

*THE*  
ARCHITECTURAL  
FORUM

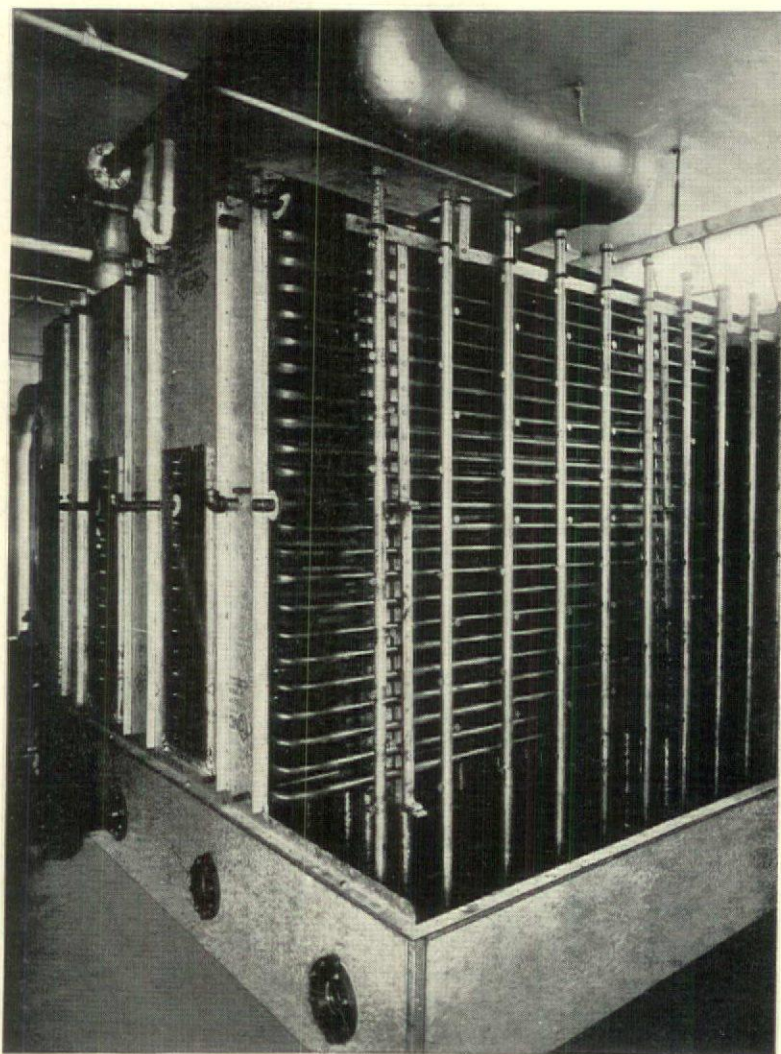
UNIVERSITY OF HAWAII  
LIBRARY  
INCLUDING "BUILDING MONEY"

OCTOBER, 1935

SMALL HOUSE REFERENCE NUMBER



Based on past performance  
**TONCAN IRON**  
is again specified for Air Washer



Five years ago, a large drug manufacturer installed an ammonia evaporator in an air washer. The material selected for both pipe and sheets was Toncan Iron. Recently, a similar installation was needed in the same plant. The performance of Toncan Iron during the last five years caused it to be specified for the new unit.

Service conditions such as are encountered in an installation of this sort are severe—air and moisture combine forces to tear down the ferrous structure. But Toncan Iron is not an ordinary metal. Refined open hearth iron, copper and molybdenum are here combined to form an alloy that possesses the highest rust-resistance of any ferrous metal in its price class. It often takes years for users to find out how superior Toncan Iron really is—how much more economical it is in service.

You'll find the story of Toncan Iron in "The Path to Permanence," if you're interested in sheets, and in "Pipe for Permanence," if pipe troubles worry you. Either, or both books, sent on request.

Republic Steel  
CORPORATION  
GENERAL OFFICES · · · YOUNGSTOWN, OHIO





# OCTOBER 1935

UNIVERSITY OF HAWAII  
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## PROGRESS MAY BE REPORTED

50

The depression provides impetus for wide gains straight across the housing front—what those gains are and how they affect the American home.

## THE SMALL HOUSE: 1935

228

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233

A panoramic view of contemporary U. S. homes . . . All sections . . . All styles . . . All within the price range eligible for FHA insured mortgages . . . All complete with interior-exterior photographs, floor plans, critical comment, cost data, and specifications . . . And all designed by architects.

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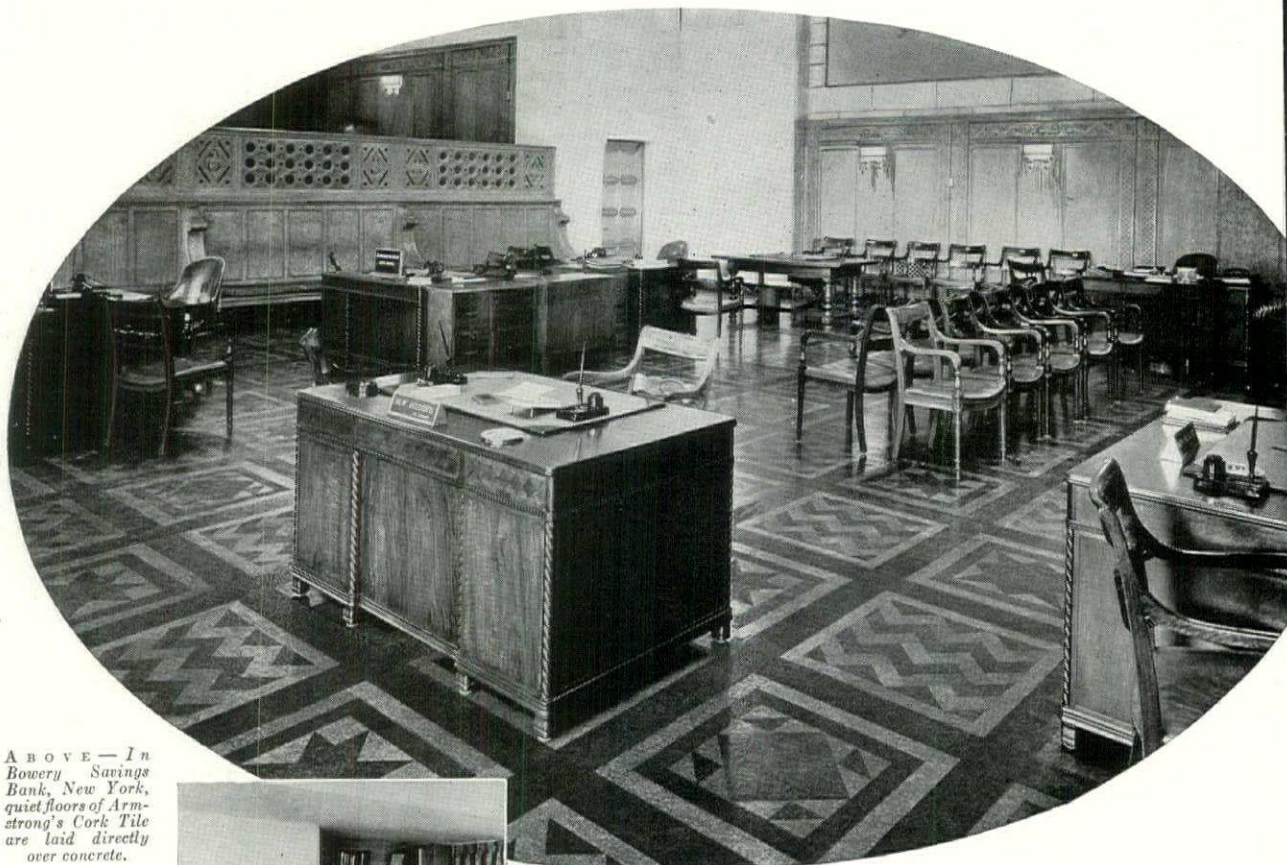
A new line of surface wiring to facilitate additional outlets with a maximum of convenience . . . Gas-fired boiler unit designed for steam, hot water and vapor heating . . . Standardized, low priced, double hung steel windows and a new casement window for residences.

*Editor, HOWARD MYERS, Managing Editor, RUTH GOODHUE, Associates, JOHN CUSHMAN FISTERS, ALAN JACKSON, ERNEST BORN, MAX FORESTEL, GEORGE NELSON, PAUL GROTZ, MADELAINE KROLL. THE ARCHITECTURAL FORUM is published monthly by Rogers and Manson Corporation, Howard Myers, President; Roy E. Larsen, C. D. Jackson, Vice Presidents; W. W. Commons, Secretary; Charles L. Stillman, Treasurer, Publication Office, 160 Maple Street, Jersey City, N. J. Executive, Editorial and Advertising Offices, 135 East 42nd Street, New York, Business Manager, Sheldon Luce, Advertising Manager, George P. Shutt, Circulation Manager, R. W. Chastaney, Jr., Subscription Office, 350 East 22nd Street, Chicago, Illinois. Address all editorial correspondence to 135 East 42nd Street, New York. Yearly Subscription, Payable in Advance, U. S. and Possessions, Cuba, Mexico, South America, \$4.00. Canada, \$5.00. Canadian duty 60c. Elsewhere \$6.00. Single issues, including Reference Numbers, \$1.00. All Copies Mailed Flat. Trade Supplied by American News Company and Its Branches. Copyright 1935, Rogers and Manson Corporation.*



# CORK

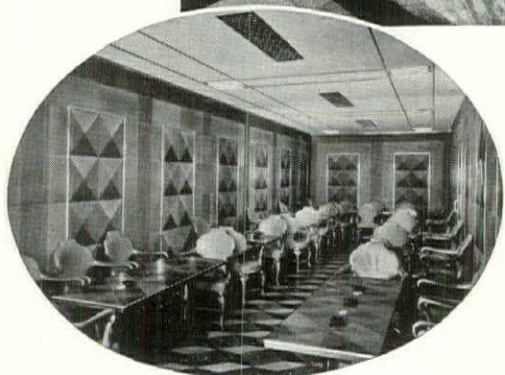
....combines **BEAUTY** and **SILENCE** in floor



ABOVE—In Bowers Savings Bank, New York, quiet floors of Armstrong's Cork Tile are laid directly over concrete.

RIGHT—This cork floor in the model library of Barker Bros., Los Angeles, shows the possibilities of Armstrong's Cork Tile in homes.

BELOW—In Pittsburgh's smart Duquesne Club bar, the floors, walls, and ceilings are Armstrong's Cork Tile.



WHERE silence is golden . . . in hospitals, libraries, banks, and private homes . . . you can insure quiet with floors of sound-absorbing cork tile. Armstrong's Cork Tile is made of pure resilient cork containing millions of dead-air cells to hush footsteps and muffle reverberation.

Yet for all its resilience, Armstrong's Cork Tile is exceptionally durable. Right now, it is demonstrating its wear-resistance in hundreds of busy public buildings. Simple washing and waxing keep

it clean and beautiful for years.

Finally, Armstrong's Tile lends itself to all manner of delightful designs. Its three warm tones of "cork brick" offer you a wide range of decorative possibilities. See Section 15, Catalog 35, pages 20 and 21—and write now for samples and a file-sized copy of "Armstrong's Cork Tile Floor." Armstrong Cork Products Company, Building Materials Division, 1204 State Street, Lancaster, Penna.

## Armstrong's

## CORK TILE FLOOR

THE ARCHITECTURAL FORUM

Published monthly by Rogers and Manson Corporation, Howard Myers, President. Publication Office, 160 Maple Street, Jersey City, N. J. Yearly Subscription: U. S. A., Insular Possessions and Cuba, \$4.00. Canada, \$5.00. Canadian duty, 60c. per year additional. Foreign Countries in the Postal Union, \$6.00. Single issues, including Reference Numbers, \$1.00. Entered as Second Class Matter at the Post Office at Jersey City, N. J., under the Act of March 3, 1879. Additional entry at New York, N. Y. Copyright, 1935, Rogers and Manson Corporation.

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VOLUME 7  
Number



# THE MONTH IN BUILDING

**VOLUME.** For the eighth successive year, residential building shot out in front of last year's figures, bringing the total for the year to nearly \$300,000,000. Against a paltry \$18,641,000 for August, the total for August of this year was \$28,000.

The newspaper advertisements of oper- builders boasting of FHA financing were not already convinced the skeptical public. This newest of U. S. agencies was not, the figures for August would have proved it. Remodeling loans reached a new high of \$24,240,035 for the month, and new applications for insurance under Title II amounted to \$32,073,949.

**USING BONDS.** Financial institutions were still waiting last month for details of the new type of housing finance with which the Administration is trying to turn the job of low cost housing back to private enterprise. As reported last month, it hinged on the insurance by the FHA of mortgage bonds underwritten by banks and sold to the general public. Carrying a probable yield of 4 or 4½ per cent, and indirectly guaranteed by the Government through its guarantee of mortgages issued in exchange for defaulted mortgages, they were expected to be as popular in Wall and La Salle streets as Governments and municipals. However successful as a stimulus to building the new plan may be, it is regarded as a reflection of the Government's decision to withdraw as quickly as possible from the field of direct lending or spending. Although the new financing is part of the FHA, it has been prepared with the full collaboration of all the mortgage and financing agencies of the Government. (See p. 441.)

**ARTISTICAL NOTE.** Buried in the unimportant sections of the nation's newspapers last month appeared this item concerning the world's biggest architectural client: the Castel Gandolfo, Italy, Sept. 26.—Pope Pius XI spoke his disapproval of modern architecture for Catholic churches today. Advising the French delegates to the International Architects' Congress, he told them that their art should 'glorify the church,' and that 'unfortunately' modern architecture did not meet the requirements of religion."

Although modern architecture might not be for churches, it apparently will do for residences, if a *Fortune* survey of opinion can be accepted as evidence. Not among the readers, but among the rank and file

it had investigators sent out to ask whether they would build modern or Colonial houses. The replies were 56 per cent for Colonial, 42 per cent for Modern. Two per cent were undecided.

**MORTGAGE MARKET.** The same brokerage house in Wall Street (see p. 453) was responsible last month for two encouraging reports, one a fact, the other a well-founded rumor. The fact was that it made the first offering of FHA mortgages with good results, and the rumor was that it had just about completed arrangements for the formation of a National Mortgage Association, with funds supplied by several important building manufacturers.

The steady increase of available mortgage money continued. In Philadelphia, a timid inquiry by an architect to the FHA as to whether money might be forthcoming for an apartment house he had on the boards brought the representatives of three banks to his office the next day. In New York, the Bowery Savings Bank, along with other less potent but none the less eager institutions, continued to advertise its willingness to lend.

As yet, however, no national banks were taking the active part in mortgage lending that is expected of them once they digest the real estate provisions of the new Banking Act. Most of the larger New York banks had tentatively decided to try a few local loans, but few were thinking seriously of doing a nationwide business, such as is permitted in the Act.

**HYPODERMIC.** Just as true as one picture is worth a thousand words, so one house is worth a thousand pictures. Belief in this principle inspires hundreds of model dwellings each year; and next year it will inspire an ambitious series of home shows jointly sponsored by the Government and private industry.

The plan grew out of the wreckage of the Housing Caravan, a promotion stunt conceived last winter, which was to have consisted of a half a dozen elaborately equipped motor floats, moving from town to town selling better housing. Next year, if the sponsors carry out a suggestion of Secretary Morgenthau, the traveling shows will ride in streamlined trains. And besides, six permanent shows will be set up in major cities.

To work out the details, a committee of manufacturers, headed by Russell Crevison of the Crane Company, and Marshall Adams of the American Radiator Company, are collaborating with the National

Association of Real Estate Boards, father of the plan. Funds to promote it will be private funds, the Government's contribution being simply its blessing.

**RENTS AND OCCUPANCY.** Most brokers and managing agents were well satisfied as they looked over their rental charts just as the October 1 renting season was ending. Scattered reports from all sections of the country indicated a further reduction of vacancies and a lifting of renting prices.

As it must be, improvement was far from uniform. The Southwest and West reported the most progress, New England the least. The Middle Atlantic States showed slight but encouraging advances, with the Midwest somewhat stronger.

Estimated increase of rents for the past year reported by the Federal Home Loan Bank:

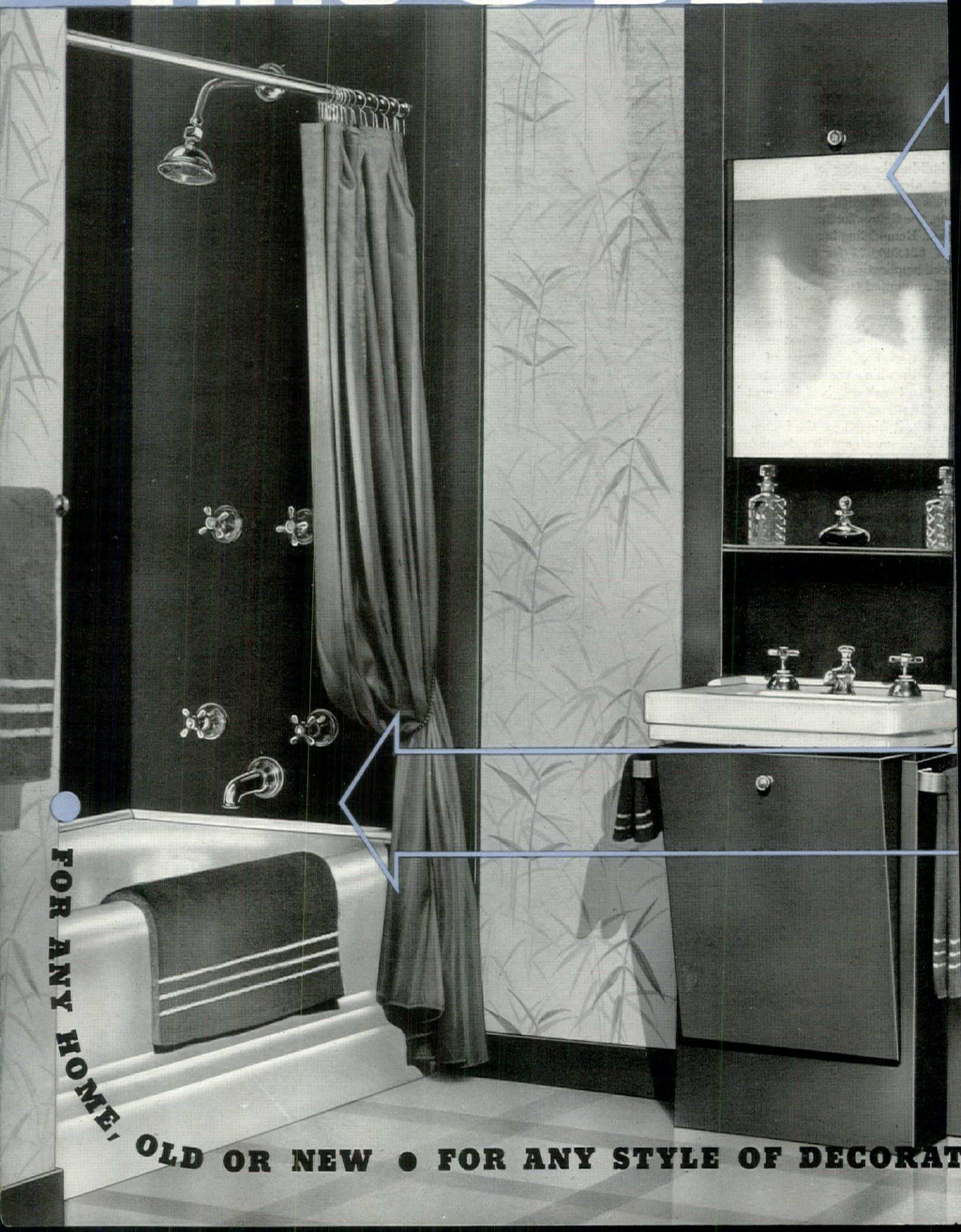
State	Occu-pancy	Increase	State	Occu-pancy	Increase
Me.	87.5%	None	Tenn.	94%	9%
Mass.	92%	2%	Ill.	95%	7.4%
R. I.	90%	1.7%	Wis.	97.5%	13%
N. H.	91%	None	Mich.	95%	13.2%
Vt.	98%	None	Ind.	95.7%	8.8%
Conn.	93%	None	Kan.	96.5%	10.4%
N. Y.	92.8%	3.6%	Colo.	97%	13.7%
N. J.	91.2%	5%	Minn.	97%	7%
Md.	95.6%	6.2%	N. D.	98.7%	13.7%
Del.	98.8%	3%	S. D.	98%	7%
Va.	92.8%	6.6%	Neb.	96.4%	11%
Penna.	94.8%	5%	Ia.	93%	9%
W. Va.	97.5%	9%	Tex.	96%	8.7%
Ohio	94%	9.2%	Okla.	97%	11.4%
Ala.	95%	8.6%	N. Mex.	98%	4%
N. C.	98.4%	8%	Cal.	94%	8.3%
S. C.	98.4%	6%	Wash.	93.2%	12%
Fla.	92%	15%	Ore.	94.2%	12.8%
Ga.	97%	7.6%	Mont.	96.3%	7%
Mo.	94%	5.87%	Nev.	94%	10%
La.	95%	5.35%	Utah	97%	
Ark.	92.5%	11%	Idaho	98.6%	14.4%
Miss.	98%	14.3%	Wyo.	97%	20%
Ky.	94%	4.66%	Ariz.	95%	5%

**COME TO THE FAIR.** With a theme far less inspirational than the "Century of Progress," New York announced its intention last month of outdoing Chicago with a fair of its own in 1939. The purpose: to do honor to the memory of George Washington whose inauguration as President will have been a 150-year-old event by that time. The site: a broad swamp-land in the borough of Queens, which to fill in and build upon will cost about \$40,000,000. When the fair ends, the site will be converted into a permanent park and playground.



# ARCODE

UNIT PANELS



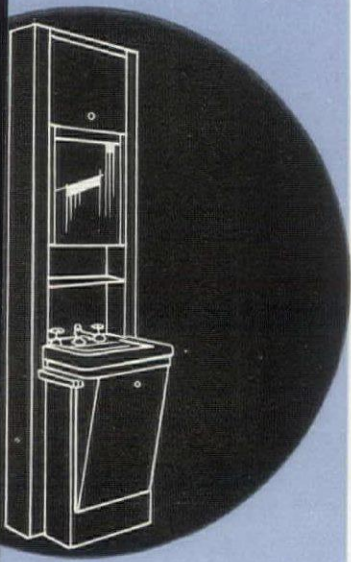
FOR ANY HOME, OLD OR NEW • FOR ANY STYLE OF DECORATION



# MAKE THE

# BATHROOM

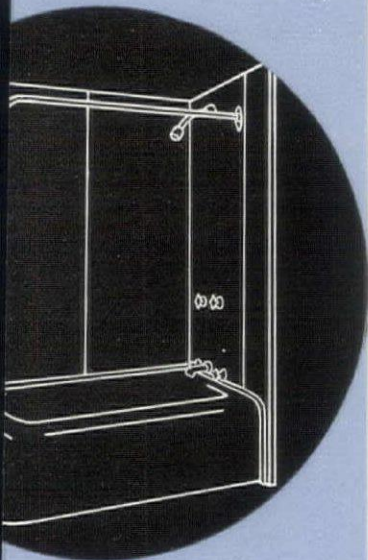
# MODERN



## ARCODE

### LABORATORY UNIT

... medicine cabinet, shaving  
... towel hamper, non-slip towel  
... shelf, supply cabinet and  
... china lavatory. Width and  
... standard. Three models—  
... ended and corner—provide  
... suit every structural require-  
... ment in color.



## ARCODE

### BATH UNIT

... anchored to each other and  
... and floor, Arcode Panels and  
... a permanently leakproof unit.  
... wall hung. Piping is accessible  
... moving a panel. Arcode panels  
... type of cast-iron vitreous  
... tub: recess, corner or square.

**Erect the panels to suit your plan.**

**Finish the rest of the room in any wall covering—washable or otherwise.**

● The many advantages of Arcode Unit Panels are making them the choice of architects and builders in present construction and modernization work. Each panel is a completely engineered waterproof wall section. It fastens directly to the studding or over the old wall. Every joint is permanently leakproof. The entire installation is forever free from the hazards of settling or leakage.

The design of Arcode Panels is in the best tradition of modern beauty... the beauty of compactness, of clean lines and surfaces. With their rich colors, they fit into any scheme of decoration; allow you wide choice of other wall coverings, washable or otherwise, to make each bathroom an individual triumph.

The development of Arcode Panels is the result of four years of research by the Bureau of Design Development of the American Radiator Company. They are backed by the world's largest manufacturer of domestic engineering equipment. To today's bathroom, as well as tomorrow's, the Arcode System

brings the first real engineered advance in construction methods and materials. A group of practical rooms has been arranged in our showroom. See them. Or write for literature.

### A Few Recent ARCODE Installations

Stoneleigh Court Apartments, Washington, D. C.

Hotel Astor, New York City

Huntington Residence, Princeton, N. J.

American Houses Inc., New York City

Model House, New Rochelle, N. Y.

Betty Lewis Apartments, Fredericksburg, Va.

Chas. Morrison Curtis Residence, Summit, N. J.

America's Little House, New York City

Model Home, Short Hills, N. J.

Margaret E. Bowen, Modern Steel Homes,  
Wichita Falls, Texas

Dormitory, Swarthmore College

## THE ACCESSORIES CO., INC.

Division of AMERICAN RADIATOR COMPANY

40 WEST 40th STREET • NEW YORK, N. Y.

# ARCODE

## SYSTEM OF FABRICATED BATHROOM PANELS



# And again at San Diego . .



Casa de Tempo, front elevation. Masonite Structural Insulation and Masonite Insulating Lath assure a warmer house in winter and a cooler house in summer. Architects, Jackson & Hamill, San Diego. General Contractor, Parish Bros., Los Angeles. Consulting Engineer, R. F. Hollman. Interior Decorator, R. D. Harrell.

## GENUINE MASONITE TEMPERED PRESWOOD POINTS THE WAY TO THE FUTURE

MILLIONS of feet of Genuine Masonite Tempered PRESWOOD went to A Century of Progress . . . and wrote new pages in building-history. Now this modern material is at The California-Pacific International Exposition, giving additional proof of its ability to produce beautiful, lasting interior and exterior surfaces . . . *inexpensively*.

Among the many interesting uses of Genuine Masonite Tempered PRESWOOD at San Diego, perhaps the most dramatic is in Casa de Tempo, a delightful adaptation of the California Monterey dwelling. In entrance hall, library and bedroom its natural warm-brown finish blends with the most modern decorative schemes and devices to provide floors, walls and ceilings of unusual charm. The kitchen is attractively walled with Genuine Masonite Tempered PRESWOOD—enameled to produce realistic tile effects.

The entire home is insulated with Masonite. Masonite Structural Insulation is used for sheathing and

floor-deadening, and Masonite Insulating Lath is used as plaster base throughout.

Casa de Tempo illustrates the reason architects, home owners and industries are specifying Genuine Masonite Tempered PRESWOOD for new-building and remodeling. It is grainless . . . moisture-resisting. Uniform in quality. Will not warp, chip, split or crack. Can be installed by regular carpenter—decorated with any standard application by regular painter. Obtainable from leading lumber dealers everywhere in  $\frac{1}{8}$ ",  $\frac{3}{16}$ " and  $\frac{1}{4}$ " thicknesses.

Genuine Masonite Tempered PRESWOOD is performing hundreds of jobs for individuals and industries today . . . *and saving money*. Perhaps it can help you solve your construction problems and reduce your costs. Write us for a free sample, and any technical information you may wish. Address: Masonite Corporation, 111 West Washington Street, Chicago, Illinois.



## Genuine

## MASONITE TEMPERED PRESWOOD AND INSULATION

QUARTRBOARD • TEMPRTILE • CUSHIONED FLOORING • STRUCTURAL INSULATION



# HERE'S WHAT 9,700 ARCHITECTS STARTED LAST SPRING

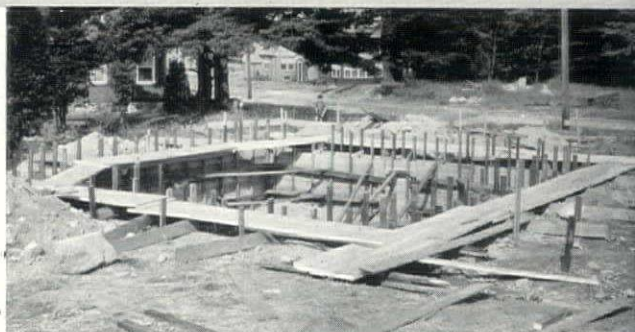
*Hundreds of "New American" homes  
springing up the country over—showing  
the importance of the architect in  
better small-house design*

are two unusual things about  
G-E nationwide architectural  
on held this year: First, it  
the idea of the "New Ameri-  
of home. Second, the idea  
fact, and hundreds of "New  
homes have actually been  
ver the country for exhibition.  
e homes built to *live in* as well  
at . . . in which the *inside*,  
family *lives*, is planned before  
e is designed. As such, it fea-  
dern, health-promoting and  
ng equipment, maximum use  
e space, and quality construc-  
ghout. It is a home in which  
d bring up children in comfort  
health, with the greatest

possible leisure and the least possible  
labor and expense.

This "New American" movement rep-  
resents one of the greatest organized  
boosts that building has had since the  
war. The homes are built and financed  
by local builders, and supervised by local  
architects. Both the architect and the  
building industry are benefited. And  
whatever helps them helps us, because  
we make all the electrical appliances  
necessary to equip an up-to-date home.

But the really vital thing about these  
homes from an architect's standpoint is  
the way they emphasize the importance  
of the architect in planning a house. The  
magazines and newspapers think so, as  
you will see by the following pages.



*Under construction at Lynnfield, Mass.—  
G-E "New American" Design No. 4  
Architect—Ralph B. Higgins, New York*



*A G-E "New American" home under construction in  
the Cleveland area*



**50,000 VISITORS IN 8 DAYS!**  
*"New American" home at Marblehead, Mass.—first  
completed in the country—had 50,000 visitors within the  
days—and a steady stream of people has been going  
there ever since • Royal Barry Wills, Architect.*

## Some cities where "New American" homes are being built

Birmingham, Ala.	Ft. Wayne, Ind.	Meridian, Miss.	Nassau Co., N. Y.	Reading, Pa.
Phoenix, Ariz.	South Bend, Ind.	Corinth, Miss.	Queens Co., N. Y.	Pittsburgh, Pa.
Tucson, Ariz.	Davenport, Iowa	Columbus, Miss.	Richmond Co., N. Y.	Washington, Pa.
Sacramento, Cal.	Des Moines, Iowa	Kansas City, Mo.	Rockland Co., N. Y.	Philadelphia, Pa.
San Jose, Cal.	Dubuque, Iowa	St. Louis, Mo.	Westchester Co., N. Y.	Bradford, Pa.
Los Angeles, Cal.	Louisville, Ky.	Omaha, Neb.	Wellsville, N. Y.	Williamsport, Pa.
Yuba City, Cal.	Hays, Kansas	Reno, Nevada	Schenectady, N. Y.	Providence, R. I.
Denver, Col.	Topeka, Kansas	Derry, N. H.	East Aurora, N. Y.	Columbia, S. C.
Hamden, Conn.	New Orleans, La.	Manchester, N. H.	Oneonta, N. Y.	Charleston, S. C.
Waterbury, Conn.	Baton Rouge, La.	Haledon, N. J.	Utica, N. Y.	Greenville, S. C.
New Haven, Conn.	Shreveport, La.	Bound Brook, N. J.	Cleveland, Ohio	Spartanburg, S. C.
Washington, D. C.	Lake Charles, La.	Paterson, N. J.	Dayton, Ohio	Memphis, Tenn.
Tampa, Fla.	Covington, La.	Westfield, N. J.	Columbus, Ohio	Nashville, Tenn.
St. Petersburg, Fla.	Baltimore, Md.	Allendale, N. J.	Alliance, Ohio	Houston, Texas
Jacksonville, Fla.	Gardner, Mass.	Short Hills, N. J.	Akron, Ohio	El Paso, Texas
Miami, Fla.	Boston, Mass.	Chatham, N. J.	Canton, Ohio	San Antonio, Texas
Orlando, Fla.	Marblehead, Mass.	Clifton, N. J.	Portsmouth, Ohio	Fort Worth, Texas
Lakeland, Fla.	Lynn, Mass.	Auburn, N. Y.	Fremont, Ohio	Dallas, Texas
Atlanta, Ga.	Worcester, Mass.	Saranac Lake, N. Y.	Tiffin, Ohio	Austin, Texas
Athens, Ga.	Lynnfield, Mass.	Plattsburg, N. Y.	Findlay, Ohio	Corpus Christi, Texas
Macon, Ga.	Pontiac, Mich.	Rochester, N. Y.	Staubenville, Ohio	Salt Lake City, Utah
Savannah, Ga.	Kalamazoo, Mich.	Syracuse, N. Y.	E. Liverpool, Ohio	Rutland, Vt.
Augusta, Ga.	Detroit, Mich.	Fulton, N. Y.	Cincinnati, Ohio	Burlington, Vt.
Wheaton, Ill.	Grand Rapids, Mich.	Binghamton, N. Y.	Toledo, Ohio	Richmond, Va.
Chicago, Ill.	Flint, Mich.	Buffalo, N. Y.	Hamilton, Ohio	Spokane, Wash.
Aurora, Ill.	Sault Ste. Marie, Mich.	Niagara Falls, N. Y.	Portland, Oregon	Fairmont, W. Va.
Peoria, Ill.	St. Paul, Minn.	Albany, N. Y.	Charlotte, N. C.	Clarksburg, W. Va.
Springfield, Ill.	Jackson, Miss.	Troy, N. Y.	Winston Salem, N. C.	Parkersburg, W. Va.
Jacksonville, Ill.	Gulfport, Miss.	Gloversville, N. Y.	Burlington, N. C.	Milwaukee, Wis.
		Kings Co., N. Y.		



**SEE  
NEXT  
PAGES**

**GENERAL  ELECTRIC**



# EDITORS CONSIDER "NEW

**BETTER HOMES & GARDENS**  
*Electrified Living*  
 Designed by Stephen J. Allen, the "New American" home was a first in a \$21,000 architectural contest.  
 By Carol Hamilton

**BETTER HOMES & GARDENS.**  
 Featuring a "New American" home in September issue.

**AMERICAN HOME.** Featuring one of the homes on cover and inside the October issue.

**WOMAN'S HOME COMP.**  
 Featuring a "New American" November issue.

**GOOD HOUSEKEEPING.** In its September issue, three pages feature "Houses With All the Comforts of Home."

**LADIES' HOME JOURNAL.** November issue illustrates "New American" home they cooperated in building.

**HOUSE BEAUTIFUL.** Two featured in October issue of this magazine.

**McCALL'S.** A cover and three pages in the October issue. More coming in November.

**ESQUIRE.** See what has to say about "New American" November

## "New American" Plan a Help to Architects

It is a great advantage to architects to be able to deal with one reputable manufacturer for all the electrical equipment in a home—as has been the case in the "New American" homes.

### List of Basic G-E Equipment used in the "New American" Home

- G-E Air Conditioning
- G-E Automatic Heat
- G-E Electric Kitchen
- G-E Electric Laundry
- G-E Lighting
- G-E Wiring

# GENERAL ELECTRIC



# "AMERICAN" HOME NEWS

So magazines and newspapers all over the country are featuring it editorially

ONE of the surest tests of public interest in anything is the editor's "nose for news." It is significant to note that ten different national magazines are devoting from two to six pages each to the "New American" home in their October and November issues—that newspapers all over the country have picked it up and featured it—even to the extent of special pages and sections.

As far back as its May issue, *House & Garden* built and reproduced two models of prize-winning houses. They will again feature these houses in October, and are planning an educational program with leading department stores. *McCall's Magazine* is featuring one of the prize-winning designs on its Home Making Section cover and in three pages of its October issue, and will feature another of the houses in November. This magazine also built a reproduction of the living and dining rooms of one house, shipped them to the Furniture Mart in Chicago for the Summer

Furniture Exposition. It is displaying models of the houses—giant illustrations of the rooms in the lobbies of 60 Chicago motion picture theatres. The American Home is featuring one of the houses on the cover and inside of its October issue, and also erected several rooms of this house at the Furniture Mart.

*Ladies' Home Journal* began in its July issue a campaign to promote the idea of designing houses "from the inside out." They are cooperating also in the construction of a "New American" home in Larchmont, N. Y., which will be illustrated in the November issue.

These are only a few of the things that are being done by the magazines and newspapers, but they illustrate the interest, and the definite action, that the "New American" home idea has aroused all over the United States. But that isn't all, either. Turn this page for more information.

**TOR.** November issue will feature a "New American" home.

**HOUSE & GARDEN.** Built models of and featured two houses in May issue. More in October.

## NEWSPAPERS

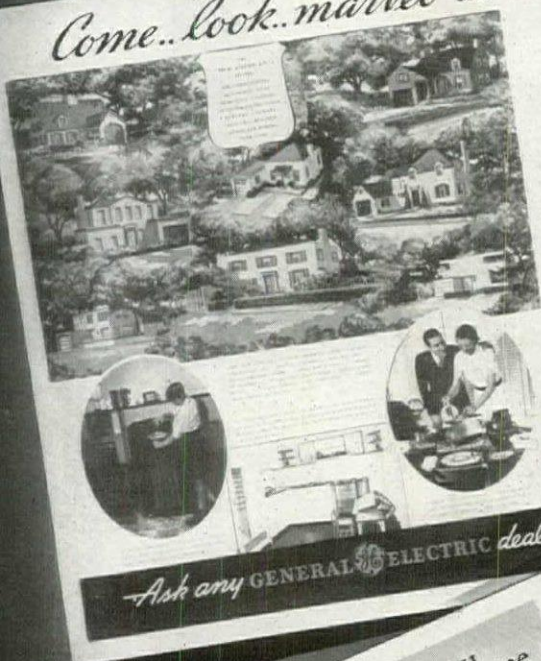
All over the country newspapers have featured the "New American" home—even to the extent of special pages and sections.

GENERAL  ELECTRIC



# SPECIAL NATIONAL ADVERTISING ON "NEW AMERICAN" HOME *reaches 13,000,000 people*

*Come..look..marvel* at the "New American" Home  
Hundreds of these demonstration homes are now nearing completion all over the country... one will be open for exhibition near you this month



G-E uses 16 magazines to tell the public the "New American" story...local newspapers will also be used

NEVER before has General Electric concentrated so much advertising in any single month on one campaign.

This advertising goes into details on the "New American" home story, adds to the other work being done to arouse the curiosity and interest of the public in these homes, and in addition, encourages home construction in general. The advertising invites the public to visit the nearest "New American" home. May we invite you to do the same, and to communicate with us for any further information you may desire? Address General Electric Company, Demonstration Home Department, 570 Lexington Avenue, New York, N. Y.

You are invited by  
**GENERAL ELECTRIC**  
to visit the "New American" Home

Designed from the inside out, to demonstrate the new concept of better living, hundreds of these homes will be on exhibition all over the country during October.



Features of the "New American" Home include air conditioning, electric lighting, modern lighting, automatic heat, and more.

In the "New American" Home, the general is built by General Electric.

Scientific lighting is an important part of the "New American" Home.

What the "New American" Home means to the Architectural Profession



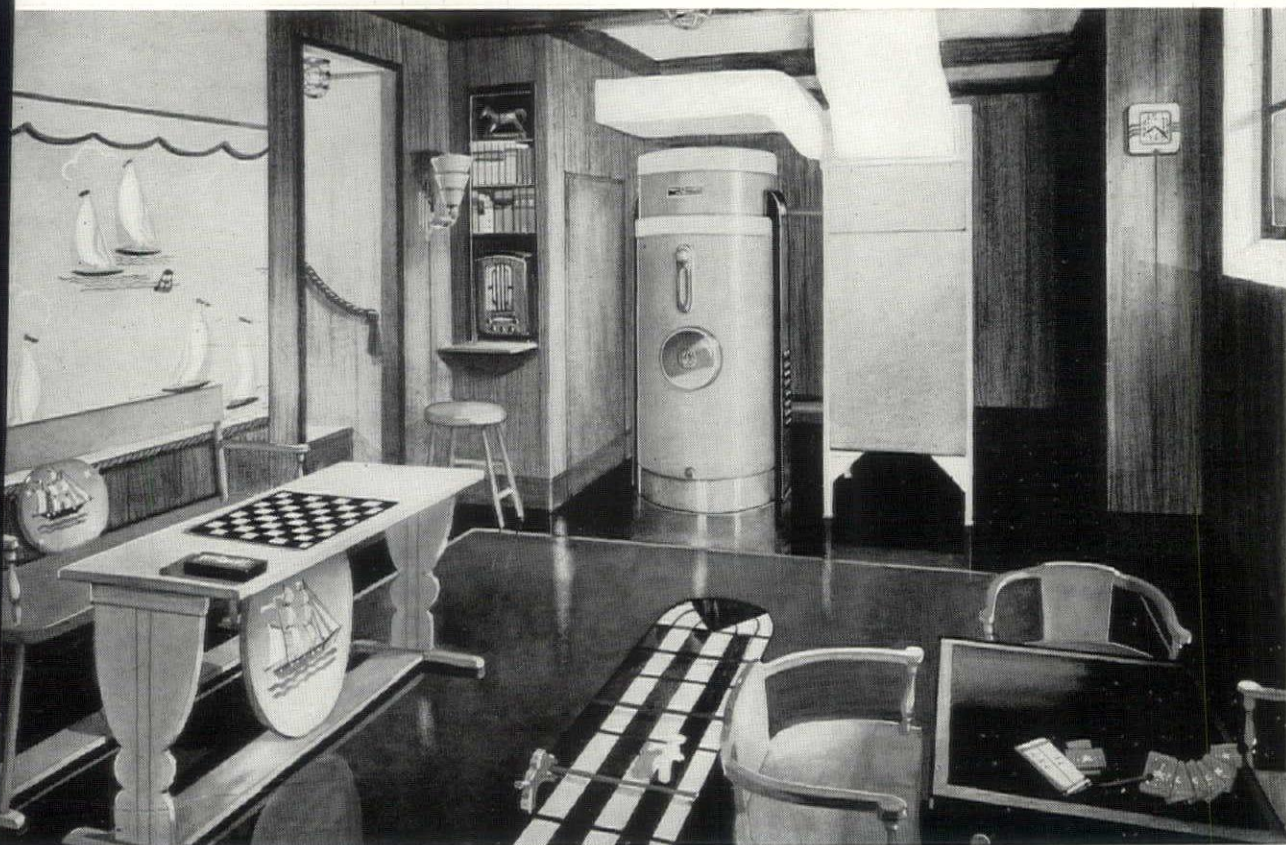
GENERAL ELECTRIC

GENERAL  ELECTRIC



# How one Designer Planned a Basement

## WITH *General Electric Air Conditioning*



THE man who designed this basement game room for a "New American" home tells us he had a lot of pleasure in doing it. Inspired by the compactness and efficiency of the G-E Oil Furnace and the straight, clean lines of the G-E Air Conditioning unit, he formed a fitting paneled alcove by an ingenious closet arrangement. One closet is housed the household water tank. In the other the condensing unit for cooling.

The flexibility, long life and lower operating costs of G-E Air Conditioning equipment appeal to every architect. It is adaptable to new homes or old. One room, one floor or an entire house may be adequately conditioned.

There may be a split system which permits of radiators where wanted and conditioned air through grilles in the other rooms. You have wide latitude in planning.

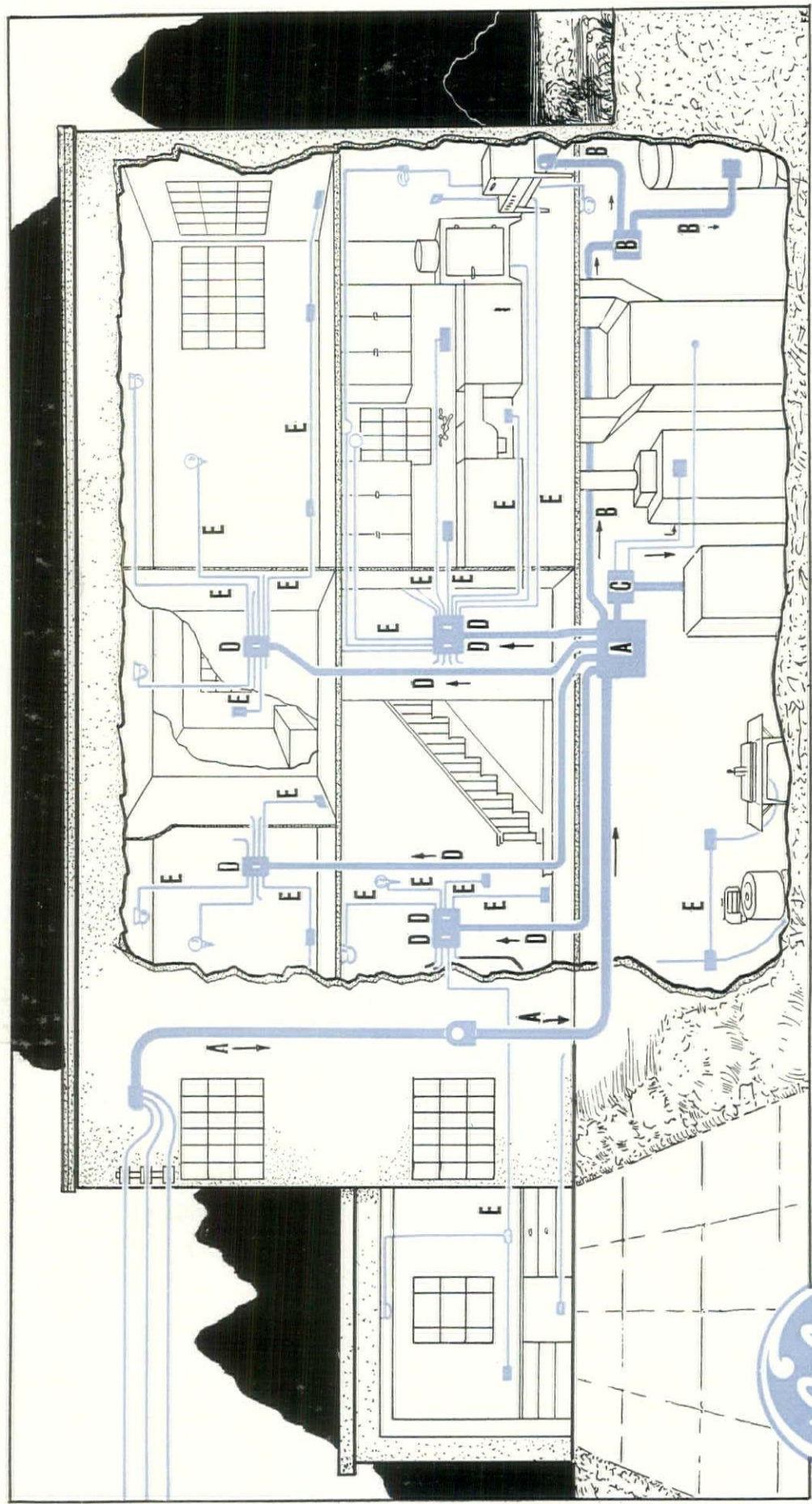
Your local G-E dealer with trained air conditioning specialists will supply you with all the engineering aid required, take full responsibility for installation, performance and service.

For quick specification data see your Sweet's Catalog. For surveys, estimates or more detailed information call either on the G-E dealer or write direct to General Electric Company, Air Conditioning Department, Division 32015, Bloomfield, New Jersey.

**GENERAL  ELECTRIC AIR CONDITIONING**



# "NEW AMERICAN" HOME WIRING SYSTEM



© 1935, General Electric Co., Bridgeport, Conn.

## GENERAL ELECTRIC WIRING SYSTEM



# PRESENTING

## THE G-E RADIAL WIRING SYSTEM

**Satisfy The Electrical Requirements of Your Modern Homes**

... drawing boards of architects the country over, modern homes are being designed. Whether their architecture is modern or traditional, they have one thing in common . . . they are all-electric homes. Your clients demand electric ranges, laundries, air-conditioning, and other labor-saving appliances. Perhaps they cannot install them all now, but they want all-electric homes as soon as possible. To do this economically and efficiently, the architect must carefully plan the wiring system, through which the electricity flows, . . . consider the electrical requirements for present and future needs.

To help you meet such broad specifications, General Electric Engineers have developed a revolutionary new wiring system. It is being built into all the General Electric sponsored "New American" Homes now under construction throughout the country.

### *The New G-E Radial Wiring System*

The G-E Radial Wiring System offers many advantages to home owners. It is simple in design and construction. It reduces voltage losses to the minimum, making the current paid for do useful work without waste. It provides a safe, efficient circuit breakers at convenient points throughout the house. These circuit breakers act also as switches and are so compact as to actually fit in standard outlet boxes. And when additions or changes are necessary in the future, they can be made easily and inexpensively.

The Radial Wiring System is based on the principle of sub-circulating branch circuits arranged in radial runs from circuit breakers. This decentralized distribution system eliminates the obviously poor practice of placing a large number of outlets on a branch circuit. It substitutes many feeders to convenient points throughout the house where it places controls for the radial circuits. It is adequate in copper, using wire sizes suited to modern loads. All details, of course, conform to National Electrical Code requirements.

On the schematic drawing, you can see exactly how the G-E Radial Wiring System functions. The specifications call for an all-electric home with major fixed appliances and a complete outlet and lighting system with modern switching. The wires marked A designate the service entrance cables going through the meter to the Totalizing Unit in the cellar. For all-electric homes, these should never be less than three No. 4's. The circuit marked B is a sub-feeder to the range and water heater made up of not less than three No. 8 conductors properly fused at the Totalizing Unit. A limiter device in this circuit cuts off use of water heater while range is in operation. The

sub-feeder circuits C of No. 10 wires lead from Totalizing Unit A to the Air-conditioning Panel from which the air-conditioning equipment is run.

The risers, labeled D consist of No. 10 conductors. They lead direct from the Totalizing Unit A to all Flush Branch Circuit Breakers. These Circuit Breakers or control units must be of suitable capacity to properly protect the wires which fan out into the various circuits over the house. You thus see that we have 4 points of sub-control conveniently located around the house. These breakers are no more obtrusive than is the standard switch in the circuits of today. The home owner does not object to them because in their operation of protecting the circuit there is no fuse blowing — they are operated the same as a switch. The Circuit Breaker locations are centered to minimize all circuit lengths.

These sub-circuits of No. 12 conductors, labeled E are fanned out from the Circuit Breakers to the lighting or convenience outlets. Wherever possible, convenience outlets are circuited separately from lighting outlets.

The kitchen circuiting is particularly noteworthy. Appliance outlets are protected by a 20-amp. Circuit Breaker served by one of risers D. From it, sub-circuits are fanned out to individual appliance outlets. Thus each of the No. 12 wires are subjected to the load of only one outlet. Such is the basic design of the G-E Radial Wiring System. Additions and modifications can be made to meet all conditions encountered in specific designs.

### *The Advantages*

The sub-circulating of branch circuits and radial runs, which are characteristic of the G-E Radial Wiring System, is adequate from every standpoint. There are full provisions for fixed electrical appliances for lighting and convenience outlets. There is copper adequacy which prevents voltage losses in the system. Electricity is carried efficiently to appliances and outlets with minimum loss of current. Another important advantage is the ease of remodeling and extending the system in the future. The problem of breaking into a limited sub-circuit and its rerouting is simpler than where a long circuitous, concealed run must be revamped to suit changes.

This G-E Radial Wiring System utilizes only General Electric Wiring Materials. A booklet has been prepared giving detailed specifications of the new G-E Radial Wiring System as applied to one of the smaller "New American" Homes. Send for a copy of this manual at once. Write Section CDW-2210, Merchandise Department, General Electric Company, Bridgeport, Connecticut.

© 1935, General Electric Company, Bridgeport, Conn.

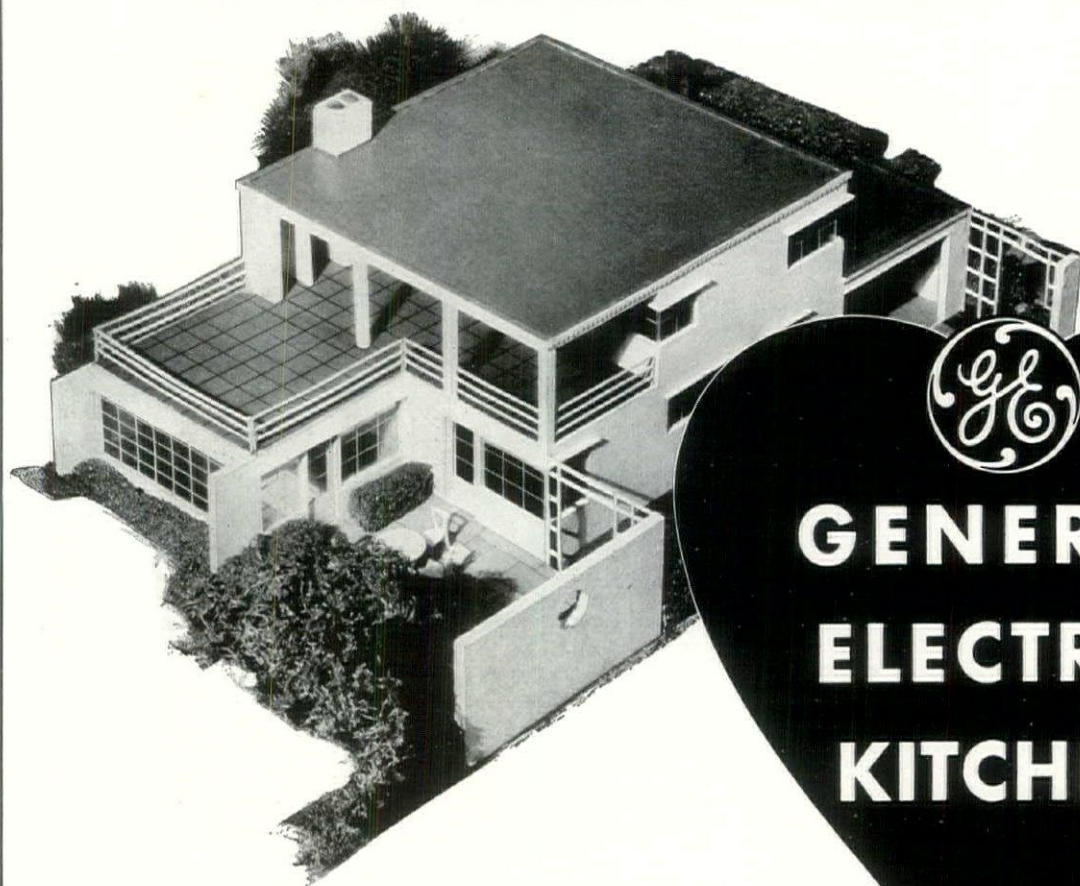
# GENERAL ELECTRIC

## WIRING MATERIALS

GENERAL ELECTRIC COMPANY, MERCHANDISE DEPARTMENT, BRIDGEPORT, CONNECTICUT



# THE HEART OF THE



**T**HE great "New American" Home movement, sponsored by General Electric, emphasizes the importance and advantages of planning homes from the *inside* out. Every thought is given to making the home *livable* and no room is more important than the kitchen, where the average American housewife spends most of her waking hours.

The General Electric Kitchen is the heart of the "New American" Home. It is a beautiful, efficiently planned room where modern electric servants perform in minutes the kitchen tasks that formerly required

hours of time and labor. Each kitchen is individually planned for the type of home it is to occupy and includes a G-E refrigerator, G-E range and G-E dishwasher.

We invite you to inspect the General Electric Kitchen when you visit the "New American" Home near you. Bring the women-folk of your household along and get their opinion of this modern electrical "workshop." You will better understand why we call it the HEART of the "New American" Home. General Electric Co., Specialty Appliance Dept., Sec. CG10, Nela Park, Cleveland, Ohio.



# NEW AMERICAN" HOME



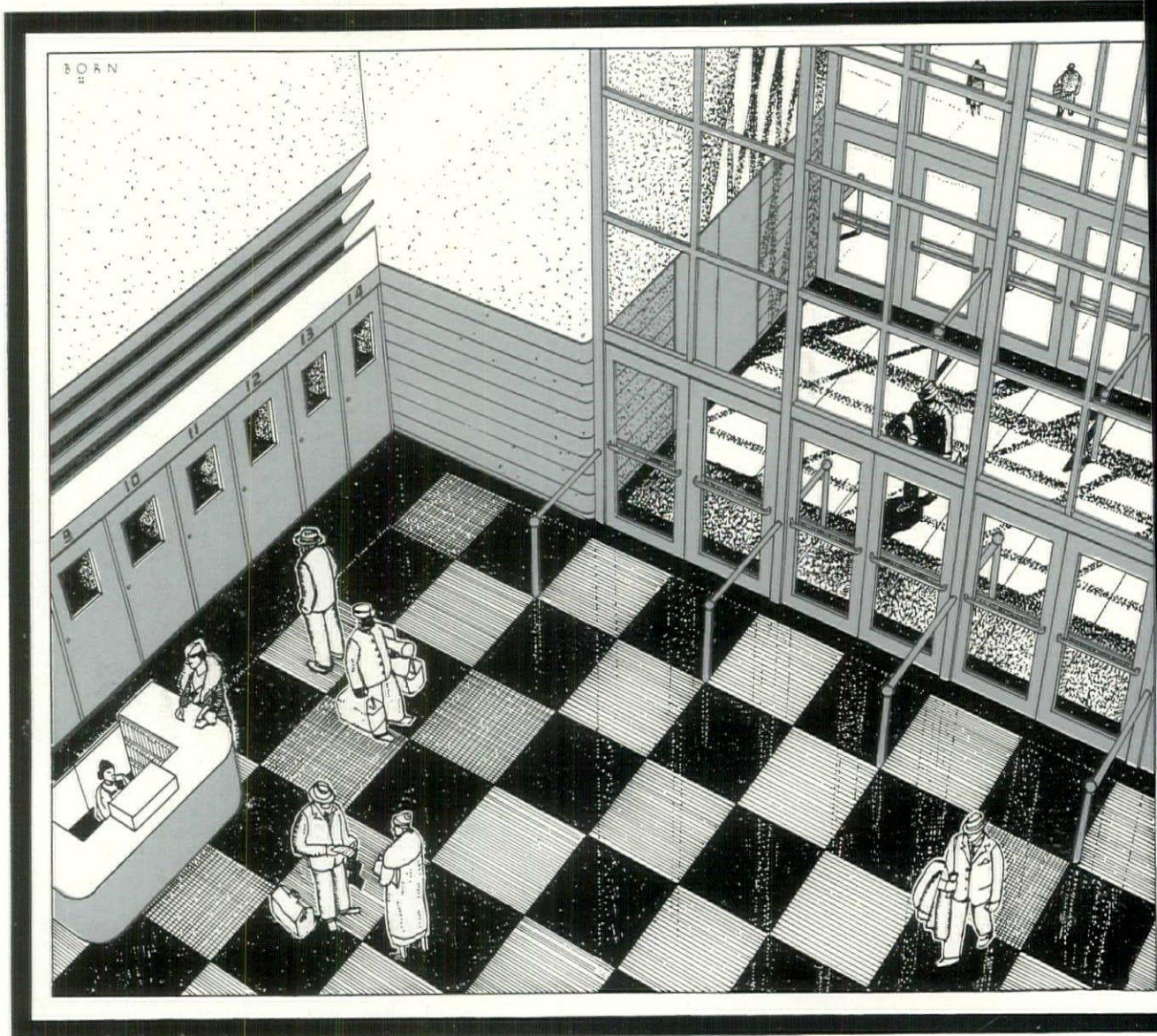
## The G-E Kitchen Institute Offers Full Cooperation To Architects on Modern Kitchen Planning

Sensing the ever increasing demand of modern housewives for kitchens *completely* equipped with electrical servants, General Electric has established the G-E Kitchen Institute as an aid to kitchen modernization. We invite architects to make full use of its services, which include detailed information and speci-

cations on all G-E Kitchen appliances. Whether you are planning a modern apartment house efficiency kitchen or a deluxe kitchen in the most palatial home, you will find the services of the G-E Kitchen Institute very helpful. For further information on this service see the General Electric Distributor in your locality.

**GENERAL**  **ELECTRIC**  
**ALL-ELECTRIC KITCHENS**





## THE DOOR . . .

Focal point of design...typifying the very spirit of the building ★ Aluminum lends itself perfectly to the execution of architectural details and confers that supreme benefit: light weight ★ A large variety of finishes, all luxurious and lasting, is at the command of the designer ★ Many methods of construction is dictated only by preference, for versatile alloys in every needed form are available to fabricators ★ Aluminum Company of America, 1866 Gulf Building, Pittsburgh, Pa.

ALCOA



ALUMINUM



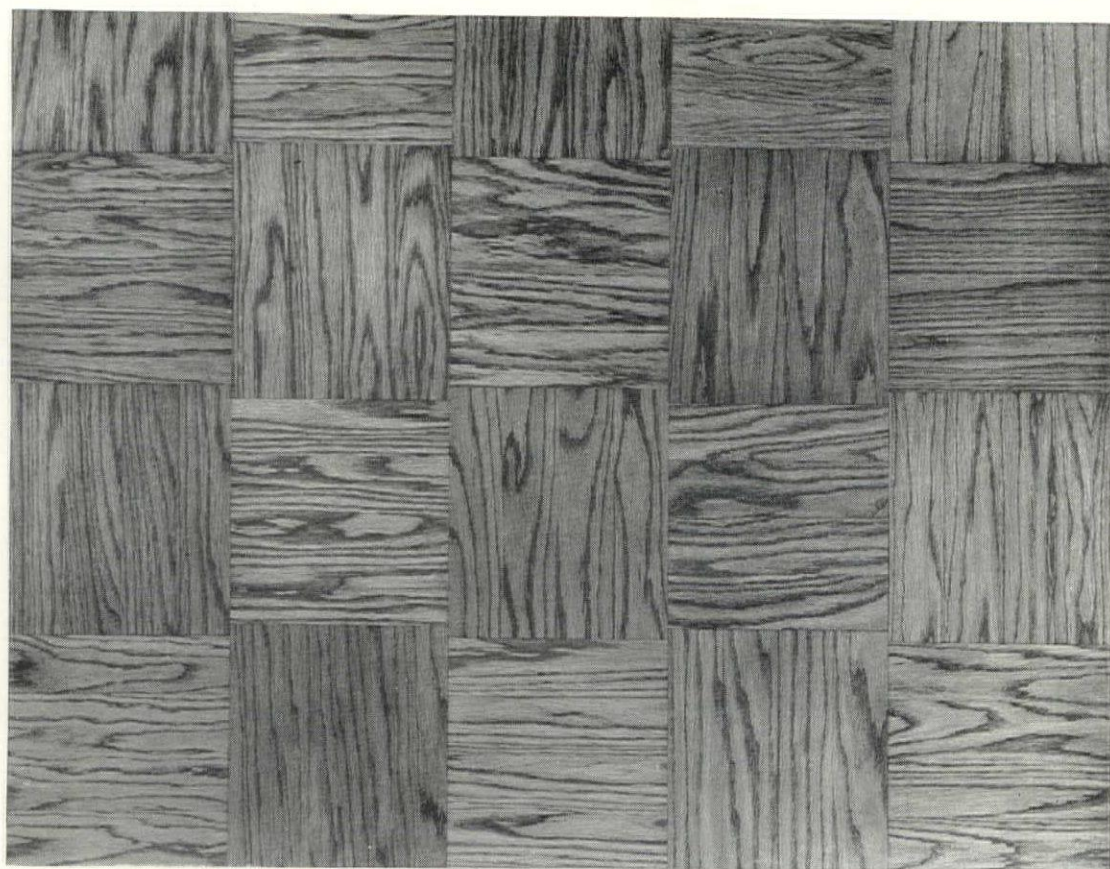
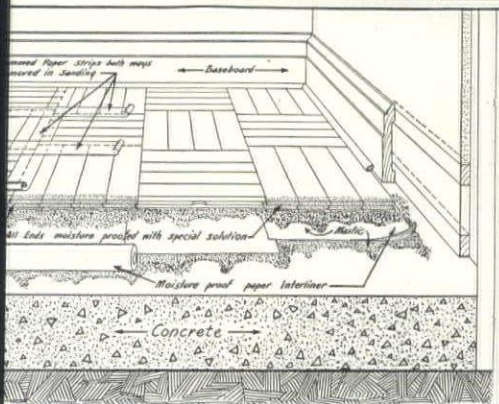
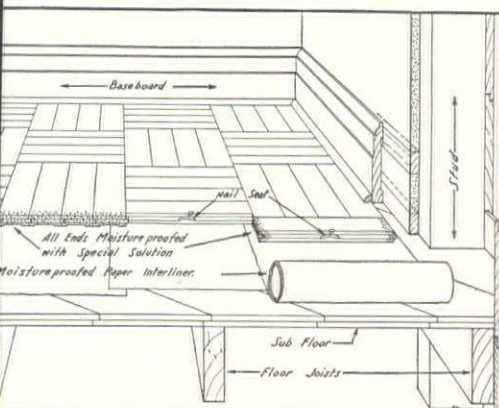


plate illustrates a  
of Bradley's "Cor-  
lock" Block Design  
ing, laid in clear  
or-Blend" Plain  
Red Oak. The off-  
ers are an exclu-  
Bradley feature.



of "Corner-Lock" Block Design installation laid over mastic.



iled installations, Bradley's "Nail-Seat" (see Architectural  
Bulletin A-3) facilitates laying to a marked degree.

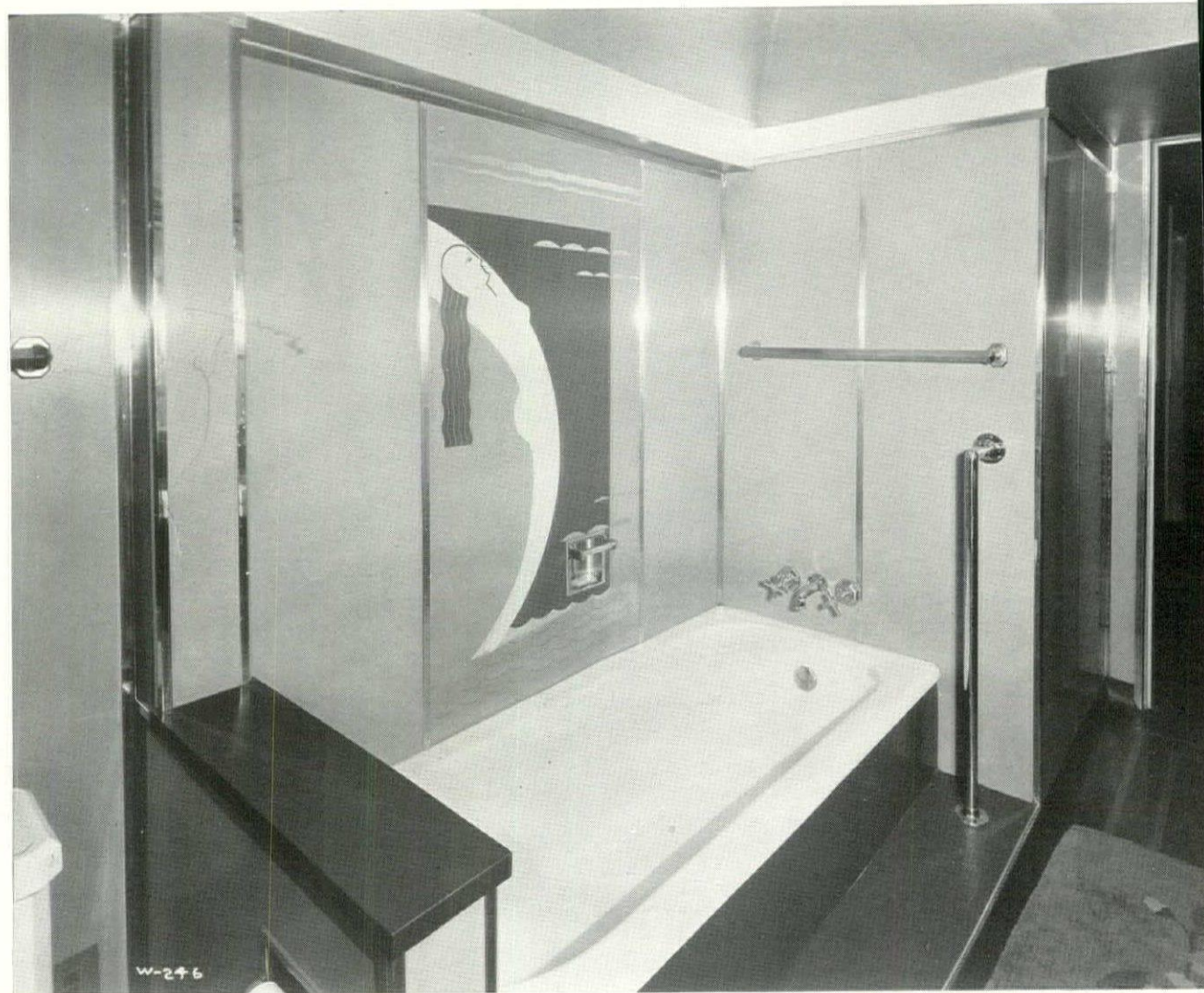
## Here's a BLOCK DESIGN FLOORING Effectually *Stabilized!*

Bradley's "Corner-Lock" block sets a new standard of stability in block design flooring and, at the same time, creates a *new distinction* in the design itself. Positive stability is accomplished by two exclusive factors: the "Corner-Lock" for which this flooring is named . . . and "End-Sealing" of block members against moisture absorption. Side expansion, swelling and buckling are *out*. ¶ Manufactured in Oak and Beech, under Bradley's exclusive specifications, "Corner-Lock" Block Design flooring adapts the long established preference for these woods as flooring material, to the current trend towards new concepts in architectural treatment. ¶ A copy of our illustrated Architect's Reference Bulletin A-3, including specifications, and conforming to AIA filing requirements, will be mailed on request. See also, Sweets Catalog, 1935, Section  $\frac{15}{48}$ .

**BRADLEY LUMBER SALES CO., WARREN, ARK.**

SALES AGENTS FOR  
**BRADLEY LUMBER COMPANY of Arkansas**





# A NEW IDEA *for* BATH ROOMS DECORATIVE FORMICA INLAYS

**N**EW interest and attractiveness is possible for bathroom walls if the architect uses Formica with inlays in metal in contrasting colors of Formica itself. . . . Nymphs, fish boats—simple silhouette designs of all kinds—can be pressed permanently into this handsome wall sheet when it is made. . . . The picture shows a bath room designed for Don Gardner, Cincinnati, by Ward Franklin. . . . The house also has kitchen walls covered with Formica, Formica inlaid faces on the built-in electric clocks in several rooms, and Formica shelves and window stools. . . . Let us send you all the facts.

THE FORMICA INSULATION COMPANY  
4620 Spring Grove Ave., Cincinnati, Ohio

# FORMICA

## FOR BUILDING PURPOSES



# WHAT IS HAPPENING IN THE Building Business?

Systems have so many separate buildings and  
of these buildings have flat roofs that the  
of pitch and tarred felt built-up roofs has  
specially visible to school officials. The trend to  
tarred felt which might go unnoticed in an  
plant with a limited number of roofs is  
apparent on the records of many a school  
Within recent months, one State school  
the boards in two large cities with hundreds  
buildings have adopted iron-bound regula-  
coal tar pitch and tarred felt must be used  
cks. For your own information, look into  
on.

**KOPPERS PRODUCTS COMPANY**  
KOPPERS BUILDING, PITTSBURGH, PA.  
Boston Chicago New York Providence, R. I. St. Louis  
Products: Membrane Waterproofing, Dampproofing, Tar  
Tarmac Road Tar for Streets, Pavements, Drives, Highways

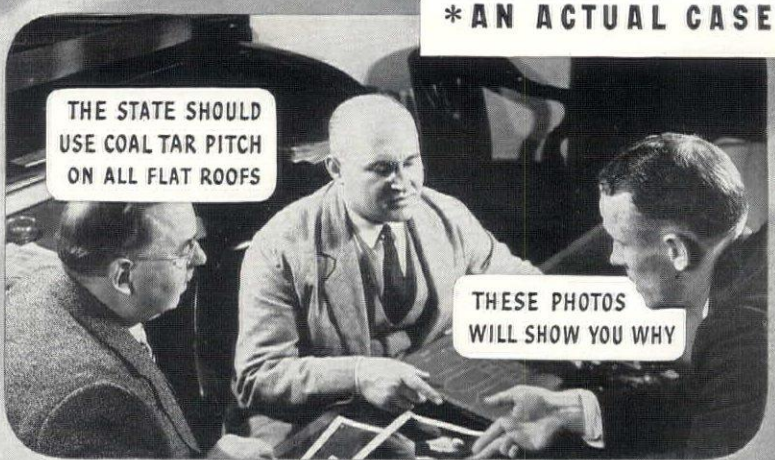
**KOPPERS**  
KOPPERS COAL TAR PITCH  
KOPPERS TAR-SATURATED FELT  
KOPPERS TAR-SATURATED FABRIC

ous reasons, models and settings were used in these pictures,  
is an actual case.

**ROOFING**  
**CONTRACTS AWARDED:**  
... School buildings, coal  
pitch and felt... let to  
Koppers Products Company,  
Pittsburgh, Pa.  
... filling stations at vari-  
ous locations, as follows:  
Northwest corner, North and  
Highland Avenues; Northwest  
Highland Avenue and Mc-  
Cormick Street; Northeast  
corner, Highland Avenue and Mc-

**3 MONTHS LATER**

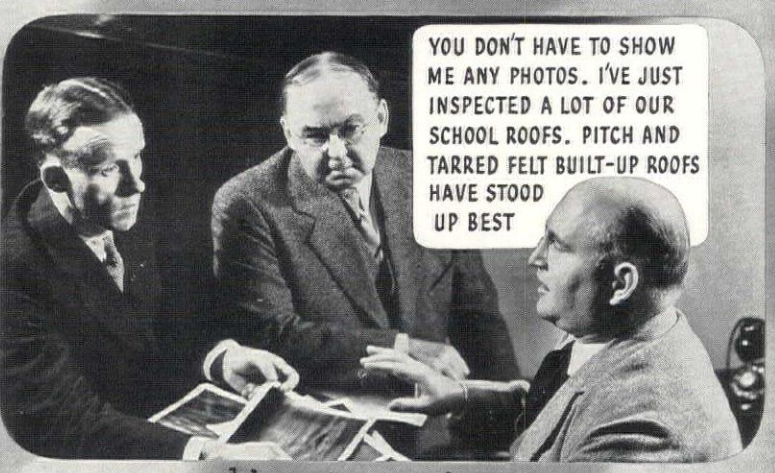
**\* AN ACTUAL CASE**



THE STATE SHOULD  
USE COAL TAR PITCH  
ON ALL FLAT ROOFS

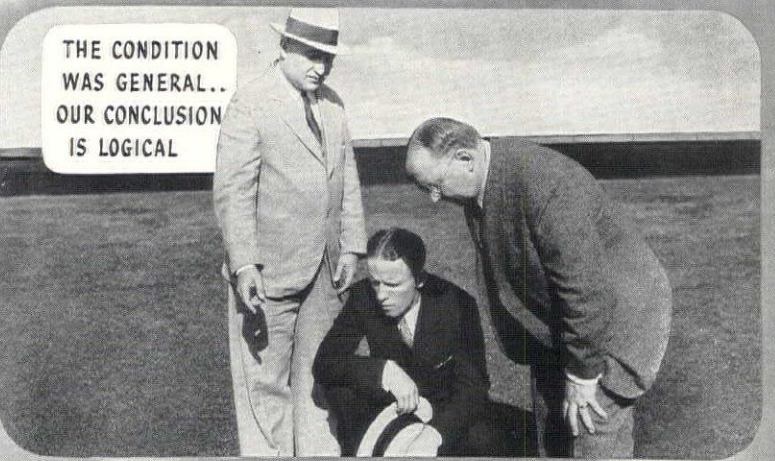
THESE PHOTOS  
WILL SHOW YOU WHY

... a call on the State architect



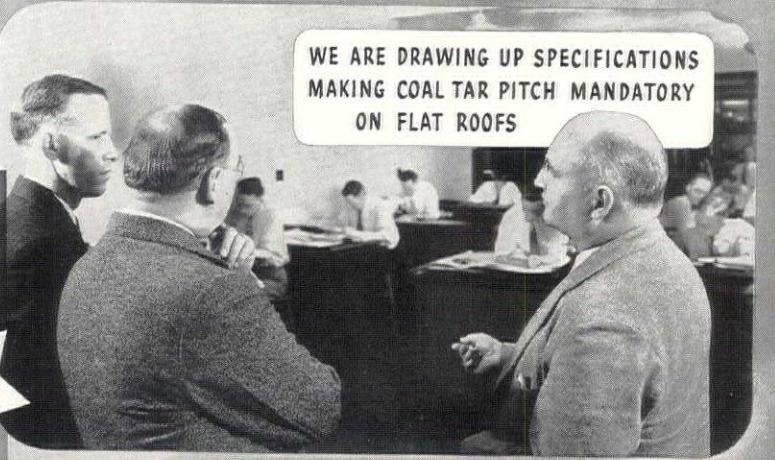
YOU DON'T HAVE TO SHOW  
ME ANY PHOTOS. I'VE JUST  
INSPECTED A LOT OF OUR  
SCHOOL ROOFS. PITCH AND  
TARRED FELT BUILT-UP ROOFS  
HAVE STOOD  
UP BEST

... his own experience



THE CONDITION  
WAS GENERAL...  
OUR CONCLUSION  
IS LOGICAL

... amply corroborated



WE ARE DRAWING UP SPECIFICATIONS  
MAKING COAL TAR PITCH MANDATORY  
ON FLAT ROOFS

KOPPERS PRODUCTS CO., Pittsburgh, Pa. AF6  
Please send literature which describes the superiority of Koppers built-up roofs.

Name.....  
Firm.....  
Address.....



# + Found!

## The EXTRA SPACE Everyone's Been Looking For

It was right there all the time—just below the sink and lavatory. Crane Co. discovered it by putting a cabinet around it. And that is how the Crane SUNNYSIDE Sink and TUCAWAY Lavatory came into being.

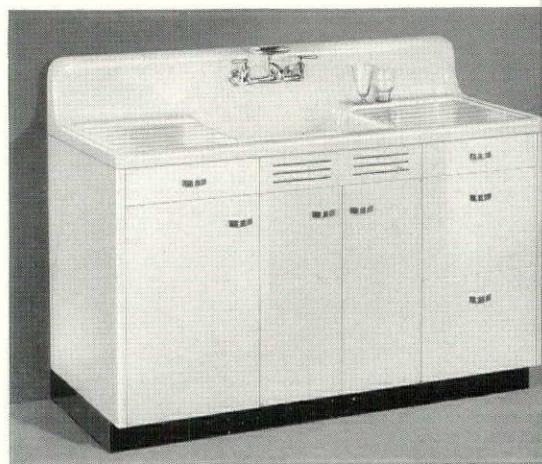
In new buildings these cabinet units reduce or eliminate the necessity for special closets. In old buildings they provide storage space where none existed before. They even eliminate the necessity for towel bars on the walls, or add to already existing capacity.

There's plenty of space for towels, soaps, cleaning powders and the overflow from the medicine cabinet. Towel bars may be had in two styles—heavy cast brass brackets and square chromium plated bars, or steel brackets and round brass rods, chromium plated or painted white. Heavy-gauge steel walls, bottom and shelf. Baked enamel finish. Perforated openings for ventilation in back. Steel sub-base with recessed toe space. Chromium plated hardware.

In apartments, stores, offices, homes—these cabinet lavatories equipped with regular Crane CORWITH bowl and fixtures, will immediately appeal to tenants and owners because of their great utility, their fine appearance. On display in all Crane showrooms.



+ Crane CORWITH-TUCAWAY Lavatory



+ Crane SUNNYSIDE Cabinet Sink

# CRANE PLUMBING AND HEATING MATERIALS

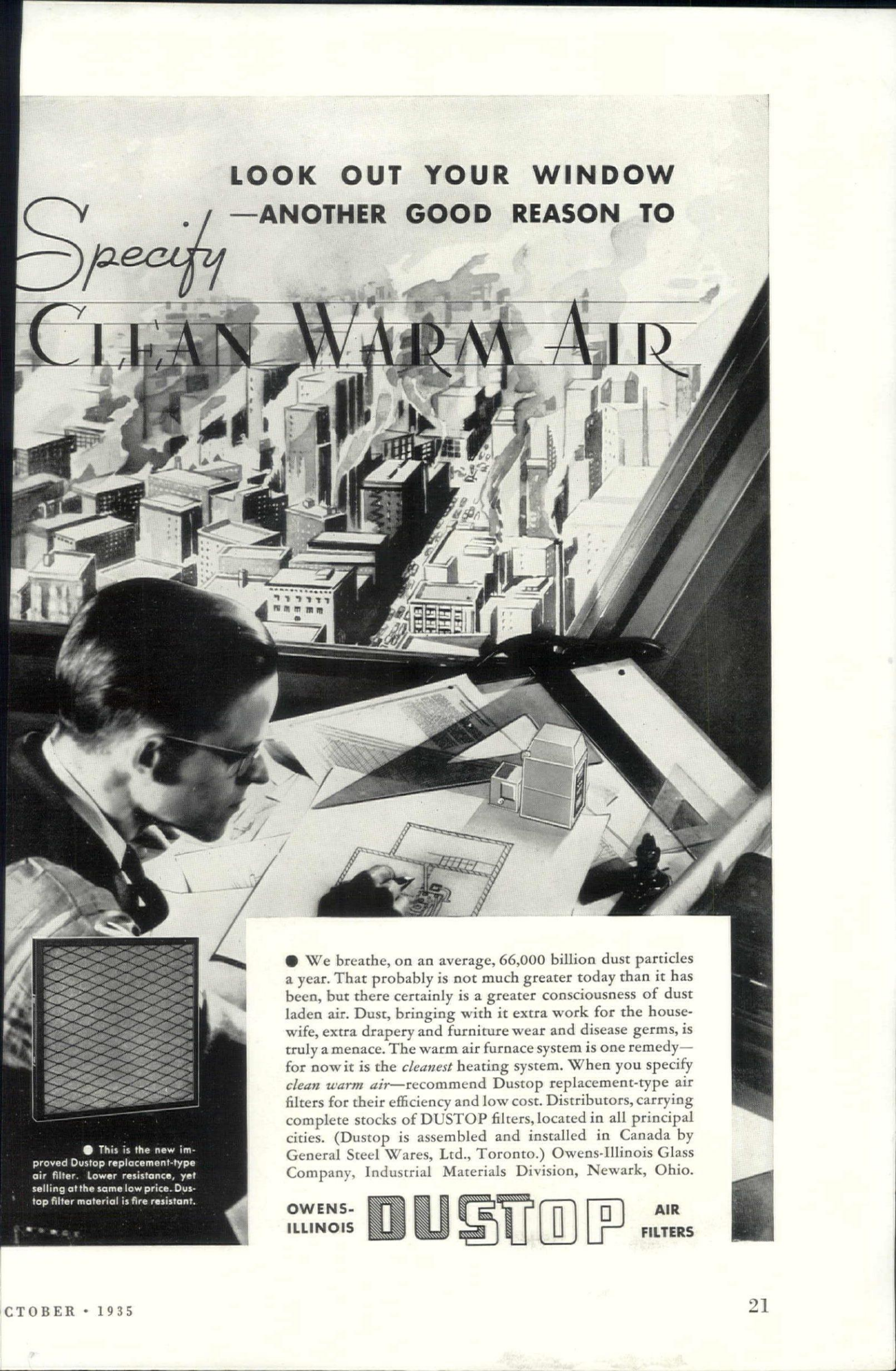
CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO, ILLINOIS • NEW YORK: 23 W. 44TH ST.  
Branches and Sales Offices in One Hundred and Sixty Cities



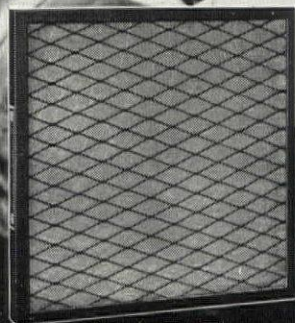
LOOK OUT YOUR WINDOW  
—ANOTHER GOOD REASON TO

*Specify*

CLEAN WARM AIR



● We breathe, on an average, 66,000 billion dust particles a year. That probably is not much greater today than it has been, but there certainly is a greater consciousness of dust laden air. Dust, bringing with it extra work for the housewife, extra drapery and furniture wear and disease germs, is truly a menace. The warm air furnace system is one remedy—for now it is the *cleanest* heating system. When you specify *clean warm air*—recommend Dustop replacement-type air filters for their efficiency and low cost. Distributors, carrying complete stocks of DUSTOP filters, located in all principal cities. (Dustop is assembled and installed in Canada by General Steel Wares, Ltd., Toronto.) Owens-Illinois Glass Company, Industrial Materials Division, Newark, Ohio.




● This is the new improved Dustop replacement-type air filter. Lower resistance, yet selling at the same low price. Dustop filter material is fire resistant.

OWENS-  
ILLINOIS

**DUSTOP**

AIR  
FILTERS





*It is not a matter to be  
taken lightly, the confining of children in  
artificial surroundings during the most  
active time of their lives.*

# HERMAN NELSON *System of Air Conditioning for Schools*

© The Herman Nelson Corporation, Moline, Illinois



# INSULATION *must* STAY on the JOB



BE SURE

*You Specify the Kind that Will*

ONCE applied, insulation is usually hidden away from sight. Will it stay on the job—year after year? Will it retain its original form unaltered? Will it continue to give the protection expected of it? These are important questions that must be answered, if the owner is to get full value.

BALSAM-WOOL Blanket Insulation retains its high efficiency *permanently*. It does not settle, because it is firmly fastened in place. It will not change its form. Because it is flexible, it tucks into every little space, leaving no crack or crevice for heat or cold to get through. With BALSAM-WOOL, you can maintain continuity of effective insulation, because BALSAM-WOOL covers all of the area to be insulated with the same thickness of insulation.

BALSAM-WOOL is waterproof, windproof, fire-resisting and verminproof. Three thicknesses— $\frac{1}{2}$ -inch, 1-inch and Wall-Thick enable you to choose the *right* thickness for every requirement. Let us tell you more about BALSAM-WOOL. Complete information is yours for the asking.


## BALSAM-WOOL

WOOD CONVERSION COMPANY  
ST. PAUL • MINNESOTA



Made by the Makers of  
**nu-WOOD**





# *for* LIGHTING MODERNIZATION

## STORES



★ Merchants everywhere are modernizing lighting with Magnalux. Magnalux provides illumination of the quality and quantity required. Merchandise and showrooms show to advantage.

Magnalux illumination is glareless and shadowless. It gives store or shop an atmosphere of inviting comfort and cheer. Customers are attracted and pleased. Clerks are cordial. Displays compel attention and sales are increased.

## OFFICES



★ Modern Magnalux lighting pays big dividends in offices and banks. Under its light, eyes keep sharp and keen. Costly errors are reduced. Business is attracted.

With Magnalux luminaires, the entire ceiling reflects a flood of softly diffused illumination that provides modern lighting perfection. It assures eye comfort and eye conservation. Magnalux is the popular choice of building owners, executives and workers.

## RESTAURANTS




★ Restaurant owners find Magnalux lighting serves their every illumination need. It provides pleasant eye comfort for patrons. It has added beauty to any type of decoration. It enhances the sparkle and cleanliness of equipment.

Every detail in the design of modern lighting is covered in our new, free handbook. Or you can refer to the Westinghouse lighting section in Sweet's Architectural Catalog.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY • LIGHTING DIVISION • EDGEWATER PARK • CLEVELAND • OHIO

★ **SPECIFY MAGNALUX** ★

WHEN YOU THINK OF *Lighting* THINK OF



**Westinghouse**



# Watch Architectural Concrete!



*The Public Market Building at Portland, Oregon, illustrates the distinction lent to commercial structures by architectural concrete. Lawrence, Holford, Allyn & Bean, architects*

## ... IT BRINGS NEW FREEDOM TO DESIGN, NEW ECONOMY TO BUILDING

**T**HE technique of using concrete as a decorative material is advancing more rapidly today than ever before.

It is noteworthy that during the depression, with building in general at its lowest ebb, concrete has established itself as a foremost combined architectural and structural material.

Whatever the function of the building contemplated, concrete lends freedom in design. Recent concrete exteriors of note run the gamut of architectural types.

Concrete is a practical material—consistently

economical in first cost—durable and low in maintenance under the widest range of service and climatic conditions.

To help you design your next building in architectural concrete, let us send monographs covering specifications, construction and design details, and textures. Write us or mail the coupon.

### TOWARD A BETTER PRACTICE

PRACTICAL MONOGRAPHS FOR YOUR FILE

#### PORTLAND CEMENT ASSOCIATION Room 2710, 33 W. Grand Ave., Chicago, Ill.

Please send monographs on architectural concrete. Also  
☐ booklet, "Beauty in Walls of Architectural Concrete."

Name.....

P. O. Box or St. No.....

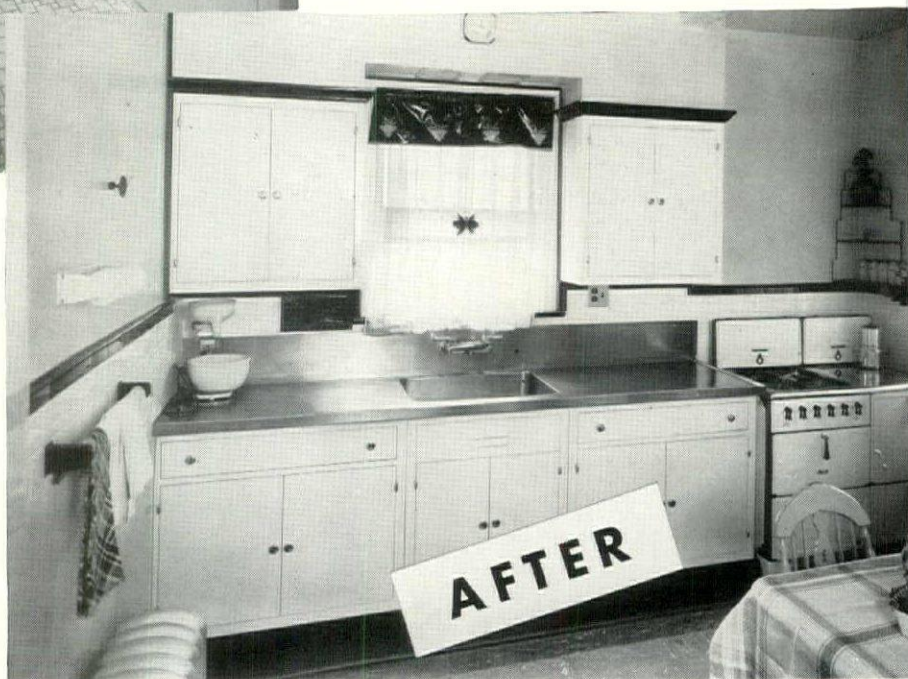
City.....State.....



# OLD KITCHEN GOES ON MONEL METAL STANDARD.



*Above: Old-fashioned kitchen in a residence at St. Albans, Long Island. At right: Same kitchen modernized with Monel Metal equipment.*



... for only

**\$391.00**

installed!

**Y**ES, just \$391.00 for this gleaming line-up of Monel Metal equipment. That one price includes a lot—the Monel Metal sink, faucet, cabinets, Monel Metal-topped range and all installation charges. No vast sum of money—but a vast improvement in appearance.

Pass the good news on to your clients. Tell them that they can afford to own a Monel Metal kitchen—that present low price levels have brought the de luxe equipment within reach of the home owner of average income. There is no surer way to make a hit with a feminine client than to help her realize her cherished ambition to own a beautiful modern kitchen.

Monel Metal cabinet-type sinks may be specified in any fraction of an inch from 48" to 144". Apron-type sinks from 41" to 82". Once installed they are "in for life." Monel Metal is rust-proof, chip-proof, crack-proof, accident-proof.



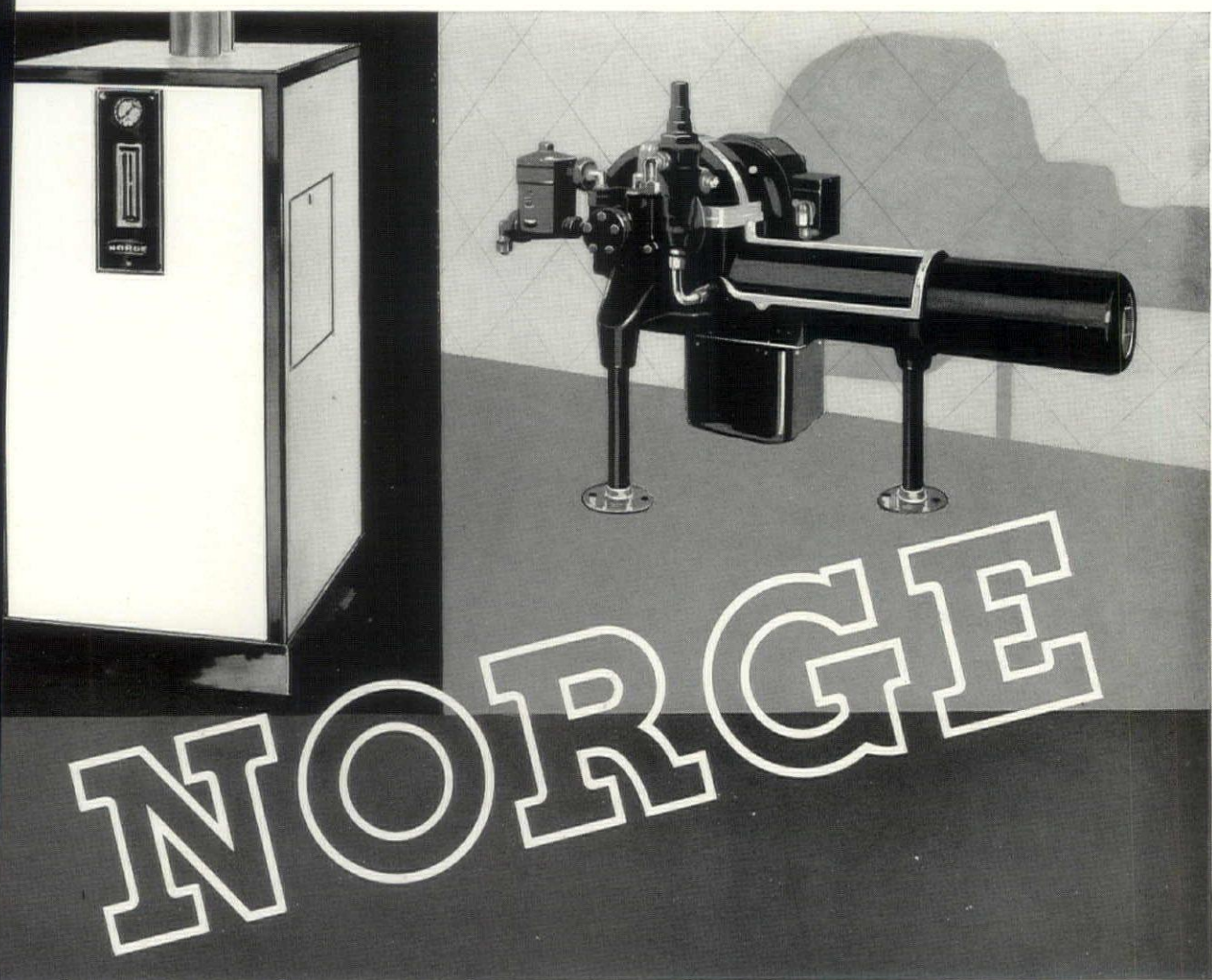
For complete information and prices, get in touch with the distributors, Whitehead Metal Products Co. of York, Inc., 304 Hudson St., New York, N. Y., or branches in principal cities.

THE INTERNATIONAL NICKEL COMPANY,  
67 WALL STREET NEW YORK,

# MONEL METAL

Monel Metal is a registered trade-mark applied to an alloy containing approximately two-thirds Nickel and one-third copper. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.





# NORGE

## A BETTER OIL BURNER BACKED BY A GOOD NAME

There is no doubt that the pressure type oil burner is the most practical for domestic use. Norgé offers this burner in its most advanced form.

The Norgé oil burner has a number of distinct advantages. It is compact—small in relation to its heat-capacity. Mechanically it is simple, easy to install, efficient and service. It is adaptable to any type of existing heating plant. It burns low grade oil with a high degree of efficiency.

Norgé has built up an enviable reputation for fine home appliances. The Whirlator Oil Burner has the standard of built-in quality that the public has learned to expect of any product bearing the Norgé name. That is an important consideration in selecting oil heating equipment.

Norgé Whirlator Oil Burners are available in capacities

from 800 to 8800 square feet of steam radiation or the equivalent in hot water, vapor or warm air. Norgé-Ideal Boiler-Burner Units are available in five models with capacities from 500 to 1350 square feet of radiation.

Home builders today are interested in air conditioning. A Norgé-Ideal Boiler-Burner Unit is the first step toward complete air conditioning. It is a comparatively simple matter to install conditioning equipment at any time after the Norgé heating plant is in use.

Write for complete and specific information about Norgé oil heat.

**NORGE DIVISION** Borg-Warner Corporation  
606-670 East Woodbridge Street, Detroit, Michigan

**WARREN NORGE COMPANY, INC.**

331 Madison Avenue

New York City

### THE WHIRLATOR PRINCIPLE...

...the exclusive method of giving the oil and air mixture a whirling motion as it enters the combustion chamber. The result is smoother, cleaner, more thorough combustion—better performance with lower fuel consumption.



# NORGE

## Whirlator

### OIL BURNER

WHIRLATOR REFRIGERATION (DOMESTIC AND COMMERCIAL) • ELECTRIC WASHERS AND IRONERS  
WHIRLATOR STOVES • AEROLATOR AIR CONDITIONERS • GAS AND ELECTRIC RANGES



**AMERICAN**  
SHEET AND TIN PLATE  
COMPANY  
PITTSBURGH  
TRADE MARK REG. U.S. PAT. OFF.

**AMERICAN**  
SHEET AND TIN PLATE  
COMPANY  
PITTSBURGH  
TRADE MARK REG. U.S. PAT. OFF.  
APOLLO BEST BLOOM

**KEYSTONE**  
COPPER STEEL  
**AMERICAN**  
SHEET AND TIN PLATE  
COMPANY  
PITTSBURGH  
TRADE MARK REG. U.S. PAT. OFF.  
APOLLO BEST BLOOM

**MODERN**  
**Steel Sheets**  
*for Exacting*  
*Modern Uses*

**Particularly Adapted to the  
Building Construction Field**

AMERICAN Products are well made and up to highest quality standards — the kind that pleases architect, builder, sheet metal worker and property owner. Demand these sheets for all forms of sheet metal work, heating, ventilating and air-conditioning systems. Supplied in Black and Galvanized

Sheets, Special Sheets, Tin and Terne Plates for all purposes. KEYSTONE Copper Steel offers maximum rust-resistance — and USS STAINLESS Steel Sheets and Light Plates are specially suited to construction fields. AMERICAN products are sold by leading metal merchants. Write for our latest literature.

## AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, P

Steel Sheets are also manufactured in the South by  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.



Sheets and Tin Plates produced on the Pacific Coast  
by the Columbia Steel Company, San Francisco, Calif.

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# PHILADELPHIA'S \$5,000,000 MEMORIAL TO BENJAMIN FRANKLIN



The Benjamin Franklin Memorial, constructed at a cost of \$5,000,000, the money raised by popular subscription, houses the Fels Planetarium and the Library, Lecture Hall and Museum of Franklin Institute, the latter dating back to Colonial days. Office of John T. Windrum, Philadelphia, Architects . . . United Engineers, Constructors . . . Strawbridge & Clothier, Interiors.

"IN the Franklin Memorial," states Mr. Morton Keast of the office of John T. Windrum, architects, "we had to solve the problem of wear and general harmony with surroundings in our selection of a flooring, and our use of Sloane-Blabon Linoleum has proven entirely satisfactory. Practical use was an important consideration and some idea of the wear to which the floors have been subjected is evident in the fact that about 900,000 people have visited the museum since it opened in December, 1933. We are well pleased with the results of Sloane-Blabon Linoleum."



Above: Museum of the Franklin Institute. In foreground is the Periodic Table of the Chemical elements. Floor is Sloane-Blabon Jaspé Linoleum.

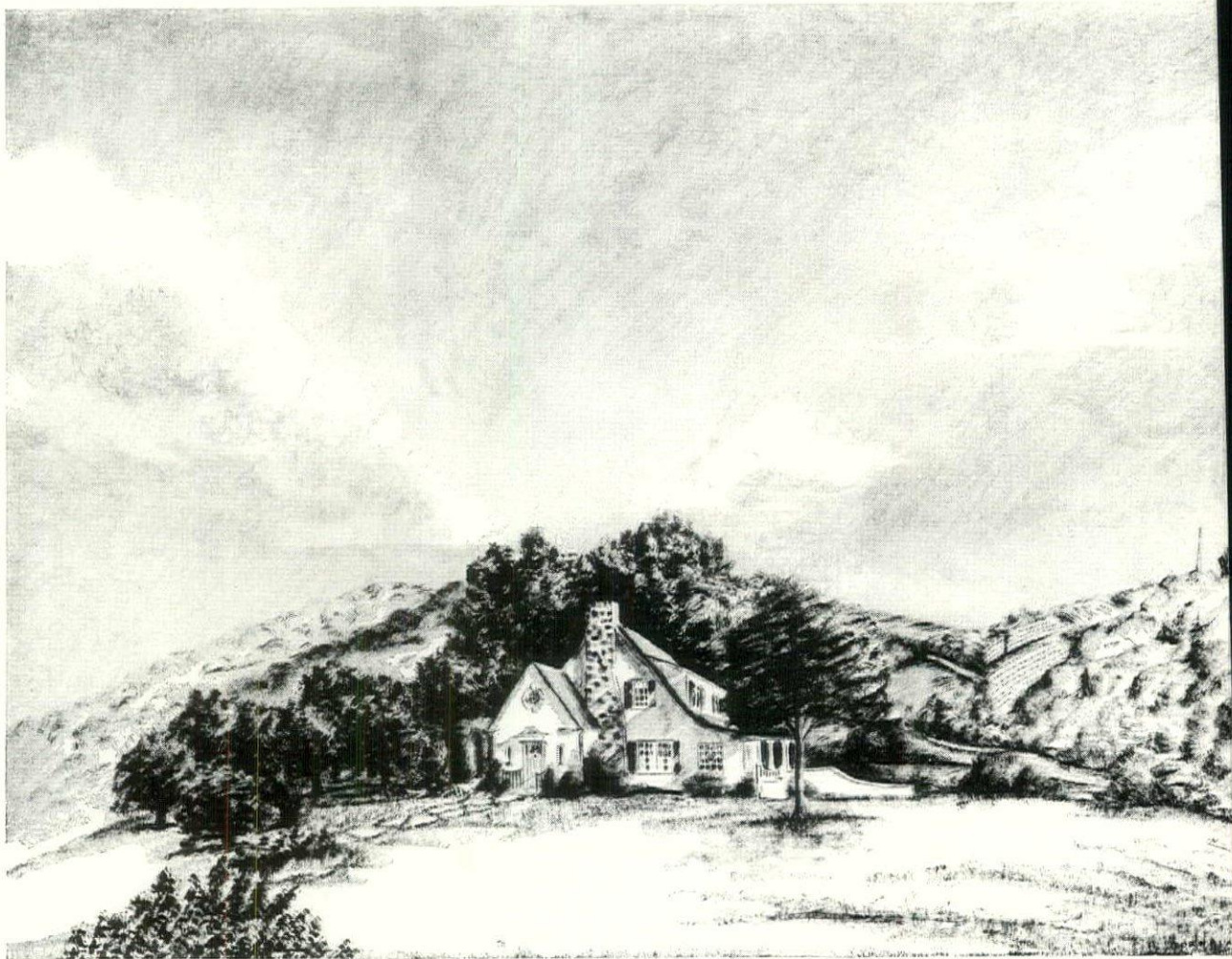


Left: Hall of Aviation, floor also of Sloane-Blabon Jaspé Linoleum. 14,000 square yards of Sloane-Blabon Linoleum, half Jaspé and half Battleship, are used in the building.

The Franklin Memorial is but one of many recent outstanding Sloane-Blabon installations. We shall be glad to send you a list of others, together with linoleum samples, and any information which may help you solve your linoleum problems. Write W. & J. Sloane Selling Agents, Inc., 577 Fifth Ave., New York.

# SLOANE-BLABON LINOLEUM





## KALMAN STEEL JOISTS HELP TO MAKE ANY HOME A SOUND INVESTMENT

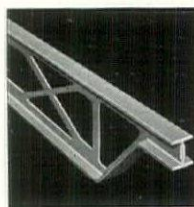
**T**ODAY as always, the prudent buyer of a home is concerned first of all with the soundness of his investment, which usually represents the savings of years.

He wants a home that will not burden him with costly repairs nor be subject to swift obsolescence. A home that is fire-safe, and secure against attacks of the dreaded termite.

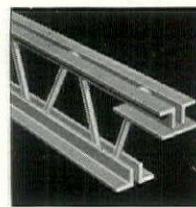
The use of Kalman Steel Joists goes far to help the architect provide him with just such a home. At very little, if any, increase in the building cost, these joists, with concrete floor slab and ceiling of plaster on metal lath, provide

greater security against fire, immunity to termite attack, a non-shrinking floor structure that never causes cracks where walls and floors meet. In addition, the owner has the deep satisfaction of knowing that the house into which he has put his money is substantially built, and will endure.

Kalman furnishes two types of joists—Kalman



KALMAN JOIST



MACMAR JOIST

Joists, one-piece steel trusses; and MacMar Joists, steel trusses assembled by pressure welding. Either type of joist can be conveniently and economically applied to a dwelling of any size and in any style of architecture.

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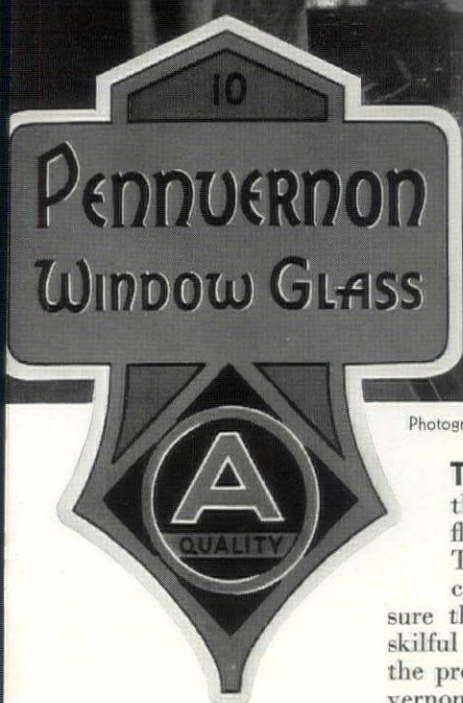
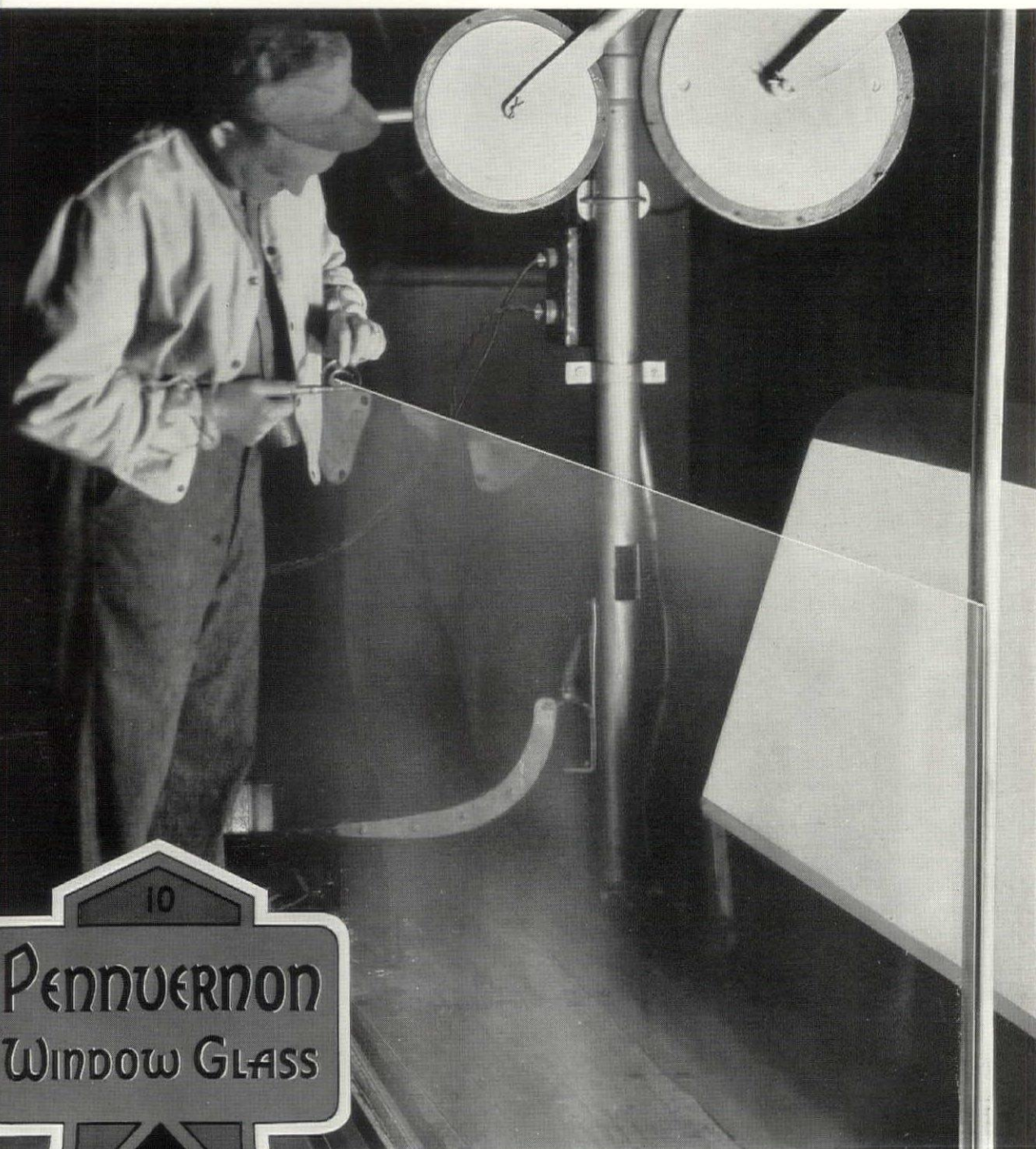
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Photograph by Johnston & Johnston

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# ANNOUNCEMENT

of winners

## MODERNIZE MAIN STREET

### Competition



● On August 26, there met at Lake Champlain a Jury of Award composed of the following seven men representative of leading contemporary thought in architecture, design and merchandising: Professor Melvin Thomas Copeland, Harvard University; J. Andre Fouilhoux, New York City; Albert Kahn, Detroit; William Lescaze, New York City; John W. Root, Chicago; F. R. Walker, Cleveland and Kenneth C. Welch, Grand Rapids, Michigan.

After a two day session in which were considered hundreds of designs submitted by the more than 3,000 entrants in the Competition, the following awards were made:

#### FIRST PRIZES

- To M. Righton Swicegood, New York City, \$1,000 for the best design for modernizing a drug store.
- To Suren Pilafian and Maurice Lubin, New York City, \$1,000 for the best design for modernizing an apparel shop.
- To G. Foster Harrell, Junior, New York City, \$1,000 for the best design for modernizing a food store.
- To Alfred Clauss, Knoxville, Tennessee, \$1,000 for the best design for modernizing an automotive sales and service station.

#### SECOND AND THIRD PRIZES

- To G. Foster Harrell, Junior, New York City, \$750 and to Nicholas B. Vassilieve, New York City, \$500, for the second and third best designs, respectively, for modernizing a drug store.
- To Lester Cohn, Chicago, \$750, and to Raoul L. Dubrul and Harry J. Trivisonne, New York City, \$500, for the same awards for modernizing an apparel shop.
- To A. Waldorf and S. T. Katz, Brooklyn, \$750, and to J. R. Sproule, Seattle, Washington, \$500, for the same awards for modernizing a food store.
- To Suren Pilafian and Maurice Lubin, New York City, \$750, and to Isadore Shank, St. Louis, Missouri, \$500, for the same awards for modernizing an automotive sales and service station.

#### HONORABLE MENTIONS

each award including a cash prize of \$500

For Drug Store designs: Harry Lon Ross, Philadelphia, Pennsylvania; Michael Auer, New York City; Isadore S. St. Louis, Missouri; Morrison Broun, New York City; Montgomery Ferar, Detroit, Michigan; Melvin L. Wood, Oak Park, Illinois; Verner Walter Johnson, New York City; and Phil Birnbaum, Far Rockaway, New York; Robert McClelland and Victor N. Jones, Seattle, Washington; William Tuntke, Hollywood, California.

For Apparel Shop designs: J. R. Sproule, Seattle, Washington; Irwin A. Sugarman, Chicago, Illinois; Anthony S. Cleveland, Ohio; Herbert L. Rodde, Chicago, Illinois; Eugene Wilson, Edwin Ellison Merrill and Robert J. Alexander, Los Angeles, California; Joseph M. Hirsch, New York City; Orlo Heller, New York City; Hironimus, New York City; Max Feldman, Ralph E. and Harry Gottesman, New York City; J. Gordon, Brooklyn, New York; George E. Recher, Chicago, Illinois; Donald M. Douglass, Georgetown, Connecticut.

For Food Store designs: Sigismund J. Von Rosen, New York City; Nowland Van Powell, St. Louis, Missouri; Maurice I. and Suren Pilafian, New York City; Royal Barry Willis, Hugh A. Stubbins, Boston, Massachusetts; Charles DuBoise, New York City; Maitland C. Harper, Woodside, Long Island, New York; J. Gordon Carr, Brooklyn, New York; H. K. Brig, Chicago, Illinois; Edward Hedberg, Homewood, Illinois; Carl Maas, New York City; Theo. B. Voyvodin and Jos. J. Pankuch, New York City.

For Automotive Sales and Service designs: Thomas D. East Orange, New Jersey; G. McLaughlin, S. C. Reese, L. Berg, Knoxville, Tennessee; Henry T. Aspinwall, Paul F. Simpson, Great Neck, Long Island, New York; Charles DuBoise, New York City; J. R. Sproule, Seattle, Washington; A. Albert Cooling, Los Angeles, California; Horace Hartman and George Wright, Detroit, Michigan; Victor Spector, Chicago, Illinois.

The uniformly high quality of the designs submitted was gratifying to the sponsors, to the jury, and to the Architectural Record, which conducted the competition with Kenneth Stowell, A.I.A., as professional advisor. The widespread interest shown was considered particularly significant, for it presaged new and profitable architectural activity in the several representative fields covered by the competition program. We extend our sincere congratulations to the winners and our equally sincere appreciation of the effort expended by all competitors. The winning designs are reproduced in the October Architectural Record and will be released for general publication shortly thereafter. Checks have been mailed to all winners.

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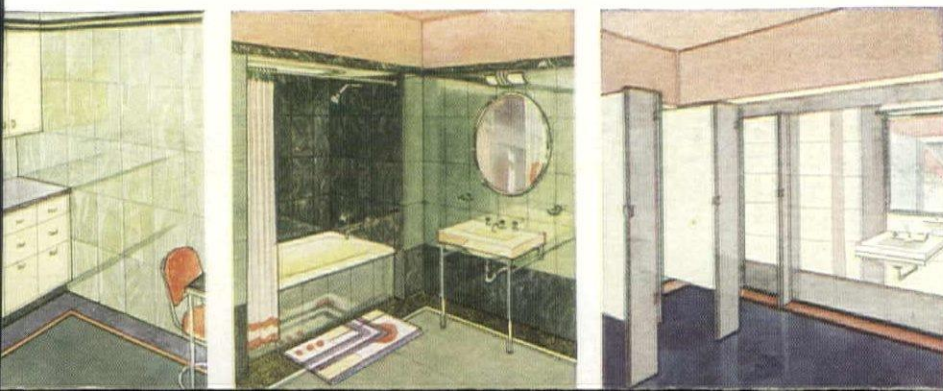
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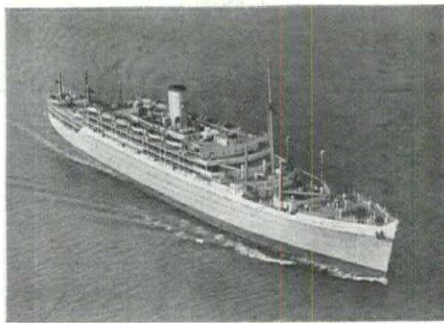


# FORUM OF EVENT

## ARCHITECTS AND NAVAL ARCHITECTS

BRITAIN last month was still celebrating the commissioning for its maiden voyage of its newest ship, the Orient Line's trim, clean *Orion*, largest (630 feet, 28,400 tons) in the Australian service. Her one funnel prompted "Astragal," the *Architect's Journal's* witty, learned columnist, to write a squib titled "Funnel Worship" which pointed to the well-known fact that most modern passenger ships have dummy stacks, gave credit to the Orient line "which has had the courage to give the *Orion* one funnel where only one was needed. In the words of the official booklet 'the only sop to purely esthetic considerations is the rake of the mast and funnel. This is supposed to give an appearance of speed, though its practical effect is to introduce a slight complication in design' (Astragal's italics)."

Of more practical interest to architects was the *Architect's Journal's* lead editorial on the *Orion* which felicitated Architect Brian O'Rorke for executing the *Orion's* entire decorative scheme, went on to philosophize: "The most superficial study of recent developments in the planning and construction of ships and of buildings makes plain the increasing similarity between the problems which architects and naval architects are now required to solve. Materials, equipment and methods of workmanship proved successful by their



Courtesy, Architect's Journal

### ORION

For her one funnel, architectural praise

use in the one form of design have often been adopted and become standard practice in the other. Until, at the present time, it may be truly said that there is not a single building material which does not also find a place in the construction or decoration of some vessel now afloat. And the same is the case, to an almost equal extent, with service equipment. . . .

"Many problems which have only become of importance to the architect in the years since the war have been of vital moment to the designers of ships during a whole century. To pass over smaller mat-

ters (such as steel construction, sound and vibration insulation, centralized heating and mechanical ventilation) there are large problems of building practice . . . it is significant that two of the chief contributions to this faster pace [of building]—the progress chart and prefabrication—were long ago anticipated by naval architecture. . . . Again, in the neat, compact and accessible stowage of complicated equipment, ship designers had already had long experience when the first few bulbous service pipes were still winding their way along skirtings and up walls. . . .

"Each ship is in a sense a building—a warehouse or hotel, or both. . . . In every ship the full utilization of each small space, and often the achievement of an effect of greater space, is of the first importance; as population densities increase and site values become greater in our large cities, the chief problem of the architect becomes one exactly the same."

## COLUMBIA'S NEW HEAD

"WHO will be Columbia's new Dean of the School of Architecture?" was the question everybody asked following Dean Joseph Hudnut's appointment to Harvard in July. Last month President Nicholas Murray Butler gave a triple answer. The new heads will be a committee headed by Professor Leopold Arnaud and assisted by Professor Cecil C. Briggs and Jan Ruhtenberg, associate in architecture. Continued will be Columbia's reorganized teaching plan which eliminates group competition in favor of the individual problem method and embraces a three-year program of personal tutoring of each student (the College of Architecture of the University of Michigan is retaining its four-year program partly as a base for its five-year plan announced in 1933). Innovations at Columbia will be a course in city planning and a collaborative program with the Juilliard School of Music whereby sets for Juilliard operas will be designed by Columbia students.

## CONTINUOUS SHOW

KNOWN to every architect who lives in or visits Manhattan are the showrooms of the Architect's Samples Corp. in the Architects' Building, 101 Park Avenue. Here last month was opened a continuous exhibition of current architecture under the direction of R. W. Sexton. The exhibit will be changed every two weeks. It will consist of sketches, plans and photographs of proposed buildings and buildings recently completed or in construction. The exhibit appearing, as it does, in conjunction with samples of the latest materials and equipment should provide a valuable cross section of architecture.

## COMING OF CORBUSIER

DUE in the U. S. October 21 is C. Edouard Jeanneret, painter and architect who in 1921 took his grandfather's name Le Corbusier, saving the name Jean for his painting. The prize architectural exhibit of Manhattan's alert Museum of Modern Art, Le Corbusier will lecture (in French, interpreted and translated).



LE CORBUSIER

his friend Architect Robert Jacobs) at the Museum and, under the Museum's auspices, at such institutions as Harvard, Columbia, Yale, Princeton, Minnesota, and Brookline, Vassar.

Known throughout the world as a leader of the International Style, Le Corbusier was born in 1888 at La Chaux-de-Fonds, near Geneva, Switzerland. At thirteen Le Corbusier was in an arts and crafts school, by the time he was seventeen he had collaborated on a house for his father. Typically gabled and balanced, this house nevertheless had a corner window. Later he traveled in Vienna, Italy, one night heard Puccini's *La Bohème* and decided to go to Paris. Under Architect Auguste Perret he studied physics and mathematics, was a good technician in architecture when he went to Germany to study under Peter Behrens. The War found him a successful architect in Paris who gave up his practice to become a factory manager. The War's aftermath found him establishing himself as a Paris painter developing an outgrowth of Cubism known as Purism. But he could not keep away from architecture and in 1922 formed a partnership with his cousin Pierre Jeanneret. The following year he gave two clear indications of his architectural trend. He built a house for his fellow artist Ozenfant, with ribs

(Continued on page 64)



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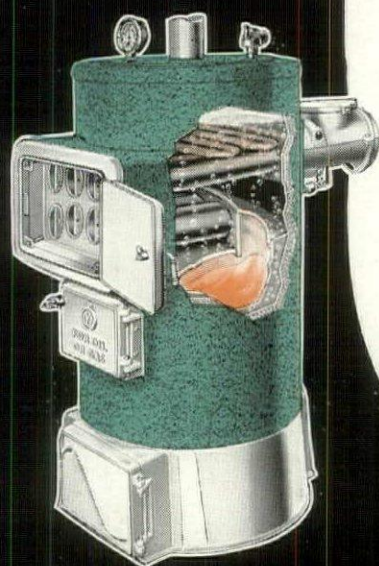
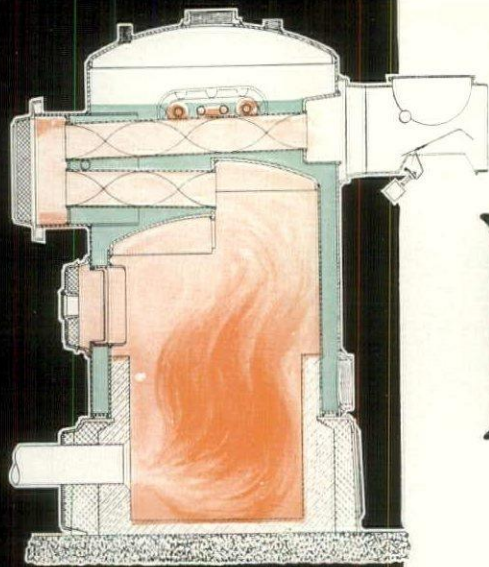


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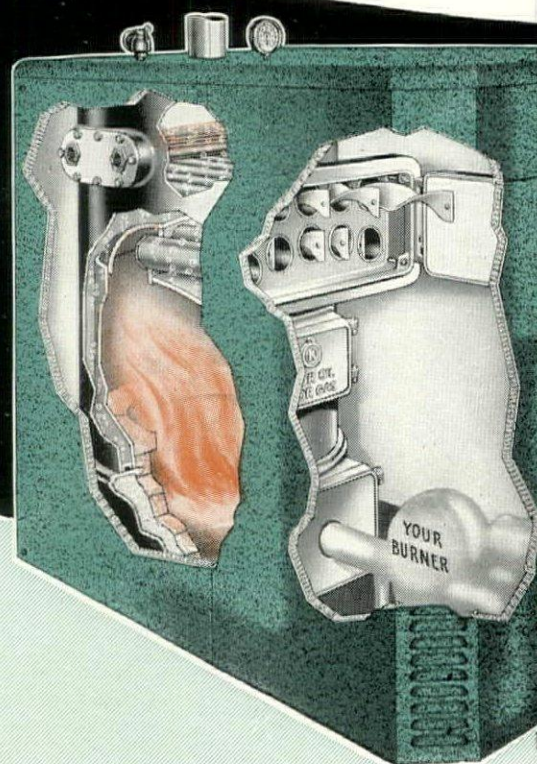




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# LETTERS

## Fake Wills

Forum:

It has come to my attention that my 1934 bronze medal has been stolen and is being used as a means of identification in obtaining money under false pretenses.

Apparently the person who is doing this is a young man, about thirty years of age, slim, with a sandy mustache, and is wearing a black, double breasted suit. He is intoxicated most of the time, and borrows money ostensibly to get home on. He was last heard from in Bridgeport on August 16, 1935.

ROYAL BARRY WILLS

Boston, Mass.

## G. E. Plans

Forum:

... I wish to make clear the policy of the General Electric Company in this "New American" Demonstration Home Building Plan with reference to furnishing architectural plans to builders.

In the first place the General Electric Company is not building any houses. The program in which we are now is merely an effort to have built a number of demonstration houses from Coast to Coast:

1. To stimulate in so far as possible the building industry and to obtain show rooms for General Electric equipment.

2. From the winning designs in our Architectural Competition, we have picked eighteen designs mostly prize winners, which we have encouraged builders and G. E. distributors from Coast to Coast to have constructed for the purpose of demonstration during the month of October, this year.

We have been very careful in all of our negotiations to assist local architects at every stage of the game, i.e., the General Electric Company will not sell plans for these houses to builders or potential owners. We have organized about 175 committees in all of the leading cities of the country, such personnel of these committees being made up of G. E. sales managers, distributors, and dealers. These committees being familiar with the building plan approach builders. When the builder asks where he can obtain the detailed plans and specifications, we have instructed our committees to tell the builder to consult his architect and obtain them through him. If the builder says he does not have an architect on his staff, we recommend that he employ one immediately especially in view of the fact that construction of these homes must be supervised by a local architect. The architect, therefore, obtains the plans from the General Electric Company for a fee of \$25, which is in reality a royalty to the original designer. We feel, therefore, that

we are helping the architectural profession greatly by not distributing plans to builders direct and by encouraging employing architects for the supervision of constructing these homes.

I feel that this should be made clear to the architects as there has been considerable misunderstanding of this matter. . . .

J. F. QUINLAN

Manager "New American"  
Demonstration Home Building Plan  
New York City

## Credit Washington Real Estate Board

Forum:

In the August issue of THE ARCHITECTURAL FORUM appeared an exceptionally interesting article on Washington, pages 136-139. . . .

The report credited to the Department of Labor was taken from our own compilation as you will note from my enclosure. The Bureau of Labor statistics for the month of June has not yet been published. The latest release, which came to hand last week, only covers the month of May. After having spent several hours with your correspondent and giving him data which is compiled from official records, I feel that some credit is due this organization.

Notwithstanding all of that, I am pleased to enclose herewith a subscription from the Washington Real Estate Board.

CHARLES J. RUSH

Washington, D. C.

## Wooden Money

Forum:

I should like to wager you one thin dime that, if an answer is found to the so-called prefabrication problem, it will be found within the ranks of the lumber industry.

T. H. MILLER

Woven Wood Laboratories  
Portland, Oregon

## Bang up, A-1

Forum:

To remind you (once again) that beginning with the October issue, THE ARCHITECTURAL FORUM is to be sent to my New York City address, 217 East 48 St. You're doing a bang up, A-1 job. Congratulations.

LEE SIMONSON

New York City

## Cubist? Modernist?

Forum:

... As a subscriber of ten years standing, after an absence of two years, I am disappointed owing to the fact that THE FORUM seems to consist altogether of a

style which does not meet the average tastes of any except the very few.

In my poor opinion a magazine to any real use to the average practical tect should meet the more conservative practice suitable for the average p who can not be educated to the modernistic and other extreme esth ideas of designs.

JAMES K. FAR

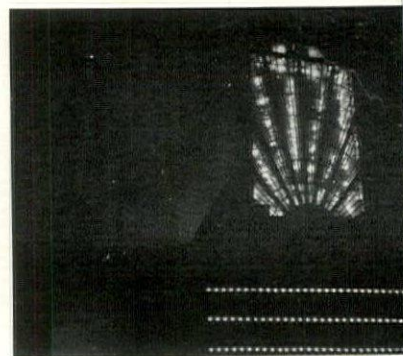
Paterson, N. J.

The circulation of THE ARCHITECTURAL FORUM: June, 1934, 6,580; June, 1935, 12,500.—ED.

## Actual Window

Forum:

I am submitting the enclosed picture because it is the only one I have which shows the window of the Travel Transport Building at the Century of Progress as it actually appeared to the eye



ing the exposition. Since the exposition have looked at many pictures of this building but without exception the windows so badly over-exposed to get the outline of the building that the beauty of the light was sacrificed entirely. . . .

CONRAD HEA

Oak Park, Ill.

## Moki Pueblo

Forum:

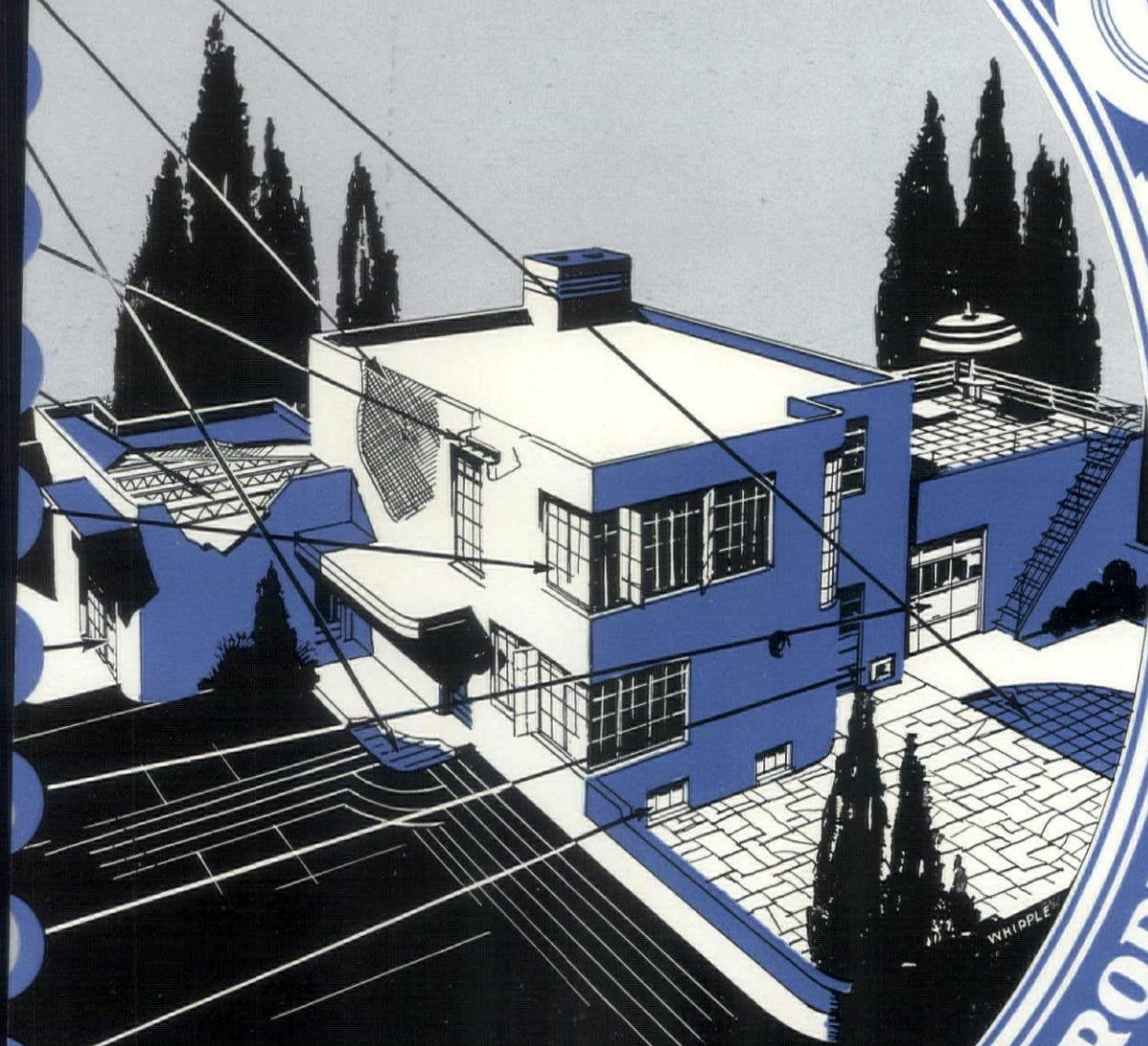
LE DERNIER CRI  
SEE THE BOXES GROW,  
ROW ON ROW  
ALL ALONG THE STREET.  
HOW SWEET!  
MOKI-PUEBLO CUBES OF MUD;  
WHAT A DUD!  
GONE THE GOOD OLD ROOFS OF CLAY  
HAD THEIR DAY.  
GONE THE LINES OF YESTER YEAR  
SEEMS SO QUEER.  
BUT WE MONKEYS UP A TREE  
WAIT TO SEE,  
WHAT THE NEXT MOVE BRINGS ALONG  
DING DONG.

DANIEL KEARN

Clearwater, Fla.



# FRUSCO

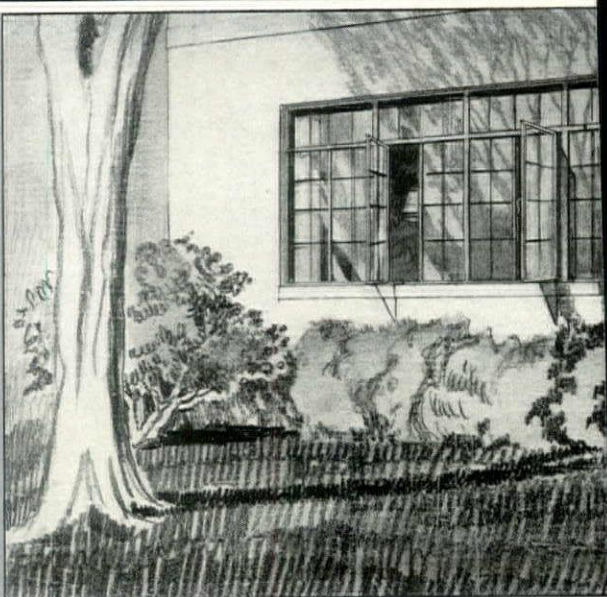
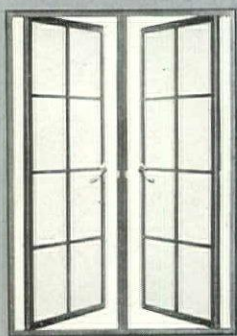


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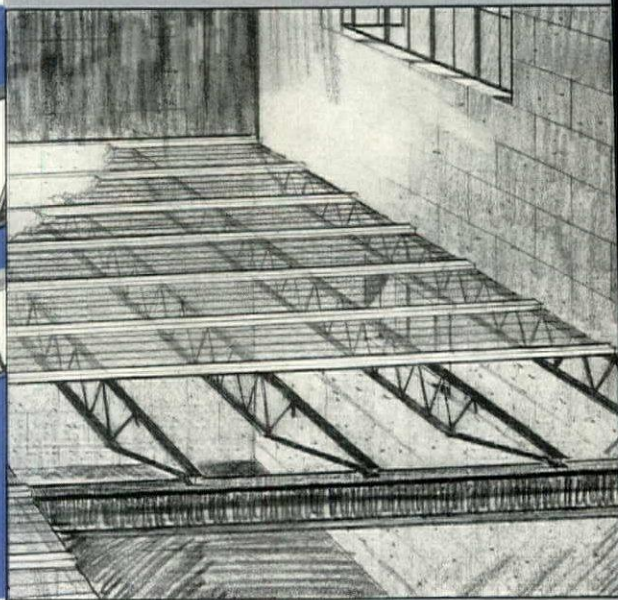


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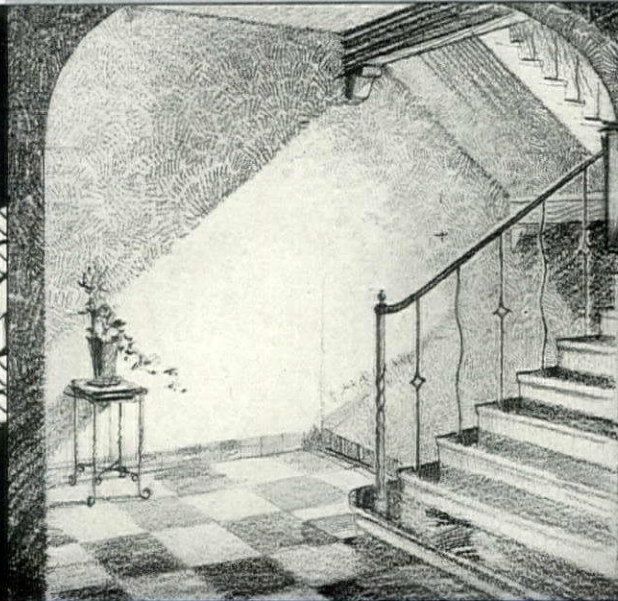
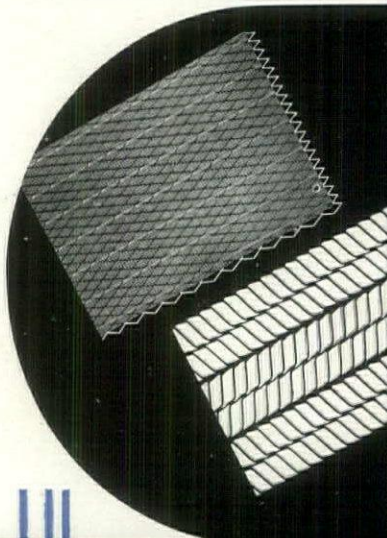
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● Truscon "Open-Truss" Steel Joists meet the increasing demand for a fireproof floor construction that can be easily and quickly erected at a cost of but little more than wood. Comprised of steel and concrete, this construction is non-shrinkable and therefore free from floor and ceiling cracks that are so common with floors of wood. Fireproofness, rigidity and elimination of cracks, comprise the outstanding features.

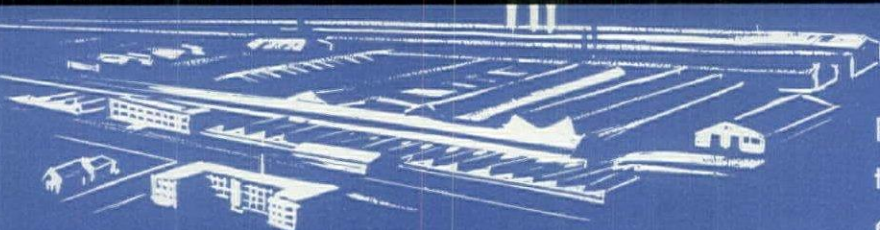


## OPEN-TRUSS STEEL JOISTS

● Truscon has been the leader in the development of metal lath. Today Truscon offers superior types of metal lath and accessories including the original Herringbone lath. Truscon metal lath is generally preferred by architects for obvious reasons. For thirty years it has proved its quality, its economy and its ability to provide crack resistance, fire resistance and permanent beauty for all varieties of plaster and stucco construction.

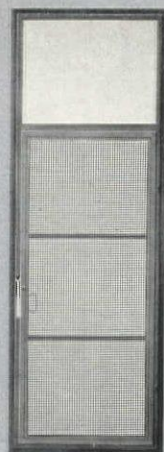


## METAL LATH AND ACCESSORIES



For over thirty years Truscon has been meeting the requirements of the building industry with efficient and economical steel building products. A pioneer in the development of fire-proof construction, Truscon began its work with merely a few products of steel. Today it manufactures hundreds - so many in fact that men say . . . "If it is made of steel Truscon makes it." How well this often-repeated phrase expresses





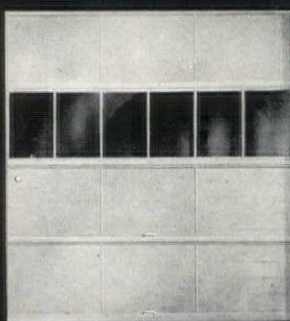
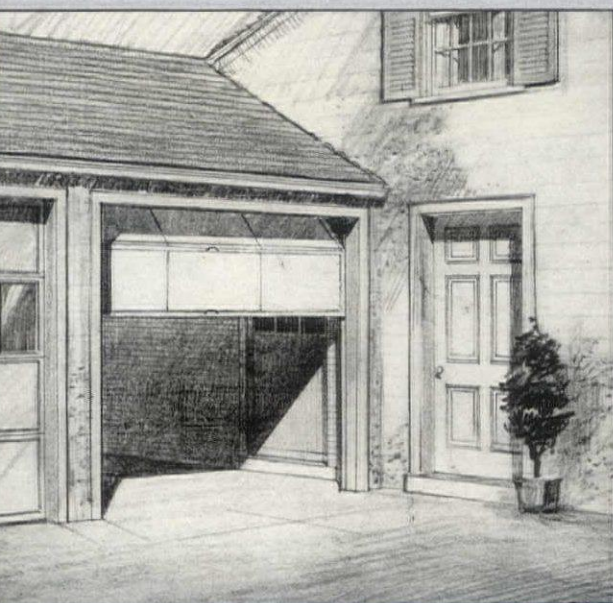
Artistic and distinctive window effects are always desired by a home builder. Many times, the importance of the cost-of-the-home consideration seems to preclude this possibility. Truscon Home Development Steel Casements solve this problem. Of highest quality, these attractive casements offer real individuality. Hardware and screens are simple in design but offer the utmost convenience in operation.

## HOME DEVELOPMENT CASEMENTS



Few features are more conducive in creating an atmosphere of "air and distinction" for a home than Truscon residence casement steel doors. This door offers a choice of many pleasing combinations for court or solarium openings or as an interior French door. The heavy sections insure positive weathering. While the standard door is made in only one size, Truscon can produce special casement doors to meet any requirement.

## RESIDENCE CASEMENT DOORS



Truscon overhead garage doors bring an advanced touch even to the most modern of properties. Truscon doors offer many advantages beside greater practicability and convenience. These include economy of space, protection from weather, neat appearance and ease of operation. The spring balances used in these doors, as well as all other operating parts, are considerably over-sized, insuring long and satisfactory service.

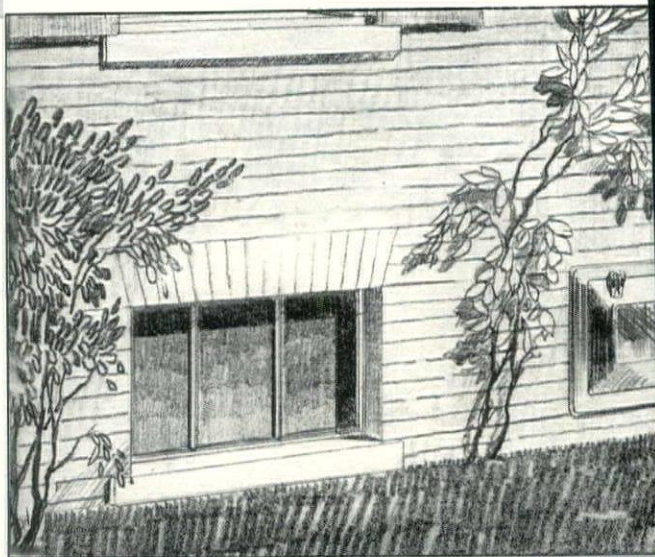
## STEEL GARAGE DOORS

Truscon's present position in the world of building. And, as in the past, Truscon will continue to create new steel building products to fulfill the needs of changing times and new conditions. There have been certain outstanding characteristics associated with Truscon products. They have been a step in advance in engineering design. They have been quality products. They have been products of character and integrity. They have always upheld the reputation of Truscon and justified the faith of those who placed their confidence in the Truscon organization. It is small wonder, therefore, that Truscon products have become the standard for comparison throughout the world.



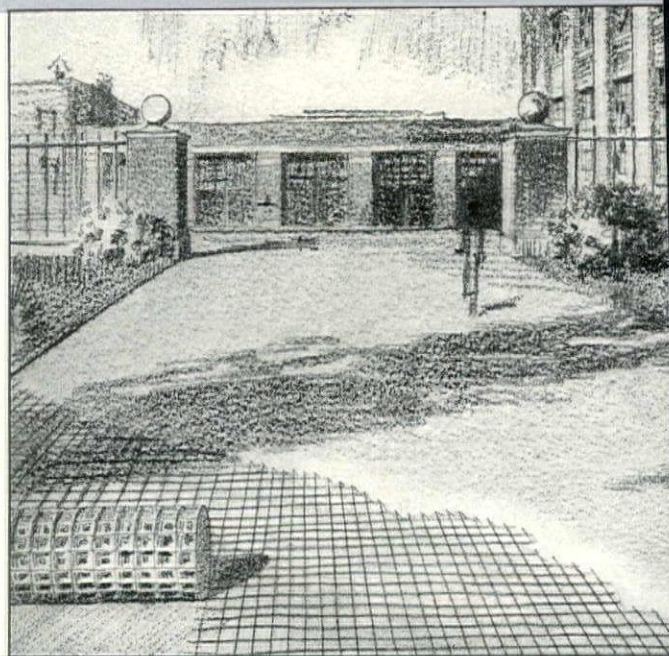
## BASEMENT WINDOWS AND COAL CHUTES

● No home built today is truly modern unless steel basement windows and pressed steel lintels are included. Truscon basement windows are manufactured of heavy, hot-rolled sections. They cannot warp, swell or stick. They operate easily under all conditions. Weather-tight, easily installed, simple to screen, they possess a wide range of usefulness. Truscon coal chutes are made of copper-bearing pressed steel and are break-proof, weather-tight and trim in appearance.



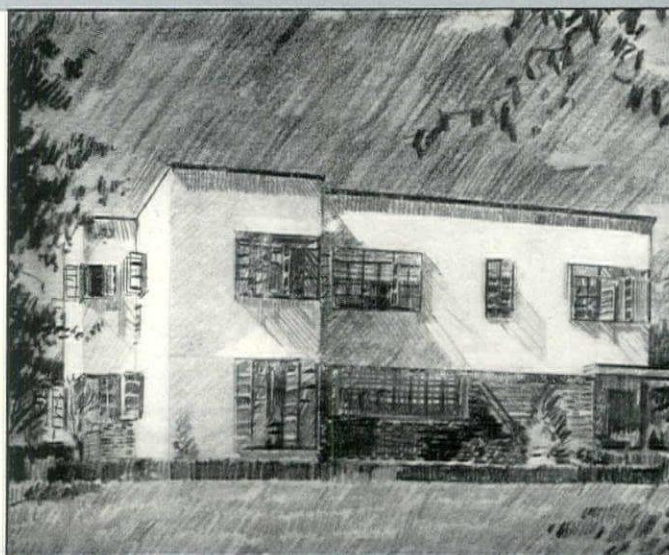
## REINFORCING STEEL

● Reinforced concrete construction, because it insures fireproofness, permanence and economy, is not only in general use for building and engineering structures of all types, but is especially recommended for driveways, courtyards, garage and porch floors and basement floors of the modern residence. Truscon's complete line of reinforcing steel includes such well known products as Kahn Trussed Bars, round or square Rib Bars, Welded Steel Fabric and  $\frac{3}{4}$ " Hy-Rib.



## FIREPROOF MATERIALS—ADVANTAGES

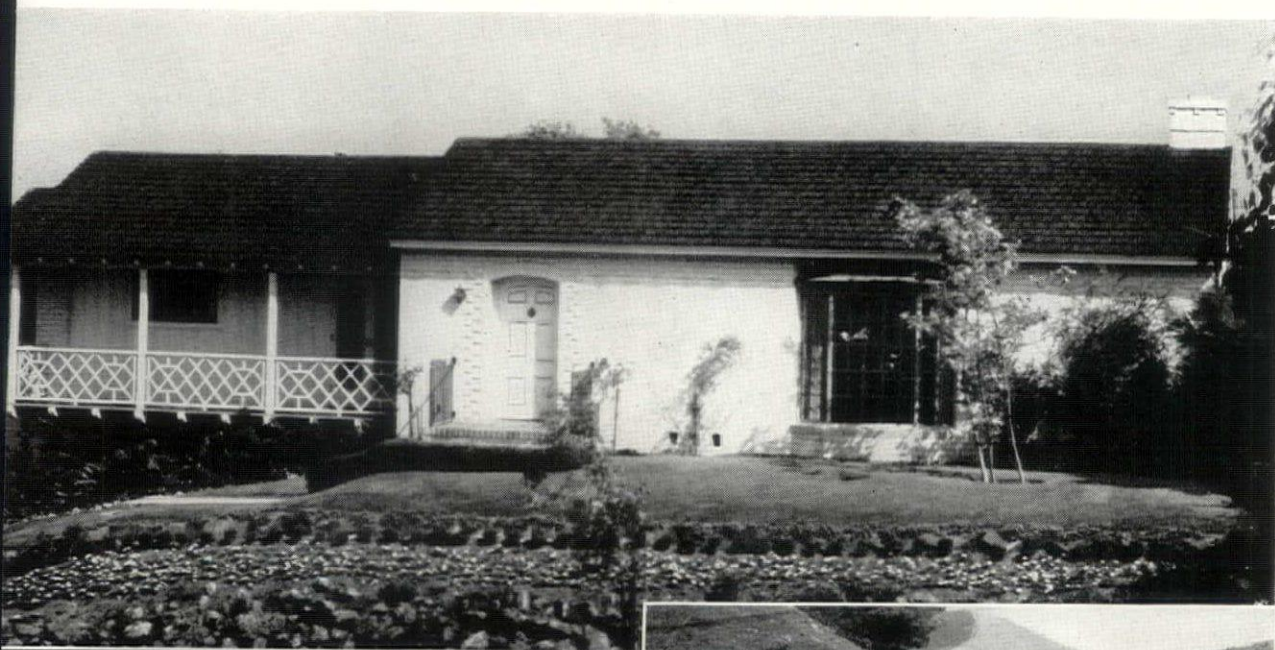
● America recognizes the importance of permanent, fire-safe construction - and this means the use of steel building products wherever possible. Our national fire loss is appalling, and the value depreciation on all kinds of buildings due to flimsy construction runs into billions. A building which utilizes steel products throughout is and will remain a good investment for many years to come. Truscon is doing its part to make America a country of permanent and firesafe buildings.



Truscon Steel Building Products are by no means confined to the requirements of residential construction. They run the gamut of the entire building industry. Each one is a highly specialized product for the purpose intended. For complete details and specifications on all Truscon Products, consult Sweet's Architectural Catalogs. For individual catalogs, address the manufacturer direct or nearest branch office. Offices and warehouses in all principal cities.

**TRUSCON STEEL COMPANY · · YOUNGSTOWN, OHIO**

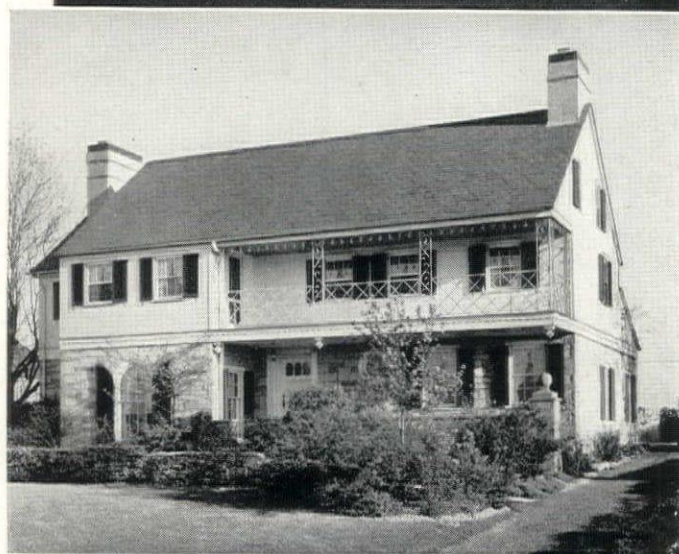




House at Los Angeles, Calif. Architect, Donald B. Worster. Roof stained with Cabot's Stains; walls painted with Cabot's DOUBLE-WHITE.



Studio House at Berkeley, Calif. Architect, Michael Goodman. Wall shingles painted with Cabot's Old Virginia White.



House at Cleveland, Ohio. Architect, John Sherwood Kelly. Painted with Cabot's DOUBLE-WHITE, trim Gloss Collopakes.

## Preferred by Architects

The architect's opinion of paints and stains has never been recorded more clearly than in this magazine. As you look through its pages, you will see that house after house is finished with Cabot's Collopakes or Cabot's Shingle Stains. We are proud of the quality that has made these products preferred by leading architects from coast to coast.

## Cabot's Shingle Stains and Collopakes

Write to: Cabot, Inc., 141 Milk Street, Boston, Massachusetts.

Please send me color cards and further information on Cabot's Collopakes ( ☐ Gloss Colors; ☐ Exterior Whites); ☐ Cabot's Shingle Stains.

