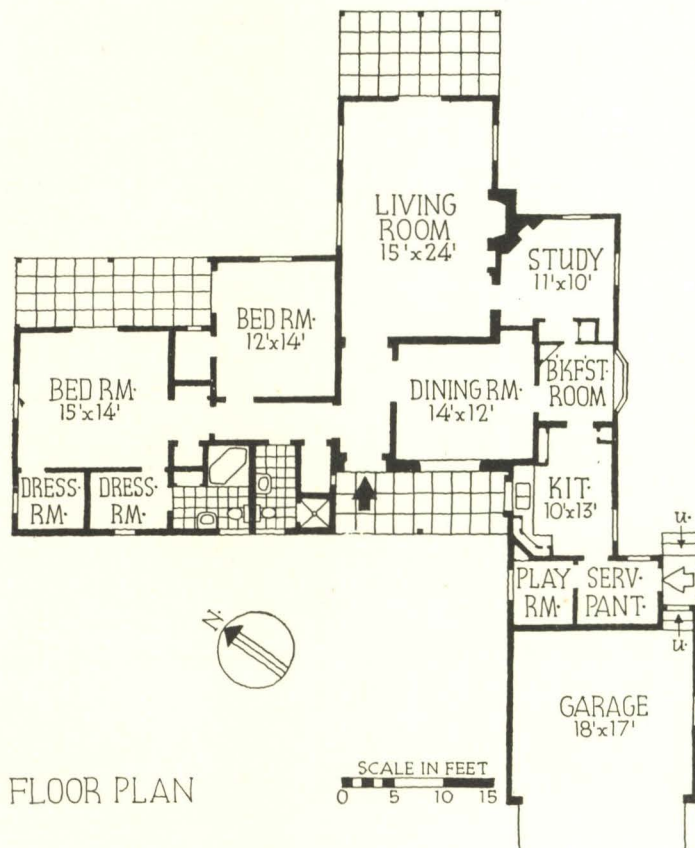
*The architect comments:* "The house is planned with the living room to the rear to take advantage of more favorable exposures, and because the rear of the property includes an interesting arroyo which offers unusual landscaping possibilities. The kitchen is planned with a window above the sink, overlooking the entrance porch. The owner considers this a very desirable feature. The attached garage with direct under-cover access is also considered desirable.

"The breakfast room is a common feature in California houses where a southern or eastern exposure is available. Where there are no servants quartered in the house, breakfasts are often prepared by the family, the maid arriving in time to do the dishes. It is also useful as a pantry when meals are being served in the dining room. In California there are probably as many small houses with breakfast rooms as there are without them. It seems to be a matter of owners' desires."

Cubage: 31,000. Cost: \$7,000 at 22½ cents a cubic foot.



## CONSTRUCTION OUTLINE



### FOUNDATION

Walls—concrete.

### STRUCTURE

Exterior walls—cement plaster, wood studs. Interior partitions—plaster on studs. Floor construction—wood joists, 6 in. sub-floor.

### ROOF

Wood frame covered with shingles.

### CHIMNEY

Lining—terra cotta; metal fireplace damper, Richardson & Boynton Co.

### SHEET METAL WORK

Flashing—galvanized iron.

### WINDOWS

Sash—steel, Druwhit Co. Glass—single strength, quality B. Blinds—1 $\frac{3}{8}$  in. fir.

### FLOORS

Living room—oak plank. Bedrooms and halls— $\frac{1}{2}$  x 2 in. oak. Kitchen—1 x 4 in. fir, covered with linoleum. Bathrooms—tile.

### WALL COVERINGS

Bedrooms—wallpaper. Bathrooms—lacquered wallpaper.

### WOODWORK

Trim, shelving and cabinets—fir. All doors—white pine.

Garage doors—fir, overhead type.

### HARDWARE

Interior and exterior—brass.

### PAINTING

All painting—3 coats lead and oil.

### ELECTRICAL INSTALLATION

Wiring system—knob and tube. Switches—tumbler, Hart & Hegeman. Fixtures—Luminaire, brass and pewter, Westinghouse Electric & Manufacturing Co.

### KITCHEN EQUIPMENT

Range—gas. Refrigerator—General Electric Co.

### BATHROOM EQUIPMENT

Seat—C. F. Church Manufacturing Co. All other fixtures by Standard Sanitary Manufacturing Co.

### PLUMBING

Pipes—wrought iron, A. M. Byers Co.

### HEATING

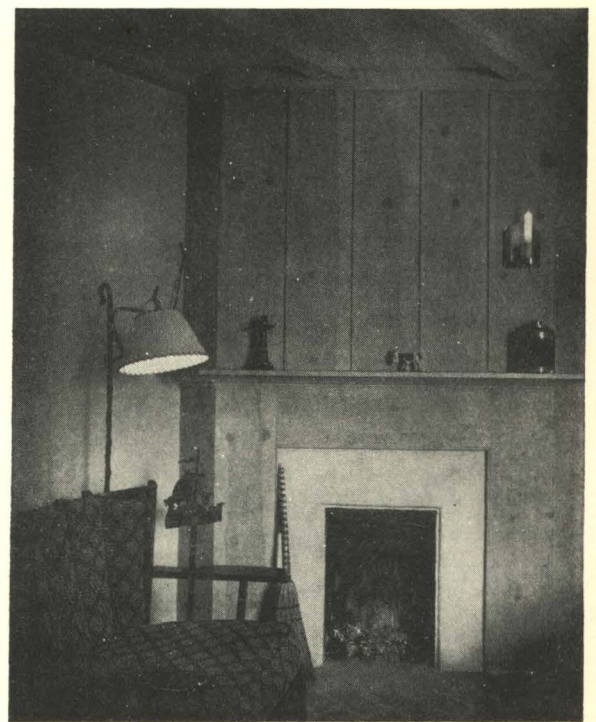
Hot air unit, gas fired furnace.

### SPECIAL EQUIPMENT

Venetian blinds—Columbia Mills.



ENTRANCE DETAIL



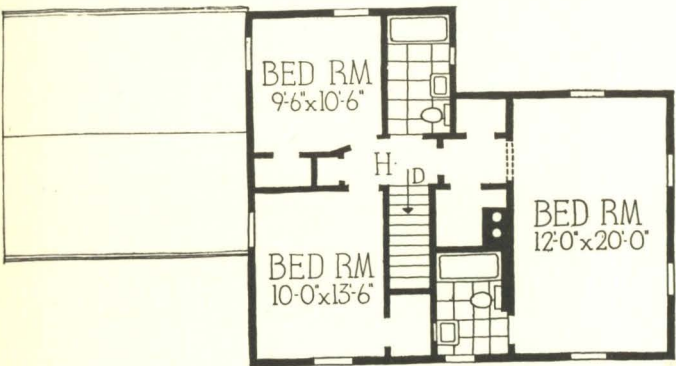
STUDY



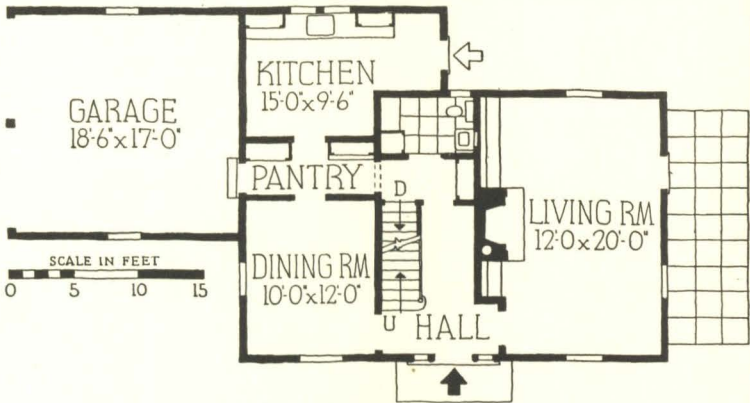
70. HOUSE FOR F. A. BIDERMAN, CHAPPAQUA, N. Y.



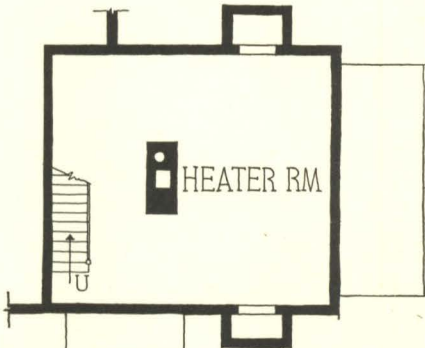
John Gass Photos



SECOND FLOOR



FIRST FLOOR



BASEMENT

A conventional small house, both in exterior and plan, this residence is fortunate in its site, which contains an old orchard and is surrounded by woods. Outside of a pine paneled living room, designed as a setting for some early American furniture, and provisions for a number of electrical appliances, there were no special requirements.  
Cubage: 23,500. Cost: \$7,000, at 29 cents a cubic foot.





ENTRANCE DETAIL



LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete blocks. Waterproofing—Anti-Hydro in cement finish, Anti-Hydro Waterproofing Co.

### STRUCTURE

Exterior walls—24 in. Royal cedar shingles.

### ROOF

Perfection cedar shingles, 18 in.

### CHIMNEY

Brick, with H. W. Covert Co. damper.

### SHEET METAL WORK

Flashing, gutters and leaders—copper.

### INSULATION

Outside walls and attic floor—rock wool. Weather-stripping—zinc, bronze saddles.

### WINDOWS

Sash—double hung. Glass—single strength, quality B.

Screens—bronze wire in wood frame.

### STAIRS

Treads—oak. Risers and stringers—pine.

### FLOORS

Living room, bedrooms and halls—clear white oak.

Kitchen—linoleum covered. Bathrooms—tile.

### WALL COVERINGS

Living room, bedrooms and halls—wallpaper.

### WOODWORK

Ponderosa pine throughout. Garage doors—overhead type, Stanley Co.

### HARDWARE

Interior and exterior—Stanley Co.

### PAINTING

Interior: Walls, trim and sash—lead and oil. Ceilings—calcimine. Floors—shellac and wax. Exterior: Walls and sash—lead and oil. Roof—creosote, Samuel Cabot, Inc.

### ELECTRICAL INSTALLATION

Wiring system—Radiant, General Electric Co. Switches—General Electric Co.

### KITCHEN EQUIPMENT

All by General Electric Co., except cabinet by Kitchen Maid Manufacturing Co.

### LAUNDRY EQUIPMENT

Sink—Standard Sanitary Manufacturing Co. Washing machine—General Electric Co.

### BATHROOM EQUIPMENT

All fixtures by Standard Sanitary Manufacturing Co.

### PLUMBING

Pipes: Soil and waste—cast iron. Vent—wrought iron.

Water supply—brass.

### HEATING

A. B. C. oil burner, Automatic Burner Co. Radiators—concealed. Valves—Hoffman Specialty Co. Regulator—Minneapolis-Honeywell Regulator Co.

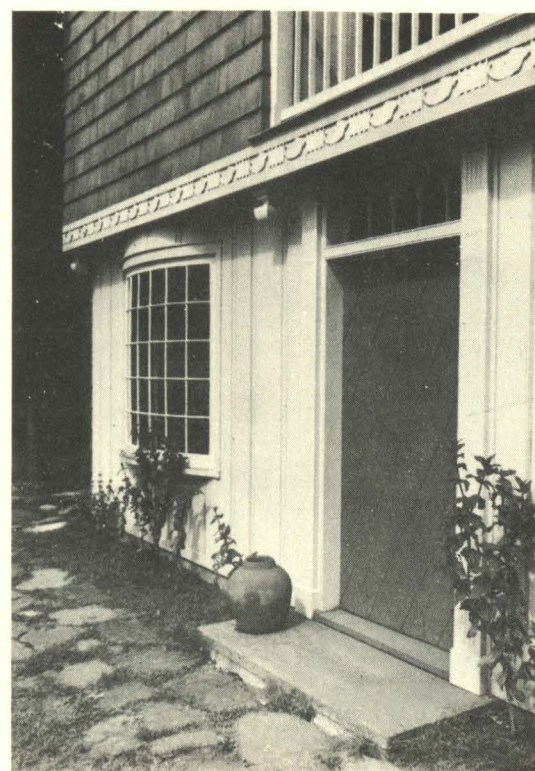


## 71. HOUSE FOR EDWARD PICKARD, KENT, CONNECTICUT

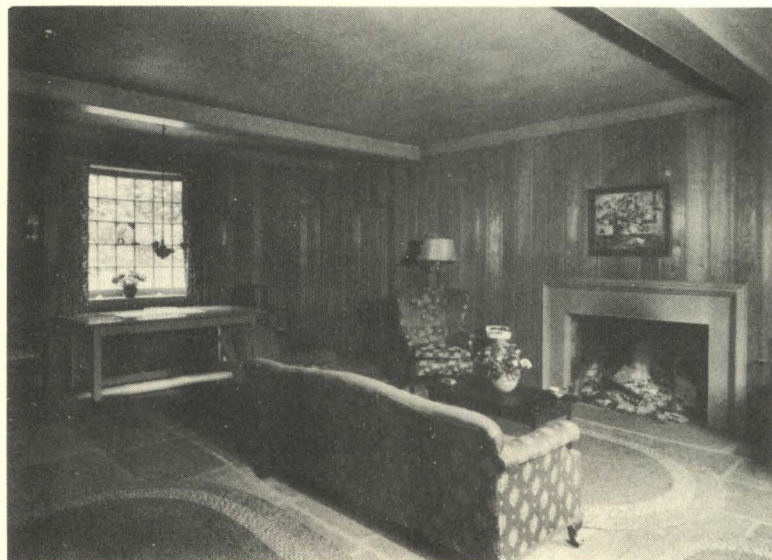


*George H. Van Anda Photos*

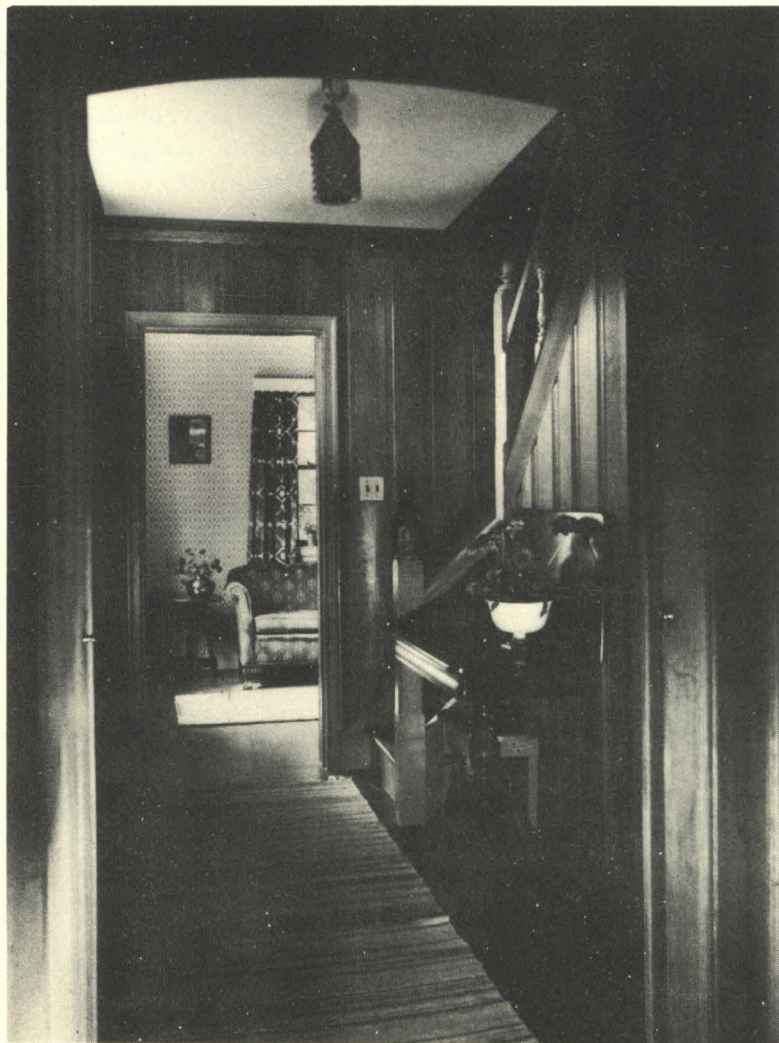
Both the exterior and the interior of this house depict admirably the versatility of wood as a building material. The horizontal shingle lines are pleasantly balanced by the vertical lap-siding, and the interior paneling gives a substantially decorative, though somber, background to the furnishings. The large second floor porch and the library bay window are not only instrumental in breaking up the facade, but are both highly commendable additions to the function of the house. Details have been carefully studied, and the whole design shows great skill in adapting stylistic precedent. Cost: \$7,000.



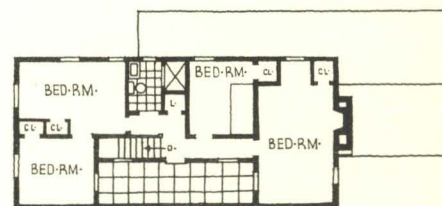




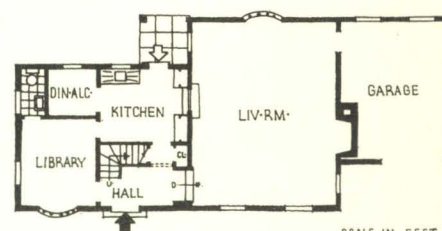
LIVING ROOM



HALL



SECOND FLOOR



FIRST FLOOR

SCALE IN FEET  
0 5 10 15

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete, continuous.

### STRUCTURE

Exterior walls—cedar shingle, building paper, diagonal sheathing, 4 in. studs, 1 in. insulating lath, gypsum plaster. First floor—6 in. cinders, 4 in. concrete, 2 x 3 sleepers, sub-floor, paper and finished floor oak and pine. Second and attic floor—wood.

### ROOF

Construction—wood frame covered with cedar shingle.

### SHEET METAL WORK

Flashing, gutters and leaders—copper.

### INSULATION

Outside walls and attic floor—1 in. insulating lath. Weatherstripping—Silentite, Curtis Co.

### WINDOWS

Sash—double hung, spring balance, Curtis Co. Glass—double strength, quality A.

### STAIRS

Main stair—closed stringer type. Treads—maple. Risers and stringers—pine.

### FLOORS

Living room—bluestone flagging, random rectangular. Bedrooms and halls—linoleum and wood. Kitchen and bathrooms—linoleum. Porches—canvas deck set in white lead.

### WALL COVERINGS

Living room—natural redwood sheathing; balance of rooms—wallpaper.

### WOODWORK

Trim, shelving and cabinets—pine. Doors—Ponderosa pine, 1 3/4 in., Curtis Companies, Inc.

### HARDWARE

Interior and exterior—wrought iron, handmade by local craftsman.

### PAINTING

Interior trim and sash—lead and oil. Exterior walls and roof—stained.

### ELECTRICAL INSTALLATION

Wiring system—BX. Fixtures—handmade by local craftsman.

### KITCHEN EQUIPMENT

Stove—electric.

### PLUMBING

Soil and vent pipes—cast and galvanized iron. Water supply—galvanized iron.

### HEATING

Provided for, not yet installed.



## 72. HOUSE FOR V. McALMON, LOS ANGELES, CALIF.



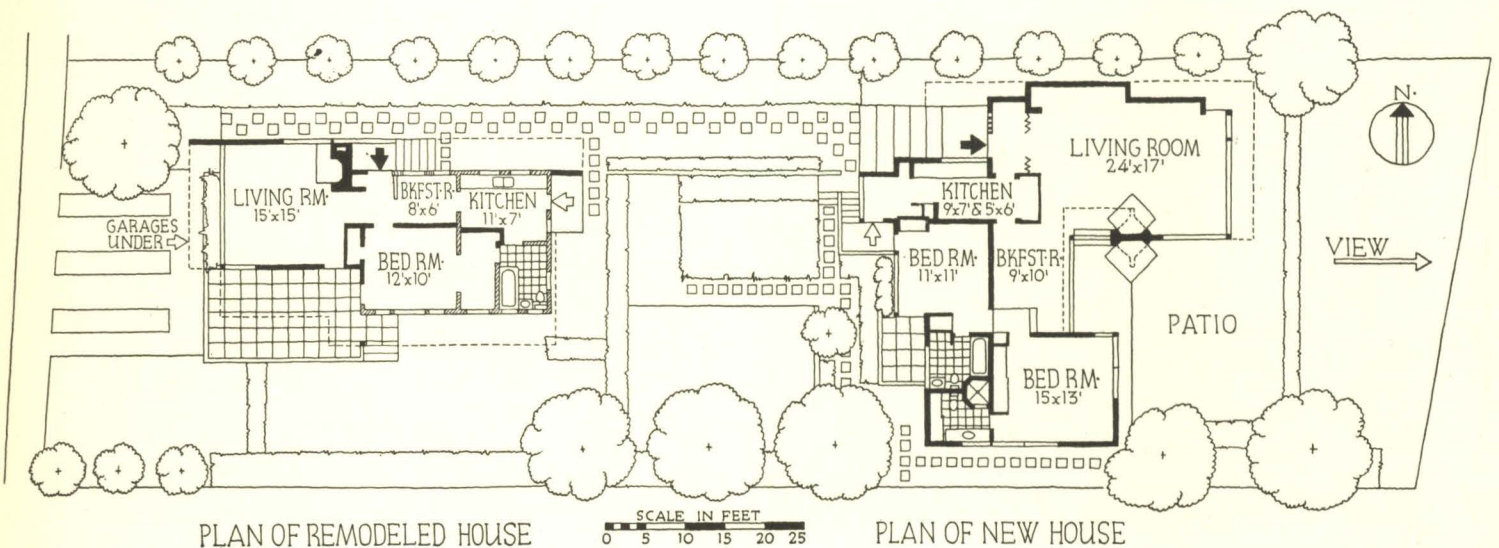
NORTHWEST ELEVATION, NEW HOUSE

**PROBLEM:** On a steep lot, with a good view to the east, to build a two-bedroom house. An existing house, lower on the property, to be modernized for rental purposes.

The new house was built at the rear (and top) of the property, with glass used extensively to take advantage of the view. The pronounced overhangs are characteristic of Mr. Schindler's work, and serve not only for protection from the intense sunlight, but give plasticity to the composition. An interesting feature of the plan is the pantry-like extension of the kitchen where a dining table on wheels may be set and then moved to any part of the house or patio.

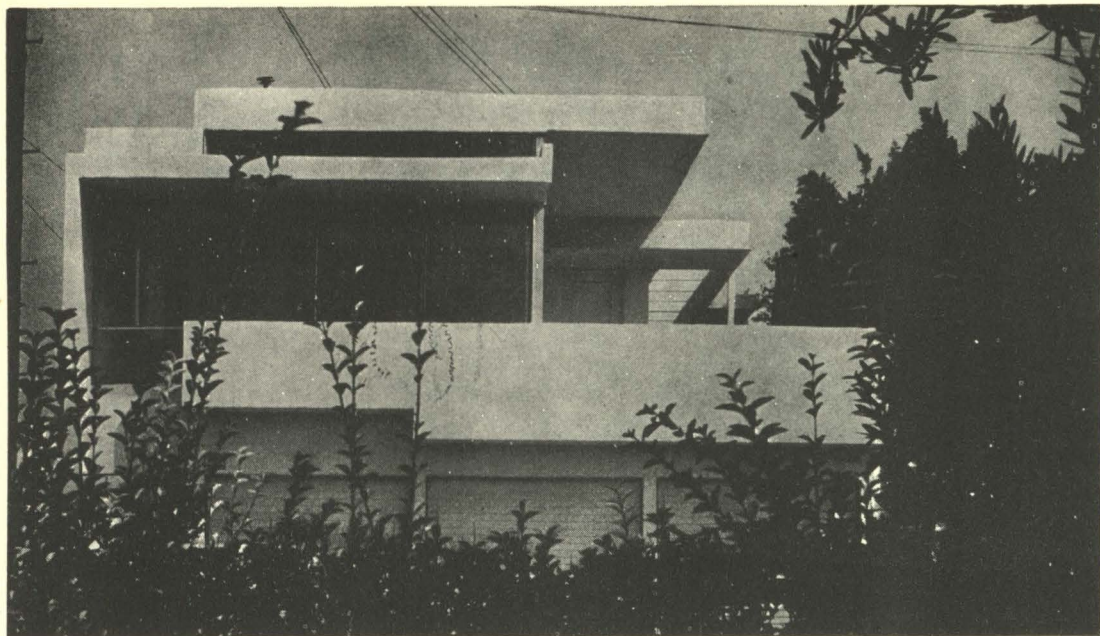
The existing house was given its own private garden, and a new living room was added.

Cubage: 24,000. Cost: \$7,200 at 30 cents a cubic foot.



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REMODELED  
HOUSE

*Julius Shulman Photos*

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete.

### STRUCTURE

Exterior—stucco, wire lath, roofing paper, wood frame, wood lath and plaster. Floor construction—concrete joists, 2 in. plank flooring.

### ROOF

Composition roofing. Deck construction—concrete floor.

### CHIMNEY

Terra cotta lining.

### SHEET METAL WORK

Flashing and gutters—galvanized iron.

### WINDOWS

Sash—sliding sheet metal, special design. Glass—3-16 in. window glass. Screens—galvanized iron.

### FLOORS

Living room—carpet. Bedrooms—hardwood. Kitchen and bathrooms—linoleum.

### HARDWARE

Interior and exterior—Schlage Lock Co.

### ELECTRICAL INSTALLATION

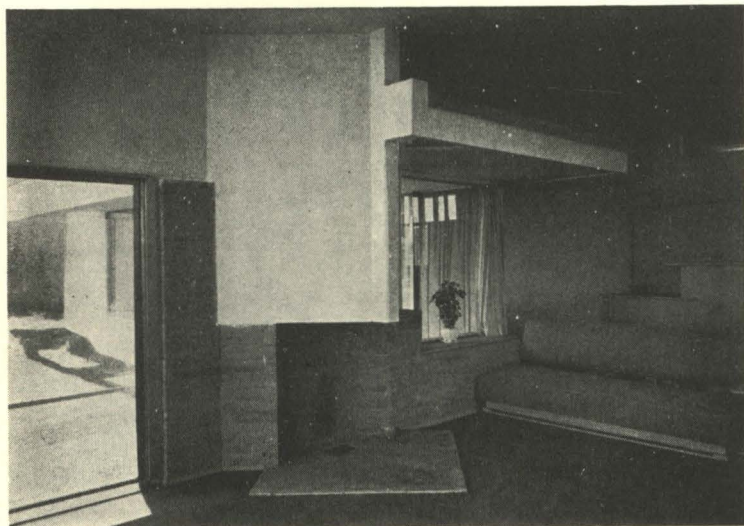
Wiring system—conduit. Fixtures—built-in, direct and indirect.

### KITCHEN EQUIPMENT

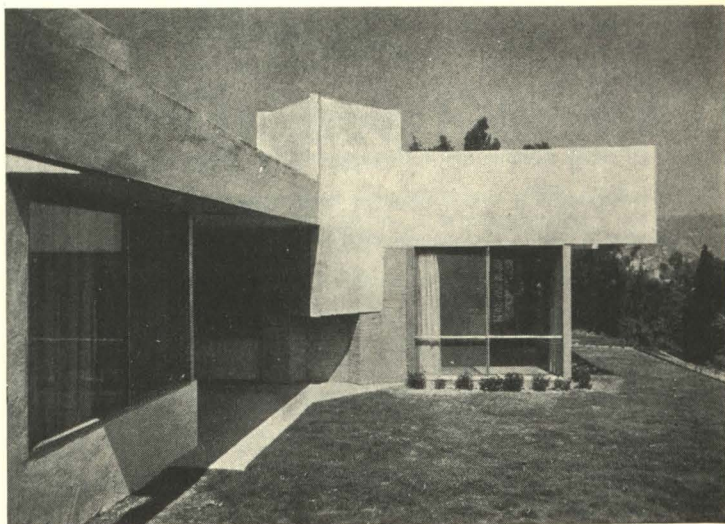
Refrigerator—Frigidaire Sales Corp.

### HEATING

Warm air, gas fired furnace.



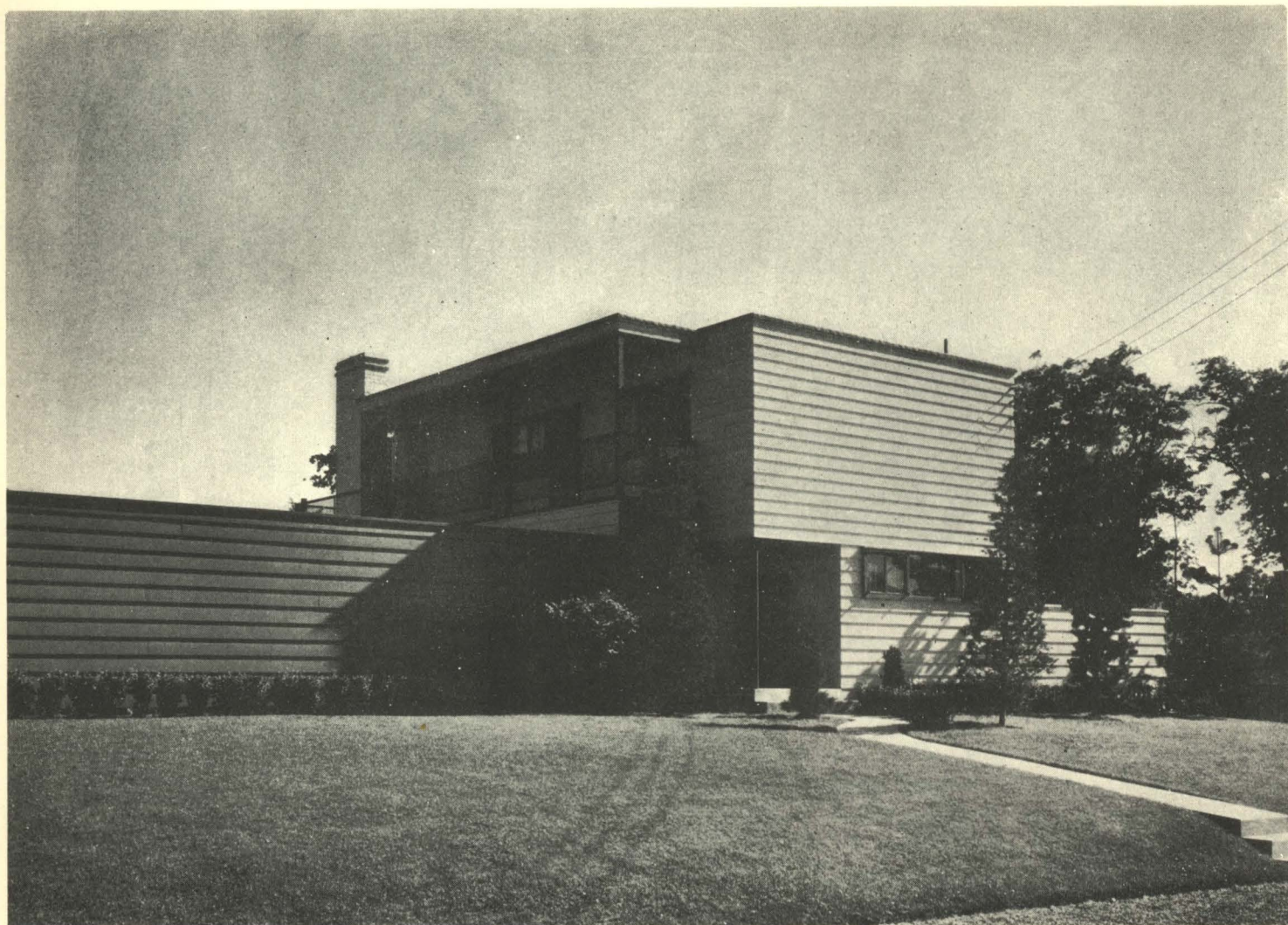
LIVING ROOM



PATIO



### 73. HOUSE FOR VINCENT K. CATES, MELROSE, MASS.



*George H. Davis Photos*

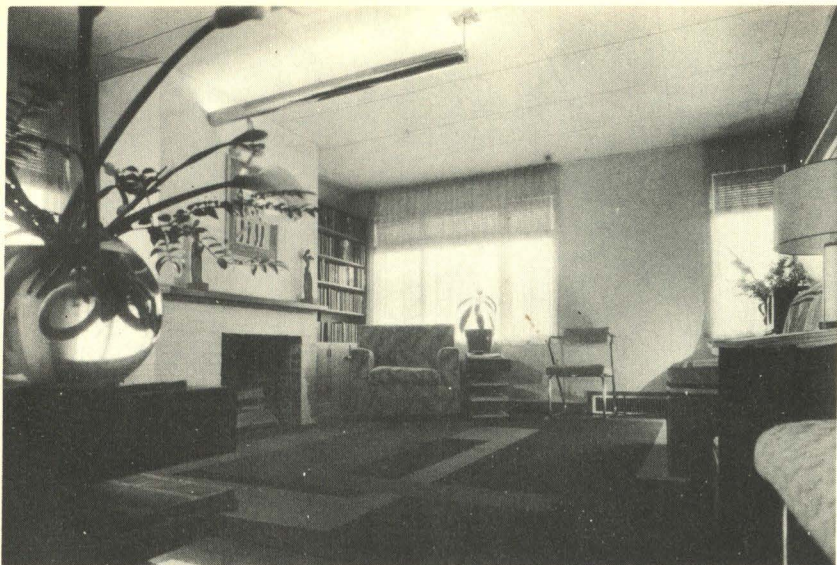
The simple forms of both plan and elevation offer an economical and attractive design. The overall horizontal pattern alternating with continuous window surfaces makes an ideal background for the landscaping. Furthermore, the long and low garden wall not only insures privacy, but is invaluable in accentuating the general mass of the structure. The location of the service elements toward the front of the house orients the main living elements toward the garden in the rear, while providing direct access to the upstairs bedrooms and terraces. Cabinets, bookcases, and other furnishings are built-in and integrated with the lighting and interior coloring to produce an harmonious whole. Cost: \$7,200. Cubage: 23,200 at 31 cents.



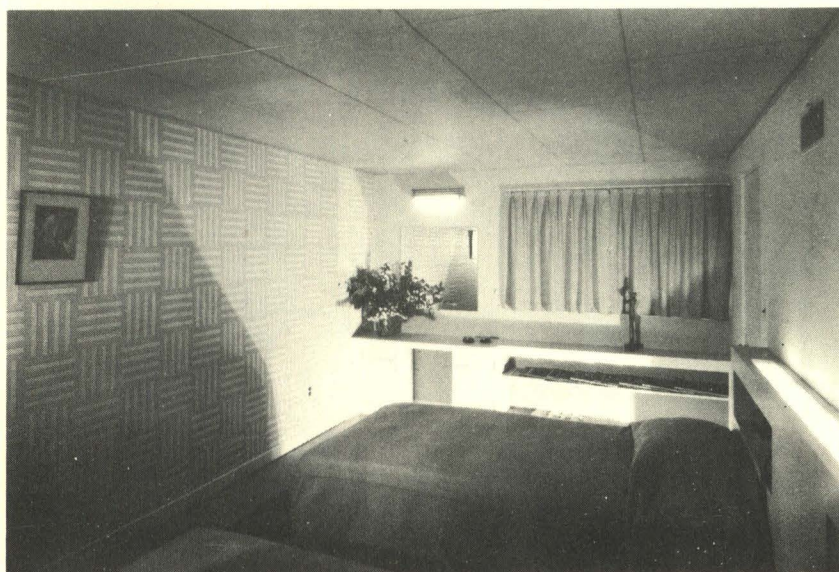
**ENTRANCE**

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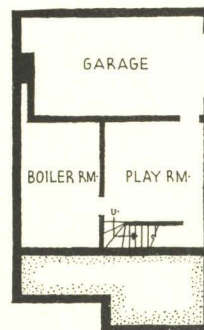
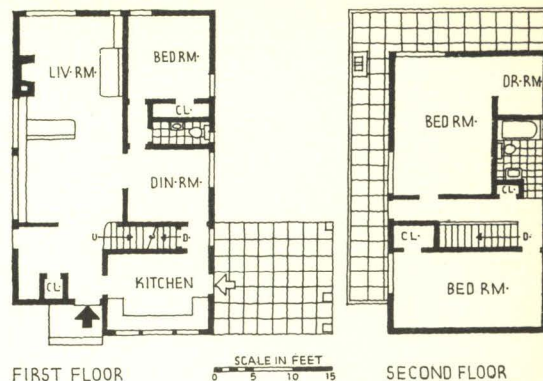
LIVING ROOM



BEDROOM



KITCHEN



BASEMENT

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—12 in. concrete block. Cellar floor—4 in. stone concrete on cinder fill. Waterproofing—membrane in floor and exterior walls below grade.

### STRUCTURE

Exterior walls—2 x 4 in. stud balloon frame; 1 in. Thermasote insulating board; siding 8 in. to weather; ½ in. Homasote inside. Floor construction—wood joists and rafters. Ceilings—½ in. Homasote, except living room which is 24 x 24 in. acoustic tile.

### ROOF

Construction—wood joists and rafter and T & G roofers, covered with 1 in. Thermasote and built up roofing.

### SHEET METAL WORK

Flashing—16 oz. soft copper. Gutters and leaders—copper.

### INSULATION

See structure and roof.

### WINDOWS

Sash—standard light-weight sections for operating sash, Hope Windows, Inc., Getty operators. Glass—double strength, quality B, Libbey-Owens-Ford Glass Co. Screens—bronze wire on standard metal frames.

### FLOORS

First and second floors—¾ in. selected pine roofers, covered with carpet. Kitchen, lavatory and bath—linoleum.

### WOODWORK

Doors—flush panel veneered and painted. Garage doors—Overhead sectional door.

### PAINTING

Interior: Walls and ceilings—U. S. Gypsum metal strips over joints and Textone plastic paint. Trim and sash—flat oil paint. Exterior: Walls—3 coats lead and oil; all exterior metal work—gray metal paint. All paint by Pratt & Lambert.

### PLUMBING

Standard fixtures. Soil pipes—cast iron. Water pipes—copper tubing.

### HEATING

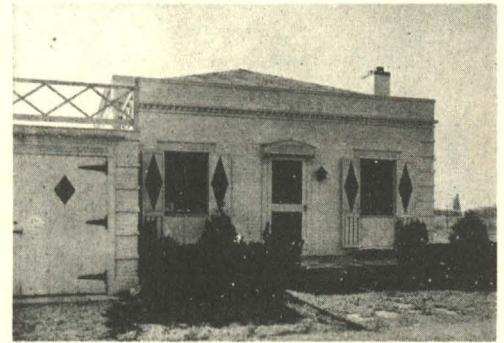
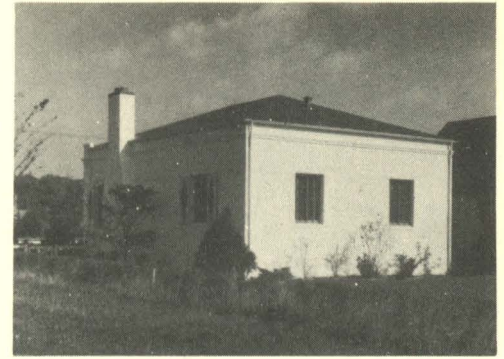
Warm air, provision made for future air conditioning.



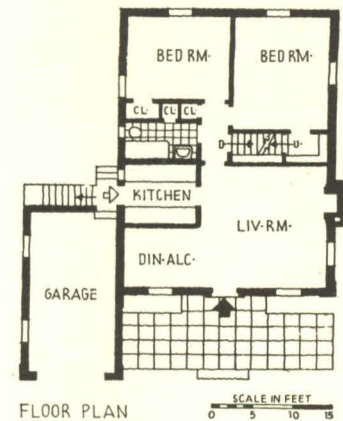
## 74. HOUSE FOR ALFRED L. HART, WANTAGH, LONG ISLAND, N. Y.



John Beinert Photos



WALKER & GILLETTE, ARCHITECTS



### CONSTRUCTION OUTLINE

**STRUCTURE:** Brick veneer on wood frame construction.

**ROOF:** Black slate. Deck—composition roof with slate laid in mastic.

**INSULATION:** Outside walls and attic floor—4 in. rock wool.

**WINDOWS:** Sash—metal casement. Glass—double thick. Screens—bronze.

**FLOORS:** All floors—oak, except kitchen which is linoleum covered and tile in bath.

**PAINTING:** Interior—3 coats lead and oil.

**KITCHEN EQUIPMENT:** Stove, refrigerator and dishwasher—electric, General Electric Co.

**PLUMBING:** Soil pipes—cast iron. Water supply pipes—brass.

**HEATING AND AIR CONDITIONING:** General Electric system including filtering, humidifying and cooling.

An extremely well correlated plan. The dining alcove is ideally situated, since it can be either a part of or entirely segregated from the living room. Among the unusual features of the residence is the use of the garage roof as a terrace accessible from the rear by a stairway. The air conditioning unit system includes filtering, humidifying, and cooling. The elevations, outside of the rather spotty blinds, are simple and tastefully designed with classical refinement. Cost: \$7,500. Cubage: 16,500 at 45½ cents.

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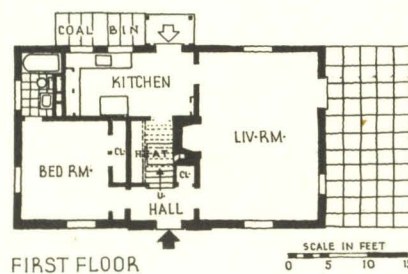


## 75. HOUSE FOR EARL KATZENSTEIN, CHAPPAQUA, N. Y.

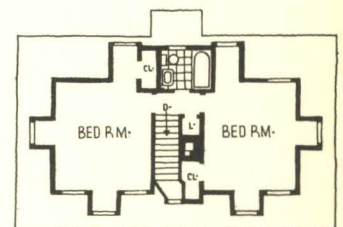


John Goss

EMIL J. SZENDY, ARCHITECT



FIRST FLOOR



SECOND FLOOR

A formality uncommon in small residences today has been achieved in this Westchester house by the use of French domestic precedent of the eighteenth century. In keeping with the style, complete symmetry has been maintained in all but the rear elevation. Dormers typical of the period, also symmetrically disposed, serve to light and ventilate the two upstairs bedrooms. The house approaches a minimum in its provision of accommodations: the living room is used for dining as well, there is no basement, and entrance to the kitchen is directly from the outside. To save space the heater room is placed under the main stair and is easily accessible from the kitchen. An attractively shaded terrace opens off the living room. Cost: \$7,500.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—cinder block painted with 2 coats Portland cement paint. Inside—lath and plaster.

**ROOF:** Wood frame shingles with 2 in. rock wool blanket for roof and dormer insulation.

**INSULATION:** Reynolds metallation.

**SHEET METAL WORK:** Copper throughout.

**WINDOWS:** Wood, casement; kitchen and upper bath—double hung, zinc weatherstripping. Screens—32 gauge, 16 mesh bronze.

**FLOORS:** Concrete floors, covered with random width red oak in living room and linoleum in kitchen and bath. **WOODWORK:** Living room—finished in knotty pine paneling, exposed beam ceiling.

**ELECTRICAL INSTALLATION:** Rigid conduit under first floor, all other BX.

**PLUMBING:** Fixtures—Kohler Co. Hot Point 40 gal. electric tank, ice box and stove.

**HEATING AND AIR CONDITIONING:** Air conditioned, oil burner.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

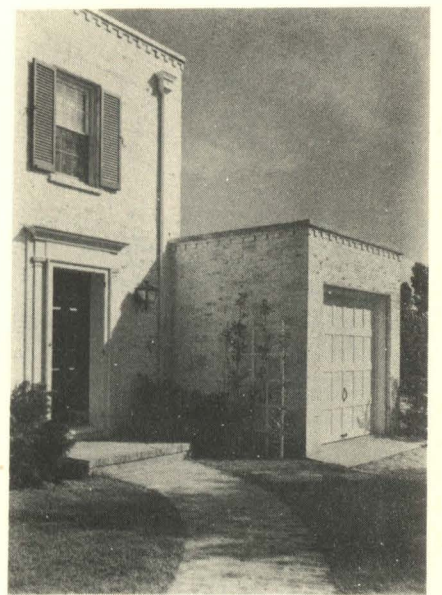


## 76. HOUSE IN WESTFIELD, NEW JERSEY



*Samuel H. Gottscho Photos*

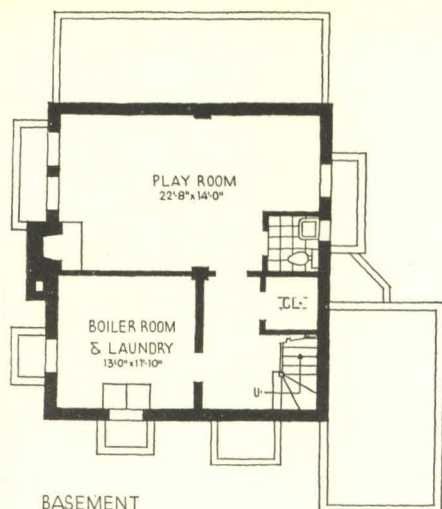
Built as part of a real estate development, this house is based on a design by the architect which received an award in the small house competition held by the New York Chapter of the American Institute of Architects. It is simple and restrained in its design, both inside and out, its severity of treatment contrasting pleasantly with the planting surrounding it. An economical square plan contains a large living room, three bedrooms, and a basement playroom. The garage is located for access through the service entrance. Cubage: 23,000. Cost: \$7,290 at about 31 cents per cubic foot.



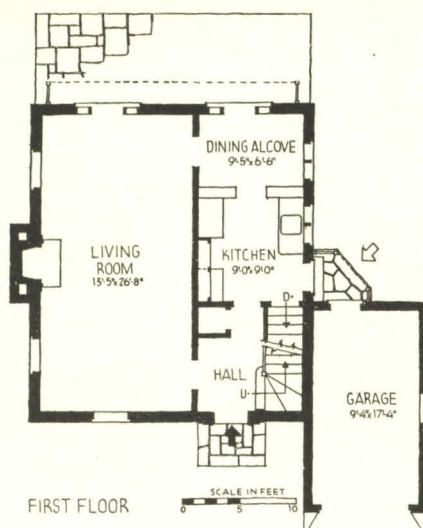
**ENTRANCE**

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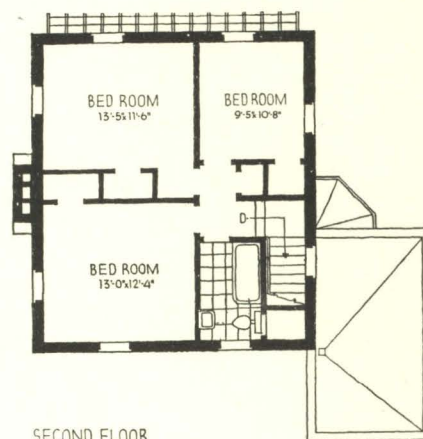




BASEMENT



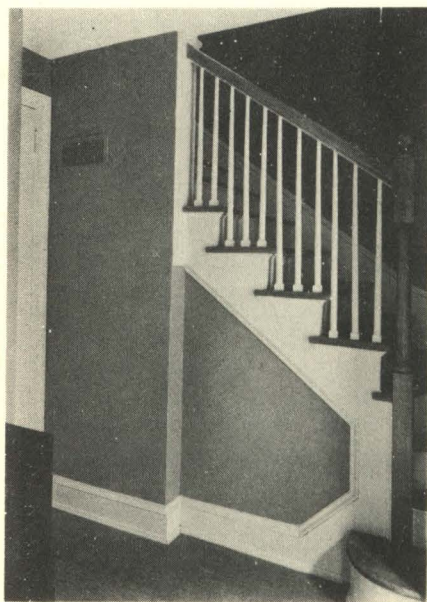
FIRST FLOOR



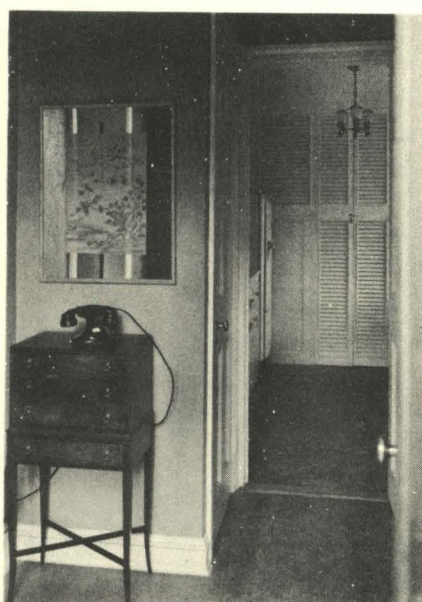
SECOND FLOOR



LIVING ROOM



STAIRS



HALL-KITCHEN

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—12 in. cinder blocks, continuous. Cellar floor—4 in. concrete with cinder fill. Waterproofing—2 brush coats liquid asphalt on cellar walls, below grade.

### STRUCTURE

Exterior walls—4 in. brick veneer anchored to cement plaster on Reynolds Corp. Ecod lath, no sheathing; 2 x 4 in. stud framing with Ecod lath and plaster for interior finish. Interior partitions and ceilings—metal lath and plaster.

### ROOF

Ten ounce copper sheets with standing seams. Deck—three-ply built-up asphalt felt roof.

### CHIMNEY

Brick with terra cotta flue lining. Fireplace and damper—Heatilator Co.

### SHEET METAL WORK

Flashing—16 oz. copper, lead coated on copings and over doorways. Gutters—16 oz. copper lining. Leaders—copper, rectangular.

### INSULATION

Outside walls—Ecod lath with metallation. Attic floor—aluminum foil metallation, Reynolds Corp. Weatherstripping—narrowline weatherstripped window, Andersen Frame Corp.

### WINDOWS

Sash—1 3/8 in. wood, double hung throughout. Kitchen and dining alcove—wood casement. Glass—1/8 in., quality A.

### STAIRS

Main stair—white pine risers and stringers, oak treads. Attic stair—disappearing type, Bessler Disappearing Stairway Co.

### FLOORS

Living room, bedrooms and halls—oak. Kitchen and bathrooms—linoleum covered.

### WOODWORK

Trim—white pine. Cabinets—knotty pine. Doors—white pine. Garage doors—wood paneled overhead type.

### HARDWARE

Interior and exterior—brass.

### PAINTING

Interior: Walls and ceilings—flat wall paint. Floors—stained and waxed. Exterior: Walls—brick painted white.

### ELECTRICAL INSTALLATION

Wiring system—BX cable. Switches—tumbler type.

### KITCHEN EQUIPMENT

Refrigerator—electric. Sink—double drainboard, Eljer Co.

### PLUMBING

All fixtures by Eljer Co. Soil pipes—cast iron. Water supply pipes—brass.

### HEATING AND AIR CONDITIONING

Warm air and humidifying, Superfex oil-fired, Perfection Stove Co.



## 77. HOUSE FOR MISS ELLEN A. DOCKERY, NEW CANAAN, CONN.

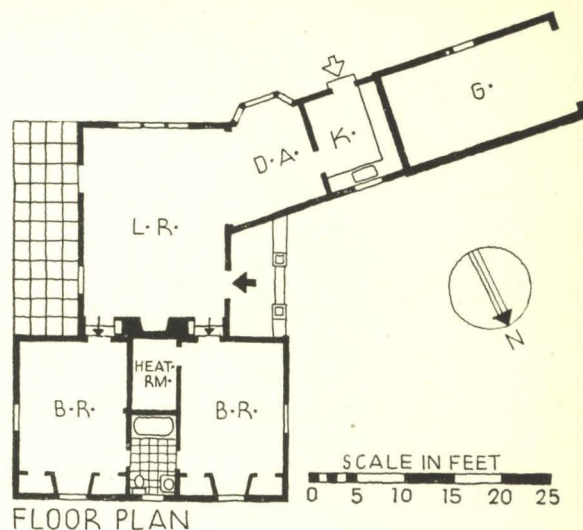


Gottscho Photos

**PROBLEM:** To design a small house in a thickly wooded site, following the contours to avoid destruction of the natural rock formation, and saving as many trees as possible.

The unusual charm of this unpretentious dwelling is due in large part to its recognition of the possibilities and limitations of the site. The requirements of the owner were simple, including two bedrooms and very small dining and kitchen space. The large living room is combined in an interesting manner with the dining alcove, producing in effect one room of generous size, as well as solving successfully the awkward problem of joining the wing to the main body of the house. Detail on the exterior is crisp and in excellent scale with the house. The heating arrangement is of particular interest; since no excavation was done the heater room had to be located on the ground floor, and considerable economy was effected by placing it so that both bedrooms and the living room can be heated with a minimum of ductwork. Cost: \$7,480. Cubage: 14,100 at 53 cents.





