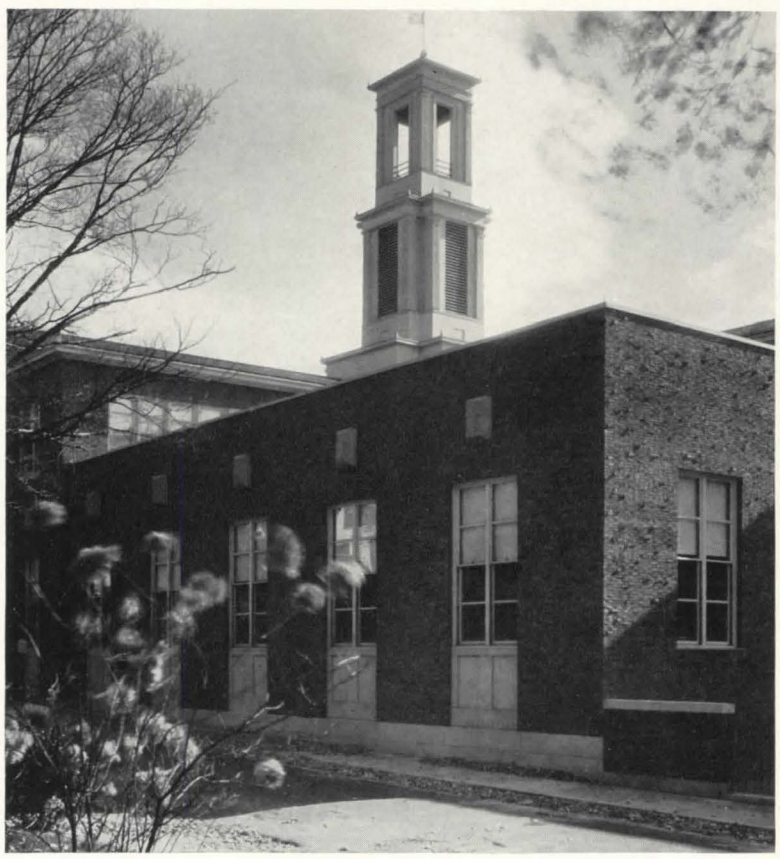
BUILDING NEWS

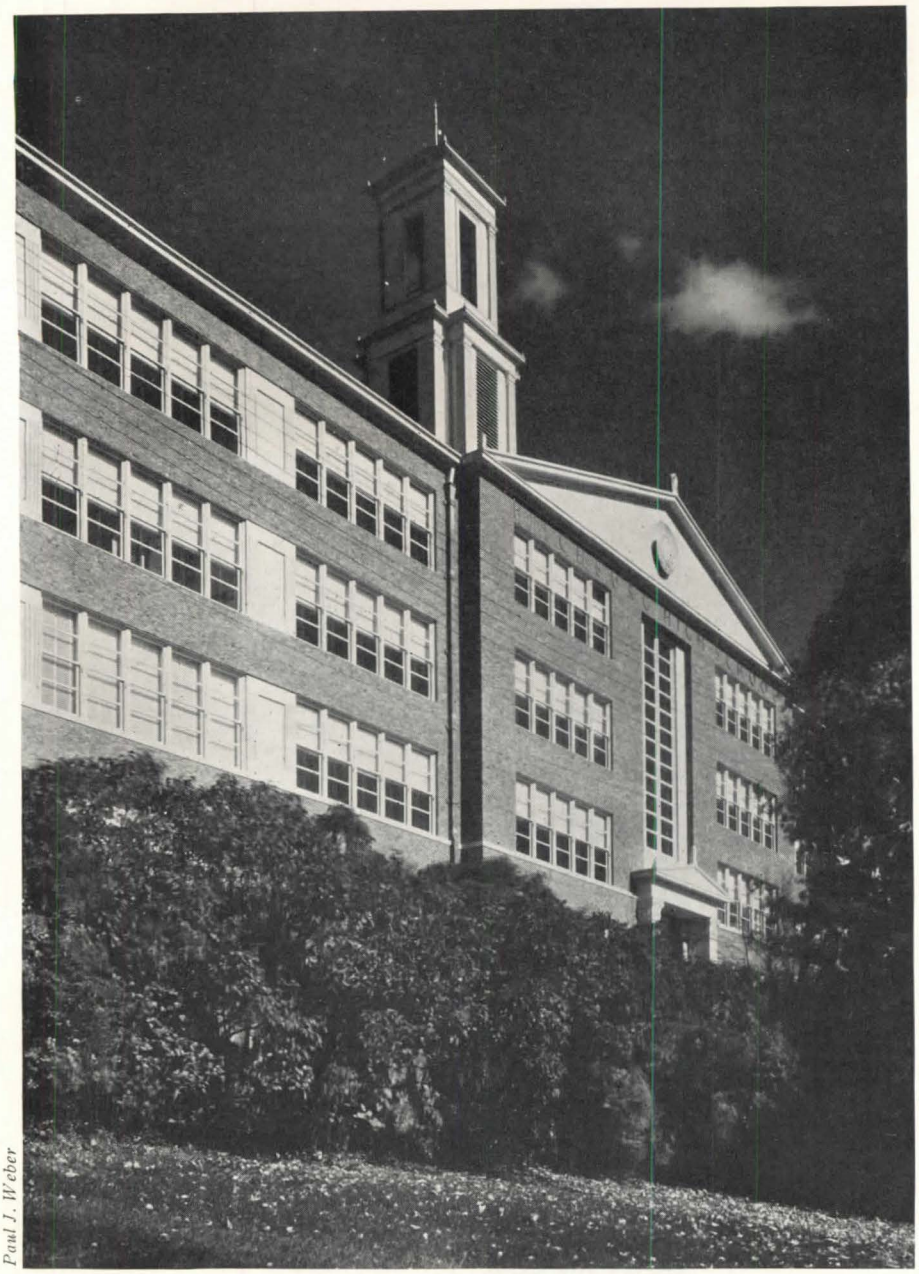


Paul J. Weber

From Boston's classicists, a new use of Greek Revival . . .

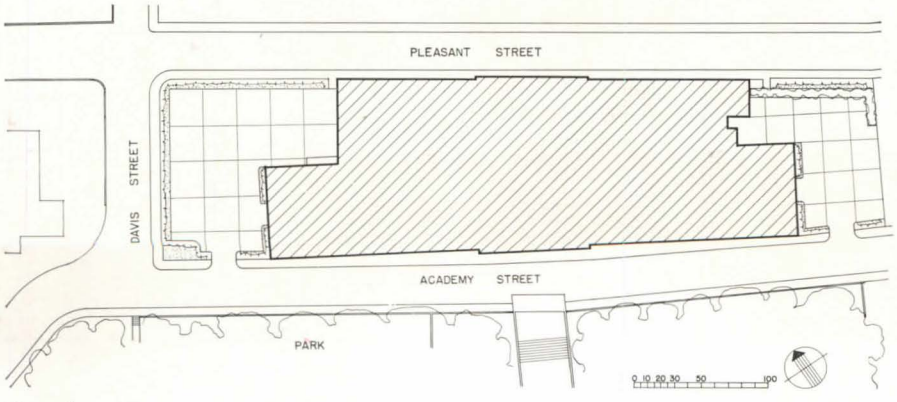
ARCHITECTURAL RECORD
COMBINED WITH
AMERICAN ARCHITECT AND ARCHITECTURE

MODERN AND NEO-GREEK COMBINED IN NEW ENGLAND HIGH SCHOO



Paul J. Weber

Front elevation from park



Plot plan

COOLIDGE SHEPLI
BULFINCH and ABBO
Architec

A BOSTON FIRM, long famous for precise rendering of the Colonial a Georgian vernacular at Harvard U versity, has recently completed t new building for the Fitchbu (Mass.) High School. Shifting th medium somewhat, the architects ha here employed a greatly simplif Greek Revival, which permits juxtaposition of Classic and conte porary detail (pedimented doorwa alongside horizontal spandrels a muntins) in such a fashion as ma rially to reduce the "fussiness" of found in designs employing the Co nial vernacular.

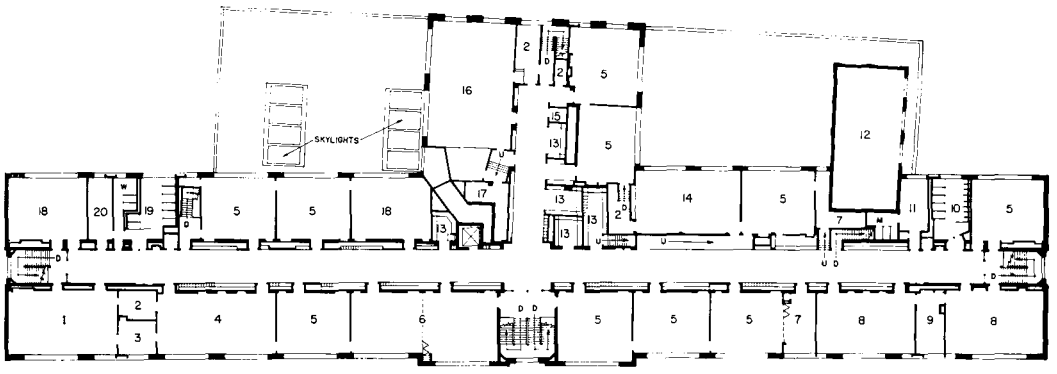
Plan of the building—which places an earlier school destroyed fire—was determined by a small a irregular plot. Although a str separates them, the school overloo and its students use the city park the south. The slope of the plot such that direct access to both au torium and gymnasium is provided the north, while main entrances classroom areas are on the lower le to the south. This ground floor largely given over to administrati staff and gymnasium activities, wh classroom areas are concentra along the southern front of the th top floors. A maximum student po lation of 1,600 is thereby provided

Exterior walls of the school of red water-struck brick with Fit burg granite trim. The cornice leaded copper with wood and cop cupola; soffits of all cornices painted vermilion. The entire str ture is second-class fireproof c struction, fully sprinkled, with fi class fireproof construction in all c ridors and stairways. The schoo almost entirely heated by warm circulated by ducts from a cen heating plant.

l floor

ood laboratory
tores
Demonstration
ewing laboratory
Classroom
tudy
Office and bookoom
iology laboratory
reparation
oys' toilet

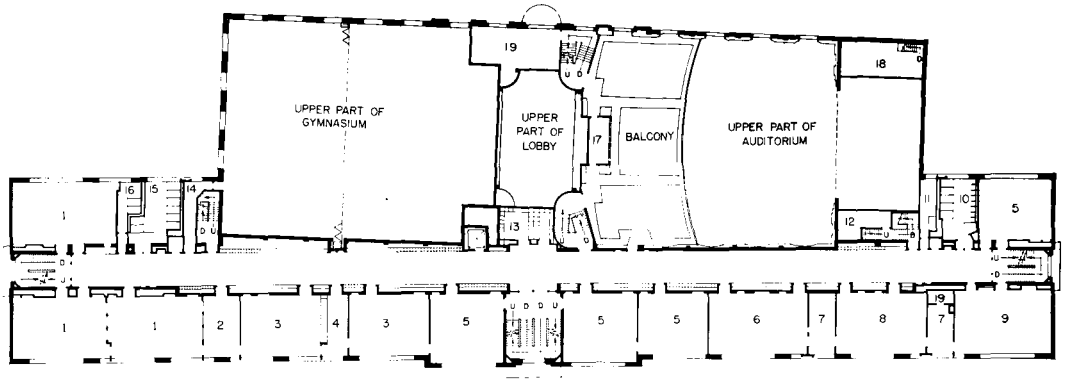
11. Men teachers
12. Scenery hoists
13. Locker alcove
14. Freehand drawing
15. Rectifier
16. Oral English and music
17. Instrument room
18. Bookkeeping
19. Girls' toilet
20. Girls' rest room



nd floor

ypewriting
Office machines
ookkeeping
ank
Classroom
hysics laboratory
rep room
ecture room
Chemistry laboratory

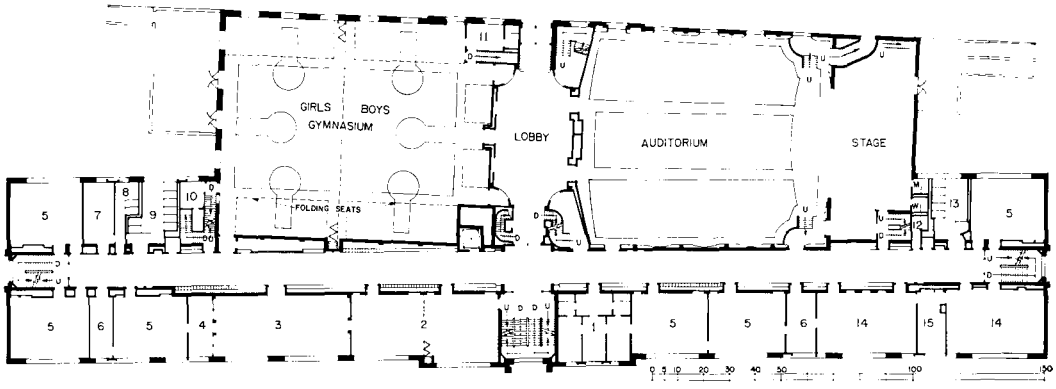
10. Boys' toilet
11. Men teachers
12. Dressing room
13. Locker alcoves
14. Bookroom
15. Girls' toilet
16. Women teachers
17. Projection booth
18. Fly floor
19. Storage



floor

Health suite
tudy
ibrary
tacks
Classroom
ookroom
Women teachers

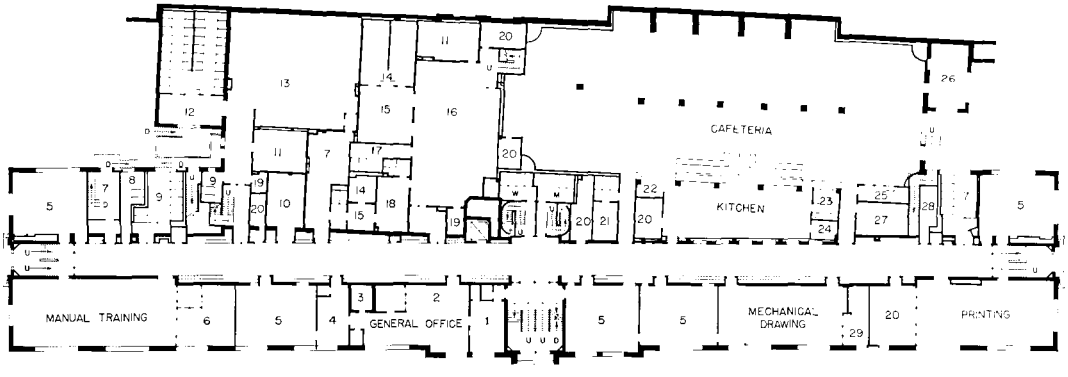
9. Girls' toilet
10. Girls' instructors
11. Boys' instructors
12. Men teachers
13. Boys' toilet
14. Biology laboratory
15. Preparation



ınd floor

rincipal
Waiting space
ault
Ass't Principal
Classroom
inishing room
anitor
Women teachers
Girls' toilets
umber storage
Corrective room
Girls' showers
Girls' dressing
oys' showers

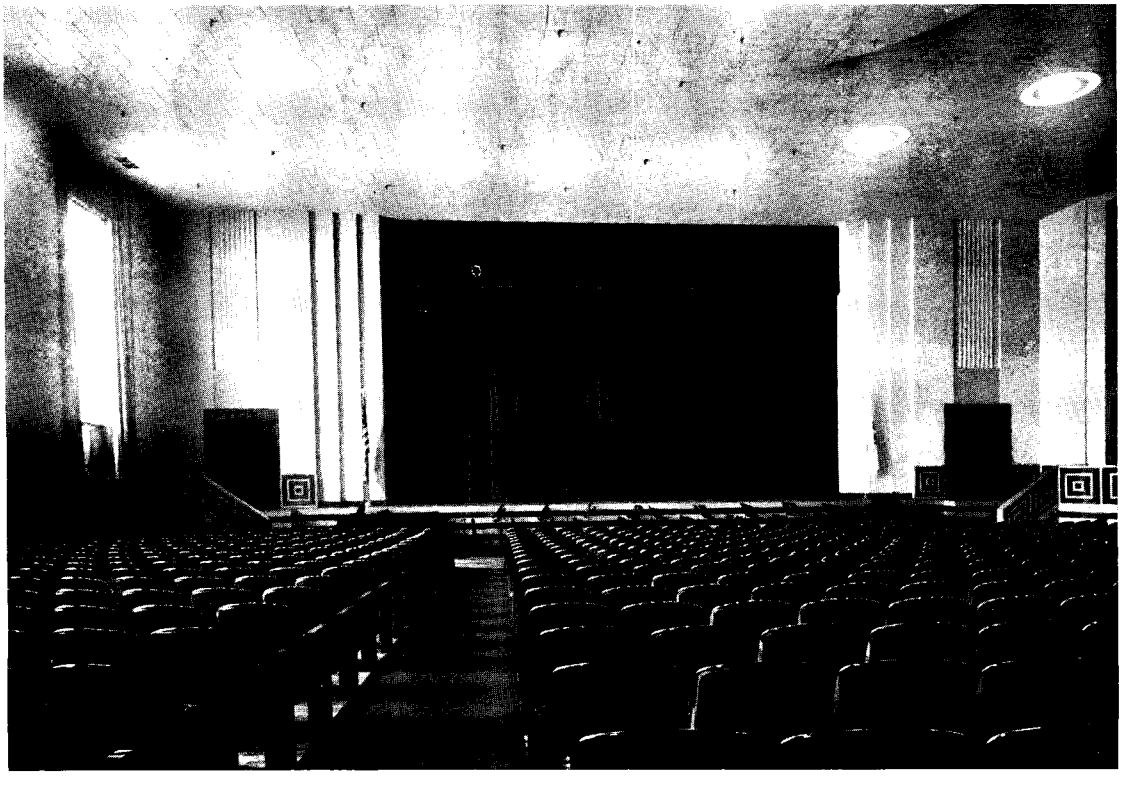
15. Boys' drying
16. Boys' dressing
17. Boys' toilet
18. Visiting team
19. Towels
20. Storage
21. Help's lockers
22. Ice cream
23. Dishwashing
24. Office
25. Candy shop
26. Teachers' dining
27. Fan room
28. Men teachers
29. Blueprinting



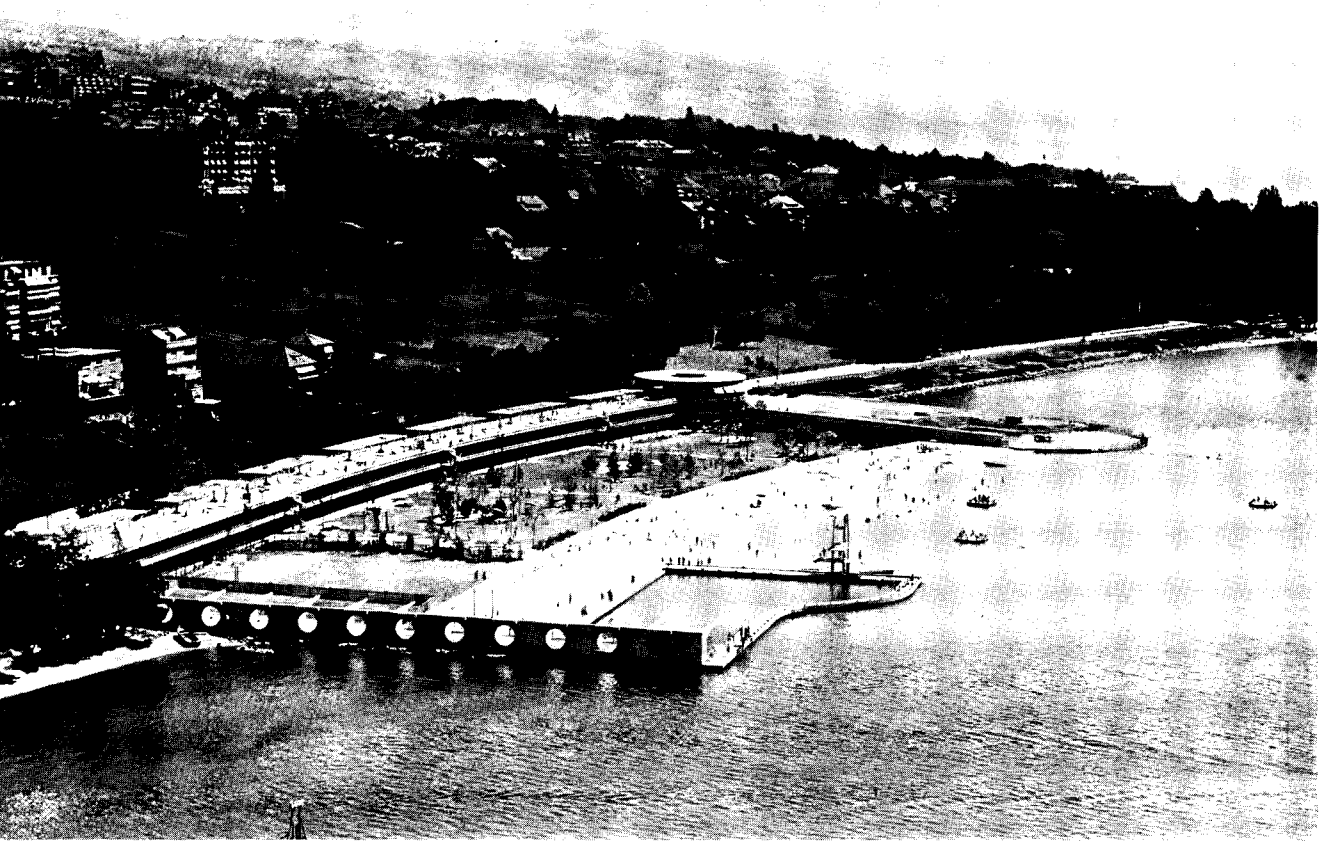
FITCHBURG HIGH SCHOOL

Photos by Paul J. Weber

East and west wings repeat the central motif on the front.