Address \_\_\_\_\_

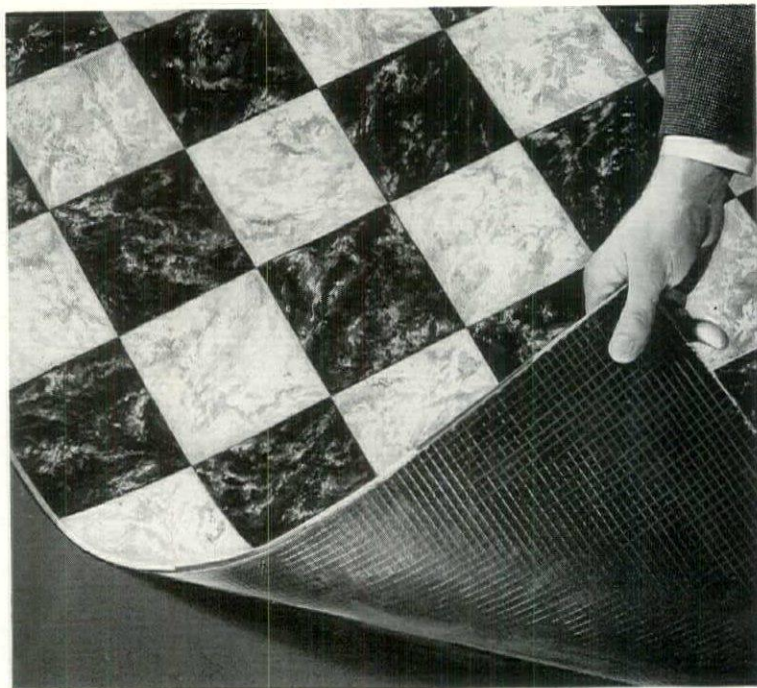
AF-10-35

*Samuel Cabot* Manufacturing  
Inc. Chemists

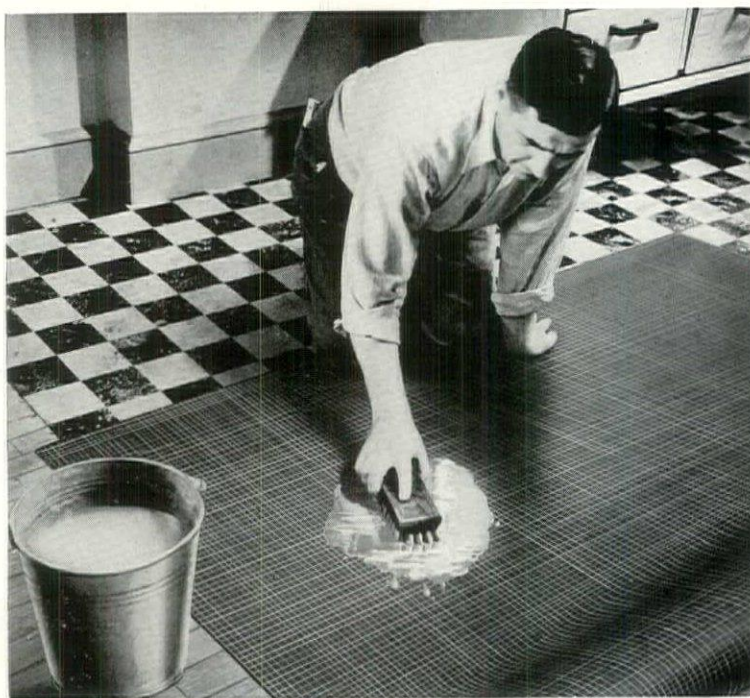


# Announcing

## ADHESIVE SEALEX LINOLEUM



*The factory-applied adhesive on the back reduces laying time and assures uniform and complete adhesion.*



*To install, simply activate the adhesive back with water, and press to the under-floor.*

THIS revolutionary new product is of interest to architects, maintenance companies and home-owners because of its practical and economical advantages.

It embodies all of the desirable qualities heretofore obtainable in the well-known and popular Sealex Linoleum.

In addition Adhesive Sealex Linoleum carries a factory-applied adhesive on the back. Because of its absolutely even distribution of adhesive, complete and uniform adhesion to the underfloor is assured. This results in a stronger installation of finer appearance.

This new Adhesive Sealex Linoleum is also installed more quickly and at lower cost than other types of Inlaid Linoleum because the use of lining felt and spreading of paste are both eliminated.

Adhesive Sealex Linoleum is available in a wide variety of attractive patterns particularly adapted for residential construction. Write for complete information and samples of this new floor-covering.

**CONGOLEUM-NAIRN INC.**

**KEARNY, NEW JERSEY**



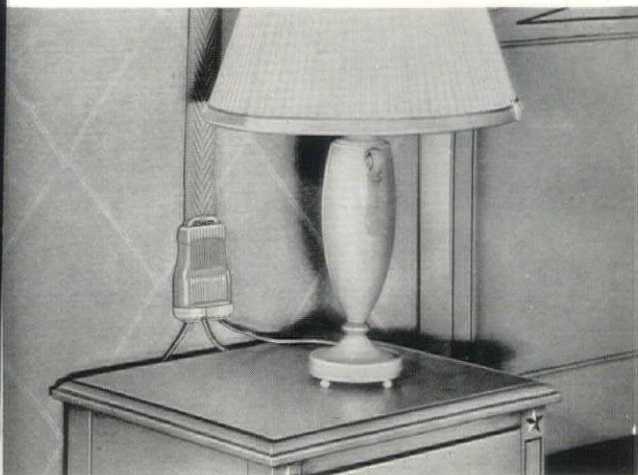
# PRODUCTS AND PRACTICE

With the long-awaited revival in building showing strongly in residential construction, heavy industries turn to the house of moderate size as the most important market for the 1936 product parade.

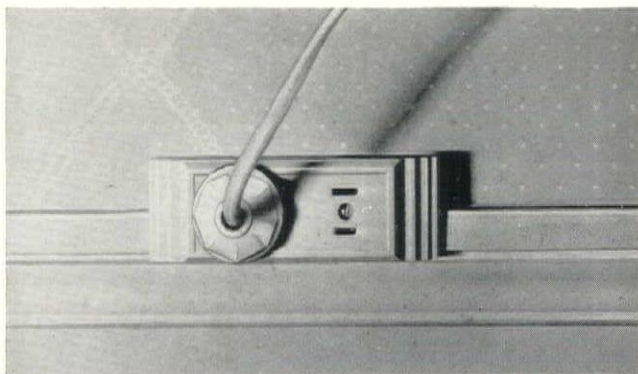
SUPPORTING the oft-repeated dictum that the house is a machine for living in, is the swiftly increasing mechanization of the residence of the 1930's. The remarkable technological advances in this field displayed by manufacturers of building materials and equipment leave no doubt as to their conviction that this trend is on the up-grade. The prediction of one writer that the house of the future would be given away with the plumbing, while doubtless something of an exaggeration, nevertheless contains more than a grain of truth, and the most cursory examination of the construction outlines of the 101 houses presented in this issue will reveal the fact that whatever the style, size, cost, or geographical location of the present-day American house, it is more completely equipped for comfortable living than ever before. And the insistence of today's housewife on results obtained with half the effort of yesterday, coupled with the intense competition among the manufacturers who sell equipment, indicate future developments of an order difficult to predict even on a basis of present achievements. After years of neglect in favor of large construction the house is finally coming into its own. The examples selected for brief review in this department are typical. To a complete technical study of the house, its construction and equipment, the December FORUM will be devoted.

## 1000. CONVENIENCE OUTLETS

A new line of surface wiring, known as AddHere, has been brought out by the Bryant Electric Co. Consisting of a rubber "raceway" which is cemented to the wall, and duplex outlets which may be attached at any point in the run, it is a most satisfactory departure in wiring practice. It eliminates long runs of extension cords, and allows the placing of outlets with a maximum of convenience. A new type of outlet, placed in a pendant, has also been introduced. The pendant is attached to the picture mold or the wall, and is covered with cloth which comes in various colors; it is used for wall fixtures,



PENDANT OUTLET

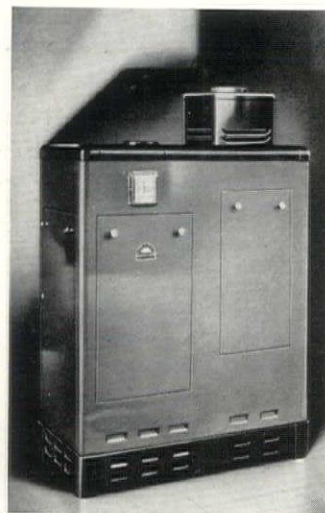


WALL OUTLET

lamps, electric irons, etc. Because of its economy, inconspicuousness, and safety this new type of wiring recommends itself to home owners who find that their requirements have outgrown the existing wiring facilities.

## 1001. GAS-FIRED BOILER

The Bastian-Morley Co., Inc., announces the new Series 25 Basmor Gas-Fired Boiler, a unit designed for steam, hot water, and vapor heating, which is now available through distributing branches of the Crane Co. throughout the U. S. The boiler illustrated is Model 25-S-6, and has an American Gas Association rating of 550 square feet of steam radiation, and is capable of handling 350 feet of actual cast iron steam radiation plus starting and piping load. The new DeLuxe housing is available with all Basmor Series 25 boilers in steam, hot water, and vapor types, and in all sizes from three to eleven sections, handling from 141 to 712 feet of actual cast iron steam radiation or from 112 to 1,162 feet of actual water radiation. The boilers are also supplied through all the above ratings and extending up to 5,665 feet of actual steam or 9,065 feet of actual water radiation with the standard housing. In addition tandem or multiple installations of any of these separate units are also possible. The smooth, simple housing of these new boilers is typical of the trend towards more clean and attractive casings for heating and air conditioning units for use in homes. The unit illustrated is very compact, being only four feet in height including the draft hood.



(Continued on page 32) GAS-FIRED BOILER



# Consider

# STREAMLINE

## IN YOUR NEXT SPECIFICATION

**D**URING the last five years architects have specified and used STREAMLINE Copper Pipe and Fittings successfully in every type of building construction and in thousands of installations throughout the United States and Canada.

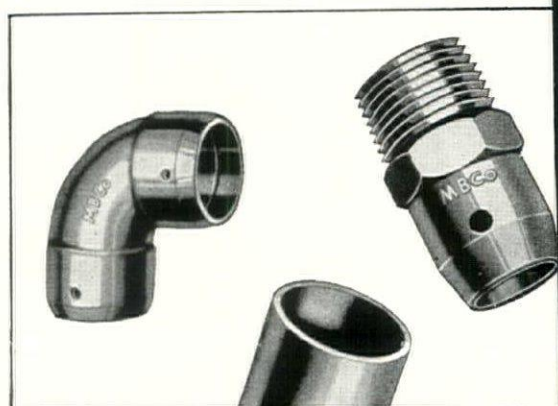
STREAMLINE Fittings and Copper Pipe are revolutionizing plumbing and heating installations—in their method of connection, which eliminates costly heavy walled pipe—in their long life—and last, but not least, in the fact that they place a non-rusting, non-clogging piping system within the reach of the ordinary investor. A STREAMLINE INSTALLATION COSTS LITTLE IF ANY MORE THAN ONE OF CORRODIBLE MATERIALS.

Under normal conditions they assure your client a non-rusting, non-clogging, trouble-free plumbing or heating system as long as the building stands. Absolute safety in concealed work, maximum efficiency in heat transference, conservation of valuable space and freedom from the harmful effects of vibration are but a few of the many advantages of this product.

May we send you a list of recent prominent STREAMLINE installations with the names of the specifying architects?

### THINK OF THIS

77% of all solder type fittings installed last year in buildings of every kind throughout the United States were STREAMLINE Fittings.



**STREAMLINE  
PIPE AND FITTINGS**  
PORT HURON, CO. MICHIGAN  
DIVISION OF MUELLER BRASS CO.





# CORK INSULATED SHINGLE WINS NATION WIDE

OK

**ITS 10 YEAR RECORD JUSTIFIES ITS USE WHEREVER BUILDING BUDGETS DO NOT PROVIDE FOR SEPARATE ROOF INSULATION!**



*Home of Architect Robert L. Stevenson, Medford, Mass.*

Architect Stevenson says: "The Carey Cork Insulated Shingles, used on my residence 8 years ago, are unfaded and not a shingle has unlifted in all this time. Proof of their insulation value: The roof will retain the snow for a longer time than surrounding homes with ordinary shingles."

On thousands of roofs—North, South, East and West—Carey Cork Insulated Shingles have demonstrated their *insulating value* plus their long-lasting roof service.

Fabricated with weather surface of slate; cork surface underneath. Three thicknesses of insulating cork act as a barrier to heat and cold; make any home cooler in summer, warmer in winter. The extra thickness of the shingle, due to the cork back, introduces a distinctive note in roof beauty. Modern colors that harmonize with any color scheme or individual setting.

Carey Cork Insulated Shingles are approved by the Underwriters Laboratories—the **ONLY** shingle that provides both roof and roof insulation at cost of roof alone.

Write today for samples and full details.

For the complete line of Carey Asphalt and Asbestos Roofings see our Catalog in Sweets.

**Carey**  
**CORK-INSULATED SHINGLES**

**THE PHILIP CAREY COMPANY - LOCKLAND - CINCINNATI, OHIO**

*Branches in Principal Cities*

*Dependable Products Since 1873*



# THERMAX

## *Structural*

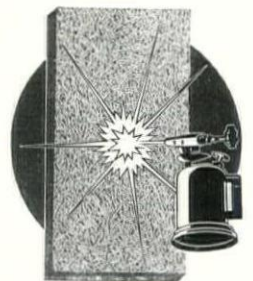
### FIRE-PROOFING INSULATION

### FOR HOMES



STEEL FRAME RESIDENCE WITH THERMAX USED AS INSULATION,  
SHEATHING & STUCCO BASE • HILLARD RUSSELL, ARCHITECT

**Thermax is the modern insulating material, structurally strong, fire-resistant, sound-deadening and light in weight . . . Furnished in slabs 1", 2" and 3" thick, 20" wide and adaptable lengths . . . Ideal for sheathing, stucco or plaster base and used extensively for furring and partitions as well as structural floor and roof slabs . . . Makes any house a more comfortable, more economical, more durable, safer, quieter home . . . Write for latest literature . . . Address Thermax, Farmers Bank Building . . . . . Pittsburgh, Pennsylvania.**



FIRE-PROOFING  
INSULATION



# Now...a *moderately priced* COPPER ROOF

NO LONGER need you hesitate to recommend a roof of this durable metal—the metal and the same type of construction considered ideal through the centuries for roof-cathedrals, state buildings and palatial residences here and abroad. For the new Anaconda *Economy* Cottage Roofing costs no more than quality commercial slate!

This low cost has been achieved by reducing weight of the copper from 16 to 10 ounces per square foot. Yet there is no sacrifice in strength, durability and wind resistance, because sheets are tighter and seams are closer together—an improvement which also makes the new roof ideally suited to residential use. And installation expense is lower because the lighter sheets are easier to install.

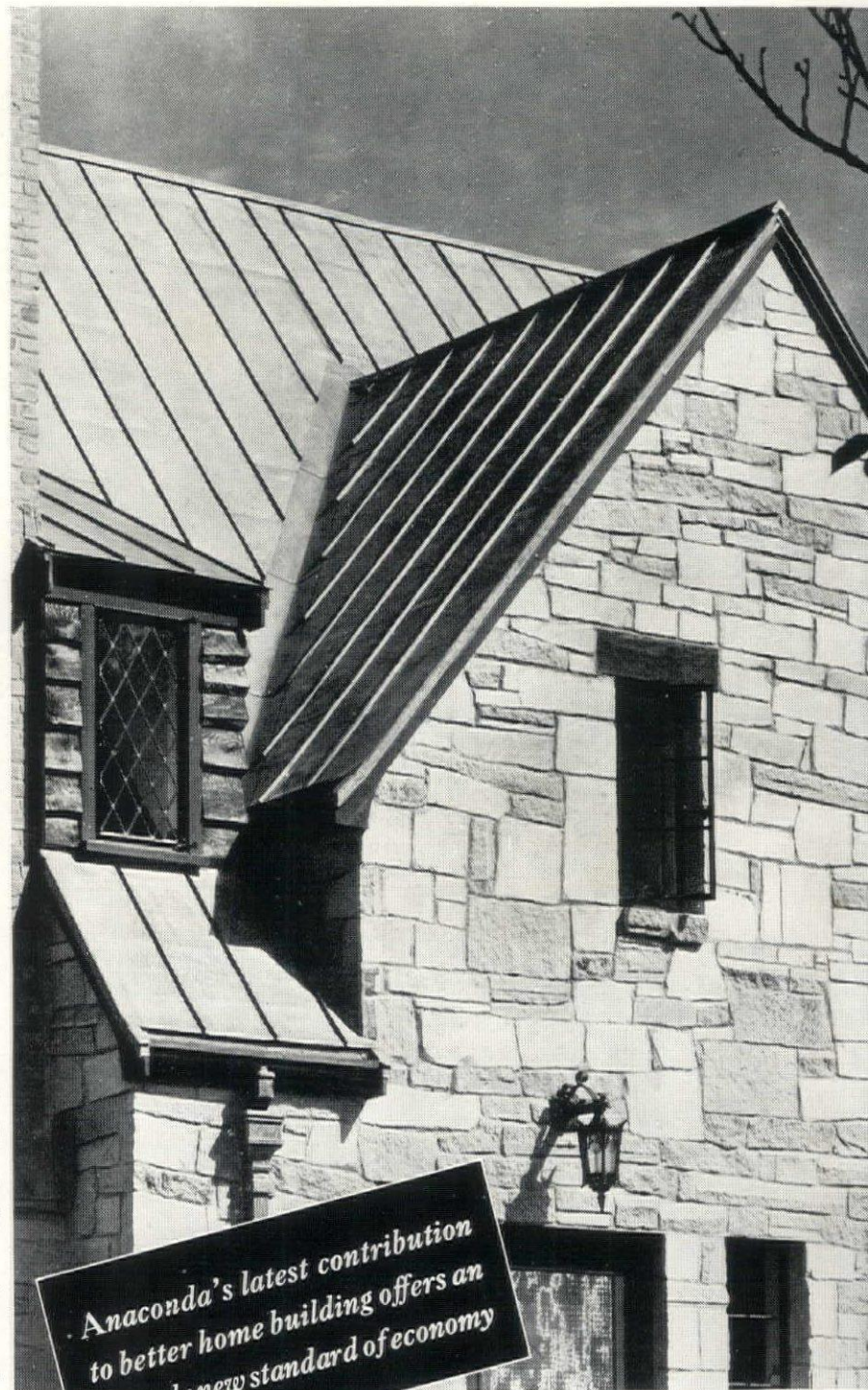
Anaconda *Economy* Cottage Roofing offers an entirely new standard of economy. Instead of deteriorating, it increases in beauty with age and service; correctly installed, it should require no further attention. It is fire-safe, light in weight, and easily applied by experienced sheet metal contractors.

Such a roof is the most durable type obtainable. Throughout the years it will add to the resale value of the home. Always it will be as fine a roof as anyone could want. May we suggest that you investigate Anaconda *Economy* Cottage Roofing?

THE AMERICAN BRASS COMPANY

General Offices: Waterbury, Connecticut  
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Anaconda's latest contribution  
to better home building offers an  
entirely new standard of economy

## Anaconda *Economy* Cottage Roofing



## SMALL HOUSES?

### PROGRESS MAY BE REPORTED

For a nation that gets a lump in its throat every time someone starts singing "Home Sweet Home" not much has been done in the past to make that home worth singing about.

Beguiled by sentimentality and salesmanship, 129 million more or less Americans have been entered in 29 million more or less houses built for the most part without benefit of architect, without benefit of rational financing and without benefit of a lot of other things too numerous and too familiar to tally.

All of which is a broad enough indictment to reach from coast to coast. And it does. It was not the fault of any one person or any five persons or any ten groups. It was the inevitable product of the totality of a disintegrated and disorganized mass that is called the Number One U. S. business—building.

How many more years or decades or generations that would have gone on no one knows. Nothing short of a cataclysmic depression could have cured it. Today, there are enormous reasons to believe that it is being cured. More than a small start has already been made and the immediate future holds promise of progressive improvement in every direction.

The architect has discovered that skyscrapers are thrilling only when they are being built. Now he is learning that the small house is the most important and the most challenging architectural problem that remains somewhat unsolved. Progress may be reported.

The speculator who built houses for sale has become an "operative builder"—a new designation more in keeping with the new standard of homes he is building today. And in greatly increasing numbers, *with* benefit of architect. Progress may be reported.

The lender of first mortgage money has become more intelligent and more particular about the real value of his collateral. And the second mortgage man with his extortionate rates and bonuses finds himself with nothing to buy or sell. Progress may be reported.

The maker of building materials and equipment has survived four years of sleepless nights in the



ratory and emerges with an array of technological improvements that make possible almost unlimited advance in the durability, convenience, safety and beauty of the new house. As yet not much change in costs, but this is an often exaggerated item as other portions of the house dollar, such as labor and financing, play a larger part. Again progress may be reported.

Finally the buyer. He too has changed. Magazines, radio and a dozen other media have been teaching him what to expect and what to demand in his new house. He is wiser. He wants to know what is behind the wall that looks so nice and smooth. He knows there are such beasts as termites and that you can't catch them in a mouse trap. He knows that an electric washing machine won't run without an outlet to plug it into. He is commencing to learn that colored tile in the bathroom is lovely only as long as the plumbing in the bathroom works. He still wants a fetching entrance but he doesn't want it smashed by a falling, rusted gutter. Etc., etc., etc. And slowly it is dawning upon him that a long term amortized mortgage may sound less alluring when he gets it but it looks mighty fine ten years later when one-half of the house really belongs to him and the other half will when he has paid it off monthly just like rent. Again progress, very great progress, may be reported.

How all of these reforms are coming about is detailed elsewhere in this issue. The important point is that unbelievable gains have been made straight across the housing front. Motivating them has been the depression, a challenging array of housing economics that could no longer be ignored, long delayed architectural and technological advances, extremely important Government activities (particularly the Federal Housing Administration) and legislation aimed at better banking facilities for home ownership. This multiplicity of changes, coupled with the unprecedented house shortage which must soon be met, should for the first time carry the U. S. to the place where its citizens can with sense as well as sentiment sing "Home Sweet Home."

Progress may be reported.



# THE SMALL HOUSE: 1935

... snubs the past, acquires a realistic plan and gives the home buyer a new and better shelter at terms he can afford to pay.

To all readers of the 1929 Sunday papers \$4,999 was a familiar figure. Familiar, too, was the little white house on the little green plot which this little sum would buy. Too late and too often the buyer learned that the house was poorly built, poorly planned and designed and that the financing finally cost almost as much as the little house itself.

The speculators were, of course, largely at fault. They tried to save by doing without architects. Labor and materials were high. It was all the operator himself could do to make money on his lot and break even on the house. And at that, he usually had to take a second or third mortgage as his hope for profit.

To further bedevil the buyer the only type of financing he could get rocketed the cost to twice the cash price if he was able to meet his payments. Many times he was not, and he lost the house.

Poverty is a purge. And while it was washing away the slim equities of countless owners, it was doing the same thing to speculative builders. One by one, Dewbright Homes, Sun-up Estates, and Golden Glow Manor went over the dam of bankruptcy.

The six creeping years since 1929 have wrought changes. And while the same builders who operated under such luscious names are clambering back into the field, they are coming in on a different basis. The speculative builder now calls himself an operative builder, and it takes more than a down payment on a swamp to become a developer.

The same is true of the buyer. His eyes have been pruned open to true value in residential building. And what he sees is far more satisfying than what he failed to see five years ago.

It is a curious truth that behind these major changes in home building are reasons, not social but economic and even political. There was no home owners' revolt, nor did conscience prod the builders into reform. Had there been no depression, there would have been no change. But there was depression. And the master minds of economics decided that the key to recovery was home building. And the master minds of politics decided that largely on recovery depended the fate of the present Administration.

Thus, for the first time, the best minds of the U. S. designed to consider the home. Once they focused their attention on the deplorable state of the industry, truths, long existent but ignored, suddenly became objects of economic and political concern. The realization that it was literally impossible for the bulk of U. S. families to buy decent homes even if they wanted to, was stunning at first. And then it brought about a national demand for better houses at lower first and final cost.

It is more than a coincidence that concurrently the building industry has been tooling up to meet such a demand. The industrial revolution, which altered the course of nearly every other business, failed to sweep

building along in its tide. It was only four years ago a minority of progressive architects and building technicians, all concentrating on the building industry, began the staggering task of catching up. But because building volume has been only ankle high, the progress has been made principally on paper, awaiting such a time as the present to make its gains actual.

Thus, with economists, business men, political technicians, all concentrating on the building industry, the small home became no longer an isolated, personal problem between its builder and the buyer. It transcended its own boundaries and is now the center of the economic life of the U. S.

## *Events which forecast a major increase in house building.*

In the years when building was most boisterous, housing never sheltered more than 500,000 families a year. The curve is familiar: \$937,352,739 in 1921, sweeping upward to \$2,461,546,270 in 1925, tumbling sharply to heart-breaking low of \$91,298,433 in 1933. The first eight months of 1935, however, have sent the industry back to work, not in its full strength, but at as much as a 50 per cent increase over last year would permit. It is an impression rooted in something more than hope that the advance will continue uninterrupted, not only for the rest of 1935, but for the rest of the decade. (page 438.)

In the first place, normal increases in population, accelerated obsolescence of houses resulting from neglect, and the low volume of building, have combined to create a physical shortage of homes unprecedented in U. S. history. The number of new units needed has been variously estimated at from two to ten million for the next five years. A proof that this shortage is fact and not theory is found in the steady dwindling in national vacancy. Where the average vacancy in 1932 was 7 per cent, today's average is 4 per cent.

These figures of need, however, cannot arbitrarily be interpreted as figures of demand, since the two are far from synonymous. Nevertheless, those forces which translate a need into a demand are in motion, and the conversion is on. Briefly, this is being accomplished by the creation of easier money and by reinstating the mortgage into financial good graces.

Following the complete disorganization of the mortgage market, the Federal agencies created under both Hoover and Roosevelt to relieve distress and to create new channels of finance are now successfully performing their tasks.

1. The Home Owners Loan Corporation has refinanced almost a million distressed home properties. Simultaneously, real estate reorganization under Section 77 of the Bankruptcy Act has permitted hundreds of other distressed properties to be reorganized and put on



basis. Funds thus tied up are now free for new  
 the Federal Housing Administration, through its  
 of mutual mortgage insurance setting new  
 rds of mortgage lending, has restored confidence  
 gages as an investment. While the FHA is still in  
 ing clothes, it is daily becoming the accepted  
 for permanent home mortgage financing, offering  
 mortgagee safety and liquidity, and to the owner  
 r and more convenient terms.  
 through the Federal Home Loan Bank System and  
 n Federal savings and loan associations an abun-  
 of immediate and reserve funds is ready for use.  
 ost no section of the U. S. is mortgage money now  
 ng.

nder the new Banking Act and also through the  
 l Home Loan Bank System, both of which pro-  
 r mortgage rediscounting, either implied or direct,  
 me mortgage for the first time has become an  
 vely liquid security.

f which argues that *eventually* home building will  
 ored to impressive levels. But will there be *imme-*  
*activity*? The answer seems to be yes. And that  
 is backed up by three good reasons.

ents and selling prices are rising in approximately  
 cent of the cities of the U. S. Soon the layman will  
 as cheap to build or to buy as to rent.

tational income, the index of ability to pay, in-  
 d \$5,000,000,000 last year over 1933. In terms of  
 building, that means that more people are able  
 for homes than were a year ago.

inally, the house which is being offered today to  
 merican public is the finest house for the money that  
 er been put on the market.

### *'s house and a generous hint of row's.*

s in elaboration of the last point that the current  
 of THE ARCHITECTURAL FORUM and its companion  
 ber issue are presented. On the following pages 101  
 s testify to the progress of the small home. Not  
 ost its owner more than twenty thousand dollars  
 any cost less than ten. Geographically, they rep-  
 the country; architecturally they do the same.  
 swing wide of all tradition, some hug it closely,  
 he great majority, while acknowledging the past,  
 re toward the future.

ey are the architecture of today, and they indicate  
 architecture of the decade ahead. Because each house  
 specific fulfillment of an individual family's needs  
 desires, no one house is a general summary of the  
 . Nor does a composite of all the houses supply the  
 er. For almost every house that is built is the product  
 mpromise. Standing between the owner and the let-  
 perfect fulfillment of what he really wants are such  
 s as his ability to pay for them, the willingness of  
 ank to lend, the local availability of products, the  
 ect's ability to interpret, and the skill of the con-  
 or to produce.

at the producers of houses are coming nearer and  
 r to giving the owner what he wants and ought to  
 at the price he can afford to pay. This in itself is  
 major advance of the industry. If the 101 houses are  
 rpreted as an approach to, though not the realization

of, the house of the late Thirties, we have a clearer picture  
 of the small home of tomorrow than the houses them-  
 selves present.

### *Inventive architecture replaces imitative.*

The building industry has more than mere specu-  
 lative interest in any attempt to project the form of  
 house that is to be typical of the approaching boom. The  
 plans of manufacturers, builders, realtors, architects  
 hinge on the answers to such significant questions as Will  
 the house of the late Thirties be Modern? Will it be  
 prefabricated? Will it be fireproof? Will it be air con-  
 ditioned?

One test, of possibly questionable acidity, is the be-  
 havior of the one city in the U. S. that is already enjoy-  
 ing its boom—Washington (ARCH. FORUM, August,  
 1935, p. 136). If that were to be marked as evidence it  
 would reveal that the house is going to be fireproof, air  
 conditioned, and adequately mechanized and electrified.  
 As for its architecture, except for a slight concession to  
 outdoor living in the form of a ground floor terrace, the  
 houses are as traditional as any Washington has built in  
 the past.

But that is a city where architects are controlled by  
 operative builders; and operative builders, dependent for  
 their financing on local banks, are controlled by the  
 bankers. And where public taste runs toward archæology  
 rather than architecture.

Thus, a conclusion based on Washington is subject to  
 reservations.

In bold opposition, the editors of *Fortune* predict that  
 Modern design, like love in the Gershwin song, will sweep  
 the country. Says the magazine in its October issue:

"Along about the year 1936 there will sprout in the  
 U. S. a second building boom. It will probably be less of a  
 boom than its predecessor. Its mother will be necessity,  
 not the stock market. Its wage scales may be lower, its  
 silk stockings skimpier, and its automobiles more battered  
 than the wage scales, silk stockings and automobiles of  
 the decade before. But its architecture, by and large and  
 with all proper allowance for the intransigence of occa-  
 sional millionaires and occasional real estate developers,  
 will not only surpass but will entirely eclipse, cancel, re-  
 peal, and nullify the architecture of the school of Coolidge.  
 For the architecture of the boom of the Thirties and the  
 Forties will be inventive, not imitative, rational, not  
 faked, useful, not decorative. The architecture of the  
 Thirties and the Forties, in other words will be Modern."

Now Modern is a term susceptible to a thousand  
 abuses. To the layman and indeed to many architects, it  
 simply means the flat roofs and unadorned planes usually  
 described as in the International Style. Modern really  
 means planning from within—for convenience, comfort  
 and health—and letting the exterior take care of itself.  
 It is perfectly possible, if not always easy or wise, to have  
 a Modern plan in a traditional shell. Conversely, flat roofs  
 and sun decks do not a Modern house make.

The fact remains, however, that Modern has popu-  
 larly come to mean an exterior style. Certainly most of  
 the visitors at the Chicago Fair, when they said "Mod-  
 ern," were talking about the outside of the house, not the  
 inside. The question immediately arises: "How do people  
 feel about these Modern outsides?" An answer has been



indicated by an independent research organization which at *Fortune's* request rang the bells on 3,000 doors and asked housewives, clerks, laborers, merchants, bankers what they thought about Colonial and Modern architecture. In one hand the inquisitor held a photograph of a Modern exterior, in the other a Colonial. "If," said he, "you had to choose between these two houses for your home and they were the same except for style, which would you choose?"

"The preferences," says *Fortune* "were Colonial, 56.3 per cent; Modern, 41.2; don't know, 2.5. The relatively large proportion of choices for Modern houses were not, as might be supposed, among the younger people; men over and under forty, and women under forty were nearly equally for it at around 43 per cent, and the women over forty only a little less favorable, at 36 per cent. Geographically the extremes are between the plain states of the West, where only 37.2 per cent of the people like the Modern, and the Southwest, the only region in which a majority—54.1 per cent prefer it."

### ***The Banker balks at Modern.***

If there is one shadow across the path of new style of exteriors more ominous than any other, it is that of the banker, whose hesitancy to support it with mortgage money is born not of dislike of unornamented design, but of the fear that the apparent trend may be no more than a fad. He believes that if and when a mortgage on a Modern house had to be foreclosed, he would find no buyer. Given proof or assurance that in five, ten and twenty years houses in the Modern style will still be salable, he would open his purse strings as wide for them as for any other type.

While proof of resale value will never be documentary, there has been set down on the side of Modern architecture a case so compelling as to move even a banker. In its technical bulletin No. 2, prepared by Miles L. Colean, the Federal Housing Administration exhorts its field organization not to refuse mortgage insurance to houses so styled. Its arguments are as potent for the original granting of the loan as they are for its insurance. The friends of Modern architecture could do no better than to place Colean's text in the hands of every mortgage lender in the U. S.

There they would find such sound logic as:

"The history of architectural design has shown many periods of accelerated development when new styles arising from changing modes of thought and living have rapidly become popular. It may well be that the increasing popularity of Modern architecture marks such a period. Coming after a period of major depression which has produced widespread ferment in inventive and artistic thought, at the same time preventing all normal flow of development, change may be expected to come with unusual rapidity.

"From the point of view of mortgage security, the problem presented is obviously not a simple one. On the one hand, it would be harmful and ultimately useless to offer resistance to a change which is rooted in changing modes of thought and living. On the other, where rapid and unforeseeable change is occurring, the hazards to a system which relies upon stability over a long period are increased. These hazards must be taken into account in

order to assure the soundness of our program. It must be kept in mind, of course, in treating with this subject that obsolescence is no new thing in real estate. What is simply an additional factor to consider in estimating obsolescence. It must also be recognized that in the housing field, even an accelerated rate of obsolescence is likely to proceed much more slowly than is frequently the case with other commodities, such as the automobile.

"If Modern design could be classed as a fad, the exclusion of the Insuring Offices [of the FHA] would be merely to eliminate it from eligibility. It appears obvious, however, that in spite of many faddish features displayed in the movement is one of more than a transitory nature and that the basic elements which characterize it are of all likelihood, sooner or later, become characteristic of a large body of our stock of housing.

"The basic characteristics of Modern design lie in the attempt made (1) to create a plan which will provide a functional relation between rooms arranged to suit present day modes of living, to facilitate efficient housing, and to permit an economical use of material; (2) to permit the exterior treatment to be dictated primarily by the plan and to be an expression thereof with little regard to traditional concepts; (3) to use materials efficiently, economically and directly, boldly eliminating decorative features and relying upon texture and color of materials together with skillful arrangement of windows and openings to produce an esthetic effect.

"There can be no quarrel with such principles.

Whether or not Modern design in its nakedest form will dominate the building scene for the next five years will undoubtedly influence the appearance, construction and planning of whatever houses may be built.

Probably the most acceptable sign that architectural thinking is shifting its ground was the predominance of open planning in the New American Home competition conducted this spring. (*ARCH. FORUM*, April, 1935, p. 10.) The square and rectangular plans of ten and twenty years ago were discarded in favor of a more open plan, specifically adapted to the living needs of the present. Arrangement of the rooms for maximum livability and ease of circulation superseded arbitrary room arrangement dictated by a fixed exterior design. This departure from tradition is frequently accompanied by turning the house around on the lot, placing the garage and kitchen times the kitchen on the front and giving the living room access to the garden areas in the rear. Another link with the past is snapped in the opening up of the rooms to themselves and the elimination of interior partitions which possibly contributing a sense of space in even the smallest of houses. Windows are put where they are wanted, not where the copy books say they should be. A first terrace, integrated with the house itself, and upper sun decks are new items in contemporary planning. As before noted, this type of house is best expressed in modern terms, where compromise demands, it is translatable into any style—as examination of certain houses in this issue will disclose.

### ***Prefabrication's major point unproven— —that it costs less.***

Though Modern architecture may ride into popularity on its own pedaling, it has, in the speed with which its promise of prefabrication is fulfilled, a powerful tan-



or although Modern architecture need not be pre-fabricated, factory built houses must be modern. The acceptance of prefabricated houses are not so specific, primarily because prefabrication is so far away from its principal goal—lowered cost. More than 100 companies which are now in widely different stages of development, less than half a dozen have become actual contenders for business in home building. Topping the list are General Houses of Chicago, American Houses, Inc., of New York. After three years of sporadic building, General Houses last month won a sales coup by signing up Sears Roebuck as a distributor (see page 452). And American Houses, whose product is termed the Motohome, was still attracting crowds of the curious along the Atlantic Coast with displays of model houses but no volume of sales. Neither of these, however, nor any other firm in the industry has come even close to attaining the self-stated goal "twice as good a house at half the price." Until they do, prefabrication must continue to constitute only a slight fraction of 1 per cent of the houses built in the U. S. will build during the next five years. Before counting them out as an immediate factory-home production, the reservation must be made that since the seed of prefabrication is fertilized with adequate funds to make mass production a reality, and to halve the cost, it will overnight make the bayonet as bloomless as a century plant.

#### **Waterproof, fireproof, pestproof— new construction techniques.**

Construction technique is nevertheless more to the left in planning and design. At the last count there were 53 different methods of steel house framing, 44 different pre-concrete systems, half a dozen new wrinkles in wood construction, and only a few less innovations in reinforced brickwork. All are aimed at better construction at lower prices. The first target has been squarely hit, the second, with few exceptions, has been missed by a wide margin.

Prefabricators contend that building better for less can come only through factory manufacture of complete houses. But the weight of opinion, in numbers at least, is on the side of those who believe mass production of residential units does not necessarily entail stock plans and stock designs. The right system, composed of an assembly of standard units, should be able to produce a house of any size and any style.\*

Whether the late Thirties house is wholly factory built, partly factory built, or built entirely on the site, it will in all likelihood tend definitely to fireproofness. And not alone or not even primarily because fireproof construction earns a lower insurance rate and is safer, but because the firesafe construction invariably offers greatly increased rigidity, and protection against termites and other pests and insect annoyance.

Along with fireproof construction, heat insulation has already earned its way into the house of the next five years. Worth its price as a fuel saver, it contributes to inner comfort as well. To be decided is not whether it

is too detailed to permit thorough examination in this issue, but construction techniques, new materials and equipment will be examined under the microscope in the December FORUM.

will be insulated or not, but which of the three kinds—board, filler, or metal foil—will predominate.

Weatherstripping, improved window sash, non-rusting pipes, are other probabilities on the specifications. In fact, there is scarcely an item in a specification written ten years ago that could stand unaltered today. Better products or better ways of using old ones have made over standard practice.

#### **Air conditioning is the trend.**

Ever since the advent of mechanical refrigeration the sales promotion methods of their manufacturers have introduced a new note in building material merchandising. Aggressive selling of the public has never been common practice among producers. Now, however, the public has been what is politely termed "educated" to demand as much gadgetry in its homes as it demands in its automobiles. The same manufacturers who introduced mechanical refrigeration into home building have expanded their activities in many cases to include air conditioning, kitchen ranges, and other items of equipment. There is no doubt that the house of the late Thirties will be a house of electrical wonders.

The outstanding item in mechanical equipment is air conditioning, and there is evidence already to support the belief that air conditioning will be general rather than exceptional in home equipment. The fact that in the houses under construction in Washington, D. C., air conditioning has been featured in a great majority of them may not hold national significance but certainly from the standpoint of the speculative builder air conditioning is becoming a potent selling weapon.

#### **The new financing that cuts costs and lessens foreclosures.**

This house of the late Thirties, it has been shown, is a better house but it has not yet become a cheaper house. Whether or not labor and material prices will be reduced during the next five years is problematical. But one thing remains inescapable—reductions in the cost of financing will lead to important reductions in the cost of ownership. The Federal Housing Administration plan of financing which has a mandatory maximum interest rate of 5 per cent plus 1/2 per cent for insurance per year and 1/2 per cent servicing charge has tended to bring all other interest rates down. In the table on page 232 are shown the costs of financing homes ranging from \$5,000 to \$20,000 over periods of from ten to twenty years.

In comparing the present method of FHA financing with the typical home financing of the past, the figures stand out in revealing contrast.

Under the old plan, on a \$5,000 house and lot with a first mortgage of 50 per cent, a second mortgage of 40 per cent, the costs would be:

Down payment of 10 per cent.....	\$	500.00
Interest at 6 per cent on \$2,500 first mortgage, term 3 yrs., renewed at each maturity, over 20 years .....	\$150.00	3,000.00
Renewal fee every 3 yrs. at 3 per cent. ....	75.00	450.00



Interest and amortization on 5-year second mortgage of \$2,000 at 6 per cent (yearly principal payment \$400, interest \$120) .....	\$520.00	\$2,600.00
Balance paid or due at end of 20 years .....	2,500.00	
		\$9,050.00

Under the FHA plan, total cost for financing would be on the same \$5,000 house and lot:

Down payment of 20 per cent .....	\$1,000.00	
Monthly payment for 20 years (239 months, including interest, amortization, mortgage insurance, service fee) .....	\$ 29.77	7,115.03
		\$8,115.03
Saving by FHA method over former method .....		\$ 934.97

Reducing the cost of mortgage money is not the only feather in the Federal Housing Administration's cap. It has, for the first time in the history of U. S. home building, set up a series of standards which, although flexible and indefinite, do establish for the home owner the real values in residential property.

Briefly, the FHA sets up five yardsticks by which property is insured and calibrates the yardsticks in terms of specific considerations. Under the three divisions which directly affect the property itself the relative values assigned to each of the elements contributing to the mortgage risk involved are as follows:

#### RATING OF PROPERTY

General layout .....	15%
Design .....	8
Suitability to climate .....	7
Livability .....	15
Light and air .....	8
Mechanical equipment .....	7
Accessory equipment .....	3
Special equipment .....	2
Structural soundness .....	20

Resistance to elements .....	
Resistance to use .....	

#### RATING OF NEIGHBORHOOD

Stability of the neighborhood .....	
Protection from adverse influences .....	
Adequacy of transportation .....	
Appeal of the neighborhood .....	
Sufficiency of utilities and conveniences .....	
Level of taxes and special assessments .....	
Presence of civic, social and commercial centers .....	
Topography and special hazards of neighborhood .....	

#### RATING OF RELATION OF PROPERTY TO NEIGHBORHOOD

Conformity as to type .....	
Conformity as to usefulness and function .....	
Conformity as to physical condition .....	
Conformity as to architecture .....	
Relative adequacy of utilities and municipal improvements .....	
Relative accessibility to neighborhood conveniences .....	
Relative freedom from nuisances .....	
Conformity as to lot characteristics .....	
Conformity as to probable remaining useful life .....	
Conformity as to placing of building on lot .....	

It will be noted from a study of the three tables for the first time in realty appraisal, conditions influence property value and which had in the past disregarded have been duly weighted. Never before such importance been given to the relation of a house to its neighborhood or to the neighborhood itself. Before has the setting of the house on a lot and its surrounding landscaping been a vital consideration in the eyes of the lender. And never before has the house itself—its design, construction and equipment—been subject to so exacting scrutiny.

The advance of the small house is thus propelled by half a dozen different fronts: design, construction, financing, landscaping, site, neighborhood, financing. In the past has been celebrated for its small house, the possibility looms large that when the history of this decade is written, the keynote will be "The Small House Comes Into its Own."

### THE COST OF BUYING HOMES, PRICED FROM \$5,000 TO \$20,000, BY THE FHA PLAN

Cost of House and Lot	Assuming 80% Loan								Monthly Payment Required										
	Cash Re-quired for Equity	Amount of Mortgage							Under 10-yr. Plan										Under 15-yr. Plan
			Install-ment incl. in-terest at 5%	Service Charge	FHA Insur-ance	Taxes†	Fire Insur-ance‡	Total	Install-ment incl. in-terest at 5%	Service Charge	FHA Insur-ance	Taxes†	Fire Insur-ance‡	Total	Install-ment incl. in-terest at 5%	Service Charge	FHA Insur-ance	Taxes†	Fire Insur-ance‡
\$5,000	\$1,000	\$4,000	\$12.42	\$1.60	\$1.67	\$8.33	\$1.56	\$55.58	\$31.63	\$1.63	\$1.67	\$8.33	\$1.56	\$44.82	\$26.46	\$1.64	\$1.67	\$8.33	\$1.56
7,500	1,500	6,000	63.64	2.41	2.50	12.50	2.34	83.39	47.44	2.45	2.50	12.50	2.34	67.23	39.69	2.47	2.50	12.50	2.34
10,000	2,000	8,000	84.84	3.21	3.32	16.66	3.12	111.15	63.25	3.26	3.32	16.66	3.12	89.61	52.92	3.29	3.32	16.66	3.12
12,500	2,500	10,000	106.06	4.01	4.17	20.83	3.90	138.97	79.07	4.08	4.17	20.83	3.90	112.05	66.15	4.11	4.17	20.83	3.90
15,000	3,000	12,000	127.27	4.81	5.00	25.00	4.68	166.76	94.88	4.90	5.00	25.00	4.68	134.46	79.38	4.93	5.00	25.00	4.68
17,500	3,500	14,000	148.48	5.61	5.83	29.16	5.46	194.54	110.70	5.71	5.83	29.16	5.46	156.86	92.61	5.75	5.83	29.16	5.46
20,000	4,000	16,000	169.70	6.42	6.64	33.32	6.24	222.32	126.51	6.53	6.64	33.32	6.24	179.24	105.84	6.58	6.64	33.32	6.24

\*Figured on the customary 19 yr. and 11 mo. basis.  
†Assumed at 2% of actual appraised value annually.  
‡Assumed at 1/2 of 1% of assumed value of house at 75% of the total cost of house and lot.



# 101

## NEW SMALL HOUSES

ALL WITHIN THE PRICE RANGE ELIGIBLE FOR F.H.A. INSURED MORTGAGES

**H**ERE are houses. 101 by count, which is important only because they all add up to 101 by reason. This is in large part a picture book but not a pretty picture book. The photographs were picked from hundreds because they convey the most information about each house; not because the editors like the cloud effects. But this issue is more than a picture book. Each house is also shown in plan and with full construction details. So that anyone who wants to know how a real 1935 house looks may also discover how it was built and how it works. And to establish standards of value, costs are given wherever obtainable. Finally, the editors have commented on each house, pointing out its merits of plan, design and construction, and, in instances, what appear to them as demerits. This experiment in architectural criticism should not be confused with condemnation. Every house in this issue has been selected for its excellence. Some are brilliant in plan and design, all are good. Therefore, the introduction of critical notes hitherto missing from American professional journals is intended solely to advance this publication's usefulness. The profession's acceptance of this attitude follows naturally its acceptance of the new approach to the small house.





Sturtevant P.

The client's desire was simply stated: a week-end and summer house accommodating the maximum number of people at the lowest possible cost. The architect solved the problem with brilliant simplicity by using the porch connecting the two portions of the house as part of the sleeping quarters. Three wall beds are built into a heated closet which forms the back of the porch. Thus this small house comfortably takes care of seven people and a maid. The house is laid out so that the court is protected from cold winds. A shelter is provided for automobiles, and the entrance so arranged that it is possible to bring in baggage without going through the living or dining rooms. The house is built in the simplest manner. Any decorative effect is inherent in the materials and their disposition; nothing is applied. Cost (including wall beds, slate floor, terrace retaining wall, brick paving on the porch and terrace): \$5,700—about 29 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—Reinforced concrete  
Columns or piers—reinforced concrete

### FRAME CONSTRUCTION

Sills—Redwood  
Floor joists  
Studding  
Plate  
Rafters  
Girders  
Bridging  
Ties

No. 2 Douglas Fir

### MASONRY CONSTRUCTION—none

### EXTERIOR SURFACE

Vertical rough boards No. 2 Common Redwood

### ROOF

Wood shingles on spaced sheathing—clear cedar shingles, 5 butts to 2" laid  $4\frac{1}{2}$ " to weather

Gutters—Redwood with lead strips at joints

Flashing—Galvanized iron  
Down spouts—Galvanized iron  
Composition sheathing paper—heavy block building paper, well lapped

### DOOR AND WINDOW FRAMES

Sash and frames  
(a) double hung } Sugar Pine sash  
(b) casement } Douglas Fir frames  
Doors and frames (exterior)—Redwood and Sugar Pine, Douglas Fir frames

### PORCHES

Floor—second hand common brick

### GLASS

Grade "B"

### EXTERIOR PAINT

Shingles—left unpainted

### Siding

(a) Priming—none  
(b) Finish coat—heavy sprayed coat of whitewash

### Trim

(a) Priming }  
(b) Finish coat } Lead and oil

### Sash

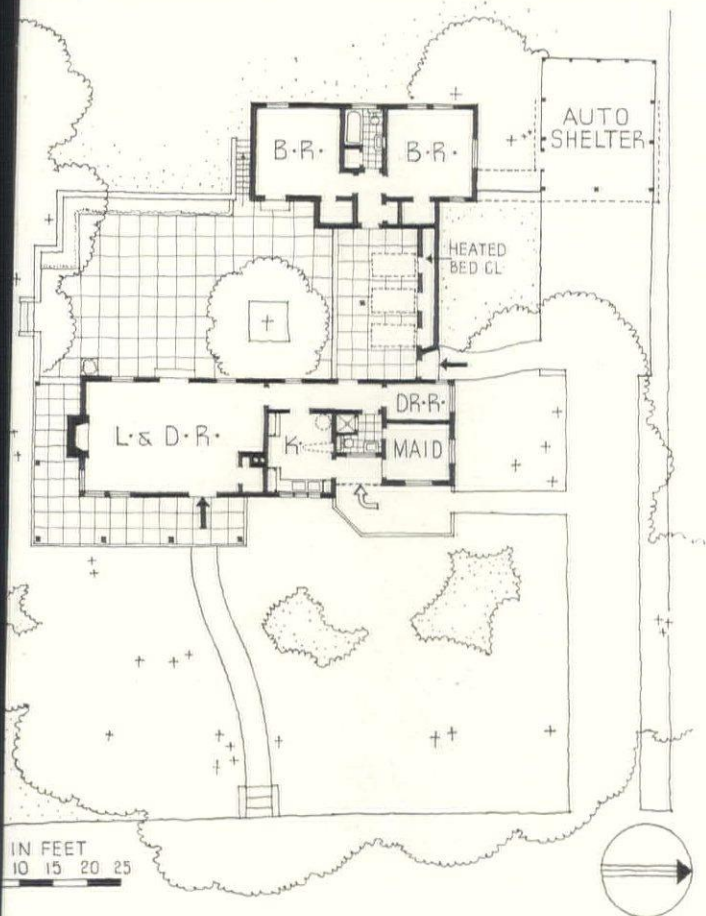
(a) Priming }  
(b) Finish coat } Lead and oil

### LATH AND PLASTERING—none

### INTERIOR WOODWORK

Trim—vertical grain Douglas Fir  
Floors—T & G No. 2 Douglas Fir in bedroom wing. Rest of floors concrete  
Yosemite slate in living room and hall  
Hardwood—oak thresholds  
Painted surfaces—Redwood and Douglas Fir





PLAN SHOWING RECESS FOR WALL BEDS

LIVING ROOM



elving and cabinets—Douglas Fir.  
Cedar linen shelving.  
ock millwork—most doors stock, five  
panel.  
LATION—none  
RIOR PAINTING  
doors—(in Bedroom Wing)—oil filler and  
2 coats spar varnish ("Lightning").  
rim { 2 coats white lead and oil, one  
doors { coat enamel  
ash { (W. P. Fuller's "Silken  
White")  
alls—2 coats cold water paint (Full-  
er's). In bath and kitchen, 2 coats  
white lead and oil, one coat enamel  
(Fuller's "Silken White")  
ING  
able—From meter to distribution panels,  
wires in rigid galvanized metal conduit

Electrical fixtures—knob and tube  
Switches—H. & H. toggle type

## LIGHTING

Direct—Fixtures by Preston Hopkins, San  
Francisco.

## PLUMBING

### Kitchen

Sink—Enameled iron, Westcoast S-721

### BATHROOM

Cabinets—Medicine cabinets, Peerless  
Built-in, No. 15

Bath tubs—Enameled iron, Westcoast  
"Barbara" S-334

Toilets—Vitreous china, Westcoast "San  
Carlos" S-1643

Showers—Westcoast fittings.

Floor—concrete.

Walls—T&G Douglas Fir.

## PIPES

Steel—Supply pipes, National Steel Spell-  
erized pipe.

## HEATING

Gas-fired hot air with fan, Aladdin Heat-  
ing Corp., Oakland

Hot water heater—Ruud

## AIR CONDITIONING—none

## CHIMNEY

### Fireplaces

- (a) facings—common brick
- (b) hearths—none
- (c) mantels—none
- (d) damper—none

## HARDWARE

### Interior

### Exterior

Corbin & Stanley

## SCREENS

Redwood frames—16 mesh bronze.





**PROBLEM:** The house stands on the peak of one of the highest mountains in the Santa Monica range. It has a view of the Pacific Ocean, frequently over fog banks and interesting cloud formations. As much glass as possible on the ocean side was indicated, as well as a balcony for use when weather permitted. The owner is a collector of modern art, and required a maximum of wall space for hanging pictures, as well as a fully fireproof workroom in which to store her pictures.

The gallery, most important room in the house, serves as living room, dining room, and exhibition space for the owner's collection of pictures by K. Kandinsky, Picasso, etc. One large glazed opening extends the length of the room, and access to the terrace is provided by a sliding door 16 feet long. To permit an unobstructed view large sheets of plate glass were used, with muntins, and metal frames as thin as possible. The conflicting requirements of maximum glass area and wall space were each satisfied by the adoption of panels which could be set over the glazed openings when it was necessary to increase exhibition space. The other elements of the house are simple, consisting of a small kitchen, dressing room, and bath, but are quite adequate for the owner's needs. A roof garden is connected with the leveled-off top of the mountain and the building's two lower stories open on three patios. Cost: under \$3,000 or about \$2.75 a square foot of net floor area.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete 1:2½:3½. Riverside Portland Cement Co.  
Cellar floor—3" cement paving No. 10 mesh reinforcing.  
Waterproofing—"Pabco" by The Paraffine Companies, Inc.

### FRAME CONSTRUCTION

Douglas Fir throughout with exception of redwood sills

### MASONRY CONSTRUCTION

Cement block for fireproof study. Tiles by Gladding, McBean & Co.

### EXTERIOR SURFACE

Stucco—Riverside cement plaster. Cement-lith brushcoat.  
Steel—suspension plate supporting porch overhang—U. S. Steel Co.

### ROOF

Gutters } Galvanized Iron—No. 1  
Flashing } "Armco" by American  
Down spouts } Rolling Mill Co.  
Composition sheathing paper—"Pabco" composition roof by The Paraffine Companies.

### DOOR AND WINDOW FRAMES

"Druwhit" casement type steel sash sliding door, 16 feet long, by Druwhit Metal Products Co.

### GLASS

Libbey-Owens-Ford double strength grade A.

### EXTERIOR PAINT

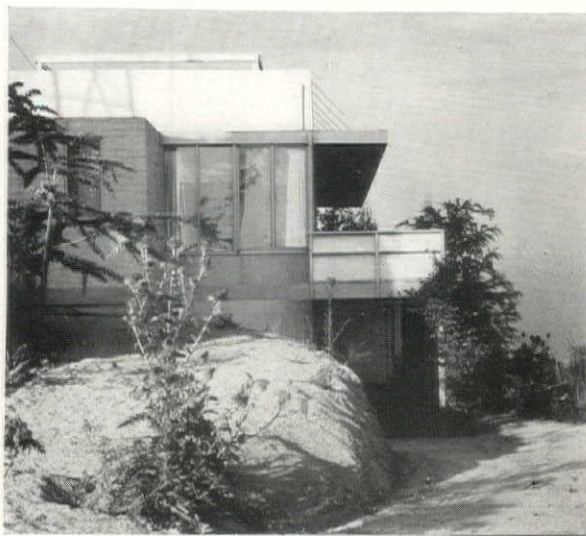
Oil paint by National Lead Co. for exterior.  
Sash—"Alcoa" aluminum paint.





CONY

Luckhaus

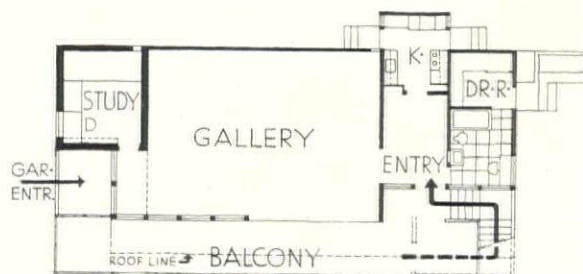


DETAIL, GARAGE AND STUDY

Luckhaus

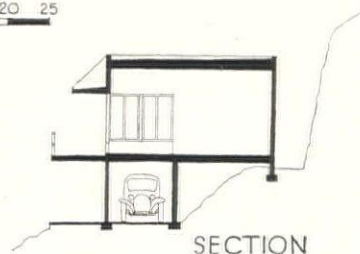


LLERY

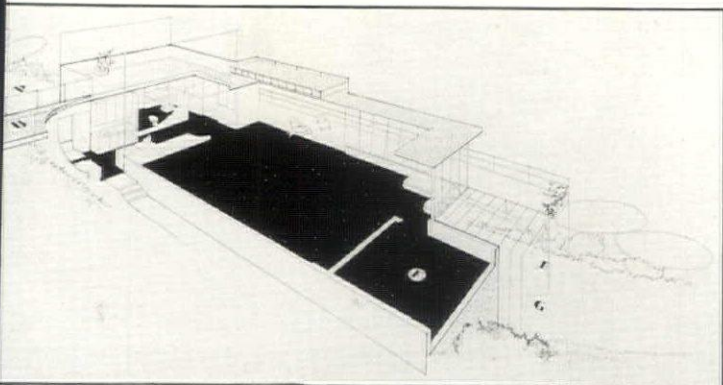


SCALE IN FEET  
0 5 10 15 20 25

PLAN



SECTION



RSPECTIVE

TH AND PLASTERING  
Lath—U. S. Gypsum felt covered Rock-  
lath and  $\frac{1}{2}$ " Celotex lath.  
Plastering—"Empire" hardwall plaster.

ERIOR WOODWORK  
Shelving and cabinets—vertical grain  
Douglas fir.

ULATING  
Outside walls—Celotex lath.  
Roof—Celotex under composition roof.

ERIOR FINISHES  
Floors and trim—gray shingle stain by  
National Lead Co.

Doors—3 coats eggshell enamel by Na-  
tional Lead Co.  
Sash—"Alcoa" aluminum paint.  
Wallpaper—Sanitas.

WIRING  
Cable—American Steel & Wire Co.  
Switches—General Electric Co.

LIGHTING  
Direct—"Light Control" lenses.  
Indirect—Blue Ridge Manufacturing Co.  
diffusing glass.

PLUMBING  
Kitchen.  
Sink—Kohler Co.

Stove—"Magic"—American Stove Co.  
Refrigerator—General Electric Co.

BATHROOM  
Fixtures—Kohler.  
Seats—Church Mfg. Co.  
Tile—Gladding, McBean & Co.

PIPES  
Puddled wrought iron pipe by Reading  
Iron Co.

HARDWARE  
Locks for interior and exterior doors by  
Schlage Lock Co.



### 3. HOUSE FOR JOHN P. McGEAN, CLEVELAND, OH



Ernest Graham

A most unusual use of early American motives in this house has resulted in an exterior that is anything but Colonial in appearance. Wood pendants, the door, windows, and the roof, all of undoubted New England ancestry, are combined with a heavy masonry base and a definitely unconventional porch. The problem of the second-story porch has always been a difficult one to solve where a certain resemblance to the traditional Colonial house form is considered desirable; here the architect has attempted to avoid the heaviness of wood supports by means of light ironwork. The interiors are less of a departure from the Colonial manner. Simple wood paneling treated very simply is used for the principal rooms. The bedroom shows the decorative possibilities in the use of uncomplicated wood forms contrasted with richly textured materials. Cost: \$20,000. Cubage: 48,500 at 41 cents per cubic foot.

#### CONSTRUCTION OUTLINE

##### FOUNDATION

Walls—brick and tile, Cleveland Builders Supply Co.

Cellar floor—Portland Cement

Waterproofing—R.I.W. Marine Cement, Toch Brothers

##### FRAME CONSTRUCTION

Norway yellow pine

##### MASONRY CONSTRUCTION

Common brick walls—Cleveco, Cleveland Builders Supply Co.

Faced brick—Cleveco, painted white

Tiled walls with stone facing—Cleveland Quarries sandstone

Stone walls—Cleveland Quarries sandstone

Tiles—Cleveland Builders Supply Co.

##### EXTERIOR SURFACE

Flush siding, Idaho white pine

Stucco—Birkett sheathing. Cement plaster, Cleveland Gypsum Co.

##### ROOF

Slate on sheathing—black Bangor

Snow breaks—Clason Copper wire, M. N. Cartier & Son

Valleys

Gutters

Down spouts } Copper

Composition sheathing paper—Sisalkraft

##### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—Idaho white pine

Casement—Idaho white pine

Steel sash—Crittall's Stanwin casements

Doors and frames (exterior)—Idaho white pine

Garage doors—Overhead Door Corp.

##### GLASS

Libbey-Owens-Ford grade "A" double strength

##### EXTERIOR PAINT

Siding } Priming. Lead and oil. Finishing coat, Cabot's double white  
Trim }  
Sash }

##### LATH AND PLASTERING

Lathing—Rocklath

Composition plaster base—U. S. Gypsum Co.

Plastering

Patent plaster—U. S. Gypsum "Red Top"

Finishing coat—U. S. Gypsum Co., graded finishing lime

##### INTERIOR WOODWORK

Trim and floors

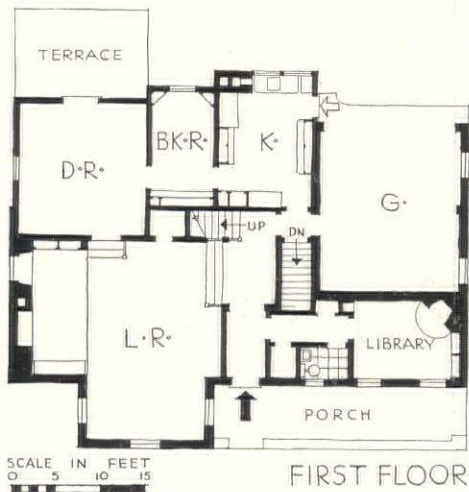




ING ROOM



DROOM



PLAN: Irregular rooms like the living room and master bedroom are easy to furnish and offer changing vistas that increase their apparent size. A further extension of the living room space is obtained by a wide opening to the hall. The stairs to hall and dining room are inconvenient, but this is a matter of the owner's preference.

Hardwood—Ritter's Appalachian red oak  
Stainwoods—knotty white pine  
Painted surfaces—poplar  
Shelving and cabinets—poplar

LIGHTING  
Direct

PLUMBING  
Kitchen  
Sink—Crane Corland acid resisting enamel iron

BATHROOM  
Fixtures—Crane Co.  
Cabinets—Corcoran  
Bath tubs—Crane Co.  
Toilets—Crane Co.  
Seats—Church  
Showers—Speakman  
Tile—Mosaic flint floor, satin finish wall tile

PIPES  
Chase brass and Byers' wrought iron

HEATING  
Gas  
Boilers—Bryant Heating Co.  
Radiators—"Arco" by Petroleum Heat and Power Co.

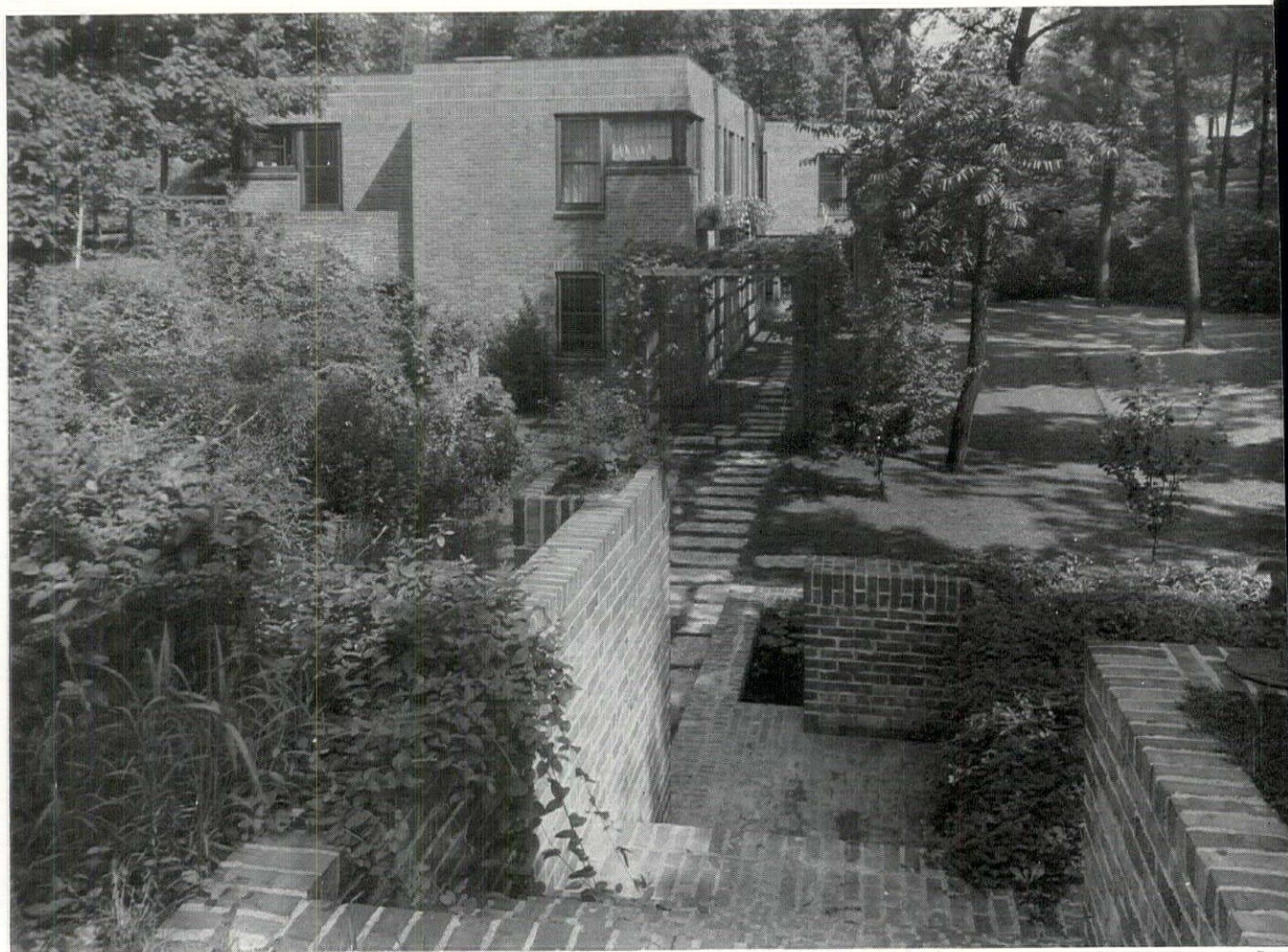
AIR CONDITIONING  
Bryant split system  
CHIMNEY  
Fireplaces  
Facings and hearths—Cleveland Builder's Supply rustic brick and Birmingham buff sandstone, Cleveland Quarries  
Mantels—knotty pine in library and living room  
Damper—Majestic poker damper

HARDWARE  
Interior—part wrought iron  
SCREENS  
Higgin Manufacturing Co.

INSULATING  
Outside walls—ground cork  
Attic floor—ground cork  
Weatherstripping—Monarch  
INTERIOR PAINTING  
Floors—one coat of silicate paste filler, one coat of black stain, two coats of Permatite  
Trim } Enamel finish  
Doors }  
Sash }  
RING  
Cable—flexible loom  
Switches—General Electric tumbler type



## 4. HOUSE FOR EDWARD X. TUTTLE, BATT



Suzuki

**PROBLEM:** "To build a home for the purpose of privately, comfortably, and efficiently rearing a family, eating, drinking, sleeping, playing . . ." The plot, approximately 90 x 100 ft., is situated between two streets which are not parallel, one a main thoroughfare, the other a short minor street.

With only himself to please, the architect has used brick in this severely tangular house to relieve the coldness of its form. Unlike the typical modern house, which strives for an expression of lightness and space, this residence, its use of masonry and wood sash, achieves a solidity quite similar to that of a more traditional type of dwelling. All furniture and fittings were built specifically to the architects' designs. The location of the house on the plot is successfully worked out; privacy on the street side has been obtained by the elimination of windows, all important rooms facing on the garden. Brick walls in the garden give a unity to house and entourage which is too often neglected. Cost: \$19,800. Cubage: 45,850 at about 43½ cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—concrete, Alpha cement  
Waterproofing—none, careful control of water cement ratio made waterproofing unnecessary

#### FRAME CONSTRUCTION

Southern yellow pine

#### MASONRY CONSTRUCTION

Common brick walls—sand lime brick  
Faced brick—Buckskin face brick, Wyandotte Clay Products Co., Upper Sandusky, Ohio.

#### ROOF

Built-up roof—Barrett Co.  
Flashing  
Down spouts } 16 oz. copper, Anaconda  
Coping

#### DOOR AND WINDOW FRAMES

Sash and frames—double hung, Eastern white pine.

Doors and frames (exterior)—Eastern white pine.

Garage doors—overhead doors by Overhead Door Corp., Hartford City, Ind.

#### PORCHES

Reinforced concrete—Alpha cement.

#### GLASS

⅛" polished plate, Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Trim and Sash.  
Priming—oil stain.  
Finish coat—Benite by Bens Chemical Co., Jackson, Mich.

#### LATH AND PLASTERING

Lathing

Metal—U. S. Gypsum Co.  
Composition plaster base—Insulite  
Plastering—U. S. Gypsum Co.

#### INTERIOR WOODWORK

Trim—Eastern white pine.  
Floors—oak, maid's room, 3rd grade oak workshop, No. 1 yellow pine.  
Painted surfaces. } Eastern  
Shelving and cabinets. } white pine.

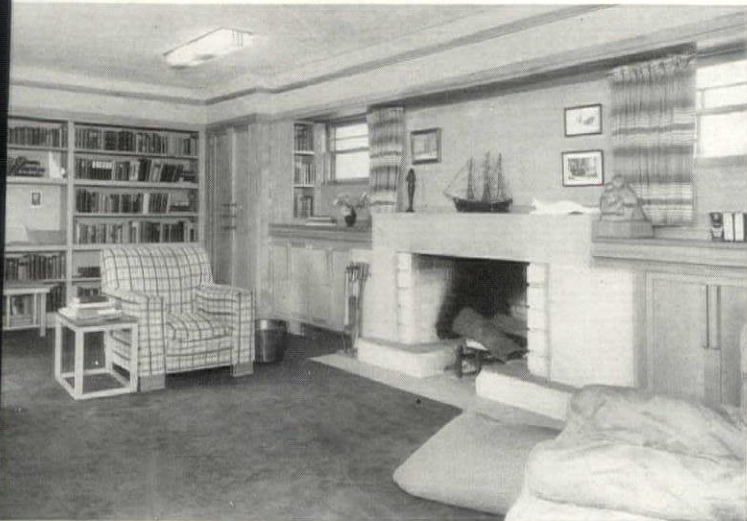
#### INSULATING

Outside walls—1" jute blanket.  
Roof rafters—2" jute blanket, ½" Insulite on roof sheathing.  
Weatherstripping — Chamberlin Mechanical Weatherstrip.

#### INTERIOR FINISHES

Floors—oak and yellow pine, 2" oak  
Benite by Bens Chemical Co.



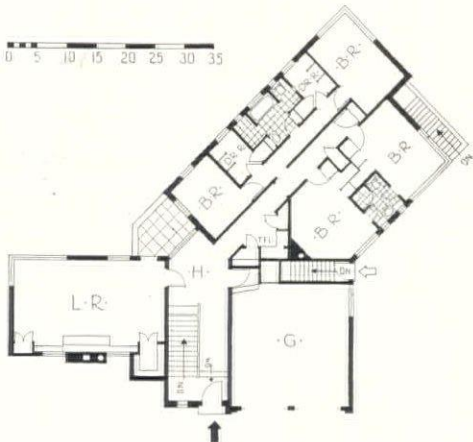
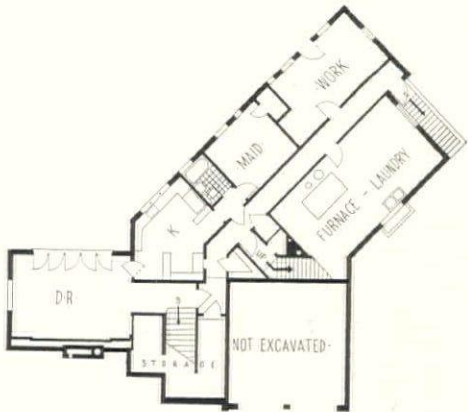
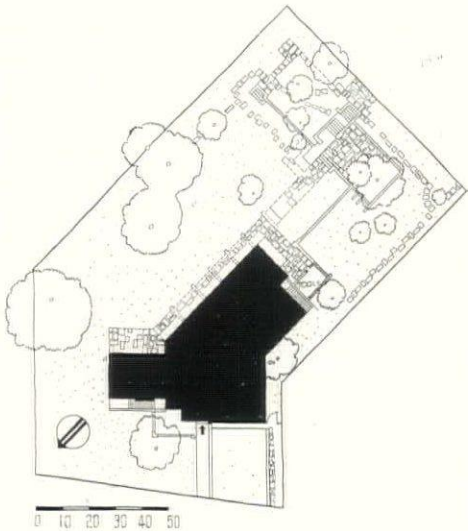


ROOM



OM

he house was backed up against the street, heavy planting screens the are, and a garden visible only to the occupants of the house was created. The usual in that living and dining rooms are on separate floors. The entrance hall, nished in the same brick as the exterior, leads on the upper floor to the living to the bedroom wing, which can be shut off. The service entrance is perhaps to the bedroom window to afford privacy to the occupant, but is otherwise tly placed, leading directly to the kitchen on the lower floor. The dining room, ot of the main stair, is easily approached through an ample passage. The o of this element from the service portion is well worked out, and the placing r to the kitchen is excellent.



Trim } Oil stain and wax—wax manufac-  
Doors } tured by A. J. Lehmer Floor  
Sash } Co., Inc.  
Walls }  
Wallpaper — “Salubra” by Frederick  
Blank & Co.

RING  
Cable—General Electric.  
Electrical fixtures—Beardslee Chandelier  
Co., Chicago.  
Switches—Harvey Hubbell.

IGHTING  
Direct—Beardslee Chandelier Co.  
Indirect—Duplexalite Division, Miller Co.

UMBING  
Kitchen.  
Sink—Standard Sanitary Mfg. Co.  
Stove—gas, A. B. Stove Co., Battle Creek,  
Mich.

Refrigerator—Seeger Refrigerator Co., St.  
Paul, Minn.  
Washing machine—General Electric.

BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—built to order.  
Bath tubs—Standard Sanitary Mfg. Co.  
Toilets—Standard Sanitary Mfg. Co.  
Seats—Church Mfg. Co.  
Showers—built to detail, Speakman heads.  
Tile—Franklin Tile Co., Ohio.

PIPES  
Steel by National Tube Co.

HEATING  
Gas.  
Hot water heater—Humphrey, Kalama-  
zoo, Mich.  
Thermostat and regulators—Minneapolis-  
Honeywell.

AIR CONDITIONING  
Bryant Heater Corp.  
CHIMNEY  
Fireplaces.  
Facings }  
Hearths } Indiana limestone.  
Mantels }  
Damper—Colonial Fireplace Co.  
HARDWARE  
Interior and exterior—Russwin, Stanley.  
WINDOW DRESSING  
Venetian blinds—Columbia Mills.  
Curtain material—F. Schumacher, New  
York.  
SPECIAL EQUIPMENT  
Water softener—Stover Water Softener  
Co., St. Charles, Ill.  
Sump pump (house is below sewer)—  
Union Steam Pump Co., Battle Creek,  
Mich.





The client introduced a distinctly human touch in his specifications for this house: "there must positive be no provision for guests." The plan shows two large bedrooms with triple exposure, one with bathroom and one with shower. Garage and maid's quarters are in a separate building. The house is a restrained adaptation of Georgian design. Cost: \$7,500 or approximately 34 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—reinforced concrete.  
Cellar floor—concrete.  
Waterproofing—emulsified asphalt.

### FRAME CONSTRUCTION

Yellow pine.

### MASONRY CONSTRUCTION

Walls—salmon pink common brick, Fraser Brick & Tile Co.

### EXTERIOR SURFACE

Salmon pink common brick, Fraser Brick & Tile Co.

### ROOF

Slate on sheathing—variegated slate, full range of colors.

Gutters } 26 gauge  
Flashing }  
Down spouts } galvanized iron.

Composition sheathing paper—30 lb. asphalt saturated roofing felt.

### DOOR AND WINDOW FRAMES

Sash and frames.

Double hung—white pine, check rail.

Doors and frames (exterior)—yellow pine frames, white pine doors.

Garage doors—yellow pine with fir panels.

### PORCHES

Reinforced concrete—Front porch of concrete with paving brick edging, exterior steps of paving brick.

### GLASS

Double strength Quality A Pennvernon, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Sash { Priming—lead and oil.  
Trim { Finish coats—outside paint, Pittsburgh Plate Glass Co.

### INTERIOR WOODWORK

Trim and floors—yellow pine trim painted, oak floors stained dark.

Hardwood—white oak.

Stainwoods—oak handrail only.

Painted surfaces—yellow pine.

Shelving and cabinets—yellow pine, panels, some white pine.

### INSULATING

Weatherstripping—Doors only weatherstripped, Chamberlain Weathers Co.

### INTERIOR FINISHES

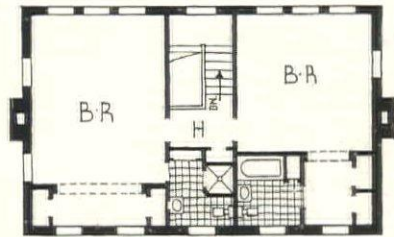
Floors—Stained dark.

Trim } Painted light, products of Pittsburgh Plate Glass Co.  
Doors }  
Sash }

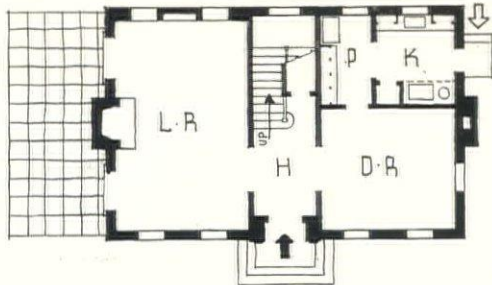




FRANCE HALL AND LIVING ROOM



SECOND FLOOR



FIRST FLOOR

PLAN: The first floor is typical of center hall plans. On the second floor, bedrooms are oriented to take advantage of exposure and garden view.

Walls—papered on sheetrock.  
Wallpaper—throughout, excepting in bath-  
rooms, which are tile, textone on  
sheetrock above tile wainscotings.

IRING  
Switches—toggle.

IGHTING  
Direct.

UMBING  
Kitchen.  
Sink—Standard Sanitary Mfg. Co.  
Cabinets—milled.  
Stove—by owner.  
Refrigerator—by owner.

ATHROOM  
Fixtures—Standard Sanitary Mfg. Co.

Cabinet—milled.  
Bath tubs } Standard Sanitary  
Toilets } Mfg. Co.  
Seats—Church Mfg. Co.  
Shower curtains } Standard Sanitary  
Showers } Mfg. Co.  
Tile—Wheeling.

PIPES  
Steel.

HEATING  
Gas, hot air furnace by Pacific Gas Prod-  
ucts Co.  
Piping—asbestos covered tin ducts.  
Hot water heater—Pittsburgh instantane-  
ous, Pittsburgh Water Heater Co.

Thermostat and regulators—Minneapolis-  
Honeywell.

CHIMNEY  
Fireplaces.  
Facings—tile.  
Hearths—tile.  
Mantels—wood.  
Damper—Majestic.

HARDWARE  
Interior } Corbin.  
Exterior }

SCREENS  
Wood milled screens, bronze netting.

WINDOW DRESSING  
Shades—by owner.  
Venetian blinds.  
Blinds—milled of white pine.



## 6. HOUSE, HEMPSTEAD, LONG ISLAND, N.



Gustav Anderson

The difficulty with speculative building from the architectural point of view is that the problem usually boils down to designing something sufficiently negative to please most of the customers most of the time. Numerous "safe" formulas have been adopted by various builders. This little house represents one of the latest and best. Colonial in style, it includes a separate dining room, attached garage, first floor lavatory, completely equipped kitchen, and basement playroom. The plan is well organized, and space, as an instance, in the small but uncramped hall, is economically used. The work space works, and the service entrance, right outside the kitchen window, is excellently located. Had a good landscape architect been employed to supervise planting, the house would have appeared to much better advantage. Cost: \$6,500. Cubage: 27,500 at about 23½ cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls  
Piers  
Cellar floor } poured concrete.  
Waterproofing — integral, Truscon Steel Co.

#### FRAME CONSTRUCTION

Wood

#### EXTERIOR SURFACE

Brick veneer—second-hand common brick whitewashed.  
Shingles—red cedar shingles on garage portion.

#### ROOF

Slate on sheathing—¼" Bangor slate.

Valleys  
Gutters  
Flashing } copper.  
Down spouts—copper, 3" diam.

#### DOOR AND WINDOW FRAMES

Sash and frames—double hung, local mill.  
Doors and frames (exterior)—local mill.

#### PORCHES

Reinforced concrete.

#### GLASS

Libbey-Owens-Ford.

#### EXTERIOR PAINT

Shingles—painted, Atlantic white lead.  
Trim  
Sash } Dutch Boy, National Lead Co.

#### LATH AND PLASTERING

Lathing  
Metal—2.75 lb. Triplex.  
Composition plaster base—metal lath backed aluminum foil.

#### INTERIOR WOODWORK

Floors—stained, Minwax.  
Shelving and cabinets—local mill, architect's design.

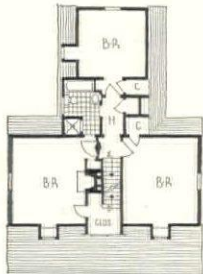
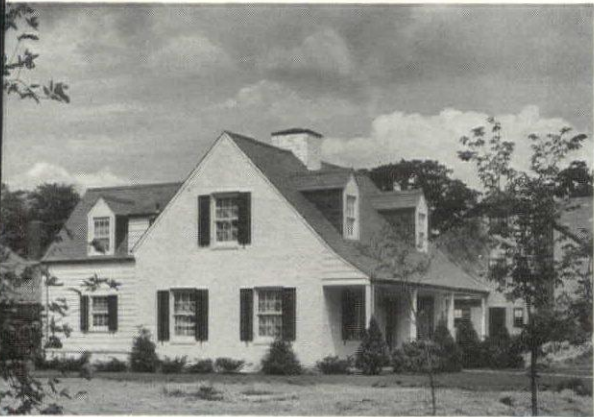
#### INSULATING

Outside walls—2nd floor ceiling, eaves and outside walls aluminum-backed wire lath.  
Weatherstripping — American Weatherstrip Co.

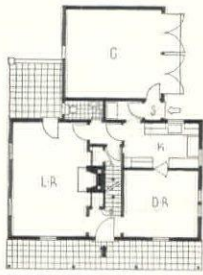
#### INTERIOR FINISHES

Floors—stained, Minwax.





SECOND FLOOR



FIRST FLOOR



BASEMENT

Trim } Dutch Boy white lead by National  
Doors } Lead Co., Valspar by Valentine  
Sash } & Co. Living room, stain mix-  
ture of linseed oil, umber, dryer.  
Wallpaper — Salubra, Imperial, Lloyd's,  
Thibaut.

RING  
Cable—General Electric Co.  
Electrical fixtures—David Kojan, hand-  
made.

LIGHTING  
Direct

CUMBING  
Kitchen  
Sink—Formica top, Monel metal pan.

Cabinet—Millwork, local.  
Stove—Magic Chef by American Stove  
Co.

BATHROOM  
Fixtures—Speakman.  
Bath tubs }  
Toilets } Standard Sanitary.  
Seats—Church Mfg. Co.  
Tile—National Tile Co.

PIPES  
85 per cent copper (red brass).

HEATING  
Home oil burner.  
Boilers—Arco.  
Radiators—concealed, Richmond Radiator  
Co. "Richwar."

Valves—Hoffman.  
Hot water heater—Taco Heaters, Inc.,  
New York.  
Thermostat and regulators—Minneapolis-  
Honeywell.

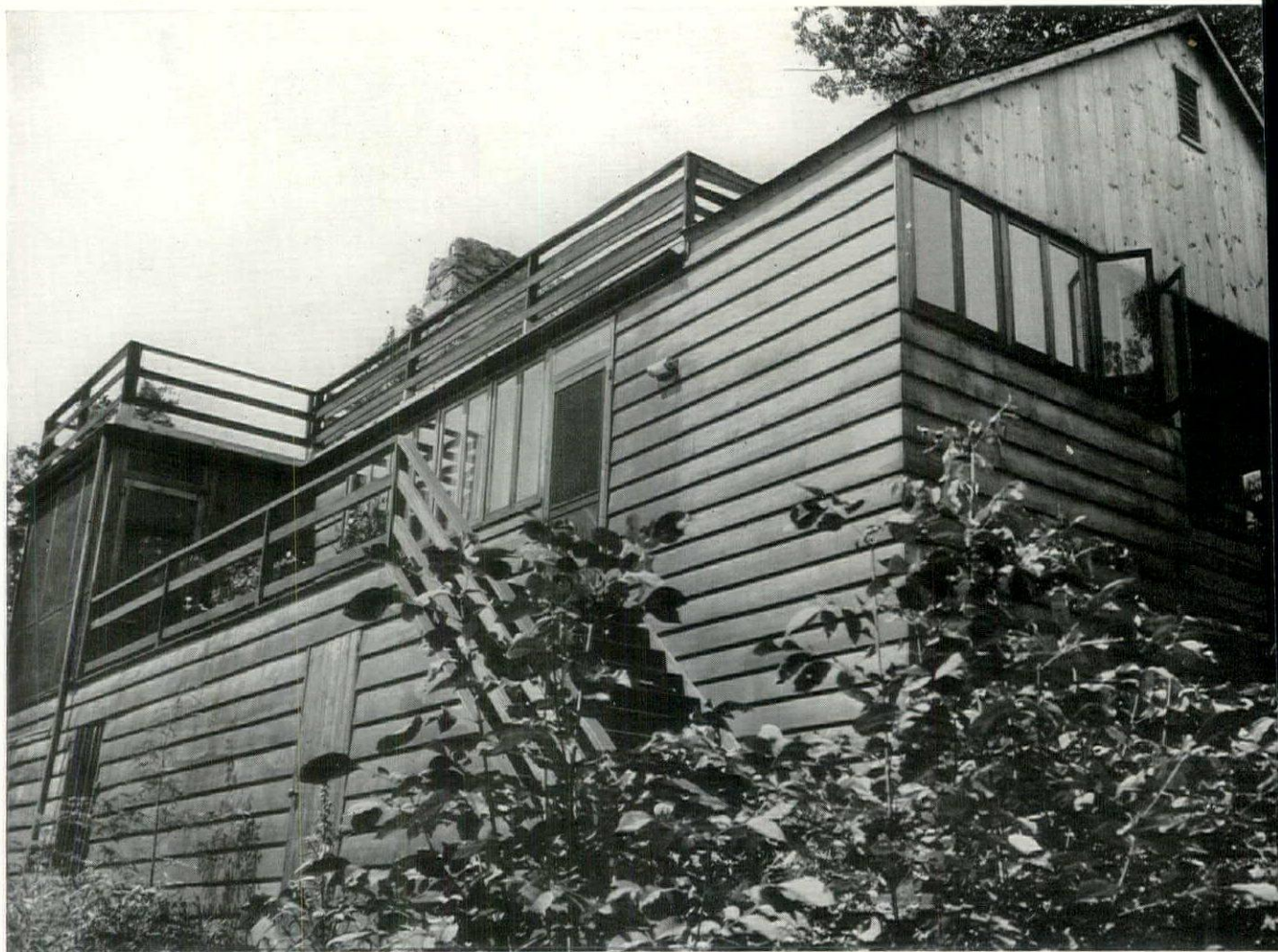
CHIMNEY  
Fireplaces  
Facings—black face brick.  
Hearths—black tile.  
Damper—cover throat.

HARDWARE  
Interior—Sargent, Stanley.  
Exterior—Corbin.

SCREENS  
Bronze

WINDOW DRESSING  
Blinds—local mill, painted red.





**PROBLEM:** To build a summer house for less than \$2,500 which would also be suitable for winter week-ends. The owner's tastes were necessarily simple and his only demands were that the house be reasonably well built, comfortably suited to outdoor living, possess at least minimum accommodations for a fairly large number of people, and have plenty of windows. The house is built on the property of the Gypsy Trail Club.

The architectural committee which had to approve this design in upon a gable roof. It will be noted, however, that the roof was extended only far enough to soothe the esthetic sensibilities of the committee, which it became the roof terrace desired by the client. The simplicity which the cheap materials were used is most commendable. The house has sleeping quarters for six, and can accommodate six more in a pinch. The plan, designed for simple and informal living, consists of an arrangement of bedrooms, sleeping porches and utilities surrounding a central living room which is used as the living room. Cost (exclusive of architect's fee, air furnace and built-in furniture): \$2,440 or about 20 cents a cubic

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block and siding (one side) between piers.  
Piers—concrete.  
Cellar floor—cement.

### FRAME CONSTRUCTION

Fir.

### EXTERIOR SURFACE

Clapboards—redwood siding.

### ROOF

Wood shingles on shingle lath—cedar shingles on gable. Canvas on flat roof terrace.  
Valleys and gutters—Anaconda copper.

### DOOR AND WINDOW FRAMES

Sash and frames—wood casement.  
Doors and frames (exterior)—Flush doors.

### PORCHES

Longleaf pine laid in "Dutch Boy" white lead.

### EXTERIOR PAINT

Siding } linseed oil.  
Trim }  
Sash }

### LATH AND PLASTERING

All interior walls, ceilings—Celotex. Joints of U. S. Gypsum metal strip and cement.

### INTERIOR WOODWORK

Trim and floors }  
Painted surfaces } pine.  
Shelving and cabinets }

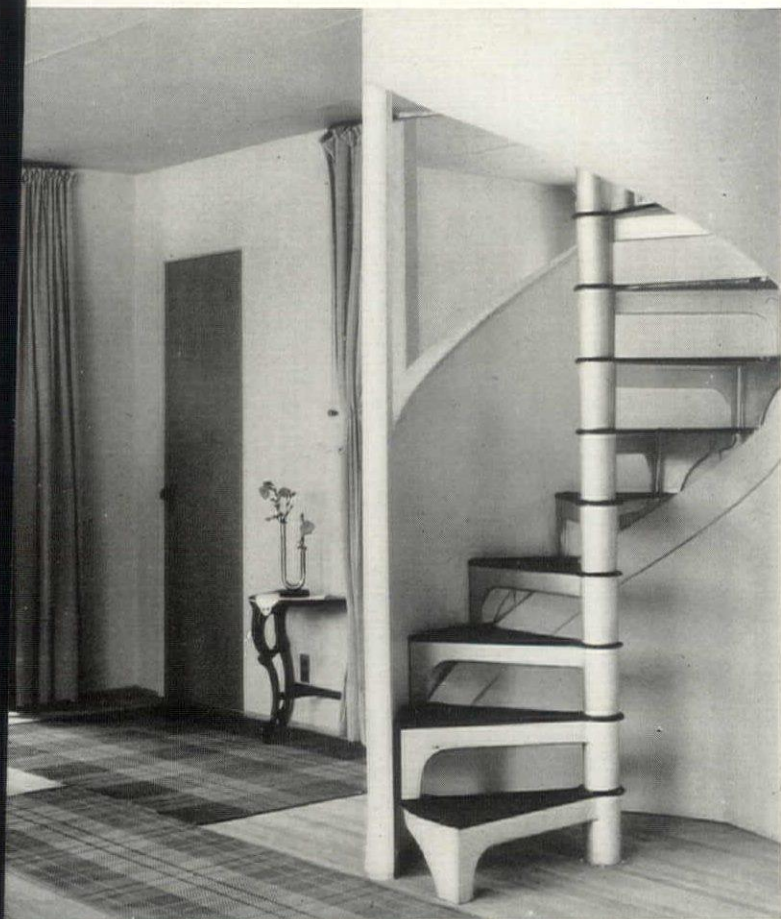
### INSULATING

Outside walls } U. S. Gypsum rock wool  
Roof rafters }

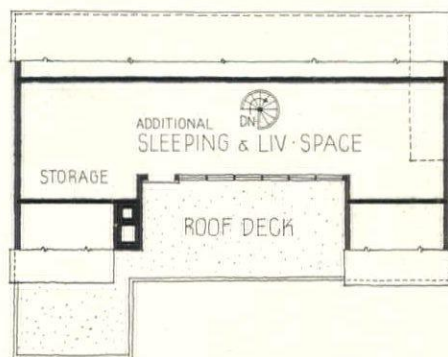
### INTERIOR PAINTING

Floors—linseed oil and Johnson's wax.  
Trim }  
Doors } lead and oil paint.  
Sash }





TO ROOF DECK IN MAIN LIVING SPACE



ROOF DECK PLAN



DECK



FLOOR PLAN

Walls—all water paint except "Stonite" in kitchen and bath.

NG  
able—BX.  
Electrical fixtures—special.  
Switches—Bryant.

HTING  
irect and indirect.

MBING  
itchen  
Sink—Standard Sanitary.  
Cabinet—Built-in.

BATHROOM  
Fixtures—Standard Sanitary.  
Seats—Church Mfg. Co.  
Walls—"Stonite" finish, Vinolyte resin protective coating.

PIPES  
Chase brass.

HEATING  
Coal—hot air furnace.  
Hot water heater—coil in heater and small coal heater.

CHIMNEY  
Fireplaces  
Facings—stone.

Hearths—slate.  
Mantels—oak plank.  
Damper—Covert.  
Built-in fireplaces—"Heatilator."

HARDWARE  
Interior } Corbin.  
Exterior }

SCREENS  
Wood.

WINDOW DRESSING  
Curtains—hand-woven silk.





Jessie Tarbox Beals P

The architect: "An inexpensive residence for a small family; the plan permits future additions. In order to make the most of the outlook the building was placed high to the rear of the lot, with the living room on the top floor. The closeness of the neighbors necessitated special provisions to secure privacy in this case an extensive trellis scheme which becomes the dominating motif of the building . . . . The interior gives a feeling of spaciousness far surpassing the actual moderate dimensions of the room. This is obtained by the following features: 1. An entrance hall running up through the second floor becomes part of the living room, 2. Kitchen, living room and one bedroom joined spatially and separated only by low partitions, 3. Variation in height of living room ceiling." While many a client would consider the trellis too extreme a method of securing privacy, few, if any, would object to the sensible placing of the living room on the upper floor. Provision was made for an outdoor fireplace and for a laundry. Cost \$5,000. Cubage (including garage): 12,000 at less than 42 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—concrete.  
Columns—wood.  
Cellar floor—cement.

### FRAME CONSTRUCTION

Oregon pine.  
Sills redwood.

### EXTERIOR SURFACE

Stucco—Monolith cement.

### ROOF

Composition flat roof.  
Down spouts—cast iron.

### DOOR AND WINDOW FRAMES

Sash and frames  
Casement type

Doors and frames (exterior)—wood.

### PORCHES

Reinforced concrete.

### GLASS

American Glass Co. "Lustra Glass."

### EXTERIOR PAINT

Trim }  
Sash } W. P. Fuller Co.

### LATH AND PLASTERING

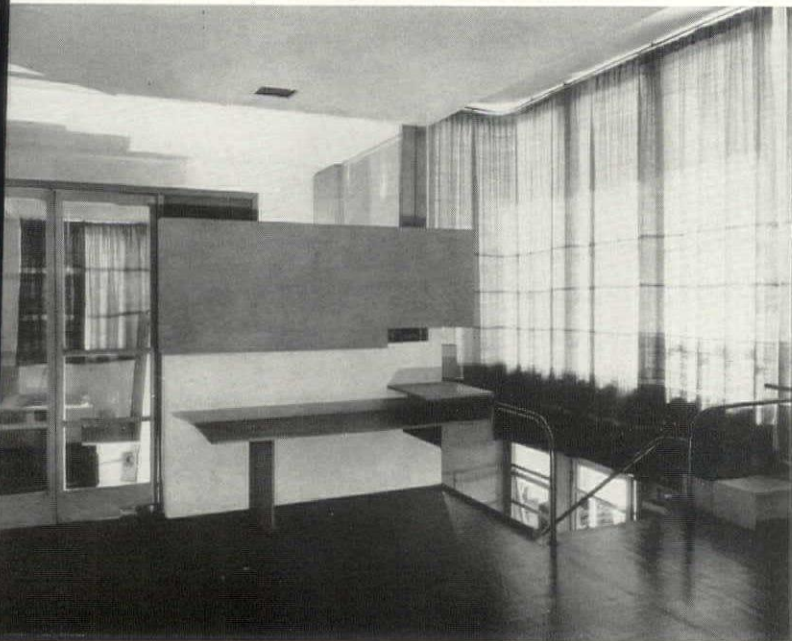
Lathing—wood.  
Plastering

Patent plaster—Blue Diamond.  
Finishing coat—interior stucco.

### INTERIOR WOODWORK

Trim and floors—stainwoods.  
Shelving and cabinets—Oregon pine.

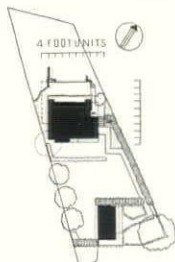




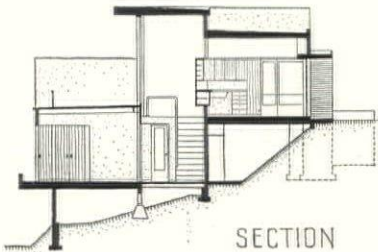
NG ROOM WITH KITCHEN PARTITION AND DINING SPACE



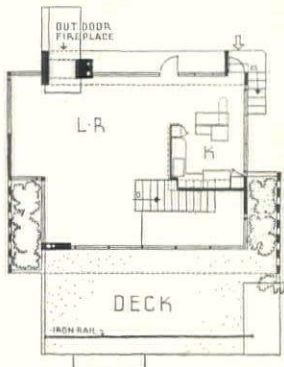
ROOM



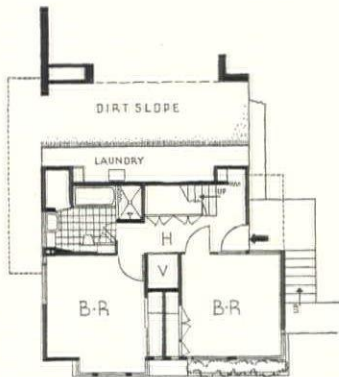
PLOT PLAN



SECTION



MAIN FLOOR



GROUND FLOOR

ULATING  
None

ERIOR PAINTING  
None

HTING  
Indirect

UMBING  
Kitchen  
Sink—Washington Iron Works.

Stove—built-in.  
Refrigerator—General Electric.

BATHROOM  
Toilets—1 piece, Crane Co.  
Seats—Pyrene.  
Tile—Pomona Tile Co.

PIPES  
Steel

HEATING  
Gas—furnace, hot air.

AIR CONDITIONING  
Unit system.

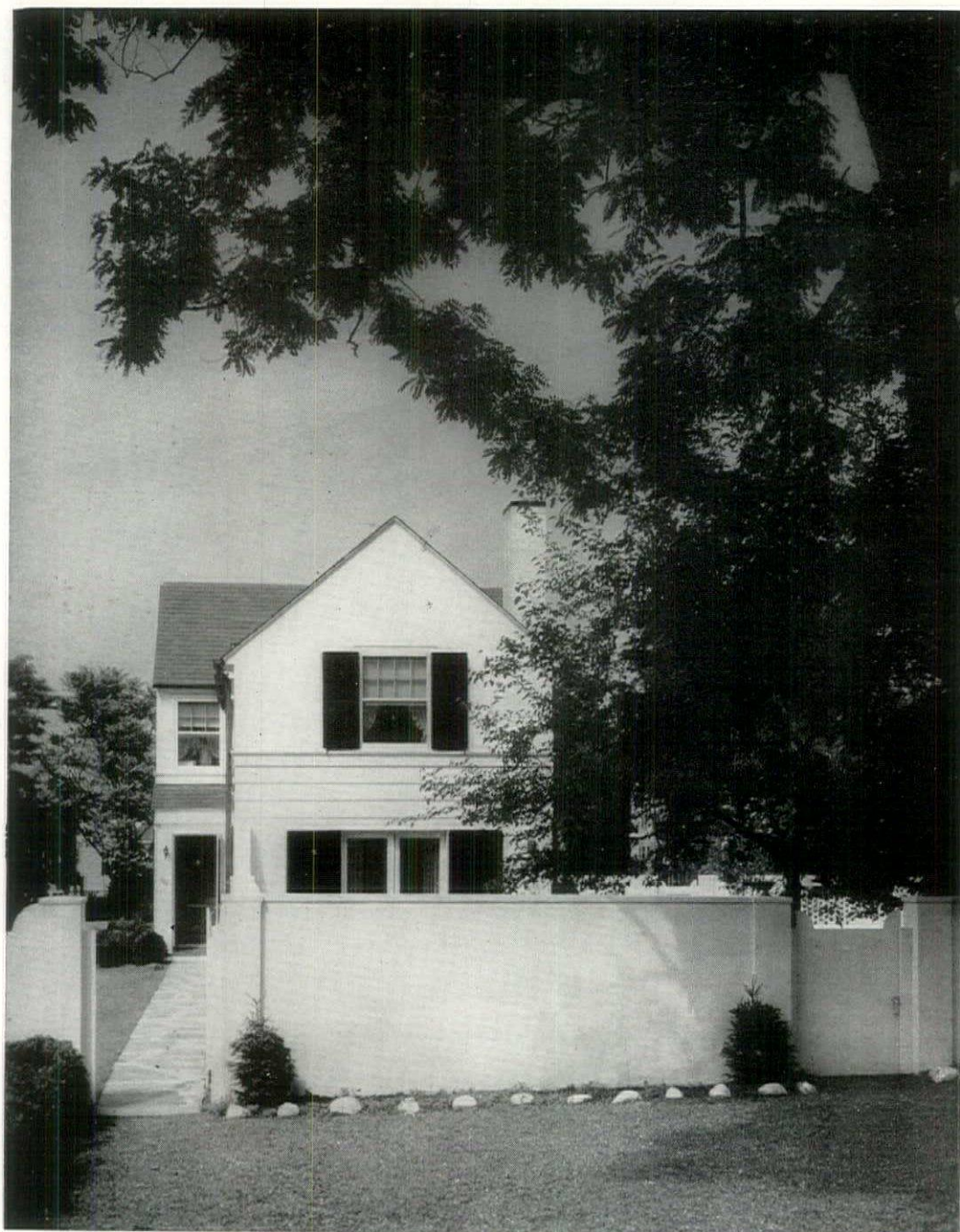
CHIMNEY  
Fireplaces  
Facings—brick.  
Hearths—cement.  
Damper—special design.

HARDWARE  
Interior—nickel plated.

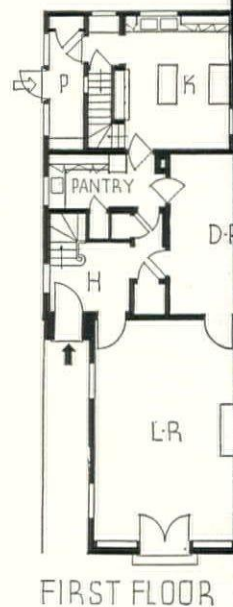
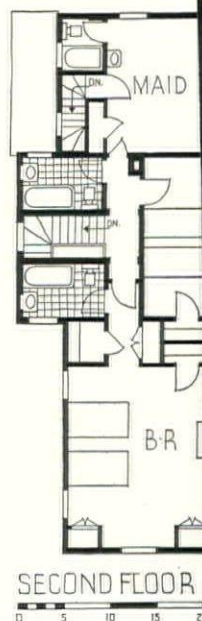
SCREENS  
Galvanized iron.



## 9. HOUSE FOR TOWAR BATES, MORRISTOWN, N.



Richard Garrison Photos



### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—Straub cinder block.  
Cellar floor—cement.  
Waterproofing—Anti-Hydro.

#### FRAME CONSTRUCTION

Wood.

#### MASONRY CONSTRUCTION

Chimney—Sayre & Fisher Brick Co.

#### EXTERIOR SURFACE

Clapboards 12" cypress 10" to weather.  
Shiplap.

Stucco—cement stucco on wire lath.

#### ROOF

Slate on sheathing— $\frac{1}{4}$ " Pennsylvania  
black "Bangor."

Valleys }  
Gutters } 16 oz. copper.  
Flashing }

Down spouts—16 oz. copper round.

Composition sheathing paper—"Sta-tite."

#### DOOR AND WINDOW FRAMES

Sash and frames

Double hung } stock, Anderson.  
Casement }

Doors and frames (exterior)—wood.

#### PORCHES

Concrete floor.  
Matched pine walls.

#### GLASS

Double thick Libbey-Owens-Ford.

#### INTERIOR PAINT

Siding } Priming }  
Trim } Finish coat } lead and oil.  
Sash }

#### LATH AND PLASTERING

Lathing  
Metal on ceiling.

Wood on walls.

Plastering—patent plaster, white finishing coat.

#### INTERIOR WOODWORK

Trim and floors—pine.

Painted surfaces—all pine.

Shelving and cabinets—pine.

Stock millwork—all except trim.

#### INSULATING

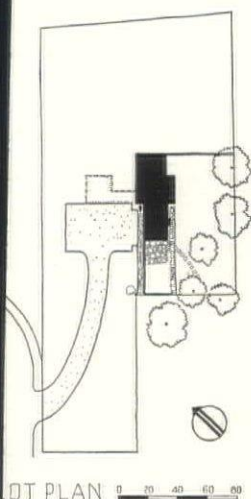
Attic floor—Johns-Manville rock wool.

Weatherstripping—doors only, Chamlin.

#### INTERIOR FINISHES

Floors—stain, shellac and wax.





GARDEN AND LIVING ROOM TERRACE

The house was first designed as flat-roofed modern. The client objected to its uncompromising severity, and the present house is the result. It is in no definite "style" but the exterior achieves by simplicity character which many consciously traditional designs lack. The relation of the house to the plot and the treatment of the garden are excellent. Through the use of walls this house, like the quite different No. 4, gains greatly in apparent size, and the garden is not only sheltered, but becomes an integral part of the living scheme. The plan is intelligently adapted to a narrow plot. The entrance, close to the middle of the side elevation, is interesting and reduces the trip of the maid to the front door. Three bathrooms on the second floor are more than a small house architect often has to cope with. The architect managed to include them without cramping either bathroom or bedroom. Cost: \$11,800. Cubage: 28,000 at about 42 cents per cubic foot.

Trim }  
Doors } lead and oil.  
Sash }  
Walls—painted.

RING  
Cable—BX  
Electrical fixtures—James R. Marsh.  
Switches—Toggle, Westinghouse Electric  
& Mfg. Co.

LIGHTING  
Direct.

UMBING  
Kitchen  
Sink—Kohler combination laundry  
tray and sink.

Stove—gas.  
Refrigerator—electric.

BATHROOM  
Fixtures—Kohler Co.  
Cabinets—Columbia Metal Box Co.  
Bath tubs } Kohler Co.  
Toilets }  
Seats—Church Mfg. Co.

PIPES  
Chase Brass & Copper Co.

HEATING  
Oil  
Boilers—Quiet May, May Oil Burner Corp.  
Radiators—Richwar, Richmond Radiator  
Co.  
Piping—steel.

Valves—Warren Webster (2-pipe air re-  
turn).  
Hot water heater—integral with boiler.

CHIMNEY  
Fireplaces  
Facings } selected old brick.  
Hearths }  
Mantels—wood.  
Damper—Covert old style.

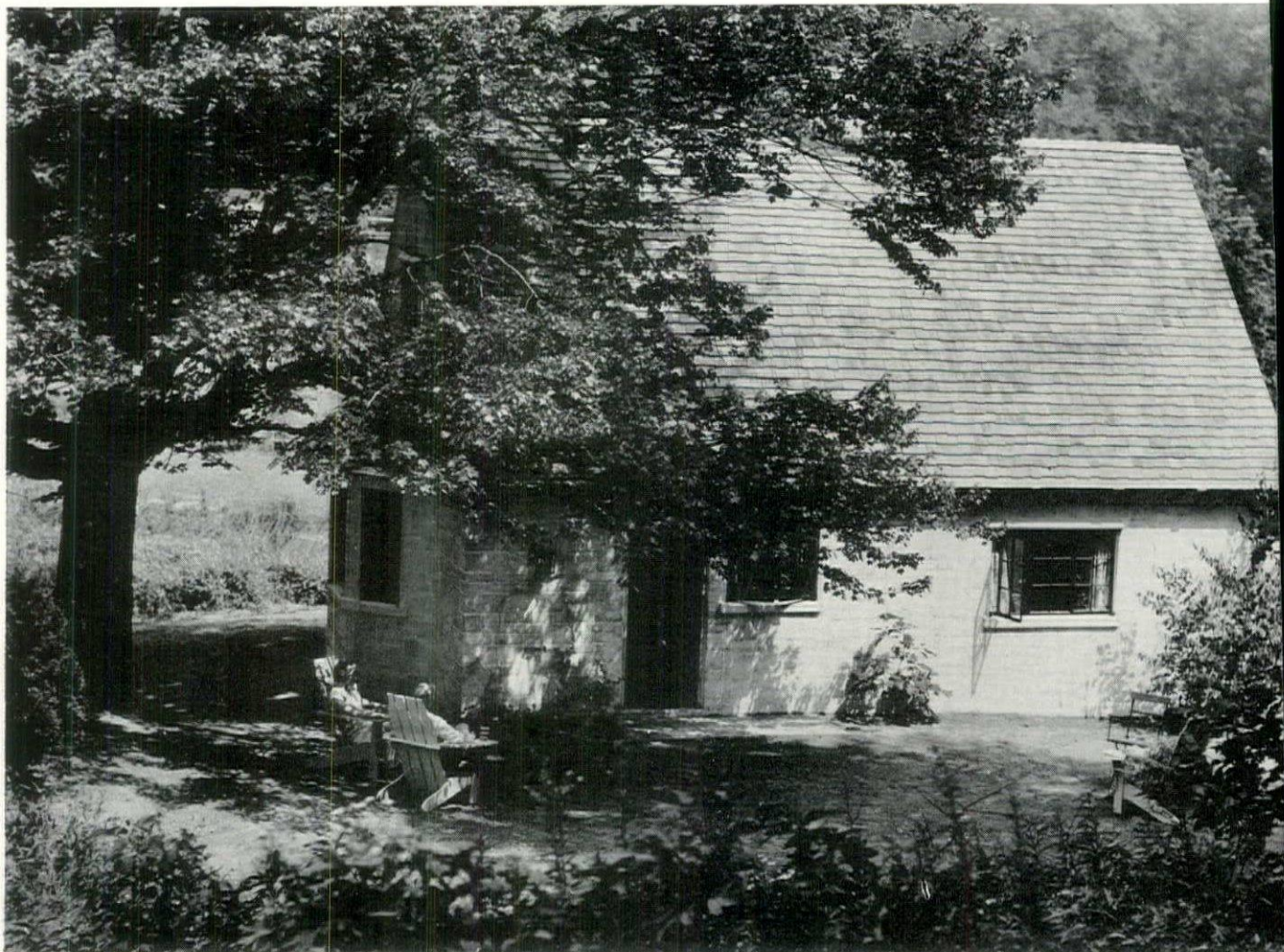
HARDWARE  
Interior } Corbin.  
Exterior }

SCREENS  
Bronze mesh.

WINDOW DRESSING  
Blinds—solid raised panel.



## 10. HOUSE FOR MARTHA COBB PEABODY, WESTPORT, CO



*Courtesy, Portland Cement Association*

Situated on a little more than an acre of Connecticut land, the house savors of the style and plan of the farmhouse in which the kitchen was the one room constantly lived in. Dictated by economy and utility, this old scheme of the kitchen-living room as the actual living center of the house, is still soundly serviceable today. The stove, which burns either coal or oil, heats the living room in winter while the windows on three exposures provide means for cooling the kitchen in summer and for speedy removal of cooking odors. There is a view of Long Island Sound from the bay window of the living room. The house fits well into its surroundings without needing the customary fringe of planting at the base of the walls to tie it to the ground. Cost: \$2,968. Cubage: 11,000 at 27 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete.

#### FRAME CONSTRUCTION

Rafters—wood.

#### MASONRY CONSTRUCTION

Cinder block walls—Bedford Hills Concrete Products Co.

#### ROOF

Wood shingles on shingle lath.

#### DOOR AND WINDOW FRAMES

Sash—steel casement.

Doors and frames (exterior)—wood.

#### PORCHES

Reinforced concrete.

#### EXTERIOR PAINT

Walls—white cement paint

Trim } painted.  
Sash }

#### LATH AND PLASTERING

No lath or plaster

#### INTERIOR WOODWORK

Shelving and cabinets—wood.

#### INSULATING

Roof rafters—Cabot's quilt.

Weatherstripping on wood doors—copper.

#### INTERIOR FINISHES

Floors—Master Builders' cement colored.

Trim—stained and waxed.

Sash—painted.

Walls—white cement paint.

Wallpaper—attic rooms.

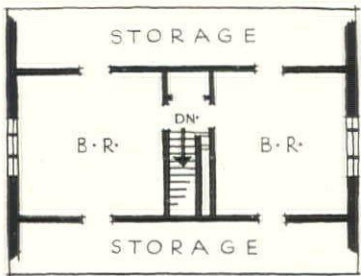




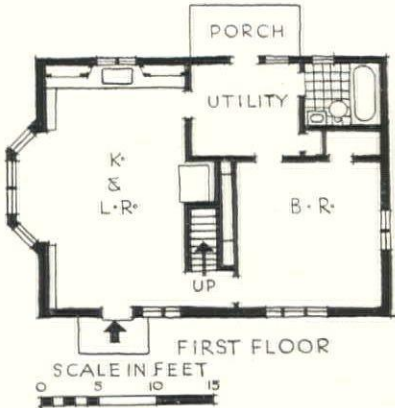
KITCHEN-LIVING ROOM



Thayer Photos



SECOND FLOOR



FIRST FLOOR

PLAN: Extremely simple with living room taking advantage of southern exposure and view. Dormer windows of the second floor would have given cross ventilation. They were omitted, not to protect the roof's lines, but for the sake of economy. Cross ventilation (north and south) may be had by leaving open the bedroom doors.

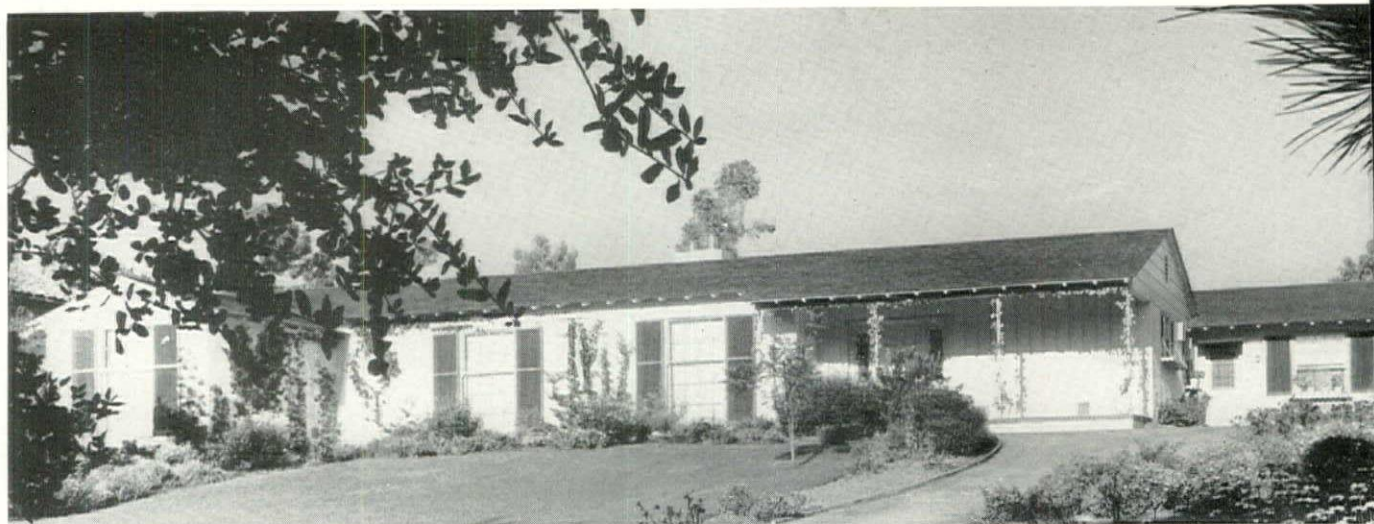
- RING
- Cable—BX.
- Electrical fixtures—handwrought.
- Switches—push button.
- LIGHTING
- Direct
- CLIMBING
- Kitchen
- Sink
- Cabinet
- Stove
- Refrigerator

- BATHROOM
- Bath tubs
- Toilets
- Seats
- PIPES
- Brass
- HEATING
- Coal or oil
- Hot water heater
- Thermostat and regulators

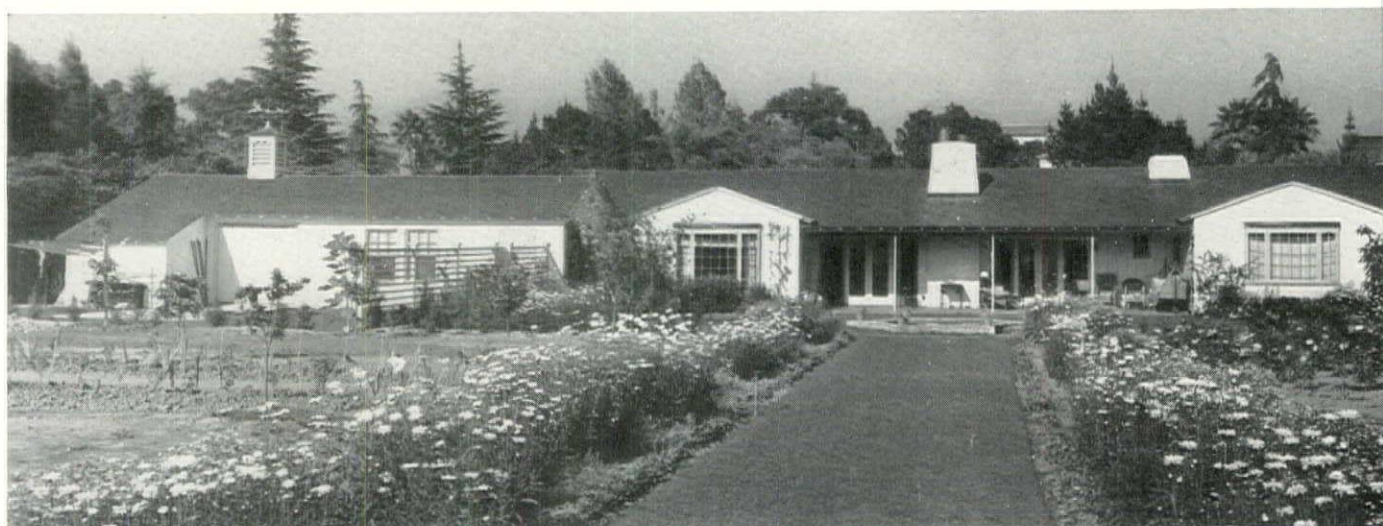
- AIR CONDITIONING
- Fan blower
- CHIMNEY
- Fireplaces
- Facings—brick.
- HARDWARE
- Interior and exterior—wrought iron.
- SCREENS
- Roll type.



## II. HOUSE FOR C. M. PETIT, PASADENA, CALIFORNIA



ENTRANCE APPROACH



GARDEN AND SERVICES

The plan of the house is organized, as so many Western houses are, to take advantage of the garden placed at the rear. This arrangement presents the difficulty of treating large and continuous wall areas in an interesting manner, happily solved in this example by a receding porch on the front and two gabled projections facing the rear garden. Cost: Approximately 30½ cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete, California Portland Cement Co.  
Cellar floor—cement.  
Waterproofing—Anti-Hydro.

#### FRAME CONSTRUCTION

Douglas fir.  
Sills—redwood.

#### MASONRY CONSTRUCTION

Common brick walls in garden—Los Angeles Brick Co.

#### EXTERIOR SURFACE

Clapboards—white pine.  
Stucco—cement, reinforcement by Youngstown Pressed Steel Co.

#### ROOF

Wood shingles on shingle lath—No. 1 Perfect cedar.  
Valleys } Galvanized iron, Armco.  
Flashing }

Composition sheathing paper—Sisalkraft.

#### DOOR AND WINDOW FRAMES

Double hung sash—sugar pine.  
Frames—Douglas fir.  
Doors and frames (exterior)—sugar pine and Douglas fir.  
Garage doors—white pine.

#### PORCHES

Reinforced concrete—acid stained cement.

#### GLASS

No. 1, 26 oz., American Window Glass Co.

#### EXTERIOR PAINT

Shingles—oil stain.  
Siding } Cabot's double white.  
Trim }  
Sash }

#### LATH AND PLASTERING

Lathing  
Douglas fir.  
Plastering  
Patent plaster—hardwall.  
Finishing coat—putty.

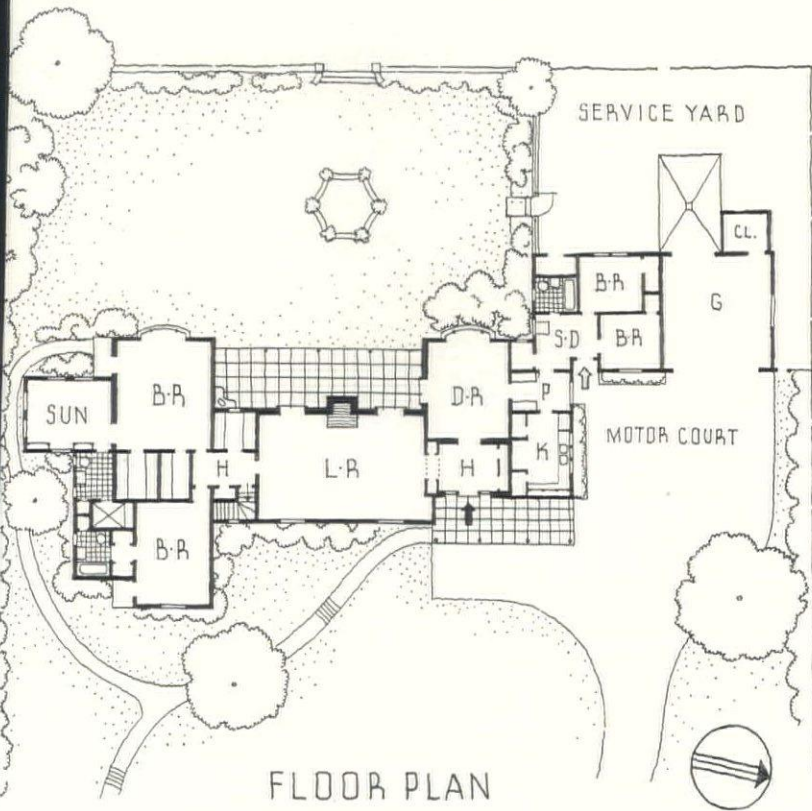
#### INTERIOR WOODWORK

Trim and floors  
Hardwood—oak.  
Painted surfaces—white pine.  
Shelving and cabinets—white pine.

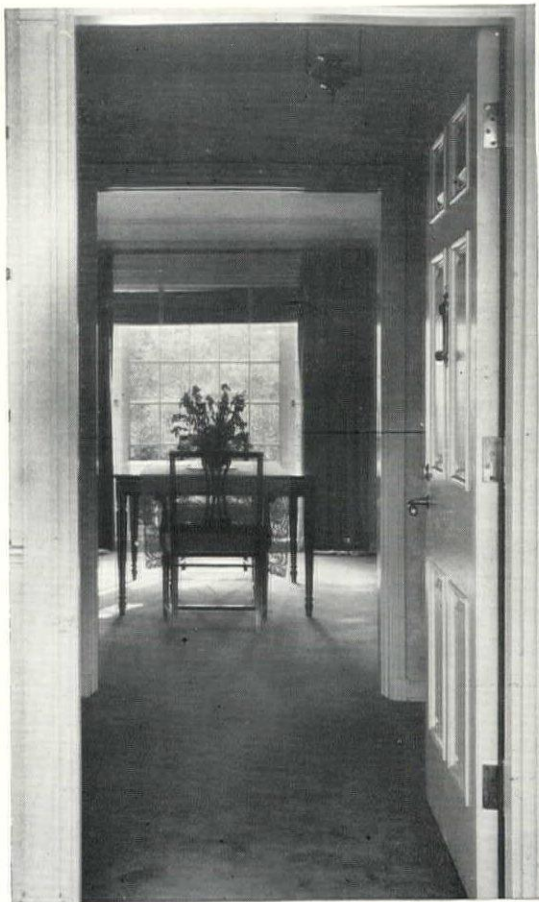




TAIL, GARDEN



FLOOR PLAN



ENTRANCE DETAIL AND DINING ROOM

<p><b>INSULATING</b></p> <p>Outside walls—Sisalkraft paper. Weatherstripping—Chamberlin metal.</p> <p><b>INTERIOR FINISHES</b></p> <p>Floors—stain and wax. Trim } Doors } lead and oil. Sash } Walls } Wallpaper—Lloyd's.</p> <p><b>WIRING</b></p> <p>Cable—General Electric. Electrical fixtures—B. B. Bell &amp; Co.</p> <p><b>LIGHTING</b></p> <p>Direct</p>	<p><b>PLUMBING</b></p> <p>Kitchen</p> <p>Sink—Standard Sanitary. Stove—gas. Refrigerator—Frigidaire.</p> <p><b>BATHROOM</b></p> <p>Cabinets—metal and wood. Bath tubs } Toilets } Standard Sanitary. Seats } Showers } Shower curtains—waterproof silk. Tile—American Encaustic Tile Co.</p> <p><b>PIPES</b></p> <p>Wrought iron—Reading.</p>	<p><b>HEATING</b></p> <p>Gas Piping—galvanized iron. Hot water heater—Crane Co.</p> <p><b>CHIMNEY</b></p> <p>Fireplaces</p> <p>Facings } Hearths } marble. Mantels—wood. Damper—Covert.</p> <p><b>HARDWARE</b></p> <p>Interior and exterior—Yale &amp; Towne.</p> <p><b>SCREENS</b></p> <p>Alloy, Hipolito Screen Co.</p> <p><b>WINDOW DRESSING</b></p> <p>Venetian blinds—National Venetian Blind Co.</p>
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## 12. HOUSE FOR JAMES V. RITCHEY, DARIEN, CONN.



The house reflects a fine scholarship which has not been distorted to adjust itself to the architect's m. preoccupation—present-day living. The trees at the front and rear form an admirable setting for the structural composition. The general spirit of the house is well indicated both by the dignified entrance front and also by the rear, which is dominated by the outside brick chimney and by the large dining room window overlooking the terrace—an agreeable spot for outdoor meals. The amiable garden affords consistent accompaniment. Extending the roof of the dining room bay-window over the door as a shelter was practical as well as pictorial. Cost: \$20,000. Cubage: 50,000 at 40 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete, "Atlas" cement.  
Columns—lally.  
Cellar floor—Universal cement.  
Waterproofing—exterior face parged with  $\frac{1}{2}$ " coat of waterproofed Medusa cement, Anti-Hydro Waterproofing Co.

#### FRAME CONSTRUCTION

Douglas fir, Weyerhaeuser.

#### EXTERIOR SURFACE

Clapboards— $\frac{1}{2}$ " x 6".

#### ROOF

Wood shingles on shingle lath—18"  $4\frac{1}{2}$ " to weather, Creo-Dipt Co.  
Valleys—closed, flashed with copper.  
Gutters  
Flashing } 16 oz. copper.  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—Curtis Silentite.  
Steel casement—Truscon.  
Doors and frames (exterior)—wood, Morgan.  
Garage doors—Overhead Door Corp.

#### PORCHES

Flagstone on concrete slab

#### GLASS

"A" double thick, clear sheet glass, Libbey-Owens-Ford Glass Co., American Window Glass Co.

#### EXTERIOR PAINT

Shingles—dipped  
Siding } lead and oil, Devco & Reynolds  
Trim } Co.  
Sash }

#### LATH AND PLASTERING

Lathing  
Ceilings—metal.  
Walls—Rocklath, U. S. Gypsum Co.  
Plastering  
Patent plaster—King's Windsor  
Rockwall.  
Finishing coat—hard white.

#### INTERIOR WOODWORK

Trim—pine.  
Floors—oak.  
Walls—in library, stained pine.  
Shelving and cabinets—painted pine.  
Stock millwork—Morgan and Curtis.

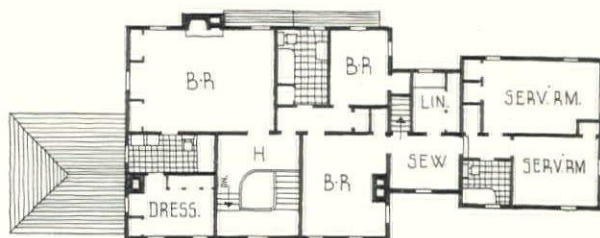
#### INSULATING

Outside walls } rock wool.  
Roof rafters }  
Weatherstripping—Curtis Silentite.





ING TERRACE AND REAR GARDEN



SECOND FLOOR



FIRST FLOOR

PLAN: The kitchen at the front is properly located. The library is completely isolated from the living room and thus ensures a quiet retreat. The extra first floor bedroom may be used as a guest room, in which case the library becomes part of a suite.

## TERIOR FINISHES

Floors—Minwax floor finish.  
Trim }  
Doors } 3 coats lead and oil paint.  
Sash }  
Walls—Salubra.  
Wallpaper—F. Blank Co., W. H. S. Lloyd Co.

## WIRING

Cable—BX.  
Electrical fixtures—Chase Brass & Copper Co.  
Switches—Hart & Hegeman tumbler.

## LIGHTING

Direct

## CUMMING

Kitchen

Sink—Standard Sanitary enameled iron.

Cabinet—wood, Curtis stock.  
Stove—A. G. A. Co., coal, insulated.  
Refrigerator—Frigidaire.

## BATHROOM

Fixtures—Standard, Chromard fittings.  
Bath tubs—"Pembroke."  
Toilets—Compact.  
Seats—Church Mfg. Co.  
Showers—K 200.  
Shower curtains—K 290, duck.  
Tile—floor, ceramic mosaic. Walls, Parisian matt glazed, American Encaustic Tile Co.

## PIPES

Brass—American Brass Co.

## HEATING

Oil—Gilbert & Barker.  
Radiators—American Radiator Co.  
Valves—H. A. Thrush & Co.  
Thermostat and regulators—Minneapolis-Honeywell Regulator Co., H. A. Thrush & Co.

## CHIMNEY

Fireplaces  
Facings }  
Hearths } brick.  
Mantels—wood, Wm. H. Jackson.  
Damper—H. W. Covert Co.

## HARDWARE

Interior and exterior—Yale & Towne Mfg. Co.

## SCREENS

Curtis stock.





Hazen P.

Elements of Tudor design were incorporated to produce a not displeasing result. The hall descends three steps to the first floor level. A steeply sloping site dictated this change of level and also made possible an economical basement in which is stored the machinery and sound chamber of a pipe organ. Though the gabled dormers somewhat detract from the general repose of aspect, they are, nevertheless, a frank concession to utility and are not at variance with the modes from which the external form was adapted. One questions the expediency of having the kitchen veranda so close to the main entrance. The exterior of brick veneer, painted white, and wood form an agreeable combination. Cost: \$13,000. Cubage: 53,000 at 24 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete, Pioneer Sand & Gravel Co.  
Columns—wood.  
Cellar floor—concrete, Pioneer Sand & Gravel Co.  
Waterproofing—hot asphalt, Union Oil Co.

### FRAME CONSTRUCTION

Fir  
Girders—steel I-beams, Bethlehem Steel Co.

### EXTERIOR SURFACE

Brick veneer—common brick, Builders Brick Co.  
Rough cedar siding—Seattle Cedar Lumber Mfg. Co.

### ROOF

Wood shingles on shingle lath—double cased 5x, Seattle Cedar Lumber Mfg. Co.

Valleys } 16 oz. copper, American  
Flashing } Brass Co.  
Gutters } 26 gauge galvanized iron.  
Down spouts } American Rolling Mill Co.

### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Truscon Steel Co.  
Doors and Frames (exterior)—wood, Quality Millwork Co.  
Garage doors—wood, Overhead Door Co.

### PORCHES

Reinforced concrete — Pioneer Sand & Gravel Co.  
Tile floor—quarry tile, Builders Brick Co.

### GLASS

Double strength A, Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Shingles—brush stained, Schorn Paint Co.  
Siding }  
Trim } white, Schorn Paint Co.  
Sash }  
Brick veneer—Bay State Brick & Cement Co.

### LATH AND PLASTERING

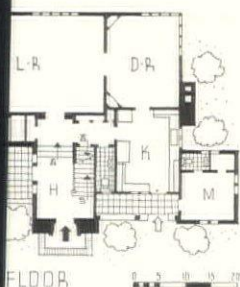
Lathing—wood, Reed Mill & Timber Co.  
Plastering—Standard Gypsum Co.

### INTERIOR WOODWORK

Hardwood floors—oak, Bruce Co.  
Stainwoods—knotty hemlock.  
Painted surfaces  
Shelving and cabinets } vertical grain



# ORGE WELLINGTON STODDARD, ARCHITECT



PLAN: Kitchen convenient to hall and directly accessible to dining room. The interest of this plan derives from putting the kitchen at the front of the house with the windows of the living room at the back, where they command an extensive outlook. Maid's room has separate entrance, making it a self contained and, if the owners so desire, a rentable unit. Dressing room-bathroom arrangement good.



**INSULATING**  
Outside walls—Sisalkraft paper.  
Attic floor—Insulite.  
Weatherstripping—Chamberlin.

**EXTERIOR FINISHES**  
Trim } 3 coats paint, Schorn Paint Co.  
Doors } 1 coat enamel, Pratt & Lam-  
dash } bert's "Vitrolite."  
Walls—paint and paper.

**WIRING**  
Electrical fixtures—Seattle Lighting Fix-  
ture Co.  
Switches—Hart & Hegeman.

**HEATING**  
Direct

**DRAINAGE**  
Kitchen  
Sink—Standard Sanitary.

**BATHROOM**  
Fixtures—Standard Sanitary.  
Cabinets—American Glass Co. medicine  
cabinet.  
Bath tubs }  
Toilets } Standard Sanitary.  
Seats—Church.  
Showers—Standard.  
Tile—Gladding, McBean & Co.

**PIPES**  
Wrought iron.

**HEATING**  
Hart oil burner.  
Thermostat and regulators—Minneapolis-  
Honeywell.

**AIR CONDITIONING**  
Fan and air conditioner.

**CHIMNEY**  
Fireplaces  
Facings—brick.  
Hearths—stone.  
Mantels—wood.  
Damper—Richardson high form.

**HARDWARE**  
Interior and exterior—Yale & Towne,  
Earle.

**SCREENS**  
Roller type.

**WINDOW DRESSING**  
Shades  
Venetian blinds





**PROBLEM:** "The special considerations which influenced the design were very few. The client is the sole occupant of the house, except for occasional visits from his son. He therefore preferred a dining alcove to a full dining room. The living room, and the main bedroom directly above, had to be on the west side of the house to take advantage of the delightful outlook over fields, stream, and pool. Woodworking and flowers are the client's hobbies, and it was required to provide a completely equipped shop in the basement and a small lean-to greenhouse on the southwest corner of the house with direct communication to the office, where he spends most of his time."

Few types of early American houses show more vigor, or better adaptation to local conditions than the Pennsylvania farmhouse. Few have been so abominably travestied in the residential architecture of recent years. In this house outside of Philadelphia the architect has handled his materials and forms with such restraint and skill that none of the criticisms ordinarily made can be applied here. The walls have excellent texture without being exaggeratedly rough, and the stone joints have been left in the natural condition of the mortar, thereby preserving the simplicity of the wall surface. Spruce wood has been used for exterior surfaces, but in amount small enough not to disturb the fine stone character of the house. Cost: 28½ cents per square foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—stone.  
Cellar floor—cement.

### FRAME CONSTRUCTION

Hemlock. Plate and girders Longleaf  
Yellow pine.

### MASONRY CONSTRUCTION

Stone walls—local stone.

### EXTERIOR SURFACE

Clapboards—cypress.

### ROOF

Wood shingles on shingle lath—No. 1  
Royal, Washington Red Cedar.  
Valleys—open.  
Gutters—copper lined.  
Flashing—copper.  
Down spouts—copper.

### DOOR AND WINDOW FRAMES

Sash and frames—wood.

Double hung—yellow pine pulley stiles,  
long leaf.

Yellow pine Sills, white pine sash.

Casement—white pine

Doors and frames (exterior), garage  
doors—white pine

### TERRACE

Brick floor—old paving brick.

### GLASS

Libbey-Owens-Ford double thick grade A.

### EXTERIOR PAINT

Roof—shingles, left to weather.  
Siding, trim and sash—priming of white  
lead, 3 coats Cabot's double white.

### LATH AND PLASTERING

Lathing  
Metal—in corners only and garage  
ceiling.  
Wire—living room ceiling.  
Wood—spruce.  
Plastering—finishing coat of lime plaster.

### INTERIOR WOODWORK

Trim and floors—white pine trim, long  
leaf yellow pine. floors except in se  
ice portion or under linoleum wh  
N. C. pine is used. Library has S.  
brick floor. Stainwoods and pain  
surfaces of white pine.

Shelving and cabinets—white pine.  
Stockmillwork—2nd floor interior door

### INSULATING

Outside walls—1½" cork board used  
plaster base, all exterior walls.  
Attic floor—4" rock wool over entire 2  
floor.  
Weatherstripping — zinc, interlocking  
type, all exterior openings except  
basement.

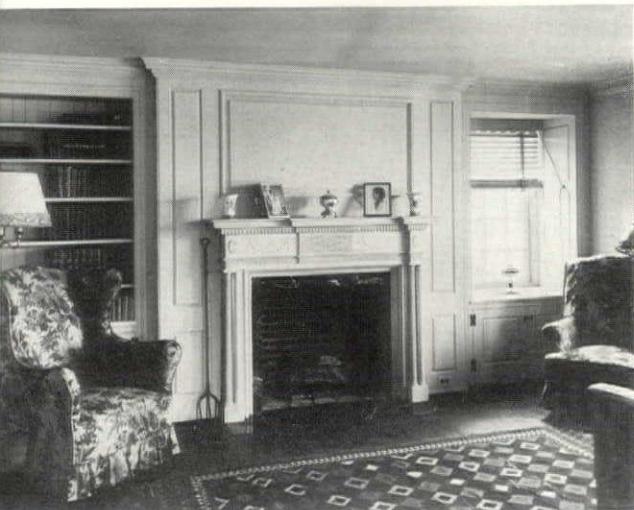
### INTERIOR FINISHES

Entire 1st floor except library a  
kitchen, painted walls and woodwork





AGE AND SERVICE ENTRANCE

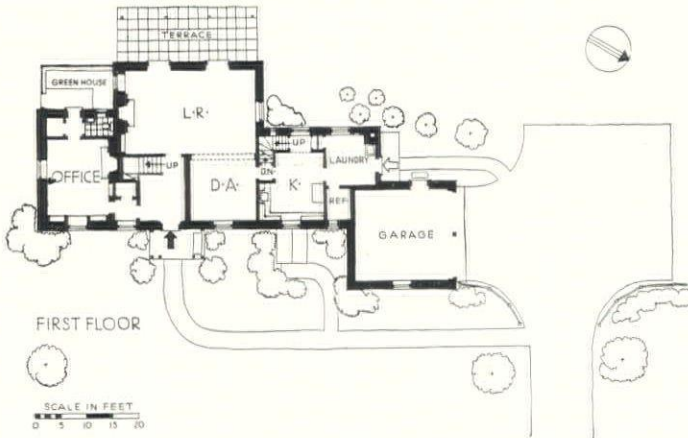


IVING ROOM

AN: Arrangement of living room and dining alcove  
ellent; it makes for a spacious interior and a form more  
resting than a simple rectangle. It is necessary for the  
d to go through the living room to go to the front door,  
in an informal living scheme, this should not be objec-  
nable.



SECOND FLOOR



FIRST FLOOR

Floors—Stained and waxed (dark).  
Wallpaper—all bedrooms. Sanitas all  
bathroom walls.

WIRING  
Switches—toggle, plates in colors to match  
walls.

LIGHTING  
Direct.

PLUMBING  
Kitchen.  
Sink—Kohler Co.  
Cabinet—detailed and built in.  
Stove — Chambers' Automatic gas  
range.  
Refrigerator—Frigidaire.

BATHROOM  
Fixtures—Kohler Co.  
Cabinets—Kleer-Vu.  
Showers—over tubs.

Shower curtain—white duck.  
Tile—3 courses around tubs only.

PIPES  
Brass.  
HEATING  
Oil—Williams' Oil-o-matic with B. & G.  
Booster.  
Radiators—American Radiator "Corto"  
(concealed).  
Hot water heater—included in Oil-o-matic  
set up.  
Thermostat and regulators — separate  
thermostatic control for green house.

CHIMNEY  
Fireplaces  
Facings and hearths—Verde Antique  
Marble in living room, rough stone in  
library. S. F. brick hearth in bed-  
room.

Mantels—Original mantel from old family  
mansion used in living room. Simple  
wood elsewhere.  
Damper—Covert old style.

HARDWARE  
Interior—about half of early American  
design, made to order. Remainder  
Corbin.  
Exterior—Corbin.

SCREENS  
Wood and copper wire by carpenter.

WINDOW DRESSING  
Shades—throughout 2nd floor.  
Venetian blinds—in all main rooms 1st  
floor.

SPECIAL EQUIPMENT  
Access to attic—Bessler Pull-Down stairs.  
Small lean-to green house by Hitchings  
& Co.



## 15. HOUSE FOR JOHN KAEWATS, ROCKVILLE CENTER



Gustav Anderson

The main part of the house and the wing on the left are approximately the same size. But the wing's arch and the consequent shadows skillfully subordinate it to the central portion. Proper planting would give the garage a less dominant position in the design. The hayloft pulley over the maid's window is pure affectation. Cost: \$12,500. Cubage: 43,000 at 29 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—poured concrete.  
Columns—Lally.  
Cellar floor—cement (fir floor for play room).

#### FRAME CONSTRUCTION

Fir

#### EXTERIOR SURFACE

Brick veneer—Staple's common brick.  
Stone veneer—Westchester.  
Shingles—cedar, Perfection.  
Flush boarding—redwood.

#### ROOF

Slate on sheathing—Bangor black slate.  
Valleys  
Gutters  
Flashing  
Down spouts } 16 oz. copper.

Salt glazed tile drains—to drywells.

Composition sheathing paper—20 lb. felt.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung } local lumber yard.  
Casement }  
Steel sash—Fenestra cellar sash.

Doors and frames (exterior) } Curtis  
Garage doors }

#### PORCHES

Posts, arches and trim—redwood.  
Floors—concrete with slate flagging.

#### GLASS

Pennvernion, Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Shingles—brush stained.  
Siding } 3 coats Atlantic white lead.  
Trim }  
Sash }

#### LATH AND PLASTERING

Lathing  
Wood—lath.  
Metal corner pieces.  
Composition plaster base—Celotex  
2nd floor ceiling.

#### Plastering

Patent plaster—King's Windsor.  
Finishing coat—plaster of Paris.

#### INTERIOR WOODWORK

Floors—oak throughout.  
Stainwoods—knotty pine.  
Painted surfaces—white pine.  
Shelving and cabinets—knotty pine and white pine.

#### INSULATING

Attic floor—Celotex.  
Weatherstripping—Kingsway metal striping.





RANCE



SECOND FLOOR



FIRST FLOOR

#### ERIOR FINISHES

Floors—Minwax stain and wax.  
Trim } cream color, some trim natural  
doors } wax.  
Walls—kitchen and baths enamel paint.  
Wallpaper—all principal rooms.

ING  
able—BX.  
lectrical fixtures—Lightolier Co.  
witches—toggle.

HTING  
irect

MEING  
itchen

Sink—Standard Sanitary flat rim sink.

Cabinet—Kingsway.  
Stove—Star.

#### BATHROOM

Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—Kingsway.  
Bath tubs—Standard Sanitary recessed.  
Toilets—Standard Sanitary.  
Showers—Kingsway glass door.  
Tile—Mosaic Tile Co.

#### PIPES

Copper by National Copper Tubing.

#### AIR CONDITIONING

Central—Delco oil burning "Conditionair."

#### CHIMNEY

Fireplaces

Facings—brick.  
Hearths—slate.  
Mantels—design part of wall treatment  
of knotty pine.  
Damper—H. W. Covert Co.

#### HARDWARE

Interior and exterior—Schlage Lock Co.

#### SCREENS

Copper screens full length.

#### WINDOW DRESSING

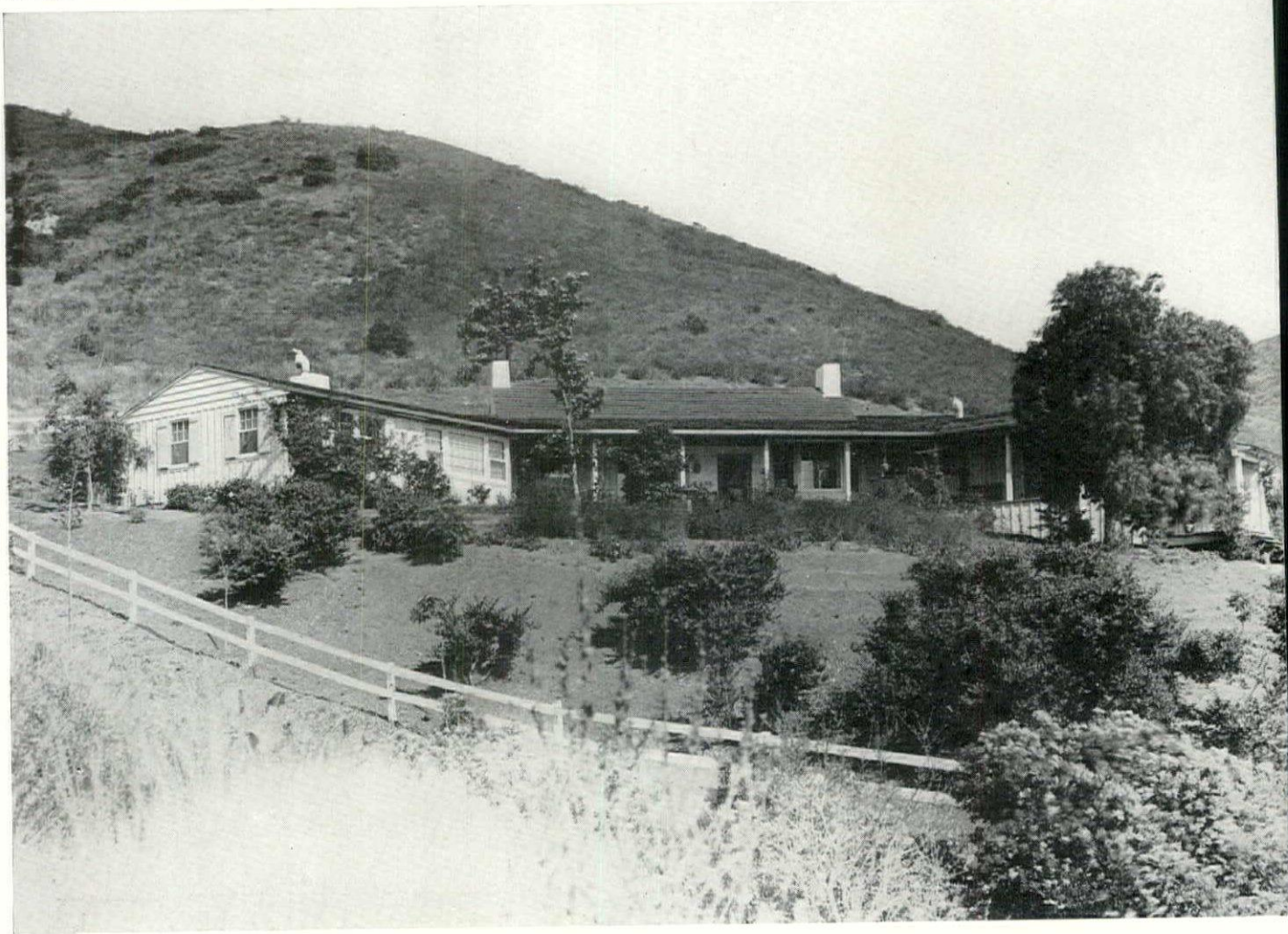
Shades—linen.  
Blinds—Curtis.

#### SPECIAL EQUIPMENT

Telephone alcove unit special design.



## 16. RANCH HOUSE FOR JOEL McCREA NEAR LOS ANGELES



Located on a thousand acres of cattle grazing land about 50 miles from Los Angeles, this pleasant retreat of a motion picture actor closely follows the lines of the traditional California ranch house. The central portion of the house is in stone tile; the wings are of whitewashed boards and batts—an attempt to give the impression that they have been added to an original small building. In spite of this trick, romantic touch, the house is attractive and suited to its location. It shows the excellent use of simple materials characteristic of Californian residential work and the irregular, sprawling plan solves the problems of site and living requirements with directness and ease. As fire protection and for cooling purposes, ordinary lawn sprinkler heads are spaced about 10 ft. apart on the roof ridge. A ten to twenty degree interior temperature reduction results from thorough soaking and evaporation on hot days. Cost: approximately \$3 a square foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls }  
Piers } } Portland Cement.  
Cellar floor }  
Waterproofing—Anti-Hydro.

#### FRAME CONSTRUCTION

No. 1 Common Douglas Fir.  
Sills—Redwood.

#### MASONRY CONSTRUCTION

Common brick walls—Simons Brick Co.  
Faced brick—Los Angeles Pressed Brick Co.  
Tiles—"Hollostone," Hollystone Co.

#### EXTERIOR SURFACE

Shingles—Split Redwood shakes.  
Stucco—Blue Diamond.

#### ROOF

Valleys }  
Gutters } } Armco  
Flashing }  
Down spouts }  
Composition sheathing paper—No. 15 felt  
Pioneer Roofing Co.

#### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—Sugar pine.  
Doors and frame (exterior) }  
Garage doors } } Douglas Fir.

#### PORCHES

Reinforced concrete—Portland Cement  
and Clinton Wire Mesh.

#### GLASS

Libbey-Owens-Ford, double strength.

#### EXTERIOR PAINT

Shingles—left natural.  
Siding—Cabot's "Old Virginia White"  
Trim }  
Sash } } Priming, lead and oil.  
Finish Coat, Oakley Paint.

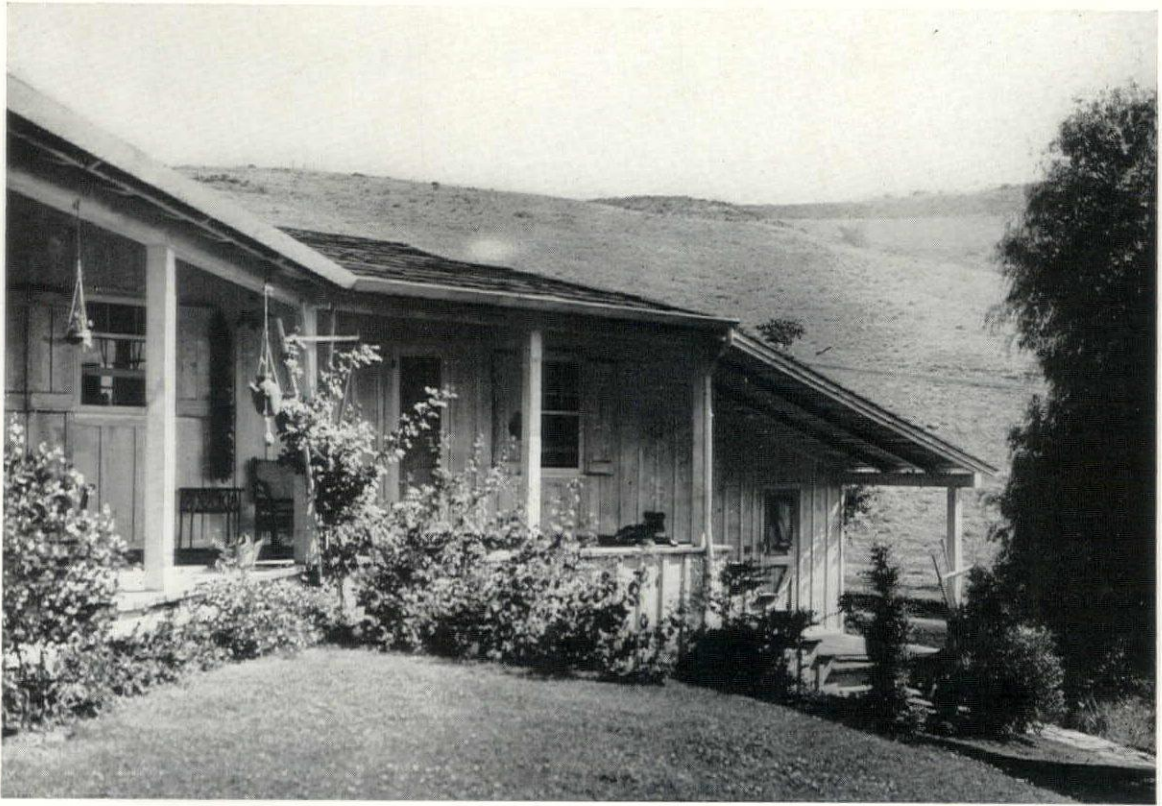
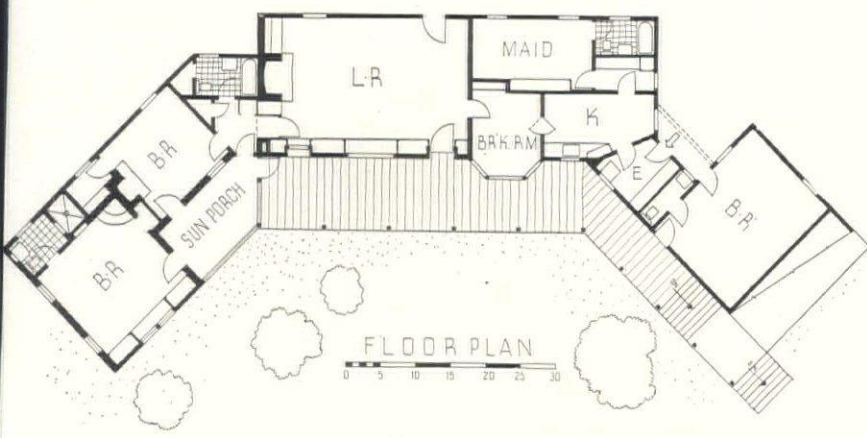
#### LATH AND PLASTERING

Lathing.  
Wood—Long-Bell No. 1 green Douglas  
Fir.  
Plastering.  
Patent plaster—Medusa Portland Cement Co.