NORTH ELEVATION



LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Poured concrete waterproofing—Hot pitch on felt under first floor slab.

### STRUCTURE

Exterior walls—Frame construction, shingle, sheathing. Inside partitions—Ecod lath and 3 coat plaster on wooden studs. First floor—4 in. concrete slab on gravel fill, wood tile floor laid in mastic, E. L. Bruce Co.

### ROOF

Construction—shingle lath covered with cedar shingles.

### SHEET METAL WORK

Flashing, gutters and leaders—copper.

### INSULATION

Outside walls and roof—Reynolds Metallation.

### WINDOWS

Sash—wood, double hung, weatherstripped with Curtis Silentite. Glass—single thickness. Screens—outside, hung.

### FLOORS

Living room and bedrooms—Bruce tile wood. Kitchen and bathrooms—linoleum.

### WOODWORK

Trim—Curtis stock; Oxford kitchen cabinets. Interior doors—6-panel Curtis. Garage doors—Curtis imitation plank.

### PAINTING

Interior: Walls, trim and sash—lead and oil. Exterior: Walls and sash—lead and oil.

### KITCHEN EQUIPMENT

Stove—Universal Electric. Refrigerator—Frigidaire. Sink—Standard Sanitary Mfg. Co.

### BATHROOM EQUIPMENT

All fixtures by Standard Sanitary Mfg. Co.

### PLUMBING

Soil and vent pipes—cast iron. Water supply—brass pipe and copper tubing from street.

### HEATING AND AIR CONDITIONING

Warm air including filtering and humidifying. Boiler—Scott Newcombe direct fired furnace with oil burner. Thermostat—Minneapolis Honeywell Regulator Co. Hot water heater—Westinghouse Electric & Mfg. Co.



## 78. HOUSE FOR H. HILL JONES, SEATTLE, WASH.



### J. LISTER HOLMES, ARCHITECT

**PROBLEM:** To build a five-bedroom house on a very limited budget.

The simplicity of the solution had much to do with the architect's success in meeting the severe financial limitations imposed. The house is a simple rectangle, with all superfluous breaks and detail eliminated. The frequent inconsistency between the modern plan and a traditional shell is illustrated here by the small windows on the second floor, made as inconspicuous as possible to avoid interrupting the predetermined rhythm of the facade. The lattice on the side porch, recalling the division of the windows, gives interest and consistency to the design.

Cubage: 37,000. Cost: \$7,800 at 21 cents a cubic foot.

### CONSTRUCTION OUTLINE

**FOUNDATION:** Walls—concrete, continuous. Cellar floor—cement finish. Waterproofing—Pabco, asphalt, The Paraffine Companies, Inc., on outside basement walls.

**STRUCTURE:** Exterior walls—hand split shakes, building paper, sheathing, studs, wood lath and plaster.

**ROOF:** Covered with shingles.

**CHIMNEY:** Brick, Seattle Brick & Tile Co. Damper—Majestic Co.

**SHEET METAL WORK:** Flashing, gutters and leaders—Armco iron, American Rolling Mills Co.

**WINDOWS:** Sash—double hung, fir. Glass—double strength, quality B, Libbey-Owens-Ford Glass Co.

**STAIRS:** Treads—oak. Risers and handrail—fir.

**FLOORS:** Main rooms—oak. Kitchen and bathrooms—linoleum, Armstrong Cork Products Co.

**WALL COVERINGS:** Main rooms—wallpaper. **WOODWORK:** Fir throughout.

**HARDWARE:** All by Yale & Towne Mfg. Co.

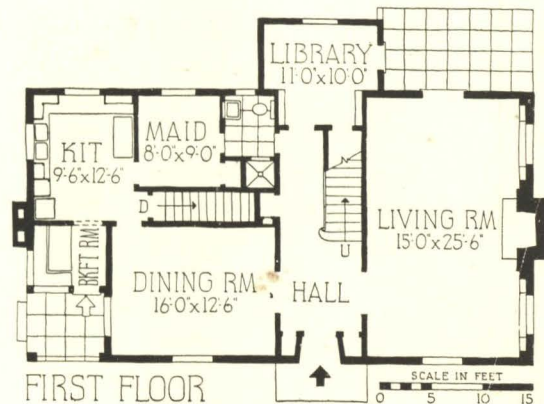
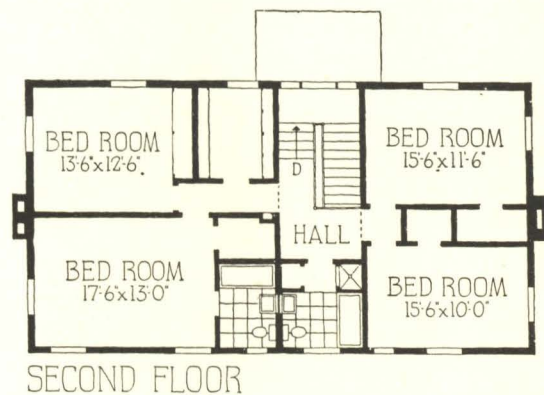
**PAINTING:** Interior: Walls and ceiling—paint. Floors—oil. Trim—Ripolin, The Glidden Co. Exterior: Walls—Double White, Samuel Cabot, Inc. Sash—lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—knob and tube. Switches—Harvey Hubbell, Inc. Fixtures—direct and indirect, Chase Brass & Copper Co.

**KITCHEN EQUIPMENT:** Stove—Westinghouse Electric & Manufacturing Co.

**PLUMBING:** All fixtures by Standard Sanitary Manufacturing Co. Pipes: Soil, waste and vent—cast iron. Water supply—medium steel.

**HEATING AND AIR CONDITIONING:** Forced air, filtered. Oil burner—Pacific, W. W. Rosenbraugh Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—electric.



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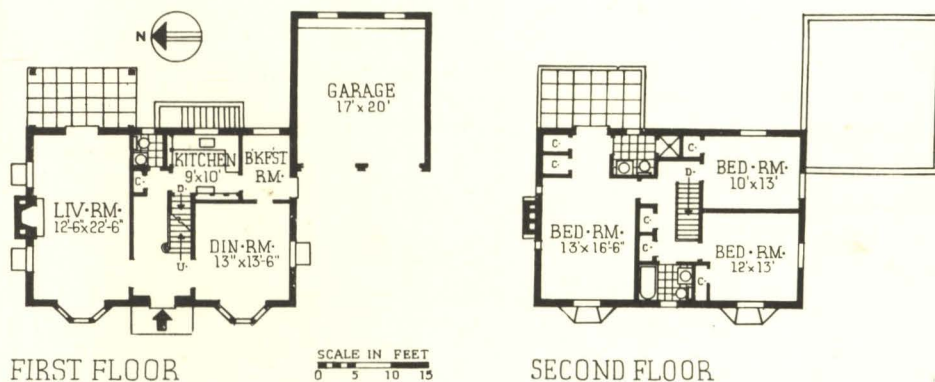


## 79. HOUSE FOR J. ROBERT MOSER, TENAFLY, N. J.



Gottcho

LUCHT AND ANDERSON, ARCHITECTS



Few traditional domestic styles are more in harmony with present-day building trends than Regency. Simple and dignified, it lends itself with grace to the modifications demanded by contemporary living requirements. Larger window areas, a freer relationship with outdoor living spaces, and similar changes can be incorporated in the existing framework with a minimum of disturbance. This example shows a compact plan, well arranged for ventilation and convenient circulation. The garage is attached, but set back, a scheme which has many obvious advantages. The house cost \$10,600, at 32 cents per cubic foot, in 1936. The architect, whose fee is not included in the above figure, notes that the cost at the present time would be higher.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Solid brick walls, 8 in., laid up in Century masonry cement, Century Cement Mfg. Co., Inc., 1 x 2 in. furring strips inside and wood lath and plaster finish.

**ROOF:** Construction—2 x 6 in. wood rafters, 20 in. o. c. wood sheathing covered with ¾ in. Vermohlt gray black roofing slate. Deck construction—canvas roof over felt, John Boyle & Co.

**CHIMNEY:** Common brick hard tile flue lining; dampers, H. W. Covert Co.

**WINDOWS:** Casement type, Crittall Mfg. Co., Inc. Glass—single thickness, quality A, Libbey-Owens-Ford Glass Co.

**STAIRS:** Main—whitewood with white oak treads. Attic—Bessler Disappearing Stairway Co.

**FLOOR COVERINGS:** Kitchen—standard gauge linoleum, Armstrong Cork Products Co.

**WALL COVERINGS:** Living room and bedrooms—Glennkraft paper, Imperial Wall Paper Co. Kitchen—Sealex linoleum, Congoleum-Nairn Co. Bathrooms—matt glazed tile wainscot and Imperial glazed wall paper above.

**PAINTING:** Interior: Ceilings—water paint, Texolite, U. S. Gypsum Co. Floors—wax finish. Trim and sash—egg shell finish. Exterior: Walls—whitewash. Sash—3 coats white lead and oil, Dutch Boy, National Lead Co.

**ELECTRICAL INSTALLATION:** Wiring system—BX, General Electric Co. Switches—General Electric Co. Fixtures—Chase Brass & Copper Co.

**KITCHEN EQUIPMENT:** Range—gas. Refrigerator—electric. Sink—10 in. one-piece Monel Metal, Whitehead Metal Products Co.

**BATHROOM EQUIPMENT:** Fixtures by Standard Sanitary Mfg. Co. Cabinet—Columbia Metal Box Co. Shower door—G. M. Ketcham Mfg. Co.

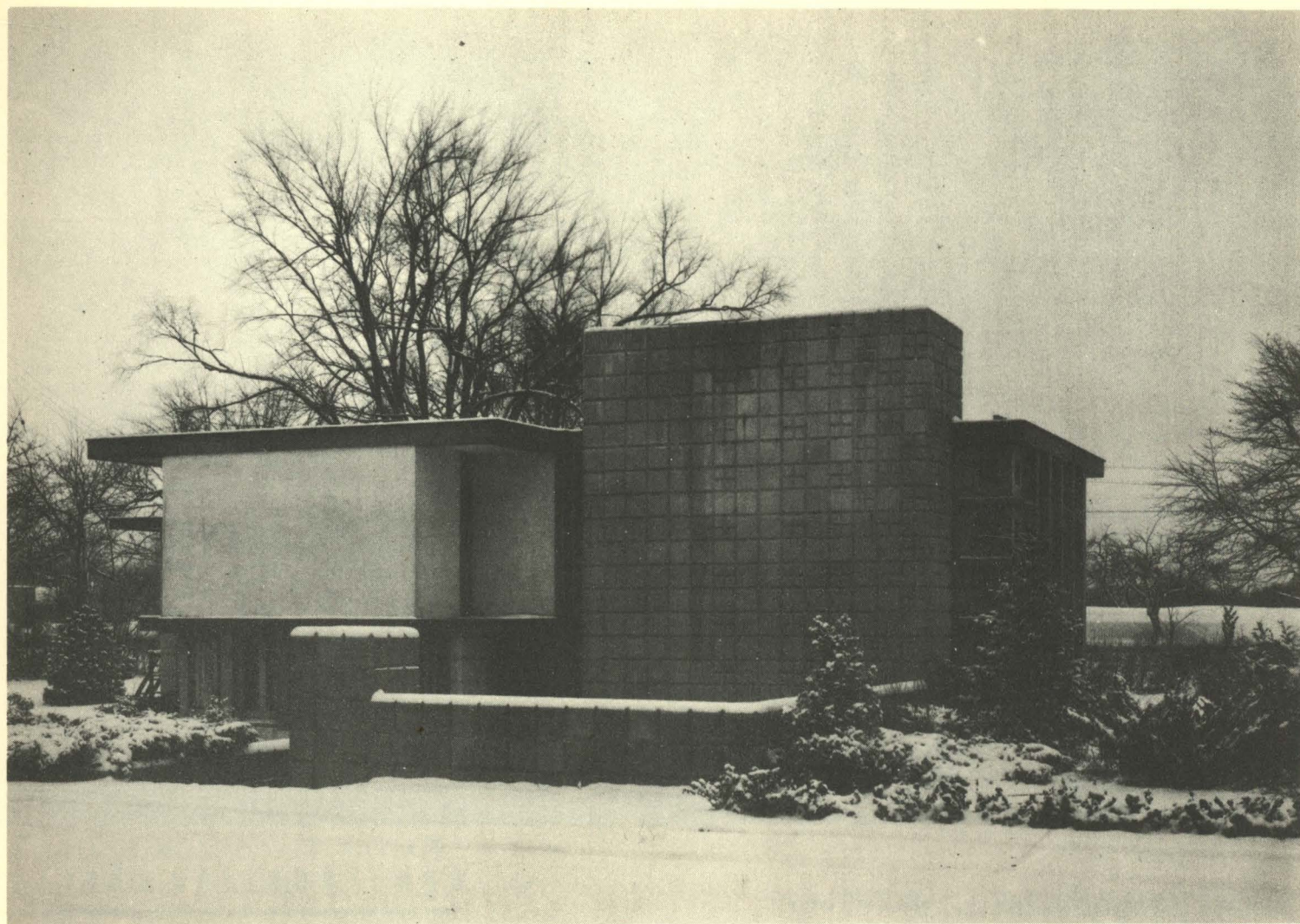
**PLUMBING:** Pipes: Soil—cast iron. Water—brass, Chase Brass & Copper Co.

**HEATING:** One pipe system. Boiler—cast iron sectional square jacketed for oil burning, Burnham Boiler Corp. Fuel—oil, "Esso" gun type burner, Gilbert & Barker Mfg. Co. Hot water heater—sectional header heater, Burnham Boiler Corp.

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## 80. HOUSE FOR ALDEN W. HANSON, MIDLAND, MICH.



Wright

**PROBLEM:** To design an immediately required minimum number of rooms, with provision for future expansion.



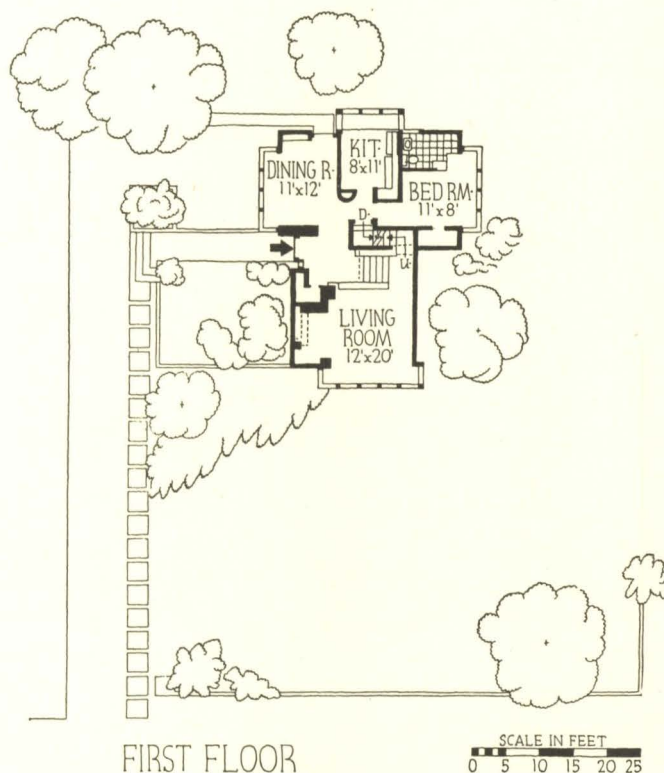
SECOND FLOOR

While the multiplicity of materials and rather exaggerated use of Frank Lloyd Wright mannerisms makes for restlessness, the outstanding merit of this house is its design as a three-dimensional object, in contrast to the average small house which is designed as a series of elevations.

*The architect comments:* "The plan provides low cubage for kitchen, dining room, and lower bedroom which are located below grade and rest on the earth. This arrangement is economical, makes for cooler rooms in summer, and provides an interesting view of the planting outside.

"The combination of the toilet room with the maid's room has proven satisfactory, and is, of course, economical. The present service entrance is a temporary arrangement which considers the future plan."

Cubage: 17,811. Cost: \$7,658.73 at 43 cents a cubic foot.

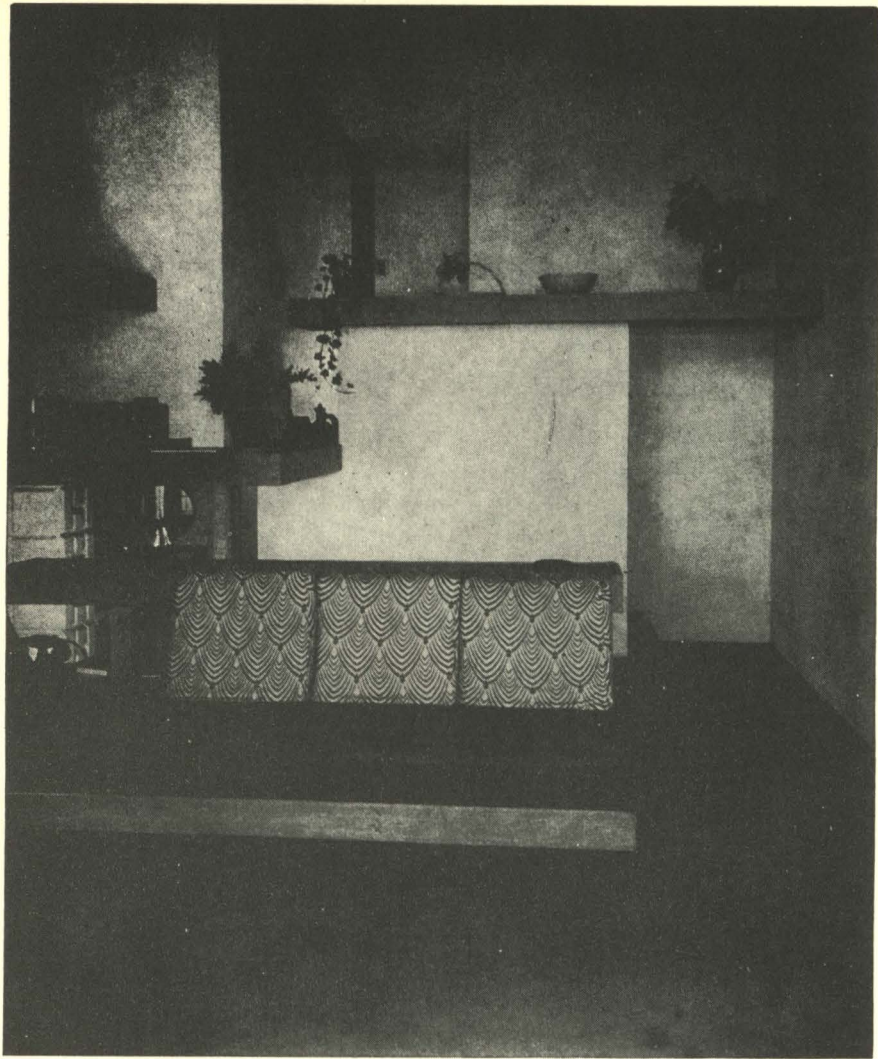


FIRST FLOOR

SCALE IN FEET  
0 5 10 15 20 25

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





LIVING ROOM

*Chickering*

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block. Floor construction—concrete.

### STRUCTURE

Exterior walls—block made of special design of cinder concrete developed by the architect and used as structural and finish wall. Waterproofing—exterior of blocks treated with waterproofing compound, Western Waterproofing Co.

### ROOF

Construction—4-ply tar and gravel laid over  $\frac{7}{8}$  in. matched lumber.

### CHIMNEY

Unit cinder block construction with terra cotta flue lining.

### SHEET METAL WORK

Copper flashing, 16 oz., throughout.

### WINDOWS

Wood sash of edge grain fir.

### WOODWORK

Trim, cabinets and all finish wood—edge grain fir.

### HARDWARE

Polished brass throughout, Schlage Lock Co.

### PAINTING

Interior: Walls—sand-float finish plaster left natural. Woodwork—1 coat of linseed oil and 1 coat of flat white rubbed down to show grain. Exterior: Woodwork—stained blue-green.

### ELECTRICAL INSTALLATION

All interior lighting recessed in ceiling or indirect from decks.

### KITCHEN AND BATHROOM EQUIPMENT

All fixtures by Kohler Co.

### PLUMBING

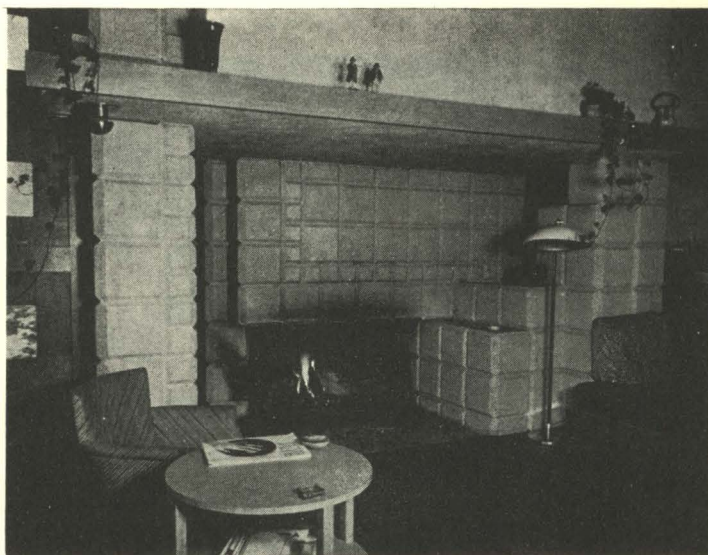
Pipes: Soil—cast iron. Water supply—copper tubing.

### HEATING AND AIR CONDITIONING

Conditioned air, direct fired furnace, Dail Sheet Products Co.



*Wright*



FIREPLACE-LIVING ROOM

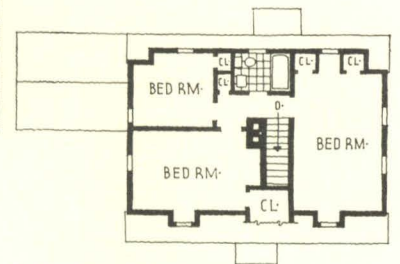
*Hanson*



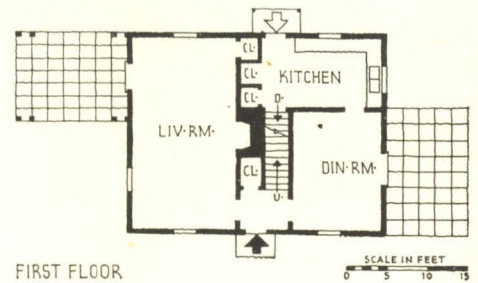
## 81. HOUSE IN NORWALK, CONN. ALFRED W. GRANT, ARCHITECT



Colonial cottage forms were carefully followed in this residence, recently erected as a Model House in Norwalk. The dormers, small sixteen-light windows, elliptical entrance shelter, and the low, square chimney are characteristic features. In plan as well as exterior design the house is entirely conventional: three bedrooms and a bath occupy the second floor and the first floor has a central chimney and stairway dividing the living room from the dining room and kitchen. Cost: \$7,800 at 42.5 cents per cubic foot.



SECOND FLOOR



FIRST FLOOR



KITCHEN

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—frame construction, Perfection red cedar shingles. Inside—plastered throughout except for wood paneled walls in living room.

**ROOF:** Perfection red cedar shingles on shingle lath.

**INSULATION:** Rock wool over second floor ceiling, Johns-Manville.

**WINDOWS:** Sash—double hung throughout except in kitchen, all weatherstripped. Glass—single strength, Pittsburgh Plate Glass Co.

**FLOORS:** All rooms—No. 2 select white oak, except medium gauge linoleum laid over fir flooring in kitchen and bath.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle.

**KITCHEN EQUIPMENT:** Combination laundry tub and sink—Standard Sanitary Mfg. Co.

**PLUMBING:** Soil pipes—extra heavy cast iron. Water supply pipes—copper tubing. Hot water heater—Welsback Hotzone, 30 gal. automatic gas.

**HEATING AND AIR CONDITIONING:** Forced air with humidifier and filters, no cooling, Dail Steel Products Co. Delco oil burner with thermostatic control.

**VENTILATION:** ILG ventilating fan in attic, ventilating kitchen and upper hall.

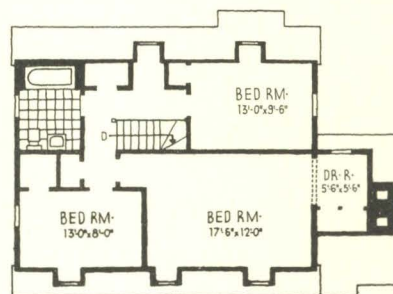
CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



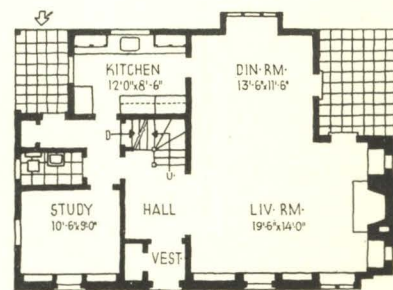
## 82. HOUSE FOR JACOB J. DAITCH, BROOKLINE, MASS.



George H. Davis Photos



SECOND FLOOR



FIRST FLOOR

SAMUEL GLASER, ARCHITECT

A comparison of the two illustrations above brings out a most interesting point in connection with small house design. The large photograph shows an effective combination of rough stone with white wood trim: its simplicity is admirable. When seen as a whole in the smaller picture, the house loses somewhat due to the introduction of wood on the side and wing. The plan is compact, again displays the living-dining room combination, has a study well located for privacy, and a lavatory easily accessible from the living rooms. Cost: \$8,400.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—frame construction,  $\frac{7}{8}$  in. boarding, Sisalkraft paper, air space, and field stone. Interior partitions—wood studs, U. S. Gypsum rock lath and plaster.

**ROOF:** Asphalt shingles, Bird & Son, Inc.

**CHIMNEY:** Tile flue lining. Living room fireplace—Bennett Fireplace Corp. damper; incinerator, Kerner Incinerator Co.

**SHEET METAL WORK:** Flashing and leaders—copper. Gutters—wood.

**INSULATION:** Outside walls and attic floor—U. S. Gypsum rock wool.

**WINDOWS:** Sash — wood, double hung, weather-stripped. Glass—double thick, quality A, Libbey-Owens-Ford Glass Co.

**FLOORS:** All rooms select oak; kitchen—oak, covered with linoleum.

**WALL COVERINGS:** Living room and bedrooms—wallpaper. Kitchen and bathrooms—paint.

**HARDWARE:** Interior and exterior—Schlage Lock Co.

**KITCHEN EQUIPMENT:** Stove and refrigerator—electric. Sink—enamel iron, acid resisting.

**PLUMBING:** All fixtures by Kohler Co. Pipes—cast iron.

**HEATING AND AIR CONDITIONING:** Forced air, filtering and humidifying and cooling. Boiler—Winter-master, with oil burner. Thermostat—Minneapolis-Honeywell Regulator Co.



### 83. HOUSE FOR MRS. JAMES A. WARD, EGYPT, MASS.



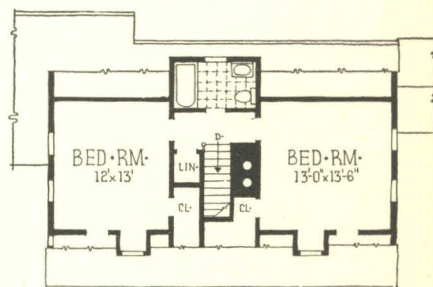
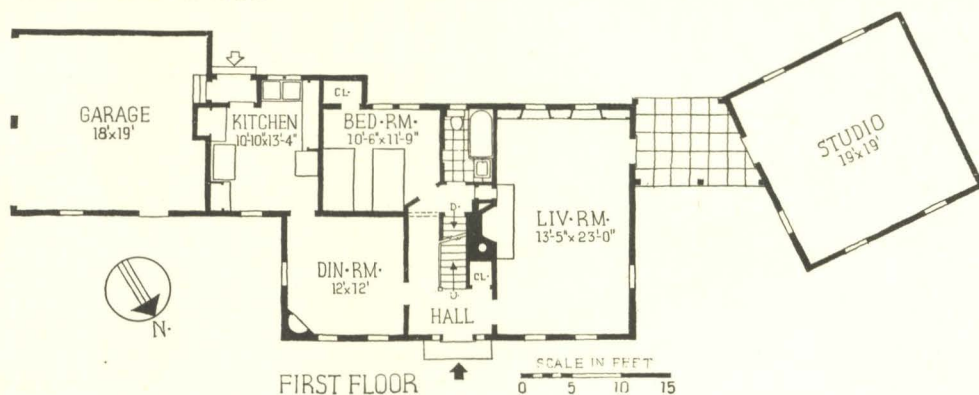
Arthur C. Haskell Photos

The nucleus of this interesting composition is a modified Cape Cod plan, to which has been added the garage and studio. The utilitarian character of the latter is emphasized by the random vertical siding, reminiscent of barn construction. The many roof slopes have been organized to give a picturesque but predominantly low appearance to the various masses. The large chimney also contributes to the homogeneity of the silhouette. What was considered the best orientation for the studio was apparently unnecessary for the living quarters. Cubage: 30,856. Cost: approximately \$8,100 at about 38 cents per cubic foot.





NORTH ELEVATION



SECOND FLOOR

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete, continuous. Cellar floor—cinder concrete.

### STRUCTURE

Frame construction, exposed studs inside studio, wood floors and plaster ceilings.

### ROOF

Wood frame covered with cedar shingles.

### SHEET METAL WORK

Flashing—copper. Gutters—wood. Leaders—2 in. round Toncan iron, Republic Steel Corp.

### INSULATION

Outside walls—Celotex lath, The Celotex Co.

### WINDOWS

Sash—wood, double hung. Glass—single strength, quality A.

### STAIRS

Treads—soft pine. Risers—country pine.

### FLOORS

Living room, bedrooms and halls—wide soft pine. Kitchen and bathrooms—fir, covered with linoleum.

### WALL COVERINGS

Living room, bedrooms and halls—wallpaper.

### WOODWORK

Trim, shelving and cabinets—country pine. Doors—white pine.

### HARDWARE

Interior—hand wrought. Exterior—some hand wrought, remainder P. & F. Corbin.

### PAINTING

Interior: Ceilings—calcimine. Floors—3 coats spattered. Trim and sash—3 coats enamel. Exterior: Walls—double white, Samuel Cabot, Inc.

### ELECTRICAL INSTALLATION

Wiring system—BX. Switches—stock tumbler.

### PLUMBING

All fixtures by Crane Co. Soil pipes—cast iron. Water supply pipes—copper.

### HEATING

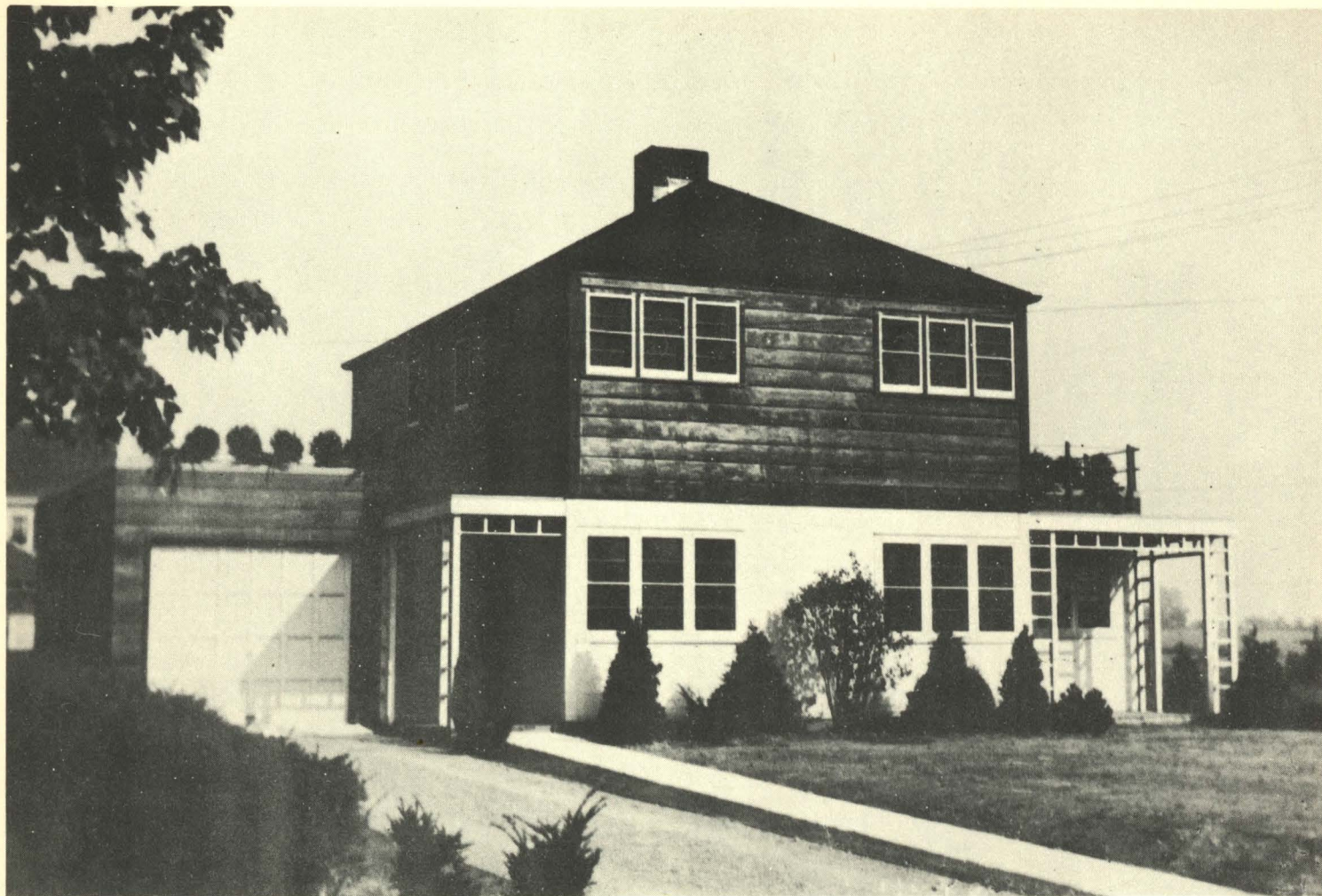
Oil furnace, General Electric Co.



LIVING ROOM



## 84. HOUSE IN ELMIRA, NEW YORK



C. R. Elliott

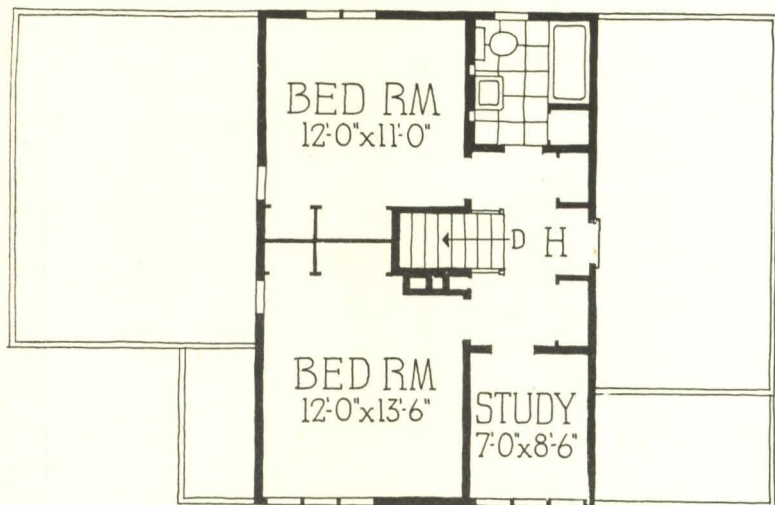
**PROBLEM:** To build a demonstration house incorporating the latest improvements in plan and equipment.

The house was built on a 60-foot lot in a restricted residential area. A cellar was omitted because of water conditions, and replaced by a large storage space at one side of the attached garage. The house was presented as a “zoned house” because of the possibility of separating the various family activities. One useful feature is the play room, which can also be used as a guest room, where children’s play can be supervised from either the kitchen or the living room.

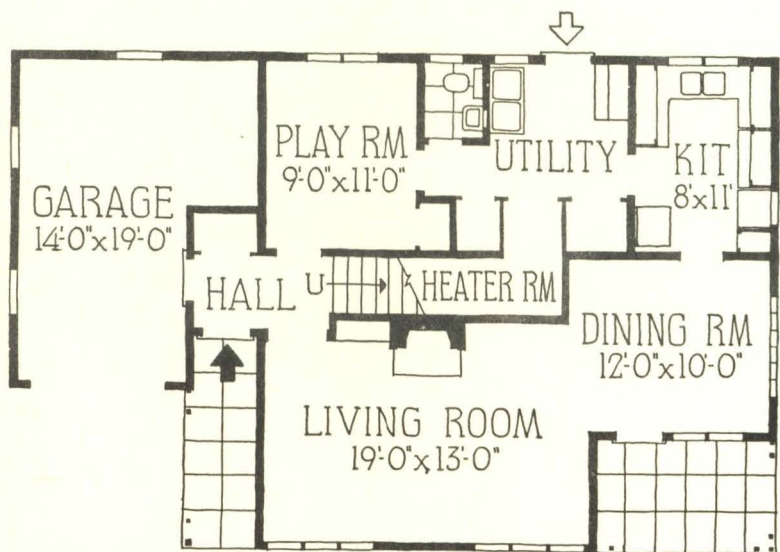
Cubage: 20,300. Cost: \$8,400 at 41 cents a cubic foot.

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SECOND FLOOR



FIRST FLOOR



LIVING-DINING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—cinder block on concrete footings, continuous.

### STRUCTURE

Exterior walls—redwood shiplap siding, wood sheathing, building paper, studs, and glass wool insulation. Interior partitions—wood studs, Reynolds Metals Co., Inc. Ecod lath and plaster, Floor construction—wood joists, sub-floor, paper and birch finish floor. Ceiling—Ecod lath, Reynolds Metals Co. and plaster.

### ROOF

Wood rafters, sheathing, roofing paper covered with asphalt strip shingles, U. S. Gypsum Co. Deck construction—built-up roofing, Philip Carey Co.

### CHIMNEY

Lining—terra cotta. Damper—H. W. Covert Co.

### SHEET METAL WORK

Flashing, gutters and leaders—Armco galvanized iron, American Rolling Mills Co.

### INSULATION

Outside walls and attic floor—glass wool, U. S. Gypsum Co. Weatherstripping—Unique cushion type, Unique Window Balance Co.

### WINDOWS

Double hung, pine, Unique Window Balance Co. Glass—double strength, quality A, Pittsburgh Plate Glass Co. Screens—bronze wire cloth on wood frames.

### STAIRS

Risers and stringers—white pine. Treads and wall rail—birch.

### FLOORS

Living room, bedrooms and halls—birch. Kitchen—Sealex linoleum, Congoleum-Nairn, Inc. Bathrooms—rubber with cove base, The Goodyear Tire & Rubber Co.

### WALL COVERINGS

Living room, bedrooms and halls—wallpaper, Richard E. Thibaut, Inc. Bathrooms—wainscot of Marlite, Marsh Wall Products Co.

### WOODWORK

Trim, shelving and cabinets—fir plywood. Interior doors—flush, 1½ in. Exterior doors—stock white pine. Garage doors—overhead type, Ro-way, Rowe Manufacturing Co.

### PAINTING

Interior: Walls—3 coats lead and oil on plywood, shellac and flat varnish on knotty pine. Ceilings—casein. Floors—stained, sealed and waxed. Trim and sash—3 coats lead and oil. Exterior: Walls—2 coats linseed oil.

### ELECTRICAL INSTALLATION

Wiring system—Romex cable, General Cable Co. Switches—Bakelite Corp. and General Electric Co. Fixtures—Lightolier Co.; bath and kitchen counter—Lumiline, General Electric Co.

### KITCHEN EQUIPMENT

Sink—Crane Co.

### BATHROOM EQUIPMENT

Shower—Speakman Co. All other fixtures by Standard Sanitary Manufacturing Co.

### PLUMBING

Pipes: Soil and waste—cast iron. Water supply—copper, streamline fitting, Streamline Pipe & Fittings Co.

### HEATING AND AIR CONDITIONING

Gas, direct fired furnace. Lennox forced air system with filters and humidifier, Lennox Furnace Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—American Radiator Co.

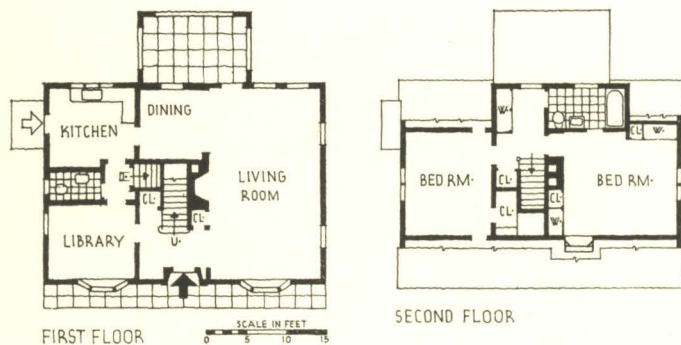


## 85. HOUSE FOR LEONARD CHAMBERLAIN, MIDLAND, MICH.

FRANTZ & SPENCE,  
ARCHITECTS



R. W. Tebbs Photos



The combination of bay window, wide roof projection, and trellis is an original and charming conception, enhanced by the pleasant variation of stucco and horizontal wood board siding. The plan displays ingenuity in its use of a traditional precedent, altered to include a spacious and amply closeted entrance hall, a library, and a lavatory. Particular regard has been paid to the location and space requirements of the many mechanical and electrical devices mandatory in the contemporary home. Cost: \$8,500. Cubage: 20,000 at 42 cents.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Frame, cedar siding, wood sheathing and Sisalkraft paper, 1½ in. rock wool, plaster, papered or lined with No. 2 common white pine.

**ROOF:** Wood shingles on roof boards.

**SHEET METAL WORK:** Armco iron, American Rolling Mills Co.

**INSULATION:** Outside walls—1½ in. rock wool. Attic floor—3 in. rock wool.

**WINDOWS:** Sash—double hung, white pine, weather-stripped. Glass—double strength, quality A.

**FLOORS:** Living room, halls and library—Bruce plank. Bedrooms—oak. Kitchen and bathrooms—gauge A linoleum.

**WOODWORK:** Trim and doors—white pine.

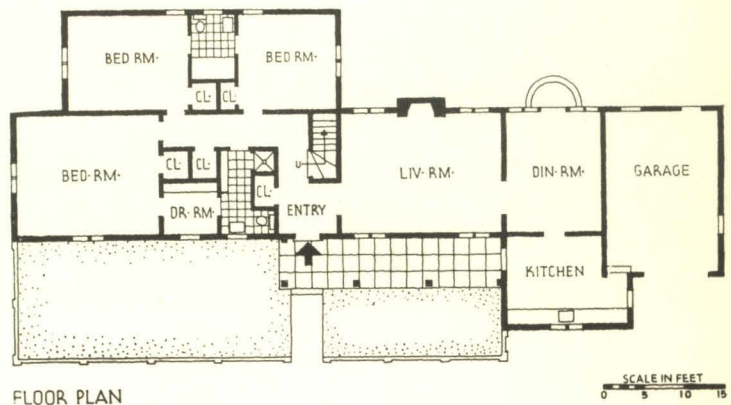
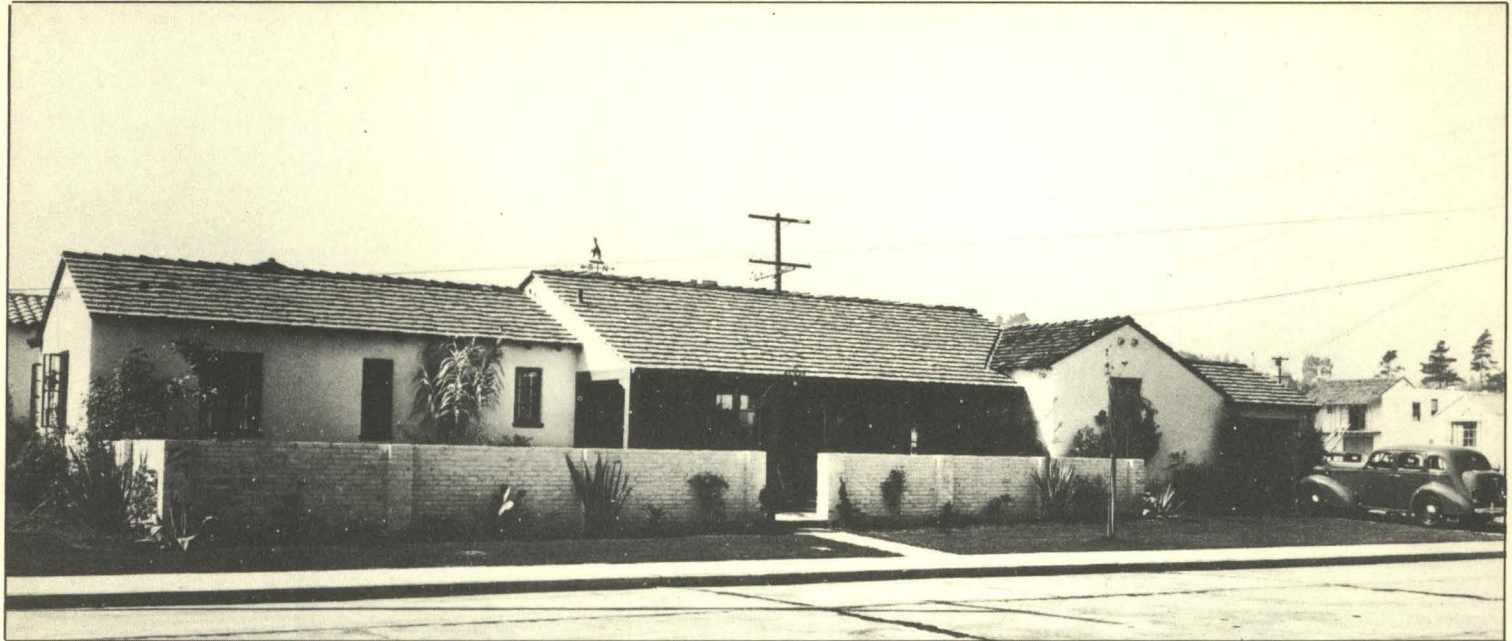
**ELECTRICAL INSTALLATION:** Wiring system—Romex. Switches—toggle, Hart & Hegeman.

**PLUMBING:** All fixtures by Kohler Co. Soil and vent pipes—cast iron. Water supply pipes—Type L, Anaconda.

**HEATING AND AIR CONDITIONING:** Warm air, filtered and humidified, gas fired boiler. Hot water heater—Ruud.



## 86. HOUSE IN SAN MATEO, CALIF., ED. MUSSON SHARPE, ARCHITECT



### CONSTRUCTION OUTLINE

**STRUCTURE:** Frame construction, sheathing, metal lathed and plastered inside.

**ROOF:** Hand-split redwood shakes.

**SHEET METAL WORK:** Galvanized iron.

**WINDOWS:** Double hung and casement, some steel. Glass—double strength, quality A. Screens—roller, bronze.

**FLOORS:** Living room, dining room and halls—plank flooring. Kitchen and bathrooms—linoleum covered.

**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—General Electric Co. Sink—Crane Co.

**PLUMBING:** All fixtures by Crane Co. Soil pipes—cast iron. Water supply pipes—galvanized iron.

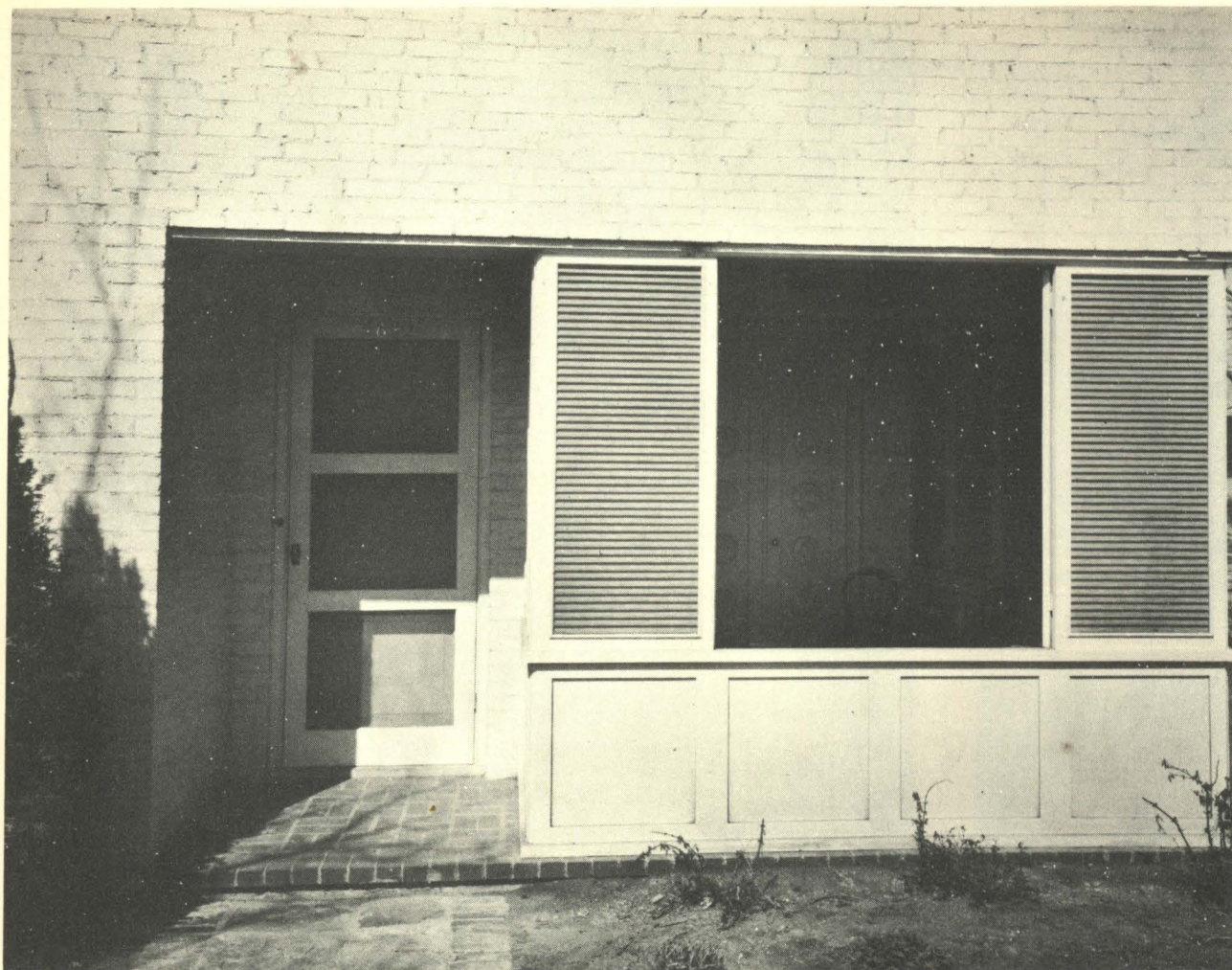
**HEATING:** Hot air with blower and glass fiber filter, gas fired boiler.

This low rambling house, ideally suited to the amenities of a southern climate, is an intelligent adaptation of mission and early ranch architecture. The wall contiguous to the public sidewalk affords ample privacy and screens the garden from the street. The central hall affords a separating element between bedrooms and living area, thus eliminating all friction between these varied functions. Practically every major room is cross ventilated, a desirable feature in any design. Cost: \$8,500. Cubage: 24,000 at 35½ cents.

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## 87. HOUSE IN DALLAS, TEXAS



ENTRANCE  
DETAIL

*Parker-Griffith*

This conventional-looking house has some interesting features not commonly seen in the small house. Chief of these is the louvered porch, which meets the requirements of the summer climate by providing maximum ventilation with control of sunlight. It also gives the living room a southern exposure and adds decorative interest to the interior. The dark ceiling in the kitchen is unusual, and while its illumination value is dubious, it is undeniably effective in producing a trim, neat appearance.