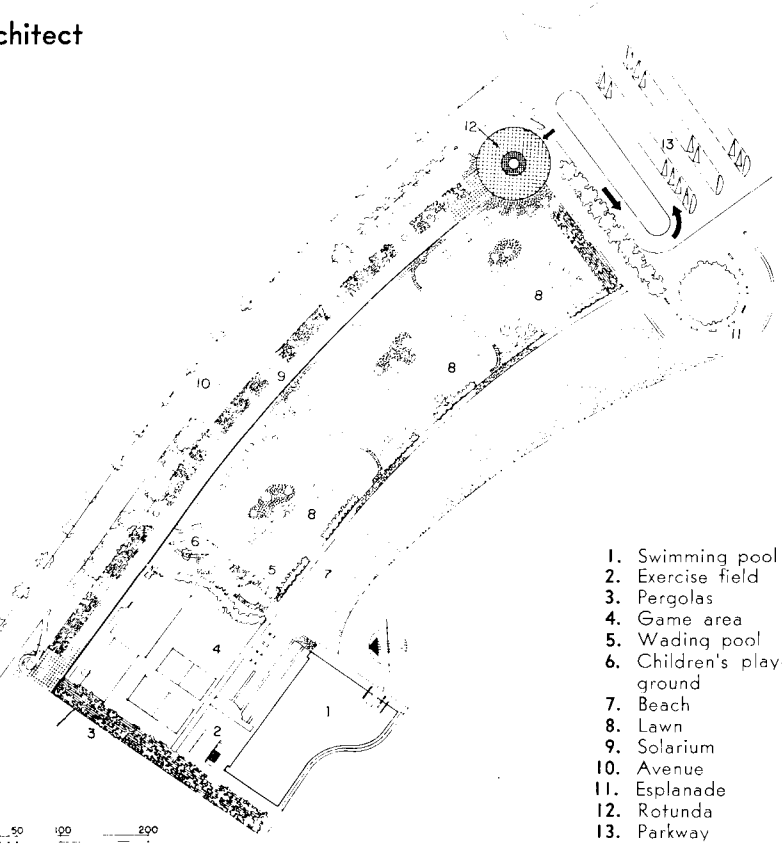
An unusually well-equipped stage serves the large auditorium. The decorative dado is of alternate veneers of birch and maple. Ceilings are acoustically treated and have recessed lighting.



Monkmeyer

ACH PARK IN SWITZERLAND CLAIMED FROM BOTTOM OF LAKE

RC PICCARD
chitect

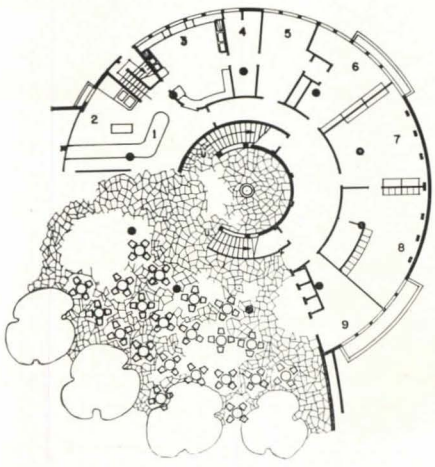


BELLERIVE is a new beach park on Lake Geneva, west of the city of Ouchy. It is one of what will eventually be a great chain of parks, playgrounds, and other public projects extending eastward from this point to the city. A network of roads, wharves, and esplanades will assure easy communication with the city.

The entire beach at Bellerive, about 200,000 sq. ft. in area, has been dredged from the bottom, and lies lakeward of the natural shore line. On the side nearest the city are quays and a parking area for automobiles. Entrance to the park is by way of a circular building in which are located a restaurant and general personal services. From this rotunda there is direct access at each floor level to a three-story bathhouse which extends parallel with the beach for about 800 ft. On the west a leaf-shaded pergola leads from bathhouse to pool. In the great central space between beach and cabins are game areas, lawns, and paved rest spots; further growth of recently planted trees will, in time, give this area a more verdant appearance.

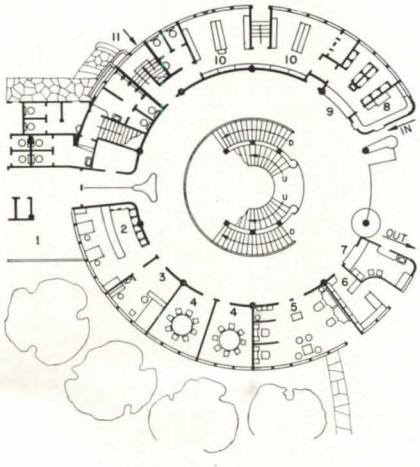
Photos by Monkemeyer

Rotunda at northeast corner of park. The ground story of the building opens on a lower grade beyond retaining wall at left. A restaurant occupies the top story and opens directly onto the bathhouse sun terrace, which extends length of the beach. Entrance to bathhouse is on first floor; persons at right are awaiting admission.



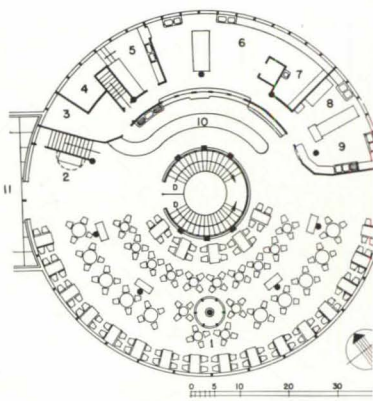
Ground floor

1. Buffet
2. Office
3. Scullery
4. Cellar
5. Beer
6. Wine cellar
7. Employees' dining room
8. Linen
9. Rentable articles



First floor

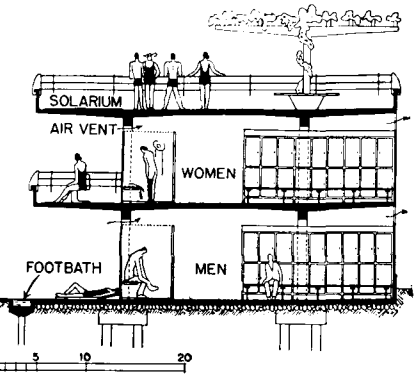
1. Balcony, women's section
2. Office
3. Bath sup't.
4. Salon
5. Hairdresser
6. Tobacco
7. Soiled linen
8. Ticket office
9. Clean linen
10. Steward
11. Service entrance



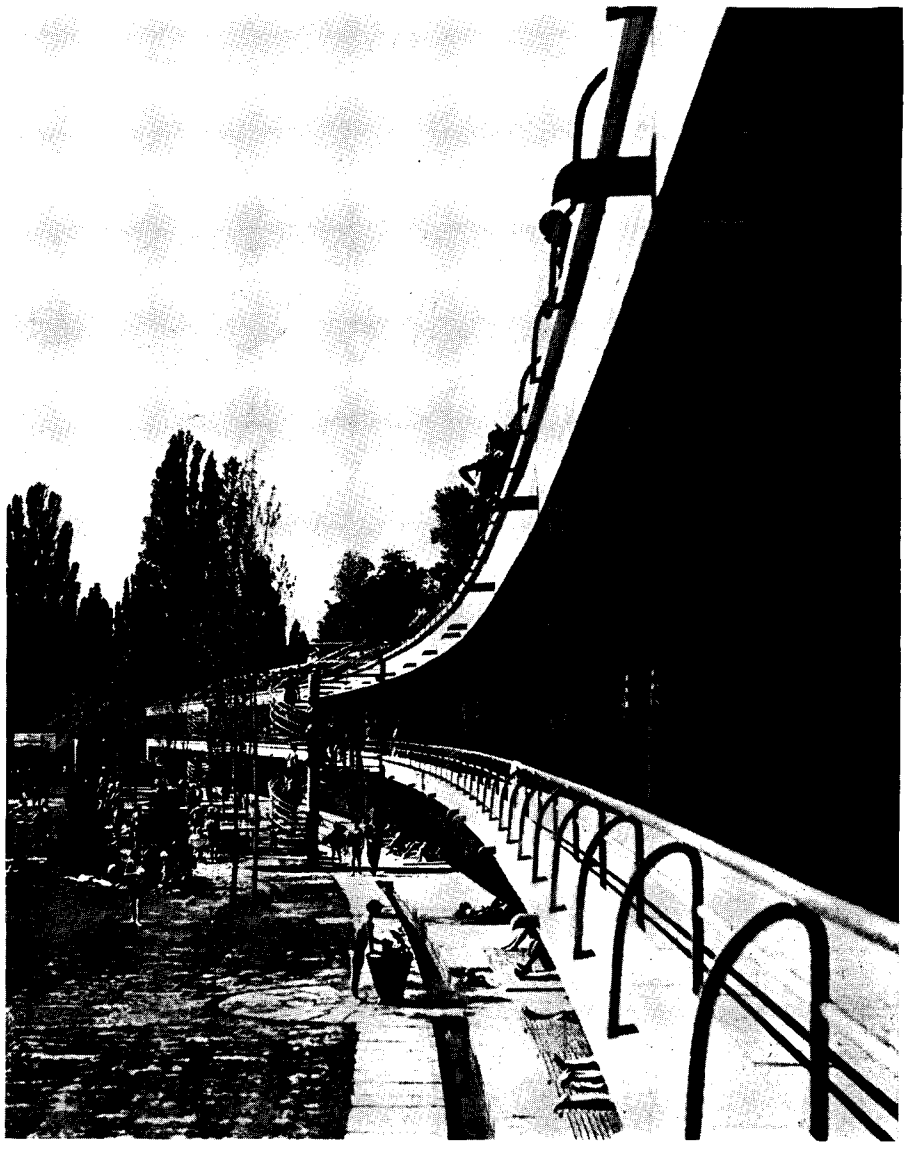
Second floor

1. Restaurant
2. Grill
3. Storeroom
4. Cooling room
5. Cold foods
6. Kitchen
7. Bakery
8. Food prep tion
9. Dishwashing
10. Buffet
11. Sun terrace

WISS BEACH PARK



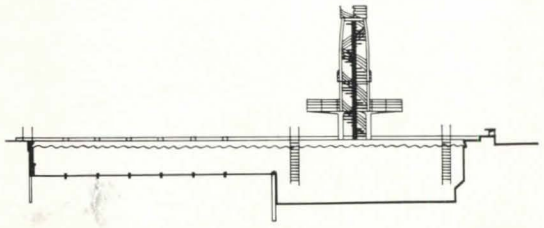
len's cabins at ground level, women's abins above, sun terrace on top; piral stairways at regular intervals



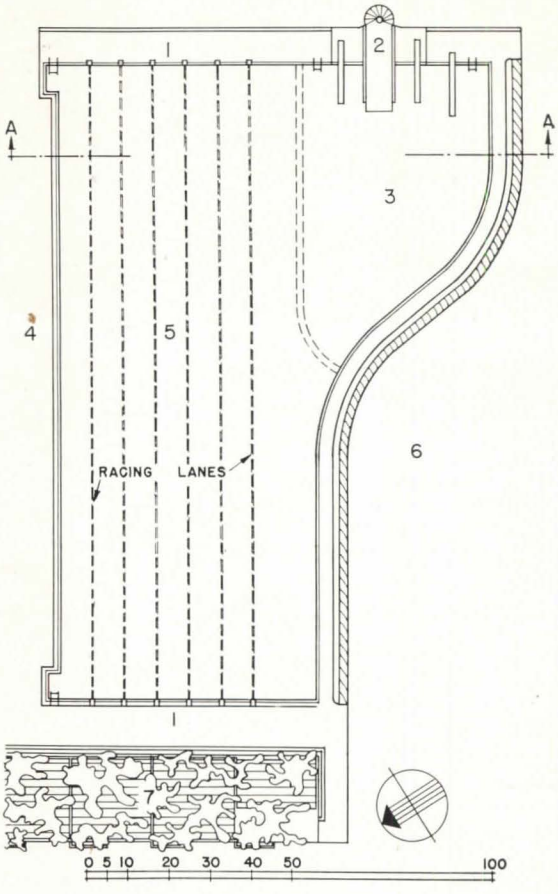
ne of the many paved and shaded st areas for nonbathers

SWISS BEACH PARK

Photos by Monkemeyer

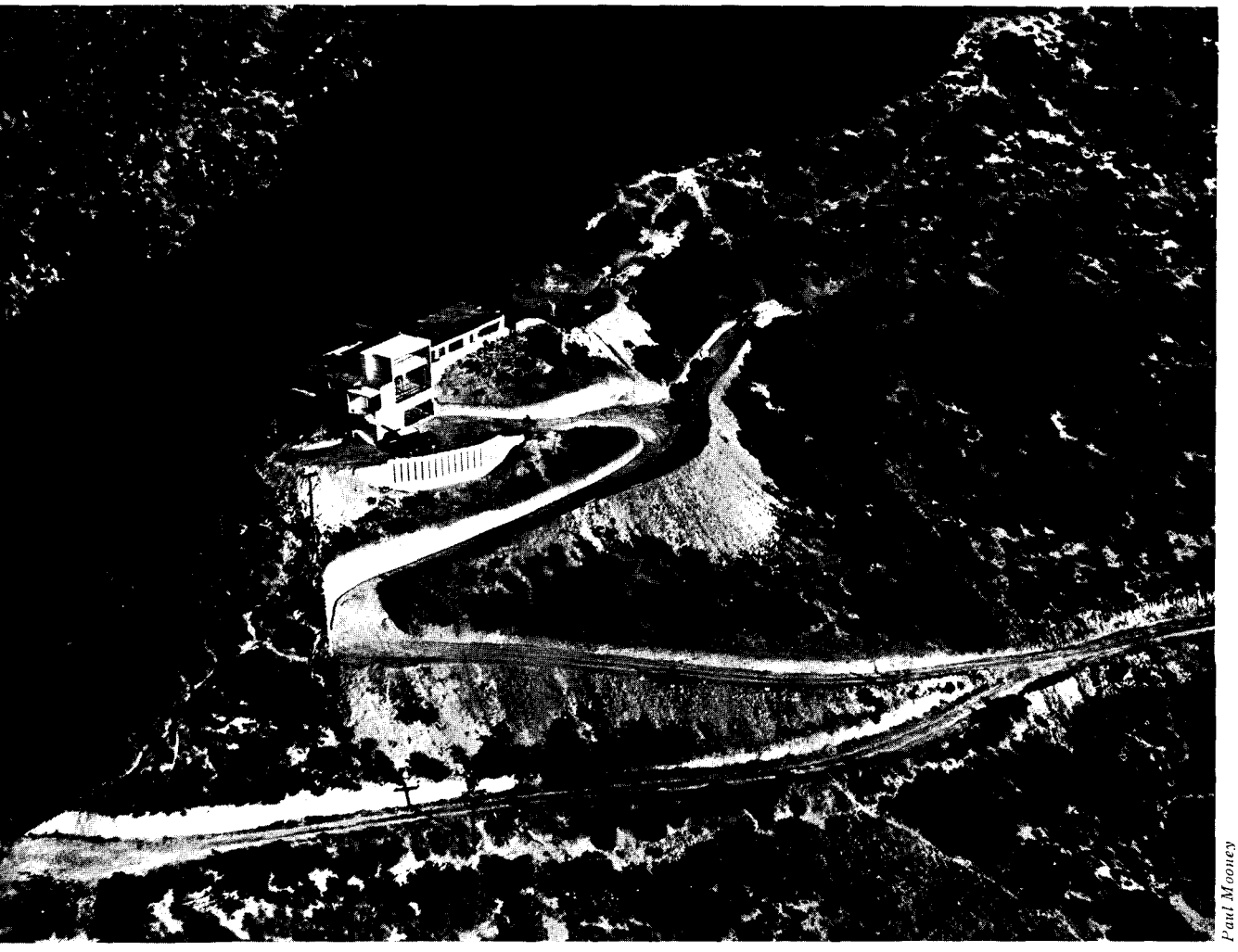


Section of pool



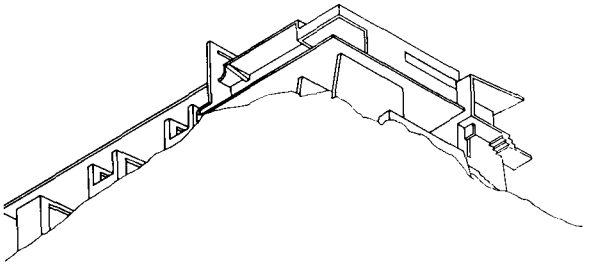
Plan of pool

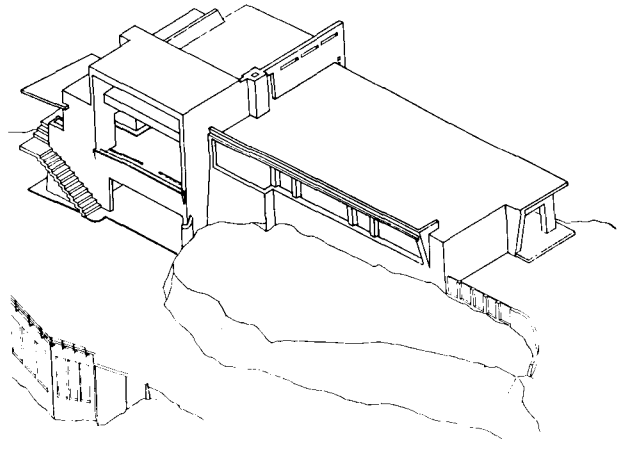
1. Starting platform
2. Diving tower
3. Diving area
4. Beachside
5. Swimming section
6. Lakeside
7. Pergola



Paul Mooney

OUSE FOR WRITER AFFORDS PRIVACY AND SPECTACULAR VIEW

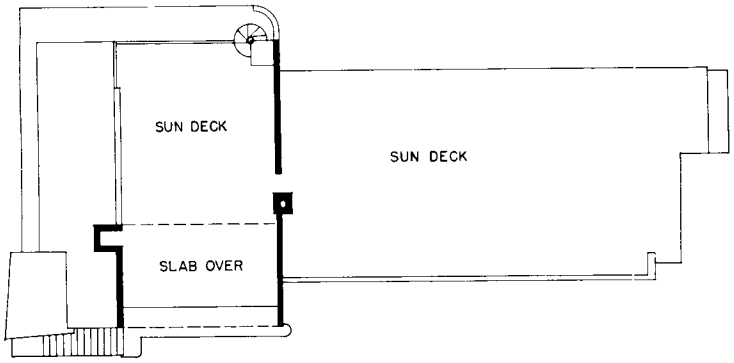




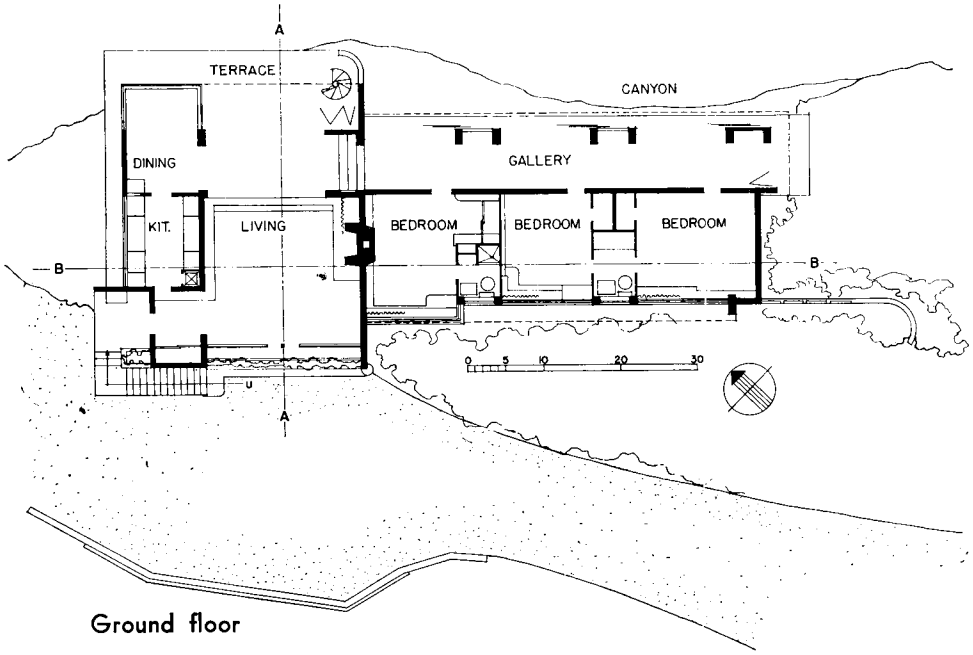
ALEXANDER LEVY
Designer

FIVE HUNDRED feet sheer above an ocean-inlet canyon at Laguna Beach, California, is the house of Richard Halliburton, writer and traveler. At the top of a steep roadway a 17-ft. retaining wall, hooked back into the bedrock, supports a level area from which the work of building was done. The site affords spectacular views in three directions—eastward through an uninhabited canyon to the mountains 80 miles away, northwest along the coast for 70 miles, and southwest across the Pacific for more than 60 miles. Every room in the house controls an ocean view and a canyon view.