#### INTERIOR WOODWORK

Trim and floors—Douglas Fir.  
Hardwood—No. 2 oak }  
Painted surfaces } } Douglas Fir and  
Sugar Pine.  
Shelving and cabinets }





LATING  
Weatherstripping — American Weather-  
strip Co.  
PRIOR PAINTING  
Doors }  
Trim } Oakley Paints  
Floors }  
Walls }  
Wallpaper—Stockwell Wall Paper.  
NG  
ble—Pass & Seymour, Inc.  
electrical fixtures—Meyburg Co.  
switches—"P & S", Despard type.  
TING  
rect.

PLUMBING  
Kitchen  
Sink—Standard Sanitary Mfg. Co.  
Stove—"Hot Point."  
Refrigerator—General Electric.  
BATHROOM  
Fixtures—Standard Plumbing Co.  
Cabinets—Master Products.  
Bath tubs } Standard Sanitary  
Toilets } Mfg. Co.  
Seats—Church Mfg. Co.  
Showers—Crane Shower Head.  
Tile—Gladding, McBean & Co.  
PIPES  
Steel—Youngstown Sheet & Tube Co.  
HEATING  
Electric.

Boilers—Hoffman "Thermador."  
Hot water heater—"Thermador" Everhot.  
CHIMNEY  
Fireplaces  
Facings—Los Angeles Pressed Brick  
Co.  
Hearths—Simons Brick Co.  
Mantels—Wood.  
Damper—Richardson.  
HARDWARE  
Interior } Dresslar Hardware Co.  
Exterior }  
SCREENS  
"Hipolito"—Hipolito Mfg. Co.  
WINDOW DRESSING  
Venetian blinds—National Venetian Blind  
Co.



## 17. HOUSE FOR KENNETH J. REMPP, GWYNEDD VALL



The architect was obviously at ease with the changes of material demanded by the Pennsylvania farmhouse. Clapboards were originally added to the leaky fieldstone walls of these houses as protection for the more exposed elevations. Thus clapboards would appear on all walls with the same orientation. Modern insulation, however, allows these features to be arbitrarily decorative. The plan is typical, capably handled. The economy of local materials is reflected in the low cost of this house. Cost: \$5,940. Cubage: 22,771 at 26 c per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls }  
and } local stone.  
Piers }

Cellar floor—cement.

#### FRAME CONSTRUCTION

Douglas fir, structural grade.

#### MASONRY CONSTRUCTION

Stone walls—local stone.

#### EXTERIOR SURFACE

Clapboards—California redwood.

#### ROOF

Wood shingles on shingle lath—Washington red cedar.

Valleys }  
Gutters } lead clad copper.  
Flashing }  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash and frames

Double hung }  
Casement } white pine, specially milled.

Doors and frames (exterior)—white pine.

#### PORCHES

Kitchen porch—long leaf Georgia pine.  
Main porch—flagstone floor.

#### GLASS

Libbey-Owens-Ford double strength A.

#### EXTERIOR PAINT

Shingles—unfinished.

Siding }  
Trim } Priming } lead and oil mixed  
Sash } Finish coat } on job.

Shutters—Cabot's Collopakes.

#### LATH AND PLASTERING

Lathing

Composition plaster base—U. S. Gypsum Sheetrock.

Plastering

Patent plaster }  
Finishing coat } U. S. Gypsum

#### INTERIOR WOODWORK

Floors—white oak.

Trim—poplar.

Doors—white pine.

#### INSULATING

Outside walls }  
Roof rafters } Balsam wool.

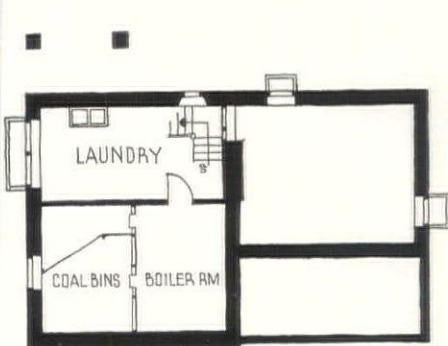




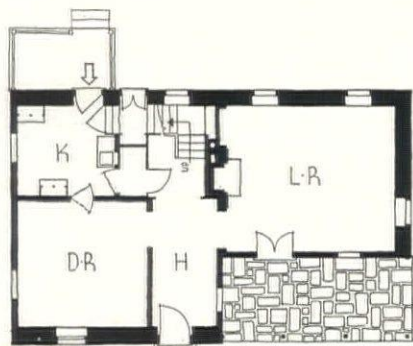
FAIR HALL



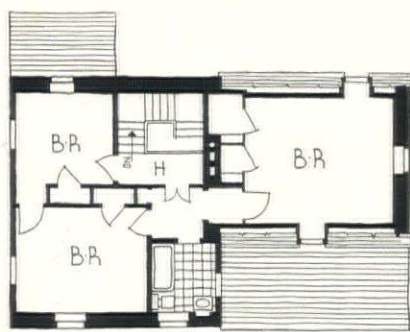
LIVING ROOM



BASEMENT



FIRST FLOOR



SECOND FLOOR

PLAN. Simple and direct. The circulation from kitchen to front entrance does not pass through intermediate rooms, a point frequently overlooked. One factor contributing to the low cost of this house was the single bathroom on the second floor.

#### INTERIOR FINISHES

Floors—stained and waxed.  
Trim }  
Doors } enameled.  
Sash }  
Walls—tinted plaster, no paint.

#### WIRING

Cable—BX.  
Electrical fixtures—locally purchased.  
Switches—Hubbell toggle.

#### LIGHTING

Direct—mostly lamps, few fixtures.

#### PLUMBING

Kitchen  
Sink—enameled iron.  
Stove }  
Refrigerator } electric.

#### BATHROOM

Fixtures—Kohler.  
Bath tub—enameled iron.  
Toilet—vitreous china.  
Seat—white.

#### PIPES

Wrought iron.

#### HEATING

Coal  
Boiler }  
Radiators } American Radiator Co.  
Piping—Steel.  
Valves—Jenkins.  
Hot water heater—coal.

#### CHIMNEY

Fireplaces.  
Facings—plaster.  
Hearths—common hard red brick.  
Mantels—wood.  
Damper—Covert.

#### HARDWARE

Interior } wrought iron, blacksmith made,  
Exterior } by Julius Rempp, Spring-  
house, Pa.

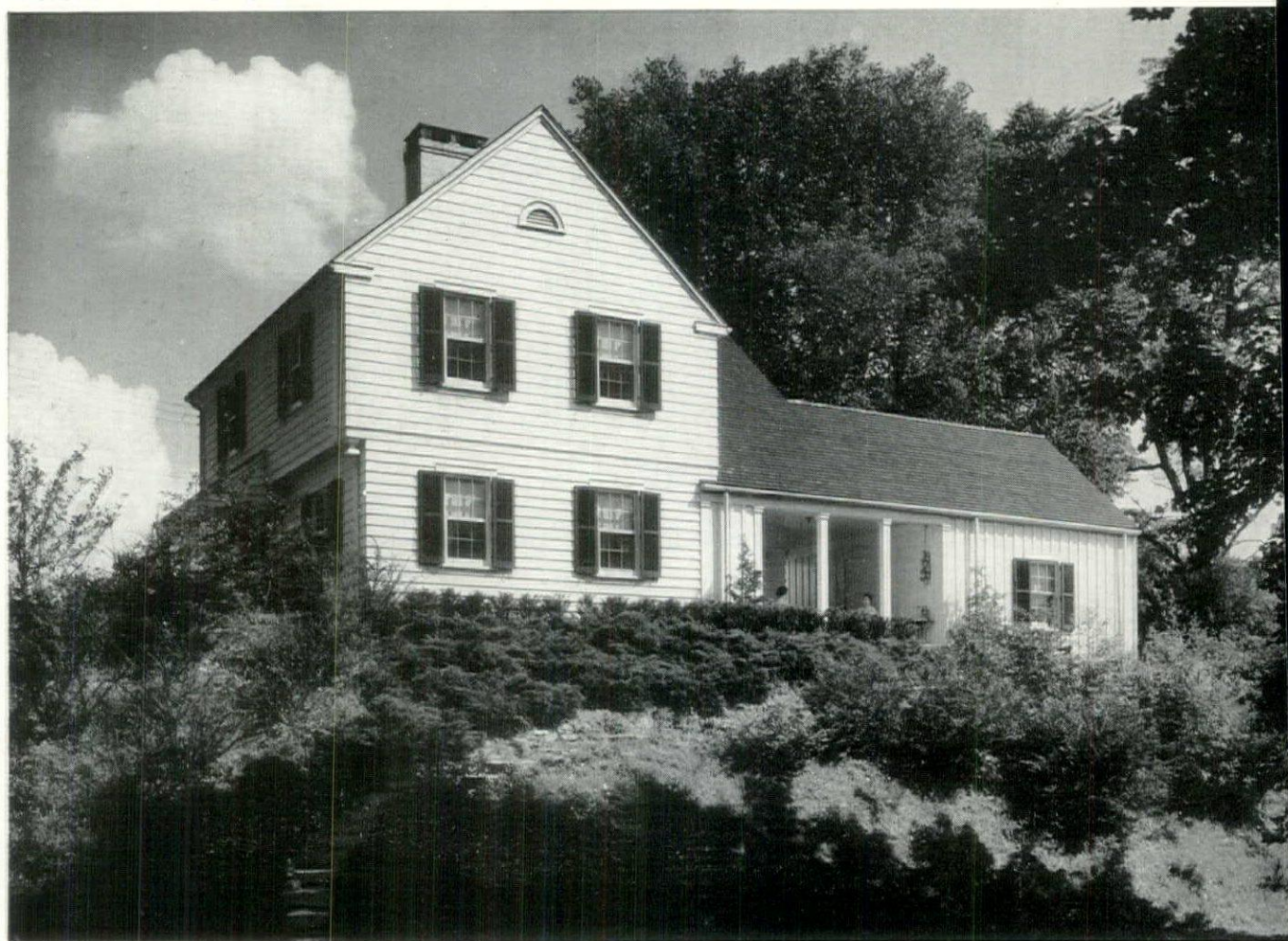
#### SCREENS

Wood.

#### WINDOW DRESSING

Done by owner.





Because this 230 x 350 foot lot was unruly and hilly the owner was able to buy it advantageously. Realizing that building in the center of the lot would have necessitated an expensive two-level house the owner decided to build on the crest of a hill and use this saving for landscaping. The incorporation of the garage with the house contributes to its pleasing form and results in the through-porch which creates an automatic draft in summer. There is no esthetic reason for repeating the shuttered windows on the garage. A glazed strip near the roof would have provided light and variety of treatment while better expressing the garage's purpose. Cost: \$11,500. Cubage: 29,500 at 39 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete poured.  
Columns—steel stanchions.  
Cellar floor—cement.  
Waterproofing—Cellite.

### FRAME CONSTRUCTION

Yellow pine.  
Sills—oak.

### EXTERIOR SURFACE

Clapboards—first story.  
Shingles second story, some vertical boarding and battens garage wing.

### ROOF

Wood shingles on shingle lath.  
Valleys—closed, copper flashed.

Gutters—O. G. improved fir gutter.  
Flashing } copper  
Down spouts }

### DOOR AND WINDOW FRAMES

Sash and frames—double hung type.  
Doors and frames (exterior)—white pine.  
Garage doors—white pine.

### PORCHES

Reinforced concrete.

### GLASS

Double strength, quality A, by Libbey-Owens-Ford

### EXTERIOR PAINT

Shingles—dipped and brush stained; 2 coats, Truscon white.

Siding } Priming—lead and oil.  
Trim } Finish coat—2 coats  
Sash } Truscon white.

### LATH AND PLASTERING

Lathing—Composition plaster base.  
Plastering  
Patent plaster.  
Finishing coat—white.

### INTERIOR WOODWORK

Floors—knotty random width oak.  
Stainwoods—knotty white pine.  
Shelving and cabinets—poplar.  
Stock millwork—stock and special.



# BERT ISPHORDING, ARCHITECT



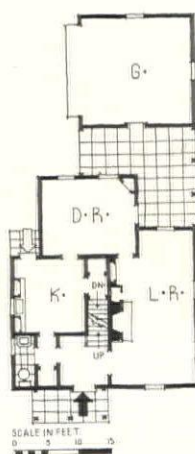
PORCH APPROACH



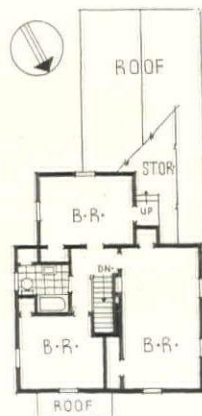
DETAIL, STAIRWAY



LIVING ROOM



FIRST FLOOR



SECOND FLOOR

**PLAN:** Readily workable, with kitchen having easy access to main and servants' entrances, dining room and stairs. Bathroom connects directly with no bedroom. In a small house this is desirable because, when two flanking bedrooms have access to the intervening bathroom, the occupant of the bathroom locks his neighbor's door and then frequently forgets to unlock it.

house, both inside and out, has much to commend it. Greater living space could have been created from one end of the living room through to the garage, a distance of about forty feet, by glazing from floor to ceiling with French windows simply fixed-sash at the end of the living room and the part of the dining room which gives on the porch. The vertical boarding and the mantel design are good.

**INSULATING**  
Overhangs—1" Insulite.  
Attic floor— $\frac{1}{2}$ " Insulite.  
Weatherstripping—interlocking type.

**INTERIOR FINISHES**  
Floors—stain, shellac and wax.  
Trim { stain, shellac, wax and  
Doors { Vitrolite enamel.  
Sash—stain, Valspar varnish and Vitrolite enamel.

**WIRING**  
Cable—BX.  
Electrical fixtures—brass by owner.  
Switches—Bryant.

**LIGHTING**  
Direct.  
**PLUMBING**  
Kitchen  
Sink—Veribrite.  
Cabinet—McDougall.  
Refrigerator—General Electric.

**BATHROOM—**  
Fixtures—Crane.  
Cabinets—Lawco.  
Showers } Crane.  
Shower curtains }  
Tile—Cambridge.

**PIPES**  
By Anaconda.

**HEATING**  
Gas—Pennsylvania Furnace, gravity.  
Thermostat and regulators—Minneapolis-Honeywell.

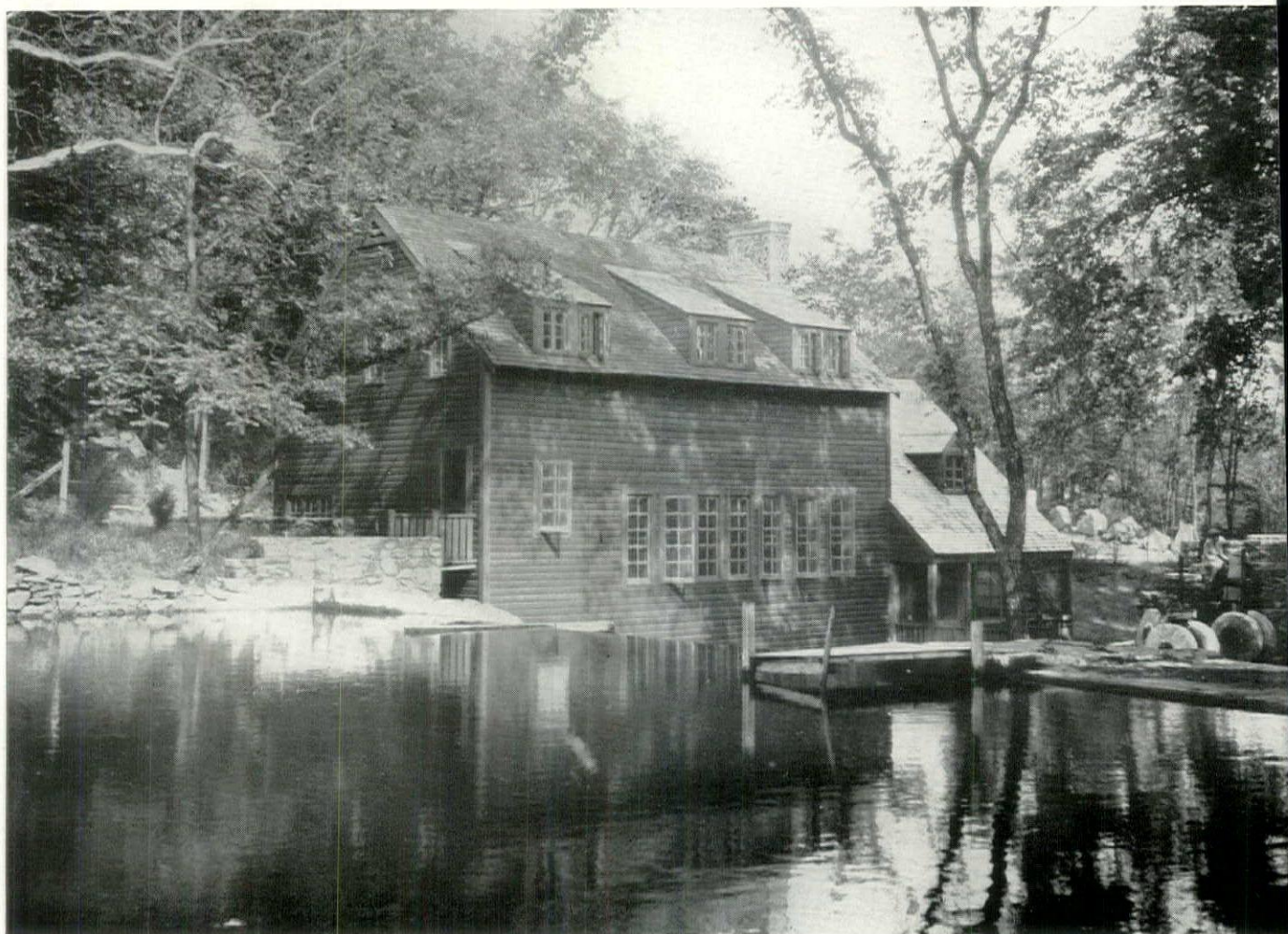
**CHIMNEY**  
Fireplaces  
Facings } faience tile.  
Hearths }  
Mantels—knotty white pine.  
Damper—Donley.

**HARDWARE**  
Interior and exterior—McKinney.

**WINDOW DRESSING**  
Blinds—American Shade Co., Brenneman.



## 19. GUEST HOUSE IN BEDFORD, NEW YORK



The timbers of an old frame mill, 24 x 40 feet, were used in the construction of this guest house. Everything else in the construction was new, but the materials used and the site, with its associations, plainly indicate the most suitable manner of treatment. There is a garden below the spillway of the dam. The arrangement of levels was suggested by the irregularities of the site. The division between the upper and lower masses of the building became a natural separation between master's and servants' quarters. The bedrooms are of unusual shape and their somewhat unexpected disposal is determined by the placing of the stairs with reference to the demands of the great living room below. One of the living room's most engaging features is the long range of windows overlooking the stream. Cost, approximately \$19,000.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—rubble stone.  
Cellar floor—cement.  
Waterproofing—integral, underfloor fill drained with porous fill.

#### FRAME CONSTRUCTION

Oak.  
Rafters—spruce.  
Wood pins.

#### MASONRY CONSTRUCTION

Stone walls—rubble stone, local.

#### EXTERIOR SURFACE

Clapboards — mill siding, composition sheathing paper under.

#### ROOF

Wood shingles on shingle lath.  
Valleys  
Gutters  
Flashing  
Down spouts } copper.  
Salt glazed tile drains—to dry wells.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Casement type—white pine.  
Doors and frames (exterior)—pine.

#### PORCHES

Bluestone flagging.

#### GLASS

Double thick, American Window Glass Co.

#### EXTERIOR PAINT

Siding }  
Trim } 2 coats linseed oil.  
Sash }

#### LATH AND PLASTERING

Lathing—Toncan metal lath in bath rooms, kitchen and pantry only.  
Plastering—cement plaster in same spaces, smooth finish.

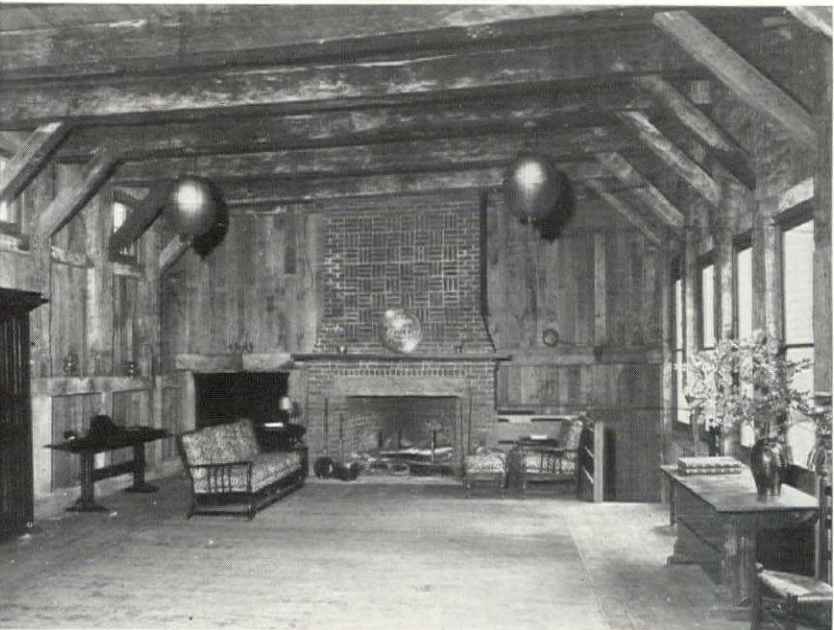
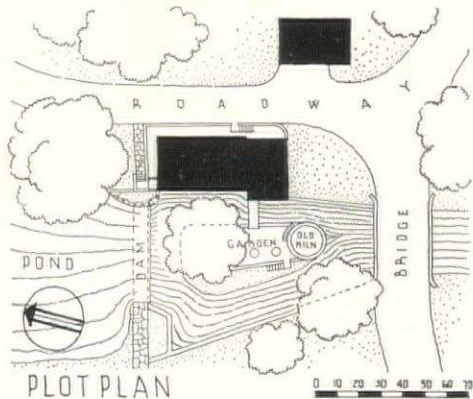
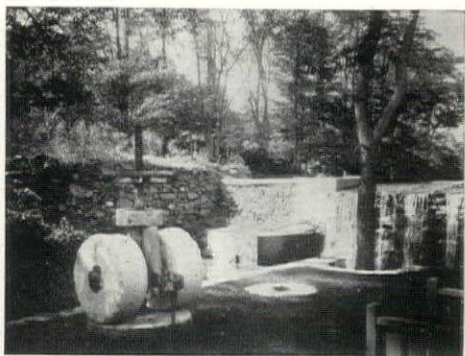
#### INTERIOR WOODWORK

Trim and floors—red oak in living room elsewhere spruce.  
Wall surfaces—chestnut in living room other rooms spruce.  
Shelving and cabinets—white pine.

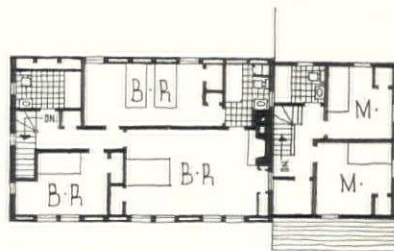




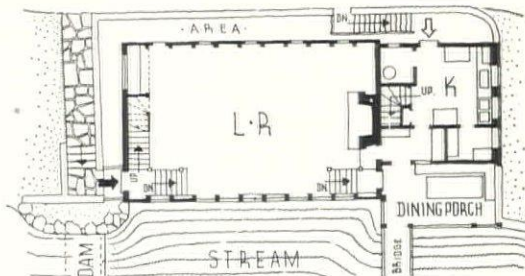
VIEW FROM THE BRIDGE



LIVING ROOM



SECOND FLOOR



FIRST FLOOR

INSULATING  
Roof rafters— $\frac{1}{2}$ " Insulite.  
Attic floor— $\frac{1}{2}$ " Cabot's Quilt.

INTERIOR FINISHES  
Floors—stained, shellacked and waxed.  
Trim  
Doors } 2 coats linseed oil.  
Sash }  
Walls—living room naturally weathered and unfinished, all other rooms stained and oiled.

WIRING  
Cable—BX.  
Electrical fixtures—specially designed, tin.  
Switches—toggle type.

LIGHTING  
Direct.  
PLUMBING  
Kitchen  
Sink—enameled iron.  
Stove—container gas.  
Refrigerator—ice.

BATHROOM  
Fixtures—enameled iron, Standard Sanitary Mfg. Co.  
Bath tubs—enameled iron.  
Toilets—porcelain.  
Seats—white, Church Mfg. Co.  
Showers—over tub.  
Floor—linoleum.

PIPES  
Supply—brass.  
Waste—cast iron.  
HEATING  
None.  
Hot water heater—coal.  
CHIMNEY  
Fireplaces  
Facings }  
Hearths } common brick.  
Mantels }  
Damper—Covert, Old Style B.

HARDWARE  
Interior and exterior—wrought iron  
latches, etc., P. & F. Corbin.  
SCREENS  
Wood frames.





VIEW FROM THE

The house comfortably adapts itself to the topography. The interior treatment, in which native sand plaster applied directly to the concrete-block building-unit gave the final finish for the walls, is economical and gives an air of sincerity. The garage approach, often an awkward item, is successfully integrated with the house and garden by the wall. The horizontal courses of the stone parapet wall, accented by the shadows in the mortar joints, coincide with the roof lines. Windows on the road side have been kept at a minimum, but the house is open at the rear (See House No. 23). Cost: \$15,800. Cubage: 42,060 at 37½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—concrete.  
Cellar floor—concrete.  
Waterproofing—Bay State.

### FRAME CONSTRUCTION

Oregon pine.  
Sills—redwood.

### MASONRY CONSTRUCTION

8" stone tile.

### EXTERIOR SURFACE

Stone tile—waterproofed and colored by Semolith.

### ROOF

Slate on sheathing.  
Gutters }  
Down spouts } galvanized iron.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—white pine.  
Doors and frames (exterior) } white  
Garage doors } pine.

### PORCHES

Brick floor—select common.

### GLASS

Single strength by Libbey-Owens-Ford  
Glass Co.

### EXTERIOR PAINT

Trim and sash—3 coats lead and oil.

### LATH AND PLASTERING

Lathing—wood.  
Plastering—gypsum patent plaster.

### INTERIOR WOODWORK

Trim and floors—vertical grained Douglas fir.  
Shelving and cabinets—white pine.

### INSULATING

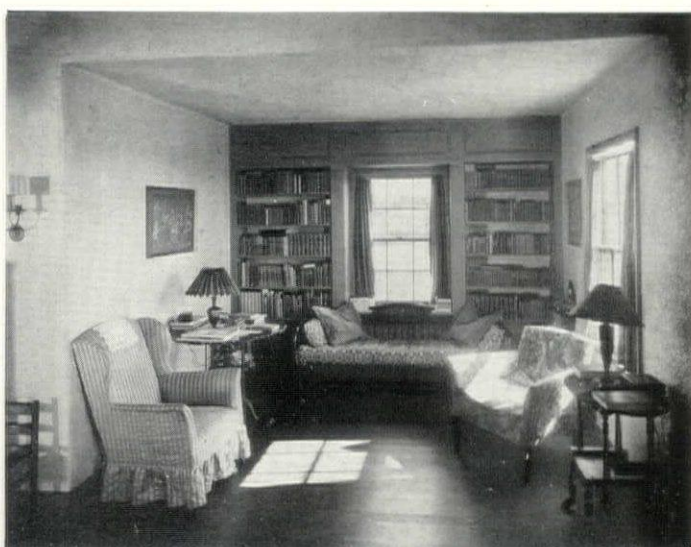
None.





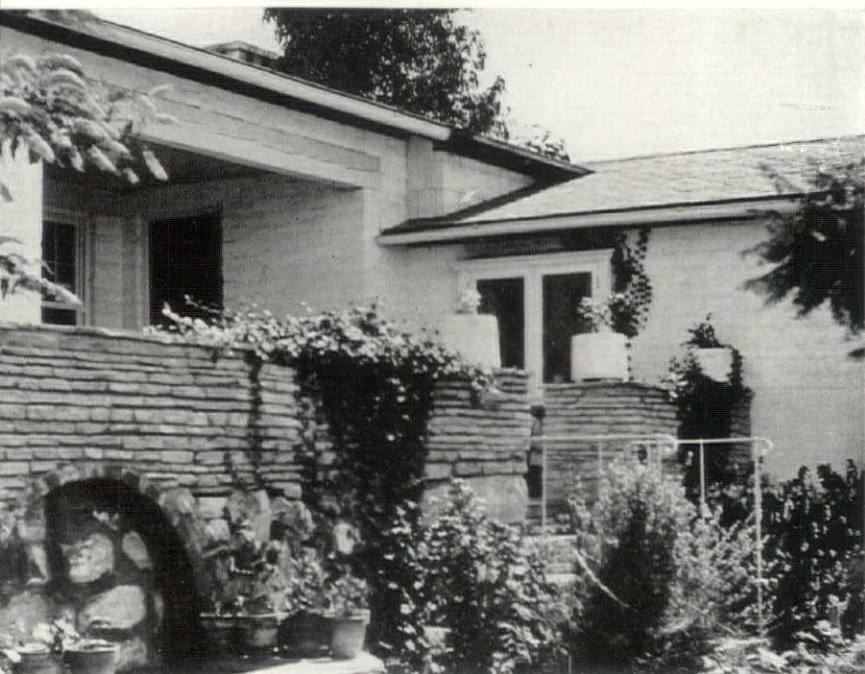
HALL

Padilla Studios

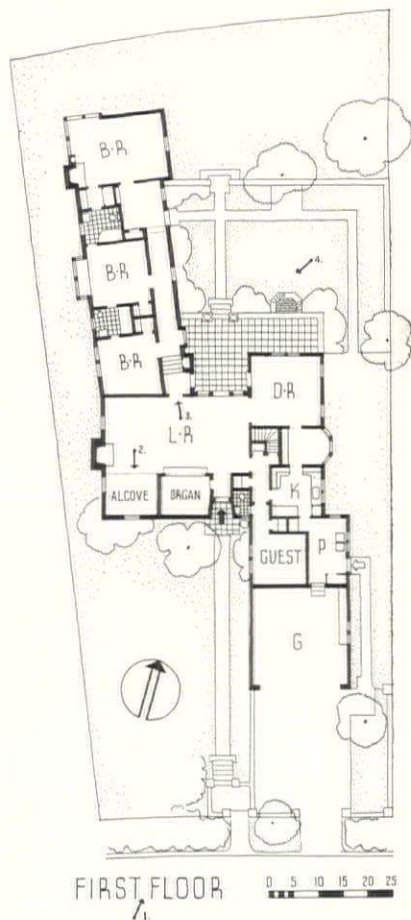


LIVING ROOM, BOOK CORNER

Padilla Studios



AR GARDEN



AN: Living and dining room space organized to give an impression of spaciousness. There is a 50-foot sight-line from alcove to dining room, although the actual length of the living room is less than 30 feet. Steps from the living room level to the bedroom level are skillfully handled and the vestibule at the end of the hall, instead of a door or window, adds perspective and seems to enlarge the entire area. The hall entrances to the garden are a good architectural treatment.

## INTERIOR FINISHES

Floors—special oil finish by owner.  
Trim } 4 coats lead and oil, W. P. Fuller  
Doors } & Co.  
Sash }  
Walls—canvased and painted, 4 coats  
lead and oil in baths and kitchen, balance of house unfinished.

## WIRING

Cable—Sheraduct.  
Electrical fixtures—special, iron and brass.  
Switches—General Electric.

## LIGHTING

Direct.

## PLUMBING

Kitchen  
Sink—Crane Co.  
Refrigerator—General Electric.

## BATHROOM

Fixtures—Crane Co.

## PIPES

Wrought iron—A. M. Byers Co.

## HEATING

Gas—Payne Furnace.  
Hot water heater—Crane.

## CHIMNEY

### Fireplaces

Facings { Mexican tile  
Hearths {  
Mantels—wood.  
Damper—Covert.

## HARDWARE

Interior and exterior—Russwin.

## SCREENS

Half screen, bronze wire.





**PROBLEM:** A small house for a lawyer and his wife. One positive requirement, an isolated law library virtually shut off from the rest of the house. A rear alley permitted placing the garage at the rear of the lot, thus eliminating a driveway from the street.

The house, instinct with all the quiet poise of the Regency manner, has a charming exterior characterized by simple formality; the ironwork of the porch and the entrance door is graceful and well detailed. A curious concession to serve a stylized exterior is the large window over the main entry. This window opens into a closet, the wall of which was bent to accommodate. The formal lawn with the heavy trees close to the house is in character. Cost: 26.7 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—Chattahoochee common brick.

Columns—steel.

Cellar floor—4" concrete.

Waterproofing—2 coats of pitch on exterior of walls, 4" open tile drains at footings.

### FRAME CONSTRUCTION

Short leaf yellow pine.

### MASONRY CONSTRUCTION

Common brick walls—Chattahoochee, Portland cement mortar.

### EXTERIOR SURFACE

Brick veneer—Chattahoochee common brick.

### ROOF

Composition shingles on sheathing—Bird

& Son Inc., 3 in one strip, thick butt, black slate finish.

Gutters

Flashing

Down spouts

} Armco galvanized iron.

Composition sheathing paper—Neponset, Bird & Son, East Walpole, Mass.

Copper hood over front entrance and kitchen door.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—1 $\frac{3}{8}$ " sash yellow pine on 2nd floor.

Casement—1 $\frac{3}{4}$ " yellow pine on 1st floor.

Steel sash—"Fenestra" in basement.

Doors and frames (exterior)—yellow pine.

### PORCHES

Reinforced concrete slab with random

rectangular "Crab Orchard" stone finish.

### GLASS

Single strength B grade, Libbey-Owens Ford Glass Co.

### EXTERIOR PAINTING

Brick veneer—Sherwin-Williams stucco paint.

Trim

Sash

} Sherwin-Williams exterior paint

### LATH AND PLASTERING

Lathing

Metal—on ceilings.

Wood—on walls, metal Cornerite.

Plastering

Patent plaster—U. S. Gypsum.

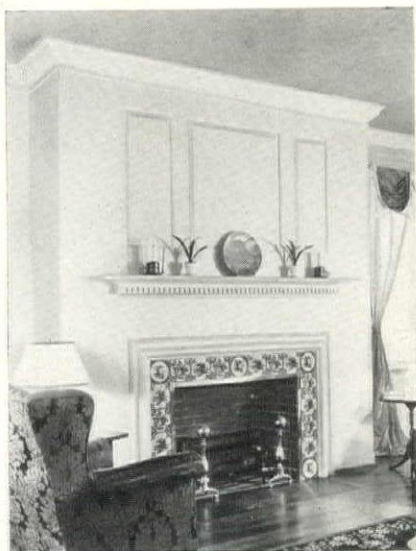
### INTERIOR WOODWORK

Trim—yellow pine.





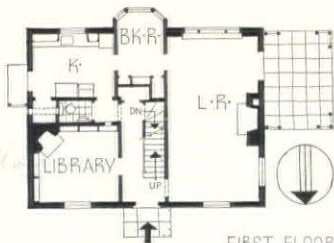
ENTRANCE DETAIL



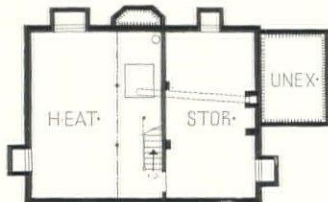
FIREPLACE LIVING ROOM



SECOND FLOOR



FIRST FLOOR



SCALE IN FEET  
0 5 10 15

BASEMENT

PLAN: Access from kitchen to entrance simply solved for typical cube house with center hall. An apparently simpler solution would have been to place the kitchen where the library is, but rear alley conditions prohibited it. Basement includes servant's toilet, laundry, heating equipment, storage space and recreation room.

Floors—oak.	Walls—Benjamin Moore's Muresco.	heating with thermostat, humidistat, etc.
Stainwoods—knotty white pine boards in library.	Wallpaper—bedroom No. 1.	
Painted surfaces—vertical poplar boards in living room and hall.	WIRING	CHIMNEY
Shelving and cabinets—yellow pine in kitchen, breakfast room cupboard.	Cable—BX.	Fireplaces
Stock millwork—all millwork by Willingham-Tift Lumber Co., Atlanta, Ga.	Electrical fixtures—Capitol Electric Co.	Facings—black slate in library, blue Dutch tile in living room.
	LIGHTING	Hearths—black slate in living room and library.
	Direct.	Mantels—wood, special design.
	PLUMBING	Damper—Donley.
	Kitchen	HARDWARE
	Sink — Standard Sanitary, double drainboard.	Interior and exterior—Corbin, dead black finish.
	Stove—Tappan gas range.	SCREENS
	Refrigerator—Kelvinator.	Wood frames by local mill.
	HEATING	WINDOW DRESSING
	Gas.	Blinds—wood louvered by Willingham-Tift.
	AIR CONDITIONING	
	Central—Moncrief gas-fired forced draft	
INSULATING		
None.		
EXTERIOR FINISHES		
Floors—dark oak stain and filler, shellacked and waxed.		
Trim		
Doors		
Sash		
	Sherwin-Williams semi-gloss.	



22. HOUSE FOR DOROTHY GREENO, BILTMORE FOREST, N.



The architect: "This residence was planned entirely around the owner who desired plenty of sunshine and air. Note that in the living room, study, and owner's bedroom the sun shines in all hours of the day. Note also the second floor porch where the owner has breakfast each morning, looking over the garden." This house like House No. 3, omits the supporting column at the corner of the porch. Here with a flatter roof and broken up masses, the treatment seems architecturally at ease. The kitchen is well placed; the study can be used as another living room. The living room fireplace was designed with openings on either side where wall space beside fireplaces is a more usual treatment. Cost: \$15,000. Cubic feet: 55,500 at 27 cents per cubic foot.

CONSTRUCTION OUTLINE

FOUNDATION

Walls and piers—common brick.  
Cellar floor—concrete.  
Waterproofing—emulsion No. 55—Union Products Co.

FRAME CONSTRUCTION

Native yellow pine.

MASONRY CONSTRUCTION

Tiled walls.

EXTERIOR SURFACE

Common brick veneer over tile.

ROOF

Tile on sheathing—B. Mifflin Hood Co.  
Valleys—copper.  
Gutters—24 ga. Galvanized iron.

DOOR AND WINDOW FRAMES

Sash and frames  
Double hung

Doors and frames (exterior)—white pine.  
Garage doors—roll up overhead type,  
Yoder Morris Co.

PORCHES

Brick floor.  
Matched pine.

GLASS

Flat drawn sheet glass D. S. A., Libbey-Owens-Ford Glass Co.

EXTERIOR PAINT

Brick painted 2 coats "Bondex" cement paint.

Trim } Priming—lead and oil.  
Sash } Finish coat—2 coats Sherwin-Williams outside paint.

LATH AND PLASTERING

Lathing  
Wood  
Plastering  
Patent plaster—U. S. Gypsum Co.  
Finishing coat—smooth finish, U. S. Gypsum Co.

INTERIOR WOODWORK

Trim and floors—hard wood.  
Shelving and cabinets—painted except for cedar lining.  
Stock millwork.

INSULATING

Roof rafters—Johns-Manville rock wool.  
Weatherstripping.

INTERIOR FINISHES

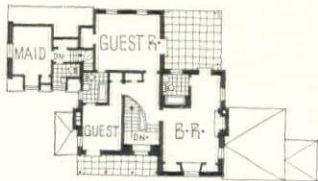
Floors—filled, varnished, 2 coats, Pratt & Lambert.



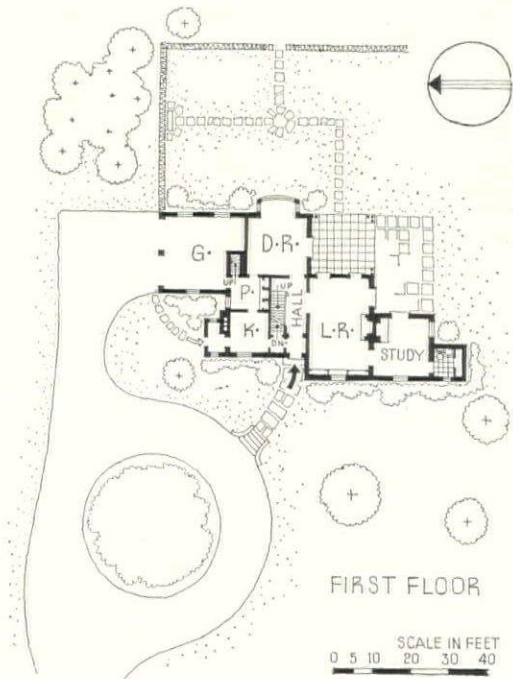


FRANCE

DINING ROOM BAY



SECOND FLOOR



FIRST FLOOR

PLAN: Kitchen in front makes it easy for maid to answer front door and allows dining room to have large window and pleasant view of rear garden. Garage well located in relation to service quarters. Upstairs arrangement workable with two guest rooms sharing bath.

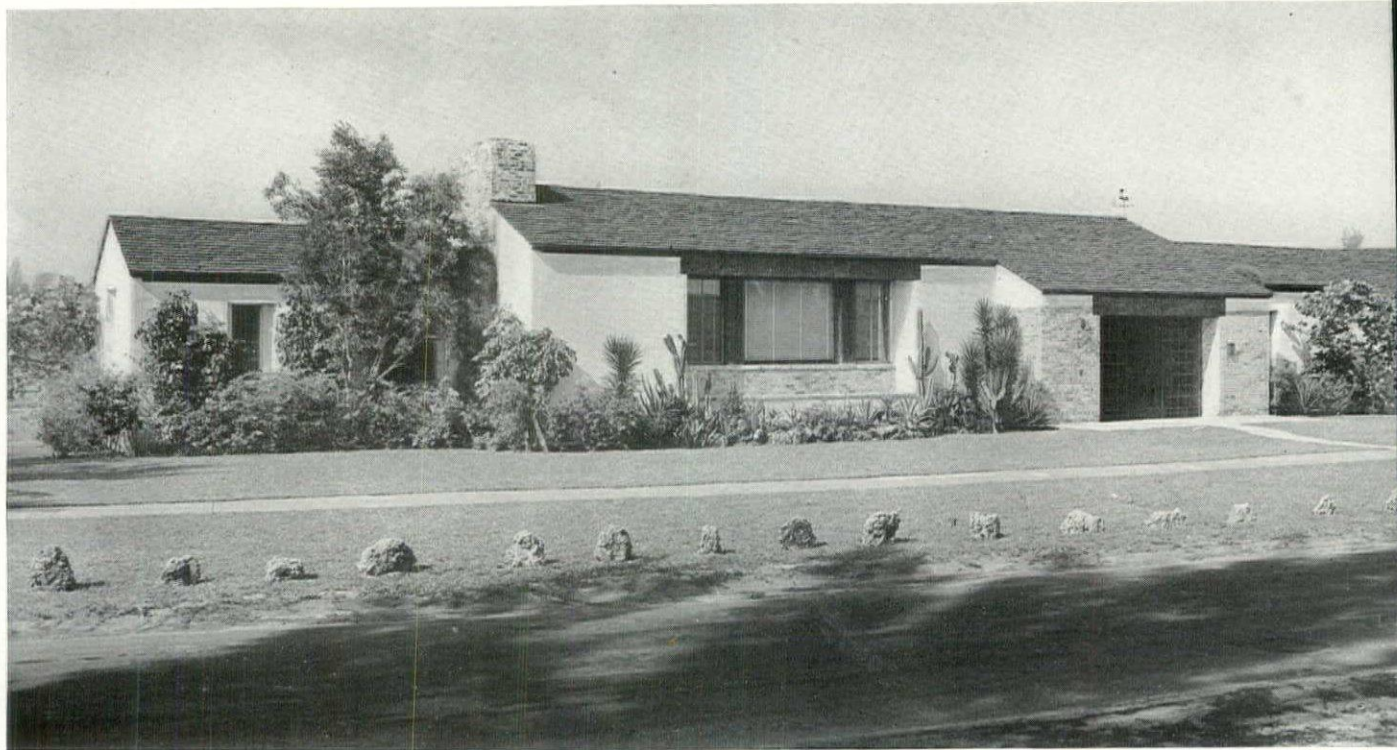
Trim }  
Doors } 5 coats enamel—Pratt & Lambert  
Sash }  
Walls—2 coats "Valumnia," Pittsburgh  
Plate Glass Co.  
Wallpaper—bathrooms only, "Salubra."  
FRING  
Cable  
Switches—Bakelite.  
LIGHTING  
Direct  
UMBING  
Kitchen  
Sink—enamel iron, pantry sink—Monel  
metal, Crane Co.  
Cabinet—wood.  
Stove—Pyrofax Gas, Carbide & Chemi-  
cals Corp.  
Refrigerator—Kelvinator.

BATHROOM  
Fixtures }  
Bath tubs } Crane Co.  
Toilets }  
Cabinets—Miami Cabinet Co.  
Seats—Church Mfg. Co.  
Tile—4 ft. high in guest bath.  
Composition tile—floor and wainscot own-  
er's bath, Armstrong Cork Co.  
PIPES  
Steel  
HEATING  
Coal  
Boiler }  
Radiators } cast iron, U. S. Radiator Co.  
Piping—steel.  
Valves—Dunham Co.

Hot water heater—heated from main  
boiler with summer controls from  
stoker.  
Stoker—Iron Fireman.  
Thermostat and regulators.  
CHIMNEY  
Fireplaces  
Facings }  
Hearths } Marble.  
Mantels—wood.  
Damper—Covert.  
HARDWARE  
Interior }  
Exterior } Yale & Towne.  
SCREENS  
By Rolscreen Co.  
WINDOW DRESSING  
Shades  
Blinds



## 23. HOUSE FOR C. H. HECKER, MIAMI BEACH, FLORIDA



In this Florida seaside house the horizontal lines of the old adobe houses impart the dominant character. The unadorned lawn and the close planting are customary. Originally this planting protected the foundations by breaking up rainwater as it fell from the roof. The large living room window contributes to the appearance of the house, but at the cost of a three-foot furred wall. An optional arrangement would have placed the window facing a garden terrace on the private side of the house, in which case the position of the bathroom next the dining alcove, would have to be changed. The spacious hall with an iron grille across its opening at once hall and porch. Cost: \$10,388. Cubage: 31,500 at 33 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—8" cement blocks. Footing reinforced concrete.  
Waterproofing—Crystex.

#### FRAME CONSTRUCTION

No. 2 common yellow pine. Cypress for exposed rafters.

#### MASONRY CONSTRUCTION

Cement block walls—Maule Ojus Co.  
Faced brick—old red clay brick.

#### ROOF

Tile on sheathing—Eaton shingle tile, National Fireproofing Corp.

Valleys }  
Flashing } copper.

Composition sheathing paper—75 lb. slate-surfaced roofing felt, Barber Asphalt Co.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Fenwrought casements, Detroit Steel Products Co.  
Doors and frames (exterior)—cypress.  
Garage doors—Overhead Door Corp.

#### GLASS

Pennvernon double strength, Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Trim }  
Sash } Benjamin Moore & Co.

#### LATH AND PLASTERING

Lathing  
Metal—expanded galvanized metal lath, Clinton.  
Wood—cypress.  
Plastering  
Florida Red Top.

#### INTERIOR WOODWORK

Floors—2" pine plank.  
Shelving and cabinets—specially milled.

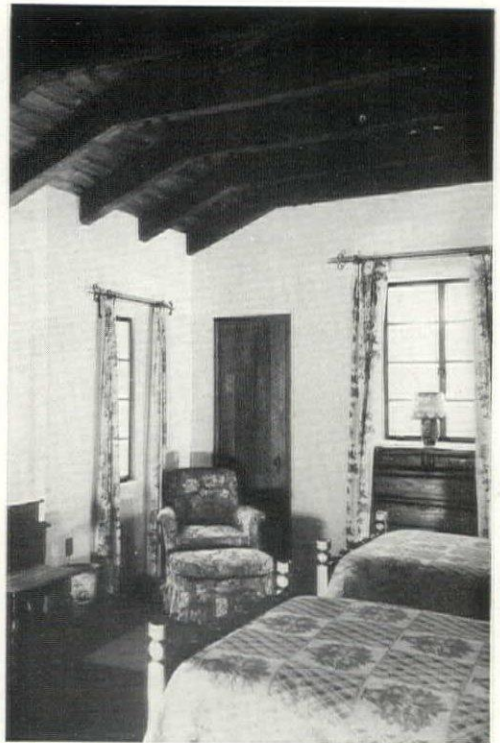
#### INSULATING

Weatherstripping—Chamberlin.

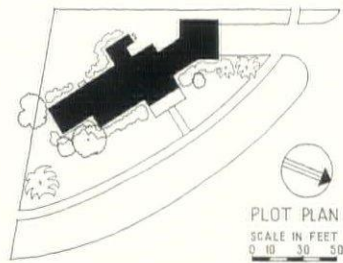




ROOM



BEDROOM



PLAN: The large hall would have gained by a larger opening to the living room. The bedroom at the south is well placed and, if desired, could form, with the bathroom, a completely separate unit in the house.

INTERIOR PAINTING

- Floors
  - Trim
  - Doors
  - Sash
  - Walls
- Benjamin Moore & Co.

WIRING

- Cable—thin wall conduit.
- Electrical fixtures—special.
- Switches—Bryant tumbler type.

LIGHTING

- Direct.

PLUMBING

- Kitchen

- Sink—flat rim sink.
- Cabinet—wood.
- Stove—gas.
- Refrigerator—electric.

BATHROOM

- Fixtures—Standard Sanitary.
- Cabinets—Morton.
- Bath tubs—Pembroke.
- Toilets—Compact.
- Seats—Church.
- Tile—Standard grade U. S. Quarry.

PIPES

- Copper, Mueller Streamline tubing.

HEATING

- Radiators—electric in baths only, Markel
- Electric Products, Inc.
- Hot water heater—gas, Pax X, 30 gal.

CHIMNEY

- Fireplaces
  - Facings
  - Hearths
  - Mantels—brick and wood.
- brick.

HARDWARE

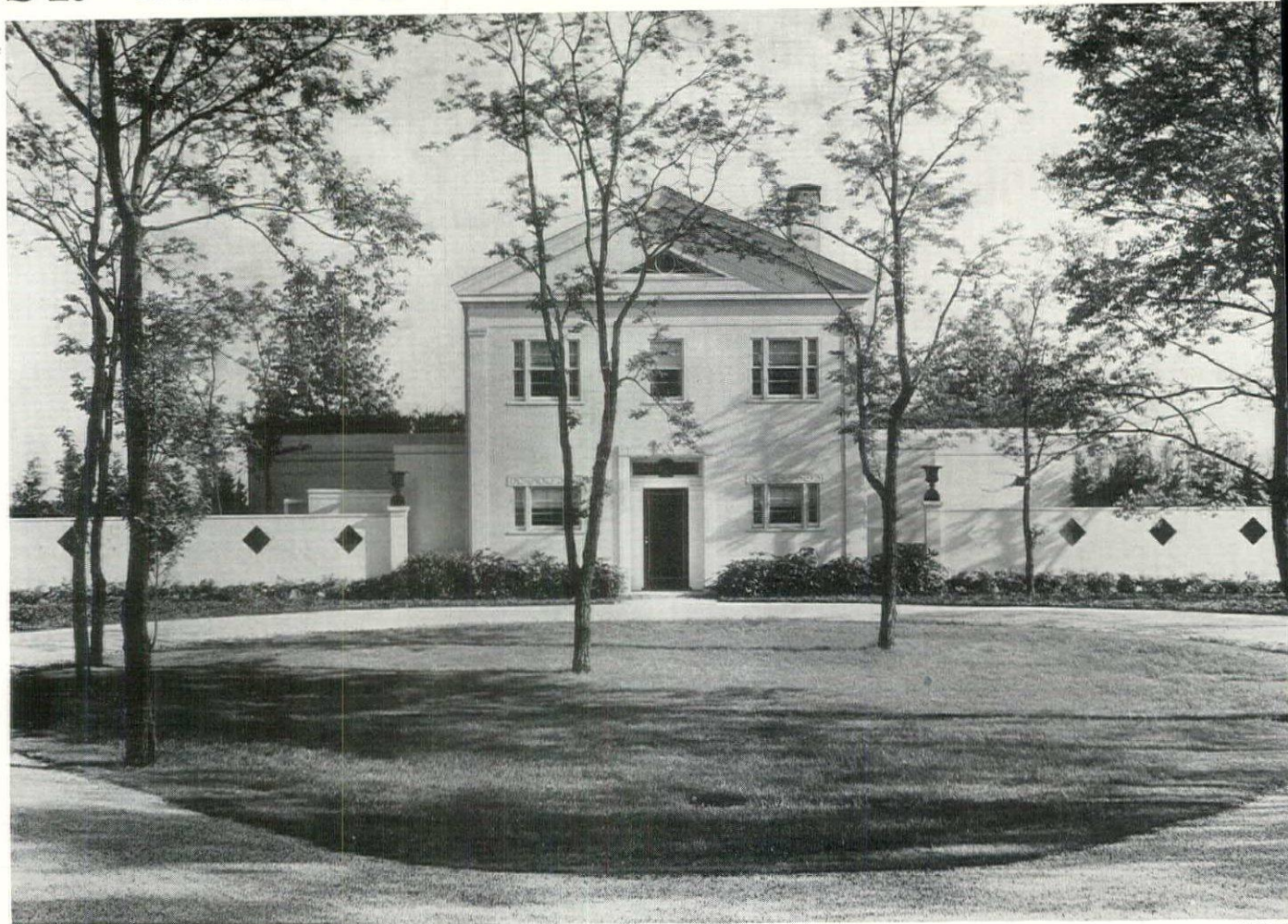
- Interior—Sargent and McKinney.
- Exterior—McKinney.

WINDOW DRESSING

- Venetian blinds — Southern Venetian blinds.



## 24. HOUSE FOR R. COLGATE V. MANN, LOCUST VALL



Gottsch

**PROBLEM:** To build inexpensively for a small family a house combining economy of household labor and maintenance costs with urbanity of architectural style and due consideration for the amenities of modern suburban life. At the same time to adapt one or more of the Classic phases current in the late 18th or early 19th Century to the expression of present requirements.

Blending inspiration from the French Directoire and the English Regency modes which lend elegance and courtliness to the small house. This result challenges admiration by its poised, convincing simplicity. The white-painted matched boarding of the external walls, the restraint of ornament, and the symmetrical proportions all contribute serenity, a quality likewise found in the plan. Cost: \$12,700. Cubage: 39,965 at 32 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—poured concrete.  
Columns—lally.  
Cellar floor—concrete.  
Waterproofing—fabric at sill line.

#### FRAME CONSTRUCTION

Spruce.  
Girders—steel I beams.

#### EXTERIOR SURFACE

Flush boards—pine.

#### ROOF

Slate on sheathing—Bangor.  
Gutters—copper lined pine.  
Flashing—copper.  
Down spouts—wrought iron, inside.  
Flat decks—slate.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung } pine to details.  
Casement type }  
Doors and frames (exterior)—pine to details.

#### PORCHES

Floor—oak.

#### GLASS

Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Siding }  
Trim } lead and oil paint.  
Sash }

#### LATH AND PLASTERING

Lathing—composition plaster base, Celotex.  
Plastering—2 coat job, white finish.

#### INTERIOR WOODWORK

Trim—pine.  
Floors—oak.  
Painted surfaces—pine.  
Shelving and cabinets—pine to detail.  
Stock millwork—doors, pine.

#### INSULATING

Outside walls } Celotex.  
Roof rafters }  
Attic floor—Bird insulating board, Bird & Son, Inc.

Weatherstripping.

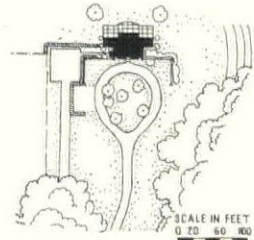
#### INTERIOR FINISHES

Floors—filled, stained and waxed.  
Trim }  
Doors } lead and oil.  
Sash }  
Walls }  
Wallpaper—baths only.

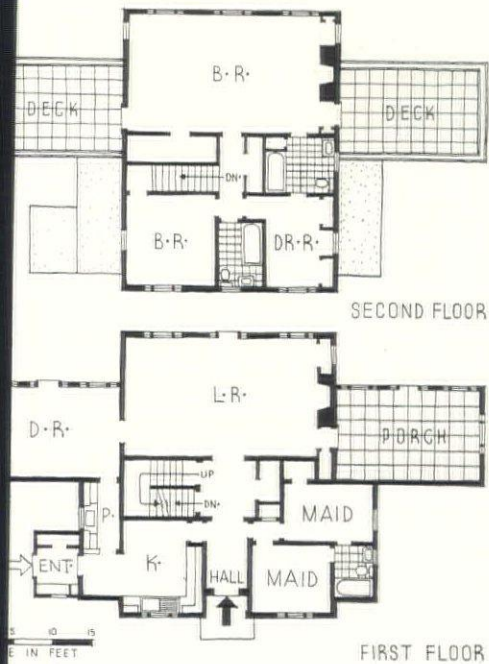




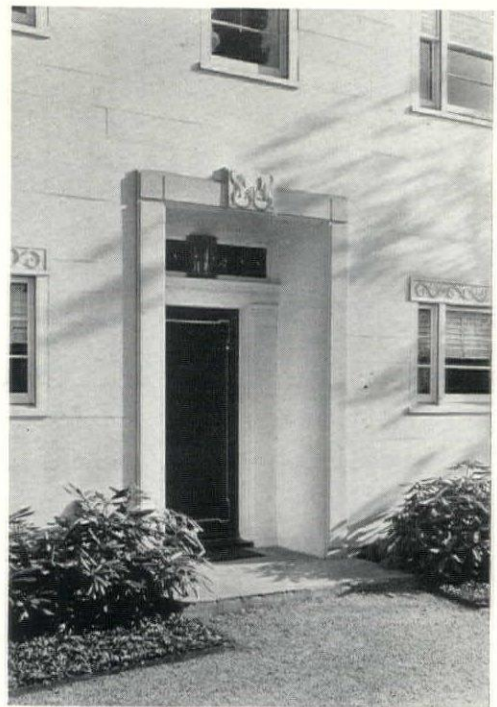
R GARDEN



PLOT PLAN



**PLAN:** The plan is direct and logical. Flanked on one side by the maids' quarters, on the other by the kitchen—which commands ready access to both the front door and the dining room—the entrance hall leads straight to the large living room extending across the entire garden front of the main house. This assures both privacy and agreeable outlook. The sequence of divisions is natural and the compact arrangement thoroughly convenient.



ENTRANCE DETAIL

ING  
able—BX.  
lectrical fixtures—by owner to archi-  
tect's design.  
witches—toggle type, Harvey Hubbell,  
Inc.

HTING  
irect and indirect.

MBING  
Kitchen  
Sink—Crane Co.  
Cabinet—to architect's detail.  
Stove  
Refrigerator } by owner.  
Washing machine }

THROOM  
ixtures } Hoegger, Inc.  
cabinets }

Bath tubs  
Toilets  
Seats  
Showers } Crane Co.  
Composition tile—"Royalite," U. S. Rub-  
ber Co.

PIPES  
Supply—brass and copper—Chase Brass  
& Copper Co.  
Soil and vent—wrought iron, A. M.  
Byers Co.

HEATING  
Oil fired steam system.  
Boilers—General Electric Co.  
Radiators  
Piping } Dunham Co.  
Valves }

Hot water heater } General  
Thermostat and regulators } Electric Co.

CHIMNEY  
Fireplaces  
Facings } marble, slate.  
Hearths }  
Mantels—by owner.  
Damper—H. W. Covert Co.

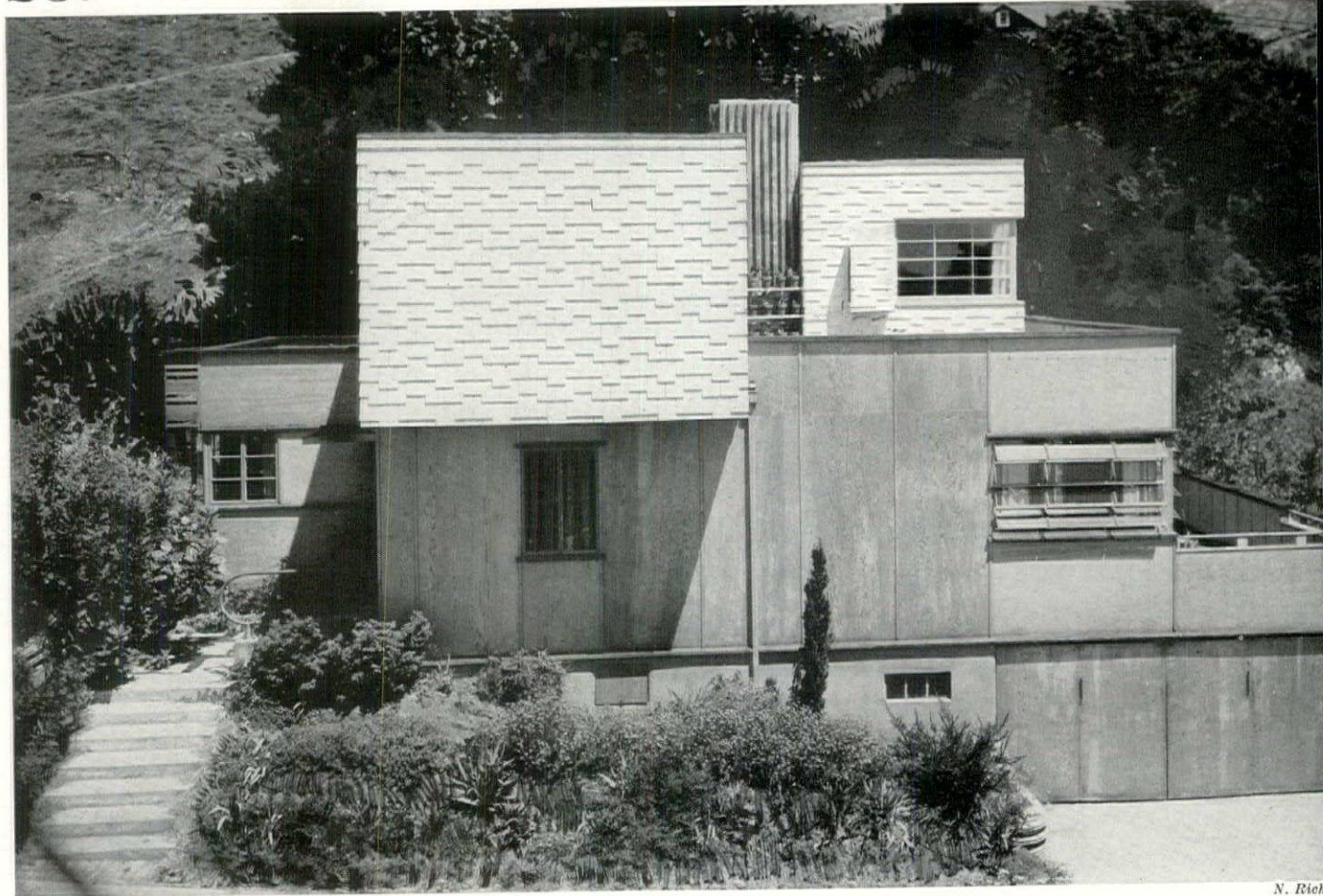
HARDWARE  
Interior and exterior—special design,  
Peter & Neale Co., New York.

SCREENS  
Copper, wood frames.

WINDOW DRESSING  
Shades—by owner.  
Venetian blinds—Western Venetian Blind  
Co.



## 25. HOUSE FOR EDGAR TAYLOR, BERKELEY, CALIFORNIA



N. Rich

**PROBLEM:** A house of contemporary design for an artist. House must include full facilities for his work, plus the normal amenities for living. An irregular lot with a steep grade on the approach side strongly influenced the solution.

Esthetically this house acknowledges that raw wood in a natural setting is a suitable material. Collaboration between architect, client and a chemist, Mr. John Richards, produced an improved wood preservative which allowed the use of large plywood panels,  $\frac{5}{8}$  in. thick on the exterior and  $\frac{1}{4}$  in. thick for the interior. The house presents an interesting solution of the problem by providing the necessary shelter and accommodations at a low cost. The style has been altogether dictated by the individual requirements and tastes of the owner and by the local conditions respecting materials and cost. Cost: \$3,700 (including hot air furnace, refrigerator and stock millwork). Cubage: 16,100 at 23 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls } Portland cement concrete  
Piers } Mt. Diablo cement, Crowley Cement Co.  
Cellar floor }  
Waterproofing—asphalt hot coat, Paraffine Co.

#### FRAME CONSTRUCTING

Oregon pine and Douglas fir, sills of California redwood.

#### EXTERIOR SURFACE

Plywood,  $\frac{5}{8}$ " California white pine and Oregon pine, Red River Co. and Oregon Washington Plywood Co.

Shingles—Port Orland red cedar shingles.  
Stucco—California stucco.

#### ROOF

Tar and gravel roofing, Paraffine Co.  
Flashing and down spouts—copper sheet, American Brass Co.

Salt glazed tile drains—Gladding, McBean & Co.

Composition sheathing paper—Double Kraft, Johns-Manville Co.

#### DOOR AND WINDOW FRAMES

Steel Sash—casements, Soule Steel Co., Ventrolite No-Draft.

Doors and frames (exterior)—built-up veneer doors.

Garage doors— $\frac{1}{4}$ " Oregon pine plywood, Richards-Wilcox hardware.

#### SUN PORCH

Mastipave floor, Paraffine Co.

#### GLASS

Sheet glass by Libbey-Owens-Ford.  
Ribbed glass old fashioned.

#### EXTERIOR PAINT

Shingles—painted, Collopakes (white) by Samuel Cabot.

Siding—plywood.

Priming and finish coat—1 coat "Ply-Seal."

Trim—1 coat "Ply-Seal."

Sash

Priming—shop coat.  
Finish coat—Sherwin-Williams.

#### LATH AND PLASTERING

Lathing—button board, U. S. Gypsum Co.  
Wire—U. S. Wire.

Plastering—California stucco.

#### INTERIOR WOODWORK

Floors—random width oak plank, Wood-Mosaic Co.

Stainwoods— $\frac{1}{4}$ " knotty pine plywood, Red River Lumber Co.

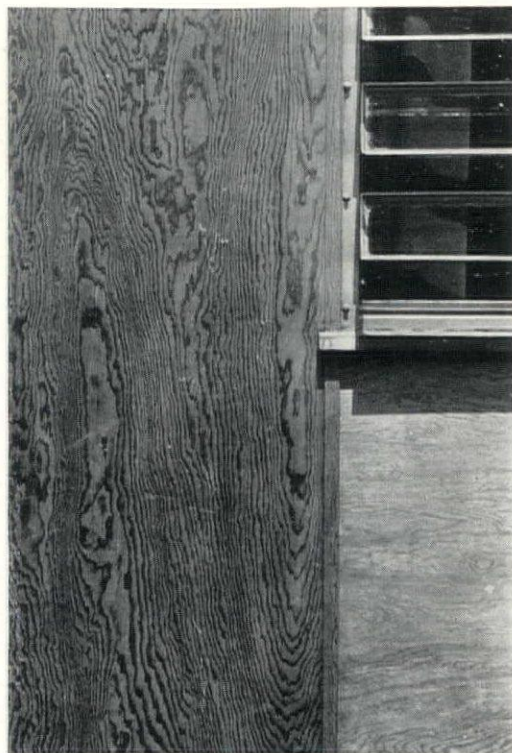
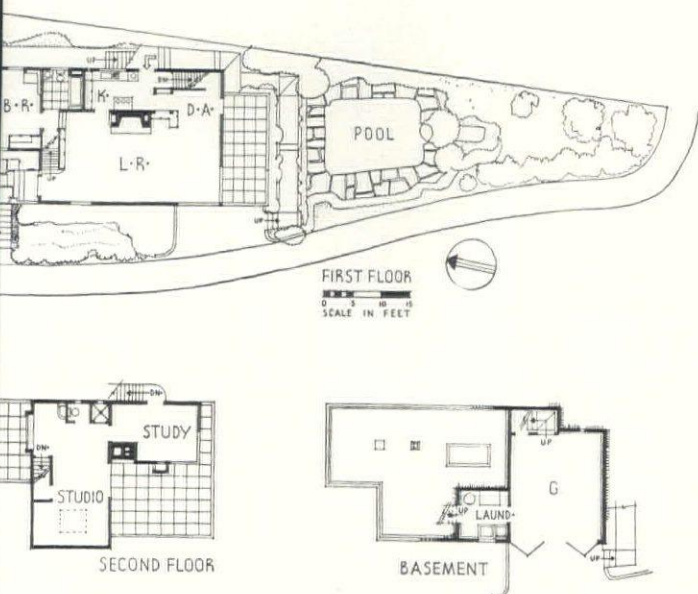
Painted surfaces, shelving and cabinets— $\frac{3}{8}$ "— $\frac{1}{4}$ " Oregon pine plywood, Oregon Washington Co.

Stock millwork—California white pine.





DINING ALCOVE



PLYWOOD SIDING

4: Spacious living room with large corner windows facing south and overlooking San Francisco Bay. Second floor work space has toilet shower economically placed over kitchen-bathroom plumbing. An or staircase makes this floor a complete separable unit. Traffic kitchen through living room to entry is not always desirable and in this case might have been avoided by placing the entrance approximately in the position of the present dining alcove.

The wood treatment here used experimentally was aimed at creating a preservative that would not discolor, polish nor eventually darken the wood's natural color.

LATING  
of rafters and attic floor—Flax-Li-Num.

RIOR FINISHES

doors } Sherwin-Williams stains and  
trim } wax.  
doors }

ash—Sherwin-Williams paints.

NG  
able—GI rigid conduit, General Electric Co.

Electrical fixtures—Sears, Roebuck & Co.  
switches—General Electric Co.

HTING  
irect.

MBING

itchen.

ink—acid resisting Standard Sanitary.

Cabinet—Oregon pine. Drainboard Onyx-ite, Onyxite Co. of California.  
Stove—Wedgewood gas range.  
Refrigerator—General Electric Monitor type.  
Washing machine—General Electric.

BATHROOM

Fixtures—Standard Sanitary.  
Cabinets—Sears, Roebuck & Co.  
Bath tubs—Standard Sanitary recess "Pembroke."  
Toilets—Standard Sanitary with Dalmo Silent Flush valve.  
Seats—Church Mfg. Co.  
Showers—Standard Sanitary fixtures.

PIPES

Chase sweat joint copper tubing, Byers' wrought iron.

HEATING

Gas furnace, Torridaire Co.  
Hot water heater—Ruud automatic storage.  
Thermostat and regulators—G. E. controls.

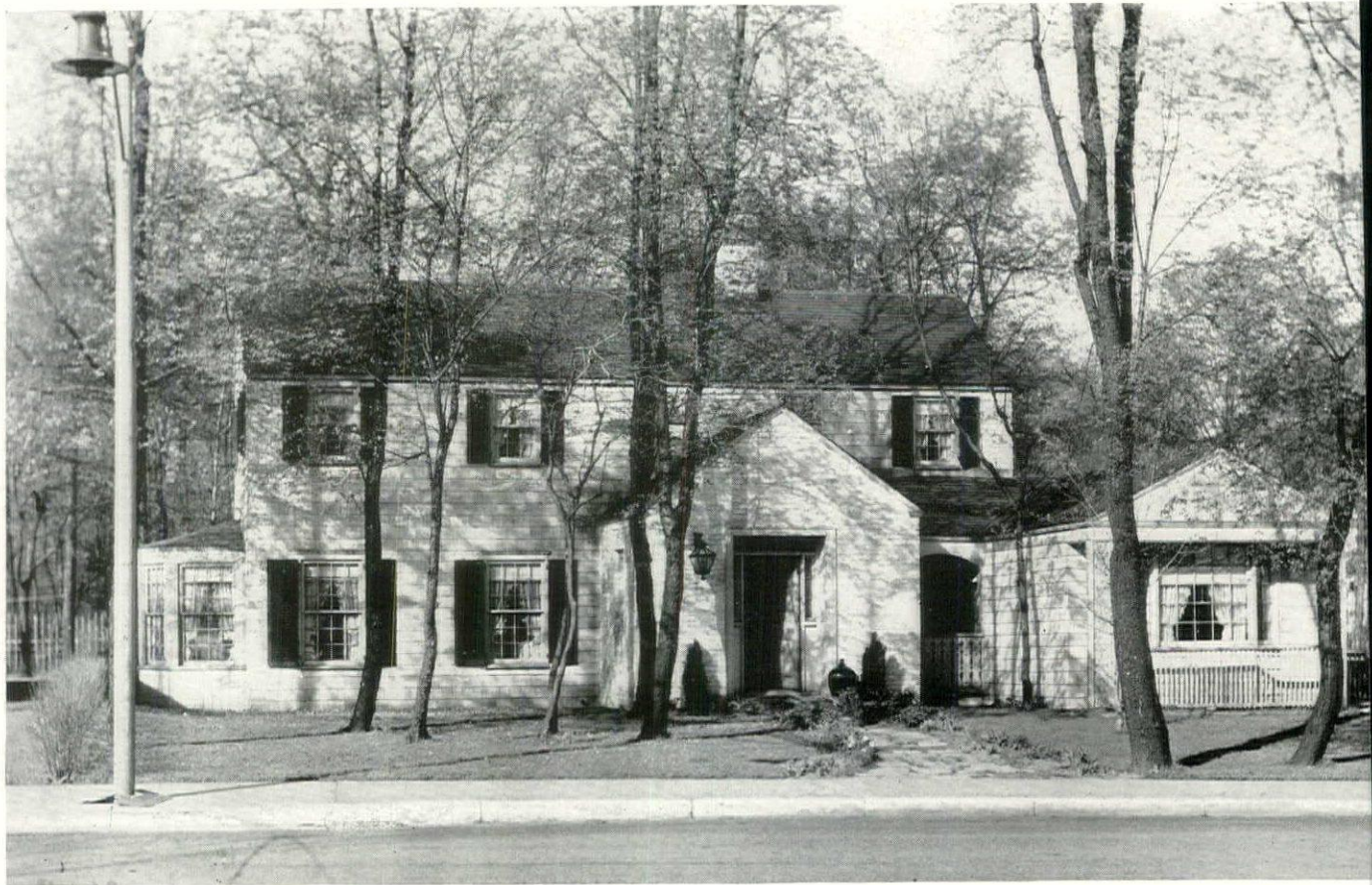
CHIMNEY

Fireplaces—reused brick.  
Facings—common brick.  
Hearths—fire brick.  
Mantels—California redwood.  
Damper—Covert new type.

HARDWARE

Interior and exterior—Schlage locks, other hardware P. & F. Corbin.





This white shingled, black shuttered house expresses its purpose directly and, striving for no trick architectural effects, pleasantly ornaments and fits in with its surroundings. The architect's original design set and logically called for front garage doors on the street front where they belong. Neighbors objected the doors had to be placed in the rear. The curtained garage window, therefore, was installed under porch. The bay window gives light and spaciousness to the pine-paneled living room. The circulation from kitchen to entrance hall by means of the narrow "sneak" passage is commendable. Cost: \$8,000. Cubage: 27,000 at 29 cents per cubic foot.

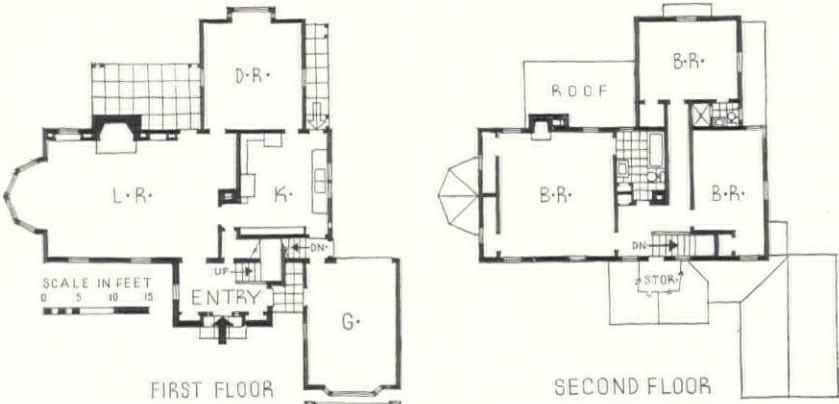
CONSTRUCTION OUTLINE

<p><b>FOUNDATION</b></p> <p>Walls—concrete block.</p> <p>Columns—lally.</p> <p>Cellar floor—cement.</p> <p>Waterproofing—blocks painted with asphalt.</p> <p><b>FRAME CONSTRUCTION</b></p> <p>Fir.</p> <p><b>MASONRY CONSTRUCTION</b></p> <p>Common brick walls, front entrance.</p> <p><b>EXTERIOR SURFACE</b></p> <p>Shingles—16" Dixie white shingles laid 7" to weather.</p> <p><b>ROOF</b></p> <p>Wood shingles on shingle lath—Creosote dipped and stained black, Creo-Dipt Co.</p> <p>Valleys } copper.</p> <p>Flashing }</p> <p>Composition sheathing paper.</p>	<p><b>DOOR AND WINDOW FRAMES</b></p> <p>Sash and frames</p> <p>Double hung and casement type } made according to detail drawing. Meyer Mill Co.</p> <p>Doors and frames (exterior) }</p> <p>Garage doors—built up of diagonal beaded siding.</p> <p><b>PORCHES</b></p> <p>Floor—flagstone laid in cement.</p> <p><b>GLASS</b></p> <p>Libbey-Owens-Ford Glass Co.</p> <p><b>EXTERIOR PAINT</b></p> <p>Shingles—dipped, Creo-Dipt Co., Inc.</p> <p>Trim } lead, oil and turpentine, Dutch Boy, National Lead Co.</p> <p>Sash }</p>	<p><b>LATH AND PLASTERING</b></p> <p>Lathing—wood.</p> <p>Plastering</p> <p>Patent plaster—Paragon.</p> <p>Finishing coat—lime and plaster Paris.</p> <p><b>INTERIOR WOODWORK</b></p> <p>Floors—oak.</p> <p>Trim—white pine, hall and part of living room</p> <p>Painted surfaces } Meyer's Lumber &amp; Co., N. Tonawanda, N. Y.</p> <p>—white pine</p> <p>Millwork—made special from detail drawings</p> <p><b>INSULATING</b></p> <p>Outside walls } rock wool, Johns-Manville.</p> <p>Roof rafters }</p>
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N: Two bedrooms share the one bath. Guest at rear has private bath with shower. The long closets in the main bedroom may work r than they appear to in plan. The walls of closets seem to shut off light from the two windows.



Weatherstripping—metal, Accurate Metal Weatherstrip Co.

ERIOR FINISHES

Floors—filled, stained, shellac and wax.  
Trim } paint and enamel, Pratt & Lam-  
Doors } bert.  
Cash }  
Wallpaper—Thibaut and Lloyd's.

ERING

Cable—BX.  
Switches—brass plate, toggle.

HTING

Direct.

UMBING

Kitchen

Sink—flat rim, Standard Sanitary Mfg. Co.

Stove }  
Refrigerator } General Electric Co.  
Washing machine }

BATHROOM

Fixtures }  
Bath tubs } Standard Sanitary Mfg. Co.  
Toilets }  
Showers—Speakman.  
Shower curtains—Standard Sanitary Mfg. Co.

PIPES

Supply—brass.  
Soil and vent—wrought iron.

HEATING

Coal—hot air furnace.  
Hot water heater—coal.

CHIMNEY

Fireplaces  
Facings } tile.  
Hearths }  
Mantels—white pine.  
Damper—"Peerless."

HARDWARE

Interior and exterior — hand-wrought iron.

SCREENS

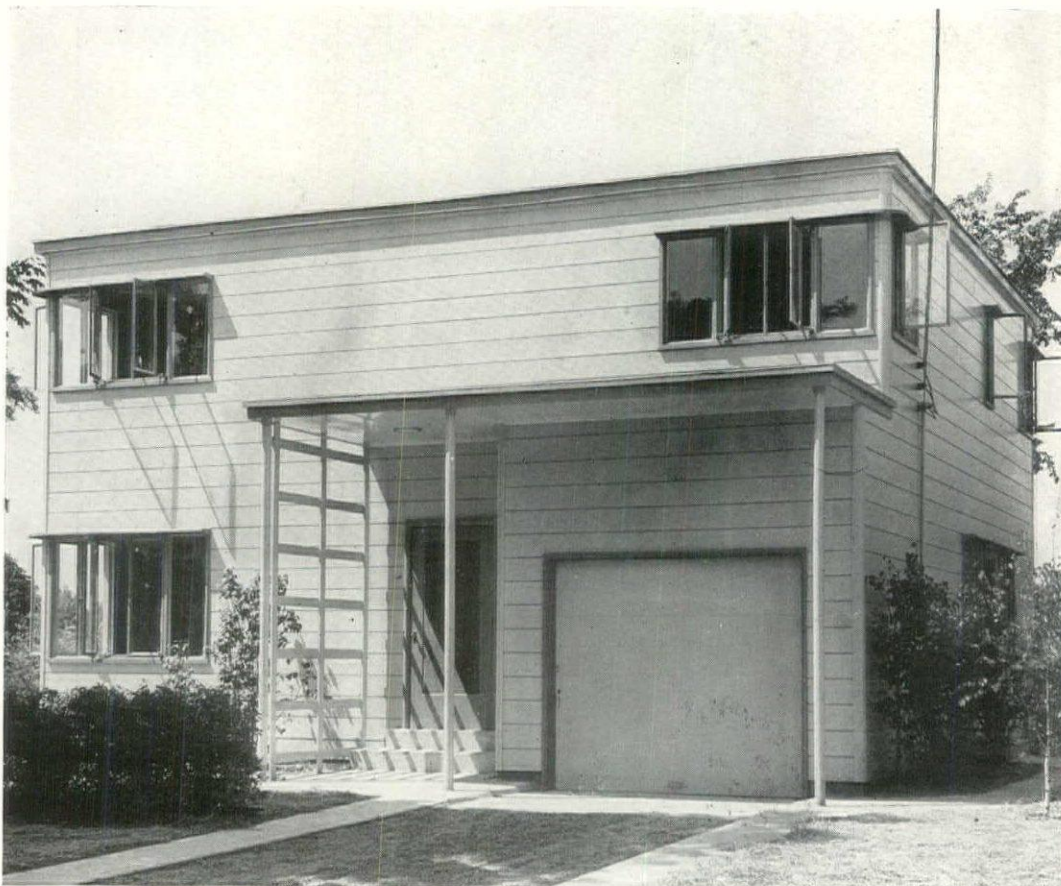
Bronze, frames white pine.

WINDOW DRESSING

Shades.  
Blinds.



## 27. HOUSE 1 W, WILLOUGHBY, OHIO



Carl F. Waite Photos

FRONT

This house is the first unit of a group near Cleveland, Ohio, designed for speculative purposes. A square weather-boarded wooden structure, devoid of any pretense to the graces of "style," it is most efficiently devised for the least laborious and inexpensive scheme of housekeeping for a small family demanding modern comfort and convenience. It frankly meets the physical requirements in a realistic manner, and only a realist can be expected to appreciate it. The garden design is diverting, and smacks of the same orderly realism as the dwelling. Careful examination of the construction details below is essential to a just appreciation of this stimulating design. The extent to which built-in equipment has been used is noteworthy. Cost: 32.8 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—concrete blocks.  
Cellar floor—cement.  
Waterproofing—Master Builders Co.

#### FRAME CONSTRUCTION

Wood.  
Girders—steel.

#### EXTERIOR SURFACE

Siding—flush wood.

#### ROOF

4-ply tar and gravel by Philip Carey Co.,  
Lockland, Ohio.  
Drains—"Josam" (require no flashing) by  
Josam Mfg. Co., Michigan City, Ind.  
Composition sheathing paper—Sisalkraft.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Vento Steel Sash Co.,  
Muskegon, Mich.

Doors and frames (exterior)—wood.  
Garage doors—Stanley overhead type.

#### GLASS

Pennvernon, Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Siding } "Sunproof" by Pittsburgh Plate  
Trim } Glass co.  
Sash }

#### LATH AND PLASTERING

Lathing.  
Composition plaster base—Gold Band

Sheetrock by National Gypsum

Plastering

Patent plaster—National Gypsum

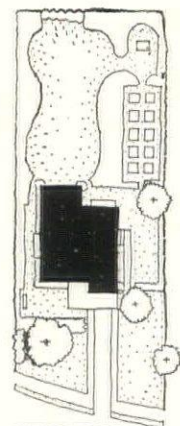
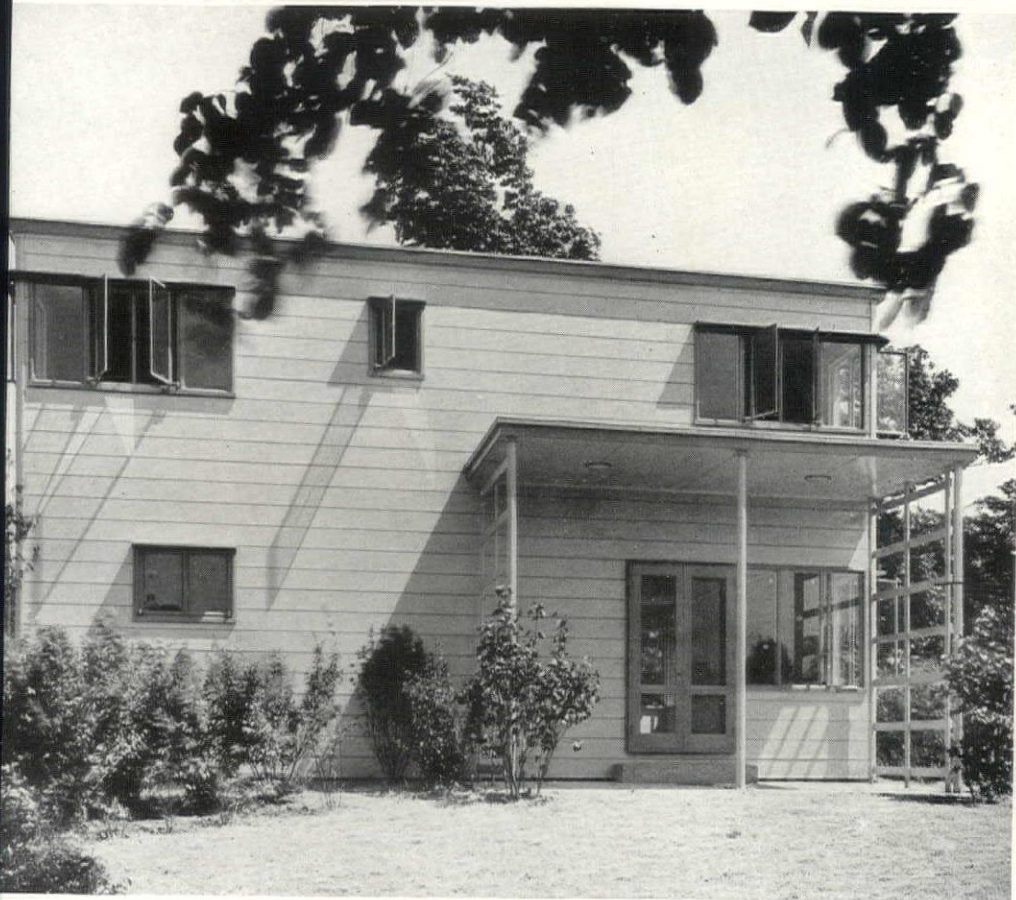
#### INTERIOR WOODWORK

Floors—oak.  
Painted surfaces—poplar.  
Shelving and cabinets—white pine.  
Stock millwork—poplar and birch.

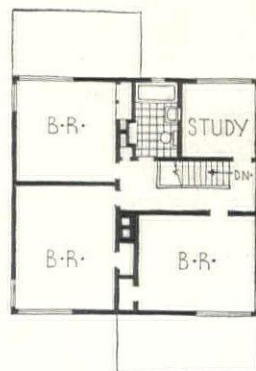
#### INSULATING

Outside walls—  
2" Rockwool } "Gimco," Gen  
Roof—4" Rockwool } Insulating  
Mfg. Co., A  
andria, Ind.  
Thresholds—Chase Brass and Copper

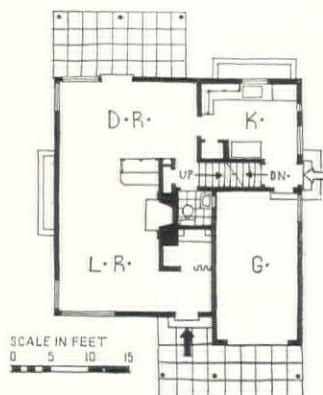




SCALE IN FEET  
0 20 40  
PLOT PLAN

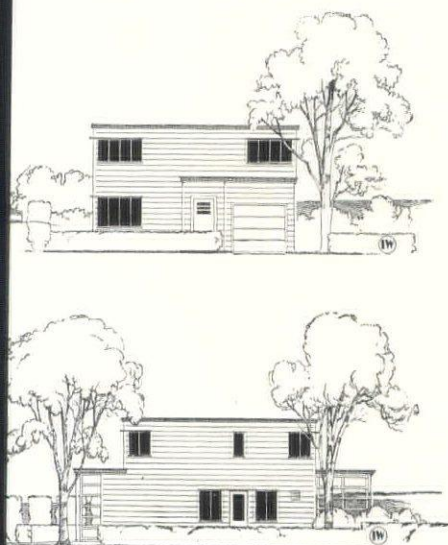


SECOND FLOOR



SCALE IN FEET  
0 5 10 15  
FIRST FLOOR

PLAN: The plan is simple, direct, efficient. A place to cook, a place to live, and a place to keep the car; upstairs, adequate provision for sleep, bathing and study. The many merits of the plan are obvious. In addition to advantages of cross circulation, concentrating windows at the corners results in reduced carpentry and fitting labor with attendant savings. Rooms with such window treatment are easy to furnish.



## ERIOR FINISHES

Floors—Minwax Co., Inc.

Trim } enamel, Pittsburgh Plate Glass  
Doors } Co.  
Sash }

Walls and floors—Armstrong linoleum in kitchen, bath and lavatory.

Wallpaper—balance of house.

## WIRING

Cable—BX.

Electrical fixtures—Chase Brass and Copper Co.

## HEATING

Direct.

## PLUMBING

Kitchen

Cabinet } Kohler.  
Sink }

Wall fan—Victor Electric Products Co.

## BATHROOM

Fixtures—Kohler Co.

Seats—Church Mfg. Co.

Walls and floor—Armstrong linoleum.

## PIPES

Chase Brass and Copper Co.

## HEATING

Coal.

## AIR CONDITIONING

Central—"Moncrief," The Henry Furnace & Foundry Co., Cleveland, Ohio.

## CHIMNEY

Fireplaces

Facings—wood.

Hearths—slate.

Damper—Donley Bros.

## HARDWARE

Interior and exterior—P. & F. Corbin.

## SCREENS

Metal frames by Vento Steel Sash Co.

## WINDOW DRESSING

Venetian blinds—Western Venetian Blind Co.



## 28. HOUSE AT CONCORD, MASSACHUSETTS



REAR VIEW

Paul Wolf

The studied rigidity and formality of this house with its single, great chimney and toilet vent pipe care on axis are relieved on the interior by a non-symmetrical plan. The sun porch, an element accepted by conservatives in architecture, is a summation of much of the philosophy expressed in such designs as H Nos. 8 and 9. In this case, it remains simply a glazed porch, well handled, and with the capricious criss-balustrade above it a cheerful note. Cost: \$13,137. Cubage: 30,460 at 43 cents.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete.  
Columns—lally.

#### FRAME CONSTRUCTION

Fir.  
Girders—steel.

#### EXTERIOR SURFACE

Clapboards—fir.

#### ROOF

Wood shingles—white cedar on boarding.  
Valleys—closed.  
Gutters—redwood.  
Flashing—16 oz. copper.  
Down spouts—wood, 16 oz. copper goose-necks.  
Composition sheathing paper—Brown-skin waterproof building paper, Angier Mfg. Co.  
Hoods over doorways—16 oz. copper.

#### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—white pine.  
Doors and frames (exterior)—white pine.

#### PORCHES

Wood floor—heart rift hard pine.

#### GLASS

Single thick by Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Siding  
Trim  
Sash } 3 coats lead and oil.

#### LATH AND PLASTERING

Lathing  
Metal—24 gauge, 2.8 lb. standard.  
Composition plaster base—"Homo-sote," Agasote Millboard Co.  
Plastering

Patent plaster—Rockwall plaster, Atlantic Gypsum Products Co.  
Finishing coat—Riverside Gaug plaster and Rockwall hydr lime by Atlantic Gypsum Co.

#### INTERIOR WOODWORK

Trim and floors—Arkansas pine, m stairs mahogany.  
Painted surfaces—white wood, wh pine.  
Shelving and cabinets—red birch.

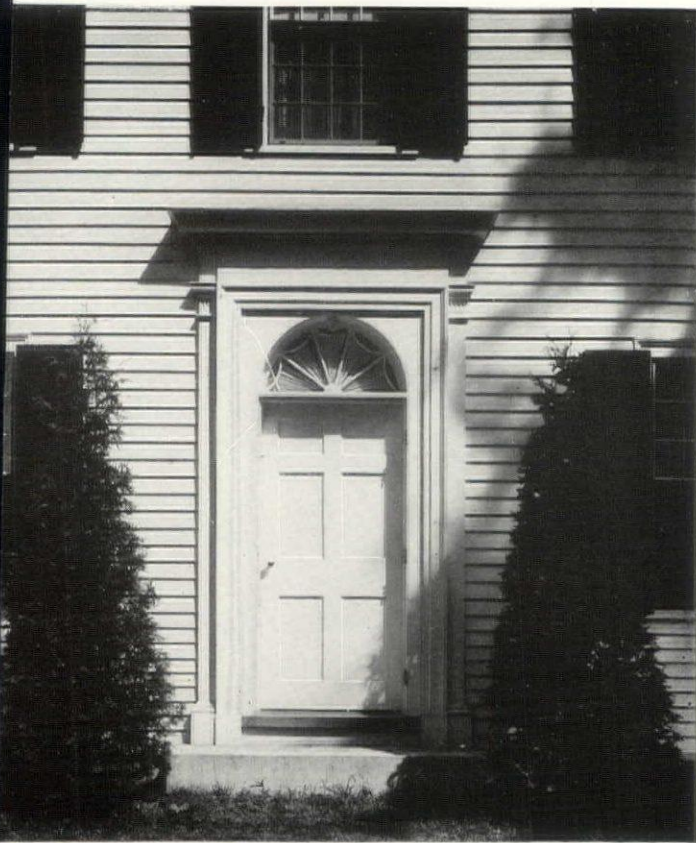
#### INSULATING

Attic floor—1" Cabot's Quilt under jois  
Weatherstripping—Reese Flexo-Seal i terlocking zinc, Reese Metal Weathe strip Co.

#### INTERIOR FINISHES

Floors—stain, Minwax.





PLAN: This type usually has hall and stairs down the center of the building. Here the stairs are placed to the side against a window. The location of the maid's room gives direct access to the entire second floor, eliminating the customary service stairs.

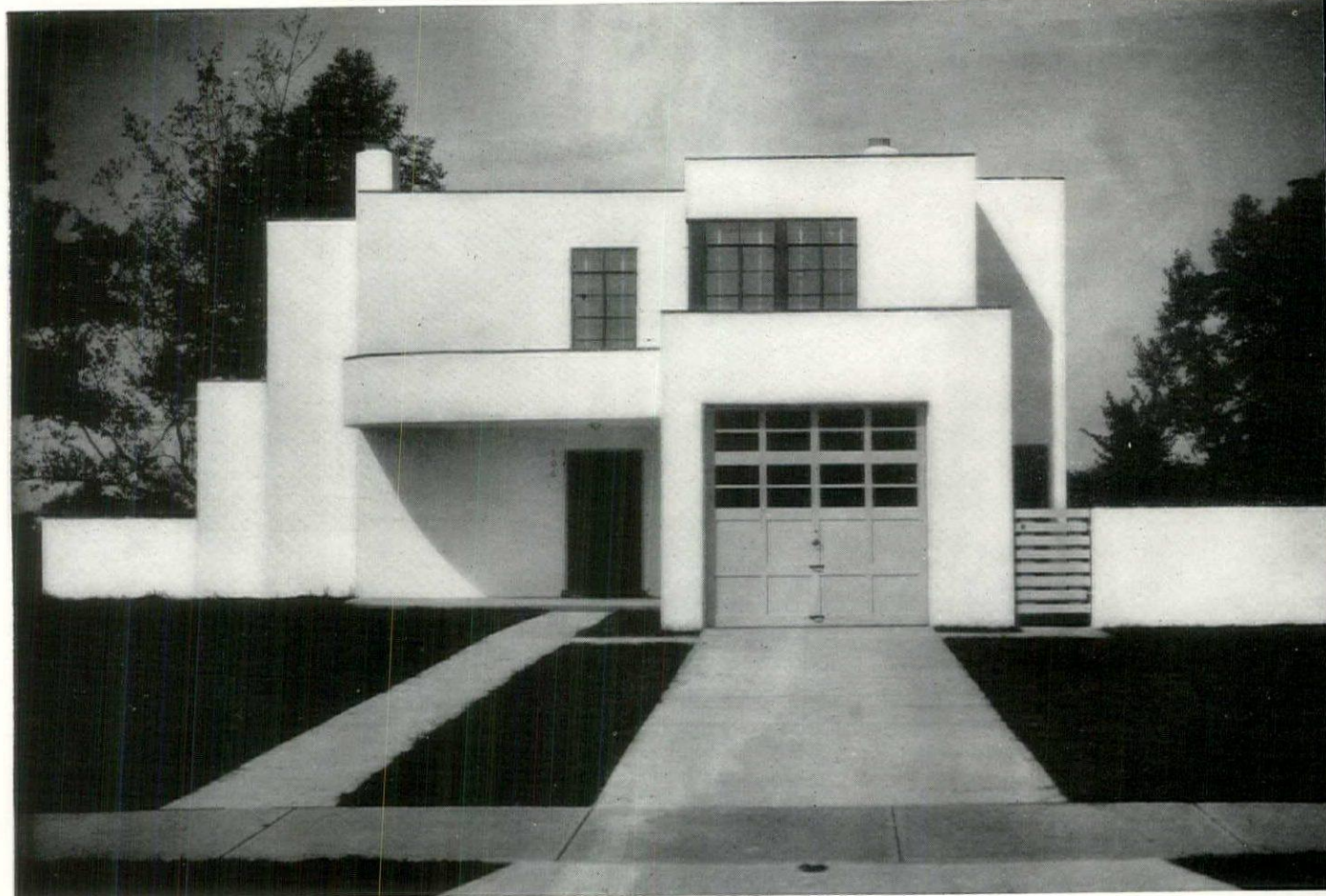
Trim } lead and oil paint.  
Doors }  
Sash }  
Walls—baths, lead and oil over painter's  
linen. Service wing, lead and oil.  
Wallpaper—balance of house.  
WIRING  
Cable—BX—House, No. 4 Parkway under-  
ground.  
Electrical fixtures—Bigelow, Kennard &  
Co.  
Switches—toggle type, General Electric.  
LIGHTING  
Direct.  
PLUMBING  
Kitchen  
Sink—enameled iron.  
BATHROOM  
Fixtures—Locke, Stevens & Sanitas.

Cabinets—Conant Bros. Co.  
Bath tubs—enameled iron.  
Toilets—vitreous china.  
Seats—white celluloid.  
Floor— $\frac{1}{2}$ " cork tile.  
PIPES  
Brass and copper—American Tube Works,  
Boston, Mass.  
Wrought iron—A. M. Byers Co. and  
Reading Iron Co.  
Steel—Youngstown Pressed Steel Co.  
HEATING  
Coal.  
Boilers—"Ideal" Red Flash.  
Radiators—"Murray" convectors.  
Piping—Youngstown Sheet and Tube  
Works.  
Valves—Jenkins.

Hot water heater—Ruud "Autohot."  
Stoker—Electric Furnace-Man.  
CHIMNEY  
Fireplaces  
Facings—cement.  
Hearths—waterstruck brick.  
Mantels—wood.  
Damper—Murdock.  
HARDWARE  
Interior and exterior—W. C. Vaughan Co.,  
Boston.  
SCREENS  
Metal frames, copper bronze wire, Cam-  
bridge Screen Mfg. Co.  
WINDOW DRESSING  
Shades—hand-painted tint cloth, Crown  
Shade & Screen Co.  
Blinds—white pine painted.



## 29. HOUSE FOR DR. HENRIETTA RACE, APPLETON, WISCONSIN



Courtesy, Stran-Steel

**PROBLEM:** To design a Colonial house with lots of closet space, including trunk storage room on the second floor. The house to take full advantage of a fine view of a river at the rear of the property.

The architect concluded, and his client agreed, that a traditional style would not satisfactorily solve the problem. The house was planned so that only one living and guest bedroom, faces the street. The rest of the rooms overlook the garden which slopes down to the river. Noteworthy are the large glazed areas of living room and dining room. The house is called "modern" for convenience, but it is modern, not because of "style," but because it is an accurate reflection of contemporary ideas of living, and appropriately constructed of concrete, steel, and glass. Cost: \$9,100. Cubage: 26,000 at 34 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—concrete, Portland Cement Co.  
First floor—4" reinforced concrete slab, Portland Cement Co.  
Waterproofing—integral.

#### FRAME CONSTRUCTION

"Stran Steel"—Stran-Steel Corp., Detroit, Mich.

#### EXTERIOR SURFACE

Stucco— $\frac{3}{8}$ " thick applied to 1" Thermax.

#### ROOF

5-ply composition.  
Down spouts—cast iron soil pipe inside.  
Flashing and coping—copper.

#### DOOR AND WINDOW FRAMES

Sash and frames.  
Casement } Fenestra stock by Detroit  
Steel sash } Steel Products Co.  
Doors and frames (exterior)—wood, flush.  
Garage doors—Overhead Door Corp.

#### PORCHES

Reinforced concrete.

#### GLASS

"Thermopane" patent double glass with  $\frac{1}{8}$ " air space, by Thermopane Co., Toledo, Ohio, Division of Libbey-Owens-Ford.

#### EXTERIOR PAINT

Trim }  
Sash } oil paint, Prussian Blue  
Doors }

#### LATH AND PLASTERING

Lathing  
Composition plaster base— $\frac{1}{2}$ " insulating and Rocklath.

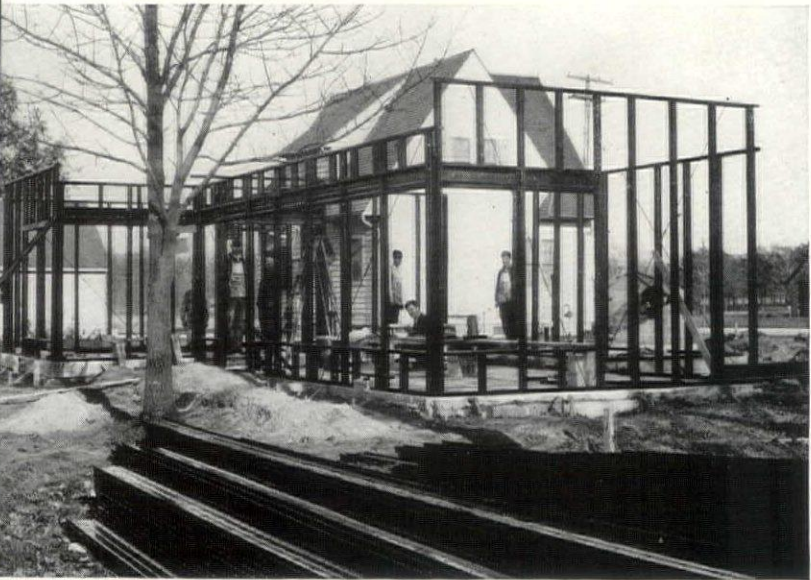
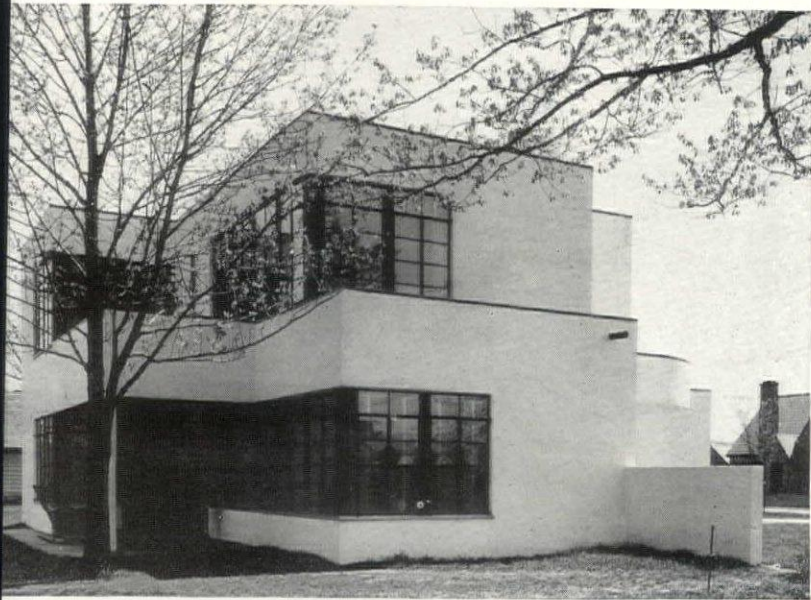
Plastering  
Patent plaster—U. S. Gypsum Red Top  
Finishing coat—sand float.

#### INSULATING

Outside walls—1" Thermax outside air space.

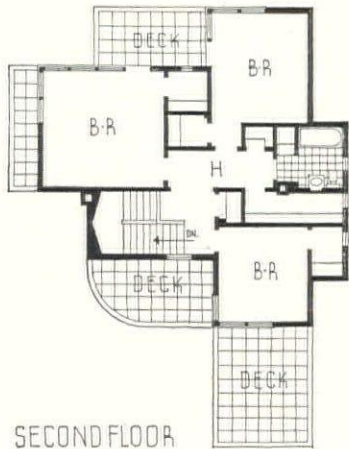
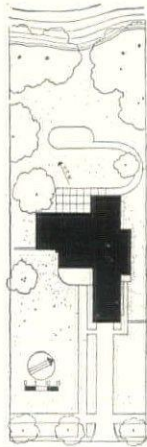


# LLARD RUSSELL, ARCHITECT



ECTING STEEL FRAME

N: Kitchen excellently placed in relation to entrance vestibule, laundry and  
ce entrance. Trunk closet next to bathroom. While dining room and living room  
into one another, the dining room still preserves its identity. The bedroom  
ts are deep enough to be used as dressing rooms.



SECOND FLOOR



FIRST FLOOR

"Kimlark" (Kimberley Clark Paper Co.) between steel studs.  
Second floor—1" Thermax.  
Roof—3" Thermax.  
INTERIOR FINISHES  
Floor—3/16" Accotile in living room, dining room, halls, stairs and bedrooms by Armstrong Cork Products Co.  
Trim }  
Doors } oil paint.  
Bath }  
Base }  
SINKING  
Sinks—BX.  
Electrical fixtures—special design.

LIGHTING  
Direct and indirect.  
PLUMBING  
Kitchen  
Sink—Kohler of Kohler, Wisconsin.  
Cabinet—metal by Elgin Stove & Oven Co., Elgin, Ill.  
Stove—Hot Point, General Electric Co.  
BATHROOM  
Fixtures—Kohler of Kohler, Wisconsin.  
Cabinets—The Miami Cabinet Division, Philip Carey Co., Middletown, Ohio.  
PIPES  
Copper—by Streamline Pipe & Fittings Co.

HEATING  
Oil—Timken Silent Automatic oil burner.  
Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
AIR CONDITIONING  
Central—"Wier" furnace and air conditioner.  
CHIMNEY  
Fireplaces  
Hearths—slate.  
Mantels—Vitrolite.  
SCREENS  
"Fenestra," Detroit Steel Products Co.  
WINDOW DRESSING  
Venetian blinds.





The wall adds to the feeling of spaciousness of this house and gave a good landscape architect a good background against which he could plant. It also creates a semi-private court and to some extent masks the garage. Thin supports for the roof, similar to those in the architect's house for the Los Angeles Times (No. 32), give a particular grace. An excellent touch was the use of white shutters against white walls. The living room fireplace was less imaginative. Cost: \$9,000. Cubage: 33,000 at about 27 cents.

LANDSCAPE ARCHITECT, FRED BA

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls  
Piers  
Cellar floor } concrete.  
Waterproofing—Succonem.

### FRAME CONSTRUCTION

Douglas fir throughout with exception of redwood sills.

### EXTERIOR SURFACE

Common brick veneer and vertical redwood boards. Riverside Portland Cement Co.  
Stucco—Monolith Portland cement plaster, brush coated.

### ROOF

Wood shingles on shingle lath—red cedar "Royal."

Valleys  
Gutters  
Flashing  
Down spouts } Armco iron galvanized.  
Composition sheathing paper—Sisalkraft.

### DOOR AND WINDOW FRAMES

Doors and sash—sugar pine.  
Frames—vertical grain Douglas fir.

### PORCHES

Common brick floor.

### GLASS

Pennvernion clear glass, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—oil stained.

Siding  
Trim  
Sash } lead and oil paint.

### LATH AND PLASTERING

Lathing  
Wood—Douglas fir.  
Plastering  
Patent plaster—Arden hardwall.  
Finishing coat—smooth putty coat.

### INTERIOR WOODWORK

Trim and floors  
Hardwood—No. 1 common oak.  
Stainwoods—white pine selected knots.  
Painted surfaces  
Shelving and cabinets } vertical grain Douglas





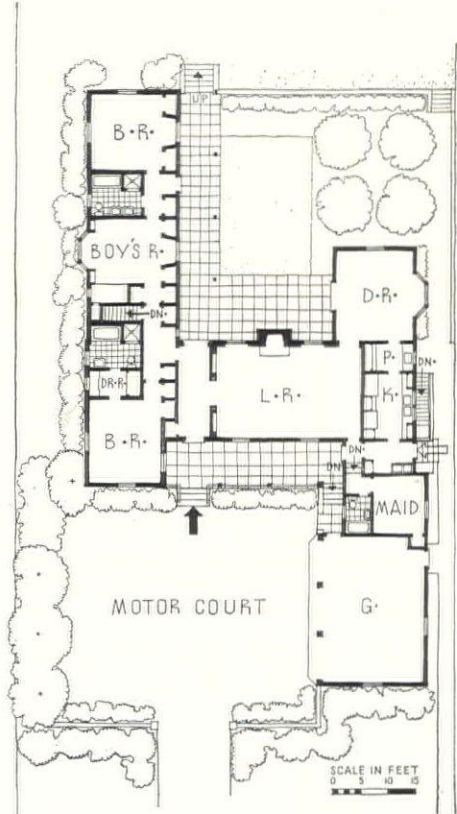
R GARDEN



DETAIL, ENTRANCE PORCH



ING ROOM



N: The motor court seems most practical allowing the automobile to go to the front door and then into the garage. The entrance through the motor court and out into another court is pleasing. The long row of closets along the living room walls is unusual. The Z-shaped plan takes advantage of exposures.

**INSULATING**  
Weatherstripping—Monarch on exterior doors.

**INTERIOR FINISHES**  
Trim } enamel finish with Vitrolite enamel except where stained.  
Doors }  
Sash }  
Walls—painted except in bedrooms and dining room.  
Wallpaper—in dining room and bedrooms.

**RIGID**  
Rigid iron conduit.  
Electrical fixtures—Luminaire Co., Los Angeles.  
Switches—Bryant.

**LIGHTING**  
Direct.

**PLUMBING**  
Kitchen  
Sink—Standard Sanitary 2-compartment sink built in kitchen case-work.  
Stove }  
Refrigerator } by owner  
Washing machine }

**BATHROOM**  
Fixtures—Standard Mfg. Co. throughout.  
Tile—Gladding, McBean & Co., Los Angeles.

**PIPES**  
Steel.

**HEATING**  
Gas—furnaces, unit type, Payne Furnace & Supply Co.  
Hot water heater—Day and night automatic storage type.

**CHIMNEY**  
Fireplaces  
Facings } common brick.  
Hearths }  
Mantels—wood.  
Damper—Richardson damper and throat form.

**HARDWARE**  
Interior and Exterior—Russwin.

**SCREENS**  
In-Vis-O Disappearing Roller Screen Co.





Haigh

This house is similar to House No. 30 by the same architect. The gable roofs, here preferred to hip roofs, are a simpler, cleaner, more elementary form. The courtyard, also, seems simpler than the court of the preceding house. The planting is an integral adornment of the house, accenting the horizontality of the house by contrast of vertical trees. The whole house is finely proportioned. The bay window too often merely a "habit" is here justified in a room so tiny. Cost: \$6,300. Cubic feet: 23,000 at 27½ cents.

LANDSCAPE ARCHITECT, FRED BARR

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls }  
Piers } concrete.  
Cellar floor }

### FRAME CONSTRUCTION

Douglas fir throughout except redwood sills.

### EXTERIOR SURFACE

Brick veneer—Simons common brick.  
Vertical boards—redwood.  
Stucco—Monolith Portland cement plaster, brush coated.

### ROOF

Wood shingles on shingle lath—5 to 2" vertical grain red cedar.  
Valleys }  
Flashing } Toncan iron galvanized.  
Composition sheathing paper—Sisalkraft.

### DOOR AND WINDOW FRAMES

Sash and frames }  
Double hung } sash of sugar pine,  
Casement } frames of vertical grain Douglas fir.  
Door and frames (exterior)—doors sugar pine, frames vertical grain Douglas fir.  
Garage doors—"Over the Top," Frantz Mfg. Co.

### PORCHES

Brick floor—Simons common brick.

### GLASS

Libbey-Owens-Ford clear glass.

### EXTERIOR PAINT

Shingles—oil stain.  
Trim }  
Sash } Lead and oil paint.

### LATH AND PLASTERING

Lathing  
Wood—Douglas fir.  
Plastering  
Patent plaster—Arden hardwall.  
Finishing coat—smooth putty coat.

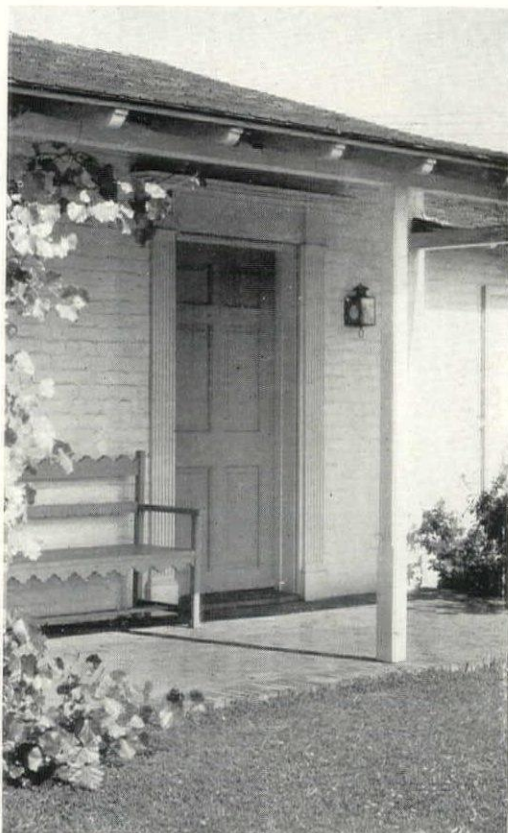
### INTERIOR WOODWORK

Trim and floors  
Hardwood—13/16" No. 1 common oak flooring.  
Stainwoods—white pine selected knots.  
Painted surfaces—vertical grain Douglas fir.  
Shelving and cabinets—vertical grain Douglas fir.





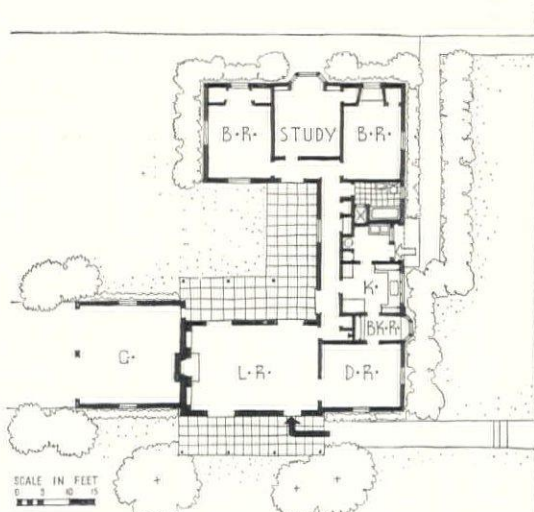
LIVING ROOM PORCH



DETAIL, ENTRANCE



LIVING ROOM



Similar to House No. 30 with the entrance on axis to entrance to court. The elimination of the breakfast nook and the conversion of the dining and living rooms into one large room for the joint purposes might have been more pleasant planning. The study is well isolated and can be used as a bedroom for the unexpected guest.

**PAINTING**  
Weatherstripping—Monarch on exterior doors.

**EXTERIOR FINISHES**  
Siding—stained, filled and waxed.  
Windows—enameled except in living room.  
Doors—Pratt & Lambert Vitrolite enamel.  
Walls—painted 3 coats oil paint except in bedrooms and dining room.  
Paper—bedrooms and dining room.

**ELECTRICAL**  
Wiring—rigid iron conduit.  
Lighting fixtures—Luminaire Co., Los Angeles.  
Switches—Bryant.

**LIGHTING**  
Direct

**PLUMBING**  
Kitchen  
Sink—Crane Co. flat-rim sink built-in.  
Stove  
Refrigerator  
Washing machine } by owner.

**BATHROOM**  
Fixtures—Crane Co.  
Shower curtains—"Emdee" colored curtain.  
Tile—Gladding, McBean & Co., Los Angeles.

**PIPES**  
Steel

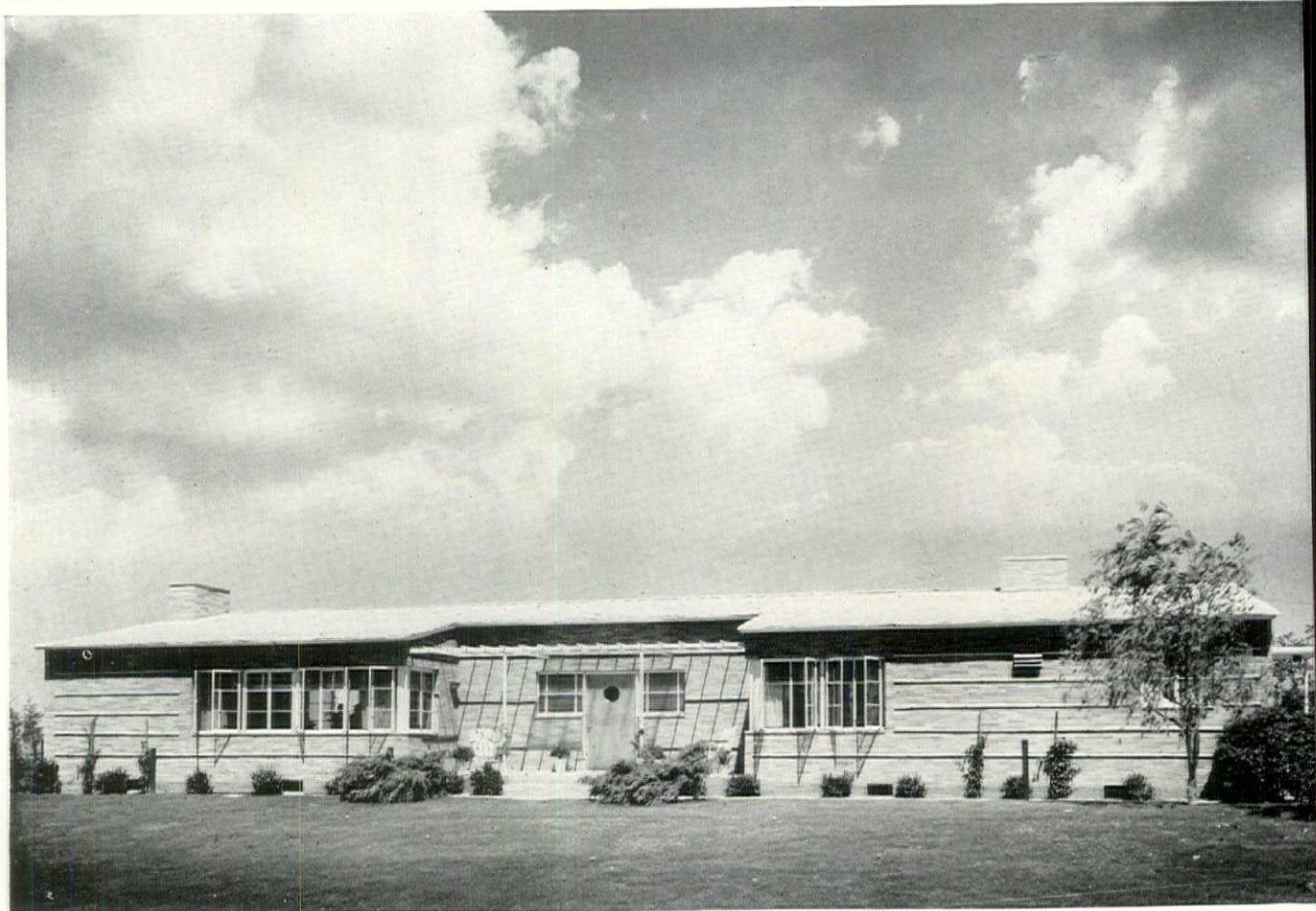
**HEATING**  
Radiators—James B. Clow non-vented gas steam.  
Hot water heater—Crane Co. "Superior."

**CHIMNEY**  
Fireplaces  
Facings }  
Hearths } Simons common brick.  
Mantels—wood.  
Damper—Richardson damper and throat form.

**HARDWARE**  
Interior and exterior—old brass finish, Russell and Erwin Mfg. Co.

**SCREENS**  
Roller screens—"Inviso," In-Vis-O Disappearing Roller Screen Co.





The house shows the growing tendency in California residential architecture to combine features of modern and traditional design. Not unlike the typical ranch house with its long lines and sloping roof, this house takes on new character through the use of horizontal rows of casements, and of the glazed roof over the entrance terrace. The plan provides living and sleeping quarters separated without loss of convenience. The one bath centrally located is accessible from any part of the house. A dining terrace and a porch furnish outdoor living spaces, privacy being obtained by screens of translucent glass. The interior carries out the scheme of combining old and new motives; the walls of the living room, hall and dining room are covered with large sheets of wood veneer, while the bedroom is treated in a more conventional manner. Cost: \$10,000. Cubage (house) 19,000, (garage) 5,250.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—reinforced concrete.  
Riverside Portland Cement Co.

### FRAME CONSTRUCTION

Entire frame, steel—standard rolled sections electrically welded by Columbia Steel Co. Fabrication, Unity Builders, Inc., Los Angeles.

### MASONRY CONSTRUCTION

Terrace walls and chimneys. Same brick and mortar as for exterior veneer.

### EXTERIOR SURFACE

Brick veneer—specially manufactured small Roman brick light coral color by Gladding, McBean & Co. and Los Angeles Brick Co.

### ROOF

Tile on Sheathing—special white over-glazed shingle tile on 1¾" wood sheathing and tile by Gladding, McBean & Co. Sheathing—1¾" T. & G. Oregon Pine.

### Gutters

Galvanized Iron—"ARM-Flashing CO"—American Rolling Mill Co.

Down Spouts }  
Composition sheathing paper—Two thicknesses "Flintco" by Pioneer Roofing Co., subsidiary of Johns-Manville Co.

### DOOR AND WINDOW FRAMES

Windows and French doors steel casements by Druwhit Metal Products Co., Los Angeles.

Doors and frames—Main entrance and service, wood.

Interior doors wood.

Garage Doors—"Over-the-top" door equipment by Frantz Mfg. Co.

### PORCHES

Brick Floor—Entrance terrace paved with brick, same as exterior veneer.

Tile Floor—Dining terrace and living room terrace quarry tile by Alhambra Kilns, Los Angeles.

### GLASS

Pennvernion, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

All paint and stain by General Paint Co.  
—White Lead by National Lead Co.

### LATH AND PLASTERING

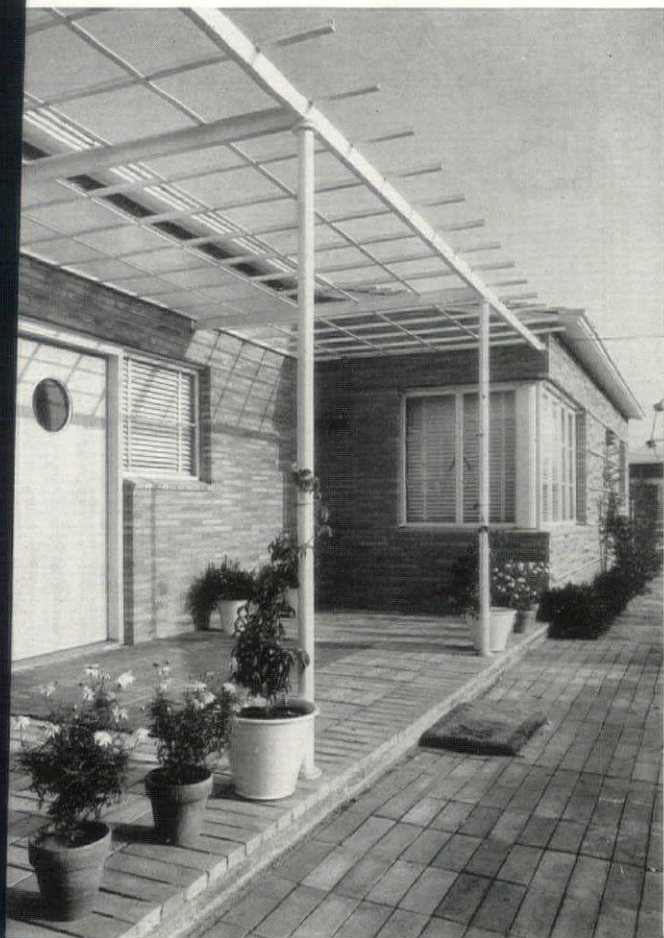
Metal—"Lathex," by Penn Metal Co.  
Plastering—"Lavalite" patent plaster by Lavalite Products Inc.

### INTERIOR WOODWORK

Trim and Floors—All doors and floors of Oak. Living Room carpet throughout, bedrooms and hall linoleum by Paraffine Co., Inc.  
Paneling—Dining room walls ¼" pine mahogany veneer, living room ¼" Birch veneer—all by E. J. Tilton Mfg. Co.

Shelving and cabinets—Oregon Pine  
Stock millwork—None.

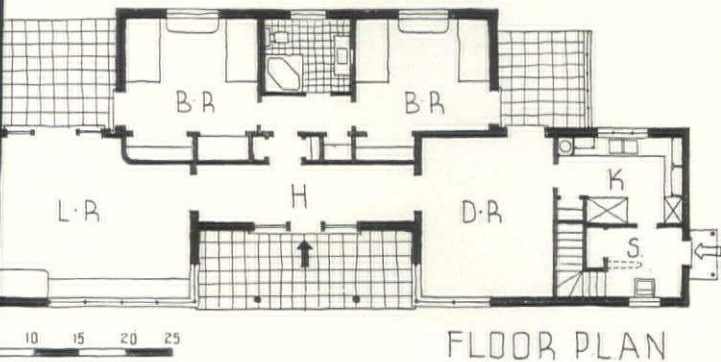




PORCH



BEDROOM DETAIL



PLAN: Diagonal ventilation in living and dining rooms. Outdoor fireplace. Recessed wardrobes. Less preoccupation with symmetry and publicity requirements would have resulted in more efficient utilization of space. The hall and terrace arrangement is somewhat out of proportion to the scheme as a whole.

CLADDING  
Outside walls—"Insulite" 1" thick.  
Weatherstripping—None.  
EXTERIOR FINISHES  
Paint and enamel by General Paint Corp.—White Lead by National Lead Co.  
Wallpaper—Bedrooms and bedroom hall papered on "Insulite Hardboard." Paper by Stockwell Wall Paper Co. of Los Angeles.  
CEILING  
Plaster—Austin steel tube by General Electric Co.  
ELECTRICAL FIXTURES—manufactured locally.  
SWITCHES—Distributing panel by Frank Adams Co., switches and plates by Bryant Electric Co.  
HEATING  
Direct and indirect.  
KITCHEN  
Kitchen.

Sink—Monel metal by International Nickel Co.  
Cabinets—Oregon Pine.  
Stove—Gaffers & Sattler.  
Refrigerator—O'Keefe & Merritt.  
Washing machine and electric ironers—A. B. C. Altorfer Bros.

BATHROOM  
Fixtures—Standard Sanitary Mfg Co.  
Cabinets—medicine case especially made by Pryne Co. Los Angeles.  
Wainscot—"Carrara" glass by Pittsburgh Plate Glass Co.

PIPES  
All water pipe steel.

HEATING  
Gas—Forced air circulating unit, by Payne Furnace & Supply Co.  
Piping—Steel  
Hot water heater—Automatic storage insulated tank, Superbo Mfg. Co.

AIR CONDITIONING  
None.

CHIMNEY  
Fireplaces.  
Facings—Brick same as exterior veneer.  
Hearths—Quarry tile (Alhambra Kiln).  
Mantels—Wood.  
Damper—None.

HARDWARE  
Interior—locks and knobs by Schlage Lock Co., hinges, Rixon Olive Knuckle Hinges.

WINDOW DRESSING  
Venetian Blinds—National Venetian Blind Co.  
Roller Screens—Inviso Disappearing Roller Screen Co.

SPECIAL EQUIPMENT  
Radio—Patterson.  
Garage Door—Operated by Varnum Door Engine.



### 33. COTTAGE AT BEDFORD, NEW YORK



John A. Davis Photo

The unusually steep slope of the site permits entrance from the ground at three levels, and makes it possible to incorporate the garage economically in the basement. The retaining walls and steps to the terraces are substantially built of fieldstone. The walls of the house are covered with cedar shingles. The roof is also shingled. The design adapts itself well to a difficult site. Although the fenestration in the main is agreeable, the bathroom window and the window of the room next might have been made larger, while there seems little need for so generous a window in the coat closet. This type of house, characteristic of this part of New York, is far more spacious inside than the exterior appearance suggests. Cost: Approximately \$12,000.

#### CONSTRUCTION OUTLINE

##### FOUNDATION

Walls—rubble stone.  
Cellar floor—cement.  
Waterproofing — Integral, underfloor  
drained by porous fill.

##### FRAME CONSTRUCTION

Spruce.

##### MASONRY CONSTRUCTION

Walls—local rubble stone.

##### EXTERIOR SURFACE

Wood shingles—composition sheathing  
paper under.

##### ROOF

Wood shingles on shingle lath.

Valleys

Gutters

Flashing

Down spouts

Salt glazed tile drains—to dry wells.

Copper.

##### DOOR AND WINDOW FRAMES

Sash and frames

Double hung and casement—white  
pine.

Doors and frames (exterior)—pine.

Garage doors—white pine, hinged.

##### PORCHES

Fir.

##### GLASS

Double thick—American Window Glass  
Co.

##### EXTERIOR PAINT

Siding

Trim

Sash

lead and oil, 3 coats.

##### LATH AND PLASTERING

Lathing.

Metal—Toncan metal throughout.

Plastering—3 coats, hard white  
finish.

##### INTERIOR WOODWORK

Floors—soft pine.

Trim—white pine.

Shelving and cabinets—white pine.

##### INTERIOR FINISHES

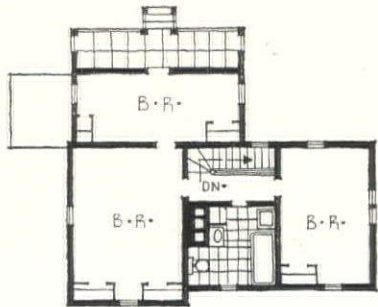
Floors—painted gray.

Trim—painted white.

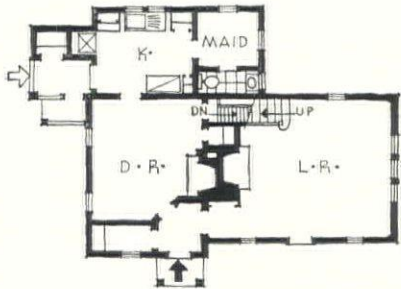




LIVING ROOM



SECOND FLOOR



FIRST FLOOR

0 5 10 15  
SCALE IN FEET

N: The plan is compact and efficient, and displays an easy, logical sequence of communication throughout. The direct entrance to the living room is probably more used than the main entrance to the dining room. Maid's room and bathroom have windows under a sleeping porch accessible from the ground.

Floors—painted green exterior, white interior.  
Wash—painted white.  
Wallpaper—papered throughout.  
FLOORING  
Flooring—BX.  
Electrical fixtures—specially designed brass.  
Switches—toggle type.  
LIGHTING  
Direct.  
UMBRELLA  
Kitchen  
Sink—enameled iron.  
Stove—container gas.  
Refrigerator—General Electric.

BATHROOM  
Fixtures—enameled iron, Standard Sanitary Mfg. Co.  
Bath tubs—enameled iron.  
Toilets—porcelain.  
Seats—white Church.  
Floor—linoleum.

PIPES  
Brass.  
Cast iron wastes.

HEATING  
Coal—hot air.  
Hot water heater—coal.

CHIMNEY  
Fireplaces  
Facings }  
Hearths } common brick.  
Mantels—wood.  
Damper—Covert old style B.

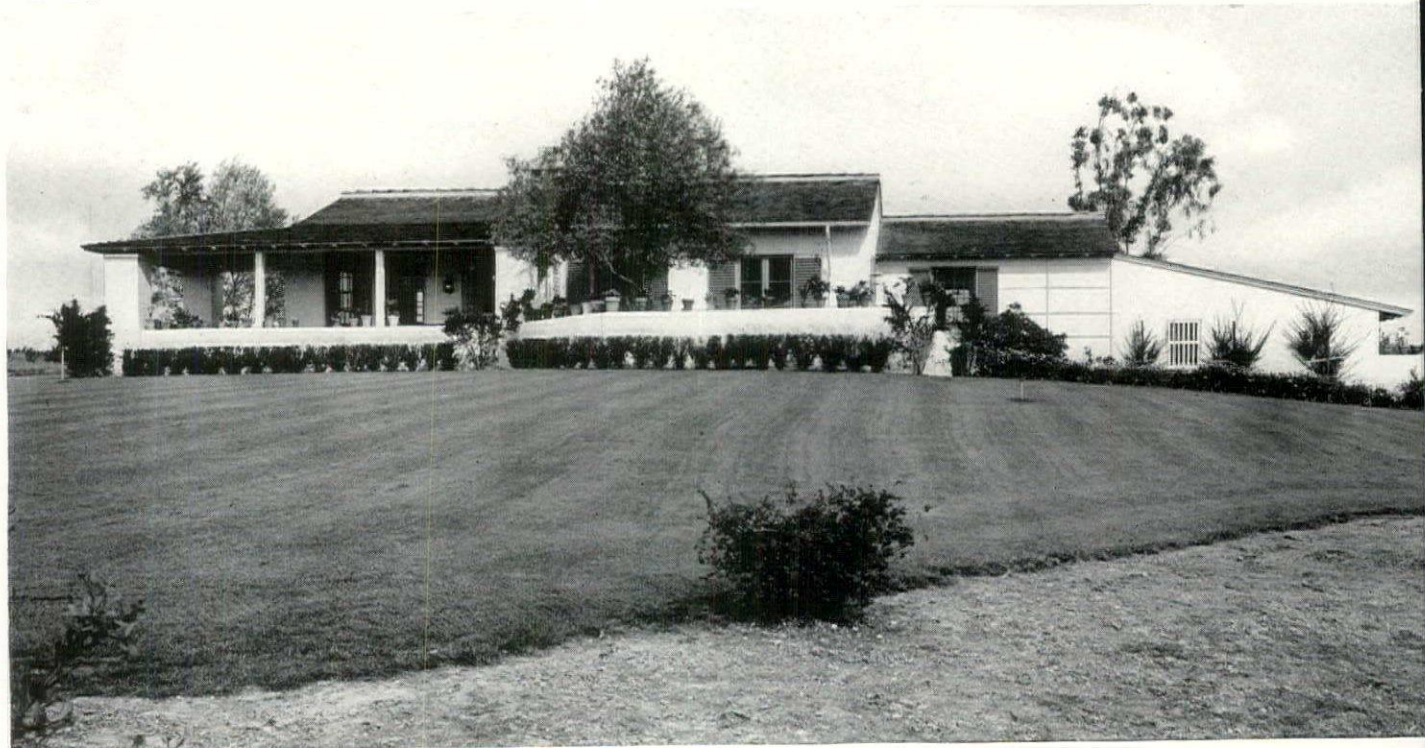
HARDWARE  
Interior and exterior—brass, Yale & Towne.

SCREENS  
Wood frames.

WINDOW DRESSING  
Curtains only.



## 34. HOUSE AT RANCHO, SANTA FE



The broad expanse of lawn abutting on the clipped hedge against the parapet wall makes a sympathetic frame for this house. As might be expected, the interiors are simple and restrained and evince a nice feeling for appropriate detail. The louvered doors or jalousies in the living room, typical of warm or tropical climates, are practical and have decorative value. Cost: \$10,900.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—reinforced concrete.  
Cellar floor—concrete.  
Waterproofing—Anti-Hydro integral, exterior walls mopped with hot tar.

#### FRAME CONSTRUCTION

Douglas Fir.  
Sills—redwood.

#### EXTERIOR SURFACE

Stucco—3 coats cement plaster waterproofed and colored by "Bondex."  
Cement applied over 1" 17-gauge wire mesh.

#### ROOF

Wood shingles on shingle lath—5 in 2" "Perfects."

#### Gutters

Flashing } galvanized iron, 26 gauge.  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—white pine.  
Doors and frames (exterior)—white pine.  
Garage doors—white pine, sliding.

#### PORCHES

Brick floor—selected common.

#### GLASS

Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Shingles—oil stained, Cabot.  
Trim } 3 coats lead and oil, Fuller.  
Sash }

#### LATH AND PLASTERING

Lathing  
Composition plaster base—"Griplath" by Schumacker Wall Board Co. Los Angeles.

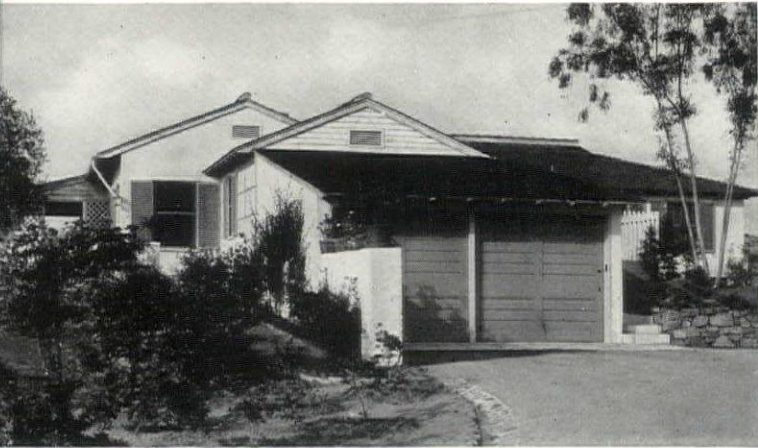
#### Plaster

Patent plaster—gypsum.

#### INTERIOR WOODWORK

Trim—knotty white pine in living room and dining room, vertical grained Douglas Fir balance of house.





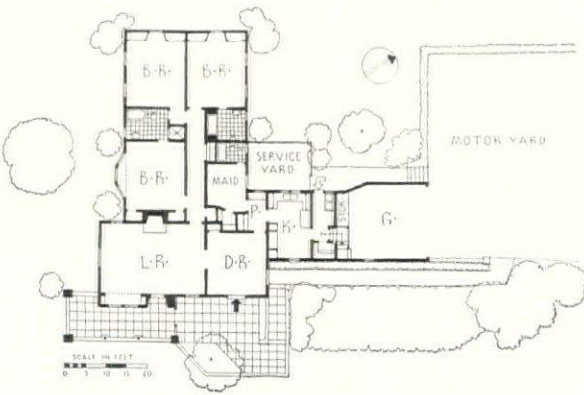
DRIVEWAY APPROACH AND GARAGE



LIVING TERRACE



LIVING ROOM



NOTE: Service quarters in good relation to motor yard. If the size of yard allows, it provides a direct route for incoming and outgoing guests. Kitchen, pantry, maid's, and dining room in a convenient sequence.

Floors— $\frac{5}{8}$ "x2" hardwood.  
Shelving and cabinets—white pine.

INSULATING  
None.  
Weatherstripping—"Monarch."

INTERIOR FINISHES  
Floors—stain, 2 coats shellac, 2 coats Johnson's floor wax.  
Trim } 4 coats lead and oil, W. P. Fuller & Co.  
Doors }  
Sash }  
Walls—baths, service porch and kitchen, 2 coats lead and oil, final coat "Fullerglo."  
Wallpaper—balance of house.

WIRING  
Cable—Sherarduct.  
Electrical fixtures—especially designed.  
Switches—General Electric.

LIGHTING  
Direct.  
PLUMBING  
Kitchen  
Sink—Standard Sanitary.

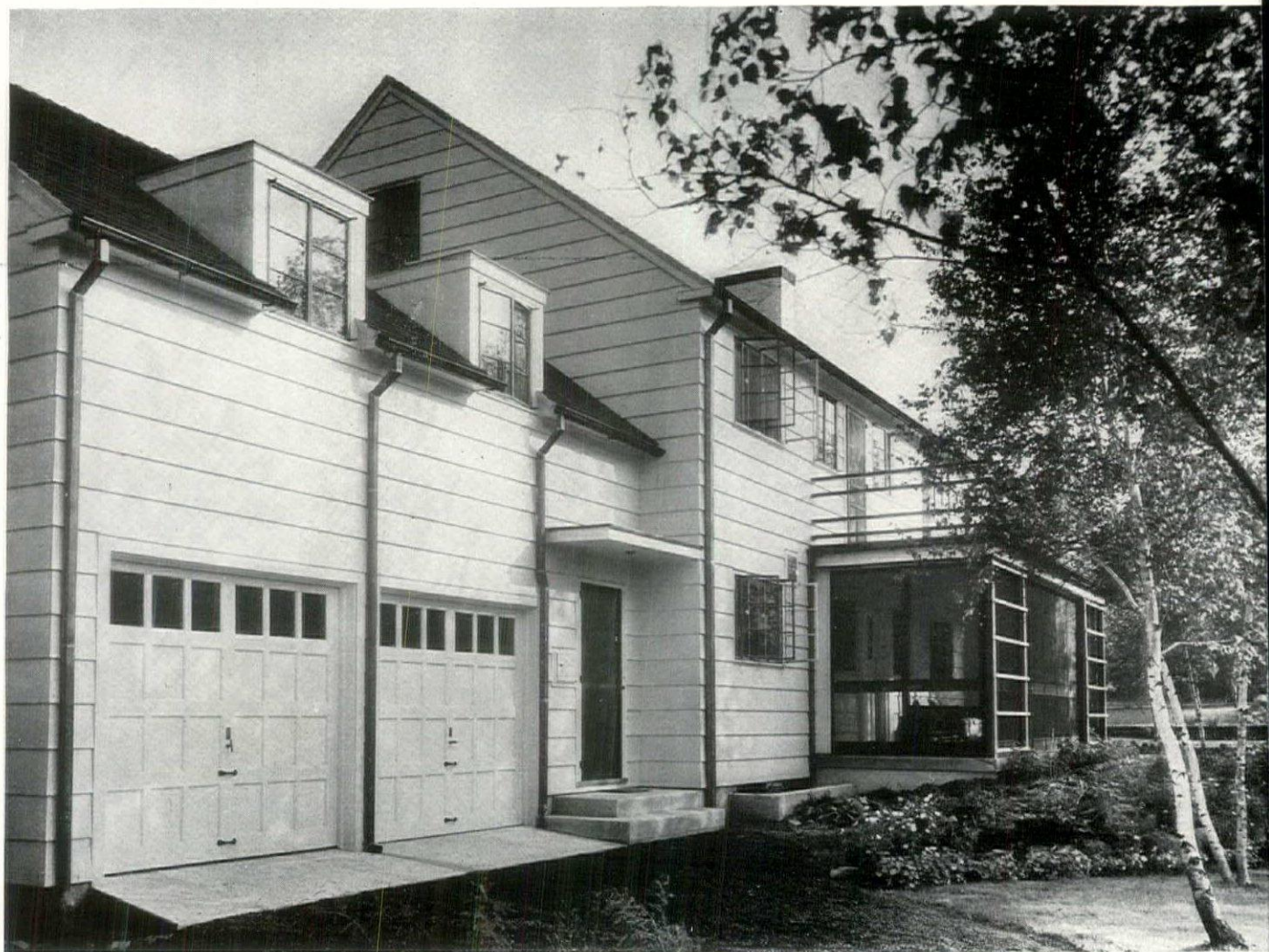
BATHROOM  
Fixtures—Standard Sanitary.  
PIPES  
Steel.

HEATING  
Oil—Oil-O-Matic, Model K  
Hot water heater—40 gal., "Everhot" electric.

CHIMNEY  
Fireplaces  
Facings } selected common brick.  
Hearths }  
Mantels—knotty white pine.  
Damper—Covert.

HARDWARE  
Interior and exterior—Russwin.  
SCREENS  
Metal frame, bronze wire, special make.





Gustav Anderson

The architect has produced a house in reasonable conformity with the manner of the neighborhood in its major features, yet one stamped with individuality. Casement windows with metal sash have taken the place of double-hung sash; painted a warm maroon, they give an agreeable color accent in contrast with the white exterior walls. The veranda top becomes a sun deck with canvas floor and a wooden railing. The railing, maroon like the casements, and the blue veranda posts continue the color interest. Inside, the blue linoleum flooring of the hall and library, inlaid with 1-in. white strips at 30-in. intervals carry color emphasis. Horizontal wallboard paneling in some of the rooms, linoleum dadoes in kitchen and pantry, the absence of wooden window trim in the upstairs rooms, where the plaster returns on curved jambs and heads into steel sash, all contribute. Cost, including architect's fee, \$15,000.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—cinder block.  
Columns—lally.  
Cellar floor—4" concrete.  
Waterproofing—Anti-Hydro Waterproofing Co.

### FRAME CONSTRUCTION

Fir.  
Girders—steel I-beams

### EXTERIOR SURFACE

Clapboards— $\frac{3}{4}$ " x 12" cedar.

### ROOF

Wood shingles on shingle lath—18" Perfection.  
Valleys } 16 oz. copper.  
Gutters }  
Flashing—copper and sheet lead.  
Decks covered with 4 lb. sheet lead.

### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Fenwrought "Fenestra,"  
Detroit Steel Products Co.  
Doors and frames (exterior)—wood,  
special design.

Garage doors—Overhead Door Corp.

### PORCHES

Floor—4" reinforced concrete.

### CLASS

Double strength, quality B, Pennvernion,  
Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—Cabot's brush stained.  
Siding } 3 coats, Sherwin-Williams.  
Trim }  
Sash  
Priming—1 coat metalastic } Sherwin-Williams Co.  
Finish coat—1 coat maroon }

### LATH AND PLASTERING

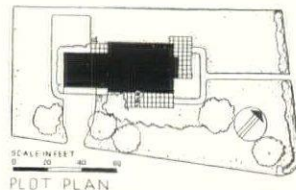
Lathing  
Metal—in garage.  
Composition plaster base—Rocklath  
U. S. Gypsum Co.  
Plastering  
Patent plaster—2 coat float, Red T prepared.

### INTERIOR WOODWORK

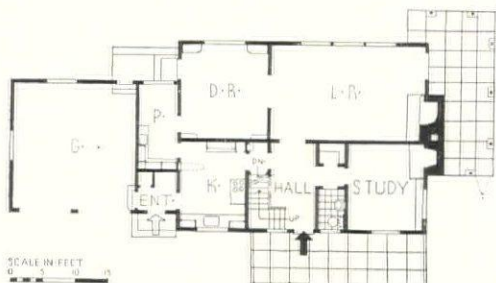
Floors—library, hall, kitchen, lavatory and pantry—linoleum by Congoleum Nairn Co. Balance of house clear plain white oak.  
Trim  
Stainwoods—birch.  
Painted surfaces—clear white pine.  
Shelving and cabinets—pine.



# W JERSEY, WILLIAM WILDE, ARCHITECT



SECOND FLOOR



FIRST FLOOR



BASEMENT

**PLAN:** In a tightly compact arrangement, there is ready access from the kitchen to the front door, and, through the pantry, to the dining room, while the study obtains desirable privacy from the rest of the house through a passage flanked on one side by a closet and by a lavatory on the other. Upstairs, the plan is equally well considered, and there is adequate provision for baths, cross ventilation and convenient circulation.

## PAINTING

4" Gimco rock wool insulation by General Insulating & Mfg. Co., Alexandria, Ind.  
side walls }  
c floor }  
otherstripping—none.

## INTERIOR PAINTING

—filler, sealer, stain and wax.  
—stain, shellac and wax.  
—2 coats of paint.  
—3 coats of flat paint.

## GLASS

le—BX.  
strical fixtures—Amon Lighting Studios.  
tches—Hart & Hegeman.

## LIGHTING

Direct and indirect.

## PLUMBING

Kitchen  
Sink—flat rim, Standard Sanitary Mfg. Co.  
Cabinet—Murphy Door Bed Co.  
Stove—gas  
Refrigerator—electric } provided by owner.  
Washing machine

## BATHROOM

Fixtures—Standard.  
Cabinets—Morton.  
Bath tubs—enamel } Standard Sanitary Mfg. Co.  
Toilets—vitreous china }  
Seats—Church Mfg. Co.  
Showers—Standard Sanitary Mfg. Co.  
Tile—Franklin Tile Co

## PIPES

Brass.

## HEATING

Oil.

## AIR CONDITIONING

Central—Gilbert and Barker Mfg. Co. unit with oil burner.

## CHIMNEY

Fireplaces  
Facings—tile in living room, copper in library.  
Hearths—tile.  
Damper—Donley.

## HARDWARE

Interior—dull pewter, Schlage Lock Co.  
Exterior—black, Schlage Lock Co.

## SCREENS

Copper in wood for porch, copper in steel frames for windows.





Spiritually descended from a type of house common throughout the Middle and New England States from the mid-eighteenth to the mid-nineteenth century—a type whose main mass was augmented by a lower wing, whether coeval or in the form of a later addition. This suburban house asserts the still vigorous claim of that type to consideration. It is of a sort that appeals to conservative people and assures them a known quantity of comfort. Its style, inside or out, is a composite drawn from several sources, but the combination has been creditably effected. The house is brick-veneered, painted white, and the roof is slate. Cost, including planting, decorating and architect's fee, \$15,000, at 39 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete blocks.  
Cellar floor—4" concrete.  
Waterproofing—Medusa waterproof cement by Medusa Portland Cement Co.

### FRAME CONSTRUCTION

Fir  
Bridging—spruce.

### EXTERIOR SURFACE

Brick veneer—North River common brick.

### ROOF

Slate on sheathing—No. 1 Bangor.  
Gutters } copper.  
Down spouts }

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—pine, 1 $\frac{3}{8}$ " thick to detail by Midland Mill & Lumber Co.

Doors and frames (exterior)—pine to detail.

Garage doors—overhead with Crawford hardware.

### PORCHES

Blue stone flagging on reinforced concrete slab.

### GLASS

Double strength quality A, Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Brick veneer—2 coats Bay State cement coating, Devoe and Raynolds.

Trim } 3 coats Dutch Boy, National  
Sash } Lead Co.

### LATH AND PLASTERING

Lathing  
Metal—3 lb. black.  
Plastering  
Patent plaster—U. S. Gypsum.

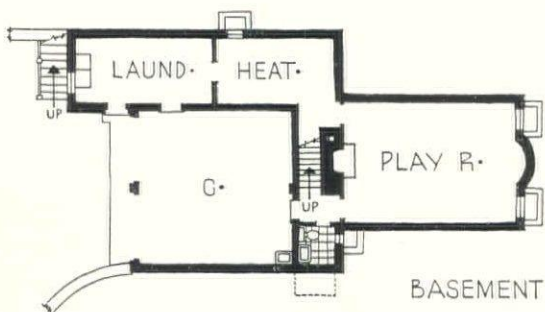
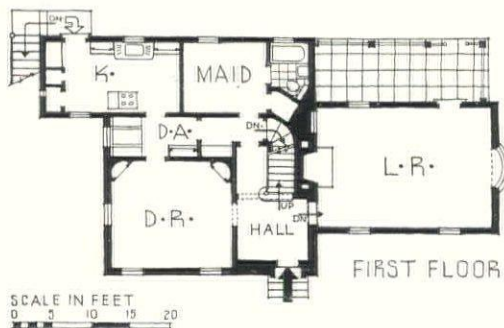
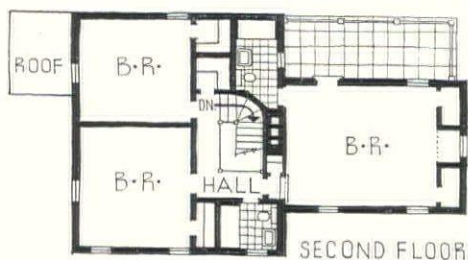
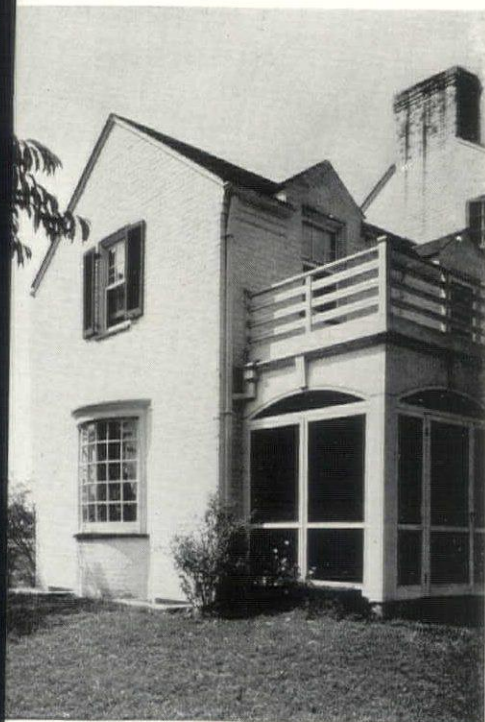
### INTERIOR WOODWORK

Floors—oak.  
Trim, painted surfaces } pine and  
Shelving and cabinets } wood.