*The architect comments:* "The service part of the house was treated in accordance with the owners' requests; the rear entrance may be entered from the garage or outside. A breakfast room originally planned was omitted and changed to a pantry and entry. Special consideration was given to providing ample closet space, and the owners are delighted with the number of ample closets, all of which are cedar lined."

Cubage: 18,900. Cost: \$8,400 at 44 cents a cubic foot.





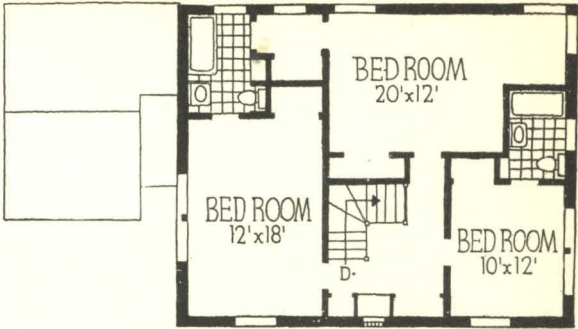


KITCHEN

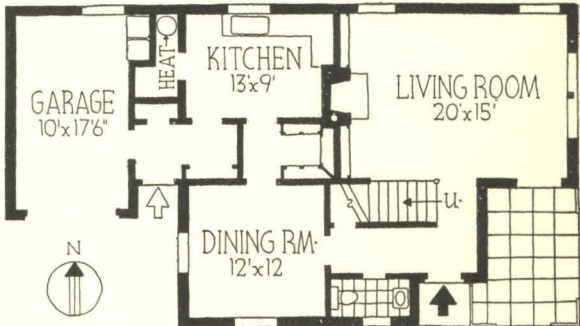
LIVING ROOM



Parker-Griffith Photos



SECOND FLOOR



FIRST FLOOR

CONSTRUCTION OUTLINE

**STRUCTURE**  
Walls—common brick, diagonal shiplap sheathing, Reynolds Metal Co.'s Metallation, studs, Milcor Sheet Co.'s metal lath and U.S. Gypsum Co.'s plaster. Floor construction: First—4 in. concrete slab on wooden beams. Finish—oak floor bedded in hot asphalt. Second—2 x 10 in. joists, 1 x 6 in. sub-floor, deadening felt and oak flooring. Ceiling—metal lath and plaster.

**ROOF**  
Construction—rafters, sheathing, covered with Perfection cedar shingles.

**INSULATION**  
Outside walls—Metallation, Reynolds Metal Co., Inc. Attic floor—rock wool, Johns-Manville, Inc.

**WINDOWS**  
Double hung, white pine. Glass—double strength, quality A.

**FLOORS**  
Living room, bedrooms and halls—clear plain red oak, Martin Flooring Co. Kitchen—inlaid linoleum, Congoleum-Nairn, Inc. Bathrooms—tile.

**WALL COVERINGS**  
All rooms—wallpaper. Bathrooms—tile wainscot.

**WOODWORK**  
Trim—yellow pine. Shelving, cabinets and doors—white pine.

**HARDWARE**  
Interior and exterior—Sargent & Co.

**PAINTING**  
Interior: Walls, ceilings, trim and sash—3 coats lead and oil, Pittsburgh Plate Glass Co. Exterior: Walls—2 coats cement paint, Medusa Portland Cement Co. Roof—stain.

**ELECTRICAL INSTALLATION**  
Wiring system—steel tube conduit. Switches—flush-tumbler. Fixtures—direct, Chase Brass & Copper Co.

**KITCHEN EQUIPMENT**  
Stove—gas range. Refrigerator—Electrolux, Servel, Inc. Sink—Crane Co.

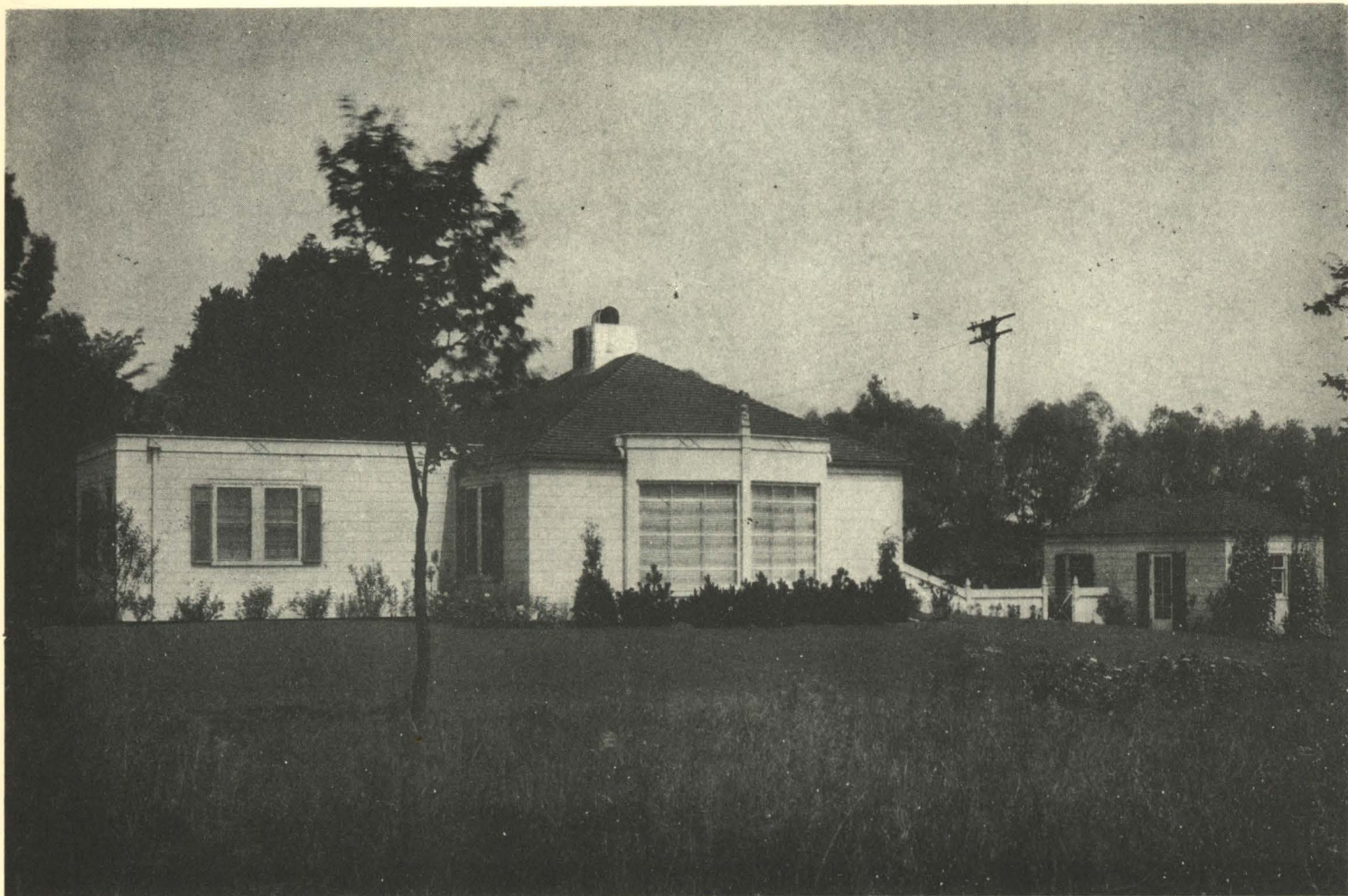
**BATHROOM EQUIPMENT**  
All fixtures by Crane Co.

**PLUMBING**  
Soil, waste and vent pipes—galvanized iron. Water supply pipe—copper.

**HEATING AND AIR CONDITIONING**  
Gas, individual units.



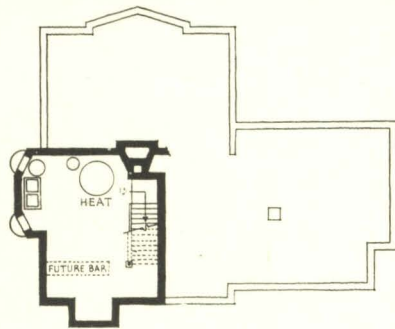
**88. HOUSE FOR EVAN C. SCHWEMER, FOX POINT, WIS.**



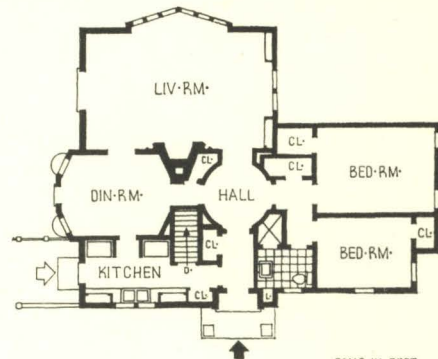
The large window area is successfully handled in conjunction with a style inspired from the classic. The plan seems rather grand and axial in composition, but since an increase in the scale of the living room and the dining room is obtained through this procedure, the end may justify the means. The garage separated from the main structure enhances the rambling and spacious feeling of the whole design. Cost: \$8,604. Cubage: 24,620 at 34 $\frac{3}{4}$  cents.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

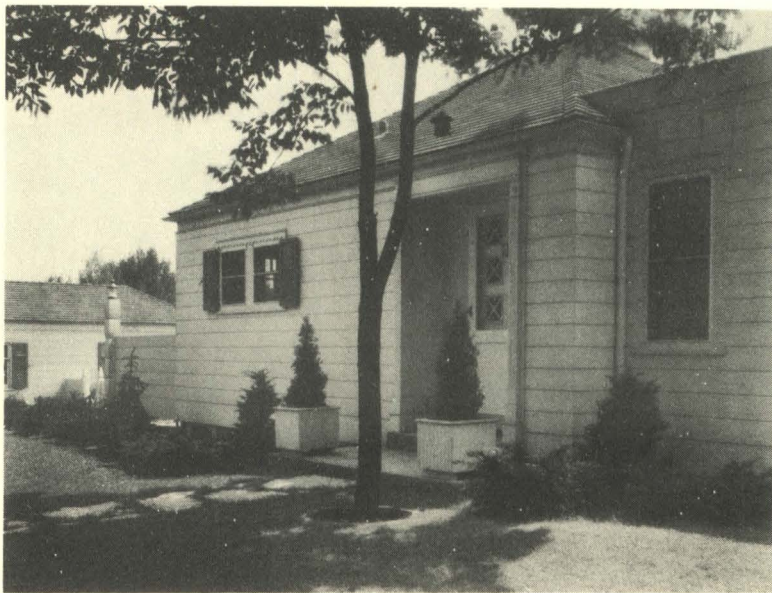




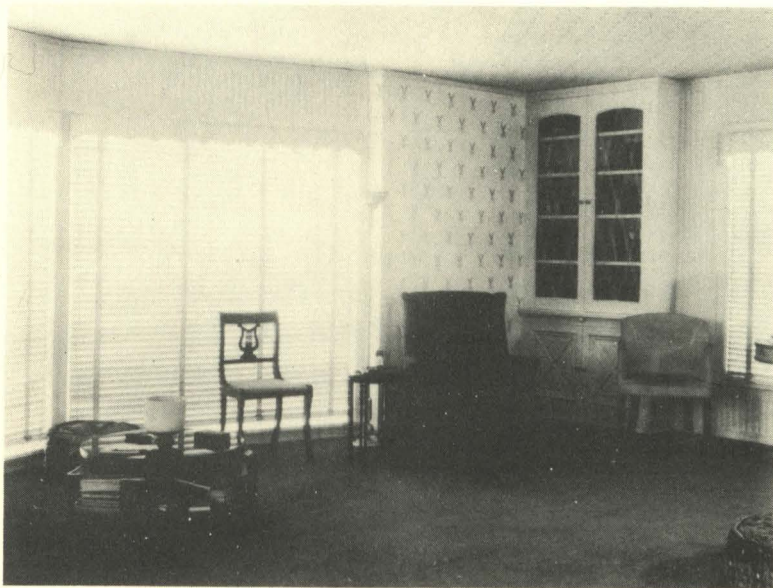
BASEMENT



FIRST FLOOR



ENTRANCE



LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block. Cellar floor—reinforced concrete on cinder.

### STRUCTURE

Exterior walls—2 x 4 in. studs, 1 x 6 in. T. & G., 6 in. hemlock sheathing and 15 lb. paper, 1 x 6 in. special California red wood siding soaked in oil. Inside—U. S. Gypsum Co. sheet rock and plaster. First floor construction—2 x 12 in. red fir. Attic floor—2 x 8 in. red fir.

### ROOF

Covered with 100 per cent edge grain, cedar shingle. Deck covered with built up roofing.

### SHEET METAL WORK

Flashing and gutters—galvanized iron.

### INSULATION

Outside walls and attic floor—rock wool, 4 in., U. S. Gypsum Co. Weatherstripping on doors—Chamberlin Weatherstripping Co.

### WINDOWS

Sash—double hung, wood, Anderson Co. Storm sash throughout except in large bay which is Thermopane double thick, American Window Glass Co. Screens—copper in wood frame.

### FLOORS

All rooms 1 x 5 in. fir, T. & G.; kitchen and bathroom—linoleum covered.

### WALL COVERINGS

Living room, bedrooms and halls—wallpaper.

### WOODWORK

All interior trim and woodwork—white pine. Garage doors—Majestic Overhead Door Co.

### HARDWARE

Interior and exterior—dull nickel finish, Yale & Towne.

### PAINTING

Interior: Walls, ceilings, trim and sash—except for wallpaper all walls enameled 3 coats, Frank Dow Paint Co. Exterior: Walls and sash—3 coats lead and oil. Roof—stained creosote.

### ELECTRICAL INSTALLATION

Switches—Cutler Hammer, Inc. Fixtures—Moe Brothers Co., Milwaukee, Wis.

### KITCHEN EQUIPMENT

Stove and refrigerator—electric. Sink—enameled iron, two compartment, Kohler Co.

### PLUMBING

All fixtures by Kohler Co. Soil and vent pipes—cast and galvanized iron. Water supply—galvanized iron. Pump for well, softener, etc., all by Heil Co., Milwaukee, Wis.

### HEATING AND AIR CONDITIONING

Air conditioned with well water. Indirect system with steel boiler, oil fired. Filters and air conditioner, Syncromatic Air Conditioning Corp. of Milwaukee. Hot water heater—coil in boiler.

### SPECIAL EQUIPMENT

Kernerator incinerator, brick built, fired in basement.



## 89. HOUSE FOR DR. M. F. CERASOLI, BARRE, VERMONT

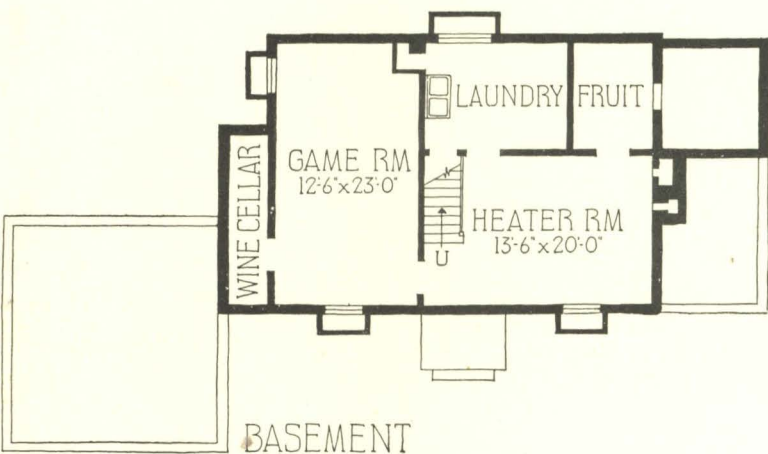
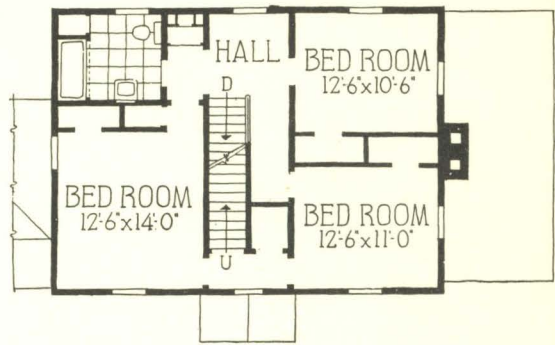
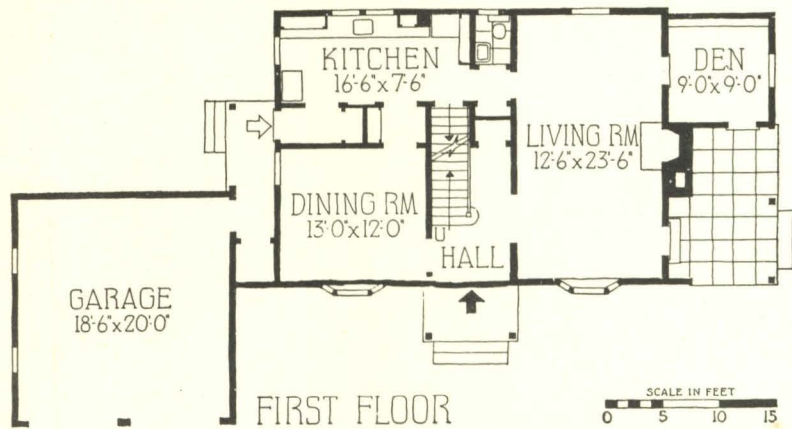


Not all small houses can show as good a rear elevation as the one above. The straightforward handling of the few elements is admirable. The change to flush siding on the lower floor and the omission of shutters minimizes the varying sizes of windows, the general regularity of the design being emphasized by the three windows with black shutters on the second floor.

*The architect comments:* "The client preferred a central hall scheme. The lot had 100 feet frontage, but only 60 feet of depth. Consequently the house was placed well to the rear of the lot with the garage projecting forward. This provided a good lawn in the front with a play yard behind the garage, opening off the kitchen. An added feature is the direct connection between the master bedroom and the nursery."

Cubage: 34,480. Cost: \$8,929 at 26 cents a cubic foot.





## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—poured concrete, continuous. Cellar floor—3 in. concrete on gravel fill. Waterproofing—Adensite integral in foundation walls, Adensite Co.

### STRUCTURE

Exterior walls—10 in. red cedar siding and random width matched flush boarding, 40 lb. resin paper, 8 in. sheathing, studs, No. 2 native spruce, rock lath and plaster, U. S. Gypsum Co. Floor construction—2 x 10 in. joists, 16 in. o.c., rough and finished floor. Ceiling—plaster hard finish.

### ROOF

Construction—rafters, T. & G. roof boarding covered with 12 in. Flintkote thickbut strip asbestos shingle laid 5 in. to weather, The Flintkote Co.

### CHIMNEY

Common brick, terra cotta flues. Damper—cast iron, rotary control, Donley Brothers Co.

### SHEET METAL WORK

Flashing and gutters—16 oz. copper.

### INSULATION

Outside walls—aluminum foil on U. S. Gypsum Co.'s rock lath. Attic floor—4 in. Red Top insulating wood, U. S. Gypsum Co. Weatherstripping—Chamberlin Metal Weatherstrip Co.

### WINDOWS

Wood, double hung, Iroquois Millwork Corp. Glass—single thickness, Libbey-Owens-Ford Glass Co.

### FLOORS

Living room, bedrooms and halls—red birch. Kitchen and bathrooms—linoleum covered pine, Armstrong Cork Products Co.

### WALL COVERINGS

Main rooms—wallpaper, Imperial Paper & Color Corp. Kitchen and bathrooms—Linowal, Armstrong Cork Products Co.

### WOODWORK

Trim, shelving and cabinets—white pine and Douglas fir. Doors—white pine.

### HARDWARE

Interior and exterior—P. & F. Corbin.

### PAINTING

Interior: Walls, trim and sash—enamel. Floors—varnish and Valspar, Valentine Co. Exterior: Walls and sash—Sherwin Williams Co.

### ELECTRICAL INSTALLATION

Wiring system—Romex non-metallic, Rome Wire & Cable Co. Switches—Hart & Hegeman. Fixtures—direct, Lightolier Co.

### KITCHEN EQUIPMENT

Stove and refrigerator—Edison General Electric Appliance Corp.

### PLUMBING

All fixtures by Standard Sanitary Manufacturing Co. Pipes: Soil and waste—hard copper, Chase Brass & Copper Co. Water supply—copper, Mueller Brass Co. (Streamline Pipes and Fittings Co.)

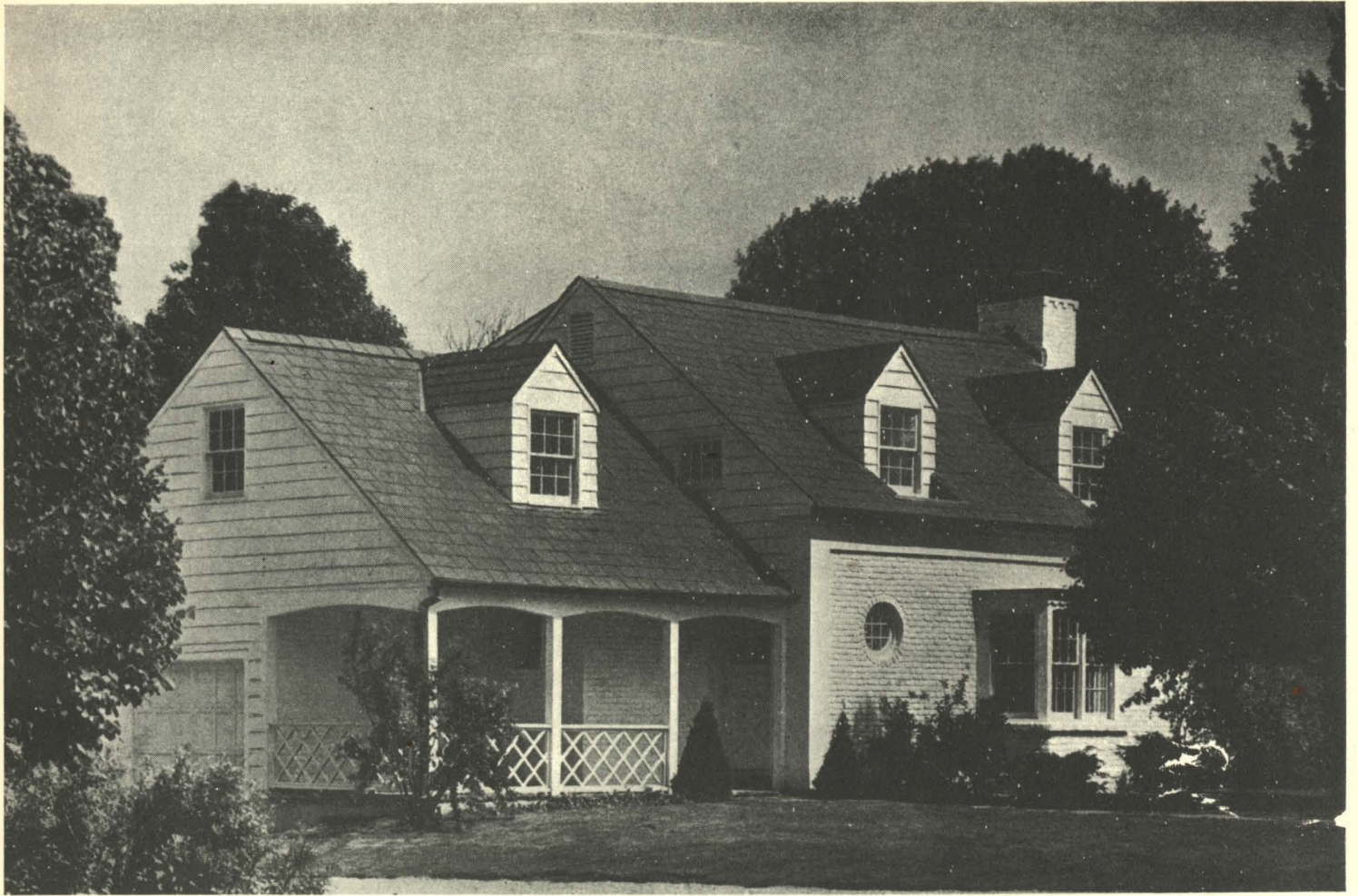
### HEATING

Two pipe vapor system. Boiler—Thatcher Furnace Co. Radiators—Corto and Convector, American Radiator Co. Valves—Hoffman Specialty Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—Excelso indirect, Excelso Products Corp.





**90. HOUSE FOR BERTRAM PASHLEY, EAST WILLISTON, L. I., N. Y.**



*Murray M. Peters Photos*

The house is a successful treatment of brick and wood, and uses its large dormers to emphasize the intimacy of the scale. Like most Colonial houses of the present day it puts its best face forward, using a much-needed but less attractive shed dormer in the rear to light the upstairs rooms. Interiors are commodious, and follow the accepted pattern in their use of pine paneling, exposed beams, and figured wallpaper. The plan is convenient and economical, and follows a growing trend in its incorporation of living room with dining room. Cost: \$8,950, at 34 cents per cubic foot.

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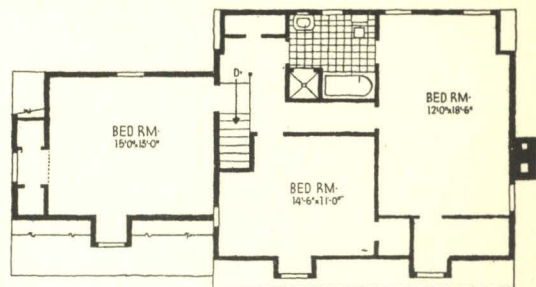




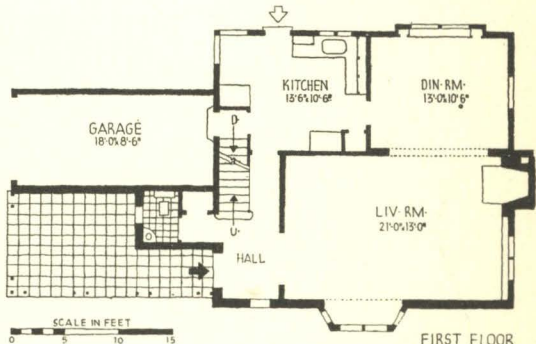
LIVING ROOM



ENTRANCE HALL



SECOND FLOOR



FIRST FLOOR

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—10 in. concrete. Cellar floor—4 in. concrete.

### STRUCTURE

Exterior walls—brick veneer in front, otherwise shingles on wood frame. Inside—Celotex lath and plaster.

### ROOF

Frame, covered with slate.

### SHEET METAL WORK

Flashing, gutters and leaders—16 oz. Revere copper.

### INSULATION

Outside walls and attic floor and roof—Celotex.

Weatherstripping—zinc.

### WINDOWS

Sash—wood, double hung. Glass—quality B, single strength.

### STAIRS

Treads—oak. Risers and stringers—pine.

### FLOORS

Living rooms, bedrooms and halls—wood, Colonial Floor Co. Kitchen—linoleum, Armstrong Cork Products Co.

Bathrooms—tile.

### WALL COVERINGS

All rooms—wallpaper, Richard E. Thibaut, Inc.

### DOORS

Garage doors—Overhead type, Rowe Mfg. Co.

### HARDWARE

Interior and exterior—brass, Sargent & Co.

### PAINTING

Floors—Minwax. Exterior walls—whitewashed brick.

### ELECTRICAL INSTALLATION

Wiring system—BX.

### KITCHEN EQUIPMENT

Stove—gas. Sink—Monel metal, International Nickel Co.

### PLUMBING

Soil pipes—extra heavy cast iron. Water supply pipes—copper tubing, Chase Brass & Copper Co.

### HEATING

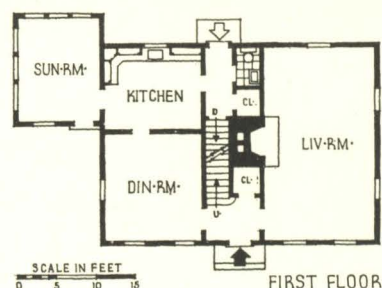
Gilbarco warm air, Gilbert & Barker Mfg. Co.



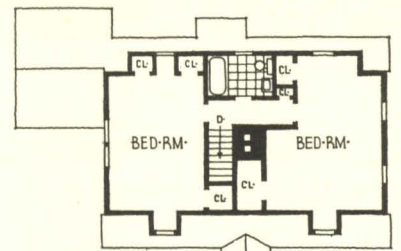
## 91. HOUSE FOR MALCOLM C. MACKENZIE, DERRY, NEW HAMPSHIRE



MALCOLM C. MACKENZIE, DESIGNER



FIRST FLOOR



SECOND FLOOR

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—pine, clapboards, 2 x 4 in. studs, wirelath and 3 coats plaster.

**ROOF:** Covered with asphalt shingles.

**SHEET METAL WORK:** 16 oz. copper throughout.

**INSULATION:** Outside walls and roof—Johns-Manville rock wool.

**WINDOWS:** Sash—pine, double hung. Glass—double strength. Screens—wood frames, copper wire.

**FLOORS:** All rooms oak, except linoleum in kitchen and bathrooms.

**WALL COVERINGS:** Living room and bedrooms—wallpaper. Asbestos tile dado in kitchen and bath.

**PAINTING:** Interior: Ceilings—calcimine. Floors—varnish. Exterior: Walls and sash—1 coat aluminum, 2 coats lead and oil.

**ELECTRICAL INSTALLATION:** BX cable. Switches—Bakelite covers, General Electric.

**KITCHEN EQUIPMENT:** Stove and refrigerator—General Electric.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply pipes—wrought iron.

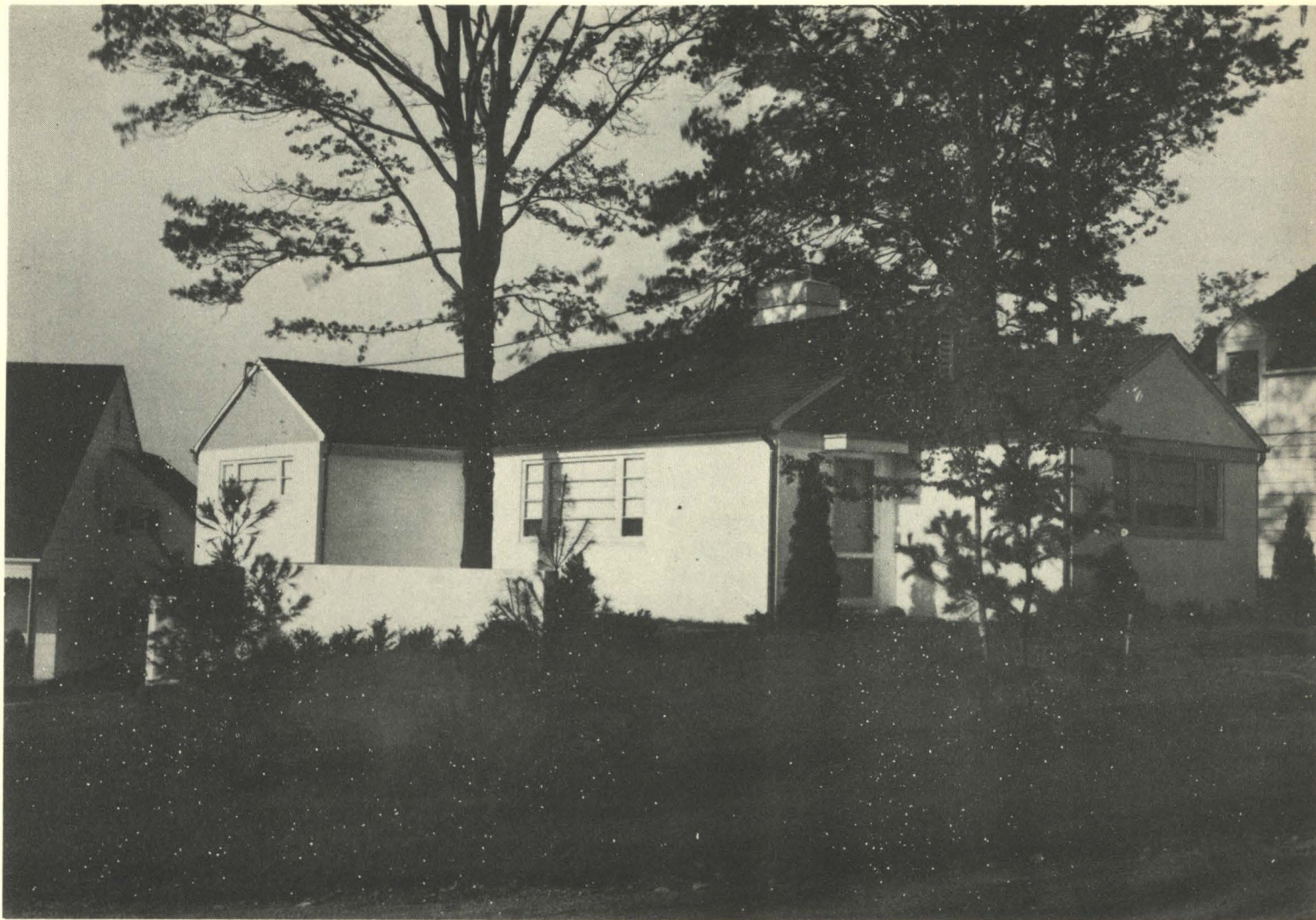
**HEATING AND AIR CONDITIONING:** Air conditioning system with oil burner, General Electric Co.

Patterned in traditional style, this residence obeys good precedent both in plan and in elevation and draws much of its evident appeal from its fine proportions. The white picket fence, seldom used today, enhances the design and affords additional privacy. The plan follows the usual scheme in its main elements but the addition of a service wing adjacent to the kitchen is a distinct and original departure from the usual. Cost: \$8,500.

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## 92. HOUSE FOR ERNEST L. RUH, WESTFIELD, N. J.



LUCHT & ANDERSON, ARCHITECTS  
M. B. BOHM, ASSOCIATE



FIRST FLOOR

### CONSTRUCTION OUTLINE

**STRUCTURE:** Stucco on wire lath, sheathing, wood studs. Inside—Masonite in patterns.

**ROOF:** Wood rafters and shingles.

**SHEET METAL WORK:** Copper throughout.

**INSULATION:** Outside walls—metal rock lath. Attic floor—rock wool.

**WINDOWS:** Living rooms, dining room and master's bedroom—special wood casement. Steel in remainder of the house, all weatherstripped.

**FLOORS:** All rooms—tempered Presdwood, linoleum covered in master's bedroom and kitchen. Bathrooms—tile.

**PAINTING:** Interior: All Masonite walls—2 coats flat paint. Exterior—white washed, wood, painted. Roof—stained.

**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—electric, Frigidaire.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Water supply pipes—copper tubing.

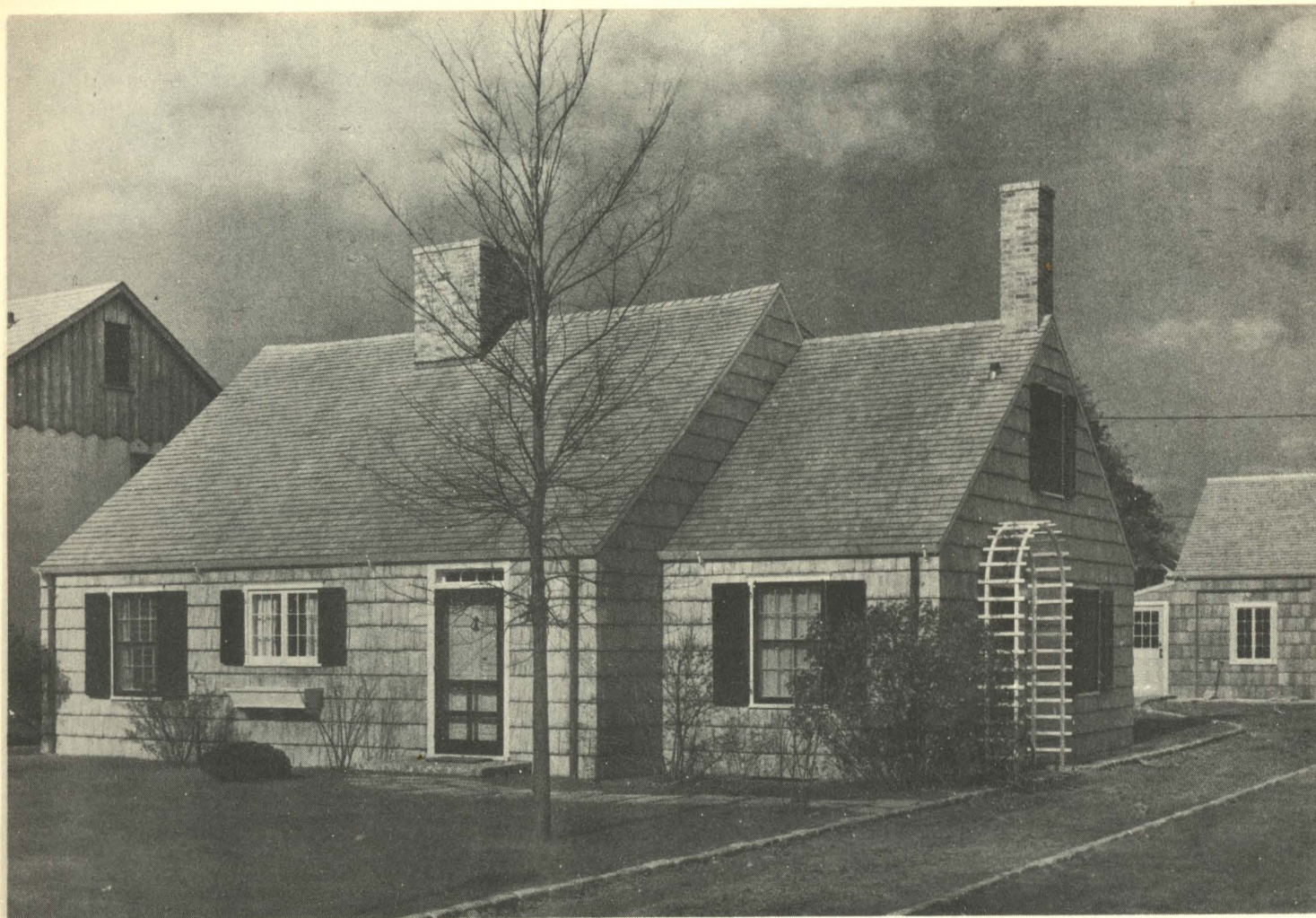
**HEATING:** Superfex, oil fired, Perfection Stove Co.

A comparison between this and the Alexandria house on page 435 is of interest for the degree in which they have departed from stylistic precedent. Similar in fenestration and the use of terrace space, they differ noticeably in form. The example shown here has maintained the roof formation and general mass characteristic of the one-story Colonial house, but has ignored the symmetrical window placing and other exterior features of this type. The plan meets the modest requirements with ample room sizes and an efficient layout. The arrangement of the service portion is excellent, and the introduction of a separate entrance to the bedrooms from this part aids convenient circulation. The house is a part of Wychwood, a restricted suburban development for residences ranging from \$5,000 to \$50,000. Cost, including landscaping, terrace, and driveway: \$9,000. Cubage: 24,000.

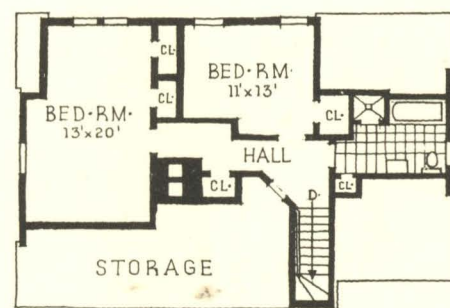
CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



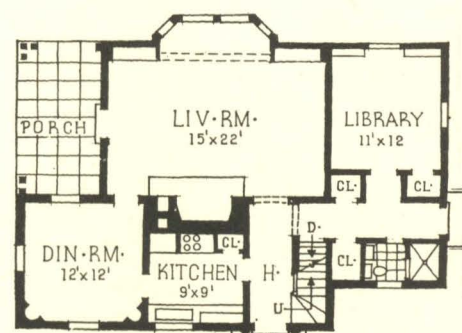
### 93. HOUSE FOR CY WILLIAMS, ROCKVILLE CENTRE, L. I., N. Y.



Murray M. Peters Photos



SECOND FLOOR

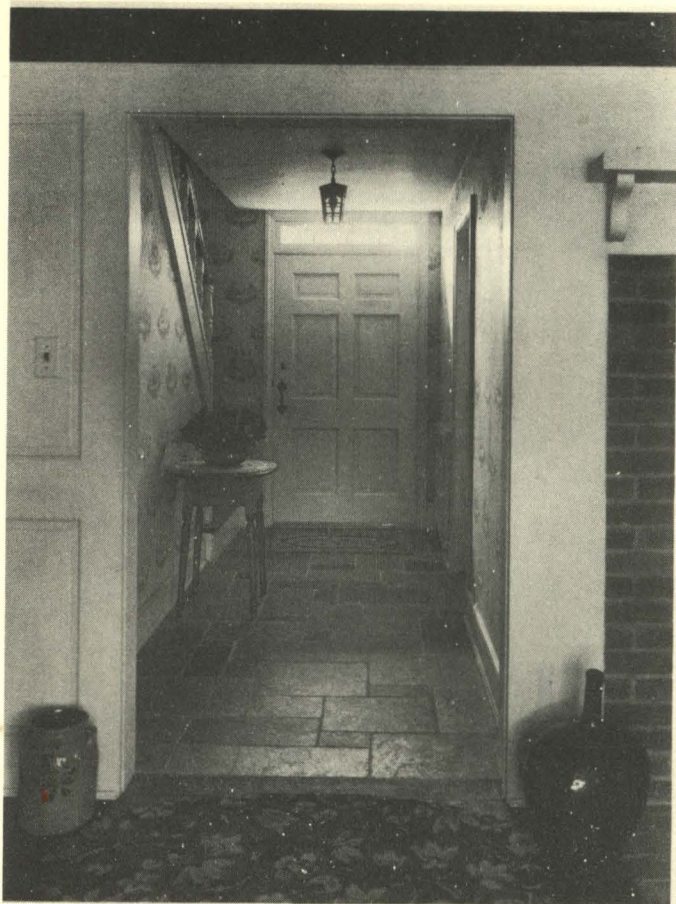


FIRST FLOOR

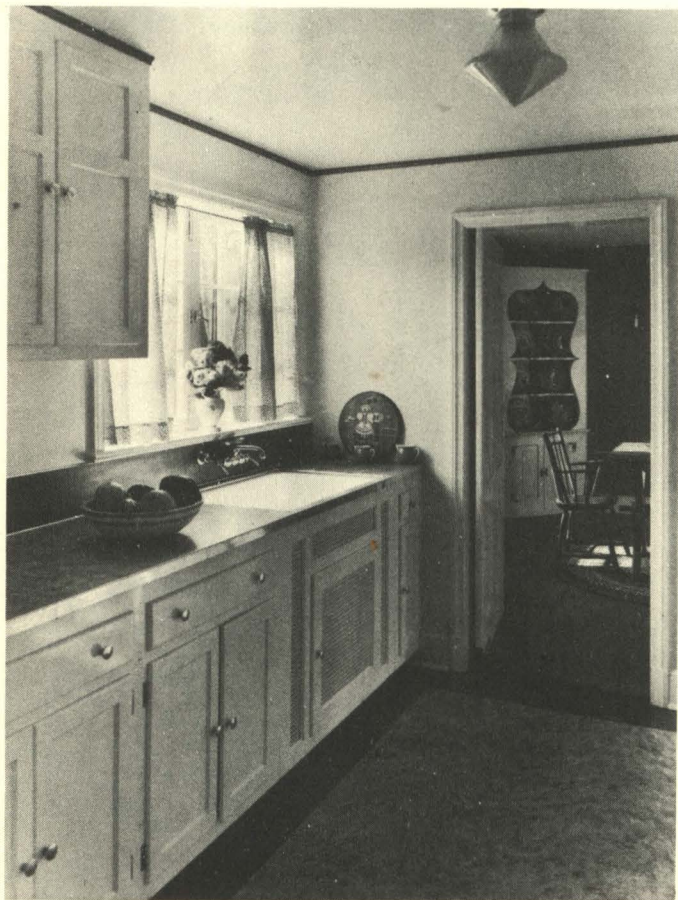
SCALE IN FEET  
0 5 10 15

The adaptation of the Colonial idiom to contemporary planning is successful in this example. The ample hall areas may be justified by the ease of circulation from the kitchen to other rooms. The location of the living and bedrooms, at the rear, besides contributing to privacy, has preserved the simple roof planes in front. The size of the shingles and detail is consistent with the true scale of the house. Cubage: 25,116. Cost: \$9,500 at about 27 cents per cubic foot.





ENTRANCE HALL



KITCHEN



LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—poured concrete. Cellar floor—cement.

### STRUCTURE

Exterior walls—hand rift wood shingles on wood frame.

### ROOF

Covered with wood shingles.

### CHIMNEY

Flashing and leaders—copper. Gutters—wood, copper lined.

### INSULATION

Outside walls, attic floor and roof—4 in. rock wool, Johns-Manville, Inc.

### WINDOWS

Sash—wood, double hung. Glass—double thick, quality A. Screens—wood frame, bronze mesh.

### FLOORS

Living room—oak plank. Bedrooms—N. C. pine. Halls: First floor—slate; second floor—oak. Kitchen—linoleum, Armstrong Cork Products Corp. Bathrooms—tile.

### WALL COVERINGS

Living room—white pine wall paneling, painted. Bedrooms—pine, painted. Halls—wallpaper. Bathrooms—tile wainscot, 4 ft. high, wallpaper above.

### PAINTING

Interior: Ceilings—painted, glazed, Sherwin-Williams Co. Floors—oak, antiqued, and waxed; pine, painted.

### ELECTRICAL INSTALLATION

Wiring system—BX. Fixtures—wrought iron, special, Lightolier Co.

### KITCHEN EQUIPMENT

Stove, electric, Westinghouse Electric & Manufacturing Co. Refrigerator—General Electric Co.

### PLUMBING

All fixtures by Kohler Co. Soil pipes—extra heavy cast iron. Hot and cold water pipes—copper tubing.

### HEATING

One pipe steam. Boiler—oil fired, American Radiator Co. Radiators—convactor type. Valves—Hoffman Specialty Co., Inc. Thermostat—Minneapolis-Honeywell Regulator Co. Hot water heater—Taco, 40 gallon Monel metal storage, Taco Heaters, Inc.



## 94. HOUSE IN WESTFIELD, NEW JERSEY



John Guss Photos

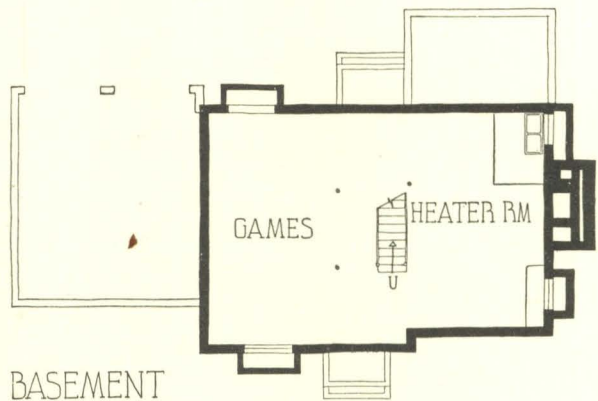
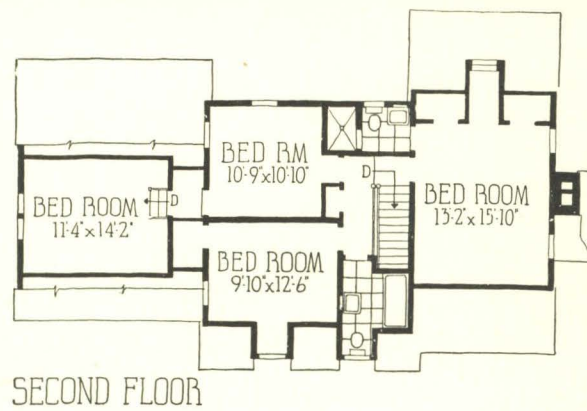
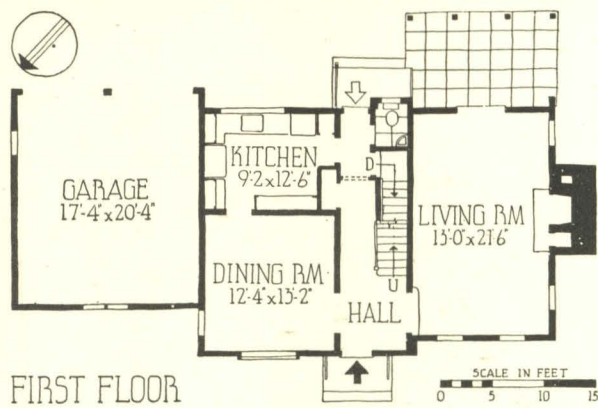
This house was designed as the first unit in a new development. The site adjoins a park. The house was placed on the summit of a small hill, and it was the contour of the land which dictated the placing of garage and living room on a lower level than the rest of the house. The house follows the conventional lines of small development houses, although it is better than many. A less varied window treatment, and a simpler handling of the masses might have produced a more composed result.

Cubage: 26,500. Cost: \$9,700 at about 37 cents a cubic foot.



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HALL-LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—cinder block, concrete footings. Cellar floor—4 in. concrete over cinder fill. Waterproofing—Anti-Hydro in ½ in. stucco over exterior foundation, Anti-Hydro Waterproofing Co.

### STRUCTURE

Exterior walls—red cedar shingles, frame, insulating rock lath and gypsum plaster by U. S. Gypsum Co. Floor construction—wood joists, sub-floor, paper and finished oak.

### ROOF

Wood rafters and shingle lath, covered with red cedar shingles.

### CHIMNEY

Lining—terra cotta. Damper—Donley Co.

### SHEET METAL WORK

Flashing, gutters and leaders—copper.

### INSULATION

Bright surface rock lath, U. S. Gypsum Co.

### WINDOWS

Sash—double hung. Glass—single strength, quality B, Lustraglass, American Window Glass Co. Screens—copper mesh in wood frames.

### STAIRS

Treads—oak. Risers—pine.

### FLOORS

Main rooms—oak. Kitchen—linoleum covered, Congoleum-Nairn, Inc. Bathrooms—tile.

### WALL COVERINGS

Main rooms—wallpaper. Kitchen and bathrooms—tile, Pardee-Matawan Tile Co.

### WOODWORK

Trim and doors—white pine. Garage doors—swinging type. All woodwork by Morgan Sash & Door Co.

### HARDWARE

Interior and exterior—Schlage Lock Co.

### PAINTING

All paint Dutch Boy, National Lead Co.

### ELECTRICAL INSTALLATION

Wiring system—BX. Fixtures—direct.

### KITCHEN EQUIPMENT

Stove—Magic Chef, American Stove Co. Refrigerator—Westinghouse Electric & Manufacturing Co.

### BATHROOM EQUIPMENT

All fixtures by Standard Sanitary Manufacturing Co.