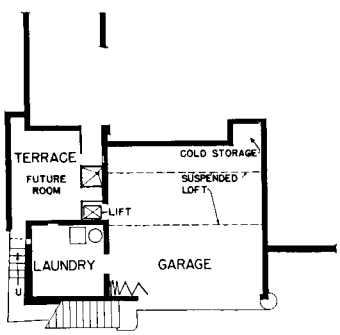
The house is in earthquake country, sparsely settled and without adequate fire protection; therefore, concrete was indicated as the construction material. The use of reinforced concrete has made possible a lightness of structure and a width of span which permits maximum exploitation of the view.



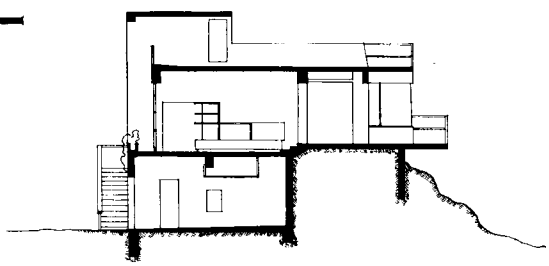
Roof plan



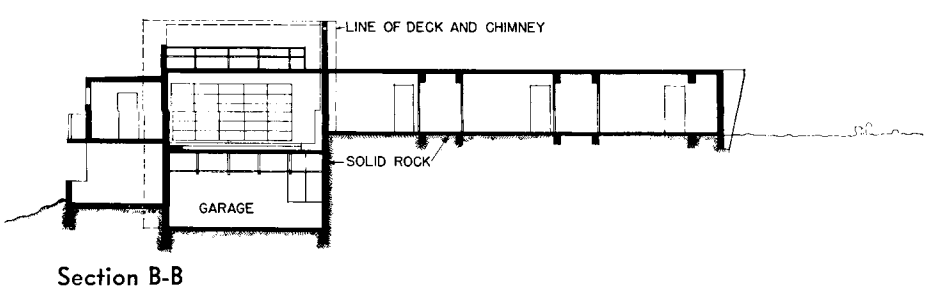
Ground floor



Basement



Section A-A

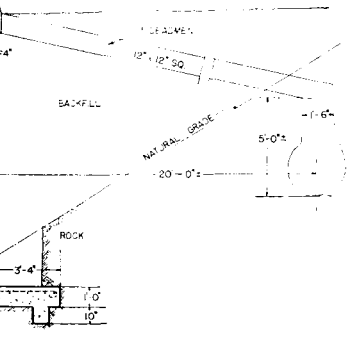


Section B-B

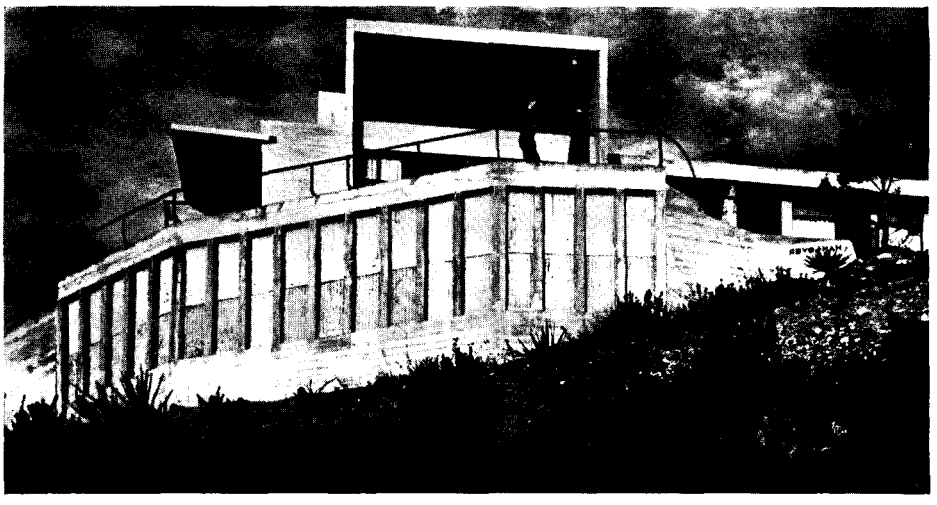
THE advantages of reinfor
concrete construction have
utilized most fully in the de
of living room and dining r
The latter has a 6-ft. cantilev
bay permitting an unobstru
view in three directions.
living room has only two bea
walls. On the sunset side
9 x 20 ft. clear glass curtain o
ing onto a narrow balcony.
posite are steel and glass acc
ion doors, 8 x 16 ft.; these
on a terrace cantilevered
the rim of the precipice, 50
above the floor of the canyon

An iron spiral stair rises
terrace to roof, where a roof-
shelter provides space for
door living in the California
A dumbwaiter leads from ga
to kitchen to roof, and meals
be served here without in
venience.

All ceilings, like walls
floors are of reinforced conc
floors are integrally colored.
and doors are soundproofe
suring privacy to the two w
who live here.

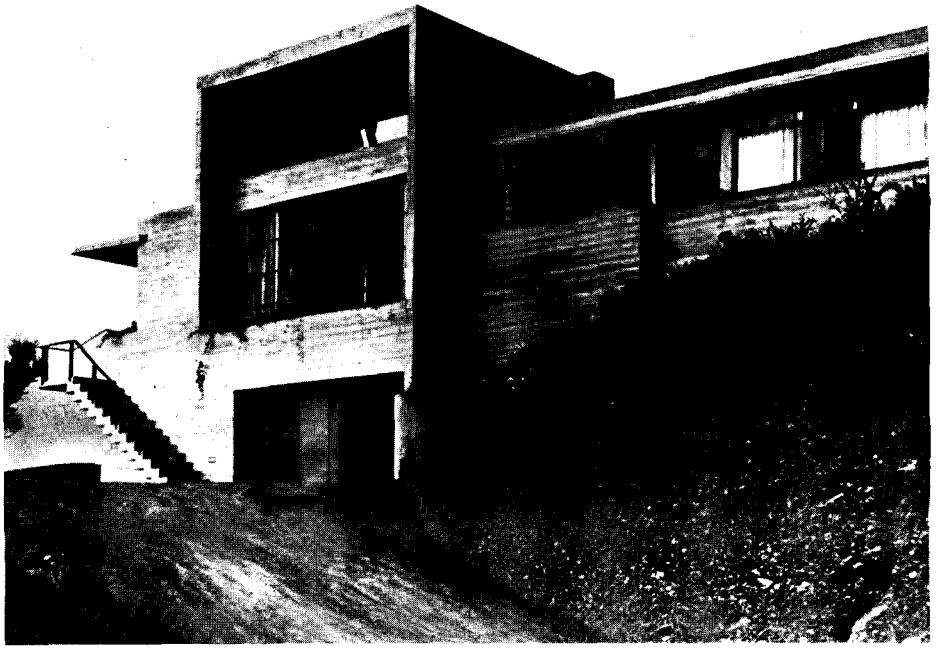


ing wall, hooked back into bed-
y concrete beams. Parking and
ound space is provided above.

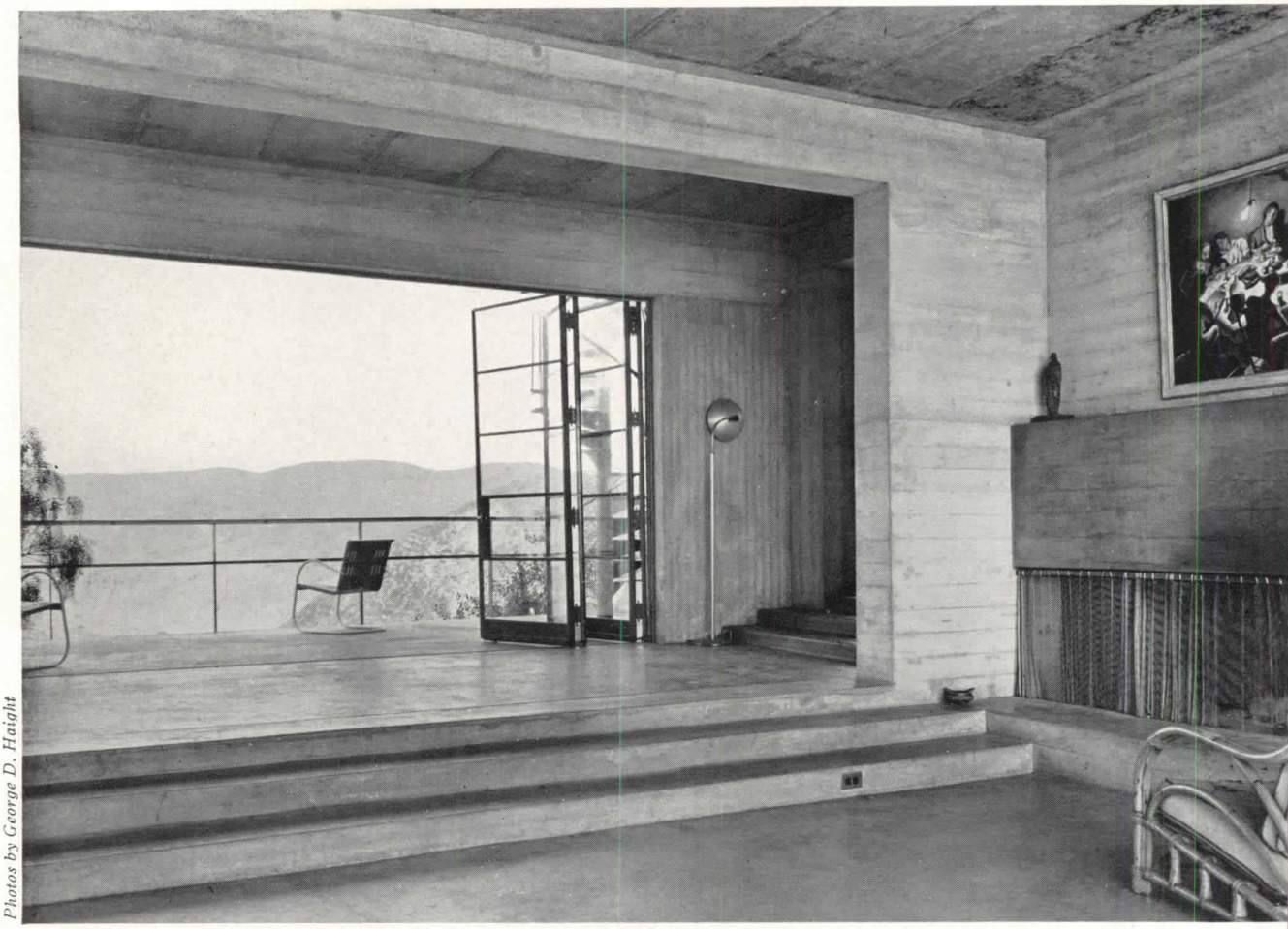


View from south

Photos by Carl Zeigler



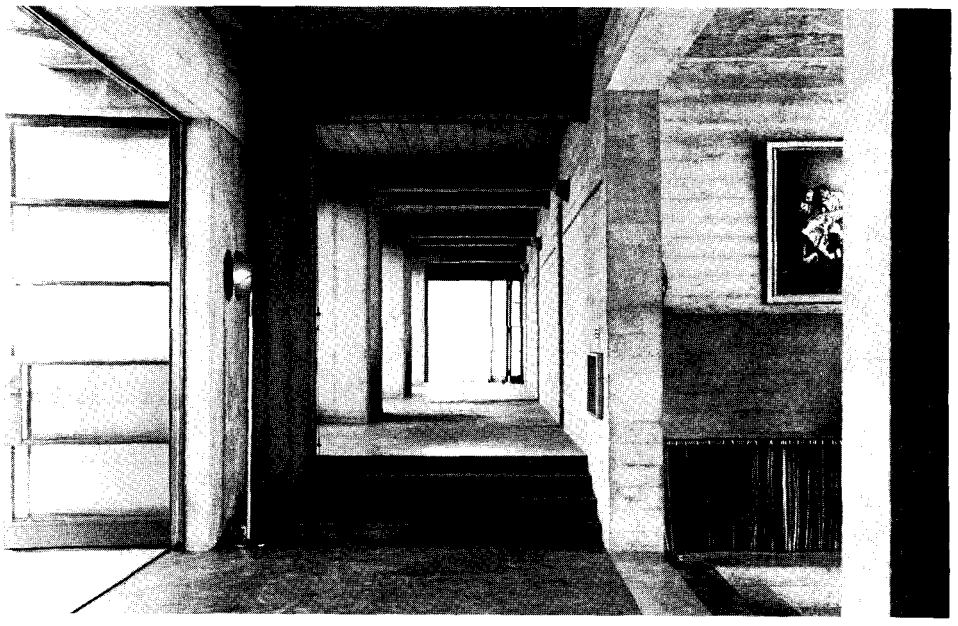
View from east



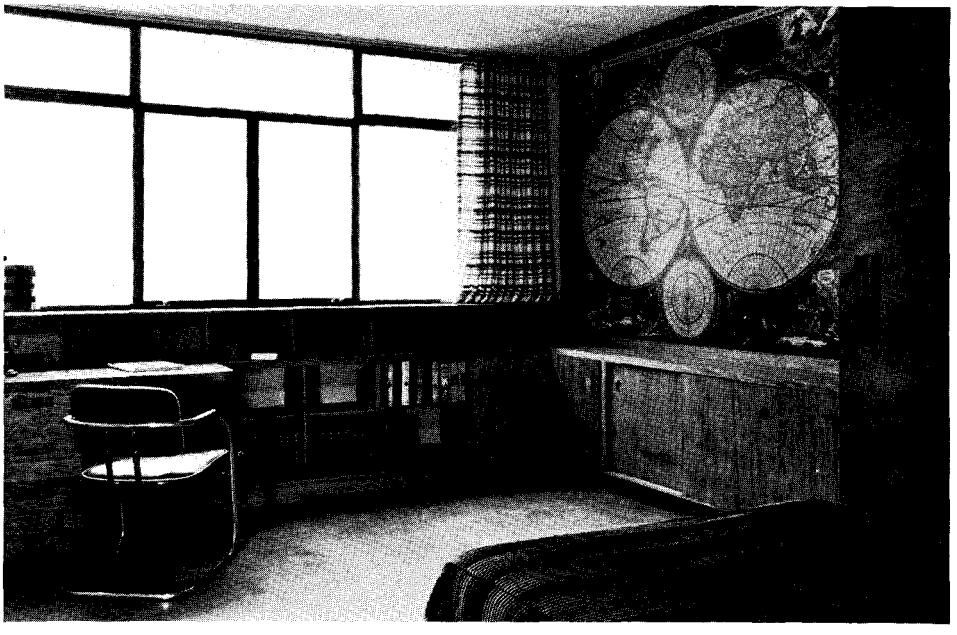
Photos by George D. Haight

ABOVE: *Living room*, looking west. The elev
concrete hearth merges into three concrete
crossing the width of the room. Hearth
steps provide seating for a relatively large
ber of guests, without cluttering the room
too many chairs. LEFT: Dining room, seen
gallery; bay is cantilevered over canyon

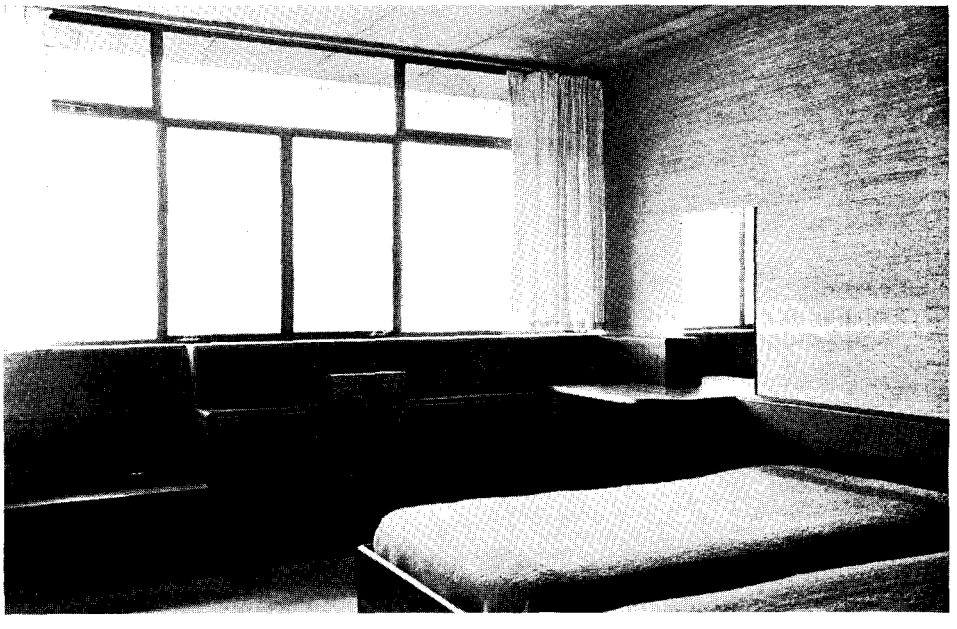
CALIFORNIA HOUSE



Gallery, looking southeast



Master bedroom



Guest bedroom

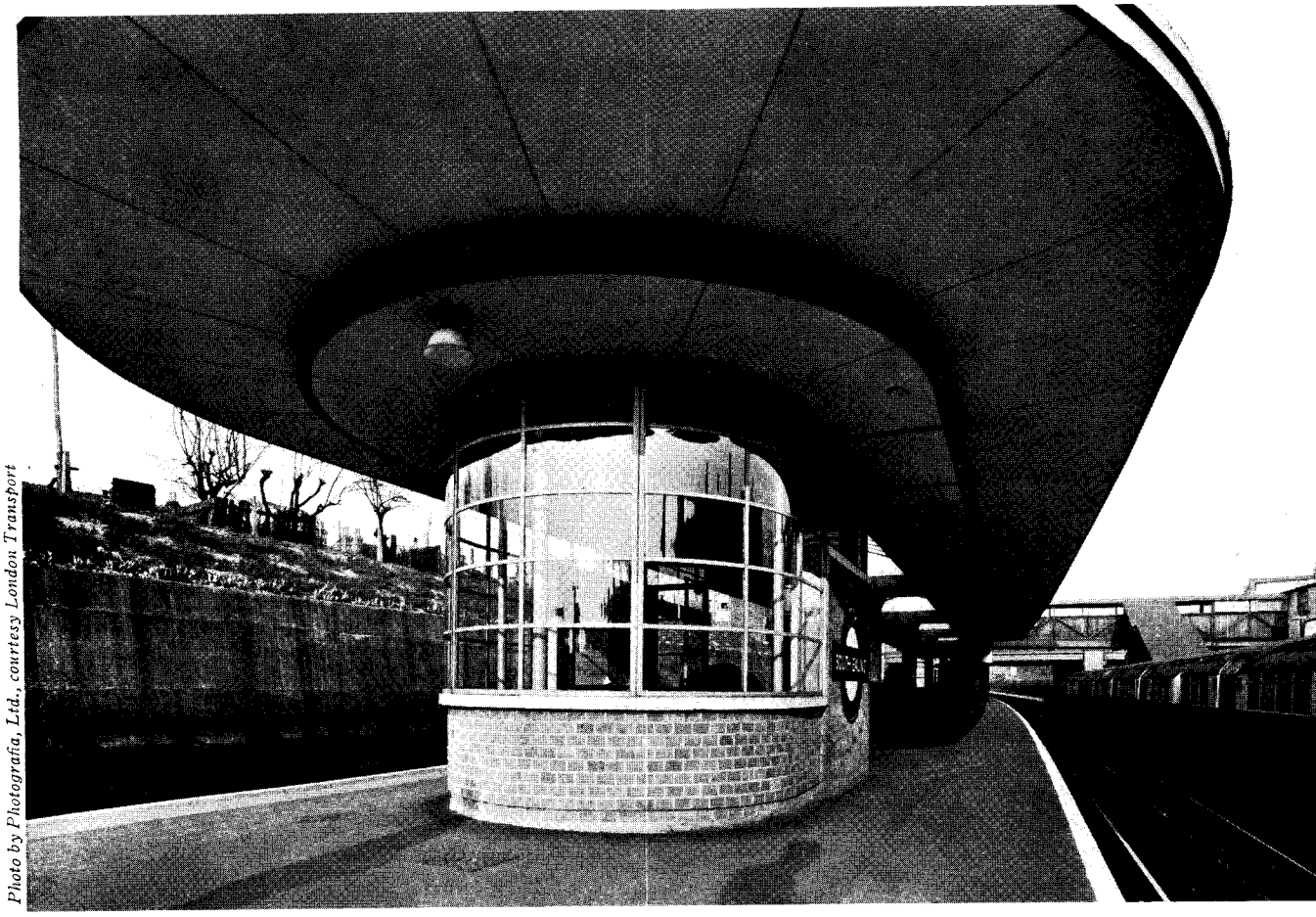
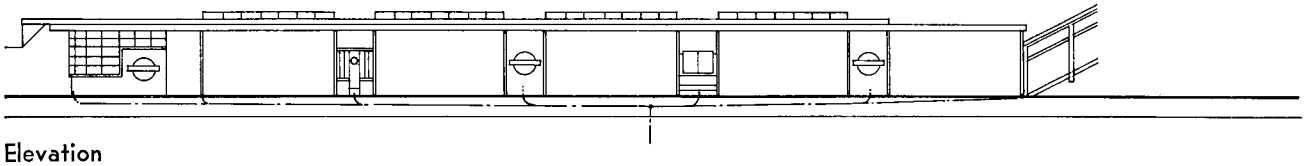