### INSULATING

Outside walls } 4" rock wool.  
Attic floor }





PLAN: A sloping site permits the economy of putting the garage in the basement, along with a commodious playroom and the laundry. The dining alcove is probably a source of satisfaction in plan rather than in actuality. The upstairs arrangement is well thought-out and roomy.

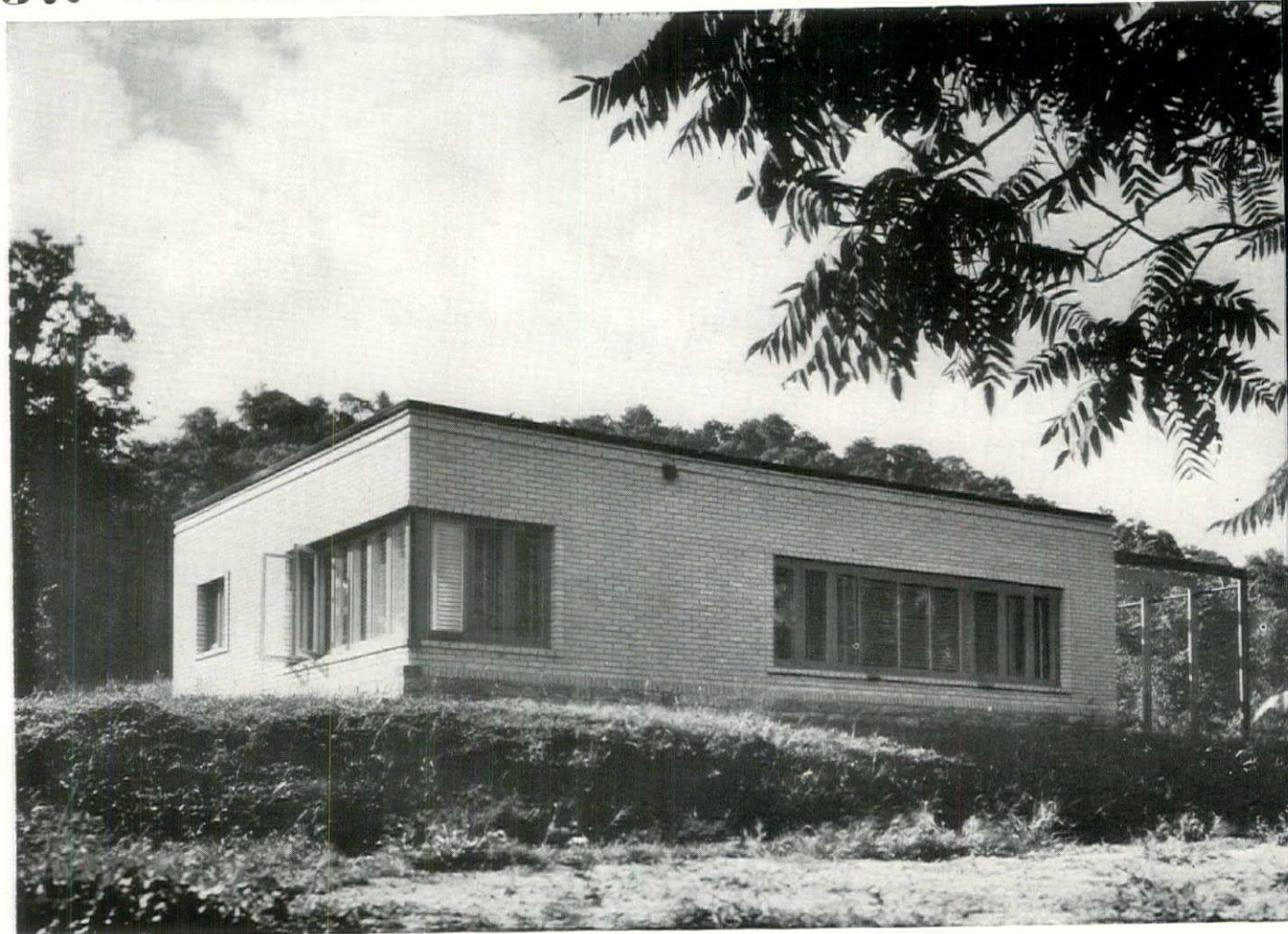
Weatherstripping—zinc, H. A. Kammerer, Mt. Vernon, New York.  
 EXTERIOR FINISHES  
 Floors—stain and wax.  
 Trim }  
 Doors } 4 coats oil paint.  
 Sash }  
 Wallpaper—Richard E. Thibaut, Inc.  
 PAINTING  
 Paint—BX  
 Electrical Fixtures—Whiffen Electric Co., White Plains, New York.  
 Switches—toggle, Arrow-Hart & Hegeman Electric Co., Hartford, Conn.  
 LIGHTING  
 Direct.

PLUMBING  
 Kitchen  
 Sink—enameled iron, Standard Sanitary Mfg. Co.  
 BATHROOM  
 Fixtures—Standard Sanitary Mfg. Co.  
 Seats—Church Mfg. Co.  
 Tile—American Encaustic Tile Co.  
 PIPES  
 Anaconda brass.  
 HEATING  
 Oil—Fairfield Burner.  
 Boilers—Fitzgibbons Boiler Co., Inc.

Radiators—convector type, American Radiator Co.  
 Piping—steel.  
 Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
 CHIMNEY  
 Fireplaces  
 Facings } Slate.  
 Hearths }  
 Mantels—wood to detail.  
 Damper—H. W. Covert Co.  
 HARDWARE  
 Interior and exterior—P. & F. Corbin.  
 SCREENS  
 H. A. Kammerer, Mt. Vernon, New York.



## 37. HOUSE FOR LULU BARNES, RICHLAND CENTE



The problem offered here was to design a house for a single woman, living alone without a servant. Consequently, everything had to be done to minimize labor and augment convenience. The house is built with a cellar, except under the kitchen; this space serves for food storage and the heating equipment. On a foundation of native sandstone, the walls are of brick veneer whitewashed, and the flat roof is of asphalt on a wood deck. On the road or entrance side, the window space is minimized, while generous ranges of windows in the living units command views of lake and forest. The windows themselves are double-glazed units. Inside, the walls are finished with Sheetrock and the ceiling is made of acoustic tile. There is considerable built-in equipment not only in the kitchen and bathroom, but elsewhere also. The ranges of windows overlooking lake and forest are highly desirable. Cost, including architect's fee, approximately \$4,000. Cubage: 12,000, at about 33½ cents.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—Native stone.

Cellar floor and main floor—4 in. concrete.

#### FRAME CONSTRUCTION

Fir.

Sills—Douglas fir.

Roof joists—hemlock.

#### EXTERIOR SURFACE

Brick veneer—Madison sand lime brick.

#### ROOF

4-ply built-up asphalt, Bird & Son.

Flashing—26 ga. Armco iron.

#### DOOR AND WINDOW FRAMES

Casement type—wood, Carr, Ryder &

Adams Co. (double glazed).

Doors and frames } wood, Carr, Ryder &  
(exterior) } Adams Co.  
Garage doors }

#### GLASS

Double strength quality A, Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Trim } priming—aluminum.

Sash } finish coats—lead and oil.

#### INTERIOR WALLS

No plaster—all sheet materials, walls Sheetrock; and ceilings, acoustic tile, U. S. Gypsum Co.

#### INTERIOR WOODWORK

Trim—white pine.

Floors—1 in. white oak.

Painted surfaces—white pine.

Shelving and cabinets—1 in. white and ¾ in. plywood doors.

Stock millwork—white pine.

#### INSULATING

Outside walls—aluminum foil on Sheetrock, Reynolds Metallation.

Roof rafters—insulating wool, U. S. Gypsum Co.

#### INTERIOR PAINTING

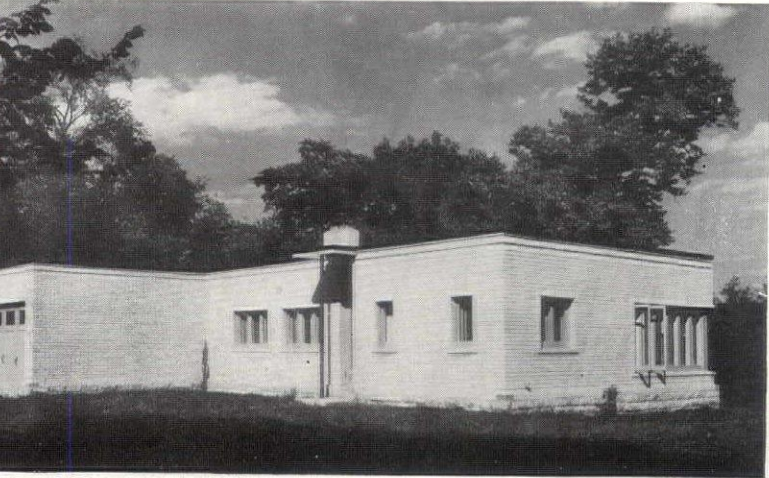
Floors—filler, varnish, wax.



# WISCONSIN, ALLEN JOHN STRANG, ARCHITECT

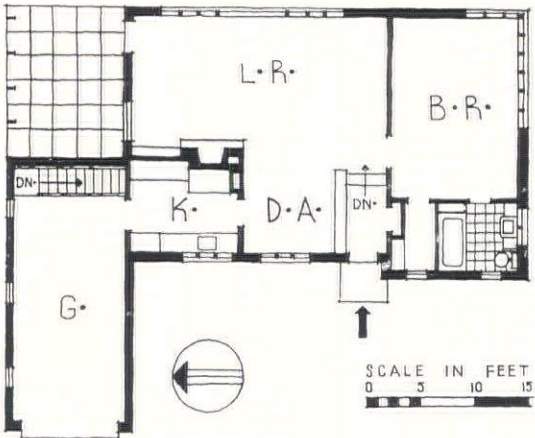


BACK CORNER



FRONT WITH ENTRANCE

NOTE: Although the living room, with its dining alcove, and the entrance occupy a large rectangle, of which one corner is cut out for the kitchen, the parts are so integrated that each retains its identity. The gain in spaciousness through the absence of divisions. By using one of the garage doors it becomes a service entrance to the kitchen.

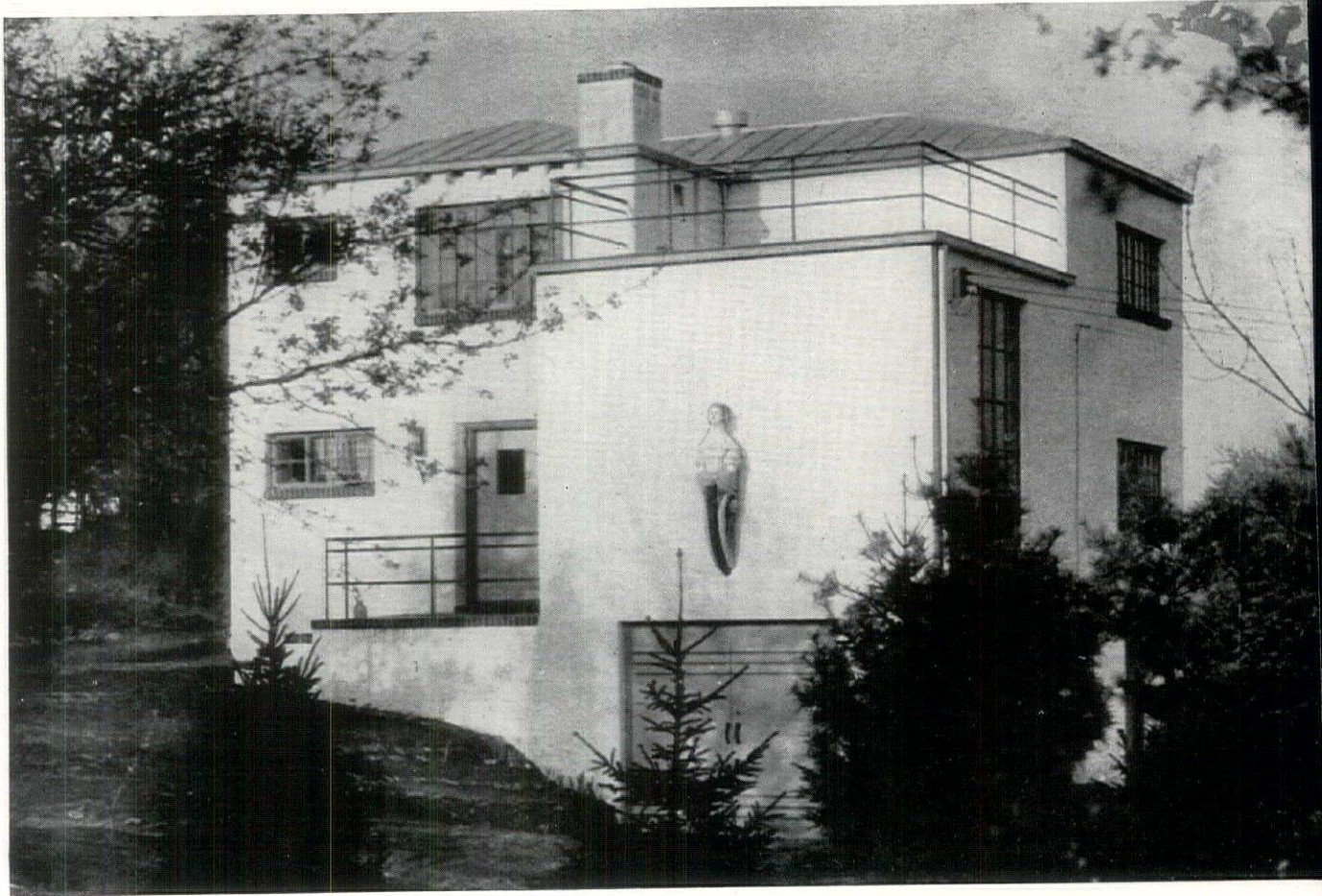


Trim }  
Doors } 1 prime coat, 2 finish coats oil  
Sash } paint.  
Walls }  
WIRING  
Cable—BX armored conduits, G. E.  
Electrical fixtures—Moe Brothers, Milwaukee.  
Switches—General Electric.  
LIGHTING  
Direct.  
FURNISHING  
Kitchen  
Sink—Kohler.

Stove—General Electric.  
Refrigerator—Frigidaire, Division of General Motors Corp.  
BATHROOM  
Fixtures—Kohler Co.  
Floor—linoleum.  
PIPES  
Wrought iron.  
HEATING  
Oil—Superfex No. 120 forced hot air heating, Perfection Stove Co.  
Hot water heater—Lonergan automatic kerosene.

CHIMNEY  
Fireplaces  
Facings }  
Hearths } brick.  
Mantels—white pine.  
Damper—Adams Co.  
HARDWARE  
interior }  
Exterior } locks, McKinney Co.  
SCREENS  
Wood frames.  
WINDOW DRESSING  
Venetian blinds—Mitchell Molding Co.





Many unusual requirements are satisfied in this servantless house for three people: a large, high ceiling studio with north light and individual entrance as far as possible from the rest of the house; a library opening into the studio, with the possibility of using the two together for social purposes; a living room, dining room, and a kitchen; and a garage to be included within the walls of the house. The design meets the views of the client who had definite ideas about modern continental architecture. With stone foundations, the house is built of concrete blocks painted white. The steel sash are painted blue-gray; and the raised seam in roof is coated with aluminum paint to reflect the heat. Over the studio is a canopy sun deck whose iron railings are painted blood red. The wooden doors are painted two shades of pale sage green. Indoors, the library walls are horizontally boarded with white pine, stained a light, warm gray. The joints and solid bridges have one coat of aluminum paint, rubbed, and the molding between ceiling and walls is Chinese red. Cost, exclusive of architect's fee and finished grading of garden, \$5,830. Cubage: 21,500, at about 27 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—retaining, stone masonry—other, Nailcrete block, Ellis Concrete Products Co., Bridgeport, Pa.  
Columns—Nailcrete block.  
Cellar floor—cement on cinder fill.  
Waterproofing—none.

### MASONRY CONSTRUCTION

Walls—Nailcrete block masonry, 12" below 1st floor, 8" above 1st floor, Ellis Concrete Products Co., Bridgeport, Pa.

### FRAME CONSTRUCTION

Floor joists—hemlock and yellow pine.  
Studding }  
Plate } hemlock.  
Rafters }  
Girders—I-beams in basement.  
Bridging—solid yellow pine.

### EXTERIOR SURFACE

Weatherboards at "Deck" (cypress "Drop" siding).  
Nailcrete wall surfaces painted 2 coats white "Bondex," Pittsburgh Plate Glass Co.

### ROOF

Raised seam 40 lb. Target & Arrow Taylor's roofing tin on  $\frac{7}{8}$ " sheathing. Painted 3 coats Pittsburgh Plate Glass Co. aluminum paint.

Gutters }  
Down spouts } Toncan.

### DOOR AND WINDOW FRAMES

Sash and frames—steel casement, David Lupton's Sons residential type.  
Doors and frames (exterior)—one Lupton's steel door, others cypress.  
Garage doors—braced batten cypress.

### GLASS

Quality A, flat-drawn, double thick.

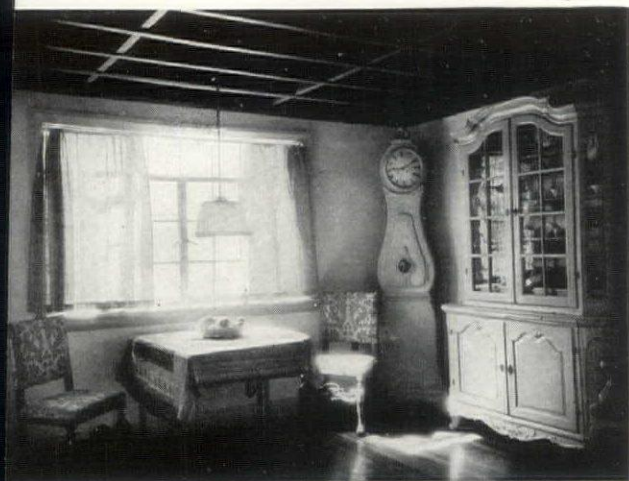
### EXTERIOR PAINT

For block masonry see "Exterior Surface."  
Siding—3 coats ready mixed exterior white.  
Trim }  
Sash } 4 coats ready mixed  
Gutters } oil paint.  
Railings }

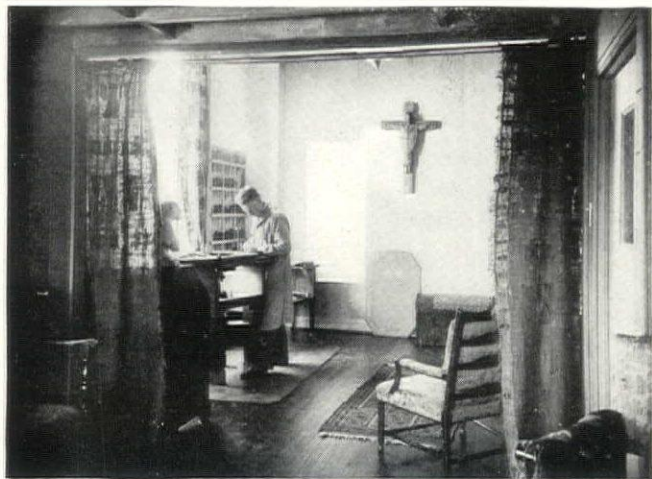
### LATH AND PLASTERING

Lathing—wood, spruce.  
Plastering  
Patent plaster—Red Top, U. S. Gypsum Co.  
Finishing coat—sand float finish, textured.

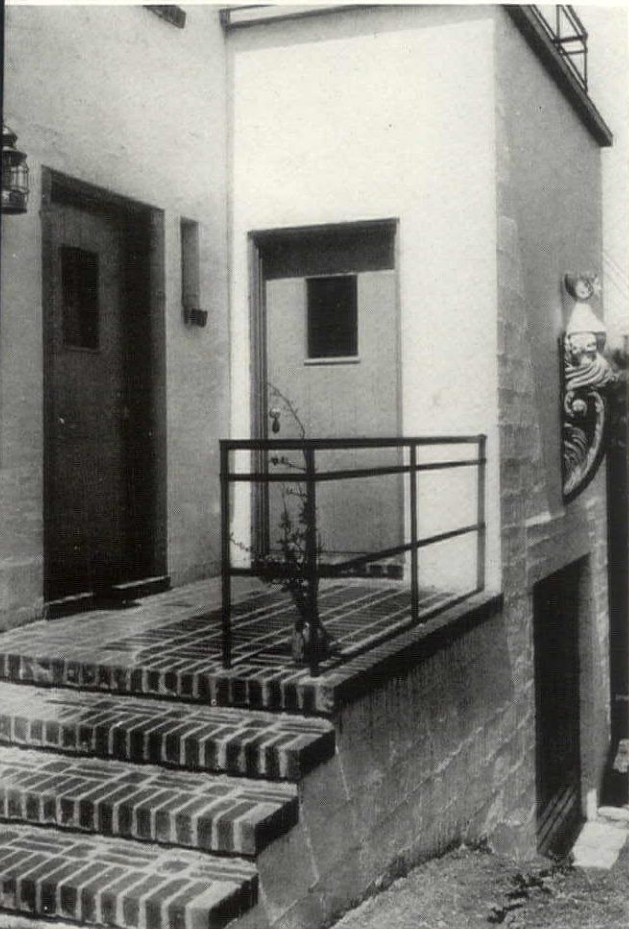




LIVING-DINING ROOM



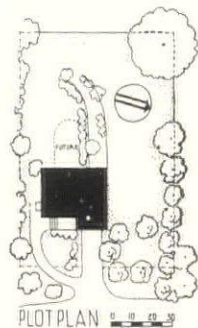
STUDIO



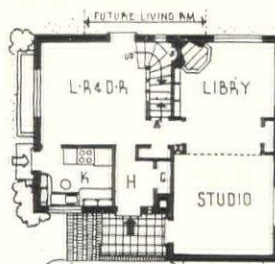
ENTRANCE DETAIL WITH GARAGE BELOW



SECOND FLOOR



PLOT PLAN



FIRST FLOOR



BASEMENT

PLAN: The basement, besides containing the laundry and garage, provides for a loggia at garden level. As no servant is contemplated, the ground floor plan logically provides a kitchen window commanding the approach to the front door. The easy rise of the steps deserves a special word of praise.

INTERIOR WOODWORK

Trim and floors—longleaf quarter-sawn yellow pine.  
Hardwood—white oak treads.  
Painted surfaces } poplar and  
Shelving and cabinets } white pine.

INSULATING

Outside walls—triple ply waterproof Cabot's Quilt.  
Attic floor—4" bulk Gimco rock wool and B type aluminum foil, Reynolds Metals Co., Inc.  
Weatherstripping—none.

INTERIOR FINISHES

Floors—stained, shellacked, waxed.  
Trim } oil paint.  
Doors }  
Sash }  
Walls—natural sand finish plaster.

WIRING

Cable—BX.

LIGHTING

Direct and indirect.

PLUMBING

Kitchen

Sink—Standard Sanitary Mfg. Co.  
Cabinet—wood as detailed.  
Refrigerator—Frigidaire, Division of General Motors Corp.

BATHROOM

Fixtures }  
Bath tubs } Standard Sanitary.  
Toilets } Mfg. Co.  
Seats }  
Showers }

Walls—Masonite "Presdwood" painted

and enameled, secured with chromium-plated washer screws.

PIPES

Copper tubing.

AIR CONDITIONING

Winter only.  
Central—Fox Furnace-American Radiator system, coal-fired.

CHIMNEY

Fireplaces  
Facings } brick.  
Hearths }  
Damper—H. W. Covert, improved.

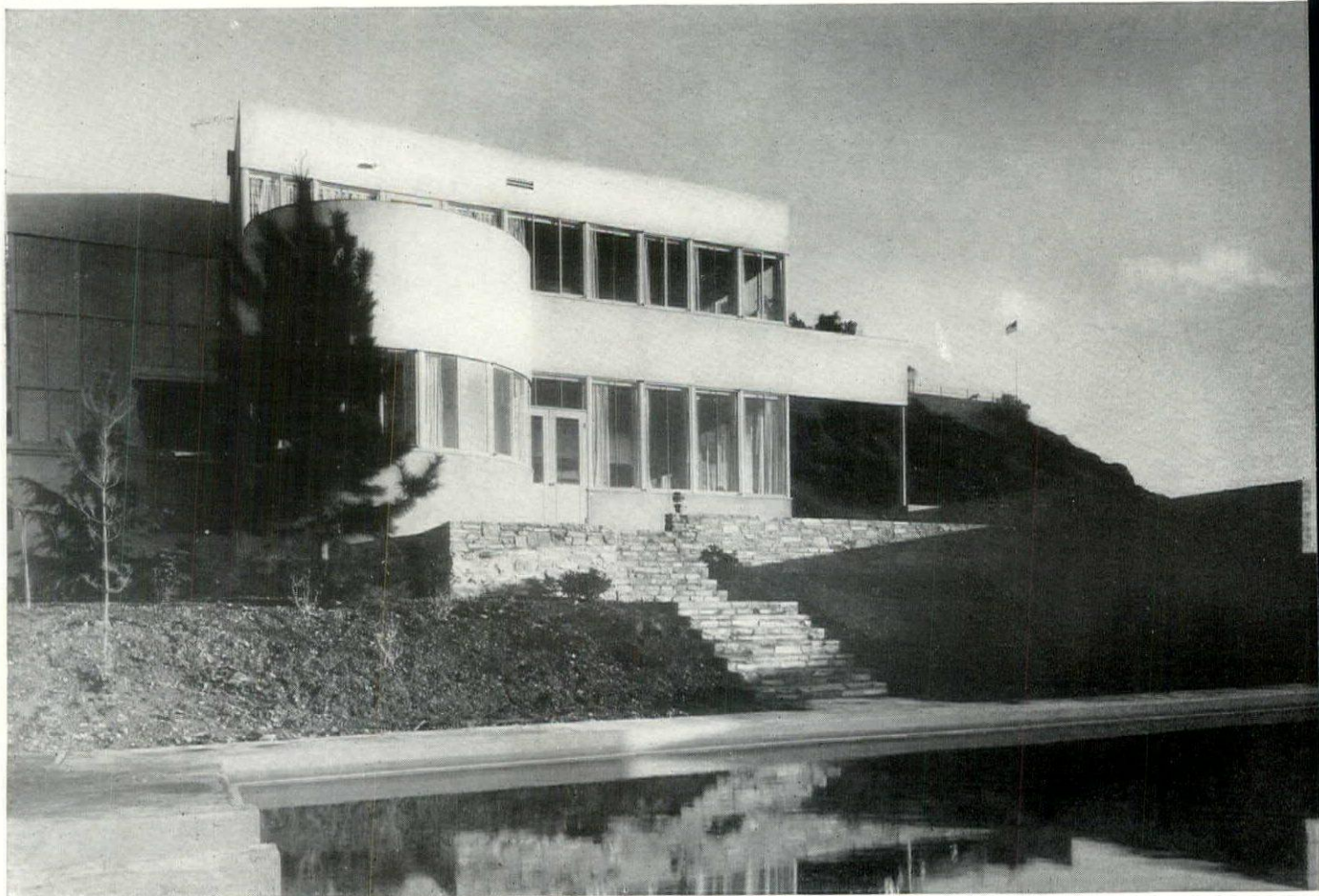
HARDWARE

Interior and exterior—P. & F. Corbin.

SCREENS

Sliding copper mesh in wood frames.





The architect says of Miss Sten, "that she is not an overgroomed town and parlor creature; she fits best into a frame of gardens . . . likes the out-of-doors. She and her husband are charming and hospitable people, but they do not wish to be mere organizers of social events and would hardly care for parties in the grand style." The first floor of this beach house, luxurious in its expanse of window and air of spaciousness, looks extremely comfortable, but was obviously not designed for large-scale entertainment. Similarly, the second floor, with almost all of its area given over to the suites of the owners, is not intended to accommodate many guests. The house is well located, with no interruption of the fine views of the sea and distant mountains. Cost was between \$4.50 and \$5 a square foot of net floor area.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—concrete mix 1:2½:3½,  
Riverside Portland Cement Co.

Cellar floor—cement floor, 3 in. thick, re-  
inforced No. 10 mesh.

Waterproofing—Packstone waterproofing,  
Pabco Membrane, damp courses under  
balcony tile.

### FRAME CONSTRUCTION

Standard unit type chassis, Douglas fir  
with surfaced timber supports, re-  
bated to receive steel sash, Pacific  
Manufacturing Co. Sills—Redwood.

### MASONRY CONSTRUCTION

Garden walls—concrete block, brush  
coated.

### EXTERIOR SURFACE

Stucco on Armco No. 1 sheet steel.

### ROOF

Gutters—24 Ga. Galv. iron, Armco No. 1.  
Flashing—Armco No. 1.

Down spouts—24 Ga. 3 in. diam. galv.  
iron, Armco No. 1.

Salt glazed tile drains—Gen. Ceramics Co.  
Composition sheathing paper—ten-year  
composition roof (gravel) Pabco,

Paraffine Co., Inc.

Copper—Revere Copper & Brass, Inc.

### DOOR AND WINDOW FRAMES

Sash and frames—Druwhit steel sash  
casement type with extension hinges.

Doors and frames (exterior)—sugar pine  
doors, glazed, and covered with tem-  
pered Presdwood panels.

Garage doors—sliding on overhead  
Richard Wilcox Track, 1 x 4 in.  
Douglas fir tongued and grooved with  
vertical joints on 1 x 6 in. Douglas fir  
braced frame.

### PORCHES

Reinforced concrete—3 in. slabs reen-  
forced with 6 x 6 No. 10 galv. wire  
mesh, V-jointed and integrally colored  
with "Lithochrome."

### GLASS

Libbey-Owens-Ford glass, first quality  
D. S. and ¼ in. plate.

### EXTERIOR PAINT

Sash

Finish coat  
Priming

Aluminum coating on  
exterior steel, sh  
steel, steel windows  
woodwork; Alumin  
Co. of America.

### LATH AND PLASTERING

Lathing

Expanded metal, Celotex lath, U.  
Gypsum Sheetrock.

Plastering

Keene's cement in bathrooms ab  
wainscoting, and Empire hardv  
plaster.

Exterior—Light gray cement plaste

Interior—White smooth putty fini  
Cemelith brush coat.

### INTERIOR WOODWORK

Trim and floors

Hardwood block floor, E. L. Bruce  
Battleship Linoleum by Armstr

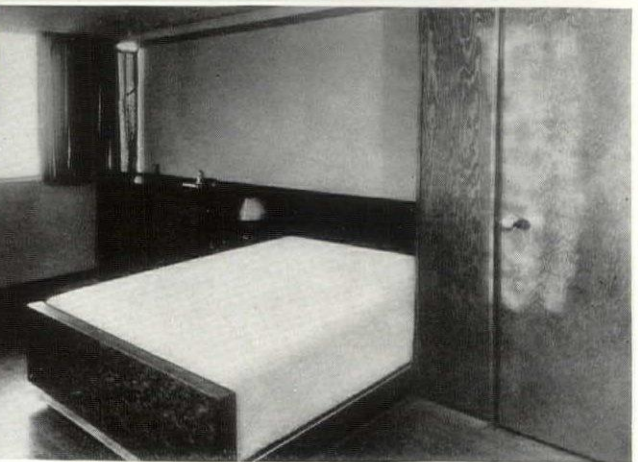
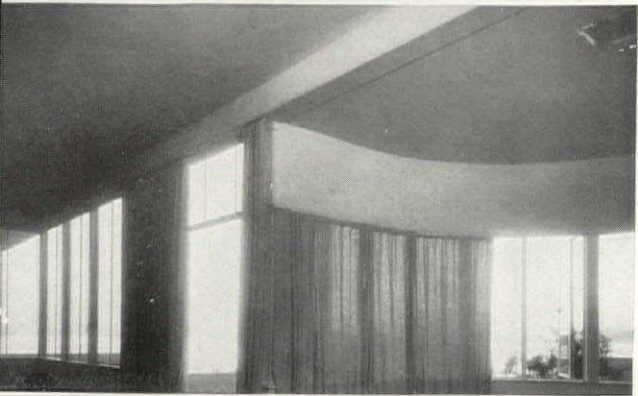
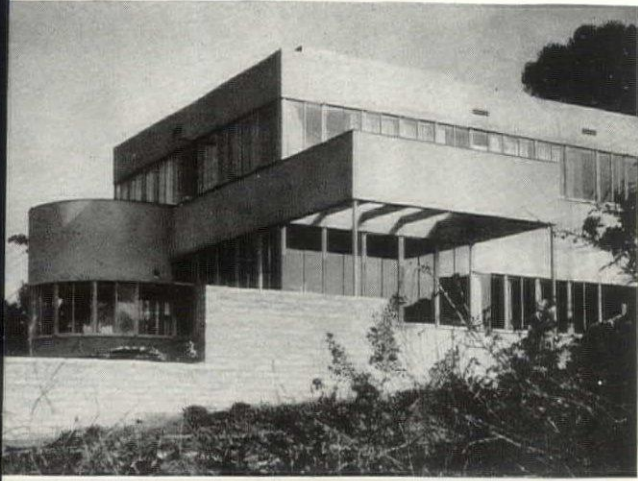
Cork Products Co.

Painted surfaces—Douglas fir.

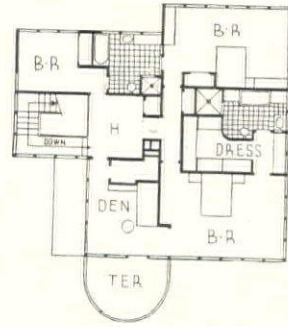
Shelving and cabinets—¾ in. Douglas  
No. 2 clear vertical grain.

Stock millwork—clear Douglas fir.

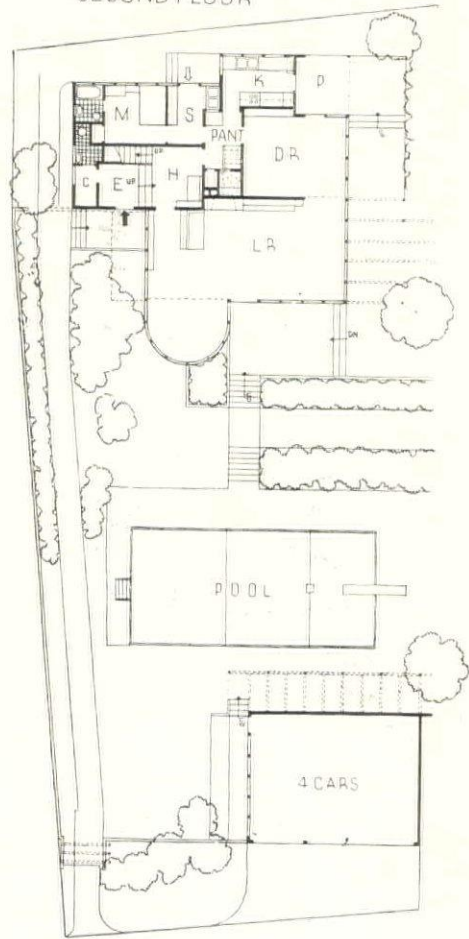




Luckhaus



SECOND FLOOR



FIRST FLOOR & GARDEN



TING  
 de walls—airspace between outside  
 nd inside plaster, plus felt.  
 rafters—Celotex insulation.  
 therstripping—24 ga. galv. sheet  
 etal, Armco No. 1.  
 OR FINISHES  
 s—paint, 4 coat finish, Nat. Lead Co.  
 4 coat enamel in kitchen and  
 bathrooms, oil stain, shellac  
 rubbed, waxed and polished in all  
 other rooms.  
 —3 coats aluminum paint.  
 s—4 coats enamel in kitchen and  
 bathrooms above wainscot, 3 coat oil  
 aint in living room, dining room, en-  
 trance hall.  
 paper—white smooth Sanitas in bed-  
 rooms, den and guestroom.  
 G  
 e—American Steel & Wire Co. Con-  
 uit, Steel & Tubes, Inc.  
 ches—G. E. Bakelite.  
 NG  
 ct—light control lenses in recessed  
 sheet metal boxes.

Indirect—light shelves, Diffusex and  
 prism glass.  
**PLUMBING**  
 Kitchen  
 Sink—Kohler, porcelain enamel.  
 Cabinet— $\frac{3}{4}$ " hard Masonite Presd-  
 wood on Douglas fir frame.  
 Stove—Southern California Gas Co.  
 Refrigerator—General Electric.  
**BATHROOM**  
 Fixtures—Kohler.  
 Cabinets—Sugar pine with tile top.  
 Bath tubs—recessed, Kohler.  
 Toilets—flush valve, Kohler.  
 Seats—Church Mfg. Co.  
 Showers—American encaustic glazed tile.  
 Glass shower doors.  
 Tile—encaustic tile, floor and wainscot.  
**PIPES**  
 Brass, copper and galvanized iron.  
 Wrought iron—mains, Central Tube Co.  
 Steel—Reading Iron Co.  
**HEATING**  
 Magic Way gas furnace.  
 Hot air registers, Hart & Cooley.

Piping—galvanized iron ducts, Johns-  
 Manville asbestos covered.  
 Hot water heater—Hoyt 60 gal. automatic.  
 Regulators—electric push buttons.  
**AIR CONDITIONING**  
 Unit furnaces with electrically boosted  
 air circulation, Magic Way.  
**CHIMNEY**  
 Fireplaces  
 Facings—split brick.  
 Hearths—cement.  
 Mantels—wood top on split brick front.  
 Damper—cast iron.  
**HARDWARE**  
 Interior—Schlage Locks, 2 in. knobs.  
 chromium plated hinges.  
 Exterior—Yale cylinder locks.  
**SCREENS**  
 Roller screens, Rollaway.  
**WINDOW DRESSING**  
 Shades—Mission cloth curtains on Kirsch  
 curtain track.  
**SPECIAL EQUIPMENT**  
 Swimming pool—filter plant by Paddock  
 Engineering Co.





Carl F. Walto Ph

The growing favor with which the Regency phase of Georgian domestic architecture has been received denotes its affinity with the modern trend. This house displays a generally good Regency exterior. The front elevation has distinct individuality and poise. The windows are excellently proportioned and the fenestration and frieze nicely balanced. The "swan neck" apron above the door might better have been omitted. Cost, including architect's fee, \$11,880. Cubage, 36,200 at 32½ cent per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—Haydite.  
Columns—brick.  
Cellar floor—cement colored. Coloring by  
Master Builders, Inc., Cleveland, Ohio.  
Waterproofing—Toch Bros., Inc.

### FRAME CONSTRUCTION

Sills } yellow pine.  
Floor joists }  
Studding } Douglas fir.  
Plate }  
Rafters }  
Bridging } yellow pine.  
Ties }

### EXTERIOR SURFACE

Brick veneer—Cleveland "Rustics" by  
Cleveland Builders Supply Co.

### ROOF

Wood shingles on shingle lath—Perma-  
Stain.

Gutters }  
Down spouts } Toncan metal.  
Flashing—zinc, New Jersey Zinc Co.  
Salt glazed tile drains.  
Composition sheathing paper—Sisalkraft.

### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—white pine, Babin Sash  
and Door Co., Cleveland, Ohio.  
Doors and frames (exterior)—white pine,  
Babin Sash and Door Co., Cleveland,  
Ohio.

### PORCHES

Reinforced concrete—colored finish by  
Master Builders Co., Cleveland.

### GLASS

Flat drawn sheet glass, Libbey  
Ford Glass Co.

### EXTERIOR PAINT

Trim } 3 coats lead and oil, S  
Sash } Williams Paint Co., C  
Ohio.

### LATH AND PLASTERING

Lathing—composition plaster base  
lath on all walls and ceiling  
floor. Temlock ceiling on second

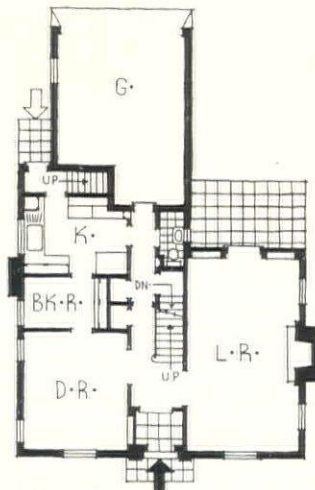
### INTERIOR WOODWORK

Trim—gumwood.  
Floors—select white oak.  
Painted surfaces—yellow pine, garage  
basement.  
Shelving and cabinets—yellow pine  
Stock millwork—Babin Sash and  
Co., Cleveland, Ohio.





SECOND FLOOR



SCALE IN FEET  
0 5 10 15 FIRST FLOOR

PLAN: The injection of a breakfast room into the plan cuts down the area of a dining room that might have been more satisfying without the partition. On the second floor the backstairs cut into a good rear bedroom. When a bath serves two rooms, it is better entered by a door from outside rather than from the rooms it serves.

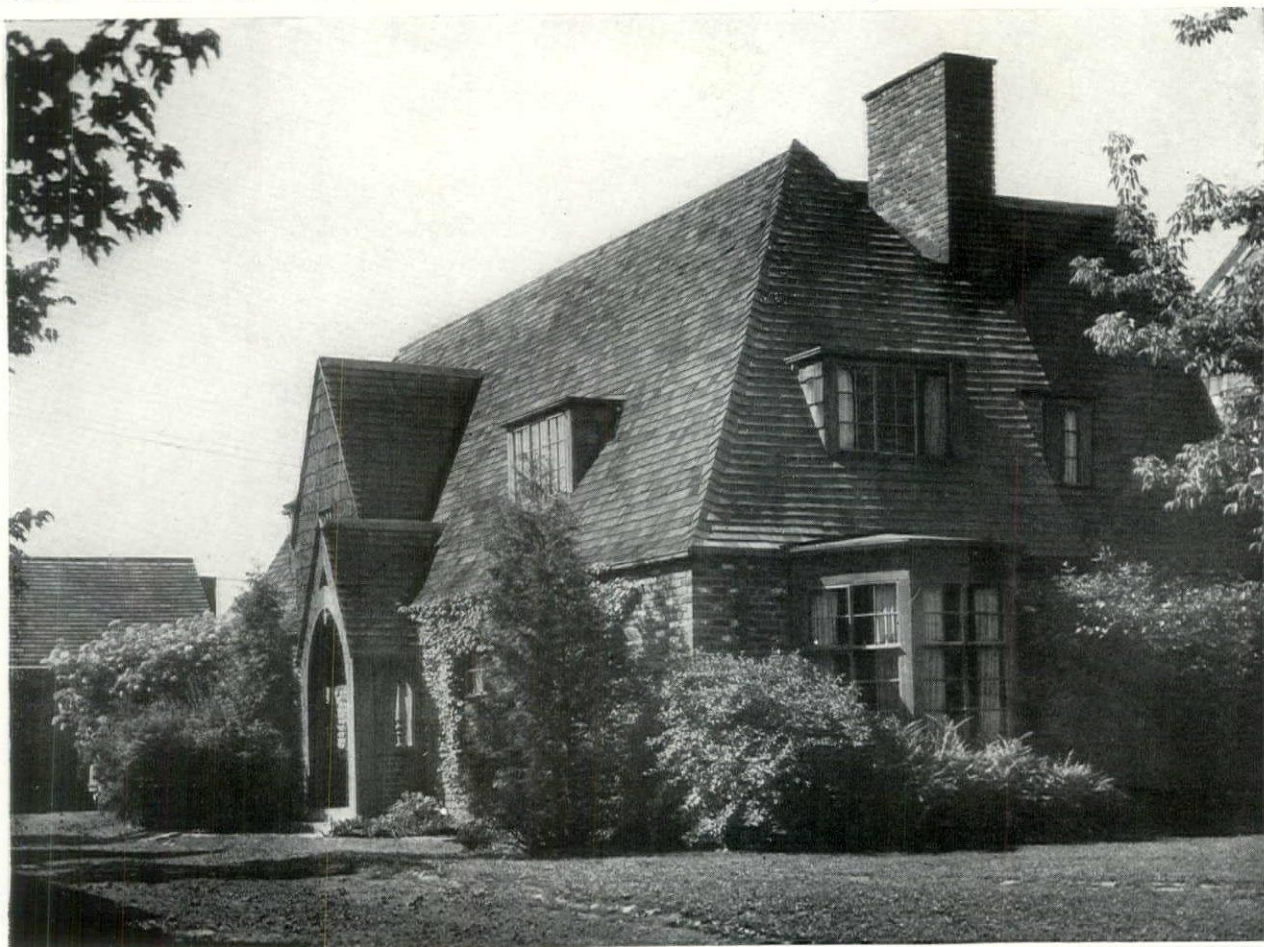
ATING  
c floor—1" Temlock entire second  
floor ceiling by Armstrong Cork and  
Insulation Co.  
atherstripping—Knight Interlocking,  
Barland Knight Co., Cleveland, Ohio.  
IOR FINISHES  
ors—Minwax.  
n }  
rs } enameled.  
h }  
lls—papered, Sanitas in bathrooms  
and kitchen.  
G  
le—knob and tube.  
ctrical fixtures—Enterprise Electric  
Co., Cleveland.  
TING  
ect.

PLUMBING  
Kitchen  
Sink—flat rim with rubber on coun-  
ters, Standard Sanitary Mfg. Co.  
Refrigerator—Frigidaire.  
BATHROOM  
Fixtures—chromium plated.  
Cabinets—Miami Cabinet Co.  
Bathtubs—Pembroke }  
Toilets—Compact } Standard Sanitary  
Seats—Ivorite } Mfg. Co.  
Showers—at tubs, self cleaning.  
Tile—glazed wainscot, Romany Tile Co.  
PIPES  
Wrought iron—"Toneau," Republic Steel  
Co.  
HEATING AND AIR CONDITIONING  
Gas-fired Fox Furnace, American Radia-  
tor Co. central system.

Thermostat—Minneapolis-Honeywell Reg-  
ulator Co.  
CHIMNEY  
Fireplaces  
Facings—living room, black marble.  
Recreation room, brick.  
Hearths—living room, black marble.  
Recreation room, stone.  
Mantels—gum in living room, pine in  
recreation room.  
Damper—Donley Bros.  
HARDWARE  
Interior and exterior—solid bronze,  
Schlage Lock Co.  
SCREENS  
Wood frames, copper mesh.  
WINDOW DRESSING  
Venetian blinds



## 41. HOUSE FOR HAROLD B. TYREE, GROSSE POINTE



Astleford Photos

This pleasant little house might have been transplanted from one of the southern counties of England. With walls of red brick and a shingled roof, the treatment unmistakably belongs to the "picturesque" school. While the dormers somewhat break the repose of the roof—and peacefulness in roof design this type is presumably valued—they are not so large as to be obtrusive. One danger with houses in this manner is that the occupants, in their fervor, often smother them with herbaceous planting. In this case, there seems a likelihood of luxuriant growths obscuring light that ought to enter the windows. The internal convenience of an otherwise adequate plan would be increased were the space now devoted to the kitchen and pantry together given wholly to the kitchen. Cost, \$13,500. Cubage, 25,000 at 54 cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls } common brick.  
Columns }  
Cellar floor—Wabash Portland cement.  
Waterproofing—R.I.W. by Toch Bros., Inc.

#### FRAME CONSTRUCTION

No. 1 and better Southern pine.

#### EXTERIOR SURFACE

Brick veneer—reclaimed common brick.  
Shingles—creosote stained.

#### ROOF

Wood shingles on shingle lath—creosote stained.  
Valleys }  
Gutters } copper.  
Flashing }  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—"Fenwrought," Detroit Steel Products Co.  
Doors and frames (exterior)—wood, Detroit Lumber Co.  
Garage doors—overhead, Detroit Steel Products Co.

#### PORCHES

Paving slabs.

#### GLASS

Double strength, quality A, Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Shingles—creosote stained.

#### Trim

Priming—stain.  
Finish coat—oil.

#### Sash

Priming } lead and oil.  
Finish coat }

#### LATH AND PLASTERING

Lathing  
Composition plaster base—U. S. Rocklath.

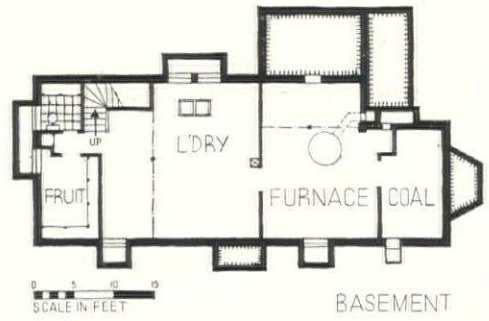
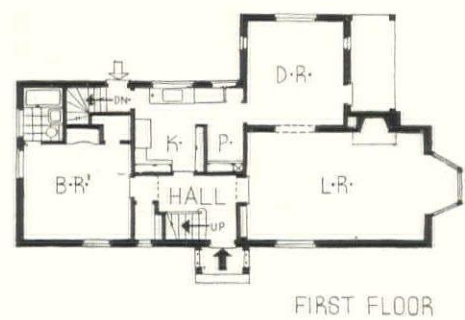
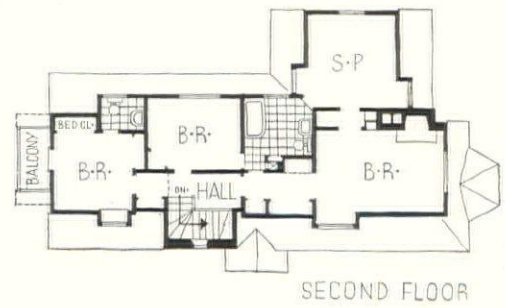
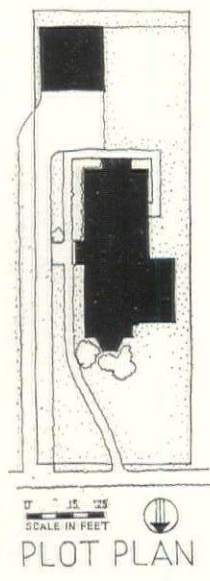
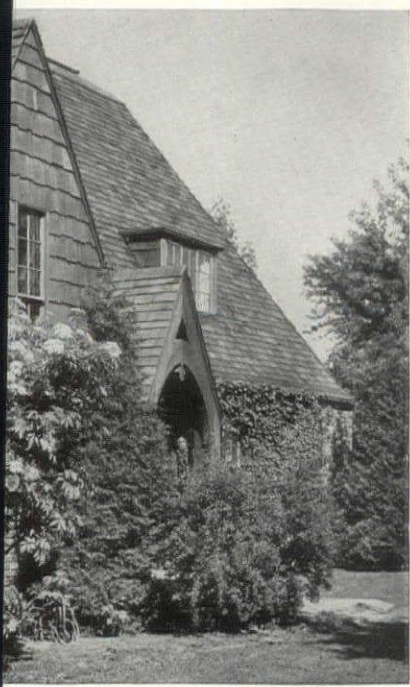
#### Plastering

Patent plaster—U. S. Gypsum wall.  
Finishing coat—sand and putty.

#### INTERIOR WOODWORK

Trim—gumwood.  
Floors—oak.





PLAN: There is no waste of space in this compact plan, and there can be no complaint on the score of circulation on the ground floor. Access from kitchen to both front door and dining room is particularly convenient. Upstairs, it is unfortunate that one must pass either through a bathroom or a bedroom to reach the sleeping porch over the dining room.



ENTRANCE HALL

Shelving and cabinets—Detroit Lumber Co.  
  
PAINTING  
Outside walls } Flaxlinum Insulating Co.,  
of rafters } New York.  
Weatherstripping — Chamberlin Metal  
Weatherstrip Co. for doors.  
  
PRIOR FINISHES  
Floors—stain, varnish and wax, Berry Bros.  
Walls } stain and paint.  
Floors }  
Sh—oil paint.  
Walls—painted and papered.

WIRING  
Cable—BX.  
Switches—Hart & Hegeman tumbler.  
  
LIGHTING  
Direct.  
  
PLUMBING  
Kitchen  
Sink—double drain enameled iron, Standard Sanitary Mfg. Co.  
Stove—gas, Detroit Stove Co.  
Refrigerator—Kelvinator.  
  
BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Bath tubs } Standard Sanitary, built-in.  
Toilets }  
Seats—Church Mfg. Co.  
Tile—American Encaustic Tile Co.

PIPES  
Wrought iron—A. M. Byers Co.  
  
HEATING  
Oil—Silent Automatic oil burner.  
Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
  
CHIMNEY  
Fireplaces  
Facings } brick.  
Hearths }  
  
HARDWARE  
Interior and exterior—bronze, Yale & Towne Mfg. Co.



## 42. HOUSE FOR GRAHAM LAING, PASADENA, CALIFORNIA



**PROBLEM:** A small hillside home for a professor and his wife, house and garden to be no larger than actually needed, and devised to reduce maintenance labor and cost to a minimum. Living room to accommodate seminars of 25 to 30 students in single large group around fireplace. Living room to serve also a dining room, with kitchen provision for serving large buffet suppers. Beside master bedroom, one small room to be used either as study or guest room. Living room and master bedroom to have view of mountains to north and all rooms to have southern exposure. Garage to have room for small woodworking shop, and floor areas to extend into the garden wherever practicable.

This house with large open wall areas is built to be more than usually resistant to earthquakes, and at a cost no greater than for ordinary wood-frame construction. With the assistance of Dr. Hugo Benioff of the Carnegie Seismological Laboratory, a shape was chosen which responds only to the shorter and less destructive seismic waves. All loads are carried on 4x4 in. wood columns spaced 3 ft. on centers and continuous from mudsill to roof. All beams are built-up and are also continuous. Continuous diagonal bracing occurs in both exterior and interior walls and also in roof and ceiling. To reduce maintenance to a minimum, the interior is finished with easily cleaned surfaces and the garden is planted with native shrubs. Exterior walls are of light buff plaster with deep coral-red trim. Inside, the pine is its natural color, with deep coral-red woodworking, eggplant-colored trim and metal trim. Cost: \$5,300.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—concrete  
Cellar floor—concrete  
Waterproofing—Asphaltum

#### FRAME CONSTRUCTION

Douglas Fir.  
Sills—redwood.

#### EXTERIOR SURFACE

Stucco—"La Habra" integrally colored light buff.

#### ROOF

Wood shingles on shingle lath—16" redwood, 5" to weather.  
Gutters  
Flashing } 24 gauge galvanized iron.  
Down spouts }  
Flat roofs—4-ply built-up asphalt and felt with gravel top.

#### DOOR AND WINDOW FRAMES

Sash—white pine casement

Doors (exterior)—white pine flush panel  
Garage doors—redwood

#### PORCHES

Reinforced concrete—with and without colored topping  
Brick floor—common red, Simons Brick Co.

#### GLASS

3/16" crystal by Libbey-Owens-Ford Co.

#### EXTERIOR PAINT

All paint Bauer's  
Shingles—filled with oil and finished with aluminum.  
Trim and sash—deep coral color.

#### LATH AND PLASTERING

Lathing  
Wire 16 gauge wire mesh, with 1½" openings for exterior.

Composition plaster base—"Grip" for interior.

#### Plastering.

Patent plaster—"La Habra" exterior and interior colored stucco.

#### INTERIOR WOODWORK

Wall panels—3'-0" x 6'-9" 3 ply white pine natural color.  
Painted surfaces—white pine  
Shelving and cabinets—white pine Douglas fir.  
Stock millwork—white pine.

#### INSULATING

Aluminum surface on roof.

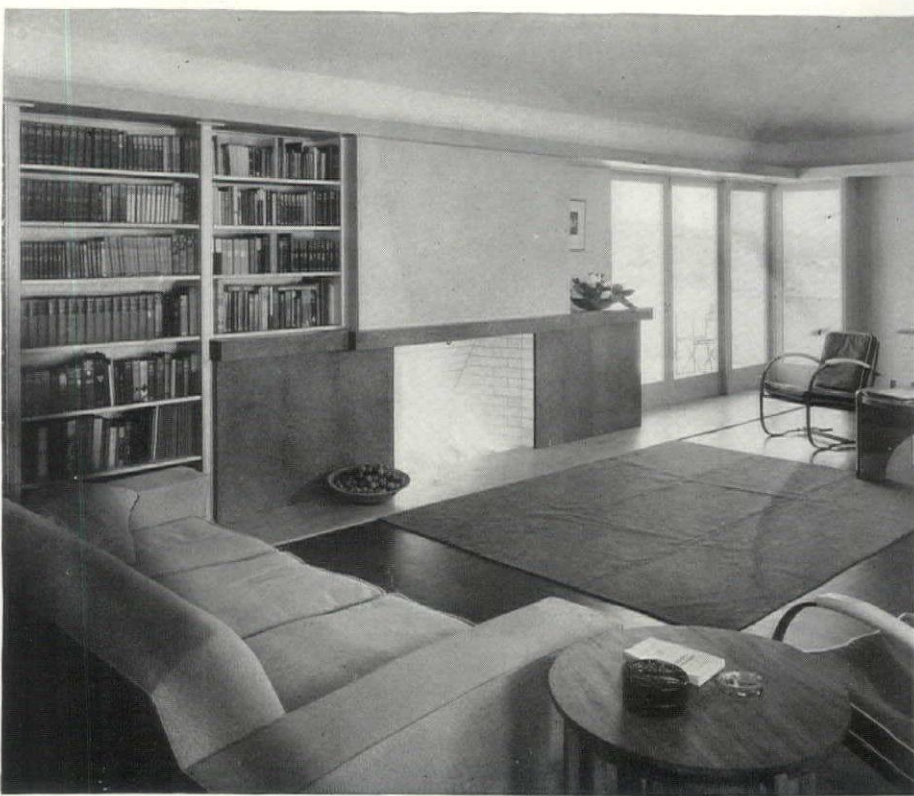
#### INTERIOR FINISHES

All paint Bauer's.  
Floors—"B" gauge Armstrong linoleum throughout, eggplant color.  
Panelling—shellacked and waxed.  
Wallpaper—"Sanitas," bath and kitchen.

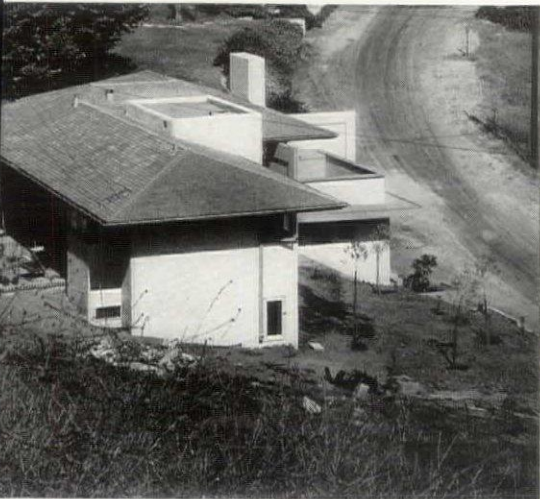




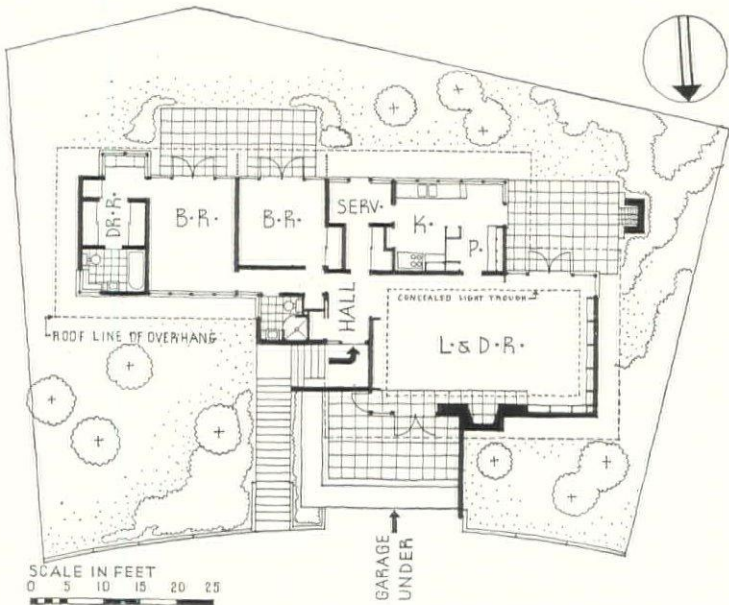
RY HALL AND PASSAGE



LIVING ROOM



hillside site and the insistent horizontals of the house it seem to cling to the soil. With floor surfaces con- out of doors wherever possible, and the recurrent flat of the structure, the illusion of clinging and belonging soil is heightened.



NG  
le—knob and tube.  
TING  
ect—recessed lights with flush panel  
faces.  
irect—concealed in living room cor-  
nice.  
BING  
chen  
Sink—set of 2 acid resisting flat rim  
"Standard."  
Refrigerator—Kelvinator.  
ROOM  
ictures—"Hall-Mack" by Hallenscheid  
& McDonald.  
abinets—"Albatross" by Albatross Steel  
Furniture Co.  
th tubs—5'—6" "Pembroke" recess by  
Standard Sanitary Co.

Toilets—F2140 "Compact" china—Stand-  
ard.  
Seats—Church No. 600 Regal.  
Showers—K-248 all metal "Chromard"—  
Standard.  
Lavatories—F-115-F "Companion"—  
Standard.  
Linoleum—"B" gauge Armstrong on  
floors.  
PIPES  
Wrought iron.  
HEATING  
Gas and electric.  
Radiators—No. 80 and No. 88 Pacific Gas  
Radiator Co., LR161 Thermador Elec-  
trical Mfg. Co.  
Hot water heater—No. 302-S Dictator 30  
gal. automatic storage by American  
Radiator Co.

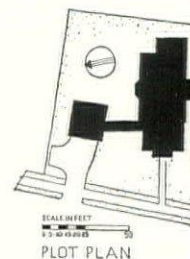
CHIMNEY—Reenforced concrete.  
Fireplaces.  
Facings—monastery brown Zenitherm,  
American Cyanamid & Chem. Corp.  
Hearths—colored cement.  
Damper—"Superior Fireplace Form  
Damper" by Superior Fireplace Co.  
HARDWARE  
Interior—Schlage locks and latches, Stan-  
ley butts, dull nickel finish. "Whitco"  
casement hangers.  
Exterior—Richards-Wilcox garage door  
hardware.  
SCREENS  
No. 16 galvanized wire cloth.  
SPECIAL EQUIPMENT  
Aluminum trim for bullnosing and pic-  
ture mold by Superior Metal Trim Co.  
"Micarta" counter top in kitchen.





PROFESSIONAL VISITOR'S ENTRANCE

This house, like House No. 14, shows a skillful and sympathetic use of the Pennsylvania farmhouse. Again the stone surfaces have been kept from being exaggeratedly jagged and the combining of stone and wood is not disturbing. The corner lot makes possible the complete separation of the professional entrance from the social entrance (the difference between these two elevations is reminiscent of the front and rear elevations of House No. 49). The loggia screens living quarters from patients. In answer to the problem, the kitchen is in good relation to the two main and to the service entrances. Because of plumbing problems, the kitchen is quite properly and conveniently placed next to the laboratory. Cost: approximately 40 cents per square foot.



## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—local stone.  
Columns—steel.  
Cellar floor—cement.

### FRAME CONSTRUCTION

Hemlock  
Plate—longleaf yellow pine.

### MASONRY CONSTRUCTION

Walls—local stone.  
Garage—cement blocks.

### EXTERIOR SURFACE

Clapboards—white pine.  
Stucco—on concrete blocks.

### ROOF

Composition shingles on sheathing—  
Keasby-Mattison Old Colony asbestos  
shingles.  
Valleys—open.

Gutters—pole gutters, copper lined.

Flashing }  
Down spouts } copper.

### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung and casement—cypress  
frames, white pine sash, longleaf  
yellow pine sills.  
Doors and frames (exterior)—white pine.  
Garage doors—frames cypress, doors  
white pine.

### PORCHES

Flagstone floors except 2nd floor porch  
which is T. & G. N. C. pine.

### GLASS

"Lustra," Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Siding }  
Trim } Priming—white lead.  
Sash } Finish coat—white lead and

### LATH AND PLASTERING

Lathing  
Metal—in corners.  
Wood—spruce.  
Plastering  
Patent plaster.

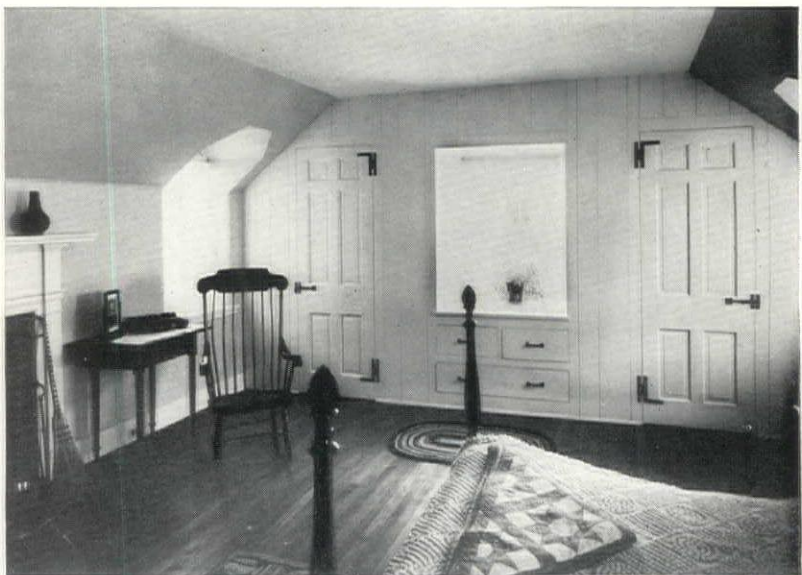
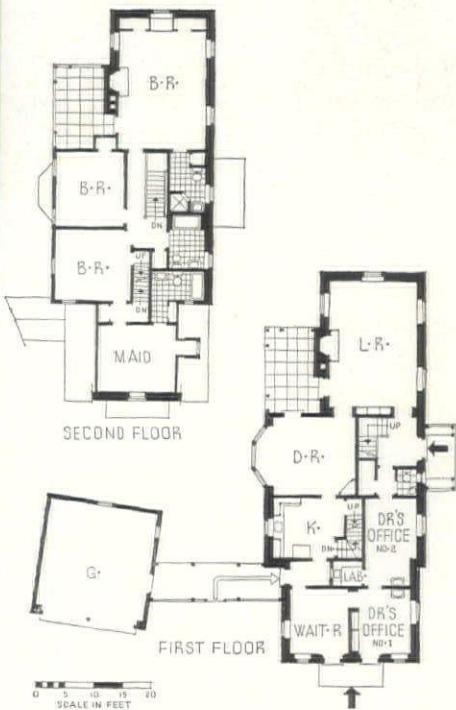
### INTERIOR WOODWORK

Floors—random width oak floors down  
1st floor, 2 1/4 face T. & G. white  
2nd floor.  
Painted surfaces—white pine, all interior  
work.  
Shelving and cabinets—white pine.  
Stock millwork—interior doors only.





SOCIAL VISITOR'S ENTRANCE



DETAIL, MAIN BEDROOM

- INSULATING**  
Outside walls } Reynold's Metallation over  
Attic floor } sheathing of frame walls.  
Weatherstripping—all openings, spring  
bronze type.

**INTERIOR FINISH**  
Floors—stained and waxed.  
Trim } painted.  
Doors }  
Sash }  
Walls—office, kitchen and baths painted.  
Wallpaper—in all other portions.

**WIRING**  
Switches—toggle, plates to match color  
of walls.

**LIGHTING**  
Direct
- PLUMBING**  
**Kitchen**  
Sink—Monel metal, Int. Nickel Co.  
Cabinet—stock wood dressers.  
Stove—gas range.  
Refrigerator—General Electric Co.

**BATHROOM**  
Fixtures—Standard Sanitary Mfg. Co.  
Bath tubs—white enamel recessed.  
Seats—white.  
Tile—floor and shower stall bath No. 1,  
white with colored trim. Floor and  
side walls bath No. 2, colored tile.

**PIPES**  
Copper tubing.

**HEATING**  
Oil—Gar Wood system.  
Hot water heater—electric "Penco," Phil-  
adelphia Electric Mfg. Co.
- Thermostat—Minneapolis-Honeywell with  
oil burner.

**CHIMNEY**  
Fireplaces  
Facings } Sayre & Fisher brick.  
Hearths }  
Mantels—wood.  
Damper—Covert.

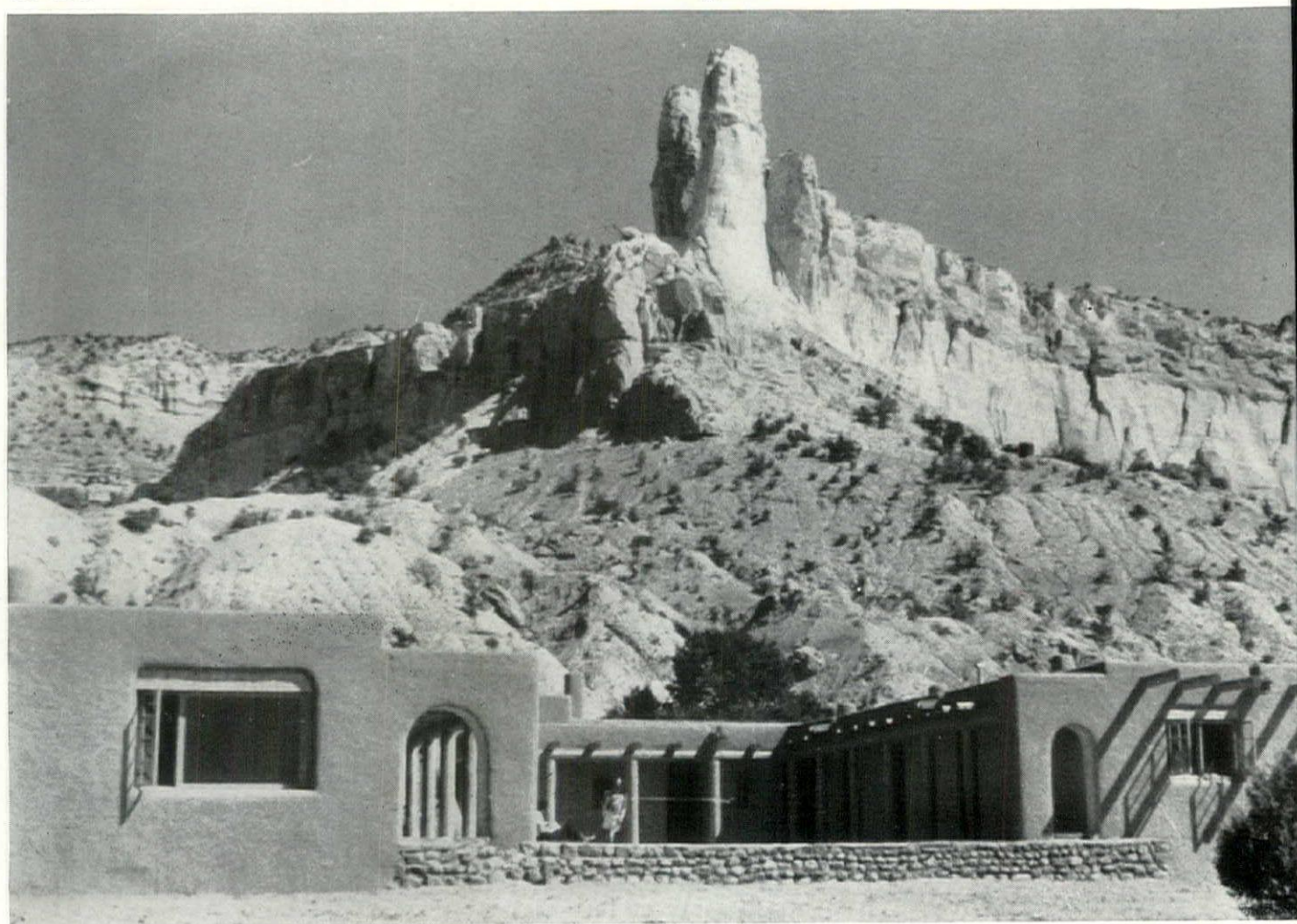
**HARDWARE**  
Interior } Schlage (a few reproductions of  
Exterior } early hardware made to  
order).

**SCREENS**  
Wood and copper wire by carpenter.

**WINDOW DRESSING**  
Shades—2nd floor.  
Venetian blinds—1st floor.  
Blinds—exterior blinds and shutters.



## 44. ADOBE HOUSE NEAR ABIQUIU, NEW MEXICO



From the designs of the architects, this ranch house was built in the native manner by a local builder attached to the ranch staff, employing local and Indian workmen. The design and material alike cannot fail to be of special interest to those unacquainted with the Southwest. Upon a foundation of rough stone grouted with cement, the walls are built of adobe blocks, made of mud from a nearby pit; the blocks were afterward coated, inside and out, with an adobe plaster and then washed with white or pale colors prepared from local earth (*tierra blanca*). The exterior has a rose hue so like the color of the foothills as to be almost indistinguishable from them at a distance. Pine logs, from the higher land a few miles away, supply the posts of the portico around the patio, and also the rafters for the roof; these are ceiled above with planks of Oregon pine. The whole structure is thoroughly robust—the walls of the living room are 30 in. thick. Fireplaces provide all necessary heating. Notwithstanding the extreme simplicity of the structure, every advantage is taken of modern mechanical facilities. A generator with batteries is installed in the garage and pumps water from an artesian well, works a refrigerator and operates an electric light system. A septic tank meets all sanitary requirements. Cost—excluding generating plant, pump, septic tank and well: \$15,000.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—stone and cement.

#### WALL CONSTRUCTION

Adobe brick

#### FRAME CONSTRUCTION

Floor joists }  
Studding } No. 1 Oregon pine.  
Bridging }

#### EXTERIOR SURFACE

Adobe finish.

#### ROOF

Built up (felt and asphalt), Johns-Manville.

Gutters—galvanized iron.

Flashing—5-ply felt and asphalt.

#### DOOR AND WINDOW FRAMES

Sash and frames—wood casement, special made.

Doors and frames }  
(exterior) } wood, special made.  
Garage doors }

#### PORCHES

Floor—flagstone.

#### EXTERIOR PAINT

Trim }  
Sash } 3 coats lead and oil

#### LATH AND PLASTERING

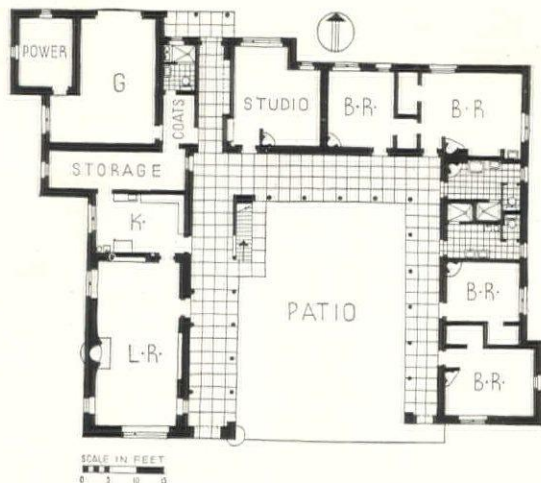
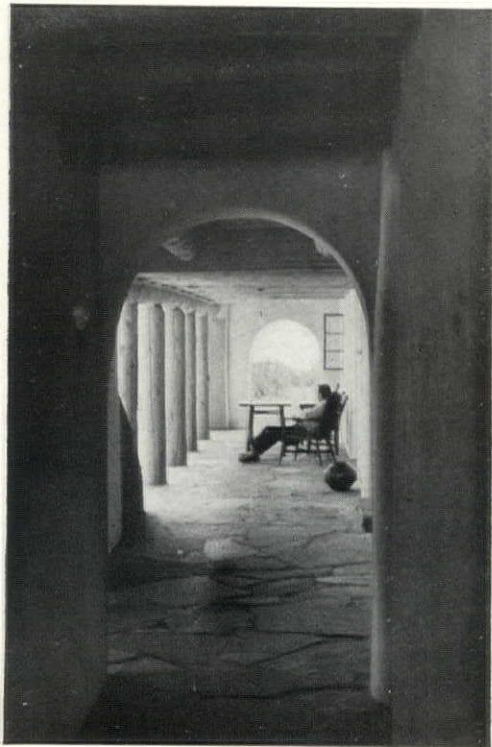
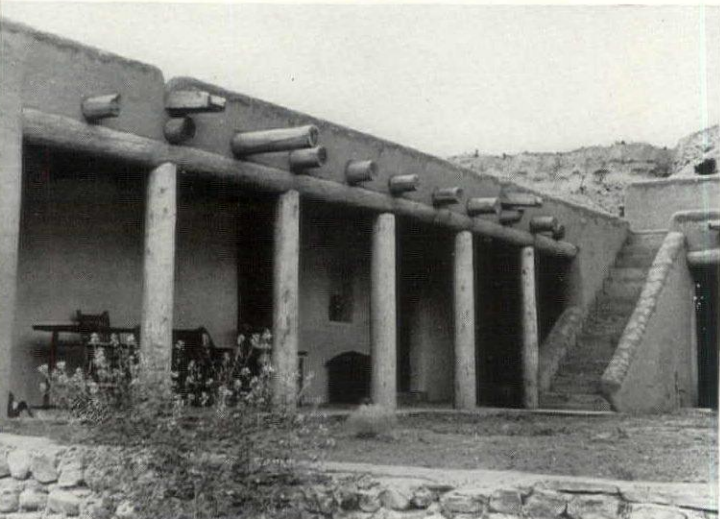
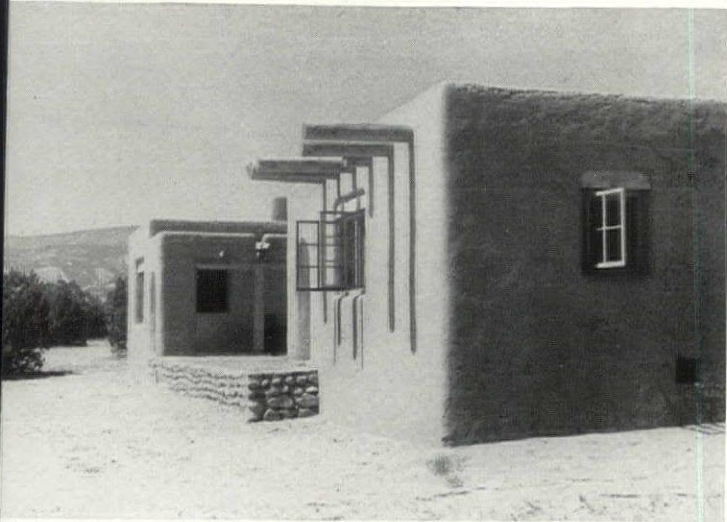
Lathing—metal.  
Plastering—adobe.

#### INTERIOR WOODWORK

Floors—hardwood.  
Trim, shelving and cabinets—pine.



# ENNETT, PARSONS AND FROST, ARCHITECTS



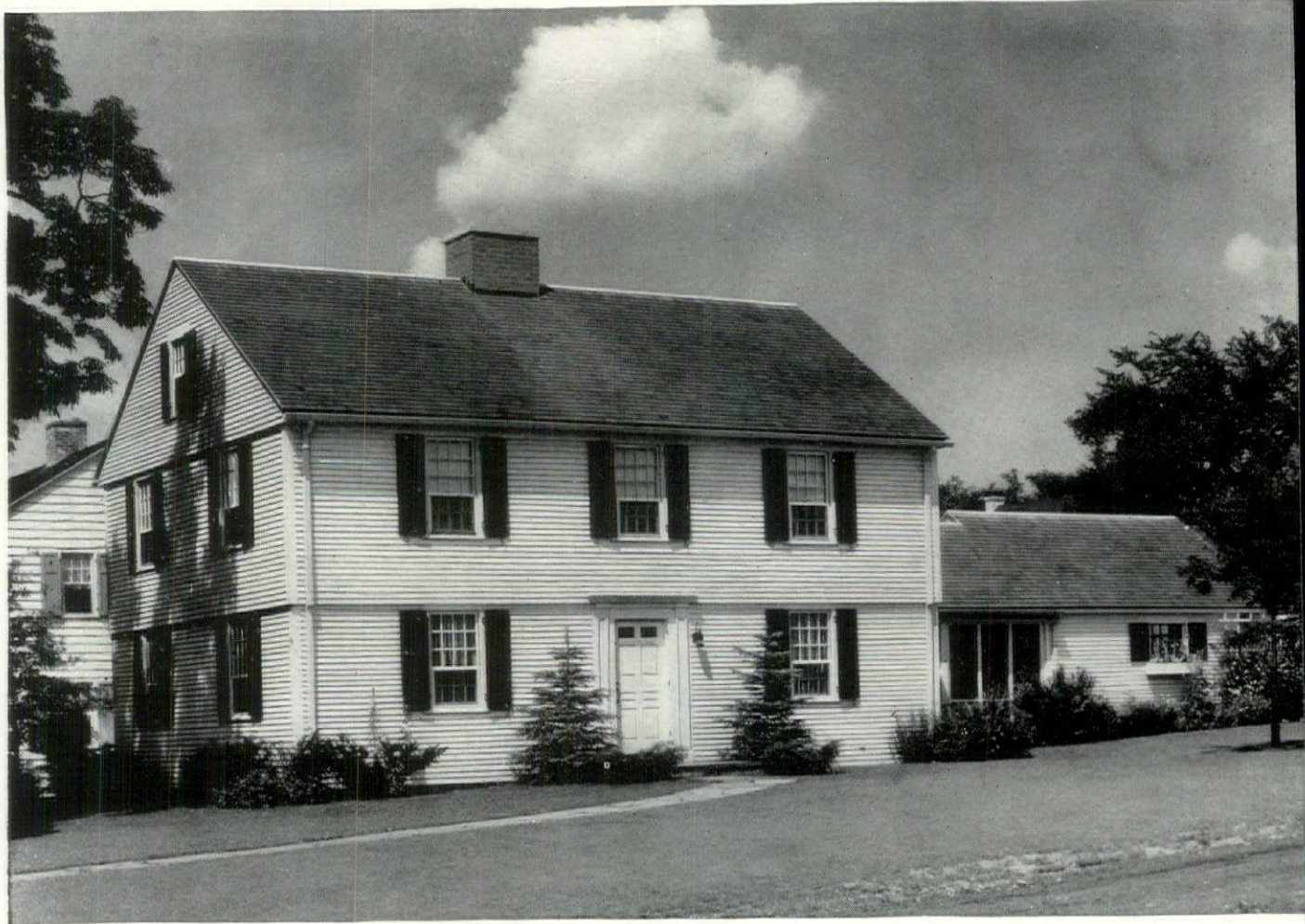
PLAN: Since the portico of the patio serves as a general means of communication, and oftentimes as an outdoor living room as well, the plan is necessarily organized loosely, with rooms of associated use in proximity as, for instance, the kitchen and the living room, which latter is likewise the dining room. The bathrooms are planned for showers.

INSULATING  
None.  
INTERIOR FINISHES  
Floors }  
Trim } natural finish.  
Doors }  
Sash }  
Walls—King wall finish.  
RING  
Cable—steel tube.  
Electrical fixtures—special.  
Switches—plain black.

PLUMBING  
Kitchen  
Sink  
Cabinet  
Stove  
Refrigerator  
BATHROOM  
Fixtures—complete.  
PIPES  
Galvanized iron.

HEATING  
Fireplaces.  
Hot water heater—Pierce, one unit in each bathroom.  
CHIMNEY  
Fireplaces  
Facings—brick.  
Hearths—stone.  
Mantels—adobe.  
HARDWARE  
Interior and exterior—plain black.





This white-boarded house is something more than merely a well-executed reproduction of the familiar old Connecticut "salt-box" dwelling. As a matter of fact, its exterior is an exact replica of an old house in South Windsor. Inside, however, it displays the revolutionary change wrought by the introduction of central heating, bathrooms and electric cooking. The living room and dining room walls have dados formed of three widths of horizontal matched boarding, beaded at the joints, with a cap at window sill height. The inside of the open corner cupboard in the dining room is painted a robin's-egg blue; the remainder of the trim in the house is enameled a light putty color. There is full insulation with rock wool and the house is heated by an air conditioning system. At the rear of the upstairs hall there is enough space for another bath to be eventually stalled. Cost, including architect's fee, \$10,600. Cubage, 33,540 at 31½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete, 1-3-5 mixture.  
Columns—4 in. lally.  
Cellar floor—concrete, 1-2-4 mixture.  
Waterproofing—1 coat of hot asphalt on outside of wall.

### FRAME CONSTRUCTION

Fir.  
Girders—8" steel I-beams.

### EXTERIOR SURFACE

Clapboards—6 in. red cedar, 4 in. to the weather.

### ROOF

Wood shingles on shingle lath—18 in. perfection red cedar.  
Valleys }  
Gutters } 16 oz. copper.  
Flashing }  
Down spouts—2 x 3 in., 16 oz. copper.

### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—stock white pine with Unique sash balance, Unique Sash Balance Co.  
Steel sash—in basement, Detroit Steel Products Co.  
Doors and frames (exterior)—white pine, Curtis Companies, Inc.  
Garage doors—white pine by Curtis.

### PORCHES

Flagstone laid loose on fill.

### GLASS

"A" quality Pennvernon, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Siding } Dutch Boy white lead, National  
Trim } Lead Co.  
Sash }

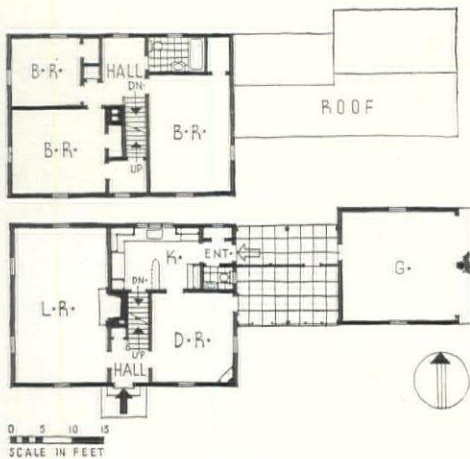
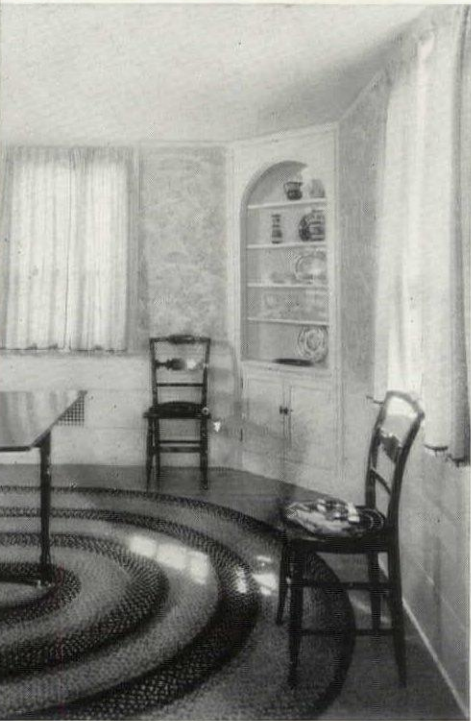
### LATH AND PLASTERING

Lathing  
Metal for ceilings, Z-Rib, U. S. Gypsum Co.  
Wood on all walls.  
Plastering  
Patent plaster—wood fiber plaster, U. S. Gypsum Co.  
Finishing coat—red top trowel finish, U. S. Gypsum Co.

### INTERIOR WOODWORK

Floors—clear white oak.  
Painted surfaces—white pine.  
Shelving and cabinets—white pine.  
Stock millwork—mantel, stairs and corner cupboard, Curtis Companies, Inc.





PLAN: The plan is good. It is valuable for comparison with the old central-chimney type of plan, in use before the advent of modern equipment and mechanical facilities to lighten household labor.

**LATING**  
 Outside walls } 4 in. Capitol Rockwool,  
 etic floor } The Standard Lime &  
                   } Stone Co.  
 Featherstripping—Chamberlin.  
**ERIOR FINISHES**  
 Floors—1 coat stain filler, 2 coats John-  
 son's floor wax.  
 Trim } 1 coat white lead and oil, 2 coats  
 doors } Vitralite enamel undercoat-  
 ash } ing, 1 coat Vitralite enamel.  
 Walls—bath, lavatory and kitchen sized  
 and painted 2 coats.  
 Wallpaper—Birge wallpaper in all other  
 rooms.  
**ING**  
 able—BX.  
 Electrical fixtures—hand wrought, Tull  
 Bros., Hartford, Conn.  
 switches—Bakelite plates.

**LIGHTING**  
 Direct.  
**PLUMBING**  
 Kitchen.  
 Sink—enameled iron, Standard Sani-  
 tary Mfg. Co.  
 Stove—electric, by owner.  
 Refrigerator—General Electric.  
**BATHROOM**  
 Cabinets—metal, venetian mirror.  
 Bath tubs—recessed type, enameled iron,  
 built-in, Standard.  
 Toilets—syphon action, Standard.  
 Seats—Church Mfg. Co.  
 Showers—over tub, Standard.  
 Shower curtains—white duck, Standard.  
 Wainscot } tile.  
 Floor }

**PIPES**  
 Brass for hot and cold water.  
**HEATING AND AIR CONDITIONING**  
 Gar Wood air conditioning and heating  
 unit, oil fired, thermostat and regula-  
 tors.  
**CHIMNEY**  
 Fireplaces  
 Facings } hard burned sand mold  
 Hearths } common brick.  
 Damper—new style, H. W. Covert.  
**HARDWARE**  
 Interior } hand wrought iron, Tull Bros.  
 Exterior } Hartford, Conn.  
**SCREENS**  
 Full length bronze screening in wood  
 frames.





Dignity and interest attach to this house with the two-story veranda. The plan is straightforward and evidently adopted to meet the peculiar and agreeable conditions of the site. In design, the house savors local traditions, though there is no affected archaeological forcing to be detected. For the sake of the outlook the living rooms were turned away from the street and toward the community commons; by the same token the garage, kitchen entrance and kitchen were placed facing the road. The dwelling was planned for a man and wife, their widowed daughter and her son. No servant's room is included. The inconspicuous entrance through a porch between the end of the living room and the side of the garage, might puzzle the approaching visitor. The sun room, living room and dining room occupy the whole "commons" front of the house and all open onto a paved terrace under the high arcade of the lower veranda. The principal bedrooms open on the upper veranda. Cost, approximately \$8,000.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls } concrete, Volunteer Cement  
Columns } Co., Louisville, Ky.  
Cellar floor }  
Waterproofing — integral, "Flamingo,"  
Riverton Lime Co. Inc., Riverton, Va.

### FRAME CONSTRUCTION

Virginia yellow pine, creosoted.

### EXTERIOR SURFACE

Stone veneer—local fieldstone.  
Clapboards—random width, shiplapped  
rough sawn, Virginia pine.

### ROOF

Wood shingles on shingle lath—"Aristocrat" cypress, textured.

Gutters } copper, Chase Brass &  
Flashing } Copper Co.  
Down spouts }

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung with  
"Unique" sash  
balances, Unique  
Window Balance  
Co.

Casement type  
Doors and frames  
(exterior)  
Garage doors

### PORCHES

Brick floor—Monticello Brick Co.  
Floor on covered porch—No. 1 heart  
Virginia pine.

### GLASS

Single strength, quality A, Libbey-Owens-  
Ford Glass Co.

### EXTERIOR PAINT

Roof shingles—creosote stain, gray.

Siding } Priming—lead and oil, "U.  
Trim } Boy," National Lead  
Sash } Finish coat—Cabot's  
white.

### LATH AND PLASTERING

Lathing  
Composition plaster base — Celotex Co.  
Plastering  
Patent plaster—Red Top, sand  
U. S. Gypsum Co.

### INTERIOR WOODWORK

Floors—wide pine boards.  
Trim } Virginia pine  
Shelving and cabinets } special design

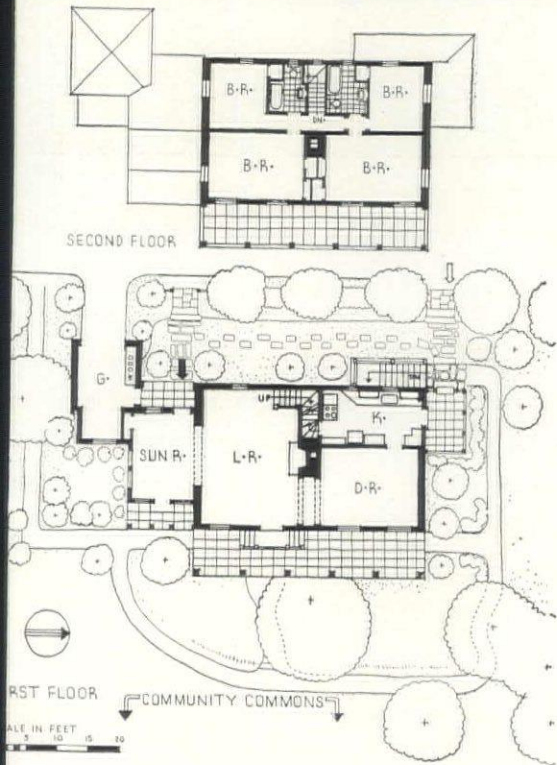
### INSULATING

Outside walls—Celotex lath, 2" air





ENTRANCE DETAIL



PLAN: Stairs ascend from the adjacent corner of the living room. There is no direct passage from the kitchen to the front door. Such remoteness, even in a home with service, is open to criticism. Excellent is the planning of the sun room, living room and dining room area so that all connect by large openings, making virtually one great room, though each may be separated by screens or curtains. The bath-rooms, centrally located, are entered only from the hall.

between frame construction and stone veneer.  
 of rafters } Red Top bat rockwool,  
 ic floor } U. S. Gypsum Co.  
 atherstripping—Monarch Co.  
 RIOR PAINTING  
 ors—filled and waxed.  
 m } painted flat finish, Sherwin-Wil-  
 rs } liams Co.  
 h }  
 lls—"Farbo" cold water paint, Farboil  
 Paint Co.  
 IG  
 ple—Trumbull Electric Co.  
 etrical fixtures—antique fixtures re-  
 wired.  
 tches—Trumbull Electric Co.  
 TING  
 ect

PLUMBING  
 Kitchen  
 Sink—Standard Sanitary Mfg. Co.  
 Cabinet—Monel metal top by Inter-  
 national Nickel Co., wood below.  
 Stove—General Electric Co.  
 Refrigerator—Westinghouse Electric  
 & Mfg. Co.  
 BATHROOM  
 Fixtures }  
 Cabinets } Standard Sanitary Mfg. Co.  
 Bath tubs }  
 Toilets }  
 Seats—Church sani-white.  
 Floor—linoleum, Armstrong Cork  
 Products Co.  
 PIPES  
 Copper—Streamline Pipe & Fittings Co.,  
 Division of Mueller Brass Co.

HEATING  
 Oil—Gilbert & Barker Co.  
 Boilers—"Red Flash" } American  
 Radiators—"Corto" } Radiator  
 Co.  
 Hot water heater—none, hook-up to oil  
 burner.  
 CHIMNEY  
 Fireplaces  
 Facings } brick.  
 Hearths }  
 Mantels—wood (antique).  
 Damper—Old Style, H. W. Covert Co.  
 HARDWARE  
 Interior and exterior—Sargent Mfg. Co.  
 with antique locks and hinges.  
 SCREENS  
 Wood frames  
 WINDOW DRESSING  
 Shades—"Mayflower," Belknap Co.





Harold

A modern interpretation of Dutch Colonial, this house at Sleepy Hollow Manor faithfully perpetuates tradition. It makes use of materials in pleasant combinations; it discloses an interior surprisingly spacious for the modest external measurements; and its exterior bears that aspect of sturdy unadorned solidity which was common to the old Dutch houses of New York State and North Jersey. Though the house appears simple from the outside, it contains seven rooms and three baths, all of good dimension. The cast sandstone of the lower story closely resembles the brown sandstone ashlar of northern New Jersey. Air conditioning units and all modern appointments are included. Cost: Approximately \$12,500.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls } concrete block.  
Columns }

Cellar floor—concrete.

Waterproofing—asphalt on walls, waterproof fabric at sill line.

### MASONRY CONSTRUCTION

Concrete block, 1st story, integrally colored.

### FRAME CONSTRUCTION

Spruce.

### EXTERIOR SURFACE

Clapboards—2nd story.

### ROOF

Wood shingles on shingle lath.

Gutters }  
Flashing } copper.  
Down spouts }  
Roof decks—canvas.

### DOOR AND WINDOW FRAMES

Sash and frames—double hung, wood.

Doors and frames (exterior)—wood.

Garage doors—wood, sliding.

### PORCHES

Columns—concrete block.

Floor—bluestone.

### EXTERIOR PAINT

Shingles—no finish.

Siding }  
Trim } lead and oil paint.  
Sash }

### LATH AND PLASTERING

Lathing—metal, galvanized Truscon.

Plastering—2 coat job, white finish, special finish in living room, dining room and hall.

### INTERIOR WOODWORK

Trim—pine.

Floors—oak.

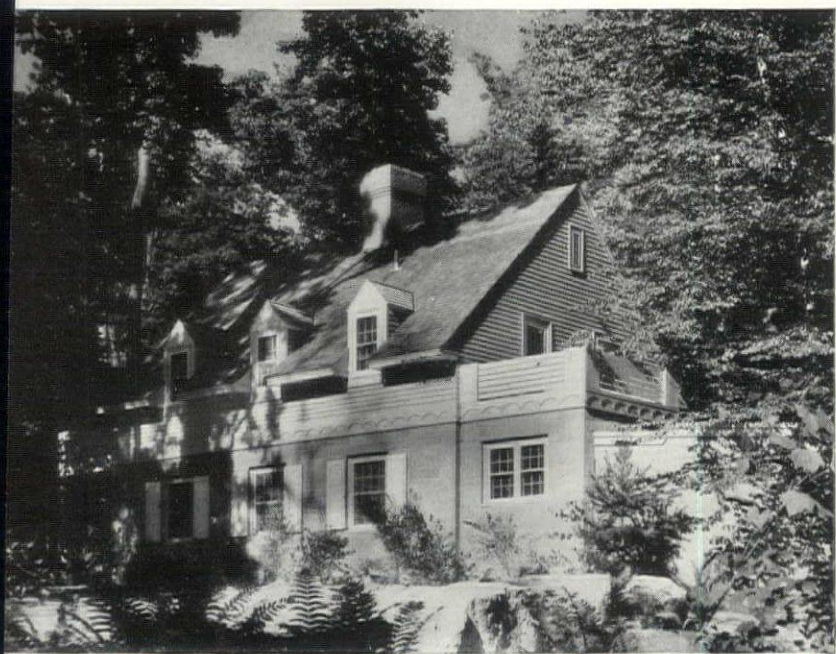
Stainwoods—pine wainscot in living room, vertical pine boarding in hall.

Painted surfaces—pine.

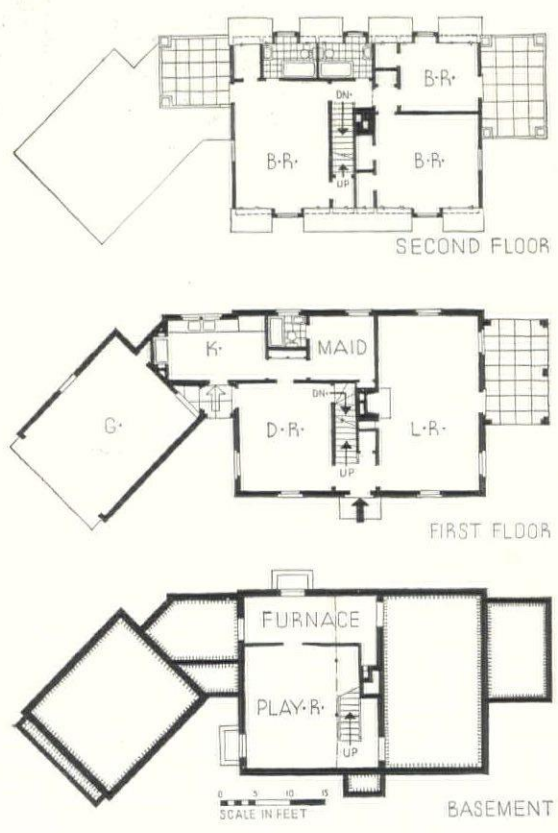
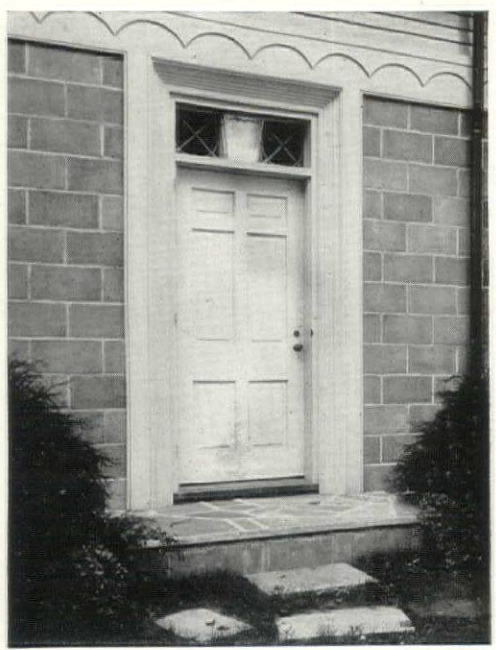
Shelving and cabinets—pine.

Stock millwork—doors and cabinets,





Imandt Photos



PLAN: Following in the main a rather conventional arrangement of the downstairs-plan of the small house, this case the architect has departed from it to the extent of thrusting out the kitchen at one side, thereby creating a maid's room and bath at the rear. This position of the maid's room and bath is economically convenient in placing the two upstairs bathrooms side by side, an arrangement that fits in suitably with the plan of the second room floor.

- |   |   |   |
|---|---|---|
| <b>INSULATING</b><br>Outside walls } rockwool.<br>Roof rafters }  | <b>LIGHTING</b><br>Direct and indirect.   | <b>Tile</b> —American Encaustic Tile.<br><b>Composition tile</b> —service bath.                                     |
| <b>INTERIOR FINISHES</b><br>Floors—filled, stained and waxed.<br>Trim }<br>Doors } lead and oil paint.<br>Sash }<br>Walls } | <b>PLUMBING</b><br>Kitchen<br>Sink—by owner.<br>Cabinet—pine to architect's details.<br>Stove<br>Refrigerator } by owner.<br>Washing machine }<br>Floor—linoleum. | <b>PIPES</b><br>Brass and Copper.   |
| Wallpaper—all rooms except kitchen, hall, pantry.   | <b>BATHROOM</b><br>Fixtures—Crane Co.<br>Cabinets—by owner.<br>Bath tubs }<br>Toilets } Crane Co.<br>Seats }  | <b>HEATING AND AIR CONDITIONING</b><br>Oil—Robeson Engineering Corp.  |
| <b>RING</b><br>Cable—BX.<br>Electrical fixtures—by owner.<br>Switches—toggle type, Hubbell, Inc.                            |   | <b>CHIMNEY</b><br>Fireplaces.<br>Facings } tile.<br>Hearths }<br>Mantels—pine to detail.<br>Damper—H. W. Covert Co. |
|   |   | <b>HARDWARE</b><br>Interior and exterior—Reading Iron Co.   |
|   |   | <b>SCREENS</b><br>Copper, wood frames.  |





Ernest Graham Ph

This house shows the architect's fondness for handling Colonial precedent in an individual way. The narrow clapboards and heavy pediment have an early 19th Century atmosphere but the fieldstone was the architect's own idea. The octagonal window vents the first floor lavatory. The very good L-shape plan allows for three comfortable, cross-ventilated bedrooms with easy access to the bathrooms. Cost \$11,160. Cubage: 30,000 at 37 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—Tile by Cleveland Builders Supply Co.  
Cellar floor—Portland Cement.  
Waterproofing—R. I. W. Marine cement by Toch Bros.

### FRAME CONSTRUCTION

Norway yellow pine throughout.

### MASONRY CONSTRUCTION

Stone walls—Cleveland Quarries sandstone.

### EXTERIOR SURFACE

Clapboards—Idaho White Pine.

### ROOF

Wood shingles on shingle lath—Permatrain.  
Valleys }  
Gutters } Copper.  
Down spouts }  
Composition sheathing paper—Sisalkraft.

### DOOR AND WINDOW FRAMES

Frames—Idaho White Pine.  
Steel sash—Crittall's Stanwin Casements.  
Doors and frames (exterior)—Idaho White Pine.  
Garage doors—Overhead Door Corp.

### GLASS

Pennvernon Grade A dougla strength.

### EXTERIOR PAINT

Siding, trim, and sash—Lead and priming, Cabot's double white finish coat.

### LATH AND PLASTERING

Lathing—Composition plaster base Rocklath by U. S. Gypsum Co.  
Plastering—U. S. Gypsum Co. "Red T" patent plaster, finishing coat of graded finishing lime by U. S. Gypsum Co.

### INTERIOR WOODWORK

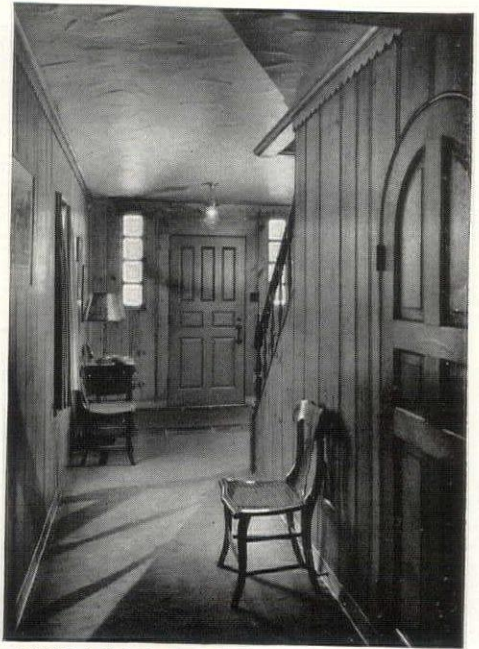
Trim and floors—Hardwood of Appalachian Oak, Stainwoods knotty white pine. Painted surfaces of poplar. Shelving and cabinets—poplar.



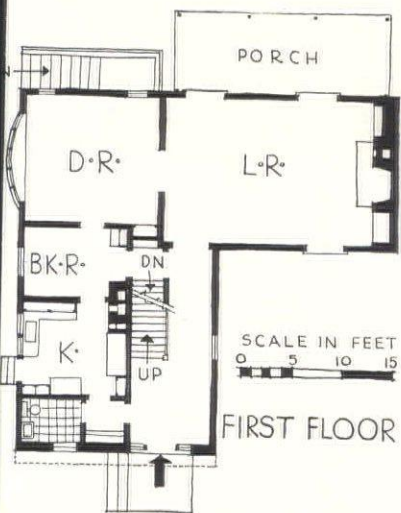
# HIO, JOHN SHERWOOD KELLY, ARCHITECT



LIVING ROOM



ENTRANCE HALL



PLAN: The kitchen is excellently placed in relation to both front and service entrances. The unusual long hall provides a fitting reception to the spacious living room beyond. The breakfast room is also unusual in that it can be reached without going through the dining room.

PLASTERING  
Outside walls } Johns-Manville rock  
and } wool.  
Attic floor }  
Weatherstripping — Monarch Metal  
Weatherstrip Co.

INTERIOR FINISHES  
Floors—Silicate paste filler. Black stain  
by Permatite.  
Trim, doors, sash—enamel finish.

PAINTING  
Paintable by Brown & Sharpe.  
Switches—Tumbler type.

LIGHTING  
Direct.  
PLUMBING  
Kitchen  
Sink—"Inco" by International Nickel  
Co.

BATHROOM  
Fixtures—Kohler.  
Cabinets—Corcoran.  
Bathbaths—Kohler.  
Toilets—Kohler.  
Showers—Speakman.  
Tile—Continental Faience & Tile Co.

PIPES  
Chase brass and Byers' wrought iron.

HEATING  
Coal—Lennox boilers. Kennedy Hot  
Stream water heater.

AIR CONDITIONING  
Central.

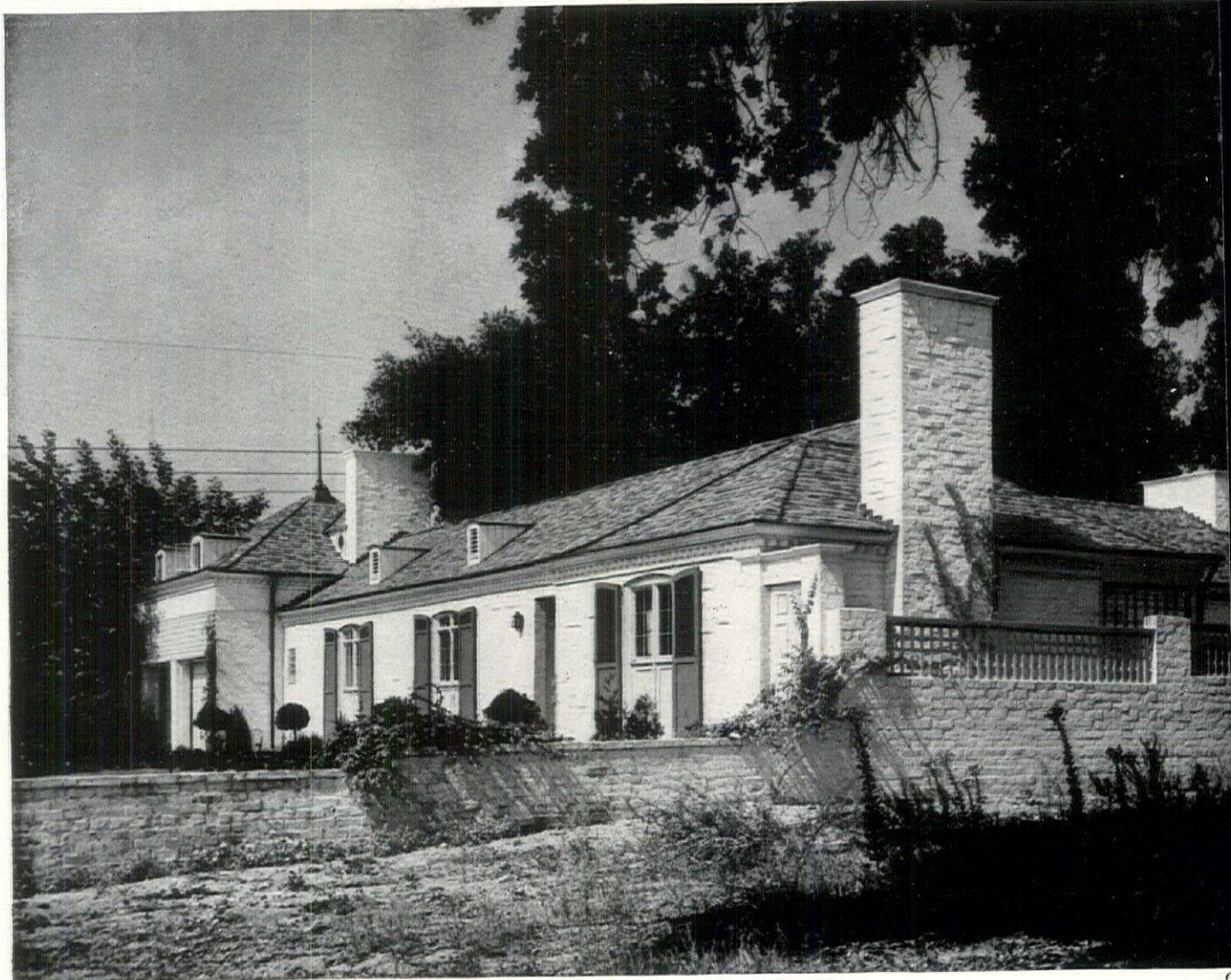
CHIMNEY  
Fireplaces—facings and hearths of Cleve-  
land Builders' Supply rustic brick,  
Poplar mantels, Donley Poker damper.

HARDWARE  
Interior—Midland Hardware Co.

SCREENS  
Metal frame.



## 49. HOUSE FOR WALTER W. FOX, PASADENA, CALIFORNIA



Even with its definitely French character this house is still unmistakably Californian. Typical is the strong preoccupation with surface textures—slate, whitewashed brick, wood. Also typical is the marked differentiation between the formal “public” elevation and the easy-going, informal “private” elevation (cf. House No. 43). The shape was partly determined by an effort to save some fine oak trees on the property. Maid quarters are in the upper part of the garage. The plan is comfortable with excellent separation of elements: service, living, sleeping, study. Cost: \$18,500. Cubic feet: 38,000 at about 48½ cents.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—Monolith Portland cement—cellar,  
Monolith plastic waterproof Portland  
cement.  
Cellar floor—concrete.

#### FRAME CONSTRUCTION

Douglas Fir.  
Sills—redwood.

#### MASONRY CONSTRUCTION

Yard walls hollow cement block construction.

#### EXTERIOR SURFACE

Brick veneer—common brick by Simons  
Brick Co., Los Angeles.

#### ROOF

Slate on sheathing—imported Belgian  
slate.  
Valleys  
Gutters  
Flashing  
Down spouts } copper.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Casement—Campbell steel casement.  
Doors and frames (exterior)—white pine.

#### PORCHES

Floor—common brick.

#### GLASS

Double strength Pennvernon, Pittsburgh  
Plate Glass Co.

#### EXTERIOR PAINT

Trim—Dutch Boy white lead, 4 coats  
and oil, color mixed from pigment  
the job.  
Brick—2 coats of exterior brush coat  
pared on the job.

#### LATH AND PLASTERING

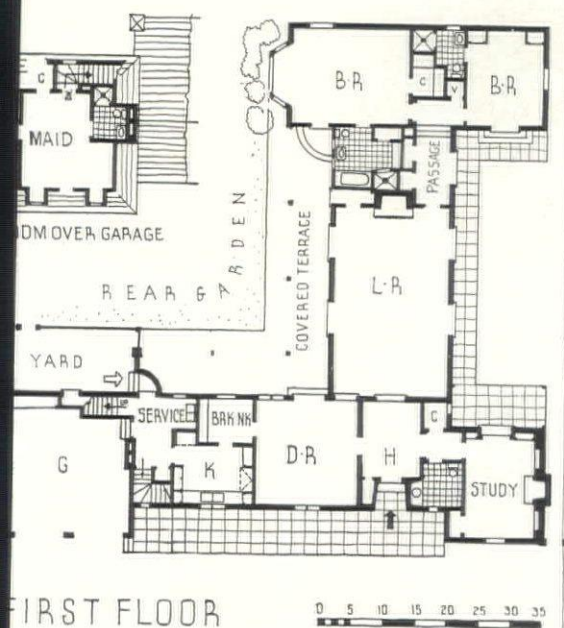
Lathing  
Wood—Douglas Fir covered with  
18-gauge galvanized wire.  
Metal—3.4 pound diamond mesh m  
lath.  
Plastering—Blue Diamond plaster  
Paris, Best Bros. hardwall plaster.





REAR GARDEN

Haight Photos



FIRST FLOOR



BEDROOM DETAIL

The bedroom "unit" is planned so that it may be entered from the side court into the rear passage, a scheme of considerable merit when entertaining is part of the home life.

## INTERIOR WOODWORK

Trim—Douglas Fir, white pine, Port Orford cedar in living room and entrance hall.

Hardwood—Bruce oak flooring, both planks and 1½" straight run.

Millwork—clear pine to detail.

## INSULATING

Roof rafters—1" Celotex.

Weatherstripping—Chamberlin.

## INTERIOR PAINTING

Floors—in 2 bedrooms 3 coats Pratt & Lambert floor paint.

Trim—Dutch Boy white lead for trim and pure linseed oil with color pigment added mixed on the job. All other interior paint the same.

Wallpaper—local distributor.

## WIRING

Cable—rigid iron conduit, Underwriter's label.

Electrical fixtures—made to order locally. Switches—main switch, Brown and Penigilly. Individual switches, Hart & Hegeman.

## PLUMBING

Kitchen

Sink—Crane Co.

Refrigerator—Westinghouse Electric.

## BATHROOM

Fixtures

Bath tubs

Toilets

Showers

Shower curtains

Floor covering—Armstrong's linoleum.

Crane Co.

## PIPES

Mueller brass, other pipe steel galvanized.

## HEATING

Gas fired, hot air, Payne Furnace Co.

Hot water heater—Crane Co.

## CHIMNEY

Fireplaces

Damper—Richardson.

## HARDWARE

Interior—finish, Corbin.

Exterior—Richards-Wilcox.

## SCREENS

Roll-Away screens by Disappearing Screen and Shade Co.





Gustav Anderson

The cheerful white exterior, accented by dark shutters, and the large brick chimney to connote stability, conspire to give this house an unaffected appeal. The house is particularly fortunate in its wooded area. Inside, the open stair increases the spaciousness of the living room which occupies half the ground floor area. All rooms except the kitchen have cross ventilation. Cost: \$6,000. Cubage: 18,000 at about 33 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—poured concrete (1:1½:3), concrete blocks for garage  
Columns—4" lally.  
Cellar floor—6" concrete slab.  
Waterproofing—none.

### FRAME CONSTRUCTION

Douglas fir.  
Sheathing—North Carolina pine.

### EXTERIOR SURFACE

Shingles—edge grain red cedar, 18" No. 1 "Perfection."  
Clapboards—redwood.

### ROOF

Wood shingles on shingle lath—edge grain red cedar, 18" No. 1 "Perfection" on 1"x2"

### Valleys

Gutters } 14 oz. copper, American  
Flashing } Brass Co.  
Down spouts }  
Salt glazed tile drains—4" copper.  
Composition sheathing paper.

### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—clear white pine, Andersen Frame Corp.  
Doors and frames (exterior)—No. 2 pine.  
Garage doors—fir.

### PORCHES

Floor—¾" matched pine.

### GLASS

Quality B.

### EXTERIOR PAINT

Shingles—Brush stained, "Dutch Boy," National Lead Co.

### Siding

Trim } 3 coats oil paint.  
Sash }

### LATH AND PLASTERING

Lathing  
Wire—all corners, garage and bath.  
Wood—No. 1 spruce balance of house.  
Plastering—3 coats, trowel finish.

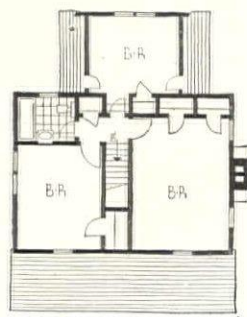
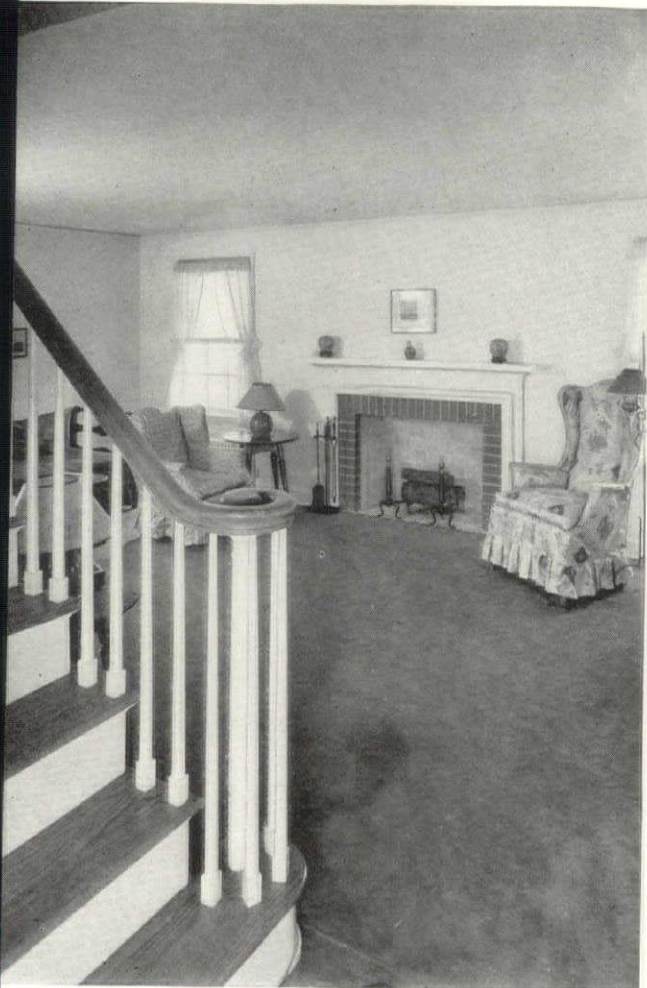
### INTERIOR WOODWORK

Floors—select red oak.  
Trim—white pine.  
Stair treads—oak.  
Stair railings—birch.  
Painted surfaces  
Shelving and cabinets } white pine.  
Stock millwork }

### INSULATING

Attic floor—4" Cabot's Quilt.

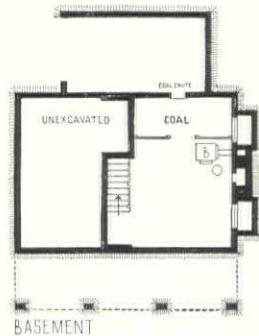




SECOND FLOOR



FIRST FLOOR



BASEMENT

AN: Second floor plan quite workable. In so small an establishment, direct access from kitchen to living room should prove a great convenience. The proximity of the garage and kitchen doors appears to cause unnecessary congestion. Second floor closet space evenly distributed.

Weatherstripping—metal, all doors and windows.

## INTERIOR FINISHES

Floors—shellacked and waxed, kitchen—Armstrong linoleum.

Trim }  
Doors } oil paint.  
Sash }

Wallpaper—all rooms except kitchen and bath.

RING  
Cable—BX.

Electrical fixtures—brass.  
Switches—toggle.

LIGHTING  
Direct.

HEATING  
Kitchen.

Sink  
Drain boards—tile, Franklin Tile Co., Lansdale, Pa.  
Stove  
Refrigerator  
Washing machine

## BATHROOM

Fixtures—Standard Sanitary Mfg. Co.  
Seats—Church Mfg. Co.  
Floors and walls—tile, Franklin Tile Co.

PIPES  
Brass.

HEATING  
Coal

Boilers } American Radiator Co.  
Radiators }

Piping—1 pipe steam.  
Valves—American Radiator Co.  
Hot water heater—Excelso Products Corp., Division American Radiator & Standard Sanitary Corp.

## CHIMNEY

Fireplaces  
Facings—wood and face brick.  
Hearths—tile.  
Mantels—wood.  
Damper—H. W. Covert Co.

## HARDWARE

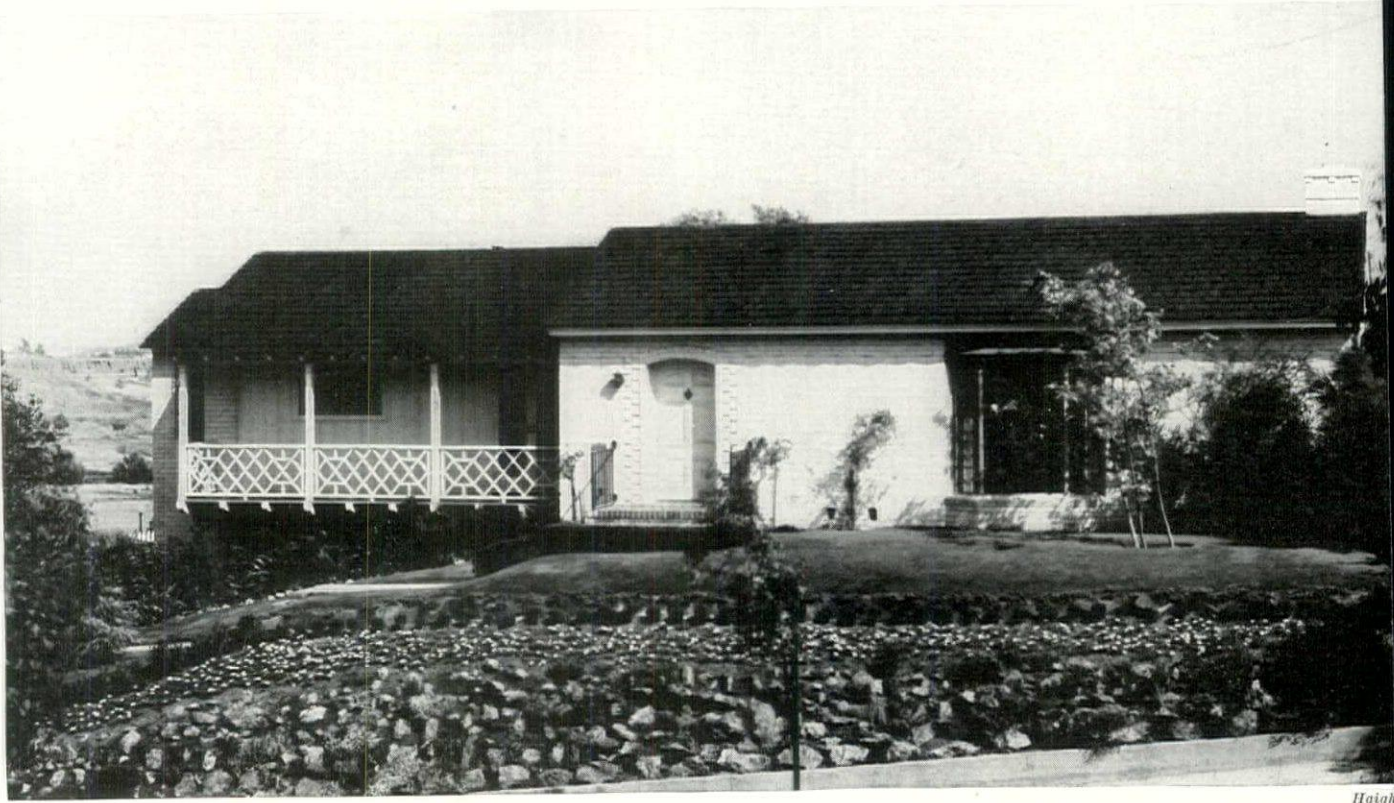
Interior and exterior—brass with black finish, Schlage Lock Co.

## WINDOW DRESSING

Shades—Holland Shade Co.  
Blinds—white pine, louvered.



## 51. HOUSE FOR LEROY G. BROWN, LOS ANGELES



Haigh

**PROBLEM:** To adapt a house of ample proportions to a lot considerably constricted by a 25-foot setback requirement. To provide cross ventilation in most of the rooms and space for the weaving and furniture-making hobbies of the owner.

The vertical boards and battens in the kitchen wing, and the masonry veneer in the master's quarters, exemplify the contrast in textures popular in the West. The living room window facing the street is the dominating feature. The house has much of the hospitable and informal aspect typical of this part of California, where exterior design is still largely traditional. These same houses, however, have undergone great structural changes due to technological developments. Cost: \$12, Cubage: 32,076 at 40 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete.  
Cellar floor—cement.

#### FRAME CONSTRUCTION

Oregon pine.  
Sills—redwood.

#### MASONRY CONSTRUCTION

Common brick walls—Los Angeles Brick Mfg. Co.

#### EXTERIOR SURFACE

Common brick veneer.  
Stucco—California stucco.

#### ROOF

Wood shingles on shingle lath—Old Colony shakes.  
Valleys }  
Gutters } galvanized iron.  
Flashing }  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash and frames }  
Steel sash—Ariston. }  
Doors and frames (exterior) } wood.  
Garage doors }

#### PORCHES

Brick floor—common brick.

#### EXTERIOR PAINT

Shingles—Cabot's brush stained.  
Brick veneer } Cabot's double white.  
Trim }  
Sash—Cabot's Collopakes.

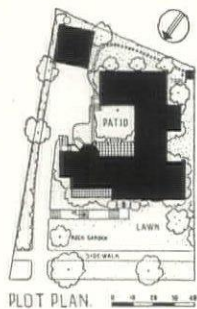
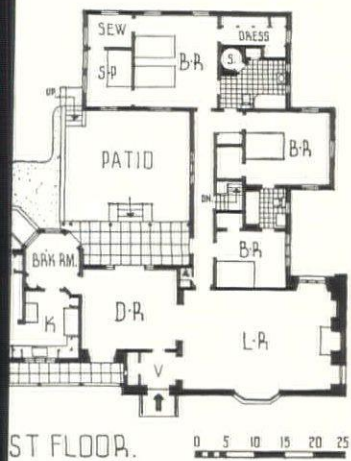
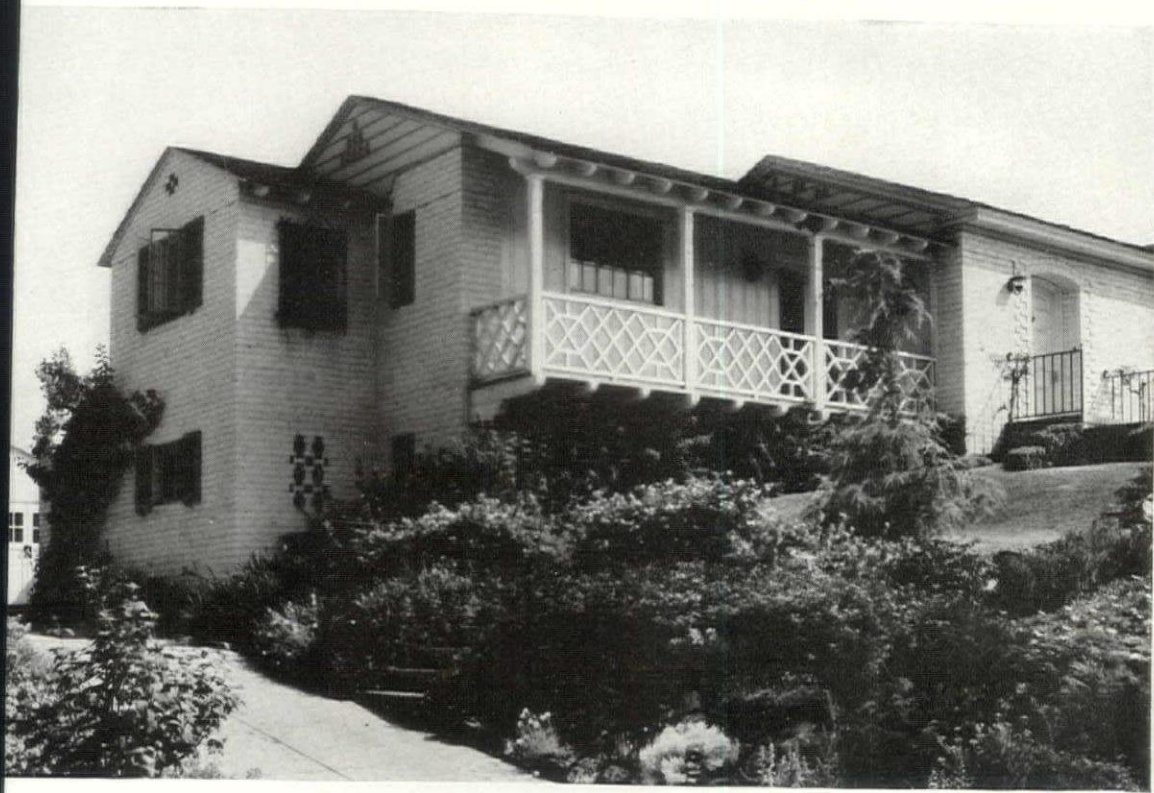
#### LATH AND PLASTERING

Lathing—wood.  
Plastering  
Finishing coat—putty.

#### INTERIOR WOODWORK

Floors—oak.  
Shelving and cabinets } white pine.  
Stock millwork }





PLAN: Balcony decorative but of doubtful practical value being too near front door to be used as a kitchen veranda and too near kitchen for family use. Circulation from kitchen to dining room or vestibule is complicated. If long bedroom hall had been glazed, it would have added to the openness of the house.

INTERIOR FINISHES  
Floors—waxed.  
Walls—m  
Doors—enamel, W. P. Fuller & Co.  
Shutters—lead and oil.  
PAINTING  
Electrical fixtures—local dealer, Lumin-  
aire Co.  
Switches—General Electric.  
LIGHTING  
Furniture—ect.  
SCREENING  
Screens—chen

Sink—Kohler.  
Cabinet—mill.  
Stove—Wedgewood.  
Refrigerator—General Electric.  
BATHROOM  
Fixtures  
Cabinets  
Bath tubs  
Toilets  
Seats  
Showers  
Tile—American Encaustic Tiling Co.  
PIPES  
Wrought iron, Reading

HEATING  
Gas, Payne Furnace Co.  
Hot water heater—Day and night heater.  
CHIMNEY  
Fireplaces  
Facings  
Hearths } common brick.  
Mantels—white pine, stained.  
Damper—Covert.  
HARDWARE  
Interior  
Exterior } Sargent & Co.  
SCREENS  
Inviso Roller Screen Co.



## 52. HOUSE FOR MARJORIE MILLS BURNS, WINCHESTER



**PROBLEM:** To plan a home of informal character for a man and his wife, one daughter and a servant; the rooms to be small and easily cared for; the house to be placed on an irregular corner lot of 65 ft. frontage, with set-back restrictions of 30 ft. from main road, 20 ft. from secondary road, and 10 ft. from property line along the other side.

Both in structure and downstairs plan the architect has adhered to an early England type, so far as it was compatible with modern conditions and equipment. On a concrete foundation, the house is brick-veneered for one story across the front with old sidewalk bricks; the rest is walled with cedar clapboards stained brown and the roof is shingled. The sash are painted red, the trim light brown, and the oyster white. The vertical boarding of the interior is pine, molded along the eaves. Insulation, brass piping, complete electric cooking and refrigerating appointments and an oil burning furnace are included in the equipment. Cost, \$9,700, or about 10 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Cellar floor } concrete.  
Walls }

#### FRAME CONSTRUCTION

No. 1 spruce.  
Girders—No. 1 fir.

#### EXTERIOR SURFACE

Brick veneer—old dark waterstruck brick formerly used in sidewalks.  
Clapboards—California red cedar.

#### ROOF

Wood shingles on sheathing—16" Perfection cedar.  
Gutters—wood.  
Down spouts—16 oz. copper.  
Composition sheathing paper—Sisalkraft.

#### DOOR AND WINDOW FRAMES

Sash and frames—double hung and casement type, white pine.  
Doors and frames (exterior)—white pine.  
Garage doors—matched redwood built up on job.

#### PORCHES

Floor—old sidewalk brick, basket weave pattern.

#### GLASS

Pennvernon, quality A, Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Siding—weathered brown oil stain.  
Sash—3 coats "Kyanize," Boston Paint & Varnish Co.

#### LATH AND PLASTERING

Lathing  
Metal—Milcor Steel Co.  
Composition plaster base—Rockliff  
Plastering  
Patent plaster—U. S. Gypsum Co.  
Finishing coat—lime putty.

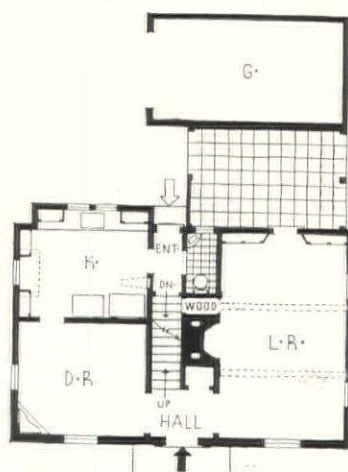
#### INTERIOR WOODWORK

Floors—select oak.  
Trim  
Stainwoods—country pine.  
Painted surfaces—whitewood.  
Shelving and cabinets—whitewood.

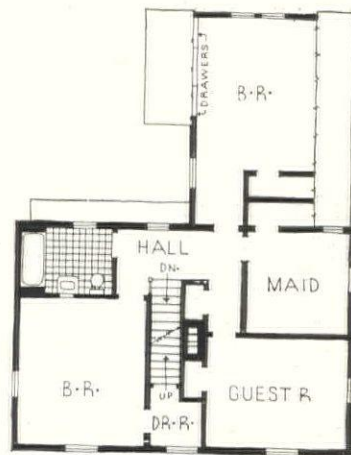
#### INSULATING

Outside walls } 2-ply Cabot's Quilt.  
Attic floor }  
Weatherstripping—Chamberlin.





SCALE IN FEET  
0 5 10 15  
FIRST FLOOR



SECOND FLOOR

PLAN: While downstairs the traditional central chimney type, with stair adjacent and rooms on each side, has been only slightly modified, the upstairs plan shows more change. There is a generous bathroom and the space over the garage and connecting loggia has been well employed for a bedroom.

PRIOR PAINTING  
 Doors—Lignophol, L. Sonneborn Sons, Inc., New York City.  
 Kyanize, Boston Paint and Varnish Co.  
 Electrical Fixtures—Sack Inc., Boston, Mass.  
 Switches—Hart & Hegeman.  
 SINK — Monel metal, International Nickel Co.

Stove—Crawford Electric Range.  
 Refrigerator—Frigidaire Division of General Motors Corp.  
 BATHROOM  
 Bath tubs—Kohler "Metropolitan," white.  
 Toilets—Standard Sanitary, one piece, white.  
 Tile—hand-made special 3"x3", blue-green faience walls and floors.  
 PIPES  
 Copper—Streamline Pipe & Fittings Co., Division of Mueller Brass Co.  
 HEATING  
 Oil—one pipe steam, "Ballard" oil burner.  
 Boilers—Richardson & Boynton.  
 Radiators — "Arco" convactor type, American Radiator Co.

Piping—wrought iron.  
 Valves—No. 2B vacuum valves, Dole Valve Co.  
 Hot water—connected to boiler with aquastat.  
 Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
 CHIMNEY  
 Fireplaces  
 Facings } brick  
 Hearths }  
 Damper—Old Style, H. W. Covert Co.  
 HARDWARE  
 Interior and exterior—brass and wrought iron, Sack, Inc., Boston, Mass.  
 SCREENS AND SHADES  
 By P. W. Merrill Co., Boston, Mass.



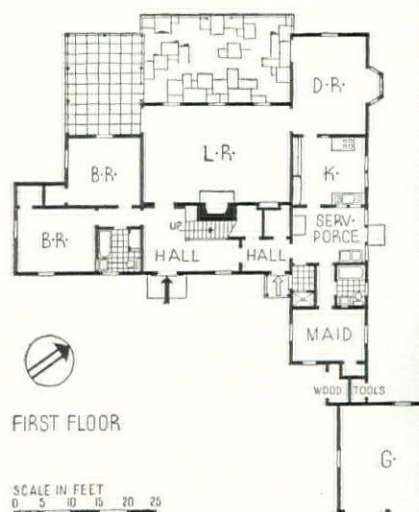
## 53. HOUSE FOR JOHN D. CRANE, MANTOLOKING



VIEW FROM ROAD WITH ENTRANCE

Gustav Dr.

This house recalls the type associated with Cape Cod, but on a somewhat larger scale. Screened by a plantation of beach shrubs, the road front faces east or northeast and gets the full morning sun. Silver gray shingles, white trim for definition, and green shutters for deeper accent, with the masses of glossy foliage in the dooryard, combine to give a crisp, sparkling character. On the other front, the living room windows command a long view down and across Barnegat Bay. The fireplace wall of the living room is pine paneled in early American manner; the stair hall is finished with vertical pine boarding, molded along the joints. In addition to the usual bathrooms the plan provides an accessible shower where one can shed wet bathing suits and have a fresh water bath without tracking water and sand through the house. Cost: \$13,475. Cubage: 35,000 at 38½ cents per cubic foot.



### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete on cedar piling.  
Columns—cement block.

#### FRAME CONSTRUCTION

Wood.

#### EXTERIOR SURFACE

Shingles—hand-split cypress.

#### ROOF

Wood shingles on shingle lath.  
Valleys }  
Flashing } copper.  
Down spouts }  
Gutters—wood.  
Composition sheathing paper—Sisalkraft.

#### DOOR AND WINDOW FRAMES

Sashes and frames—double hung.  
Doors and frames (exterior) } pine.  
Garage doors }

#### PORCHES

Flagstone on reenforced concrete slab.

#### GLASS

Pennvernon flat glass, Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Shingles—dipped and brush stained.  
Trim }  
Sash } Atlantic white lead.

#### LATH AND PLASTERING

Lathing  
Metal—on ceilings.

Composition plaster base—Insulite on walls.

#### Plastering

Patent plaster—U. S. Gypsum.  
Finishing coat—Tiger lime, except living room—sand finish.

#### INTERIOR WOODWORK

Floor—oak.  
Trim—white pine.  
Stainwoods—living room, dining room and hall.  
Painted surfaces—balance of house.

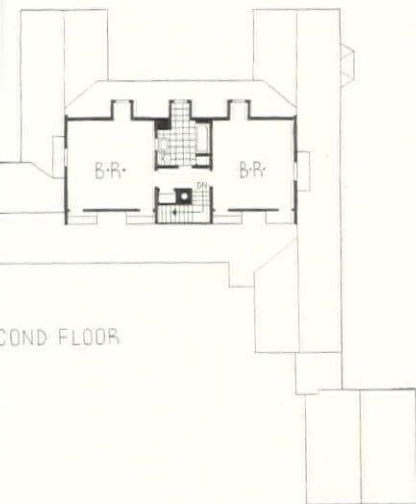
#### INSULATING

Outside walls and 2nd floor ceiling—rock wool.





W FROM BEACH SIDE



LIVING ROOM

#### TERIOR FINISHES

Floors—wax.  
Trim—stain and paint.  
Doors } oil paint.  
Sash }  
Walls—oil paint, living room, kitchen,  
baths, maid's room.  
Wallpaper—dining room and bedrooms.

#### RING

Cable—BX.  
Electrical fixtures—bronze.  
Switches—General Electric.

#### IGHTING

Direct.

#### PLUMBING

##### Kitchen

Sink—Standard Sanitary Mfg. Co.  
Cabinet—to detail.  
Stove.  
Refrigerator.  
Washing machine.  
Floor—linoleum.

##### BATHROOM

Fixtures—Standard Sanitary Mfg. Co.  
Tile floor.

##### PIPES

Brass.

##### HEATING

None.

#### CHIMNEY

##### Fireplaces

Facings—tile.  
Hearths—brick.  
Mantels—wood.  
Built-in fireplaces—Heatilator.

#### HARDWARE

Interior—bronze.  
Exterior—bronze, black finish.

#### SCREENS

Copper.

#### WINDOW DRESSING

Shades.  
Awnings.  
Blinds.



## 54. HOUSE IN BEDFORD HILLS, NEW YORK



John Gass Photo

This cottage for one or two occupants has distinct and virile charm. It is built of cinder concrete blocks painted white; the inside walls are also of cinder concrete blocks painted, and every bit of material and construction is modern. Floors and ceiling, too, are of concrete construction, their surfaces treated with a render them both practical for cleaning and agreeable to the eye. Not the least arresting feature is the compact plan. A work room shares an equal part of the basement with the laundry and heating apparatus. The ground floor has every provision for comfort and the amenities of modest, unlaborious living; the attic storage space is sure to prove useful: Cost: \$4,400. Cubage: 13,800, at about 32 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete blocks, Bedford Hills Concrete Products Corp.  
Cellar floor—ready mixed concrete, Bedford Hills Concrete Products Corp.  
Waterproofing—Mason lime.

#### MASONRY CONSTRUCTION

Walls—concrete masonry units, cinder concrete, Bedford Hills Concrete Products Corp.

#### FLOOR CONSTRUCTION

Joists—"Floform" concrete, Bedford Hills Concrete Products Co.

#### ROOF CONSTRUCTION

Plate } wood.  
Rafters }

#### ROOF

Tile on sheathing—concrete tile set in mastic on roof paper.

Gutters } copper.  
Down spouts }

Flashing—none, heavy roof cement around chimney.

Tile drains—concrete, Bedford Hills Concrete Products Corp.

#### DOOR AND WINDOW FRAMES

Sash and frames

Casement type—steel, Truscon Steel Co.

Doors and frames (exterior)—pine wood.

#### PORCHES

Concrete flagging on terrace, Bedford Hills Concrete Products Co.

#### EXTERIOR PAINT

Concrete masonry units painted with Bedford Hills Concrete Products masonry paint.

Trim

Priming and finish coat—Pittsburgh Plate Glass Co.

Sash

Priming—shop coat.

Finish coat—aluminum paint.

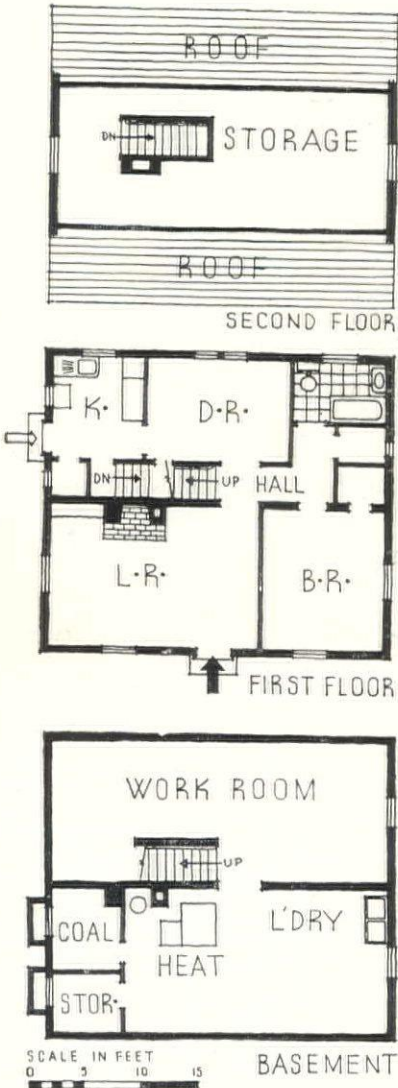
#### LATH AND PLASTERING

None.





NOTE: Every room is well lighted and ventilated, and the bedroom and bathroom of the cottage can be completely shut off from the rest. There is ample living space. The kitchen is large enough to contain all necessary equipment for comfortable and efficient cookery.



Concrete blocks painted with masonry paint.

INTERIOR WOODWORK  
Trim } pine.  
Shelving and cabinets }  
Floors—concrete finish stained.

INSULATING  
None.

EXTERIOR PAINTING  
Floors—acid stain on concrete.  
Trim } Pittsburgh Plate Glass Co.  
Doors }  
Sash—Aluminum paint.  
Walls—masonry paint, Bedford Hills Concrete Products Co.

PLUMBING  
Kitchen  
Sink—"Priscilla," Sears, Roebuck & Co.  
Stove—Westinghouse Mfg. Co.

BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—Sears, Roebuck & Co.  
Bath tubs } Standard Sanitary Mfg. Co.  
Toilets }

PIPES  
Brass—Chase Brass & Copper Co.

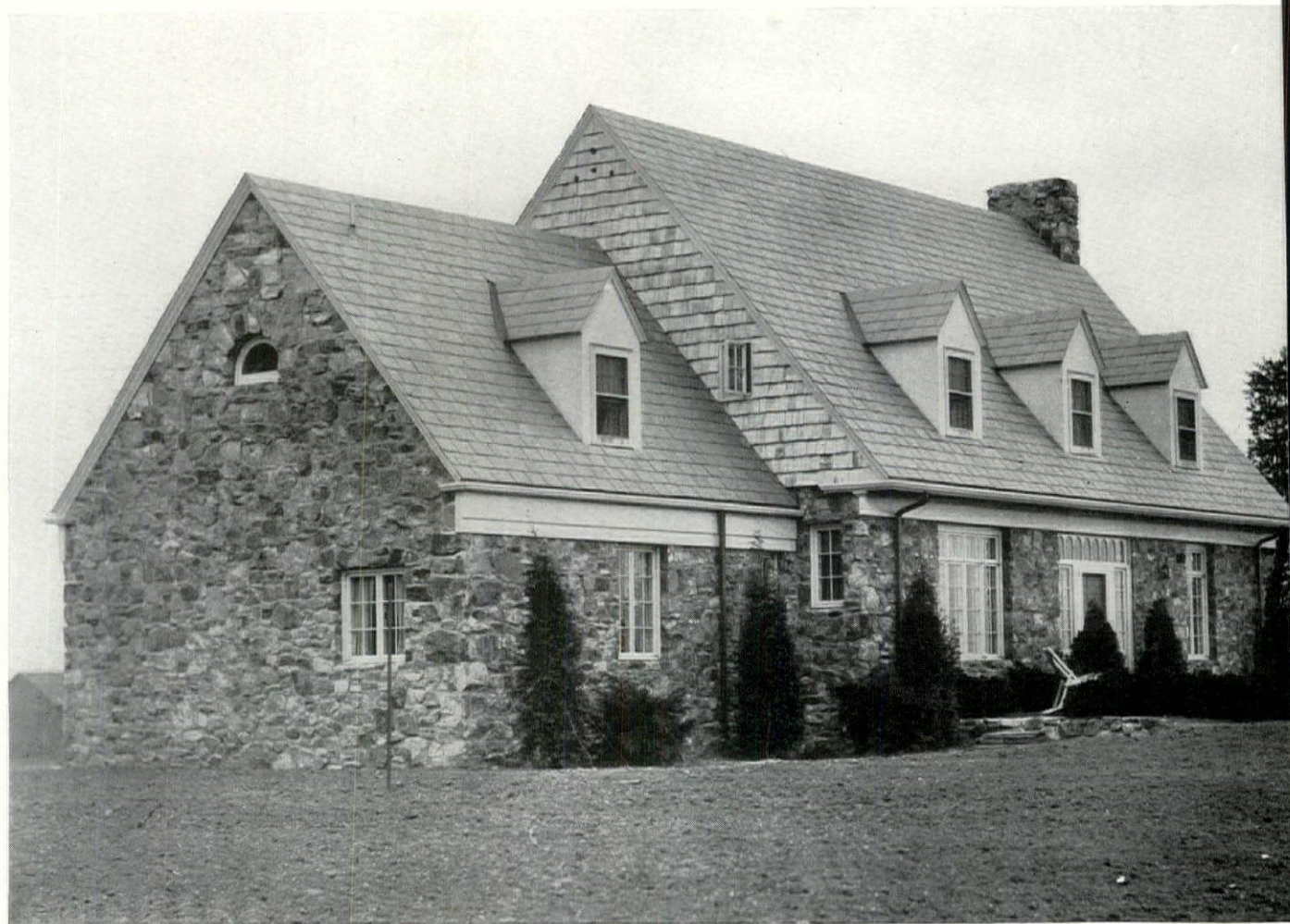
HEATING  
Coal.  
Square boiler plate, hot air, Sears, Roebuck & Co.  
Thermostat and regulators.

AIR CONDITIONING  
Semi-system by Richmond & Decker.

CHIMNEY  
Fireplaces  
Facings — cinder masonry units painted with masonry paint by Bedford Hills Concrete Products Co.  
Hearths—concrete, plain gray, by Bedford Hills Concrete Products Co.  
Mantels—chestnut plank.

SCREENS  
Casement side-hinged, Truscon Steel Co.





This house is small—how small, a glance at the plans will show. But it has a large presence—derived partly from the scale of the front penetrations; and it has personality, derived from its Dutch ancestry. Of fine construction, it is veneered with local fieldstone, excepting one gable, which is shingled. The materials help this house appear to belong where it is. One of the faults of the old Dutch houses was the relatively small size of their windows. They not only shut out cold in winter but kept out much-needed air circulation from small rooms in warm weather. This defect the large window openings remedy. One commendable feature of the plan is the ease of completely shutting off the service portion from the rest of the house. Cost: \$17,640. Cubage: 42,000 at 42 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—Portland cement concrete, Atlas Co.

Columns—lally.

Cellar floor—concrete, Atlas Co.

Waterproofing—integral and external, L. Sonneborn Sons, Inc.

### FRAME CONSTRUCTION

Fir.

Girder—steel.

### EXTERIOR SURFACE

Stone veneer—8 in. field granite from Lebanon, N. J.

Shingles—on one gable, pilgrim shakes, Cabot.

### ROOF

Slate on sheathing—Vermont fading green, Vermont Structural Slate Co.

Valleys } copper, Cheney Co.  
Down spouts }

Gutters—fir.

Composition sheathing paper—Sisalkraft, treated.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung casement—Andersen narrow line, Andersen Frame Corp, Steel sash—Fenestra, Detroit Steel Products.

Door and frames (exterior)—white pine.

Floor—slate on reinforced concrete slab, Co.

### PORCHES

Floor—slate on reinforced concrete slab, Vermont Structural Slate Co.

### GLASS

Clear, Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Trim } Priming } White lead and oil,  
Sash } Finish coat } Atlantic Paint Co.

### LATH AND PLASTERING

Lathing

Metal—Meshtex, Penn Metal Co.

Plastering

Patent plaster } U. S. Gypsum Co.  
Finishing coat }

### INTERIOR WOODWORK

Floors—red oak, linoleum in kitchen

Armstrong Cork Products Co.

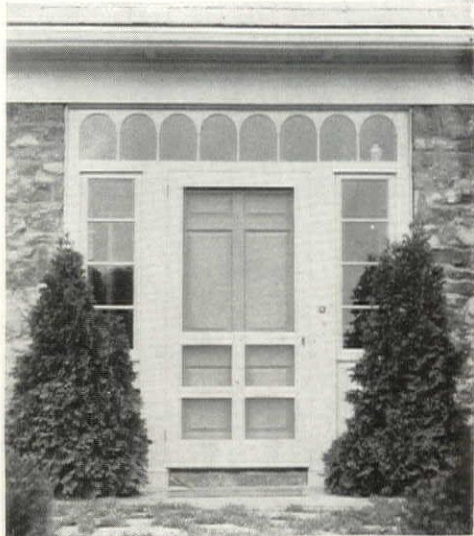
Painted surfaces—white pine.

Shelving and cabinets } white pine, Curtis  
Stock millwork } Companies.