### PLUMBING

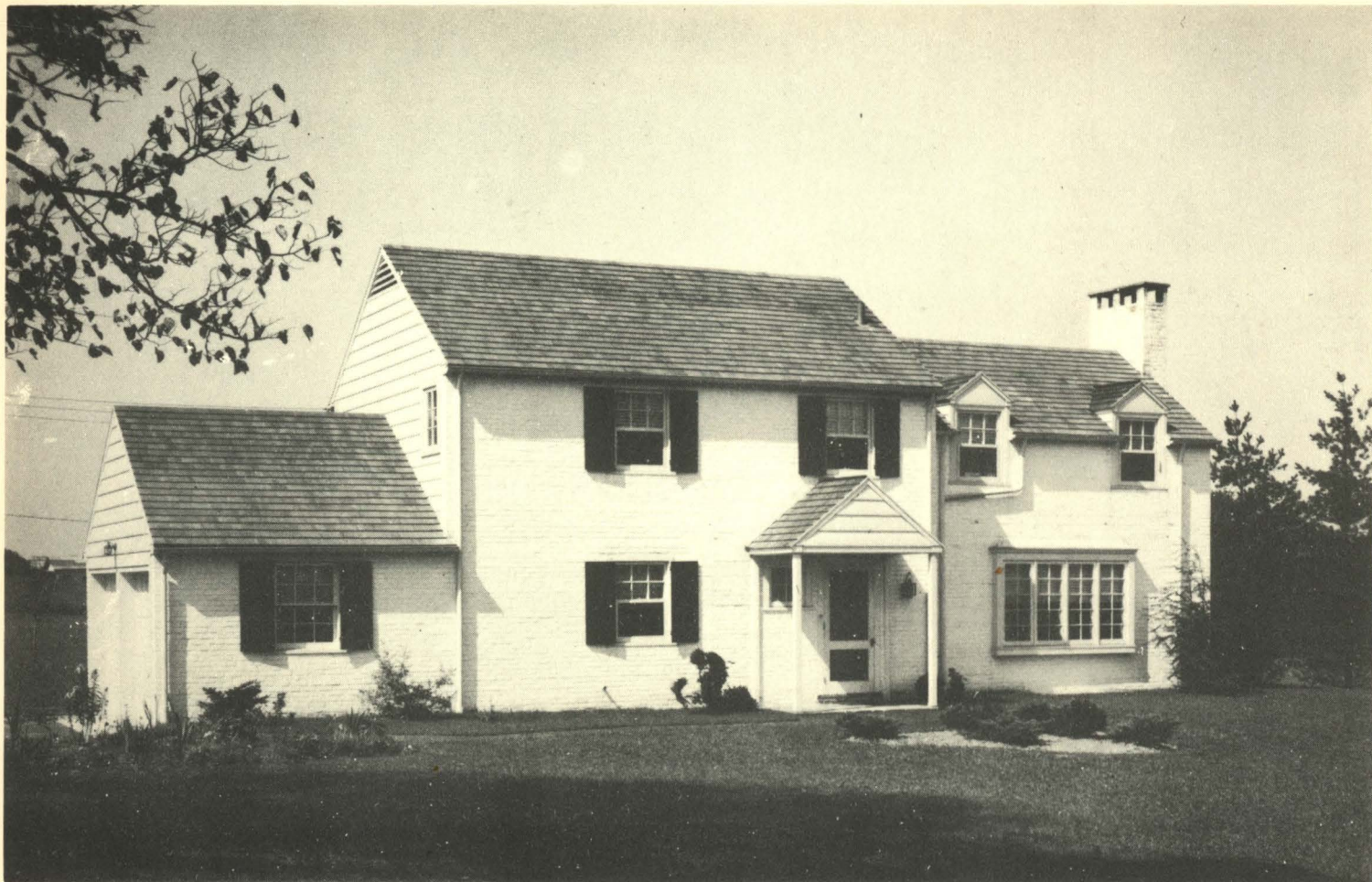
Pipes: Soil and waste—cast iron. Water supply—copper and brass.

### HEATING AND AIR CONDITIONING

Air conditioning, filtering and humidifying by Superfex, Fox Furnace Co.



## 95. HOUSE FOR DR. JEROME J. YOUNGFLEISH, PLYMOUTH, PA.

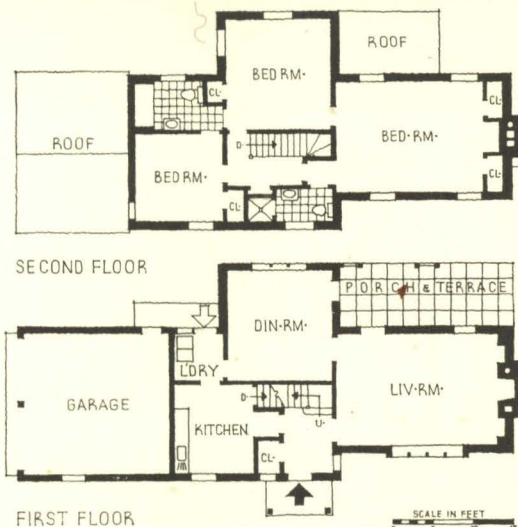


J. LINERD CONARROE, ARCHITECT

A precedent may be found in this house, based upon New England prototypes, which has been adapted to fill such contemporary requirements as the two-car garage and the separate laundry unit. The interiors show evidence of good taste and refinement in their calm and well proportioned handling of cabinet work and trim. Cost: \$9,700. Cubage: 27,556 at 35 cents.



LIVING ROOM



### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—common brick painted with Bondex, furred on inside, insulation lath and plaster.

**ROOF:** Rafters, 2 x 6 in., Royal cedar shingles.

**SHEET METAL WORK:** 16 oz. copper.

**WINDOWS:** Sash—double hung, some casements. Glass—double strength, quality A.

**FLOORS:** Living room and halls—random width oak. Bedrooms—2 1/4 in. oak. Kitchen—pine, linoleum covered. Bathrooms—tile.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle type.

**KITCHEN EQUIPMENT:** Stove—Hot Point electric, Edison General Electric Appliance Co., Inc.

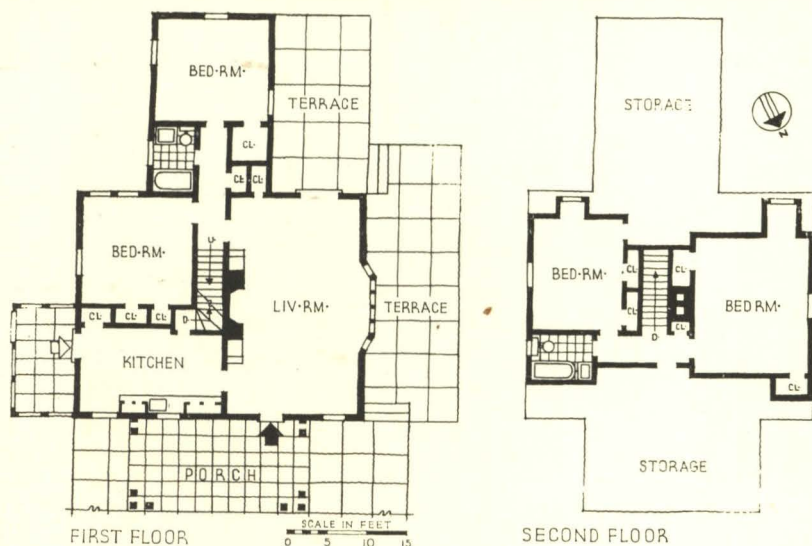
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil and vent—cast iron. Water supply pipe—Chase stream line copper tubing.

**HEATING:** Hot water, Boiler—oil fired.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## 96. HOUSE FOR MRS. LEWIS MIDDLETON, CHESTER, N. J.



ALTON L. CRAFT, ARCHITECT

### CONSTRUCTION OUTLINE

**STRUCTURE:** Sheathing and heavy roofing felt, 4 in. studs, 6 in. red cedar siding. Inside—3 coats plaster on Celotex lath.

**ROOF:** Cedar shingles on lath.

**SHEET METAL WORK:** Flashing and gutters—copper.

**WOODWORK:** Trim and doors—stock, white pine.

**PAINTING:** Interior: Walls—3 coats lead and oil.

Ceilings—calcimine. Floors—Minwax stain. Exterior:

Walls and sash—3 coats lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—3 wire BX. Switches—tumbler, General Electric Co. Fixtures—Lightolier Co.

**KITCHEN EQUIPMENT:** Stove—General Electric. Refrigerator—Westinghouse Electric & Mfg. Co.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron.

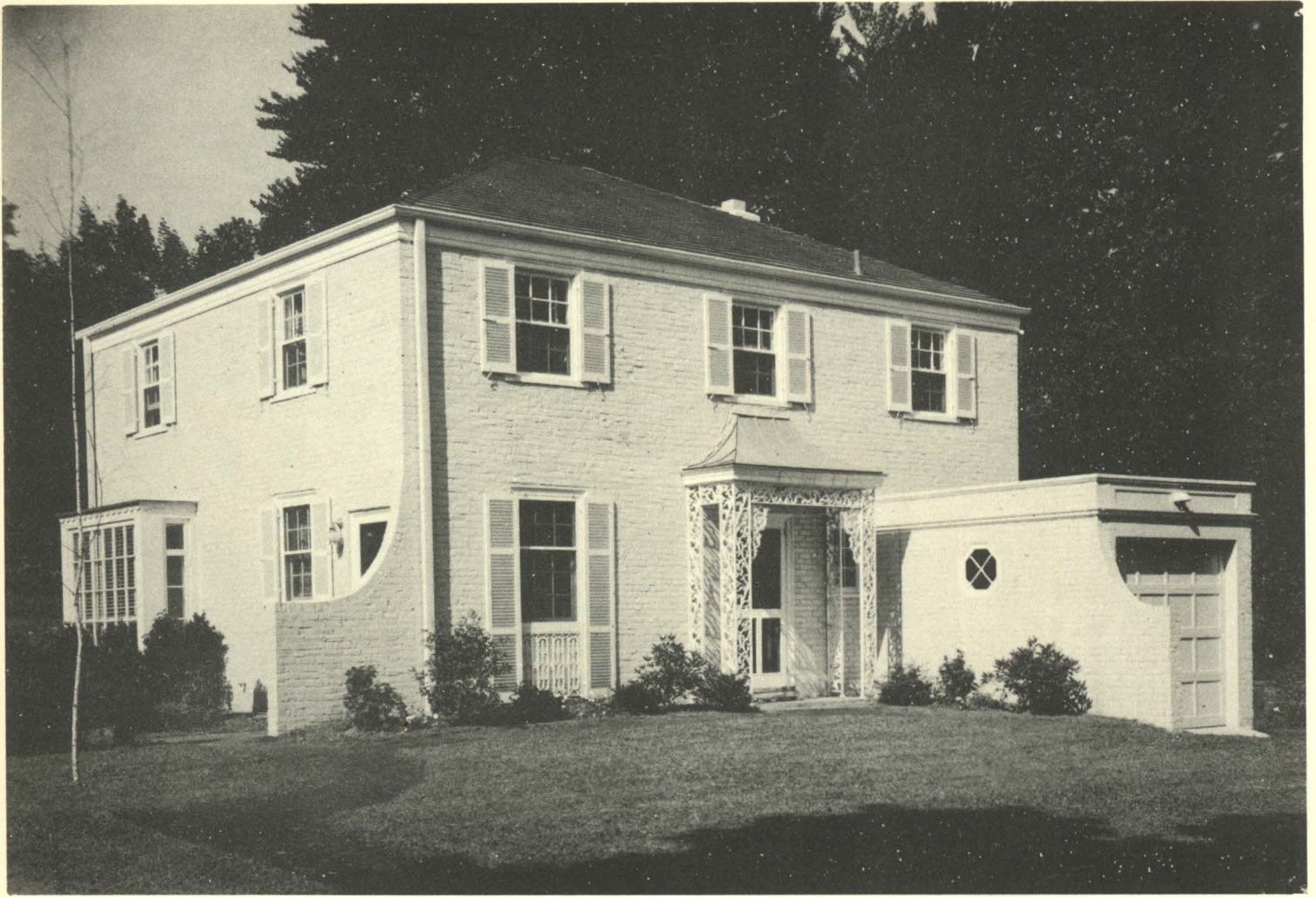
**HEATING AND AIR CONDITIONING:** Warm air, filtering, humidifying; Holland Furnace, oil fired. Hot water heater, General Electric Co.

The profusion of porches and terraces apparent in this residence make it an ideal summer home. The living room and kitchen are so arranged that dining space is available either on the partially enclosed porch, or in one end of the living room. Stairs are ideally located to insure privacy for all bedrooms with a minimum of hall space. The exterior is simply designed and well proportioned, and the large porch has been made a feature of the elevation instead of being the usual minor appendage. Cost: \$9,500. Cubage: 30,000 at 32 cents.

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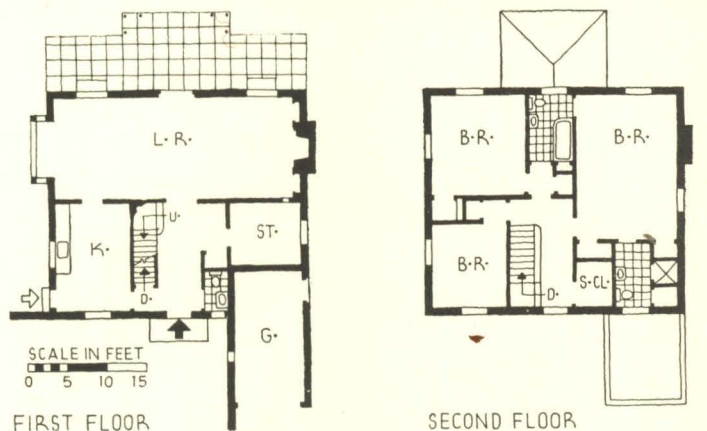
# 97. HOUSE FOR J. L. CONARROE, PHILADELPHIA, J. L. CONARROE, ARCHITECT



## LIVING ROOM

**PROBLEM:** To design a small house on a small lot, with good orientation for the main rooms, and a maximum of private outdoor space for the family.

The architect's comments are of interest: "I consider that any small house should be planned with service and garage on the front . . . I felt that for my own home it would be relaxing to have something different from what one could sell to a client, and in the square house there is more space and economy." Cost: \$9,800. Cubage: 27,807 feet at 35 cents.



## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—common brick backed with used brick. Interior partitions—rocklath and plaster on wooden studs.

**ROOF:** Shingles, 6 in. to weather.

**SHEET METAL WORK:** Flashing—lead covered copper. Gutters—fir. Leaders—copper.

**INSULATION:** Outside walls— $\frac{1}{2}$  in. insulating lath. Attic floor—4 in. of U. S. Gypsum Co. glass wool.

**WINDOWS:** Sash—cypress, double hung. Glass—double thick, quality A, Pittsburgh Plate Glass Co. Screens—copper and bronze mesh.

**FLOORS:** All rooms oak. Kitchen and bathrooms—linoleum, Armstrong Cork Products Co.

**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—electric, General Electric Co.

**PLUMBING:** Fixtures by Standard San. Mfg. Co.

**HEATING:** Hot water, concealed radiators.

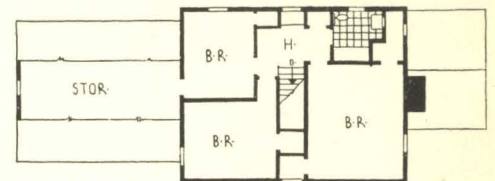
CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



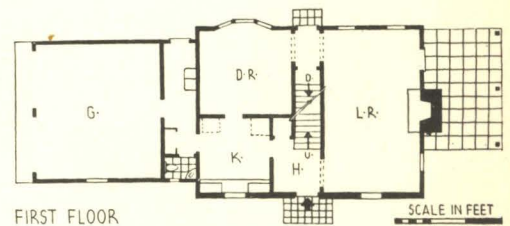
# 98. HOUSE FOR PHILIP C. SMITH, CHATHAM, N. J., WILLIAM M. PAREIS, ARCHITECT



John Beinert Photos



SECOND FLOOR



FIRST FLOOR

SCALE IN FEET  
0 5 10 15

## CONSTRUCTION OUTLINE

**STRUCTURE:** Shingles on frame construction; inside finish—lath and 3 coat plaster.

**ROOF:** Covered with wood shingles.

**SHEET METAL WORK:** Flashing and leaders—copper. GUTTERS—Wood.

**INSULATION:** Outside walls, ground floor, attic floor and roof—4 in. rock wool.

**WINDOWS:** Wood, Silentite, Curtis Companies, Inc. Glass—Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room, bedrooms and halls— $\frac{7}{8}$  in. red oak. Kitchen—linoleum. Bathrooms—tile.

**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—General Electric.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil and vent pipes—cast iron. Water supply pipe—brass, Chase Brass & Copper Co.

**HEATING:** Sunbeam furnace, Fox Furnace Co.

Long experience has indicated that the square plan, with a living room balanced by dining room and kitchen and the hall in the center, is one of the most economical and satisfactory arrangements for the small house. Here a variation appears in the introduction of a unit between house and garage, a strip containing a laundry, service entry, and toilet. The exterior is in wood and painted brick, following in general the appearance of the Colonial work in this part of the country. Cost \$9,750.



## 99. HOUSE IN CROTON-ON-HUDSON, N. Y.



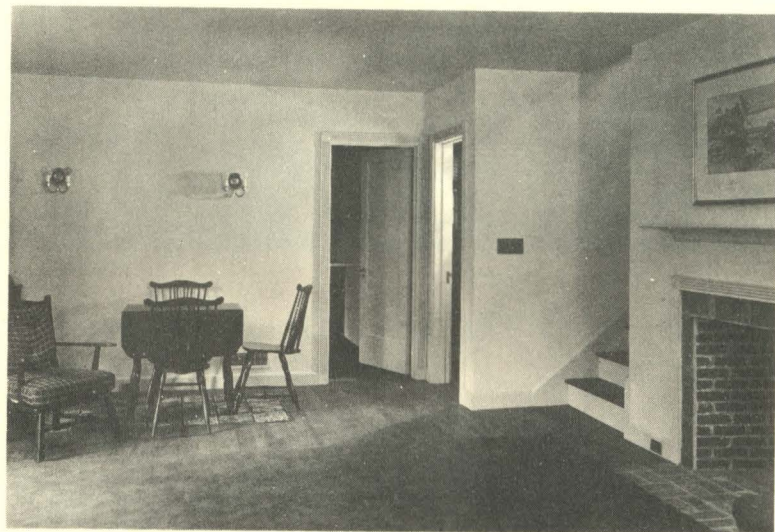
*Imandt Photos*

This, and the following residence, are two of a group of four erected upon a steeply rising slope. Each house presented a definite problem of accessibility which has been eminently well solved. The entrance is obtained in each case at an intermediate level in order to break up any long flight of steps. The living rooms are oriented to the back of the house, thus insuring privacy and correlation with the garden and terrace. The pilasters flanking the front entrance and the horizontal mullions in the windows are original notes. The color scheme consists of a soft and rather somber wall background set off by brilliant accents of color on front door and shutters. Cost: approximately \$10,000.





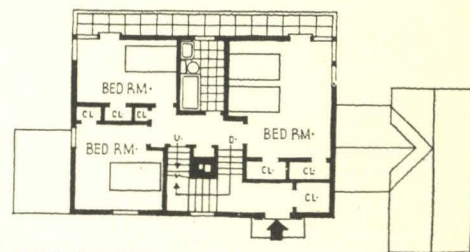
ENTRANCE



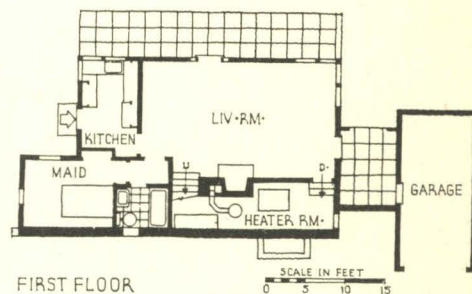
DINING ALCOVE



LIVING ROOM



SECOND FLOOR



FIRST FLOOR

## CONSTRUCTION OUTLINE

### FOUNDATIONS

Walls—copcrete block and stone. Waterproofing—membrane against earth fill.

### STRUCTURE

Exterior walls—frame, sheathing, paper, clapboards. Inside—metal lath and plaster.

### ROOF

Wood rafters, pine sheathing, No. 1 Bangor black slate over heavy roofing felt.

### SHEET METAL WORK

Flashing, gutters and leaders—copper.

### INSULATION

Roof—4 in. rock wool.

### WINDOWS

Sash—wood, casement and double hung with Unique balances. Glass—quality A, Libbey-Owens-Ford Glass Co.

### FLOORS

Living room, bedrooms and halls—oak. Kitchen—linoleum. Bathroom—rubber tile.

### WALL COVERINGS

Bedrooms and halls—wallpaper.

### WOODWORK

Trim and cabinets—pine. Doors—single panel.

### HARDWARE

Interior and exterior—brass, Sargent & Co.

### KITCHEN EQUIPMENT

Stove and refrigerator—gas.

### LAUNDRY EQUIPMENT

Laundry tubs, Standard Sanitary Mfg. Co.

### PLUMBING

All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply—brass.

### HEATING AND AIR CONDITIONING

Warm air, filtering and humidifying, Fitzgibbons Boiler Co., Inc.

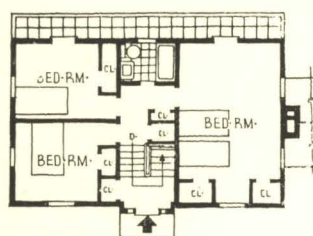


## 100. HOUSE IN CROTON-ON-HUDSON, NEW YORK

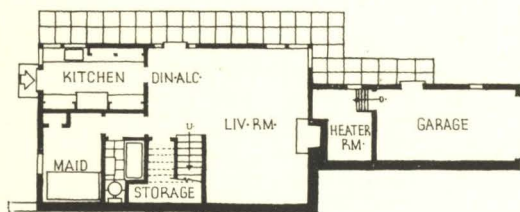


*Imandt Photos*

HARVEY STEVENSON AND EASTMAN STUDDS, ARCHITECTS

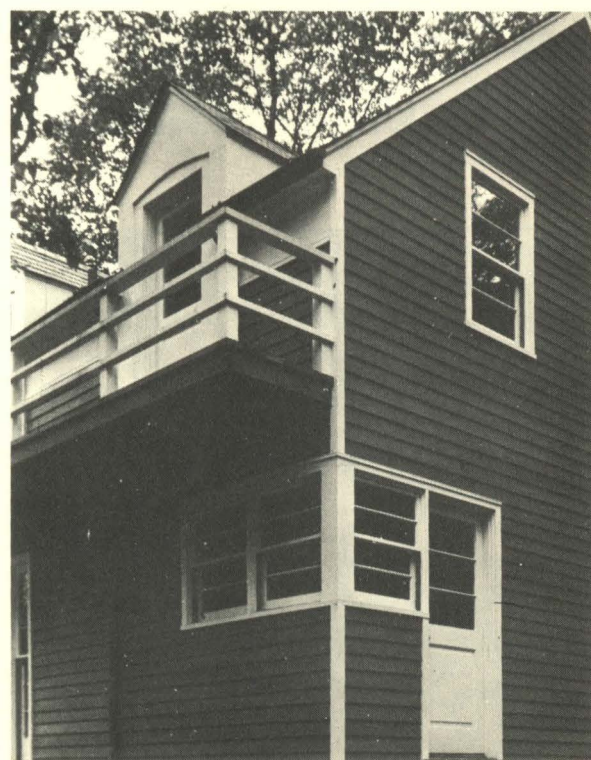


SECOND FLOOR



FIRST FLOOR

SCALE IN FEET  
0 5 10 15



GARDEN ELEVATION

This house follows the same general scheme as the one on the preceding page. The construction outline is identical. The composition of the exterior is effectively simple and loses none of its intimate feeling by symmetry.

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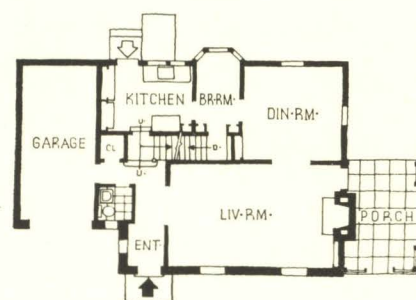


# 101. HOUSE FOR DR. JOSEPH A. SHEA, WEST ORANGE, N. J.

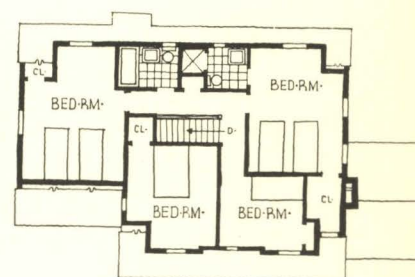


Adolph Study Jr.

R. C. HUNTER, ARCHITECT



FIRST FLOOR



SECOND FLOOR

## CONSTRUCTION OUTLINE

**STRUCTURE:** Stone veneer and shingles on frame, hard finished white plaster.

**ROOF:** Wood shingles.

**SHEET METAL WORK:** Copper. Gutters—wood.

**INSULATION:** Second floor ceiling—4 in. rock wool.

**WINDOWS:** Double hung and casement, weather-stripped. Glass—quality A, Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room and bedrooms—white oak.

Kitchen—linoleum. Bathrooms—tile.

**WALL COVERINGS:** Living room and bedrooms—wallpaper. Bathrooms—tile and paint.

**WOODWORK:** Trim—wood. Doors—white pine.

**PAINTING:** Exterior: Walls and sash—3 coats lead, oil and zinc paint.

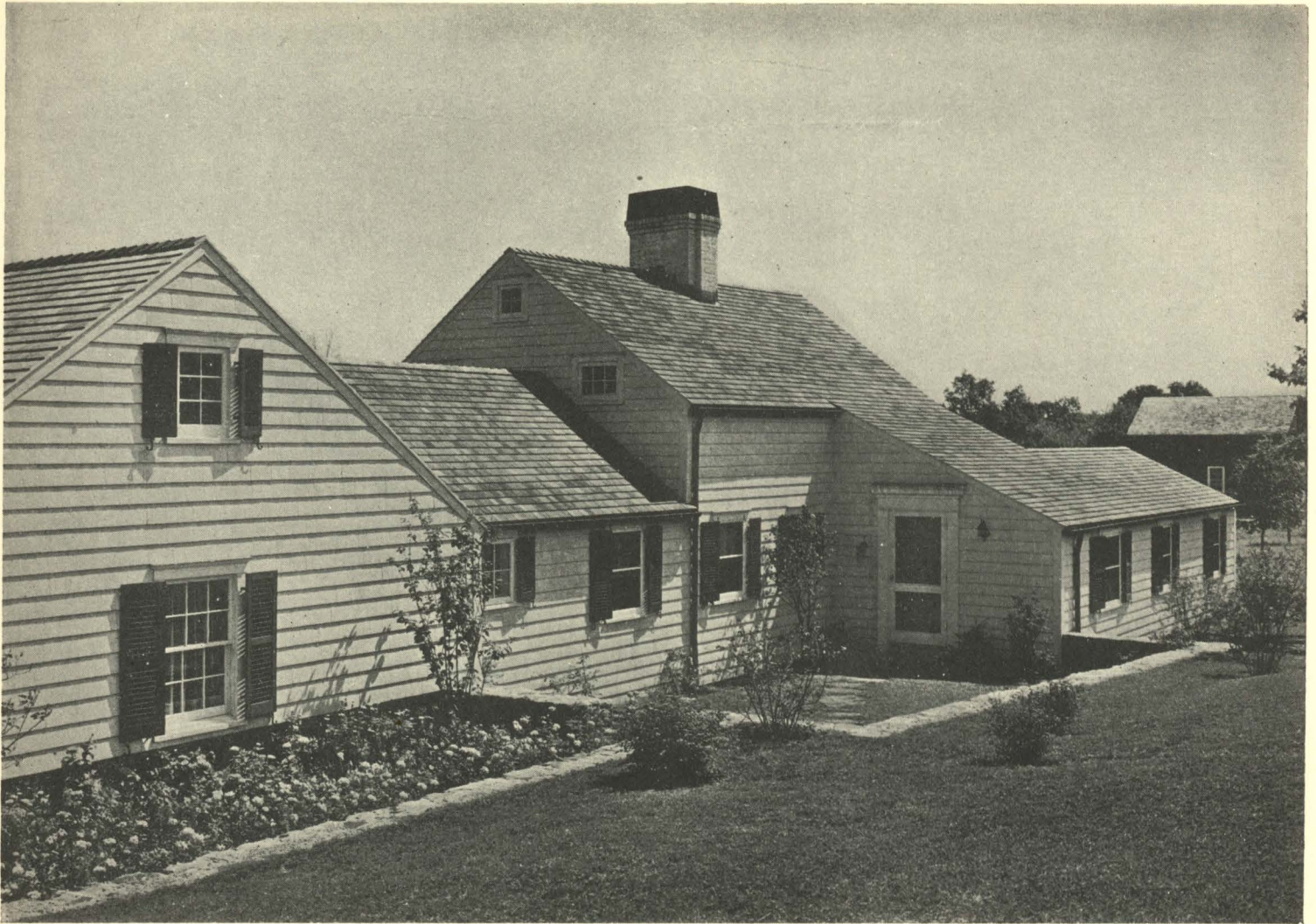
**ELECTRICAL INSTALLATION:** Wiring system—BX cable. Switches—toggle.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Water supply pipes—No. 85 copper tubing.

The vast expanse of roof is admirably balanced by the varied textures of wall materials and the unusual handling of the porch terminating the living room. The dormer windows are connected in order to emphasize the vertical plane of the main elevation. The plan, especially in the areas surrounding the main entrance, has several original features with ample provisions for lavatory, coat closet, and stair accessibility in a minimum of wasted space. Approximate cost: 35 cents per cubic foot.



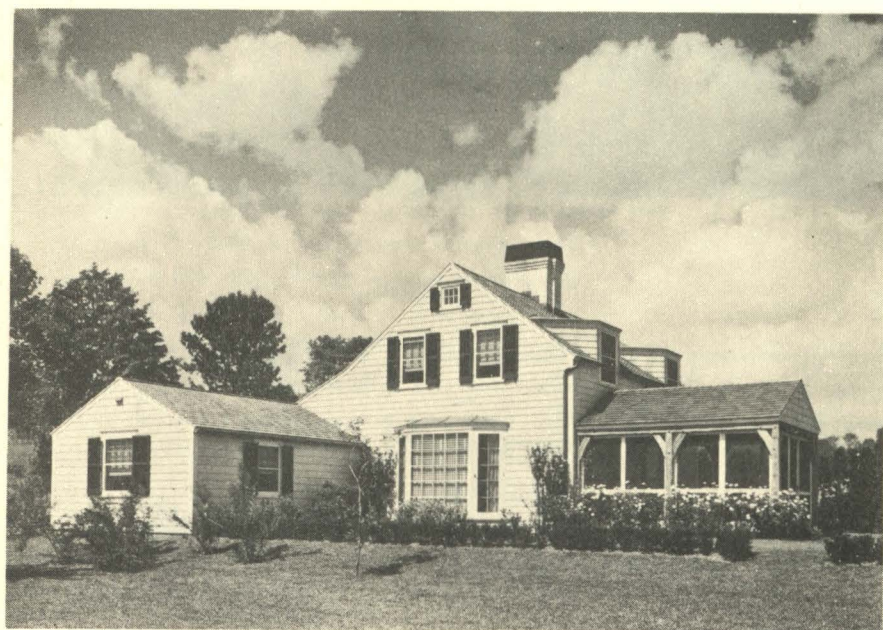
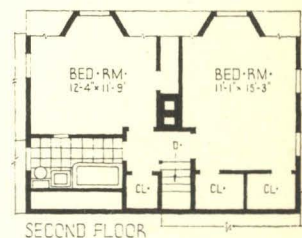
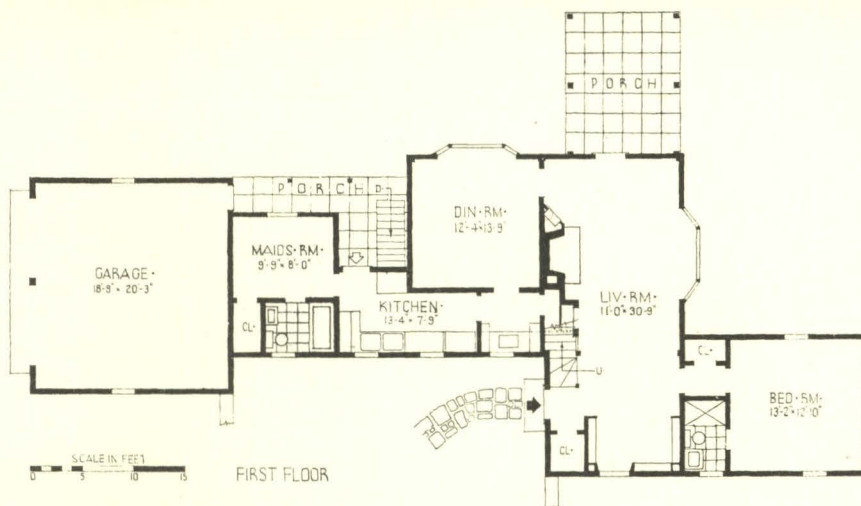
## 102. HOUSE FOR J. L. ALLEN, DARIEN, CONN.



Gottschko Photos

An old barn provided the starting point for this house, and set the unpretentious character of the design. Set on a slope, the rambling plan fits the incline with ease, and the house grows from a series of low sheds to a full two stories and attic on the garden side. Here again the virtue of simplicity in small house design is apparent, for in spite of the changing roof lines and broken mass, the essential plainness of the historic work has been maintained. The wings of the house give many exposures for sun and ventilation and are as convenient in plan as they are attractive on the exterior. The plan is worth careful study for its relation of services to living quarters; the manner in which the long, narrow living room has been broken up is also of interest. Cost \$10,000.





GARDEN



LIVING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—rubble stone. Cellar floors—concrete on gravel fill. Waterproofing—integral in mortar.

### STRUCTURE

Exterior walls—hand split cedar shakes, Neponset building paper, Bird & Son. Sheathing, studding with 4 in. Red-top rock wool, U. S. Gypsum Co. Ecod lath and plaster, Reynolds Corp. Interior partitions—studs with Ecod lath and plaster.

### ROOF

Covered with Perfection cedar shingles.

### CHIMNEY

Terra cotta flue lining. Damper—H. W. Covert Co.

### SHEET METAL WORK

Flashing, gutters and leaders—copper.

### INSULATION

Outside walls and roof—Red-top rock wool. Weatherstripping—Curtis Silentite windows, Curtis Companies.

### WINDOWS

Sash—Curtis, double hung. Glass—double thick.

### STAIRS

Oak treads, pine risers.

### FLOORS

Living rooms, bedrooms and halls—oak plank. Kitchen and bathrooms—linoleum.

### WALL COVERINGS

Living rooms—pine paneling.

### WOODWORK

Trim—pine to paint. Doors—pine paneled. Garage doors—Overhead Door Co.

### PAINTING

Interior: Walls—some lead and oil, others papered. Ceilings, trim and sash—lead and oil. Floors—stained and waxed. Exterior walls—whitewashed.

### ELECTRICAL INSTALLATION

Wiring system—BX cable. Switches—Toggle.

### PLUMBING

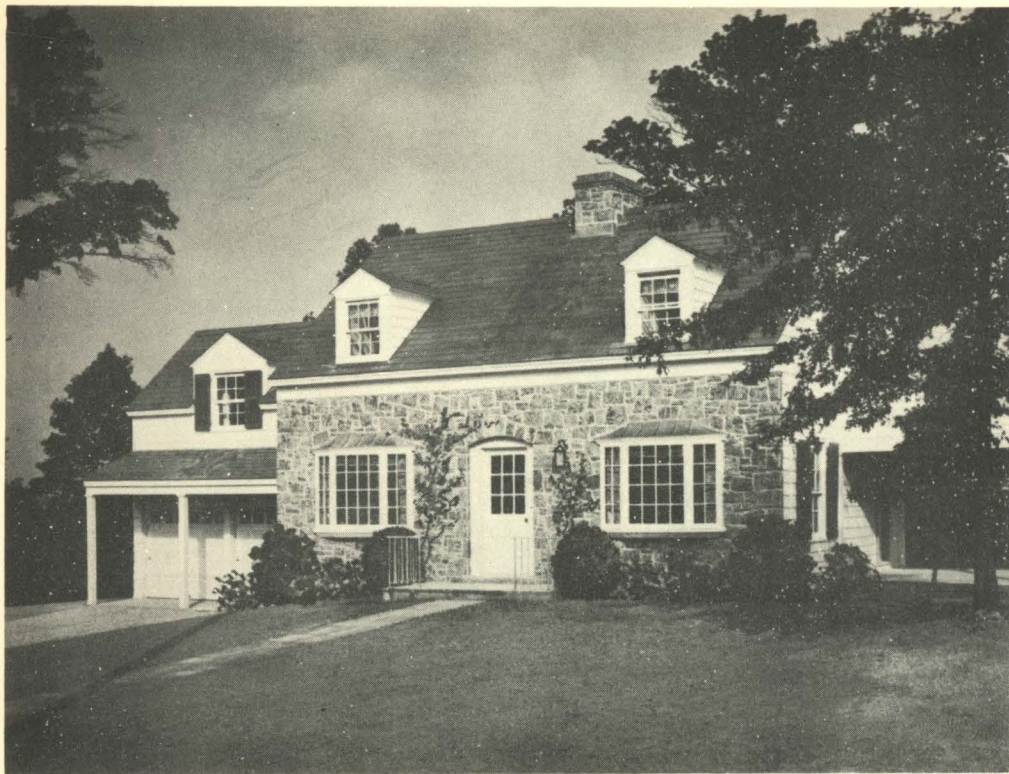
All fixtures by Standard Sanitary Manufacturing Co. Soil pipes—cast iron. Water pipes—brass.

### HEATING AND AIR CONDITIONING

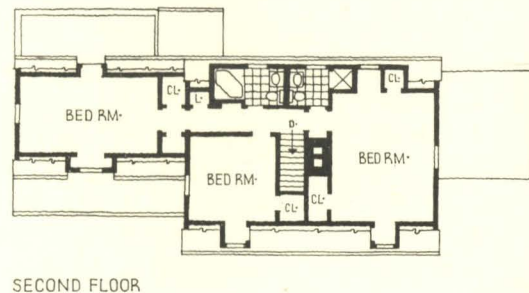
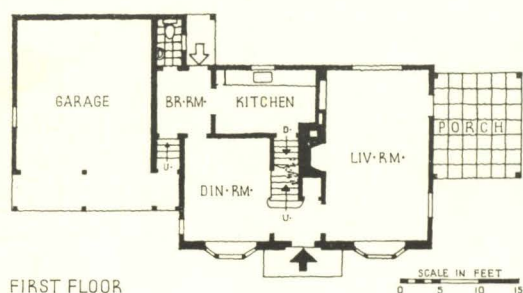
Boiler and radiators—American Radiator Co., oil burner. Thermostat—Minneapolis-Honeywell Regulator Co.



# 103. HOUSE IN BRONX HILLS, NEW YORK RANDOLPH EVANS, ARCHITECT



Gustav Anderson Photos



## CONSTRUCTION OUTLINE

**STRUCTURE:** 6 in. stone veneer, 18 in. red cedar shingles or vertical boarding and battens over heavy building paper, studs, rock wool insulation, wood lath and plaster and wall paper.

**ROOF:** Blue-black Pennsylvania slate.

**SHEET METAL WORK:** 16 oz. copper.

**INSULATION:** Outside walls—2 in. rock wool. Attic floor—4 in. rock wool.

**WINDOWS:** Sash—pine, double hung, weatherstripped. Glass—quality B.

**FLOORS:** All rooms—oak, except linoleum in kitchen and tile in bath.

**PAINTING:** Interior: Floors—1 coat filler, 1 shellac, 1 wax. Trim and sash—3 coats lead and oil, mixed on job. Exterior: Walls and sash—3 coats lead and oil.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—tumbler.

**KITCHEN EQUIPMENT:** Stove—Magic Chef, American Stove Co. Refrigerator—Norge Corp. Washing machine and drier—Graybar Electric.

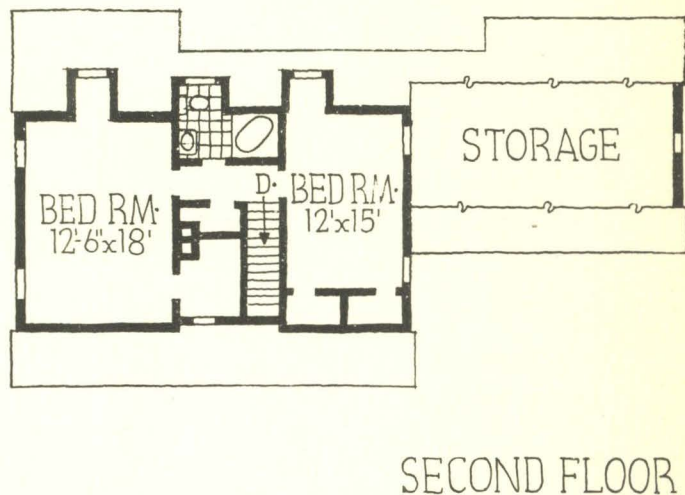
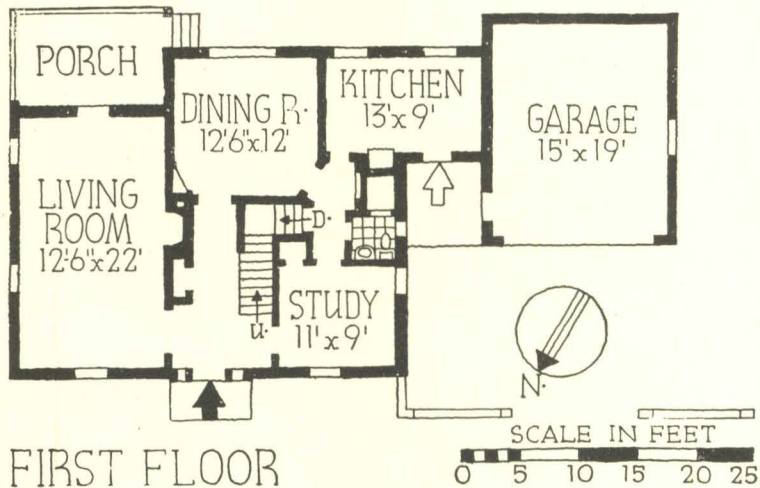
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water supply—Brass, Chase Brass & Copper Co.

**HEATING:** Steam. Boiler—Fitzgibbon oil fired.

A substantially constructed house whose main interest lies in the original treatment of the exterior. Ashlar and wood have been combined in an extremely effective manner to give this residence an appearance which is not monotonous. By setting the garage in back of the main plane of the elevation adequate protection has been secured by means of a wide marquise, and in the rear, additional space secured has been planned as service porch, breakfast pantry, and lavatory. The two baths designed in conjunction with the upstairs bedrooms are commendable features of the second floor plan. Cost: approximately \$10,000. Cubage: 26,600 at 39 cents.



# 104. HOUSE IN CHEVY CHASE, MD. DAN KIRKHUFF, ARCHITECT



A compact plan with ample rooms. The living room gains wall space by the placing of the dining room off the hall, a convenient arrangement in a house of this size. There is a good relation between the garage and service entrance. The covered porch not only provides protection for deliveries, but serves as a passage into the house from the garage. It is of interest to note that while plans with garages at the front have been proposed for this development, they have invariably been turned down by the directors of the development and by the committee of residents. Cubage: 29,865. Cost: \$10,450 at 35 cents a cubic foot.



## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—painted common brick facing, 4 in. cinder concrete block backing, 1 in. wood furring strips, rock lath, plaster board, U. S. Gypsum Co., and 3 coats plaster. Floor construction—2 x 10 in. fir joists, diagonal sub-floor. Ceilings—rock lath and plaster, U. S. Gypsum Co.

**ROOF:** Construction—2 x 8 in. rafters and sheathing, covered with roofing felt and 3-16 in. slate.

**INSULATION:** Second story and roof—4 in. rock wool. **WINDOWS:** Double hung, Silentite frames and sash, prefabricated with bronze weatherstripping, The Curtis Companies. Casements—Fenestra steel, with metal frame bronze wire screens, Detroit Steel Products Co.

**FLOORS:** Living room, bedrooms and halls—13/16 in. clear white pine. Kitchen and bathrooms—inlaid heavy gauge linoleum, Congoleum-Nairn, Inc.

**WALL COVERINGS:** Bedrooms and halls—wallpaper. Bathrooms—Marlite, Marsh Wall Products Co.

**WOODWORK:** Trim, shelving and cabinets—white pine, special. Doors—Colonial, six raised panels, The Curtis Companies. Garage doors—Overhead Door Corporation.

**HARDWARE:** Interior and exterior—P. & F. Corbin. **PAINTING:** Walls, trim and sash—3 coats lead and oil. Ceilings—Texolite, U. S. Gypsum Co. Floor—dark stain and wax. Exterior walls—2 coats Bay State brick paint, Wadsworth, Howland & Co., Inc.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—Bryant Electric Co. Fixtures—stock. **KITCHEN EQUIPMENT:** Stove and refrigerator—General Electric. Sink—Monel Metal, International Nickel Co.

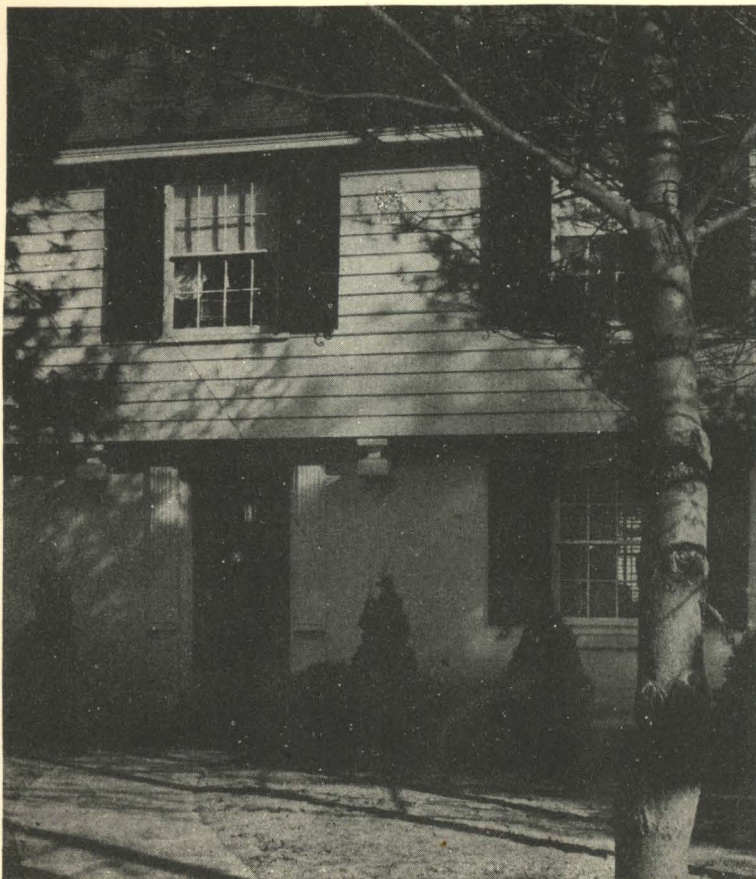
**BATHROOM EQUIPMENT:** Seat—C. F. Church Mfg. Co. Cabinets—Lawco, F. H. Lawson Co. All other fixtures by Standard Sanitary Mfg. Co.

**PLUMBING:** Pipes—cast iron and streamline copper tubing, Mueller Brass Co., Streamline Pipe & Fittings Division.

**HEATING AND AIR CONDITIONING:** Winter air conditioning, oil burning furnace, Gar Wood Industries.



## 105. HOUSE FOR EVERETT M. BROOKS, NEWTON, MASS.



Russell B. Harding Photos



LIVING ROOM

### ALBERT M. KREIDER, ARCHITECT

This house was designed for a family of three; it displays a familiar plan, and a conservative exterior not unlike the early houses of the locality. Early American was chosen not only because of the strong Colonial tradition in Massachusetts, but because it forms an appropriate setting for the owner's collection of antique furniture. An unusually large kitchen permits the omission of a pantry, an arrangement found to be most satisfactory. A good feature of the plan is the compact and convenient combination of garage and service entrances.

Cubage: 32,625. Cost: \$10,500 at about 32 cents per cubic foot.

### CONSTRUCTION OUTLINE

**FOUNDATION:** Walls—concrete, continuous. Cellar floor—cement.

**STRUCTURE:** Exterior walls—shingle exterior, except first floor which has brick veneer. Construction—wood frame, plastered inside.

**ROOF:** Covered with asphalt shingles, Fuller Lumber Co.

**CHIMNEY:** Terra cotta flue lining. Damper—H. W. Covert Co.

**SHEET METAL WORK:** Flashing and leaders—copper. Gutters—wood.

**INSULATION:** Outside walls and attic floor—rock wool. Weatherstripping—Chamberlain Metal Weatherstrip Co., Inc.

**WINDOWS:** Wood, double hung, Newton Door & Sash Co. Glass—single thickness, Libbey-Owens-Ford Glass Co.

**FLOORS:** All rooms—oak, Fuller Lumber Co. Kitchen and bathrooms—covered with linoleum.

**WALL COVERINGS:** All rooms—wallpaper. Bathrooms—tile dado, painted above.

**DOORS:** Interior—6-panel Colonial. Exterior—glazed, Morgan Sash & Door Co.

**HARDWARE:** Interior and exterior—Lockwood Hardware Manufacturing Co.

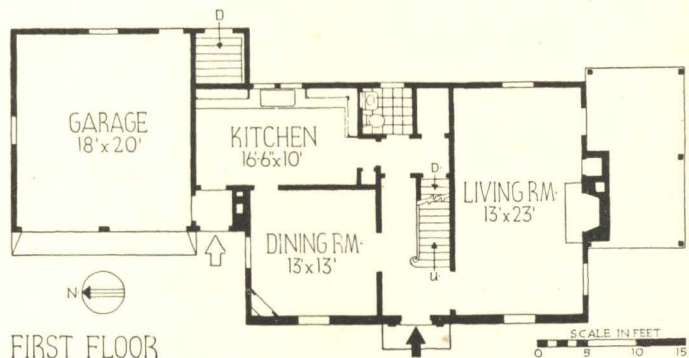
**PAINTING:** Interior: Ceilings—calcimine. Floors—shellac, wax.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—toggle.

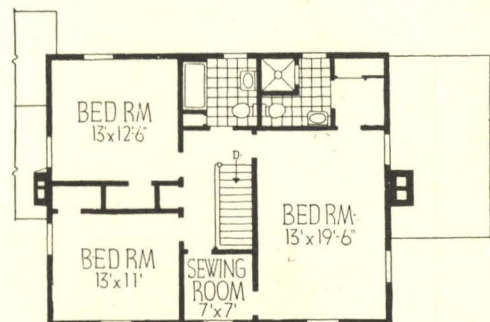
**KITCHEN AND LAUNDRY EQUIPMENT:** Stove and washing machine—electric, General Electric Co. Refrigerator—Frigidaire Sales Corp.

**PLUMBING:** All fixtures by Kohler Co. Water pipes— $\frac{3}{4}$  in. Anaconda copper, American Brass Co.

**HEATING:** Steam heat. Boiler—oil fired, Burnham Boiler Corp. Radiators—Burnham Boiler Corp. Valves—Hoffman Specialty Co., Inc.



FIRST FLOOR



SECOND FLOOR

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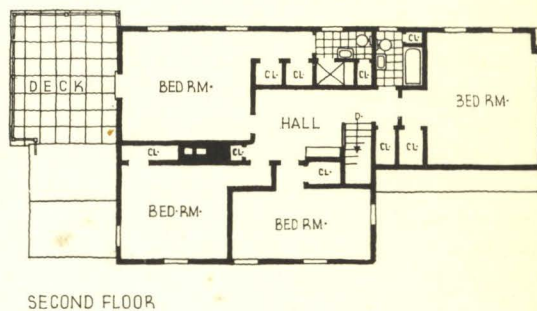
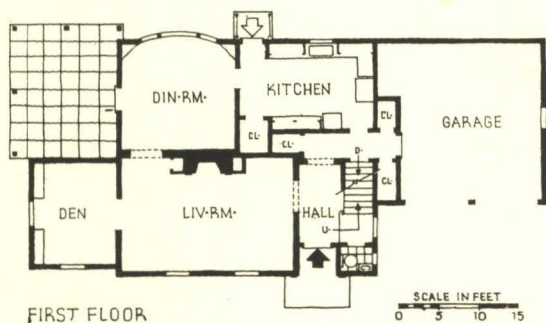


# 106. HOUSE FOR H. N. FELTON, SUMMIT, N. J.



John Beinert

WILLIAM M. PAREIS,  
ARCHITECT



## CONSTRUCTION OUTLINE

**STRUCTURE:** Frame, shingles, paper and sheathing, 4 in. rock wool, sheet rock and 3 coats of plaster.  
**ROOF:** Wood shingles.  
**SHEET METAL WORK:** Copper.  
**INSULATION:** Walls and ground floor—4 in. rock wool.  
**WINDOWS:** Curtis Silentite, weatherstripped.  
**FLOORS:** Red oak, tile in baths, linoleum in kitchen.  
**WALL COVERINGS:** All rooms—wallpaper, except paint in kitchen and bathrooms.  
**HARDWARE:** By P. & F. Corbin.  
**ELECTRICAL INSTALLATION:** Wiring system—BX cable. Switches—toggle.  
**KITCHEN EQUIPMENT:** Stove—gas. Refrigerator—Kelvinator, electric.  
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Water supply pipes—brass.  
**HEATING AND AIR CONDITIONING:** Carrier Engineering Co.