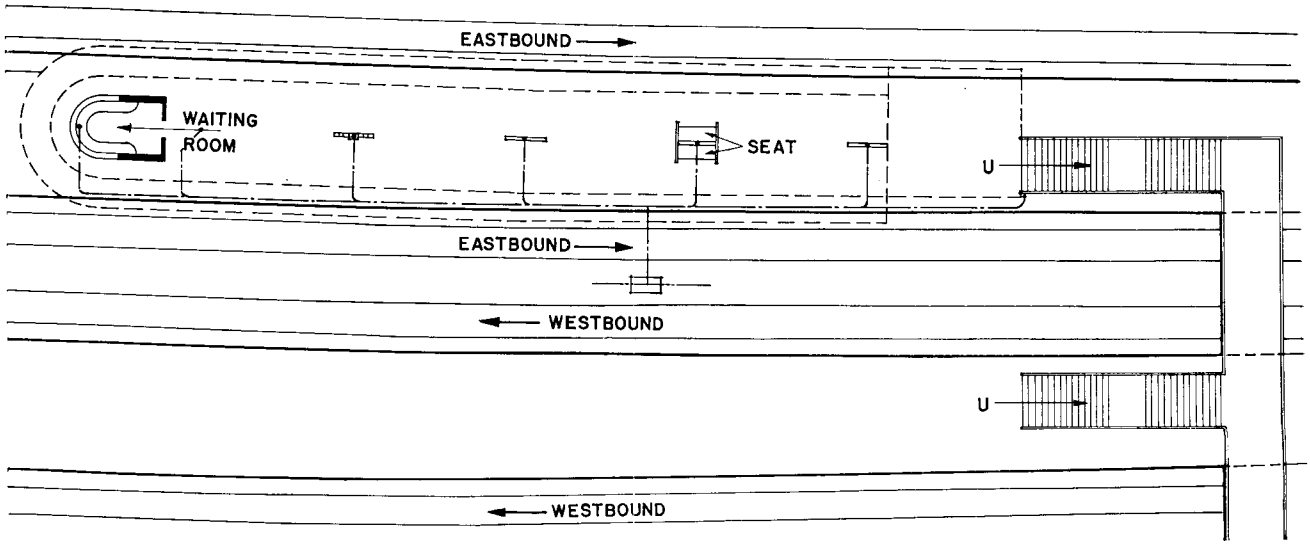
Photo by Photografia, Ltd., courtesy London Transport

Waiting room, eastbound platform

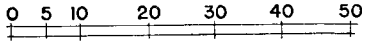
PLATFORMS



Elevation



Plan

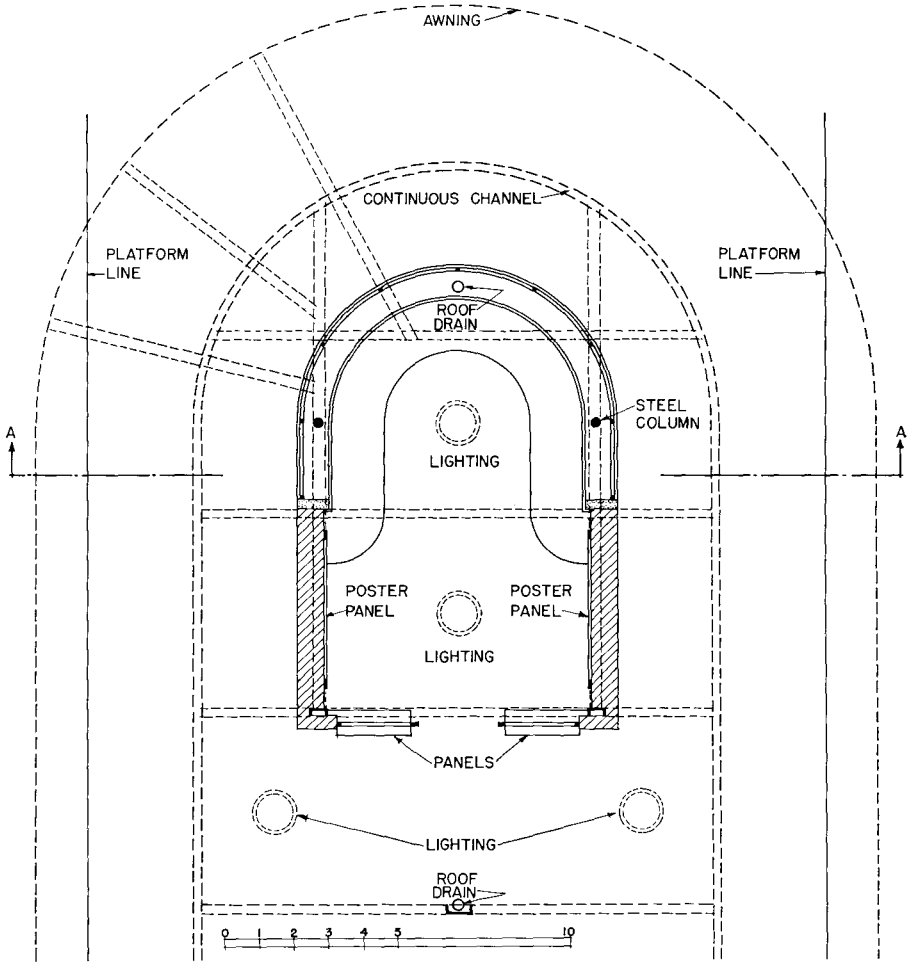


LROAD WAITING ROOM PERMITS EASY VISION IN ALL DIRECTIONS

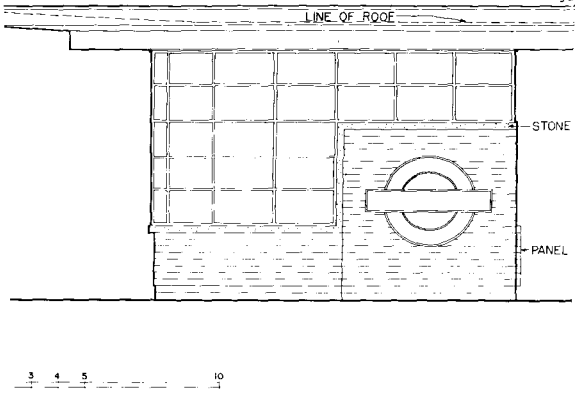
LONDON TRANSPORT
Designers

WAITING ROOM of the Ealing Station in Lon- ommands an unobstructed in all directions; east- and ound trains on all tracks e observed with ease.

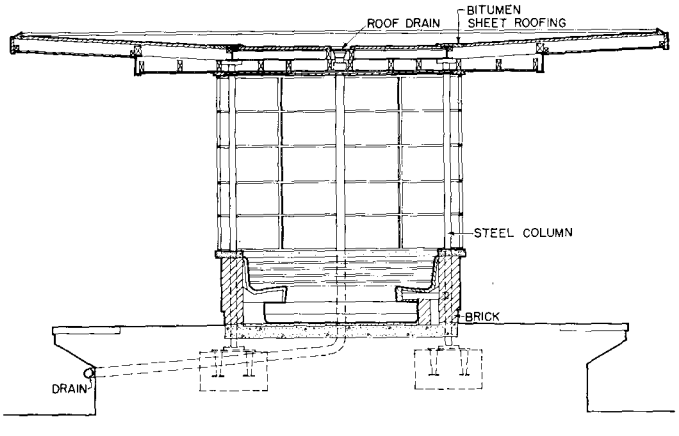
particular interest is the ruction of the roof, which s waiting room and plat- Timber rafters and board ed with asbestos are sup- d by a welded steel frame. underside is lined with Test" fiberboard and fin- with flat oil paint. The slopes slightly downward rd the center to a series of pipes along the platform, n empty into an existing ole.



Plan



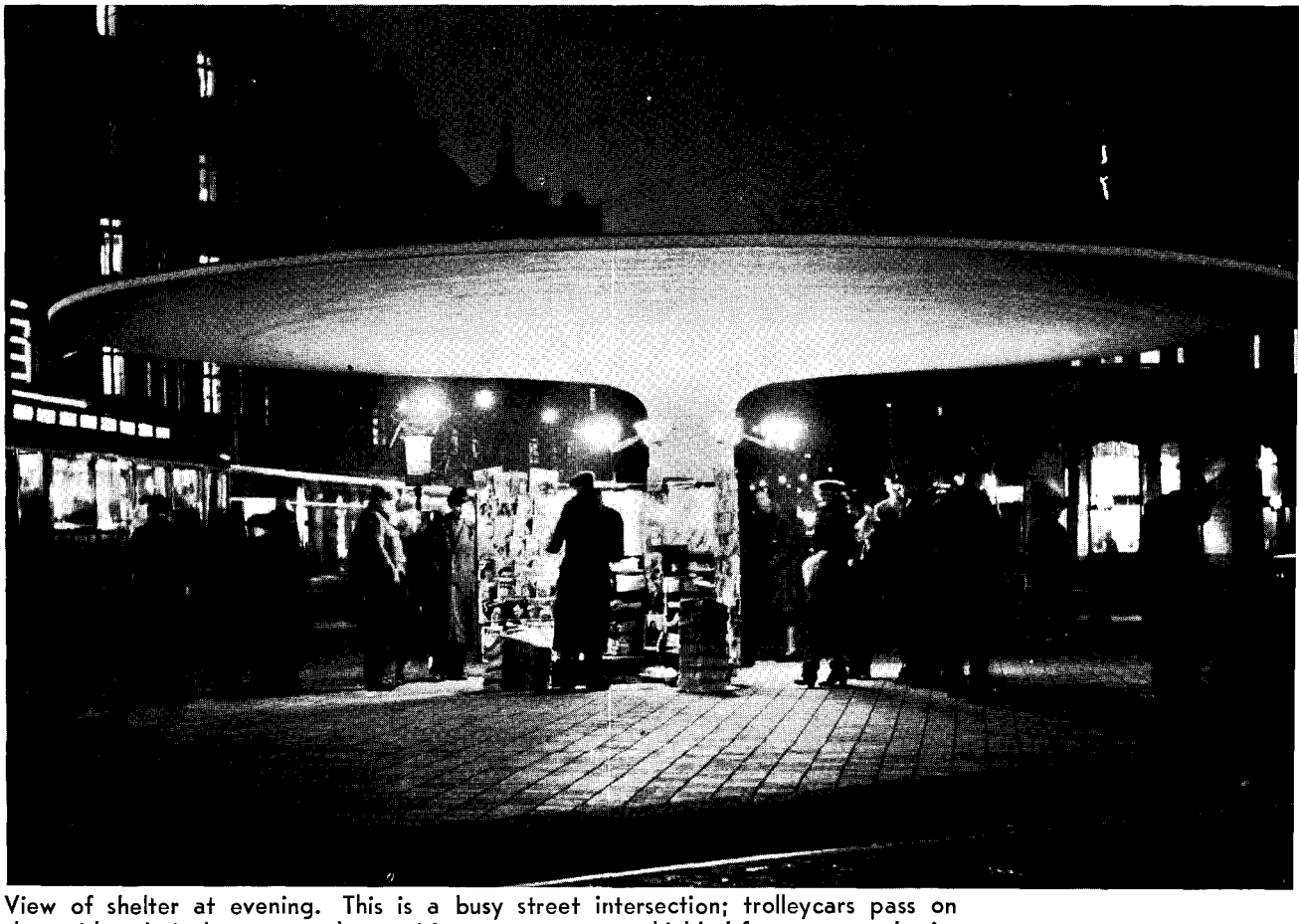
on



Section

C. E. Rosenberg

View of shelter at dawn



View of shelter at evening. This is a busy street intersection; trolleycars pass on three sides. In inclement weather, waiting commuters are shielded from snow and rain.

AIN SHELTER OFFERS MINIMUM OBSTRUCTION TO TRAFFIC

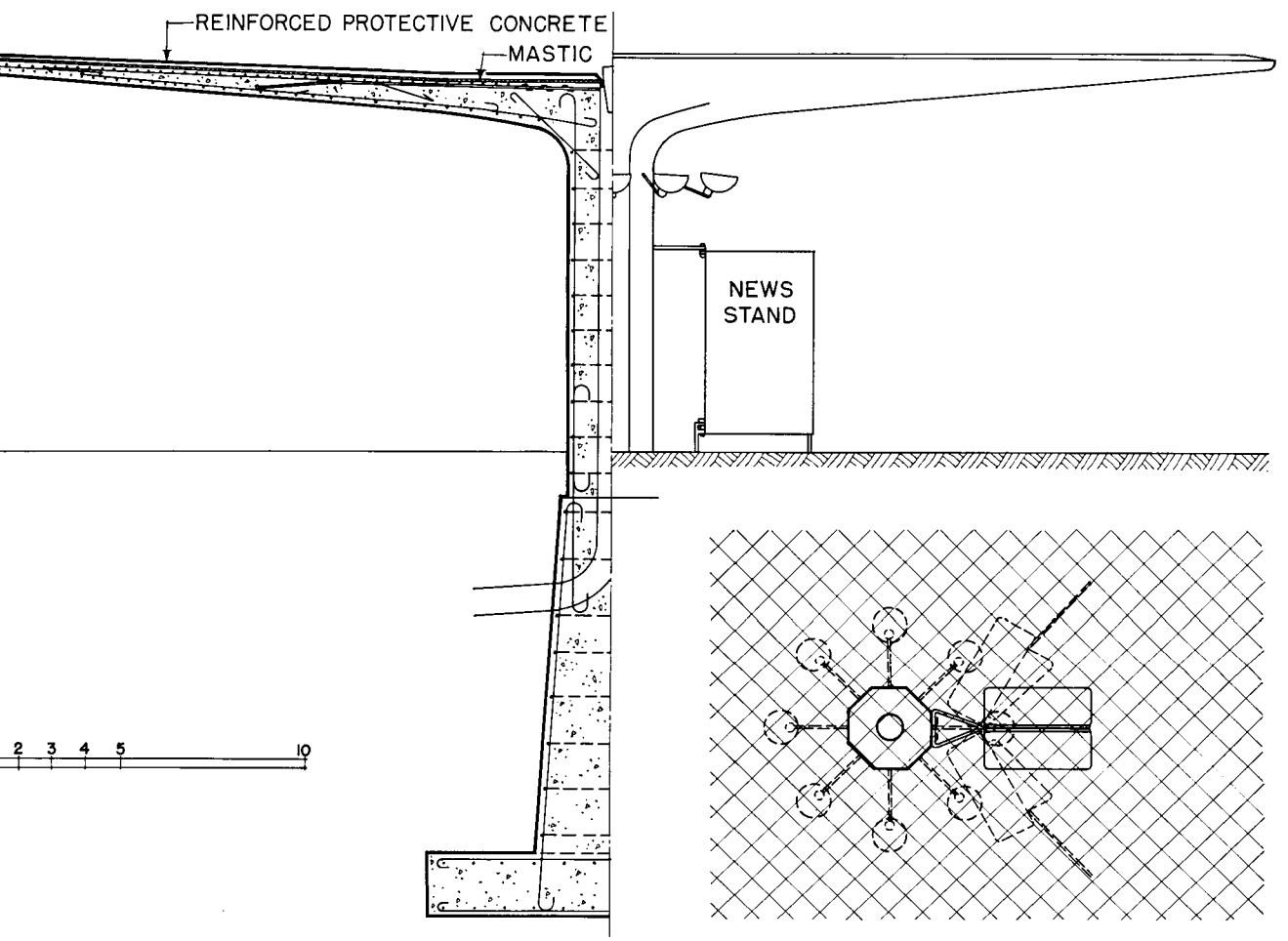
HOLGER BLOM
Architect

E. WRETBLAD
Engineer

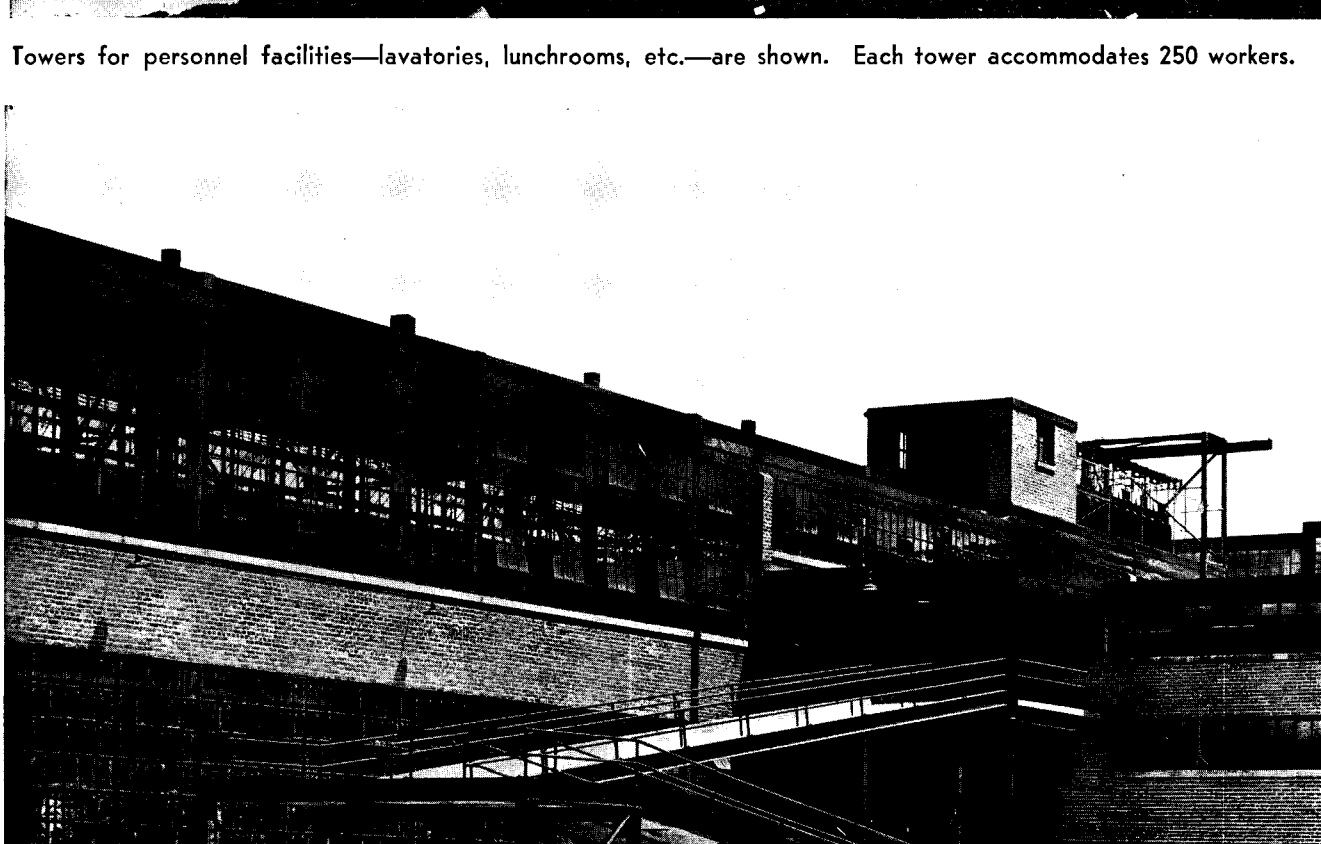
AIN SHELTER constructed by the City of Stockholm, den, performs its function with minimum obstruc- to pedestrian traffic. In form like an inverted rella, it slopes downard slightly toward the center re an outlet carries off the water. Below grade the gonal pillar passes through a bed of clay, its base- e resting on a substratum of fine sand more than t. underground.

he material, cast in a form of hardened masonite, is forced concrete throughout. Reinforcing of the slab is arranged as a network radiating from the er. High tensions in the upper part of the slab are taken by flat iron radii welded to a series of flat iron rings. The rest of the reinforcing consists of round bars, which are also joined by welding. Roof insulation consists of mastic with a protective layer of reinforced concrete above it. A sheet-copper drip runs around the edge of the roof. Visible concrete surfaces have been covered with two coats of a light grayish-green mineral paint. (See AR, 4/38, pp. 46-49.)

Close to the octagonal pillar is a newsstand operated by a vendor who has had his station here for almost a half-century. The stand is of welded sheet-iron and may be shut at the close of business.



Towers for personnel facilities—lavatories, lunchrooms, etc.—are shown. Each tower accommodates 250 workers.



Ramp: Center railings are removable; gradient is suitable for electric trucks; space underneath may be used for stora

RODUCTION INCREASED BY SEGREGATION OF AUXILIARY AREAS

IGGS MANUFACTURING COMPANY

signers

R. WYLIE

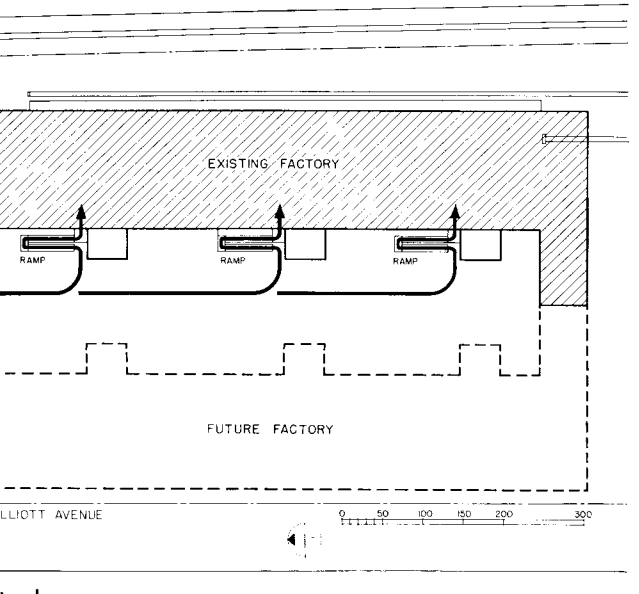
perintendent of Construction

IE PLANT of the Briggs Manufac-ing Company in Detroit, Michigan, interesting for its separation of xiliary facilities—lunchrooms, lava-ies, elevators, stairways, etc.—from rking spaces. Previous experience d demonstrated that continuity of oduction areas brought increased ciency.