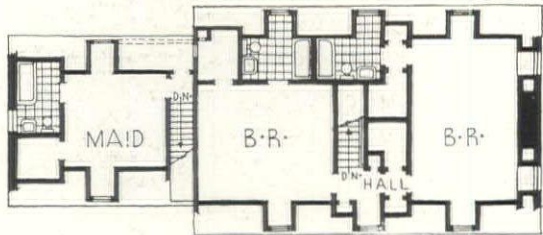
### INSULATING

Outside walls } rock wool, Johns-Manville  
Roof rafters } Corp.  
Attic floor }

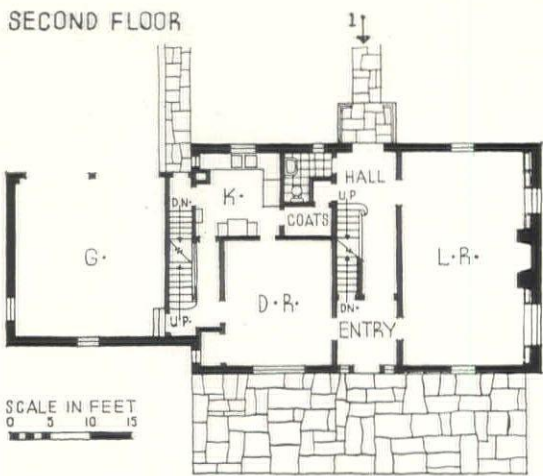




VIEW 2

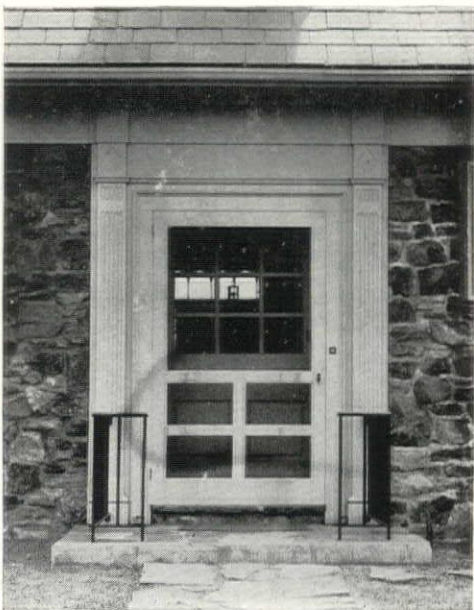


SECOND FLOOR



SCALE IN FEET  
0 5 10 15

FIRST FLOOR



VIEW 1

PLAN: The placing of the coat closet and lavatory is good; so is the arrangement of the bathrooms upstairs. Closet spaces are exceptionally generous in all places where they are needed. The maid is well taken care of. Her bedroom and bath, over the garage, connect by a private stair and entry with the kitchen. The whole plan is well organized and well proportioned.

#### INTERIOR FINISHES

Doors—shellac, Pratt & Lambert.  
Walls—white lead and oil, Devco & Reynolds.  
Paper—Richard Thibaut.

Lighting—B.X., Western Electric.  
Electrical fixtures—special, Arnold & North, New York.  
Switches—Toggle, Hart & Hegeman.

#### HEATING

Sink—stainless steel, General Electric.  
Cabinet—steel, Elgin Stove & Oven Co.  
Stove—General Electric Co.  
Refrigerator—General Electric Co.  
Washing Machine—General Electric Co.

#### BATHROOM

Fixtures—Standard Sanitary Mfg. Co.  
Bathtubs—Standard Sanitary Mfg. Co.  
Toilets—Standard Sanitary Mfg. Co.  
Showers—Standard Sanitary Mfg. Co.  
Cabinets—G. M. Ketcham Mfg. Corp.  
Seats—Church Co.  
Shower curtains—glass tub enclosure, G. M. Ketcham Mfg. Corp.  
Tile—mat glazed, American Encaustic Tile Corp.

#### PIPES

Copper, Chase Brass & Copper Co.

#### HEATING AND AIR CONDITIONING

Oil-fired, Holland Furnace Co., Holland, Mich.  
Hot water heater.  
Thermostat and regulators, Minneapolis-Honeywell Co.

#### CHIMNEY

Fireplaces—Facings, Colonial Brick, Sayre & Fisher Co.  
Hearths—promenade tile, American Encaustic Tile Corp.  
Mantels—white pine, Arnold & North, Inc.  
Damper, H. W. Covert.

#### HARDWARE

Interior—brass, Schlage Lock Co., Andersen Frame Corp.  
Exterior—bronze, Schlage Lock Co.

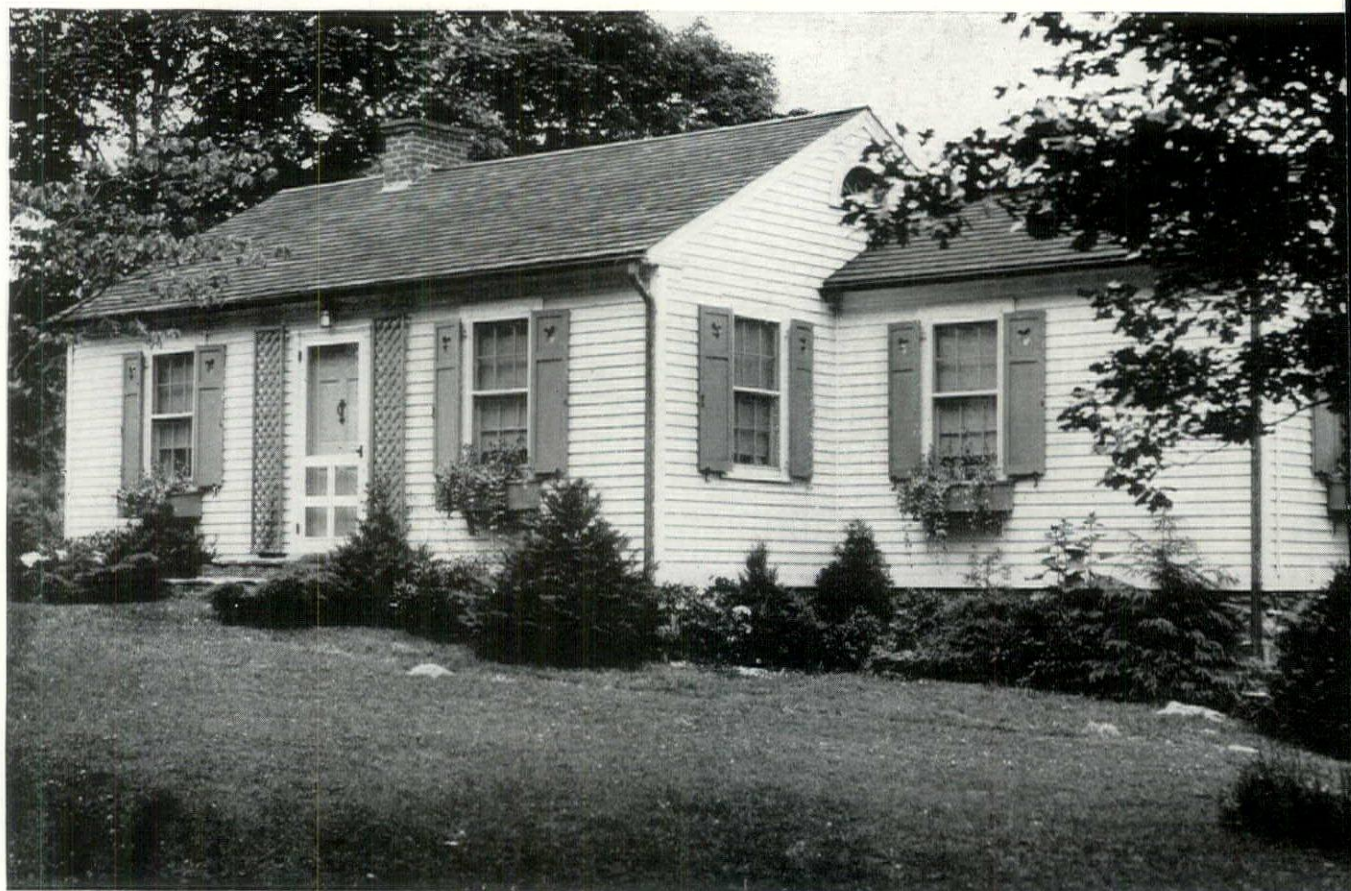
#### SCREENS

Andersen Frame Corp.

#### SPECIAL EQUIPMENT

Clothes Chute—aluminum by Haslett Chute & Conveyor Co., Oaks, Penn.





The problem of the very small house is completely in its infancy. The background of U. S. archi seems to have been framed in vast dimensions: railroad stations, office buildings, large residences, e thoughtfully planned house of the above type remains rare. Of simple clapboard construction, this b a direct, honest expression of its purpose. Because of economy, a front vestibule or shelter has been o In a region where rain and snow are commonplace, this might be essential. Cost: \$4,200. Cubage: at 35 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and columns—18" fieldstone, local.  
Cellar floor—concrete, Atlas Cement Co.  
Waterproofing—waterproofed cement,  
Anti-Hydro Waterproofing Co.

### FRAME CONSTRUCTION

Wood by Weyerhaeuser Sales Co.

### MASONRY CONSTRUCTION

Stone walls—18" fieldstone, local.

### EXTERIOR SURFACE

Clapboards.

### ROOF

Wood shingles on shingle lath—18" Per-  
fection.

Valleys—closed, copper flashed.

Gutters  
Down spouts } copper, American Brass Co.  
Flashing

### DOOR AND WINDOW FRAMES

Sash and frames—double hung, Curtis  
Companies, Inc.  
Doors and frames (exterior)—pine.

### PORCHES

Flooring—fir.

### GLASS

American Window Glass Co.

### EXTERIOR PAINT

Shingles—brush stained.  
Siding } white lead and oil, Sherwin  
Trim } Williams.  
Sash }

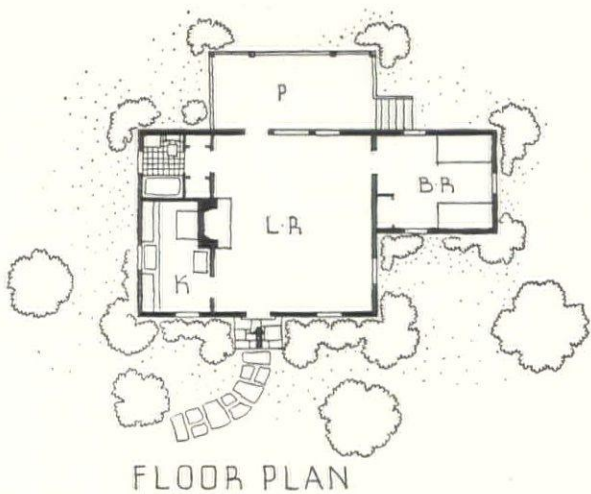
### LATH AND PLASTERING

Lathing—metal, Truscon Co.  
Plastering—patent plaster, hard v  
Red Top, Best Bros. Keene's cer

### INTERIOR WOODWORK

Floors—oak.  
Trim } pine  
Shelving and cabinets }  
Stock millwork—Curtis and Morgan.





FLOOR PLAN

PLAN: Separation of bedroom from bathroom in a house of this character is permissible but open to question.



REAR

LATING  
tic floor.  
eatherstripping.  
RIOR FINISHES  
ors—stained, shellacked and waxed.  
im } painted, 3 coats lead and oil,  
ors } Sherwin-Williams.  
sh }  
allpaper—W. H. S. Lloyd Co., Inc.  
NG  
ble—BX.  
witches—tumbler.  
TING  
rect.

PLUMBING  
Kitchen  
Sink—Standard Sanitary Mfg. Co.  
Cabinet—pine, Curtis Co.  
Stove—Pyrofax gas by Carbide and  
Carbon Chemical Corp.  
Refrigerator—General Electric.

BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Seats—Church Mfg. Co.

PIPES  
Brass, American Brass Co.

HEATING  
Coal.  
Hot water heater—coal-fired.  
CHIMNEY  
Fireplaces  
Facings } common brick.  
Hearths }  
Mantels—wood.  
Damper—H. W. Covert Co.  
HARDWARE  
Interior and exterior—P. & F. Corbin.  
SCREENS  
Wood frames.  
WINDOW DRESSING  
Blinds—Curtis stock.





A front of sophisticated severity, tastefully planted, facing the street, is in contrast to the treatment of the rear court, which performs the role of an open-air living room. The house is divided into two parts, the front section consisting of master bedroom with living, dining and kitchen facilities and a rear section consisting of two bedrooms and bath, maid's room and garage. The two rear bedrooms, circuitous of approach to the front entry, may be conveniently and independently reached through the breakfast room porch. The breakfast room with glazing on one side is virtually a shelter off the court. The long narrow kitchen with cross ventilation is efficient. Cost: \$8,500.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—concrete.  
Cellar floor—cement.  
Waterproofing—by Super Concrete Emulsion, Ltd.

### FRAME CONSTRUCTION

Douglas fir }  
Sills—Redwood } Hammond Lumber Co.  
Girders—Steel.

### EXTERIOR SURFACE

Stucco—by California Stucco Co.

### ROOF

Hand-split cedar shakes.  
Valleys }  
Gutters } Armco galvanized  
Flashing } iron.  
Down spouts }

Salt glazed tile drains—Pacific Clay Products Co.

### DOOR AND WINDOW FRAMES

Steel frames and sash—Fenestra by Detroit Steel Products Co.  
Doors and frames (exterior)—wood doors of sugar pine, French doors—steel. Fenestra.  
Garage doors—sugar pine overhead doors by Wread Overhead Door Co.

### PORCHES

Cement—blocked off in 12" squares, colored. Lithacreme color hardener—L. M. Scofield Co.

### GLASS

Lustra glass—Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—natural.  
Trim and sash—Cabot's Collopakes.

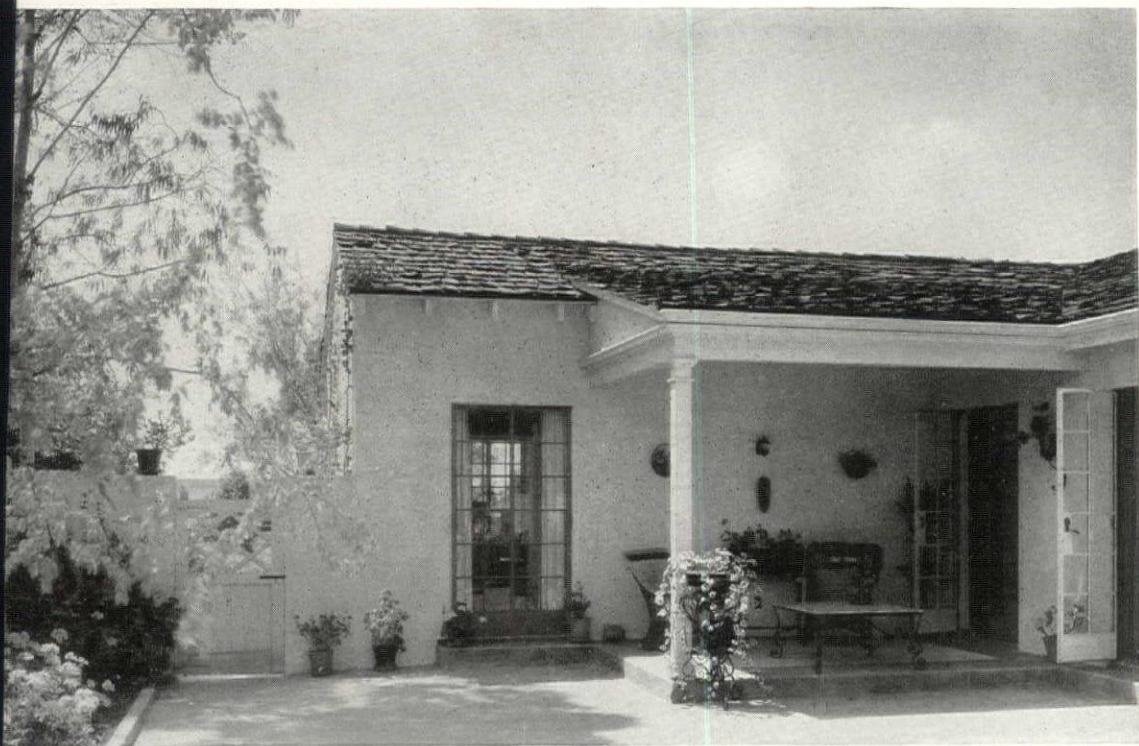
### LATH AND PLASTERING

Lathing—metal in garage, Diamond copperbearing by Milcor Co., 1" chicken wire over wood lath in kitchen and bath, wood lath balance of house.  
Plastering—Blue Diamond Co. hard patent plaster. Finishing coat exterior stucco by California Stucco Co.

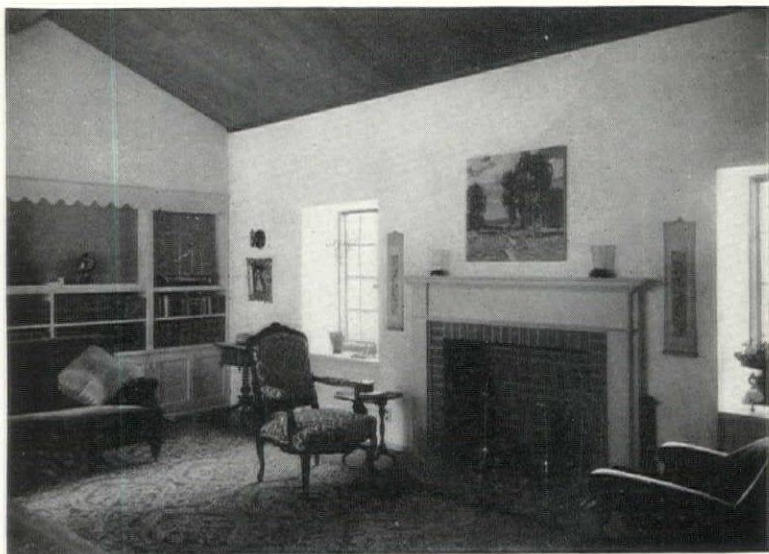
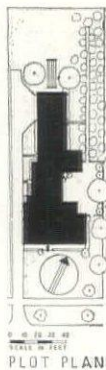
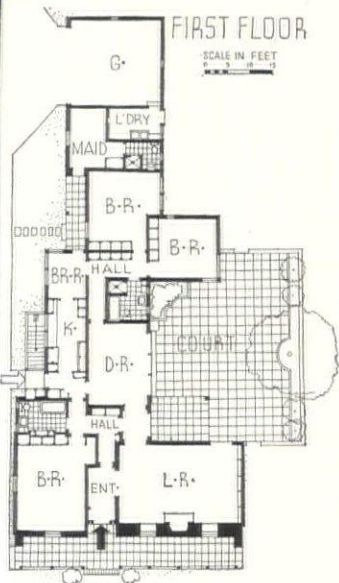
### INTERIOR WOODWORK

Trim—California pine.  
Floors—oak.  
Painted surfaces. }  
Shelving and cabinets. } California





URT DETAIL



**PLATING**  
 Outside walls—Sisalkraft.  
 Ceiling—Insulite wallboard. Insulite Co.  
 Weatherstripping—front door by Chamberlin Metal Weatherstrip Co.

**TERIOR FINISHES**  
 Floors—Durako and Johnson's wax.  
 Trim } Paint and enamel,  
 Doors } Fuller Co.  
 Sash }  
 Walls—paint, Fuller Co.

**WIRING**  
 Cable—General Electric.  
 Electrical fixtures—brass by B. B. Bell Co.

**SWITCHES**  
 Switches—Harvey Hubbell, Inc.

**LIGHTING**  
 Direct.

**PLUMBING**  
 Kitchen.  
 Sink—enameled iron. Crane Co.

**BATHROOM**  
 Fixtures—enameled iron by Crane Co.  
 Cabinets—enameled iron. Albatross Co.  
 Bath tubs—enameled iron by Crane Co.  
 Toilets—Vitreous china.  
 Seats—Church Co. white.  
 Showers—Crane Co.  
 Shower curtains—cotton, Bud Brand Products Co.  
 Tile—ceramic and glazed by Gladding, McBean & Co.

**PIPES**  
 Steel and cast iron by U. S. Steel Tube Co.

**HEATING**  
 Gas-fired hot air by Payne Furnace Co.  
 Ducts—tin.  
 Hot water heater—gas fired storage type—Hoyt Co.

**AIR CONDITIONING**  
 Fans available for Payne furnaces to blow natural cool air through ducts.

**CHIMNEY**  
 Fireplaces.  
 Facings and mantels—common brick, Los Angeles Brick Co.  
 Hearths—brick tile, Gladding, McBean & Co.

**HARDWARE**  
 Interior and exterior—Sargent.

**SCREENS**  
 Roller screens by Inviso Roller Screen Co.



## 58. COPPER HOUSE, EDMONDSON, MARYLAND



This demonstration house was built by Copper Houses, Inc., to show what could be done with copper as a building material. Of copper, steel and concrete construction, it is fire-resisting; the use of wood is confined to rafters, sheathing, trim and floor surfaces. The lower-story walls are vertical sheathing of copper, stiffened and sound-insulated by composition boards cemented to the backs; these walls afterwards painted. Roofs are covered with standing-seam copper; what appear to be clapboards on gable ends and elsewhere are copper. Strong individuality marks the exterior. The main block follows the Maryland tradition of steeply pitched gambrels (and incidentally displays a large expanse of copper); the wings are challenging. The merit of the veranda-sleeping porch wing may be questioned, its durability cannot be denied. Cost, including architect's fee, \$13,500. Cubage, 39,000 at 34½ cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete block.  
Cellar floor—concrete.  
Waterproofing—2 coats of hot pitch tar.

#### FRAME CONSTRUCTION

First story—structural steel, 4" channel studs 2'-8" on center, bolted or welded to steel sill and fastened on top with 4" steel channel; horizontal and diagonal bracing with 1½" angles.  
Floor joists of 1st and 2nd floor—Truscon open-truss.  
Sub-flooring—Gypsteel floor planks.  
Second story and roof—sloping upwards and rafters, wood.

#### EXTERIOR SURFACE

Walls—48 oz. copper plates applied to steel studs by special bronze extruded shape. Copper is backed with

½" Celotex Truscon metal lath and plaster applied to inside face of steel (on cushion strip of Celotex to prevent condensation).

Clapboards—copper at gable ends.

#### ROOF

Copper roof—16 oz. standing seam, Chase Brass & Copper Co.  
Gutters } Chase Brass & Copper Co.  
Flashing }  
Down spouts }

#### DOOR AND WINDOW FRAMES

4" steel frames around doors and windows.  
Steel sash—Truscon Steel Co.  
Exterior doors—wood.

#### PORCHES

Floor—reinforced concrete.

#### GLASS

Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Copper }  
Trim } Du Pont.  
Sash }

#### LATH AND PLASTERING

Inside of exterior walls and interior partitions  
Lathing—metal, Truscon Steel  
Plastering—3 coats.

#### INTERIOR WOODWORK

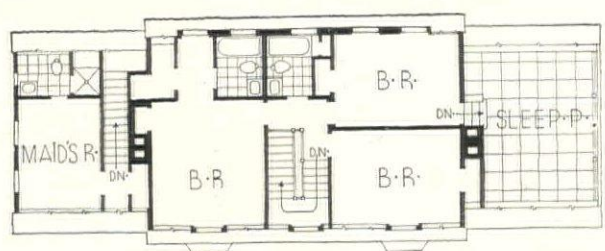
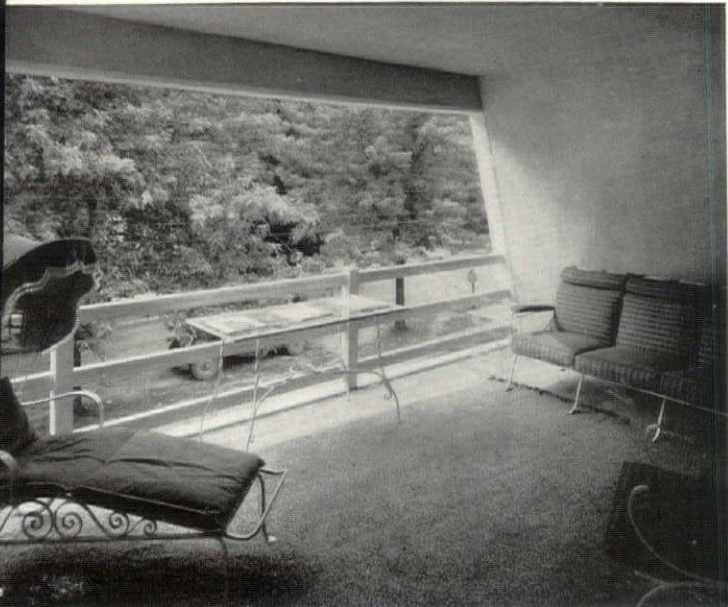
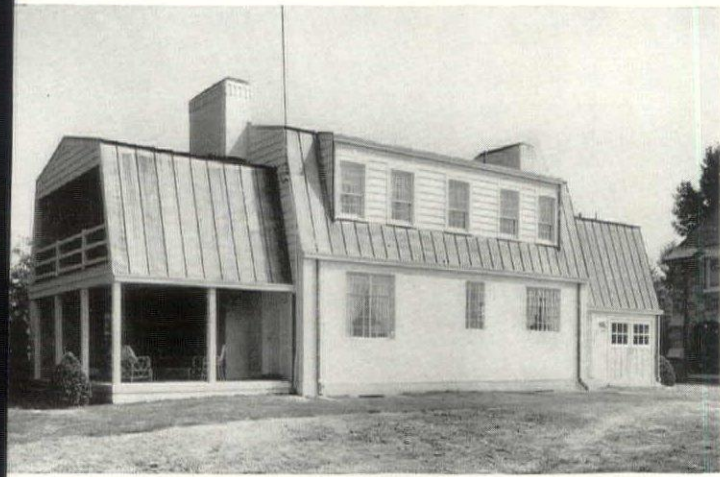
Floors—white oak applied in mastic over the Gypsteel sub-flooring.  
Shelving and cabinets—Oxford.

#### INSULATING

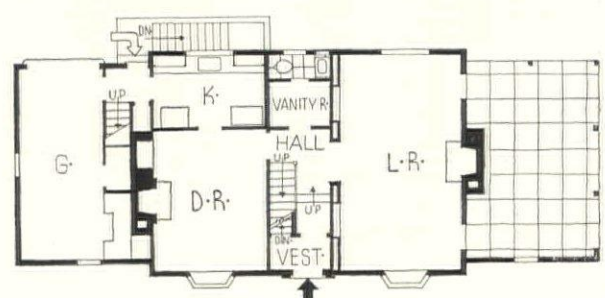
Outside walls } 4" Red Top spun glass }  
Roof rafters } U. S. Gypsum Co.  
Weatherstripping—Chase Brass & Copper Co.



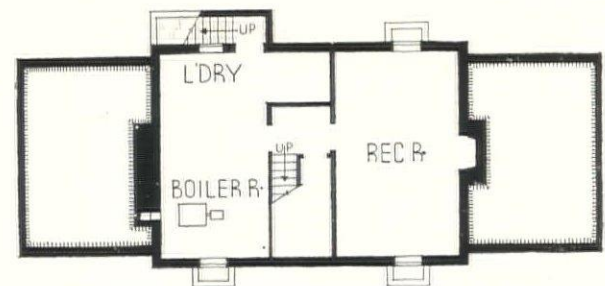
# HN J. WHELAN, ARCHITECT



SECOND FLOOR



FIRST FLOOR



BASEMENT



One excellent feature is the spacious recreation room with fireplace in the basement. The maid's room and bath above the garage, reached by a service stairway, are completely shut off from the family sleeping quarters. Besides central heating, all mechanical equipment is of recent type.

## INTERIOR FINISHES

Trim }  
Doors } Du Pont.  
Sash }  
Walls }  
Wallpaper—W. & J. Sloane.

## WIRING

Cable—concealed BX.  
Electrical fixtures } Chase Brass & Copper Co.  
Switches }

## LIGHTING

Direct.

## FURNISHING

Kitchen  
Sink—Standard Sanitary Mfg. Co.  
Stove—General Electric Co.  
Refrigerator—Frigidaire Division of General Motors Corp.

## BATHROOM

Fixtures—Standard Sanitary Mfg. Co.  
Fittings—Chase Brass & Copper Co.

## PIPES

Copper water tube and sweat fittings by Chase Brass & Copper Co.

## HEATING

In service rooms, kitchen and bathrooms—gas.  
Boilers—General Electric.  
Radiators—copper concealed convectors } Chase Brass & Copper Co.  
Piping—copper tube and sweat fittings }  
Hot water heater—Ruud  
Thermostat—Humidistat, Minneapolis-Honeywell Regulator Co.

## AIR CONDITIONING

Central system by Westinghouse, 2½ ton capacity.

## CHIMNEY

Fireplaces  
Facings—copper in recreation room.  
Hearths—slate.  
Mantels—special Caen stone and wood.  
Damper—H. W. Covert.

## HARDWARE

Interior and exterior—brass, Yale & Towne Mfg. Co.

## SCREENS

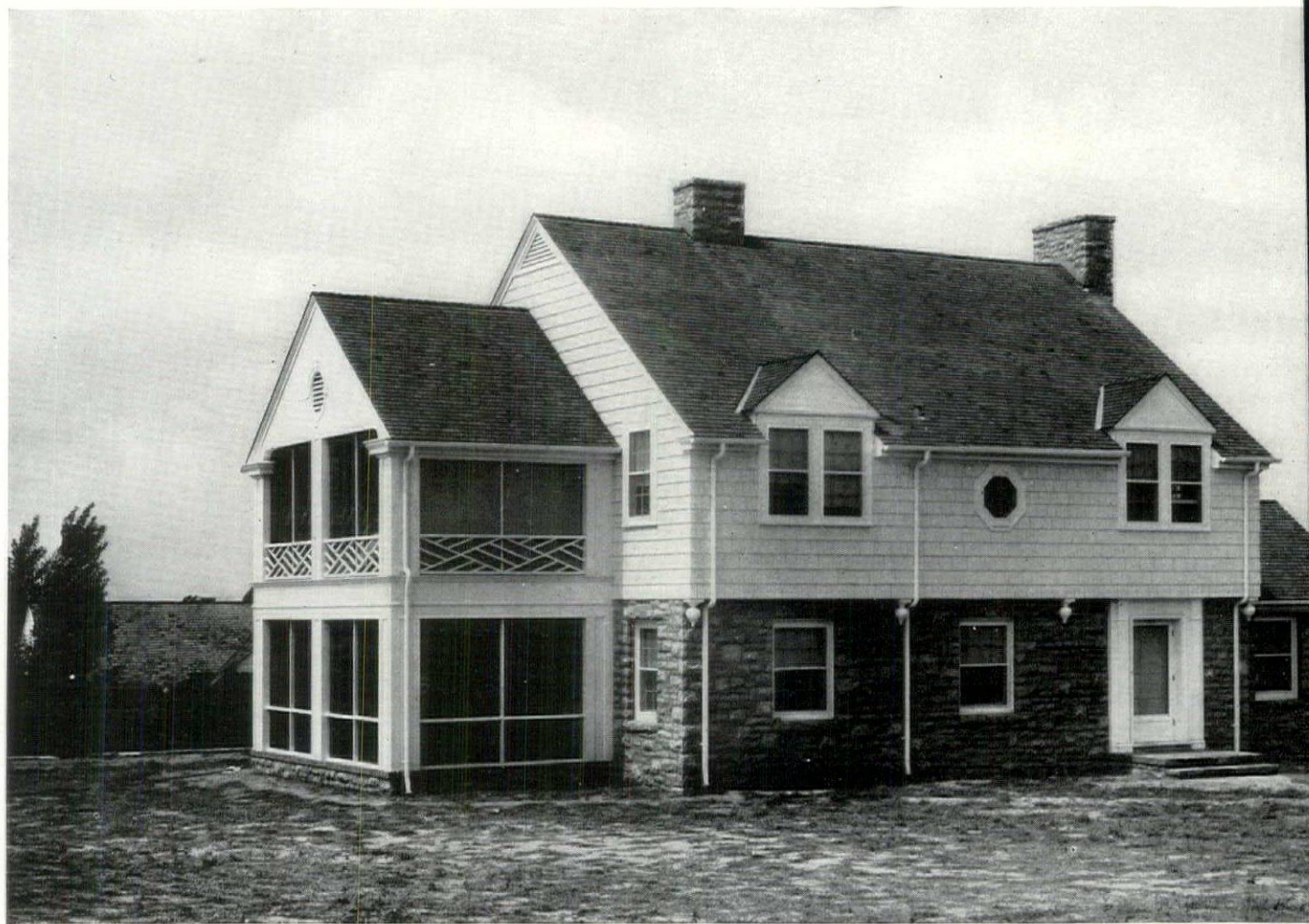
Bronze wire mesh by Chase Brass & Copper Co.

## WINDOW DRESSING

Venetian blinds—W. & J. Sloane.



## 59. HOUSE FOR A. F. TRUEX, TULSA, OKLAHOMA



In its main mass this Mid-Western house recalls the early New England two-chimney type. The overhang pear-shaped pendants are, of course, particularly reminiscent, and while the overhang may be explained the change of materials, the pendants have no recognizable structural or decorative value. A simpler elevation might have resulted had the eaves been raised sufficiently to eliminate the dormers and a full-size window substituted for the octagon which lights the bath. The location of the entrance at one side rather than in center, as is customary, makes possible an excellent arrangement of living room and hall, as may be seen from the plan. The two-story porch presents a problem which is rarely solved satisfactorily; reference to several of the California houses in this issue will show a number of solutions of interest. It is never flattering to a house to show it before landscaping has been completed, and the appearance of this particular example will be greatly improved by planting. Cost: \$13,000. Cubage: 45,400 at 29 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete.  
Columns—steel.  
Cellar floor—cement.

#### FRAME CONSTRUCTION

Wood  
Girders—steel.

#### MASONRY CONSTRUCTION

Stone walls, 1st story—native limestone.

#### EXTERIOR SURFACE

Shingles, 2nd story—edge grain, 7½" to weather.

#### ROOF

Wood shingles on shingle lath.  
Valleys } Wheeling Cop-R-Loy  
Gutters } sheets, Wheeling Cor-  
Flashing } rugating Co., Kansas  
Down spouts } City, Mo.

Salt glazed tile drains—Dickey Clay Mfg. Co.

Composition sheathing paper—black threaded felt.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—wood.  
Casement—kitchen and  
1st floor toilet } Mesker Bros.  
Steel sash—basement } Iron Co.  
Doors and frames (exterior) } wood.  
Garage doors }

#### PORCHES

Reinforced concrete.

#### GLASS

Double strength, quality A, by Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Roof shingles—Creo-Dipt, ready stained.

Wall shingles

Priming } Cabot's Old Virginia  
Finish coat } white.

Trim and sash

Priming } white lead and oil  
Finish coat } Dutch Boy, National  
Lead Co.

#### LATH AND PLASTERING

Lathing—expanded metal by Wheeling  
Corrugating Co.

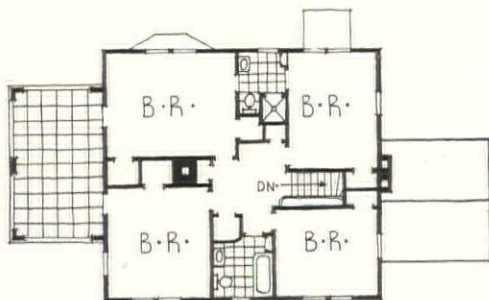
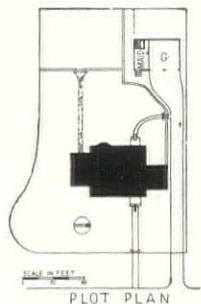
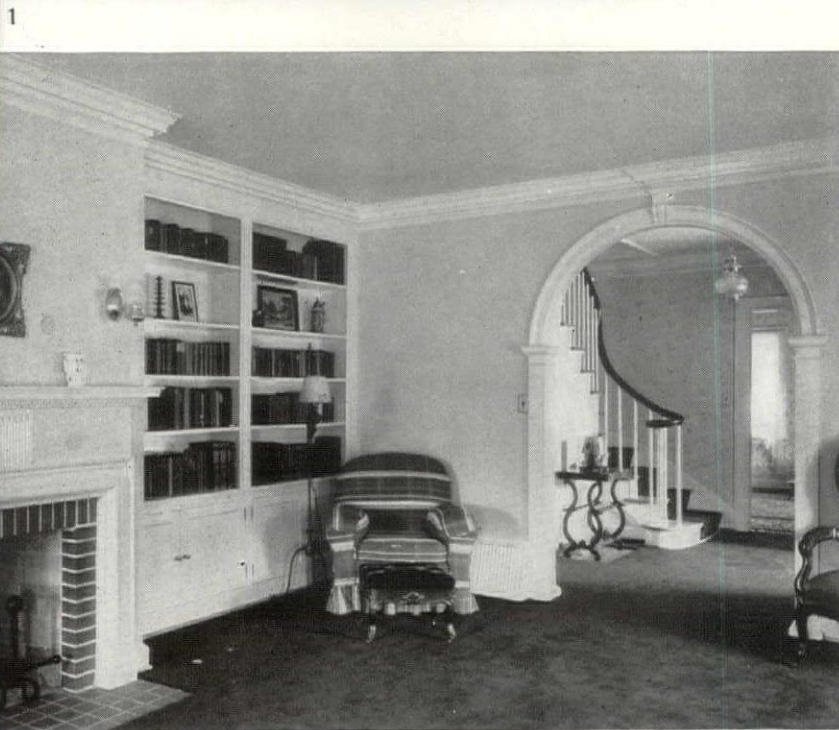
Plastering

Patent plaster } U. S. Gypsum Co.  
Finishing coat } Red Top.

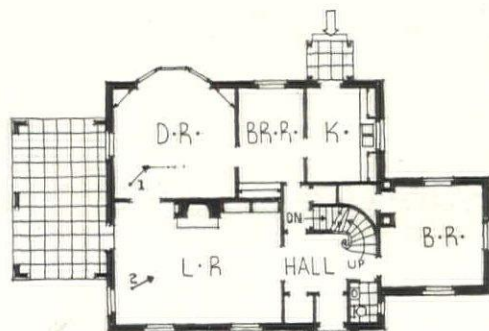
#### INTERIOR WOODWORK

Floors—clear, plain, white oak.  
Trim—white pine.  
Shelving and cabinets—white pine.  
Stock millwork—all special.





SECOND FLOOR



SCALE IN FEET  
0 5 10 15 20

FIRST FLOOR

PLAN: Had the breakfast room been omitted the first floor bedroom might have been incorporated in the main body of the house with a considerable saving. Closet space is rather pinched. Well worked out entrance hall with pleasant vista from living room.

INSULATING  
Outside walls } Bat rock wool by Eagle-  
Roof rafters } Picher Sales Corp.,  
Attic floor } Cincinnati, Ohio.  
Weatherstripping—by Higgin Mfg. Co.

INTERIOR FINISHES  
Floors—Pratt & Lambert floor varnish.  
Trim } Enamel finish, "Armorcote" by  
Doors } Cook Paint & Varnish Co.  
Sash }  
Walls—Cook Paint & Varnish Co. "Flat  
Wall."  
Wallpaper—M. H. Birge & Sons Co.

WIRING  
Cable—Simplex Wire & Cable Co. "Sim-  
core."

LIGHTING  
Direct

PLUMBING  
Kitchen  
Sink—Standard Sanitary Mfg. Co.  
Cabinet—wood.  
Refrigerator—Ice-o-matic by Williams  
Oil-o-matic Heating Corp.

BATHROOM  
Fixtures  
Cabinets  
Bath tubs  
Toilets  
Seats  
Showers  
Shower curtains  
Tile—Franklin Tile Co.

PIPES  
Wrought iron—Reading Iron Co.  
HEATING AND AIR CONDITIONING  
Gas—Pennsylvania Gas Furnace.

Registers—Tuttle & Bailey Inc.  
Hot water heater.  
Thermostat — Minneapolis - Honeywell  
Regulator Co.

CHIMNEY  
Fireplaces  
Facings } Red pressed brick, Acme  
Hearths } Brick Co.  
Mantels—wood.  
Damper—H. W. Covert Co.

HARDWARE  
Interior and exterior—Sargent & Co.

SCREENS  
Wood frames.

SPECIAL EQUIPMENT  
Disappearing stair—Bessler Disappearing  
Stairway Co.  
Bath heaters.



## 60. HOUSE OF JAMES GAMBLE ROGERS II, WINTER PA



On an island intended to reproduce a little corner of France, this house faithfully follows a northern French farmhouse tradition; the ensemble is appealing and indicates the ready adaptability of this type to the needs of a modest domestic establishment. Construction is entirely frame, veneered with brick and stucco washed, the roof is covered with random width hand-riven shingles and all exposed timbers, inside and out, are hand-hewn. The result is a mellowness of textures not often attained in a new house. Living room and kitchen are both open to the peak of the roof, the timbers exposed. Designed for a family of two adults, the owners' bedroom is on the ground-floor to save steps, the guest's suite on the upper floor for privacy. There is no heating other than by fireplaces. Cost, including architect's fee, \$7,260. Cubage, 21,586 at 33.6 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

4" reinforced concrete slab laid on grade level. Slab covered with one thickness of 30 pound felt mopped in place with hot asphalt. A second 3" slab is poured over the first.

#### FRAME CONSTRUCTION

Longleaf yellow pine.  
First floor—sleepers secured with "Bull Dog" floor clips placed in concrete slab.  
Rafters—hewn by hand where exposed.

#### EXTERIOR SURFACE

Brick veneer—second hand non-vitrified paving brick, 4x4x8.

Clapboards—heart cypress.

Stucco—made with Florida Portland cement.

#### ROOF

Wood shingles on sheathing—rived from local cypress hearts.

Valleys } Anaconda 16 oz. copper.  
Flashing }

Composition sheathing paper—Sisalkraft.

#### DOOR AND WINDOW FRAMES

Sash and frames—casement type, cypress.

Doors and frames } cypress made at  
(exterior) } local mill.  
Garage doors }

#### PORCHES

Reinforced concrete slab, Florida Portland cement.

#### GLASS

Libbey-Owens-Ford flat drawn sheet glass.

#### EXTERIOR PAINT

Roof shingles—dipped before application then given one coat of creosote.

Siding }  
Trim } Creosote.  
Sash }

#### LATH AND PLASTERING

Lathing—wood, yellow pine.

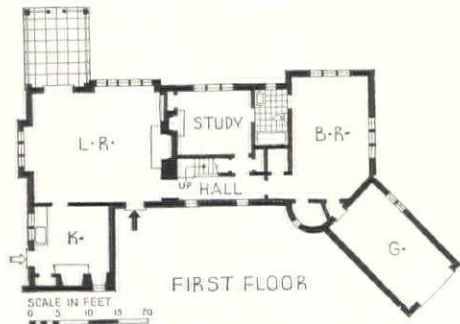
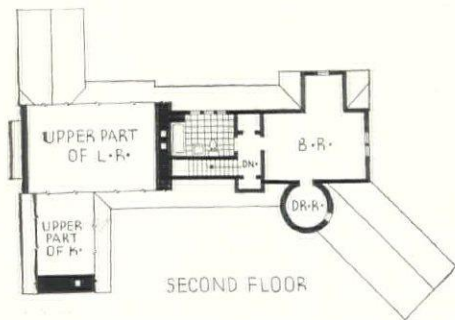
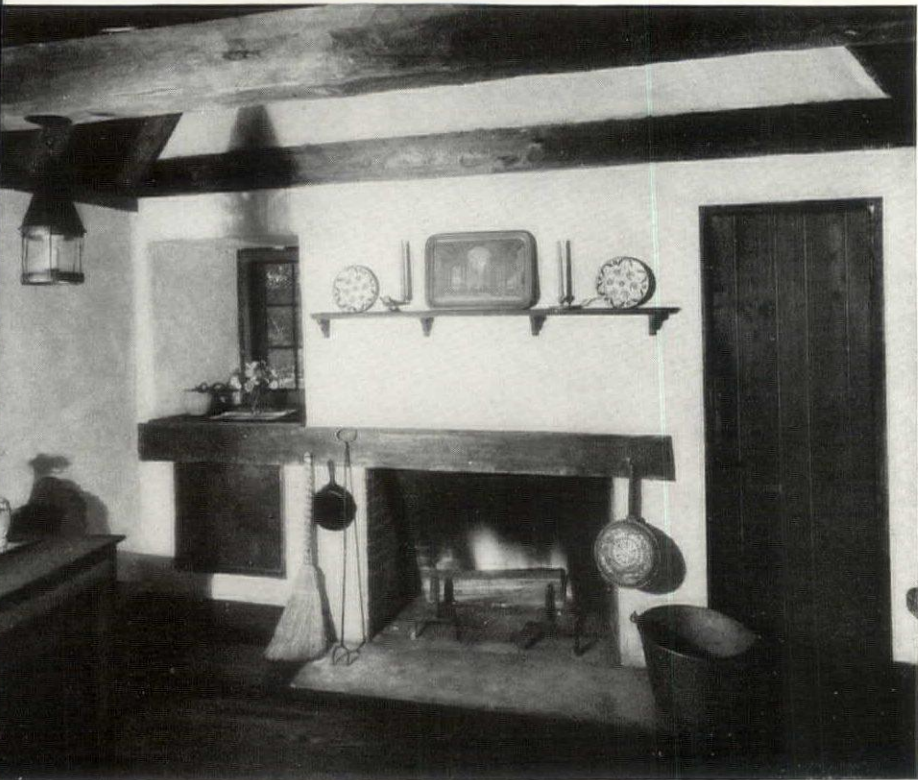
Plastering—3 coats ivory.

#### INTERIOR WOODWORK

Floors—random width yellow pine 4" to 20" wide.

Trim } Cypress, by  
Shelving and cabinets } local mill.





AN: Circular turret facilitates adjustment of the canted garage  
the rest of the structure. If the turret had been used for the  
, instead of being made into a guest's dressing room, there  
ld have been some additional space both upstairs and down.  
is merely a possible alternative; the plan is thoroughly satis-  
fory as it stands.

**INSULATING**  
Outside walls—30 lb. felt paper.  
Roof rafters—Celotex.  
Weatherstripping—Florida Weatherstrip  
Co. of Orlando.

**INTERIOR PAINTING**  
Floors—Minwax.  
Trim } Sherwin-Williams oil stain, oil  
Doors } paint in bathrooms.  
Sash }

**WIRING**  
Cable—BX.  
Electrical fixtures—made to order by Ye  
Old Forge, Orlando.

**PLUMBING**  
Kitchen  
Sink—Crane flat rim.  
Cabinet—local manufacture.  
Stove—Westinghouse electric, "Flavor  
Zone."  
Refrigerator—Kelvinator.

**BATHROOM**  
Fixtures }  
Bath tubs } Standard Sanitary Mfg. Co.  
Toilets }

Seats—Church Sani-White.  
Showers—Standard Sanitary Mfg. Co.  
Tile—3"x6" white.

**PIPES**  
Copper by Mueller Brass Co.

**HEATING**  
None  
Hot water heater—Holyoke Heater Co.

**CHIMNEY**  
Fireplaces  
Facings—plaster.  
Hearths—second hand brick and ce-  
ment.  
Mantels—wood.  
Damper—Colonial throat and damper.

**HARDWARE**  
Interior and exterior—McKinney hand  
forged.

**SCREENS**  
18 mesh copper.



## 61. WEEK-END HOUSE, NORTHPORT, LONG ISLAND



Described by the architects as a vacation house, its planning and treatment show the close relation with outdoor living which was sought. Two walls of glass admit ample sunlight, which may be controlled by awnings and curtains; they also give an excellent view of the surrounding countryside. A notable feature is that while the house consists of but one story, the light steel columns and flat roof give it three living levels: the space below is used for a porch as well as an automobile shelter while the roof is used for sun bathing and outdoor sleeping in summer. The facing of the house is particularly interesting, being of heavy canvas laid over tongued and grooved redwood flooring. Walls are insulated by aluminum foil placed as a continuous membrane between the exterior and interior of the 4 in. wall. The interior wall finish is  $\frac{1}{4}$  in. plywood. Cost including furnishings: \$982.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Footings—concrete, tapered sides resting on concrete slab.  
Pavement under house at ground level—concrete.

#### FRAME CONSTRUCTION

Columns—4" steel tubes (extra heavy section) support a pair of 2"x10"s bolted to a welded-on steel "fin" that penetrates columns. A 10" square steel plate  $\frac{3}{4}$ " thick is welded to base of each column. Columns not filled with concrete.

Joists—floor and roof 2"x8".

Bridging—double row.

Studding—two 2"x2"s to take membrane of aluminum foil between (see "Insulating")

Exterior facing—3" California redwood flooring laid diagonally. Exposed surface sanded.

#### EXTERIOR SURFACE

Facing given one coat of bedding paint (William L. Barrell & Co., New York) to serve as a preservative and adhesive base for canvas (Turner Halsey Co., New York) Canvas "Duck" No. 6, 42" wide stretched on wall; joints lapped  $1\frac{1}{2}$ " and nailed  $\frac{3}{4}$ " apart with spiral, double clad zinc nails; surface of canvas sponged slightly; canvas paint (Devco & Reynolds) applied as 2 surface coats; final paint aluminum. Ground floor ceiling—Masonite.

#### ROOF

3" California redwood flooring laid diagonally covered with No. 4 cotton duck

canvas "Mt. Vernon" treatment similar to walls.

Flashing—canvas surface requires flashing.

Down spout—cast iron connected to copper drain pipe at center of house.

#### DOOR AND WINDOW FRAMES

Sash and frames, steel factory-type Forestra sash throughout, 3 windows projecting, by Detroit Steel Products Co.

Doors and frames (exterior)—steel frame doors.

#### GLASS

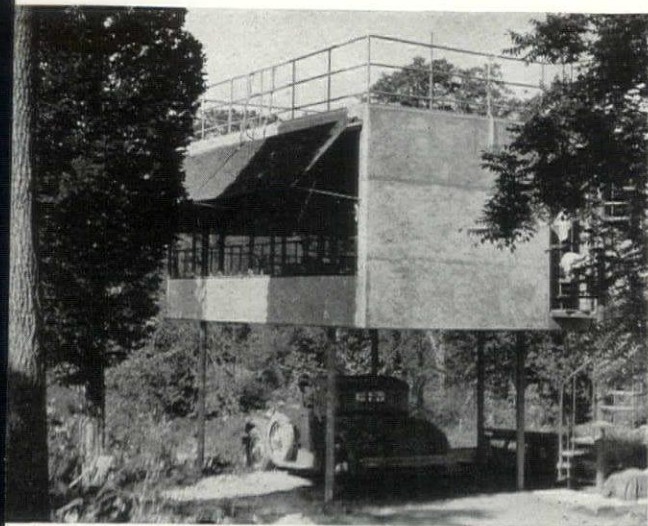
Lustra, ultra-violet, by American Window Glass Co.

#### EXTERIOR PAINT

Walls and roof—listed under "Exterior Surface" and "Roof."



# LAWRENCE KOCHER AND ALBERT FREY



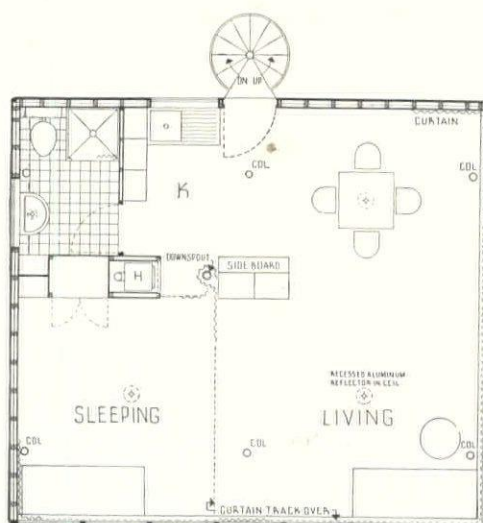
TH SIDE AND CIRCULAR STAIR TO ROOF



LALLY COLUMNS AND BUILT-UP AND NOTCHED BEAMS



Lincoln-Jensen



0 1 2 3 4 5 6 7 8 9 10 FEET

SECOND FLOOR PLAN



SECTION

**PLAN:** To reduce housework to a minimum, as well as to keep costs down, the plan is treated as a single open space, with the bathroom as the only wall-enclosed unit. This arrangement also gives a small area an effect of spaciousness. For sleeping the space may be subdivided by means of curtains into three bedrooms, each with free access to the bathroom. The simplicity of the plan is deceptive, and its admirable organization of the available space is worthy of study.

Ground floor ceiling—aluminum paint.  
Sash and railing

Priming—metal paint.  
Finish coat—"Duco," E. I. du Pont de Nemours & Co., Inc.

## INTERIOR WOODWORK

Floor—California redwood covered with canvas and painted like outside but with color as finish coat.

Walls— $\frac{1}{4}$ " plywood, clear white pine, by U. S. Plywood Co.

## INSULATING

Outside walls—continuous membrane of double-faced aluminum foil between studs providing two air spaces.

Floor and roof—continuous double-faced aluminum foil placed 2" below floor and roof, insulating against heat and cold.

2nd floor ceiling—rigid insulation board by Johns-Manville.

## INTERIOR PAINTING

Floors—clear spar varnish in addition to canvas paint.

Walls } clear spar varnish.  
Doors }

Sash—metal paint and "Duco."

## WIRING

Cable—BX

Electrical fixtures—factory-type aluminum reflectors recessed in ceiling.

## LIGHTING

Direct.

## PLUMBING

Kitchen

Sink—combination sink and laundry tray, green porcelain enamel by Standard Sanitary Mfg. Co.

Cabinets—metal by Hamilton Mfg. Co., Rahway, N. J.

Stove—electric.

## BATHROOM

Fixtures } Henry Weis Mfg. Co.,  
Shower cabinet } Inc.

## HEATING

Coal

Heater—Vecto No. 2 (central convection) by American Radiator Co.

## SCREENS

Copper.

## WINDOW DRESSING

Shades and curtains—made of Revolite by Johnson & Johnson, New Brunswick, N. J.

Awnings—for control of sun heat.





In this house the architect planned for his wife and himself a conventional New England type. Its eaves and high roof are well adapted to the hilltop site. The large center bay is the main feature of the facade and living room and its large expanse of glass gives ample light to the interior while leaving plenty of wall space for furniture. The above photograph shows the house in a rather unfavorable light, but the very bareness of its winter surroundings is an excellent illustration of the importance of adequate landscaping in setting off a house to best advantage. Cost: \$15,400. Cubage: 34,426, at 45 cents a cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Wall—stone and cinder concrete block.  
Columns—lally.  
Cellar floor—cement.  
Waterproofing—integral, Medusa.

### FRAME CONSTRUCTION

Fir.

### EXTERIOR SURFACE

Shingles—red cedar random width,  
"Weatherbest" 12" to weather.

### ROOF

Wood shingles on shingle lath—  
"Weatherbest" 6½" to weather, left  
natural.

Valleys  
Gutters  
Flashing  
Down spouts } 16 oz. copper.

Salt glazed tile drains—4" along foundations.

Composition sheathing paper—Sisalkraft.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung } Pondosa "D" select  
Casement type } white pine.  
Steel sash in basement.

Doors and frames (exterior) } white pine.  
Garage doors

### TERRACE

Floor—2" Bluestone laid in cement on 5"  
cinder concrete.

### GLASS

Single thick quality B Pennvernion, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—dipped in Cabot's bleaching oil.

Trim } oil paint.  
Sash }

### LATH AND PLASTERING

Lathing—metal, 2¾ lbs. per sq. yard  
Plastering—patent plaster Red  
Keene cement in bathroom.

### INTERIOR WOODWORK

Floors—quality red and white oak  
Paneling—Swedish knotty pine in  
room.

Trim  
Shelving and cabinets } white pine.

### INSULATING

Outside walls  
Attic floor. } Red Top wool, U  
Weatherstripping } Gypsum Co.

### INTERIOR PAINTING

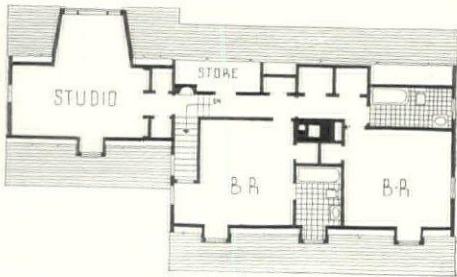
Floors—stained.



FRANCIS KEALLY, ARCHITECT



John Gass Photos



SECOND FLOOR



FIRST FLOOR

PLAN: Excellent handling of vistas, particularly from entrance through living room. The vista through the dining room door and north and south windows is given added interest by a slight change in levels. Garage entrance to house is well located. The second floor studio with its large north light is an interesting use of the space over the garage.

Oil paint, Moore's.  
Electrical fixtures—Hendrickson & Co.  
Switches—toggle.  
Painting—BX.  
Sink—Standard Sanitary Co.  
Cabinet—wood.  
Stove  
Refrigerator } General Electric.  
Incinerator—Standard Sanitary Mfg. Co.

Cabinets—Hoegger.  
Bath tubs } Standard Sanitary.  
Toilets }  
Seats—Church Mfg. Co.  
Floor—tile mosaic.  
PIPES  
Main—copper.  
Supply—brass.  
Soil and vents—wrought iron.  
HEATING  
Oil burner—General Electric, hot air.  
Hot water heater } General  
Thermostat and regulators } Electric.  
AIR CONDITIONING  
Central—General Electric.  
CHIMNEY  
Hard-burned common brick, 2" bluestone cap.

Fireplaces  
Facings } fire brick.  
Hearths }  
Mantels—wood.  
Damper—Covert Old Style A.

HARDWARE  
Interior and exterior—brass.

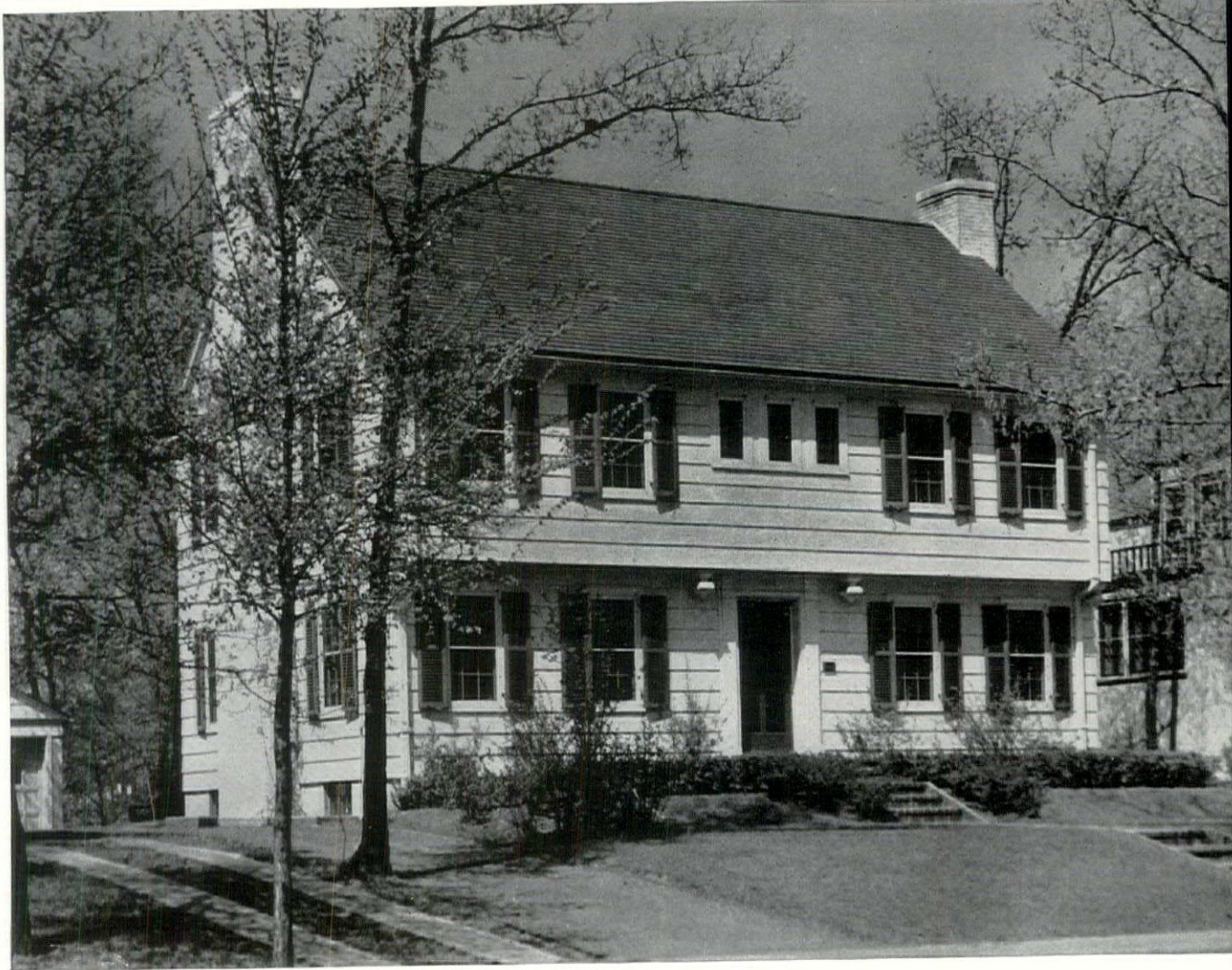
SCREENS  
Copper in wood frames.

WINDOW DRESSING  
Venetian blinds—Rolscreen Co.

SPECIAL EQUIPMENT  
Incinerator, model R7, Kerner Incinerator Co.



## 63. HOUSE FOR FRANK R. COOK, MINNEAPOLIS



**PROBLEM:** Adequately to house a family of five on a sloping lot 58 x 135 ft. A recreation room was desired. The house was faced east on the street, a stone retaining wall was built 15 ft. to the rear and along the north side. This permitted a two level lawn and garden treatment of the rear.

The two chief requirements were to house a family of five comfortably to provide a recreation room, besides the other usual essentials. The house was arranged to meet the needs of the case, the outward expression of style was a matter of arbitrary choice. Since there was no structural occasion for an overhang—such as there once was—its presence is a concession to precedent. The front elevation has balance and is well proportioned. The garage is detached, and put at the rear of the lot. Cost of house, excluding garage, \$13,050. Cubage, 33,425, at 39 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete block.

Cellar floor—cement, asphalt tile over cement in recreation room, Thomas Molding Co.

Waterproofing— $\frac{1}{2}$ " coating of Portland cement (1 part) and sand (2 parts) with 5 per cent hydrated lime added, applied outside of foundation wall.

#### FRAME CONSTRUCTION

Fir

#### EXTERIOR SURFACE

Shingles—red cedar, 24" Royals, Edham Co.

#### ROOF

Wood shingles on shingle lath—16" red cedar, Edham Co.

Valleys }  
Flashing } tin, Taylor's "Target & Arrow"

Gutters } galvanized iron, Central  
Down spouts } Alloy Steel Co.

#### DOOR AND WINDOW FRAMES

Sash and frames

Double hung } Northern white pine by  
Casement } local mill

Doors and frames (exterior)—Northern white pine.

Garage doors—McKee Door Co., Chicago.

#### GLASS

Flat drawn glass, Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Shingles

Dipped—side wall shingles factory dipped, Edham Co.

Brush stained—side wall shingles brush coated, 1 coat Cabot's double white.

Oil stain—roof shingles.

Trim }  
Sash } lead and oil paint.

#### LATH AND PLASTERING

Lathing

Metal—boiler room ceiling "Bi-Flex" outside walls and second ceiling.

Wood—white pine—interior partition

Plastering

Finishing coat—"Tiger" lime.

#### INTERIOR WOODWORK

Trim—birch.

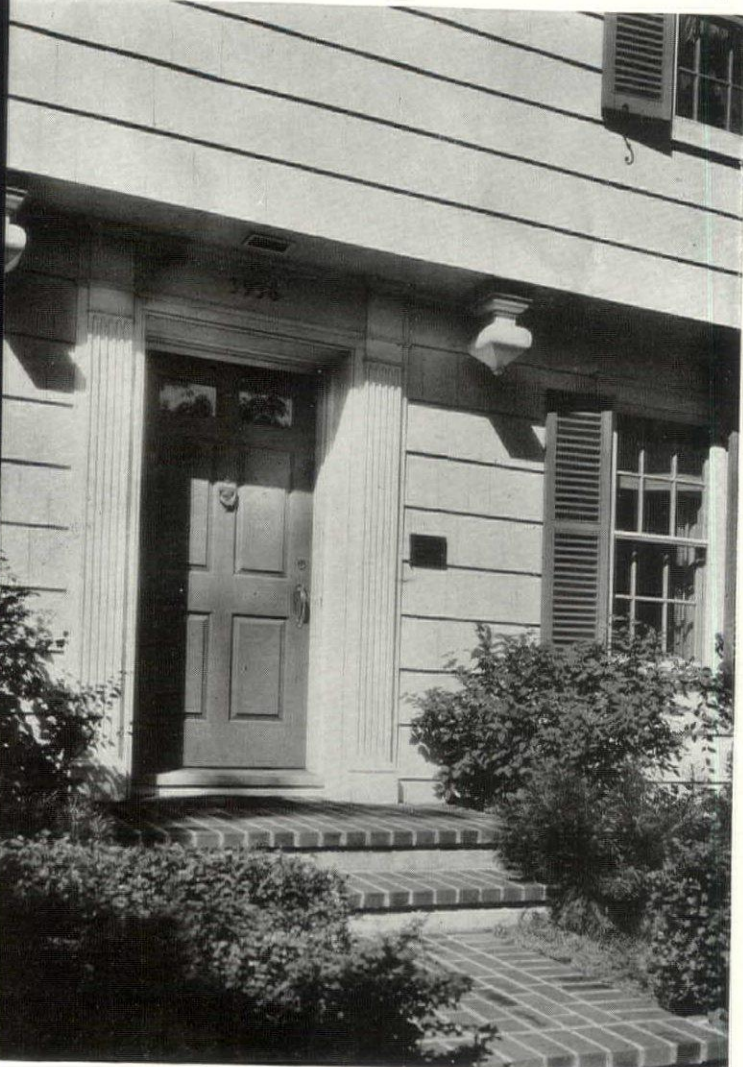
Floors—white oak.

Painted surfaces  
Shelving and cabinets } birch  
Stock millwork }

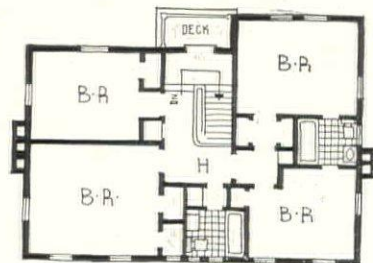
#### INSULATING

Outside walls— $\frac{1}{2}$ " thick "Bi-Flax," linum Co.

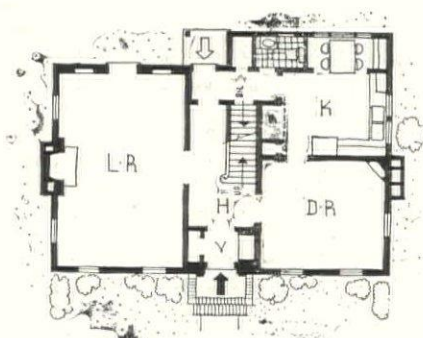




Henry Elleby



SECOND FLOOR



FIRST FLOOR

PLAN: The recreation room is in the basement under the living room, is equipped with a fireplace, and occupies that part not required by the heating plant and laundry. There are coat closets on each side of the vestibule. The kitchen has a well-lighted dining alcove. On both floors there is good closet provision and all rooms have cross ventilation.

nd story ceiling—1" thick "Bi-flax"  
therstripping — Reese Weatherstrip  
o.

#### OR FINISHES

rs—varnish, Pratt and Lambert.

ts } O'Brien's enamel.

s—O'Brien's enamel in kitchen and  
athrooms.

paper—for all principal rooms.

trical fixtures—local manufacture.  
ches—Hart & Hegeman.

NG

ct

ING

hen

ink—Crane Co.

Stove—"Universal"—Landers, Frary,  
and Clark.

Refrigerator—General Electric.

#### BATHROOM

Fixtures—Crane Co.

Cabinets—Morton.

Bath tubs—Crane Co.

Toilets—Crane Co.

Seats—Church Mfg. Co.

Showers—Crane Co.

Tile—matt glazed for walls, faience for  
floors.

#### PIPES

Steel

#### HEATING

Hubbard Oil Burner.

Boilers—Capitol, U. S. Radiator Co.

Radiators—U. S. Radiator Co.

Piping—steel.

Valves—James P. Marsh Corp., Chicago.  
Hot water heater—electric, "Thermo-  
grey."

Thermostat and regulators—Minneapolis-  
Honeywell Regulator Co.

#### AIR CONDITIONING

Unit—Lewis Air Conditioner.

#### CHIMNEY

Fireplaces

Facings } brick.  
Hearths }

Mantels—birch.

Damper—Peerless Mfg. Co.

#### HARDWARE

Interior and exterior—Sargent.

#### SCREENS

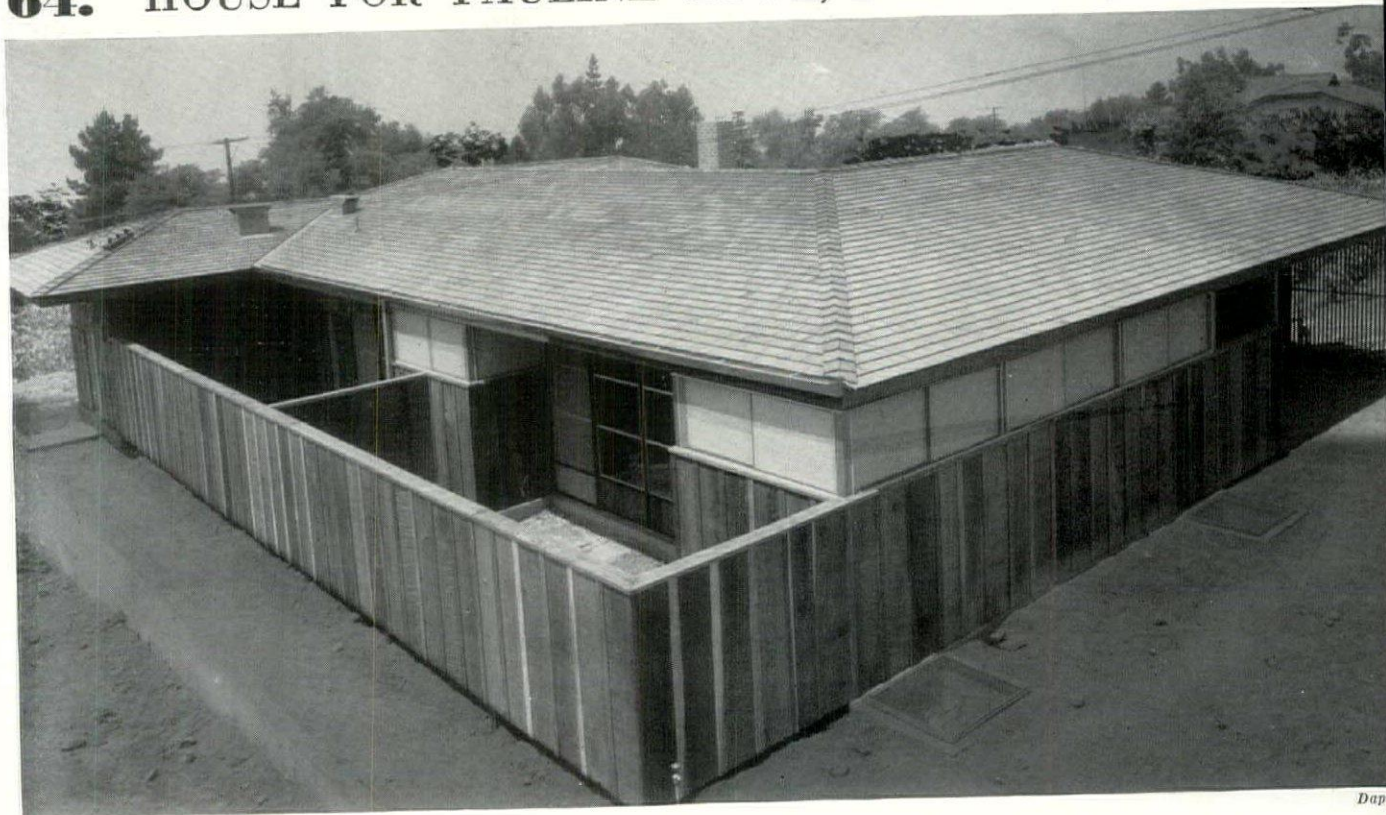
Wood—mill-made.

#### WINDOW DRESSING

Blinds—pine, mill-made.



## 64. HOUSE FOR PAULINE LOWE, ALTADENA, CALIFORNIA



Dapp

**PROBLEM:** To make economical use of an inside lot 49 ft. wide, securing privacy and some garden space; to have earthquake-resisting construction; to create a congenial setting for a sculptor imbued with Oriental ideals, reducing furnishings to bare essentials; to secure a spacious effect from a minimum of actual area; to have a sunny exposure for each room; to give as little valuable space as possible to the garage; and to secure seclusion from street and neighbors.



A few simple materials—wood, straw, fiber and glass—their natural origin left mostly undisguised, used to secure simplicity and an environment harmonious with the sculptor's personality and work. To achieve spaciousness, large wall areas of glass were used, opening into paved gardens at bedroom floor level which make room and garden one living space. These glass walls are opposite the entrances to each room and thus create the longest vistas possible. Solid enclosures of wood frame the bedroom gardens. Both bedrooms and bathroom are placed to catch early morning sunlight; kitchen, dining room and living room catch sunlight all day. Building ordinances required separation of garage from dwelling; though under the same roof, it is separated by a paved passage. Cost, \$3,900.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls and piers—concrete.  
Waterproofing—Asphaltum.

#### FRAME CONSTRUCTION

Douglas fir.  
Sills—redwood.

#### EXTERIOR SURFACE

12" redwood vertical boards with battens.

#### ROOF

Wood shingles on shingle lath—16" redwood 5" to weather.

Gutters } No. 24 gauge  
Flashing } galvanized iron.  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash—horizontal sliding of white pine.  
Doors (exterior)—Douglas fir.  
Garage doors—horizontal sliding redwood.

#### PORCHES

Brick floor—common red brick.

#### GLASS

Single weight Pennvernion. "Glass Cloth" in translucent windows by Turner Bros.

#### EXTERIOR PAINT

All paint is by W. P. Fuller Co.  
Shingles—linseed oil without color.  
Siding—left natural.  
Sash—"Negrosene," an alcoholic dye.

#### LATH AND PLASTERING

None.

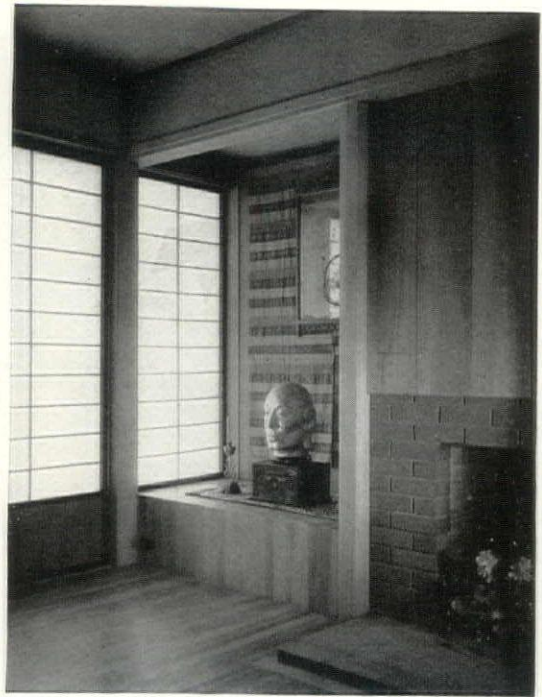
#### INTERIOR WOODWORK

All wall surfaces are heart common wood left natural.  $\frac{3}{8}$ " strip oak flooring.  
Shelving and cabinets—redwood white pine.

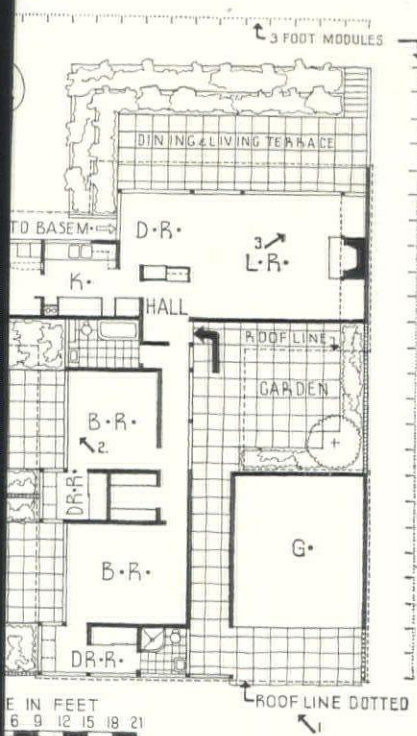




ROOM TERRACE



LIVING ROOM DETAIL



To secure seclusion from the street and neighbors the entrance is inside the house. To approach the front door from the street one traverses a paved and roofed tunnel-like passage between bedroom walls on one side, and garage and enclosed garden on the other. The dining room and living room are one, and open onto a dining terrace.

ENTRANCE DETAIL



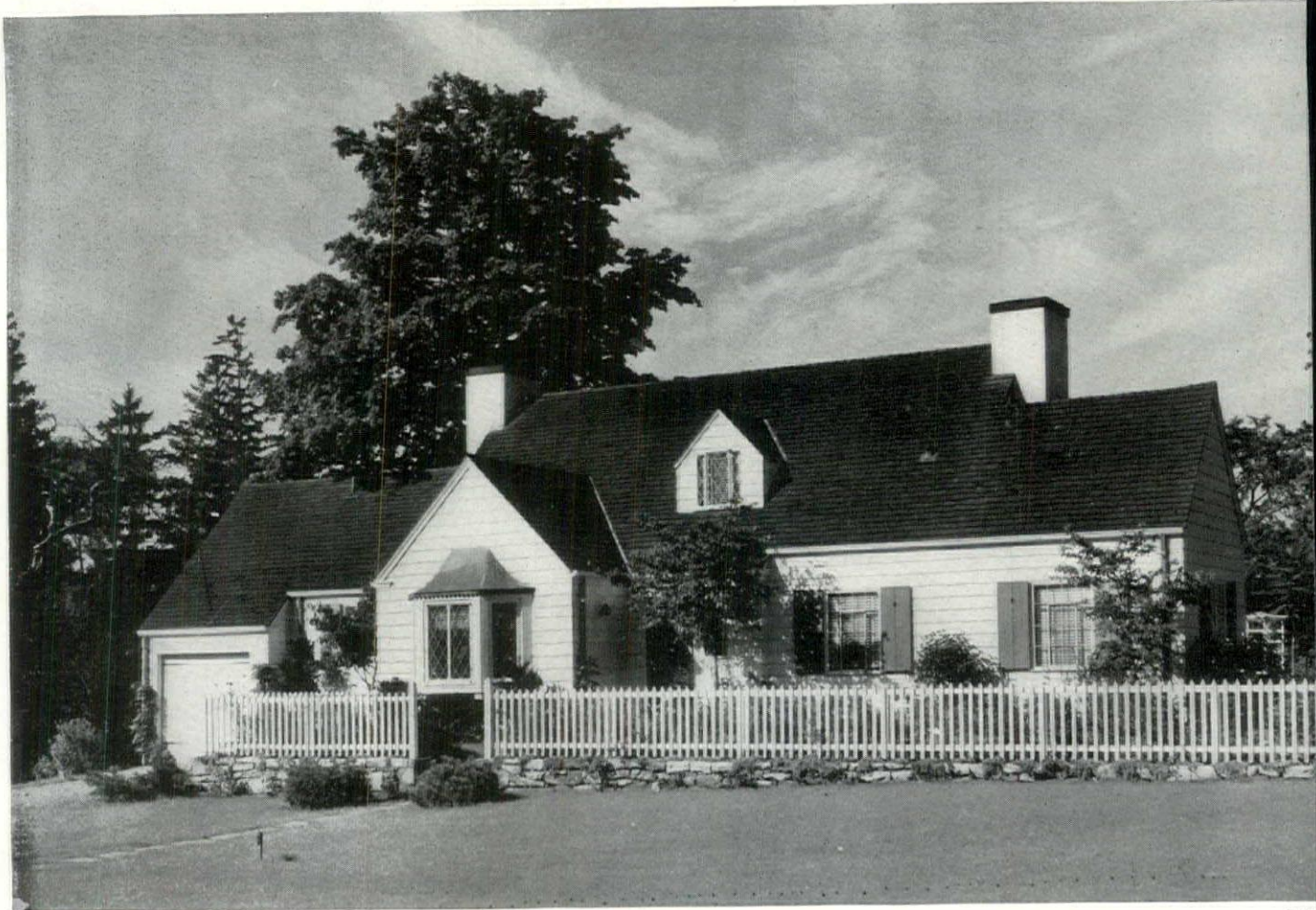
Dapprich Photos

**CEILINGING**  
Ceilings finished in Celotex except  
Masonite on kitchen and bath walls  
and ceilings.  
**PRIOR FINISHES**  
Walls of kitchen and bath—"Crestolite"  
(Fuller) on Masonite.  
**PAINTING**  
Paint—BX.  
**CEILINGING**  
Ceiling—recessed with flush face. Three  
hanging fixtures. Indirect in living  
room.

**PLUMBING**  
Kitchen  
Sink—West Coast.  
Stove—Wedgewood Gas.  
**BATHROOM**  
Fixtures—Kohler.  
Seats—Church.  
Tile—Pomona tile on floor.  
**PIPES**  
Wrought iron.  
**HEATING**  
Gas unit hot air—"Magic Way" Furnace  
Co.

Thermostat and regulators—button con-  
trol.  
**CHIMNEY**  
Fireplaces.  
Facings and hearths—brick.  
**SCREENS**  
No. 16 galvanized wire cloth.  
**SPECIAL EQUIPMENT**  
Chinese grass matting—California Asia  
Co.  
Glass cloth—Turner Bros.





John

It is altogether possible to design a house in the romantic manner without lapsing into sentimentality or losing leave of common-sense, as this example proves. Generally, such a house will fit more consistently in its local environment than one of more uncompromising characteristics that might appear overdressed for the occasion. This little white shingled house, for all its picturesque reminiscence of early Victorian models, is practical in its provision for the future and in its construction and equipment. While the latticed case of the dining room bay window recall the era of Jane Austen, the metal casement adaptation of the windows is both ingenious and modern. Though the upper floor is not needed for present occupancy, it is forehanded readiness to be made easily into two bedrooms and a bathroom, with good closets and generous storage lofts. Cost: \$7,610. Cubage: 24,600, at 31 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and columns — hollow cement blocks.

### FRAME CONSTRUCTION

No. 1 fir.  
Girders—long leaf yellow pine.

### EXTERIOR SURFACE

Shingles—red cedar, Weyerhaeuser.  
Stucco—foundation walls, Artstone stucco, Artstone Stucco Co.

### ROOF

Wood shingles on shingle lath—red cedar Weyerhaeuser.  
Valleys }  
Flashing } copper, American Brass Co.  
Down spouts }  
Gutters—fir.

### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Fenestra, Detroit Steel Products Co.  
Doors and frames } white pine, Curtis Companies, Inc.  
(exterior)  
Garage doors }

### PORCHES

Flagstone.

### GLASS

Vita-glass, Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Shingles—2 coats creosote, Samuel Cabot Inc.  
Trim } Atlantic white lead and linseed oil.  
Sash }

### LATH AND PLASTERING

Lathing  
Metal—expanded, Milcor Steel  
Plastering  
Patent plaster—fibered hydrate U. S. Gypsum Co.  
Finishing coat—hydrated lime putty, U. S. Gypsum Co.

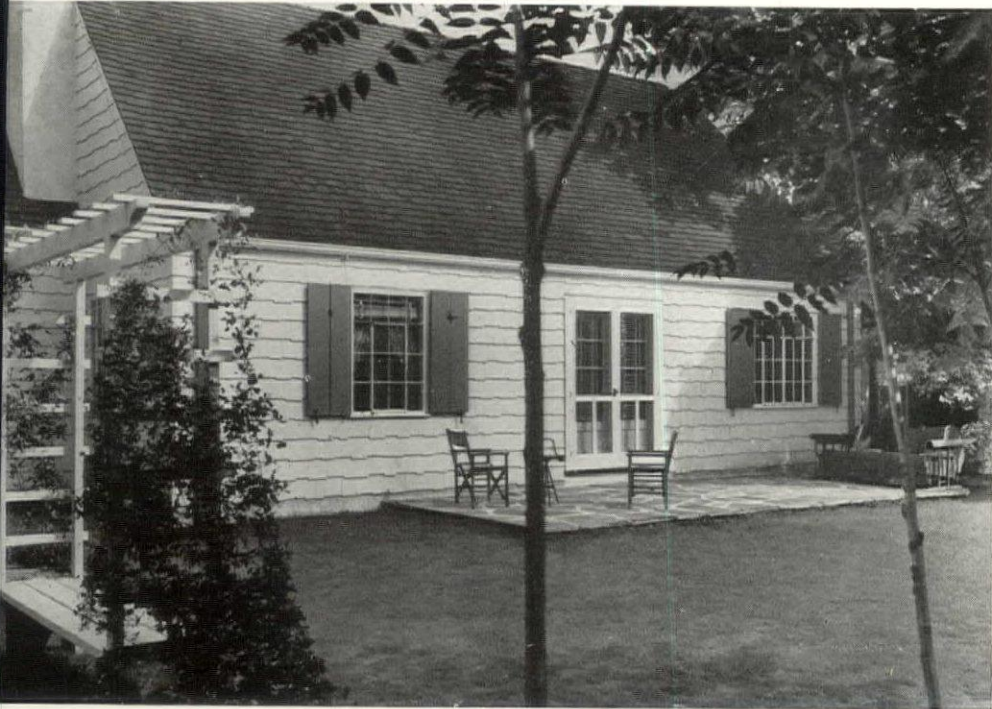
### INTERIOR WOODWORK

Floors—selected red oak.  
Trim } white pine  
Shelving and cabinets }  
Stock millwork—white pine, Curtis Companies, Inc.

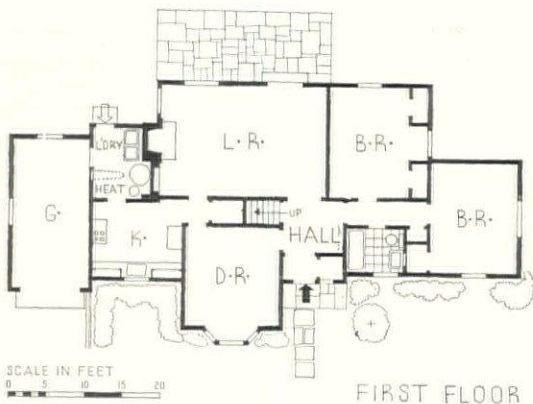
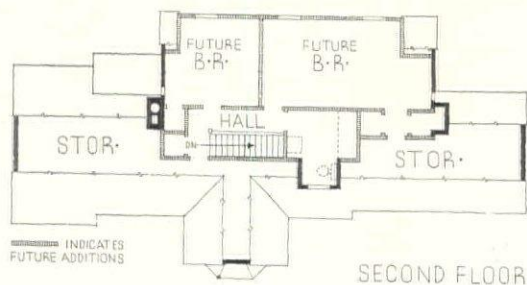
### INSULATING

Outside walls } 4" rock wool, U  
Attic floor } sulation Co.  
Weatherstripping—zinc.





Next the kitchen is the laundry, equipped with requisite appliances, and though the laundry is the service entrance; the inside door to garage. There is no breakfast room nor dining alcove and the space is much better bestowed on a convenient laundry. In a small house, a dining room or breakfast room is usually an extravagance in space. There is a coat closet near the front door and, while there is no room to accompany it, the bathroom, reached from the hall, is near enough to



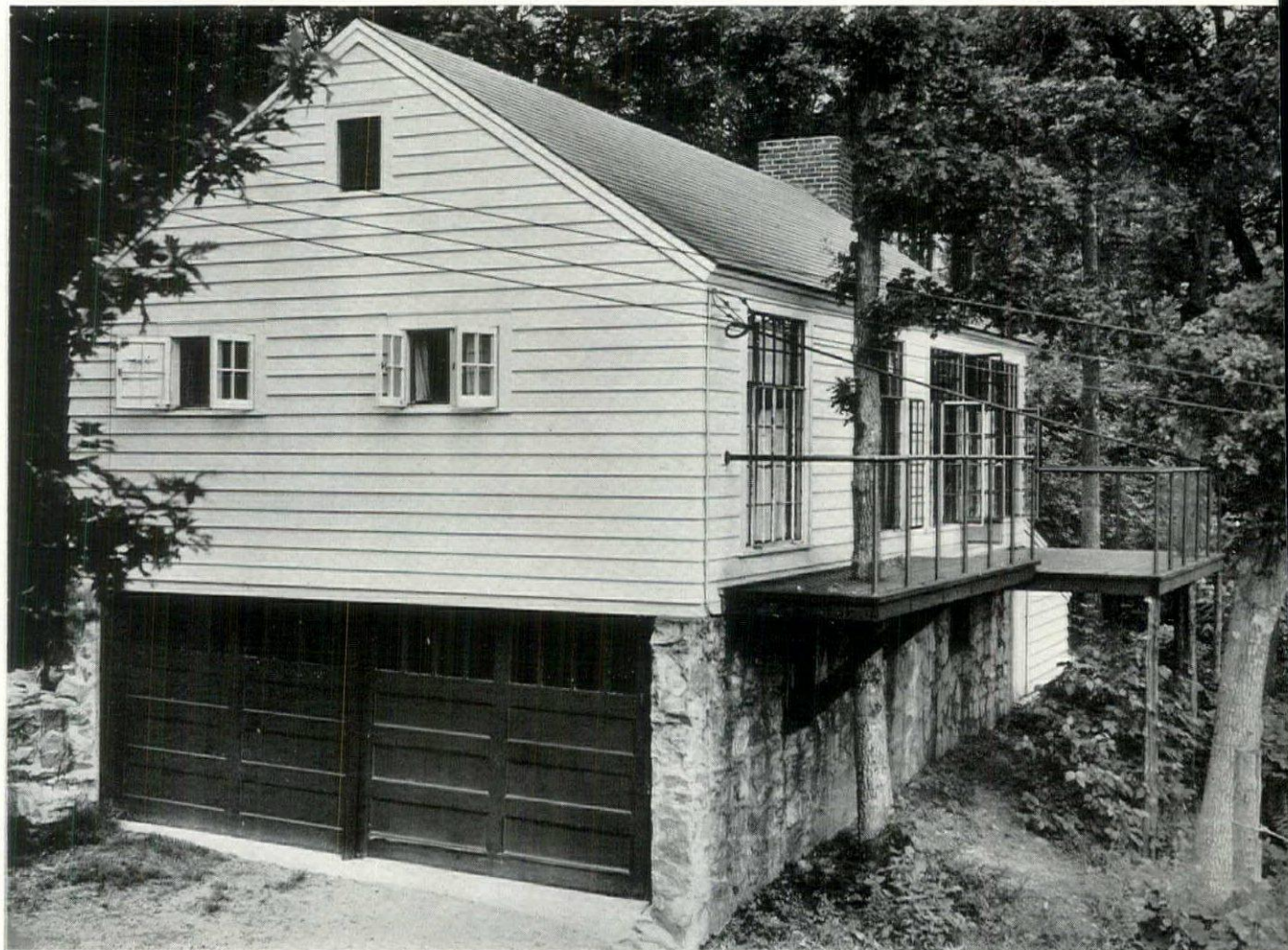
**EXTERIOR FINISHES**  
 Floors—stain, shellac, and wax.  
 Walls—3 coats Atlantic white lead and linseed oil.  
 Wallpaper—washable, Wolf Bros. Wall Paper Co., New York.  
**PAINTING**  
 Paint—BX flexible.  
 Electrical fixtures—Lightolier Co.  
**PLUMBING**  
 Kitchen Sink—flat rim enameled sink in counter, Standard Sanitary Mfg. Co. Cabinet—stock mill.

**BATHROOM**  
 Cabinets—Columbia Metal Box Co.  
 Bath tubs  
 Toilets  
 Seats  
 Showers  
 Shower curtains  
 Tile—Mosaic Tile Co.  
**PIPES**  
 Brass, Anaconda, American Brass Co.  
**HEATING**  
 Oil furnace, Bettendorf.  
 Boilers—Fitzgibbons "De Luxe" with tank-saver coils.  
 Radiators—National Radiator Co.

Piping—black steel.  
 Valves—Hoffman Specialty Co., Inc.  
 Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
**CHIMNEY**  
 Fireplaces  
 Facings—Howard brick.  
 Hearths—slate flagging.  
 Damper—H. W. Covert Co.  
**HARDWARE**  
 Interior and exterior—Norwalk Lock Co.  
**SCREENS**  
 Fenestra screens, Detroit Steel Products Co.



## 66. HOUSE AT NOROTON, CONNECTICUT



John Gass

Here Buckminster Fuller awaits the Dymaxion House in a cottage designed by his wife and apparently shares his realistic approach to housing. The high, stone foundation walls were originally part of an older structure, sensibly reemployed in this house for economy. The unconventional use of large steel casements in a New England "carpenter-type" house is justified by the view and the numerous shade trees. The interior features a room paneled with large sheets of plywood, on ceiling as well as walls, with distinctly pleasant effect. The balcony is a definite contribution to the livability of the house, and the way it is built around trees is rational. Cost: \$3,300. Cubage: 9,720, at 34 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—stone.  
Cellar floor—concrete.

#### FRAME CONSTRUCTION

Fir.

#### EXTERIOR SURFACE

Clapboards—cedar.

#### ROOF

Composition shingles on sheathing.  
Valleys }  
Flashing } copper.  
Composition sheathing paper.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Casement type—steel.  
Doors and frames (exterior)—pine.  
Garage doors—overhead.

#### PORCHES

Floor—matched pine.

#### GLASS

Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Siding }  
Trim } 3 coats Dupont.  
Sash }

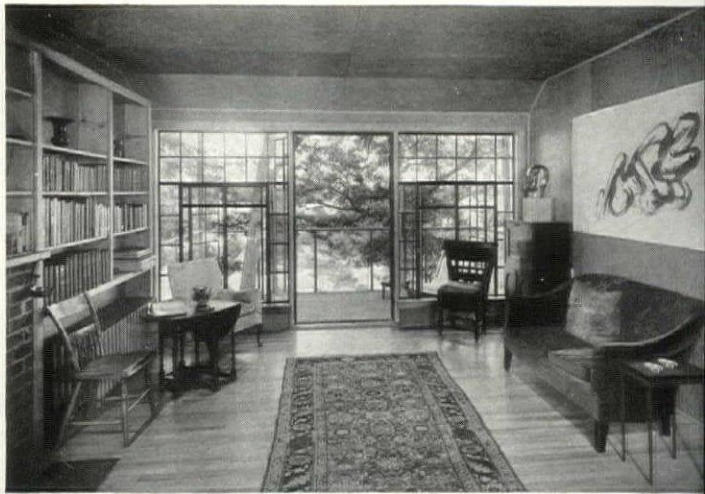
#### LATH AND PLASTERING

None.  
Walls and ceilings  $\frac{3}{8}$ " fir plywood.  
Joint coverings,  $\frac{1}{4}$ " convex tri  
corners.

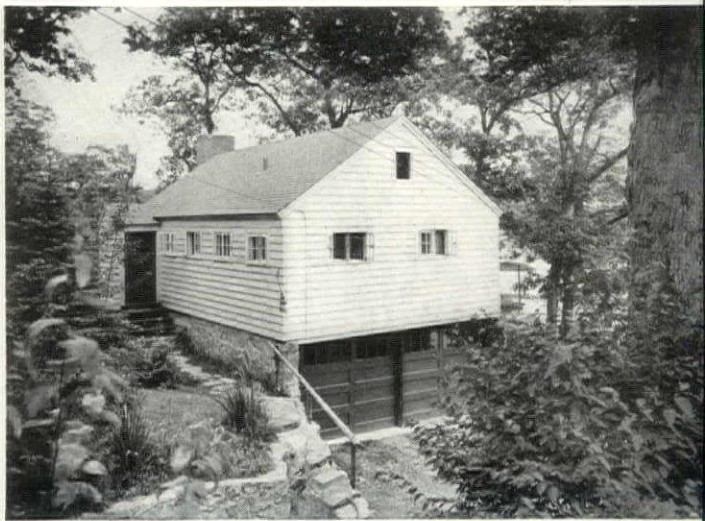




OUTDOOR LIVING SPACE

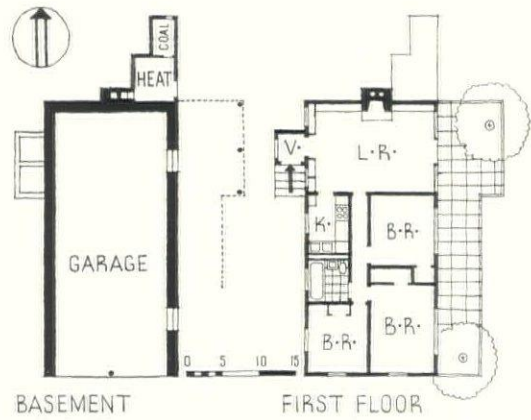


LIVING ROOM



ENTRANCE

A long narrow rectangle, necessarily divided into a simple arrangement of all rooms. Small windows give privacy on the entrance side. The plan as shown shows excellent utilization of space.



## INTERIOR WOODWORK

Floors—Carolina pine.  
Shelving and cabinets— $\frac{3}{8}$ " fir plywood,  
sugar pine frame.

## INSULATING

None.  
Weatherstripping—copper felt.

## INTERIOR PAINTING

Floors—varnished and waxed.  
Walls—1 coat dull varnish, 1 coat wax,  
kitchen and bath oil paint.  
Sash—oil paint.

## LIGHTING

Direct and indirect.

## PLUMBING

Manifold plumbing unit between kitchen  
and bath.  
Kitchen  
Sink—enameled iron.  
Cabinet—wood.  
Stove  
Refrigerator } General Electric.

## BATHROOM

Fixtures complete.

## PIPES

Supply—brass.  
Soil—wrought iron.

## HEATING

Coal-fired boiler, 2-pipe system.  
Hot water heater.

## SCREENS

Roller type.





W. A. Fishbaugh

A small lot of irregular shape was the first part of the problem; to fit house and garage on it without building the way from property line to property line and, at the same time, to keep a desirable exposure for the house was the second. How the situation was met, the plot plan shows. The garage is canted at one end of the dwelling. A brick-piered entrance court gives deep shelter to the front door, accents the approach and by the color of the bricks strikes a sharp contrast to the white stuccoed walls. Planning is simplified and building costs reduced by not having to provide for heating apparatus—the climate requires none—and by having to make little or no excavation. Nor have any stairways to be considered. The dining room walls from floor to ceiling are horizontally boarded, with chamfers at the joints. One of the bedrooms has a pair of bunk bedsteads built in. This saves much space and affords welcome storage capacity in the cupboards and drawers built in underneath. Both master bedrooms have private baths. Cost, \$8,000.

## CONSTRUCTION OUTLINE

### FOUNDATION

Wood piling.  
Columns—reinforced concrete, stub columns and grade beams.

### FRAME CONSTRUCTION

Yellow pine.  
Rafters—yellow pine and clear cypress.

### MASONRY CONSTRUCTION

Walls—common brick and concrete blocks.

### EXTERIOR SURFACE

Brick veneer—used common red brick and second hand brick.  
Stucco—Florida Portland cement, water-proofed.

### ROOF

Tile on sheathing—Natco Eton by National Fireproofing Corp.

Valleys }  
Flashing } Copper, Anaconda.  
Composition sheathing paper—Barrett Co.

### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Soule Co.  
Doors and frames (exterior)—cypress, East Coast Millwork & Fixture Co.  
Garage doors—cypress, Overhead Door Corp.

### GLASS

Double strength, quality A Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Trim and sash  
Priming }  
Finish Coat } Benjamin Moore Co.

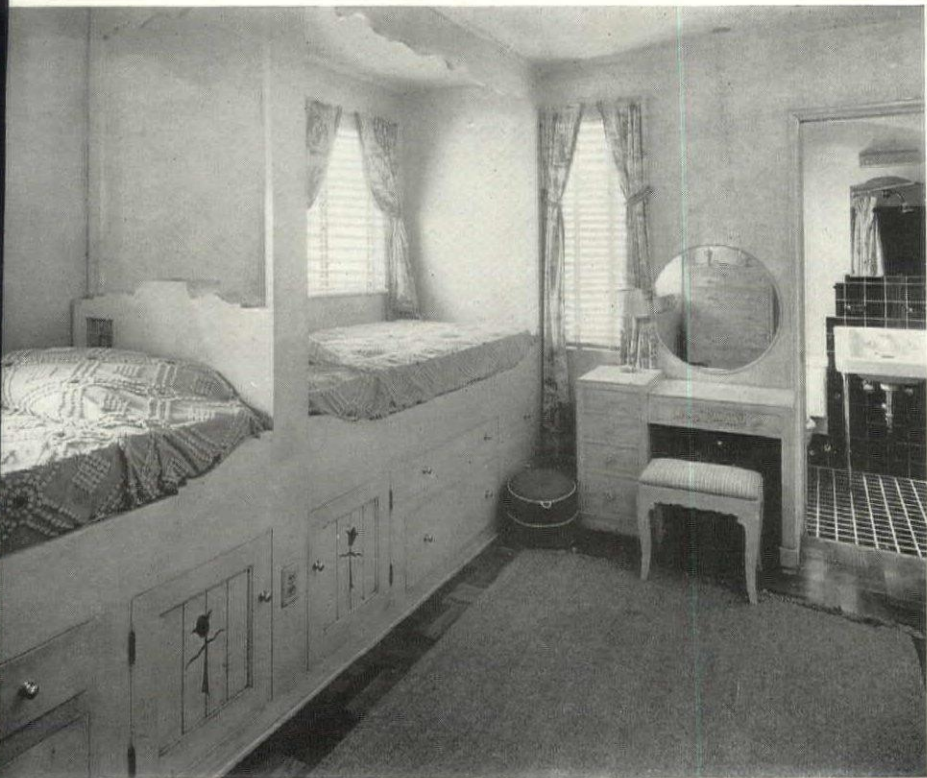
### LATH AND PLASTERING

Lathing  
Metal—galvanized Clinton cloth.  
Wood—cypress.  
Plastering  
Patent plaster — U. S. Gypsum (brown).  
Finishing coat—U. S. Gypsum (textured).

### INTERIOR WOODWORK

Floors—red oak plank and blocks.  
Paneling—dining room, white oak.  
Painted surfaces—cypress.  
Shelving and cabinets—white pine.  
Stock millwork—white pine, bedroom bunks cypress.

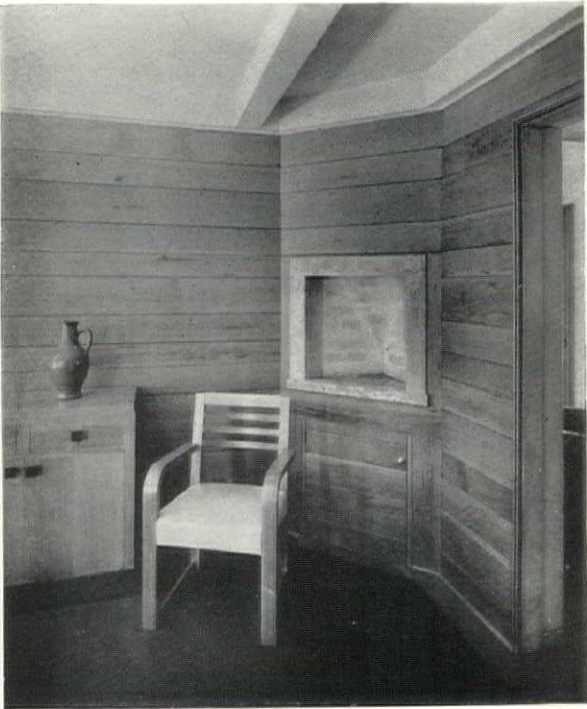
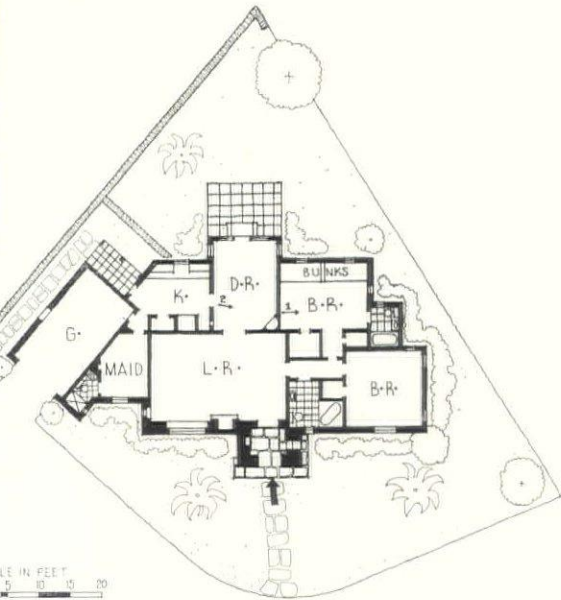




PLAN: The bath of the nearest bedroom is close enough to the front door to serve for guests, but there is no coat closet. In disposing of the difficulty of canted rectangles, it might have been better to lop off one corner of the garage and give the kitchen better shape and more space. Similarly, the maid's bedroom is cramped by its amputated corner.

VIEW 1

VIEW 2



**INSULATING**  
None  
Weatherstripping—bronze, Chamberlin Co.

**INTERIOR PAINTING**  
Trim } Stippled and oil glaze, Benjamin Moore Co.  
Doors }  
Sash }  
Walls—lead, oil and oil glaze, Benjamin Moore Co.

**WIRING**  
Cable—rigid conduit, Graybar Co.  
Electrical fixtures—aluminum.  
Switches—Bakelite.

**LIGHTING**  
Indirect and semi-indirect.

**PLUMBING**  
Kitchen  
Sink—Standard Plumbing Fixtures Co.  
Stove—Hot Point, General Electric Co.  
Refrigerator—Frigidaire, Division of General Motors Corp.

**BATHROOM**  
Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—Miami Metal Cabinet Co.  
Bath tubs } Standard Sanitary Mfg. Co.  
Toilets }  
Seats—Church Mfg. Co.  
Showers—Standard Mfg. Co.  
Tile—Franklin Tile Co.

**PIPES**  
Wrought iron—A. M. Byers Co.  
Steel—Crane Co.

**HEATING**  
None

**CHIMNEY**  
Fireplaces  
Facings—tile and quarry key stone.  
Hearths—old Cuban tile.

**HARDWARE**  
Interior and exterior—Russell & Erwin Mfg. Co.

**SCREENS**  
Metal—Soule Co.

**WINDOW DRESSING**  
Venetian blinds—Venetian Blind Co.  
Awnings—Eagle Awning Co.





Courtesy, Portland Cement Association

Thoroughly modern without being assertive, both in construction and design, this house indicates plainly that the modern mode can be comely and well-mannered. Such tactful design will go far to reconcile to modern trends the feelings ruffled by the more aggressive examples of external composition. The fenestration, usually a sore point with those who resent the methods of the modern school, is managed in a way which few could take exception. The walls are of cinder concrete blocks painted white and the semicircular hood above the door is a monolithic concrete slab—a pleasant as well as useful conceit that adds interest to the entrance without marring its simplicity. The mechanical appliances correspond with the rest of the house in efficient modernism. Cost, \$5,000. Cubage, 17,700, at about 28 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and footings—poured stone concrete.

First floor—4" poured reinforced concrete slab on concrete girders.

### MASONRY CONSTRUCTION

Walls and interior partitions—hollow cinder concrete units.

### ROOF CONSTRUCTION

Joists }  
Plate } Fir.  
Rafters }

### ROOF

Slate on sheathing—Bangor black slate.

Decks—four ply slag on wood sheathing.

Valleys }  
Gutters } Copper.  
Flashing }  
Down spouts }

### DOOR AND WINDOW FRAMES

Sash and frames

Casement type—"Fenestra" by Detroit Steel Products Co.

Doors and frames } Wood, Curtis Companies, Inc.  
(exterior) }  
Garage doors }

### GLASS

Double strength, American Window Glass Co.

### EXTERIOR PAINT

Cinder block walls—2 brush coats of white cement paint, Medusa Co.

Trim and Sash

Priming—lead and oil.

Finish coat—2 coats, lead and oil.

### LATH AND PLASTERING

Lathing—metal, Reynolds Ecod metallated fabric on ceilings only.

Plastering—cement plaster and wood float finish on ceilings only, no plaster on walls.

### INTERIOR WOODWORK

Interior doors, door frames and wood sub-frames of casement windows—Ponderosa pine. No other wood trim in this house excepting kitchen dressers.

Stock millwork—Curtis Companies, Inc.

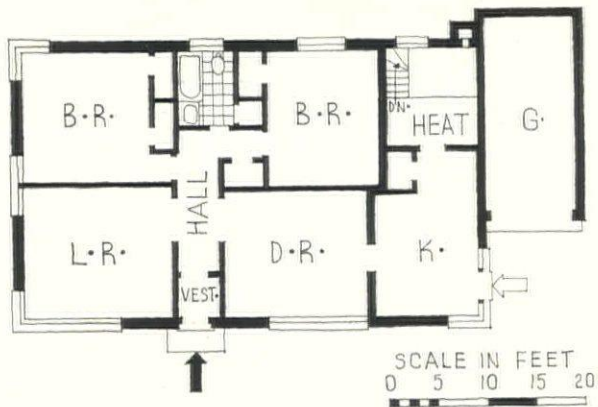
### INSULATING

Outside walls—none.

Roof—under sheathing, Reynolds metal lation.

Weatherstripping—copper and brass saddles, exterior doors only.





N: The plan is simplicity itself. Being simple, it is also work-  
 The only point for slight regret is that the bathroom door is  
 le from the entrance; a door on the line of the living room-  
 g room partition would remedy this minor defect.

## ERIOR FINISHES

Floors—asphalt tile, boiler pit floor ce-  
 ment hardener.  
 Trim } 3 coats of lead and oil, of differ-  
 doors } ent colors.  
 ash }  
 Walls—2 coats cement paint of varying  
 light shades, Medusa Co.  
 Ceilings—treatment similar to walls.  
 WIRING  
 Cable—BX flexible cable.  
 Electrical fixtures—Shapiro and Aronson,  
 New York.  
 Switches—Bryant.  
 LIGHTING  
 Direct  
 DIMMING  
 Sink—combination enameled iron sink  
 and drainboard, Kohler Co.

Cabinet—stock wood.  
 Stove—Garland Gas Range Co.  
 Refrigerator—General Electric.

## BATHROOM

Cabinets—G. M. Ketcham Mfg. Corp.  
 Bath tubs—enameled iron, Kohler Co.  
 Toilets—vitreous china, low tank, Kohler  
 Co.  
 Seats—white, Church Mfg. Co.

## PIPES

Copper tubing for hot and cold water.

## HEATING

Oil  
 Boilers—York Oil Burner Co., York, Penn.  
 Radiators—American Radiator Co.  
 Piping—wrought iron.  
 Valves—American Radiator Co.

Hot water heater—Gas.  
 Thermostat and regulators—Minneapolis-  
 Honeywell Regulator Co.

## CHIMNEY

Fireplaces  
 Facings—cinder concrete blocks.  
 Hearths—Sayre & Fisher down  
 draft brick.  
 Mantels—cinder concrete.  
 Damper—H. W. Covert.

## HARDWARE

Interior and exterior—Norwalk Lock Co.

## SCREENS

Copper on stock wood frames.

## WINDOW DRESSING

Venetian blinds.





Photo-Illustration

This house achieves consistency by being built of materials native to the neighborhood. The quality of rubble masonry conveys a feeling of sincerity. Good proportions of mass and well-disposed fenestration gain a note of accent from the belt course beneath the upper windows. The one superfluous element of composition is a certain whimsicality—the scalloped apron of the portico, the pierced shutters above, the frettings of the semicircular window in the roof. Barring this minor blemish, no reasonable exception can be taken to either design or plan of this really engaging house. Both privacy and pleasant outlook result from placing the living room and dining room at the back. Coat closet and lavatory are conveniently close to the front door, and between them is the door to a small study, quite shut off from the rest of the house; on the other side of the entrance is the kitchen with direct access to the front door. The steep slope made it possible to locate the garage in the basement, next to the laundry and heater room. Cost: \$10,000. Cubage, 26,000 at about 38½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—stone.  
Columns—Lally.  
Cellar floor—cement.

### MASONRY CONSTRUCTION

Common brick walls, garage only.  
Stone walls—local stone, warm colors.

### ROOF

Ambler Asbestos Shingle.  
Valleys  
Gutters } Copper.  
Flashing }

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—Curtis Silentile.  
Doors and frames (exterior)—Curtis Companies, Inc.  
Garage doors—Overhead.

### PORCHES

Floors—old brick.

### EXTERIOR PAINT

Trim  
Priming  
Finish coat } White oil paint.

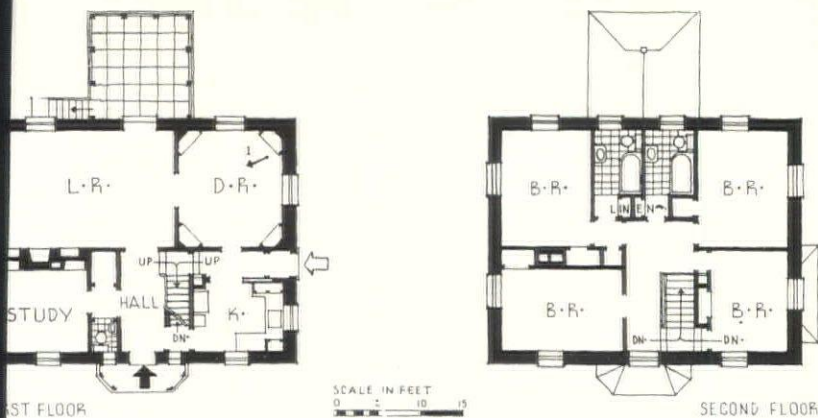
### Sash

Priming  
Finish coat } White oil paint.  
Shutters—green.

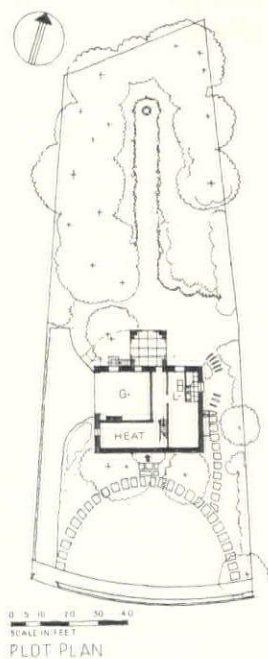
### LATH AND PLASTERING

Lathing  
Composition plaster base—U. S. Gypsum Co.  
sum Red Top Rock Lath.  
Plastering  
Patent plaster—U. S. Gypsum Co.  
Finishing coat—Tiger Finishing Lime.





PLAN: Every inch of space is well used. The backstairs problem is settled by a door from the pantry opening on the stair landing; one pair does duty for two. Every room has cross ventilation, and all bedrooms adequate closet space. There are good linen closets and a housemaid's closet besides.



**INTERIOR WOODWORK**  
Trim and floors  
Hardwood  
Stainwoods  
Painted surfaces  
Shelving and cabinets  
Stock millwork  
Curtis Companies Inc.

**INTERIOR FINISHES**  
Wallpaper—Sanitas in kitchen, baths, living room.

**HEATING**  
Direct.

**PLUMBING**  
Kitchen.  
Sink—Monel metal,  
International Nickel Co.

**BATHROOM**  
Fixtures—Hajoca Co.  
Cabinets—Miami, Philip Carey Co.  
Bath tubs  
Toilets  
Showers  
Hajoca Co.  
Composition tile—linoleum wainscot.

**PIPES**  
Copper tubing.

**HEATING**  
Oil.

**AIR CONDITIONING**  
Central—Holland Furnace.

**CHIMNEY**  
Fireplaces  
Facings  
Hearths  
Marble.  
Mantels—made up of stock moldings.  
Damper—Covert.

**HARDWARE**  
Interior  
Exterior  
Sargent.





The pleasant quality of this "Monterey" type of ranch house arises from the straightforward manner in which it meets the problems of a simplified and rather rustic mode of life; the way in which the most readily available local materials are utilized; and the suitability of the design to the climatic conditions of the country. The partly enclosed courtyard gives a measure of protection from the outer world and from bad weather, yet it does not shut out ventilation nor curtail the outlook in a countryside of splendid distances. The whole arrangement reflects the informality of an almost completely outdoor scheme of life. At the same time, the interiors adapt themselves to the amenities. Cost: \$8,000. Cubage: 28,925 at 27½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls }  
Piers } Portland Cement.  
Cellar floor }  
Waterproofing—Anti-Hydro.

### FRAME CONSTRUCTION

No. 1 Common Douglas Fir.  
Sills—Redwood.

### MASONRY CONSTRUCTION

Common brick walls—Simons Brick Co.  
Faced brick—Los Angeles Pressed Brick Co.

### EXTERIOR SURFACE

Siding—Vertical boards and batten, select common Douglas Fir.  
Stucco—Blue Diamond.

### ROOF

Shingles—Split Redwood shakes.  
Valleys }  
Gutters } Armco  
Flashing }  
Down spouts }  
Composition sheathing paper—15 lb. felt—Pioneer Roofing Co.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—Sugar Pine.  
Doors and frames (exterior)—Douglas Fir.  
Garage doors—Douglas Fir.

### PORCHES

Reinforced concrete—Portland Cement and Clinton wire mesh.

### GLASS

Libbey-Owens-Ford, Double Strength.

### EXTERIOR PAINT

Shingles—left natural.  
Siding.  
Finish coat—Cabot's "Old Virginia White."  
Trim } Priming, Lead and Oil.  
Sash } Finish coat, Oakley Paint.

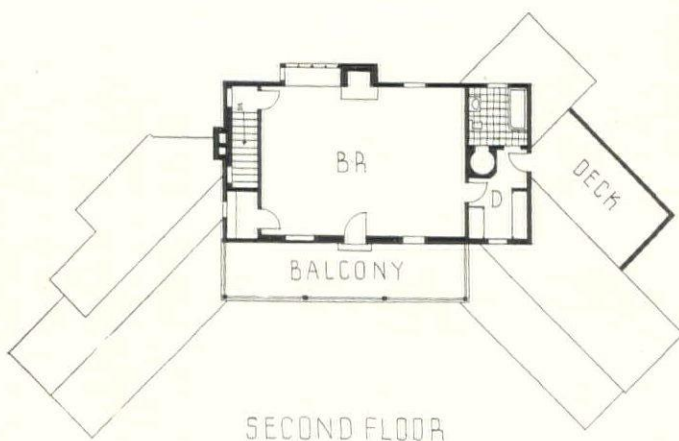
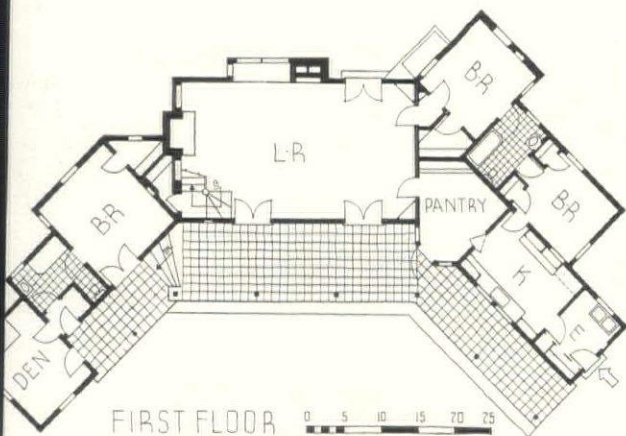
### LATH AND PLASTERING

Lathing  
Wood—Long-Bell No. 1 green Douglas Fir.  
Plastering  
Patent plaster—Medusa Portland Cement Co.

### INTERIOR WOODWORK

Trim—Douglas Fir.  
Floors—No. 2 Oak.





LIVING ROOM



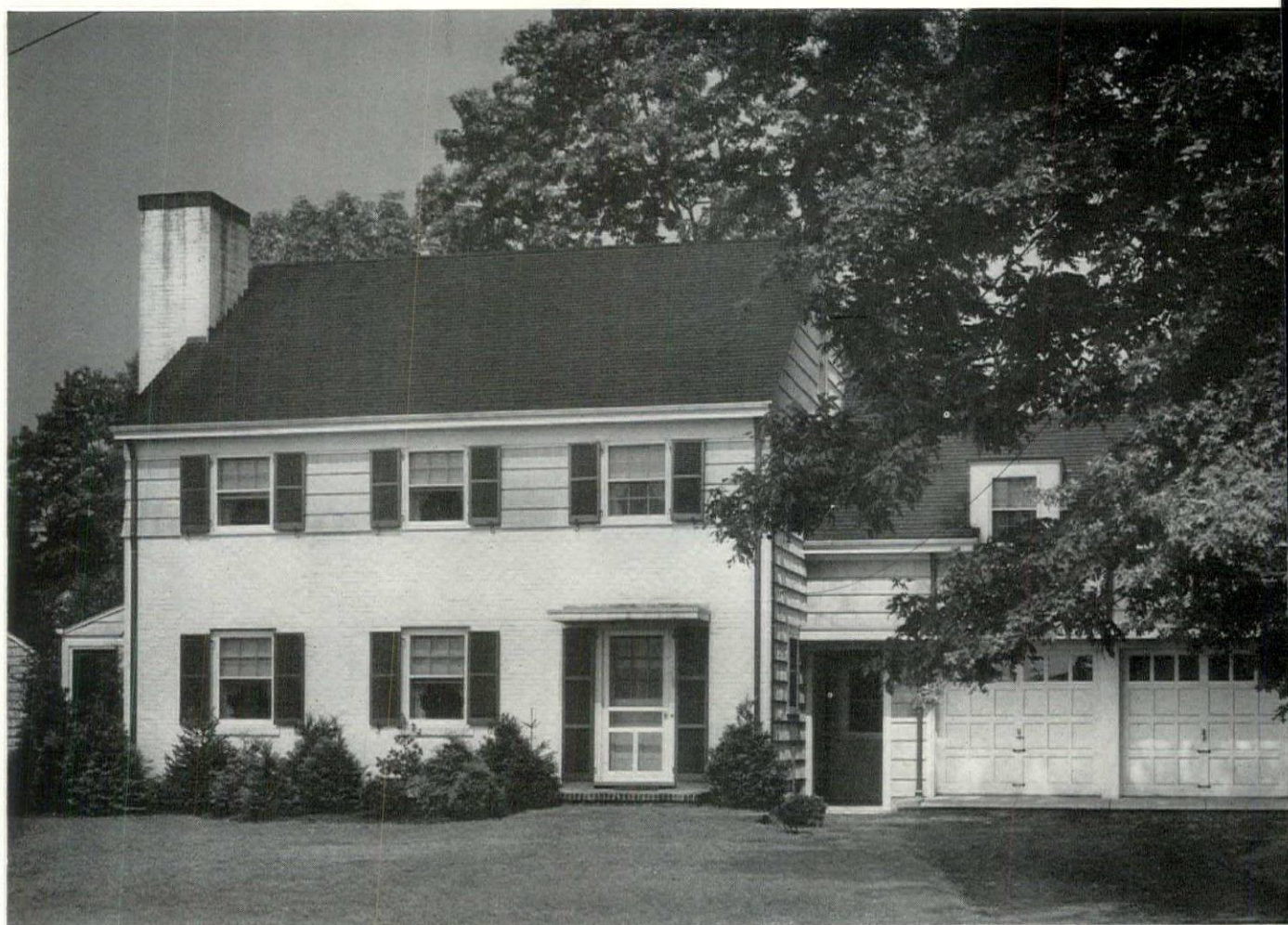
When two or more rectangles are canted at obtuse angles, it is always difficult to avoid considerable waste of space, unless one or another is annoyingly misshapen. The ingenious plan of this house has avoided any material difficulty of that sort. The pantry is the room of distinctly irregular shape in the plan that is unimportant; other irregularities are taken up by spacious closets.

Painted surfaces } Douglas Fir and  
Cupboards and Cabinets } Sugar Pine.  
Flooring }  
Outside walls—Daggett Insulating Co.,  
"Dagonite."  
Roof rafters—Daggett Insulating Co.,  
"Spray-o-flake."  
Weatherstripping—American Weather-  
strip Co.  
PRIOR FINISHES  
Doors }  
Trim }  
Floors } Oakley Paints.  
Walls }  
Wallpaper—Stockwell Wall Paper.  
Plumbing—Pass & Seymour, Inc.

Electrical fixtures—Meyberg Co.  
Switches—Pass & Seymour, Inc.  
LIGHTING  
Direct.  
PLUMBING  
Kitchen  
Sink—Standard Plumbing Co.  
Stove—"Hot Point."  
Refrigerator—General Electric.  
BATHROOM  
Fixtures—Standard Plumbing Co.  
Cabinets—Master Products Co.  
Bath tubs }  
Toilets } Standard Plumbing Co.  
Seats—Church Mfg. Co.  
Showers—Crane showerhead.  
Tile—Gladding, McBean & Co.  
PIPES  
Steel—Youngstown Sheet & Tube Co.

HEATING  
Gas—Payne Furnace Co.  
Hot water heater—Superbo, "Commo-  
dore."  
CHIMNEY  
Fireplaces  
Facings—Los Angeles Pressed Brick  
Co.  
Hearths—Simons Brick Co.  
Mantels—Wood.  
Damper—Superior.  
HARDWARE  
Interior }  
Exterior } Dresslar Hardware Co.  
SCREENS  
"Hipolito"—Hipolito Mfg. Co.  
WINDOW DRESSING  
Venetian blinds—National Venetian Blind  
Co.





Gustav

One of the requirements for this house for a family of three was that it should be modern and yet conform in design to conservative neighborhood standards. In fact, the client expressed a strong leaning toward Colonial precedents. The exterior is of shingles and brick, painted white, and its general mien is engaging, though it seems a little whimsical that brick should have been used only to veneer the lower story of the front. A straight, flat shelter over the front door—it can scarcely be called a hood—is a welcome substitute for a pediment, which would have destroyed the elevation. Blue shutters give character and incisive definition to the front windows. An unusual feature in this house is the use of linoleum to cover not only the floors of kitchen, lavatory, bathrooms, but their entire wall surface as well. Cost, including architect's fee, \$9,800.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—cinder block.  
Columns—lally.  
Cellar floor—4" concrete.  
Waterproofing—Anti-Hydro Waterproofing Co.

### FRAME CONSTRUCTION

Fir.

### EXTERIOR SURFACE

Brick veneer—common brick, Sayre & Fisher Co.  
Shingles—"Ambassador" Creco-Dipt, 10" to weather.

### ROOF

Wood shingles on shingle lath—18" Perfection.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—Morgan.

Casement—special, made in mill.

Steel sash—in kitchen and basement, "Fenestra," Detroit Steel Products Co.

Doors and frames (exterior)—white pine by Morgan.

Garage doors—Overhead Door Corp.

### PORCHES

4" reinforced concrete.

### GLASS

Double strength, quality B, Pennvernion, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Brick veneer } 3 coats oil, Sherwin-Williams.  
Trim }  
Sash }

### LATH AND PLASTERING

Lathing

Metal—U. S. Gypsum in garage.

Composition plaster base—U. S. Gypsum Rocklath.

### Plastering

Patent plaster—Red Top prepared.  
Finishing coat—Red Top trowel.

### INTERIOR WOODWORK

Trim—No. 1 clear white pine.  
Floors—2¼" clear plain white oak random width.  
Paneling—mantel and one wall in living room knotted pine.

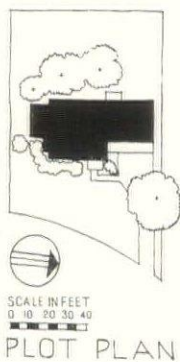
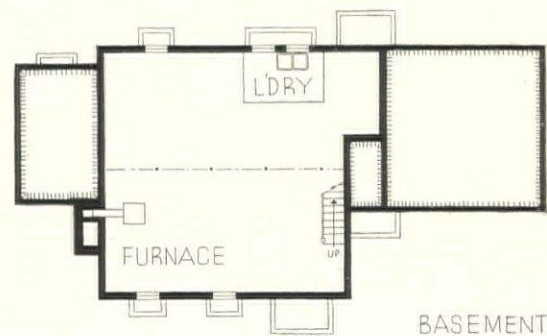
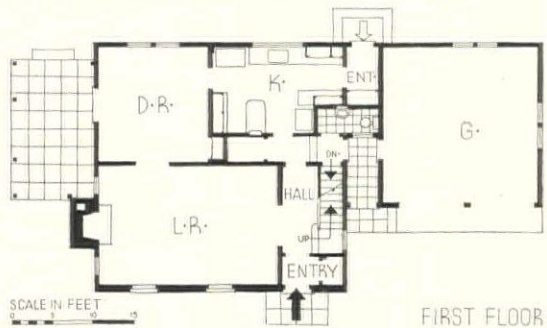
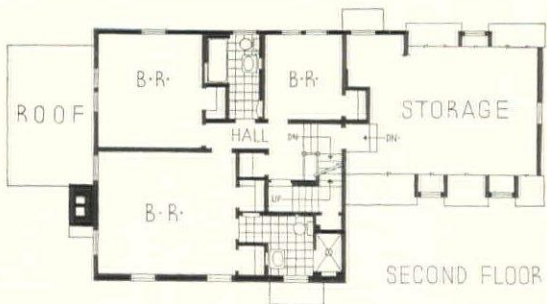
### INSULATING

None.  
Weatherstripping—Chamberlin.

### INTERIOR FINISHES

Floors—filler, sealer, 2 coats of wax, Sherwin-Williams.





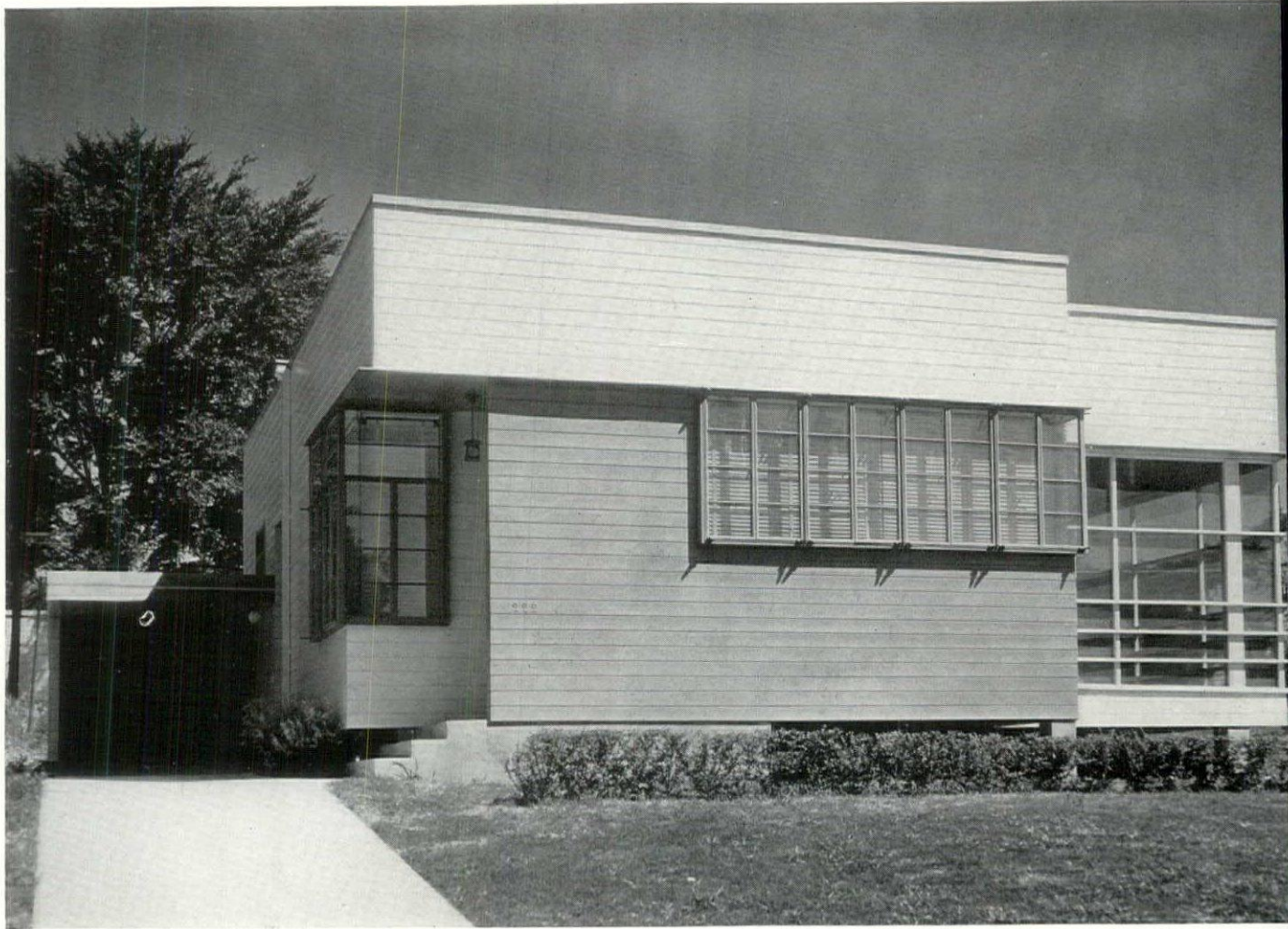
PLAN: The compact plan which gives a generous living room, a communicating dining room, and a well-appointed kitchen with convenient access to the front door does not waste space on a pantry, but it does include the convenience of an inside entrance from the garage with a lavatory beside it. The house is so planned that at any time an additional bedroom and bath can be arranged over the garage.

Paint—2 coats flat, 1 coat enamel.  
Shutters—flat oil paint.  
Walls—primer and sealer and 1 coat flat oil paint.  
Wallpaper—balance of house, Imperial, Thibaut.  
Lighting—Amon Studios, North Bergen, N. J.  
Sinks—Hart & Hegeman.  
Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—Columbia Metal Box Co., New York.  
Bath tubs—Standard Sanitary Mfg. Co.  
Toilets—Standard Sanitary Mfg. Co.  
Seats—Church Mfg. Co.  
Showers—Standard Sanitary Mfg. Co.  
Walls and floor—linoleum by Armstrong Cork Products Co.  
Sink—Standard Sanitary, flat rim (set in counter).

Cabinet—Murphy Door Bed Co.  
Stove—gas.  
Refrigerator—Frigidaire.  
Washing machine.  
Walls and floors—linoleum, Armstrong Cork Products Co.  
BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—Columbia Metal Box Co., New York.  
Bath tubs } Standard Sanitary Mfg. Co.  
Toilets }  
Seats—Church Mfg. Co.  
Showers—Standard Sanitary Mfg. Co.  
Walls and floor—linoleum by Armstrong Cork Products Co.  
PIPES  
Galvanized iron.

HEATING  
Boiler—oil-fired.  
Radiators.  
Hot water heater—gas.  
AIR CONDITIONING  
Central—Evans with Petro oil burner.  
CHIMNEY  
Fireplaces  
Facings } brick.  
Hearths }  
Mantels—knotted pine.  
Damper—Donley.  
HARDWARE  
Interior—Sargent.  
SCREENS  
Copper mesh.





Building in parts of Louisiana, where the nature of the ground forbids any considerable excavation, presents structural problems not often encountered elsewhere. The wall-section diagram shows how the difficulty was met. The load on the concrete piers is not unduly great since the construction, though staunch, is light. In its thoroughly modern vein, the house is refreshingly straightforward in its recognition of a utilitarianism that appealed to the owner, regardless of the asymmetrical appearance of the exterior. Conservatives who decry every ultra-modern form of expression must remember that the fundamental criterion of fitness is the comfortable and convenient fulfillment of function; a willingness to subordinate the claims of vanity to satisfaction. Cost: \$3,638. Cubage, 18,140 at 20 cents per cubic foot.

## CONSTRUCTION OUTLINE

**FOUNDATION**  
Footings and piers—concrete.

**FRAME CONSTRUCTION**  
Pine

**EXTERIOR SURFACE**  
Clapboards—1"x6" pine siding, flush.

**ROOF**  
Flat built-up roof, 3-ply.

**DOOR AND WINDOW FRAMES**  
Sash and frames  
Double hung—wood 3'-4" wide.

Steel sash—Fenestra, Detroit Steel Products Co.

Doors and frames (exterior)—pine frames, flush doors.

**PORCHES**  
Floor—matched heart pine.

**GLASS**  
Double strength, quality A

**EXTERIOR PAINT**  
Siding }  
Trim } lead and oil, Sherwin-Williams.  
Sash }

**LATH AND PLASTERING**

Lathing  
Composition plaster base—sheet rock  
Plastering  
None.

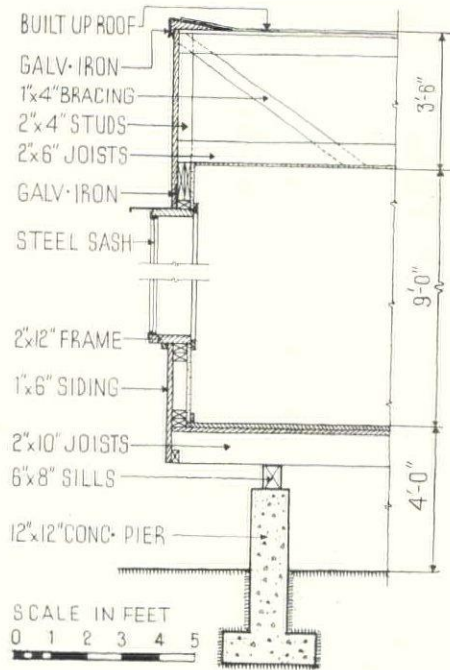
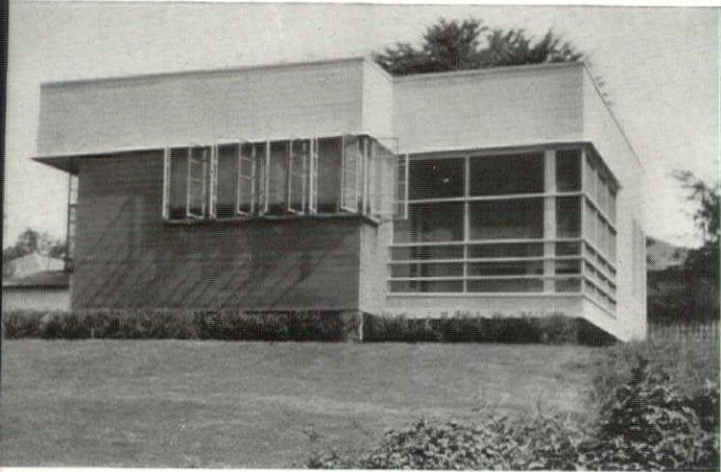
**INTERIOR WOODWORK**

Floors—3" oak.  
Trim  
Shelving and cabinets } pine.

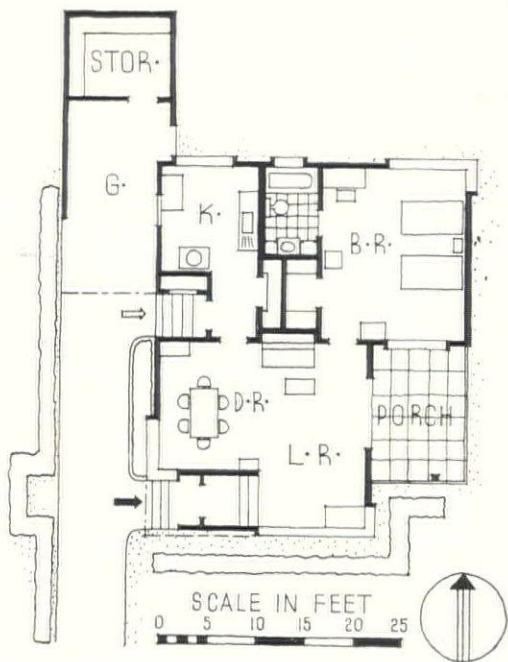
**INSULATING**

Air space between ceiling and roof.





TYPICAL WALL SECTION



AN: Direct, simple and as wholly convenient for the domestic require-  
nts of two people as a plan could be. It provides for all the daily needs  
ctually. The built-in features have great practical merit.

ERIOR PAINTING

Floors—varnished and waxed.

Trim  
Doors  
Sash  
Walls } lead and oil, and enamel.

ING

Knob and tube.

HTING

Built-in flush lights in major rooms.

MBING

Kitchen

Sink—Standard Sanitary Mfg. Co.

Cabinet—pine.

Stove.

Refrigerator—electric.

BATHROOM

Fixtures

Cabinets

Bath tubs

Toilets

Seats

Showers

Shower curtains

Standard Sanitary  
Mfg. Co.

Floor—sheet rubber, Hood Rubber Co.,  
Inc., Watertown, Mass.

PIPES

Wrought iron and steel.

HEATING

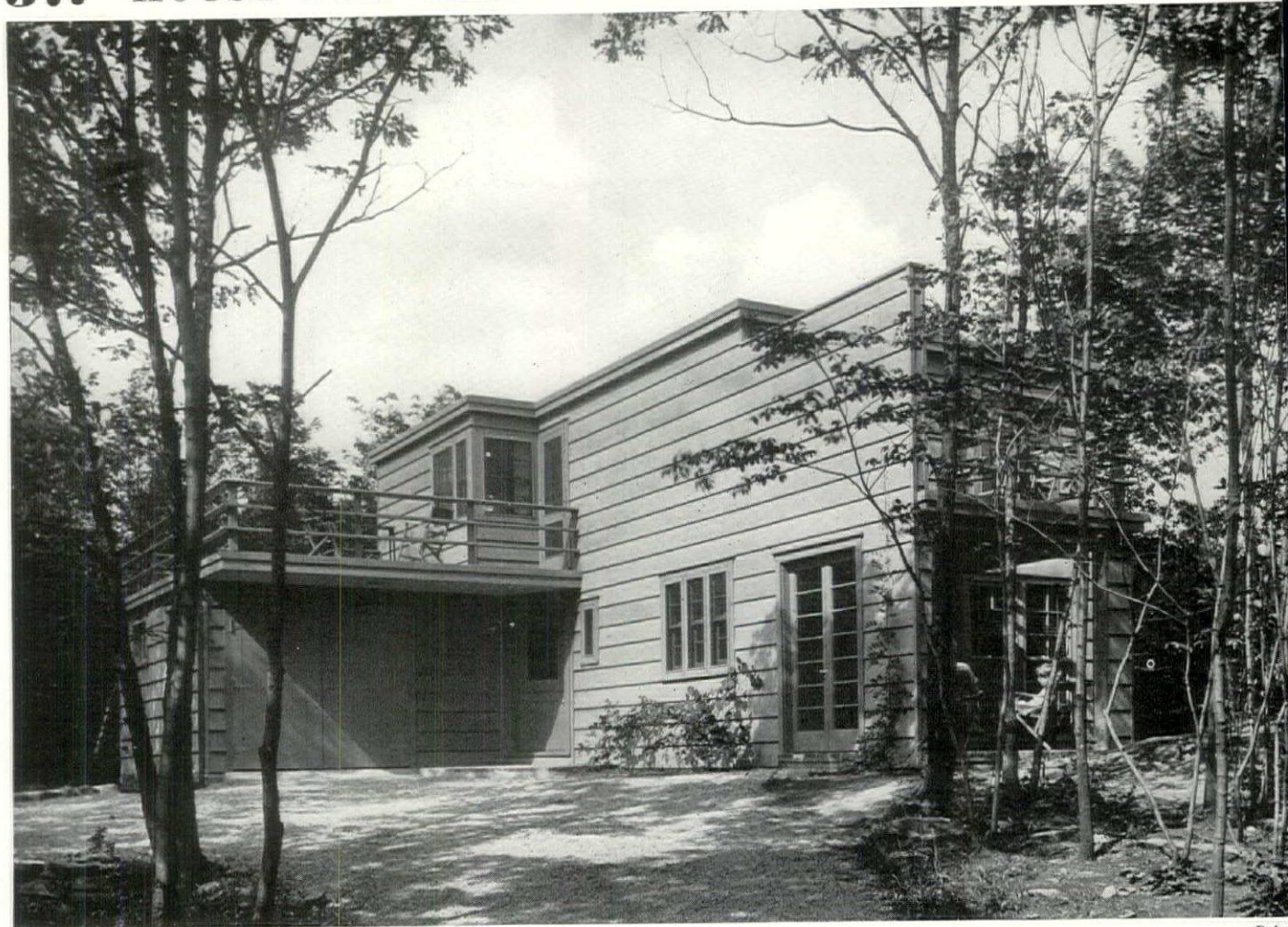
Gas stoves.

Hot water heater—automatic.

SCREENS

Copper mesh.





Drisc

If the house is to be defined as a machine for living, this example honestly fulfills the definition. It is an efficient machine. Revised methods of construction, new materials and new ways of using old materials have made the modern builder independent of structural limitations that shaped the usages and conventions of the past to which many people are still sentimentally attached. If this house lacks in the external graces of tradition, it is wholly acceptable to the present day realist. Cost: \$8,250. Cubage 16,900, at 49 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—stone.  
Cellar floor—concrete, cement finish.  
Waterproofing—none.

### FRAME CONSTRUCTION

Wood

### FLOOR CONSTRUCTION

1st floor—precast concrete joist and light cinder concrete slabs by the Bedford Hills Concrete Products Corp., Bedford Hills, N. Y.  
2nd floor and roof—wood.

### EXTERIOR SURFACE

Clapboards—1"x12" red cedar.

### ROOF

Tar and gravel built-up flat.  
Terraces—"Con-Ser-Tex" canvas decks by W. L. Barrell Co. Inc., New York.  
Gutters—wood.  
Flashing } copper.  
Down spouts }

### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—wood.  
Doors and frames (exterior) } wood.  
Garage doors }

### PORCHES

Brick floor.

### EXTERIOR PAINT

Siding—stain, Cabot's.  
Trim }  
Sash } lead and oil.

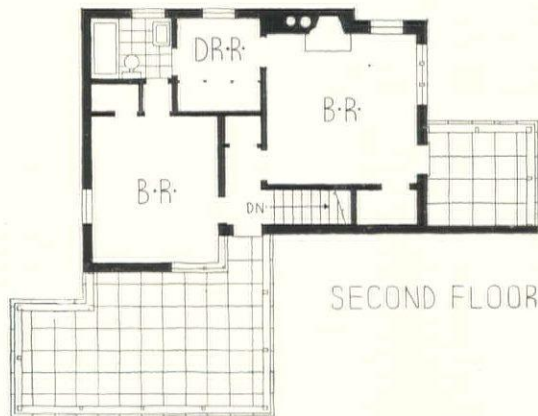
### LATH AND PLASTERING

Lathing  
Composition plaster base—plaster board.  
Plastering  
Patent plaster—"Red Top," U. S. Gypsum Co.

### INTERIOR FINISHES

Floors—1st floor, "Durite" asphalt tile reinforced with rubber by Paul Coste Inc., Providence, R. I. 2nd floor oak.  
Shelving and cabinets—wood.





AN: The ground floor plan is conceived for the convenience amenities of living, assuring mechanical facilities and abundant light and ventilation at every point. Upstairs—thanks to methods of construction—the plan follows a somewhat different pattern, equally well thought out however. It also recognizes the cheer derived from a bedroom fireplace.

**CLADDING**  
 Outside walls }  
 Roof rafters } Rock wool.  
 Floor }  
 Weatherstripping — Accurate Metal  
 Weatherstrip Co.

**INTERIOR PAINTING**  
 Trim }  
 Doors } Stain.

**PLUMBING**  
 Kitchen  
 Sink—Standard Sanitary Mfg. Co.  
 Cabinet—wood.  
 Stove—Universal Range, Landers,  
 Frary & Clark.

Refrigerator—Frigidaire, Division of  
 General Motors Corp.

**BATHROOM**  
 Fixtures }  
 Bath tubs } Standard Sanitary Mfg. Co.  
 Toilets }  
 Floor—linoleum, Armstrong Cork Products Co.

**PIPES**  
 Brass and copper.

**HEATING**  
 Silent Glow oil burner.  
 Boilers—Crane Co.  
 Radiators—"Arco," American Radiator Co.

Hot water heater—Taco-Abbot by Taco  
 Heaters Inc., New York City.

**CHIMNEY**  
 Fireplaces  
 Facings }  
 Hearths } Flagstone.  
 Mantels—wood.  
 Damper—H. W. Covert Co.

**HARDWARE**  
 Interior and exterior—P. & F. Corbin.

**SCREENS**  
 Copper mesh.

**WINDOW DRESSING**  
 Venetian blinds—James Mooney Co., New York.



## 74. HOUSE AT SUMMIT, NEW JERSEY



A good example of a Colonial type house in the moderate price range. The above illustration shows well this style of dwelling is adapted to the northern American climate; its long low lines are in exact contrast to the sweeping verticals of the fine elms which surround it, while the dark accents of shutters, windows, and evergreens break up the blank white of the walls, giving the house a scale which emphasizes its air of intimacy and comfort. The low picket fence, formerly more common than it is today, is a successful device for conveying a sense of privacy, and, by its repetition of the material of the house, completes the entire composition a size and importance which would be otherwise lacking. An outstanding example of the vital part that setting and landscaping play in presenting any house to its best advantage. Cost: \$13,000. Cubage: 34,200 at 39½ cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—cement blocks.  
Columns—Lally.  
Cellar floor—cement.  
Waterproofing—tar, 1 coat.

#### FRAME CONSTRUCTION

Wood.

#### EXTERIOR SURFACE

Shingles—Perfection.

#### ROOF

Wood shingles on shingle lath—Perfection.

Valleys  
Gutters  
Flashing  
Down spouts

Copper by Chase  
Brass and  
Copper Co.

#### DOOR AND WINDOW FRAMES

Sash and frames—wood, double hung, by Curtis.  
Doors and frames (exterior)—Curtis.

#### PORCHES

Flagstone.

#### GLASS

By Pittsburgh Plate Glass Co.

#### EXTERIOR PAINT

Siding  
Trim  
Sash } 3 coats lead and oil—  
Dutch Boy.

#### LATH AND PLASTERING

Lathing—composition plaster base,  
Lath by U. S. Gypsum Co.  
Plastering—U. S. Gypsum Co.

#### FLOORS

Minwax (2 coats).

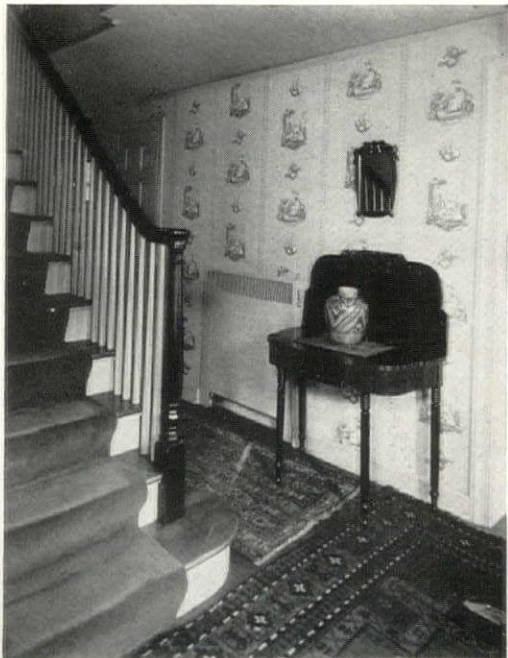
#### INTERIOR WOODWORK

Trim—pine by Curtis.  
Hardwood—red oak.

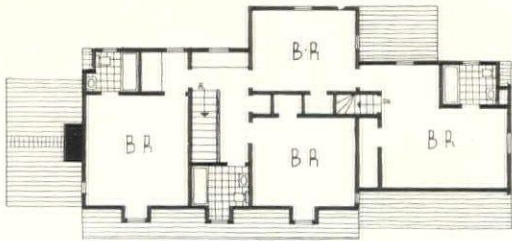




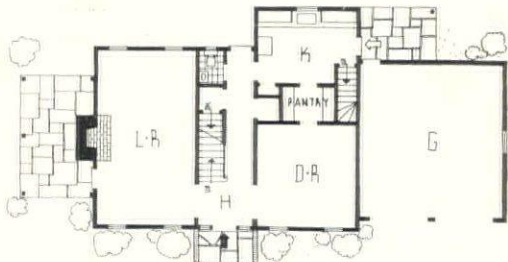
ENTRANCE DOOR



DETAIL, HALL



SECOND FLOOR



FIRST FLOOR

PLAN: Living room has been given ample space. In a house this size direct access from kitchen or pantry to living room where tea or cocktails are served might be desirable. Maid's room large with access to rest of second floor through rear master bedroom.

PLASTERING  
Outside walls } Johns-Manville.  
Roof rafters }  
Attic floor }  
Weatherstripping—Chamberlin.  
SUPERIOR FINISHES  
Coats lead and oil—Dutch Boy, National Lead Co.  
Wallpaper—Lloyds.  
PAINTING  
Cabinets—BX.  
Electrical fixtures—"Bronze Art."  
LIGHTING  
Direct.

PLUMBING  
Kitchen.  
Sink—Standard flat rim.  
Cabinet—White House.  
Stove—Gas.  
Refrigerator—General Electric.  
BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Cabinets—United.  
Bath tubs—Pembroke.  
Toilets—Devoro.  
Seats—Church.  
Showers—Standard Sanitary Mfg. Co.

PIPES  
Brass.  
HEATING  
Oil—Williams.  
Boilers } Thatcher.  
Radiators }  
Valves }  
Hot water heater—Penfield.  
CHIMNEY  
Fireplaces  
Facings and hearths—brick.  
Mantels—Curtis.  
HARDWARE  
Interior and exterior—Corbin.





Norton &amp; Peel and H

This house is typical of a tremendous amount of suburban building in the U. S. The ornamentation is confined to a discreetly enriched doorway, the location of the building in relation to the street, the materials employed, and the type of landscaping—all these are familiar sights in suburban developments for homes of moderate cost. This house varies in that the facade has been broken by a slight projecting wing; the small gable over the dressing room window is unusual, and was apparently introduced to establish a measure of balance with the gabled wing. The interiors are well carried out, particularly the study, where the simple vertical paneling is successful. Cost: \$14,500. Cubage, 41,044 at 35 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete block.  
Cellar floor—cement.  
Waterproofing— $\frac{1}{2}$ " coating of Portland cement (1 part) and sand (2 parts) with 5 per cent hydrated lime added, applied outside of foundation wall.

### FRAME CONSTRUCTION

Fir.

### EXTERIOR SURFACE

Shingles—16" red cedar, Edham Co.

### ROOF

Wood shingles on shingle lath—24" red cedar, Edham Co.  
Valleys } tin, Taylor's "Target &  
Flashing } Arrow."

Gutters }  
Down spouts } galvanized iron.

### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung } Northern white pine by  
Casement } local mill.  
Doors and frames (exterior) — same as windows.  
Garage doors—Overhead Door Co.