A well built and soundly designed house, featuring the off-axis entrance. The cornice treatment over the garage doors and the recessed entry afford ample protection from inclement weather. The plan is outstanding in its simplicity, the built-in cabinets in den, living room, kitchen, and dining room have been integrated in the design of the rooms themselves, thus reducing the problem of fitting in furniture designed ex tempore. Approximate cost: 33½ cents per cubic foot.



## 107. HOUSE FOR WILLIAM J. NAVIN, PORT WASHINGTON, NEW YORK



Gottscho Photos

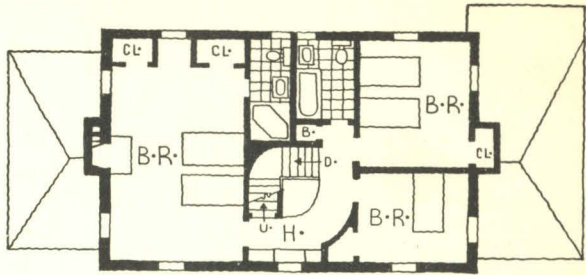
**PROBLEM:** Chiefly one of placing a conventional house on a plot of moderate size (90 x 145 ft.), with provisions for future expansion.

A house of Georgian type was designed to meet the requirements of the owner, who wanted a house that was formal in character. Complete symmetry was maintained on the front elevation, with a porch to balance the one-car garage, and a false chimney containing a bedroom closet to match the real one. It is planned to use the present attic space for additional rooms, and the necessary piping was installed when the house was built; also a row of windows was placed in the rear of the attic so that a minimum of structural changes would be required. The one-car garage is to be converted into an additional room, and a new two-car garage is planned for the rear of the plot. The garden has been placed in the front of the house, and its simplicity and formality are in character with the design of the house. Cost: \$10,500. Cubage: 30,500 at 34 cents.

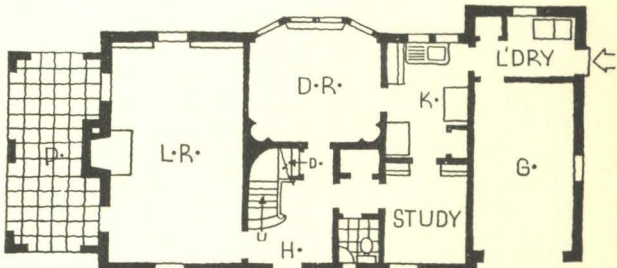




DINING ROOM



SECOND FLOOR



FIRST FLOOR

SCALE IN FEET  
0 5 10 15

CONSTRUCTION OUTLINE

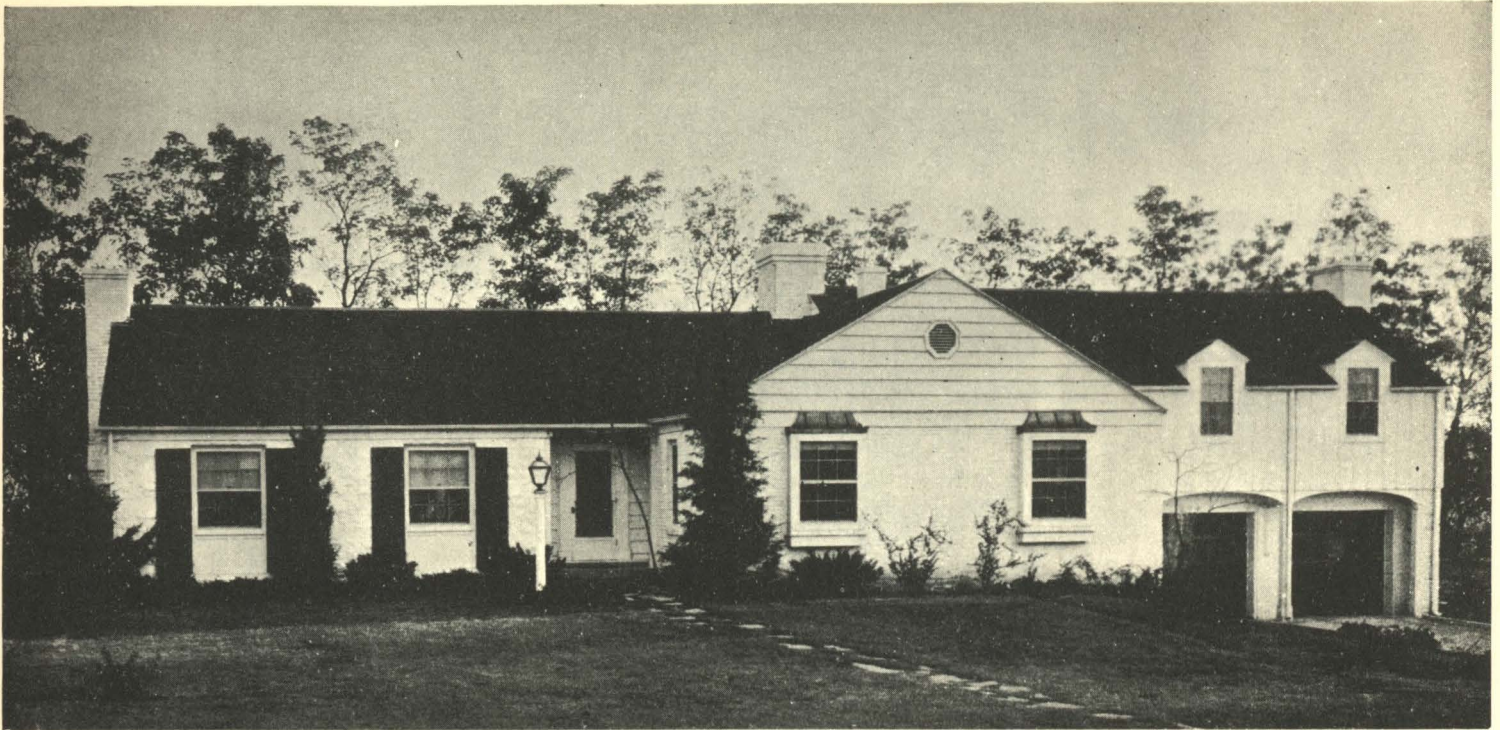
- FOUNDATION**  
Concrete blocks, 12 in. hollow.
- STRUCTURE**  
Exterior walls—4 in. brick veneer, 1 in. air space, building felt, 1 x 8 in. shiplap sheathing, 2 x 4 in. studs, lath and 3 coat plaster, hard wall finish.
- ROOF**  
Construction—2 x 6 in. rafters, 16 in. o.c. Covered with 1 x 2 in. No. 1 spruce lath, 18 in. Perfection wood shingles spaced 5 in. to weather.
- SHEET METAL WORK**  
Flashing, gutters, leaders—14 oz. copper.
- INSULATION**  
Roof—½ in. balsam wool.
- WINDOWS**  
Double hung wood, Curtis stock. Storm sash on north and west. Glass—flat drawn single thickness. Screens—copper bronze, full length.
- FLOORS**  
Living room, bedrooms and halls—red oak. Kitchen—pine with linoleum. Bathrooms—ceramic tile.
- WALL COVERINGS**  
Living room, bedrooms and halls—wall paper. Bathrooms—tile.
- WOODWORK**  
Trim—pine. Interior doors—6-panel 1⅜ in. Colonial stock. Exterior doors—1¾ in. stock. Garage doors—roll up overhead.
- HARDWARE**  
Polished brass, Schlage Lock Co.
- PAINTING**  
Interior: Walls in kitchen and bath—enamel. Ceilings—calcimine except kitchen and baths which are enamel. Floors—Minwax. Exterior: Walls—permanent white-wash. Roof—creosote and linseed oil mixed with barn red.
- ELECTRICAL INSTALLATION**  
Wiring system—3 wire B.X. Switches—tumbler.
- KITCHEN EQUIPMENT**  
Refrigerator—General Electric. Sink—Standard Sanitary Mfg. Co.
- BATHROOM EQUIPMENT**  
All fixtures by Standard Sanitary Mfg. Co. Cabinet—G. M. Ketcham Mfg. Co.
- PLUMBING**  
Soil and vent pipes—extra heavy cast iron. Water supply pipes—brass with brass fittings.
- HEATING**  
Steam with vacuum valves, using Quiet May unit.



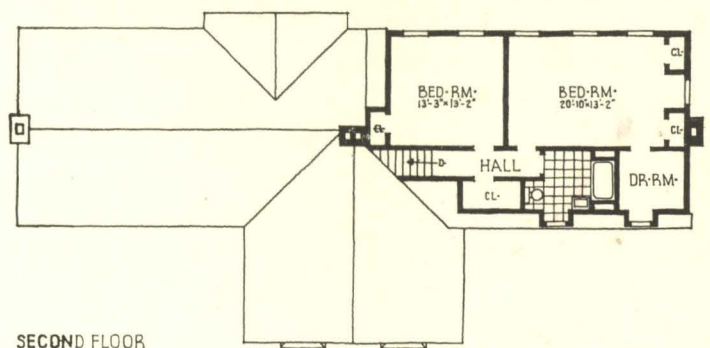
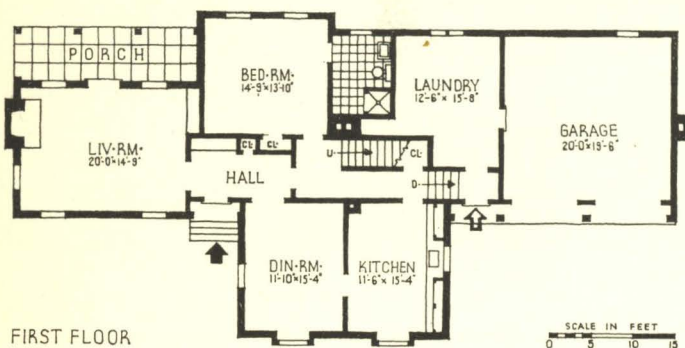
SECOND FLOOR—HALL



## 108. HOUSE FOR G. H. BOWEN, TULSA, OKLA.



Miller Studio



E. PALMER POTTER, DESIGNER

A change in ground level permitted the placing of two bedrooms and a bath over the garage without substantially altering the low roof line of the house. The main rooms are all on the ground floor level. The plan is of interest chiefly for the unusual amount of space that has been given to the service elements: the laundry alone is as large as the usual kitchen plus laundry, and the kitchen also is generous in size. By comparison the living room appears cramped, although its dimensions are by no means uncommonly small. A great convenience in the plan is the location of the service entrance next to the garage doors, providing easy access for guests in bad weather. Cost \$10,930 at about 40 cents per cubic foot.

### CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—brick veneer, 20 lb. asphalt felt, 1 x 6 in. matched boxing, 2 x 4 in. studs, U. S. Gypsum rock lath and plaster.

**ROOF:** Cedar shingles, 16 in.

**SHEET METAL WORK:** Flashing, gutters and leaders—26 gauge galvanized iron.

**INSULATION:** Attic floor—Johns-Manville rock wool.

**WINDOWS:** Sash—double hung, wood, weather-stripped. Glass—double strength, Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room—wood, random width Tavern plank, E. L. Bruce Co. Bedrooms— $1\frac{1}{2}$  x  $13/16$  in. clear red oak. Kitchen—linoleum, Armstrong Cork Products Co. Bathrooms—tile.

**WALL COVERINGS:** Living and dining room—Texolite, U. S. Gypsum Co. Bedrooms and halls—wallpaper. Kitchen—washable wallpaper. Bathrooms—tile.

**PAINTING:** Interior: Floors—filler, color developer Murphy Varnish Co., wax. Trim and sash—semi-gloss paint, Cook Paint & Varnish Co. Exterior: Walls and sash—outside white. Roof—green shingle stain.

**ELECTRICAL INSTALLATION:** Wiring system—conduit. Switches—Pass & Seymour.

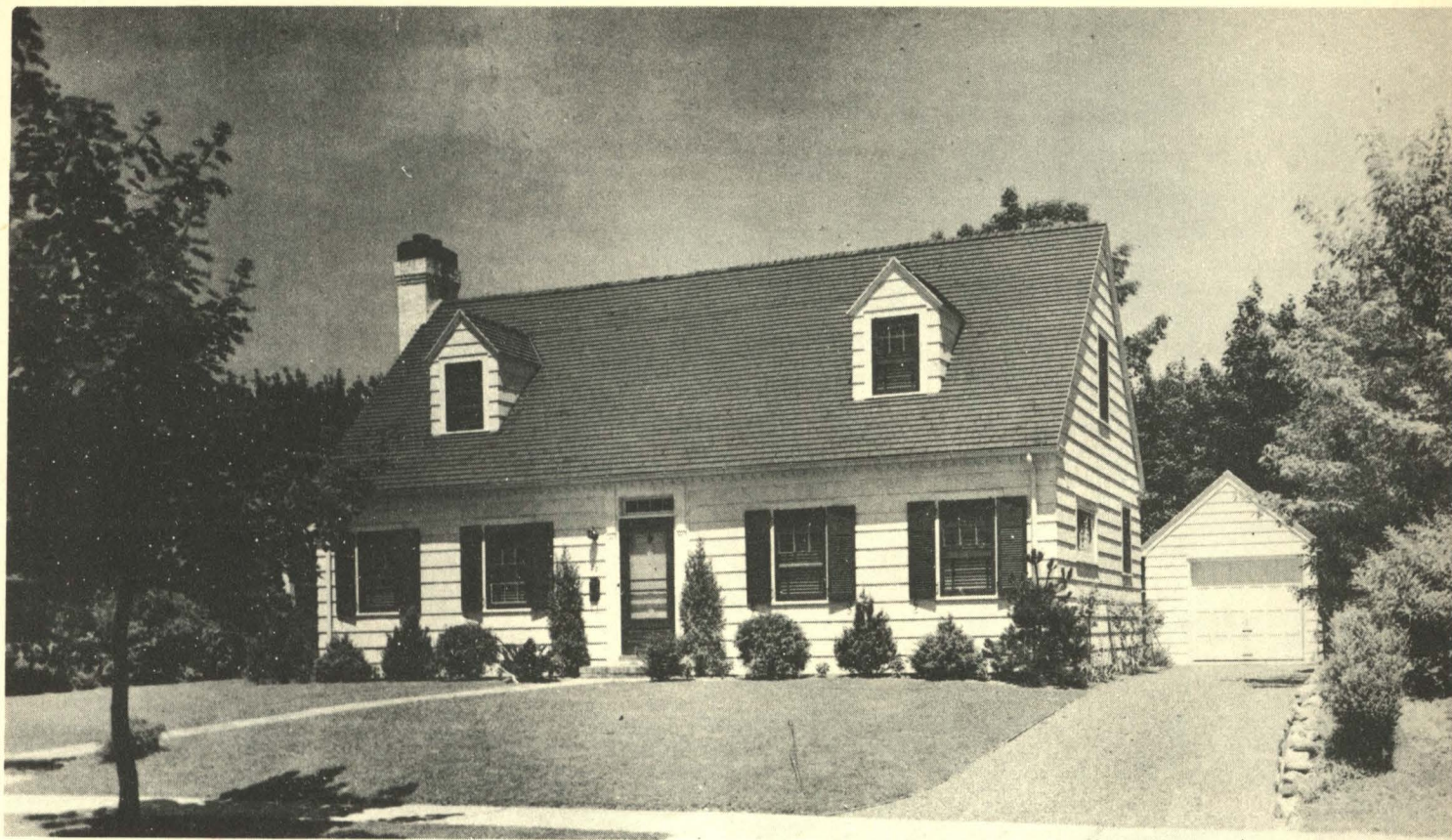
**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—cast iron. Water pipes—galvanized iron.

**HEATING AND AIR CONDITIONING:** Pennsylvania gas fired furnace, fan, filters, humidifier, 2-zone control, thermostat controlled.

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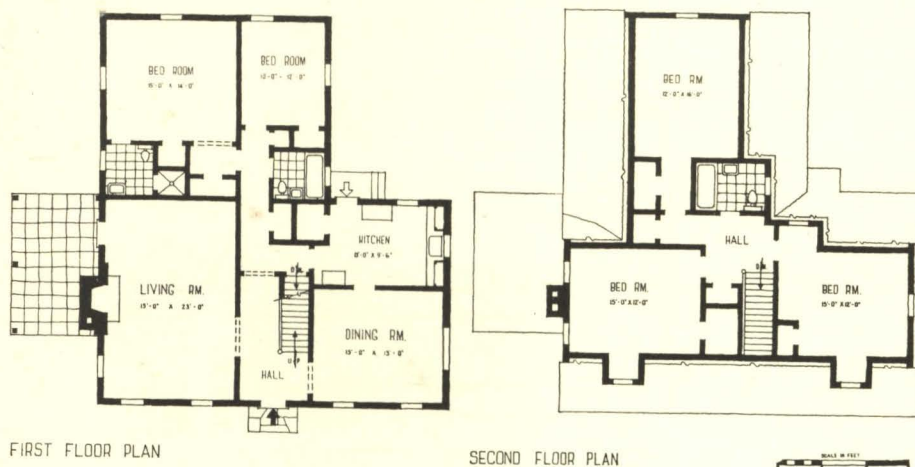


# 109. HOUSE FOR H. C. BAUMGARDNER, MANHASSET, LONG ISLAND, N. Y.



Murray M. Peters

HENRY W. JOHANSON, ARCHITECT



FIRST FLOOR PLAN

SECOND FLOOR PLAN

## CONSTRUCTION OUTLINE

**FOUNDATION:** Walls—12 in. poured concrete. Cellar floor—concrete.

**STRUCTURE:** Exterior walls—2 x 4 in. studding, 16 in. o.c., 7/8 in. sheathing; 24 in. No. 1 Royal cedar shingles, 9 in. to weather. Interior partitions—2 x 4 in. studding, 3 coats plaster on wood lath.

**ROOF:** Royal cedar shingles.

**CHIMNEY:** Brick terra cotta lining. Damper—H. W. Covert Co.

**INSULATION:** Outside walls, attic floor and roof—4 in. Celotex, U. S. Gypsum Co. Weatherstripping—zinc interlocking.

**WINDOWS:** Sash—wood, double hung. Glass—double strength, quality A, Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room, bedrooms and halls—7/8 x 2 1/4 in. red oak strip. Kitchen—N. C. pine, covered with linoleum, Armstrong Cork Products Co. Bathrooms—ceramic tile.

**WOODWORK:** First floor trim—chestnut; second floor—white pine. Shelving and cabinets—mill made white pine. Doors—6-panel Colonial 1 3/4 in. Garage doors—overhead, Roway, Rowe Mfg. Co.

**HARDWARE:** Interior—Colonial brass. Exterior—black iron, Sargent & Co.

**PAINTING:** Interior: Walls, trim and sash—3 coats flat oil paint. Ceilings—calcimine. Floors—Minwax Co., Inc.

**ELECTRICAL INSTALLATION:** Wiring system—BX cable. Switches—Hart & Hegeman. Fixtures—Light-olier Co.

**KITCHEN EQUIPMENT:** Stove—gas, American Stove Co. Sink—Monel metal, International Nickel Co.

**PLUMBING:** All fixtures by Standard Sanitary Mfg. Co. Soil pipes—extra heavy cast iron. Water supply pipes—brass with 85 per cent copper.

**HEATING:** One pipe steam. Boiler—jacketed oil-fired direct gun type. Radiators—concealed. All by American Radiator Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—60 gal. copper tank, Taco Heaters, Inc.

The irregularity of the plan is rather unexpected after a glance at the severely symmetrical exterior, and a view of the rear elevation would probably be somewhat at variance with the impression of small scale given by the front. For all its apparent small size, the house contains an astonishing amount of room: living room, dining room, and kitchen are more than ample, and other accommodations include five bedrooms and three baths. The house is typical, in its exterior appearance, of the great bulk of residential work being done on Long Island at the present time. Both one- and two-story types show a decided preference for the Colonial exterior of the kind shown here. Cubage: 35,000. Cost: \$10,500 at 35 cents per cubic foot.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## 110. HOUSE FOR H. JACKSON SILLCOCKS, TUCKAHOE, N. Y.



John Gass Photos

**PROBLEM:** To build the first of a proposed series of houses, designed for young married couples with moderate incomes; to set up in this first house architectural standards which would control those to follow.

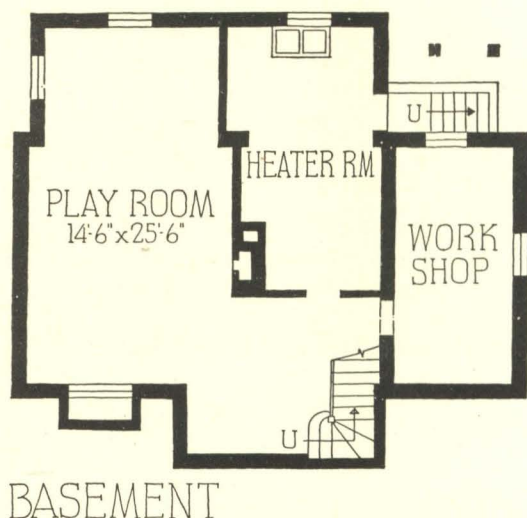
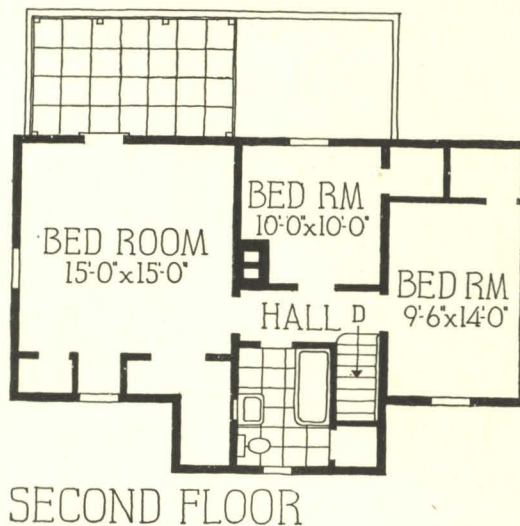
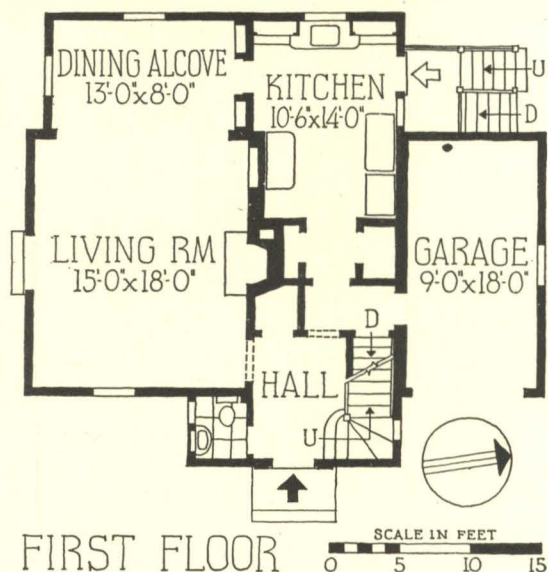
More than usual care in all of its details has added much to the appearance of the house. A terrace off the living room provides for an extension of its uses in the summer, and living room and dining room have been merged to increase the spaciousness of an otherwise small interior. A deck on the second floor faces the rear for privacy, and is further protected by the trees at the edge of the property. This house, originally designed for an operative builder, George N. Schmiedel, was sold shortly after its completion and has already been followed by two others. Cubage: 24,000. Cost \$10,728 at 45 cents a cubic foot.



ENTRANCE DETAIL

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





LIVING-DINING ROOM

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block, continuous. Waterproofing— $\frac{5}{8}$  in. coat waterproof, Medusa Portland Cement Co.

### STRUCTURE

Exterior walls—random width shingles, 10 in. exposure, building paper, sheathing, studs, insulation, wire lath and plaster. Floor construction—wood joists, wire lath and plaster.

### ROOF

Construction—wood rafters, sheathing, felt, covered with black slate, Bangor Slate Association, Inc. Deck construction—canvas.

### CHIMNEY

Lining—terra cotta. Damper—H. W. Covert Co.

### SHEET METAL WORK

Flashing and leaders—copper. Gutters—long fir wood.

### INSULATION

Outside walls—rock wool, Eagle-Picher Lead Co. Attic floor—rock wool and down knee walls.

### WINDOWS

Sash and frame—Silentite, The Curtis Companies. Glass—glazing by The Curtis Companies. Screens—bronze in white pine frame.

### FLOORS

Living rooms, bedrooms and halls—white oak, Ritter Floor Co. Kitchen—linoleum, Armstrong Cork Products Co. Bathrooms—tile, American Encaustic Tile Co.

### WALL COVERINGS

Living room and halls—wallpaper, Imperial Wall Paper Co. Bedrooms—wallpaper, Richard E. Thibaut Co.

### WOODWORK

Trim and doors—white pine, stock types, The Curtis Companies. Shelving and cabinets—white pine. Garage doors—Overhead Door Co.

### HARDWARE

Interior and exterior—Yale & Towne Manufacturing Co.

### PAINTING

All paint by Keystone Varnish Co.

### ELECTRICAL INSTALLATION

Wiring system—BX, National Electric Products Co. Fuze panel—Columbia Metal Box Co. Switches—Hart & Hegeman. Fixtures—Cassidy & Co.

### KITCHEN EQUIPMENT

Stove—General Electric Co. Cabinet—Oxford, Bradley Co.

### BATHROOM AND LAUNDRY EQUIPMENT

Seat—C. F. Church Manufacturing Co. Cabinet—Hoegger, Inc. All other fixtures—Standard Sanitary Manufacturing Co.

### PLUMBING

Pipes: Soil and waste—extra heavy cast iron, Crane Co. Water supply—Anaconda brass—American Brass Co.

### HEATING AND AIR CONDITIONING

Two pipe vapor system, oil burner and thermostat, General Electric Co.



### III. HOUSE FOR PRICE BERRIEN, PORT CHESTER, N. Y.



W. W. Hennessy Photos

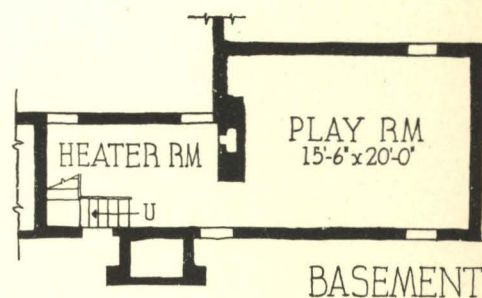
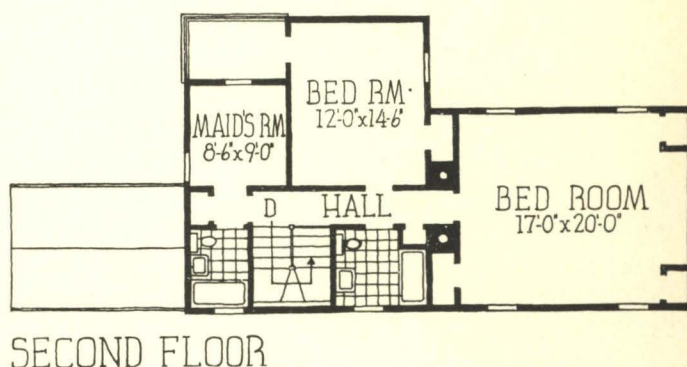
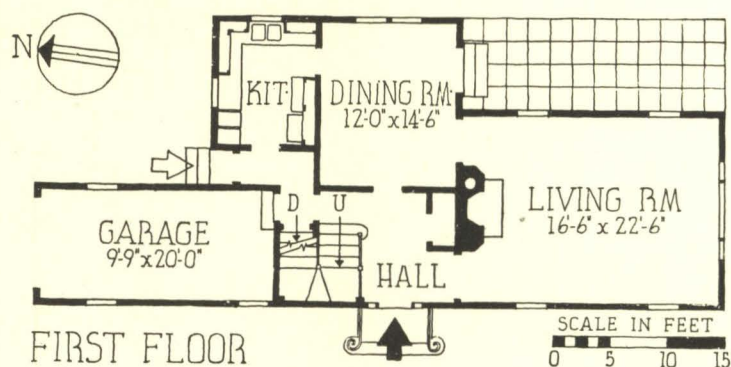
Problem: To provide accommodations for a young couple and a maid. The plot is 200 x 200 and is located on the edge of a large estate. The house to harmonize with the old Colonial house on the estate, and to be as long and low as possible.

A certain crispness of mass and detail gives this house more character than is usually found in small house adaptations of Colonial.

*The architect comments:* "The first floor arrangement of spaces gives reasonably long interior vistas, and provides for access from the front hall to the garage, cellar, play room, living room, dining room, and stair to the second floor—all with a minimum of circulation.

"The chimney was located as shown to leave the space under the living room clear of heating apparatus for use as a play room, and to leave the south wall of the living room free of the fireplace for the picture window and its view over the grounds of the estate." Cubage: 26,755. Cost: \$10,777.73 at 40 cents a cubic foot.





## CONSTRUCTION OUTLINE

### STRUCTURE

Exterior walls—red cedar Perfection shingles,  $\frac{3}{8}$  in. sheathing, insulation, fir studs, metal lath and 3 coat plaster. Floor construction—fir joists; plaster ceilings on first and second floors, cellar and attic unfinished.

### ROOF

Fir rafters and shingle lath, covered with wood shingles. Deck construction—wood, covered with canvas.

### CHIMNEY

Terra cotta lining. Damper—H. W. Covert Co.

### SHEET METAL WORK

Flashing and gutters—copper.

### INSULATION

Outside walls and attic floor—4 in. rock wool.

### WINDOWS

Double hung, white pine, Andersen Frame Co. Glass—quality A.

### FLOORS

Living room, bedrooms and halls—red oak. Kitchen—linoleum covered pine. Bathrooms—rubber tile and linoleum.

### WOODWORK

Trim, shelving and cabinets—white pine. Doors—Curtis Companies.

### HARDWARE

Interior and exterior—P. & F. Corbin.

### PAINTING

Interior: Walls, ceilings, trim and sash—lead and oil. Floors—shellac and wax. Exterior: Walls—Cabot's white, Samuel Cabot, Inc. Roof—Creo-Dipt stain, Creo-Dipt Co., Inc.

### BATHROOMS AND KITCHEN EQUIPMENT

Seat—C. F. Church Manufacturing Co. Shower—Speakman Co. All other fixtures—Standard Sanitary Manufacturing Co.

### PLUMBING

Pipes: Soil and waste—cast iron. Water supply—brass, Bridgeport Brass Co.

### HEATING AND AIR CONDITIONING

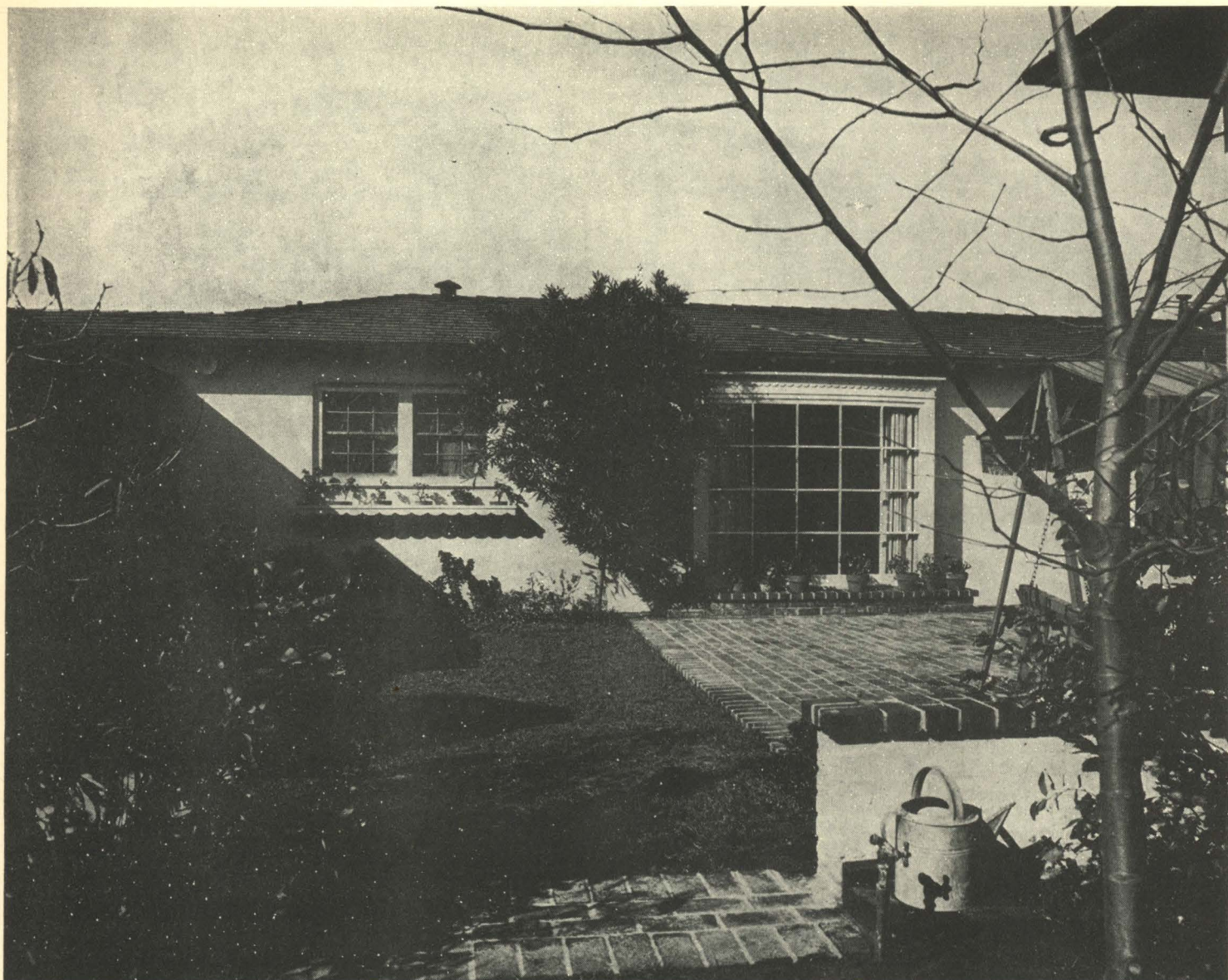
Winter air conditioning, filter, humidifier and gas furnace, Fox Furnace Co. Thermostat—Chronotherm—Minneapolis-Honeywell Regulator Co.



LIVING ROOM



## 112. HOUSE FOR CLARE D. HAMMAN, LONG BEACH, CALIF.



Floyd Ray

**PROBLEM:** To relate as many rooms as possible to the patio. (The patio is used about eight months of the year as an outdoor dining room.)

Typical in its general appearance, this house shows an unusually good relation of rooms to each other and to the patio. A pleasant feature of the exterior is the large dining room bay, set on a broad brick base wide enough to accommodate plants and flowers.

The architect's comments, and replies to questions:

"The maid's room is in an unusual position, but the owner wanted her room as near as possible to the children's without having it actually adjoining the family bedrooms."

**Q.** Is not the inclusion of a breakfast room in a small house that has a dining room a wasteful use of space?

**A.** "The alcove is used by the family at breakfast and as a servant's dining room the rest of the day. It may be wasteful, but most families prefer an alcove for occasions when they do not wish to prepare the dining room."

**Q.** Why are 2 x 6 studs used for partitions instead of 2 x 4's?

**A.** "The 2 x 6 stud walls were used so that the French door

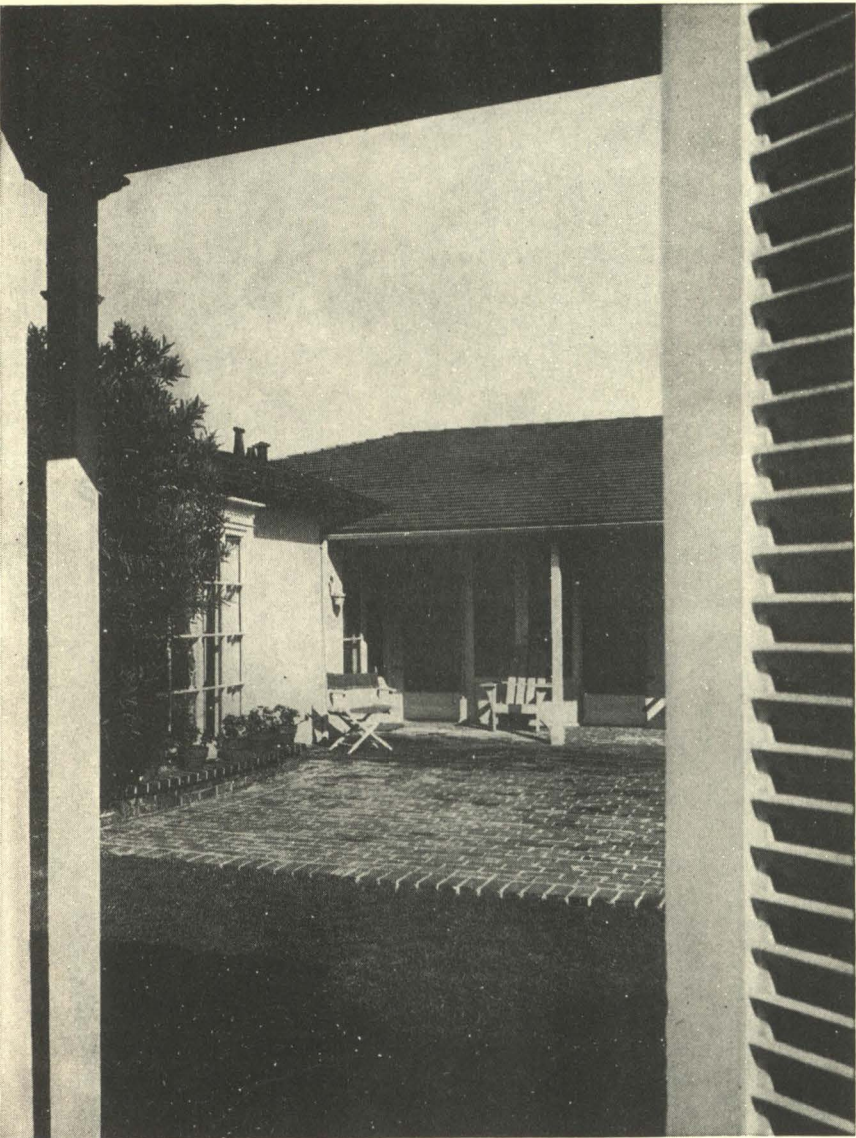
hardware would not interfere with that of the screen doors. Roll screens also work better in thicker walls."

**Q.** The shallow closets with sliding doors seem excellent. How do the sliding doors compare with hinged doors for cost and practicality?

**A.** "Shallow closets are economical of floor space, and open-face trays are useful for folded wearing apparel. The cost of hardware is not great, in fact most doors slide in hardwood grooves using small Domes of Silence (the common glides used on chair legs) on the bottom of the doors. The doors, in many cases, are of plywood."

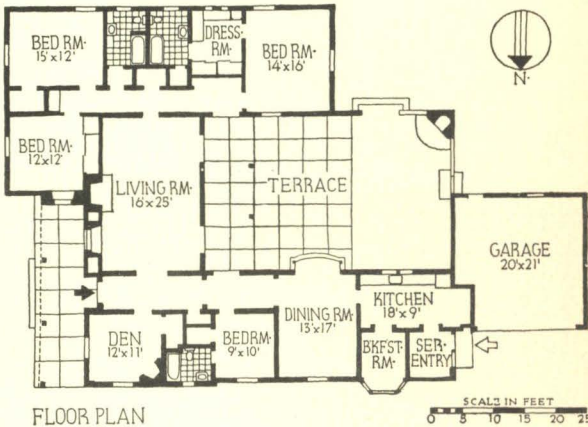
Cubage: 29,000. Cost: \$10,800 at 37 cents a cubic foot.





INTERIOR COURT

Floyd Roy



CONSTRUCTION OUTLINE

**STRUCTURE**  
Exterior walls—1 in. cement plaster, 16 gauge 1½ in. mesh wire lath, brownskin paper, Brown Co., applied against horizontal tie wires, wood studs, rock lath, hardwall plaster, U.S. Gypsum Co. Floor construction—2 x 10 in. Joists, 1 x 6 in. diagonal sub-floor, ½ x 2 in. clear plain white oak.

**ROOF**  
Covered with Royal cedar shingles.

**CHIMNEY**  
Terra cotta flue lining, Gladding, McBean & Co. Damper—Superior, Superior Fireplace Co.

**SHEET METAL WORK**  
Flashing—galvanized iron and Lead Clad, Wheeling Metal Manufacturing Co. Gutters and leaders—galvanized iron.

**WINDOWS**  
Sash—wood, double hung. Weatherstripping—Monarch Metal Weatherstripping Co. Glass—quality B, Libbey-Owens-Ford Glass Co.

**FLOORS**  
Living room, bedrooms and halls—½ x 2 in. clear plain white oak. Kitchen—Sealex linoleum, Congoleum-Nairn, Inc. Bathrooms—Sealex linoleum, Congoleum-Nairn, Inc., and tile, Gladding, McBean & Co.

**WALL COVERINGS**  
Living rooms, bedrooms and halls—wallpaper. Kitchen—Sealex wall covering—Congoleum-Nairn, Inc.

**HARDWARE**  
Interior and exterior—P. and F. Corbin.

**PAINTING**  
Interior: Walls and ceilings—washable wall paint. Floor—stain, fill, shellac and wax. Trim and sash—Silken White, egg shell enamel. Exterior: Walls—Lithide, Lithide Products Co., Sash and exterior woodwork—lead and oil. All paint by W. P. Fuller & Co.

**ELECTRICAL INSTALLATION**  
Wiring system—knob and tube. Switches—Despard, Pass & Seymour. Fixtures—Strickley, Stein & Gerard.

**KITCHEN EQUIPMENT**  
Range—Gaffers & Statler. Refrigerator—Electrolux, Servel, Inc. Sink—two-part, Standard Sanitary Manufacturing Co.

**BATHROOM EQUIPMENT**  
Lavatory, tub, toilet—Standard Sanitary Manufacturing Co. Seat—two-piece compact.

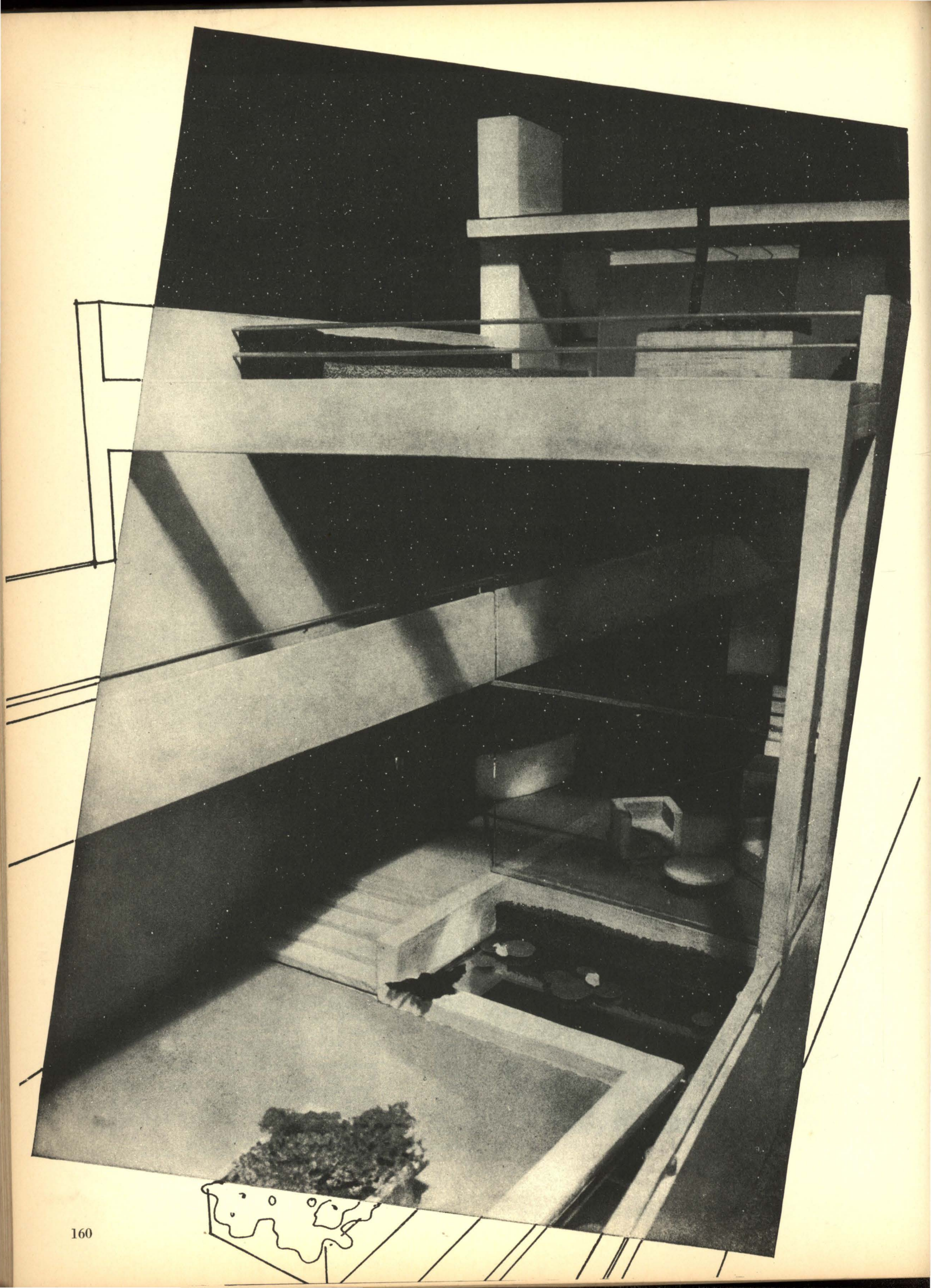
**HEATING**  
Unit heater and hot water heater.



STREET ELEVATION

Inman Co.







# 113. CITY HOUSE AND GARDEN

ERNEST BORN, ARCHITECT

C. BERTIL LUND, ASSOCIATE      THOMAS D. CHURCH, LANDSCAPE ARCHITECT

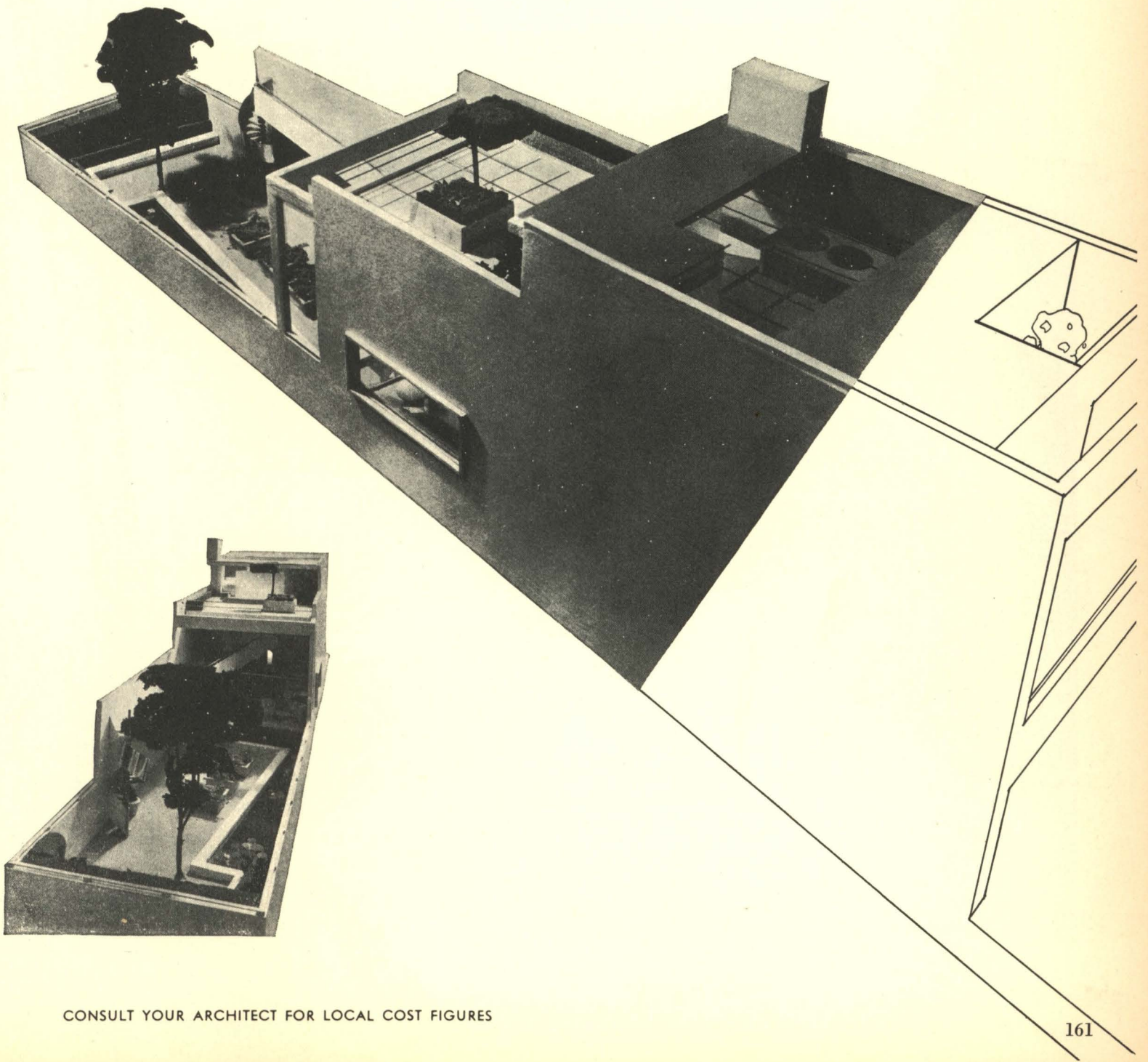
This project, recently awarded first prize in a competition held in conjunction with the San Francisco Exhibition of Landscape Architecture, is so brilliant a solution of a by no means uncommon problem that it is here offered as an example of the potentialities of the architect who is willing to think clearly and creatively. The problem was to design a house and garden for a 25-foot city plot.

*The architect and landscape architect comment:* "Essentially the house consists of two units: (1) a living and eating space (with kitchen, bar, etc.), (2) a space for retirement, privacy, sleeping.

"The general living area on the ground floor is in intimate relation with the garden, which is conceived as an extension of the interior living and entertaining area. Effort has been made to treat these areas of interior and exterior living in such a way as to eliminate a hard and fast separation between them. The dining balcony, wide

at the kitchen end, tapers down to the width of the circular stair in the garden. Besides creating a pleasant effect inside and out, this device acts strongly to splice the outside and inside together. The great area of glass acts neither as wall nor window, but merely as physical agent for the control of inside temperatures, yet rendering the garden a source of stimulation and delight to the inside occupants.

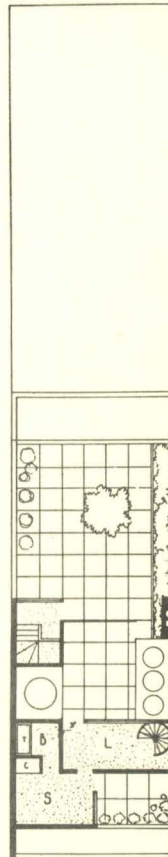
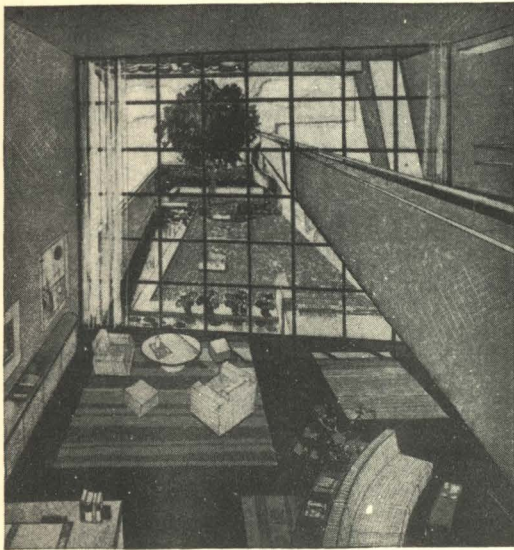
"A garden of this type has nothing to do with gardening, as such, but nevertheless serves to inspire a sense of garden without the trappings associated with the garden idea. First aim in the architecture is the development of space concepts—in the garden, that of form. Second aim, to completely unify and integrate these two fundamental objectives in terms of construction materials and planting so as to produce a dwelling unit lending itself to a fine tradition of living."