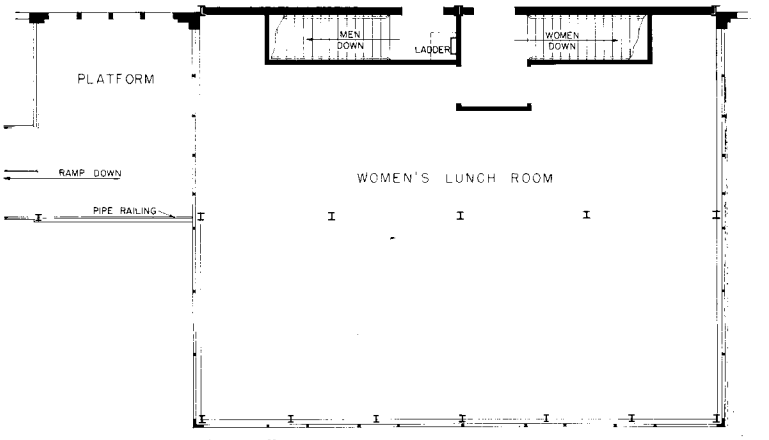
Employee facilities are contained in vers, three stories in height, adja-nt to the plant itself; each tower can commodate 250 workers at one time. evators have been eliminated: ramps e used instead: these have been de-ned with removable center railings d with gradient that will permit ng electric trucks to carry to the cond floor those materials which can-t be handled by conveyor lines.

Snow or ice formations on ramps e not expected to cause trouble; the me areas must usually be cleared yway. If necessary, steam can be ed to clear ramp surfaces—there is a eam outlet under each ramp.

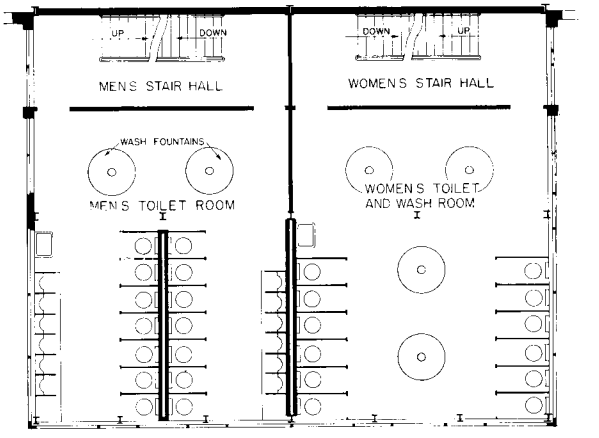
Space under ramps can be used for orage tanks or for other objects hich cannot conveniently be kept in-le the building.



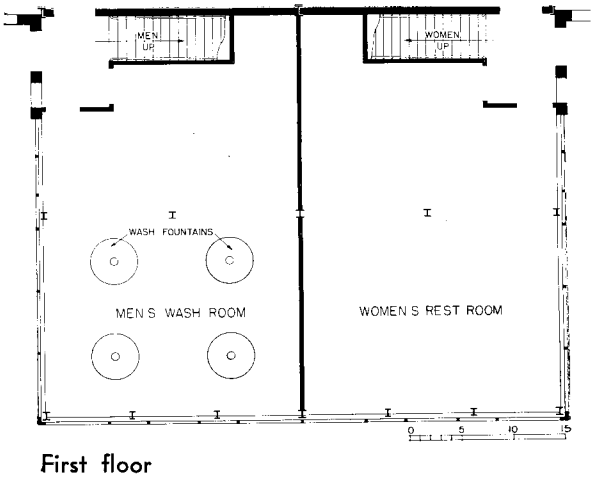
t plan



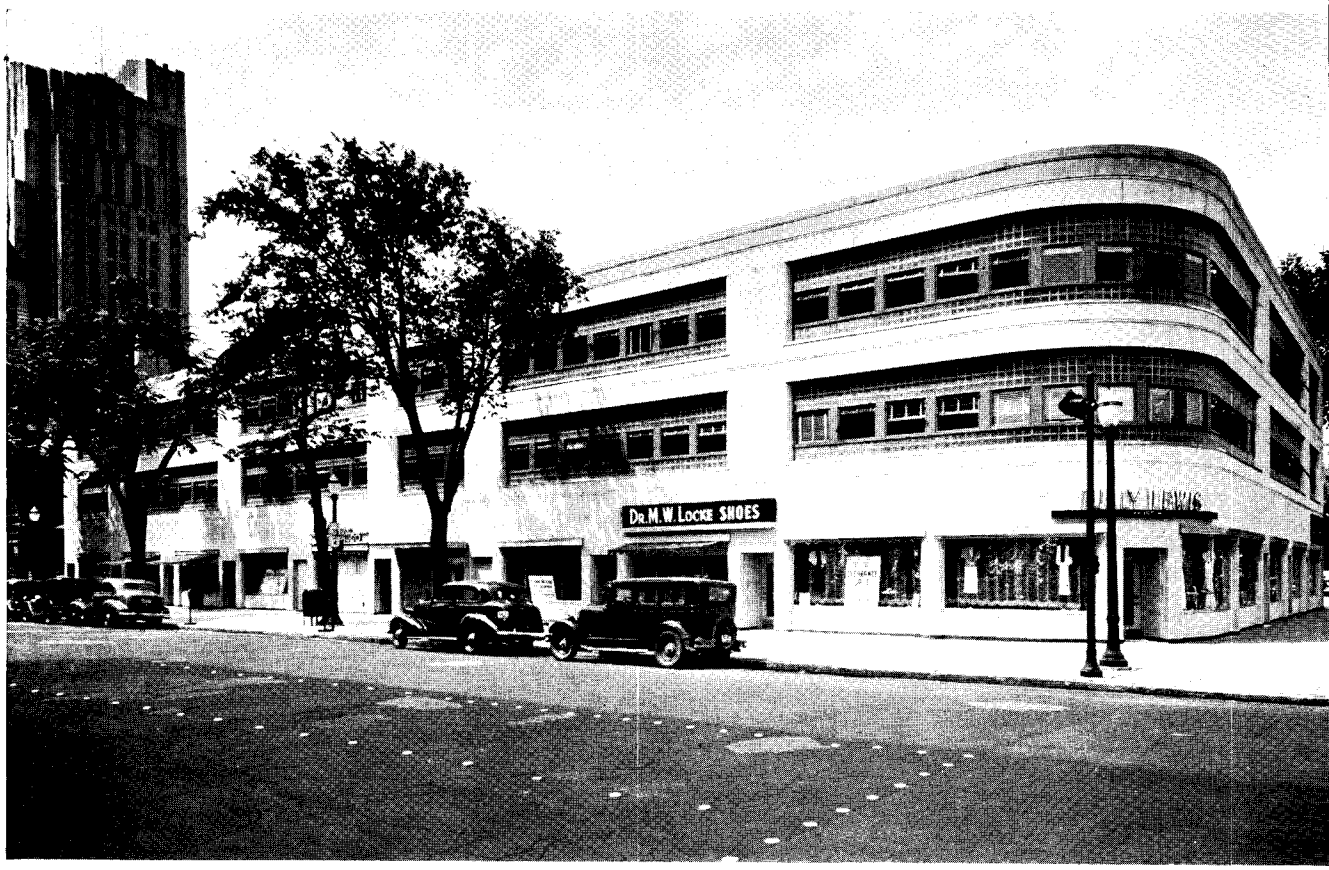
Third floor



Second floor



First floor



Photos by D. E. Ahlers

Talbott Realty Building. Structure is a combination of reinforced concrete and steel framing. Exterior is limestone

Talbott Realty Building. There is a parking area at the rear of the building.

ESIGN FOR AIR CONDITIONING PLUS ACCESS TO OUTSIDE AIR

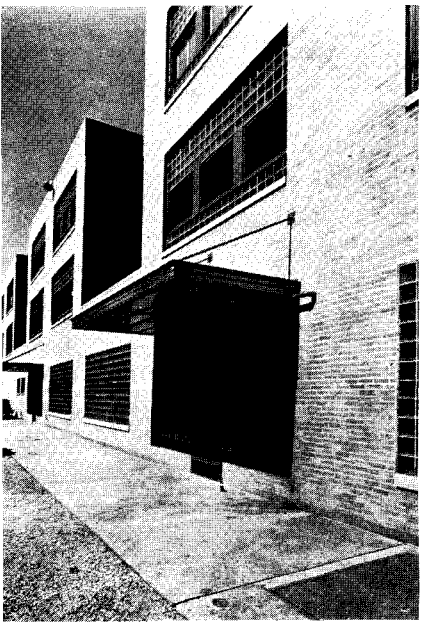
DOUGLAS LORENZ, AIA
chitect

E DESIGN of the Talbott Realty lding in Dayton, Ohio, has been in- nced strongly by air-conditioning uirements. Exterior walls include ge panels of glass block and metal n: glass block for maximum light h insulating value, metal sash for on and access to outside air—still chologically necessary to many ants.

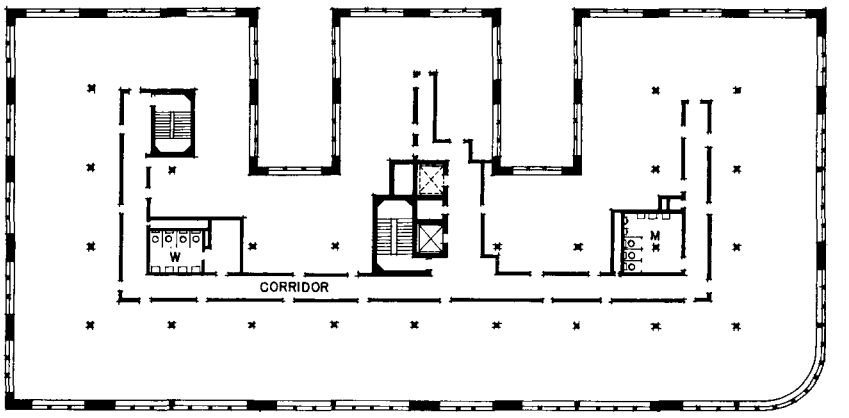
For winter conditioning, steam coils viced from mains in the street trans- heat to blower and duct systems ough which air is filtered, tempered, distributed. In summer, air is led by well water pumped through s and delivered by the same blower duct systems. The well water is lly ejected upon the roof, covering entire area three inches deep and viding additional cooling for top- r offices.

On the west wall of the building, ss block is again used generously the ground floor, admitting daylight the corridor and into the rear dows of retail shops.

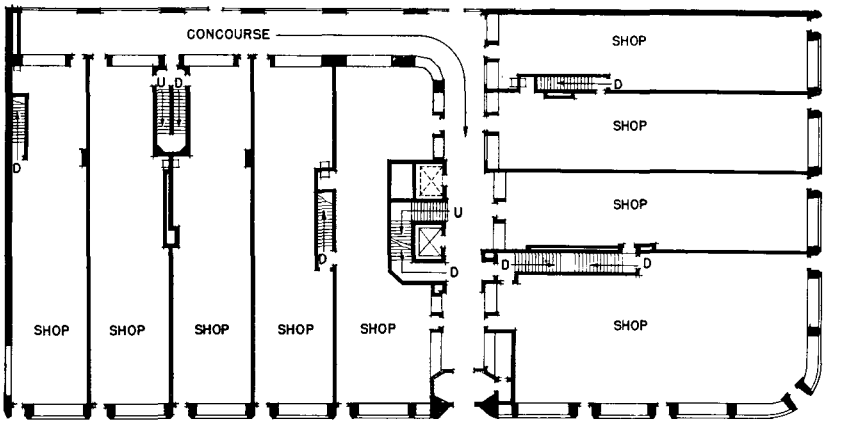
The basement includes two large p areas, one of which is fully ipped and furnished for cafe or nt-club purposes.



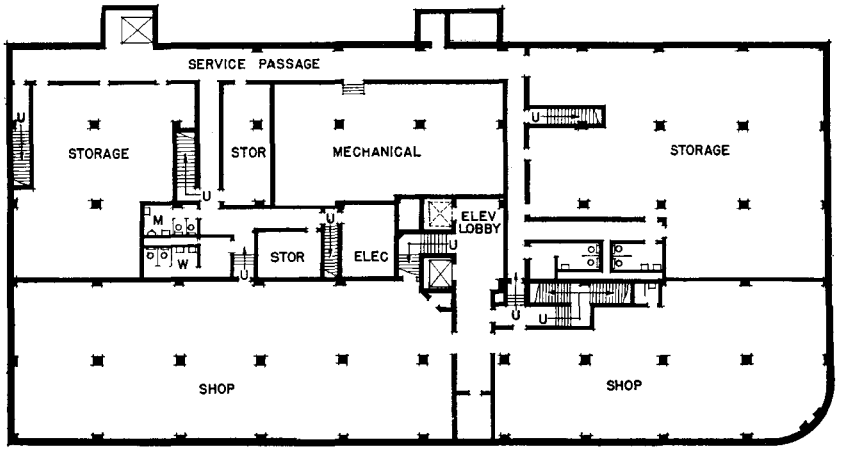
· of building facing parking area



Second and third floors

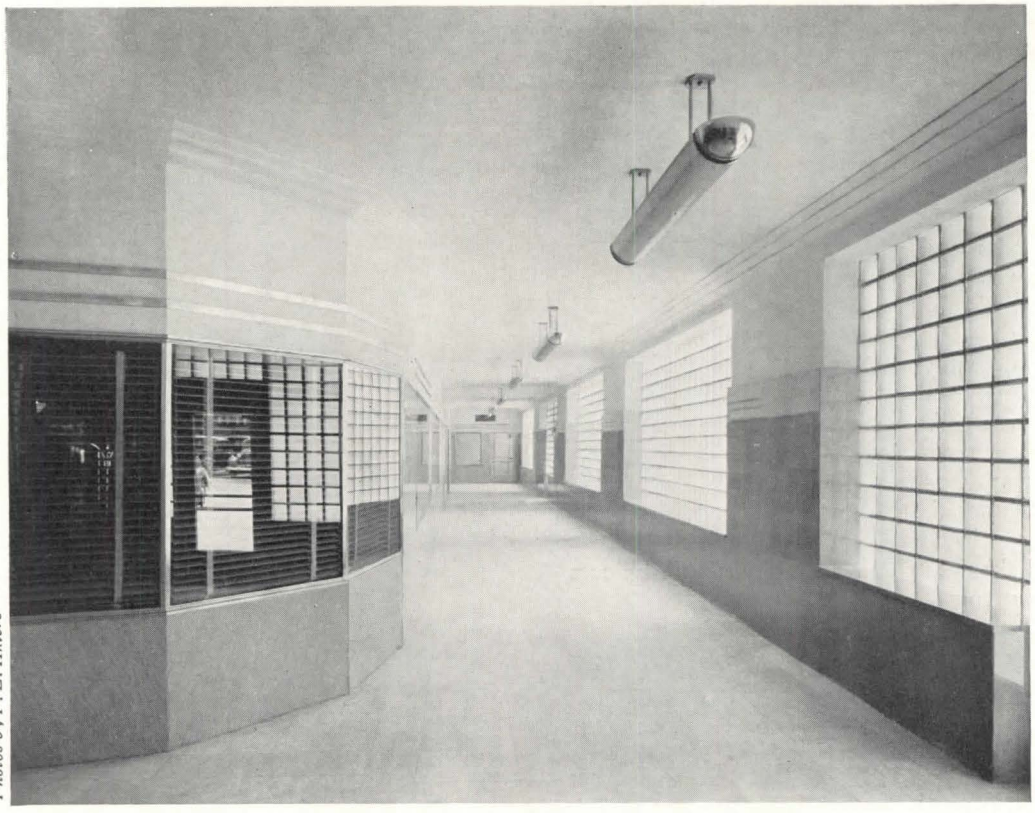


First floor



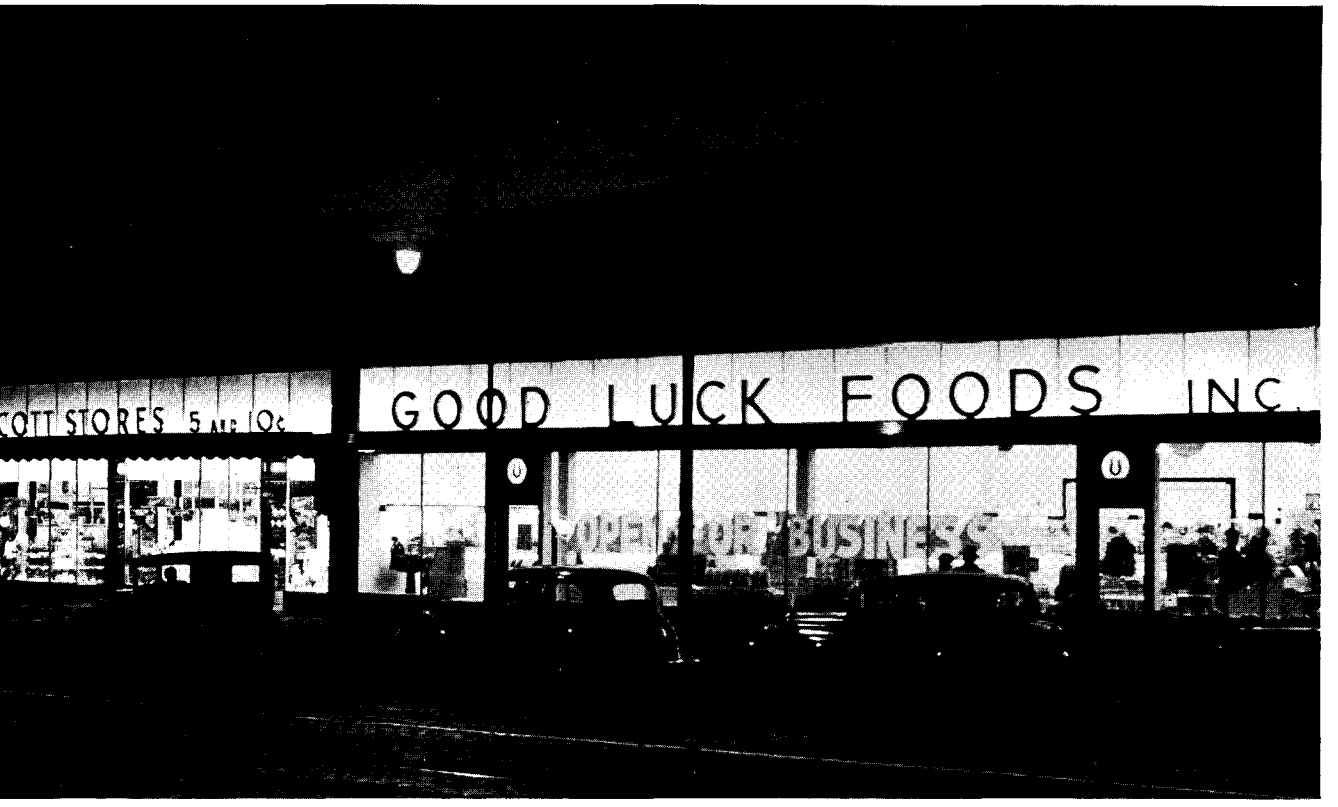
Basement

TALBOTT REALTY BUILDING



Photos by P. E. Ahlers

TOP: Retail shops have interior frontage on a spacious corridor leading both to street and to parking area. Use of glass block in wall reduces lighting costs. BOTTOM: Typical office. Each glass panel is about two-thirds glass block and one-third metal sash.