### PORCHES

Reinforced concrete.

### GLASS

Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Shingles  
Dipped  
Brush stained } Edham Co. stain.

Trim }  
Sash } lead and oil paint.

### LATH AND PLASTERING

Lathing  
Wood—No. 1 white pine.  
Plastering  
Finishing coat—"Tiger" lime.

### INTERIOR WOODWORK

Trim—birch.  
Floors—white oak.  
Painted surfaces  
Shelving and cabinets } birch.  
Stock millwork

### INSULATING

Outside walls }  
Attic floor } "Spray-O-Flake."  
Weatherstripping—Monarch Weather  
Co.





L L Rogers



STUDY Graphic Arts



FIRST FLOOR



SECOND FLOOR

INTERIOR FINISHES

Floors—stain, shellac and wax.  
Trim }  
Doors } Vitrolite enamel.  
Sash }  
Walls—Vitrolite enamel kitchen and  
baths.  
Wallpaper—all principal rooms.

RING  
Electrical fixtures—local manufacture.  
Switches—Hart and Hegeman.

LIGHTING  
Indirect

UMBING  
Kitchen  
Sink—"Ebco," Ebinger Mfg. Co.

Stove—Westinghouse Electric and  
Mfg. Co.  
Refrigerator—Frigidaire.

BATHROOM  
Fixtures }  
Bath tubs } Crane Co.  
Toilets }  
Showers }  
Shower curtains }  
Seats—Church Mfg. Co.  
Tile—matt glazed wall tile, Faience Tile  
floors.

PIPES  
Steel

HEATING  
Forced warm air plant with Marr Oil  
Burner.  
Boilers—Waterman-Waterbury Furnace.

Hot water heater—gas, American Radiator  
Co.—"Hot-coil."  
Thermostat and regulators—Minneapolis-  
Honeywell Regulator Co.

CHIMNEY  
Fireplaces  
Facings }  
Hearths } brick.  
Mantels—birch.  
Damper—Peerless Mfg. Co.

HARDWARE  
Interior and exterior—Sargent.

SCREENS  
Pine, by local mill.

WINDOW DRESSING  
Blinds—pine, by local mill.





The living room wall with its sweeping projecting eave is a splendid foil for the foreground planting with one in sunshine, the other in shadow. The large pepper tree has been purposely utilized to dominate the approach and keep it in shade. Typical of the excellent landscaping, done in the office of the architect, which surrounds this house is the rear garden with trellises and covered porches opening on paved terraces and simple expressive planting. Cost: \$16,060. Cubage: 34,884 at 46 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers } concrete.  
Cellar floor }  
Waterproofing — Anti-Hydro integral waterproofing.

### FRAME CONSTRUCTION

Oregon pine.  
Sills—redwood.

### EXTERIOR SURFACE

Stucco.

### ROOF

Wood shingles on shingle lath—5 in 2"s  
"Perfects."  
Gutters }  
Down spouts } galvanized iron.

### DOOR AND WINDOW FRAMES

Sash and frames  
Steel sash—Truscon.  
Doors and frames (exterior)—white pine.  
Garage doors—sliding, Douglas fir.

### PORCHES

Brick floor—select common.  
Tile floor—12"x12" in service porch, Gladding, McBean & Co.

### GLASS

Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Shingles—dipped, Cabot.

### Trim

Priming—lead and oil. } Dutch Bo  
Finish coat—3 coats } Nation  
lead and oil } Lead C  
Sash—3 coats lead and oil, W. P. F  
& Co.

### LATH AND PLASTERING

Lathing—3.4 lb.  $\frac{3}{8}$ "x $\frac{3}{4}$ " metal.  
Plastering—Blue Diamond patent plaster.

### INTERIOR WOODWORK

Trim—Douglas fir.  
Floors— $\frac{1}{2}$ "x2" hardwood.  
Shelving and cabinets—white pine.

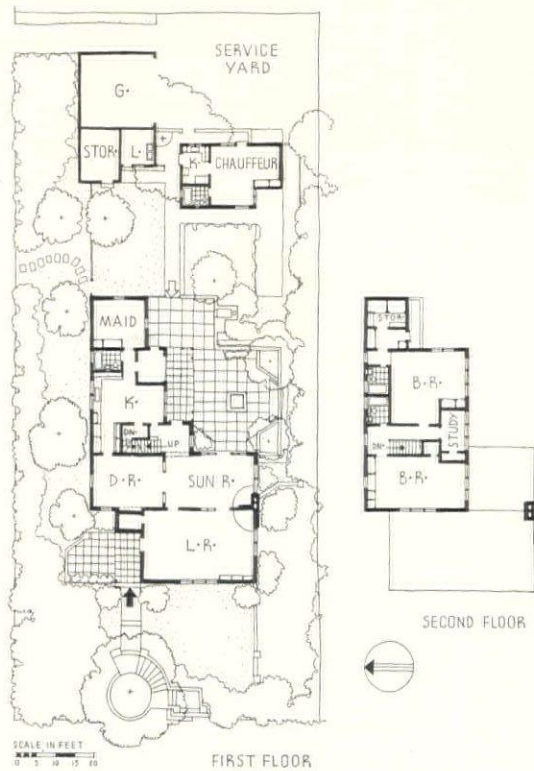




R GARDEN



SUN ROOM



N: The sun porch, less sunny than most of its kind, is used as a transition element between living room and rear garden. The use of wardrobes instead of closets in the two bedrooms is commendable. Bedrooms orientated to receive the best of the exposure, as is also the tiny study comfortably set between

LATING  
der roof— $\frac{5}{8}$ " Celotex.

RIOR FINISHES  
doors—stain, 2 coats shellac, 2 coats Johnson's floor wax.

rim } 4 coats lead and oil, W. P. Fuller  
doors } & Co.  
sh }  
alls and ceilings of baths, kitchen and service porch—3 coats lead and oil. Final coat Fuller's "Fullerglo." Balance of house given 2 coats "Permo."

NG  
ble and switches—General Electric.

Electrical fixtures—brass and iron, specially designed.

LIGHTING  
Direct.

PLUMBING  
Kitchen  
Sink—Crane Co.  
Refrigerator—General Electric Co.

BATHROOM  
Fixtures—Crane Co.  
Tile—Gladding, McBean & Co.

PIPES  
Wrought iron—A. M. Byers Co.

HEATING  
Gas—Payne hot air furnace.  
Hot water heater—Crane "Premier."

CHIMNEY  
Fireplaces  
Facings } brick.  
Hearths }  
Damper—H. W. Covert Co.

HARDWARE  
Interior and exterior—Russwin.

SCREENS  
In-vis-o Disappearing Roller Screen Co.





Elliot F.

A one-story house on two levels, built for a client who occupies it alone. The house reflects the simple requirements both in its plan and exterior and its loose, rambling form is well suited to the irregular hillside. Completely unconventional in its treatment, it has a charming air of informal comfort. The huge chimney is difficult to explain from the standpoint of flue requirements, since the one fireplace is of moderate size; it might be of interest to compare it with the treatment of house No. 82 where a similar situation was solved by expanding the masonry into an entire end wall. The gable over the porch, while pleasant in appearance, is hard to reconcile with the form of the living room. The porch, with its heavy square supports, has a simplicity most appropriate in the setting. Cost: \$3,000, at about 20 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Concrete blocks—Southern MacTile Co., Asheville.

### FRAME CONSTRUCTION

Native yellow pine.

### EXTERIOR SURFACE

Native cedar shingles.

### ROOF

Slate from demolished old house.

Metal work—26 gauge galvanized iron.

### DOOR AND WINDOW FRAMES

Metal casement windows—Detroit Steel Products Co.

Wood doors—white pine from local mill.

### PORCHES

Flagstone floor over concrete base.

### GLASS

Double strength, grade A.

### EXTERIOR PAINT

Shingles—stained white, Samuel Cabot, Inc., Boston.

Doors, etc.—painted 3 coats lead and

### LATHING AND PLASTERING

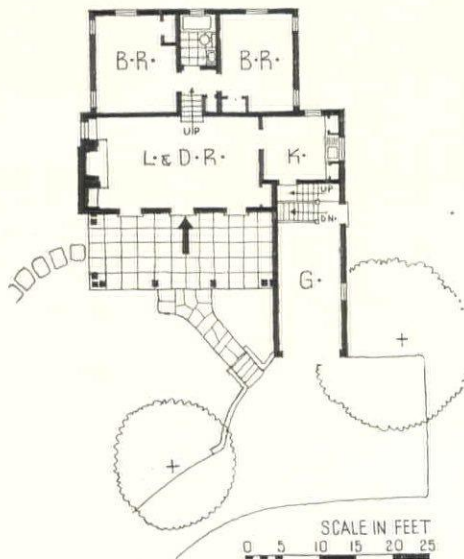
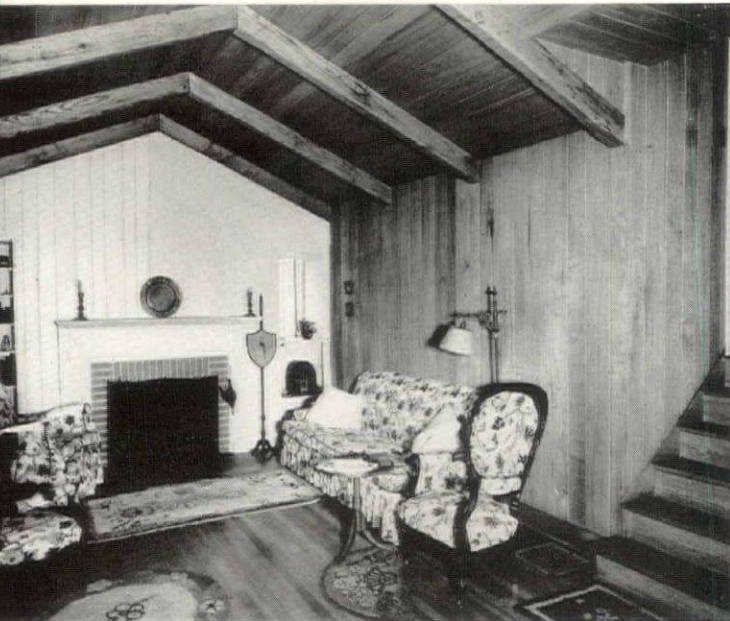
Wood lath.

Sand finished plaster.

### INTERIOR WOODWORK

Living and dining room paneled in white chestnut. Balance of trim graded and better yellow pine. Floors native oak.





PLAN: Few required elements produce a simple if unusual layout. Bedrooms, living-dining room and garage on different levels due to requirements of site. Nothing unnecessary has been forced into the plan.

INTERIOR FINISHES

Floors—filled and waxed—some varnished  
2 coats.  
Trim—Enameled 4 coats.  
Walls—Plaster kalsomined.  
Wallpaper—Bedrooms.

WIRING

Cable

LIGHTING

Direct

PLUMBING

Fixtures—Crane Co.

PIPES

Steel

HEATING

Warm air gravity system, Peerless Heat-  
er, ducts to each room.

CHIMNEY

Fireplace

Facing }  
Hearth } brick.  
Mantel—wood.  
Damper—Covert.

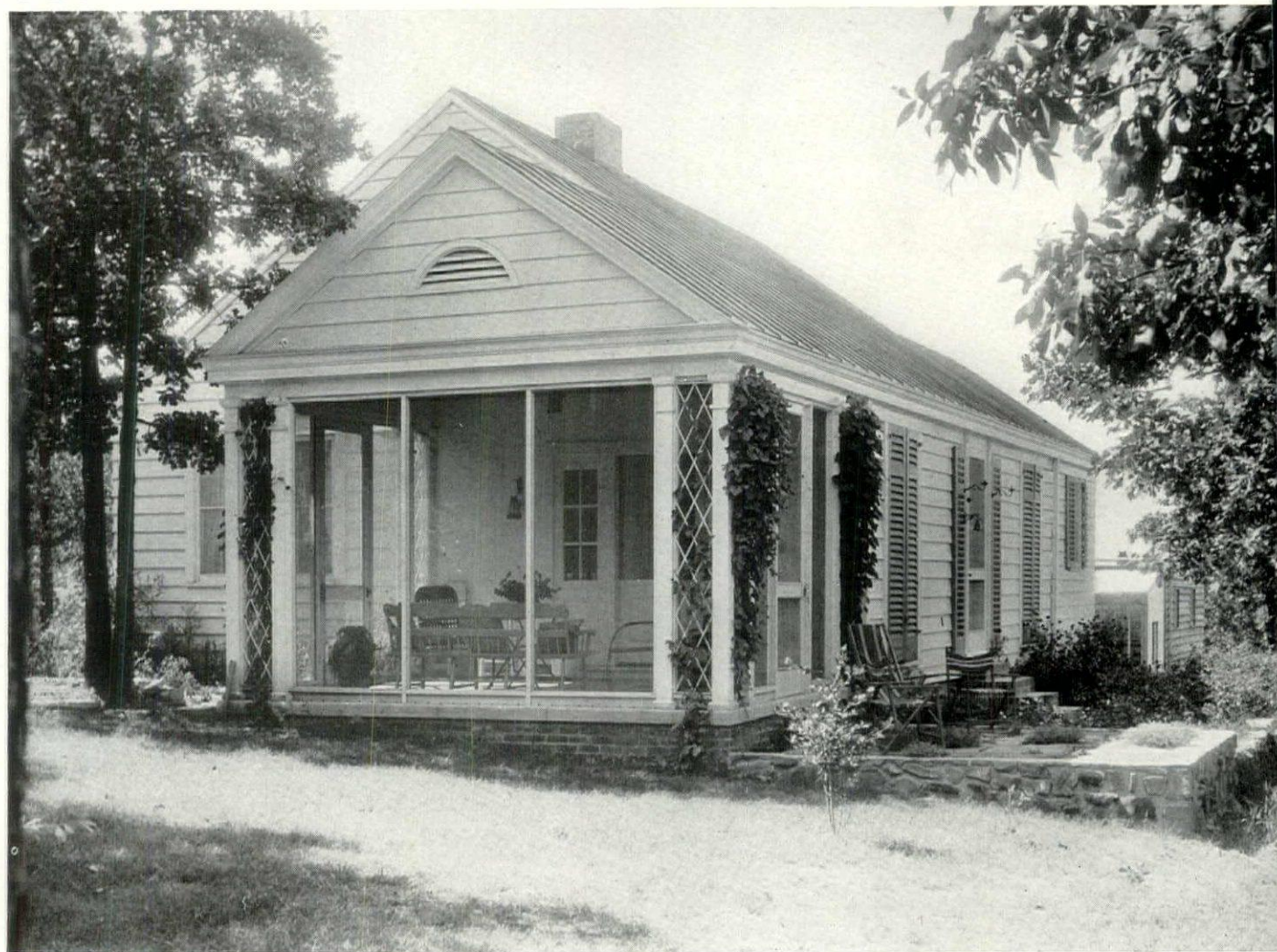
HARDWARE

Sargent and Co.

SCREENS

Full length outside wood screens with  
copper mesh.





A small one-story house, simply designed to meet the modest living requirements of a family, direct in exterior expression. It may be a far cry from a temple-fronted exterior in Arkansas to a Gothic manor hall in the English Midlands, but the principle of plan is almost identical. The exterior is well-mannered and inviting in an unobtrusive way; the interior discloses more interest. In the living room, one end of which is used for dining purposes, the walls are vertically boarded and the hardware is of old New England provenance. The kitchen is completely equipped with all the most modern electric appointments against a color background of red, white and black. The house is fully insulated, Cost \$6,000. Cubage: 26,000 at 23 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—brick, Malvern.  
Cellar floor—none.  
Waterproofing—none.

### FRAME CONSTRUCTION

Wood sills and plate, Bruce treated.

### EXTERIOR SURFACE

Clapboards—10" pine, Monarch.

### ROOF

Tin  
Valleys  
Gutters  
Flashing  
Down spouts  
Salt glazed tile drains—Dickey.  
Composition sheathing paper—15 lb. felt.

} galvanized iron, Armco.

### DOOR AND WINDOW FRAMES

Sash and frames—double hung yellow pine, Monarch.  
Doors and frames (exterior)—cypress, Monarch.  
Garage doors—rough pine, Monarch.

### PORCHES

Reinforced concrete—Portland cement, Acme.

### GLASS

Pennvernon, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Siding  
Priming  
Finish coat

} outside white, Benjamin Moore.

Trim } part stain, part exterior gloss, Benjamin Moore.  
Sash } Priming—flat coat.  
Finish coat—exterior gloss.

### LATH AND PLASTERING

Lathing—flat rib metal lath 3 lb., Truscon  
Plastering  
Patent plaster } Acme.  
Finishing coat }

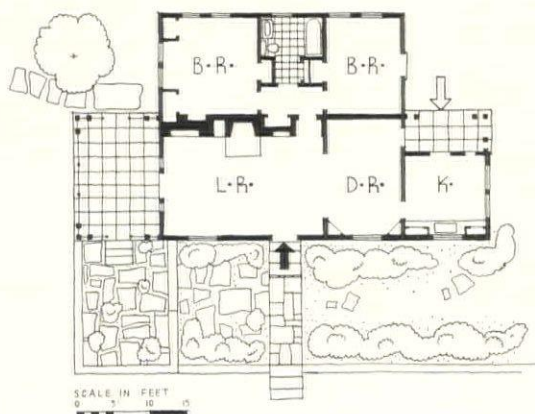
### INTERIOR WOODWORK

Paneling—yellow pine, 4", 6" and 8" widths.  
Stock millwork—window and door frames, Monarch.

### INSULATING

Outside walls—rock wool batt, Johns Manville.





PLAN: The modern adaptation of an ancient plan does not make the underlying principle any less vital or worthy of present-day use. It has the advantage of simplifying the mechanics of living, as this arrangement nicely demonstrates.



Roof rafters—Celotex.  
Attic floor—rock wool batt, Johns-Manville.

## TERIOR FINISHES

Floors—Pyra-Seale, Vestal Chemical Co.  
Trim } interior gloss, Benjamin Moore.  
Doors }  
Sash }  
Walls—paper by Sherwin-Williams.  
Pine walls—oil stain.

## RING

Cable—Romex.  
Electrical fixtures—Chase.  
Switches—toggle, Bryant Electric Co.

## HTING

Direct.

## PLUMBING

Kitchen  
Sink—flat rim, Kohler.  
Cabinet—yellow pine, Monarch.  
Stove—Papan gas.  
Refrigerator—X-6, General Electric.

## BATHROOM

Cabinets—Hoegger.  
Bath tubs—built-in, Kohler.  
Toilets—one piece, Kohler.  
Seats—Kohler.  
Showers—Kohler.  
Shower curtains—Hoegger.  
Tile— $4\frac{1}{2}$  x  $4\frac{1}{2}$  semi-glazed, Sparta Ceramic Co., East Sparta, Ohio.

## PIPES

Steel—standard galvanized pipe.

## HEATING

Hot water heater—Automatic "Crest."

## CHIMNEY

Fireplaces  
Facings } common brick, Malvern.  
Hearths }  
Mantels—job built.  
Damper—H. W. Covert Co.

## HARDWARE

Interior—special collected in New England, antique. Standard—Richards-Wilcox locks, Sargent, P. & F. Corbin & Co.  
Exterior—P. & F. Corbin & Co

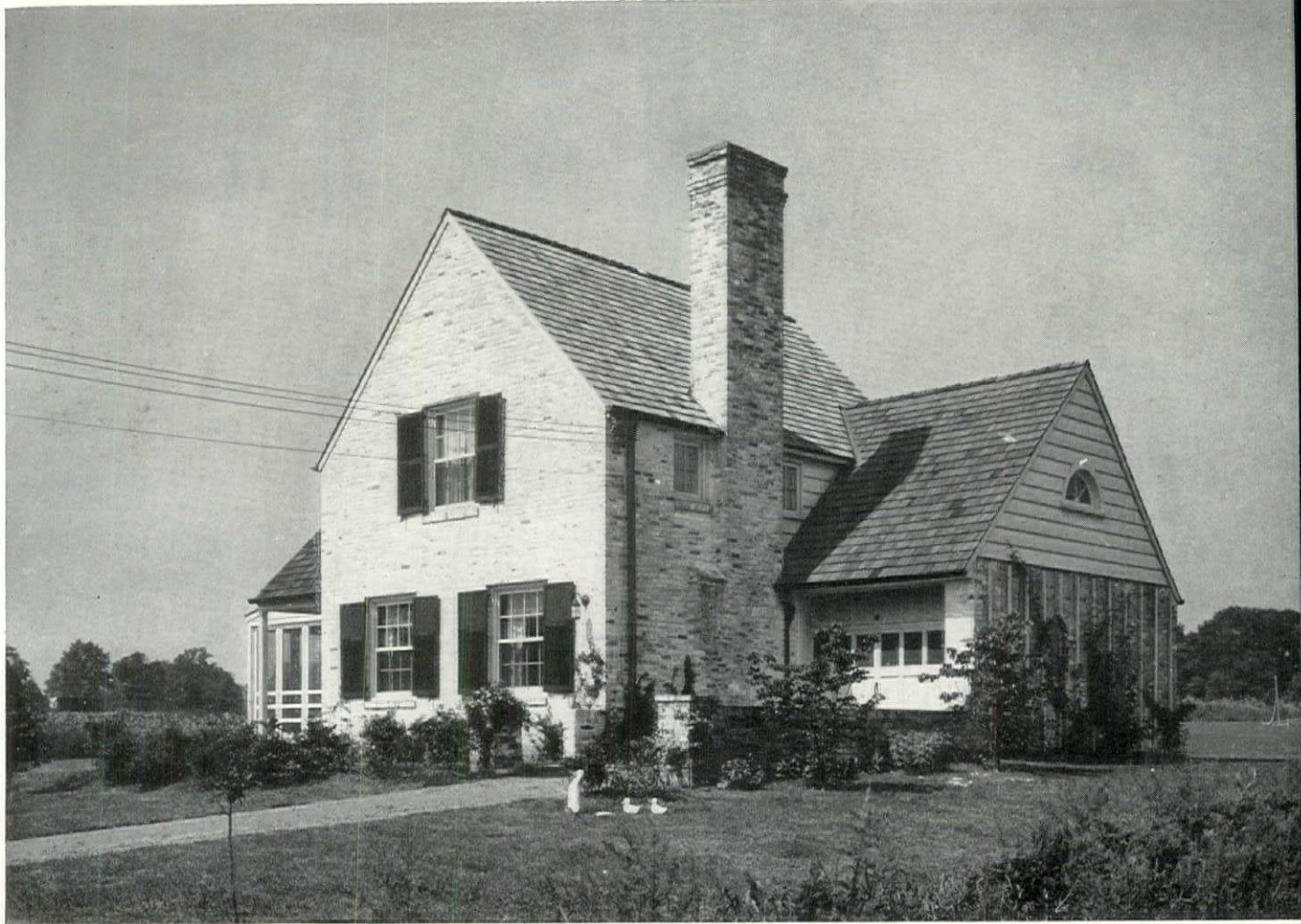
## SCREENS

Galvanized screen.

## WINDOW DRESSING

Blinds—job built.





Here the first aim was to design at the outset the house eventually desired by the clients, but to build only that part of it which would be an irreducible living minimum for two people; second, to plan it so that the future enlargements could be made without disturbing anything already built or materially changing its use. The house as it stands represents the complete first stage of the program. The method employed here is one which might well be followed by many home-builders: to build one's house in sections, adding to it as finances permit, is not only an intelligent and economical procedure, but it also minimizes initial errors and omissions and makes possible their correction in future additions. Cost: \$5,200. Cubage: 21,000 at 25 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—stone.  
Columns—structural steel.  
Cellar floor—cement.

### FRAME CONSTRUCTION

Hemlock.

### EXTERIOR SURFACE

Brick veneer.  
Clapboards—cypress.

### ROOF

Wood shingles on shingle lath—red cedar.  
Valleys }  
Gutters } copper.  
Flashing }  
Down spouts }  
Composition sheathing paper—Sisalkraft.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung }  
Casement } white pine.  
Doors and frames (exterior) } white  
Garage doors } pine.

### PORCHES

Flagstone floor.

### GLASS

Single strength, quality A, Pennvernion,  
Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Brick—2 coats Bondex.  
Siding } 3 coats du Pont's exterior  
Trim } white.  
Sash }

### LATH AND PLASTERING

Lathing—composition }  
plaster base } U. S. Gypsum Co.  
Plastering }  
Patent plaster }  
Finishing coat }

### INTERIOR WOODWORK

Floors—oak.  
Trim—poplar.  
Shelving and cabinets—poplar.

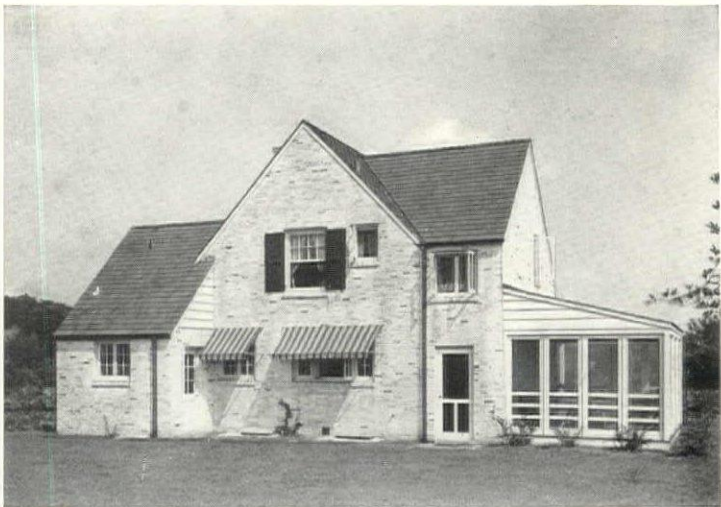
### INSULATING

Roof rafters }  
Attic floor } 4" rock wool.  
Weatherstripping—zinc, interlocking.

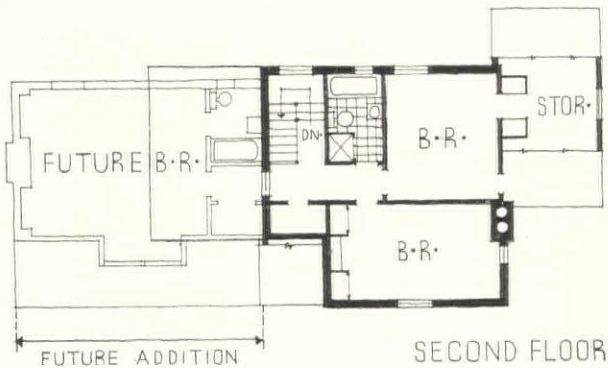




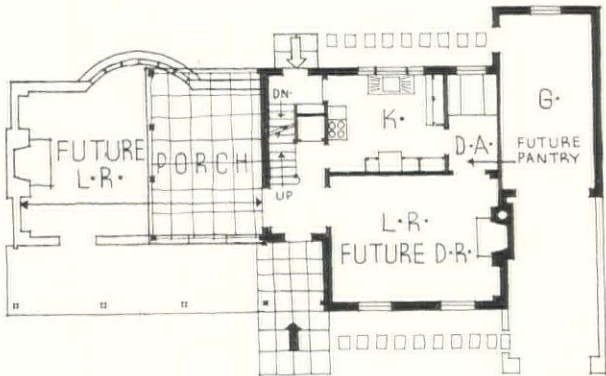
BUILT-IN WARDROBE, CLOSETS AT SIDES



REAR



SECOND FLOOR



FIRST FLOOR



Note: The existing porch, as indicated on the plans, is temporary. The upstairs space over the garage, indicated "storage," has already been made into a small study. Plans show with how little trouble the enlargement will be carried out.

INTERIOR FINISHES

Trim } 3 coats du Pont's  
Doors } Dulux.  
Cabinet—wood.  
Stove } Westinghouse Electric  
Refrigerator } & Mfg. Co.  
BATHROOM  
Fixtures }  
Bath tubs } Standard Sanitary  
Toilets } Mfg. Co.  
Seats }  
Showers }  
Shower curtains }  
Tile—Olean Tile Co. and Franklin Tile Co.  
PIPES  
Copper tubing with Streamline fittings,  
Mueller Brass Co.  
HEATING AND AIR CONDITIONING  
Oil-fired Gar Wood unit.  
Hot water heater—coal fired.  
Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
CHIMNEY  
Fireplaces.  
Facings—wood.  
Hearths—flagstone.  
Mantels—wood.  
Damper—Covert, old style.  
HARDWARE  
Interior and exterior—P. & F. Corbin.  
SCREENS  
Anaconda screen cloth.  
WINDOW DRESSING  
Shades—cambric, Columbia Mills, Inc.  
Blinds—wood.





Although the owners have an excellent collection of Colonial furniture they did not for this reason insist upon a Colonial house. This board and batten, brick and shingle-roofed house fittingly accommodates the period furniture and happily emphasizes that a "modern" design for living does not have to depend upon modern materials. The style of the ventilating device over the garage is a romantic hangover from similar arrangements for barns and is the only jarring note in this otherwise excellent example of simple taste. Approximate cost today slightly exceeding \$3.00 a square foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls  
Columns } Monolith cement.  
Cellar floor }  
Waterproofing—Anti-Hydro Waterproofing Co.

### FRAME CONSTRUCTION

No. 1 common Douglas fir.  
Sills—heart common redwood.

### MASONRY CONSTRUCTION

Common brick walls—garage and chimney.

### EXTERIOR SURFACE

Vertical board and batten.  
Stucco—Monolith.

### ROOF

Wood shingles on shingle lath.  
Valleys }  
Gutters } Armco.  
Down spouts }  
Composition sheathing paper—30 lb. asphalt saturated rag felt.

### DOOR AND WINDOW FRAMES

Sash and frames—double hung, sugar pine.  
Doors and frames (exterior)—Douglas fir frames, sugar pine doors.  
Garage doors—overhead.

### PORCHES

Brick floor—Simons brick.

### GLASS

Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Shingles—oil stained, Cabot's.  
Siding }  
Trim } Oakley Paint Co.  
Sash }

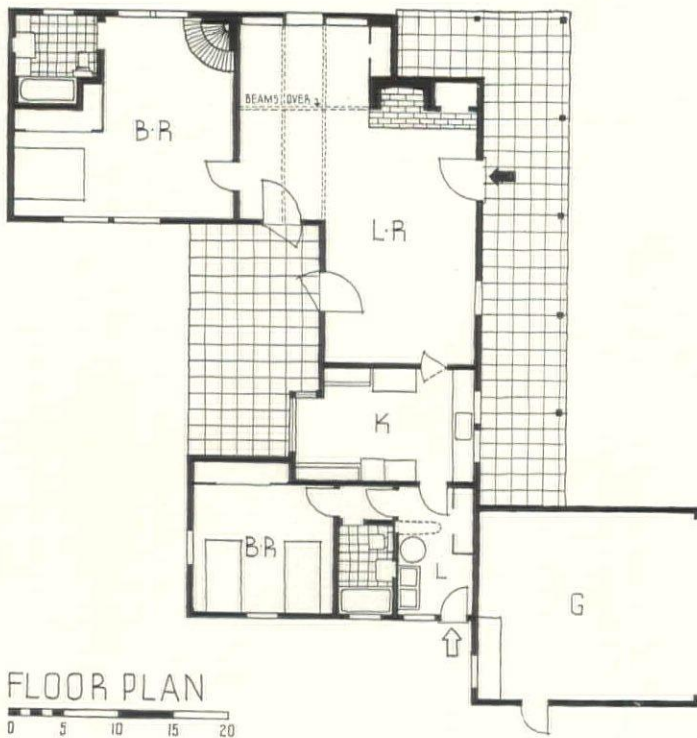
### LATH AND PLASTERING

Lathing—wood, No. 1 green Douglas  
Long-Bell Lumber Sales Corp.  
Plastering—"Blue Diamond"

### INTERIOR WOODWORK

Floors—oak.  
Trim—clear vertical grain Douglas fir.  
Painted surfaces } vertical grain  
Shelving and cabinets } Douglas fir





PLAN: Z-shaped, giving maximum exposure. A symmetrical living-dining room gives pleasant feeling of spaciousness. The house is small, no larger than the familiar Eastern-cube, but its livability strikingly exceeds that of the typical cube.



VIEWS OF THE LIVING-DINING ROOM



**INSULATING**  
None.  
Weatherstripping—American Weather-strip Co.

**INTERIOR FINISHES**  
Floors }  
Trim } Oakley Paint Co.  
Doors }  
Sash }  
Walls }

**WIRING**  
Switches—Despard type, Pass & Seymour Inc.

**LIGHTING**  
Direct.

**PLUMBING**  
Kitchen  
Sink—Standard Sanitary Mfg. Co.  
Stove—"Magic Chef," American Stove Co.  
Refrigerator—General Electric Co.

**BATHROOM**  
Fixtures }  
Bath tubs } Standard Sanitary Mfg. Co.  
Toilets }

Seats—Church Mfg. Co.  
Showers—Crane Co.  
Tile—Gladding, McBean & Co.

**PIPES**  
Wrought iron—Reading Iron Co.

**HEATING**  
Gas—Payne Furnace & Supply Co.  
Hot water heater.

**CHIMNEY**  
Fireplaces  
Facings } Simons brick.  
Hearths }  
Damper—Richardson.

**HARDWARE**  
Interior and exterior—Dresslar Hardware Co.

**SCREENS**  
In-vis-o Disappearing Roller Screen Co.

**WINDOW DRESSING**  
Venetian blinds—Western Venetian Blind Co.





Woodcock P

An admirable solution of the difficult problem of the two-story porch; the use of light posts and correspondingly open ironwork make this porch appear as an important and distinct element of the composition while on the street elevation it is sufficiently set back and shielded by trees to attain a measure of privacy. The use of plants to enhance the design, favored by the California climate, might well be emulated in other sections of the country. The patio is used to excellent advantage as an outdoor living space, and shelters on two sides provide shade as well as protection for furniture in inclement weather. The use of materials varied and rich: clapboards, plaster, and cement tile, all light in color, provide an agreeable play of texture without producing a restless design. Cost: \$17,486.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete.  
Cellar floor—concrete, cement finish.  
Waterproofing—Anti-Hydro.

### FRAME CONSTRUCTION

Douglas fir.  
Sills—redwood.

### EXTERIOR SURFACE

Front elevation veneered with "Gray-stone" concrete tile.  
Clapboards—2nd story 1" x 10" shiplap.  
Vertical boards and battens—inside of patio.  
Sides and rear—cement plaster.

### ROOF

Wood shingles—red cedar.

Valleys }  
Gutters } galvanized iron, 24 gauge.  
Flashing }  
Down spouts }  
Composition sheathing paper—15 lb. felt, one layer.

### DOOR AND WINDOW FRAMES

Double hung } sugar pine sash, Douglas  
Casement } fir frames.  
Doors and frames (exterior)—sugar pine.  
Garage doors—Douglas fir, sliding.

### PORCHES

Floor—front porch and patio, common brick, basket weave.

### GLASS

All glazing double strength grade A clear window glass, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Siding  
Priming } lead, zinc, and oil,  
Finish coat } mixed.  
Trim } finish coat, lead, zinc, and oil,  
Sash } mixed.  
Exterior concrete tile and cement plaster  
2 coats Lithide, Lithide Products Co.

### LATH AND PLASTERING

Lathing  
Wood—Longbell No. 1 covered with mesh 20 gauge galvanized wire.  
Plastering  
Patent plaster—Gypsum hardwax Blue Diamond.  
Finishing coat—smooth white putty coat.

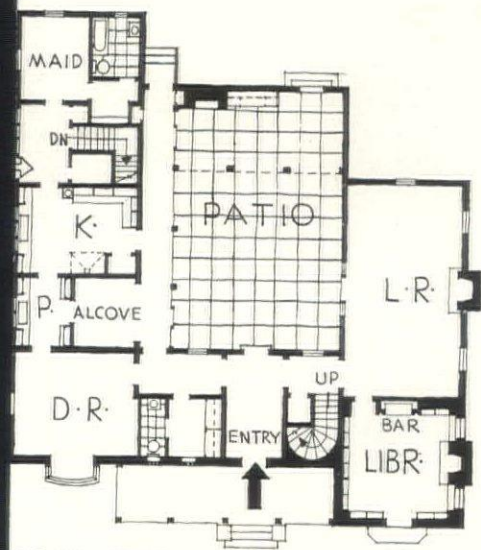




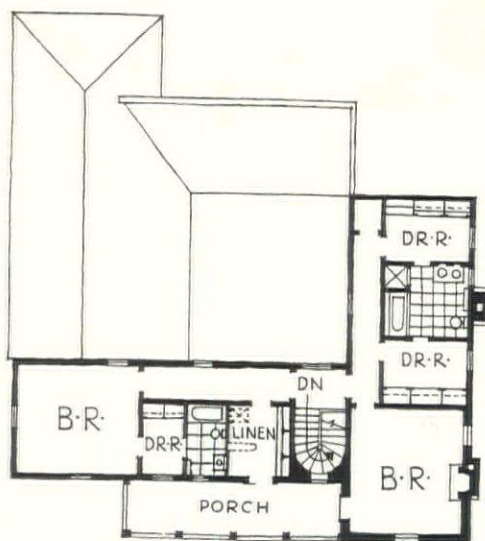
PATIO OR OUTDOOR LIVING SPACE



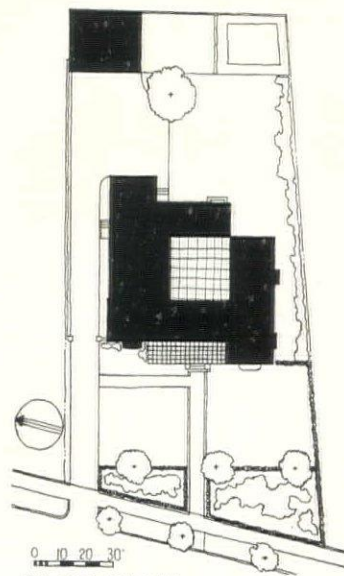
DINING ROOM



FIRST FLOOR



SECOND FLOOR



PLOT PLAN

N: Revolves about the enclosed patio which centers on the axis of the entrance and includes an fireplace for barbecues. House set 50 feet back on a lot 100x190 feet. Access from patio to garden truck garden beyond. Garage unattached. Note two dressing rooms flanking south bathroom.

LANDSCAPE ARCHITECT, EDWARD HUNTSMAN TROUT

**INTERIOR WOODWORK**  
 Floors—Douglas fir.  
 Walls—oak, plank and strip.  
 Cabinetry—knotty pine.  
 Millwork and cabinets—Douglas fir.  
 Work—to detail.  
**PAINTING**  
 Exterior stripping—exterior doors only, Monarch.  
**INTERIOR FINISHES**  
 Floors—stain, shellac and wax.  
 Walls—4-coat enamel.  
 Ceilings—Pequot sheeting.  
 Paper—washable.  
 Electrical fixtures—special by B. B. Bell.

**LIGHTING**  
 Direct.  
**PLUMBING**  
 Kitchen  
 Sink—2 compartment, colored.  
 Pantry  
 Sink } Monel metal.  
 Bar }  
**BATHROOM**  
 Bath tubs—recessed.  
 Toilets—syphon Jet, bowl and tank in one piece.  
 Seats—Church Mfg. Co.  
 Tile—wainscot and shower, Gladding, McBean & Co., Los Angeles.  
**PIPES**  
 Steel—galvanized.

**HEATING**  
 Gas—unit heaters in basement.  
 Hot water heater—60 gal. auto storage, Mission.  
**CHIMNEY**  
 Fireplaces and chimney of "Groutlock Brick"—Simons Brick Co.  
 Facings—common brick, painted.  
 Hearths—common brick, oiled.  
 Mantels—wood.  
 Damper—Superior.  
**HARDWARE**  
 Interior—Russell & Erwin.  
**SCREENS**  
 Wood, bronze mesh.  
**WINDOW DRESSING**  
 Venetian blinds—Air Lite Mfg. Co.





A board and batten house of great simplicity, planned so that the principal rooms face away from the street. The outstanding feature of the exterior is the chimney, which has been expanded to become the entire end of the living room wing, providing interesting textural contrast to the wood walls of the other portions of the house. The raised hearth, on the interior, is not only a very practical arrangement, but is decorative as well. As is usually the case in houses of this type, the living room opens on to a porch, beyond which is the garden. It is very interesting to note that this house has corner windows in both bedrooms, a feature better seen on the photographs; that the architect saw fit to incorporate this element, supposedly the exclusive property of the "International Style," in an otherwise traditional design, is another instance of a growing and healthy indifference to stylistic correctness in American residential work. Cost: \$4,200. Cubage: 21,496 at 19½ c per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—concrete.

### FRAME CONSTRUCTION

Oregon pine.

Sills—redwood.

### EXTERIOR SURFACE

Siding—redwood vertical shiplap and battens.

### ROOF

Wood shingles on 1"x4" sheathing.

Gutters

Flashing

Down spouts

} Armco 26 gauge galvanized iron.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—California white pine.

Doors and frames (exterior)—California white pine.

### PORCHES

Brick floor—basket pattern common.

### GLASS

Single strength "Lustra" grade A, American Window Glass Co.

### EXTERIOR PAINT

Shingles—oil stained.

Siding—casein cold water.

Trim } lead and oil.

Sash }

### LATH AND PLASTERING

Lathing—½" Beaver insulating masonry lath.

Plastering

Patent plaster—Empire hardwall.

Finishing coat—Peerless stucco.

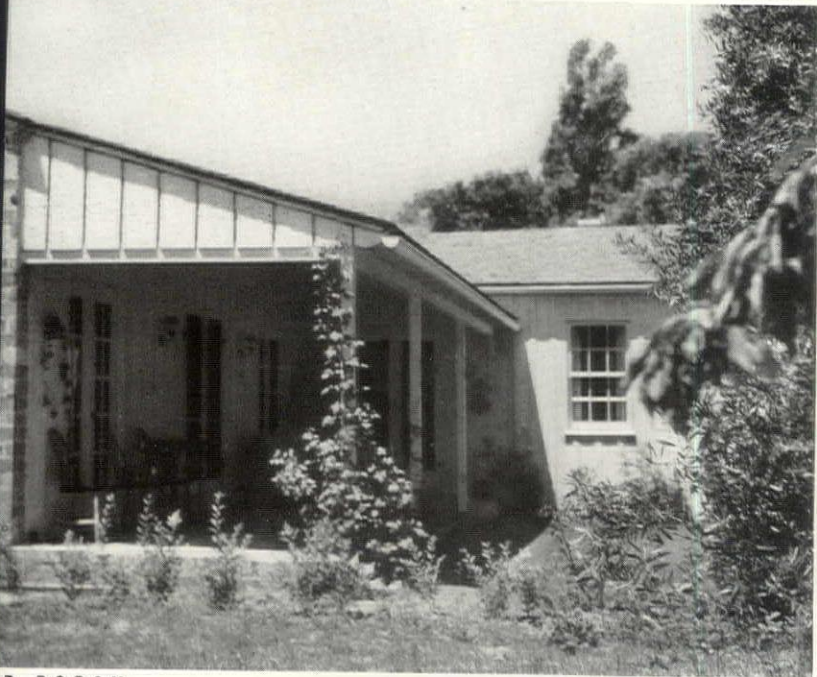
### INTERIOR WOODWORK

Floors—plank oak.

Walls and doors, living room and dining room—"Shevlin" knotty white pine.



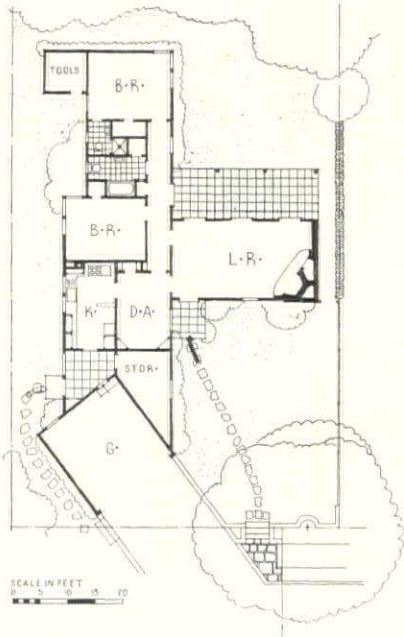
# GEORGE PATTON SIMONDS, ARCHITECT



R PORCH



ING ROOM WITH GREAT CORNER FIREPLACE



PLAN: Entrance to bedrooms can be effected without going through living room. The askew garage is adapted to the special requirements of the site. Rear porch common to entrance, stor- age and garage. Kitchen large and well planned.

Shelving and cabinets—"Shevlin" knotty white pine.

LIGHTING  
Direct.

Insulating  
Outside walls—Beaver insulating lath and board.

PLUMBING  
Kitchen

Interior Painting  
Trim } stained and waxed.  
Doors }

Sink—Standard Sanitary.  
Cabinet—knotty pine.  
Refrigerator — Frigidaire Division,  
General Motors Corp.

BATHROOM  
Fixtures—Standard Sanitary.  
Seats—Church Mfg. Co.

PIPES  
Galvanized iron and steel.

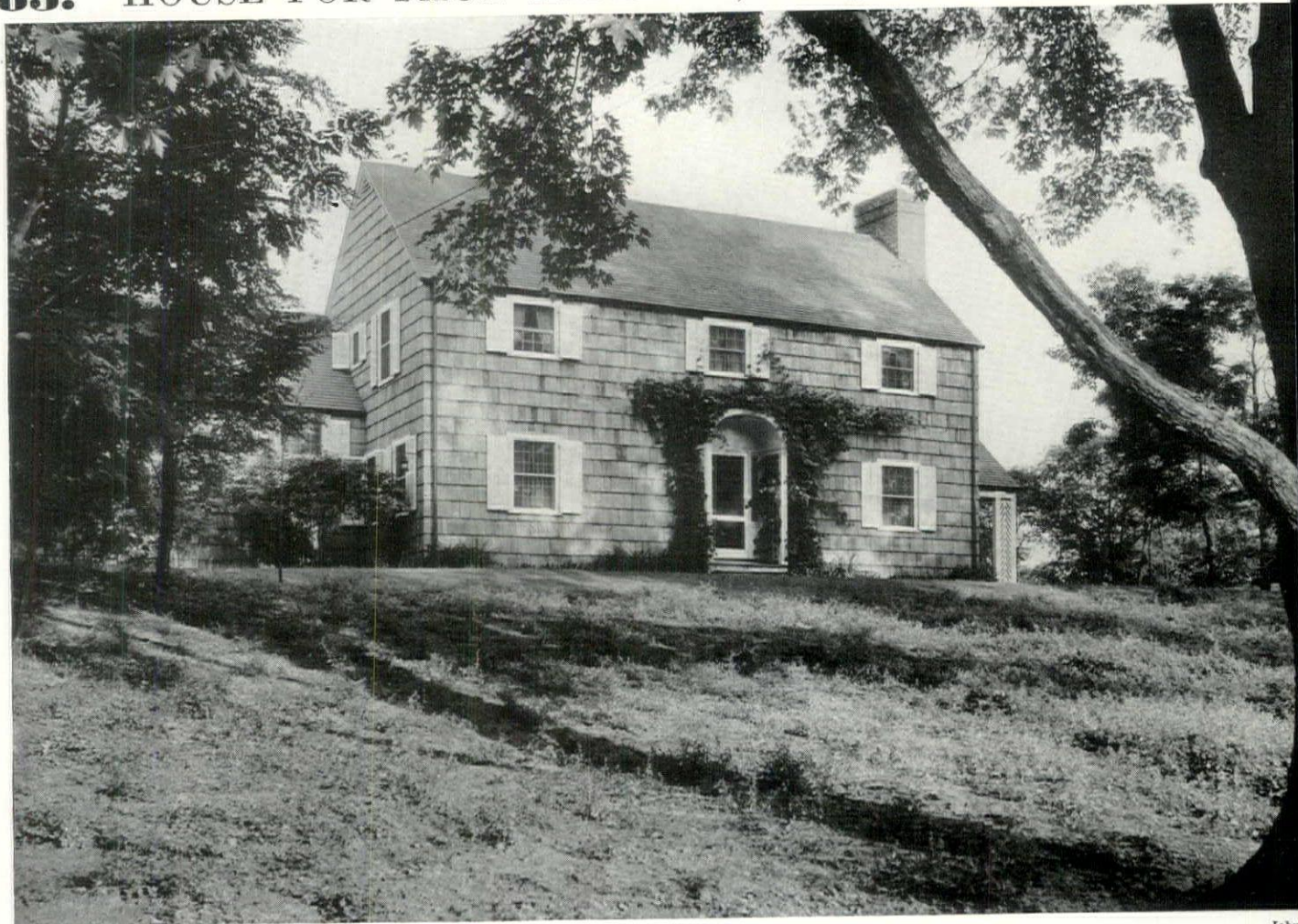
HEATING  
Gas-fired hot air.  
Hot water heater.

CHIMNEY  
Fireplaces  
Hearths } common brick  
Mantels }

HARDWARE  
Interior and exterior—Ry-Lock Co., Ltd.,  
and handwrought iron.



## 83. HOUSE FOR PAUL HENCHEY, RYE, NEW YORK



John

The house looks comfortable in its setting. The small windows are in accord with early American tradition. The early settlers had no efficient heating systems and their best way of fighting the severe North Atlantic winters was with tiny windows. The rear elevation, with its small bow window, its terrace and its greater fenestration has a more utilitarian air. Cubage: 36,222 at 32 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—Stone.  
Piers—brick.  
Cellar floor—cement.  
Waterproofing—integral cement.

#### FRAME CONSTRUCTION

Wood

#### EXTERIOR SURFACE

Shingles—hand-split cedar.

#### ROOF

Wood shingles on shingle lath  
Valleys  
Gutters  
Flashing  
Down spouts

} copper.

Salt glazed tile drains.

Composition sheathing paper.

#### DOOR AND WINDOW FRAMES

Sash and frames.

Double hung } wood.  
Casement }

Doors and frames (exterior) } white  
Garage doors—special design } pine.

#### PORCHES

Brick and flagstone floor.

#### GLASS

Double thick—Libbey-Owens-Ford.

#### EXTERIOR PAINT

Shingles—dipped in Cabot's bleaching oil.

Trim } Priming  
Sash } Finish coat } lead and oil.

#### LATH AND PLASTERING

Lathing—wire.

Plastering

Patent plaster—gypsum.

Finishing coat—plaster of Paris  
white.

#### INTERIOR WOODWORK

Floors—oak and pine.

Trim—white pine.

#### INSULATING

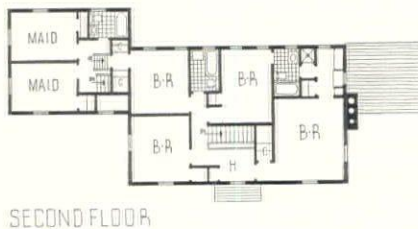
Outside walls } Rock Wool.

Attic floor }  
Weatherstripping—Chamberlin.





John Guss



PLAN: Unusual is the large hall, approximately 25 feet long and 7 feet wide, with a small closet projecting into it. Dining room is strictly a one purpose room with entrance to living room; access to living room only through a small door. Maid's quarters over garage.

### INTERIOR FINISHES

Floors—stained and waxed.  
Trim }  
Doors } 3 coats lead and oil.  
Walls—papered.  
Wallpaper—Thibaut and Salubra.

### WIRING

Cable—BX

### LIGHTING

Direct.

### BATHROOM

Fixtures—Standard Sanitary.  
Cabinets—Hoegger.  
Seats—Church.

### PIPES

Brass and wrought iron.

### HEATING

Oil.  
Boilers—Fitzgibbon.  
Radiators—Trane Co.  
Piping—steel.  
Valves—Trane Co.  
Hot water heater—Taco unit.  
Thermostat and regulators—Minneapolis-Honeywell.

### CHIMNEY

Fireplace  
Facing }  
Hearth } marble.  
Mantel—wood.  
Damper—Covert.

### INCINERATOR

Kerner Incinerator Co.

### HARDWARE

Interior }  
Exterior } Corbin.

### SCREENS

Wood frame, aluminum mesh.

### WINDOW DRESSING

Shades.





Gustav Anders

A familiar form of residence in the East, handled with taste and restraint. The use of brick veneer on the front, and wood on the ends and wings of the house produces an agreeable play of textures, while the white paint on both surfaces preserves the severe integrity of the form as a whole. The combination of the two materials as here employed also frankly reveals the front wall as a veneer rather than a solid masonry construction. The light-colored shutters give an effect as pleasant as it is unusual in residences of this type. A sense of privacy and richness is given by the picket fence, and it is a welcome division between the surrounding lawn and the more heavily planted area close to the house. Details are well handled, particularly the front door. Landscaping is excellent. Cost: \$13,150. Cubage: 36,000, at 36½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—cement blocks.  
Columns—Lally.  
Cellar floor—cement.  
Waterproofing—tar (1 coat).

### FRAME CONSTRUCTION

Wood

### MASONRY CONSTRUCTION

Common brick walls.

### EXTERIOR SURFACE

Common brick—Sayre & Fisher Co.  
Shingles—Perfection.

### ROOF

Slate on sheathing—black.

### Valleys

Gutters } Copper—Chase Brass and  
Flashing } Copper Co.  
Down spouts }

### DOOR AND WINDOW FRAMES

Sash and frames—double hung, Curtis.  
Doors and frames (exterior)—Curtis.  
Garage doors—Curtis.

### PORCHES

Flagstone.

### GLASS

Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—brush stained, Cabot's.

### Siding

Trim } 3 coats lead and oil, Dutch Boy.  
Sash }

### LATH AND PLASTERING

#### Lathing

Composition plaster base—Rocklath,  
U. S. Gypsum Co.

Plastering—U. S. Gypsum Co.

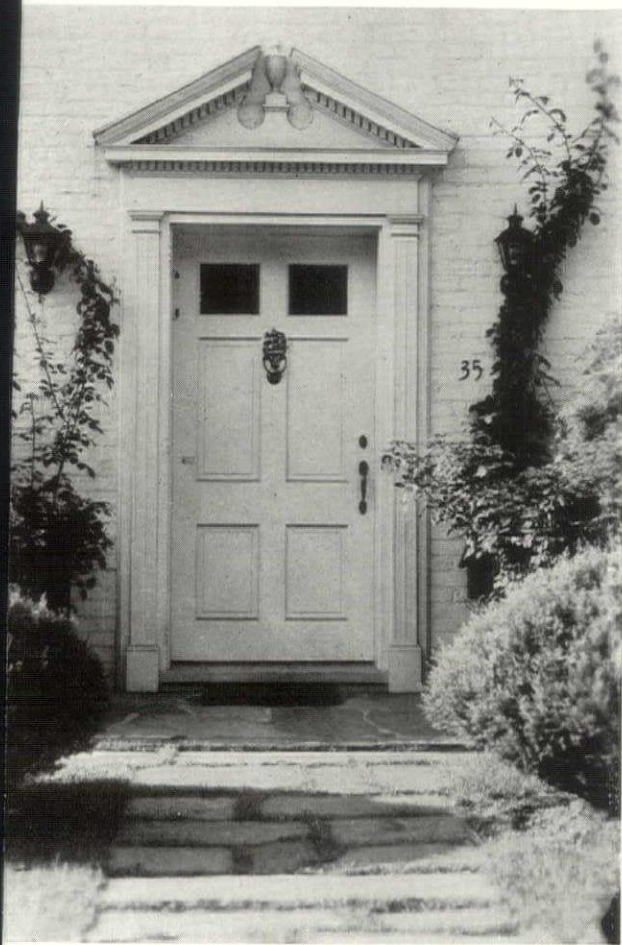
### INTERIOR WOODWORK

Trim and floors—pine.  
Hardwood—red oak.  
Stock millwork—Curtis.

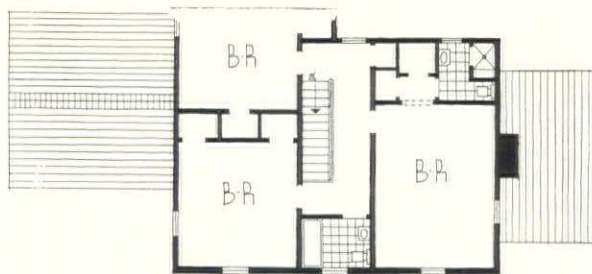
### INSULATING

Roof rafters—Cabot's wool.

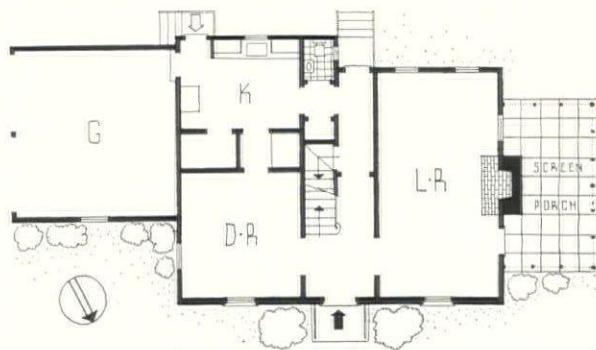




PLAN: A typical arrangement of rooms, with generous auxiliary space for the kitchen. Vistas through the rooms are good. End windows in living room make up for light cut off by the screened porch. Upstairs closets ample, and convenient in shape. Square form of dining room is one that might well be more widely adopted.



SECOND FLOOR



FIRST FLOOR



#### INTERIOR FINISHES

Floors—Minwax, 2 coats.

Trim  
Doors  
Sash  
Walls  
Wallpaper—Lloyd's.

#### RING

Cable—BX.  
Electrical fixtures—Chase.

#### LIGHTING

Direct.

#### CHEATING

Kitchen

Sink—Standard Sanitary.

Stove—gas, Tappan Stove Co.

Refrigerator—General Electric.

#### BATHROOM

Fixtures—Standard Sanitary.

Cabinets—United.

Bath tubs—Pembroke.

Toilets—Devoro.

Seats—Church.

Showers—Standard Sanitary.

Tile—Pardee Matawan Tile Co.

#### PIPES

Brass.

#### HEATING

Oil—Petro.

Boilers

Radiators

Piping

Valves

Hot water heater—Penfield.

#### CHIMNEY

Fireplaces

Facings  
Hearths } brick

#### HARDWARE

Interior and exterior—Corbin.





The architect of this house is well known for his carefully studied adaptations of old New England residential architecture, and in this house, originally submitted in the small house competition recently held by the General Electric Company, he handled the early forms with a certain amount of freedom. The design of the whole is simple, with a large and satisfying expanse of roof. The junction of main house with garage wing has been effected without complication. It is worth noting that the low eaves do not cut off needed light from the upstairs rooms, all of which also have cross ventilation. The projection of the garage wing gave an opportunity to create a small terrace whose form is sharply defined by the white picket fence. Erected as a demonstration house, the building was visited by thousands of people in the month that it was open to the public, and was sold shortly afterward. Cost: \$9,000. Cubage: 18,850 at 47½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—poured concrete.  
Cellar floor—concrete.

### FRAME CONSTRUCTION

Fir.  
Girders—steel.

### MASONRY CONSTRUCTION

Chimney—brick.

### EXTERIOR SURFACE

Clapboards.

### ROOF

Slate on sheathing—Monson slate.  
Valleys—copper.  
Gutters—Toncan metal hung.  
Flashing—copper.  
Down spouts—round Toncan metal.

### DOOR AND WINDOW FRAMES

Sash and frames all double hung wood

except wood casements in kitchen and dining alcove.  
Doors and frames (exterior)—wood.  
Garage doors—wood.

### PORCHES

Reinforced concrete.  
Brick floor.

### GLASS

Flat drawn window glass.

### EXTERIOR PAINT

Siding, trim and sash—white paint.

### LATH AND PLASTERING

Lathing—composition plaster base of reinforced Rocklath.  
Plastering—U. S. Gypsum patent plaster.  
Oriental finishing coat.

### INTERIOR WOODWORK

Trim—pine.  
Floors—plain oak.  
Painted surfaces—pine.  
Shelving and cabinets—pine.

### INSULATING

Outside walls } U. S. Gypsum wool.  
Roof rafters }  
Attic floor }  
Weather stripping—Empire Metal Co., Cambridge, Mass.

### INTERIOR FINISHES

Floor—stained and waxed.  
Trim }  
Doors } Boston  
Sash } Varnish Co.  
Walls (kitchen and bath) }



# YAL BARRY WILLS, ARCHITECT



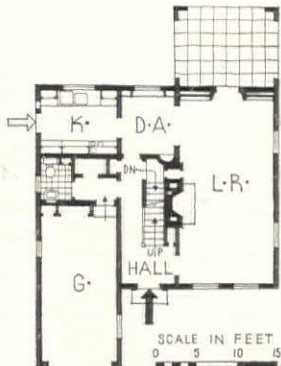
Arthur Haskell Photos



ERIOR DECORATION BY: C M. FRANCIS MacDONALD



SECOND FLOOR



FIRST FLOOR



BASEMENT

PLAN: Circulation excellent. Dining room reduced to a small alcove, large enough for family meals. Location of lavatory and coat closet unusual, but admirable. Economical use of space throughout.

allpaper—principal rooms and hall by  
Richard Thibaut, N. Y.  
NG  
ble—G. E. wiring system.  
ectrical fixtures — Pettingal-Andrews  
Co.  
itches—General Electric.  
TING  
rect.  
MBING  
tchen  
Sink—G. E. dishwasher and sink.  
Cabinet—Art Metal Co.  
Stove—G. E. range.  
Refrigerator—G. E.  
Washing machine—G. E.  
Floors—Armstrong linoleum.

BATHROOM  
Fixtures—Standard Sanitary Mfg. Co.  
Tile—Wheeling Tile Co.  
PIPES  
Copper—American Tube Co.  
Wrought iron.  
HEATING  
Boiler—G. E. Oil furnace.  
Hot water heater—in furnace.  
Thermostat and regulators—G. E. Ther-  
mal Control, G. E. Humidistat time  
clock, day and night double thermo-  
static setting.  
AIR CONDITIONING  
Central—G. E. system.  
CHIMNEY  
Fireplaces.

Facings—brick.  
Hearths—brick.  
Mantels—wood.

HARDWARE  
Interior—Brass by Corbin.  
Exterior—black iron.

SCREENS  
All windows and doors, wood frames, gal-  
vanized iron—Crown Shade & Screen  
Co.

WINDOW DRESSING  
Shades—Lansdale Holland Co.

SPECIAL EQUIPMENT  
Radio, workshop, ironer, clock, health  
lamp, exhaust fan for kitchen, all by  
G. E.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Built by the Catalina Foothills Estate, Inc., this house in the desert is patterned after the Mexican fa house, a type indigenous to the region and in harmony with the character of the gaunt, cactus-studded Adobe bricks, not coated with adobe plaster, furnish the structural material. The porch roof is covered v Spanish tiles. Notwithstanding the rugged quality of the exterior, the interior is planned and finished v full consideration for all the amenities and conveniences of modern life. There is an air conditioning-b ing plant in the basement. There are fireplaces in the living room and two of the bedrooms. Cost, \$16,0 Cubage, 44,000, at 36 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete.  
Cellar floor, boiler room }  
Main floor } Cement  
Waterproofing—emulsified asphalt.

### MASONRY CONSTRUCTION

Adobe, stabilized (waterproofed) with Bitumuls, American Bitumuls Co.

### FRAME CONSTRUCTION

Sills—redwood.  
Studding—2 x 6 Douglas fir.  
Rafters—6 x 8 Douglas fir exposed.

### ROOF

3" of diatomaceous earth with 15 per cent Portland cement, applied as concrete over sheathing and building

paper. 30 lb. felt mopped with hot asphalt over same; surface then mopped with hot asphalt; then painted with asphalt aluminum paint. Paint by Republic Paint and Varnish Co.

Flashing }  
Down spouts } Galvanized iron.

### DOOR AND WINDOW FRAMES

Sash and frames—wood, double hung.  
Doors and frames (exterior)—plank doors.  
Garage doors—plank doors with hardware from Overhead Door Corp.

### PORCHES

Reinforced concrete for sleeping porch.  
Brick floor, 8" x 12", front porch and patio terrace.

### GLASS

Single strength, Pittsburgh Plate Glas Co.

### EXTERIOR PAINT

Sash }  
Priming } Oil paint by Pione  
Finish coat } Oil Paint Co., Tuc  
son.

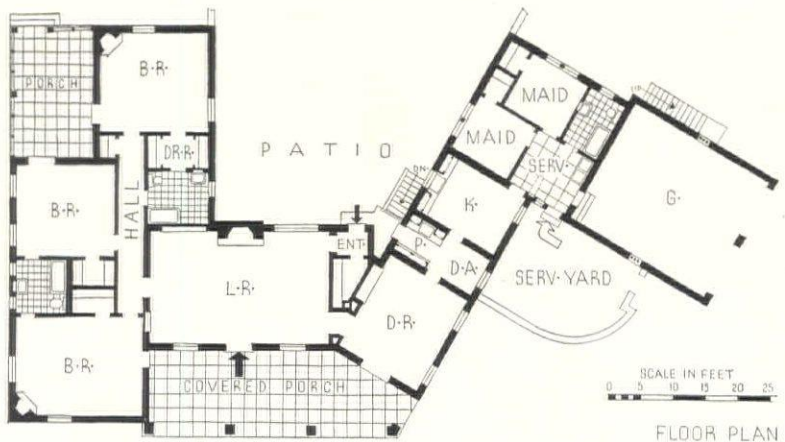
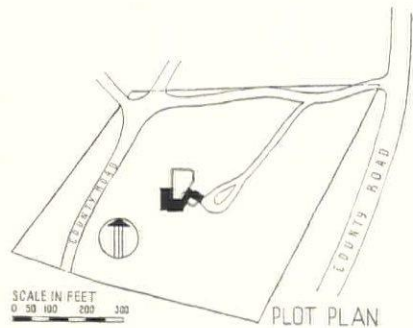
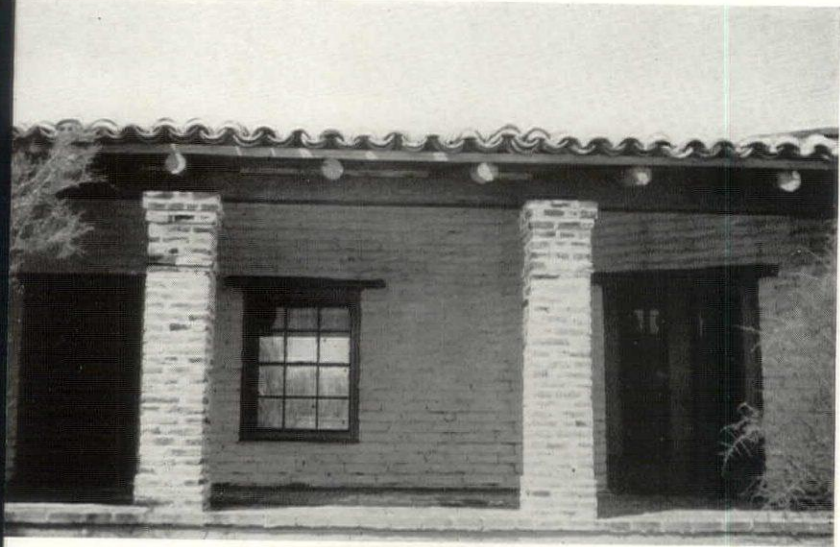
### LATH AND PLASTERING

Lathing—wood.  
Plastering—patent plaster, "Sunco" Gyp sum Products Co., Tucson.

### INTERIOR FINISHES

Cement floors, no trim.  
Exposed beams and sheathing, mineral color and oil stain in living room halls, and dining room.





PLAN: Focused upon an irregular-shaped patio, the core and heart of the house is the living room which forms the center of communication, with entrance to the sleeping quarters at one end and to the dining room and service portion at the other. Chief access to the house is through an entry from the patio to one corner of the living room. The canted service wing is well managed without disfigurement of rooms or any waste of space.

ings of bedrooms, baths, pantry, kitchen, laundry and maid's room beams and planks painted flat white, Pioneer Paint Co., Tucson, Ariz.  
 rs—waxed, W. P. Fuller Co.  
 n } Stained or painted,  
 rs } Pioneer Paint Co.  
 n }  
 trical fixtures—from Taxco, Mexico.  
 BING  
 hen.  
 Sink—colored 20 x 30 flat rim with Duo-strainer, Washington Eljer Co., Los Angeles.  
 Cabinet—rough pine boards.

**BATHROOM**  
 Fixtures—chrome } Washington  
 Bath tubs—iron enamel } Eljer Co.  
 Cabinets—steel, "Lawco."  
 Toilets—china.  
 Seats—Church Mfg. Co.  
 Shower curtains—duck.  
 Tile—Gladding, McBean & Co.  
**PIPES**  
 Supply—copper, Chase Brass & Copper Co.  
 Sewer and soil—cast iron.  
**HEATING**  
 Automatic oil burner by Taylor Metal Works, Tucson.  
 Air ducts.

Hot water heater—"Ever-hot" automatic storage.  
 Thermostat and regulators—Minneapolis-Honeywell Regulator Co.  
**AIR CONDITIONING**  
 Central—"Monitor."  
**CHIMNEY**  
 Fireplaces.  
 Facings—plastered.  
 Hearths }  
 Mantels } Tile or brick.  
 Damper—Superior.  
**HARDWARE**  
 Stanley and wrought iron.  
**SCREENS**  
 Galvanized iron mesh, wood frames.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Photos Let

An interesting and unusual house composition. Starting with a typical rectangular block for the body of the house, the architect set the garage at a slight distance and developed the intervening into a covered porch and a terrace. This ingenious arrangement produced an unusually livable home as well as giving a rather luxurious appearance to a residence of moderate cost. While the front is more successfully worked out than the back, the effect as a whole is satisfactory. By extending in the middle of the rear elevation the designer shut off the kitchen from the terrace, giving this space additional privacy. Cost: \$14,650. Cubage: 48,540, at 30 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—common brick.  
Cellar floor—4" concrete plus 1" cement topping.  
Waterproofing—none.

### FRAME CONSTRUCTION

Pine.

### EXTERIOR SURFACE

Brick veneer—3" x 8" rough surface.  
Clapboards—garage wing.

### ROOF

Slate on sheathing—weathered slate.  
Valleys—40 lb. tin.  
Gutters } 24 gauge galvanized  
Down spouts } Toncan.  
Flashing—tin and galvanized iron.  
Composition sheathing paper—Carey 30 lb. felt under slate.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—pine, cast iron weights, cotton cord.

Doors and frames (exterior) } Pine.  
Garage doors }

### PORCHES

Reinforced concrete slabs.  
Terrace—hand made old brick.  
Porch—red quarry.

### GLASS

Double strength, quality A, Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Walls } Barrell Sunlight, U. S. Gutta  
Trim } Percha Paint Co.  
Sash }

### LATH AND PLASTERING

Lathing—composition plaster base.  
Plastering }  
Patent plaster—Gypsum } Certain-teed Products Corp.  
Finishing coat—finishing lime }

### INTERIOR WOODWORK

Trim and floors.  
Floors—mixed red and white oak widths.  
Trim—yellow pine.  
Doors—Ponderosa.  
Shelving and cabinets—yellow pine.  
Stock millwork—special, except in doors.

### INSULATING

Outside walls—fiber board, Certain Products Corp.  
Attic floor—kiln dried treated pine lings.  
Weatherstripping—zinc strips, thresholds.

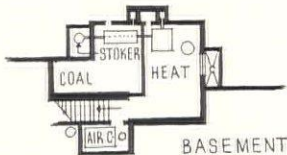
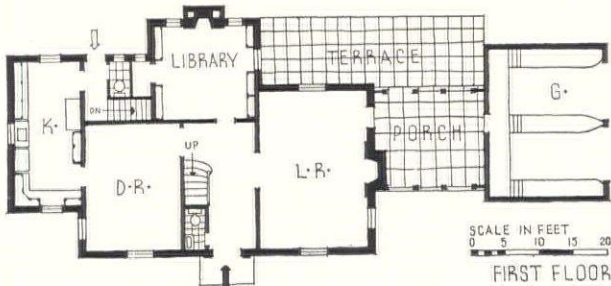
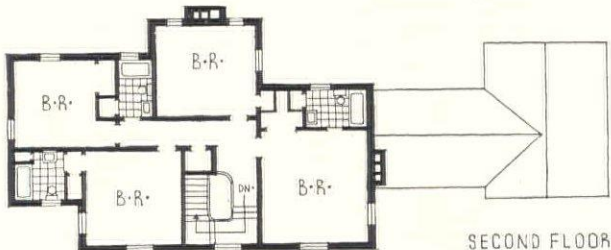
### INTERIOR FINISHES

Floors—wood filler, 3 coats varnish.  
Pittsburgh Plate Glass Co.





Though somewhat irregular, the plan is compact, efficient, convenient. The generous kitchen is well planned. Basement small. Note that the bath which serves two bedrooms has one door, a preferable arrangement, as a rule, to that of one door from each bedroom.



Interior enamel U. S. Gutta Percha Paint Co.  
 Walls—flat tinted  
 Wallpaper—living and bedrooms, Alfred Peats, Chicago.  
 Impregnated fiber covered, two wire.  
 Electrical fixtures—brass by Shapiro & Aronson and imported glass chandeliers.  
 Direct—Colonial type.  
 Sink—enamel.  
 Cabinet—wood, special detail.  
 Stove—General Electric Co.  
 Refrigerator—Bohn box, Kelvinator unit in basement.

**BATHROOM**  
 Fixtures—Standard Sanitary Mfg. Co.  
 Cabinets.  
 Bath tubs—enameled iron  
 Toilets—low tank models } Standard Sanitary Mfg. Co.  
 Seats—Church Mfg. Co.  
 Shower curtains—canvas.  
 Floors and walls—hard tile.  
**PIPES**  
 Steel  
**HEATING**  
 Split system—coal fired.  
 Boilers—McWane.  
 Radiators—in kitchen and bathrooms, Trane Co.  
 Piping—steel, Central Tube Co.  
 Hot water heater—cast iron, American Radiator Co.

**AIR CONDITIONING**  
 Prepared to install cooling coil or chilled water washer later, ducts are insulated.  
**CHIMNEY**  
 Fireplaces.  
 Facings—one handmade colonial brick, other marble.  
 Mantels—wood.  
**HARDWARE**  
 Interior and exterior—Yale & Towne Mfg. Co.  
**SCREENS**  
 Wood frames.  
**WINDOW DRESSING**  
 Shades—cotton.  
 Awnings—cotton duck.  
 Blinds—wood.



## 88. HOUSE FOR BENJAMIN E. LORENTZ, OAKLAND



THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Waters & Ha

Houses like this one give California clear leadership in U. S. residential architecture. Thoroughly modern in spirit, the house shows influences of the native "ranch house" architecture, the International School, the New England Colonial, all combined with a singlemindedness of purpose that has resulted in a completely unified composition. The effectiveness of the repetition of a simple roof form, the use of wide vertical elements, the directness and delicacy of porch and window details are worthy of close study. Chimneys are well located and in character. The close proximity of house to highway suggests that a less open scheme of entrance elevation might have been adopted; it will be noted on the plan, however, that all the rooms are on one face away from the road. Cost: \$7,700. Cubage: 30,300 at 25½ cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls  
Columns } concrete.  
Cellar floor

#### FRAME CONSTRUCTION

Oregon pine.  
Sills—redwood.

#### EXTERIOR SURFACE

Vertical siding and California stucco.

#### ROOF

Wood shingles on sheathing—split cedar shakes.  
Valleys } copper.  
Flashing }

Gutters }  
Down spouts } galvanized iron.  
4" salt glazed tile drains.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung.  
Steel sash—Fenestra, Detroit Steel Products Co.  
Doors and frames (exterior)—pine.  
Garage doors—redwood.

#### PORCHES

Brick floor.

#### EXTERIOR PAINT

Siding } Priming—lead and oil } Sherv  
Trim } Finish coat—lead and } Willia  
Sash } oil and zinc } Co.

#### LATH AND PLASTERING

Lathing—wood.  
Plastering—patent plaster, Empire brand hardwall.

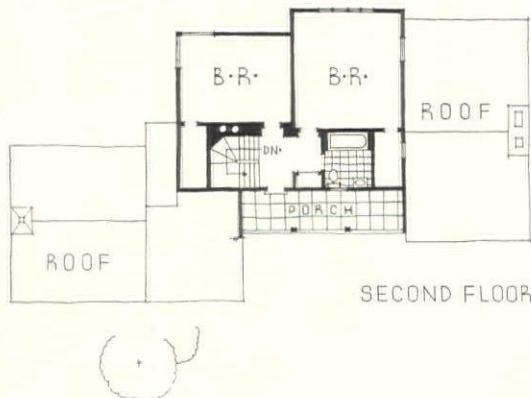
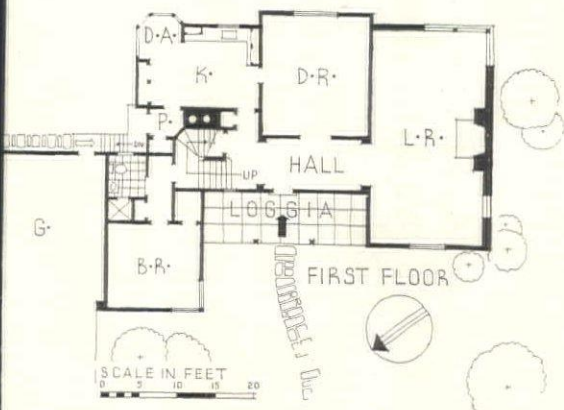
#### INTERIOR WOODWORK

Floors—oak.  
Trim—pine  
Shelving and cabinets } pine, to detail.  
Millwork }

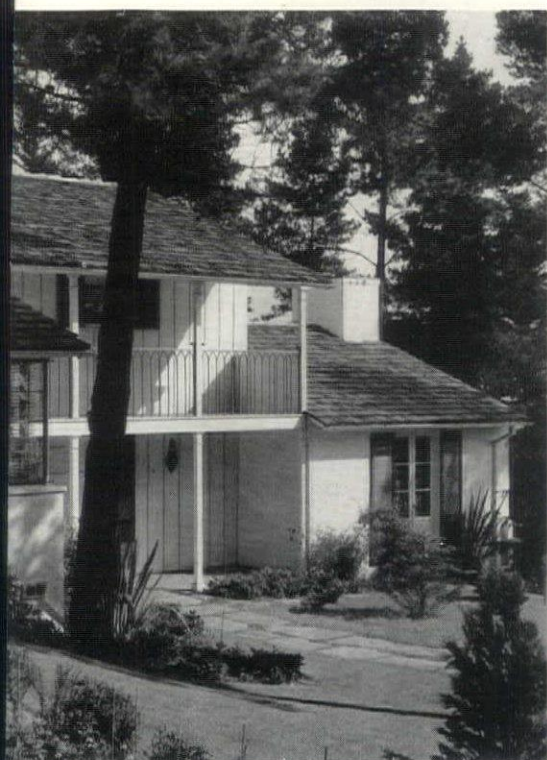
#### INSULATING

None.





PLAN: Simple, direct, economical. Note separation of extra bedroom from rest of house. Awkwardly shaped upstairs bedroom closets. Living room fenestration excellent, leaving ample wall space for furnishings. Unusual dining alcove, all glass for view.



TAIL



LIVING ROOM

## INTERIOR PAINTING

Floors—stained and waxed.

Trim  
Doors  
Wash  
Walls

oil paint.

Wiring—G. E. wire, knob and tube wiring.  
Switches—General Electric Co.

## HEATING

Direct.

## UMBING

Kitchen

Sink—Crane Co.

Cabinet—wood.

Stove

Refrigerator

Washing machine

## BATHROOM

Fixtures

Cabinets

Bath tubs

Toilets

Seats

Showers

Shower curtains

## PIPES

Steel—galvanized, copper bearing, U. S. Steel Corp.

Standard Sanitary Mfg. Co.

## HEATING

Gas

Hot water heater.

Thermostat and regulators.

## CHIMNEY

Fireplaces

Hearths—brick.

Mantels—brick and wood.

Damper—Richardson.

## HARDWARE

Interior and exterior—Russwin, Russell & Erwin Mfg. Co.

## SCREENS

Rollscreen Co., Pella, Iowa.

## WINDOW DRESSING

Venetian blinds—Ry-Lock Co., Ltd.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Knee

In reverting approximately to the old English H-shape and lengthening one leg, the architect of this one-story house at Santa Fe has nevertheless preserved the spirit of local usage and contrived a semi-pa with most of its agreeable portico features. Built of adobe and severely simple on the exterior, the interior with open pine-beamed ceilings and wide arched openings, lends itself admirably to the austere but rich treatment of decoration so admired in old Spanish houses. The interior walls are as plain as those outside but their very severity makes an excellent foil for the colorful furnishings and the courses of polychrome tiles used in step risers and skirtings. The two functions of the spacious dining room-kitchen are divided by a high-backed dresser, placed like a screen across the room. The great living room is the means of communication between the parts of the house; a door at one end opens into a small hall connecting with the two bedrooms. Cost: \$9,400.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls  
Columns } concrete.  
Cellar floor }

### MASONRY CONSTRUCTION

Hollow tile walls.

### EXTERIOR SURFACE

Stucco.

### ROOF CONSTRUCTION

Round timber.  
Built up composition, 20 year guarantee.  
Flashing—tin.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung and casement type.  
Doors—wood, special design.

### PORCHES

Floors—flagstone.

### GLASS

Double strength flat drawn sheet, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

None.

### LATH AND PLASTERING

Lathing—metal.  
Plastering—patent plaster.

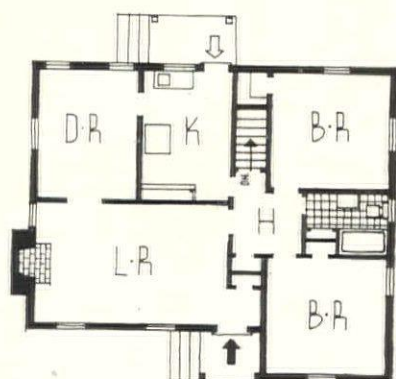




REAR AND SIDE ELEVATION



LIVING ROOM



FLOOR PLAN

PLAN: Hall is the center of traffic with living room, kitchen, two bedrooms and the bathroom opening on it. The two small closets interfere with direct circulation from kitchen to entrance.

## INTERIOR WOODWORK

Floors—5/16" x 1 1/3" oak.  
Trim—knotty pine.

## INSULATING

Attic floor—3" Thermofill.

## INTERIOR PAINTING

Floors—filled, stained and shellacked.

Trim }  
Doors } 3 coats Dupont's Duco.  
Sash }

## WIRING

Cable—BX cable and conduit.  
Switches—Bryant.

## LIGHTING

Direct.

## PLUMBING

Kitchen fixtures—Crane Co.

## BATHROOM

Fixtures—Crane Co.  
Accessories—built-in, Fairfax Co.

## PIPES

Galvanized iron.

## HEATING

Coal-fired hot air furnace, 22" C.I. bowl,  
Hart Mfg. Co.  
Hot water heater—Florence No. 2 coal oil  
heater, 30 gal. tank.

## HARDWARE

Interior and exterior—dull brass.

## SCREENS

Galvanized wire, wood frames.



## 91. HOUSE FOR JOHN I. GEARHART, PITTSBURGH



THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Johnston & Johnston

A type of residence which is popular in the low and medium cost range, this house is characterized by simplicity of design, the attractive use of inexpensive materials, and by the almost complete lack of ornamentation. Obviously inspired in its form by the "salt-box" type of early New England, it nevertheless makes no attempt to be archæologically correct. The slight overhang on the garden elevation may be objectionable to the confirmed functionalist as a useless survival of a bygone style, but its existence is justified, if not demanded, by the change of material. Cost: \$9,175. Cubage: 28,724, at 32 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—concrete 1:3:4 mix.  
Columns—4" lally.  
Cellar floor—4" concrete slab on 4" cinder fill.

#### FRAME CONSTRUCTION

Yellow pine No. 1  
Composition sheathing paper nailed to diagonally placed yellow pine sheathing.

#### MASONRY CONSTRUCTION

Concrete block, basement walls.  
Areaways—9" brick.  
Chimney—hard burned used brick.

#### EXTERIOR SURFACE

Brick veneer—hard burned, laid in cement mortar.  
Clapboards—redwood, service wing and dormers, 9" and 6" to weather.

#### ROOF

Slate on sheathing—laid over 30 lb. roofing felt nailed with copper nails.  
Valleys—open, copper.  
Gutters  
Flashing } 16 oz. copper.  
Down spouts }

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung—by N.S.W. Co., Detroit, Mich.  
Steel sash—utility, basement.  
Shutters—1½" stock.  
Doors and frames (exterior)—white pine.

#### PORCHES

5" reinforced concrete slab on cinder fill.  
Fieldstone laid in cement, random joints.

#### GLASS

Double thick, quality A.  
Cathedral hammered in bathrooms.

#### EXTERIOR PAINT

Brick veneer	} Prime coat and 2 coats Cabot's Old Virginia white.
Siding	
Trim	
Sash	

#### LATH AND PLASTERING

Lathing  
Wood—hemlock, exterior angles corner beads.  
Wire—interior angles.  
Plastering  
Patent plaster—hard.  
Finishing coat—sand.  
Wainscot—Keene's cement, maid's bath.

#### INTERIOR WOODWORK

Trim—white and yellow pine.  
Paneling—living room, wormy chestnut stair hall, yellow pine.  
Stair treads—oak.  
Shelving and cabinets—white pine.



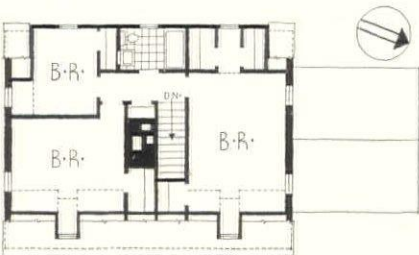


REAR

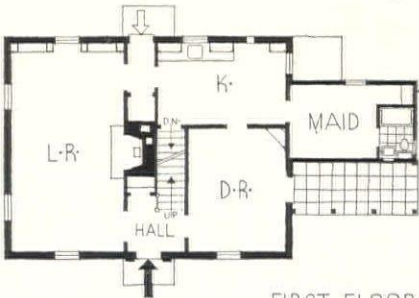
PLAN: A typical small house plan, with chimney in the center, a minimum-size vestibule, and customary arrangement of living room, dining room, and kitchen; the maid's room is a variation which in this case works well. Relation of kitchen to living room and dining room is excellent. Too often the circulation between kitchen and living room is neglected in the small house plan. No space has been wasted by the inclusion of a breakfast nook.



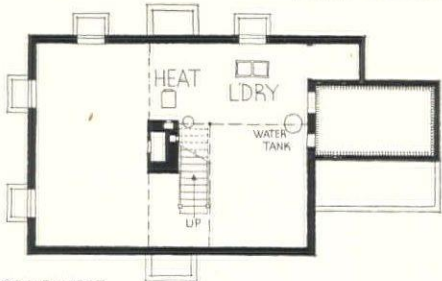
DINING ROOM



SECOND FLOOR



FIRST FLOOR



BASEMENT

FLOORING

Red oak, random width,  $\frac{7}{8}$ " thick, living room, dining room and hall.  
Linoleum laid on felt and yellow pine, kitchen, maid's bath, and rear hall.  
Oak select No. 1, balance of house.

INSULATING

Outside walls }  
Roof rafters } 4" bats, Johns-Manville.  
Attic floor }  
Weatherstripping—windows, N.S.W. Co., Detroit, Mich.

INTERIOR PAINTING

Floors—3 coats Minwax.  
Paneling—3 coats dull wax.  
Trim }  
Doors } 1 coat white shellac, 2 coats flat white, 2 coats flat egg-shell enamel.  
Sash }  
Walls }

WIRING

Cable—BX 3 wire.  
Electrical fixtures—not included in cost.

LIGHTING

Direct.

PLUMBING

Kitchen  
Sink  
Stove  
Refrigerator  
Washing machine } by owner.

BATHROOM

Fixtures—white china, Standard Sanitary Mfg. Co.  
Bath tubs—neo-classic recess.  
Toilets—Standard Sanitary, vitreous china "Compact."  
Seats—Church & Co.  
Floor—ceramic tile, 6" tile base.  
Wainscot—No. 1 glazed tile.

PIPES

Supply—Streamline copper tubing by Mueller Brass Co.  
Under floor—brass.  
Sewer—cast iron.  
Vents—galvanized iron.

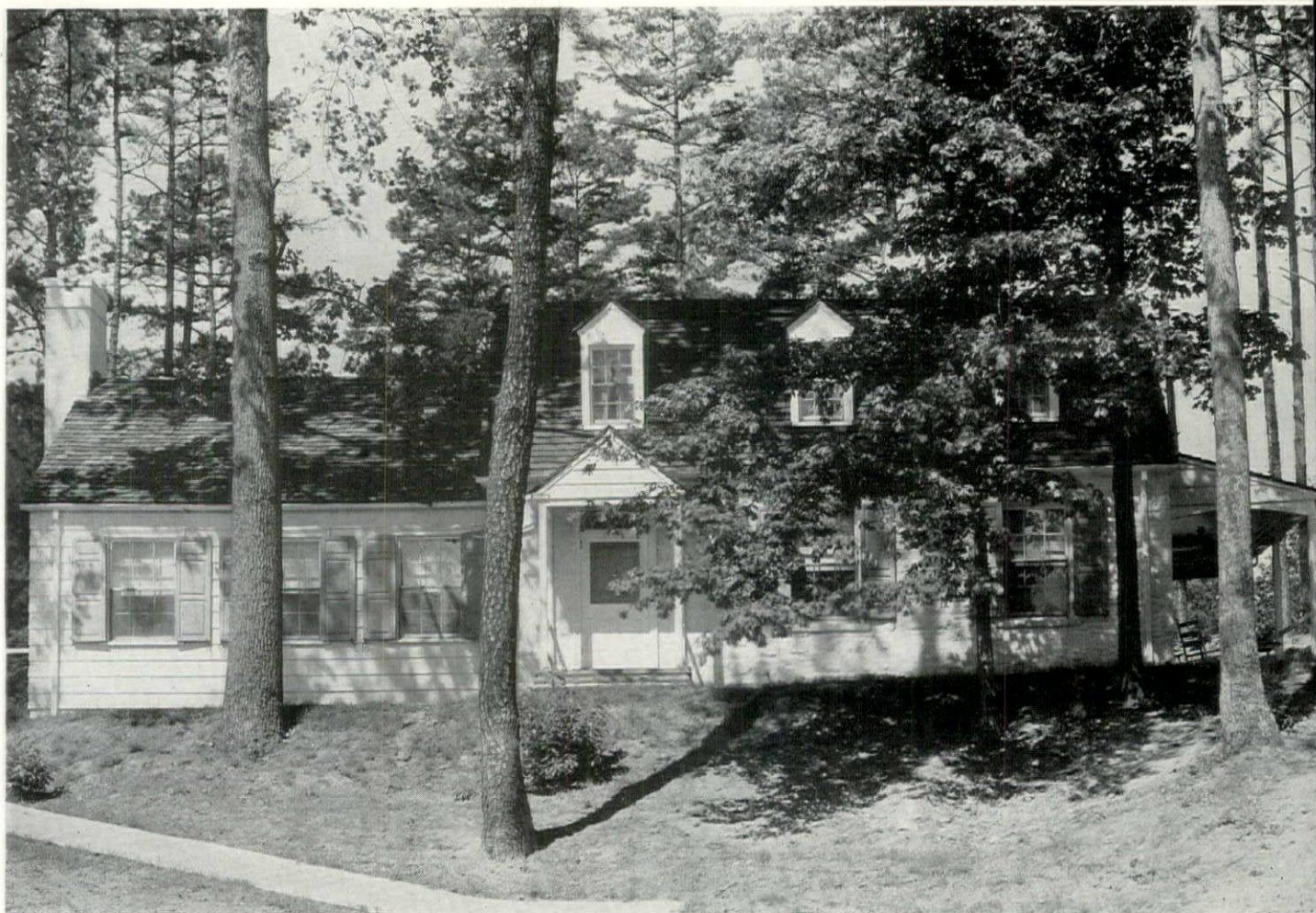
HEATING

Gas  
Boilers—Bee-Line by Columbia Gas Co.  
Radiators—United States Tin Cast, hot water type, damper control.  
Piping—wrought iron.  
Hot water heater.

CHIMNEY

Fireplaces  
Hearths—Beaver County sand stone.  
Facing } chestnut.  
Mantels }  
Damper—H. W. Covert, No. 648 face control.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

William Dunn Photo

Gambrel-roofed and with white walls of rubble masonry and shingles, the house of an architect-owner is somewhat reminiscent of the Hudson Valley. The promise of its comfortable-looking and assured exterior is realized within. Like the old Dutch houses of the Valley it has bedrooms on the ground floor and is designed to use all available space to advantage. The cutting up of what might have been the full extent of the dining room by the presence of half-partitions to create a breakfast nook without opening into the kitchen seems questionable. Having the garage separated from the small house is not always objectionable. Cost of house, including garage and drive, \$7,650.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls and piers—partly stone, partly brick.  
Columns—galvanized iron pipe.  
Cellar floor—4" concrete.  
Waterproofing—General Fireproofing Co.

### FRAME CONSTRUCTION

Sills }  
Floor joists } long leaf yellow pine.  
Girders }  
Studding }  
Plate } short leaf framing  
Rafters }  
Bridging—1"x3" rough.  
Ties—knotch and halved.

### MASONRY CONSTRUCTION

Common brick walls—8" curtain wall, 12"x12" piers.  
Stone walls—16" natural stone.

### EXTERIOR SURFACE

Shingles—Royal cedar.

### ROOF

Tile on sheathing—B. Mifflin Hood's tile.  
Valleys }  
Flashing } lead covered copper.  
Gutters }  
Down spouts } 26 gauge galvanized iron.  
Salt-glazed tile drains—4" and 6".  
Composition sheathing paper—30 lb. felt under tile.

### DOOR AND WINDOW FRAMES

Sash and frames—B and better yellow pine.  
Double hung—stock sizes.  
Casement—1 $\frac{3}{4}$ " wood casements and frames.  
Steel sash—basement.  
Doors and frames (exterior)—yellow pine frame, white pine doors.

### PORCHES

4" reinforced concrete slab and 4"x8" brick tile.

### GLASS

Double strength, grade B, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—Cabot's primer dipped and painted 2 coats.  
Stone walls—Pratt & Lambert cement coating.  
Trim } 3 coats Dutch Boy lead, oil and  
Sash } zinc, National Lead Co.

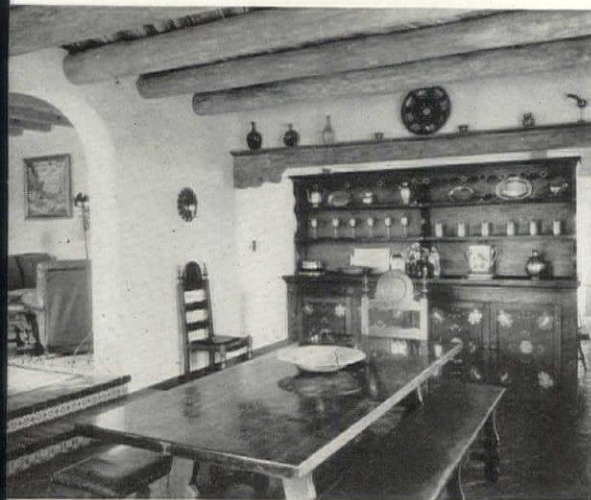
### LATH AND PLASTERING

Lathing—"Ecod" metal lath, Reynolds Metals Co., Inc.  
Plastering  
Patent plaster—Gold Bond.  
Finishing coat—eggshell, hard finish.

### INTERIOR WOODWORK

Trim and floors  
Painted surfaces } B and better  
Shelving and cabinets } yellow pine.





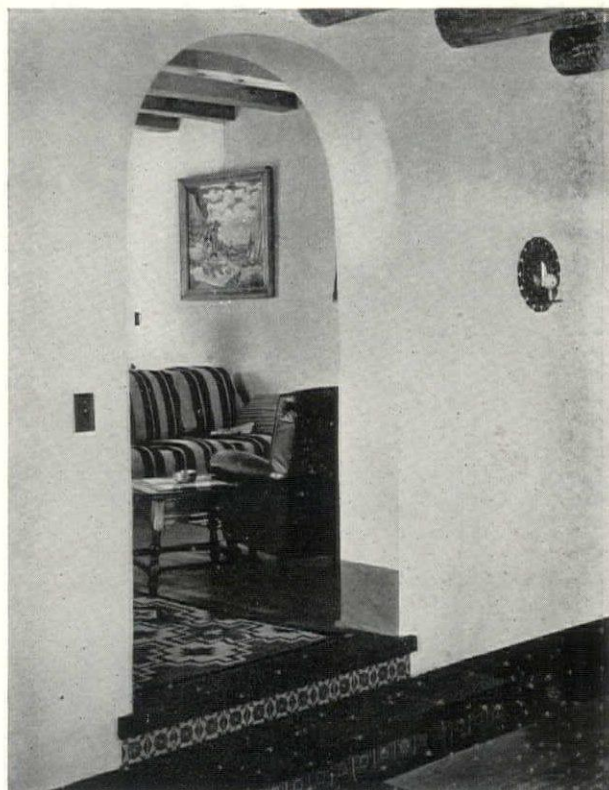
KITCHEN-DINING ROOM



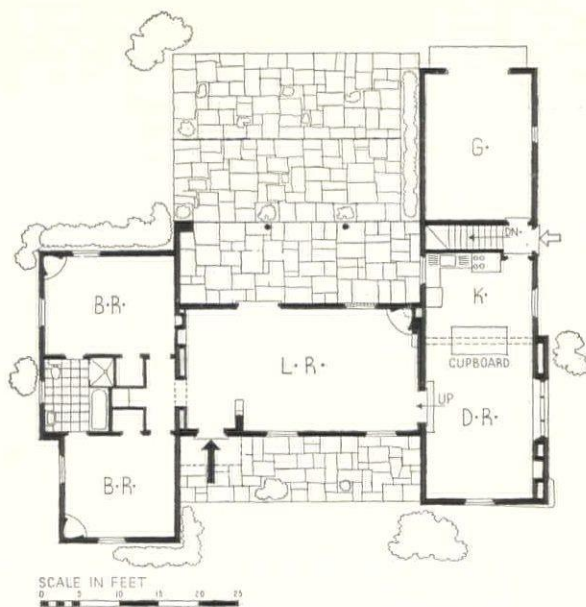
LIVING ROOM



STUDY



DOOR TO LIVING ROOM



PLAN: Free from the complication of stairways, the only flight of steps is between the kitchen and garage, leading to a deck on the flat roof.

## EXTERIOR WOODWORK

Floors—oak.  
Trim  
Shelving and cabinets } fir.

## INSULATING

Roof—2" Temlock, Armstrong Cork Products Co.

## EXTERIOR PAINTING

None.

## WIRING

Conduit.  
Fixtures—special design.

## LIGHTING

Direct.

## PLUMBING

Kitchen  
Sink—Kohler.  
Cabinet—wood.  
Stove.

## BATHROOM

Fixtures—Kohler.  
Floors and wainscot—tile.

## PIPES

Galvanized iron.

## HEATING

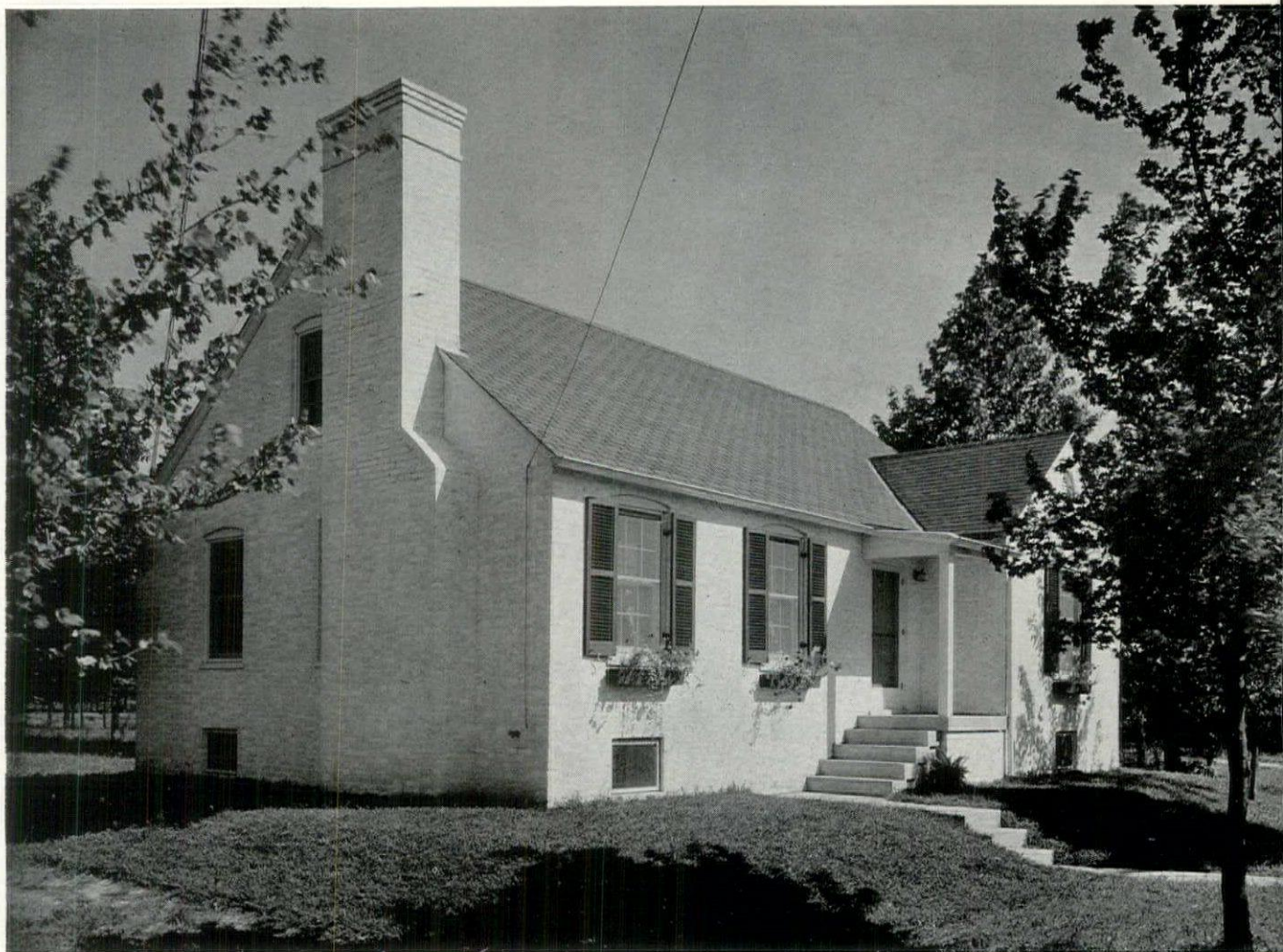
Gas.

Boiler } "Capitol" U. S. Radiator Corp.  
Radiators }

## HARDWARE

Interior and exterior—wrought iron.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

The house has great appeal probably because it consciously avoided routine trappings and efforts for charm. The same severe simplicity is carried into the interior. Sensible is the living room chimney placed off center on the gable simply because it belonged there according to the dictation of the plan. Federal Housing Administration appraised value: approximately \$5,000.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—9" concrete.  
Columns—4" lally.  
Cellar floor—4" concrete.  
Waterproofing—Speeds waterproof cement.

### MASONRY CONSTRUCTION

Common brick walls—used, 9" thick.

### FRAME CONSTRUCTION

Floor joists  
Studding, interior partitions  
Rafters  
Girders

} wood.

### ROOF

Composition shingles on sheathing—  
Johns-Manville.  
Valleys } Old Taylor Scotts.  
Flashing }  
Gutters }  
Down spouts } 26 gauge galvanized iron.

### DOOR AND WINDOW FRAMES

Mill-built by Johnson Lumber & Millwork Co.

### PORCHES

Reinforced concrete.

### GLASS

Double strength, quality A.

### EXTERIOR PAINT

Brick and woodwork—"Cabot's Vir-  
white," 3 coats.  
Trim } 3 coats Duco, Dupont Co.  
Sash }

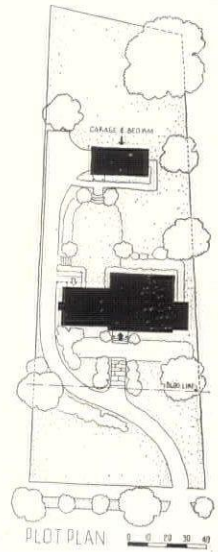
### LATH AND PLASTERING

Lathing—composition plaster base, F  
lath, U. S. Gypsum Co.  
Plastering—patent plaster.

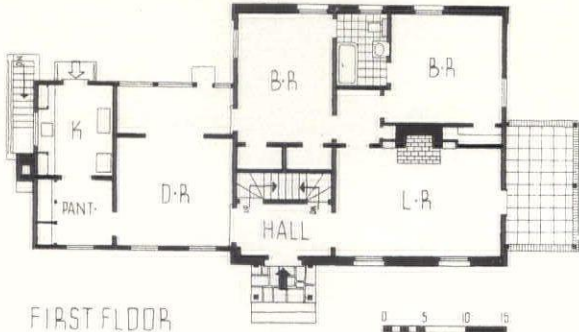




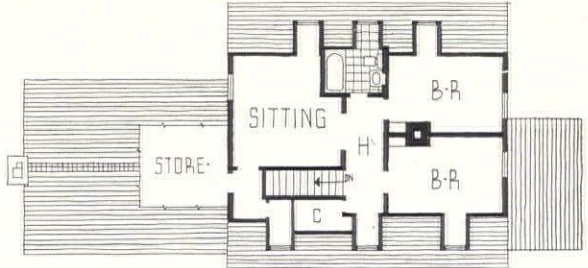
LIVING ROOM PORCH



PLOT PLAN



FIRST FLOOR



SECOND FLOOR

PLAN: Though the pantry has gone much out of favor in the small house, many feel that kitchen dressers alone afford insufficient storage room for china and glass, and prefer to have some intermediate place where the serving of meals may be managed. That the ground floor bathroom is accessible only through the adjoining bedrooms is open to criticism.

INSULATING

Roof rafters "Ecod" lath with aluminum foil.  
Weatherstripping—exterior doors, Chamberlin's 5" bronze threshold and interlocking strips.

INTERIOR FINISHES

Floors—filled, 3 coats shellac and waxed.  
Trim } painted, Pratt & Lambert interior paint.  
Doors }  
Sash }  
Walls }  
Wallpaper—dining room and 2 bedrooms.

WIRING

Cable—No. 14 BX, Frank Adams panel board-fuse type.  
Switches—Bryant.

LIGHTING

Direct—except dining room.

PLUMBING

Kitchen  
Sink—enameled iron, Crane Co.  
Cabinet—mill detail.  
Stove—Hot Point, General Electric Co.  
Refrigerator—General Electric 6 cu. ft.

BATHROOM

Bath tubs } Crane Co.  
Toilets }  
Showers }  
Shower curtains—white duck.  
Tile—4'-6" high wainscot, ceramic, standard grade, Wheeling Tile Co.

PIPES

Copper, type M, Streamline Pipe & Fittings Co., Division of Mueller Brass Co.

HEATING

Coal  
Ducts—galvanized iron.

Hot water heater—electric.  
Thermostat and regulators.

AIR CONDITIONING

Central—blower and filter type, no refrigeration, no washer.

CHIMNEY

Fireplaces  
Facings } Crab Orchard stone.  
Hearths }  
Mantels—wood to detail.

HARDWARE

Interior and exterior—Corbin.

SCREENS

Metal frames, copper cloth, Watson Mfg. Co., Jamestown, N. Y.

WINDOW DRESSING

Shades—cloth.  
Venetian blinds—in dining alcove.  
Blinds—wood.



93. HOUSE FOR L. D. JAMES, ST. LOUIS COUNTY



THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Piaget P

The adaptability of Dutch domestic country architecture to other places than its original environment is clearly shown in this instance. Dutch in the way it rambles along in seeming additions to a parent block. Dutch to the very bell-flare of the roofs, it is nevertheless modern in construction and equipment. The outside walls of the living room—the central block—are veneered with brick; the rest of the structure is shingled. Inside, the house is highly original in its arrangement, but the scheme is just as effective as its unusual. The living room is accepted as the center of the house; as such, circulation goes one way from the living room into the sleeping quarters, and the other way into the service portion. The maid has her room and bath on the upper floor, where there is also a store room; these connect directly with the kitchen by a stairway. The kitchen shows an orderly array of modern equipment. Cost: \$18,200. Cubage: 59,164, at about 30 cents per cubic foot.

CONSTRUCTION OUTLINE

FOUNDATION

Walls  
Columns  
Cellar floor } concrete.

FRAME CONSTRUCTION

Yellow pine.

MASONRY CONSTRUCTION

Common brick walls—outside walls of living room.

EXTERIOR SURFACE

Shingles—Edham Co.

ROOF

Wood shingles on shingle lath—Edham Co.

Valleys  
Gutters  
Flashing  
Down spouts } Armco iron.

DOOR AND WINDOW FRAMES

Sash and frames  
Double hung and casement type—white pine.  
Doors and frames } white pine.  
(exterior)  
Garage doors

PORCHES

Brick floor.

EXTERIOR PAINT

Shingles

Dipped—1 coat.  
Brush stained—1 coat.  
Trim } Titanium oxide.  
Sash }

LATH AND PLASTERING

Lathing  
Metal—all corners.  
Wood—inside walls and ceilings.  
Composition plaster base—outside walls.  
Plastering—patent plaster.

INTERIOR WOODWORK

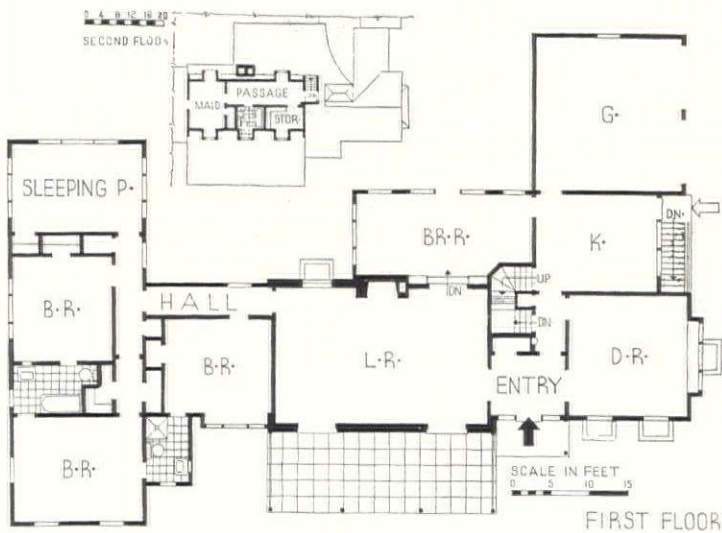
Trim—mostly sap poplar.  
Floors—clear red oak.





KITCHEN

PLAN: Considering the general excellence of plan, it seems unfortunate that no lavatory is available for visitors without passing through one of the bedrooms. A coat closet and lavatory have come to be almost inseparably associated. The bathroom between the two end bedrooms, entered from each, involves some cooperation between the occupants to avoid lockouts.



Stainwoods—paneling in breakfast room, wainscoting in dining room.

INSULATING

Outside walls—rock wool.

Roof rafters—rock wool over developed portion of 2nd floor.

Attic floor—rock wool.

Weatherstripping.

INTERIOR FINISHES

Floors—stained and waxed.

Trim

Doors } enamel.

Sash }

Walls—oil paint in kitchen and baths.

Wallpaper—balance of house except breakfast room.

WIRING

Cable—BX.

Switches—General Electric.

LIGHTING

Direct.

PLUMBING

Kitchen

Sink

Cabinet

Stove

Refrigerator

Washing machine

} General Electric.

BATHROOM

Fixtures—Standard Sanitary Mfg. Co.

Tile—rubber.

PIPES

Reading Iron Co.

HEATING

Oil—forced air.

Radiators—American Furnace Co.

Hot water heater.

CHIMNEY

Fireplaces

Facings } marble.

Hearths }

Mantels—wood.

Damper—Covert.

HARDWARE

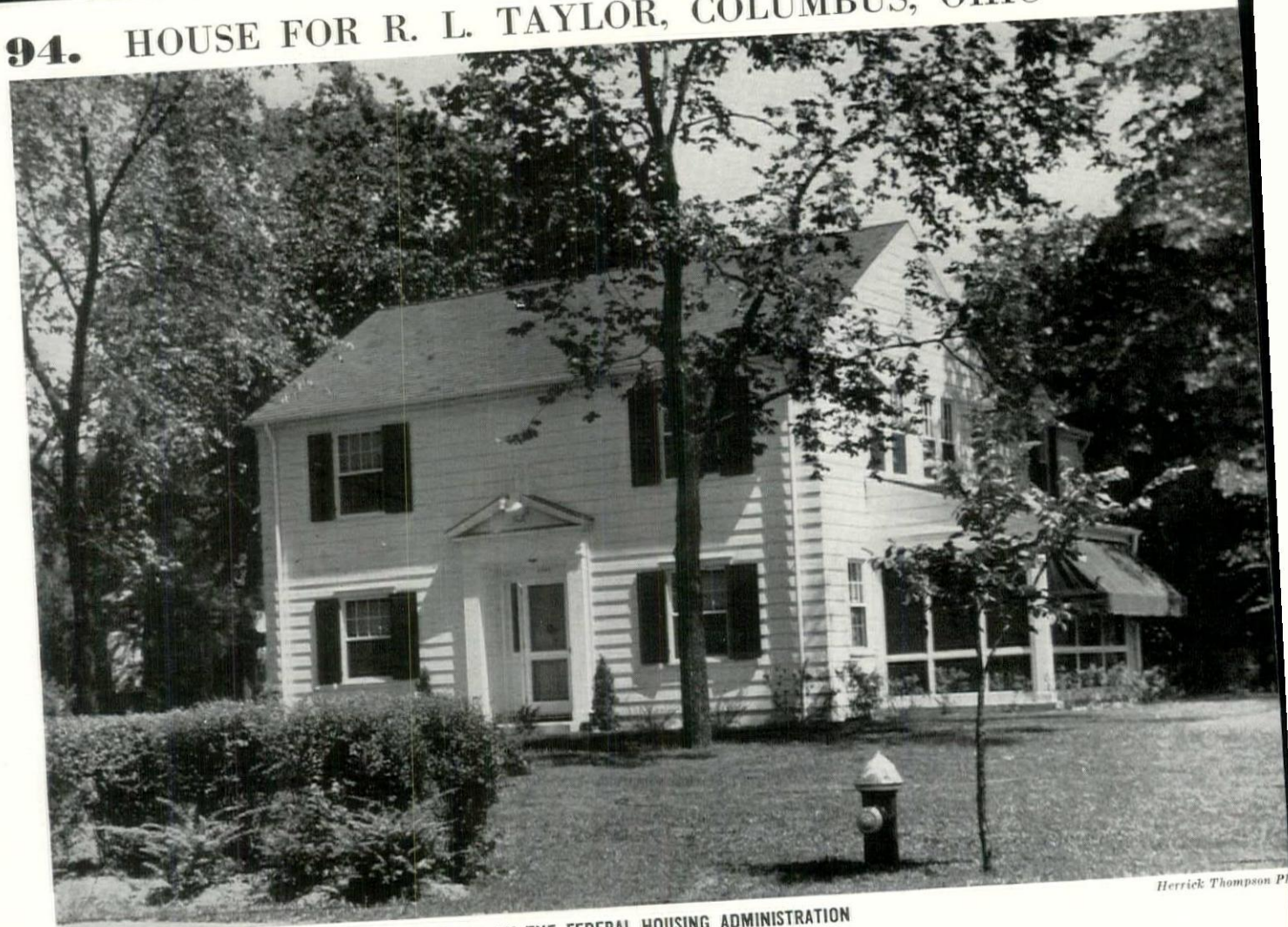
Interior and exterior—polished bronze.

SCREENS

Copper.



# 94. HOUSE FOR R. L. TAYLOR, COLUMBUS, OHIO



Herrick Thompson Pl

THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

The interior of this house has arrangements and provisions not commonly met with in a house of limited size. Besides the usual living room, dining room and kitchen on the ground floor, there is an extension of the kitchen fitted up as a breakfast room. And adjacent a convenient ground floor lavatory. Upstairs is a fair-sized study with open fireplace in the upper part of the garage extension. Commendable is the omission of the usual over-door window common in this type of plan. The back to back closets of the front bedrooms dictated solid wall. The equipment of the house is thoroughly modern and efficient in all respects. Cost: \$8,400. Cubage: 32,530, at about 25½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—cement block.

### FRAME CONSTRUCTION

Kiln dried yellow pine.

### EXTERIOR SURFACE

Clapboards—clear red cedar, Seattle Cedar Lumber Mfg. Co.

### ROOF

Wood shingles on shingle lath—American Stained Shingle Co.

Valleys } copper, Anaconda.  
Flashing }

Gutters }  
Down spouts } 23 gauge Toncan iron.

### DOOR AND WINDOW FRAMES

Sash and frames—double hung, Idaho white pine.

Doors and frames (exterior)—Idaho white pine.

Garage doors—redwood.

### PORCHES

Reinforced concrete—Portland cement, Wabash.

### GLASS

Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Shingles—brush stained, American Stained Shingle Co.

Siding }  
Trim } Sherwin-Williams Co.  
Sash }

### LATH AND PLASTERING

Lathing—composition plaster base, "Blue Band," American Gypsum Co.

### Plastering

Patent plaster } American Gypsum Co.  
Finishing coat }

### INTERIOR WOODWORK

Floors—Ritter oak.

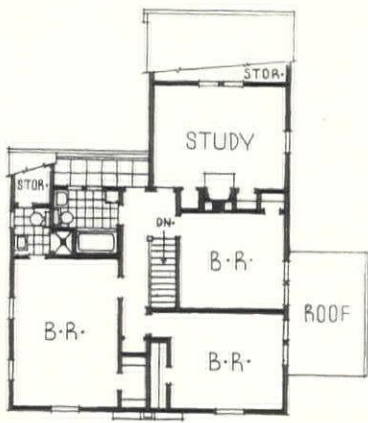




PLAN: Lighting and cross ventilation are considered in all the rooms on the ground floor, but it is to be regretted that a window at the side of the kitchen was placed directly over the sink, instead of at one side. Upstairs, the bedroom between the front bedroom and the study has only one window, so that there can be no cross ventilation unless the door is open. The two bathrooms are symmetrically placed together above the kitchen, and one of them has the advantage of a shower.



FIRST FLOOR



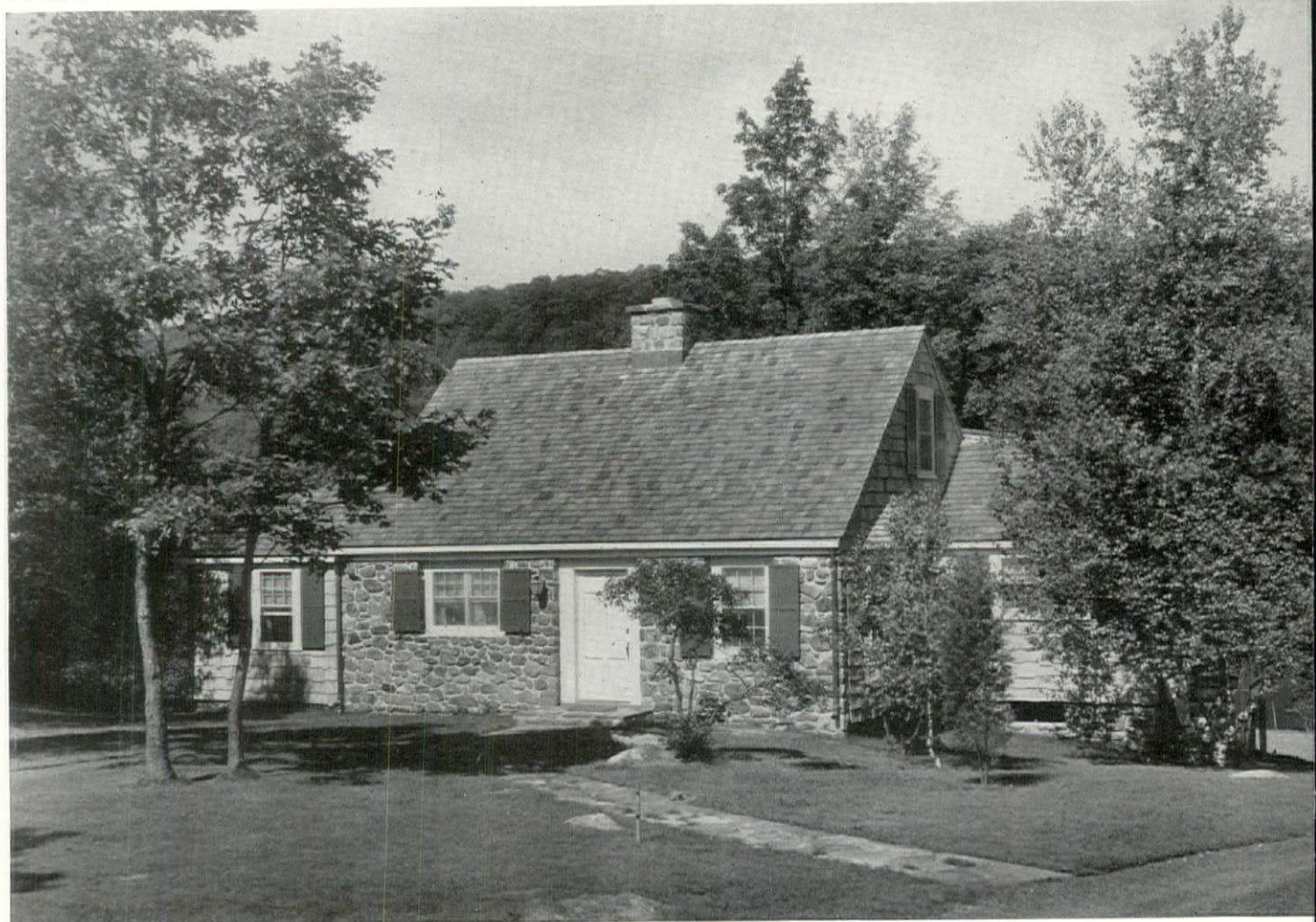
SECOND FLOOR

- Trim and stainwoods—Wisconsin birch.
- Painted surfaces—Ponderosa pine.
- INSULATING
  - Roof rafters } "Rep Top" wool, U. S.
  - Attic floor } Gypsum Co.
- INTERIOR PAINTING
  - Floors } Sherwin-Williams.
  - Trim }
  - Doors }
  - Cash }
  - Walls }
- WIRING
  - Cable—Triangle.

- Switches—Hart & Hegeman and "Square Deal."
- LIGHTING
  - Direct and indirect—Carl B. Frey, Inc.
- PLUMBING
  - Kitchen
    - Sink—Kohler.
    - Cabinet—stained pine.
- BATHROOM
  - Fixtures—Kohler.
  - Cabinets—Miami.
  - Tile—American Encaustic Tile Co.
- PIPES
  - Copper—Chase Brass and Copper Co.

- HEATING
  - Coal.
  - Hot water heater.
- CHIMNEY
  - Fireplaces
    - Facings } brick.
    - Hearths }
    - Mantels }
  - Damper—Peerless.
- HARDWARE
  - Interior and exterior—Sargent & Co.
- WINDOW DRESSING
  - Venetian blinds.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Of North Jersey Dutch ancestry, and showing markedly Dutch character only slightly modified by current conditions, this cottage, both in design and plan, radiates a spirit of sturdy Dutch common sense and comfort. The quadrangular central mass of the house has rubble masonry walls of local stone; the one-story bedroom and kitchen wings are shingled. There is no consciously applied external ornament but the composition derives a strong picturesque quality from its homespun simplicity. Inside, the walls are vertically boarded with pine, and the ceilings show the open framing of beams and joists. Floors are of oak and the fireplace is built up of local stone roughly dressed. Two good bedrooms and a bath accommodate the regular occupants, and several guests can sleep in the attic dormitory. A generous living room, taking more than half the area of the main block of the house, is also the dining room. The garage is located beneath the big living room veranda. Cost: \$6,500. Cubage: 20,000, at 32.5 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—local stone and Vulcanite Portland Cement.  
Columns—4" lally.  
Cellar floor—Vulcanite Portland cement.  
Waterproofing—Aqua-Pruf.

### FRAME CONSTRUCTION

"4-square" Douglas red fir, Weyerhaeuser.

### MASONRY CONSTRUCTION

Common brick walls—used brick.  
Stone walls—local rubble and face stone.

### EXTERIOR SURFACE

Shingles—18" Perfection, Seattle Cedar Lumber Co.

### ROOF

Wood shingles on shingle lath—18" Perfection, Seattle Cedar Lumber Co.

Valleys

Gutters

Flashing

Down spouts

16 oz. Anaconda copper,  
American Brass Co.

Composition sheathing paper—Flintkote.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—"Master," Andersen

Frame Corp., Bayport, Minn.

Steel sash—Fenestra, Detroit Steel Products Co.

Doors and frames (exterior)—Andersen Frame Corp.

### PORCHES

Matched pine—"4-square" Idaho, Weyerhaeuser.

### GLASS

Lustra glass, American Window Glass Co.

### EXTERIOR PAINT

Shingles—brush stained, Cabot's creosote.

Trim { Priming } Cabot's Collopack  
Sash { Finish coat }

### LATH AND PLASTERING

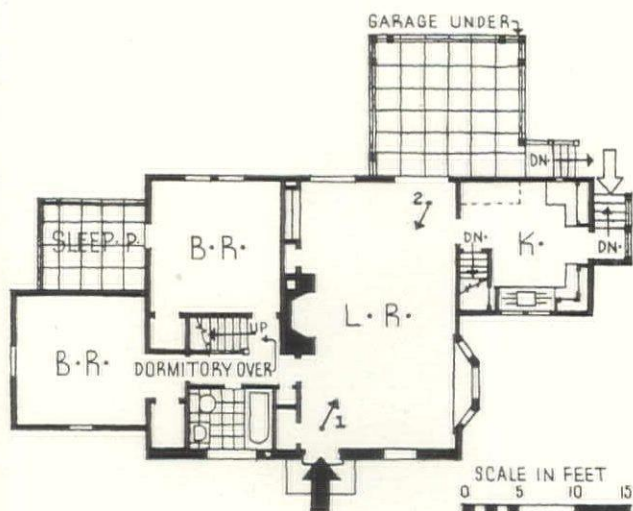
None.

### INTERIOR WOODWORK

Floors—oak, E. L. Bruce Co., Memphis, Tenn.

Stainwoods } clear white pine.  
Painted surfaces }





PLAN: Bedrooms have abundant light and cross ventilation; the living room is flooded with light from three sides. Living room and bedrooms alike have plenty of closet space. The bathroom is entered only from the hall, and it is worth noting that the whole sleeping side of the house can be completely shut off by closing the door from the living room into the bedroom-hall, from which the dormitory stairs ascend.



VIEWS OF LIVING ROOM

INSULATING  
None.

INTERIOR PAINTING  
Floors—varnish, Devoe & Raynolds.  
Trim }  
Doors } varnish.  
Sash }

Walls—stain and varnish.

WIRING  
Cable—"Romex," Rome Wire & Cable Co.  
Electrical fixtures—handwrought, Robert Kraeuter.  
Switches—Hart & Hegeman.

LIGHTING  
Direct.

UMBING  
Kitchen

Sink } Sinkabnet, Standard Sani-  
Cabinet } tary Mfg. Co.  
Stove—Westinghouse electric.  
Refrigerator—Frigidaire Division of  
General Motors Corp.

BATHROOM  
Cabinets—No. 1501, United.  
Bath tubs—"Pembroke" } Standard  
Toilets—"Modernus" } Sanitary  
Mfg. Co.  
Seats—"Climax," Church Mfg. Co.  
Showers—Standard Sanitary Mfg. Co.

PIPES  
Supply—brass and copper, Streamline  
Pipe & Fittings Co., Division of  
Mueller Brass Co.

Soil and vent—wrought iron, A. M. Byers Co.

HEATING AND AIR CONDITIONING  
Oil—"Superfex," Perfection Stove Co.  
Hot water heater—coal, Eastern Foundry.  
Thermostat and regulators—Detroit Lubricator Co.

CHIMNEY  
Fireplaces  
Facings—cut local stone.  
Hearths—broken flagstone, Vulcanite cement.  
Damper—Peerless.

HARDWARE  
Interior and exterior—Stanley Works and P. & F. Corbin Hardware Co.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

This tidy little shingled house was the first in the vicinity of Darien to be built through a Federal Housing Administration insured mortgage. Designed in the Colonial spirit, its construction is of the best. It is thoroughly insulated, has brass piping throughout and is heated by an oil burning furnace. About the exterior there is little to be said beyond commending its just proportions and the pleasant use of materials. The entrance is too ambitious for the house. Cost: \$7,300. Cubage: 22,428, at 32½ cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete.  
Cellar floor—concrete, Atlas.  
Waterproofing—Anti-Hydro.

### FRAME CONSTRUCTION

Douglas fir. Weyerhaeuser.

### EXTERIOR SURFACE

Shingles—24" Royal.

### ROOF

Wood shingles on shingle lath—18" Perfection.

Gutters  
Flashing  
Down spouts } Copper.  
Copper—dormer roof.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung—wood.  
Casement—steel.  
Doors and frames (exterior)—Curtis stock.  
Garage doors—Curtis stock.

### PORCHES

Reinforced concrete.

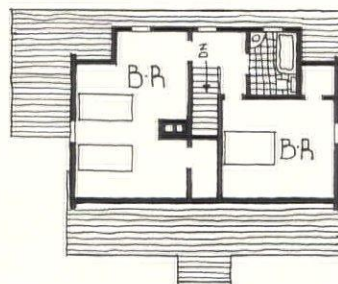
### GLASS

American Window Glass Co.

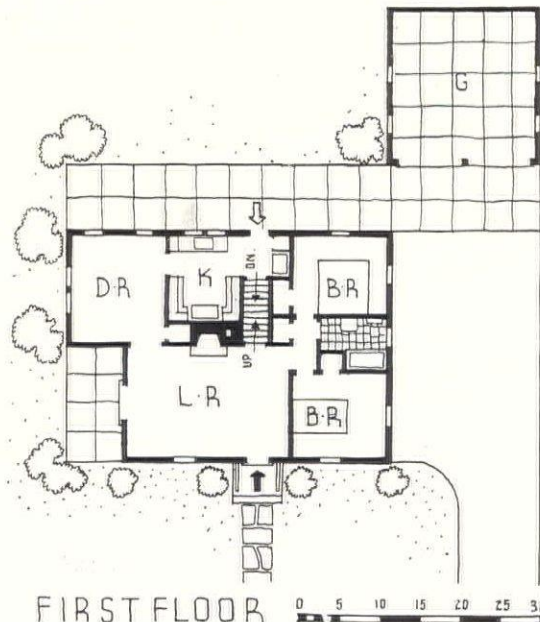
### EXTERIOR PAINT

Shingles—brush stained.  
Siding. } Priming and } Sherwin-  
Trim. } Finish coat. } Williams.  
Sash. }





SECOND FLOOR



FIRST FLOOR

PLAN: It is hard to conceive how a more satisfactory plan could have been packed into so small a space and yet be so well integrated. That one must go through the dining room and living room to get from the kitchen to the front door can be no objection in this case because the front door opens directly into the living room. The kitchen is well ordered and the upstairs arrangement is good.

## LATH AND PLASTERING

Lathing—metal by Truscon.  
Plastering—Best Bros.

## INTERIOR WOODWORK

Shelving and cabinets } Curtis and  
Stock millwork } Morgan.

## INSULATING

Roof rafters—rock wool, U. S. Gypsum Co.

## WIRING

Cable—BX.  
Switches—Bryant.

## PLUMBING

Kitchen.  
Sink—Standard Sanitary Mfg. Co.

## BATHROOM

Fixtures—Standard Sanitary Mfg. Co.  
Seats—Church Mfg. Co.

## HEATING

Oil—Petro.  
Boiler  
Radiators } American Radiator Co.

## CHIMNEY

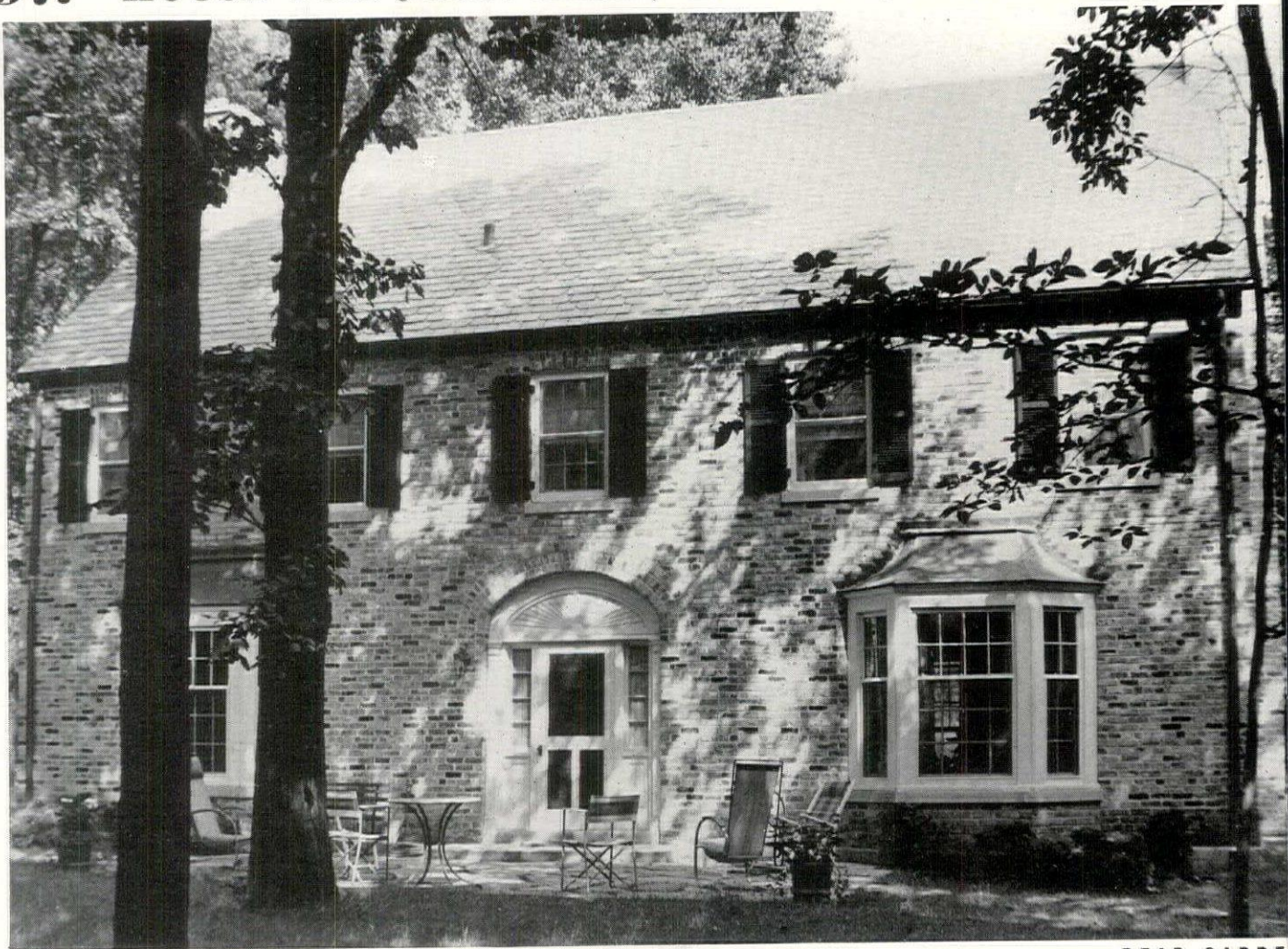
Fireplaces.  
Mantels—stone.

## HARDWARE

Interior—Yale & Towne Mfg. Co.



## 97. HOUSE FOR JOHN DERN, GLENCOE, ILLINOIS



THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

REAR GARDEN

It is the fashion to be eclectic in derivations—even amongst ultra-modernists, though few of them care to admit it—and the fashion is praiseworthy, provided it is followed with common sense. In the matter of design, the treatment of this house is conservatively eclectic. The whole tone, of course, is purely Georgian but a felicitous blending has yielded a door and bay windows on the garden front in the Regency manner, while the entrance front and the pine-paneled walls of the living room recall a much earlier era. The random variations in the color of the brickwork are gratifying. Despite a popular objection for cornices, the designer has put in another good Regency touch by omitting one, using only enough roof projection to shed rainwater from the walls. The kitchen entrance is not far from the front door, and approached by the main drive, it is so unobtrusively managed that no one could object to its being there. Cost: \$19,500. Cubage: 52,500 at 37 cents per cubic foot.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls } concrete.  
Cellar floor }  
Waterproofing—tar on exterior of concrete walls.

#### MASONRY CONSTRUCTION

Exterior walls—common brick 12" thick.  
Hollow tile partitions, first floor.

#### FLOOR CONSTRUCTION

First and second floors are of "Lith-I-Bar" concrete joists covered with 2½" of concrete.

#### WOOD CONSTRUCTION

Studding (2nd floor partitions) }  
Plate } pine.  
Rafters }  
Bridging }

#### ROOF

Slate on sheathing—commercial thickness.  
Valleys }  
Gutters } 16 oz. copper.  
Flashing }  
Down-spouts }  
Sheet metal work—copper.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung type.  
Steel sash for basement.  
Doors and frames (exterior)—pine.

#### PORCHES

Reinforced concrete.

#### GLASS

Single strength, Libbey-Owens-Ford Glass Co.

#### EXTERIOR PAINT

Trim } 3 coats lead and oil.  
Sash }

#### LATH AND PLASTERING

Lathing—metal.  
Plastering—3 coats, last coat smooth putty finish.

#### INTERIOR WOODWORK

Trim—pine.  
Floors—oak blocks cemented to concrete.  
Stainwoods—antique pine wainscot paneling in living room.  
Shelving and cabinets—pine.

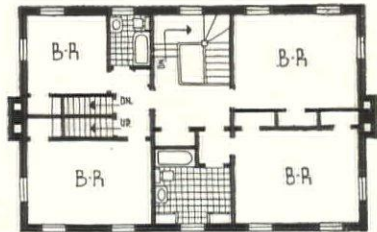
#### INSULATING

Attic floor—4" rock wool, Johns-Manville.  
Weatherstripping—zinc.

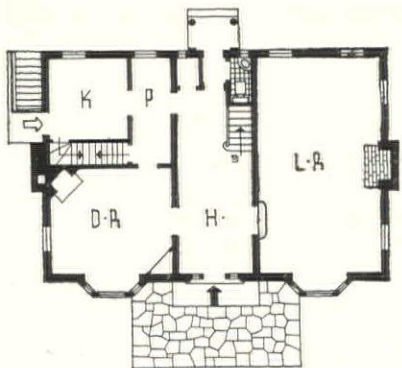




ENTRANCE AND FRONT OF HOUSE



SECOND FLOOR



FIRST FLOOR

PLAN: Follows the familiar plan-pattern of a central hall through the whole depth of the house, with approximately a quarter of the ground floor space assigned to the kitchen and pantry. The compact planning of the kitchen, pantry and back-stairs is good, and the access from kitchen to dining room and front door is excellent. Closet arrangement between the bedrooms is also commendable.

TERIOR FINISHES

Floors—stain, shellac and 2 coats wax.  
Trim } prime and 3 coats, last coat  
Doors } enamel.  
Sash }  
Walls—sized and painted 3 coats.  
Wallpaper—all bedrooms.  
WIRING  
Cable—black enameled conduit.  
Electrical fixtures—special by Beardslee  
Chandelier Mfg. Co.  
Switches—flip switches.  
LIGHTING  
Direct.  
PLUMBING  
Kitchen  
Sink—enameled iron, Crane Co.  
Counter top—linoleum.  
Stove—gas.  
Refrigerator—by owner.

BATHROOM

Bath tubs—enameled iron } Crane Co.  
Toilets—vitreous china }  
Tile—1" hexagon floors, 4" x 4" tile  
wainscot around tubs.

PIPES

Steel.

HEATING

Oil.  
Boilers—Ideal water tube } American  
Radiators—convactor type } Radiator Co.  
Piping—one pipe, high temperature hot  
water forced-flow system.  
Valves—American Radiator.  
Hot water heater—forced-flow.  
Thermostat and regulators—Minneapolis-  
Honeywell.

AIR CONDITIONING

Central—convactor radiators plus air  
ducts by American Radiator Co. No  
cooling other than passing air through  
cold water spray.

CHIMNEYS

Fireplaces  
Facings } white domestic marble and  
Hearths } old Dutch tile.

HARDWARE

Interior and exterior—brass and old iron  
finish by P. & F. Corbin.

SCREENS

Copper wire, wood frame.

WINDOW DRESSING

Shades.  
Exterior blinds.



## 98. HOUSE FOR ALLEN E. WARD, LOUISVILLE, KENTUCKY



THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Theodore Webb Photos

A formal exterior more closely associated with the Renaissance manner of England than with the American adaptations of it. The window over the main entrance actually opens into a hall, according to the old tradition. This comes as a pleasing surprise after many plans which allow this window to open into a closet or bath. The rear of the house, strictly utilitarian, is neither formal nor symmetrical. The interior of the living room is well designed. A pleasing sense of space is obtained from the composition of the fireplace mantel with side pilasters extending from floor to ceiling. Federal Housing Administration appraised value: approximately \$12,500.

### CONSTRUCTION OUTLINE

#### FOUNDATION

Walls—10" concrete.  
Columns—4" lally.  
Cellar floor—4" concrete.  
Waterproofing—none.

#### FRAME CONSTRUCTION

Fir.  
Sheathing—yellow pine.

#### EXTERIOR SURFACE

4" brick veneer over sheathing and 15 lb. roofing felt, "Genasco" by Barber Asphalt Co.

#### ROOF

Wood shingles on shingle lath—5 in 2"s  
Washington red cedar edge grain.  
Valleys } 40 lb. tin, Scotts.  
Flashing }

Gutters }  
Down spouts } 26 gauge galvanized iron.

#### DOOR AND WINDOW FRAMES

Sash and frames  
Double hung and casement type—built by Louisville Lumber and Millwork Co.

Steel sash—Fenestra, basement.  
Doors and frames (exterior) } same as  
Garage doors } sash.

#### PORCHES

Reinforced concrete.

#### GLASS

Double strength quality A.

#### EXTERIOR PAINT

Shingles  
Dipped—creosote stain.

#### Siding and sash

Priming } 3 coats linseed oil a  
Finish coat } Dutch Boy white lead  
National Lead Co.

#### Trim

Priming—1 coat lead and oil, 1 coat flat.  
Finish coat—2 coats enamel, semigloss.

#### LATH AND PLASTERING

Lathing—walls and ceiling Rocklath, ceilings 2nd floor, Celotex.

#### Plastering

Patent plaster—Kentucky Wall Plaster Co.  
Finishing coat—Plaster of Paris a lime putty, smooth.

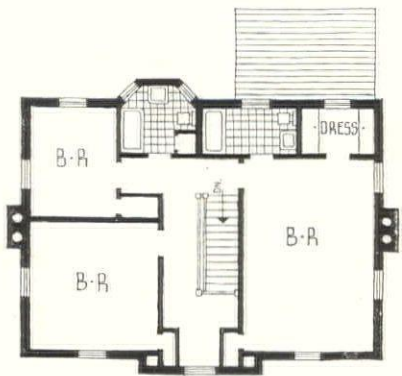




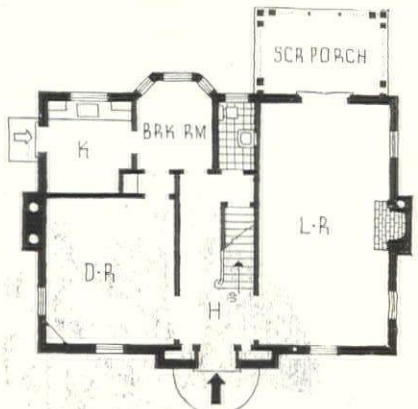
SHOWING PORCH AND GARAGE ENTRANCE



ING ROOM



SECOND FLOOR.



FIRST FLOOR

PLAN: The breakfast room bay becomes a bathroom bay on the second floor with wash basin placed between the two side windows. The two minor bedrooms seem to lack sufficient closet space. Entrance to garage steep but workable.

RIOR WOODWORK  
im—poplar.  
ors—oak, 1st floor random width, 2nd  
floor 5/16" by Wood Mosaic Co., Louis-  
ville, Kentucky.  
elving and cabinets } Louisville Lumber  
ock millwork } & Millwork Co.  
LATING  
tic floor—Reynolds metal insulation and  
Celotex.  
RIOR PAINTING  
oors—natural finish.  
rim  
ors } enamel.  
sh }  
alls—3 coats semigloss finish.

WIRING  
Cable—BX.  
Switches—Bryant.  
LIGHTING  
Direct.  
PLUMBING  
Kitchen fixtures—Crane Co.  
BATHROOM  
Fixtures—Crane Co.  
PIPES  
Anaconda, American Brass Co.  
HEATING  
Oil.  
Boilers—Red Flash boiler, American  
Radiator Co.

Radiators—American Radiator Co.  
Hot water heater—No. 3 Crane Superior  
36 gal. automatic.  
CHIMNEY  
Fireplaces  
Facings—brick.  
Mantels—wood.  
HARDWARE  
Interior and exterior—wrought iron by  
Russwin.  
SCREENS  
Poplar frames, 16 mesh copper wire.  
WINDOW DRESSING  
Shades—E. I. du Pont de Nemours Co.  
Blinds—mill built slat.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

The design of this house is one not usually associated with Texas and, despite its merits, appears exotic to the environment and the result of some personal preference demanding a cherished form transplanted from the North. The fact that it would seem more at home anywhere north of Charleston need not, however, blind one to its pleasant qualities. The general tenor of arrangement, with respect to both elevations and plan, suggests a residence in some leisurely country-town of the Middle States or New England where the quietude it displays would be peculiarly in keeping. Its well-mannered reflection of a mode that has long since proved its endur-  
 worth and homelike charm creates a measurable degree of popular appreciation. It is more than merely a matter of mien; save for the earlier doorway, it actively and insistently recalls the spirit of a certain very vital and estimable phase of our architectural past. Cost: \$8,800.

## CONSTRUCTION OUTLINE

### FOUNDATION

Footings—reinforced concrete.

### FRAME CONSTRUCTION

Yellow pine.

Sills—creosoted heart pine.

### EXTERIOR SURFACE

Brick veneer—second-hand common.

### ROOF

Wood shingles on shingle lath—Perfection No. 1 red cedar.

Gutters

Flashing

Down spouts

26 gauge Armco galvanized iron.

### DOOR AND WINDOW FRAMES

Sash and frames

Double hung—white pine.

Doors and frames (exterior)—white pine.

Garage doors—yellow pine, sliding, Richards-Wilcox track No. 31.

### PORCHES

4" reinforced concrete slab covered with random slabs.

### GLASS

Pennvernion single strength, Pittsburgh Plate Glass Co.

### EXTERIOR PAINT

Shingles—brush stained with graphite and oil.

Sash

Priming—Benjamin Moore Primer.

Finish coat—Benjamin Moore exterior paint.

### LATH AND PLASTERING

Lathing—metal, 3 lb. copper beaded Gold Bond.

Plastering—3 coats, bathrooms, Kewanee cement.

### INTERIOR WOODWORK

Floors—hardwood.

Trim

Shelving and cabinets } white pine.

Stock millwork

### INSULATING

Outside walls—15 lb. felt.

Weatherstripping—"Ceco" throughout Concrete Engineering Co., Omaha, Neb.





LIBRARY BEFORE FURNISHING

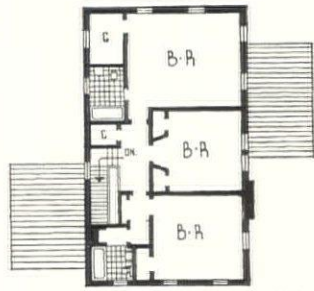
LIVING ROOM BEFORE FURNISHING



PLAN: The plan almost exactly revives the plan of scores of city or country town houses of the early 19th Century. That plan was comfortable and efficient in practice, despite the fact that it was a long way from the kitchen to the front door. Barring the omission of the kitchen chimney—thanks to the advent of gas and electric cooking appliances—and barring provision for a breakfast room at the back of the hall (a concession to the popular acclaim for that feature), the plan makes many of us who have lived in old houses feel strangely at home.



FIRST FLOOR



SECOND FLOOR

INTERIOR FINISHES

Floors—1 coat paste filler, 1 coat stain, 2 coats white shellac, 1 coat Pratt and Lambert wax.  
Trim } 1 coat lead and oil, 2 coats  
Doors } Ripolin enamel.  
Sash }  
Walls—baths, 1 coat size, 2 coats Ripolin enamel.  
Wallpaper—over canvas and shiplap. Canvas not less than 1 lb. to 6.75 yards.

WIRING

Electrical fixtures—Chase Brass and Copper Co.

LIGHTING

Direct.

PLUMBING

Kitchen

Sink—dual sink, Crane Co.

BATHROOM

Fixtures—Crane Co.  
Seats—Church Mfg. Co.  
Shower—Crane Co.  
Shower curtains—Crane corded white.  
Tile—ceramic clay tile with cap and base.

PIPES

Brass.

HEATING.

Hot air with gas-fired Moncrief by Henry

Furnace & Foundry Co., Cleveland, Ohio.

Hot water heater—"Superior," 36 gallon, Crane Co.

Thermostat and regulators—with furnace.

CHIMNEY

Fireplaces  
Facings } slate  
Hearths }  
Mantels—white pine.  
Damper—Peerless Mfg. Corp.

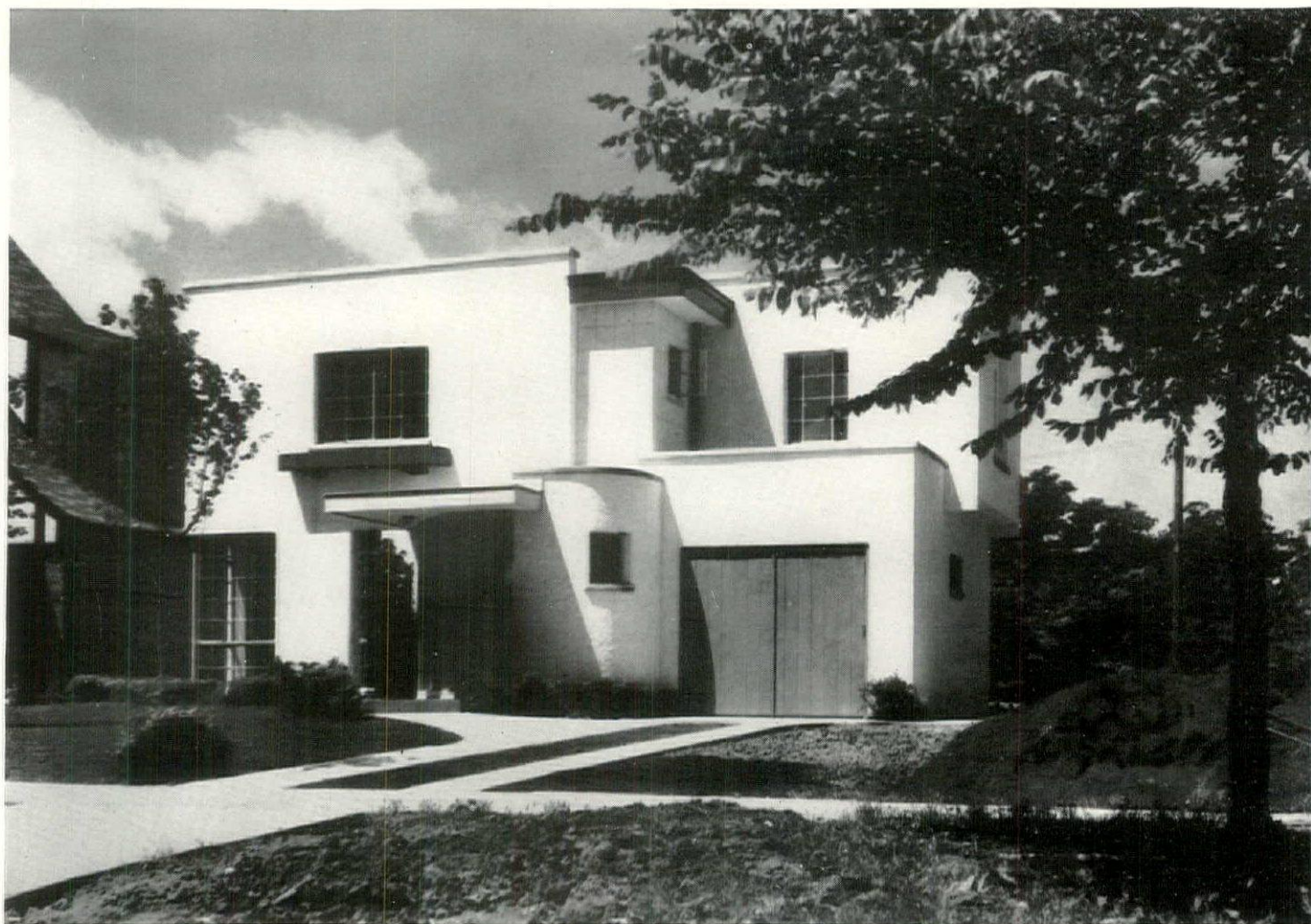
HARDWARE

Interior and exterior—Russwin, Russell & Erwin Mfg. Co.

SCREENS

Copper.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

William Joern & Sons, Chicago builders, erected this demonstration house, kept it open for a month, and sold it. Total operating costs including fuel, taxes, maintenance and insurance are \$24 per month. With an FHA loan of \$6,000 for twenty years this monthly cost becomes \$67.89, still less than a house of this type would normally rent for. The plan is typical for houses of this size, the recreation room being included as an increasingly important selling point. Structurally the house is of considerable interest; it is almost completely fireproof, the only wood construction being in the roof, and it is thoroughly insulated against heat losses and noise. Esthetically the house is less notable, although greatly superior to most of the speculative houses that are hopefully labeled "modern." Cost, \$7,250; cubage 20,850 at 34.8 cents per cubic foot.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—concrete.  
Columns—Lally.  
Cellar floor—concrete.

### MASONRY CONSTRUCTION

Haydite building units—Western Brick Co., Chicago, Ill.  
Partitions—4" U. S. Gypsum Pyrobar throughout.