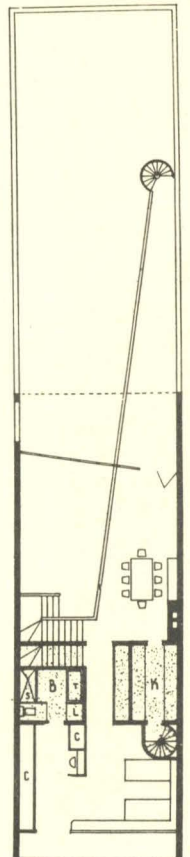


# CITY HOUSE AND GARDEN

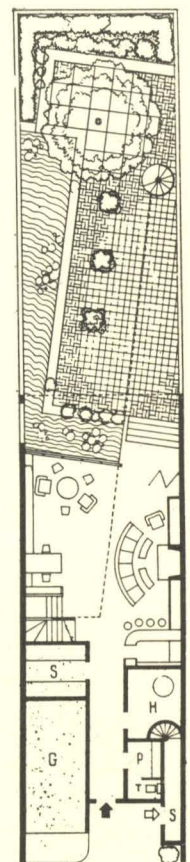
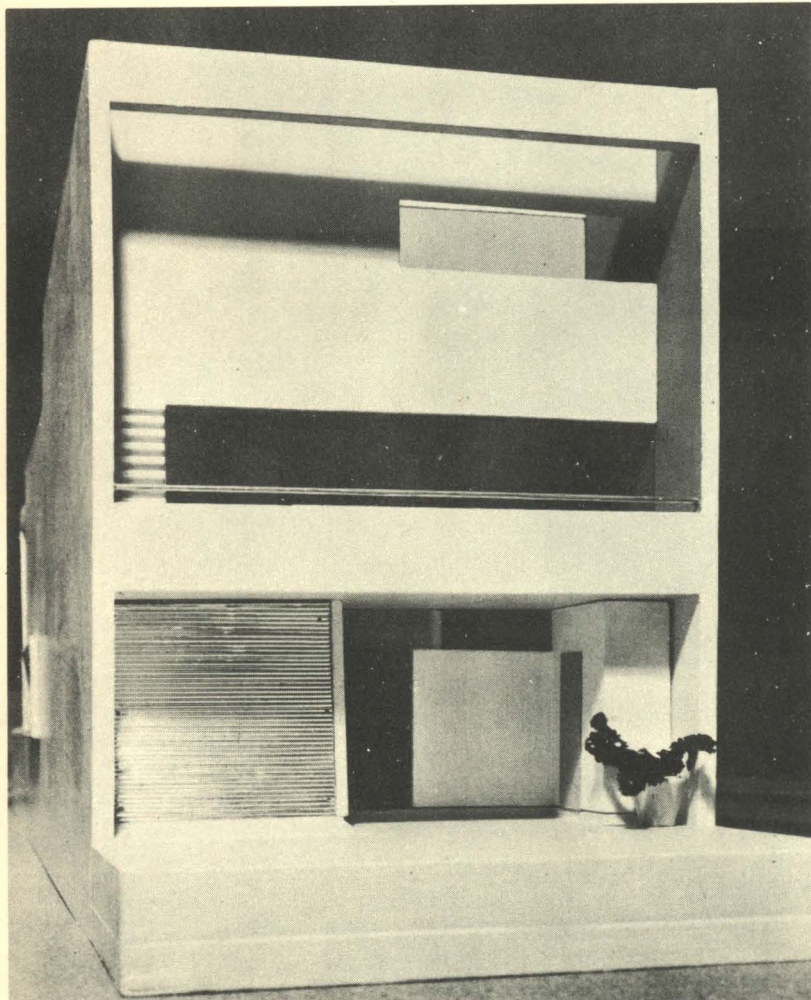
ERNEST BORN, ARCHITECT; C. BERTIL LUND, ASSOCIATE;  
THOMAS D. CHURCH, LANDSCAPE ARCHITECT



THIRD FLOOR



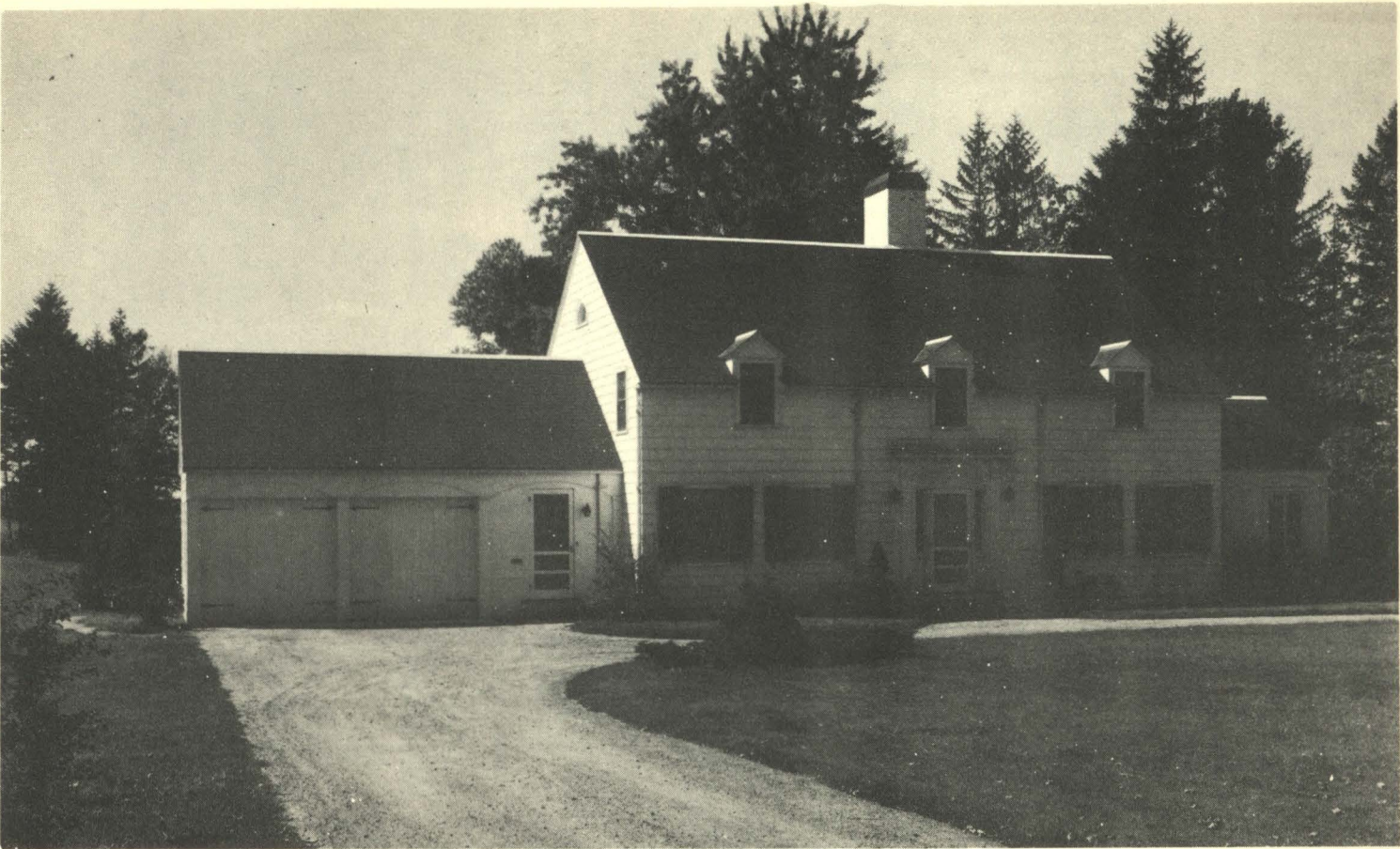
SECOND FLOOR



SCALE IN FEET  
0 5 10 15 20 25  
FIRST FLOOR.



114. HOUSE FOR PAUL E. HARRISON, DOVER, N. H.



Currier

LUCIEN O. GEOFFRION, ARCHITECT

**PROBLEM:** The owner called for a comparatively inexpensive, yet generously appointed house with provisions for entertaining guests. A combined laboratory and playroom was required in the basement.

*The architect comments:* "The owners wished their house to appear as long and low as possible, yet to provide for full use of second floor space for maximum sized bedrooms. They also demanded auxiliary stairs to reduce wear on the main stairs, and to facilitate circulation from second floor to service portion. The owners also wished an effort to be made to integrate the living room, dining room, and sun porch with the large terrace.

"The pantry, in my opinion, is not needed and if it had been made into a breakfast room instead it would have allowed a better designed and more comfortable kitchen."

Cubage: 42,000. Cost: \$11,000 at 26 cents a cubic foot.

CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—red cedar shingles, building paper, pine sheathing, studs, Celotex lath, The Celotex Co., and plaster. Floor construction—hemlock, metal lath and plaster; Thermofill between joist, U. S. Gypsum Co.

**ROOF:** Covered with composition shingles, Johns-Manville Co.

**SHEET METAL WORK:** Flashing—copper. Gutters—Toncan metal, Republic Steel Corp.

**INSULATION:** Roof—4 in. Thermofill, U. S. Gypsum Co.

**FLOORS:** Main rooms—oak. Kitchen and bathrooms—linoleum covered fir, Congoleum-Nairn.

**WALL COVERINGS:** Bedrooms—wallpaper, Richard E. Thibaut, Inc.

**ELECTRICAL INSTALLATION:** Wiring system—BX. Switches—Cutler Hammer Co. Fix-

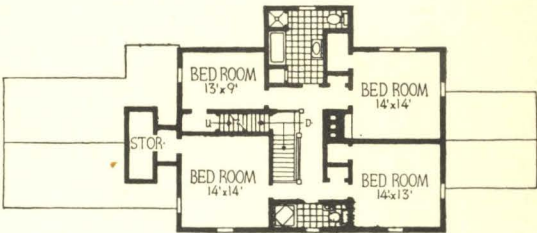
tures—indirect, Chase Brass & Copper Co.

**KITCHEN EQUIPMENT:** Stove—General Electric Co. Sinks—Standard Sanitary Manufacturing Co. Cabinet—Morgan Woodworking Co. Washing machine and drier—Maytag Co.

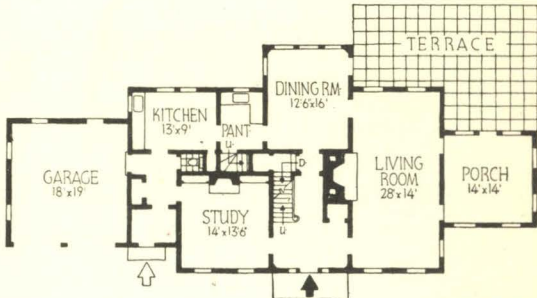
**BATHROOM EQUIPMENT:** Seat—C. F. Church Manufacturing Co. Cabinet—Philip Carey Co. All other fixtures—Standard Sanitary Manufacturing Co.

**PLUMBING:** Pipes: Soil and waste—wrought iron, A. M. Byers Co. Water supply—copper and brass. Monel tank, sump pump, Penberthy Injector Co.

**HEATING:** Boiler and radiators—National Radiator Corp. Valves—Hoffman Specialty Co., Inc. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—Excello No. 6, Excelso Products Corp.



SECOND FLOOR

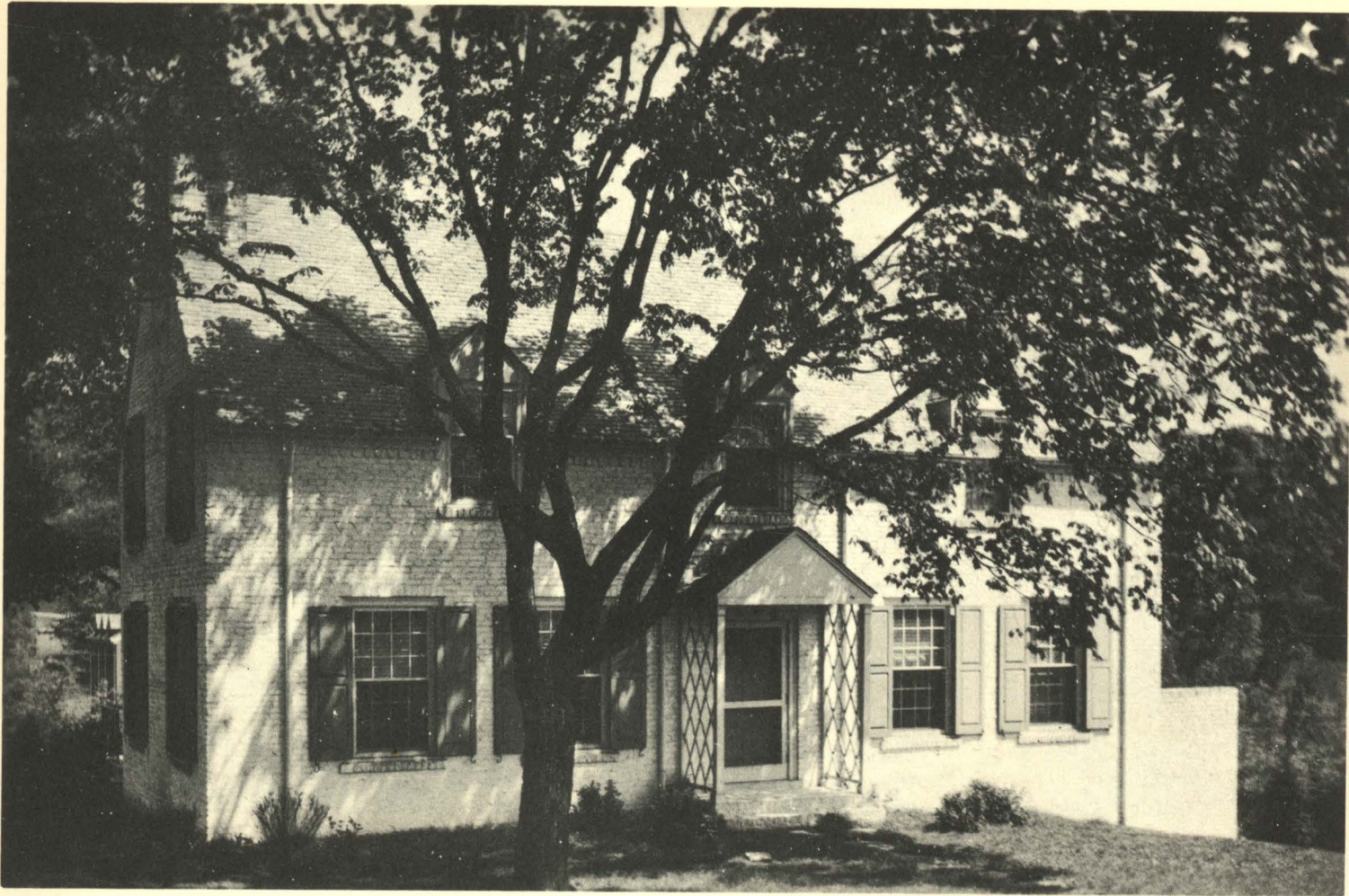


FIRST FLOOR

SCALE IN FEET  
0 5 10 15



## 115. HOUSE FOR PHIL JONES, KNOXVILLE, TENN.



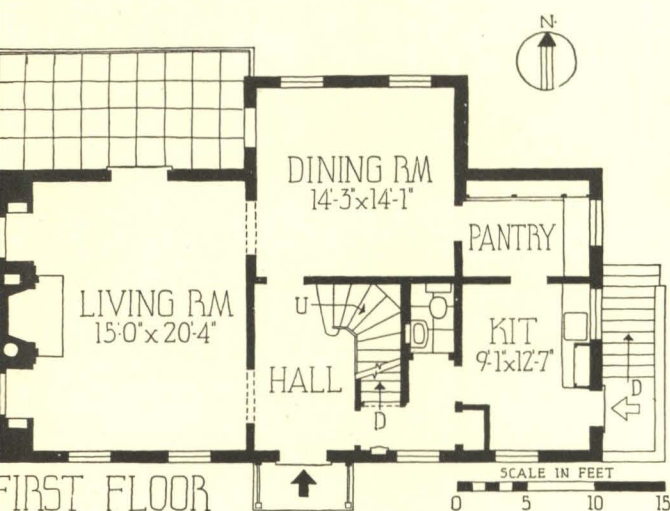
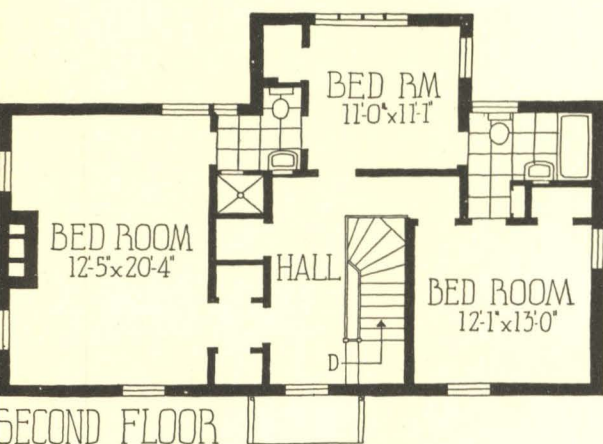
**PROBLEM:** To design a small house for a lot 125 feet wide by 140 feet deep which slopes downward from the street.

Since there were large trees on the lot which the owner did not wish to destroy, it was necessary to set the house back, and consequently below the street level. As the slope continues downward it was possible to put the garage and maid's room in the basement, which is above ground. The plan requirements, according to the architects, were not unusual, except that the requirements for circulation from the front hall were rather difficult to meet. The placing of the living room fireplace between deeply recessed windows is not common, and may at times hamper suitable location of furniture. The white brick exterior is typical of much local domestic work.

Cubage: 29,000. Cost \$11,500 at 40 cents a cubic foot.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—brick, continuous. Waterproofing—waterproof cement.

### STRUCTURE

Exterior walls—brick veneer, building paper, sheathing, studs, insulation, lath and plaster, U. S. Gypsum Co. Floor construction—wood joist, sub-floor, and oak finish floor. Ceiling—lath and plaster, U. S. Gypsum Co.

### ROOF

Rafters and sheathing, covered with slate.

### CHIMNEY

Brick with Majestic Manufacturing Co.'s damper.

### SHEET METAL WORK

Flashing and gutters—copper.

### INSULATION

Outside walls and attic floor—4 in. mineral wool. Weatherstripping on exterior doors—Monarch Metal Weatherstrip Corp.

### WINDOWS

Double hung, pine. Glass—double strength, quality A. Screens—copper mesh on wood frames.

### STAIRS

Treads—oak. Risers and stringers—pine.

### FLOORS

Main rooms—oak. Kitchen—linoleum, Armstrong Cork Products Co. Bathrooms—tile.

### WALL COVERINGS

Bedrooms—wallpaper.

### WOODWORK

Pine throughout.

### HARDWARE

Interior and Exterior—Russell & Erwin Mfg. Co.

### PAINTING

All paint material by Berry Brothers. Exterior walls—Bondex, The Reardon Co.

### ELECTRICAL INSTALLATION

Wiring system—BX cable.

### KITCHEN EQUIPMENT

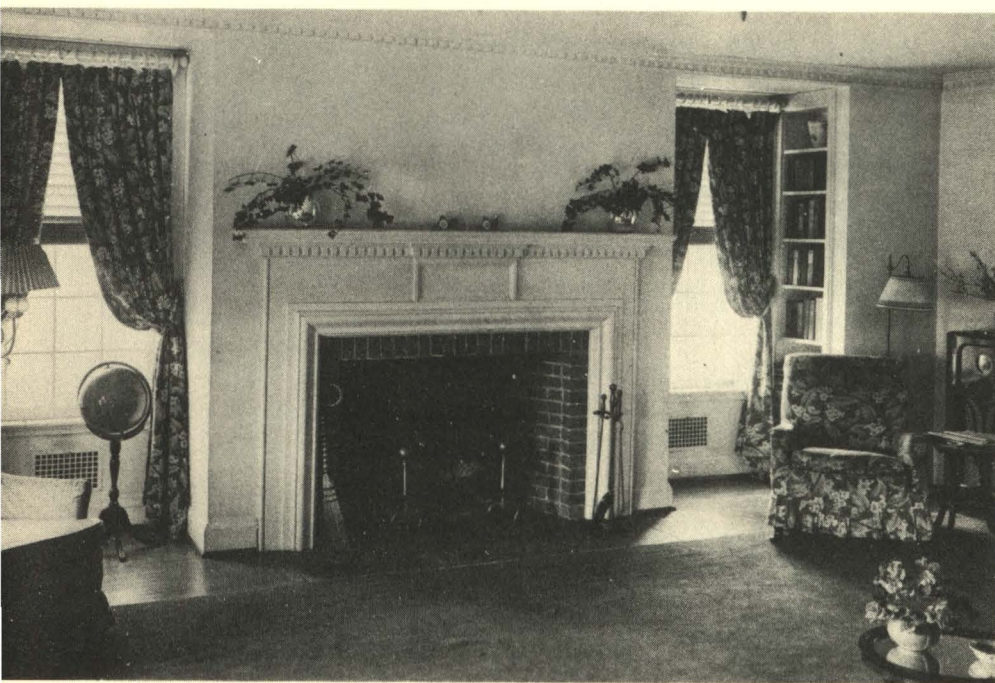
Stove and refrigerator—electric.

### PLUMBING

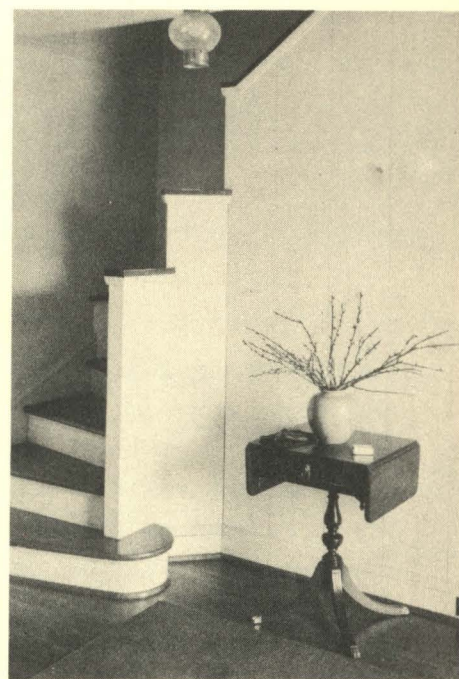
All fixtures by Crane Co. Pipes: Soil and waste—cast iron. Water supply—wrought iron.

### HEATING AND AIR CONDITIONING

Sunbeam unit, filtering and humidifying, Fox Furnace Co.



LIVING ROOM



STAIR DETAIL

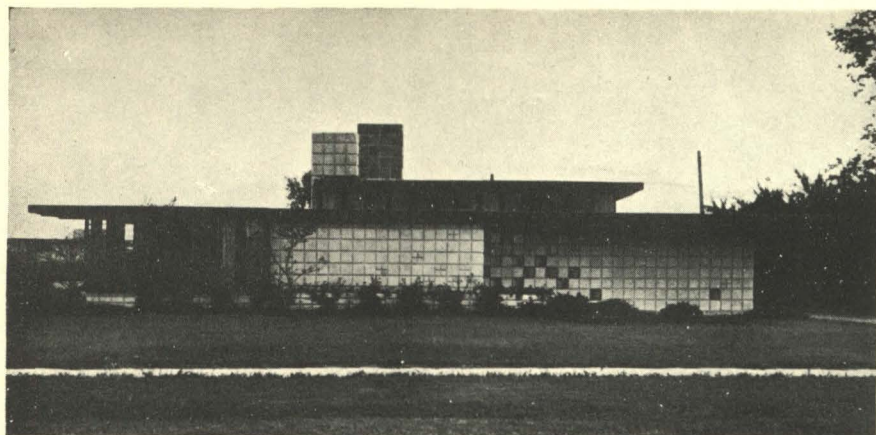


## 116. HOUSE FOR S. B. HEATH, MIDLAND, MICHIGAN



Here is an ingenious plan with varying levels defining the sequence of the rooms. Library, living and dining areas are composed around a large and centrally located fireplace. This fireplace, one of three within the house, is topped by a skylight and offers a fine conservatory. The arrangement of the various units in the floor plan produces interesting interior vistas and correlation between the many functions of the living area. Since the lot provided both rear and front access, the garage was designed toward the back of the structure. A great deal of originality is revealed in the use of varied textures upon the elevations. The horizontal, stressed by the continuous and overhanging roof lines, is further emphasized by the fenestration, the chimney structure, and the landscaped pattern. Cubage: 27,000 at 43 cents.

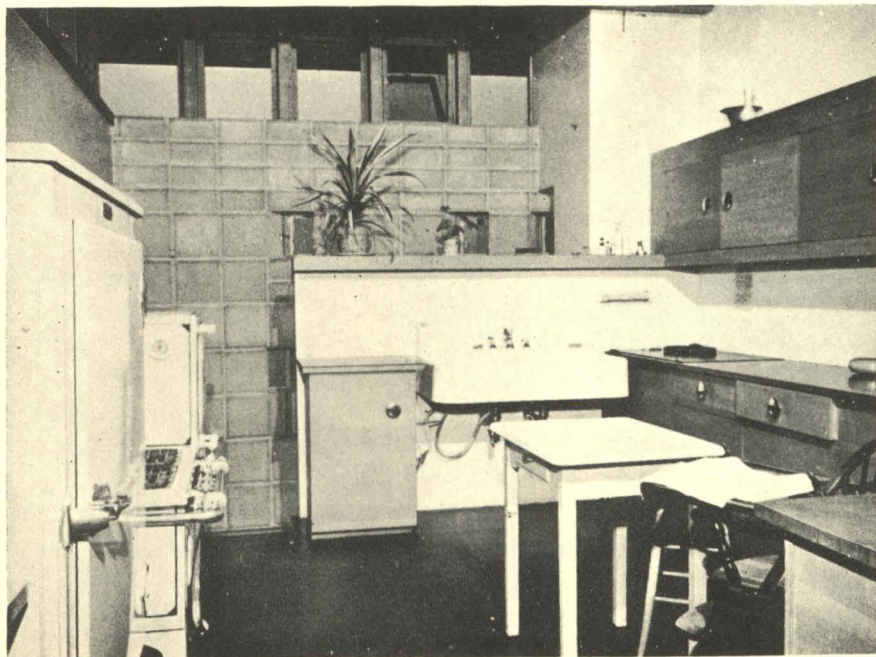




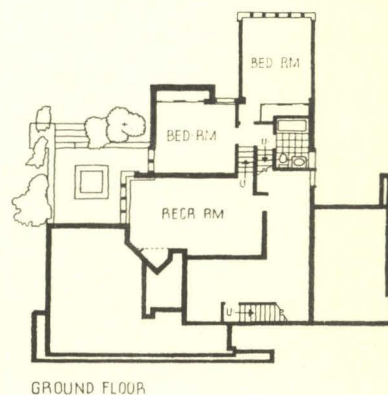
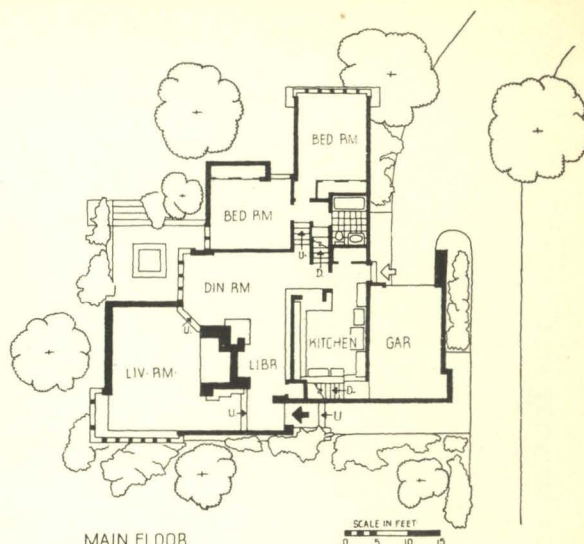
ENTRANCE



LIVING ROOM



KITCHEN



## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block, and concrete membrane floors.

### STRUCTURE

Block walls made of special design of cinder concrete developed by the architect and used as structural and finish wall. Blocks, on the exterior, treated with a waterproofing compound as made by Western Waterproofing Co., and finished light buff.

### ROOF

Five ply tar and gravel, laid over  $\frac{3}{8}$  in. matched lumber.

### SHEET METAL WORK

Copper flashing throughout, 16 oz.

### WINDOWS

All ventilating sash—steel casements, Hope Windows, Inc.

### WOODWORK

Trim, cabinets and all finish wood—edge grain fir.

### HARDWARE

Polished brass locks throughout, Schlage Lock Co.

### PAINTING

Interior walls—natural. Woodwork—1 coat flat white rubbed down to show grain and treated with 2 coats of flat varnish. Exterior woodwork—stained blue.

### ELECTRICAL INSTALLATION

All interior lighting either recessed in ceiling or indirect lighting from decks.

### PLUMBING

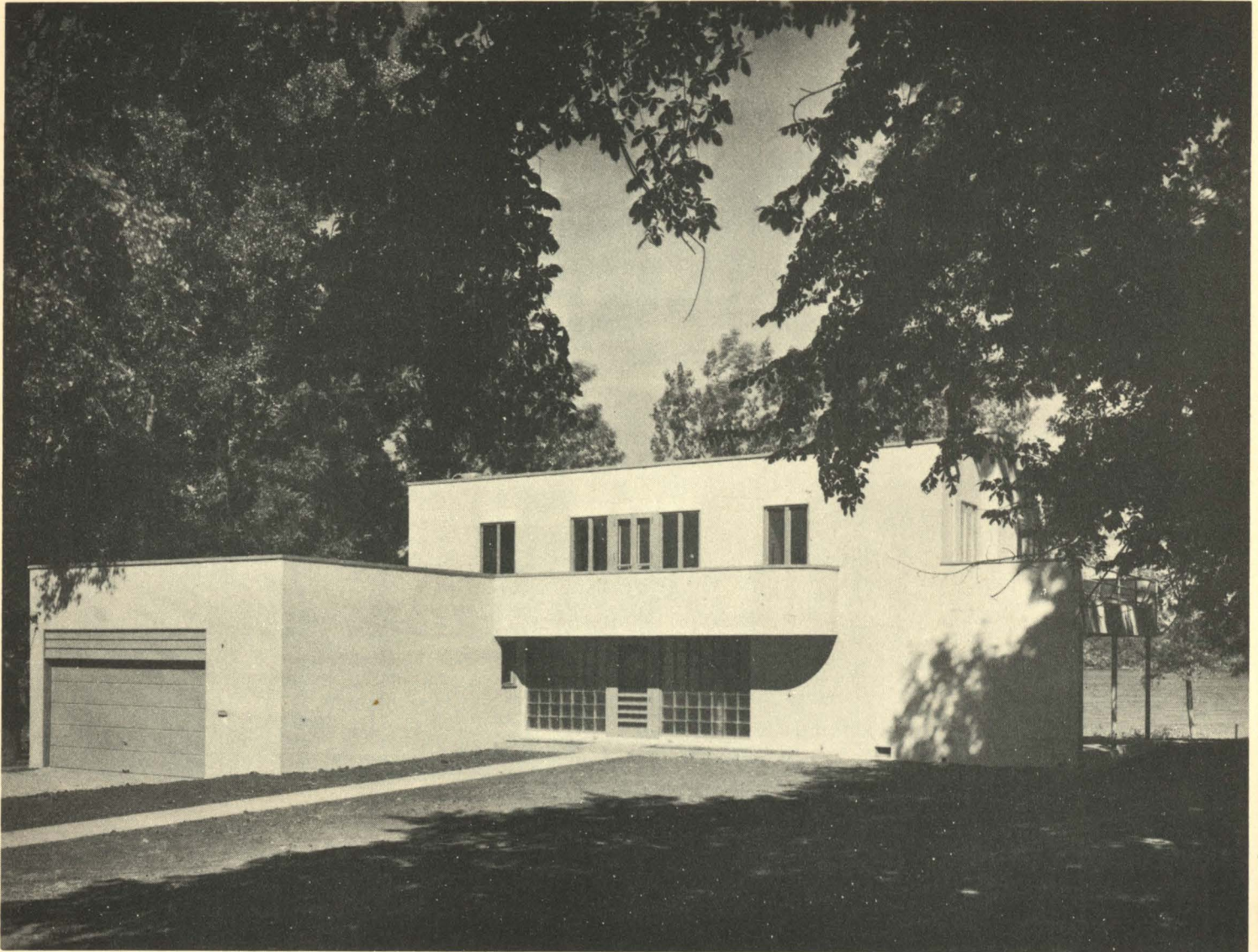
All fixtures by Kohler Mfg. Co. Soil pipe—cast iron. Water supply pipe—copper tubing.

### HEATING

Conditioned air, direct fired furnace.



## 117. HOUSE FOR V. M. S. KAUFMANN, MINNEAPOLIS, MINN.



Charles W. Howson Photos

**PROBLEM:** To design a house for use chiefly on week-ends, by a couple with no children. The owner wanted an open, informal plan with ample facilities for entertaining.

The large windows open the entire lake side to the view. In a correspondingly generous manner the rooms open into one another, solving the requirements of informality and of facilities for entertaining. The garage, incorporated with the house, adds interest to the mass, and the balcony above serves as a shelter over the door.

*The architects comment:* "The house was originally designed for reenforced concrete beam and slab construction, but due to the inexperience of the average small house contractor in this section, and to the higher cost, it was changed to wood. Site conditions indicated that a basement should be omitted and this spring has proven that it was wise to do so. The maid, whose bathroom lacks bathing facilities, uses the shower in the laundry."

Cost: \$12,000.

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



## CONSTRUCTION OUTLINE

### STRUCTURE

Exterior walls—stucco, Johns-Manville, Inc., wire lath, No. 2 fir shiplap, 2 x 4 in. studs, ½ in. Insulite, Insulite Co., lime plaster, U.S. Gypsum Co. Floor construction—fir, 2 x 10 in. joists, rough boards select red oak.

### ROOF

Construction—wood joists and blocking for pitch, covered with 20-year bonded roofing with Mica cap sheet, The Barrett Co. Decks covered with 1 x 3 in. wood grill.

### CHIMNEY

Lining—glazed tile. Fireplace—tri-stop damper, Peerless Manufacturing Corp.

### INSULATION

Outside walls, ground floor and roof—4 in. rock wool, Johns-Manville, Inc.; ½ in. Insulite plaster base; 1 in. Insulite under-roofing, Insulite Co.

### WINDOWS

Sash—wood casements, weatherstripped and screened, crank and lever operated, Andersen Frame Corp.

### WALL COVERINGS

Living room, bedrooms and halls—wallpaper. Kitchen—Carrara glass above counters—Pittsburgh Plate Glass Co. Bathrooms—Carrara glass and paper.

### WOODWORK

Trim, cabinets and doors—birch. Exterior doors—pine. Garage doors—single, overhead type, Frantz Manufacturing Co.

### HARDWARE

Interior and exterior—Schlage Lock Co.

### ELECTRICAL INSTALLATION

Wiring system—BX cable. Switches—Bryant Electric Co. Fixtures—concealed built-in, direct and indirect.

### KITCHEN EQUIPMENT

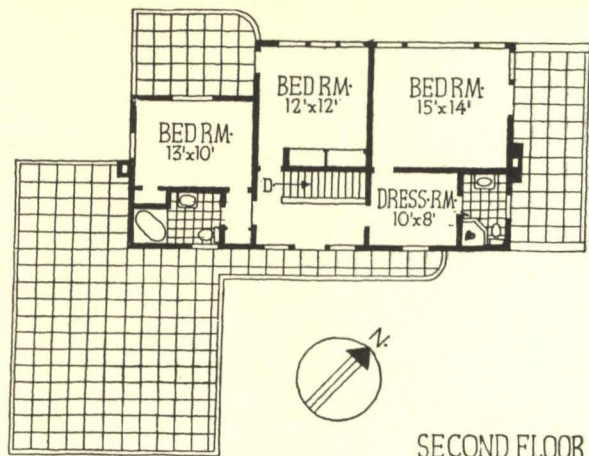
All equipment by General Electric Co. Cabinets—wood.

### BATHROOM EQUIPMENT

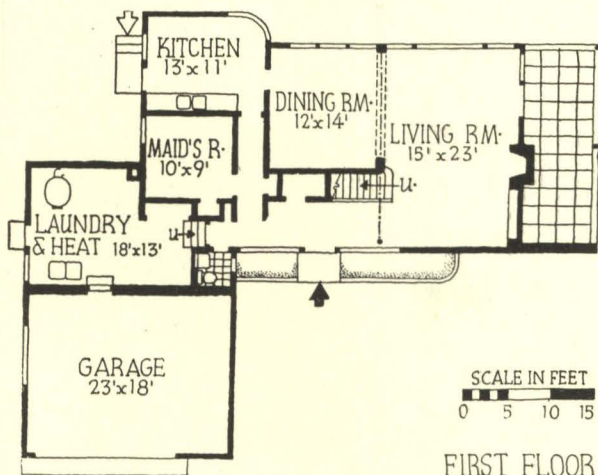
All fixtures by Standard Sanitary Manufacturing Co. Seat—C. F. Church Mfg. Co. Cabinet—Lawco, F. H. Lawson Co.

### HEATING AND AIR CONDITIONING

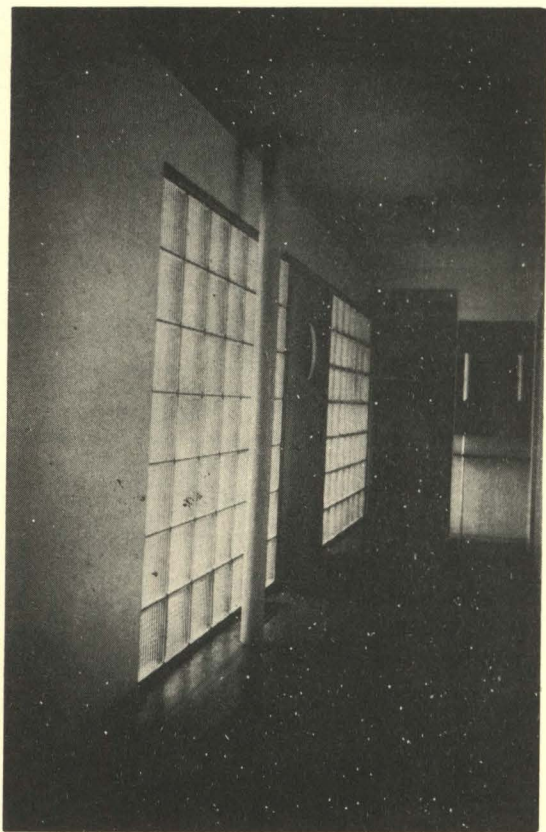
Air conditioning system including filtering and humidifying, General Electric Co. Thermostat—Minneapolis-Honeywell Regulator Co. Hot water heater, General Electric Co.



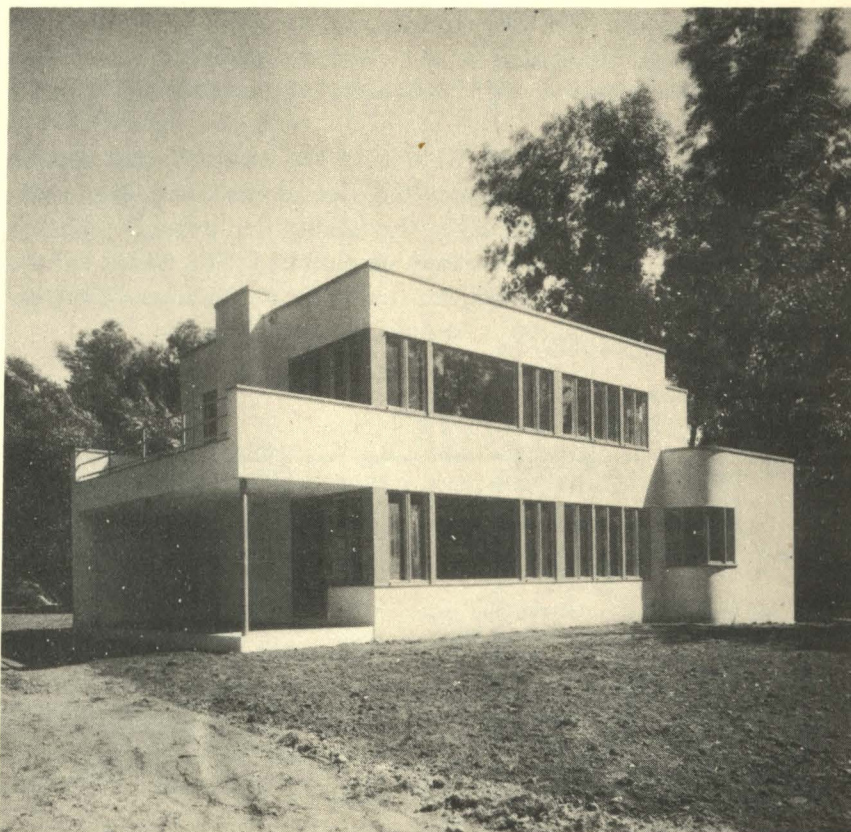
SECOND FLOOR



FIRST FLOOR



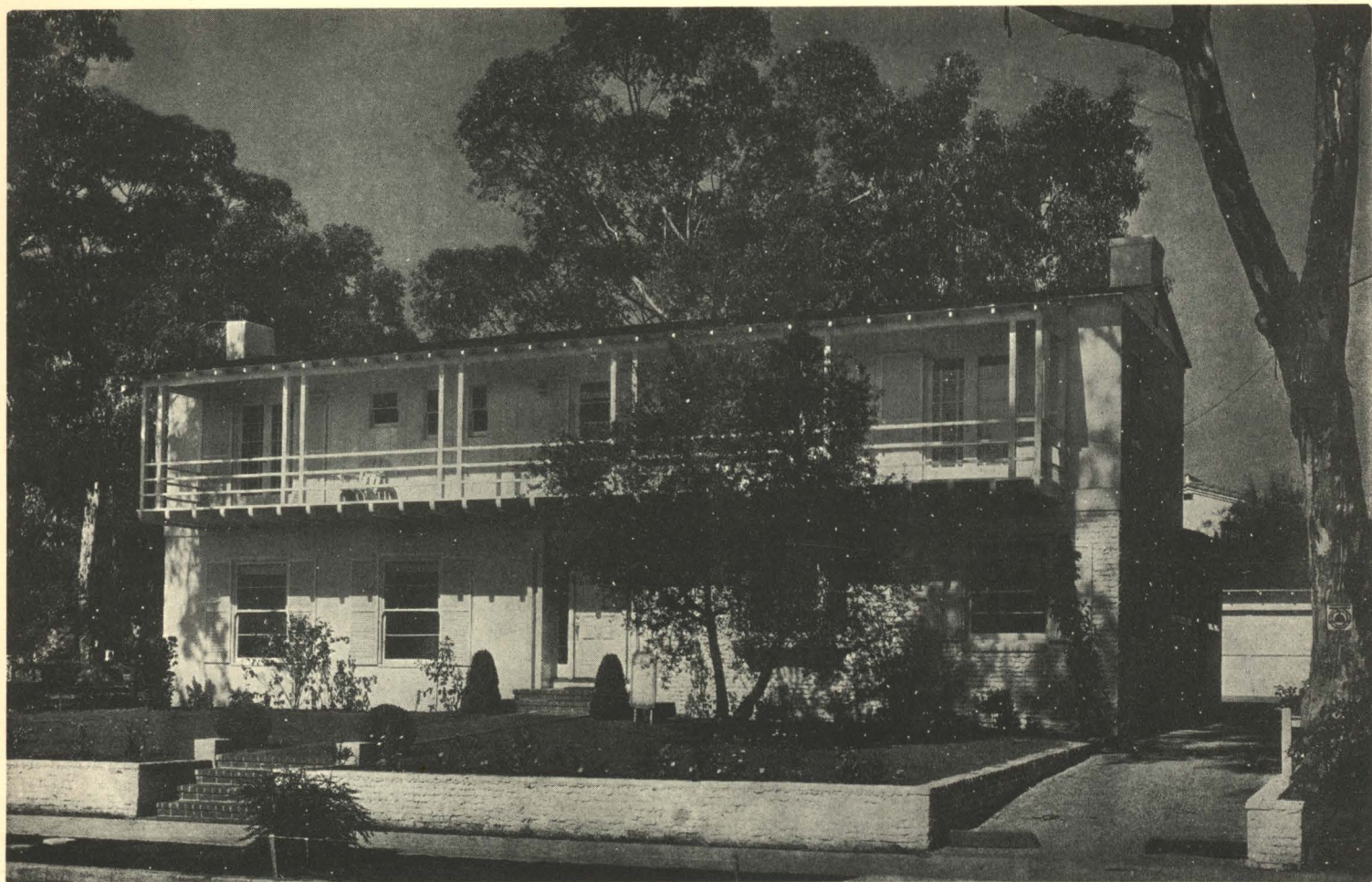
ENTRANCE HALL



REAR ELEVATION



# 118. HOUSE FOR W. E. STONE, HUNTINGTON PALISADES, CALIFORNIA



Don Milton

SAUL H. BROWN, ARCHITECT

The long balcony, built to take advantage of an ocean view, serves much the same purpose esthetically as the overhang of the building on the facing page. Plan, exteriors, and landscaping are consistently simple and attractive.

*The architect comments:* "The feature of the house is that the main rooms and balcony have an unobstructed view of the ocean. Materials are plaster and wood, commonly used in the locality. No unusual problems as to family requirements or layout were encountered. The owner has found satisfaction in the orientation, which permits the sun to enter all rooms."

Cubage: 64,000. Cost: \$12,000 at 19 cents per cubic foot.

## CONSTRUCTION OUTLINE

**FOUNDATION:** Walls—cement. Waterproofing—Anti-Hydro Waterproofing Co.

**STRUCTURE:** Exterior walls—stucco on wood studs. Inside—plaster on rock lath.

**ROOF:** Pre-dipped shingles, Samuel Cabot, Inc.

**SHEET METAL WORK:** Flashing and gutters—Armco, American Rolling Mills Co.

**INSULATION:** Outside walls, ground floor and roof—Celotex, The Celotex Co.

**WINDOWS:** Sash—wood, double hung. Glass—quality A, Libbey-Owens-Ford Glass Co.

**FLOORS:** Living room, bedrooms and halls— $\frac{1}{2}$  x  $1\frac{1}{2}$  in. clear oak, Western Hardwood Mfg. Co. Kitchen—linoleum, Armstrong Cork Products Co. Bathrooms—tile.

**WALL COVERINGS:** All rooms—Sanitas, Standard Textile Products Co.

**WOODWORK:** Trim, cabinets and doors—pine.

**HARDWARE:** Interior and exterior—Schlage Lock Co.

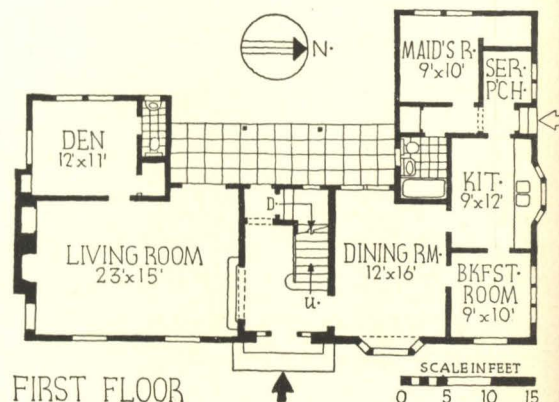
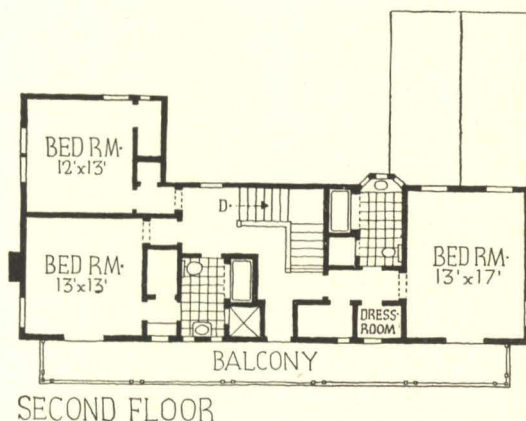
**PAINTING:** All paint material by National Lead Co.

**ELECTRICAL INSTALLATION:** Wiring system—conduit. Switches—Bryant Electric Co.

**KITCHEN EQUIPMENT:** Stove—Wedge-wood, James Graham Manufacturing Co. Refrigerator—Electrolux, Servel Sales, Inc.

**PLUMBING:** All fixtures by Standard Sanitary Manufacturing Co. Pipes by A. M. Byers Co.

**HEATING:** Furnace—Payne Furnace & Supply Co.



CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES



# 119. HOUSE IN WILMETTE, ILLINOIS



Wesley Bowman

BERESFORD BECK, ARCHITECT

A narrow lot (50 feet) led to the placing of the house with its end facing the street. The arrangement is a reasonable one, although it ensures less privacy for the interior than would be possible with a more conventional plot plan. The plot faces south, thereby giving the house three exposures to the sun; there is a good view to the north. The simplicity of the house is a definite factor in its pleasing appearance.

Cubage: 33,165. Cost: \$12,100 at 36 cents a cubic foot.

## CONSTRUCTION OUTLINE

**STRUCTURE:** Exterior walls—common brick, Neponset waterproof paper, Bird & Son, Inc., yellow pine sheathing, studs, 4 in. rock wool, metal lath and plaster. Floor construction—wood joists, fir sub-floor, stripping, and red oak finish floor. Ceiling—metal lath and plaster.

**ROOF:** Wood frame covered with asbestos shingles, Philip Carey Co. Deck—frame construction, covered with 20 oz. copper.

**SHEET METAL WORK:** Flashing—20 oz. copper. Gutters and leaders—Toncan galvanized iron, Republic Steel Corp.

**WINDOWS:** Double hung, white pine. Glass—Libbey-Owens-Ford Glass Co.

**FLOORS:** Living rooms, bedrooms and halls—clear red oak. Kitchen and bathrooms—linoleum covered fir, Congoleum-Nairn, Inc.

**WALL COVERINGS:** Living room and halls—Sanitas, Standard Textile Products Co. Bed-

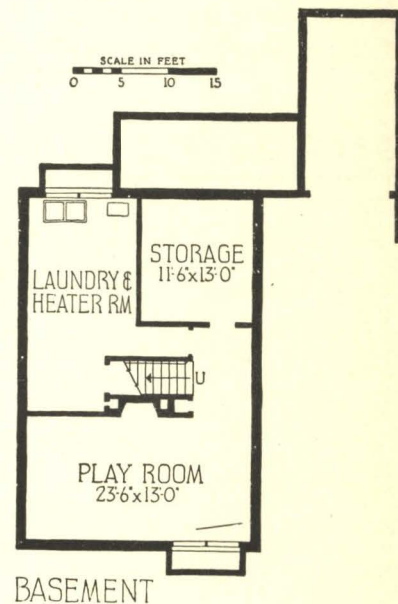
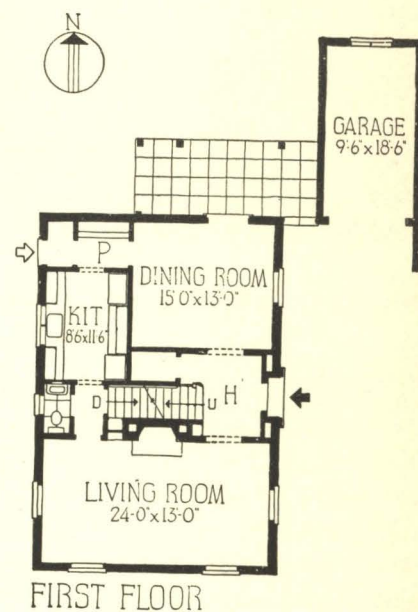
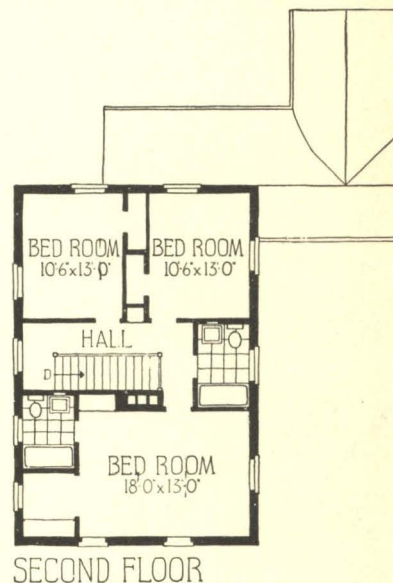
rooms—Imperial Paper & Color Corp. Bathrooms—linoleum, Congoleum-Nairn Co.