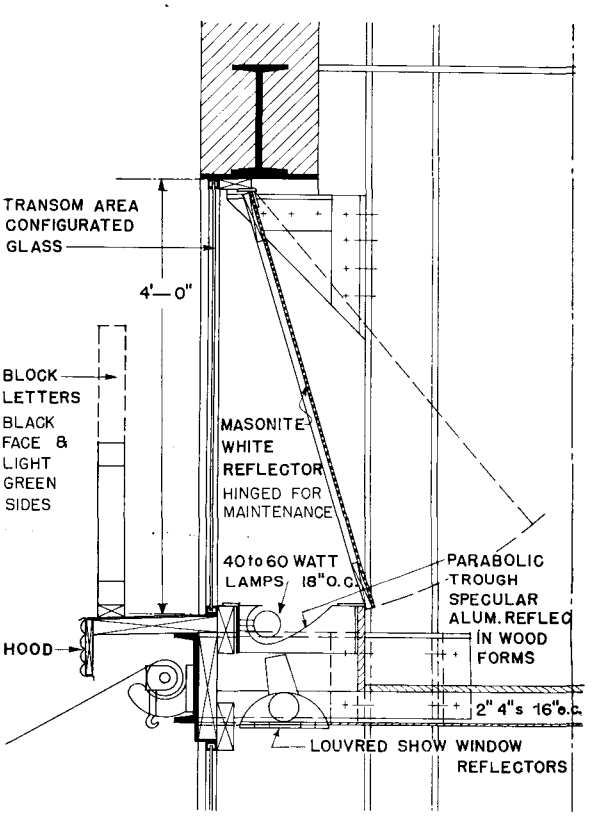


ansom Lighting Brings Increased siness to Cleveland Stores

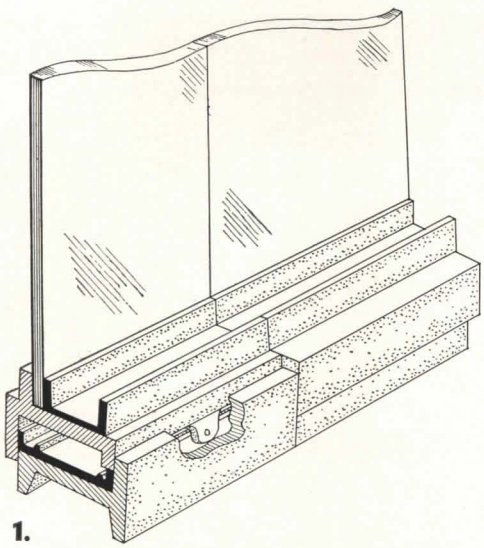
T. MASTERSON
chitect

M. POTTER
minating Engineer

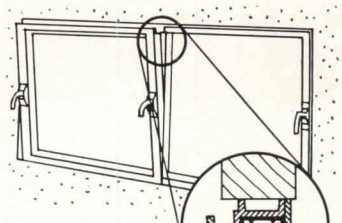
ANSOM LIGHTING of two newly remodeled store-nts in the Cleveland area is credited with hav- brought quick rentals and increased sales. As art of the work of modernization, "hung-on" tric neon signs have been removed and con-ious transom lighting has been substituted. s system of illumination is said to give greater bility and to avoid glare and blur.



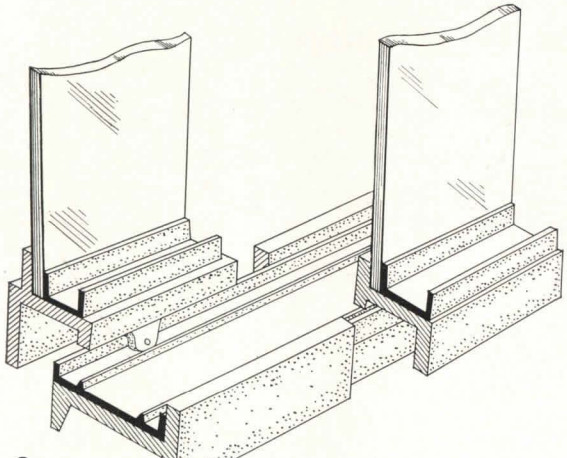
Detail of transom lighting



1.



3.



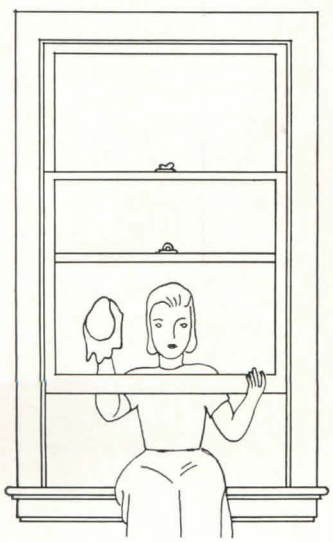
2.

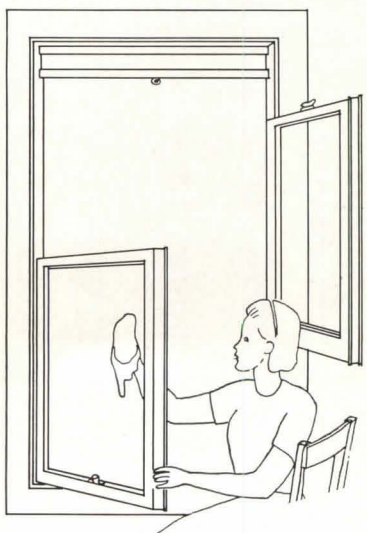
1. Both sashes are flush and slide in the same groove. 2. Sashes are in different grooves and will slide one behind the other. 3. The sash can be titled forward at top, admitting air but not rain.

Metal horizontal-slidi window-frame introduc

RECENTLY INTRODUCED in Belgiur a metal window frame which sli horizontally, and which can also tilted forward at the top admitting but not rain. To open, one sash pushed out, the other is pulled each is then in a different plane can slide one behind the other. W closed, both sashes are in the sa plane and the window is said to absolutely weathertight. Hinges weights are unnecessary, as the op ating mechanism is contained in sash. Among the advantages clai for this window are the followi that it can be cleaned more ea than vertically sliding sash; tha can be opened without the remova articles inside; that it can be mounted without tools to admit niture or other large equipment; it will not move and clatter in a str wind.

American patents have been app for, but no distribution licenses h yet been granted here. Licen agreements have been made some foreign manufacturers, inc ing Canadian and British firms. firm of John Thompson Beacon W dows Ltd., Beacon-Works, Wol hampton, England, holds the Br license.





Window combines casem and double-hung sash

THE SUPREME WINDOW, manu tured by the Supreme Window S Corporation, 45 W. 57 St., York, N. Y., acts both as dou hung sash and as casement. mally, it operates as a double-h window; but when the lower sas raised to within a few inches of top and the upper sash is compl lowered, the two sections can swung into the room and moved and down to any position des When swung in, cleaning, regla and painting are made safer easier. The window comes in stock sizes and in special sizes wood and in metals, assembled knocked down.

DESIGN TRENDS

Photo Ferd. Bucina

PRAGUE—An ancient background for modernism

ARCHITECTURAL
RECORD
COMBINED WITH
AMERICAN ARCHITECT AND ARCHITECTURE

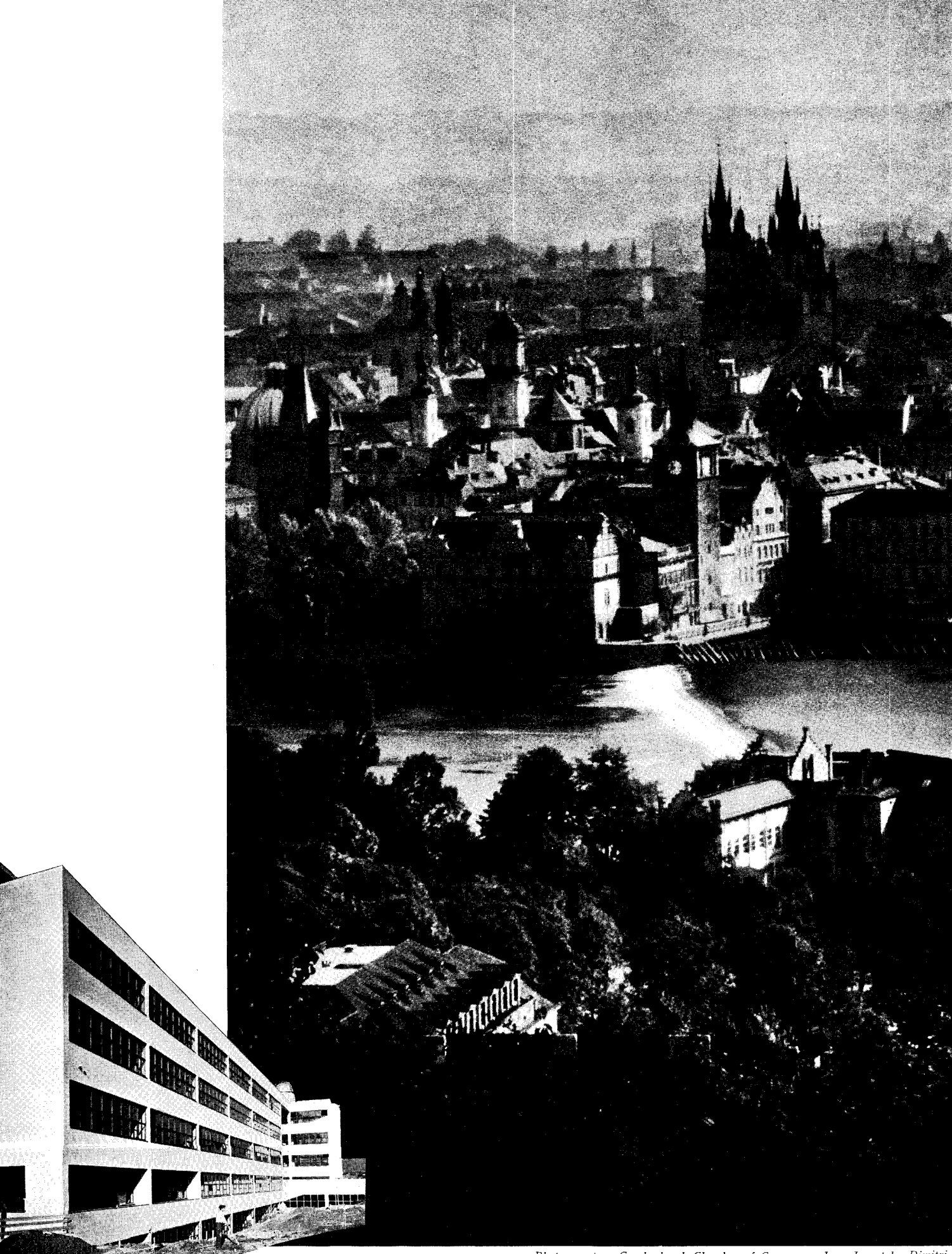


Photo courtesy Czechoslovak Chamber of Commerce, Inc., Insert by Dimitri

RAGUE . . .

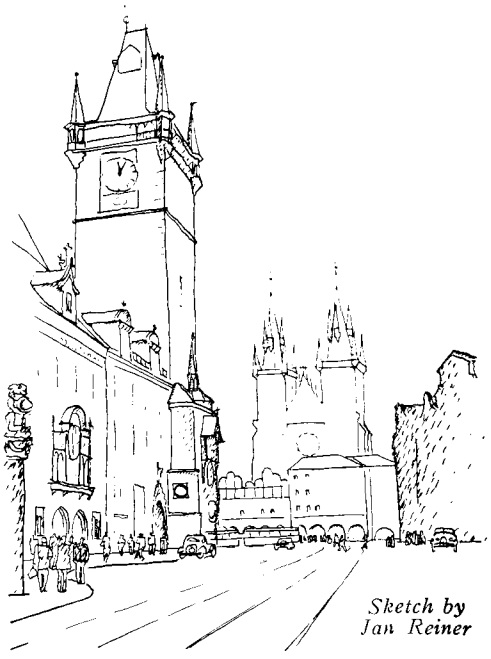
A thousand years ago this "town of a hundred towers" became the capital of an independent Czech state. Today, as the metropolis of the Czechoslovakian Republic it ranks eighth in area, eleventh in population, among European capitals.

E HISTORY OF PRAGUE is the history of the ancient Kingdom of emia and, in a certain sense, the history of Central Europe. Ever e the Premyslide princes fortified a rocky eminence on the lower hes of the Vltava River, Prague has been important as a factor he economic, political, and architectural development of Central ope.

nder Charles IV (1346-1378) of the house of Luxembourg, Prague me the largest city of Central Europe and the cultural center of Holy Roman Empire. For over a century Prague developed as a of Gothic architecture; but late in the 15th century the city's acter changed under the influence of the Italian Renaissance. In a rebellion against the ruling House of Hapsbourg was followed Catholic Restoration that converted Prague into a Baroque capital period that ended about the close of the 18th century. Prague me Germanized as a provincial town of the Austro-Hungarian ire until the Czech element reasserted itself in 1861.

odern Prague dates from 1918 when it became the capital of the choslovakian Republic. The city expanded; and the rapid construc- of new buildings, streets, and parks added entirely new quarters e old city. New bridges were thrown across the Vltava and some ne streets and old structures changed. But largely the character he ancient town was preserved; and the development of modern gue is most evident in outlying districts.

hroughout this development the Czechs have sought the newest. -war architecture changed from "cubism" to "the plastic-decora- style" into what is now generally called "modern." Spurred by post-war pioneer architects of Holland, Russia, France, and Ger- y, Czech architects rapidly mastered a technique of their own. following pages report recent solutions to a variety of design prob- . The buildings suggest the trend of Prague's future development. also provide a commentary on the influence that availability of materials, equipment, and services—here as well as in Central ope—is having on solutions to current problems of building design.

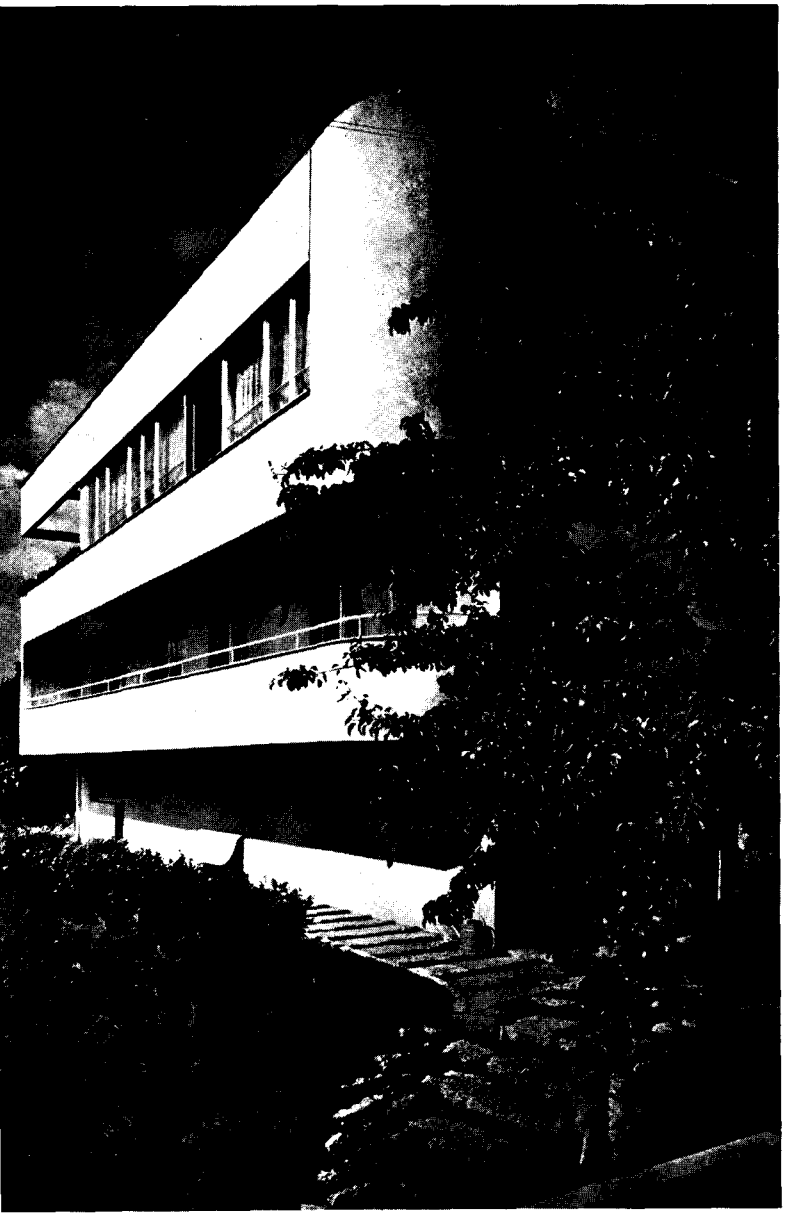


Sketch by Jan Reiner

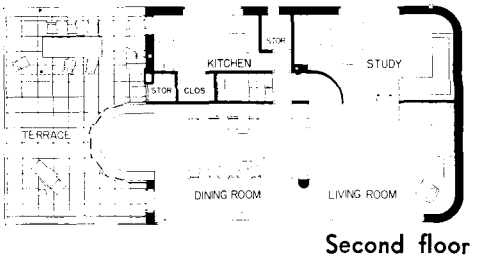
HOUSE . . .

On wooded slopes of suburban Prague modern houses provi
startling contrast to the fortified castles of the ancient Czech nob
This one, designed by Ladislav Zak, architect, is part of a small c
try estate that includes a garage and a greenhouse. The terr
elevation faces south giving the second-floor living rooms
greatest amount of sunshine and a clear view of the entire es

Dimitri Kessel

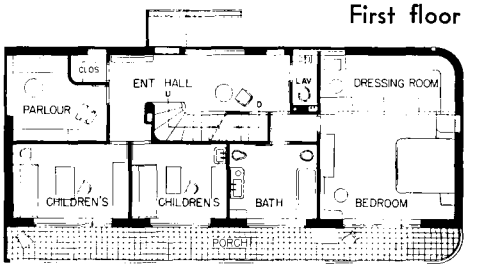


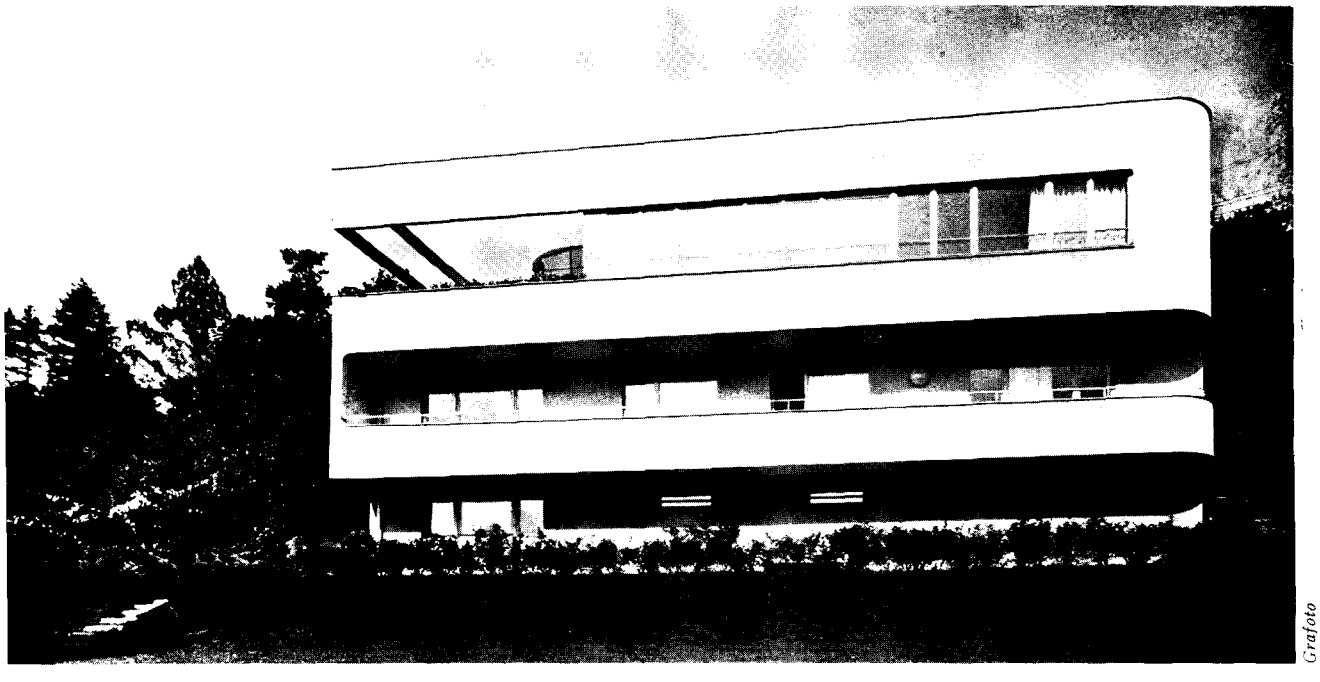
Construction is a combination of reinforced concrete and brick bearing walls, insulated with sheets of treated wood shavings. Windows are double-glazed; doors, plywood in steel frames. A partition of plate glass slides out from the wall to separate living room and study spaces when desired. The house is heated with a warm water plant; domestic hot water is supplied from an electric unit.



Second floor

First floor





Grafoto

Grafoto

View from living r
toward dining r
(left), kitchen (cen
and study (right).

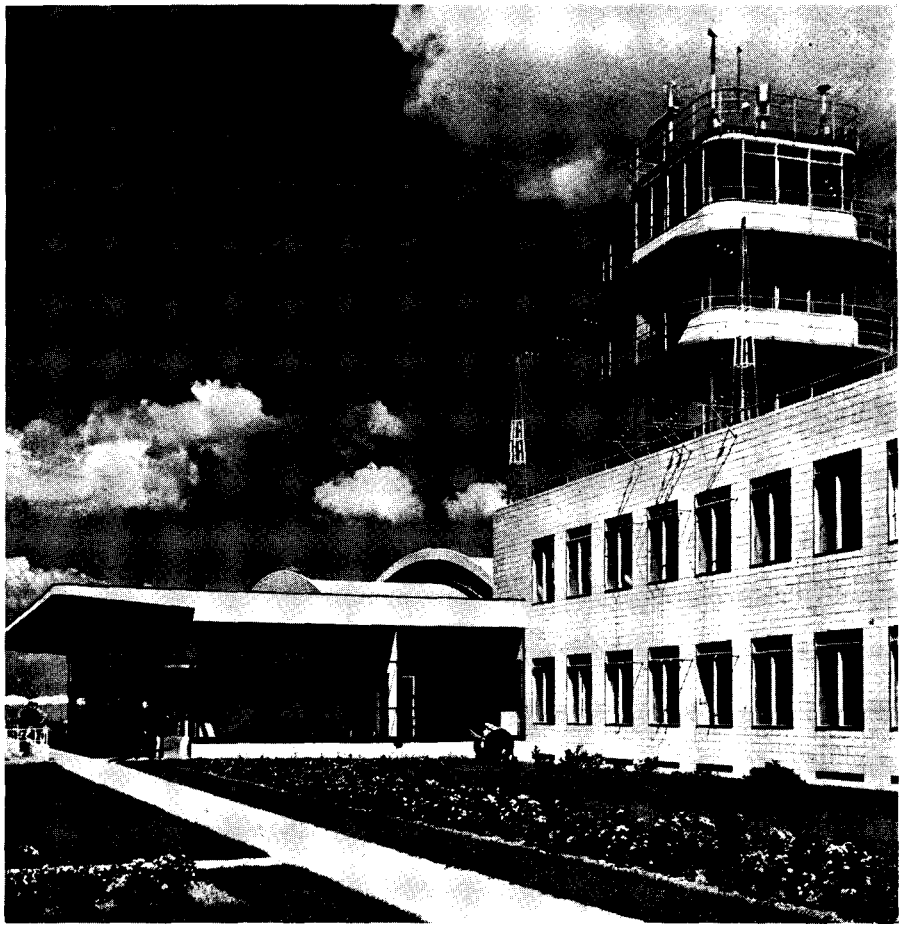
Dimitri Kessel

Dining room. Te
beyond bay is
during the summe
an open-air living
dining room.