### FLOOR CONSTRUCTION

Jones & Laughlin  
Junior Beams, 2½" reinforced concrete slab.

### EXTERIOR SURFACE

Stucco—Portland Cement Stucco. Medusa white waterproofed.

### ROOF

Wood joists, 16" on center.  
Built-up asphalt 2—15 lb. and 1—30 lb. felt.  
Gutters }  
Flashing } Copper, C. G. Hussey,  
Down spouts } Chicago, Ill.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Steel sash—Detroit Steel Products Co.  
Garage doors—interior door frames, steel.  
Metal Door & Trim Co., La Porte, Ind.

### PORCHES

Flagstone.

### GLASS

¼" plate—Libbey-Owens-Ford Glass Co.

### EXTERIOR PAINT

Trim  
Priming }  
Finish coat } Paint, Remien & Kuhn-  
Sash—aluminum paint. } ert Co., Chicago.

### LATH AND PLASTERING

No lath—Sprayo-Flake plaster base for exterior walls, metal lath 1st floor ceiling. Celotex composition plaster base 2nd floor ceiling.  
Plastering—all rooms.

### INTERIOR FINISHES

No trim. Plaster return all windows and steel door bucks. Wood base only.  
Floors—carpet or linoleum on concrete.  
Shelving and cabinets—wood.



# WILLIAM F. KRAMER, ARCHITECT



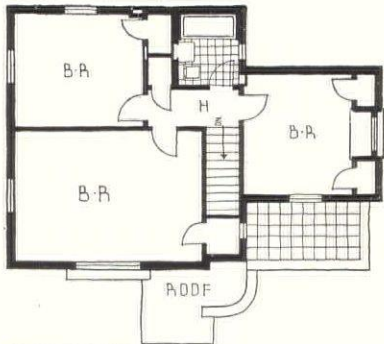
ft. foundation walls waterproofed with emulsified asphalt.  
ght, The I-beams in place for floor construction.



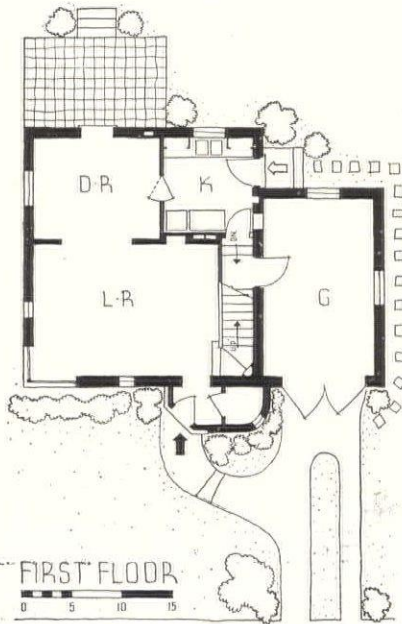
reinforcing floor with 1/4 steel rods, at intervals of 6 in. on  
center.



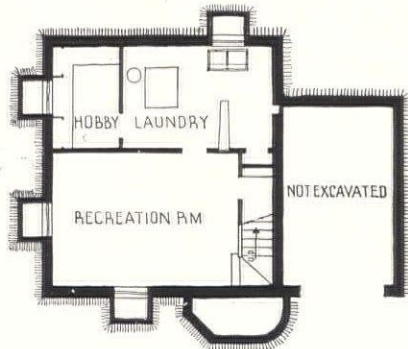
Wall of Haydite building units in course of construction, stucco  
applied directly to exterior walls, metal lath and plaster to  
inside walls.



SECOND FLOOR



FIRST FLOOR



BASEMENT

Trim } Paint and glazed.  
Doors }  
Sash—aluminum paint.  
Walls—paint 1st floor, kitchen and bath  
linoleum floor and walls. Basement  
recreation room—Celotex walls and  
ceiling.  
Wallpaper—Salubra paper 2nd floor. Re-  
mien & Kuhnert, Chicago.  
Window sills—linoleum, Vitrolite in  
kitchen and bath.

INSULATING  
Outside walls—1/2" Sprayo-Flake.  
Attic floor—8" U. S. Gypsum rock wool.  
Garage ceiling—1" Armstrong Temlock.

LIGHTING  
Direct and indirect.

PLUMBING  
Kitchen  
Sink—2 compartment, by Crane Co.  
Cabinet—wood.  
Stove—gas.  
Refrigerator—electric.  
Walls—linowall, Armstrong Cork  
Products Co.

BATHROOM  
Fixtures—Crane Co.  
Floors and walls—Armstrong linoleum.

HEATING AND AIR CONDITIONING  
Central—Mueller gas-fired steel furnace.  
L. J. Mueller Furnace Co., Milwaukee,  
Wis.

HARDWARE  
Interior—chromium plated.  
Exterior—front door chromium plated,  
rear brass.

SCREENS  
With steel sash.

WINDOW DRESSING  
Venetian blinds.

SPECIAL EQUIPMENT  
Stair railing—iron, chromium plated.





THE MORTGAGE ON THIS HOUSE HAS BEEN INSURED BY THE FEDERAL HOUSING ADMINISTRATION

Brooks P.

Houses built in the vernacular have a peculiar fascination because of the use made of native materials and their local characteristics of design. The house, though of recent construction, bears the earmarks of traditional derivations inseparably associated with the vicinity in which it stands. The site is most irregular and demands ingenuity to achieve successful handling. With materials, forms and textures familiar to the everyday usage of the neighborhood, the architect has accommodated his design to the exigencies of the ground and produced an arresting result. On the lower level are the dining room, kitchen and garage. One half flight up, and reached either from outdoors, or by steps from the corner of the dining room, is the living room. Up half a flight more, by a stair beside the living room fireplace, are two bedrooms and a bath. The whole arrangement is unconventional and could be found only as a solution to some such highly individual site. Cost: \$6,180. Cubage: 17,700 at about 34½ cents.

## CONSTRUCTION OUTLINE

### FOUNDATION

Walls—stone.  
Cellar floor—cement.

### FRAME CONSTRUCTION

Fir.  
Bridging } hemlock.  
Ties }  
Girders—I-beams.

### MASONRY CONSTRUCTION

Stone walls—Brandywine granite with wide plaster joints.

### EXTERIOR SURFACE

Clapboards—¾" x 10" beveled siding of No. 1 cypress.

### ROOF

Wood shingles on shingle lath—sawed cypress.

Valleys }  
Gutters } tin.  
Flashing }

Down spouts—Toncan metal.  
Salt glazed tile drains—French.  
Composition sheathing paper—under clapboard.

### DOOR AND WINDOW FRAMES

Sash and frames.  
Double hung and casement type—wood.  
Doors and frames (exterior) } wood.  
Garage doors }

### TERRACE

Avondale flagstone.

### GLASS

Double thick No. 1 American.

### EXTERIOR PAINT

Shingles—natural.  
Siding }  
Trim } 3 coat work, Masury's.  
Sash }

### LATH AND PLASTERING

Lathing  
Metal—cellar.  
Wood—1st and 2nd floor.  
Plastering  
Patent plaster—Gypsum.  
Finishing coat—white coat and texture sand finish.

### INTERIOR WOODWORK

Floors—red oak.  
Stainwoods—fir.  
Painted surfaces  
Shelving and cabinets } N. C. pine.  
Stock millwork }



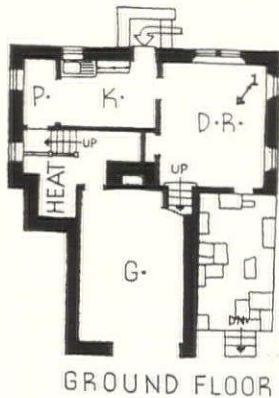
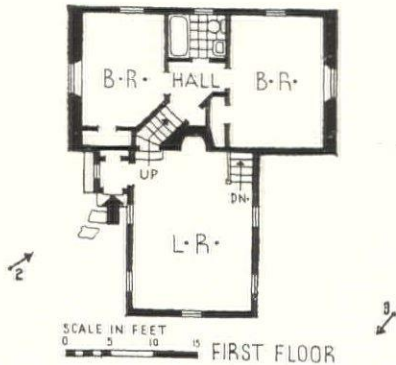
# ELAWARE, ROSCOE COOK TINDALL, ARCHITECT



DINING ROOM TOWARD LIVING ROOM



FRONT AND REAR ELEVATION



PAINTING  
Side walls—none.  
Rafters—Celotex.  
Interior PAINTING  
Walls—stain and wax.  
Ceiling } 4 coats paint and enamel.  
Doors }  
Windows } partially paint.  
Paper—partially.

WIRING  
BX flexible cable.  
Electrical fixtures—Colonial.  
Switches—tumbler type.

HEATING  
Pacific oil burner.  
Boiler—Crane jacketed.  
Radiators—Crane.  
Piping—Byers' wrought iron.

PLUMBING  
Kitchen  
Sink.  
Cabinet.  
Stove.  
Refrigerator.

BATHROOM  
Fixtures—complete.  
Floor—ceramic tile.

PIPES  
Wrought iron.

HEATING  
Pacific oil burner.  
Boiler—Crane jacketed.  
Radiators—Crane.  
Piping—Byers' wrought iron.

Valves—Ohio Brass Co.  
Hot water heater.  
Thermostat and regulators.

CHIMNEY  
Fireplaces.  
Facings—stone.  
Hearths—brick.  
Mantels—white pine.  
Damper—Donley.

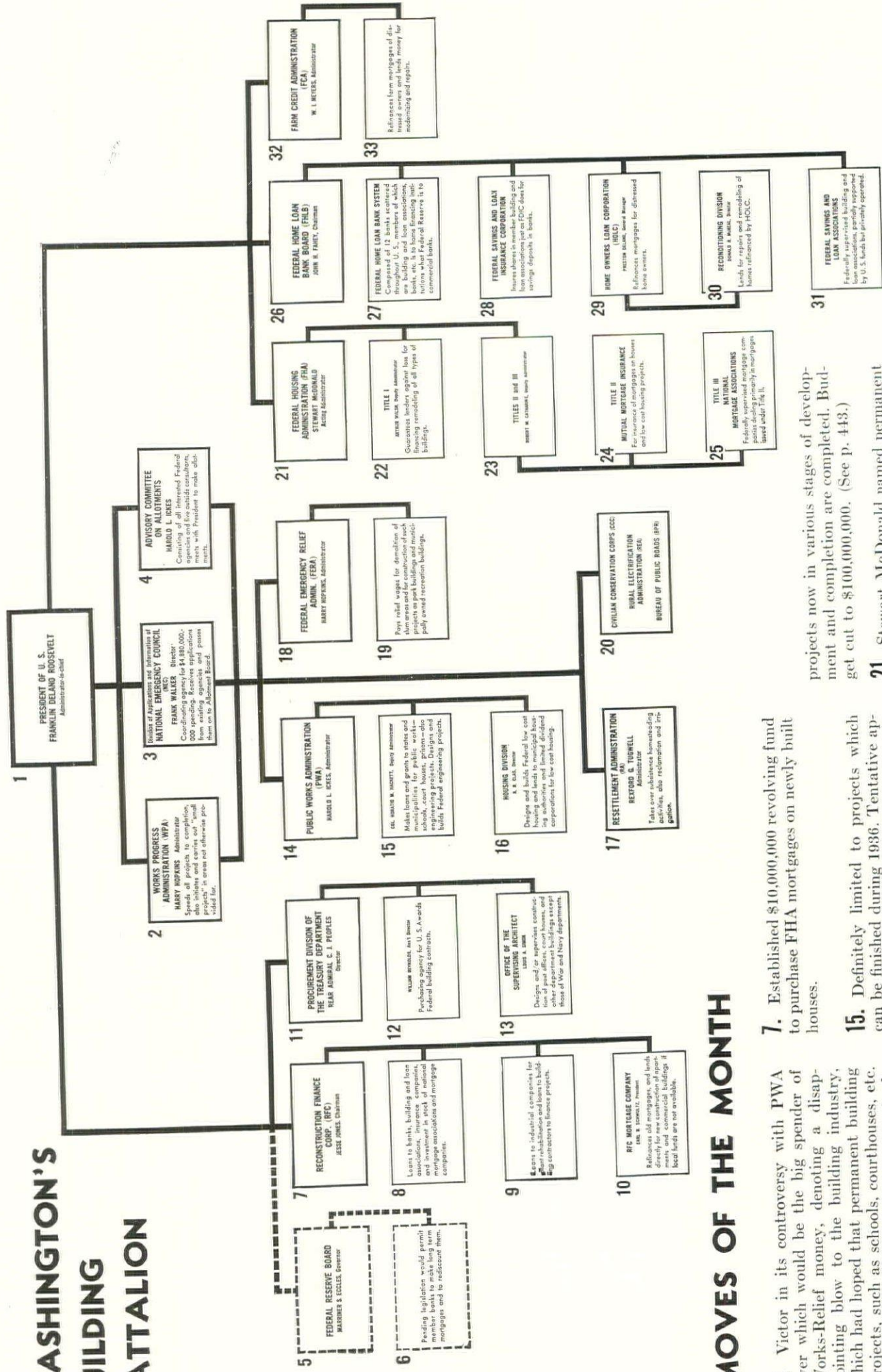
HARDWARE  
Interior—brass.  
Exterior—wrought iron and brass.

SCREENS  
Wood frames with copper wiring.

WINDOW DRESSING  
Venetian blinds.



# WASHINGTON'S BUILDING BATTALION



# MOVES OF THE MONTH

**2.** Victor in its controversy with PWA over which would be the big spender of Works-Relief money, denoting a disappointing blow to the building industry, which had hoped that permanent building projects, such as schools, courthouses, etc., would get the call over Hopkins' leaf-raking projects.

6. Legislation no longer pending, but

projects now in various stages of development and completion are completed. Budget cut to \$100,000,000. (See p. 443.)

**21.** Stewart McDonald named permanent administrator. (See p. 441.)

**22.** Remodeling loans total \$159,285,673 as of Sept. 21.

cant development on low cost housing finance through insured bond issues expected before end of month. (See p. 443.)



# BUILDING MONEY

A monthly section devoted to reporting the news and activities  
of building finance, real estate, management and construction

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JOHN CUSHMAN FISTERE  
Editor



Man of the Month STEWART McDONALD (see Page 441)

*Underwood & Underwood*



# THE RISING TIDE OF HOME BUILDING

is floating the derelict building industry. Rising rents and selling prices presage immediate conversion of need into demand

ONE question dwarfs all others in the minds of building men: "Is this a boom, or isn't it?"

And the answer was never so important as it is today, not only to building, but to business of all kinds. For economists of both wings agree that national recovery is dependent on the answer.

Economists also agree that if the advance in volume experienced so far in 1935 is to continue into 1936 and the rest of the decade, the load must be borne by residential building. With commercial building vacancies hovering around 27 per cent, nothing but free rent will fill up the space until general recovery, accompanied by commercial expansion, is achieved. Thus increased commercial building becomes a dependency rather than a contributory to immediate building revival.

What, then, are the facts of residential building?

January was better than January a year ago, February better than February, August better than August. There was not a month in the first eight months of 1935 that did not top by a big margin the residential building for the corresponding month last year. The specific figures are:

Month?	AMOUNT		Per Cent Increase
	1934 (thousands)	1935 (thousands)	
January....	\$16,617	\$22,410	35
February...	14,520	16,617	14
March.....	28,076	32,209	15
April .....	22,686	42,203	86
May.....	24,840	44,902	81
June.....	26,565	49,833	87
July.....	19,845	48,395	144
August....	18,641	40,528	117

The total for the period is the best for any similar period since 1931.

Ordinarily, such an uninterrupted uphill climb would justify the belief that more

climbing was ahead. But five years of economic mirages have forced Business to conclude that its eyesight is bad. It is essential to examine the underlying causes before making anything better than a guess on the future of residential contracts.

The Law of Supply and Demand, although none the less operative in building than in any other industry, is modified by amendments peculiar to building. It is modified first by the unalterable fact that residential building is a local activity. A shortage in Des Moines is not a shortage in Savannah. Rising rents in New York have no influence on rents in Chicago.

The second modifier is the defying elasticity of existing supply. Housing can be made to serve a period long beyond its normal physical or even useful life if other factors do not produce new housing. And apparently the ability of a given number of housing units to absorb any number of inhabitants, as reflected in the doubling up of families, is indeterminable.

Recognizing the very real bearing of these two factors on the final answer, and weighting accurately the adverse influences that may retard volume, the conclusion seems inescapable that residential building in 1936 will top the gains of this year by equally large margins, and will continue to soar for the rest of the decade.

The supporting facts are these:

## There is a definite physical shortage of housing units in the U. S.

In the four years from 1929 to 1933, there was a population increase of approximately 3,500,000 people. During those same years, new housing was built to accommodate only about 1,100,000 people, creating a surplus of population over housing accommodations of 2,400,000. Since

the average number of persons per family is roughly 3.5, there was an undersupply on a purely numerical basis for families during the 5-year period of 700,000 units. This underbuilding is reflected in the gradual decline in vacancies from a known 7 per cent in 1935 to an estimated 4 per cent at the present. Though accurate figures are not available yearly for the nation, the National Association of Real Estate Boards, in its annual survey completed July 1 of this year reported an actual shortage (measured less than 5 per cent vacancies) of housing accommodations in 69 per cent of the cities surveyed, a normal supply in 1 per cent, and an over-supply in only 2 per cent. The complete figures are:

## PERCENTAGE OF CITIES REPORTING OVER-BUILDING, NORMAL SUPPLY, SHORTAGE IN SINGLE FAMILY DWELLINGS AND APARTMENTS

Section and Size of City	Single Family Dwellings			Apartments	
	Over	Normal	Short	Over	Normal
Total for U. S. and Canada.....	2	29	69	6	6
New England.....	8	59	33	8	5
Middle Atlantic.....	2	31	67	8	4
East North Central.....	3	18	79	5	6
West North Central.....	..	61	39	..	7
South Atlantic.....	3	37	60	8	6
East South Central.....	..	50	50	13	8
West South Central.....	..	14	86	10	7
Mountain.....	..	13	87	..	8
Pacific.....	..	19	81	2	7
Canada.....	..	50	50	..	5
Over 500,000.....	..	29	71	14	8
200,000 to 500,000.....	..	30	70	5	8
100,000 to 200,000.....	7	32	61	14	6
25,000 to 100,000.....	2	28	70	5	7
Under 25,000.....	..	38	62	2	6
District and County Boards.....	2	16	82	5	4

The shortage is even more acute than the amount of doubling up of families is into account. The Real Property Survey reported approximately 8 per cent of the dwelling units in the 64 cities covered in its canvass were occupied

There are unmistakable signs that better days are ahead for home building. The pendulum swung too high in the peak year of building back in 1928 and it swung too low in the depths of the depression in 1933. Already there has been a most significant and encouraging upturn in home building from the extreme low point. Obstacles in the way of building revival are slowly being cleared away and in my opinion we are now heading into a period of increasing activity; 1936 should see a good increase over this year. The tide is coming in and not going out. Frankly, I am optimistic for home building over the next five years.

ROGER W. BABSON, *Economist*

We have every reason to expect an upturn in business all along the line in the immediate future, owing chiefly to the restoration of the nation's principal circulating medium; namely, deposits subject to check as well as to the partial restoration of confidence. Usually such a recovery is more rapid in the building trades than in most others and their recovery should continue for several years, recording an improvement.

IRVING FISHER  
*Yale University*

The stagnation in home building during the period of depression has undoubtedly as much attributable to the inability of prospective home builders to obtain mortgage financing as to general conditions of employment, etc. Therefore with numerous agencies providing sources of financing, homesteads operating on insured basis, Federal housing money available for development in private mortgage investment field and improved economic conditions, I believe there will be a stimulation in home building activity in 1936 and in the years immediately following.

R. S. HECHT, *President*  
*American Bankers Association*



than one family, leaving one-half of families, or 4 per cent, without private accommodations.

an equally active influence on shortage of the sub-normal condition of existing housing. Because of the inability of property owners to keep their buildings in good repair, the percentage of dwellings unfit for habitation, and ready to be torn down, has risen to 3 per cent.

Assuming then that there is a national deficiency of 4 per cent, this is more than met on a purely numerical basis by the 1 per cent of the families which are added up plus the 3 per cent of the families living in houses unfit for habitation—creating a purely physical need of 3 per cent. On the basis of 30,000,000 dwellings, the actual physical need is about 9,000,000 units.

Furthermore, because marriage rates and birth rates have started upward again, after four years of continuous falling, the shortage will grow if the current rate of falling continues. If trends established by experience since the Civil War continue, birth rates will soon exceed normal, probably reaching as many as 12 per thousand marriages, and 24 per thousand births.

**The basic flaws in the economic foundation upon which residential demand must be built have been almost completely eliminated.**

During the 1920-30 period, ill-advised mortgage financing created a national home mortgage debt of fantastic proportions, rising from about \$7,000,000,000 to \$50,000,000,000 in ten years. Not only the amount of mortgage financing unhealthily skyrocketed, but the type of financing was in many cases fundamentally unsound.

The faults have been too frequently cited without elaborate elaboration: short terms, inadequate first mortgages requiring costly and risky second and sometimes third mortgages, too much dependency on the value of the property and not enough on the ability of the borrower to pay, disregard of amortization provisions—these were the worst.

The result was that when the slump hit

general business, residential building, thus unsoundly based, plunged to the lowest depths it has ever reached. Equities were wiped away almost overnight, and an uncontrollable deluge of foreclosures was let loose. Forced sales loaded mortgage institutions down with property and sent the prices of all property down to ridiculous levels.

For four years, nothing was done to right the market. But in 1933 the Home Owners Loan Corporation was formed, and began to operate as speedily as the condition of real estate warranted. In its two years of existence it has refinanced nearly 1,000,000 mortgages, and has enabled an uncountable number of lending institutions to clean house. With the HOLC taking the worst cases, mortgagees have been enabled to refinance a large percentage of their "in trouble" mortgages themselves.

Although foreclosures are still running high, it is paradoxical that improved business conditions rather than weakness of the market is responsible. Mortgagees whose leniency in the past was due to the absence of a market are now exercising their foreclosure privilege because the market has come back again, a very favorable sign.

Dumping of properties has definitely come to a halt. The 1,000,000 mortgages held by the HOLC are not necessarily safe from foreclosure, but the properties will never be thrown on the market in volume sufficient to depress prices. The same is now true of property held by banks and other institutions.

The combination of all these factors has produced an unusually healthy background for future building, leaving little property at distress prices on the market, and readjusting the debts of a considerable, though incalculable, number of owners.

**A rise in rents and selling prices, generally regarded as the immediate predecessor of new building, has taken place.**

Although no agency keeps complete and accurate figures on rents and property sales prices, two agencies which make a semi-scientific attempt at reporting both trends report substantial advances. The signifi-

cance of such advances is apparent. When it is phenomenally cheaper to rent than to buy or build, people rent. When prices of existing houses are far lower than the cost of new building, the major incentive to build is lacking.

The National Association of Real Estate Boards reports rising rents for one-family houses in 71 per cent of the 251 cities covered in its semiannual survey, in 57 per cent for two-family houses, and in 65 per cent for apartments. The figures by geographic areas and by size of cities follow:

**PERCENTAGE OF CITIES REPORTING UPWARD, STATIONARY OR DOWNWARD MOVEMENTS OF RESIDENTIAL RENTS AS COMPARED WITH JUNE, 1934**

Section and Size of City	Single Family Dwellings			Two Family Dwellings			Apartments		
	Up	Stat.	Down	Up	Stat.	Down	Up	Stat.	Down
Totals for U. S. and Canada.....	71	27	2	57	40	3	65	34	1
New England.....	33	50	17	20	60	20	17	67	16
Middle Atlantic.....	45	47	8	31	60	9	51	46	3
East North Central.....	87	13	..	69	31	..	82	18	..
West North Central.....	67	33	..	56	39	5	61	39	..
South Atlantic.....	79	21	..	67	33	..	74	26	..
East South Central.....	63	37	..	50	50	..	63	37	..
West South Central.....	76	19	5	67	29	4	65	35	..
Mountain.....	75	25	..	75	25	..	88	12	..
Pacific.....	79	21	..	53	47	..	60	40	..
Canada.....	..	100	..	..	100	..	..	100	..
Over 500,000.....	63	37	..	50	38	12	75	25	..
200,000 to 500,000.....	95	5	..	70	30	..	75	25	..
100,000 to 200,000.....	75	25	..	68	32	..	75	25	..
25,000 to 100,000.....	73	25	2	57	41	2	63	35	2
Under 25,000.....	66	30	4	55	41	4	65	35	..
District and County Boards.....	59	36	5	48	48	4	56	41	..

A similar improved condition is noted in the selling prices of residential buildings, as reported in the following breakdown:

**PERCENTAGE OF CITIES REPORTING HIGHER, SAME OR LOWER SELLING PRICES CLASSIFIED BY SECTION AND SIZE OF CITIES, COMPARED WITH JUNE, 1934**

Section and Size of City	Higher	Same	Lower
Total for United States and Canada.....	61	35	4
New England.....	9	64	27
Middle Atlantic.....	28	62	10
East North Central.....	70	28	2
West North Central.....	44	50	6
South Atlantic.....	85	15	..
East South Central.....	75	25	..
West South Central.....	81	19	..
Mountain.....	63	37	..
Pacific.....	67	28	5
Canada.....	..	100	..
Over 500,000.....	75	25	..
200,000 to 500,000.....	80	20	..
100,000 to 200,000.....	71	25	4
25,000 to 100,000.....	59	36	5
Under 25,000.....	55	41	4
District and County Boards.....	52	41	7

It must be remembered, of course, that neither rents nor prices are close to what

residential building seems definitely to have reversed a down trend which started in 1928. Improvement of several years duration may reasonably be expected and this movement could occur quite rapidly, though the speed of improvement is of course unpredictable. The chief factors warranting such a conclusion are: (1) The condition of American housing at present; (2) the trend of rents; (3) the attractiveness or lack of modern residential construction; (4) the condition of the mortgage market; (5) alleviation of distress conditions and adjustment of debt; (6) rise in values of building space, and (7) the upward trend of national income.

MOODY'S INVESTORS SERVICE

My analysis of the national housing situation is this: Contraction in space used vacated 1,500,000 living units early in the depression. Population increase creates about 300,000 new families yearly, while casualty and destruction eliminates 200,000 yearly, making the annual requirements for new units about 500,000. Construction for the last four-year period grosses less than 500,000, so vacated units today are completely absorbed. Expect acute shortage to develop by the spring of 1936, followed by rent and value increases. New units constructed should total 300,000 in 1936 and from 600,000 to 800,000 yearly till 1940.

WALTER S. SCHMIDT, President National Association of Real Estate Boards

There is ample reason to believe that the long awaited recovery in residential building is finally under way. The improvement in 1935 will extend into 1936, but disappointment awaits those who believe a boom is just ahead. It is unlikely that residential building next year will reach the total for 1931; such an accomplishment would entail a virtual doubling of the 1935 volume. Since it is a practical certainty that we are in an ascending phase of the residential cycle which can be interrupted only by war, the longer range appears favorable.

L. SETH SCHNITMAN, Chief Statistician F. W. Dodge Corporation



is generally considered the normal (1926) level. National Industrial Conference Board figures, based on that year as 100, have shown a steady rise since July, 1934, when the average was 64.7. For July, 1935, the average was 70.0, a gain over June of the same year of 0.6 per cent, and over May of 0.9 per cent. Still further increases attended the October 1 rental season.

It can be assumed from all of the foregoing that first, a housing shortage exists; second, that the factors which pull the market down have been corrected; and third, that increases in rentals and prices have tended to narrow the gap between existing and new construction values.

What remains is to examine the remaining considerations that will contribute to increased volume: the desire to build and the ability to pay.

### ***American interest in home ownership is at a level seldom, if ever, approached before.***

Long regarded as the least capable merchandisers in all business, the building industry has recently given indications of a newly acquired technique. No small amount of credit is due the Federal Housing Administration, which performed the rather unusual governmental function of staging what is probably the most intensive campaign for home building and remodeling that the country has ever seen. Whether it is strictly a governmental function or not is immaterial, but more than 1,000 home shows have been staged during the past two years, and have been attended by an estimated 20,000,000 people.

But the interest stimulated by the FHA, or by any other source is only secondary compared with the interest created by the widely publicized advent of all kinds of new magic in residential design, construction, and equipment. Prefabrication and air conditioning are two words that command attention today. It is relatively immaterial whether the day of prefabrication is five or five hundred years off, or whether air conditioning is two or ten years away from being priced reasonably enough to earn a place in every home. These two developments have drawn attention to building. The public understands very little about either—but they crystallize the idea that great expectations are justified in building a home today.

### ***Increased national income and more equitable financing are increasing the nation's ability to pay.***

Aside from the comparatively small number of houses that are sold for cash, paying for a home is split into two parts: the down payment and the amortization of the mortgage debt with interest. At the root of both are national income and the condition of the mortgage market.

Including about \$1,400,000,000 paid out last year for relief, national income in-

creased about \$5,500,000,000 over 1934. The total national income, as reported by the Division of Economic Research of the Department of Commerce, was \$49,440,000,000 as against \$44,431,000,000 the year before. While this was not favorably balanced against the peak of \$78,576,000,000 in 1929, the increase was marked.

There is little doubt that whereas investment was seeking money no less than a year ago, money is today seeking investment. Apart from the generally improved conditions, a series of Federal acts has served to alter radically the position of mortgage lenders with respect to new building financing. In addition to providing fresh capital for new and old institutions alike, it has substantially increased both the security and effective liquidity of the mortgage instrument.

Topping all its activities is the creation of insured mortgages under the Federal Housing Administration, under which mortgagees are guaranteed through the exchange of defaulted mortgages for bonds, a return of at least 3 per cent on their investment. The insured mortgage plan, seemingly complicated at first, is now fully understood and endorsed by most lenders, and gives promise of becoming one of the best permanent features of home mortgage finance in the U. S.

Nor are the value of FHA mortgage insurance confined to the lenders. The lowered interest rates plus the lengthening out of the amortization have not only made home ownership cheaper and more convenient for the normal home buyer, but they have extended the opportunity of ownership to a new class of wage earners, heretofore blocked out by inability to pay.

Not to be overlooked for its future worth is the comparatively ancient Federal Home Loan Bank System, the scope of whose influence has recently been extended to permit both member and non-member institutions to rediscount their mortgages. While only negligible use has been made of the system so far, due to the abundance of money available, the System is a very real guarantor of liquidity.

Before drawing any general conclusions, it is essential to report the minus signs that can defer residential building revival for an indefinite length of time. Undoubtedly the most serious deterrent is the apparent high cost of building. The wide disparity between construction costs and rentals is frequently tabulated thus:

#### **CONSTRUCTION COSTS VS. RENTALS**

Yearly Averages	Construction Costs (1926=100)			Residential Rentals (1923=100)
	Labor	Materials	Combined	
1925	97	101.7	99	104.1
1926	100	100	100	101.3
1927	102	93.7	98	97.8
1928	102	93.7	98	93.7
1929	105	97.1	100	92.0
1930	108	90.3	98	89.5
1931	104	79.2	91	82.4
1932	94	71.5	82	72.4
1933	92	77.0	84	63.8
1934	92	86.3	89	64.8

Relating those figures to booms, it is obvious that new building is created when rents and costs approach equality. Indices, however, are based on market prices, and wage scales—which are at all the same as the actual cost of house. Neither the increased speed of building, which cuts down the amount paid to labor, nor the widespread practice of hiring labor at less than prevailing wage or paying less than market prices are taken into account.

Furthermore, the high initial cost of building is partially offset by the low interest rates. Although the actual difference in cost of the final house financed with different interest rates is seldom appreciated by the public, a difference of 1 per cent may equal a 10 per cent reduction in the total cost of house.

Assuming, for example, that on a year, \$10,000 amortized loan, the interest rate was 6 per cent, the total interest would be about \$6,000 over the life of the loan. At 5 per cent, the total interest would be approximately \$5,000, a saving of \$1,000.

Then, too, when the cost of a house based on the carrying charges per month and compared with the rent per month for a similar house, they are more nearly equal. Under the FHA plan, the carrying charges for a loan, including amortization, interest, taxes and fire insurance, approximate 1 per cent a month. A \$7,500 house with a \$5,000 mortgage costs about \$1,000 a month to carry under the FHA plan. The same house rented would have brought just about the same to the owner.

Finally, the second handicap still to overcome is the incontrovertible evidence supplied by the relief rolls, on which families represent one-fifth of the population. However, a building boom is not dependent upon the entire population being employed. The greatest boom the country ever experienced produced housing accommodations for only 2,000,000 people (2,000 units). Prosperity in Detroit began a local boom; prosperity in Washington gets a local boom. The sum total of all local booms is—national recovery. With rising building activity, a high percentage of those unemployed will soon be put back to work.

How sizeable the home figures for next year will be cannot be mathematically deduced. If the same percentage of new homes only are made over this year, the eight months of 1936 will total about \$575,000,000 worth of homes, and eleven months of 1936 will total about \$750,000,000 for the full year. If the volume is in the same proportion, it will total almost \$1,500,000,000.

If on the other hand, home building takes the bit in its teeth, and produces at a rate fast enough to wipe away the physical shortage, the figures will be higher, with the possibility that from the period of 1936 to 1940, the average yearly home production will near \$2,000,000,000.



## THE MOST POTENT U. S. AGENCIES

laborate to produce a new mortgage system, vague in form not in purpose, with McDonald its key figure.

QUAL though the explanations may have been for the first failure in U. S. history of a Treasury bond issue month before it was frankly disturbing to Secretary Morgenthau and his aides. Except by the interest of Administration foes, it was not regarded as a serious reflection on the Government's credit, but it did strengthen the influence of right wing advisers that the time had come to clamp down on hasty expenditure of Federal funds, and wholesale discounting of the nation's credit.

The Treasury's new real estate department, presided over by suave Peter Grimm, brass tacked Harold Riegelman, the situation was particularly worrisome. It was arranged informally, but none the less officially by the President with the task of unifying the scattered agencies of the Government that are now hilt-deep in real estate, construction, and housing finance, they were expected to emerge with a program that would minimize Treasury participation and at the same time produce an abundance of housing in quick order.

To that end they have been conferring early with the heads of the several agencies whose activities heretofore have been as unrelated as right and left hand fingers. Among the conferees have been Donald of the FHA, Schwulst from the RA, Fahey of the Federal Home Loan Bank System, Tugwell of the RA, Clas from PWA's Housing Division, Gill of the WPA, Myers of the FCA, Daiger of the Federal Reserve, and Bell, director of the budget.

With unanimity they agreed that the job could be done without the complicating existence of a new agency, and further, if the powers already granted to each of them were cooperatively exercised, the result would be not a perfectly unified mortgage system perhaps, but one that would do the work until a more permanent structure is designed.

Three things that any national mortgage system must provide are:

A plentiful supply of mortgage money at reasonable interest rates.

Security to the lender.

Effective if not actual liquidity of the mortgages themselves.

All these essentials, in the opinion of the conferees, were immediately available, partly through the FHA, partly through the Federal Reserve System, partly through the RFC, partly through the Federal Home Loan Bank System and its affiliated Federal mortgage and loan associations.

Because the passage of mortgage laws has been scattered over a period of four years, building men have been aware of the

unconscious dovetailing of the different acts. Even at the last session of Congress there were passed, in between debates of a more headlining character, a handful of amendments that change the mortgage picture significantly. Some were amendments to the Home Loan Bank Act, some to the Banking Act, some to the law creating the RFC, and some to the National Housing Act. Together they hold great meaning for real estate and building, and out of them and earlier legislation, the Grimm committee is framing the new mortgage structure. (See box on page 442.)

To understand the program it is necessary to review the various acts and amendments that were passed at the last session of Congress, and from them to sketch the broad policies to which they contribute. First, it became absolutely essential to create a system of mortgage discounting. Three very significant steps were taken to further this end:

1. Extending the rediscounting privilege of the Federal Home Loan Bank System to non-member institutions. Though it has not yet been a powerful factor in the Government's policies, the Federal Home Loan Bank System, created four years ago under Herbert Hoover, is beginning to assume its place as a genuine discount bank. (ARCH. FORUM, April, 1935, p. 416.) How readily non-member institutions will take advantage of this new privilege remains to be seen.

Obviously, such discounting is most needed in very good or very bad times. And the present is neither of these. Up to last month only a small amount had been loaned to a few non-member institutions by the System and total loans to members and non-members stood near \$100,000,000.

2. The provision whereby mortgages are rated as eligible collateral for loans from the Federal Reserve Bank, one of the primary planks in Marriner Eccles' platform for a revised Federal Reserve Bank System, this clause was persistently fought by Sen. Carter Glass and only in the last days of Congress was it returned to the Bill and approved by the Senate and House conferees. The law says that loans may be made to member banks on mortgage security at a rate one-half of 1 per cent higher than the rate for other discountable paper. Such notes will have a four-month maturity and will, of course, be subject to renewal.

Such a provision is not, of course, genuine rediscounting, and while it will not increase the actual liquidity of a mortgage it will take the curse off mortgages as far as many banks are concerned.

3. An immediately important but probably impermanent aid to liquidity was the agreement of the RFC to set aside a \$10,000,000 fund to buy FHA mortgages. That continuance of this offer may not be necessary seemed probable from the live interest displayed by Wall Street in insured mortgages as an investment. The brokerage firm of Pask & Walbridge stepped into the limelight by placing on the market \$1,250,000 worth of insured mortgages, which it had asked the Manufacturers Trust Company and the New York Trust Company to buy for resale. An advertisement in the New York Times offering to buy and sell insured mortgages literally swamped the



A Pen to the Banking Act

Behind the toy-laden desk of the President smile Senator Glass, Comptroller O'Connor, Senator Fletcher, Secretary Morgenthau, RFC Chairman Jones, Representative Steagall, and FRB Governor Eccles.



desk of R. Gould Morehead, Pask & Walbridge partner, whose study of the FHA convinced him that insured mortgages offered an ideal security for the firm to handle.

What makes all these forms of liquidity possible is, of course, mortgage insurance, and the Federal guarantee of principal and interest on FHA debentures issued to mortgagees in return for defaulted mortgages.\* The buyer of an insured mortgage does not have to appraise the property himself; it has been appraised and insured for him, thus increasing their marketability.

\*The Government guarantee applies only to mortgages insured before January 1, 1937. After that, the debentures will be the obligations of the FHA's insurance funds alone.

The second attribute of a mortgage system is security to the lender, which is also accomplished through the FHA's mortgage insurance program. Not only is there a guaranteed return of 3 per cent on any insured mortgage, but the steps which FHA takes in determining the eligibility of a mortgage for insurance are so thorough (despite the fact that the work is done by a government agency) that the simple fact of insurance is a reasonably sound guarantee of the mortgage's value.

Finally, the provision of adequate funds at acceptable interest rates is assured by a handful of different methods. Changes in the Banking Act, enumerated in the box, constitute an almost inescapable invitation to national banks to elevate mortgages to

high standing as securities. Sections 3 and 7 broaden the scope of their activities; Sections 8 and 9 eliminate the two most serious deterrents.

Other stimulants to the supply of mortgage money are the Treasury's offer to buy shares in Federal savings and loan associations, and the already mentioned extension of discounting privileges in the Federal Home Loan Bank system to member institutions. The first of these is designed to swell the amount of funds immediately available, and the second to insure a constant flow of funds in times of need.

Although rates will still hinge on supply and demand, the fixing of a maximum rate of 5 per cent on FHA mortgages (including insurance and service fees) has had the effect in lowering the cost of mortgage money.

Thus, it becomes apparent that a mortgage system is in the making, around the hastily assembled Federal Housing Administration. Gradually, FHA is living down among unsympathetic bankers and business men the fact that it was born under Roosevelt. When political control and the PWA are forgotten, FHA will undoubtedly be flourishing as a permanent unit of the government.

### SUMMARY OF PRINCIPAL AMENDMENTS PASSED BY 74TH CONGRESS FACILITATING THE ADMINISTRATION OF THE NATIONAL HOUSING ACT

1. The limit of \$2,000 originally set on insured modernization loans has been increased to \$50,000 on certain types of property, in order especially to encourage improvements to business and industrial property, and the purchase and installation of machinery and equipment. Under the amendment it is not necessary that equipment and machinery become a part of the real estate.

2. The face amount of debentures paid to mortgagees in satisfaction of insurance claims is to include interest (present guaranteed rate is 3 per cent per annum) from the date foreclosure proceedings are instituted by the mortgagee. Originally provision for payment of interest was made only from date title to property was delivered to the Federal Housing Administrator.

3. The restriction that heretofore prevented a national bank from placing real estate loans outside its own Federal Reserve district, or farther than 100 miles from the location of the bank regardless of district lines, has been removed. This should facilitate especially the sale of insured mortgages between banks that have a correspondent or similar relationship with one another.

4. The requirement that in making a real estate loan a national bank must acquire the entire mortgage has been removed. This should make it feasible for banks to join with one another in financing low cost housing projects under the terms of the Housing Act.

5. Provision is made whereby the Comptroller of the Currency may classify as investment securities, rather than as real estate loans, BONDS issued against FHA-insured mortgages on low cost housing projects.

6. Holders of bonds secured by mortgages insured under the low cost housing provisions of the Housing Act are excepted from the corporate reorganization provisions (Section 77B) of the Bankruptcy Act.

7. The proportion of their funds that national banks may invest in real estate loans has been raised to 100 per cent of their capital and surplus or 60 per cent of their time and savings deposits, whichever is the greater. This raises the effective limit of mortgage lending by national banks to approximately \$4,700,000,000, an increase of approximately \$1,100,000,000. At present the volume of mortgages held by national banks is approximately \$1,300,000,000. Hence, they could increase their mortgage loans by \$3,400,000,000 before reaching the effective limit; and in the case of mortgages insured under the Housing Act such loans may be made up to 80 per cent of the appraised value of the property.

8. Under regulations to be prescribed by the Board of Governors of the Federal Reserve System, real estate mortgages will be eligible as security for advances by the Federal Reserve banks. Mortgages insured under the terms of the National Housing Act are also eligible as security for advances by the Federal Home Loan banks, to approved mortgagees, whether or not they are members of the Federal Home Loan Bank System.

9. Section 21 (a) 1 of the Banking Act of 1933 under which it was unlawful for institutions receiving deposits to engage in the business of buying and selling securities, has been amended so as to permit banks to sell mortgages without recourse or agreement to repurchase.

**Administrator.** Because of the lasting character of the agency which he is administering, Stewart McDonald, who last month was definitely chosen to succeed James Moffett as administrator, takes on an importance to business and the building industry. On his pre-FHA record, he would appear to be as ill-suited for his job as his predecessor. And yet his willingness to listen to reason when it is good, and his Scotch habit of tending strictly to business may offset his ignorance of the real estate and mortgage business.

The chief props in the McDonald background are that he is a graduate of Columbia University, that he was at one time head of the St. Louis firm which made Moon and Diana motor cars, that immediately preceding his Washington appearance he was associated with Speculator William C. Durant in New York where he met Oil King John D. Rockefeller. Insignificant facts about him are that he was the onetime police commissioner of St. Louis, that he is divorced, that his daughter is married to the son of Missouri's late Governor Gardner.

Administrator McDonald looks like a shrewd, experience-trained business man. No better speechmaker than Moffett, he has the wisdom to make his speeches. In an agency that is laden with the customary amount of expensive personnel overhead, he knows how to place responsibility to those who can take it and to sidetrack in figurehead jobs those who can't. Possibly because of his political background, he has far better control of his organization than Moffett had, and a previous virtue in a Federal agency.



DEAFBCMTLSKRJQIPHONGN

ITEM		CAPITAL CHARGE PERCENTAGE																			
ADJUSTMENT		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1.	DEBT SERVICE																				
	REST PAST	03087	03046	02861	03370	03126	02924	02589	01635	01682	01730	01778	01826	01876	01323	01362	01401	01441	01481	01522	01562
	REMAINDER	03123	02133	02133	02400	02400	02340	02180	01600	01600	01920	02240	02560	02880	02020	01334	01666	02000	02334	02666	03000
	TOTAL DEBT SERVICE	05420	05177	04974	05770	05526	05264	04769	03285	03282	03650	04018	04386	04756	03040	02696	03067	03441	03818	04186	04562
2.	MORTGAGE INSURANCE																				
	1/25 x 80%	004	004	004	004	004	004	004	004	004	004	004	004	004	004	004	004	004	004	004	004
3.	TAXES																				
	2 1/2%	025	025	025	025	025	025	025	025	025	025	025	025	025	025	025	025	025	025	025	025
4.	DIVIDENDS																				
	6% x 20%	012	012	012	012	012	012	012	012	012	012	012	012	012	012	012	012	012	012	012	012
5.	FEDERAL INCOME TAXES																				
	61 x 20% x 13.34%	00181	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191	00191
	86 1/4%																				
	TOTAL CAPITAL CHARGES	08711	03458	03265	03661	03817	03813	03849	01708	01708	01740	01794	018308	018577	019047	019664	019687	021358	021732	021806	024729
6.	ADJUSTED FOR 5% VACANCY	10422	03766	02753	03591	03334	03121	02500	01583	01583	01625	01678	01746	018134	018832	019585	019745	021338	021533	021625	025119



# A WORKABLE RENTAL FORMULA

that fixes the room return required for all land and building costs, financing plans, and operating budgets.

THE unintelligent habit of branding all initialed U. S. agencies as interferers in private business has blinded many a building man and mortgage man to the very real difference in principle which exists between such agencies as the HOLC or the FCA, and the FHA or the FHLB. Whereas the first two are frankly relief agencies, open in their disbursement of Federal funds, the others are non-spending units, whose purpose is the encouragement rather than the supplanting of private business.

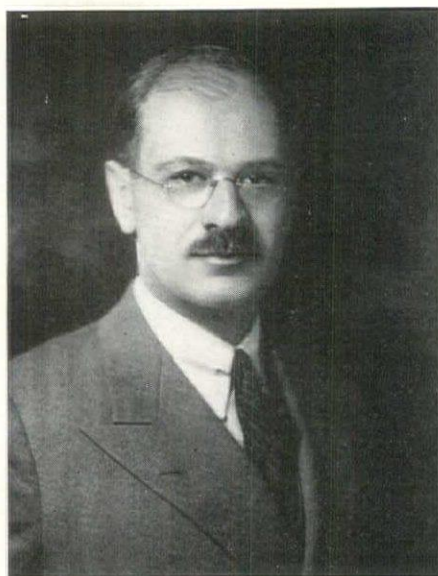
As part of its "breathing spell," the Administration is now definitely committed to a speedy termination of the direct spending agencies. This is particularly true of housing, where the once ascendant star of the PWA's Housing Division has fallen rapidly, accompanied by a steady rise of the FHA's kind of housing. Urged by the conservatives among the Administration's advisers, the end of PWA housing, once present allotments are spent, is assured.

As a counter proposal to direct Federal spending, the conservatives were framing last month a new method of housing finance, calling for the insurance of low yield mortgage bonds issued to finance projects of limited dividend companies. Until now, few lenders have been willing to finance FHA low cost housing developments because they involved too much money. Now, however, under the amended Banking Act, they are permitted to finance parts of projects through cooperatively underwritten bond issues. It is on this amendment that the new finance plan hinges.

In the opinion of a group of New York banks and Wall Street houses which met with FHA, RFC, and Treasury Department representatives in New York last month, FHA low-cost housing bonds will rank with governments and municipalities as an attractive investment. With a guaranteed return of at least 3 per cent (this is the return fixed by the NHA on debentures issued to holders of defaulted FHA mortgages), New York financial men tentatively saw no reason why such bonds would not make prime investments for their own accounts as well as for their clients.

In most of the intricate details surrounding the FHA low-cost housing program there was present but not evident the fine minds of Assistant to the Secretary of the Treasury Peter Grimm and his astute counsel, Harold Riegelman. Like hundreds of others in New York building circles, Peter Grimm values the practical as well as the legal wisdom of Attorney Riegelman. Member of the firm of Nordlinger, Riegelman & Cooper, Harold Riegelman drafted the State Housing Law and the Multiple Dwellings Law which are considered models for other state acts. He numbers among his

clients a score or more of prime real estate companies, not the least of which is Knickerbocker Village, Inc., the Fred F. French Co., which built the mammoth development on New York's lower East side. Unlike most lawyers, Mr. Riegelman has the faculty of making difficult things simple, of boiling down complex laws for lay digestion. Of medium height and build, his face is a familiar one on New York speaking platforms and his name is equally familiar in the city's press.



Counselor Riegelman

Working in close cooperation with Mr. Riegelman the Technical Division of the FHA, had by last month prepared a wealth of data that would enable it to approve loans speedily once the applications were in. Not the least valuable item in the collection was a rental chart drawn up by Messrs. Albert C. Shire and Paul M. Green of the FHA (see reverse pages). Designed to enable the FHA to check the financial accuracy of any scheme proposed under its low-cost housing program, the chart becomes to building men a rapid estimator for calculating rents with any set of conditions. Complex in form, it is comparatively simple in operation.

**Definition.** It works thus:

The first part of the chart is based on the following equation:

$$\frac{\text{Sq. Feet per Room} \times \text{Developed Land Cost}}{\text{Number of Stories} \times \% \text{ Land Coverage}} = \text{Land Cost per Room}$$

The horizontal scale represents the product of the number of stories multiplied by the per cent land coverage. The vertical scale represents the developed land cost per square foot. Two hundred square feet of space is assumed as an average room size.

The product of the number of stories multiplied by the per cent land coverage is

found on the horizontal scale. The developed land cost per square foot is found on the vertical scale. These points are projected perpendicularly to the respective base lines, to the point where the two projections intersect. This point of intersection is projected along the diagonal line to the scale at the right side of this part of the chart. Here is read the land cost per room.

For convenience in reading this part of the chart a second scale is added. When the product of the number of stories multiplied by the per cent land coverage is not more than one and the developed land cost per square foot is not more than two dollars and fifty cents (\$2.50) the supplementary scale should be used with the reading made as outlined above.

## PART II

With the land cost per room established on the vertical scale on the second part of the chart the construction cost per room is found on the horizontal scale. This latter figure includes fees, carrying charges, and miscellaneous expenses. These two points are projected perpendicularly to the respective base lines to the point of intersection. This point of intersection is projected along a diagonal line to the scale at the top of this part of the chart. Here is read the total capital cost per room.

## PART III

Before this part of the chart can be read the desired plan of financing must be found in the table at the base of the chart. With this done the total capital cost per room is projected perpendicularly to the base line to the point of intersection with the line representing the financing plan which has been selected. This point of intersection is projected horizontally to the left side of this part of the chart. Here is read the total capital charges per room per month.

## PART IV

With the total capital charges per room per month established on the scale at the right side of this part of the chart the remaining step is the addition of the operating cost factor. This is accomplished by Part IV of the chart.

The operating cost per room per year is found on the horizontal scale. This point and the point representing the total capital charges per room per month are projected perpendicularly to the respective base lines to the point where the projections intersect. This point of intersection is then projected along the diagonal line to the scale at the left side or at the top of this part of the chart. On this final scale is read the rent per room per month.

Another valuable contribution to the quick estimation of costs and rentals was the series of tables prepared by the Treasury Department and the FHA (see page opposite). There in quick form are the answers to dozens of questions that temporarily perplex even the astutest of financial statement framers—the difference in monthly room rentals per unit of difference in cost—land cost, building cost, interest rate, coverage, etc.



TABLE I

RENTAL FACTOR	AMOUNT OF CHANGE	EFFECT ON MONTHLY RENT				
		NUMBER OF FLOORS				
		3	4	6	8	10
Construction Cost Per Cu. Ft.	\$ .01	\$ .22	\$ .20	\$ .19	\$ .18	\$ .18

Example:

An increase in construction costs of 1 cent per cu. ft. in a building three stories in height increases the rent 22 cents per room per month.

TABLE II

Land Cost Per Sq. Ft. Coverage:	\$1.00					
30%		\$1.68	\$1.26	\$ .84	\$ .63	\$ .50
35%		1.44	1.08	.72	.54	.43
40%		1.26	.95	.63	.47	.38
45%		1.12	.84	.56	.42	.34
50%		1.01	.76	.50	.38	.30
55%		.92	.69	.46	.34	.27
60%		.84	.63	.42	.32	.25

Example:

An increase in land costs of \$1 per sq. ft. when coverage is 35 per cent and the number of stories is 6 increases rent per room per month 72 cents.

TABLE III

Coverage: from coverage of:	5%	(For each \$1.00 of land cost per sq. ft.)				
30%		\$ .24	\$ .18	\$ .12	\$ .09	\$ .07
35%		.18	.14	.09	.07	.05
40%		.14	.11	.07	.05	.04
45%		.11	.08	.06	.04	.03
50%		.09	.07	.05	.03	.03
55%		.08	.06	.04	.03	.02

Example:

An increase of coverage of 5 cents when coverage is 35 per cent and the number of stories is 4 decreases the rent 14 cents per room per month for each \$1 of land cost per sq. ft. If land costs are \$4 per sq. ft. the above example would decrease rent four times 14 cents or 56 cents.

TABLE IV

Effect on Rent Per Room Per Month of Change (increase or decrease) of .01 in Total Debt Service Factor. (Debt service factor includes interest, amortization, taxes, insurance, and dividends.)

From a total debt service factor of:	When Monthly Rent, Excluding Operating Cost, Is:					
	\$4.00	\$6.00	\$8.00	\$10.00	\$12.00	\$14.00
.04	1.00	1.50	2.00	2.50	3.00	3.50
.05	.80	1.20	1.60	2.00	2.40	2.80
.06	.67	1.00	1.33	1.67	2.00	2.33
.07	.57	.86	1.14	1.43	1.71	2.00
.08	.50	.75	1.00	1.25	1.50	1.75
.09	.44	.67	.89	1.11	1.33	1.56
.10	.40	.60	.80	1.00	1.20	1.40
.11	.36	.55	.73	.91	1.09	1.27
.12	.33	.50	.67	.83	1.00	1.17

Since the total debt service factor is generally about 10 per cent, the following rough rule of thumb may be used. An increase of 1 per cent in debt service factor which may be due to a change or a combination of changes in interest, amortization, insurance, dividends, or taxes produces a 10 per cent change in rent per room per month exclusive of operating costs in every case.

The following table is included to provide concrete examples and is used in connection with Table IV. The decimal figures represent that part of the total debt service factor which combine interest and amortization under each of the various rates and plans indicated in the table. The change in total debt service factor due to a change in amortization plan, interest rate (or both) is obtained from this table by subtracting the factor for the new plan from the factor for the original plan. Note that this table provides a method for determining subsequent rents under "graded amortization" plans, once the original rent is determined.

The use of Table V in relation to Table IV is shown in the example following Table V.

TABLE V

Amortization Factors  
(Resulting in 80 per cent amortization when applied to total capital cost)

Plan of Amortization	Interest Rate				
	4%	4 1/4%	4 1/2%	4 3/4%	5%
30 years					
1/3 in { first 11 years	.0518	.0535	.0553	.0570	.0588
{ next 10   "	.0435	.0446	.0457	.0468	.0479
{ last 9     "	.0359	.0363	.0367	.0371	.0375
1/3 in { first 10 years	.0542	.0560	.0577	.0594	.0612
{ next 10   "	.0435	.0446	.0457	.0468	.0479
{ last 10   "	.0329	.0333	.0337	.0341	.0345
Constant total payment	.0463	.0477	.0491	.0506	.0520
35 years					
1/3 in { first 12 years	.0497	.0515	.0532	.0550	.0568
{ next 12   "	.0391	.0402	.0412	.0423	.0434
{ last 11   "	.0304	.0309	.0313	.0317	.0321
Constant total payment	.0429	.0443	.0458	.0473	.0489

Example:

Assume rent (excluding operating cost) is \$8. If amortization is at 4 per cent for 35 years under the constant total payment plan; and if insurance, taxes, and dividends are assumed as follows:

Interest and amortization	.0429
Taxes	.0311
Insurance (80% of .005)	.0040
Dividend (20% of .06)	.0120

Then the Total debt service factor is .0900

Changing the interest rate to 5 per cent and the amortization period to 30 years increases the debt service factor by .0091 (.0520-.0429) (Table V). From Table IV, a change of .01 when the rent is \$8 and the total factor is .09 causes a change of .89 in rent. An increase of .0091 increases rent 91 cents which is obtained by multiplying .91 by 89 cents.

Effect on Rent per Room per Month  
of a Change in Occupancy Percentage

Tables VI and VII are the means of learning the changes in dollars in rents required by change in percentage of occupancy. The first step (Table VI) is to ascertain the factor by which the total rent must be multiplied to obtain the new rent resulting from a given change in occupancy percentage.

Having determined this factor, the next step is to locate it in the left column of Table VII. The figure horizontally to the right of that factor under the appropriate rent column shows the change in that rent resulting from the change in percentage of occupancy, for which the factor was disclosed by Table VI.

Factor of Change in Occupancy Percentages

TABLE VI

Revised Occupancy %	Original Occupancy Percentage						
	100	97 1/2	95	92 1/2	90	87 1/2	85
100	1.0000	.9750	.9500	.9250	.9000	.8750	.8500
97 1/2	1.0256	1.0000	.9744	.9487	.9231	.8974	.8718
95	1.0526	1.0263	1.0000	.9737	.9474	.9211	.8947
92 1/2	1.0811	1.0541	1.0270	1.0000	.9730	.9459	.9189
90	1.1111	1.0833	1.0556	1.0278	1.0000	.9722	.9444
87 1/2	1.1429	1.1143	1.0857	1.0571	1.0286	1.0000	.9714
85	1.1765	1.1471	1.1176	1.0882	1.0588	1.0294	1.0000

Change in Rent per Room per Month due to Change in  
Occupancy Percentage

TABLE VII

Factor of Change in Occupancy %	Monthly Rent (including Operating Cost)						
	\$4	\$6	\$8	\$10	\$12	\$14	\$16
.85	— .60	— .90	— 1.20	— 1.50	— 1.80	— 2.10	— 2.40
.90	— .40	— .60	— .80	— 1.00	— 1.20	— 1.40	— 1.60
.95	— .20	— .30	— .50	— .50	— .60	— .70	— .80
1.00	0	0	0	0	0	0	0
1.05	.20	.30	.50	.50	.60	.70	.80
1.10	.40	.60	1.00	1.00	1.20	1.40	1.60
1.15	.60	.90	1.502	1.50	1.80	2.10	2.40
1.20	.80	1.20	2.00	2.00	2.40	2.80	3.20

Example:

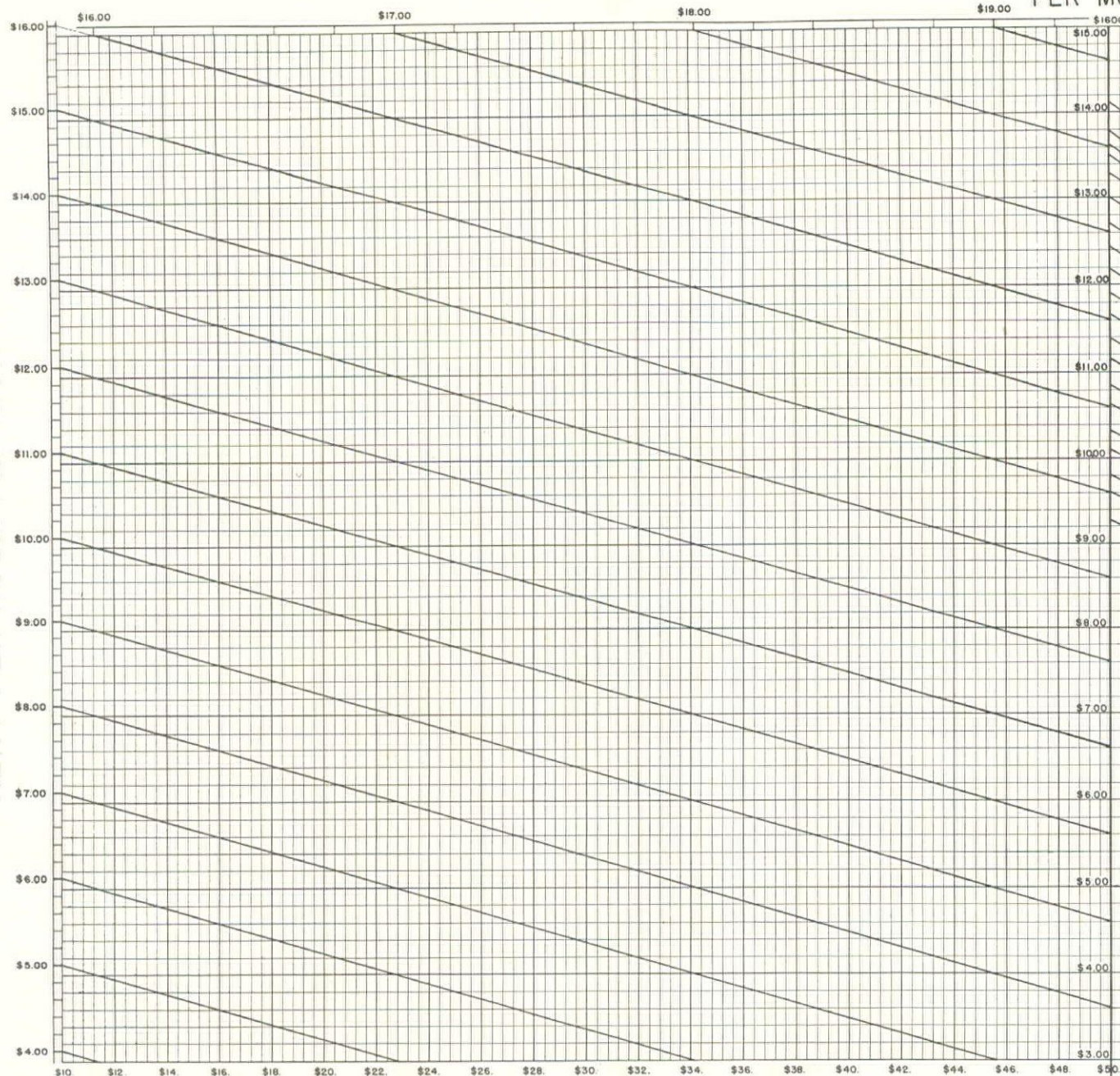
Assume that rent is \$12. If occupancy percentage changes from 90 per cent to 100 per cent, the ratio of occupancy percentages (Table VI) is .90. Entering Table VII with \$12 and .90, we find a decrease in rent of \$1.20.



RENT PER ROOM PER MONTH

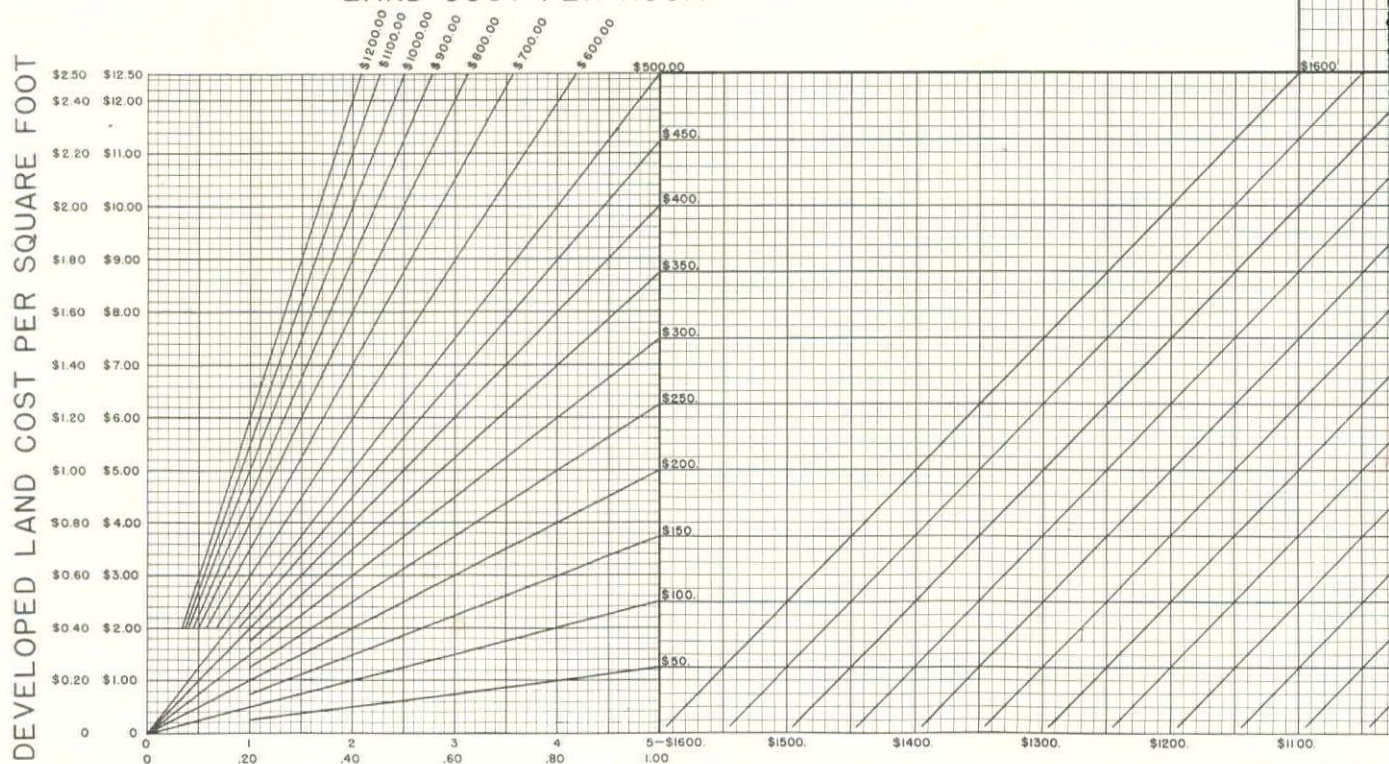
CAPITAL CHARGE  
PER ROOM  
PER MONTH

RENT PER ROOM PER MONTH



OPERATING COST PER ROOM PER YEAR

LAND COST PER ROOM



DEVELOPED LAND COST PER SQUARE FOOT

NUMBER OF STORIES X COVERAGE

CONSTRUCTION COST  
(INCLUDING FEES, CARRYING CHARGES AND MISCELLANEOUS)



# THE RIGHT START FOR A SUCCESSFUL PIPING SYSTEM....

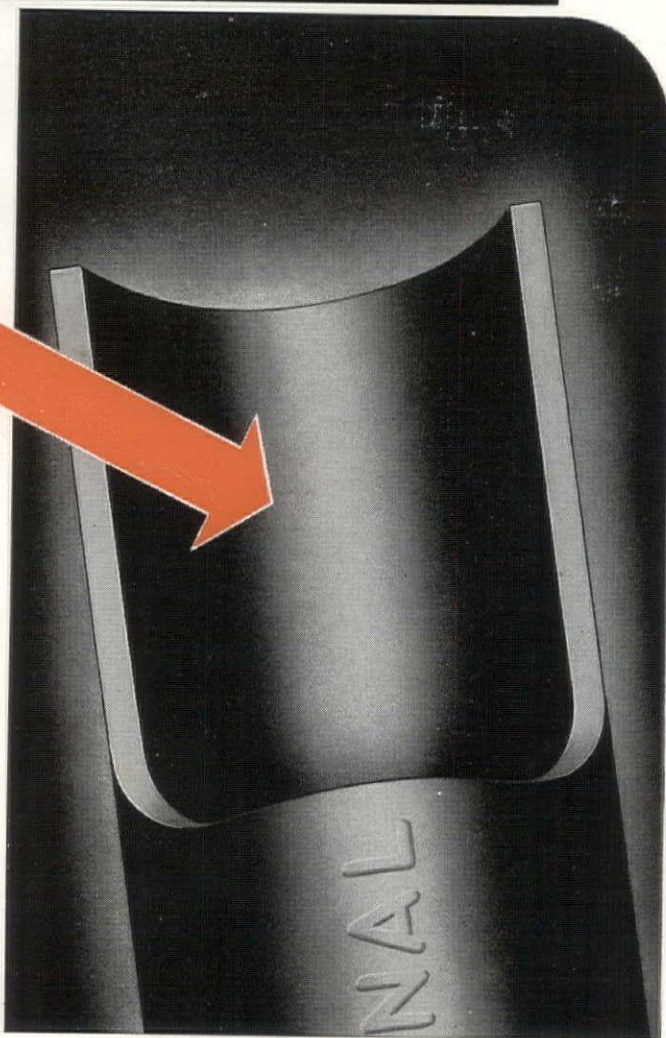
**begin with smooth,  
clean, scale free pipe**

The foundation of successful performance in a piping system lies in the intelligent selection of the pipe— and, in good, sound installation practice. It costs more to use pipe that will assure better performance and greater economy in the long run—pipe that has real "plus" qualities, such as the NATIONAL Scale Free Spellerizing features. A good workmanlike installation deserves to be backed by pipe that will measure up to every expectation of both the installer and the owner. The NATIONAL Scale Free process (applied to butt-weld pipe 1/2 to 3-inch) and the Spellerizing process (size 4-inch and under) give a real protection against corrosion, while the uniform, strong, ductile steel and good threading qualities of NATIONAL make for easier and quicker time on the job. Consistent specification in the plumbing and piping field by leading architects and engineers for many years has made NATIONAL Scale Free Pipe—

*America's Standard Wrought Pipe*

NATIONAL TUBE COMPANY • Pittsburgh, Pa.  
Pacific Coast Distributors—COLUMBIA STEEL CO., San Francisco, Calif.  
East Distributors—UNITED STATES STEEL PRODUCTS CO., New York, N. Y.

*United States Steel Corporation Subsidiary*

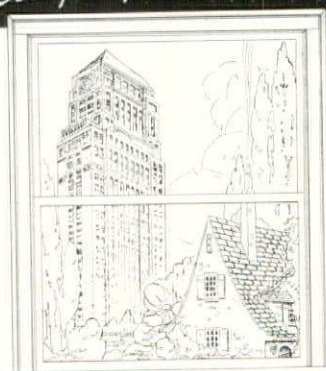


**CHROMATE TREATMENT**—All National Galvanized Pipe is given a special chromate treatment to resist discoloration and the formation of white rust. This patented process preserves that smooth, glistening surface or metallic lustre which is characteristic of good galvanizing.

## NATIONAL SCALE FREE PIPE SPELLERIZED



Everything the name implies—



**ACCURATE**  
METAL WEATHER STRIPS

## All Installations Guaranteed for Life of Building

**A**bsolute precision in manufacture characterizes all Accurate Metal Weather Strip.

**C**ontinuous improvement over a 30 year period assures the latest development in metal weather strip design.

**C**old winds, dust, moisture are effectually barred when windows and doors are Accurate Metal stripped.

**U**most dependability under all service conditions has helped to make Accurate the leading weather strip of the present day.

**R**eputation must be sustained, so Accurate strip is subjected to rigid inspection from raw material to finished product.

**A**ir conditioning demands tightly sealed windows and doors, so Accurate Metal Weather Strip is widely used for this purpose.

**T**he proof of Accurate superiority lies in its performance. Try out Accurate on your next weather strip requirement.

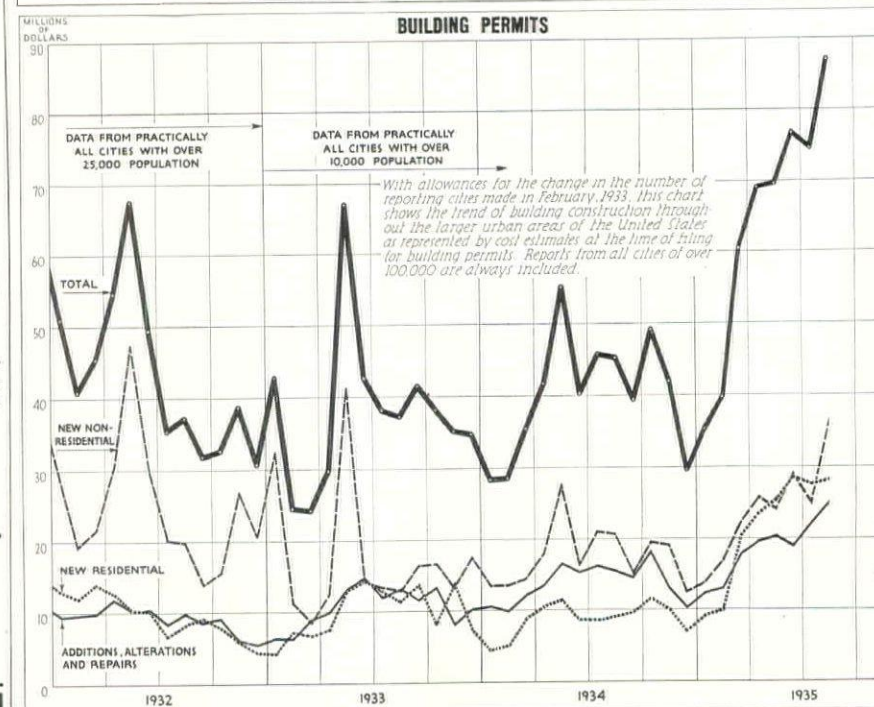
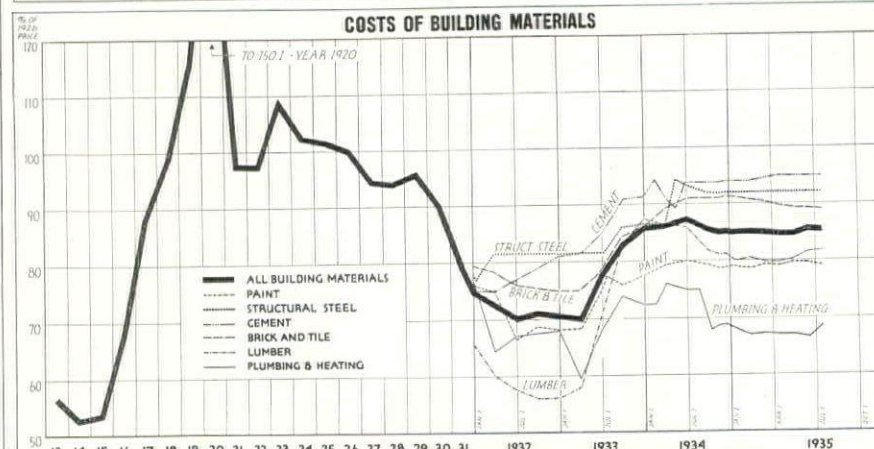
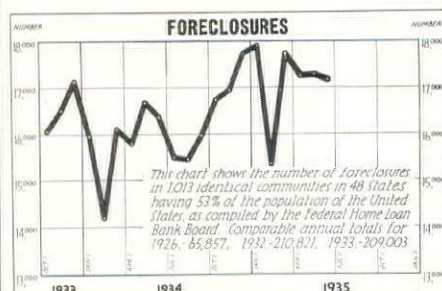
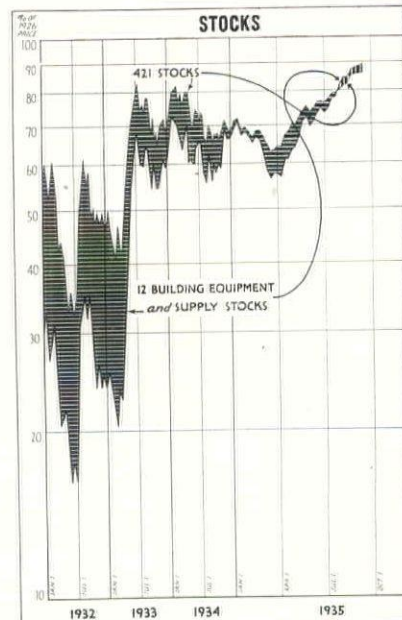
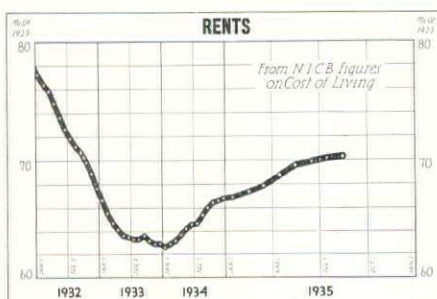
**E**ither write or phone for list of typical installations and let us help you select the type of strip best suited to your specific needs.

**ACCURATE**  
**Metal Weather Strip Co.**  
214 East 26th Street, New York



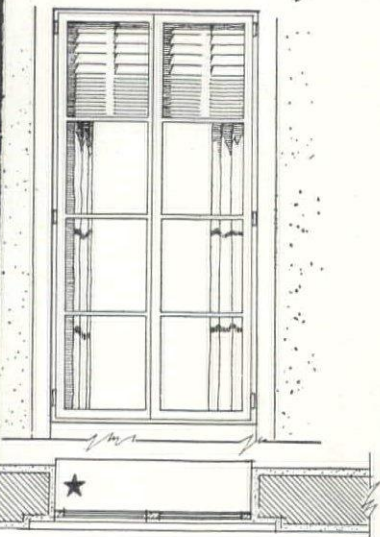
## RESIDENTIAL BUILDING'S PACE

shows no sign of slackening, with rising rents forecasting more gains for the rest of '35.

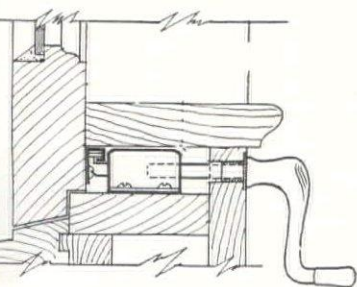




## E Good CASEMENT PENDS UPON Good



## Hardware



tail of Win-Dor Series 26 Operator under stool installation.

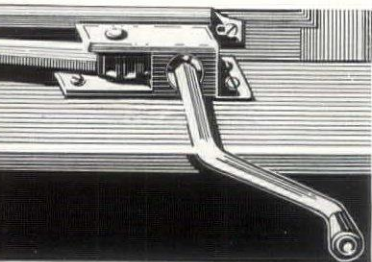
★ The first consideration in casement window installation is **CONVENIENCE** which only hardware can provide. . . . It need not be expensive but it cannot be cheap, for satisfactory window operation and control demands a product of quality. For over thirty years the Win-Dor has identified hardware of this type. It is designed and manufactured by specialists who make nothing else. Win-Dor meets requirements of all modern casements. Our hardware is available on controlling devices for wood and steel windows. Write for it. Insist on this identification in your specifications.

# Win-Dor

**CASEMENT HARDWARE CO.**  
406 N. WOOD STREET

Always in Sweet's. Members: The Producer's Council.

Illustrating typical surface installation Series 26 Operator.



## A COUZENS GIFT

of \$550,000 propels a U.S. housing venture in decentralization.

A PLEASANT land of lakes, rolling hills and wooded dells lies north and west of Detroit, Michigan. It is now a convenient playground for the thousands of families whose pay envelopes are filled with Ford and General Motors money. The automobile industry once concentrated in Detroit, has in recent years begun the decentralization which Henry Ford forecast as long ago as the dawn of the 1920's. Today the industry's activities have been dispersed to former farming centers in the neighborhood of Detroit; Flint, Pontiac and Lansing have become busy centers of General Motors activity; a score of small communities have been activated by the Ford program of decentralization, and the automobile industry actually surrounds the belt of hills and lakes north and west of Detroit.

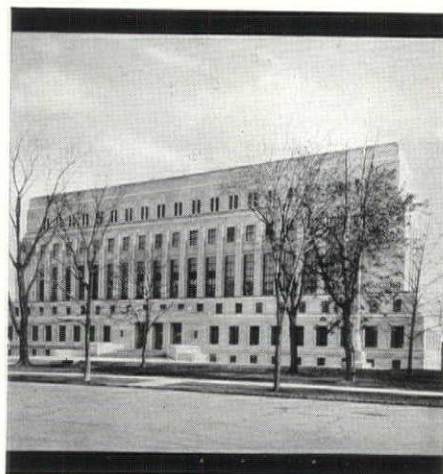


Harris & Ewing

### Senator Couzens

Within that pleasant area, on an 850-acre tract lying 32 miles northwest of Detroit, construction began last month on the first 50 of 150 houses for a subsistence homestead project financed jointly, and in some respects, strangely by the Federal Government and affluent Senator James Couzens, onetime associate of Henry Ford.

Unnamed as yet, the project has been incorporated under Michigan laws as Oakland Housing, Inc., with a term existence of 30 years, which may be extended. A non-profit organization, it is directed by Chairman William J. Norton, who is also secretary of the Children's Fund of Michigan, another Senator Couzens' philanthropy which he founded with an initial gift of \$10,000,000.



● The Sheboygan County Court House, Sheboygan, Wisconsin. A modern and beautiful building housing two fine court rooms with accessory offices, and the county jail on the top floor. Architects: W. C. Weeks, Inc., and K. M. Vitzthum Co.

## Court of Law

● While man's laws may be interpreted variously, according to circumstances, the laws of nature, on which automatic control is based, do not alter. In this fine building, natural laws work constantly to maintain uniform temperature in jail and court rooms.

● Our thorough understanding of the basic fundamentals of automatic control, and our experience in applying them, justifies your calling us in to pass judgment on—and to help you with—any of your heating, ventilating, and air conditioning problems.

## Barber-Colman Temperature and Humidity Controls

BARBER-COLMAN COMPANY, ROCKFORD, ILL.

● A view of the fan room in the Sheboygan County Court House, showing parts of the court room and jail systems, with their automatic controls.

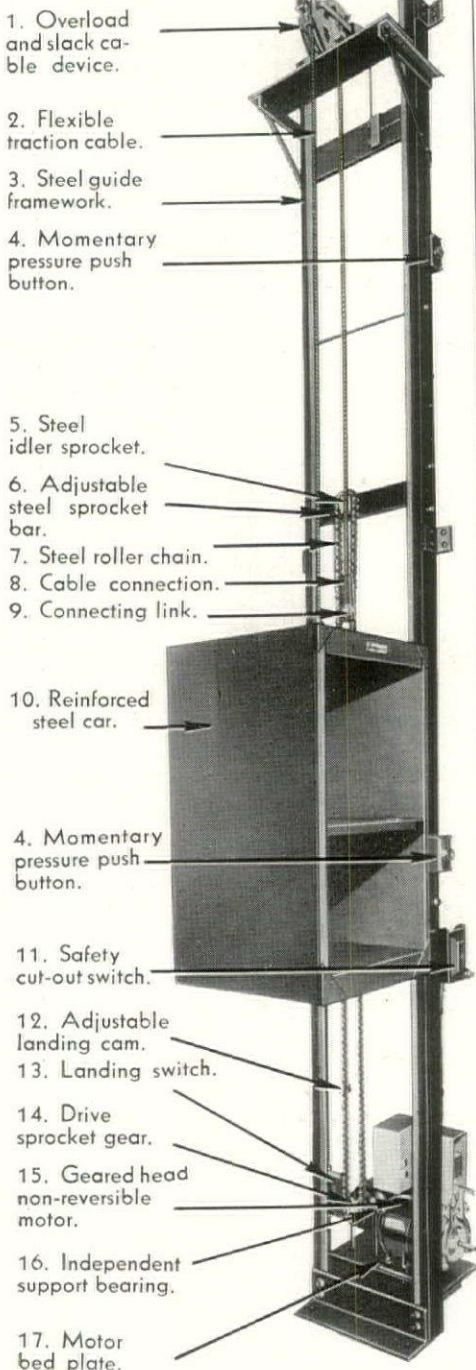




# THE NEW SEDGWICK ELECTRIC **Roto-Waiter**

Registered Trade Mark  
Patented in the United States and Canada

## THE MODERN WORD FOR FULL AUTOMATIC ELECTRIC DUMB WAITER EQUIPMENT



*Better Service at Lower Cost  
Safe, Compact, Durable and  
Economical*

Write for New Catalog and Complete Data  
**SEDGWICK MACHINE WORKS**  
Established 1893  
140 West 15th Street, New York, N. Y.

The land was acquired last June, when Senator Couzens donated \$550,000 to the Federal Government to supplement the Government's \$300,000 appropriation for a workingmen's subsistence homestead project in Oakland County.

Senator Couzens' donation was accepted by Harry L. Hopkins, FERA Administrator, with an agreement that the Government would spend the first \$300,000 and then draw upon the Couzens' grant for the remaining cost.

"If the work should cost more than the \$850,000 thus provided," said Mr. Norton, "it is Senator Couzens' intention to see it to completion."

During the past summer the plans for the 150 houses that are to be ready next spring were completed by Barton P. Jenks, Jr., FERA supervising architect, and his staff. Each home will have about an acre of land for its "back yard," an acre which may be cultivated by factory workers in their spare time, and during seasonal unemployment. Each house will face on a street, designed to accommodate a family of six, construction being planned to permit facility of later expansion. The houses, all with attached garages, are of different design, but average about 26 x 22 ft. Typical is one having a living room (11 x 20 ft., 6 in.), kitchen, dining alcove, garage and terrace on the ground floor, and three bedrooms and bath room on the second floor.

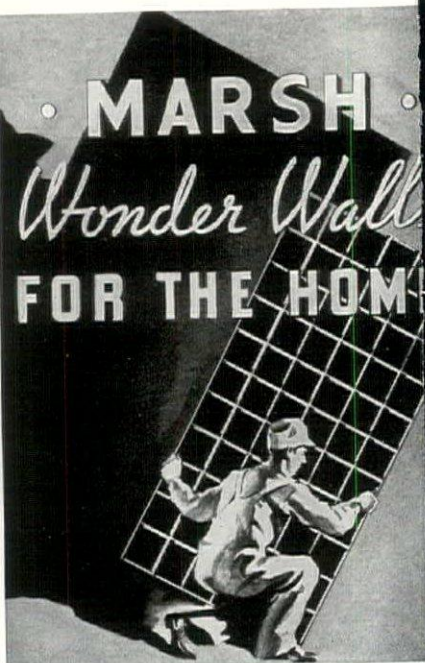
There will be no basements. Utility rooms will contain laundry equipment, storage accommodations and forced circulation hot air heating system. Garages will house work benches. Bedrooms will be large enough to accommodate two single beds; closets will be large; and windows, with metal casements, will be larger than those ordinarily used in houses of such dimensions. All houses will be insulated and interiors will be furred and plastered. First floor exteriors are of slag and cinder block; second floor, wide siding and shingles; roofs, asphalt slate.

The first of the houses will be finished by January 1, 1936.

When the 150 houses are completed next spring, the homesteads will occupy approximately one-third of the available acreage. Plans call for the farming of a 300-acre tract of which a 70-acre apple orchard is a part, and the installation of a cannery and roadside market. This plot has been planted with rye and fertilized in preparation for farming next spring.

Although the plans make provision for stores, gasoline station, automobile service station, community center, etc., the planners, in deference to Couzens' views, point out that the homesteaders themselves shall have the last word on such phases of the project.

"We are conducting an economic experiment," says Mr. Jenks, "trying to do something on a sound economic basis, and there are no social implications involved. It is not the purpose of the proponents of



● The wall finishes described below are large-sized sheets of pressed wood, made moisture-proof with a highly-burnished, lustrous, easily-washed surface of high durability. They are easily installed over old or new walls with ordinary carpenter tools.

**MARSHTILE** . . . tile-marked sheets in black, white, and many colors, giving tile-effects at a fraction of the usual cost.

**MARLITE** . . . plain sheets, without tile-marking, particularly adaptable to the modern mode of design.

**MARSHMARBLE** . . . accurate photographic reproductions of fine marbles which closely represent the costly beauty of the originals.

**MARSHWOOD** . . . exact photographic reproductions of selected woods, retaining all the beauty of color and grain of the most expensive woodwork.

Marsh Wonder Walls give architects and builders the opportunity to secure unusual artistic effects in kitchens, bathrooms, recreation rooms, and elsewhere at a cost made possible only by these exclusive materials. Complete literature gladly furnished free on request.



See our display in  
Radio City, Shop No. 15  
Concourse, R. C. A.  
Bldg., New York City

**MARSH WALL  
TILE COMPANY**  
101 Marsh Place, Dover, O.  
Exclusive Manufacturers

# MARSHTIL



this project to fit the residents of the community into a planned pattern. We hope to include a community center, and other structures required for the needs and recreation of the homesteaders, but these will be built only as the homesteaders decide upon them."

This phase of the activity was stressed also by Senator Couzens' explanation of his motives at the time the grant was made. At that time the Senator, who is now convalescing in a hospital in Rochester, Minn., called attention to defects in the so-called subsistence homestead policies then advanced, and cautioned against making the beneficiaries of such projects subservient and consciously inferior. Recognizing that decentralization of industry appeared to be inevitable, he expressed distrust of the possibility of forcing the issue by creating communities in the belief that industries would come to them. Confessing that he did not believe that a way had yet been found to make such undertakings economically sound, he added that he believed a solution to the problems would be found, and said:

"While we are waiting for the really effective solution we must permit considerations of social welfare to guide us."

The managing corporation, Michigan ERA men for the most part, will select homesteaders (about 200 applications have been received, none have been acted upon), manage the farm and all properties not taken over by the homesteaders, and decide on future expansion of the homesteads when and if such expansion is deemed advisable.

Although no final decision has been announced, it is believed that homesteads will be sold for approximately \$2,500 on the lease-purchase plan, i.e., no down payment, with the title passing to the occupant after he has built up an equity. To avoid competition with strictly private developers, it is probable that a maximum income ruling will be imposed, probably somewhere between \$1,000 and \$1,500.

In announcing the project, Senator Couzens said:

"In order that men shall not be tied down so that they cannot better their economic status if opportunity offers, I have insisted that the plan include provisions for either purchase on the instalment plan or lease of the property."

It is probable that homesteads will be leased the first two years, enabling the corporation to decide on the desirability of homesteaders as permanent residents. To those who would buy their houses, it is planned to sell at cost with at least twenty years in which to pay the full amount.

Jenks, who is supervising architect for FERA, was born in Brookline, Mass., and had his own office in Boston before he joined the Federal bureau about a year ago. A graduate of Harvard, he attended the Sorbonne and the Ecole des Beaux Arts

and spent a year in a French architect's office in Paris. A slender and nervous young man, he harbors no fixed notions about the future of his profession, sees clearly that revolutionary forces are leavening concepts relative to shelter provisions in the U. S., but ventures no predictions as to the probable manner in which these forces will ultimately manifest themselves. Unlike many of the older men of his profession, he understands the meaning of the current and growing discussion of prefabricated shelter, believes that the trend is definitely in the direction of such shelter, but adds that the movement in that direction will continue to be a groping one

until some individual with great vision enters the field with the objective of creating shelter as the automotive industry produces transportation.

His assistants on the present project are FERA Architects E. G. Van Storch and R. O. Cuppy; Ray C. Perkins, architectural engineer, Royal Oak, Mich.; Miss Genevieve Gillette, Lansing landscape architect, and four architects from Wayne and Oakland counties.

From the unusual quiet in the office of Resettlement Administrator Rexford Tugwell, there came rumors last month that within a month details of a new suburban housing program would be forthcoming.

ADVERTISEMENT

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## MODERN HEATING SHOWS A PROFIT ON 44TH STREET

Webster Moderator System  
Improves Service in N. Y.  
Commerce Building

OWNED BY JACOB RUPPERT  
REALTY CORPORATION

Heating Costs in 31-Story  
Building Reduced \$3,651  
In Single Season

SYSTEM PAYS FOR ITSELF

New York—When an office building counts among its assets a deservedly good name, a fairly stable rental income and an advantageous location, there can be little doubt about the economic soundness of an intelligent program of heating modernization.

Such were conditions in New York's 31-story Commerce Building, at 155 E. 44th Street, when the Cross & Brown Co., Managing Agents of the building, authorized the installation of the Webster Moderator System in the winter of 1933-34.

The Commerce Building is managed by the same firm which installed Webster Systems at 183 and 285 Madison Avenue. Substantial steam savings effected in these buildings were a determining factor in the closing of this modernization contract.

The new system was placed in operation on March 16, 1934. There is a total of 44,000 square feet of installed direct radiation.

From March 16 to June 1, despite the fact that the first few months with a new system are necessarily a period of adjustment, steam savings totaled 900,754 lbs. This is a cash saving of \$768.08.

To heat the Commerce Building for an entire season under the old system required 9,082,000 lbs. of steam.

During 1934-35, the first complete season with the Webster Moderator System, the installation used only 4,954,000 lbs. of steam. This reduction is the equivalent of \$3,651.78.

Savings are figured on the difference between the current steam cost and past monthly steam consumption over a two-year period, after taking into consideration differences in degree day load (a measure of the weather) and changes in occupancy.

With the Webster Moderator System, the Commerce Building has been able to give tenants perfectly balanced heating even during the severest weather. In addition, the investment is paying for itself in reduced steam consumption.

Campbell & Smiley, Inc., who acted as modernization heating contractors for the Commerce Building installation, are developing a steady volume of worthwhile business through concentration on heating system modernization. This is the fourth such modernization contract executed by this enterprising firm of New York heating contractors.

If you are interested in (1) improved heating service and (2) lower heating cost in your building, address  
WARREN WEBSTER & CO., Camden, N. J.  
Pioneers of the Vacuum System Steam Heating  
Branches in 60 principal U. S. Cities—Estab. 1906



## Permanency in DECORATION FEATURES



**AIDS QUICKER  
LOAN APPROVAL**

*... Specify*

## **WALL-TEX** CANVAS WALL COVERING

In submitting specifications for a building or improvement project on your own or a client's property, permanency in decoration carries a lot of weight. The durability and permanency of Wall-Tex as a practical decorative covering for walls and ceilings, insure that it will outlast the loan.

### THESE WALL-TEX FACTS PROVE ITS ADVANTAGES

- 1 Wall-Tex is canvas decorated with permanent oil colors—the same mediums an artist uses. Gives colorings and textures not possible in paper.
- 2 Its strong fabric reinforces plaster walls and ceilings, prevents cracks, hides them if they should occur.
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- 6 Wall-Tex is the perfect base for painting should it ever be desired to change the color scheme.
- 7 Dull prints, glazes, and metallic satins—nearly 200 patterns—for every room.

Let us send you full details. Ask for A.I.A. File Folder No. 23-C-1, including group of Wall-Tex sample patterns particularly desirable for income properties.

**COLUMBUS COATED FABRICS CORP.**  
COLUMBUS, OHIO

*for beauty and long service*

**WALL-TEX**  
DECORATIVE WALL CANVAS

## SEARS ROEBUCK

**boards the prefabrication band-  
wagon with plywood houses.**

LONG before the term "prefabricated houses" was bandied about by the building industry, Sears, Roebuck was in the prefabricated house business. It did not know its business by that name, nor did there hang over it the concealing haze of factory fabrication. Sears sold "ready-cut," stock plan houses. It sold them so well that in its peak year of 1927 its construction department turned in about \$20,000,000 in sales.

Guessing that it was missing just as much business in individually designed and built houses, Sears started a construction department in 1929, advertised widely that it was ready to build any size house in any style and, what was more important, was ready to finance the construction over a period of fifteen years. Had their announcement not preceded by a few months the tailspin of building, Sears today might have been the biggest home builder in the U. S. Instead it took an awful licking that forced it in 1932 to abandon its tailor-made construction, though not its ready-cut, business entirely. One thing Sears learned: Operating on a national basis, it is literally impossible to build to order and make money.

Last month the company announced its entry into real prefabrication. Its ally is a company which made news as the first prefabricated house company — General Houses, Inc., of Chicago, whose premature birth was announced in *Fortune* and *THE ARCHITECTURAL FORUM* in July, 1932.

Sears, Roebuck will sell 30 different models of General Houses' prefabricated dwellings, ranging in price from \$2,900 to \$4,200. But they will not be the all-steel houses that General Houses sells to its regular customers. Instead they will have a plywood exterior, which besides pulling the cost of the house down into a price range that Sears things it can sell, ought

to appeal more immediately to Sears' rural and suburban trade.

Besides selling the houses through its widely scattered retail stores, this fall it will issue a new catalogue of the houses, will incorporate the best sellers in the general catalogue at some future undetermined date. As it does with standard make refrigerators and other items of equipment, Sears will market the houses as Sears houses, not as General Houses.

In charge of the division which will handle the new items in the catalogue will be Louis Roy Walker, supervisor of Sears home construction, and veteran building man.

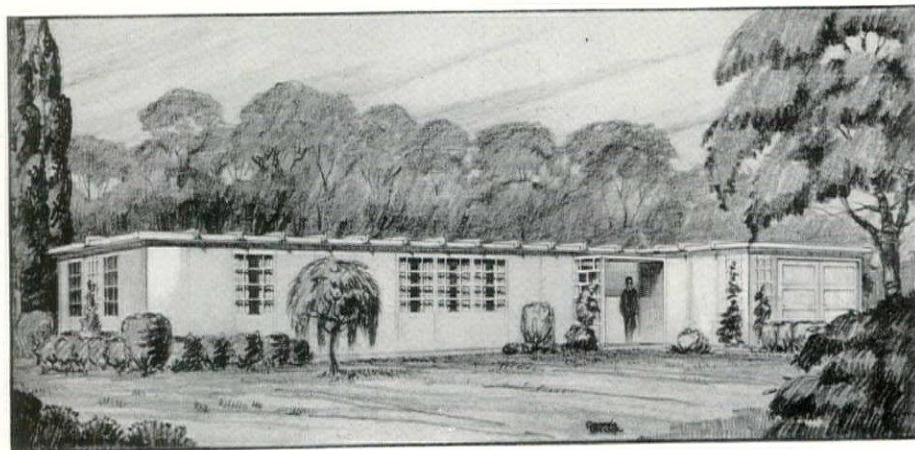
To show off its wares, the company will build a model house in Chicago (see cut). The display house, costing about \$3,500, will contain five rooms—living room 13x16, dining room 10x10, kitchen 8x13, and two bedrooms 10x13 and 10x16—as well as a bath, a garage 13x20, and a utility-storage room in which will be stored the heating equipment and laundry tubs.

Different in construction from past General Houses units, all structural framing members such as joists and studs are to be of specially formed steel shapes. Walls will be of two thicknesses of plywood thoroughly insulated, the outer plywood being waterproof, and made with a thermoplastic adhesive in a hot plate press.

The roof, to be doubly insulated, will be of flat steel unit construction, modern in appearance. Windows will be of the steel casement type furnished complete with curtain tracks and hinged screens.

Exclusive of their foundation and final painting, the new Sears homes will be prefabricated from front to back and top to bottom. With the exception of the ingredients for the foundation—cement, sand, gravel, and cinders—Sears will supply every inch and ounce of materials and equipment to be used in assembling the house. It will leave actual construction, however, to local contractors.

Houses will be confined to the single story type for the present but it was indicated two-story structures will be offered at a later date.



**Sears' First Prefabricated House**



## A WALL ST. HOUSE

seeks to make a market for  
FHA insured mortgages.

THE same day that Morgan Stanley and Co., underwriting offshoot of J. P. Morgan & Co., offered its first issue last month, an offering, less spectacular, but far more significant to the building industry, was made by the likewise consequential firm of Pask & Walbridge. Trust officers, insurance company treasurers, bond buyers for institutions folded back the New York Times and read with interest, if not complete understanding, an advertisement for \$1,250,000 worth of FHA mortgages. It was the first such offering they or anyone else had seen.

Their interest lay in the phrase "at prices to yield 4½ to 5 per cent," but to the building industry the yield was of only minor concern compared with the simple fact that a Wall Street brokerage house was offering to sell FHA mortgages. For the industry has long known that if a market for mortgages could be made, construction funds would pour from lending institutions like water.

Several months ago, after a study of the NHA, R. Gould Morehead, Pask & Walbridge partner, concluded that mortgage insurance gave to mortgages what they had never had before—uniformity. In the transfer of such a mortgage there was no need for fresh appraisals, no need for the buyer even to see the property. Since that has always been the most serious handicap to marketability of mortgages, Broker Morehead saw no reason why they could not be as salable as bonds.

Accordingly, the firm of Pask & Walbridge talked to possible institutional buyers, found them sympathetic. It then communicated with banks in a few States, expressing its intention of acting as broker between the mortgage seller and buyer. The result was that the firm was swamped with offers to sell. Because it is not an approved mortgagee and therefore cannot actually own an FHA mortgage, Pask & Walbridge arranged with the Manufacturers Trust Co. and the New York Trust Co. to receive the mortgages direct from the sellers and make deliveries direct to the buyers. With that as its set-up, the New York Times advertisement was inserted.

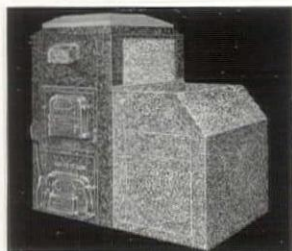
While it refused to disclose the specific results of the offering, the firm admitted that the response had been more than satisfactory and it planned to extend its service as a broker for FHA mortgages. As it always does, the news of Pask & Walbridge's effort spread quickly through Wall Street. Research departments of other firms dug out of the files copies of the NHA to determine how they too might add FHA mortgages to their scant and none too attractive inventories.

# You Can Specify

## MONCRIEF AIR CONDITIONING SYSTEMS...

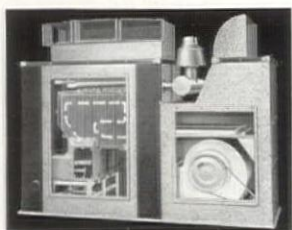
### with Confidence

#### ● for coal



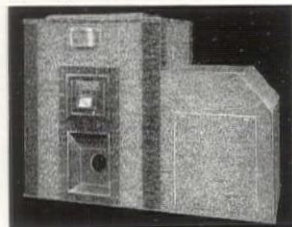
Moncrief "Aristocrat"—Heating unit either of cast or steel construction, for hand or stoker firing. Casing has galvanized metal floor forming dust-tight air chamber. Patented wind-box distributes air flow evenly over surfaces of heating unit.

#### ● for gas



Moncrief Gas Air Conditioning Unit—Heating chambers present extra large radiating surfaces in relation to gas input. Very economical. Heats, cleans, circulates and humidifies. With automatic controls, it requires no operating attention whatever.

#### ● for oil



● In the extensive Moncrief line the architect and the builder have at their command units to provide every type of house with complete winter air conditioning at reasonable cost.

Moncrief Air Conditioning Systems have, over many years, earned noteworthy reputations for efficiency, reliability and fuel economy. The experience of thirty-eight years in building heating equipment for homes has contributed their excellence of design, construction and performance. Made in many types for gas, coal, or oil, and in a wide range of sizes, of both cast and steel construction.

Modern in every particular, substantially built, and beautifully finished, they afford every benefit of winter air conditioning, and assure long trouble free service. Moderately priced, they present the home owner plus values.

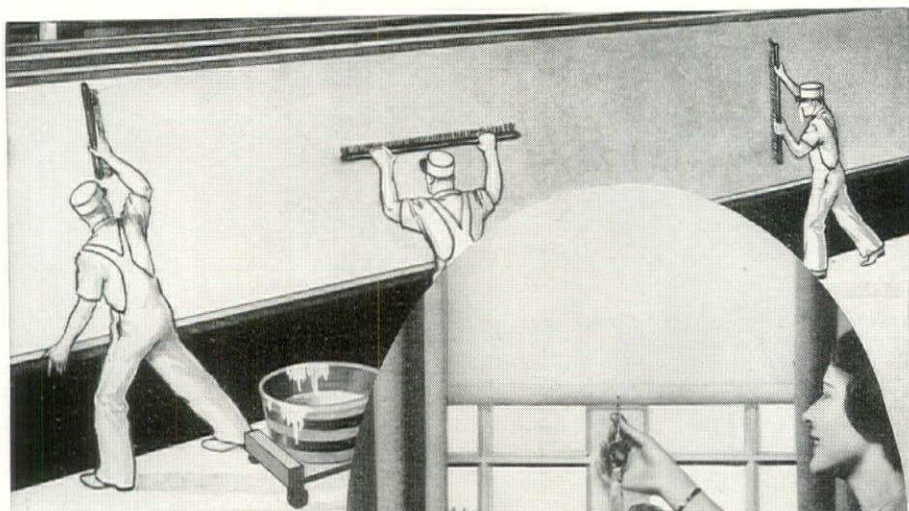
Send for illustrated descriptive literature and engineering data sheets.

**The Henry Furnace & Foundry Co.**  
3485 E. 49th St. Cleveland, Ohio

*Moncrief Engineering Service is freely available to Architects and Builders.*

Moncrief Oil Fire "Aristocrat"—Made also with vestibule enclosing oil burner and entire front. Takes any standard make oil burner. "Aristocrats" include blower, filters, humidifier, patented windbox. Superior units in every particular.





# You Can't Beat HAND MADE WINDOW SHADES *for Looks or Wear*

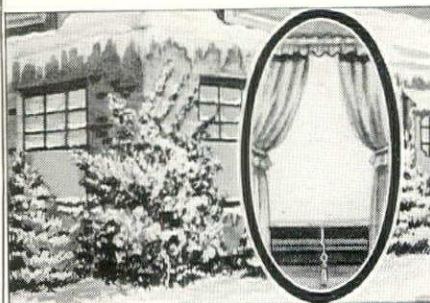
WHEN you buy new window shades ask the salesman—"Are they Hand Made?" Then you will be sure to get 3 to 5 times more wear than you would ever be able to get from shades of inferior quality.

Hand Made *Luxor* and *Victor* shade cloths contain none of the cheap clay filling that is used in inferior grades, so of course, they do not readily crack or pin-hole, even when roughly treated. Against sun and moisture—the window shade's greatest enemy—they are thoroughly protected with pure linseed oil colors, brushed into the fabric *by hand*.

We manufacture, of course, many other grades of window shades. But with no other process of manufacture have we or any other manufacturer been able to duplicate the qualities that have made *Luxor* and *Victor* Hand Made window shades the first choice of home owners for more than 50 years.

Your dealer, too, will recommend Hand Made window shades. He knows from experience that they are far more decorative and far more durable than window shades made in any other manner.

## CUT FUEL BILLS WITH WINDOW SHADES



"By hanging a pair of shades at every window, and keeping them drawn at night," says the research department of a famous university, "you can reduce the dissipation of heat by more than 43 per cent, and thus effect a very noticeable saving in your heating costs." Thousands of home owners have learned that drawn shades keep the home warm in winter and cool in summer.

### MAIL THIS COUPON FOR SAMPLES

THE WESTERN SHADE CLOTH CO.  
Cermak Rd. & Jefferson St., Chicago, Illinois  
or  
WILLIAM VOLKER & CO.  
Main, Second and Third Sts., Kansas City, Mo.  
Please send samples of HAND MADE shade cloth  
and your booklet, "The Inside Story."

Name.....  
Address.....

# LUXOR & VICTOR

## WINDOW SHADES ARE HAND MADE

## MINIMUM STANDARDS

set for one and two-family houses  
by Brooklyn savings banks.

FOLLOWING close on the heels of its minimum specifications for apartment houses, the Group Five Mortgage Information Bureau, cooperative research unit of Brooklyn, N. Y. savings banks (Arch. Forum, Aug., 1935, p. 152), issued last month an 18-page pamphlet covering one and two-family houses. The specifications, covering every item from general conditions to built-in equipment, were prepared by a savings bank committee, headed by Webster J. Caye, and including Adolph Goldberg and Paul W. Connelly.

What makes the work significant is that the specifications are not recommended, but mandatory. Says the committee, "Savings banks which have adopted these requirements will insist that any building on which they make a loan started after September, 1935, shall follow these minimum specifications. Builders are advised to make their contracts with the banks before starting construction, and owners are urged to insist on the requirements if they want loan approvals.

While the specifications contain no radical departures, they follow accepted practice closely. Sample paragraphs:

"The use of recognized architectural design will be preferred to modernistic forms of architecture. This will not preclude the use of 'modern' architecture but it is intended to discourage freak designs. . .

"Fireproof or semi-fireproof buildings shall be encouraged. . .

"The use of approved insulation material at least 1" thick on all roofs shall be required. . .

"Pitched roofs shall be covered with an asphalt felt of not less than 20 lbs. per sq. ft. and roofed with either copper, tile, slate, or rigid asbestos shingles. . . The use of paper asphalt shingles will be prohibited. . .

"The use of wall boards for walls and ceilings shall be permitted only for very low cost buildings. . .

"All plumbing fixtures shall be either 'Standard,' 'Kohler,' 'Crane,' 'Briggs,' or equal as approved. . .

"Where showers are installed. . . the use of tile or marble stalls with chrome plated glazed doors shall be required in preference to shower curtains. . .

"It is recommended that built-in brass or cast iron convectors be used in place of open radiation. . .

"Each building shall be equipped with mechanical refrigeration of standard manufacture. . .

"All kitchens shall be covered with either Grade B or better linoleum double cemented on felt or tiled with soft tile subject to approval."



# If Floor Coverings ...Could Talk!



*The AZROCK line of products  
includes Carpet Tile, Floor  
Tile, Industrial Tile and Tex-  
tured Plank.*

**AZROCK**  
(TRADE MARK REG. U. S. PAT. OFF.)  
**CARPET TILE**

AZROCK CARPET TILE could tell you just how easy it is for the cushiony resilience of this unusual floor covering to cling smoothly to its subfloor. AZROCK will not crack, warp nor fade. In addition, it is sound-absorbing, fire-resistant and easy to maintain. Specify AZROCK for any interior floor and it will meet your most exacting standard for durability and service. At the same time, your client gets just what he wants: a beautifully modern floor covering, distinctive yet inexpensive, with colorful patterns to harmonize with your decorative theme.

Uvalde Rock Asphalt Company  
San Antonio, Texas.

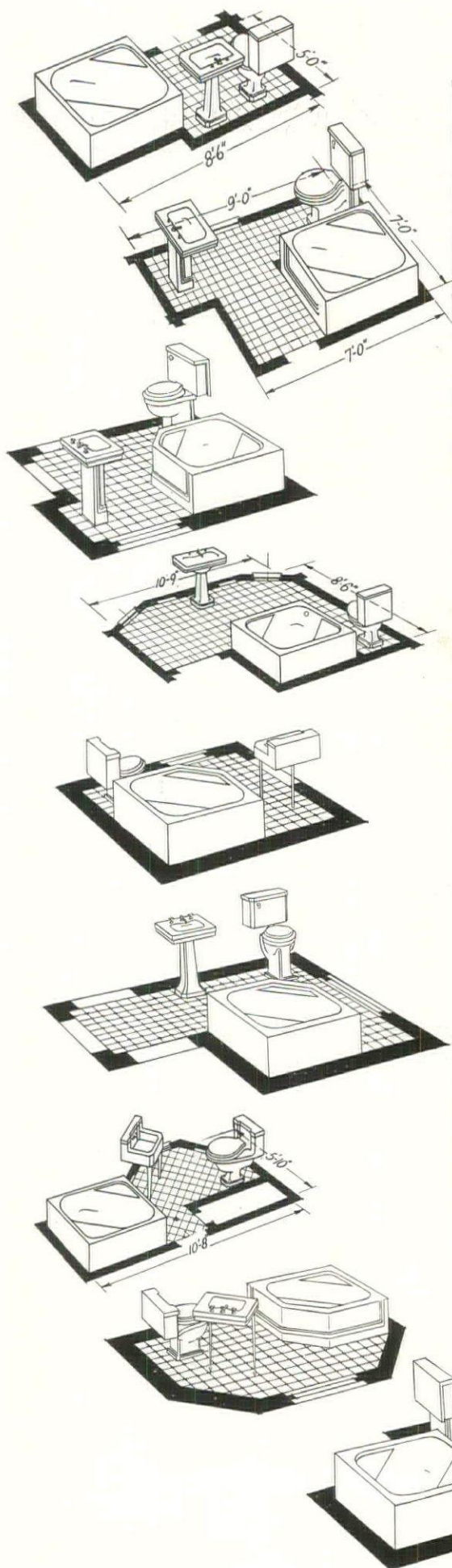
Without obligation, please send me more information about  
AZROCK Carpet Tile.

Name \_\_\_\_\_ Address \_\_\_\_\_

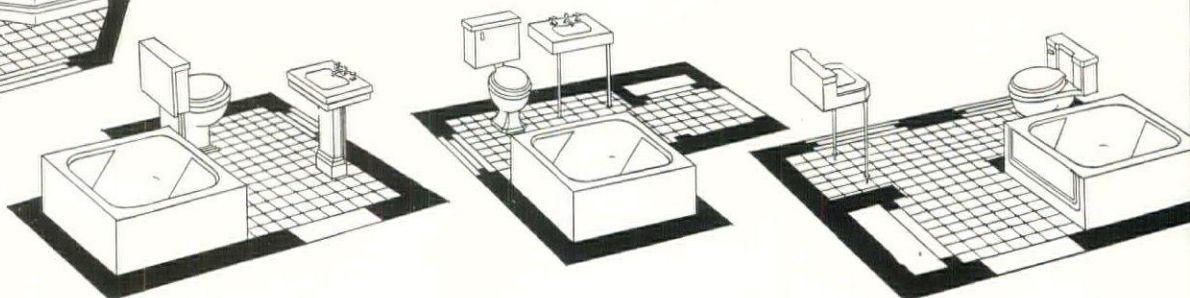


# THE BATH

## that opens a new era



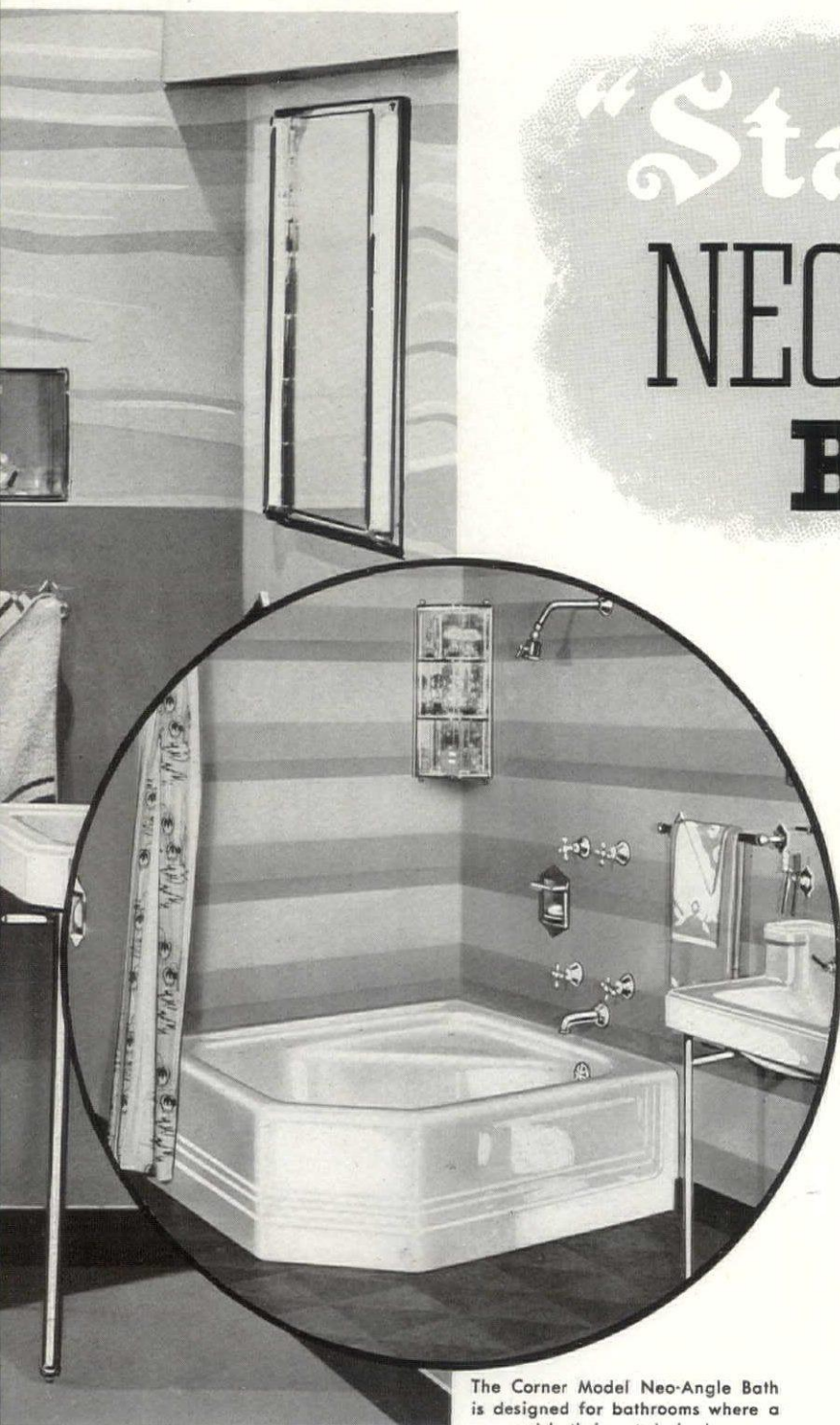
The "Standard" Neo-Angle Bath, with seats in two opposite corners, is a full-size, roomy bathing space is as long as the usual 5½ ft. tub and 6" wider. The tub measures 48" x





# MODERN BATHROOM design

## "Standard" NEO-ANGLE BATH



The Corner Model Neo-Angle Bath is designed for bathrooms where a recessed bath is not desired.

■ It's new...different...distinctive...and combines all the practical types of bathing in one modern bath. It's a bath that brings a new freedom to modern bathroom design without sacrificing utility. For the "Standard" Neo-Angle Bath is a convenient, roomy, full-size bath that adds beauty and charm to any decorative effect.

■ Shown here are only a few of the many ways in which the Neo-Angle Bath fits almost any modern bathroom. It opens unlimited possibilities for new, unusual and original arrangements, because it is so adaptable to the artistic grouping of other bathroom fixtures. Here, indeed, is the bath of the future for the homes of today.

■ Turn to your "Standard" Catalogue, or write for descriptive literature giving all the details of the "Standard" Neo-Angle Bath for both modernization and new building.

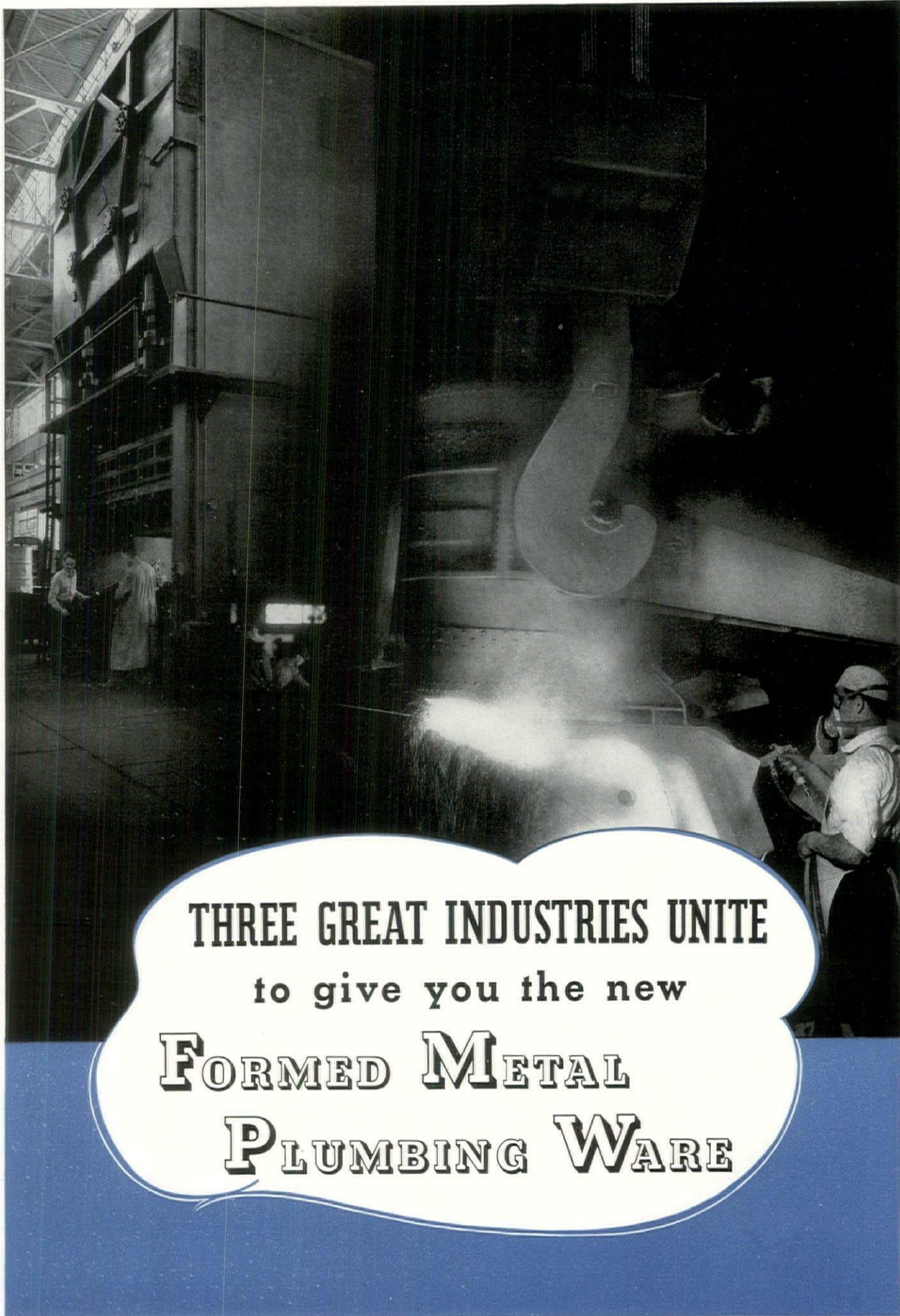
# Standard Sanitary Mfg. Co.

PITTSBURGH, PA.

Division of AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

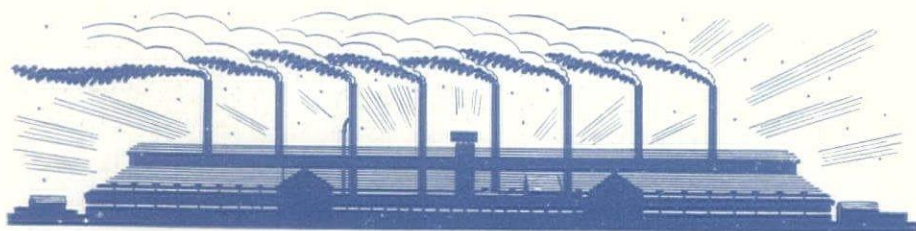






THREE GREAT INDUSTRIES UNITE  
to give you the new  
**FORMED METAL**  
**PLUMBING WARE**





**Y**OU will see in the new *formed metal* plumbing ware a perfect blending of the designer's art, the fabricator's ingenuity, the porcelain enameler's skill, and the steel-maker's long research. Light, strong, rolled metal replaces heavy, ponderous construction. Sheer bulk gives way to grace and style. Multi-color effects replace monotonous sameness of finish.

Formed metal plumbing ware is as new as today. It sounds a refreshing note in a depression-weary age. It is attuned to the times and enables you, the architect, to breathe new inspiration and utility into your creations.

Your clients will welcome this greatly-improved plumbing ware—kitchen sinks, bathtubs, lavatories, closets, cabinets and laundry tubs. You will approve it wholeheartedly, once you have seen how completely it eclipses everything that has gone before.

Formed metal plumbing ware opens a vast field for architects, builders and plumbers. Your clients are expecting new and better materials and products. Their interest is being whetted

every day by new buildings and renovations of the old. They will respond keenly to formed metal fixtures. They will quickly approve your desire to give them the finest that industry affords at a reasonable cost.

And remember, this new-day plumbing ware is porcelain enameled on Armco INGOT IRON—a metal scientifically made to form perfectly in the giant presses and to hold the lustrous, life-time porcelain enamel. Widely advertised, and used for years by the leading manufacturers of ranges, refrigerators, washing machines and other familiar household appliances, Armco INGOT IRON is known as "the world's standard enameling iron." You'll find a ready acceptance among your clients for this well-known metal.

Formed metal plumbing ware offers you and your clients new designs and color combinations, greater utility, proved installation economy, and definite assurance of lasting satisfaction. Now you can meet the challenge of a more exacting period with a completely new line of modern plumbing ware—*made entirely of formed metal*.

## THE AMERICAN ROLLING MILL COMPANY

• Millions of people know the familiar Armco trademark as a sign of the highest quality in porcelain enameled products.

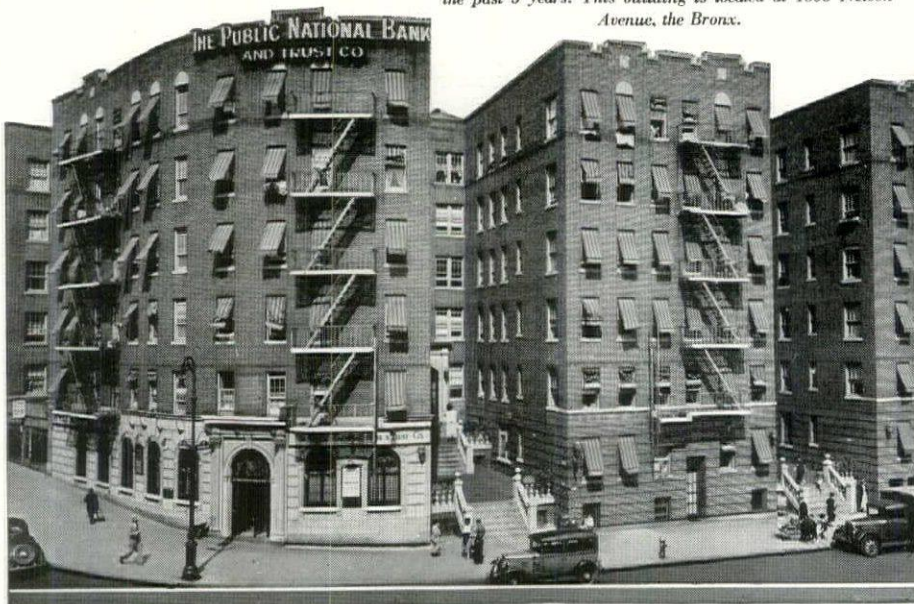
Executive Offices, Middletown, O.  
District Offices in All Key Cities

• For more than twenty years buyers have been reading Armco advertising and for seven years listening to Armco on the air.



# INSTALLED BY THIS BUILDER IN MORE THAN 1,000 APARTMENTS

One of the apartment buildings which Mr. Harold P. Dworsky, New York builder, has equipped with Electrolux during the past 3 years. This building is located at 1605 Nelson Avenue, the Bronx.



*"Electrolux has fully lived up to every claim made for it"*

says HAROLD P. DWORSKY, of 1440 Broadway, N. Y. C.

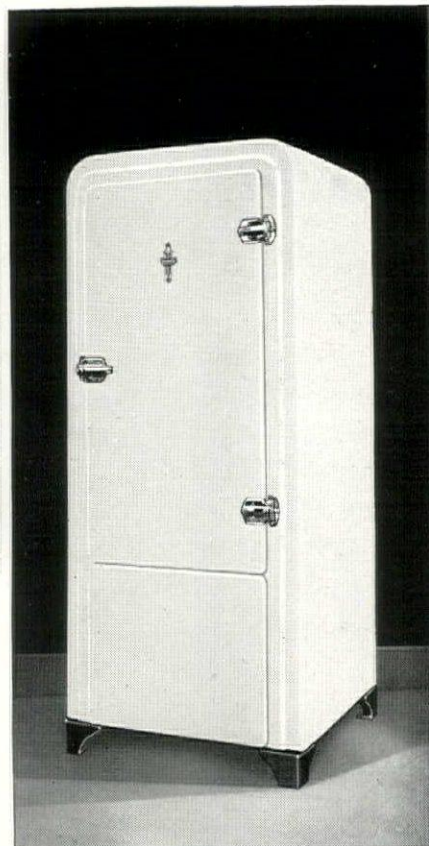
## MR. DWORSKY WRITES:

"Our original choice of the gas refrigerator for our properties was made because it has no moving parts to get out of order, because of its silence, and because the gas company stood back of and serviced Electrolux. During the past 3 years, we have installed more than 1,000 water-cooled and air-cooled Electrolux, and I am happy to state that Electrolux has fully lived up to every claim made for it."

THE New York builder's experience quoted above is typical of the experience of builders and owners the country over who have installed Electrolux in their properties. And it explains clearly why this modern gas refrigerator is such an overwhelming favorite—both for original equipment

and to replace other types of automatic refrigeration! In New York City alone, Electrolux has been selected for more than 4500 apartment buildings.

The reason for the utter dependability and efficiency of Electrolux is its basically different method of operation. A tiny gas flame takes the place of all moving parts. It circulates the simple refrigerant, which is cooled by ordinary air. This absence of moving parts that wear and cause noise eliminates probably the biggest sources of refrigeration complaint, interrupted service and high maintenance costs. In addition, your local gas company backs and services every



Electrolux it sells. Another important advantage to you!

You will find it well worth your while to investigate Electrolux thoroughly before choosing any refrigerator for your properties. Electrolux gives you more—and it gives your tenants more, too. Tenants appreciate the low running cost which the simpler operation of Electrolux makes possible. And they appreciate, as well, its smart modern beauty, its many worthwhile conveniences. Electrolux is on display at your local gas company showroom. See the new models today. Servel, Inc., Electrolux Refrigerator Sales Div., Evansville, Ind.

NEW *Air-Cooled* ELECTROLUX  
THE SERVEL *Gas* REFRIGERATOR



# THE NEW SUNBEAM AIR CONDITIONING UNIT

**I**N THE NEW SUNBEAM Oil Burning Air Conditioning Unit, a pioneer organization in the heating, ventilating and air conditioning industry combines with efficiency of the highest order, beauty and attractiveness that heretofore have never been attained!

It is the result of 50 years of heating experience . . . the result of successful air conditioning installations that number well into the thousands . . . installations that have performed successfully for several years, from New York to San Francisco and from Minnesota to Texas.

There is a Sunbeam Air Conditioning Unit for every type of home, large or small — and for every kind of fuel, gas, oil or coal, stoker-fired or hand-fired.

The services of a capable staff of factory engineers, who will prepare air conditioning layouts from building plans, are available to architects.

The coupon below will bring you data on Sunbeam Air Conditioning equipment. Fill in your name and return it — today.

**THE FOX FURNACE COMPANY**  
**ELYRIA, OHIO**

*A Division of*  
**AMERICAN RADIATOR & STANDARD SANITARY CORP'N**

**SUNBEAM**  
**AIR CONDITIONING UNIT**



**The Sunbeam Oil Burning Air Conditioning Unit**

THE FOX FURNACE COMPANY  
ELYRIA, OHIO

● Please send descriptive literature on the new Sunbeam Oil Burning Air Conditioner, also complete data on the five other types of Sunbeam Units.

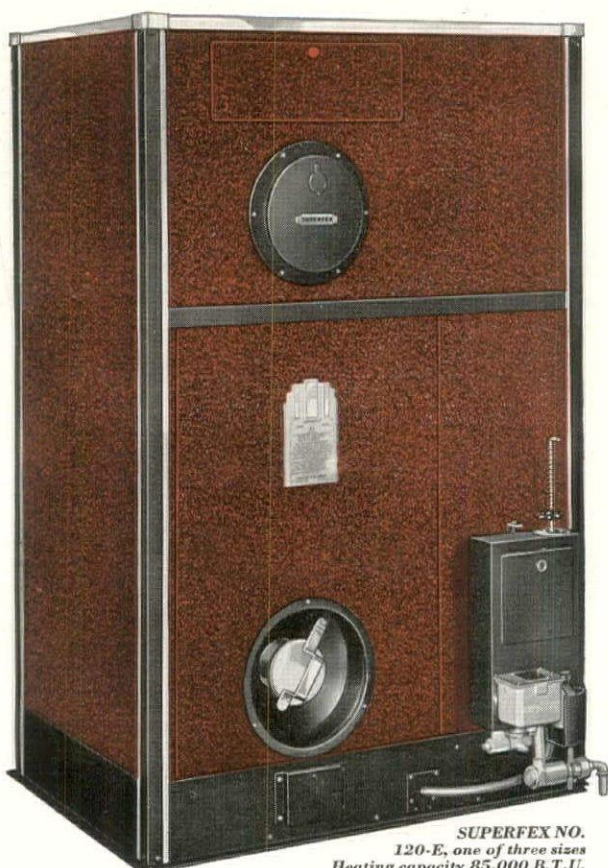
NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY and STATE \_\_\_\_\_



# LOW COST AIR CONDITIONING AND HEATING PLANT THAT sells HOUSES



SUPERFEX NO.  
120-E, one of three sizes  
Heating capacity 85,000 B.T.U.

## Read what Superfex owners say:

"Have had this heating plant serving us for three winters. It has worked beautifully all this time."

"Not dependent on electricity in case of severe storm."

"Cheaper than coal. No dust. Even heat at all times. Needs no attention during a busy day."

"It is clean, reliable, efficient, quiet, economical."

"On account this machine relieving me of asthma which I had for 21 years, I operate more than others would find necessary."

"I would buy another Superfex for the reasons they are clean, economical, and labor-free."

## SPECIAL ADVANTAGES OF SUPERFEX AIR CONDITIONING HEATING PLANTS

TYPE	Automatic Heat	Automatic Air Circulation	Automatic Air Humidification	Automatic Air Filtration	Added Summer Comfort
<b>SUPERFEX</b>	YES	YES	YES	YES	YES
Hot Water Plant	YES	No	No	No	No
Steam Plant	YES	No	No	No	No
Vapor Plant	YES	No	No	No	No



ARCHITECTS • BUILDERS • HOME OWNERS ... Send this coupon

PRODUCT OF PERFECTION STOVE COMPANY

# SUPERFEX

Complete automatic oil burning heating plant that conditions air

Modern **SUPERFEX** oil burning plant circulates cool, clean, air in summer and automatically warmed, humidified, filtered air in winter. Costs no more than automatic hot water heat!

**T**HE more livable the house, the easier it is to sell. This is demonstrated, daily, by cases in which homes having Superfex air conditioning installations have quickly outsold similar houses having ordinary systems.

## Single-unit plant provides summer and winter comfort

When you put a Superfex automatic oil burning air conditioning heating plant in a house, the one installation assures healthful comfort the year round. In summer, circulated, cool, pollen-free air; in winter, circulated, filtered and humidified warm air. Superfex heating dependability has been proved by years of satisfactory service including sub-zero weather.

## There's nothing complicated about Superfex

The Superfex method of burning oil is simple. It is completely automatic—year-round air conditioning in its simplest, most economical form. Superfex is made by Perfection Stove Company, for 45 years the world's leading manufacturer of oil burning equipment.

Everyone interested in new construction should investigate the surprisingly low cost of the Superfex oil burning heating plant that conditions air.

PERFECTION STOVE CO., 7671-A Platt Ave., Cleveland, Ohio

I would like to know more about the modern, clean, economical SUPERFEX automatic oil burning heating plant that conditions air.

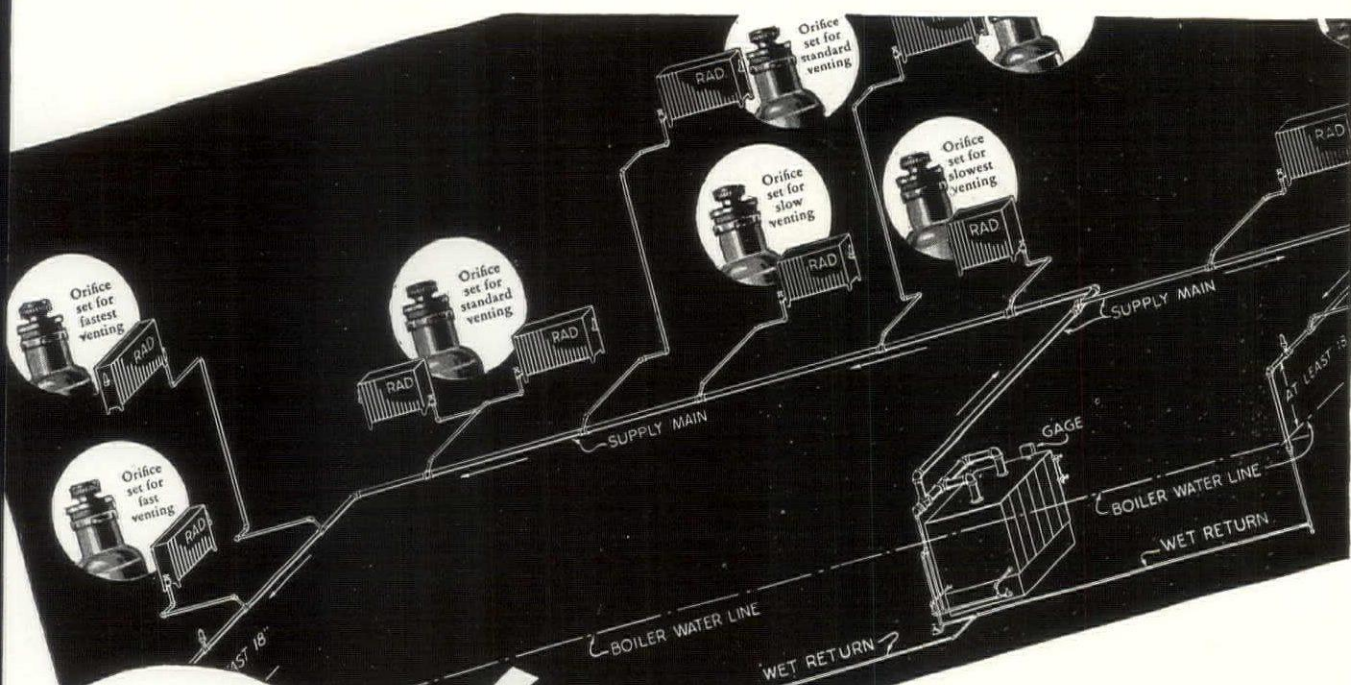
Please check: ☐ Architect ☐ Engineer  
☐ Builder ☐ Planning new home

Name \_\_\_\_\_

Street \_\_\_\_\_

Post Office \_\_\_\_\_ State \_\_\_\_\_





# 6-SPEED VENTING

## NOW BRINGS INDIVIDUAL RADIATOR CONTROL TO ONE-PIPE STEAM SYSTEMS

Lack of "balance" — the inherent disadvantage of one-pipe steam heating systems — can now be corrected by a new device incorporated in all Hoffman Air and Vacuum Radiator Valves. The Hoffman Adjustable Orifice Venting Port makes available six venting speeds, which permit an accurate control of the rate of steam flow into the radiators.

By a simple adjustment in the Venting Port size, large or distant radiators can be made to heat faster and smaller radiators slower. Thus a "balance" is achieved in which all radiators heat in equal proportion, regardless of size or distance from the boiler.

Hoffman 6-Speed Venting is particularly valuable in systems with concealed radiation or where automatically fired boilers are installed.

There is no guesswork in setting a Hoffman Adjustable Port Venting Valve. All six ports are visible and the method of adjustment assures a precise control of venting speed and hence the rate of heating. The special construction of the cap prevents accidental complete closure of the port.

The new Hoffman Adjustable Orifice Venting Port does not in any way affect the positive and sensitive action for which Hoffman Air and Vacuum Valves are noted. For descriptive literature, write to the Hoffman Specialty Co., Inc., Dept. AF-12, Waterbury, Conn.

SIMPLE, VISIBLE AND PRECISE ADJUSTMENT ELIMINATES ERRORS IN SELECTING AND SETTING THE PROPER VENT PORT.

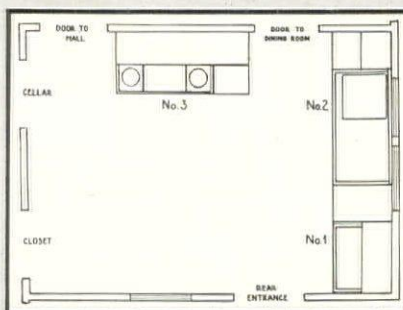
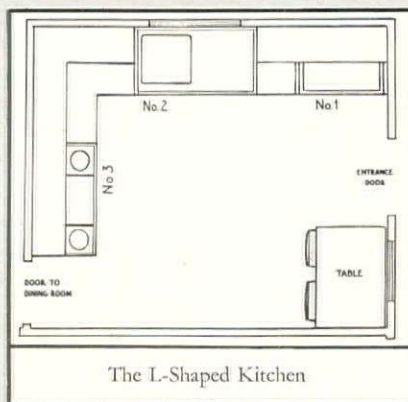
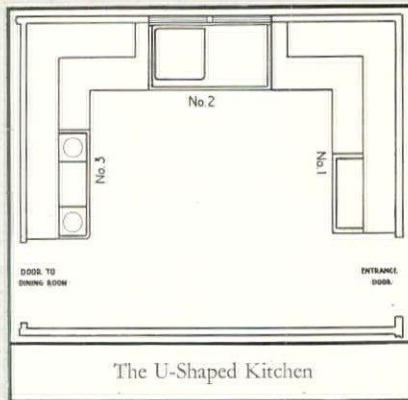
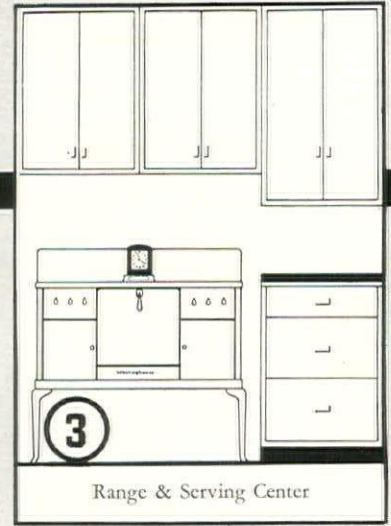
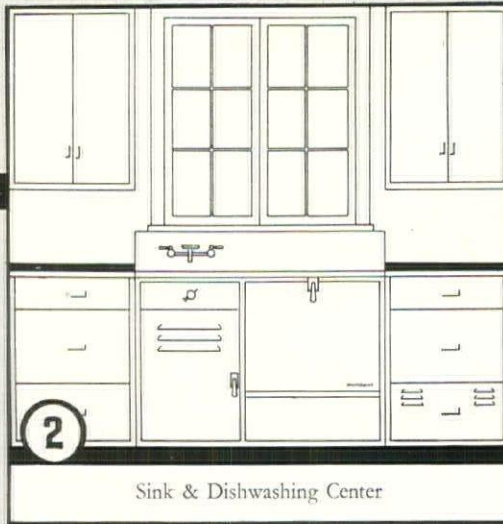
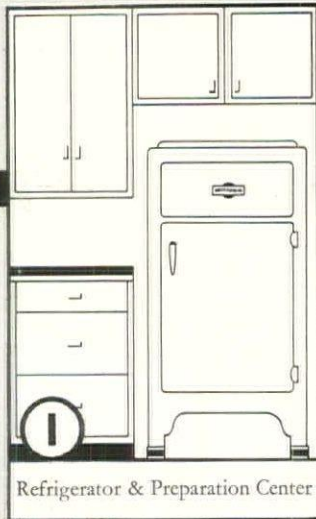


The new Hoffman Adjustable Vent Port Air and Vacuum Valves are sold everywhere by leading wholesalers of Heating and Plumbing Equipment.

**HOFFMAN SPECIALTY CO., Inc.**  
WATERBURY, CONN.



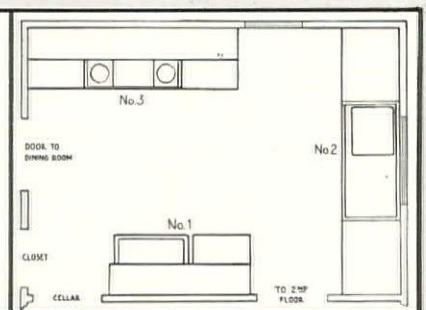
# WESTINGHOUSE OFFERS



The Broken L-Shaped Kitchen



The Individual Unit Kitchen

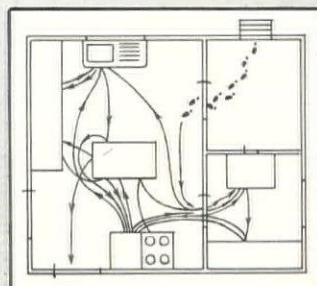
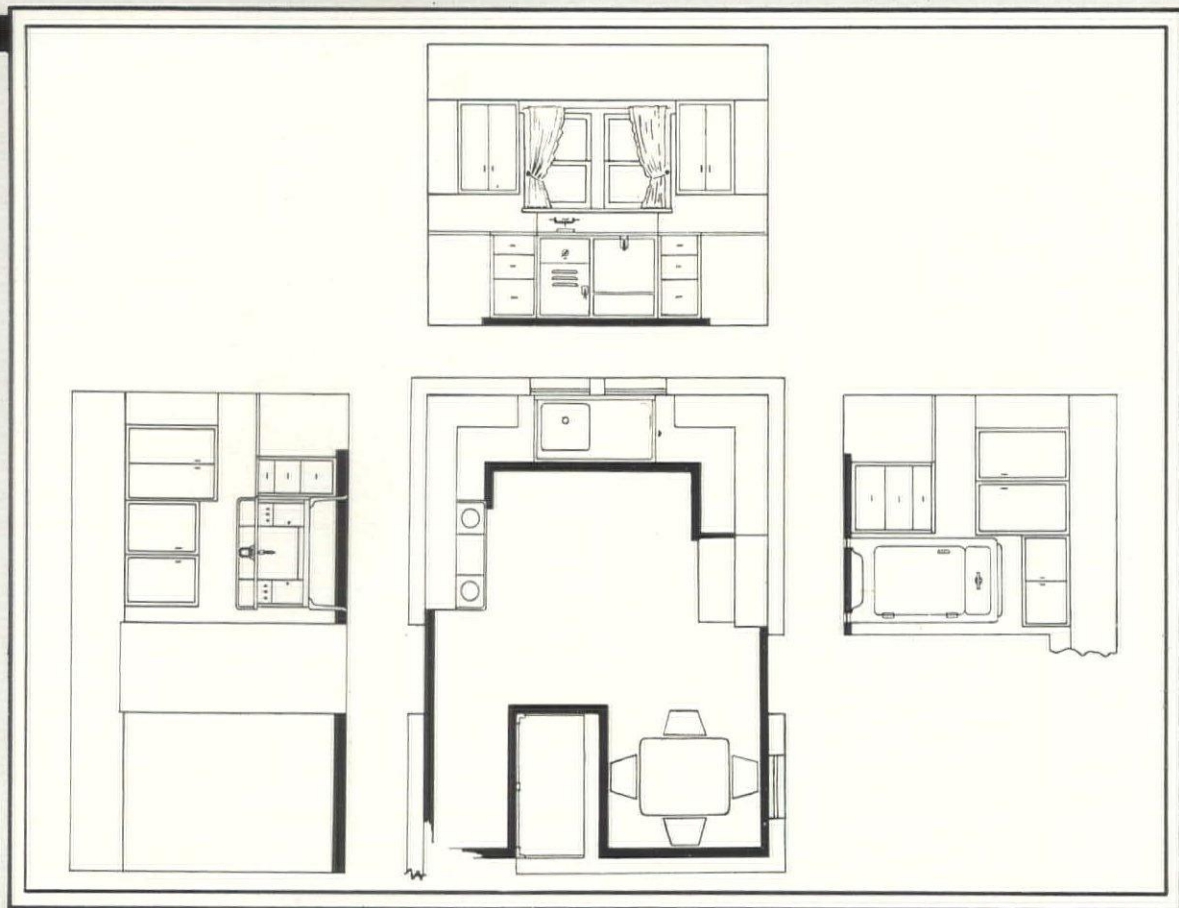


● Now all residential layouts for your clients can have the additional support of modern all-electric kitchen plans, based upon well-defined scientific principles, and drawn by the Westinghouse Kitchen Planning Staff. For example, an intensive study of thousands of kitchens proved conclusively that to be correctly arranged a kitchen must be laid out in one of four distinct classes, each containing three basic work centers. A formula was evolved to determine the exact kitchen cabinet space required for a given size family. The proper cooking utensils, supplies, and equipment for each center were also defined. These fundamentals were clarified and endorsed by leading women authorities who participated in the Westinghouse Kitchen Clinic, held in Mansfield, Ohio, early this year.

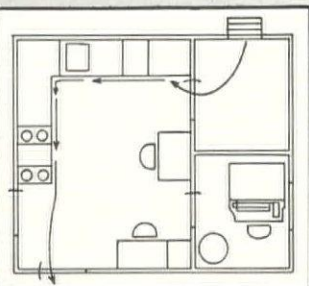
The results of all this research are now available to you. Complete color plans and elevations with detailed blueprints picturing proper arrangement in the modern kitchen will be submitted for your approval. This service is yours without charge. For full details of how your kitchen layouts can be filled in with modern, scientifically arranged equipment, write Kitchen Planning Department, Westinghouse Electric & Mfg. Company, Mansfield, Ohio.



# A CONSULTING SERVICE FOR MODERN HOME KITCHENS



UNPLANNED KITCHEN—miles of wasted steps, needless hours of work.



MODERN PLANNED KITCHEN—arranged for fewer steps, less work.

• Plans like the above, approximately 10¾" x 14¾", are submitted to you in full color. Included also are blueprints, detailed with all dimensions, and specification sheets which suggest the proper sizes and types of equipment for the particular residence problem you are solving. Each kitchen plan submitted has drawn into it the broad experience and research of the Westinghouse Kitchen Planning Staff. Make use of this service. WESTINGHOUSE ELECTRIC & MFG., COMPANY MERCHANDISING DIVISION, MANSFIELD, OHIO

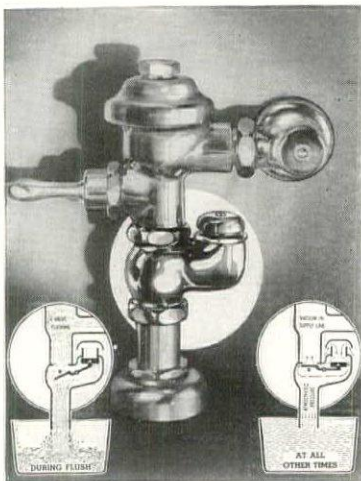
AIR CONDITIONING  
DISH WASHERS  
FANS • FOOD MIXERS  
IRONS AND IRONERS  
RADIANT HEATERS  
CLEANERS • WARMING PADS

## Westinghouse

RANGES • REFRIGERATORS • TABLE APPLIANCES • VACUUM  
WASHERS • WATER COOLERS • WATER HEATERS

LIGHTING FIXTURES  
MAZDA LAMPS  
PORTABLE HEATERS  
PORTABLE LAMPS





PROTECT  
YOUR  
WATER  
SUPPLY

WITH  
**SLOAN VACUUM BREAKERS**

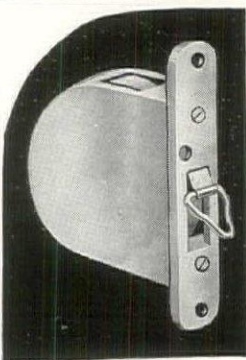
The SLOAN Vacuum Breaker is open to the atmosphere at all times, except during the flush, as shown above. It is leak-proof, noiseless and does not restrict the rate of flow.

The Sloan Vacuum Breaker is easily applied to old installations as well as new and is guaranteed to prevent back-siphonage with any make of flush valve when properly installed above the spill line of the fixture.

*Send for your copy of our new catalog*

**SLOAN VALVE CO.**

4300 WEST LAKE STREET, CHICAGO, ILLINOIS



*For the Uninterrupted  
Trouble-Free Service that  
Clients Will Appreciate for  
Years to Come*

**SPECIFY**

**CALDWELL**  
*Sash Balances*

Forty-seven years' experience has demonstrated that Caldwell Sash Balances have a trouble-free life of 30 years, or longer. The home owner is quick to realize what economy this means in terms of actual upkeep savings.

Moreover, the new Caldwell Sash Balances, requiring less space between the frames, fit the attractive designs of modern tight-fitted narrow mullion windows. And the price... lower than it has been in our history.

• **MODERN WINDOW DESIGN**

*calls for*

• **CALDWELL SASH BALANCES**

**Caldwell Manufacturing Company**  
46 Industrial St., Rochester, N. Y.

*For your files—A Complete Catalog of working drawings, installation instructions. Write for your copy.*



**A DISTINGUISHED HOME**

World leaders and distinguished visitors...for over forty years...have stopped at The Waldorf-Astoria. For The Waldorf is more than an internationally famous hotel... it is a delightful home. Room rates are from \$5 the day.



**THE WALDORF-ASTORIA**

PARK AVENUE • 49TH TO 50TH STREETS • NEW YORK

*To have been in  
Europe and not  
to have seen Paris...*

or to have been in Chicago and not to have savored the very sheen of fine living at the largest of the world's hotels...THE GREAT STEVENS! Two great misses.

The new beautiful swift automobiles! Do you like them? And the new prices?

Here, too, at THE GREAT STEVENS modern operation has created multitudinous new finesses in living!

Living is "Streamlined" at THE STEVENS! And, from now on, new era prices prevail. Room with bath from \$2.50

**THE STEVENS**  
**CHICAGO**

WORLD'S LARGEST HOTEL



**MODERN BUILDERS**

**INSURE**

**SMALL HOME**

**AIR CONDITIONING**

**EFFICIENCY**

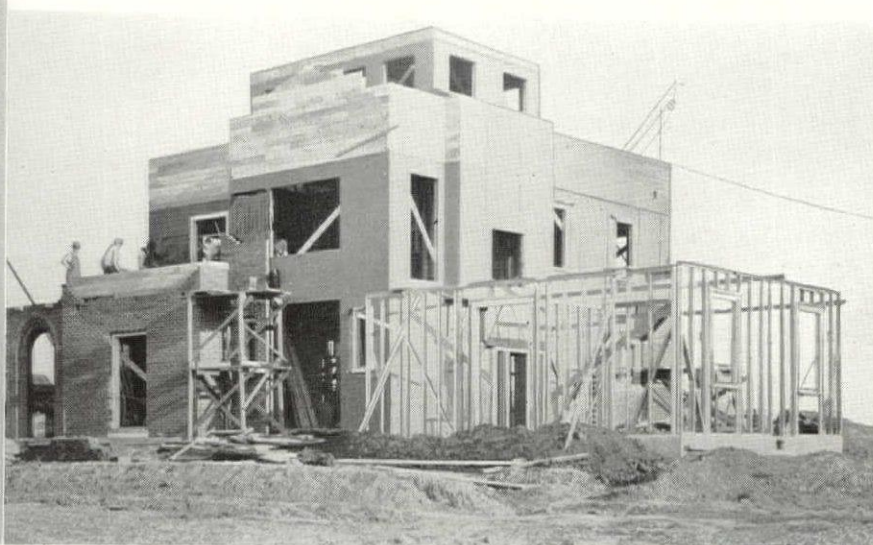
**WITH**

*Armstrong's*

**TEMLOK**



ABOVE—Air conditioned Manor House designed by M. R. Evans of Lancaster, Pa., for the Lancaster Real Estate Board as a model home. All exterior walls are insulated with full inch Armstrong's Temlok.