**HARDWARE:** Polished brass, Sargent & Co. **ELECTRICAL INSTALLATION:** Switches—Harvey Hubbell, Inc. Fixtures—direct, Victor Pearlman Co.

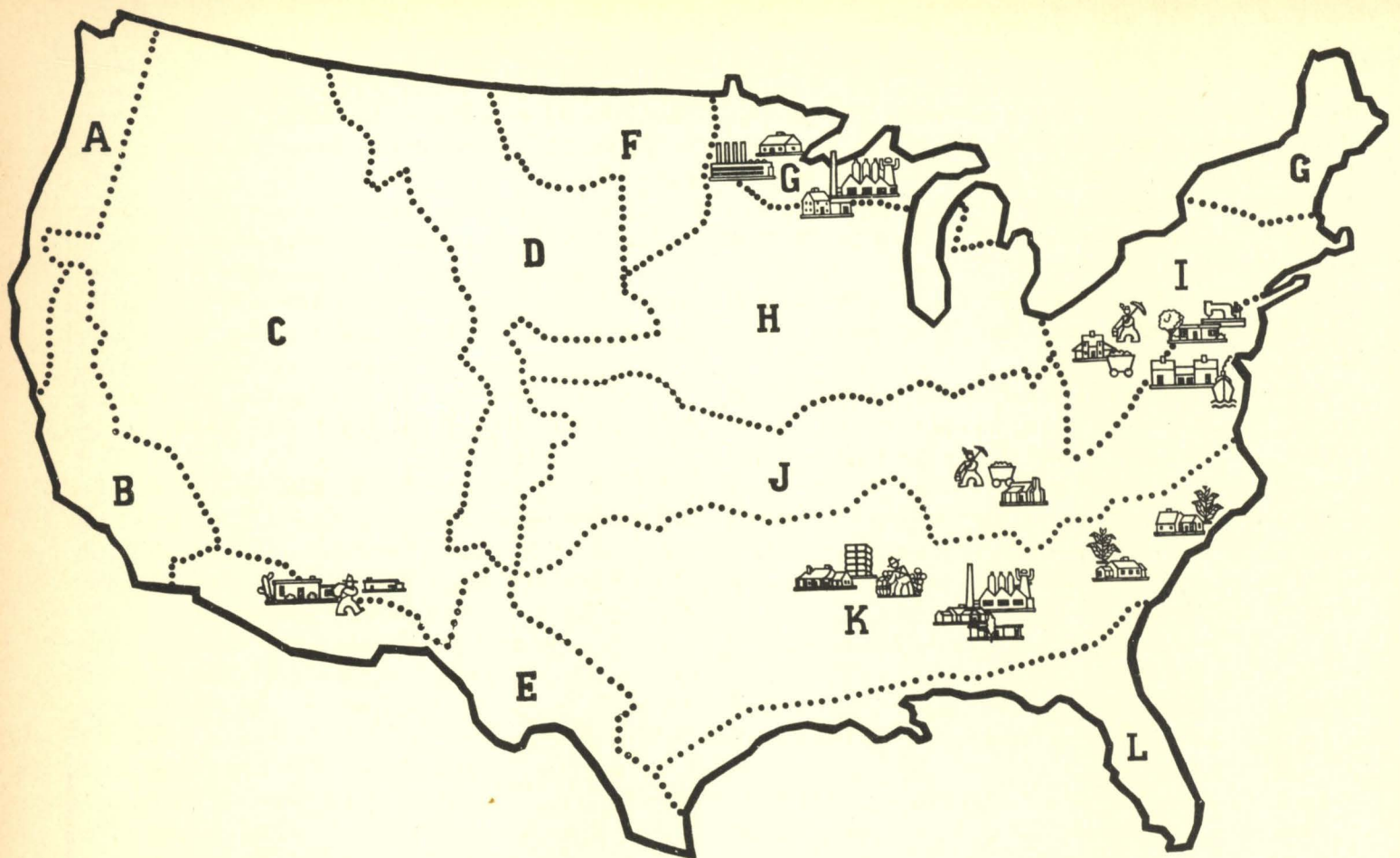
**KITCHEN EQUIPMENT:** Stove—Geo. D. Roper Corp. Refrigerator—Electrolux, Servel, Inc. Sinks—Standard Sanitary Manufacturing Co.

**BATHROOM EQUIPMENT:** Lavatory, tub and toilet—Standard Sanitary Manufacturing Co. Seat—C. F. Church Manufacturing Co. Shower and all fittings—Chicago Faucet Co. Cabinet—Excel Metal Cabinet Co.

**HEATING AND AIR CONDITIONING:** Warm air, filtered, humidified, gas furnace, L. J. Mueller Furnace Co. Regulator—Minneapolis-Honeywell Regulator Co. Hot water heater—Ruud DeSoto, 30 gallon, Ruud Mfg. Co.







**HOUSING NEEDS** vary in different parts of the country as heat, cold, altitude, rainfall, and other climatic conditions vary. This map indicates in a general way the areas in which farm families need similar housing facilities with respect to such factors as arrangement of rooms, need for privacy, facilities for outdoor living and working, and heating facilities. The areas are rough approximations, for of course there are great differences within any one of them, and many needs are common to most of them. They represent, however, discernible differences in needs.

**ROOMS AND ROOM USES:** While residents of homes in all regions express a preference for laundry space outside of kitchens, a majority of farm people in two regions only, K and L, express a preference for separate dining rooms, whereas dining space in kitchen is desired by householders in regions

A, B, C, D, E, G, H, I and J. Families in regions B, C, E, G, H, I, J, K and L feel it desirable to have dining porches or terraces in connection with their homes. All regions express a preference for screened work porches and a linoleum covering on the dining area.

**CLIMATIC FACTORS:** Differences in temperature and humidity in different regions give rise to different needs, although these differences are not sharply defined.

**ORIENTATION** is another important factor. People in regions E, J, K and L prefer their bedrooms to face on side from which the breeze comes. In regions A, D, F, G, H and I, householders express a preference to have their living rooms face the south (Winter sun); and in regions E, H, J, K and L home-

keepers prefer to have their kitchens avoid a western exposure.

**DIVISION INTO SECTIONS:** As a basis for classifying returns from the studies described in foregoing paragraphs, the United States was divided into twelve sections. The objective in the division was to determine areas in which farmhouses of a given cost level would be similar as to plan. Decisions as to the number and boundaries of sections were based upon weather bureau data, upon United States 1930 Agricultural Census data on sizes of farms and types of farm enterprises, upon the information secured from the forty-four State home demonstration leaders mentioned above, and upon suggestions made by Dr. O. E. Baker and other members of the staff of the Bureau of Agricultural Economics, United States Department of Agriculture. Boundaries were placed along county lines. The division is shown on the map above.

## FOREWORD

**T**HIS has been prepared to serve a double purpose: to show some samples of what the Resettlement Administration has done in the planning and construction of houses in rural and semi-rural areas: and to make available to those interested in small house design and construction some information gained from the experience of a Government Agency.

The Resettlement Administration is not and has not been primarily a housing agency. Building houses has always been but one factor in a major objective. For example, the houses it has built in semi-rural areas adjacent to middle-

sized and small communities were usually part of a plan which enabled persons who made their living in town to supplement their income by raising certain types of agricultural products. Houses were necessary as places in which these people would live. Moreover, in assisting people who live on farms, the building of the house was not the chief objective. The house is simply an item in the general farm and home plan which has been worked out with these people.

The Government has been guided by the realization that



the conditions which stimulate house building on the edge of small towns are basically different from those on a farm. The person who constructs his own house near a town can usually regard it as an investment. The farmer's house, on the other hand, is a minor part of his investment. His chief investment is his productive land, his live stock, barns, and machinery. These must be cared for first; if his income from them is large enough, he may finally build himself a good house.

Taking such facts into consideration, the problem of building homes has been approached in terms of their surroundings. In the case of farmers, the Administration has not only striven to build better farm houses but also to build them in proper relationship to the farmsteads of which they are units. And where rural homes are an integral part of a community, it has built with the intention of relating each house to the rest of the community.

It should be remembered also that the primary purpose for which the Resettlement Administration received funds was for rural relief. It was possible to supply relief, to assist in the development of sound community life, and to establish housing standards all at the same time. However, rarely is it possible to expend funds in this way and secure the most efficient operations. There are too many conflicting, even though complementary, ends. The circumstances surrounding the use of relief labor, for example, are likely to make such labor costly. Hence low costs are seldom found on such projects.

The difficulties which stand in the way of low cost housing have been the subject of discussion for many years. Private builders have been remarkably successful in achieving economies on large scale mass production in many suburban developments. The very success, however, which has been achieved has been at the expense of variety, space and oft-times quality. The number of factors which must be assembled, the variety of ends sought, have made for increasing awareness of the fact that building a house is one of the most difficult tasks which can be undertaken. No architect or builder, no Government Agency, is today all-wise.

In building a house privately, a person usually follows the customs of his community. These customs have grown up over many years and rest on sound foundations. However, they are also likely to carry over into the house design many features which may have been necessary in the past, but which have outlived their usefulness. Also they fail to take into account the changing circumstances in the newer developments in materials and in the methods of construction. Sound design, then, requires that local prejudice and custom be taken into account, but be fused with the more modern methods.

It is exactly this process which the architects and builders of the Resettlement Administration have tried to follow as they have developed the various houses which the administration has built. No claim is made that perfection has

been achieved; nevertheless, the designs which are shown in this booklet have some contribution to make in house planning.

Just like an individual building a house, the Government has had to work out means of obtaining the most house for the least amount of money. Although the Resettlement Administration may have been able to achieve savings through centralized design and planning, and through quantity production and wholesale purchase of materials, the private builders may be able to effect other savings, such as the use of qualified skilled labor, which costs less than the relief labor.

In building its houses, the Resettlement Administration attempted to keep the square foot areas of the houses to a minimum, conforming to the utility needs of each family. Stress was laid on room arrangements which would be most practical for the people living in the houses.

In determining the height of the houses, in stories, certain factors had to be considered: Location, climate, land cost and local custom. Houses that were constructed in the North are frequently one- or two-stories in height with a basement, to facilitate heating, while houses built in the South are often one-story in height without a basement.

The choice of materials for construction is also an important factor in building a house. Certain materials are manufactured in standard sizes and are so carried in stock. The use of standard sized stock materials generally makes for economy. In addition, materials manufactured locally, if practicable, are generally cheaper because of lower transportation costs. Local labor is also generally more familiar with local methods of construction and local materials, and the gain in time resulting from this familiarity is therefore reflected in a definite financial saving.

It is apparent that if the Resettlement Administration were to state the actual immediate costs of some of these houses, it would be completely misleading. An individual who tried to build at the figure stated could not do so. He would have some costs which the Government did not have—on the other hand, the Government had certain costs which the private individual would not have. Such contribution as these designs have is primarily in their suggestive quality. A soundly conceived design is usually more economical than a poor design. The suggestion of a new material or a new way of using an old material will be more helpful than a whole series of cost figures.

Economy does not imply the absence of beauty or taste. No small house is ever completely satisfactory if it is not also attractive; and no housing problem is ever solved that does not install the family amidst homelike surroundings. But little additional is required to obtain esthetic satisfaction. Care in the proportioning of the plan units, the mass of the house, the size and arrangement of the openings or the selection of harmonious colors, costs nothing extra. The resulting attractiveness is a decided incentive toward encouraging the occupants to maintain and enhance this attractiveness with furnishings and planting.

RESETTLEMENT ADMINISTRATION



# ALABAMA GARDENDALE HOMESTEADS

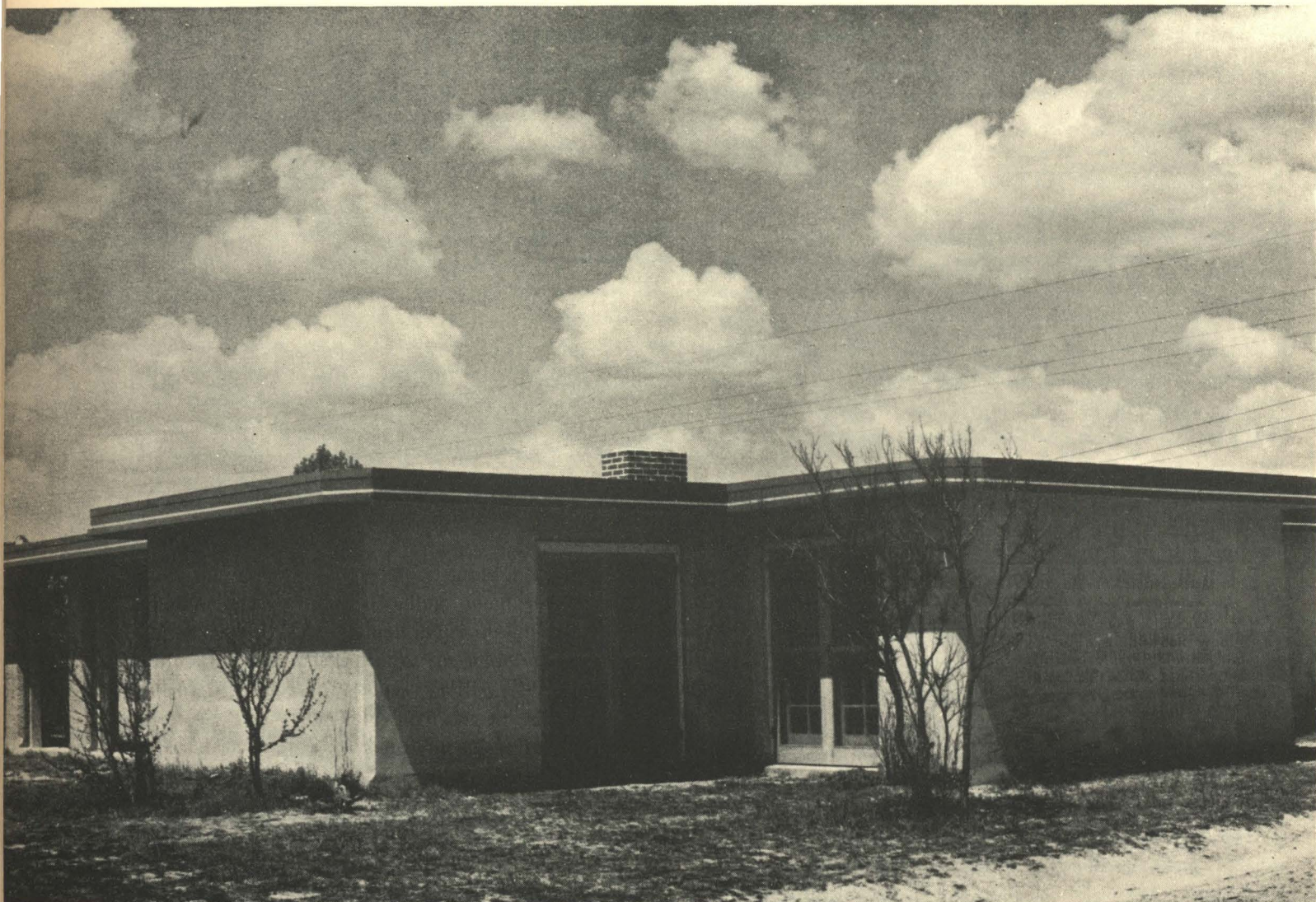
Seven houses made of mud—rammed earth—constitute one of the unique features of the Gardendale Homesteads. This project, 13 miles from Birmingham, was designed for part-time workers from the industries and white collar trades of the city. The project offers them good homes and a chance to supplement their small incomes by part-time farming on a small scale.

Rammed earth construction consists of tamping the earth in forms. The forms are designed in conformance to the plan. In them earth consisting of three parts sand, two parts clay and one part aggregate, is placed in three inch layers and tamped into a hard compact mass. After each layer has been tamped, another is placed on the form and the

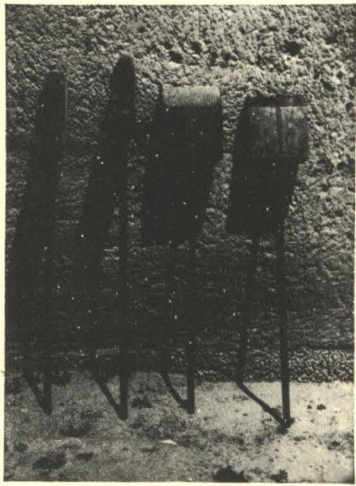
work continued until the form has been filled. The form is then raised and the operation is repeated until the wall has been completed.

Aside from the seven houses and barns built of rammed earth, Gardendale Homesteads will contain 68 additional one-story houses. Fifty-six of these are of frame construction, 12 are of brick veneer. With each unit there will be a combination garage, barn and poultry house. The whole tract is 512 acres and the individual tracts range from 3 to 10 acres.

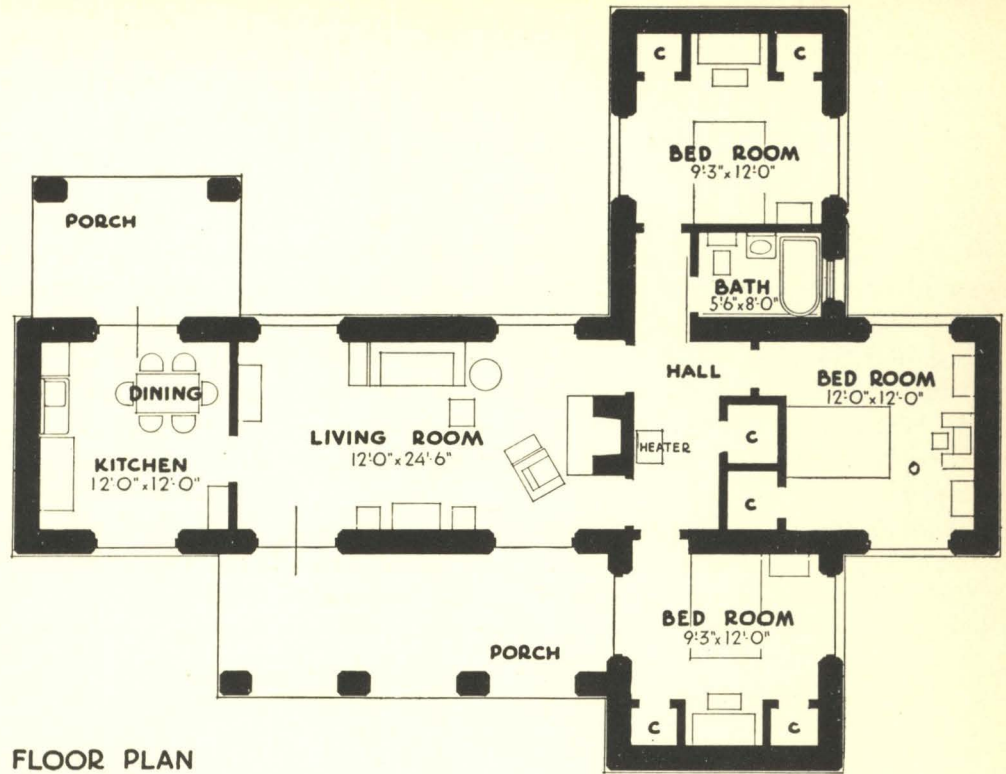
Fencing, landscaping, walks and driveways are provided. Water is supplied by individual wells with pumps and pressure tanks.







TOOLS USED FOR RAMMING



FLOOR PLAN

SCALE IN FEET  
0 5 10 15

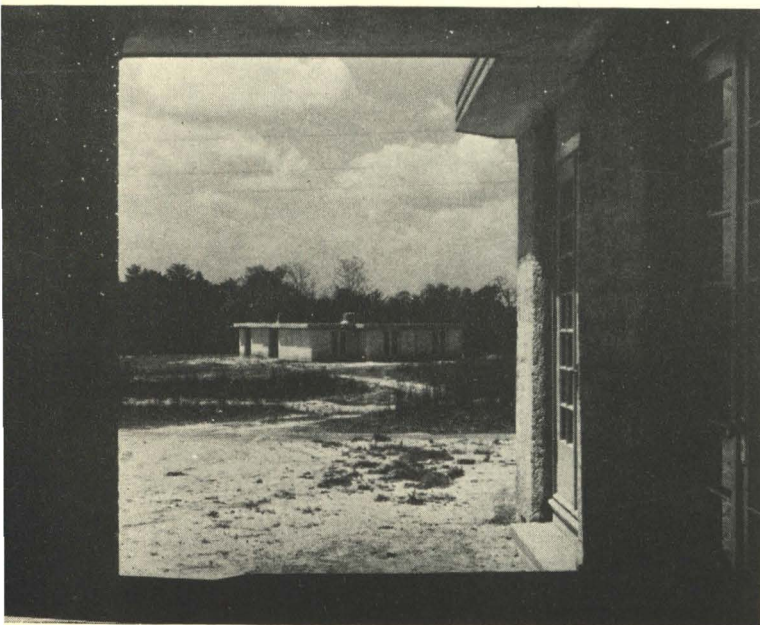
### ANALYSIS OF BUILDING

This house is of rammed earth construction. Abundant, unskilled labor and local workable clay and sand deposits make the construction possible. The earth walls make exceptionally good insulating material which, combined with the ventilated roof, produce a house that is cool in hot weather and inexpensive to heat in the winter. The plan emphasizes cross-ventilation in all rooms. The full openings with French doors are used in place of windows because the local climate is such that for nine months of the year the greatest ventilation is desired. For the other three months a device is provided which, in effect, makes casement windows out of the doors. No laundry is necessary because all laundry is done out of doors. The rear porch is used for laundry in inclement weather. Volume: 17,528 cu. ft.

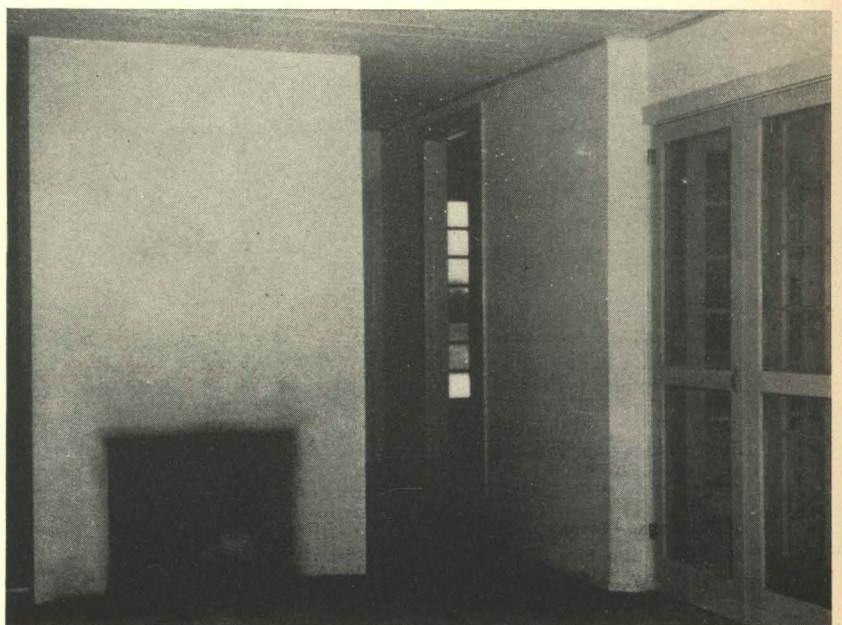
### CONSTRUCTION OUTLINE

FOUNDATIONS: Concrete.  
EXTERIOR WALLS: Rammed earth; exterior finish, linseed oil.  
ROOFS: Wood framing, hollow ventilating spaces; finished roof 5-ply tar and felt.  
INTERIOR FINISH: Plaster directly on wall.  
CEILINGS: Plaster over plasterboard.  
FLOORS: Asphalt tiles on reinforced concrete slab.  
WINDOWS: Wood casements.  
HEATING: Fireplace and stove in hallway.  
PLUMBING: Copper tubing.  
SANITARY FACILITIES: Sewerage, individual septic tanks.

### PORCH



### LIVING ROOM





## ALABAMA PALMERDALE HOMESTEADS, BIRMINGHAM

Palmerdale Homesteads is one of the four garden communities the Resettlement Administration is developing for low-income families in and around Birmingham, Alabama. It was designed to make possible a satisfactory standard of living for a group of part-time employees of the steel and chemical plants located in the Birmingham area. It enables these families to supplement their incomes by growing the major portion of their food supply on individual kitchen gardens.

When Palmerdale is completed it will provide 102 modern homes on 3-acre tracts. The first unit of 60 houses is now completed and occupied, and the second unit of 42 houses has also just been completed.

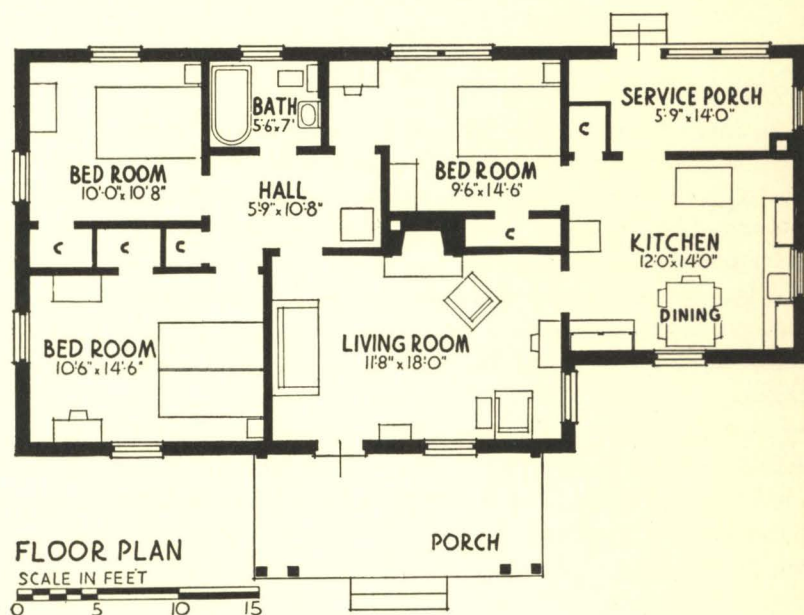
They contain four to five rooms, and are one story high. Thirty-four are of frame construction, eight of brick veneer. In addition to the houses each unit is equipped with a well house and either a combination cow-stall, feed room and poultry house, or a garage and poultry house. Water supply from individual wells, each equipped with automatic pump and storage tank.

A community house will be constructed with facilities for motion pictures, basket ball, community gatherings, kindergarten, clinic, library, and administrative offices. This building will also include a community store and will serve as a school for project children in the lower grades.



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### ANALYSIS OF BUILDING

The warm climate of its location affected the design of this home. The plan is open; rooms well ventilated. A screened service porch provides space for outdoor dining. There is also a large front porch. Large living room heated by fireplace. Spacious bedrooms are connected by center hall. While initial costs for frame construction with wood siding are lower than the cost of the brick veneer shown above, higher maintenance costs of frame houses, made necessary through the need of constant attention and re-painting, partially defeat the low cost objective. Volume: 23,745 cu. ft.

### CONSTRUCTION OUTLINE

FOUNDATION: Brick.  
 EXTERIOR WALLS: Brick veneer.  
 ROOFS: Wood framed, red wood shingles.  
 INTERIOR FINISH: Wall board.  
 CEILINGS: Plaster.  
 FLOORS: Pine, double.  
 WINDOWS: Kitchen range and fireplace.  
 PLUMBING: Copper tubing.  
 SANITARY FACILITIES: Sewage disposal by individual septic tanks and tile disposal field.

PORCH



LIVING ROOM



KITCHEN





## ARIZONA PART-TIME FARMS, PHOENIX, ARIZ.

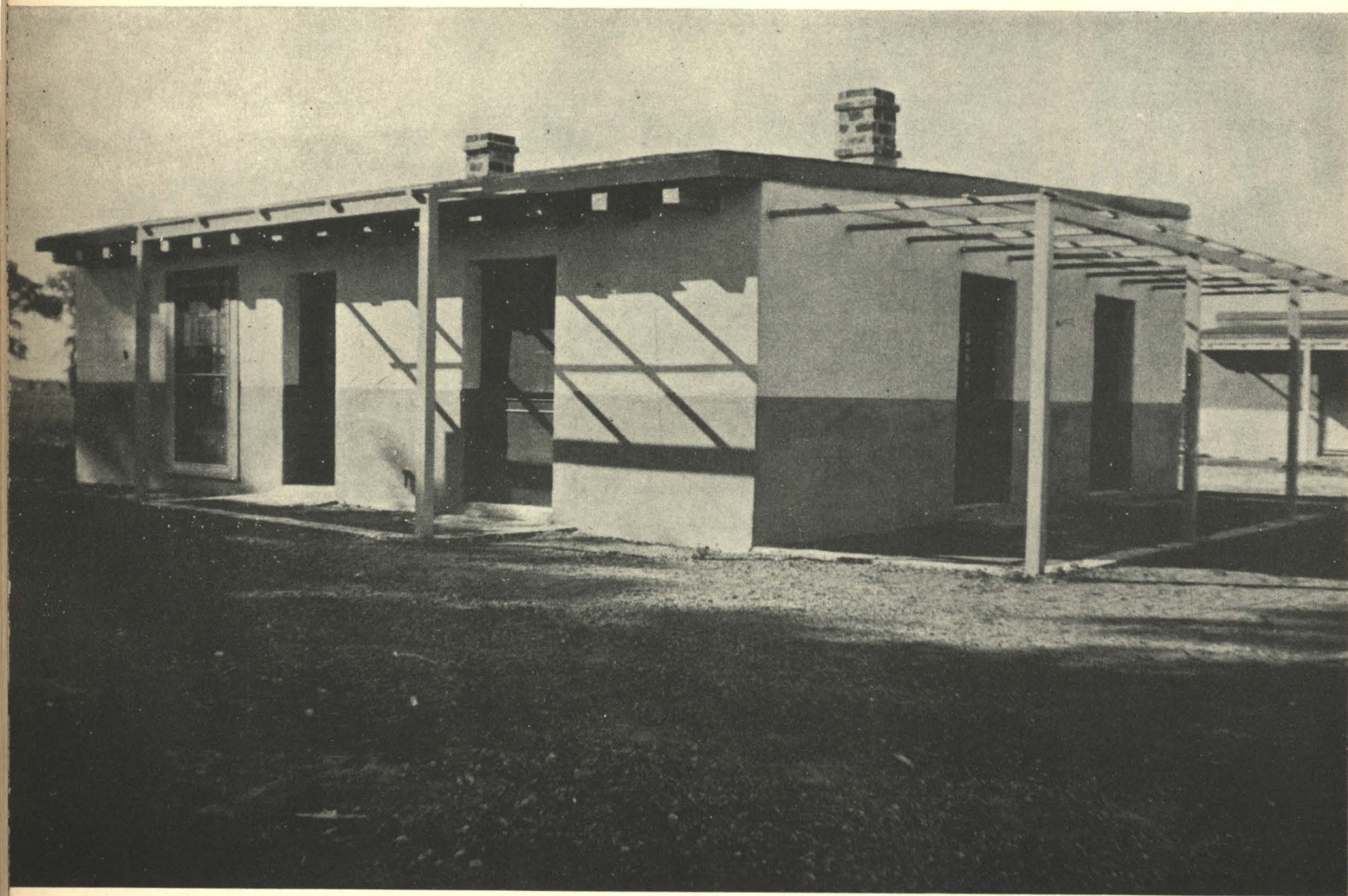
This project is being developed for the resettlement of the families of 100 farm laborers. A large majority of the working population in certain sections of Arizona are employed as farm laborers. The work is seasonal and the family incomes, as a consequence, are small. The project gives these people a chance to supplement their means of livelihood by homegrown foods and a small amount of cash crops.

Arizona Part-Time Farms are being developed in three units—24 located at Glendale; 36 at Phoenix; and 40 at Chandler. The Glendale unit has been laid out so that the houses are located on small plots averaging  $\frac{1}{3}$  of an acre, and the main portion of the land is devoted to a community farm, cooperatively operated by residents in their free time.

In the Phoenix and Chandler units the houses are located on three-acre tracts. A cooperative dairy-poultry-truck farm will provide the families with part of their food.

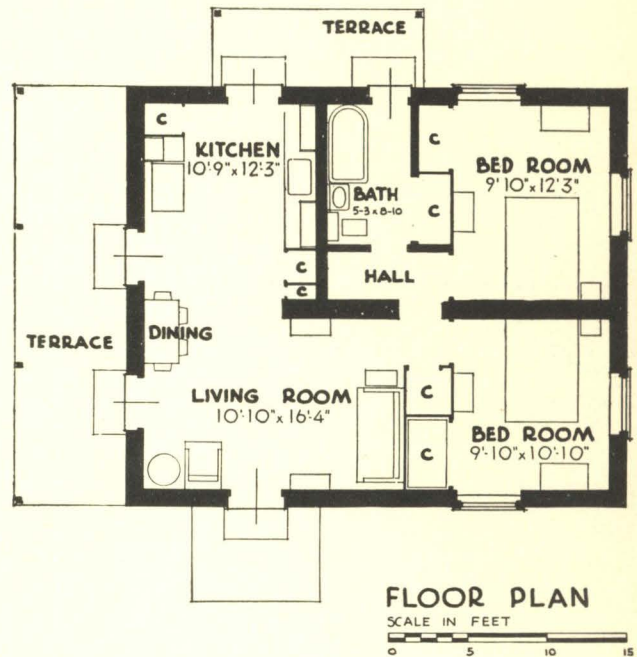
The houses contain from 3 to 5 rooms, and are one story high. Domestic water supply is from electric motor driven pumps and deep wells. Additional buildings on each farmstead include a barn, poultry house, and milk shed. Fencing, landscaping and orchards are included in the plans as are a cooperative canning room and store.

An irrigation system with individual unit connections will be constructed. The water will be supplied from one general pumping plant.



CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





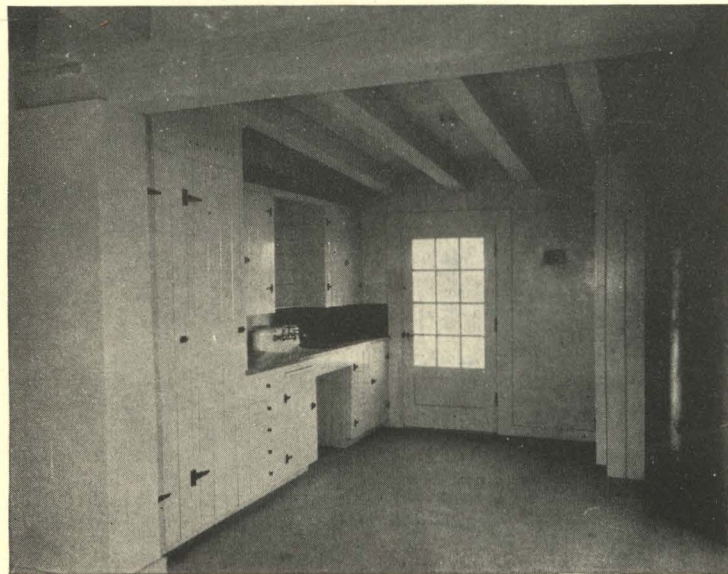
### ANALYSIS OF BUILDING

Extremely warm summers and mild winter temperatures characterize this region. The houses of adobe construction are typical of the area. They have paved floors. Their flat roofs are of wood construction, with an insulation of stabilized earth. This stabilized earth is adobe treated with oil emulsion, making it firmer and increasing its resistance to the elements. The airy sleeping accommodations are completely screened. All of the rooms have cross ventilation and the closets are large in size. Three piece bathroom and kitchen sink. Volume: 10,083 cu. ft.

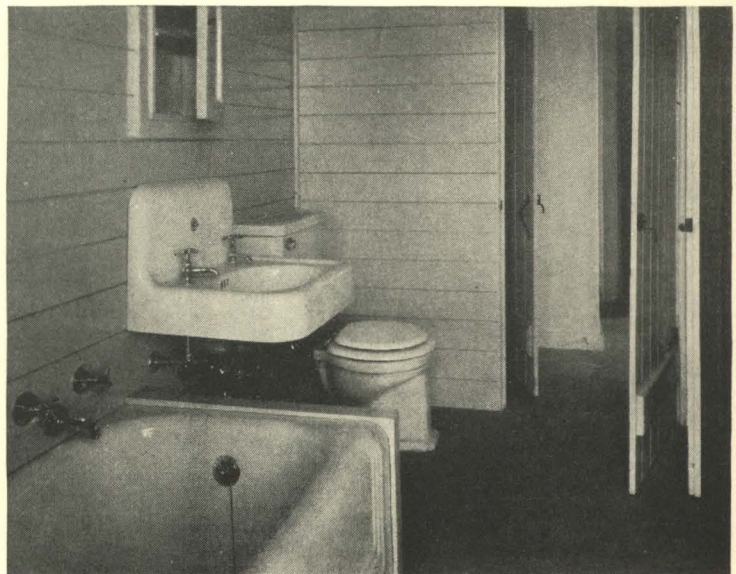
### CONSTRUCTION OUTLINE

FOUNDATIONS: Concrete.  
EXTERIOR WALLS: Adobe 12 in. thick with stucco exterior.  
ROOFS: Stabilized earth.  
INTERIOR FINISH: Plaster on metal lath.  
CEILING: Plaster on metal lath.  
FLOORS: Cement painted.  
WINDOWS: Casement type, opening out.  
HEATING: Kitchen range.  
PLUMBING: Copper tubing.  
SANITARY FACILITIES: Sewerage disposal by individual septic tank and tile disposal field.

KITCHEN



BATH



INTERIORS FROM SIMILAR BUILDING WITH PLAN REVERSED

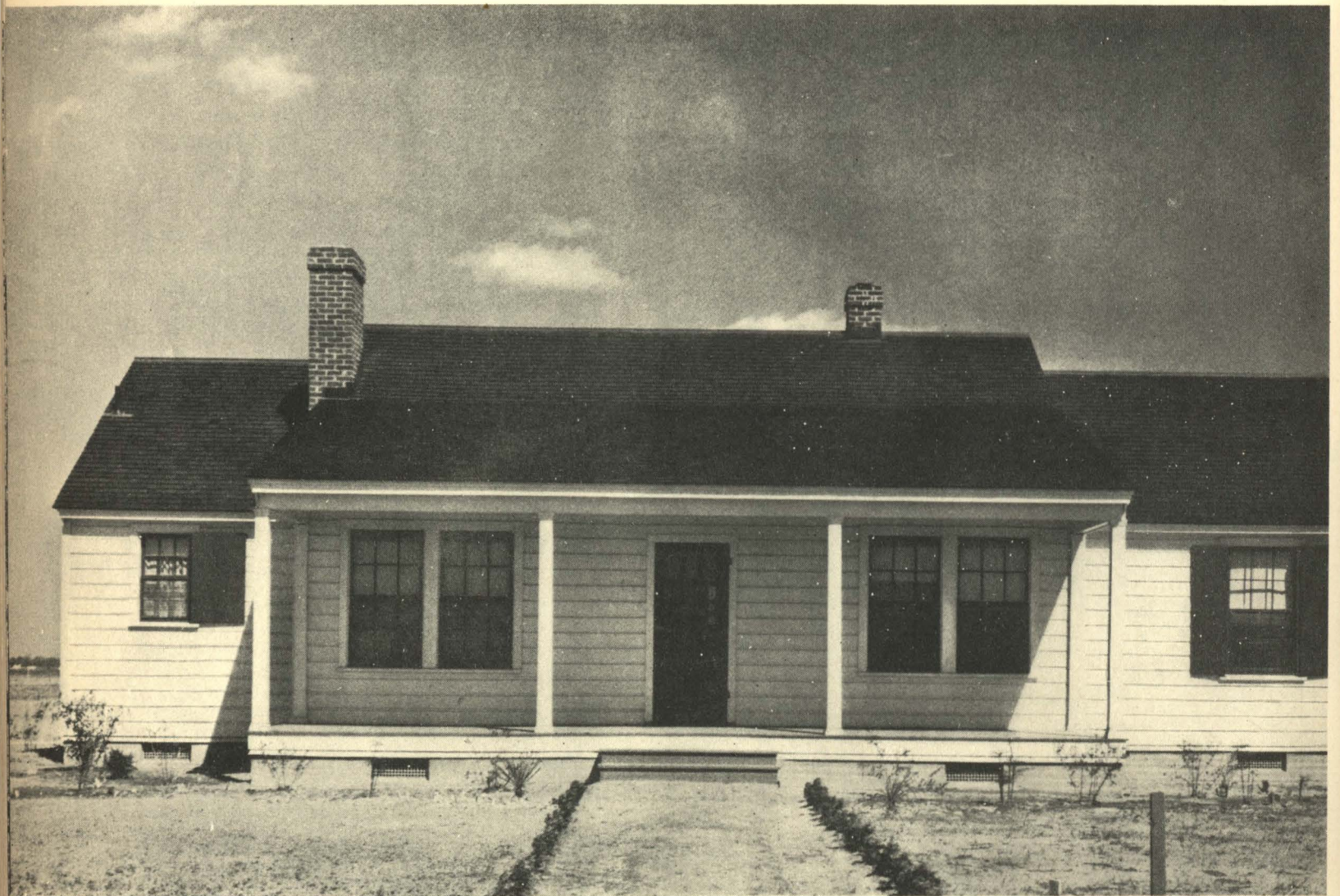


# ARKANSAS PLUM BAYOU PLANTATION, JEFFERSON CY.

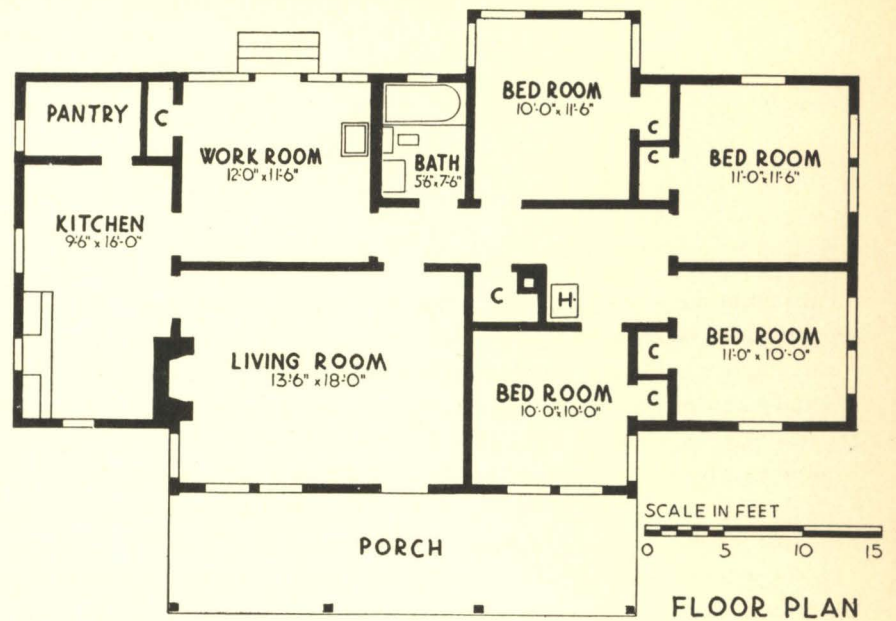
The community is located on a 5,800-acre tract in Jefferson County, 35 miles from Little Rock, Arkansas. It included one hundred 36-acre farmsteads grouped about a community center and surrounded by woodland and pasture. This project has been designed for the resettlement of young families, whose heads are 35 years or under, selected from the farm families of the State. Many of them have been making a futile attempt to farm poor ground. The rich soil of the project will give them a better chance to earn a livelihood.

On each farmstead a modern one-story home containing from four to six rooms is being constructed. Each tract will be landscaped with native shrubs and trees, fenced, and equipped with a barn, cotton house, poultry house, hog house and well house. Running water under pressure is furnished by an electric pump from deep wells.

Old roads are being improved and new roads being built. Cooperative enterprises, including a cooperative store and warehouse, a cotton gin, a meat curing cold storage and ice plant, and a farm repair shop, are proposed.







### ANALYSIS OF BUILDING

This house is planned for a Southern climate. The arrangement of the rooms and the windows is designed to give the house maximum ventilation. To serve the same purpose louvers are placed in the side walls directly beneath the eaves and an 18 x 24 in. vent in the ceiling of the hall. There is also a 12 x 24 in. vent in the kitchen ceiling over the coal stove. This serves both for ventilation and to carry off the fumes from cooking. The vents may be closed if desired. The foundation of the house has metal termite guards and cast iron air vents. Heating is necessary during part of the year and to facilitate this there is an 8 x 12 in. hot air register over each hall doorway. These openings from the hall to the adjoining rooms are controlled by shutters. The ceilings are insulated with two inches of mineral wool insulation. All chimneys are lined with flue lining. All screen doors and windows are 16 in. mesh bronze screening. The kitchen has a built-in sink, drainboards, and cabinets. There is a large adjoining pantry with ample shelves. The hot water tank is located in the kitchen next to the range. The work porch is screened in and contains large laundry tubs. The bathroom has a bath tub and a lavatory. Volume: 18,250 cu. ft.

### CONSTRUCTION ANALYSIS

FOUNDATION: Concrete wall.  
EXTERIOR WALLS: Pine siding over insulating paper.  
ROOF: Wood shingles.  
INTERIOR FINISH: V-joint No. 2 pine 1" x 8".  
CEILING: Kitchen and bath—v-joint No. 2 pine 1" x 6".  
Remainder of house—v-joint No. 2 pine 1" x 4".  
FLOORS: No. 1 edgegreen T&G fir 1" x 4".  
WINDOWS: Double hung with wood sash.  
HEATING: Fireplace, kitchen range and heater in hall.  
PLUMBING: Galvanized wrought iron pipe.  
SANITARY FACILITIES: Sewerage; sanitary privies.

LIVING ROOM



KITCHEN





## MICHIGAN IRONWOOD HOMESTEADS

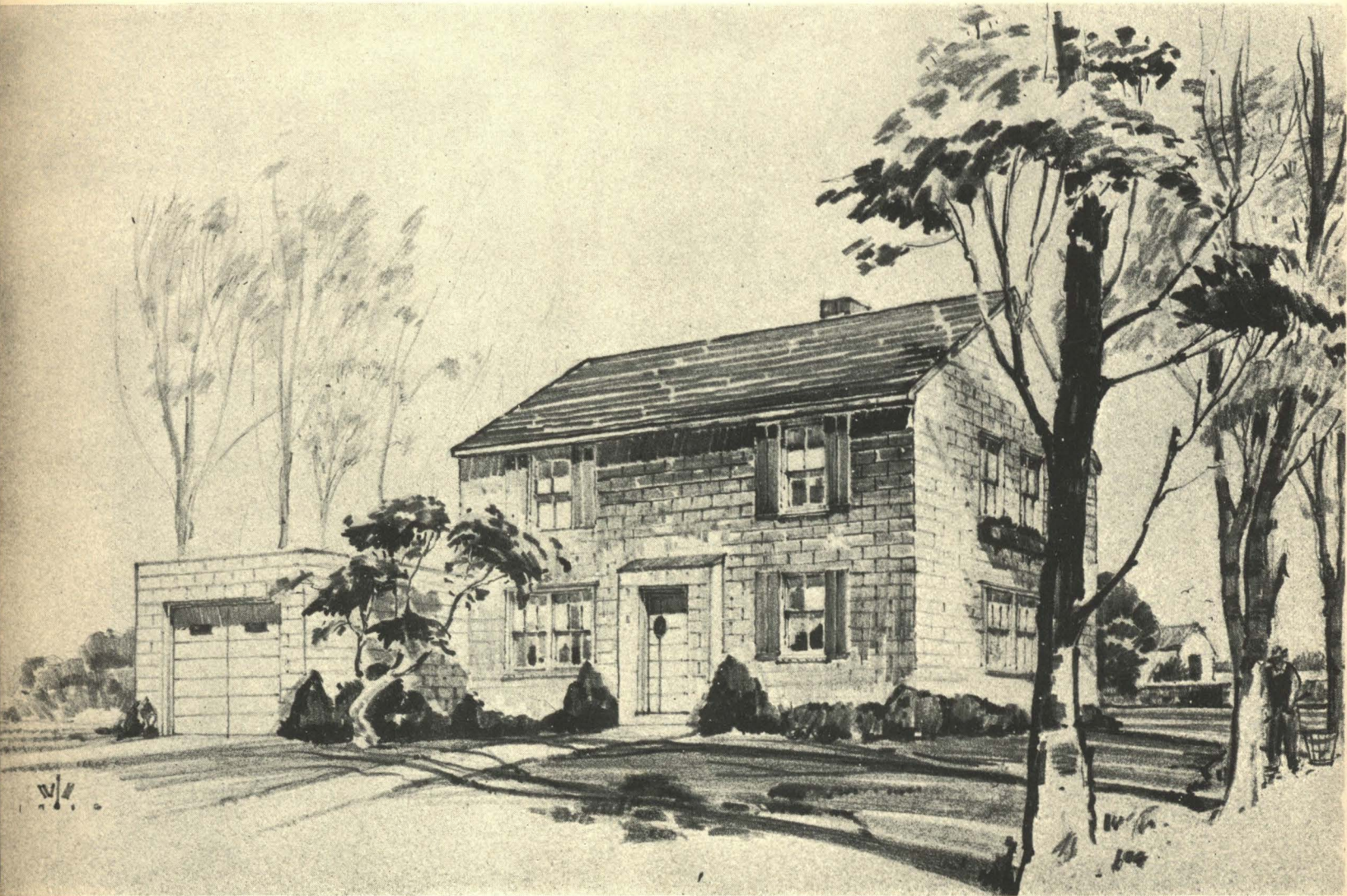
A garden community for 200 low-income families, this project is now under construction on 1,600 acres of fertile land in Gogebic County, Michigan. It is a mile and a half north of the town of Ironwood.

Ironwood, an iron-mining town with a population of 14,000 is in the Upper Peninsula of Michigan. Bad housing conditions there were aggravated by the unusual severity of the economic depression in the region. Also, a residential section of the town has been slowly sinking because of underground mining operations. The building of Ironwood Homesteads will not only meet general housing needs but

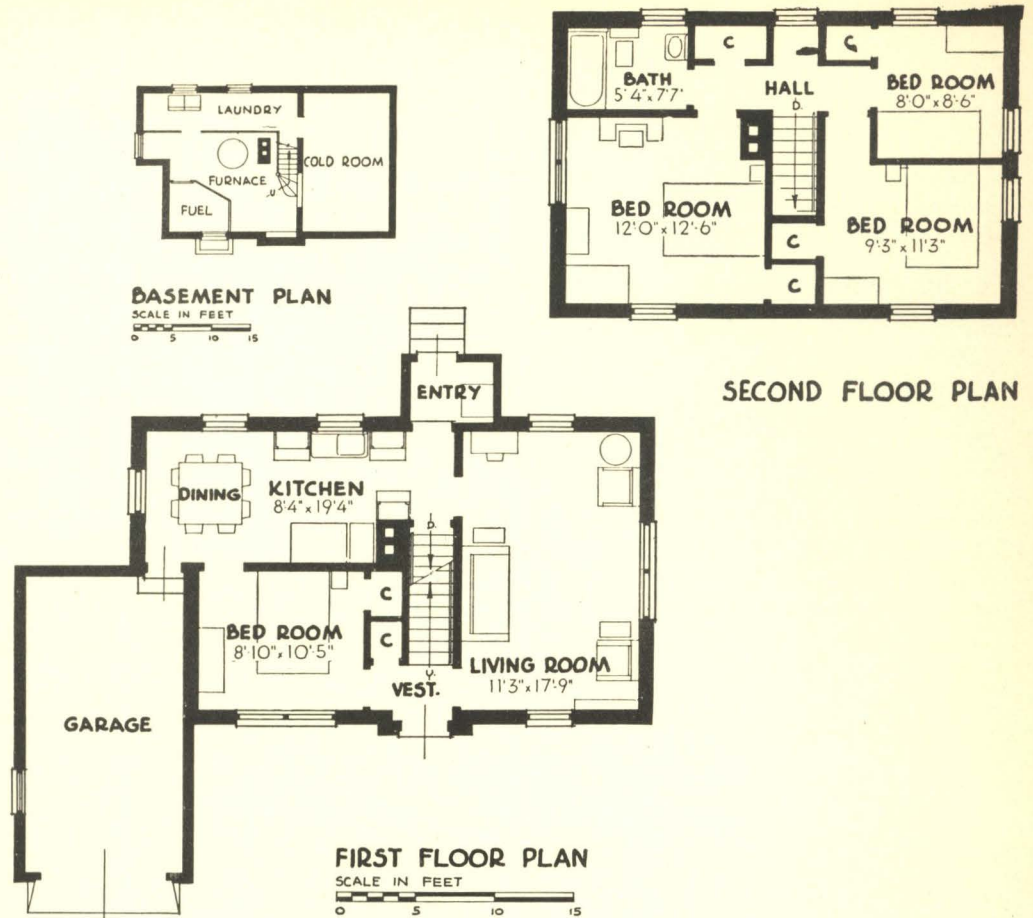
will primarily provide a chance for low-income workers to supplement their incomes with food grown for home consumption. Each family will have a garden plot of at least  $\frac{5}{8}$  of an acre adjacent to its home.