IRPORT . . .

The newest and largest of Czechoslovakian civil airports—Ruzin Airport at Prague—serves as an important junction of international and local airlines. The airport building, designed by Adolph Benes, architect, contains a large waiting room, customs, ticket, and administration offices and an excellent restaurant.

truction is largely of reinforced ete, plate glass, and stainless The concrete is faced with d white ceramic tile.

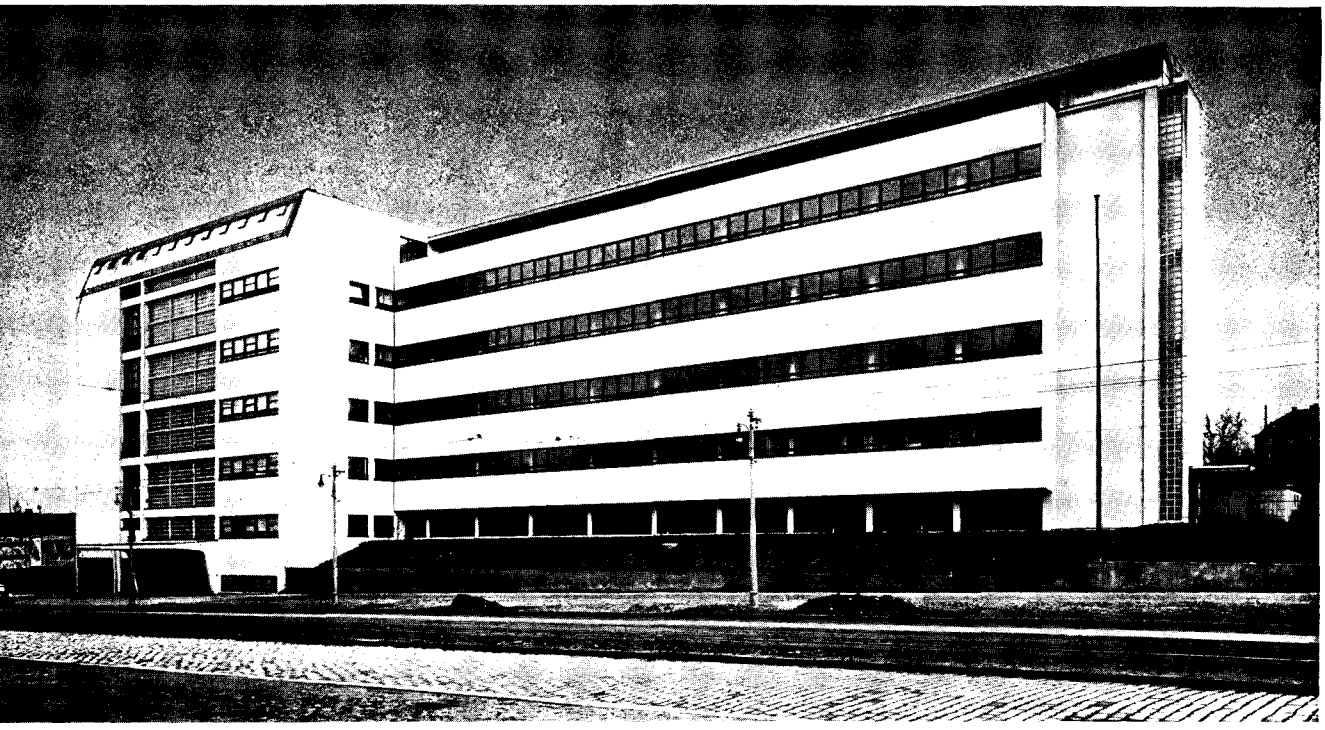


Photos by Dimitri Kessel

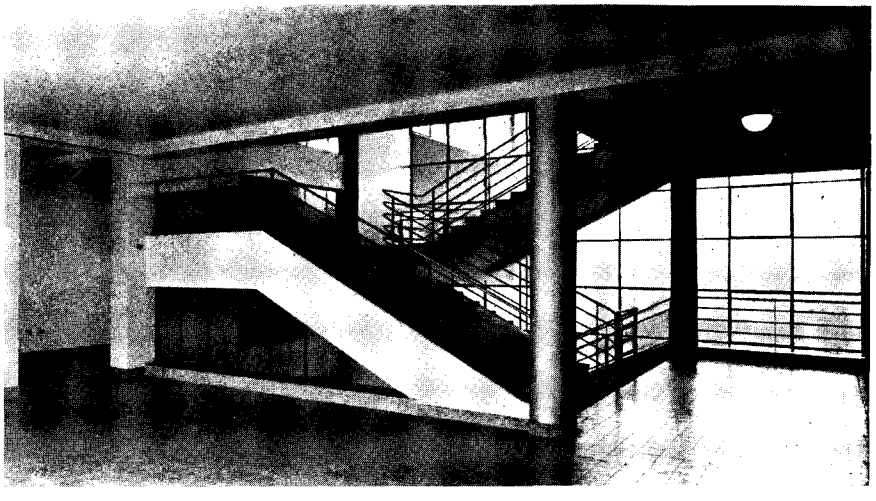
SCHOOL . . .

Prague, wherein is located the oldest university in Central Euro numbers among its modern educational plants, the Reform Grammar School which corresponds generally with a comm cial high school in this country. Owned and administered by State, it was designed by Eugen Linhart, architect. Its modern te nical equipment includes a small astronomical observatory par shown in the picture below.

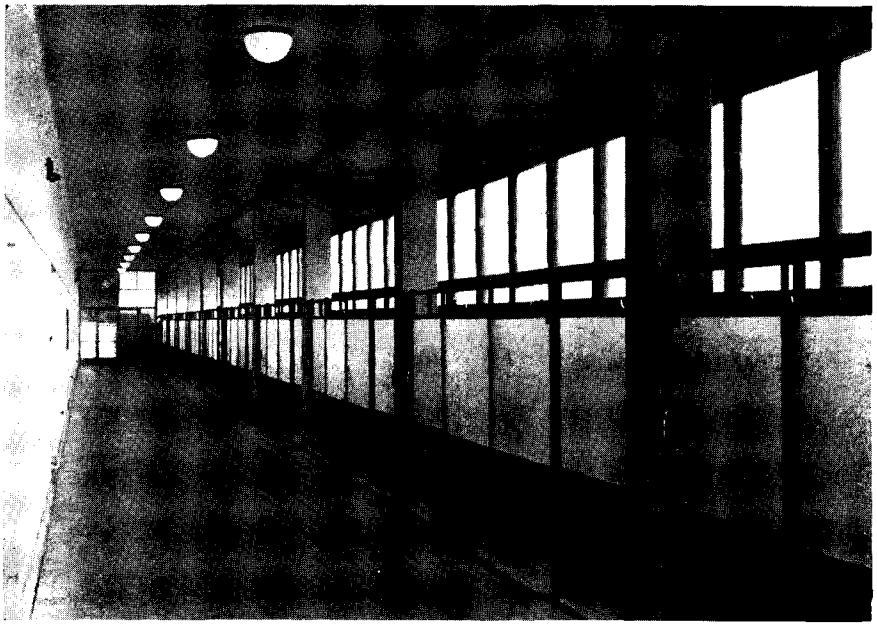
Dimitri Kessel



De Sandalo



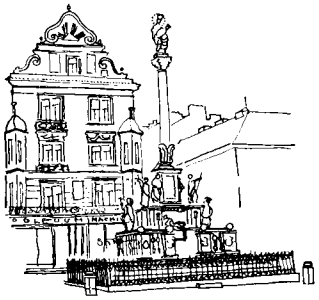
A. Gubcevsky

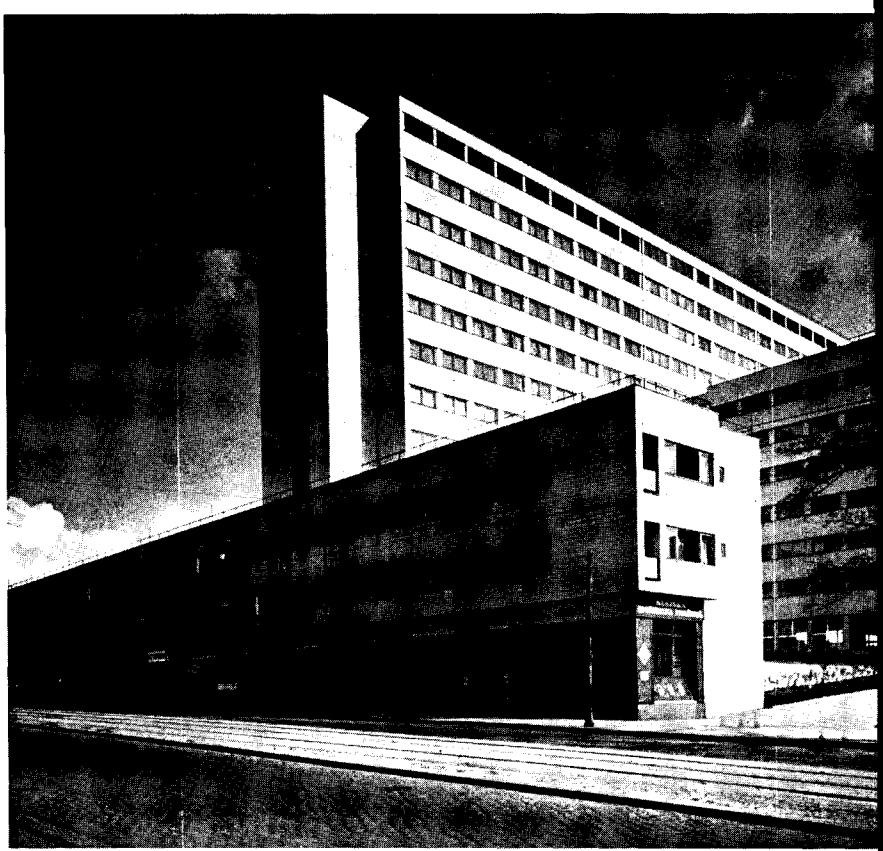


A. Gubcevsky

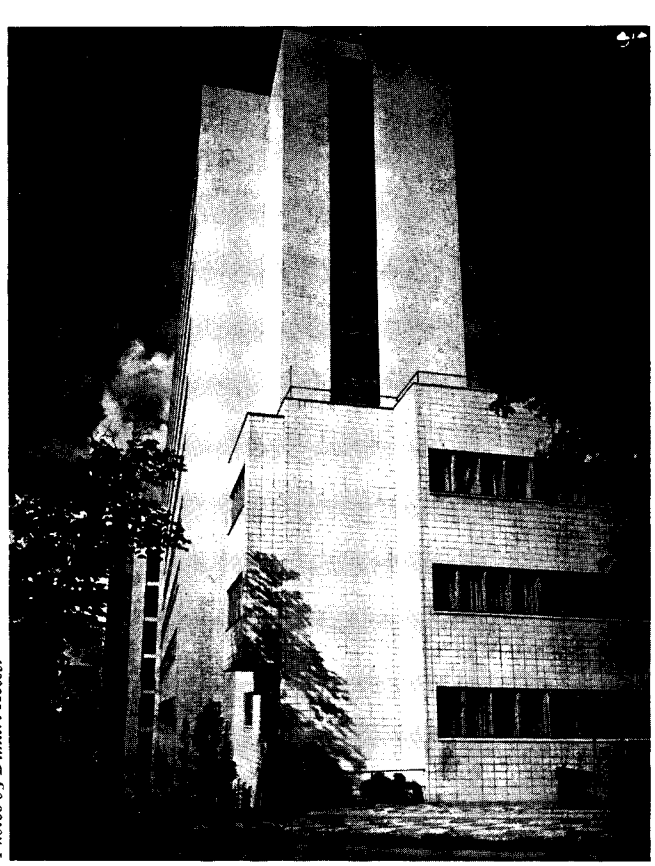
ke several other modern structures Prague, this school is faced with ient stucco colored a deep buff. recreation terrace on the roof, wn in detail on the facing page, is aced with tan-colored terrazzo. this page, right, is a typical cor- r lined with well-lighted and venti- d locker spaces.

OFFICE BUILDING . . .

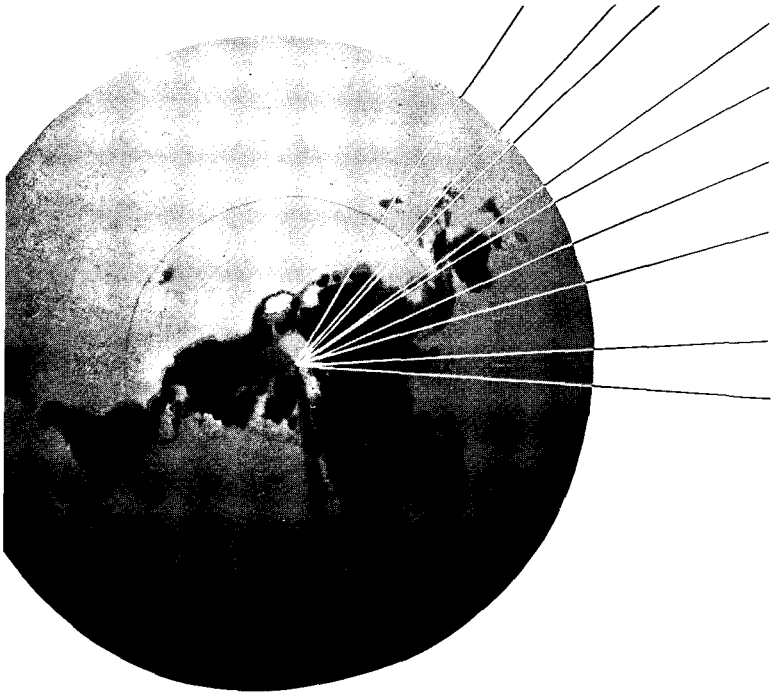




In the newer portion of Prague is the General Pension Institute, designed by J. Havlicek and K. Honzik, architects. The highest modern building in Prague, it combines office space with a number of apartments and stores. It is air-conditioned throughout, constructed of reinforced concrete and faced with white glazed ceramic tile. Below, right, is a view of the main entrance at the upper level of the slope on which it is built.



Photos by Dimitri Kessel



An air-wise map of the Earth, devised by Buckminster Fuller. It centers on the north pole, and in it all dry land appears to be one continent. Fuller calculates that if man were to be deployed over the pleasantly livable and arable areas there would be but 80 persons to the square mile. On this basis each family would have about 80 acres. He also calculates that if all the earth's $2\frac{1}{3}$ billion people were to stand one upon another's heads, they would make nine complete chains to the moon. Compacted, they would make 10 billion cubic feet. "Yet if put under a gigantic hydraulic wine press, so that all the water and gas might be squeezed out of them, they could be compressed into one Empire State Bldg."

'MAXIONIZING THE UNIVERSE... a review of Nine Chains to the Moon

YEARS AGO there came out of Chicago an inventor a small-scale model of an extraordinary sort of ing—an hexagonal-shaped affair suspended by cables a central utility tower mast—which he argued could ctory-fabricated in quantities so large that the econ- s would be like those in the auto industry. The e was called the Dymaxion—a term coined from amic" and "maximum." Soon, he predicted, it l be in production.

decade has gone by. The Dymaxion House still ins an idea, but the world of architecture has ged considerably. If the changes seem revolutionary aracter, then Buckminster Fuller, the Dymaxion eer, can be held largely responsible. His ideas prefabrication have penetrated far; it is now a gen- belief that inevitably the building field will be com- y industrialized. Nor have the years been barren angible accomplishments. In 1933 came the axion Car, a 3-wheeled rear-engined streamlined ter-mobile" designed in collaboration with Starling ess, the racing yacht architect. In 1936, out of the s-Dodge research laboratories, came his integrated oom, a structure with walls, floors, and fixtures de- l all as a single compact unit.

w comes a book* on the Dymaxion philosophy, and prediction that before July 12, 1948, the mass pro- n of mechanical chassis of dwellings will attain a million units per annum, in the U. S. the curve rising rapidly therefrom at the end of the ten years." e are 21 other predictions, covering such diverse as population shifts, a mechanical stock exchange, new farm mechanics, socialization of leisure, labor evolution, insurance evolution, and the change in name of New York City to "Radio City", all neatly tabulated.

Forecasting is a necessary consequence of the Dymaxion philosophy which holds that everything in the universe is constantly in motion, and that if the cosmic forces are recognized and their interplay understood, then the inevitability of certain trends becomes apparent and various events in the line of evolution can be anticipated. To this extent Fuller is a materialist in his philosophy.

But he goes further: in an expanding universe, which he takes as his basic concept, the pattern of inevitability is revealed long in advance to those who have a teleologic perspective of the universe. At this point there creeps into his rather mechanistic philosophy a mysticism which is perhaps best understood if one remembers that Margaret Fuller of the Brook Farm transcendentalists was his great-aunt.

Man, so he states, is guided by a "phantom captain," who abandons ship at the instant of death. This captain has neither weight nor tangibility, but he has an infinite understanding and sympathy with all captains of mechanisms similar to his. What is this sympathy? It is "an intuitive awareness of perfection which serves as a universal yardstick relative to which any sense experience may be measured, and by virtue of which conscious selection may be made." Since some phantom captains are more sensitive than others, it is obvious that some individuals are favored to see farther ahead.

Into this idea of a superior and purposeful existence, which is expressed in fear and longing as the primary motivations of man, is blended the idea of an expanding universe. In such a universe it follows inevitably that the longing types of humanity should become dominant. Out of longing come the physical extensions—machinery,

- Chains to the Moon. R. Buckminster Fuller. Pub- by J. B. Lippincott Company, Philadelphia and New 406 pages; maps, charts, diagrams, including a ology of scientific events from antiquity up to 1936. $4.

personal equipments, intangible services—which permit man to control his environment and to articulate himself into immortality. Generic to this "new and thrillingly immunized LIFE unfolding in fulfillment of age-old dreams of freedom and growth" is the inevitable development of a universal shelter service with its mass-produced scientific dwelling-machines—the Dymaxion, *Q. E. D.*

Such, in brief, is the Dymaxion philosophy. In setting it forth, Fuller (or rather, his phantom captain) mounts the soapbox, comes in from outer space, discovers "Earth" and "Man", translates energy into dollarability (as moron prime-movers, he calculates, men would earn $4.30 in a life-time of work if they were paid at the same rate as a hydro-electric generator), comes down through the ages, discovers Einstein and mathematics, span-spins from abstract thought to physical science, encounters Leonardo da Vinci (the first phantom captain to suggest the possibility of standardized mass-production houses), zooms across to America (the land colonized by the longing types of humanity), glorifies the rustless alloys, commemorates Henry Ford (the phantom captain who consolidated the scientific emergence), recommends the use of stored-up gold to provide reflecting surfaces for beamed radio transmission of power, scolds the communists, condemns finance capitalism (conveniently dramatized into wicked old "Fincap", who typifies fear), announces the impending socialization of the plenitudinous categories of production, throws in the sponge for the patent system, identifies the recirculation of metals as the factor that is upsetting the economic system ("scrap is changing Fincap willy-nilly into a good boy"), views with optimism the growth of the CIO as a manifestation of industrialization, harangues the architects and the building trades for having tried to kill off the idea of industrialization, razzes the "pre-fabricators", suggests the tearing down of all buildings under 10 stories in height in New York City, specifies the requirements for a scientific dwelling service, and finally spirals off into the future to eavesdrop on Jones who is having a *tête-à-tête* with a charming young lady from Planet 80XK23 in trapezoidal segment 727831 of the star layer of the expanding universe.

Time and space have no limitations in this book: as an adventure story of thought, which the jacket proclaims it to be, it is likely to leave the reader dizzy with its impudent flights of fancy. Even though he may disagree most heartily with the Dymaxion philosophy, it is also likely to stimulate the reader's own imagination.

The title itself, according to Fuller, was chosen to encourage and stimulate the broadest attitude toward thought. "Simultaneously, it emphasizes the littleness of our universe from the mind viewpoint. A statistical cartoon would show that if, in imagination, all of the people of the world were to stand upon one another's shoulders, they would make nine complete chains between the earth and the moon. If it is not so far to the moon, then it is not so far to the limits,—whatever, whenever or wherever they may be. Limits are what we have feared. So much has been done to make us conscious of our infinite physical smallness, that the time has come to dare to include the complete universe in our rationalizing."