ABOVE—"Home of Tomorrow" at Mansfield, Ohio. Construction is 2" x 4" wood studding, covered with a sheathing of Temlok Insulation. The front is veneered with 4" face brick. Architects—Vernon Redding and Associates of Mansfield, Ohio; and Dwight J. Baum of New York City.

*Dependable insulation assures  
permanent, economical  
temperature control in these  
modern homes.*

**H**OME air conditioning efficiency and economy are largely dependent upon one thing—adequate insulation. Accordingly, in the Westinghouse Electric and Manufacturing Company's "Home of Tomorrow," as well as the Lancaster Real Estate Board's Manor House, Armstrong's Temlok Building Insulation was the architects' choice.

Armstrong's Temlok helps insure accurate temperature control at minimum cost. And it does more! Because it is fabricated from the resin-impregnated fibres of the southern yellow pine, Temlok resists the efficiency-destroying effects of moisture . . . provides dependable insulation

for as long as the building stands!

In the modern, air conditioned Manor House, one-inch Temlok Insulating Lath was specified for all exterior walls and for the first and second floor ceilings. In addition, all interior partitions are insulated with half-inch Temlok Insulating Lath so that individual rooms or parts of the house can be cooled or heated independently without waste.

To guard against the passage of heat in the "Home of Tomorrow," one-inch Temlok Insulating Board was specified for sheathing of all

exterior walls; one-and-one-half-inch Temlok Insulating Lath for all exposed ceilings; while various other thicknesses of board and lath were used for insulating the roof, penthouse, basement, and garage.

For complete information and samples of Armstrong's Temlok Building Insulation,—also Armstrong's Hard Boards, Temwood and Temboard—write today to Armstrong Cork Products Company, Building Materials Division, 900 Concord St., Lancaster, Pennsylvania.



*Armstrong's*  
**TEMLOK BUILDING INSULATION**



# WHATEVER THE BUILDING LESS NOISE BETTER HEARING MEAN ACOUSTI - CELOTEX

There are, of course, honest differences of opinion about various products entering the construction or modernization of a building. But when the problem is acoustical treatment, there is an almost universal agreement on Acousti-Celotex.

This exceptional preference can be attributed to its proven superiorities demonstrated over a period of more than twelve years in all types of buildings.

Architects are thoroughly familiar with the permanent effectiveness of Acousti-Celotex, its adaptability to decorative design, its paintability without lessening its efficiency, its high noise absorbing qualities.

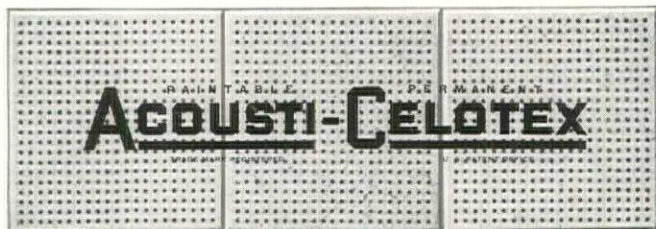
Sound absorption, better hearing, less noise—these requirements today call for Acousti-Celotex whether the specifications are for public or private buildings, churches or theatres, schools or hospitals.

When you are confronted with the problem of acoustical treatment, call in the Acousti-Celotex contracting engineer in your city. He will gladly work with you, submitting scientific analysis and costs. Or write direct.



Acousti-Celotex can now be furnished with a pre-painted hard finished surface especially adaptable to various installation requirements.

THE CELOTEX COMPANY, 919 N. Michigan Ave., Chicago.



**SPECIAL NOTE**—Acousti-Celotex Sound Absorbing Tiles are applied directly to ceilings, old or new. Unimpaired efficiency after repeated painting is due to patented perforations which permit access of sound waves to the inner absorbent material.

## FORUM OF EVENTS

(Continued from page 34)

windows, two skylights, a circular staircase. And he published his famed *Vers une Architecture*, which contained his quoted phrase "a machine for living in."

He is now entrenched as one of the great leaders of the architectural moderns. His name is indelibly associated with the flat planes and polychromy of the International Style, he is a messiah to the moderns, anathema to traditionalists. The Museum of Modern Art could have thought of no smarter architectural legerdemain than bringing him to the U. S.

In January an exhibition of the architecture of Henry Hobson Richardson will commemorate the fiftieth anniversary of his death.

### GERMAN ODDITIES

GERMANY, whence have issued some of the most important theories of contemporary architecture, also manages to keep in the architectural news every month with a continuous stream of oddities of interest, if not of importance. Last month's oddities included two modern variants of ancient ideas.

For a Berlin editor and author, Kurt Safranski, Artist Bortning screened a bookcase with a gay panel, decorated in miniature. Thus when the bookcase is closed, the owner has the equivalent of a large picture on the wall. (When it is open, it looks like any other bookcase, the white, undecorated sides of the panel merely framing it like ordinary doors.)

Carrying something of the same idea to exteriors, Architect Stadtrat Erdmann relieved the monotony of the blank walls of a Berlin development by taking a hint from ancient practice and inducing Painter Wolf Roehricht to put frescoes on them. Aware of the escapist philosophy of many an urban development, Herr Roehricht called his frescoes "A Country Idyll."



GERMAN DESIGN: INTERIOR AND EXTERIOR

(Continued on page 68)



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★

## THESE ARE THE QUALITIES OF TERRAZZO FLOORS

---

★

*For the convenience of architects in specifying flooring materials,  
here is a check-list of specific properties of terrazzo:*

**1. DURABILITY.** Terrazzo is a form of concrete—made with an aggregate of marble chips and portland cement, separated by dividing strips. It is literally as hard as marble and as permanent as concrete. When ground and polished to its final finish, the surface area of terrazzo is approximately 85% marble and 15% portland cement matrix. This provides a surface that is highly durable.

**2. APPEARANCE.** Characteristic of terrazzo are its clear, warm colors, its rich natural sheen and its pleasing variations in design. Wide variety in color and combinations of color in domestic and imported marble chips, plus the choice of pigment for coloring the matrix, provide a color range in terrazzo which is practically unlimited. In terrazzo pattern, likewise, limitation depends only upon the requirements of decorative harmony and upon the architect's expression in design. Each terrazzo floor may be individually planned for a particular installation. Any motif, in intricate pictorial detail or simple repetitive pattern, may be executed in terrazzo. And because of its durability, the

excellent appearance of a well-designed, properly placed and maintained terrazzo floor is constant throughout its life.

**3. ORIGINAL COST.** Installation costs of terrazzo floors vary somewhat in relation to detail of design, type of metal strip, color and sizing of marble chips, color requirements, and portland cement used (white or gray). In general, however, original cost of terrazzo is directly comparable to cost of other types of high-grade floorings. Consideration of the unique results achieved in terrazzo, together with its exceptional durability, definitely establishes it as one of the most economical flooring materials.

**4. MAINTENANCE.** Little maintenance is needed for terrazzo. Routine washing and mopping, plus polishing at occasional intervals, keeps a terrazzo floor in excellent condition. The hard and dense finish of terrazzo is highly stain-resistant. It is practically mar-proof, even under severe wear. It is easy to clean. These factors are reflected in low maintenance cost.

*This information is presented by The National Terrazzo and Mosaic Association, Inc.—an organization of qualified terrazzo contractors formed for the purpose of establishing and maintaining quality standards in terrazzo installation. Detailed information and established specifications for terrazzo may be obtained from the Secretary of the Association, 524 Brook Street, Louisville, Kentucky.*

## THE NATIONAL TERRAZZO AND MOSAIC ASSOCIATION

FOLLOWING ADVERTISEMENT WILL PRESENT A CHECK-LIST OF RECOMMENDED TERRAZZO USES

101



B E R R Y   B R O T H E R S   D E T R O I T

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Labor accounts for 70% of the cost—in almost any finishing operation. Berrycraft architectural finishes cost only one to fifteen percent more than many so-called "bargain" brands. As compared with these same brands, however, they have up to 50% greater covering capacity, and, in some instances, several hundred percent greater durability. We do not even consider here the superior opacity of Berrycraft Finishes or the saving in labor that results from their extraordinary ease of application.

For more than 75 years Berry Brothers has been known as America's outstanding manufacturer of

high quality architectural finishes. This reputation began generations ago when Berry Brothers produced HARD OIL. The fame of this finish became so great that its name was adopted as a generic term by other manufacturers who attempted unsuccessfully to duplicate the finish.

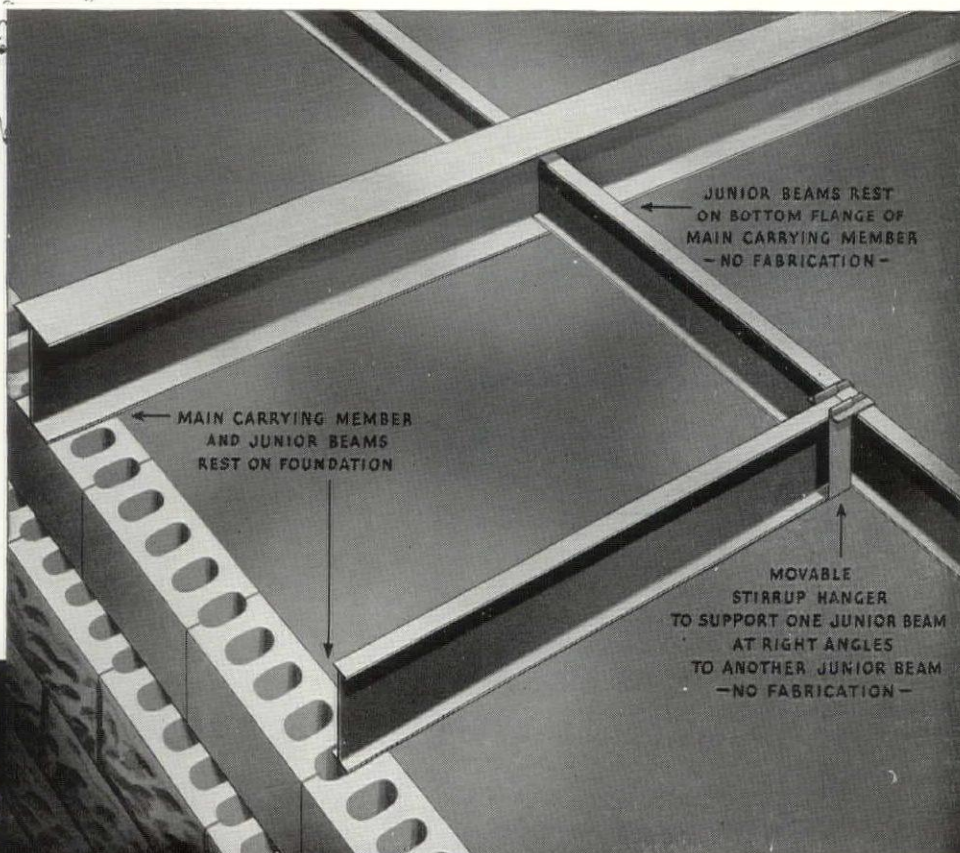
Today, rigid tests will prove to your complete satisfaction that Berry Brothers' quality standards are as high as ever. Specify Berry quality—for definite cash savings and for enduring satisfaction. Berry Brothers, Detroit, Michigan, Walkerville, Ontario—Manufacturers of Paints, Varnishes, Enamels, Lacquers.





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# STEEL CONSTRUCTION



*without*  
**TECHNICAL RESTRICTIONS**

The J & L Steel and Concrete Floor System offers the advantages of steel construction in the first floor of any residence or light-occupancy building without imposing any restriction on either architect or builder. No specialized experience or special equipment is necessary. This system is also applicable to upper floors when solid masonry walls or steel framing is used.

The concrete slab engages the top

flanges of the beams, anchors the floor to the foundation and provides a continuous firestop. The simplicity of the system, ease of installation, economies effected, and the structural values added, have brought widespread acceptance of this rigid, shrink-proof, vermin-proof, fire-resistant floor.

A detailed description of J & L Junior Beam Floors will gladly be sent to you without obligation.

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**PHILADELPHIA**

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Also Makers of  
**SASH PUTTIES  
MORTAR STAINS**

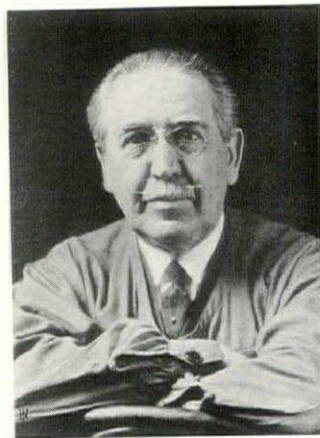
**SUCTION MASTIC  
for Structural Glass**

## FORUM OF EVENTS

(Continued from page 64)

### DEATHS

**HAROLD VAN BUREN MAGONIGLE**, 67, F.A.I.A., of paralysis; in Bain Harbor, Vt. A draftsman of extraordinary skill, architect of the McKinley Monument, at Canton, Ohio, the Schenley Fountain, Pittsburgh, the Peace Memorial, Kansas City. Mr. Magonigle was one of the greatest U. S. exponents of academic scholarship and a witty, fiery critic of most "modern" architecture, which he detested. He made his architectural views known to the whole profession through his column "The Upper Ground" in *Pencil Points*. Born in Bergen Heights, N. J., he got his first architectural training in the office of Vaux and Radford, later working with Charles C. Haight, McKim, Mead and White, and Rotch and Tilden. He was 22 when he won the gold medal of the Architectural League of New York of which he later became president. In 1930 the New York Chapter, A.I.A., of which he was also a past president, gave him its medal of honor. Among his buildings were the Gates Avenue Court House in Brooklyn, the United States Embassy and Consulate in Tokyo, the Arsenal Technical School in Indianapolis, the Soldiers' Memorial in Naugatuck, Conn., the residences of Isaac Guggenheim, Port Washington, Long Island, and of one time Governor Franklin Murphy of New Jersey in Mendham, N. J.



Courtesy, Pencil Points

**H. V. MAGONIGLE**

Architect Magonigle was also a sculptor, painter, and author. He wrote "Architectural Rendering in Wash," "The Renaissance," "The Nature, Practice and History of Art." As a public speaker and a writer he always urged architects to think of themselves as professional men as against business men, deplored architectural offices that looked like "business offices," insisted that architects were something more than "mere merchants of space."

**WALTER W. SHARPLEY**, 56, architect; after long illness; in Haddonfield, N. J. In Philadelphia he designed the Bellevue-Stratford Hotel, the Elks Home, in Atlantic City the Hotel Dennis. At the St. Louis Exposition he was assistant chief designer of the Louisiana Purchase exhibits.

**WILLIAM F. DREWRY, JR.**, 34, architect; of pneumonia; in Richmond, Va. Born in Petersburg, Va., he took a B.S. and a C.E. at Virginia Military Institute, later was graduated from the Architectural School at Columbia University. Two years ago he became an assistant professor at Columbia after several years' work in the office of Greville Rickard, New York City. This year Columbia promoted him to a full professorship. With Dr. Werner Hegemann and Henry Wright he collaborated on the May Home Development Reference Number of THE ARCHITECTURAL FORUM.

**SAMUEL E. HILLGER**, 73, A.I.A.; in Auburn, N. Y. An 1884 graduate in architecture of Cornell University, he entered the office of W. H. Miller, collaborated in the building of the Cornell Library and several Cornell fraternity houses. He opened his own office in Auburn in 1898, practicing there for 37 years. With H. Van Buren Magonigle

(Continued on page 74)



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PITTCO Store Front Products are all of proven quality, all unusually well fitted to assist you in doing exceptional work in store front remodeling. Satisfactory to your client . . . who will be proud of his store and will not regret his investment when he sees the improvement a Pittco Front produces. And satisfactory to you . . . because Pittco Store Front Products permit such freedom of design, are so versatile, so adaptable, so easy to utilize in planning distinctive, sales-building store fronts.

To your remodeling prospects . . . to the merchants and property owners in your community, we are recommending the retention of a local architect to help them in modernizing their store properties. When these prospects call you in to help them "Modernize Main Street" . . . tell them how Pittco Store Fronts increase business volume, rentals, property value. And then specify Pittco Store Front Products on the job.

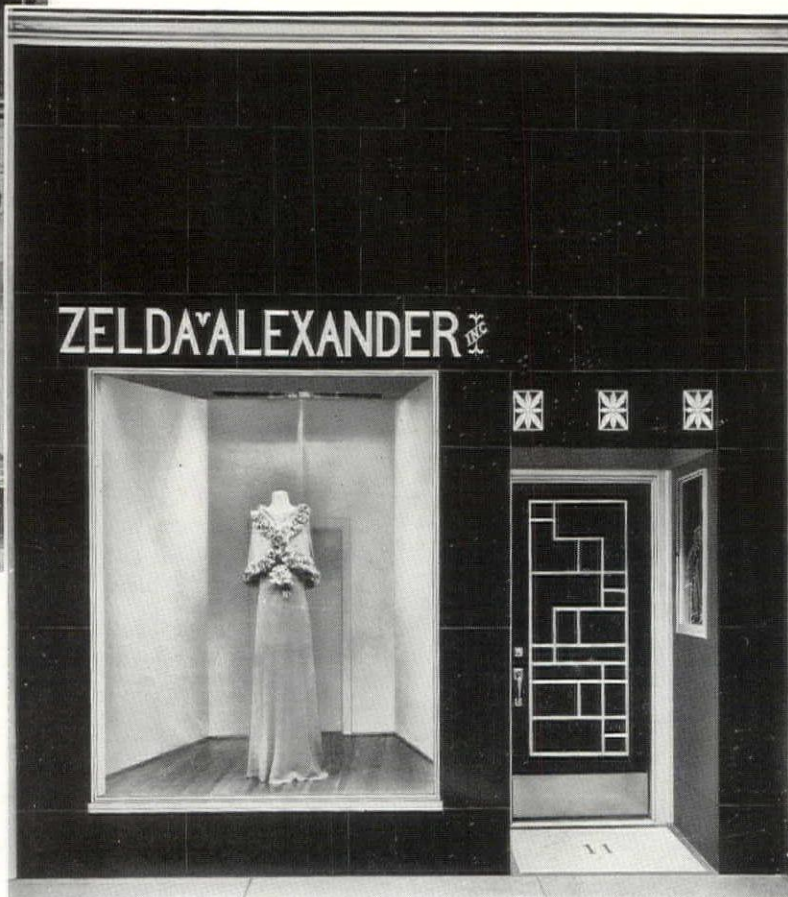
You'll want our new booklet containing complete facts about Pittco Fronts, as well as many pictured examples of Pittco-remodeled properties, construction costs, resulting business increases, detail drawings, etc. Clip the coupon for your copy . . . now.



**BEFORE:** The site of the present Zelda Alexander Shop in Roanoke, Va., as it looked before being modernized. The property stood vacant for two years prior to remodeling.

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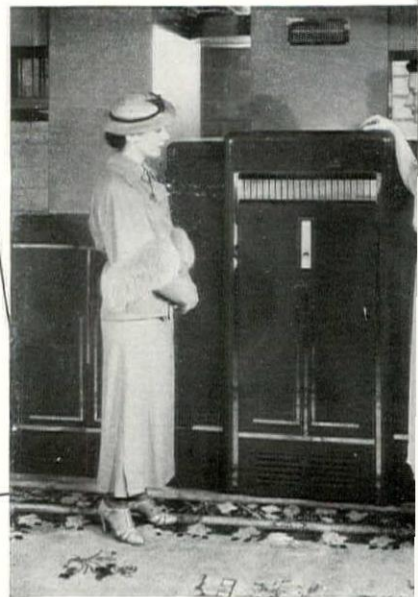
The Toridheet Air Conditioning Furnace liberates the household from shoveling coal and ashes and spending excess time and money to keep the home and its furnishings acceptably clean.

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This beautiful streamlined Toridheet Air Conditioning Furnace heats and air conditions the home and maintains even, healthful temperatures in winter . . . cleanses, humidifies, and circulates the air. In summer it serves as an effective cooling system . . . cleansing the air of dirt and pollen . . . keeping the air circulating for comfort.

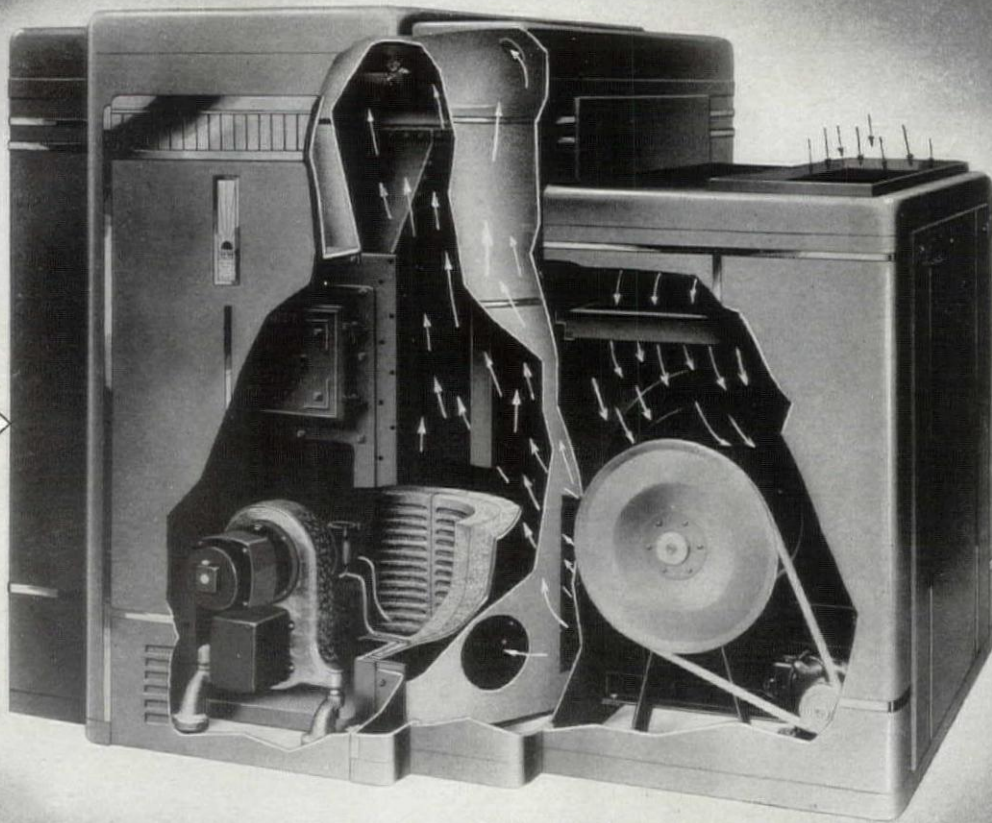
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This carefree, self-contained heating system not only takes all heating chores but invites usefulness of basement space. Recreation rooms may be planned for adults or children. The efficiency of the Ropeller operated, wall-flame burner makes it a profitable investment for old as well as new homes. A never-failing supply of hot water is assured for all domestic purposes.

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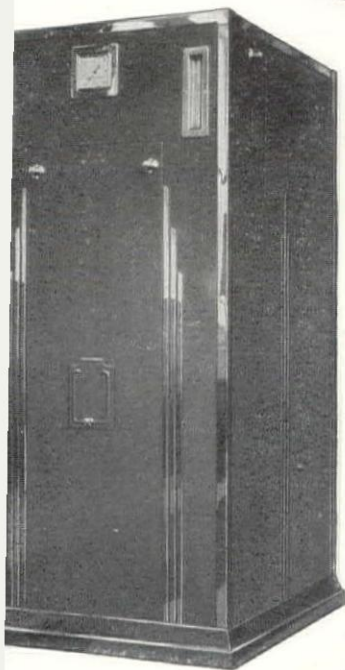
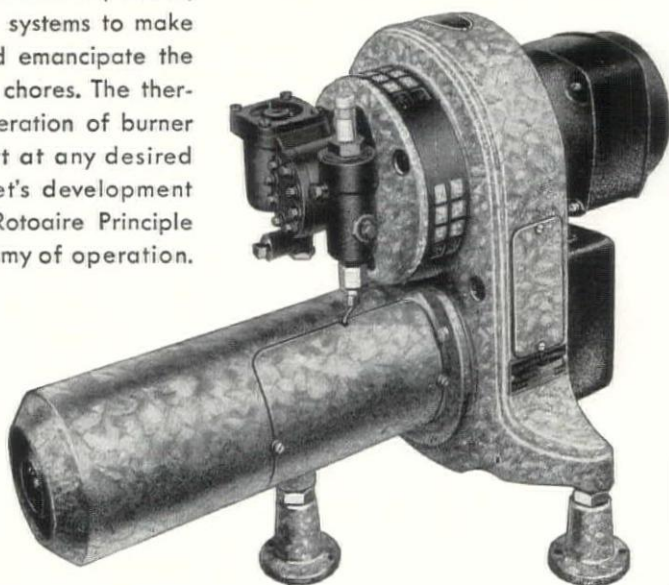


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Quickly, easily installed in warm air, steam, vapor or hot water heating systems to make them entirely automatic and emancipate the household from all heating chores. The thermostat control regulates operation of burner to maintain indoor comfort at any desired temperature level. Toridheet's development and exclusive use of the Rotoaire Principle assures exceptional economy of operation.

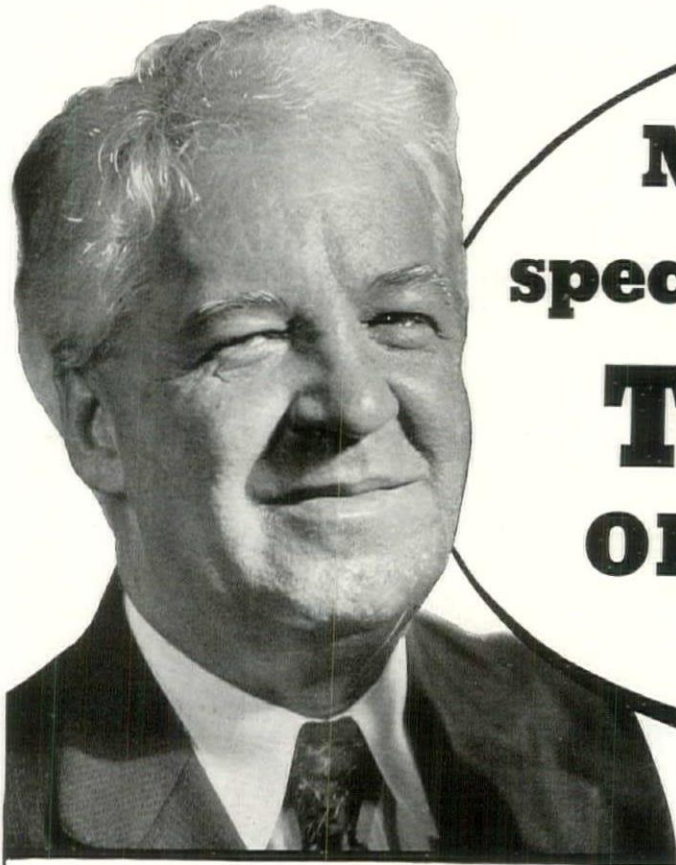


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Be posted. Read and file our descriptive printed matter. Ask the co-operation of our engineers on proposed installations. No obligation. Cleveland Steel Products Corporation, 7306 W. Madison Avenue, Cleveland, Ohio.



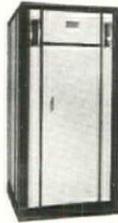


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... can be used with steam, vapor or hot water heating systems. These units consist of a burner built into a specially-designed cast iron, sectional boiler with complete automatic controls. Can be equipped with a built-in year 'round automatic domestic water heater.



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Owners of modern homes prefer modern automatic heating that they *know* will *satisfy* in every way. It is only natural, therefore, that thousands of homes being planned today will be equipped with the leading make of automatic heating—Timken Silent Automatic.

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Famous patented features, which are responsible for outstanding fuel saving and Timken's widely-recommended quiet running, are built into each of these units.

For complete information and specifications, or for details of Timken's Air-Conditioning Engineering Service, send us the coupon below or see our nearest factory branch or dealer.

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Providence County Courthouse, Providence, R. I., has a Telechron ADFR system consisting of 137 Telechrons inside the building; a giant (cast-bronze frame), 4-faced, illuminated Telechron tower clock; and automatic central control equipment. Architects: Jackson, Robertson and Adams, Providence, R. I. General Contractors: J. W. Bishop Co., Worcester, Mass. Electrical Contractors: Scannevin & Potter, Providence, R. I.

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The beautiful new Detroit Post Office, Detroit, Michigan, is equipped with a Telechron AR system consisting of 520 wall clocks, and automatic central control equipment. Architect: Treasury Department, Washington, D. C. Consulting Architect: Robert Derrick, Incorporated, Detroit, Mich. General Contractors: Great Lakes Construction Company, Chicago, Illinois.



## TELECHRON CLOCK SYSTEMS FOR ALL TYPES OF PUBLIC BUILDINGS

IN ADDITION to the 3799 Telechron clocks that keep time in the "Triangle Group" of government buildings in Washington, accurate, economical Telechron systems have been installed in public buildings all over the country.

Telechron clock systems have proved their efficiency and dependability in all kinds of structures — both new and modernized. Satisfied users are impressed by their accuracy and reasonable cost, as well as by their low operating and maintenance expense.

A Telechron system may include any number of clocks, from a single post or tower clock to thousands of Telechrons operating as a unit, centrally controlled. Every Telechron clock is synchronized with the other clocks in the system by the regulated impulses of the alternating current supplied by power companies.

A letter to us will bring our complete co-operation on your projects. Address the Warren Telechron Company, 410 Main Street, Ashland, Massachusetts.

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**SELF-STARTING SYNCHRONOUS  
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*A Practical*  
**ALUMINUM  
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*for the average home!*

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HE KAWNEER LIGHT SEALAIR WINDOW offers you a better kind of double-hung window, simple in construction, modern in design. Sturdily and compactly built of solid rustless metal, it always opens and closes with finger-tip pressure . . . never requires painting or refinishing . . . will not swell, shrink, rust, rattle, or rot out . . . effectively keeps out dust, wind, and weather . . . brings big upkeep savings. Sash may be divided as desired. Sold through building material dealers. Priced for the average home. Get full information.

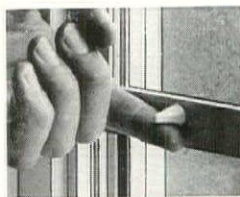
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name and address in margin and mail to The Kawneer Company, Niles, Michigan for further data. ☐ Architect. ☐ Builder. ☐ Owner. ☐ Dealer.



BIG UPKEEP SAVINGS



FINGER-TIP SASH CONTROL



A COMPLETE UNIT

## FORUM OF EVENTS

(Continued from page 68)

he collaborated on the large Auburn grammar school, was the architect for all the other school buildings, and the Mercy and Auburn City hospitals. In 1928 he formed a partnership with Wallace P. Beardsley, A.I.A., who continues the practice.

GEORGE KELLER, 92, F.A.I.A.; after brief illness; in Hartford, Conn. He was the designer of the Gettysburg Memorial at the dedication of which President Lincoln made his famed speech. He also designed the Garfield National Memorial at Cleveland.

THOMAS MOORE KELLOGG, 73, F.A.I.A.; after brief illness; in Philadelphia. Forty-four years ago, with John Hall Rankin, F.A.I.A., he founded an architectural firm in Philadelphia after working with McKim, Mead and White. His firm designed the Inquirer Building and Provident Trust Co. Building of Philadelphia, the Camden (N. J.) Safe Deposit Co. Building, and the First Methodist Church of Germantown, Pa.

## PERSONALS

PROFESSOR PETER MULLER-MUNK of Design Associates, Inc., New York City, has been appointed Associate Professor of Industrial Design at Carnegie Institute of Technology.

Carl C. Ade, architect and engineer, has moved his offices to 52 James Street, Rochester, N. Y.

The New York Building School has moved to new quarters at 67 West 44th Street, New York City, where it continues its courses in building design and review for State examinations under direction of L. M. Bernfeld and William H. Hoffberg.

Joseph W. Hart, A.I.A., and J. Carl Russell announce a partnership for practice of architecture under the firm name of Hart & Russell, 602 Hitchcock Building, Nashville, Tenn.

Robert Helmer, architect, formerly of Halsey, McCormack and Helmer, Inc., New York City, is now practicing independently at 1180 Fulton Street, Brooklyn, N. Y.

The following have been elected officers of the Chicago Architectural Club for the coming year. Ralph Gross, president; Evald A. Young, vice president; Thomas J. Mulig, secretary; John McPherson, treasurer; Henry Bresen, Charles Konsevic, George Recher, Albert J. Delong, William F. Thomson, Lee D. Berbiers, directors. The club's competition for the design of either a one- or two-story building, with terra cotta machine run wall blocks to be used in the facades, closed last month. American Terra Cotta Co. and the Northwestern Terra Cotta Corp. of Chicago were donors of \$500 in prizes.

Vitale & Geiffert, Gilmore D. Clarke, announce taking Michael Rapuano into their firm as their associate for the practice of landscape architecture. Offices are at 101 Park Avenue, New York City.

Joseph Norman Hettel, architect, is opening new offices at 730 Federal Street, Camden, N. J.

Isadore H. Braun, architect, announces the removal of his office to 228 North La Salle Street, Chicago, Illinois.

J. L. Duskee, architect, is reopening his office at 1942 West Dallas Street, Houston, Texas.

The American School and University, 470 Fourth Avenue, New York City, is canvassing all architects who have done educational buildings for inclusion in their annual Directory of Architects for Educational Buildings.

(Continued on page 78)



# What's news about Steel Windows?

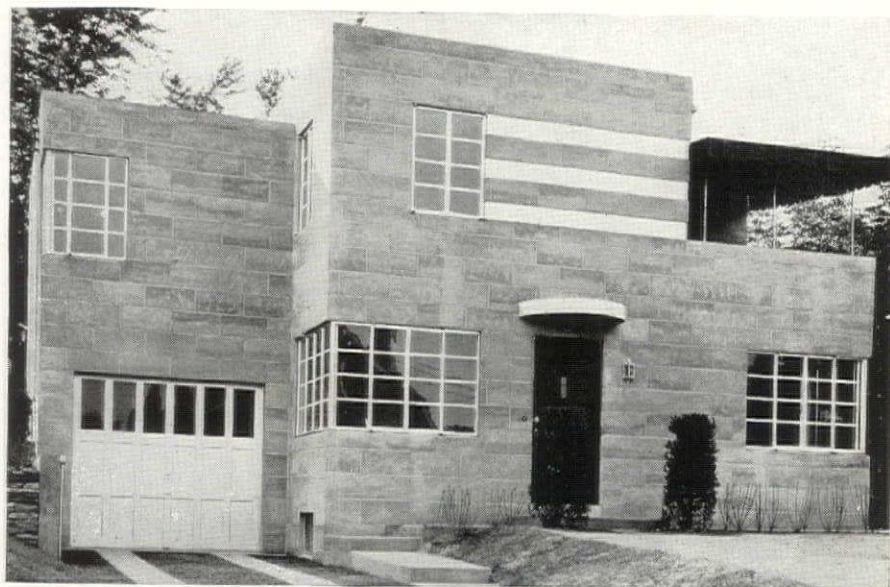
Analysis of window costs including installation labor often shows Fenestra Steel Casements effect substantial savings over double hung wood windows — news — good news for architect, contractor and homeowner. Few have realized that, besides being better steel casements frequently cost less.

A Detroit builder erected two houses from the same plans. Double hung wood windows in one, cost 13% more than Fenestra in the other

A Baltimore contractor, averaging the window cost in several 1½ story houses, found wood windows averaged \$29.83 each; Fenestra, \$25.11 each.

Three contractors recently bid on a low cost housing development. Every one of them added 25% or more to the Fenestra Casement price if wood windows were used as a substitute.

Chief misconception of window costs lies in the idea that a window is merely frame and sash. In double hung windows, frame and sash may be only 25% of the total cost. Other material and installation labor may be as high as 75%. In Fenestra, frame and sash (shipped in one unit) may be as high as 48% of the total; other material and labor as low as 52%.



● New designs in Fenestra Steel Casements include gratifying improvements in keeping with the new era of smart, modern homes at low cost.

Styled to harmonize with any type of architecture and built for durability, these windows provide conveniences unthought of even five years ago. Remember, too, Fenestra Windows are one of the few materials equally visible and attractive both from outside the house and from within.

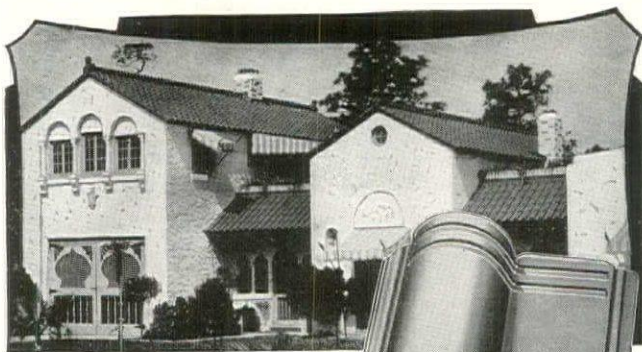
Large sizes (equivalent to two ordinary double hung windows) can be used at an actual saving even in very low cost homes.

DETROIT STEEL PRODUCTS COMPANY  
2251 East Grand Boulevard Detroit, Michigan

# Fenestra

TRADE NAME OF THE OLDEST AND LARGEST MAKERS OF STEEL WINDOWS IN AMERICA





## EDWARDS METAL SPANISH TILES

Architect John M. Peterson selected Edwards Metal Spanish Tile for his own Florida residence and specifies them for his clients because of their beauty and economy under all conditions of exposure to the action of the elements.

Write for Metal Tile and Shingle Book No. 72

See photographs of actual installations on charming houses. Note the heavy shadow lines, the apparent weight and mass. Yet they are so light that they require no special roof construction. These tile protect from fire, lightning, wind and weather. The cost is very low. Estimates on request.

### THE EDWARDS MANUFACTURING CO.

328 Eggleston Ave.

Cincinnati, Ohio

*Metal Roofing, Siding and Ceilings*



Model kitchen of Briggs Manufacturing Company. Side walls are finished with Clip-Strip and porcelain enamel.

## BEAUTIFY INTERIORS WITH CLIP - STRIP

Porcelain enamel used as an interior wall finish lends beauty, grace and color to kitchen and bathrooms. It is easy to clean and keep clean. The Frameless Steel Clip-Strip in either stainless steel or aluminum is the ideal attachment device—simple, secure and inexpensive. Write for complete information on interior or exterior finishes to:

**INSULATED STEEL CONSTRUCTION CO.**  
MIDDLETOWN, OHIO

# WANTED

## Architect as Insurance Executive

Large manufacturing corporation is desirous of securing services of an architect to handle its insurance matters.

Applicant to be graduate architect and preferably one with some experience in the adjustment of insurance losses.

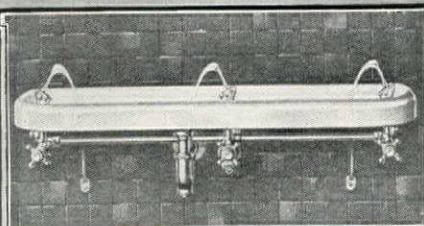
*Address Box 40*

### THE ARCHITECTURAL FORUM

135 EAST 42ND STREET

NEW YORK CITY

## CHOOSE ANY STYLE - BUT CHOOSE A HALSEY TAYLOR



Of course you may never need a fountain for a small house, but you will want to know more about the complete line of Halsey Taylor Drinking Fountains, for public buildings, hospitals, schools, churches, etc. No matter which style you choose — three-part battery types, wall or pedestal fountains, or even coolers — you get the superior advantages of patented two-stream projector and practical automatic stream control — your guarantee of sanitation and health-safety. Write for latest architect's catalog.

**The Halsey W. Taylor Co.**  
Warren, Ohio

*Halsey Taylor*  
DRINKING FOUNTAINS

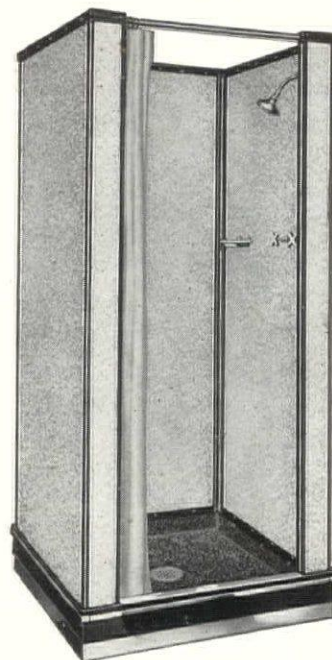




# A second bath-in limited space

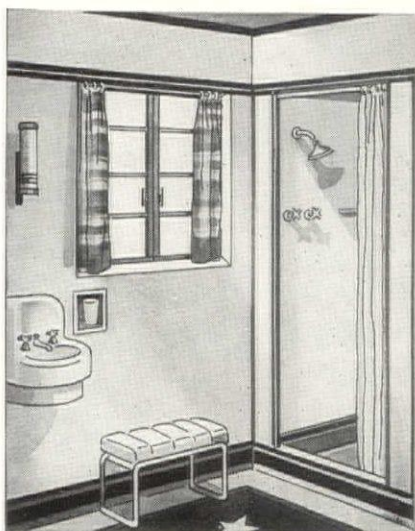
## MODERN CABINET SHOWERS BY WEIS . . .

New . . . handsome models of vitreous porcelain enamel . . . afford an additional bath for new and remodeled homes in space no larger than an ordinary closet . . . new one-piece, rustproof receptor of vitreous porcelain enamel . . . with exclusive *Foot-Grip, No-Slip* floor . . .



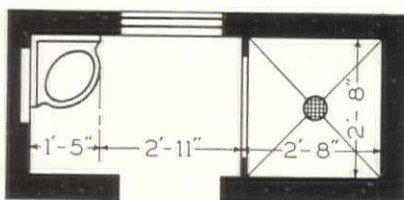
**B**EAUTIFUL, PRACTICAL, durable, Weisway Cabinet Showers are worthy of the finest home. And there are models suitable for the simplest cottage. Vital improvement over all previous shower construction is the exclusive new *Foot-Grip*,

*Sketch below, rendered from suggestive floor plan at right, shows the compactness of Weis Cabinet Shower.*



No-Slip Receptor of vitreous porcelain enamel. As a safety factor the no-slip floor is equally effective, dry or wet.

Newest Weisway Cabinet Showers have beautiful walls of



gleaming vitreous porcelain enamel, fused on Armco iron. Weisway Showers are complete units in themselves, not affected by any settling of the building. Guaranteed leakproof!

**VP VITREOUS PORCELAIN ENAMEL WEISWAY**

Weisway Cabinet Shower baths afford the additional facilities which every modern family needs—at an exceedingly small investment. And the extra sales value which this second bath adds to the property far exceeds its cost.

The complete Weisway Cabinet Shower line includes styles for homes of every size, as well as institutions. Write now for detailed specifications and prices—without obligation.

**HENRY WEIS MANUFACTURING CO., Inc.**

ESTABLISHED 1876

CABINET SHOWER DIVISION • ELKHART, INDIANA



# You phone



# We call



# We deliver

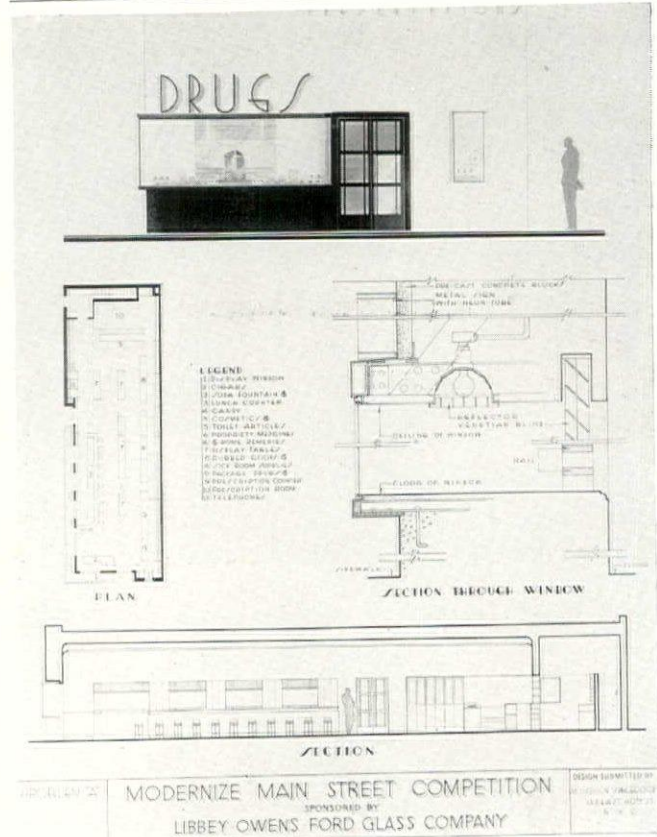


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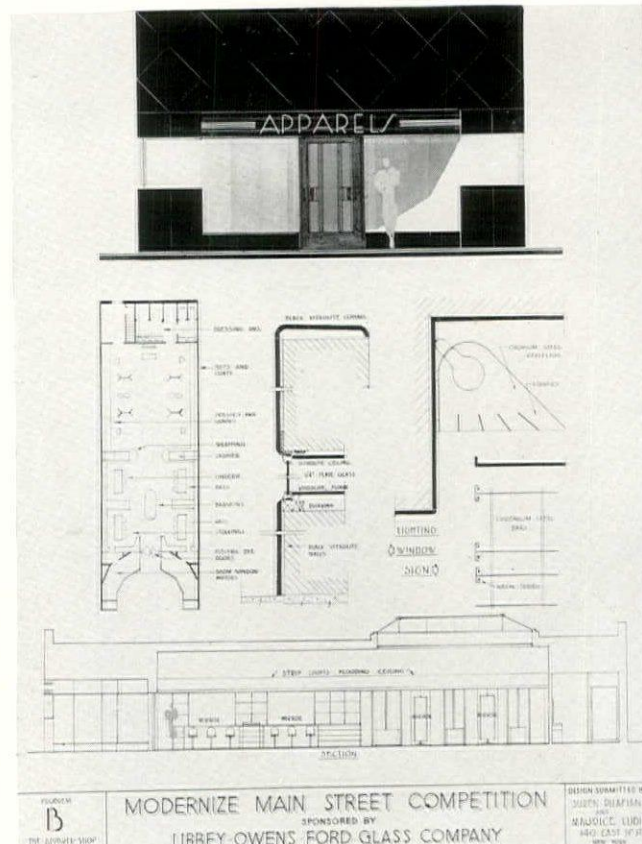
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**RAILWAY EXPRESS**  
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## FORUM OF EVENTS



Winners in the Modernize Main Street Competition sponsored by Libbey-Owens-Ford Glass Co. conducted by *The Architectural Record*. Above: Drug store by M. Righton Swicegood, New York City. Below: Apparel shop by Suren Pilafian and Maurice Lubin, New York City. Judges: Melvin Thomas Copeland, J. André Fouilhoux, Albert Kahn, William Lescaze, John W. Root, F. R. Walker, Kenneth C. Welch. Winners in the other two classes on page 81.





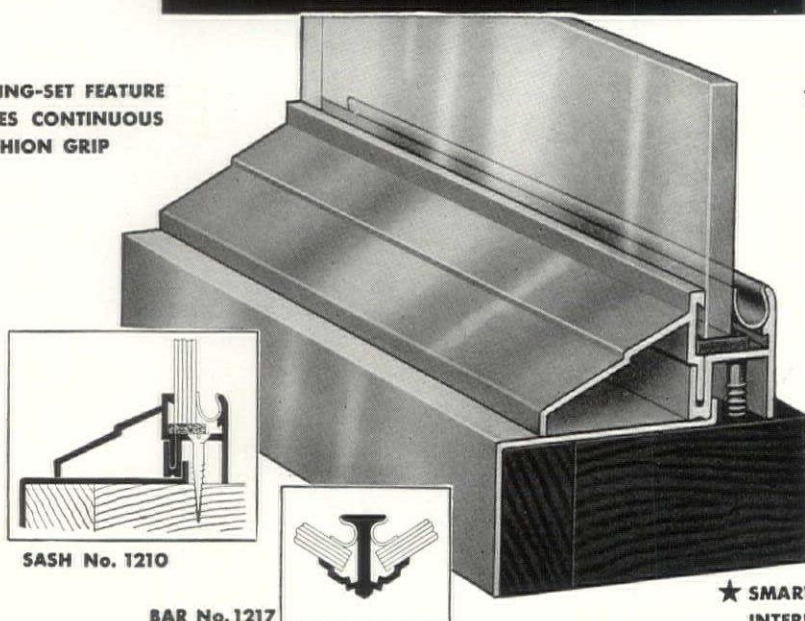
★

# ANNOUNCING A REVOLUTIONARY NEW STORE FRONT SASH BY

# ZOURI

★ **SPRING-SET FEATURE  
GIVES CONTINUOUS  
CUSHION GRIP**

★ **STATIONARY FACE  
AND GUTTER INSURE  
PERFECT MITERS —  
ELIMINATE CAPS**



PATENTS  
PENDING

★ **SMART LINES OFFER  
INTERESTING DESIGN POSSIBILITIES**

The new Zouri Spring-Set Store Front Sash with complete new accompanying members, is a notable addition to the Zouri line of rustless-metal Store Front materials. Coming at a time when a widespread revival of store front, modernizing and building activity is under way, it offers many important features to the architect, merchant, and property owner.

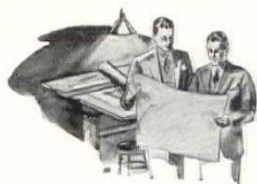
In this new construction the self-supporting gutter member and the sash interlock, after glass has been set, and form a stationary unit. Glass is then aligned against the face member from the inside out, and held in place by a strong spring which gives a continuous cushion grip.

Because of this logical construction, installation problems are tremendously simplified. Because glass thickness does not effect the alignment of the face member, perfect miters may be made easily, caps eliminated entirely if desired, and glass in any combination of thicknesses employed on

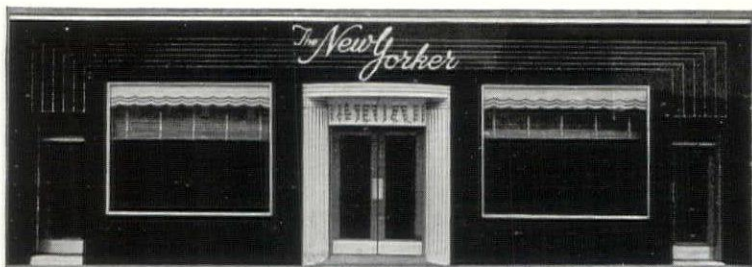
the same front. Zouri Spring-Set Store Front Sash and Bars come in extruded aluminum or bronze, with a full line of companion mouldings, awning bars, etc. Zouri has complete equipment for all types of finishes, including aluminizing—gives unusually prompt delivery.

The smart modern design of these new members is a distinct help to the architect in designing attractive store fronts. More simple construction and the more efficient glass holding method mean savings for the merchant or owner in first cost, installation, and reduced chances of glass breakage.

**COMPLETE INFORMATION SENT ON REQUEST.** Write Zouri for ☐ literature on the New Zouri Spring-Set Store Front. ☐ Full size architect's details. ☐ Illustrated Zouri catalog Number 22 on Safety Key-Set and Screw-Pressure Store Fronts. Just check items desired, write name and address in margin and mail to ZOURI, NILES, MICHIGAN.



**ZOURI** Spring-Set Store Front construction offers many advanced features which you can incorporate in your next store front design. Get complete information on this and other new Zouri store front products.





# ON THE IMPORTANCE OF BEING IN *E*arnest ABOUT LUMBER . . . .

THE renaissance of the small home at last creates a long hoped-for architectural opportunity of bringing good design on a large scale to those who need it most. But even a home of excellent design must remain in good condition long enough to justify the investment of the owner.

The part that good lumber plays in the life of that home is far more important than has been heretofore conceded. Good specifications go wrong when the quality of lumber delivered to the job is a matter of indifference to the architect or his builder. Inferior grades accepted or delivered to save a

few dollars where the eye cannot see — faulty seasoning or imperfect manufacture — all take their toll in the final reckoning in the life of the house and exact their penalty in loss of prestige to the architect or builder, to say nothing of the increased maintenance cost to the ultimate owner.

There is a difference in lumber, even of the same species and grade, just as between individual architects or individual builders. The differences lie not only in Nature but in the *Intention* and facilities of the lumber manufacturer.

The Weyerhaeuser affiliated mills with the largest production in the in-

dustry, for more than a decade have been improving lumber for better construction and trade-marking it to indicate those qualities which set Weyerhaeuser lumber apart from the industry.

Buying lumber blind is no longer necessary for the uninitiated—ask for Weyerhaeuser 4-SQUARE Lumber and be sure of the structural and finish refinements that make for wood houses of lasting beauty.

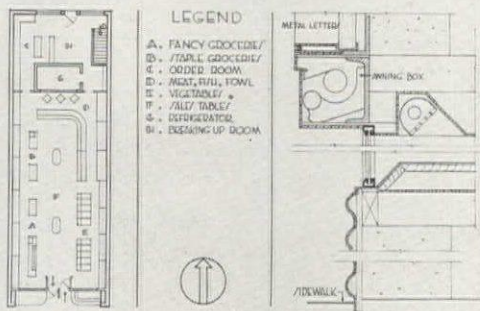


WEYERHAEUSER SALES COMPANY  
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

Weyerhaeuser 4-SQUARE Lumber is furnished in the 6 major species used in house construction and is available through more than 3000 lumber dealers.



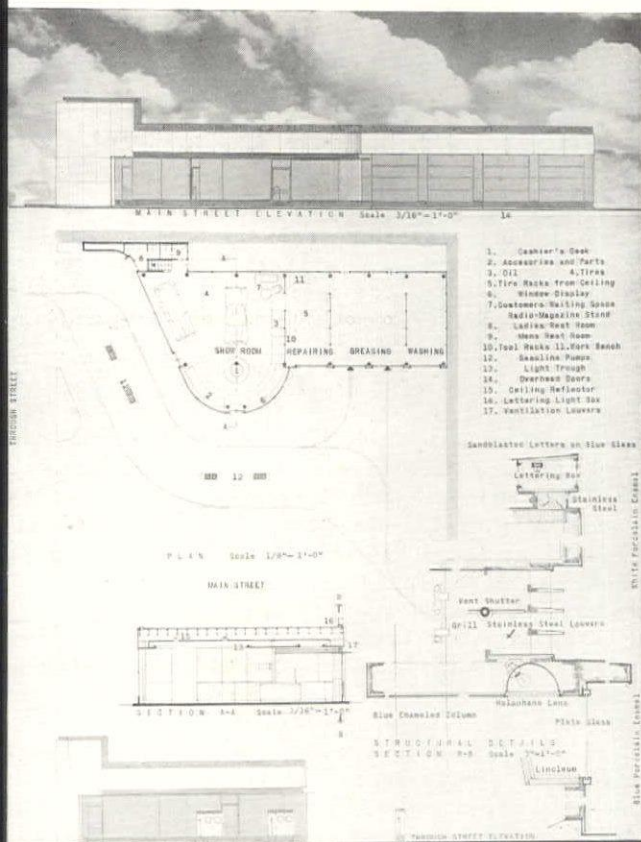
## FORUM OF EVENTS



MODERNIZE MAIN STREET COMPETITION  
SPONSORED BY  
LIBBEY-OWENS-FORD GLASS COMPANY

DESIGN SUBMITTED BY  
G. Foster Harrell, Jr.  
105 East 40th St.  
New York, N.Y.

Competition winners. Above: Food Store by G. Foster Harrell, Jr., New York City. Below: Service station by Alfred Clauss, Knoxville, Tenn. Other winners and names of jury on page 78.



MODERNIZE MAIN STREET COMPETITION  
SPONSORED BY  
LIBBEY-OWENS-FORD GLASS COMPANY

DESIGN SUBMITTED BY  
Alfred Clauss  
205 Union St.  
Knoxville, Tenn.

# AEROFIN

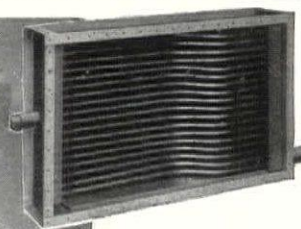
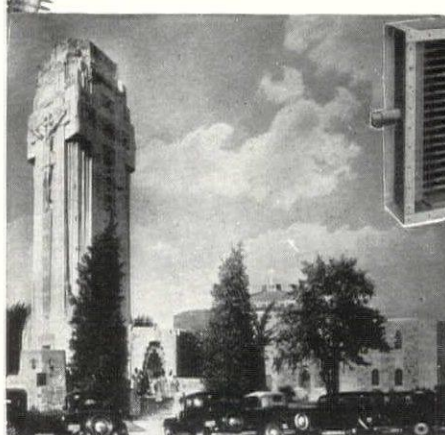
## HEATING OR COOLING SURFACE

There is nothing more modern than Aerofin Standardized Light-Weight Fan System Heat Exchange Surface.

For either Cooling or Heating applications, Aerofin is the choice of important architects, engineers and contractors because it gives complete satisfaction and unvarying performance.

Aerofin begins where ordinary surface leaves off. Its exclusive features in design and construction make it the most advanced surface available today. It is furnished in aluminum, copper or other special metals.

The home office in Newark or any branch office will gladly send descriptive literature or render prompt, personal and efficient technical cooperation. Simply write to the address below.



Aerofin Flexitube Unit for Heating or Cooling with water.

The Shrine of The Little Flower, Royal Oak, Mich. has Aerofin heating surface. Architect, Henry C. McGill, New York; Consulting Engineer, William Brown, Detroit; Heating Contractor, Fred J. Douglas, Birmingham, Michigan.

**AEROFIN**  
is sold only by  
Manufacturers  
of Nationally  
Advertised  
Fan System  
Apparatus.

List upon Request

**AEROFIN CORPORATION**

850 FRELINGHUYSEN AVENUE

NEWARK, N. J.

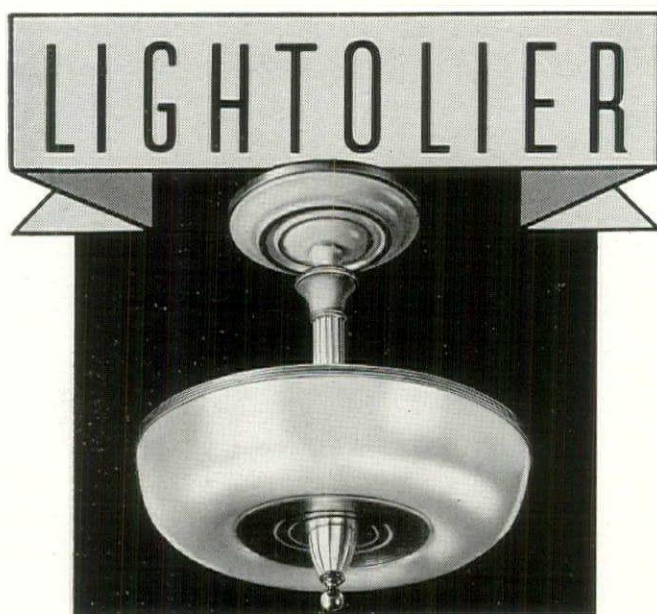
CHICAGO

DETROIT

NEW YORK

PHILADELPHIA





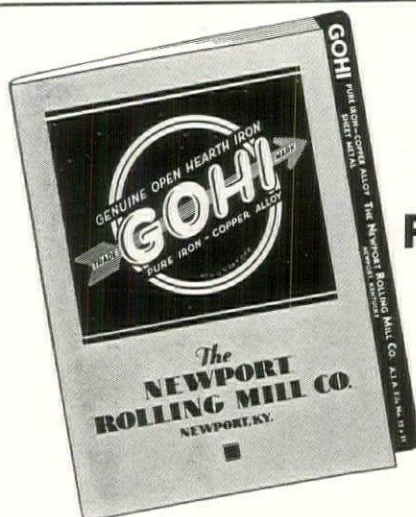
## Beautiful Lighting

No name in the field of lighting fixtures stands for more than "Lightolier." It represents the best you can buy in style, construction, and lighting efficiency. Select Lightolier fixtures to give your home the utmost in beautiful, comfortable and healthful lighting—and experience the real economies of all-around quality. Write for booklet "Correct Lighting" and name of nearest distributor.

**LIGHTOLIER**

11 East 36th Street  
NEW YORK

Quality manufacturers for over 32 years



Send for  
**FREE Copy**

A new brochure for architects and engineers on GOHI Pure Iron-Copper Alloy Sheet Metal is now available. It contains data of value to everyone engaged in the construction industry, and complete information on wear-, weather- and corrosion resisting GOHI, the longest-lived, low-cost ferrous metal.

Send for free copy, also samples of GOHI Pure Iron-Copper Alloy in convenient folder. Give permanence to your sheet metal construction by making GOHI your permanent specification.

GOHI Pure Iron-Copper Alloy is available in all sizes and gauges.

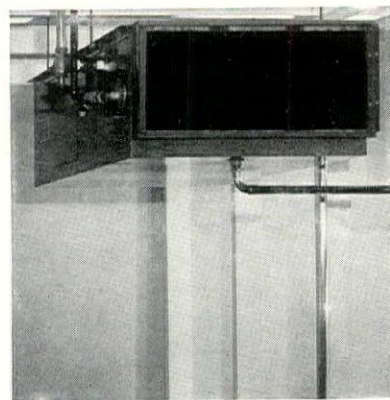
**GOHI**  
PRONOUNCED "GO-HIGH"  
**SHEET METAL**  
THE NEWPORT ROLLING MILL COMPANY . . . NEWPORT, KENTUCKY

## PRODUCTS AND PRACTICE

(Continued from page 45)

### 1002. AIR CONDITIONER

The American Radiator Co. has just developed a new unit, the Arco Air Conditioner, Model 101, designed for houses in the \$3,000-\$8,000 price range. It can be hooked in at any point on the supply line of a radiator heating system and is priced so that it can be installed by a heating contractor for about half the price of the average electric refrigerator. In its simplest form the unit is installed on a basement ceiling with an outlet through the floor above, and a register in the floor at a distant point to provide a return of air to the basement. A Sirocco blower, powered by a 1/20th H.P. motor, and using no more electricity than a 60-watt lamp, is provided. Viscous type replaceable filters of fiber board clean the air. A self-cleansing nozzle spray provides humidification and provision is made for summer cooling and dehumidification if desired.



This new unit represents a development of unusual interest in the field of air conditioning; the low price of the unit itself, the class of housing for which it has been designed, its small size, and the simplicity with which it can be incorporated into an existing radiator heating system are all indicative of the trends and probable future developments of the air conditioning industry.

ing system are all indicative of the trends and probable future developments of the air conditioning industry.

### 1003. FLAT PAINT

Medusa-Lite, a new flat wall paint with several remarkable qualities claimed for it, has been introduced by the Medusa Products Co. It comes in paste form, using water as a thinner, and can be mixed with dry or oil colors. It can be applied with a brush or sprayed, can be used on almost any surface, is washable, and requires only one coat. There is no odor whatsoever to the paint, and it dries completely in three or four hours. These numerous advantages make it a product of considerable usefulness in the redecorating of homes, as well as the painting of new ones.

### 1004. LINOLEUM

A new product of particular interest in the small house field, claimed to be the first development of importance in the linoleum industry within the past twenty years, has been announced by the Congoleum-Nairn Co. It is called Adhesive Sealex Linoleum, and its special feature is an adhesive preparation which is applied to the linoleum at the factory, thereby removing the need for laying the material over a felt lining. It is expected that this advantage will stimulate interest among house owners and architects who have avoided using linoleum because of the expense. It is estimated that a room with an area of 14 square yards could be covered in two or three hours with the new material, which would represent a considerable saving in labor costs. In addition to the economy and speed of installation claimed for the product, it is also said to have greater strength, due to the fact that every square inch is tightly held to the underfloor.

(Continued on page 84)



# Confidence

**LIBBEY·OWENS·FORD**  
GLASS COMPANY



**SINGLE STRENGTH**  
**A** *Quality*

1

**LIBBEY·OWENS·FORD**  
GLASS COMPANY



**DOUBLE STRENGTH**  
**A** *Quality*

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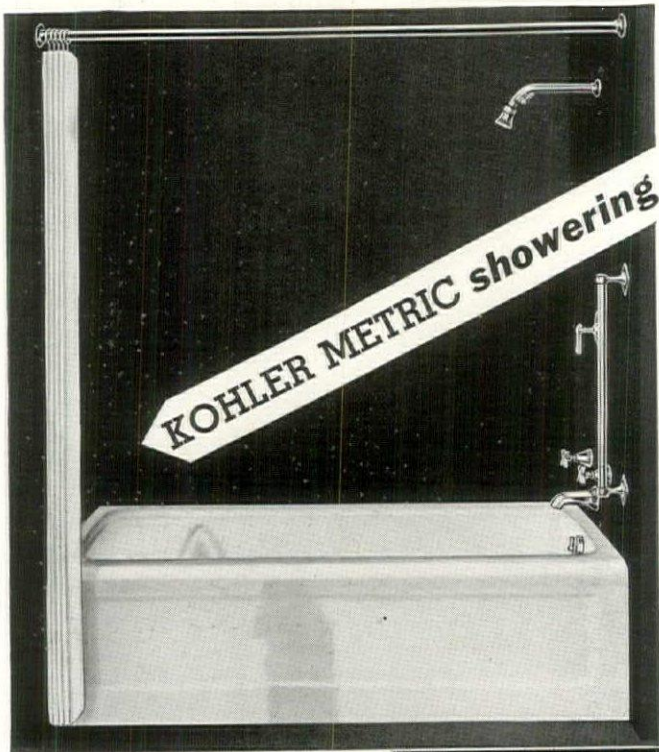
● As glass becomes more and more a major material of construction, quality becomes increasingly important. That is why a closed specification for L·O·F products assures complete satisfaction to both archi-

tect and client. For your protection, it is advisable to instruct contractors and builders to leave the labels on each light until final inspection has been made. Libbey·Owens·Ford Glass Company . . . Toledo, Ohio.

**LIBBEY·OWENS·FORD**  
**QUALITY GLASS**



## AMERICA WELCOMES A NEW KIND OF BATH



### with integral seat

New, but *not* a novelty—popular, but *practical*! Plumbing contractors at the N.A.M.P. Convention said right out that the new Kohler Metric is the biggest potential business-getter in the whole plumbing field! See why:

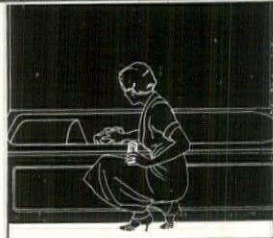
**Fits any bathroom:** No need to tear down walls to make more space—no need to crowd other fixtures—no need to build extra-large bathrooms. *Every* bathroom has room for the Kohler Metric!

**Exclusive "Integral Seat":** Original with Kohler—and the high-spot of the year's plumbing inventions. Bathing is more comfortable, more convenient, safer, especially for children and elderly people. Foot-bathing, a national habit, is now easier and safer too.

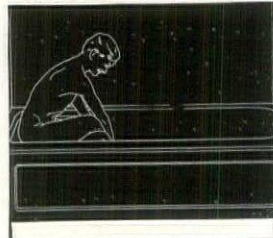
**Easy to clean:** A person of average size can reach entire tub from the front.

**Modern design:** Straight lines, clean, flat, useful surfaces, recessed panels—styled to harmonize with other Kohler fixtures, to agree with best trends in plumbing design.

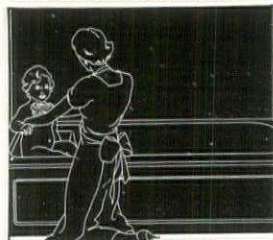
**No sales resistance:** The Metric appeals instantly to all purchasers. This bath has all the good ideas—but none of the kind that look like experiments to most people.



EASY TO CLEAN



COMFORTABLE



CONVENIENT

See the Metric soon—at the nearest Kohler branch and at wholesalers. Or write for further information. Kohler Co. *Founded* 1873. Kohler, Wis.

## KOHLER of KOHLER

PLANNED PLUMBING AND HEATING

## PRODUCTS AND PRACTICE

(Continued from page 82)

### 1005. FRAMELESS FLY SCREENS

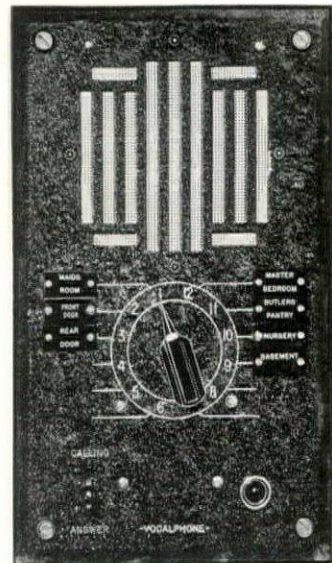
The latest addition to the numerous types of screens already on the market is known as the "Zip-in" screen, manufactured by the Cincinnati Fly Screen Co. It consists of a length of screen cloth with two rigid metal members at the top and bottom, but with no side frames. Installation is easy, top and bottom members being screwed into place, and sliding pieces in the bottom member used to pull the cloth taut. The screens are of all-bronze rustless construction, cover the entire window opening, and are claimed to cost no more than common wood frame screens. Another advantage besides ease of installation and removal is convenience in washing windows, since the bottom catch can be removed, allowing the screen to swing free. At the end of the season the screen is removed, washed, rolled up and stored in the small fiber carton in which it was shipped; the small amount of storage space required is an important factor in houses where extra space has been reduced to a minimum.

### 1006. PUMP

The Burks Self-Priming Rock Garden Pump, manufactured by the Decatur Pump Co., was designed for the growing group of home owners who wish to use water for fountains, waterfalls, etc., in their gardens, but find city water costs prohibitive. In such cases this small pump is recommended; it recirculates the water at a low monthly cost, is of all-bronze construction with a stainless steel shaft and ball bearing. The list price of pump,  $\frac{1}{8}$  H.P. electric motor, and base is \$46.

### 1007. VOCALPHONE

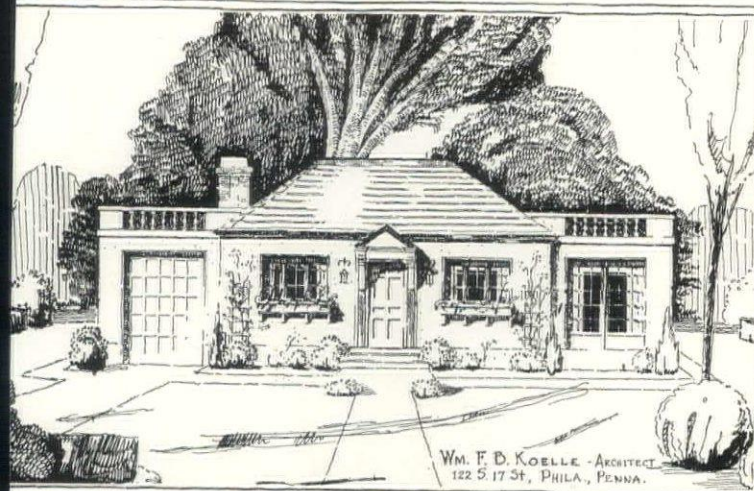
Described by its makers, the Doorman Mfg. Co., as a system of "telephoneless telephoning," the Vocalphone makes possible communication between various rooms of a house or business building without the use of a telephone. By pushing a button, for example, a housewife can talk to a caller at the front door while moving about at her work in the kitchen, and decide whether it is necessary to see him or not. Orders can be given from living room to kitchen in an ordinary conversational tone of voice; when a child wakes up in the nursery the fact can be announced in any selected part of the house. The chief advantages claimed for it are that conversations can be carried on without interruption of whatever work is going on at the time, and that the instrument transmits sounds with the greatest fidelity. The system uses four stages of audio amplification and loudspeakers are employed in place of telephones. Two-way communication is controlled by a button. Installation costs are low, it is claimed by the manufacturers, and maintenance, expense is said to be less than that of the average radio.



CONTROL PANEL

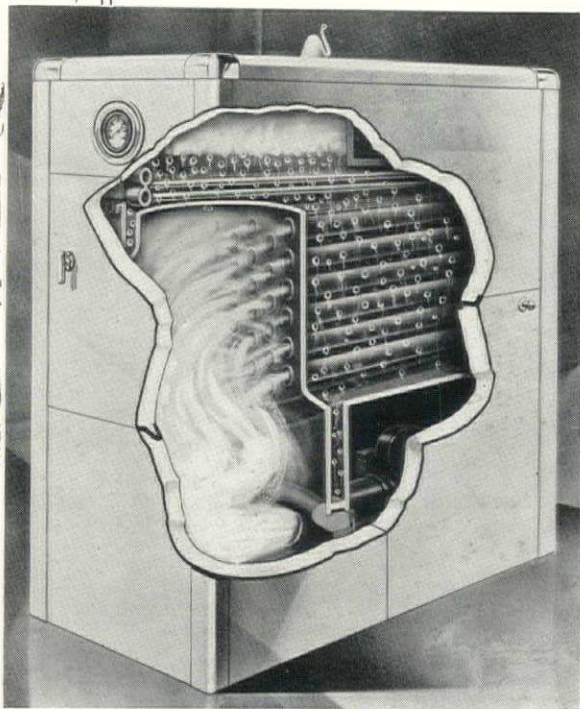
(Continued on page 87)





"The LITTLE HOME"—Steel Pier, Atlantic City, N. J.  
ARCHITECT—WM. F. B. KOELLE of Phila., Pa.

This was the first structure completed under direction of the Federal Housing Administration in its campaign to stimulate home building. A striking example of today's low-cost home-building possibilities, it also constitutes



## Significant Recognition of the FITZGIBBONS OIL-EIGHTY AUTOMATIC

### Reasons for selecting the OIL-EIGHTY AUTOMATIC

Has established a record for efficient, fuel-saving performance in thousands of homes throughout the country. Developed expressly for oil firing, it satisfies every scientific and mechanical requirement of the process.

Adaptable to all makes of burners—and permits most makes to be entirely enclosed inside the jacket, behind large, removable panels—thus saving space and enhancing appearance.

Copper-bearing steel construction provides a resilient, sturdy, corrosion-resistant unit, good for the life of the building.

Offers year 'round INSTANTANEOUS HOT WATER without a storage tank.

Enameled, chromium-trimmed steel jacket adds the appeal of modern beauty.

Available in 13 different capacities ranging from 425 to 2680 sq. ft. E. D. R.

Can be installed in a few hours in any residence, new or old.

It may be bought under the FITZGIBBONS FHA THREE-YEAR PURCHASE PLAN, which permits immediate installation with 3 years to complete payment.

That an OIL-EIGHTY AUTOMATIC was chosen for this project is more than an honor—it is a tribute to this boiler's sound value, not only in the exceptionally efficient, dependable heating it assures, but also in the *extra service* it performs in taking care of hot water requirements.

The features of the OIL-EIGHTY AUTOMATIC which decided its selection, are given in the column at the left. Including as they do, everything that could be desired in a boiler for domestic oil heating, they argue compellingly for the selection of this boiler for any home, large or small, be it a new project or one of modernization.

OIL-EIGHTY Catalog AF gives the full details.  
A copy is yours for the asking.

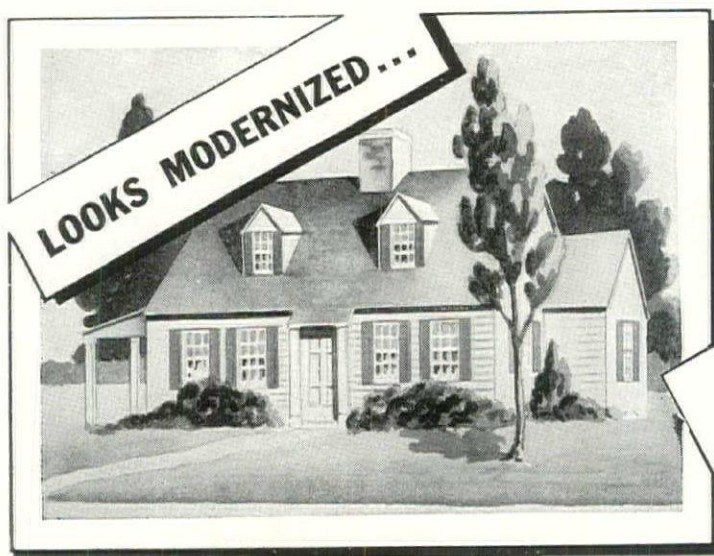
***Fitzgibbons Boiler Company, Inc.***

GENERAL OFFICES: 570 SEVENTH AVE., NEW YORK, N. Y.

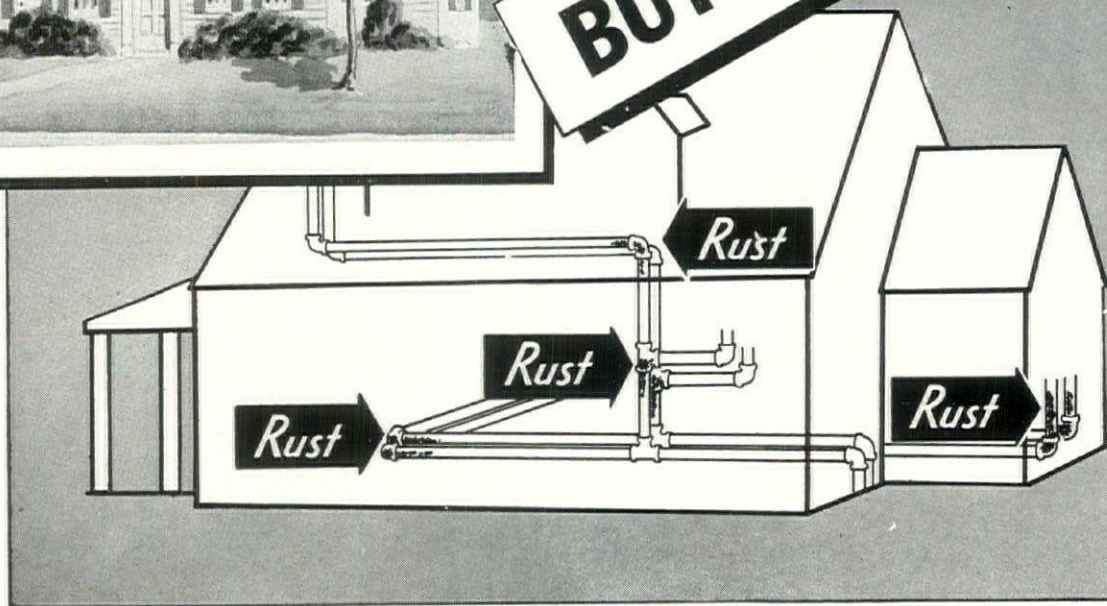
Works: OSWEGO, N. Y.

BRANCHES AND REPRESENTATIVES IN PRINCIPAL CITIES





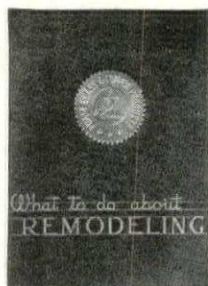
**BUT IT ISN'T!**



## Beware the false economy of *"Skin-deep"* modernization

"Skin-deep" modernization—modernization without rust-proofing—is an expense, not an investment. Sooner or later, rust will begin to drive away tenants. Maintenance costs will rise; expensive replacements will eat away profit. And income property will slide right back into the red.

Owners, managers and architects must face these facts. "Skin-deep" modernization of essentials defeats its own purpose. NOW is the time and the opportunity to replace rustable metals with rust-proof brass and copper throughout—in roofing, plumbing, heating and lighting.



*Did you get your copy of this book?*

Chase Brass and Copper Building Products are described and illustrated in the new Chase book, "What to do about Remodeling." It contains complete, practical information for the man in charge of modernization. Also applies to new building. Write for your copy today.

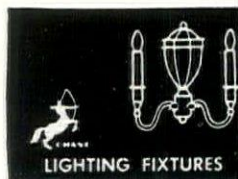
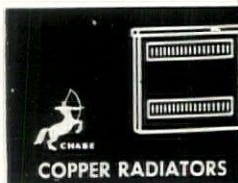


**CHASE BRASS & COPPER CO.**

*Incorporated  
Subsidiary of Kennecott Copper Corporation*

**Waterbury**

**Connecticut**



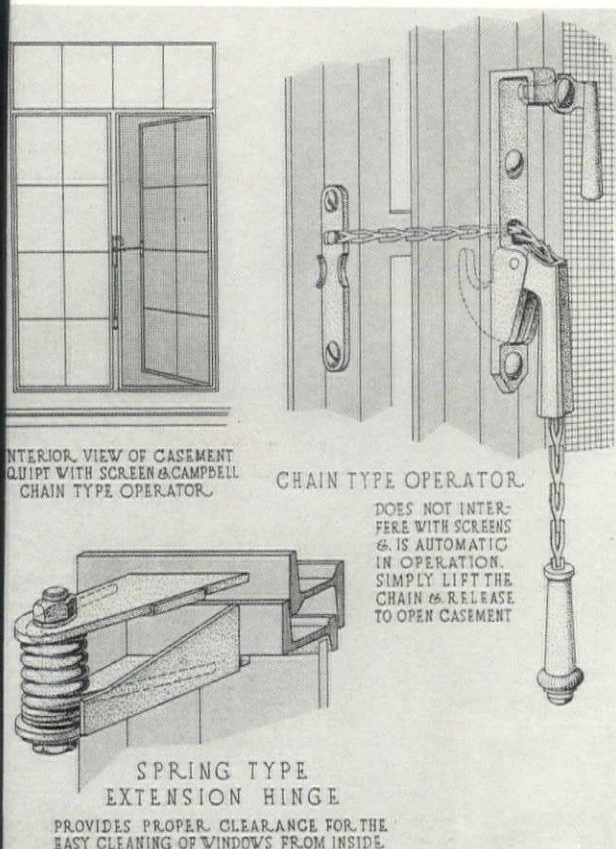


## PRODUCTS AND PRACTICE

(Continued from page 84)

### 8. METAL WINDOWS

The Campbell Metal Window Corporation has introduced two new products that are suitable for residences and cost housing projects. One is a standardized double hung window of steel at a price lower than has ever before been approached in the steel window industry. The window is fur-



DETAIL OF SPRING-TYPE CASEMENT

ished in eight standard sizes and is both galvanized and weatherstripped. The other product is a residential casement which can be equipped with a spring and chain adjuster and provides a new and simple means of operation through the same section of the window, together with a hinged screen which is interchangeable with a hinged inner sash. The inner sash provides an extremely cheap and efficient means of obtaining double windows and is particularly interesting when considered from the standpoint of savings in heat loss and fuel consumption. It is claimed that the additional cost of the inner storm sash can be amortized in five years by actual savings in fuel.

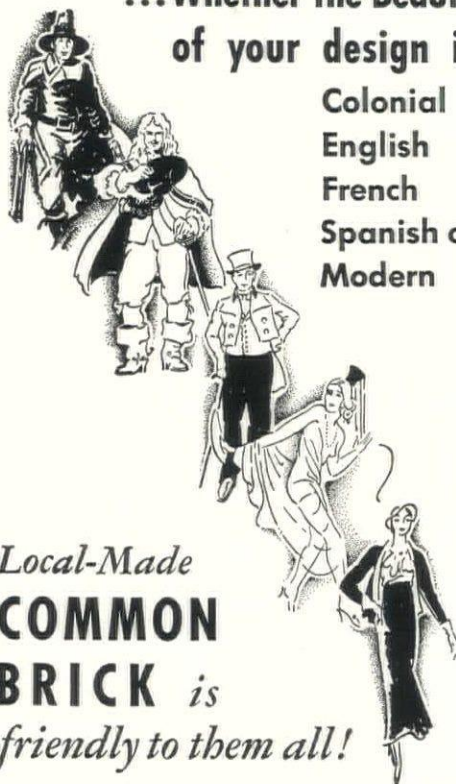
### 9. SOUND REDUCER

Johns-Manville announces a new product, known as Air-coustic Sheets, designed to reduce or eliminate the noise transmitted through ducts in air conditioning and ventilating systems. These sheets are a sound absorbing material in rigid rock form made of rock wool and are a suitable binder and are primarily used as duct lining. Because they will not smolder or support combustion, they are recommended for all installations where combustible materials would add to the fire hazard. Since materials used for duct lining in air conditioning systems are continuously subjected to a humidity, these sheets have been made highly moisture resistant.

(Continued on page 88)

...Whether the Beauty  
of your design is

Colonial  
English  
French  
Spanish or  
Modern



Local-Made  
**COMMON  
BRICK** is  
*friendly to them all!*

ARCHITECTS everywhere know Common Brick, the local-made low-cost brick, offered by makers in every community. They know it for its infinite variety of warm, natural hues and textures, and how aptly it cooperates to satisfy the most exacting architectural requirements for surface effects of genuine distinction.

Not the least of the economies from this most fire-resistive, basic building material arises from the fact that when you buy Common Brick, your building dollars are invested in actual material, not expensive transportation. It's available *everywhere*.

In a situation confused with the most extravagant claims for substitute materials, Common Brick is today, as always, the modern material favored by the foremost architects and practical builders for its extraordinary adaptability, for its enduring beauty, and for the economy of its *local* manufacture.

### A PACKET OF EDUCATIONAL LITERATURE

● Containing three interesting plan books illustrating over 100 houses; a deluxe booklet of practical Fire Place designs; a complete Builders Manual for brick construction and other useful literature, will be mailed to you postpaid for 50 cents. Simply send this convenient clipping to our National Headquarters with your remittance.

Name \_\_\_\_\_

Address \_\_\_\_\_

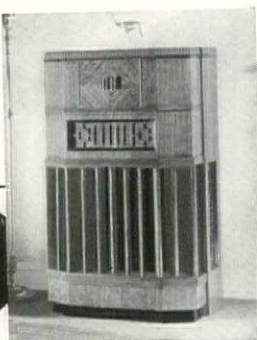
## THE BRICK MANUFACTURERS ASSOCIATION OF AMERICA

2121 Guarantee Title Building  
CLEVELAND, OHIO



WHEN YOU BUY A RADIO  
Remember—THERE CAN BE  
ONLY One "WORLD'S FINEST"

**SCOTT**  
Full Range Hi-Fidelity  
ALL-WAVE



OSCANINI—world's greatest symphony conductor—hears SCOTT Allwave in Genoa, Italy—comes half across the world to own one! Here are his own words—"Never would I have believed it possible to obtain such marvelous reproduction!"

England—France—Germany—seething Italy—bewildered Africa—hear their programs in your own home as *only* the SCOTT brings them in—pioneer "Allwave" receiver that holds all *verified* world distance records.

Breath-taking tonal beauty—every delicate shade of interpretation—every silver overtone! Twice the tonal range of any high fidelity receiver. Unqualifiedly guaranteed to *outperform* any radio on earth.

SCOTT—the internationally famous radio owned by Walter Winchell, Guy Lombardo, Rudy Vallee, Al Jolson, Eddie Cantor, and hundreds of other celebrities.

Thirty-day trial in U. S. A. Custom-built and sold direct from the laboratories—with a nationwide installation service.

You can own a SCOTT for no more than you would pay for an ordinary radio. Write *today* for "PROOFS" of its superior performance. No obligation whatever.

• Architects: SCOTT six times average power makes it the receiver to specify where speakers are desired in several rooms of the home. Write for details.

**E. H. SCOTT RADIO LABORATORIES**

4466 Ravenswood Ave., Dept. 35R5 Chicago, Ill.

## Zip-in Fly Screens IN OR OUT IN A JIFFY



**Frameless . . . ALL-BRONZE . . . Long-Lived**

Easily installed from inside. Only four screws and screw-driver required. All-bronze rustless construction throughout. No painting. To clean, just dip into tub of soapy water.

**Covers Entire Window**

Zip-in Screens are full-length, permitting either top or bottom window sash, or both, to be open—thereby providing better ventilation. Window washing is made easier. Packed individually in 3" square container. Requires only small storage space. Stock sizes to fit all standard openings.

**5200 Zip-in Screens Used in New Low-Cost Housing Project**

At right, Boulevard Gardens, Woodside, L. I., N. Y.—a new low-cost housing project in which 5200 Zip-in Screens will be used. Photo below shows one of many rows of Eastman Kodak employees' homes in which Zip-in Screens are used.



See Sweet's Catalog for Details, or Write for Illustrated Folder.

**THE CINCINNATI FLY SCREEN CO.**

Cincinnati, Ohio

Over Half a Century of Service

## MANUFACTURERS' PUBLICATIONS

Among the manufacturers' publications recently received interest to the architectural profession were the following:

### 1010. BOILER PROTECTION

From Warren Webster & Co. a new folder dealing with facts about boiler breakage and its prevention.

### 1011. AIR CONDITIONING

From the Edwards Manufacturing Co., a pamphlet describing their new Hot-Cold Winter Air Conditioning equipment.

### 1012. ELEVATORS

From the Sedgwick Machine Works, an illustrated book showing their complete line of residential elevators.

### 1013. PLASTIC

From the Continental Diamond Fibre Co., an illustrated catalogue giving information concerning Dilecto, a new laminated plastic.

### 1014. PILES

From the Carnegie Steel Co., a new catalogue giving data on steel bearing piles.

### 1015. WOLMAN SALTS

From the American Lumber and Treating Co., a book describing the applications of this wood preservative with particular reference to termite control.

### 1016. STONE FOR HOUSES

From the Indiana Limestone Corp., an illustrated pamphlet showing the use of their well-known product for homes of moderate size.

### 1017. INSTRUMENTS

From Julien P. Friez & Sons, Inc., a new folder describing their complete line of standard measuring instruments, air conditioning, and weather instruments.

### 1018. INSULITE

From the Insulite Co., a new booklet, "Building for the Future with Insulite," which presents the many forms in which this product may now be obtained, with much valuable information about its use.

### 1019. METAL LATH

From the Penn Metal Co., a new catalogue of the Penmet line, including various forms of metal lath, metal corner beads and other accessories.

### 1020. TERMITES

A bulletin from the Copper & Brass Research Association discussing termites and the use of copper and copper alloys as protection against them. It notes that literature on termite control can be obtained from the Department of Agriculture in Washington (Bulletin 101) and from the University of California at Berkeley and the University of Florida at Gainesville.

### 1021. STEEL

From the Kalman Steel Corporation, a new series of catalogues describing their light-weight steel joists and reinforcing bars and spacers.

(Continued on page 90)

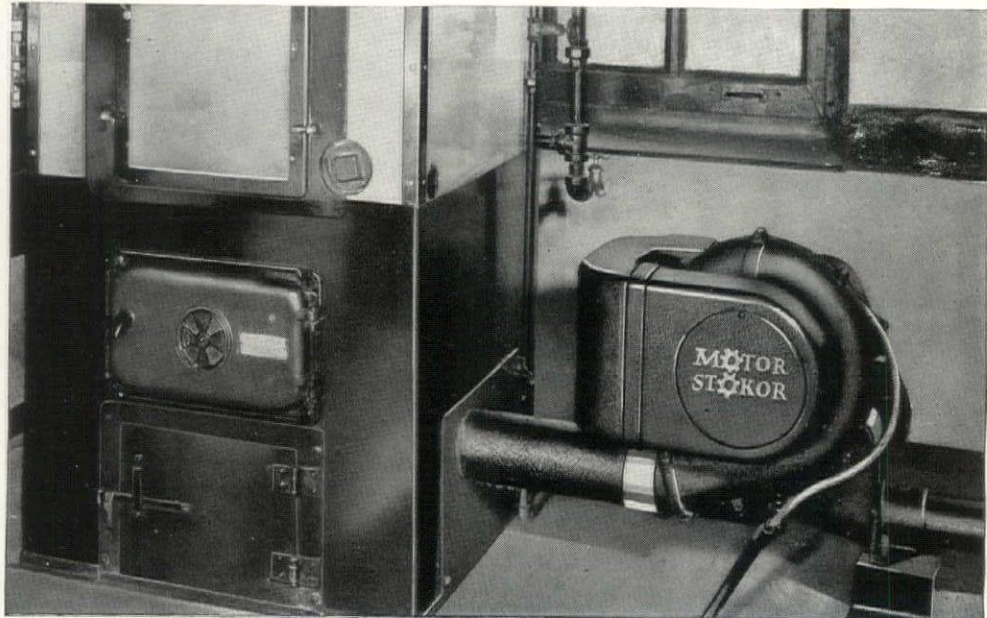


# ARCHITECTS

as professional men are rated  
by the Insurance Underwriters at  
**\$50,000.00**

**PROTECT YOUR REPUTATION!**  
and your client's pocketbook

## Specify — MOTORSTOKOR AUTOMATIC COAL BURNER



Check ✓ these points:

### CONVENIENCE

- No coal to shovel.
- No grates to shake.
- No ashes to shovel.
- No dampers to set.

### COMFORT

- Steady heat with continuous circulation.
- The constant firebed eliminates "cold 70's".

### SAFETY

- Coal is inherently safe.
- MOTORSTOKOR cannot explode, leak, or give off fumes.

### CLEANLINESS

- No dust.
- No smell.
- No noise.
- No smoke.
- No smudge.

+

## ECONOMY

There is no way to buy heat for less money that with MOTORSTOKOR.

### NO OTHER METHOD OF HOME-HEATING SO SATISFACTORY

Motorstokor developed and manufactured the first fully automatic coal burner. Since 1912 when Motorstokor produced its original burner, up to now with units operating in countries throughout the world our equipment has been identified as "The finest automatic heat in the world."

Motorstokor's 40 models and sizes are made to handle all types of central heating plants—with maximum efficiency. Some to burn Anthracite (hard coal); some to burn Bituminous. Some are fully automatic bringing coal from bin to burner and removing ashes, others are semi-automatic with hoppers.

DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS  
WASHINGTON

....  
MECHANICAL STOKERS  
July 1935

Report sales of residential  
Size Automatic Coal Burners  
from January 1st to July 31 **191% OF 1934**

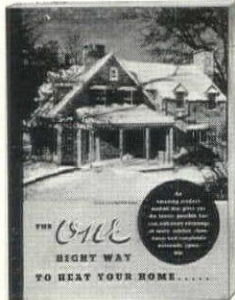
HERSHEY-MOTORSTOKOR  
CORPORATION  
347 MADISON AVENUE, NEW YORK  
Factory: MANHEIM, PA.

... as indicated by THE  
ARCHITECTURAL FORUM—  
October, 1934 . . . "few people  
realize that the increase in sales  
of stokers far exceeds that of any  
other type of heating unit. . . ."

### HERE IT IS!

The most complete presentation  
ever printed showing all the advantages to be enjoyed with  
Fully Automatic Coal Heat.

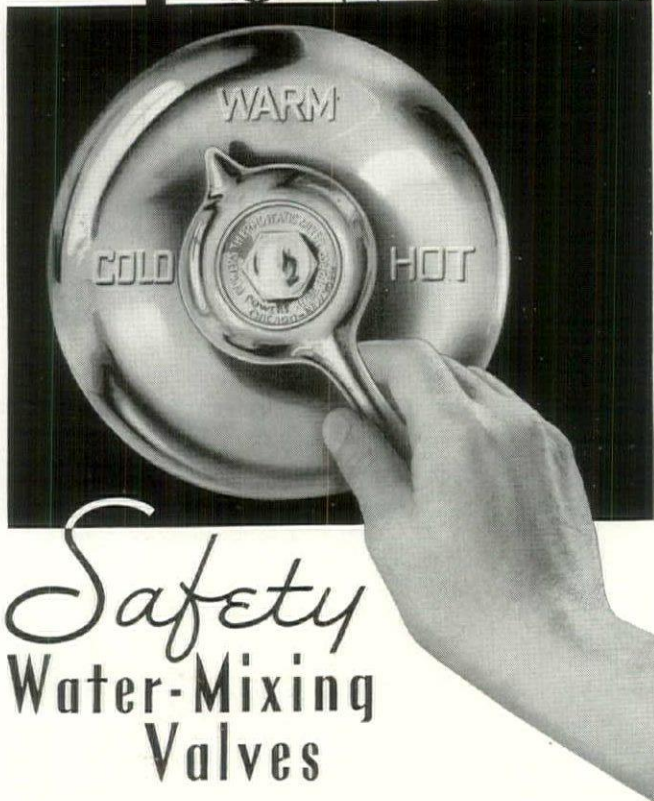
Mailed on receipt of 10 cents.



... IT'S FULLY AUTOMATIC HEAT WITH COAL ...



# POWERS



**For Shower Baths**—Powers mixers prevent scalding caused by failure of cold water supply, or by pressure changes due to use of nearby showers, faucets or flush valves. They keep the temperature of the shower where the bather wants it without any "shots" of cold or scalding hot water.

**Group and Gang Showers**—Powers mixing valves are also used for the control of water temperatures of showers in groups of from 2 to 20 showers. They may be used to establish a maximum temperature in the hot water supply so as to protect the entire group from danger of scalding or to place the entire group of showers under the control of an attendant.

**Zone Showers**—Where compulsory bathing is required before entering swimming pools, lane showers are divided into four zones, each controlled by a Powers valve. First zone is maintained at 105° F; second at 90° F; third at 75° F; and fourth at 60° F. Because of its efficiency and its hygienic and sanitary advantages, this type of shower is rapidly increasing in popularity.

**Hospital Hydrotherapy**—In infant baths, continuous flowing baths, control tables, douche baths, arm and leg baths, colonic irrigation apparatus, photographic baths, and hot water line control, Powers mixing valves are indispensable because of their safety features.

Write for bulletins: The Powers Regulator Co., 2720 Greenvue Ave., Chicago or 231 E. 46th St., New York. Offices in 43 Cities—See your phone directory.

*Quick Service*  
whenever required  
by competent engineers in 43 cities

## MANUFACTURERS' PUBLICATIONS

(Continued from page 88)

### 1022. SHINGLES

From the U. S. Department of Commerce, a publication, "Commercial Standard CS31-35" provided for the guidance of manufacturers, sellers, and users of wood shingles.

### 1023. ORIFICE SYSTEM

From the Trane Company, a new booklet dealing with the use of the Trane Orifice System in heating residences.

### 1024. LINOLEUM

From the Congoleum-Nairn Co., a booklet, "Resilient Floors" presenting the entire line of this company with many colored photographs of samples and installations. Specifications and drawings showing approved installation methods are also included.

### 1025. CARPET TILE

From the Uvalde Rock Asphalt Co., a brochure showing numerous installations of Azrock Carpet Tile.

### 1026. KITCHEN CABINETS

From the Excel Metal Cabinet Co., a folder describing the Metalcraft Line of Steel kitchen cabinets, cupboards, and dressers.

### 1027. CONCRETE

From the Portland Cement Association, a new folder on concreting in cold weather, including specifications for making, placing and curing concrete in cold weather and recommendations for the protection of concrete work at low temperatures.

### 1028. STEAM TRAPS

From the Yarnall-Waring Co., a folder describing the new Yarway impulse steam traps, a standardized unit serving all trap requirements from one-half to two inches.

### 1029. GYPSTEEL PLANK

From the Structural Gypsum Division of the American Cyanamid and Chemical Corporation, a new folder on the use of Gypsteel Plank for modern fire-safe homes.

### 1030. STEEL SECTIONS

From the Bethlehem Steel Company, catalogue showing numerous installations and giving outline specifications of their light steel sections.

### REQUEST FOR DATA

To obtain any of the publications reviewed on these pages, indicate the number and send coupon to THE ARCHITECTURAL FORUM, 135 East 42nd St., New York

.....  
 .....  
 .....  
 .....  
 NAME .....  
 STREET ADDRESS .....  
 CITY AND STATE.....  
 Please check here if engaged in Architectural Practice



# Operate Easily ... Conveniently THE YEAR AROUND

**KINNEAR DOORS**

**RoL-TOP**

**TIP-TOP**

## QUICK FACTS

- 1 Roll up overhead, out of the way.
  - 2 Clear ice, snow and swollen ground.
  - 3 Always operate easily ... never sag or bind.
  - 4 Neat ... harmonizes with any architecture.
  - 5 Stays where PUT ... free of damage from wind or car.
  - 6 Can be installed on Old or New Building.
- Built to last for years.

### The Deluxe In Upward Operating Garage Doors

TIP-TOP is composed of sections, to meet individual tastes, which roll up overhead ... clearing ice and snow ... held in place with strong tracks. A neat, positive "Safety Interbalance" insures remarkable ease of operating ease. Various features makes it weather-tight, burglar-proof ... and an attractive, convenient door that will last for years. It's as modern and efficient as a 1935 automobile.

### Economical—Easily Installed

Every one is surprised at the low cost of Kinnear Doors. And their installation is very economical, because of their amazing simplicity. Once installed, you would never again be without their luxurious convenience.

### Transforms Old Style Doors Into Overhead Operation

A marvelous invention! TIP-TOP Hardware now makes it possible for every one to enjoy convenient garage doors. A simple, inexpensive set of hardware for converting swinging or sliding doors into overhead operation ... affording a door that stays where it's PUT ... out of the way of wind or car. A "Balance-Lever"—a new principle in counterbalance—causes it to literally float open or closed. It's weathertight and burglar-proof. With few moving parts there's nothing to wear or get out of fix. Here's equipment easily and economically applied to old or new doors ... ideal for rental property. See and operate TIP-TOP. It will delight you.

**ELECTRICALLY OPERATED**

Equipped with Kinnear Motor Operators your Kinnear Doors afford ultra convenience ... open and close

like magic ... operate smoothly and swiftly by merely touching a button or turning a key. With various types of control switches placed at convenient points any desired operating hook-up can be provided. Kinnear Electrical Equipment is ruggedly, dependably built to withstand years of hard usage ... and the small cost of this modern equipment is most pleasing.

Write Today for these  
interesting booklets on  
Kinnear Doors.



### REAL BOON TO RENTAL PROPERTIES

... and don't overlook the FAMOUS KINNEAR STEEL ROLLING AND BIFOLDING DOORS. Private, commercial and industrial buildings equipped with Kinnear Doors save the Landlord of constant repairs, because they're ruggedly constructed and when out of the way. Their initial cost is the last cost.

**The KINNEAR MFG. CO.**  
COLUMBUS, OHIO

1640-60 Fields Ave.

Without obligation please send me complete information on RoL-TOP DOORS

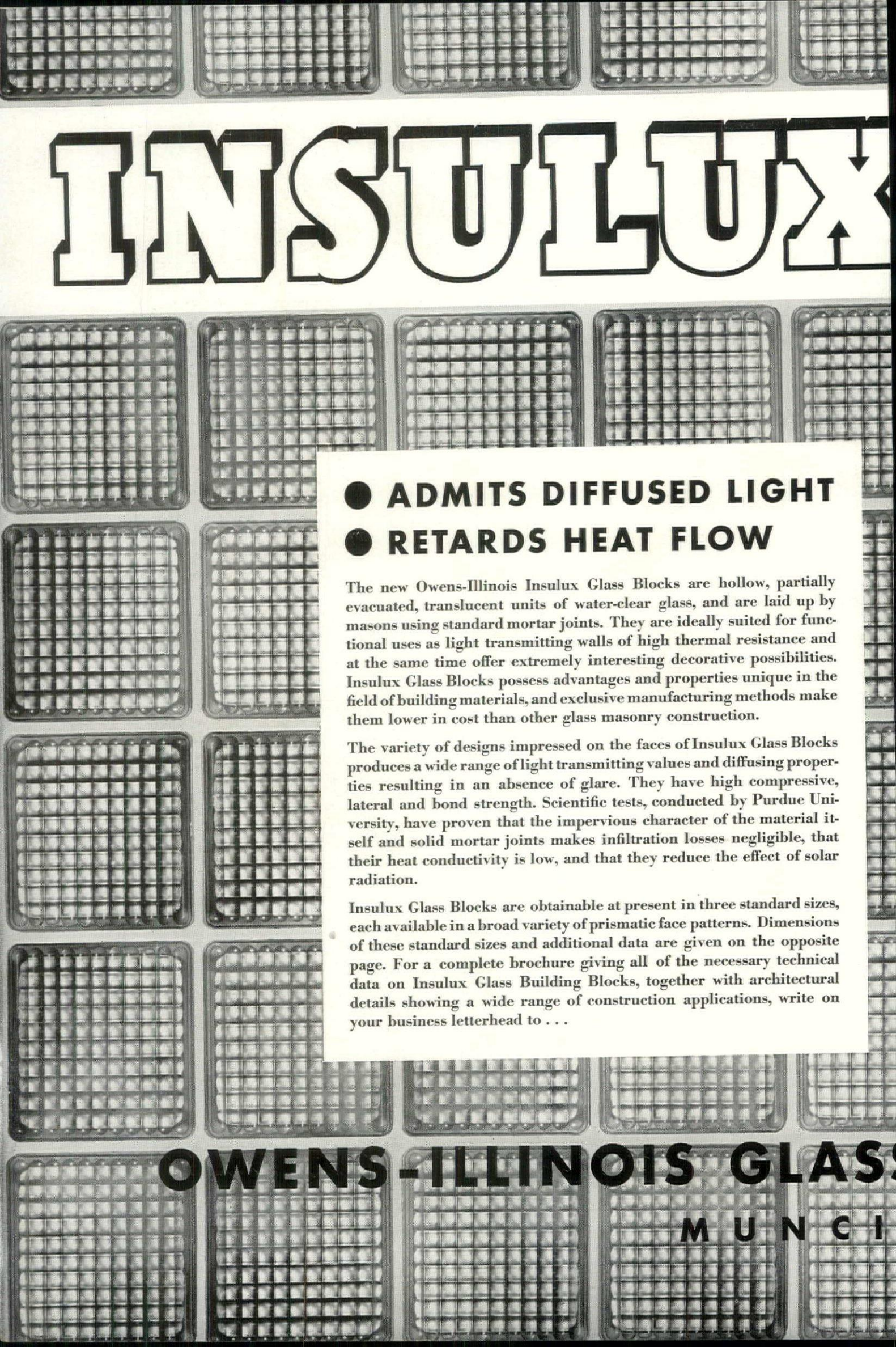
☐ TIP-TOP Hardware ☐ Kinnear Electric Door Operating Equipment ☐ Kinnear Steel Rolling & Bifolding Doors ☐

Name .....

Address .....

City .....





# INSULUX

- ADMITS DIFFUSED LIGHT
- RETARDS HEAT FLOW

The new Owens-Illinois Insulux Glass Blocks are hollow, partially evacuated, translucent units of water-clear glass, and are laid up by masons using standard mortar joints. They are ideally suited for functional uses as light transmitting walls of high thermal resistance and at the same time offer extremely interesting decorative possibilities. Insulux Glass Blocks possess advantages and properties unique in the field of building materials, and exclusive manufacturing methods make them lower in cost than other glass masonry construction.

The variety of designs impressed on the faces of Insulux Glass Blocks produces a wide range of light transmitting values and diffusing properties resulting in an absence of glare. They have high compressive, lateral and bond strength. Scientific tests, conducted by Purdue University, have proven that the impervious character of the material itself and solid mortar joints makes infiltration losses negligible, that their heat conductivity is low, and that they reduce the effect of solar radiation.

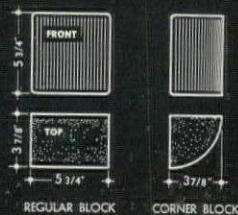
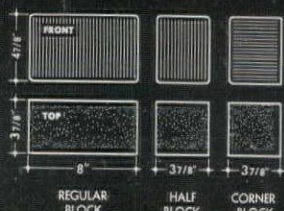
Insulux Glass Blocks are obtainable at present in three standard sizes, each available in a broad variety of prismatic face patterns. Dimensions of these standard sizes and additional data are given on the opposite page. For a complete brochure giving all of the necessary technical data on Insulux Glass Building Blocks, together with architectural details showing a wide range of construction applications, write on your business letterhead to . . .

**OWENS-ILLINOIS GLASS**  
M U N C I



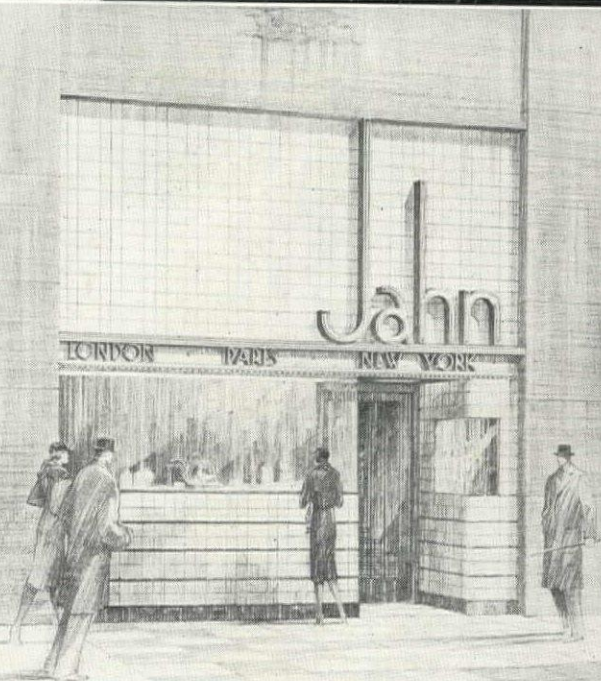
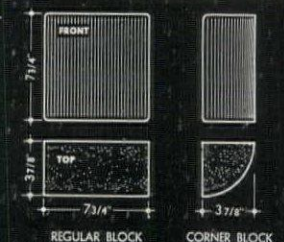
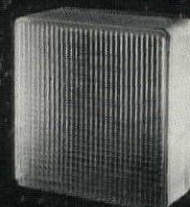
# the GLASS MASONRY

● This block bonds with 2 courses of ordinary brickwork. Square corner blocks and half blocks used to start panels of Running Bond, are standard.

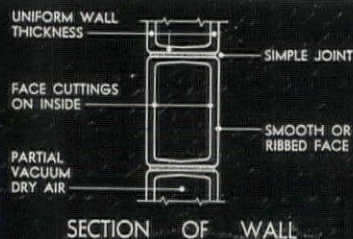


● This block is particularly suited to Checkerboard Bond. Rounded corner blocks are standard in this series.

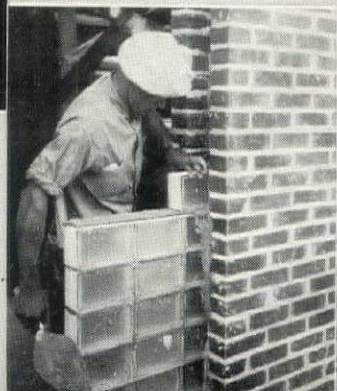
● The larger size square block results in a wall of larger scale. Rounded corner blocks are standard in this series.



● The architectural rendering reproduced above has taken advantage of both the functional and decorative properties of Glass Masonry. The bulkhead and spandrel admit light into the building during daylight hours, or can be lighted from the inside to increase the "eye appeal" of the front.



● Glass blocks are light in weight and are of a size that is convenient for the mason to handle. They lay up quickly in the same manner as other masonry units.



● The Owens-Illinois Glass Company has given the building industry the Dustop Glass Wool Air Filter and Glass Insulating Wool. These products, as well as Insulux Glass Blocks, were introduced only after exhaustive research and comprehensive studies of the problems involved.

# COMPANY INDIANA





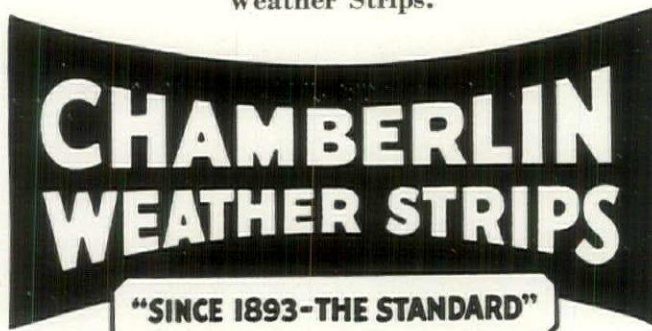
## Let Chamberlin stop this costly waste of Heat

Cracks around the doors and windows of the average small house let in cold air equivalent to the amount which would pass through a window raised ten inches.

Chamberlin Weather Strips stop drafts. They stop a 20% waste in fuel which, in a few seasons, more than pays for a Chamberlin installation.

The Chamberlin factory-trained representative in your community is equipped to give quick, efficient installation service for homes and buildings of every size and type. Architects, builders, and owners are invited to call him for service.

Mail the coupon below today for an attractive new booklet which fully describes Chamberlin Weather Strips.



CHAMBERLIN METAL WEATHER STRIP CO., Inc.  
1254 La Brosse St., Detroit, Michigan

☐ Without obligation, please send me your new Chamberlin WeatherStrip booklet.

☐ Without obligation, please send me Architectural detail book.

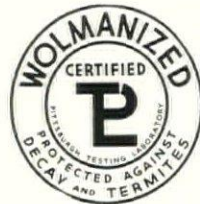
Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

## WOLMANIZED LUMBER . . . .

Protected against Decay and Termites



This seal, burned into every piece, is your guarantee of genuine WOLMANIZED LUMBER

CLEAN — DRY — ODORLESS  
ECONOMICAL — PERMANENT

Contractors Prefer It

## AMERICAN LUMBER & TREATING CO.

37 W. Van Buren St., Chicago, Ill.

New York      St. Louis      Los Angeles      Boston  
San Francisco      Shreveport

### TREATING PLANTS

*Owned and Operated*

Crossett, Ark.      Shreveport, La.  
Fordyce, Ark.      Wauna, Ore.  
Franklin, Va.      Wilmington, Cal.

### COMMERCIAL PLANTS

*Treating With Wolman Salts*

Ayer & Lord Tie Co. Carbondale, Ill.	American Creosote Wks New Orleans, La.
Wood Preserving Corp. Green Springs, W. Va.	Atlantic Creosoting Co. Savannah, Ga.
Carolina Wood Preserv- ing Co. Charleston, S. C.	Joslyn Manufacturing & Supply Co. Franklin Park, Ill.
National Lumber & Creosoting Co. Houston, Texas	Standard Fruit & Steam- ship Co. La Ceiba, Honduras
National Lumber & Creosoting Co. Texarkana, Texas	Standard Fruit & Steam- ship Co. Puerta Cabezas, Nicaragua



COMPLETE

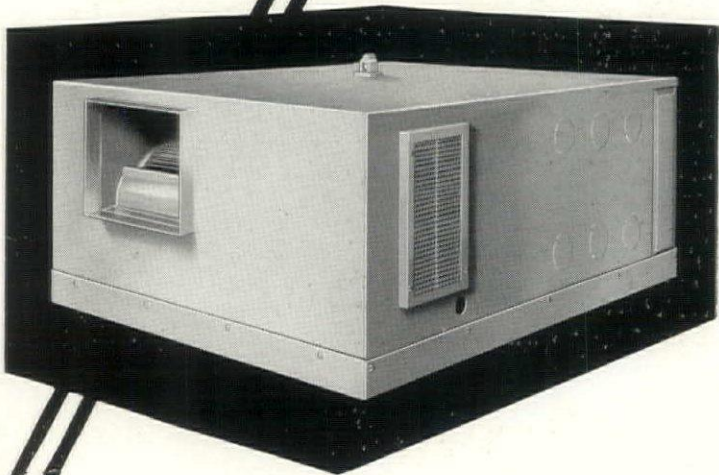
# TRANE

## HEATING AND AIR-CONDITIONING

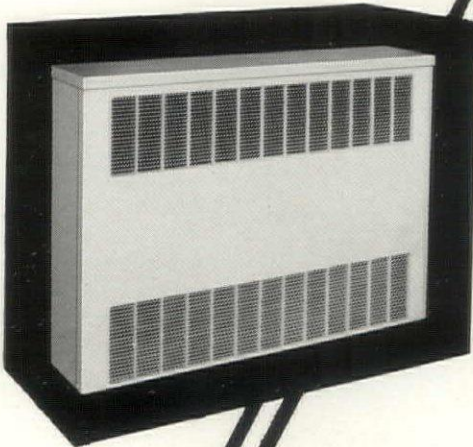
*for the home*

At Practically the Same Cost  
as a Good Heating System

Now you can specify residential air conditioning with the knowledge that it costs but little if any more than just a good heating system. And your client gets the benefit of a complete winter conditioning system that filters, humidifies and circulates the air; yet has sufficient capacity to amply cool one or two rooms during the summer. Think of it! These air conditioning features that everyone wants in his home or building now available for every residence where you ordinarily install a steam or hot water system.



The air conditioner is ordinarily used to humidify the entire home during the winter and to heat one or two rooms. The balance of your rooms will be correctly heated with equipment that cuts fuel costs and gives maximum comfort, if you specify TRANE Convection Heaters in one of the various types available to fit with your architectural requirements. Complete detail data will be supplied to you if it is not already in your files.



And if you specify TRANE Vapor Heat as the basic system for supplying the heating medium to the air conditioner and the Convection Heaters you will be doubly sure of client satisfaction. Here is a TRANE product that has been giving excellent satisfaction for more than a score of years in every type of building from bungalows to skyscrapers and still retains its popularity when owners want efficient economical heat.

Send for this free booklet that explains in complete detail the various TRANE Systems and Combinations of Units for heating and air-conditioning residences and small buildings. You will be surprised at the economies that can be secured and how inexpensively you can give your clients air-conditioned buildings.

TRANE  
VAPOR  
HEAT



The TRANE Company  
Dept. 3a  
La Crosse, Wisconsin

Mail Us Full Details On Trane

..... Air-Conditioners ..... Convection Heaters  
..... Vapor ..... Unit Heaters.

Firm Name .....

City ..... State .....





S & W Cafeteria  
Washington, D. C.

M. E. Boyer, Architect  
Charlotte, N. C.

The operators of "chain" cafeterias, restaurants and hotels draw heavily upon their cumulative experience when faced with the problems of layout and equipment for every additional unit. The famous S & W Cafeteria, illustrated here, is typical, representing, as it does, the utmost efficiency for the profitable preparation and serving of food. It is significant that the proprietors of the S & W Chain, when planning this restaurant, supplemented their own knowledge and experience by calling upon the

## JOHN VAN RANGE

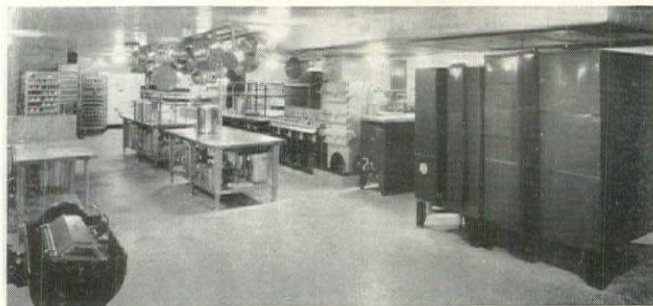
### KITCHEN ENGINEERING SERVICE

Small wonder that architects, with whom problems of commercial and institutional food service are relatively infrequent, should avail themselves of the same engineering assistance that is in daily requisition by those whose entire business lives are confined to this field.

For three generations we have rendered this service to the architectural profession, both as a check on preliminary plans and as a source of authoritative assistance in solving problems that have not come within recent experience of the architects. No fees are charged and its acceptance places the architect under no obligation.

Correct kitchen planning is quite as necessary for the small job as for the largest institutional layout; speed and economy of operation must be assured so that food can be prepared and served at a profit.

We therefore invite you to submit plans for all food service floors before construction is begun.

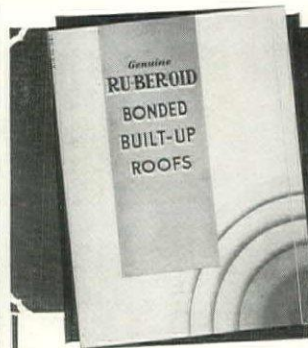


## The John Van Range Co.

EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD

328 EGGLESTON AVE.

CINCINNATI, OHIO



**THIS COMPLETE  
RUBER-OLD  
BUILT-UP ROOFING  
CATALOG FREE**

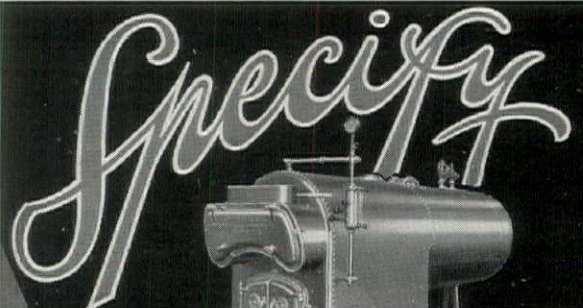
If you are drawing plans that require flat roof construction, or have re-roofing problems, you will appreciate a copy of this latest RUBER-OLD Built-up Roofing Catalog.

It contains 30 specifications in all the popular types, weights and finishes to fit most every condition that could possibly confront you. Be sure and have a copy of this valuable catalog in your files. It is a sure way to secure the greatest value for each roofing dollar expended.

## The RUBEROLD Co.

ROOFING AND BUILDING PRODUCTS

Executive Offices: 500 Fifth Avenue, New York, N. Y.



# TITUSVILLE

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THE MODERN ECONOMICAL  
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Portable return tubular fire box  
power boilers for 100 to 150  
lbs. pressure. Send for Form  
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**THE TITUSVILLE IRON WORKS COMPANY**  
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TITUSVILLE, PA.



TAKE THE ADVICE OF YOUR ARCHITECT



## INSULATE FOR COMFORT!

With this new thick, fireproof insulation

## PAINT FOR LASTING BEAUTY!

With the paint that outlasts all others

Now that the subject of new homes can be discussed again (Heaven be praised!) all parties interested—homeowners, bankers, builders, contractors, realtors, architects—will want the latest available information on such important materials as *Insulation* and *Paint*!

Read the descriptions below of the new, thick Eagle Home Insulation—and the longest lasting of all paints, Eagle White Lead. Then send coupon for complete information about both products.

## EAGLE WHITE LEAD

- This pure lead paint outlasts all others.
- Gives greater protection at lower annual cost.
- Proven best paint in Indiana Community Tests.



This community of 100 homes in Indiana tested well known paints to find out "what is the best paint."

Paint failures had been so costly in this community, that its real estate management decided to make an impartial test of high grade paints. The 100 houses were divided into 3 groups. Three different kinds of paint were used under identical conditions. Two of the paints cracked and peeled within two years. Only the third paint gave good service. Houses painted with it did not need repainting until 5 years later. That third paint was Eagle Pure White Lead, choice of good painters since 1843.

Mail the coupon for the full story of this dramatic paint test.



Pneumatic application



Installing "bats"

## EAGLE HOME INSULATION

- Thick—fireproof—gives summer and winter comfort—pays for itself in fuel savings.

Eagle Home Insulation is a soft, fluffy "wool" made from rock! In ordinary wall thickness it has insulating efficiency of solid concrete 8 feet thick. Gives maximum comfort summer and winter, pays for itself in fuel savings. It comes in two forms:

1. In loose form, it is blown between the joists in the attic floor and between wall studs by a special pneumatic process. It packs evenly, will not settle, is fireproof.
2. In "Bat" form—especially convenient for new construction. The "bats" are 15" by 18" and 3 5/8" thick. They are easy to fit between wall studs and attic joists.

THE EAGLE-PICHER LEAD COMPANY, Dept. AF-10 Cincinnati, Ohio

Please send me

- ☐ full information about Eagle Home Insulation.
- ☐ free picture folder telling the story of the Indiana Community Paint Test.

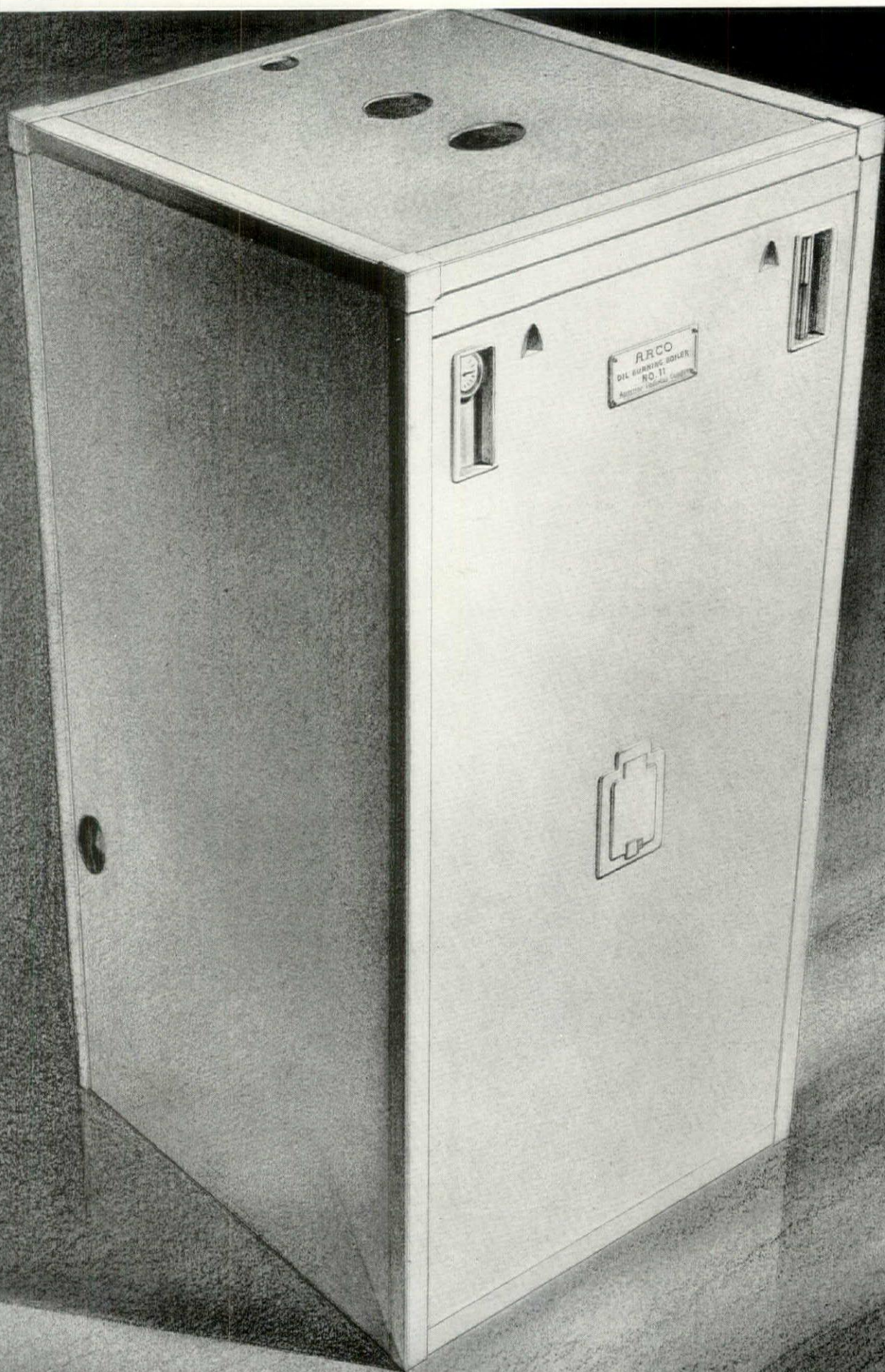
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City \_\_\_\_\_ State \_\_\_\_\_



# A **NEW** OIL BURNING boiler joins the





# Products in the complete line of

## NO. 11 ARCO

**OIL BURNING BOILER**  
for small homes

*Designed especially to meet the  
requirements of automatic heat-  
ing in small homes*

*Water and summer hot water  
valves and other necessary ac-  
cessories are built in*

*Available with regular or ex-  
posed jacket completely enclosing  
burner and all controls*

## AMERICAN RADIATOR HEATING SYSTEMS

- In the new No. 11, the small home now has a *small*, cast iron, oil burning boiler that is not a makeshift, but was designed specifically to meet the requirements of automatic oil heating.
- The No. 11 is a companion to the famous No. 12. It includes all the features of the No. 12, plus new features developed through field work and research. The design of the sections for example is such that the boiler can lose a considerable amount of water before the line will drop appreciably. This overcomes a common cause of trouble in automatic heating where the boiler is rarely looked after.
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- Like all other heating products in the complete line of American Radiator Heating Systems, the No. 11 Oil Burning Boiler is backed by the resources of the world's largest manufacturer of heating equipment. Its performance is assured by the best known name in heating.

### AMERICAN RADIATOR COMPANY

40 West 40th Street, New York, N. Y.

Division of AMERICAN RADIATOR & STANDARD SANITARY CORPORATION





# Bringing *new* Beauty to the RCA VICTOR Sound System



This is an announcement of a handsome new walnut Cabinet, housing all controls, including facilities for radio, records, and microphone. Width 42", Height 73 3/4", Depth 18 1/2".

HERE is the latest addition to the RCA Victor Commercial Sound Systems, bringing into one beautifully finished and compact cabinet all the necessary controls. Cabinet houses two complete world-wide radios, a 2-speed phonograph, a microphone, and a simple switching system by which any room or combination of rooms can be supplied with whatever service may be desired. Standard specifications include provision for control of 80 loudspeakers, and additional switching equipment can be added if desired.

Though primarily designed for use in schools, this Control Cabinet is also suitable for similar purposes in other institutions. It now becomes a vital part of the RCA Victor Commercial Sound Systems, which are suitably flexible to suit the needs of any public or semi-public buildings and areas, such as schools, playgrounds, sports arenas, hospitals, courtrooms, hotels, etc. Wiring for sound is simple, and the cost is well within reach of conservative budgets. Write for information.



## RCA VICTOR

COMMERCIAL SOUND SYSTEMS  
RCA MANUFACTURING CO., Inc., CAMDEN, N. J.  
A RADIO CORPORATION OF AMERICA SUBSIDIARY

Commercial Sound Section, Dept. AF.,  
RCA Manufacturing Co., Inc., Camden, N. J.  
Gentlemen: Please send me complete information on the RCA Victor  
Commercial Sound System.

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Dry-paC has certified conductivity of only .36 B.T.U. for low pressure.

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Ric-wiL Dry-paC Insulation is long fibre asbestos, processed to insure waterproofing—a pure natural insulation without binder, adhesives or metal staples. Non-sagging—supported all around by conduit, *not* attached to pipes. Never confuse Dry-paC, a scientifically developed and laboratory tested product, with ordinary insulations. It has properties peculiarly its own, and in combination with any type Ric-wiL Conduit system, forms the ideal protection for underground steam power or heating lines. To learn more about this unique insulation, write for Bulletin 3503.

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## CONDUIT SYSTEMS FOR UNDERGROUND STEAM PIPES



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It is easy to convince clients of the advantages of automatic oil heat and air conditioning. But, the question of expense is another matter. With the Gar Wood System, *guesswork is out* . . . for owners, everywhere, say Gar Wood oil heat costs less than coal. Specify a proved method! Specify the Gar Wood Tempered Aire Automatic Oil Furnace and Air Conditioning System. Write now for operating cost figures.

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Sweet's Catalog 20, Section 26  
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Any house with a Gar Wood System is a better home



# Genasco SLAM-TEST SHINGLES

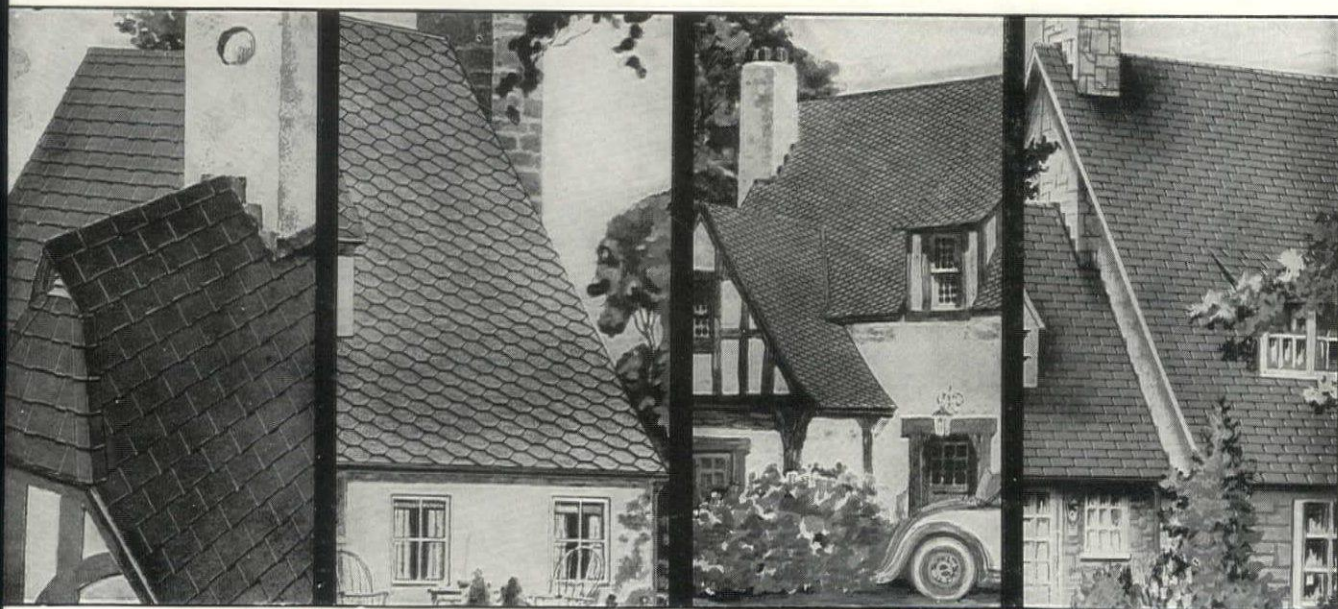
## *for enduring satisfaction*



There is a difference in the quality of asphalt shingles — and quality is largely determined by the asphalt with which they are coated.

The Slam-Test coating of Trinidad Lake Asphalt Cement resists the actinic or ultra violet rays of the sun. It is extremely adhesive and holds the mineral granules in place in spite of adverse weather conditions. Genasco Slam-Test Shingles give lasting protection.

The various types of Genasco Shingles illustrated here all have the exclusive Genasco "Slam-Test" feature.



**GENASCO BARB-LOCK SHINGLES**—an economical shingle of new design laid by the "Dutch lap" method. Colors to harmonize with architectural or color scheme of the building, include a standard Red, a pleasing Klinker Brown, a Blue-Black, a Green Tone, a brilliant Indian Red (Chinese Red), a Brier Green, and Mix-Tone — an autumn leaf coloring.

**GENASCO LATITE SHINGLES** have an exclusive patented feature which locks each shingle securely to the adjoining shingle. They have a double thick butt, which gives the roof that desirable shadow line. In a choice of beautiful colors, including standard Red, standard Green, Blue-Black, Klinker Brown, Indian Red (Chinese Red), Brier Green and Mix-Tone.

**GENASCO HEXAGON STRIP SHINGLES** provide a beautiful, durable, fire-safe roof, with the much-desired "shadow line." An original range of colors and harmonious blends include standard Red, standard Green, Blue-Black, Klinker Brown, Mix-Tone, Chinese Red (Indian Red), and Brier Green. Cypress Green available only in certain sizes.

**GENASCO SEALBAC SHINGLES** have a beauty that is all their own. Their appearance and quality have met with the unqualified approval of architects and home owners everywhere. Furnished Individual and in Strips (Multitab) with square butts — in a variety of colors and blends.

Illustrated folders in colors of each type of Genasco Slam-Test Shingles sent upon request

## FOR BUILDING MODERNIZATION—GENASCO ASPHALT SIDINGS

There is a Genasco Siding for every purpose. Genasco Double-Dip Tru-Brick Siding and Genasco Brick-Like Siding have the appearance of real, colorful face brick with recessed mortar joints. They are ideal for modernization work. Keep a building warmer in winter... cooler in summer. Save home owners money on fuel bills.

Genasco 4-Point Siding is an inexpensive diamond-shaped siding, also available in attractive colors.

# THE BARBER ASPHALT COMPANY

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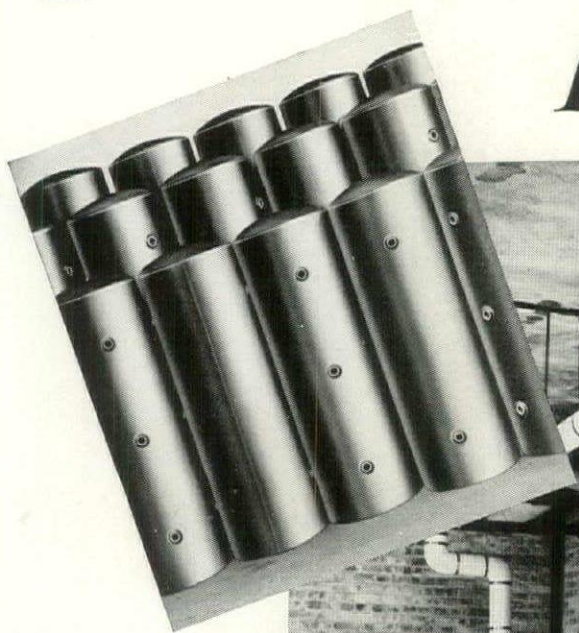
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## *Roof security is FELT with Trinidad*

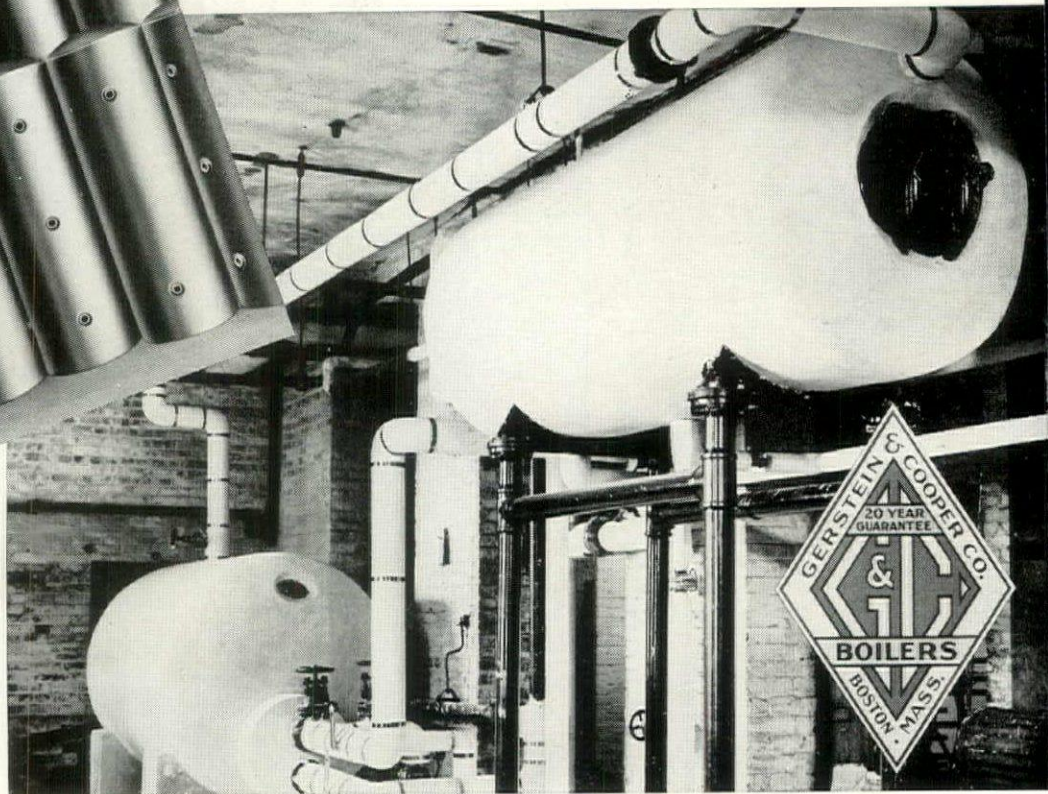


# FOR TANKS of all types...SPECIFY HERCULOY



Regular - production tanks of Herculoy as made by Gerstein & Cooper Co., long-time tank manufacturers of Boston, Mass.

Herculoy tanks made by Gerstein & Cooper Co., installed in National Health Institute, Washington, D. C.



For all types and sizes of storage tanks, range boilers or heavy-duty tanks, leading tank manufacturers are using and recommending Herculoy\*, Revere's patented high-strength silicon-bronze alloy. Consider Herculoy's advantages: (1) Strength of steel; (2) Corrosion resistance similar to that of pure copper; (3) Easily drawn and formed; (4) Fabricated by any of the standard welding processes; and (5) Meets Federal Specifications WW-P-541-9 for copper-silicon tanks. The net result: Herculoy tanks are dependable, durable, and last a lifetime.

It is to your client's advantage for you to specify Herculoy tanks whenever copper or brass piping is installed. By this

combination of rust-proof materials, a completely permanent plumbing installation is assured.

\* \* \*

Herculoy is just one of Revere's many copper, brass, and bronze products. Architects have long known and recommended Revere Copper Water Tube with Streamlined Fittings, Revere Sheet Copper and Lead, Revere Architectural Bronze Panel Sheets and Extruded Shapes... and now, the new Revere Thru-Wall Flashing or Cheney Flashing. For further details about any of the products, address our Executive Offices, 230 Park Avenue, New York City. \*U. S. Patent Nos. 1,868,679 and 2,002,4

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★ PLAN FOR  
THE BENEFITS  
OF A *modern*  
WATER CLOSET

Bathroom planning is a problem that pays a dividend for study and careful thought. And in your planning, take advantage of the extra dividends that go with the T/N, the first and finest one-piece water closet. Architects accept the T/N as a great advance in water closet design, permitting an astonishing variety of effective bathroom layouts. The T/N is not attached to the wall, and installations are possible even in corners, under windows, staircases, etc. Wherever quietness

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flow, powerful cleansing flush, special regulating stop to permit volume regulation of water under all pressures, large bowl opening, and safeguards to prevent any possible water supply contamination. Available in a wide variety of colors. Highly sanitary, acid-resisting, easily cleaned, and though the T/N is a favorite in elaborate bathroom designs, it is moderately priced to fit the budget of even the modest home.

**T/N ONE-PIECE WATER CLOSET★**

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Dept. A, 31 Main Street, Buffalo, N. Y.  
Founded 1853

Please send me complete descriptive literature and helpful data on the T/N One-Piece Water Closet, both for REMODELING and NEW HOMES.

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## COVERT FIREPLACE DAMPERS

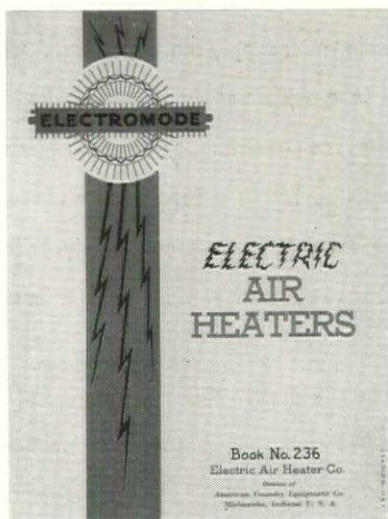
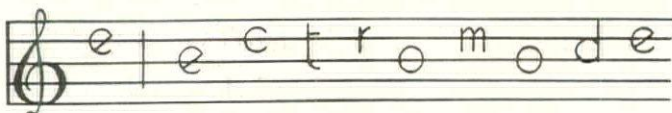


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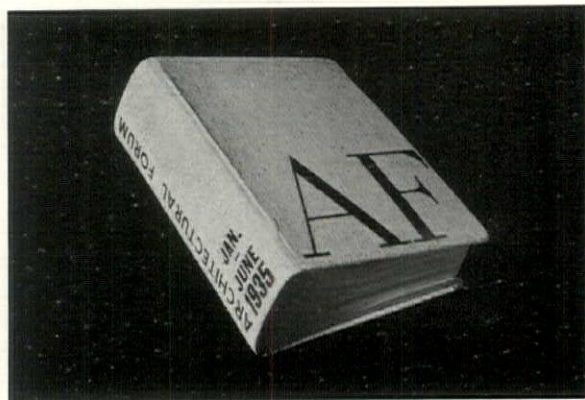
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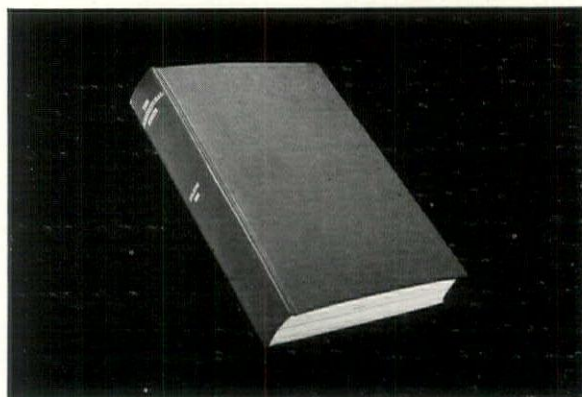
Available now are binders that will preserve them in either sewn or spiral bound form.

Illustrated above is a new binder, covered in natural tan Webtex Studio cloth and stamped with black letters, specially designed to hold the January-June, 1935 issues. The rods which slip through the spiral binding, and the inside back strip are of chrome plate. Complete single issues are easily removed and returned. Price: \$2.00, f.o.b. New York City.

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Binders are now available for the January-June and July-December, 1935 issues.

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*But* The Front appeals to the Eye . . .  
it's the FLOOR that brings in the money!



ONLY too frequently, a building's "front" is emphasized at the expense of its utility . . . in striving for impressiveness of appearance, utility factors, of equal importance to the building's success, are sometimes slighted. Among these important utility factors, the building's floors play a leading role. They alone produce the building's revenue. They determine the extent and convenience of the electrical facilities offered to tenants. And they largely determine the length of the building's profitable life. Therefore, floors obviously deserve the most careful consideration from architect, builder, and building owner. And such serious consideration inevitably leads to the newest and most modern method of floor construction . . . The Robertson Steel Floor System.

Electrically, the Robertson Floor is so completely flexible that it can meet all electrical requirements that the present or

the future may demand of it. More than that, this flexibility is such that it is readily available for use without the trouble and expense usually involved in utilizing the partial flexibility of other types of floor construction. Yet this perfect electrical provision is obtained at a cost that is little, if any, higher than that of the ordinary bare floor alone. Expensive underfloor ducts are eliminated and thereby big cost savings result.

The Robertson Steel Floor System, developed after years of study at famous Mellon Institute of Industrial Research, is in reality, a super-strong steel floor which contains, in itself, a complete system of protected wire raceways. These raceways permit of such complete electrification of the floor that electrical outlets can be placed every six inches over the floor area if desired, without the costly tearing up of floor surface which the installation of outlets in ordinary underfloor duct systems entails.

The Robertson Floor is stronger, lighter, more compact. It increases fire safety . . . lowers accident hazards. And it speeds up large building erection by 20% to 30%!

Every architect, contractor and engineer will find our brochure "New Life for Buildings" and our special technical bulletin on the Robertson Steel Floor System extremely instructive and valuable. Send for your free copies. H. H. Robertson Co., Pittsburgh, Pa.

## ROBERTSON STEEL FLOOR SYSTEM





This house, designed by Oliver Reagen, Architect, New York City, is completely insulated with Reynolds Metallation and Reynolds Metallated Ecod Fabric.

# INSULATION *by Metallation\**

THIS BRIGHT METAL INSULATION REFLECTS HEAT JUST AS A MIRROR REFLECTS LIGHT

Easy to apply in old houses or new; costs 50% less than former methods . . . . . **A**

For a plaster base and for side-wall insulation—Reynolds Metallated Ecod Fabric . . . . . **B**

As a base for stucco or brick veneer, Reynolds Ecod requires no sheathing . . . . . **C**

MANY architects have acclaimed Reynolds Metallation primarily because of its lack of bulk. They find it an important saver of space. But some of the greatest advantages of Metallation are derived from this same thinness—as thin as a calling card. Metallation reflects approximately 95% of the radiant heat which strikes its surface—and does not store heat to be given off into the house after nightfall in summer or to increase winter fuel bills. Similarly, it absorbs no moisture; (ordinary atmospheric moisture reduces the efficiency of the usual insulating materials). Lastly, Metallation is termite-proof—insects and vermin can neither attack it, nor breed in it.

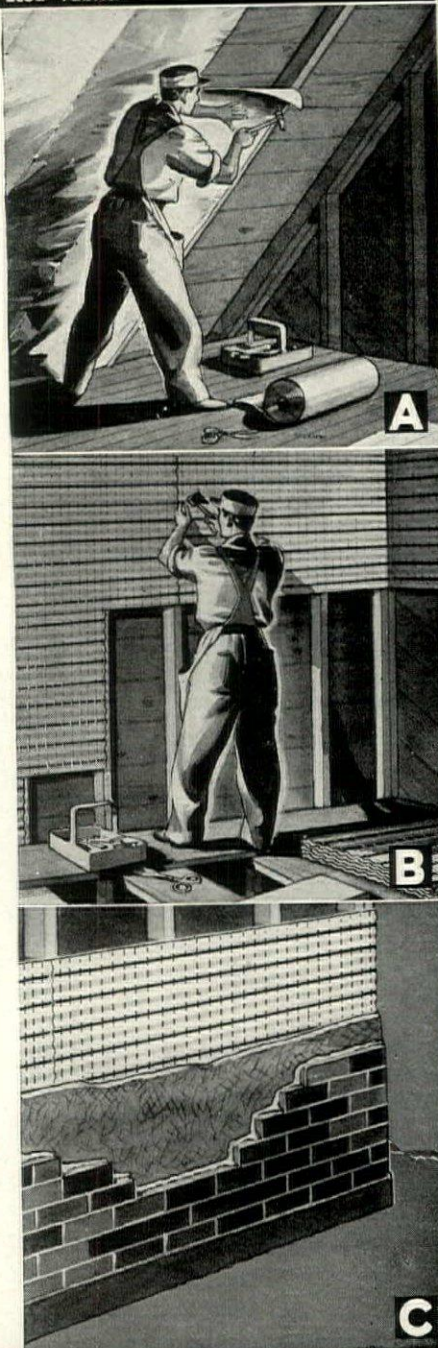
Metallation represents the maximum dollar value in insulation—costing approximately 50% less, completely installed than other methods of insulation. It is a fire-safe material—in keeping with the trend toward sound construction and greater building values. It is nailed on in strips right over the rafters, roof joists or studs.

Reynolds Ecod Fabric combines Metallation with an electrically-welded, metal-reinforcing plaster base. Reynolds Ecod is likewise an economical product to use—saving in the amount of plaster used and providing insulation for side-walls and upper floor ceilings, at a cost of only six-tenths of a cent extra per square foot, over the usual plaster bases. As a base for stucco or brick veneer, Reynolds Ecod requires no sheathing. Ecod can be nailed on to the frame members, then covered with a scratch coat of plaster. The brick veneer is then applied and the space between Ecod and bricks is slushed full with mortar so that the brick veneer is an integral part of the wall and the construction absolutely water tight.

These are only two of the many Reynolds Architectural Products which architects are now specifying to give the public better values. We would welcome the opportunity to send you more detailed literature about all of them.

For complete specifications see 1935 Sweets, Catalog 11, Section 13

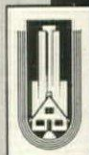
\*Trade Mark Reg. U. S. Pat. Off.



## REYNOLDS ARCHITECTURAL PRODUCTS . . .

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Efficient insulation at 50% less cost. . . . .
- **Reynolds Ecod Fabric**  
The insulated, reinforced Plaster Base. . . . .

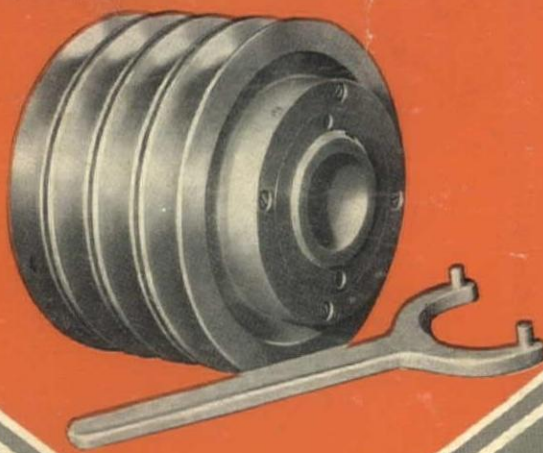
- **Reynolds Metal Wall Coverings**  
Decorative, washable, moisture-proof. . . . .
- **Reynolds Liquid Metallation**  
Protective, bright, the modern paint miracle. . . . .



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Cross-section of Vari-Pitch Sheave and Texrope Belt adjusted for maximum diameter—high speed.

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## THE *New* **VARI-PITCH** TEXROPE SHEAVE

The Allis-Chalmers Mfg. Co. now offers a most important new development in power transmission — the Vari-Pitch Texrope Sheave. ● In this new sheave, by a simple adjustment which takes but a few moments, the pitch can be altered so as to give a variation in speed of from 15 to 25 per cent per sheave; if both sheaves are of this type, the range of variation will be doubled. ● The new Vari-Pitch Sheave permits you to experiment with different speeds to ascertain at just what speed your machinery shows the greatest efficiency; it permits you to take advantage of new higher speed

cutting tools; it permits you to make different products, some of which require higher speeds and some lower — and do all this without dismantling and buying new drives, but simply by taking a few moments to make the desired adjustment. ● Vari-Speed Sheaves are made in two types, manual and automatic. The manual type is recommended for applications that require occasional change of speed. For applications that require frequent changes the entirely automatic type is recommended in which speed can be instantly varied to the full range while the drive is in operation.

# TEXROPE

# DRIVES

ORIGINATED BY

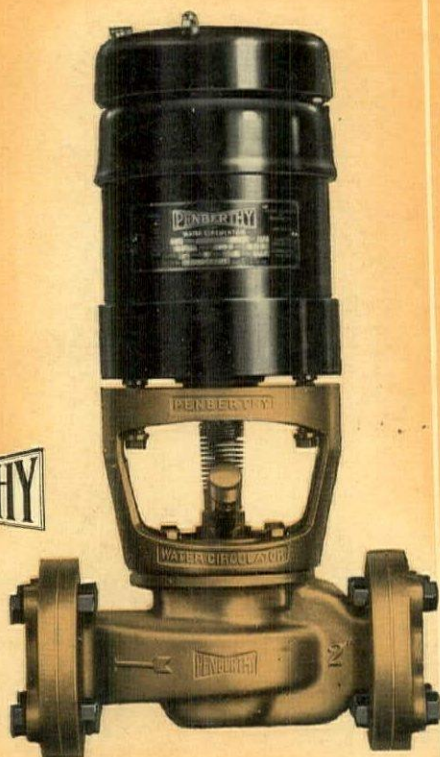


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Penberthy Hot Water Heating Specialties are constructed of high grade steam bronze; their design and workmanship are of the same exceptional quality as the materials used. Your jobber will be glad to give you complete information regarding these specialties and to let you see for yourself how superior they are.

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**CONSTRUCTED  
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STEAM BRONZE**  
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