There will be 200 houses. Houses are two stories high and have from 4 to 6 rooms, basements, and in most cases, garages. The basement has a large cold room. A central water system will supply all buildings.

Cooperative facilities including a trade center, a cannery, dairy barns, hog shelters, and poultry houses are planned. Fencing, landscaping, walks, and driveways are provided.







### ANALYSIS OF BUILDING

Because of the severe winter cold and the consequently low frost line, foundations are sunk six feet. Further protection against cold is provided by use of  $\frac{3}{4}$  in. insulating material. To overcome the handicap of heavy snow the garage was located in advance of the house in order that access to the highway might be facilitated. A bedroom is located adjacent to the kitchen and may be used for a dining room if not required for sleeping. All plumbing is located on one line of piping. Volume: 18,770 cu. ft.

### CONSTRUCTION OUTLINE

**FOUNDATIONS:** Concrete.  
**EXTERIOR WALLS:** Concrete block veneer.  
**ROOFS:** Cedar shingles; insulation, rigid insulation board.  
**INTERIOR FINISH:** Plywood.  
**CEILINGS:** Plywood.  
**FLOORS:** Basement, concrete; first and second, double floors; finish, fir.  
**WINDOWS:** Double hung, wood sash.  
**HEATING:** Coal fired, duct system, warm air furnace.  
**PLUMBING:** Copper tubing.  
**SANITARY FACILITIES:** Central sewerage system.

REAR



FRONT



PLANS FOR THIS HOUSE SIMILAR TO THAT SHOWN ABOVE, EXCEPT REVERSED



# MINNESOTA DULUTH HOMESTEADS

This is a suburban garden community, designed to provide homes for low-income families employed in the iron-works and the other trades and industries of Duluth. The community is located on a 1,200-acre tract in St. Louis County, in the northeastern part of Minnesota, seven miles from the business center of the city of Duluth.

Each home has an adjoining kitchen garden. These gardens enable the residents to supplement their income by raising a portion of their food supply.

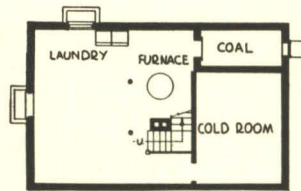
The 95 houses now under construction, of which 40 have

been completed, contain from 4 to 6 rooms and are two stories high. The individual plots run from 5 to 10 acres. The necessary barns and other outbuildings are planned. It is planned to build a community building for educational and recreational purposes. Approximately 10 acres of land will be cleared and developed into athletic fields and community park. Fencing, landscaping, and driveways will be provided.

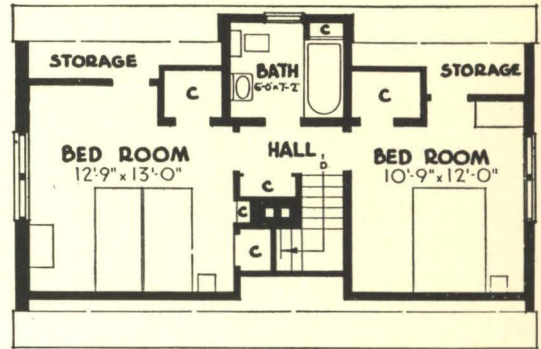
The domestic water supply comes from individual wells with pumps.



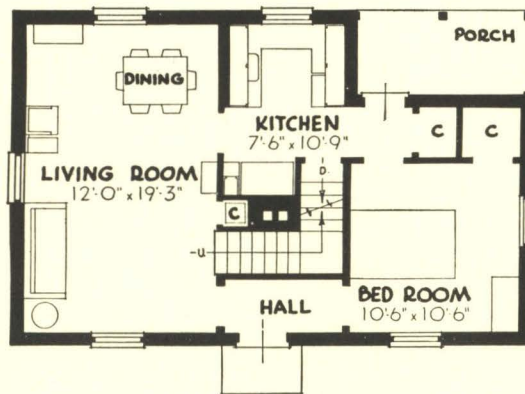




**BASEMENT PLAN**  
SCALE IN FEET  
0 5



**SECOND FLOOR PLAN**



**FIRST FLOOR PLAN**  
SCALE IN FEET  
0 5 10 15

### ANALYSIS OF BUILDING

Severe winters characterize the area. All entrances are, therefore, protected by storm entries. All plumbing is located on one line on an interior wall to reduce the possibility of freezing. The kitchen is located between a large living room and a bedroom, either may be used as a dining room. The stairway is located in the center of the house, reducing hall space to a minimum and providing ample closet space. Volume: 15,948 cu. ft.

### CONSTRUCTION OUTLINE

**FOUNDATIONS:** Concrete.  
**EXTERIOR WALLS:** Brick veneer, wood frame, insulation.  
**ROOFS:** Insulated, cedar shingles.  
**INTERIOR FINISH:** Plaster.  
**CEILINGS:** Plaster.  
**FLOORS:** Basement, concrete; first and second, double; finished floor, straight grain fir.  
**WINDOWS:** Double hung, wood sash.  
**HEATING:** Coal fired, duct system warm air furnace.  
**PLUMBING:** Copper tubing for cold water; galvanized iron for cold.  
**SANITARY FACILITIES:** Sewage disposal through individual septic tanks.



## NEW JERSEY JERSEY HOMESTEADS, HIGHTSTOWN, N. J.

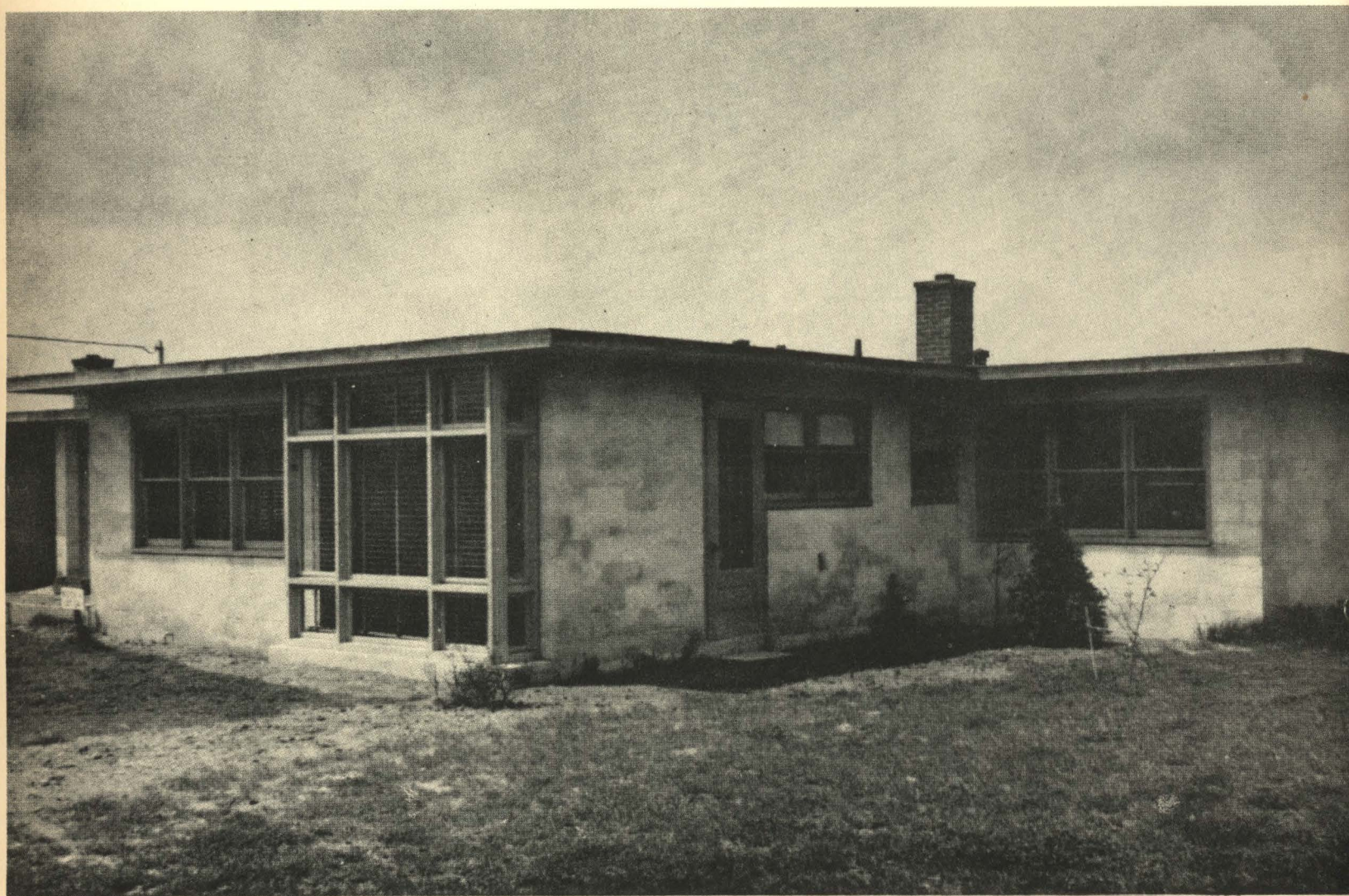
This is an agricultural-industrial community located near Hightstown in the central part of New Jersey. The 200 families selected for occupancy are needle trades workers from the New York and Philadelphia areas, who have suffered as the result of seasonal unemployment.

The families, cooperatively, manufacture women's garments and operate a 414-acre farm. In addition, they will have their own cooperative stores and shops, a community center and other necessary service trades. Of the 200 families, 160 will work in the factory; 25 will run the cooperative farm, the remaining 15 families will service the community, when in full operation, as clerks in the community store, car-

penters, plumbers, shoemakers, barbers, and the like.

The homes are grouped in horseshoe formation, with the community buildings in the center. There are 39 four-room, 106 five-room, 48 six-room, and 7 seven-room houses, all of which are one story in height.

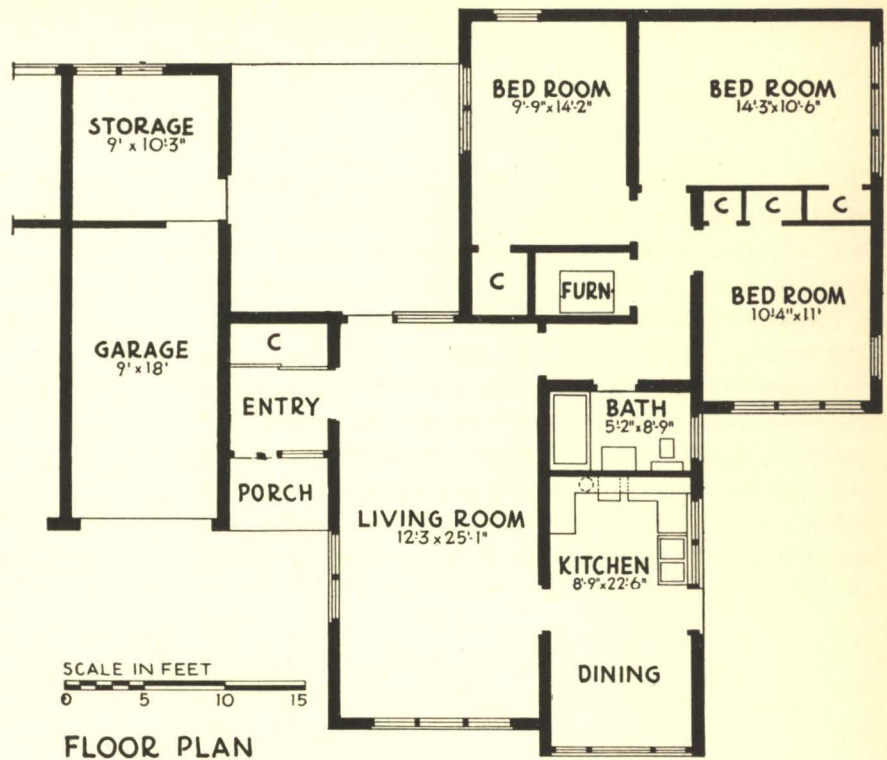
The water supply system includes five miles of main, two artesian wells and a 75,000 gallon reserve tank. The colony's sewage disposal system is one of the most modern in the country, with five miles of sewer ducts and a disposal plant. As soon as possible the community will become an incorporated township and pay State and county taxes.



John Beinert Photos

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





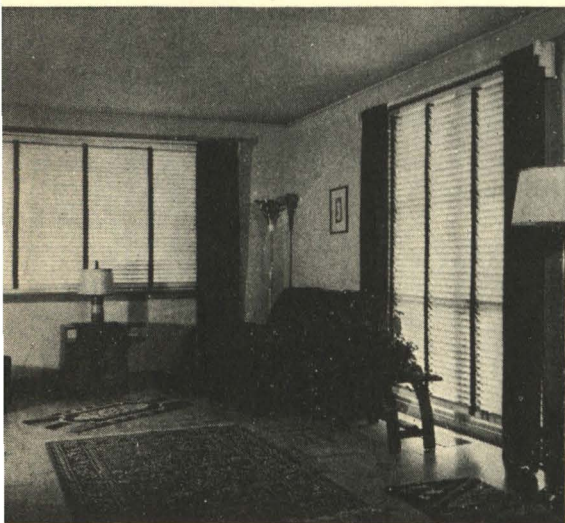
### ANALYSIS OF BUILDING

This house was planned to give adequate shelter in a region that has severe winters and warm summers. Its thorough insulation and the design of its heating system help protect its occupants against both heat and cold. Besides the airspace in the cinder blocks its walls have a  $\frac{7}{8}$  inch furring space. Its ground floor has  $\frac{1}{2}$  in. sheet insulation over cinder concrete fill. The roof has  $1\frac{1}{2}$  in. sheet insulation. To increase the efficiency of the insulation in the summer time the air ducts of the heating system are brought into use. During the day the insulation absorbs a good deal of the summer heat. To quicken the rate at which the walls cool off at night, a fan forces the comparatively cool night air through the duct system. Another feature is the large overhang on the roof. This shields the interior from the direct rays of the summer sun and still allows the slanting rays of the winter sun to reach inside the house. Volume: 14,800 cu. ft.

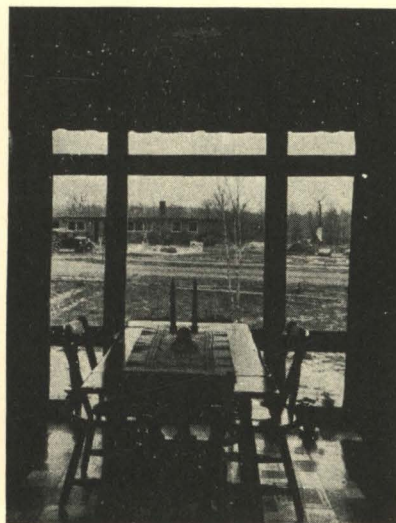
### CONSTRUCTION OUTLINE

**FOUNDATION:** Poured concrete.  
**EXTERIOR WALLS:** Cinder blocks, furring (wood) strips, insulated wire lath, two coats of plaster (scratch and finish).  
**INTERIOR FINISH:** Plaster finish same as outside wall.  
**CEILINGS:** Casein paint on cement slab.  
**FLOORS:** Hardwood block units, laid in mastic over  $\frac{1}{2}$ " sheet insulation, excepting bathroom and kitchens, which are of asphalt tile laid in mastic.  
**ROOF:** 4" structural concrete slab,  $1\frac{1}{2}$ " sheet insulation, 4 ply built up roofing.  
**WINDOWS:** Double hung wood sash, weather stripped with provisions for ventilated storm sash.  
**HEATING:** Gravity oil burning warm air furnace, duct system, forced circulation.  
**PLUMBING:** Copper tubing.  
**SANITARY FACILITIES:** Central sewerage system.

LIVING ROOM



DINING



KITCHEN





## NORTH CAROLINA PENDERLEA HOMESTEADS, WILLARD, N. C.

Penderlea Homesteads, located on the Coastal Plain, forty miles from the city of Wilmington, N. C., has been designed to give farmers in the poor land area around Wilmington an opportunity to relocate on land capable of providing them with a living.

This region is classed by farm economists as being in the farm tenant belt of the nation. Occupant families were selected with this in mind and came from four groups—families living on wornout land, tenant farmers, rehabilitation clients who have been under the care of the Resettlement Administration, and young married couples fitted for and desiring an agricultural life. Approximately 4,500 acres

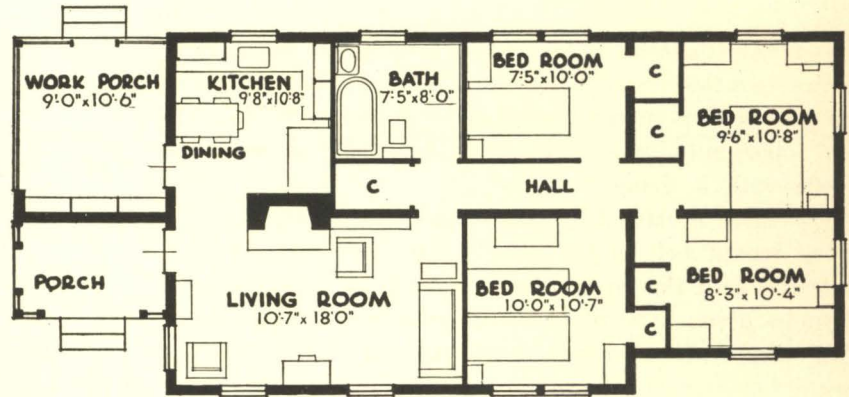
have been purchased for the development of this project.

There are 142 families housed in attractive four- five- and six-room dwellings, one story in height. A farmstead of 20 acres for each family has been cleared and made ready for the planting of crops. In addition to the home there is a chicken house, barn, movable hog house, and a pump house on each tract. Running water under pressure is furnished by electric power-driven pumps from wells.

The small acreages place the residents relatively near one another. The community is organized in cooperation with the State and County.







FLOOR PLAN

SCALE IN FEET  
0 5 10 15

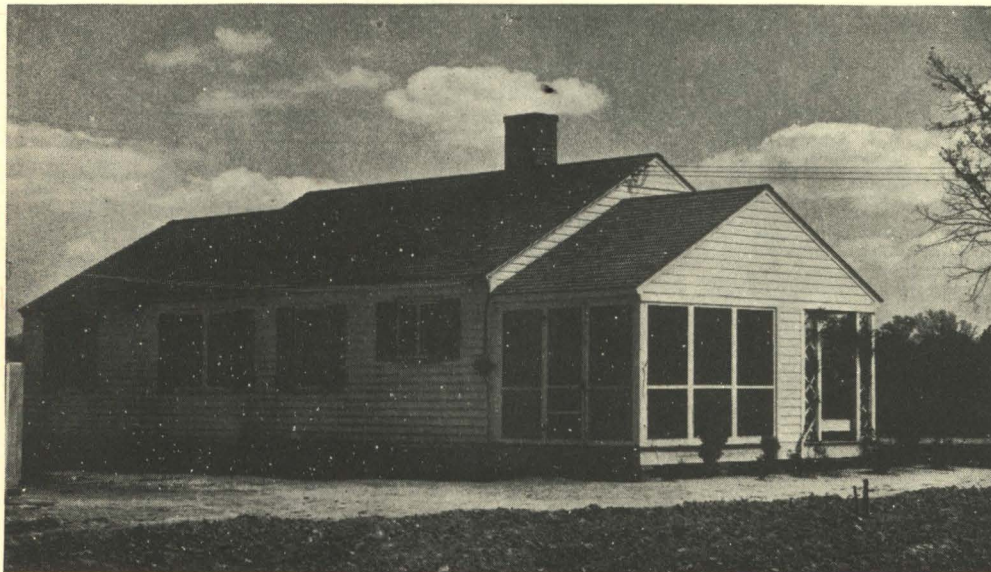
### ANALYSIS OF BUILDING

The mild climate influenced the design of these houses. Screened work porch open on two sides may be used for dining in the summer. Living room heated with fireplace. Bedrooms have ample closet space. Three-piece bathroom. Kitchen sink. Hot water tank. Copper termite shields set in foundation. Volume: 13,979 cu. ft.

### CONSTRUCTION OUTLINE

FOUNDATION: Brick piers with copper termite shields.  
EXTERIOR WALLS: Wood siding insulated with building paper.  
ROOF: Cedar shingles.  
INTERIOR FINISH: Knotty pine, waxed; insulated sills.  
CEILINGS: Knotty pine.  
FLOORS: Double floors, clear yellow pine, stained and waxed.  
WINDOWS: Check rail, 12-light, wood sash.  
HEATING: Fireplace, kitchen range.  
PLUMBING: Galvanized wrought steel tubing.  
SANITARY FACILITIES: Sewage disposal by individual septic tank and tile disposal field.

REAR



KITCHEN





## **SOUTH CAROLINA** ASHWOOD PLANTATION

This is an agricultural community, located on a 6,900-acre tract in Lee County in the north central part of South Carolina. It is designed for 134 farm families, most of whom are moving there from poor lands purchased by the Resettlement Administration in its land use program.

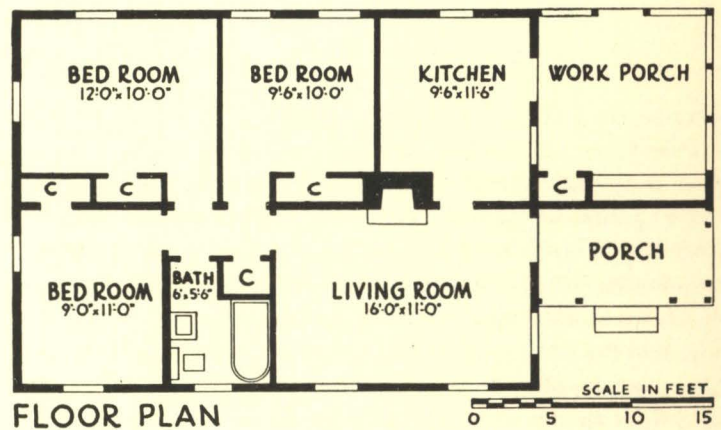
The residents will derive their living and cash income from the operation of their individual tracts varying in size from 37 to 60 acres. Several cooperative enterprises, such as cotton gin and tobacco storage barn, may also be developed by the residents.

The one-story homes contain from 4 to 6 rooms. Besides the dwelling each homestead will have a poultry house, a barn, and a storage house. Domestic water supply is afforded by windmills installed on each unit. Necessary roads, bridges, and culverts are being built. Fences, orchards, and landscaping are planned.

It is planned to remodel various existing structures and equip them as a community center. The community center and the playground will provide recreational facilities.







### ANALYSIS OF BUILDING

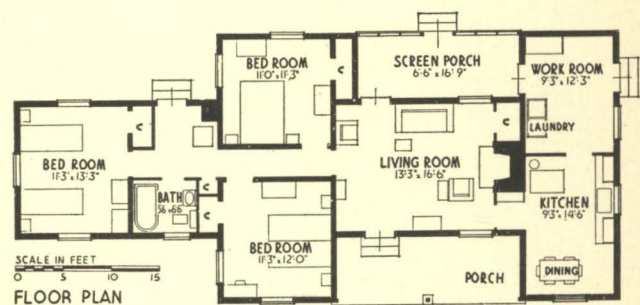
Mild winter temperature prevails. Ample porches provide shade and screened areas for living quarters. The kitchen has space for eating and the adjacent porch may be used for dining area in the summer. Large living room heated with central fireplace. Bedrooms have clothes closets and are connected by bath and small central hall. Large work-room adjoining kitchen has facilities for laundry. Volume: 11,128 cu. ft.

### CONSTRUCTION ANALYSIS

**FOUNDATION:** Brick piers with termite shields.  
**EXTERIOR WALLS:** Vertical boards and battens.  
**ROOF:** Galvanized iron.  
**INTERIOR FINISH:** Knotty pine, V-pointed boards, stained and waxed.  
**CEILINGS:** ½ inch insulation boards in interior. ¾ inch dressed board on porch.  
**FLOORS:** Wood, stained and waxed.  
**WINDOWS:** Double hung wood sash—not weighted.  
**HEATING:** Open fireplace and kitchen range.  
**PLUMBING:** Copper tubing.  
**SANITARY FACILITIES:** Sewage disposal by individual septic tank and tile disposal field; also complete bathroom and kitchen plumbing.  
**SERVICES:** Electricity—Electric ceiling outlets and wall plugs.



### ALTERNATE SCHEME





# TENNESSEE CUMBERLAND HOMESTEADS

Cumberland Homesteads is located on a 13,000-acre tract on the Cumberland Plateau, four and one-half miles from the town of Crossville, Tennessee. It is being built to aid three groups of people: the timber workers, the miners, and the farmers in the poor land areas. Many of these families have been dependent upon private and public relief funds for the last five years. It is an agricultural community planned for 274 families who will derive their income from the cultivation of individual tracts of some 25 acres each, and from the development of cooperative enterprises.

Fifteen different architectural plans, eight of which are re-

curring, have been used in constructing houses in the community.

They are one and one and one-half stories high and contain from 4 to 7 rooms.

By using local materials—the easily quarried native Crab Orchard stone and the abundant oak and white pine available on the project site—the cost of these houses is extremely low for dwellings of their type.

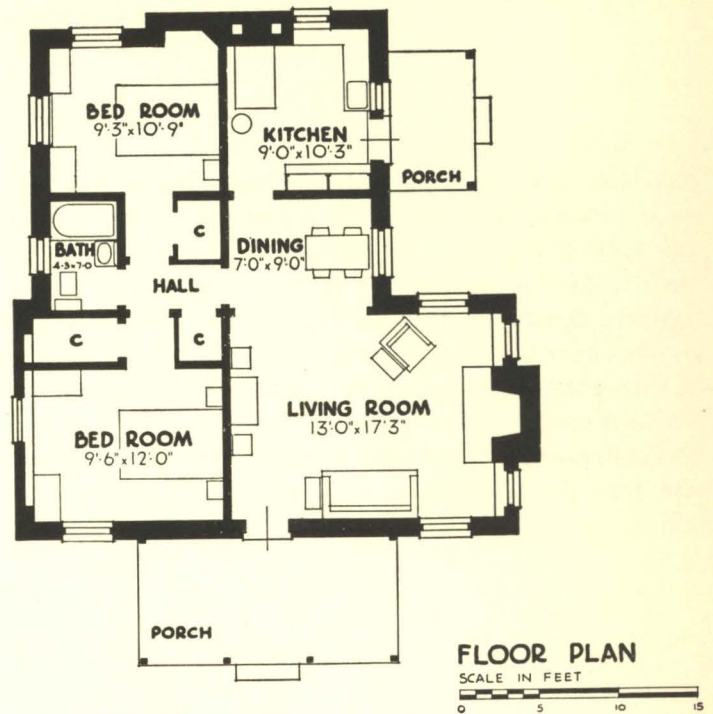
Additional buildings on each unit will consist of a poultry house, a garage and tool storage house, a stable and barn.

Health facilities are to be provided in part by an infirmary.



CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES





### ANALYSIS OF BUILDING

Walls, fireplace, and porch floors are of sandstone, quarried locally. Hand-hewn solid oak beams have been used in the interiors and for porch posts. Efficient arrangements for canning and other work are provided in the kitchen. The large living room with dining alcove provides adequate space for the social life of the family during the winter months. The arrangement of closet space, through reduction of hall area, has increased the usable area of the bedrooms. Volume: 13,600 cu. ft.

### CONSTRUCTION OUTLINE

FOUNDATION: Crab Orchard stone (native quality).  
 EXTERIOR WALLS: Stone masonry, furred and lined with native molded wood paneling.  
 ROOFS: White pine wood shingles.  
 INTERIOR FINISH: Wood paneling, pine.  
 CEILINGS: V-joint wood paneling.  
 FLOORS: Wood framing, double; finish, native oak.  
 WINDOWS: Double hung and casements, wood sash.  
 HEATING: Coal and wood burning stoves and fireplaces.  
 PLUMBING: Galvanized wrought iron piping.  
 SANITARY FACILITIES: Individual septic tanks.

REAR ELEVATION



DINING





## VIRGINIA NEWPORT NEWS HOMESTEADS

Located on the Aberdeen Road, this community is some four miles from the business center of Newport News, Virginia. It is of the suburban type, designed to provide homes with gardens for 158 low-income colored families. These families are employed, full or part-time, in the shipyards, railroad industries and other trade and service occupations in the Newport News and Hampton Roads area. They will be able to supplement their earnings with food grown for home use in the kitchen gardens.

The plot arrangement of this project provides for a concentrated group of living units surrounded by a greenbelt

of forest land and truck gardens. The individual units consist of  $\frac{3}{8}$  to  $\frac{1}{2}$  an acre and are grouped about a community building and shopping center.

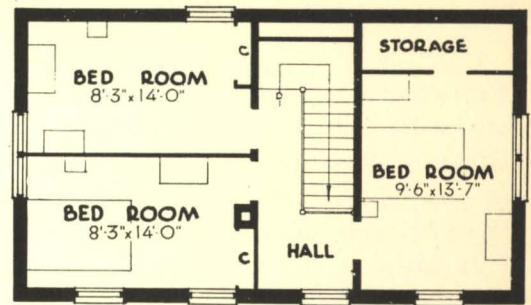
The homes are constructed in two-family units, being connected by attached garages which also serve as workshops and laundries. The houses are of seven types and vary in size from 3 to 5 rooms. They are two stories in height. The living room can be converted into an auxiliary bedroom. A cooperative association is being formed for the operation of the truck farms on the 110 acres comprising the outside circumference of the community.



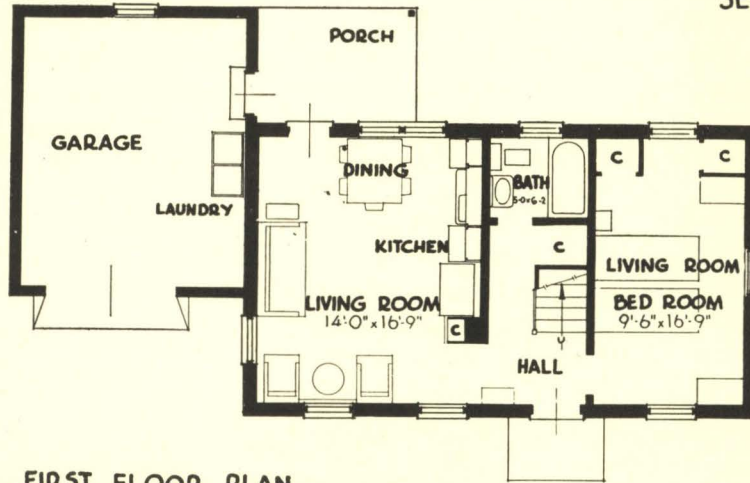
*Cheyne's Studio*

CONSULT YOUR ARCHITECT FOR LOCAL COST FIGURES

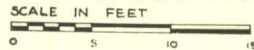




SECOND FLOOR PLAN



FIRST FLOOR PLAN



### ANALYSIS OF BUILDING

Economy in construction and space arrangement, without sacrifice of low maintenance cost, is characteristic of this house plan. On a strictly cost basis one sizable combination living-workroom was substituted for the usual living room-dinette-kitchen elements. Provision is made in the plan for additions to the house. In view of the hot summers, adequate porches are provided adjacent to the kitchen gardens and cross ventilation maintained in all rooms. The utility room, or garage, was substituted for a basement. Volume: 15,200 cu. ft.

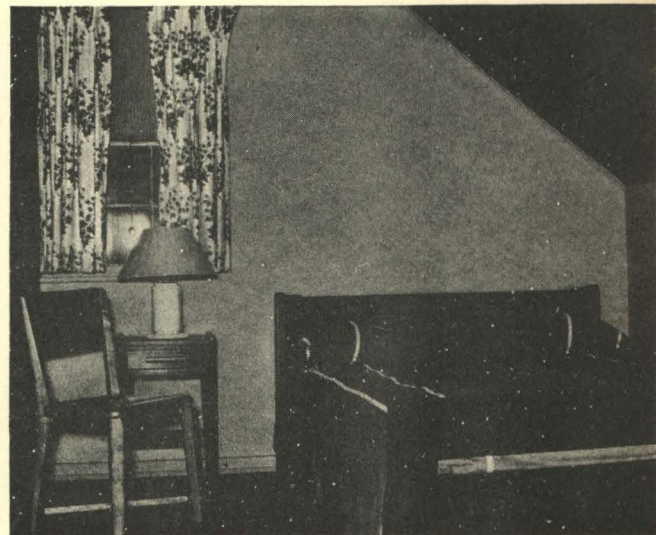
### CONSTRUCTION OUTLINE

FOUNDATION: Concrete.  
EXTERIOR WALLS: Brick veneer, wood frame.  
ROOFS: Cedar shingles.  
INTERIOR FINISH: Plaster board.  
CEILINGS: Plaster board.  
FLOORS: Wood.  
WINDOWS: Double hung.  
HEATING: Coal fired hot water radiation.  
PLUMBING: Copper tubing.  
SANITARY FACILITIES: Central sewerage system.

KITCHEN



BED ROOM





## WEST VIRGINIA ARTHURDALE COMMUNITY

The Arthurdale Community was initiated by the Subsistence Homesteads Division of the Department of Agriculture for the purpose of rehabilitating, both socially and economically, destitute mining families by establishing them in small farm homes and providing them with a new form of livelihood. Labor saving machinery, improved mining methods, and the competition of other fuels created a growing surplus of partially employed labor in this section long before production was curtailed or the mines closed. As a consequence of this situation, families found themselves either without any means of livelihood, or reduced to an extremely low standard of living.

The employment opportunities offered by two small private industries, and the development of cooperative agriculture and community enterprises by the Arthurdale Association with homestead membership chartered under the laws of West Virginia, assures future economic security to the 165 Arthurdale homesteaders. Additional income is provided

the occupants through individual subsistence garden and livestock activities on home tracts.

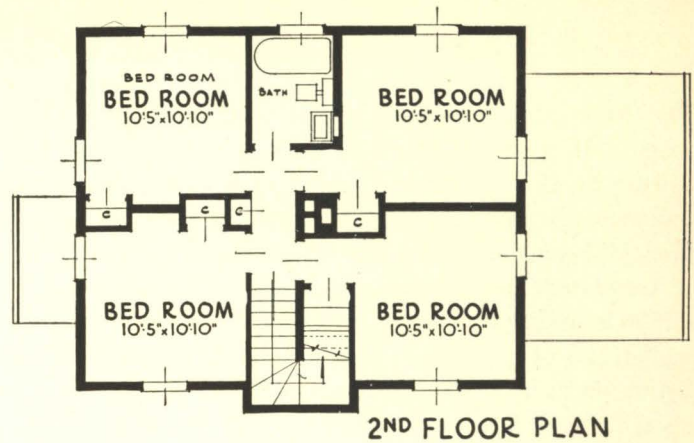
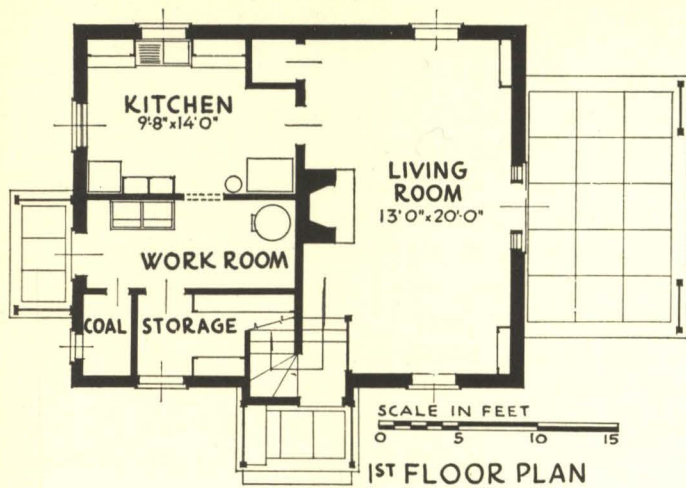
The community of 165 houses is laid out on a 1,377 acre tract, with 26 four-room, 23 five-room, and 116 six-room houses located on 2.25 to 5.11 acre individual tracts; 444.79 additional acres have been purchased by the Arthurdale Association for a cooperative farm.

First unit of fifty houses are rebuilt portable Hodgson houses, one story cedar and pine frame dwellings with cinder block basements. Second unit of 75 houses are two-story frame dwellings with cinder block first floor designed and constructed at the project. Third unit of forty houses same except for first floor of stone veneer instead of cinder block. Some houses in last two units have cellars; others have storage and furnace rooms on the first floor. One hundred and fifty-eight outbuildings are combination barn, poultry house, and pig pen. The remaining seven houses have garages.



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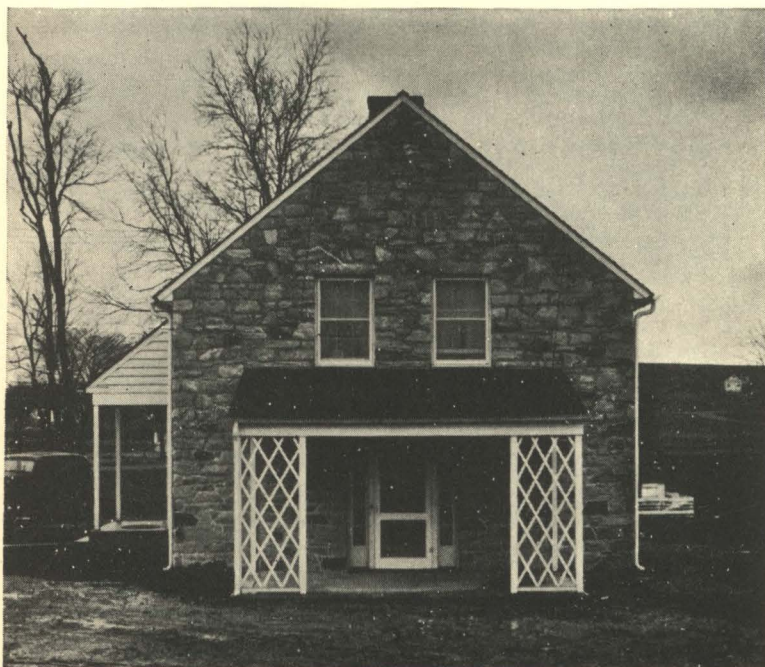


### ANALYSIS OF BUILDING

A well-planned house with four bedrooms. Special attention paid to house service as shown by the arrangement of kitchen, work room, and storage space. Due to the generous size of the living room, a separate dining room was omitted—in line with custom in this locality. Ample closet space in the bedrooms gives the housewife an opportunity to keep things in order. Volume: House, 13,417 cu. ft. Porch, 1,536 cu. ft.

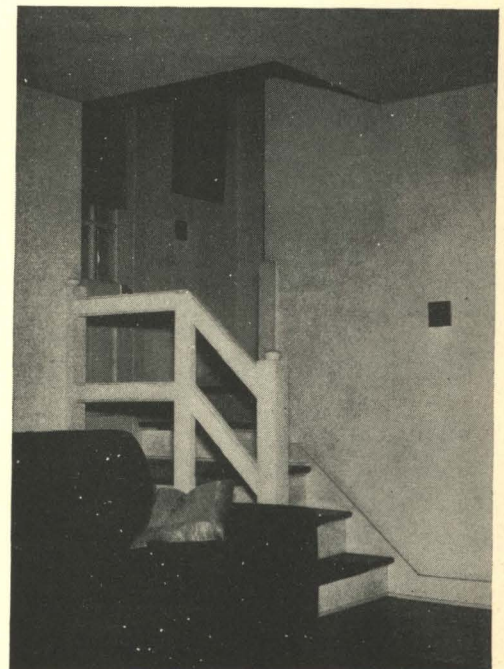
### CONSTRUCTION OUTLINE

**FOUNDATION:** Concrete base with concrete footings.  
**EXTERIOR WALLS:** 1st floor: Cinder concrete block. 2nd floor: Wood stud. Wall cover: Clapboard.  
**ROOF:** Cedar shingles.  
**WINDOWS:** Double hung sash.  
**DOORS:** Standard panel.  
**FLOORS:** 1st floor: asphalt tile, cement in Work Room. 2nd floor: Hardwood.  
**WALLS INSIDE:** Plaster.  
**CEILINGS:** Plaster.  
**PLUMBING:** Standard throughout. Kitchen with sink and drainboard. Work room two laundry trays. 2nd floor, complete bathroom.  
**SEWAGE DISPOSAL:** Septic tank with grid field for disposal.  
**WATER:** Individual well, operated by electric pump and pressure tank, for house service.  
**HEATING:** Hot water boiler, with radiation throughout.  
**ELECTRIC:** Individual meter service from project lines.



Rothstein

### LIVING ROOM





# A LIST OF BOOKS ABOUT HOMEBUILDING

*For the convenience of readers desirous of obtaining further information about the planning and building of a home, this list of representative books is appended.*

- AMERICAN COUNTRY HOUSES OF TODAY, by *Lewis Coffin*. Architectural Book Publishing Co., New York, 1935.
- AMERICAN COUNTRY HOUSES OF TODAY, by *R. W. Sexton*. Architectural Book Publishing Co., New York, 1935.
- BOOK OF BUNGALOWS AND MODERN HOMES, by *C. J. H. Keeley*. Charles Scribner's Sons, New York, 1925.
- BUILDING THE DUTCH COLONIAL HOUSE, by *Aymar Embury, II*. Robert M. McBride & Co., New York, 1929.
- CAPE COD IN THE SUN, by *Samuel Chamberlain*. Picturesque Cape Cod in Photographs. Hastings House, New York, 1937.
- COLONIAL ARCHITECTURE OF CAPE COD, NANTUCKET AND MARTHA'S VINEYARD, by *A. E. Poor*. William Helburn, Inc., New York, 1932.
- THE COLONIAL AND FEDERAL HOUSE, by *Rexford Newcomb*. J. B. Lippincott Co., Philadelphia, 1933.
- COLONIAL DUTCH HOUSES IN NEW JERSEY, by *R. C. Ellis*. Carteret Book Club, 15 Park Row, New York, 1933.
- COLONIAL HOUSES, by *H. T. Child*. Published by the author, 16 East 41st Street, New York. Rev. ed., 1936.
- COLONIAL HOUSES OF PHILADELPHIA, PRE-REVOLUTIONARY PERIOD, by *P. B. Wallace*. Architectural Book Publishing Co., New York, 1931.
- COUNTRY HOUSES, by *Frank J. Forster*. William Helburn, Inc., New York, 1931.
- DAS EINFAMILIENHAUS, by *Alexander Klein*. Julius Hoffman Verlag, Stuttgart, 1935.
- DOMESTIC COLONIAL ARCHITECTURE OF TIDEWATER, VIRGINIA, by *J. A. Burrows and T. T. Waterman*. Charles Scribner's Sons, New York, 1932.
- EARLY CONNECTICUT ARCHITECTURE, by *John Frederick Kelly*. William Helburn, Inc., New York, 1931.
- THE EARLY DOMESTIC ARCHITECTURE OF CONNECTICUT, by *J. F. Kelly*. Yale University Press, New Haven, 1933.
- ECONOMY IN HOUSE DESIGN, by *E. Gunn*. The Architectural Press, London, 1932.
- ENGLISH AND AMERICAN COLONIAL HOMES AND OTHER MEDIUM COST DWELLINGS, by *Frederick H. Gowing*. Published by the author, Boston, 1931.
- EQUIPMENT AND FITTINGS FOR SMALL DWELLINGS. International Housing Association. Julius Hoffman, Stuttgart, 1936.
- THE EVOLVING HOUSE, VOL. III: RATIONAL DESIGN, by *Albert Farwell Bemis*. The Technology Press, Cambridge, Mass., 1936.
- FACE BRICK HOMES IN 30 DESIGNS, Caspar, Krueger, Dory Co., Milwaukee, 1933.
- FIVE-ROOM BUNGALOWS AND SMALL HOUSE PLANS. Caspar, Krueger, Dory Co., Milwaukee, 1935.
- GREAT GEORGIAN HOUSES OF AMERICA. Compiled and published by the Architects' Emergency Committee, 101 Park Avenue, New York, 1933.
- A HISTORY OF THE ENGLISH HOUSE, by *Nathaniel Lloyd*. William Helburn, Inc., New York, 1932.
- HOME ARCHITECTURE, by *Rexford Newcomb and William Foster*. Chapman & Holl, Ltd., London. John Wiley & Sons, Inc., New York, 1932.
- HOME DESIGN, CONSTRUCTION & EQUIPMENT, by *Parker, Greensfelder and Bliss*. Edited by Gries and Ford. The President's Conference on Home Building and Home Ownership, Washington, D. C., 1932.
- HOMES OF OUR ANCESTORS, by *R. Halsey and E. Tower*. Doubleday, Doran & Co., New York, 1934.
- HOUSE AND HOME, by *Greta Gray*. J. B. Lippincott Co., Philadelphia, 1935.
- THE HOUSE: A MACHINE FOR LIVING IN, by *Anthony Bertram*. A. & C. Black Ltd., Inc., London, 1936.
- THE HOUSE FOR MODERN LIVING, by the Editors of *The Architectural Forum*. Harcourt, Brace & Co., New York, 1935.
- HOUSES FOR MODERATE MEANS, by *Randall Phillips*. Charles Scribner's Sons, New York, 1936.
- HOUSES IN AMERICA, by *Ethel Fay Robinson and Thomas P. Robinson*. The Viking Press, New York, 1937.
- HOUSES IN SOUTHEASTERN MASSACHUSETTS, Architectural monograph of Aymar Embury, II. R. F. Whitehead, New York, 1928.
- HOUSES OF STONE, by *Franzier Forman Peters*. Published by the author, Westport, Conn., 1933.
- HOUSES OF STONE, by *Franzier Forman Peters*. G. P. Putnam's Sons, New York, 1937.
- HOUSES PLANNED FOR COMFORT, by *G. Samson*. Crosby Lockwood & Son, London, 1934.
- INTERESTING SMALL HOMES. National Lumber Manufacturers' Association, Washington, D. C., 1935.
- LOST EXAMPLES OF COLONIAL ARCHITECTURE, by *John Mead Howells*. William Helburn, Inc., New York, 1932.
- MEDITERRANEAN DOMESTIC ARCHITECTURE IN THE U. S., by *Rexford Newcomb*. J. H. Jansen, Cleveland, 1931.
- THE MODERN HOUSE, by *F. R. S. Yorke*. The Architectural Press, London, 1934.
- MODERN SMALL COUNTRY HOUSES, by *Roger Smithells*. Charles Scribner's Sons, New York, 1937.
- MORE HOUSE FOR YOUR MONEY, by *Elizabeth Gordon and Dorothy Ducas*. William Morrow & Co., Inc., New York, 1937.
- ONE HUNDRED NEW HOMES, by *R. C. Hunter*. Published by the author, New York, 1931.
- PLANNING FOR SUNSHINE AND FRESH AIR, by *Alfred Hopkins*. Architectural Book Publishing Co., New York, 1931.
- PORTRAITS OF TEN COUNTRY HOUSES, by *Delano and Aldrich*. William Helburn, Inc., New York, 1930.
- REMODELING AND ADAPTING THE SMALL HOUSE, by *H. D. Eberlein and D. G. Tarpley*. J. B. Lippincott Co., Philadelphia, 1933.
- ROOFTREES, by *Philip Lippincott Goodwin*. J. B. Lippincott Co., Philadelphia, 1933.
- SMALL COLONIAL HOUSES, by *Peter A. Pundar*. R. F. Whitehead, New York, 1931.
- SMALL COUNTRY HOUSES, by *L. Weaver*. Country Life, New York, 1935.
- SMALL HOMES OF ARCHITECTURAL DISTINCTION, by *Robert T. Jones*. Harper & Bros., New York, 1929.
- A SMALL HOUSE IN THE SUN, by *Samuel Chamberlain*. Hastings House, New York, 1936.
- SMALL HOUSES AND BUNGALOWS, by *Frederick Chatterton*. Architectural Press, London, 1932.
- SMALL STONE HOUSES OF THE COTSWOLD DISTRICT, by *E. A. Ruggles*. J. H. Jansen, Cleveland, 1931.
- SOME HOUSES OF COLONIAL MARYLAND, by *John H. Scarff*. R. F. Whitehead, New York, 1930.
- SOUTHERN ARCHITECTURE ILLUSTRATED. Foreword by Lewis E. Crook. Introduction by Dwight James Baum. Harman Publishing Co., Atlanta, Ga., 1931.
- SPANISH COLONIAL OR ADOBE ARCHITECTURE OF CALIFORNIA, 1800-1850, by *Donald R. Hannaford and Revel Edwards*. Architectural Book Publishing Co., Inc., New York, 1931.
- STUCCO HOUSES, by *H. T. Child*. Published by the author, 16 East 41st Street, New York. Revised edition, 1936.
- SUCCESSFUL HOUSES AND HOW TO BUILD THEM, by *C. E. White, Jr.* The Macmillan Co., New York, 1931.
- TWENTIETH-CENTURY HOUSES, by *Raymond McGrath*. Faber & Faber, Faber, Ltd., London, 1934.

## MAGAZINES PUBLISHED ON THE SUBJECT OF THE HOME

- AMERICAN HOME, THE. Published by the Country Life-American Home Corporation, 444 Madison Avenue, New York City, N. Y. Subscription rate: \$1.00 for one year.
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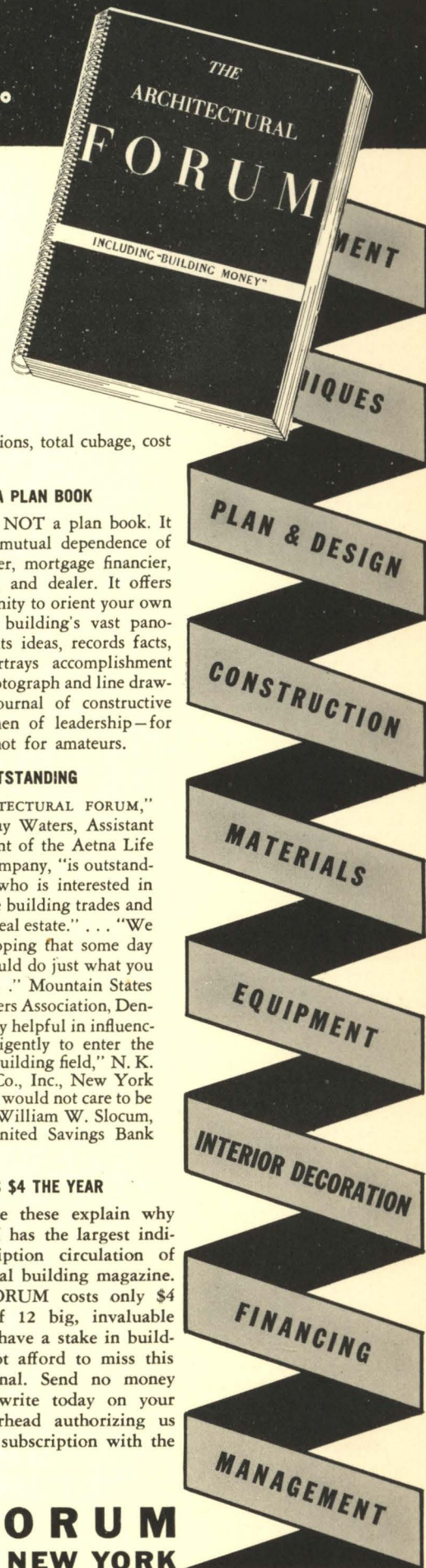
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