Paradoxically, however, in sweeping aside the barriers of time and space, the Dymaxion philosophy sets up its own limitations. All is predicated on the hypothesis of an expanding universe: if science should disprove this, then the theory of a purposeful inevitability of events collapses like a pricked bubble. Nor does the an pomorphic concept of a phantom captain guiding help matters—this is nothing but complexity squ Where do the individual phantom captains come f In an expanding universe even a phantom species have a finite beginning and a course of evolution. question is not answered.

Likewise, in rationalizing human motivations into and longing, and the identifying individuals and abstractions like ol' Fincap (another anthropomo specimen) with these forces, the logic leads straight choice of either black or white—with all the inbet grays ignored. This is an over-simplification of Consider the book itself: it is black as well as w

The book abounds with blunders—nonsequiturs contradictions and plain errors of historical fact—i cusable for anyone who writes in the name of sci "Mobilata" (data) and "vitalistics" (statistics) thrown at the reader with extravagance but rarely any credit as to source. Hardly any of the precept forth for scientific design are observed: inaccuracie not reflect "precision control" nor does verbosity re sent "doing the most with the least." Out of the w of words it is difficult to extract a clear impression o Dymaxion philosophy; always it is obscured by the s box tirades. Surely this is not a demonstratio the "segregation of functions" that makes for good de

Nevertheless, all these faults can be forgiven for vista which Fuller opens into the industrial Utopia ah Here is a new architecture to be had,—with a new thrilling and fine! But how?

It is not enough to say that this Utopia is inevit If it is possible to make predictions, it is also true th becomes increasingly possible to negate those same dictions. This is implicit in the idea of environme control, which Fuller himself identifies with the ide scientific shelter. In fact, it is entirely conceivable his book, intended to speed up industrialization, ma turned into a weapon of reaction to slow down the dustrial advance.

The nearest Fuller comes to a detailed explanatio how the new scientific dwelling machines are to brought into existence is the report by the young from Planet 80XK23 of what happened there: in emergency of a civil war the X-ians discovered that t mechanisms provided a relatively safer survival, therefore used them as temporary expedients but l them so much that they never returned to their "hum dumpty vanity tailored habitats of pre-war days."

It is clear by implication, however, that governm subsidy is the means whereby the Dymaxion dwell are to be achieved. Here again the reader runs in fog of thought. Fuller's interpretation of the evolu of society puts the emphasis entirely on the developm of technology. Advances on the economic front and t interplay with advances made along the technical fron not come into consideration. Consequently, he has to the question: what kind of government will furnish s a subsidy? . . . In setting up the thesis that a new ar tecture will bring into existence a new society, it is necessary for Fuller, or others, to explain the econo whereby the existing society can achieve this new ar tecture. Otherwise, the line of evolution is broken—c in an expanding universe.

C. THEODORE LARS

eview of New Books

OPE RE-HOUSED. By Elizabeth y. W. W. Norton & Co., Inc., York, 1938. 284 pages. 6 x9 in. over 100 illustrations, including lates. Price, $3.50.

ER eight years of experience in clearance and rehousing work ngland, the author of this book ned a research fellowship for the of rehousing on the Continent. visited thirteen countries, but has ed her study to six of them— winners in the War, two losers, two neutrals": France, Italy, nany, Austria (Vienna), Sweden, Holland.

his book contains very little sta- al material and the statistics in- ed are seldom comparable. It is ult, consequently, for the reader ain a clear impression of the tion as a whole. We have here, er, a series of scattered descrip- of specific projects in the coun- visited. These, to be sure, are without value: many of the de- oments described and illustrated offer useful suggestions to Amer- designers, who, on a larger scale, begun the work of slum clear- and rehousing in this country. Walter Gropius has written a fore- d to the book in which he de- s that scattered efforts, however ant, must be integrated to be tive.

HOUSING YEARBOOK, 1938. Coleman Woodbury, Editor. National Association of Housing Officials, Chicago. 315 pages. 6¼ x 9¼ in. Price, $3.

THIS YEARBOOK is a compilation of seventeen articles on important aspects of the housing problem—some in official and some in private positions. Some of the titles and authors are: *The First Six Months of USHA* by Catherine K. Bauer; *FHA's Activities in 1937* by Stewart McDonald; *The Federal Home Loan Bank System's Work* by John H. Fahey; *Housing Activities of the Farm Security Administration* by Will W. Alexander; *The Significance of the Greenbelt Towns* by Tracy B. Augur and Walter H. Blucher; *The Architect's Place in Current Housing* by Alfred Kastner.

There is a directory of housing agencies. Included, too, are selected bibliographies on housing and on building codes.

THE MINOR ARCHITECTURE OF WORCESTERSHIRE. By W. M. Ingemann. John Tiranti, Ltd., London, 1938. 6½ x 12¾ in. 48 plates. Price, 21 shillings.

ONE IN A series of photographic studies on the minor domestic architecture of England. This is the first volume to be compiled by Mr. Ingemann, although the General Editor, Dexter Morand, has already issued a previous volume on *Minor Architecture of Suffolk*.

The author has dealt mainly with 17th and 18th century structures of the Cotswold area. Some reference is made to the typical Avon and Severn lowland types of cottages, but for the most part this portion of Worcestershire has been covered only sparsely because of the similarity of these cottages.

The photographs cover in particular two types of domestic architecture. First, the so-called "black and white" structures of roughly-hewn timbers and whitewashed brick and, second, the well-weathered limestone structures which are so often found in this district.

The plates have been assembled to furnish charming views of entire houses rather than dealing with any particular details or phases of the buildings.

WELDING HANDBOOK. Published by the American Welding Society, New York, 1938. Illustrated from line drawings, charts and photographs. 1,211 pages. 6½ x 9¼ in. Price: to members of the American Welding Society, $5.; to non-members, $6 in U. S. A., $6.50 elsewhere.

PRIMARILY issued for use by the metal industries, this volume—a first edition—has been developed by 90 authors. It has been prepared "to cover, first, the fundamentals of the various processes, second, the materials used and the testing methods involved, and third, the applications thereof."

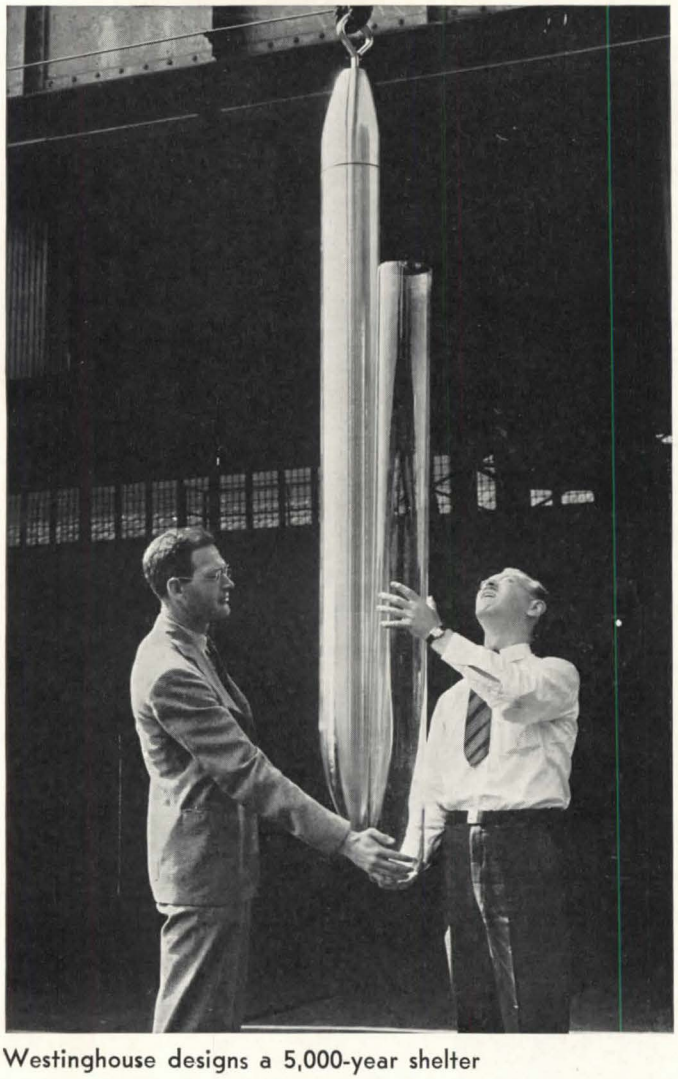
DESIGN OF STEEL BUILDINGS. By Harold Dana Hauf. John Wiley & Sons, Inc., New York, Second Edition, 1938. 232 pages. Text, problems, drawings, diagrams, tables, formulae. Price, $2.75.

A TEXTBOOK on the design of steel-framed structures in which data on structural shapes and other material have been brought up to date. First issued in 1932.

DESCRIPTIVE GEOMETRY. By Floyd A. Smutz and Randolph F. Gingrich. D. Van Nostrand Co., Inc., New York,

(*Continued on page* 128)

Trend Notes on a Building World



Westinghouse designs a 5,000-year shelter

Design for Time-control . . .

LITTLE INTERESTED as most building designers ma in what the archeologist of 6938 may think of the ture of 1938, the "time capsule" (left), which W inghouse sunk recently on the site of its exhibit buil at the New York World's Fair has certain implica for building design. For the "time capsule", late a series of scientific "cornerstones", is an ambi attempt to project some record of modern man 5 years into the future. And to achieve this, two th were essential: a compact collection of data on pre day science, art, and industry (mostly on microf and a truly permanent structure for "housing" information. This last became a design proble the first importance, and it is significant that West house engineers were forced to abandon the nat materials to which the average building designer w have turned in such cases. Instead, they used a metal—Cupaloy*—for the outer capsule, a new h resistant glass for the inner one, glass tape for pack and an atmosphere of inert gas instead of air. could they, in this particular "building type", rely u methods of production ordinarily used in the buil field. The alloy had to be produced and the cap fabricated under controlled conditions with preci instruments. . . . Scarce though commissions for bu ings to last 5,000 years may be, the architect may keep an eye on such "stunts" as these, for time-co is of increasing importance in building design.

*Recipe for cupaloy: Melt the copper, then deoxidize it with boron. hardening briquettes of copper-chromium, mix in a "pinch" of silve stir well while metal heats in a crucible to 2500° Fahrenheit. Ca a mold and machine. Result is an alloy hard as steel which—u steel—receives deposits instead of being eaten away by corr

G. M. fries eggs on a cold stove

Heat without hotness . . .

ANOTHER *tour de force* from the publicity world to be ignored by the building field was General Mo "Parade of Progress"—a national auto caravan to w up interest in G-M's exhibit at the Fair. Carried length and breadth of the land (in eight streamli transport trucks already described in AR, 4/36, p. 3 were a series of demonstrations of recent developm from G-M's research laboratories. Of immediate terest to the building designer was a "cold sto (lower left) on which eggs could be fried, water boi without scorching an interposed newspaper. Se of this apparent contradition was a new induc furnace which, by magnetism, creates enough "mo ular friction" in the pan to heat it. Although G- promotion men eagerly pointed out that it also "fla sparks and makes aluminum rings jump into the a building designers with new problems on their ha might do worse than to follow such developments.

(*Additional Trend Notes on page 87*)

urrent Trends of Building Costs

ıpiled by Clyde Shute, Manager, Statistical and Research Division, F. W. Dodge poration, from data collected by E. H. Boeckh & Associates, Inc.

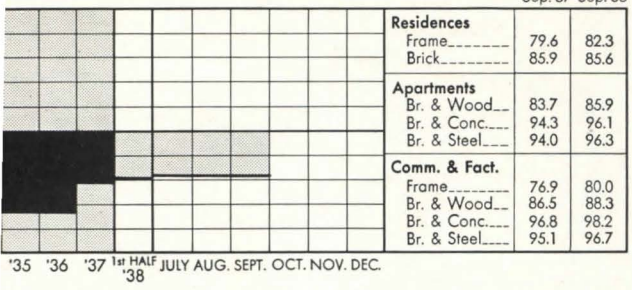
RVES INDICATE control trends in combined material and labor costs :he field of residential frame con- ıction, the monthly curves being extension of the local cost aver- s during the years 1935, 1936, and 7. The base line, 100, represents U. S. average for 1926-1929.

Tabular information gives cost index numbers relative to the 100 base for 9 common classes of construction, thus showing relative differences as to construction types for this year and last.

Cost comparisons or percentages involving two localities can easily be found by dividing one of the index numbers into the difference between the two. For example: if index A is 110 and index B, 95, (110-95)÷95 =.16. Thus costs in A are 16% higher than in B. Also costs in B are approximately 14% lower than in A: (110-95)÷110=.14.

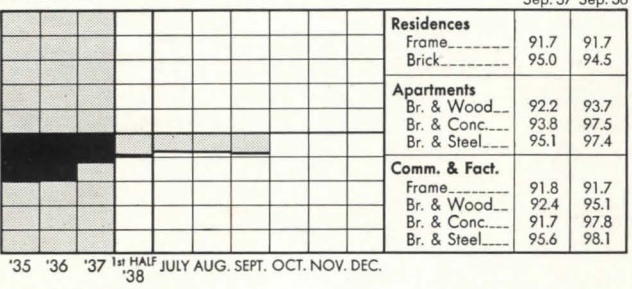
ONSTRUCTION COST INDEX U. S. average, including materials and labor, for 1926 - 1929 equals 100.

ANTA



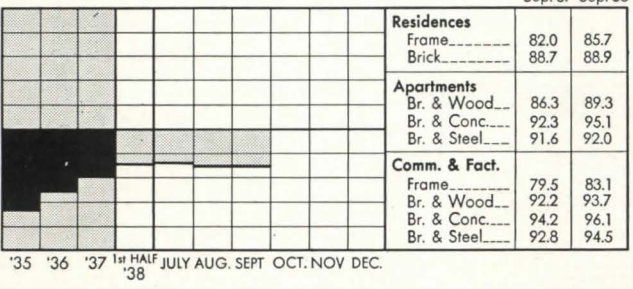
	Sep.'37	Sep.'38
Residences		
Frame	79.6	82.3
Brick	85.9	85.6
Apartments		
Br. & Wood	83.7	85.9
Br. & Conc.	94.3	96.1
Br. & Steel	94.0	96.3
Comm. & Fact.		
Frame	76.9	80.0
Br. & Wood	86.5	88.3
Br. & Conc.	96.8	98.2
Br. & Steel	95.1	96.7

LTIMORE



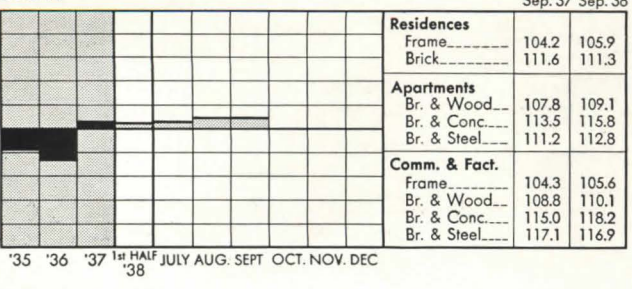
	Sep.'37	Sep.'38
Residences		
Frame	91.7	91.7
Brick	95.0	94.5
Apartments		
Br. & Wood	92.2	93.7
Br. & Conc.	93.8	97.5
Br. & Steel	95.1	97.4
Comm. & Fact.		
Frame	91.8	91.7
Br. & Wood	92.4	95.1
Br. & Conc.	91.7	97.8
Br. & Steel	95.6	98.1

MINGHAM



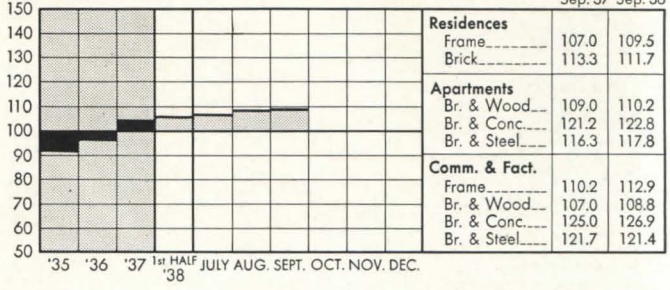
	Sep.'37	Sep.'38
Residences		
Frame	82.0	85.7
Brick	88.7	88.9
Apartments		
Br. & Wood	86.3	89.3
Br. & Conc.	92.3	95.1
Br. & Steel	91.6	92.0
Comm. & Fact.		
Frame	79.5	83.1
Br. & Wood	92.2	93.7
Br. & Conc.	94.2	96.1
Br. & Steel	92.8	94.5

STON



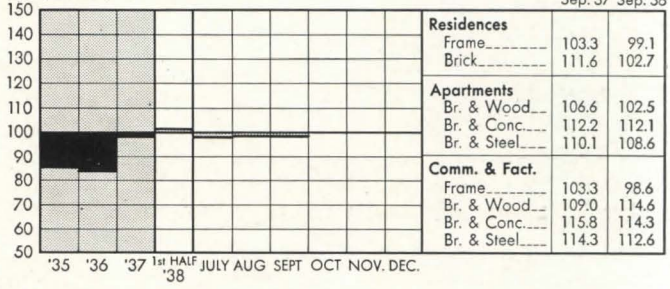
	Sep.'37	Sep.'38
Residences		
Frame	104.2	105.9
Brick	111.6	111.3
Apartments		
Br. & Wood	107.8	109.1
Br. & Conc.	113.5	115.8
Br. & Steel	111.2	112.8
Comm. & Fact.		
Frame	104.3	105.6
Br. & Wood	108.8	110.1
Br. & Conc.	115.0	118.2
Br. & Steel	117.1	116.9

CHICAGO



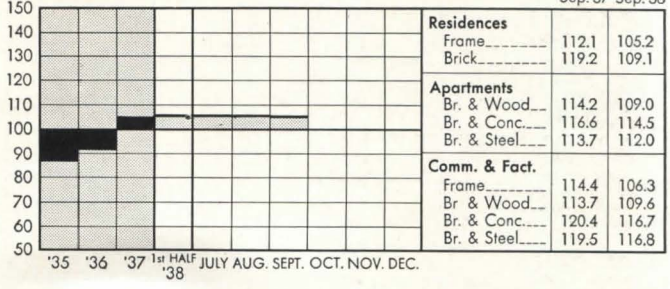
	Sep.'37	Sep.'38
Residences		
Frame	107.0	109.5
Brick	113.3	111.7
Apartments		
Br. & Wood	109.0	110.2
Br. & Conc.	121.2	122.8
Br. & Steel	116.3	117.8
Comm. & Fact.		
Frame	110.2	112.9
Br. & Wood	107.0	108.8
Br. & Conc.	125.0	126.9
Br. & Steel	121.7	121.4

CINCINNATI



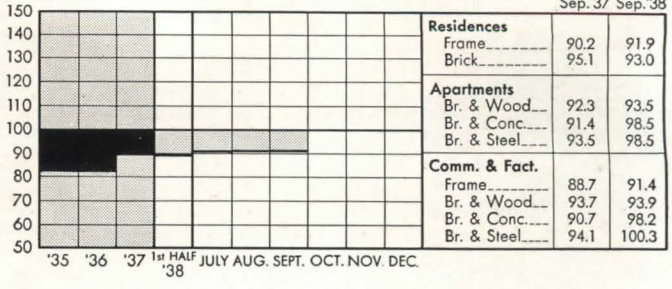
	Sep.'37	Sep.'38
Residences		
Frame	103.3	99.1
Brick	111.6	102.7
Apartments		
Br. & Wood	106.6	102.5
Br. & Conc.	112.2	112.1
Br. & Steel	110.1	108.6
Comm. & Fact.		
Frame	103.3	98.6
Br. & Wood	109.0	114.6
Br. & Conc.	115.8	114.3
Br. & Steel	114.3	112.6

CLEVELAND



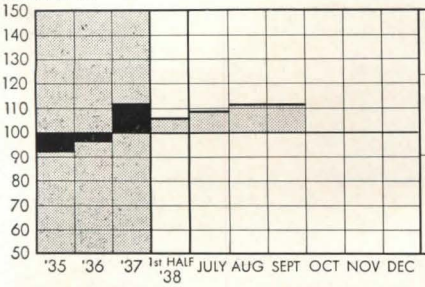
	Sep.'37	Sep.'38
Residences		
Frame	112.1	105.2
Brick	119.2	109.1
Apartments		
Br. & Wood	114.2	109.0
Br. & Conc.	116.6	114.5
Br. & Steel	113.7	112.0
Comm. & Fact.		
Frame	114.4	106.3
Br & Wood	113.7	109.6
Br. & Conc.	120.4	116.7
Br. & Steel	119.5	116.8

DALLAS



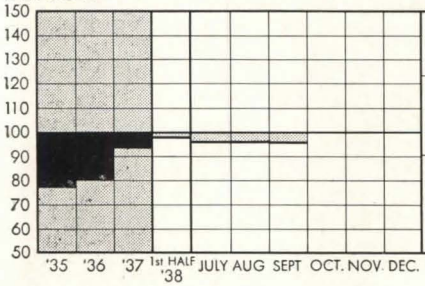
	Sep.'37	Sep.'38
Residences		
Frame	90.2	91.9
Brick	95.1	93.0
Apartments		
Br. & Wood	92.3	93.5
Br. & Conc.	91.4	98.5
Br. & Steel	93.5	98.5
Comm. & Fact.		
Frame	88.7	91.4
Br. & Wood	93.7	93.9
Br. & Conc.	90.7	98.2
Br. & Steel	94.1	100.3

DENVER



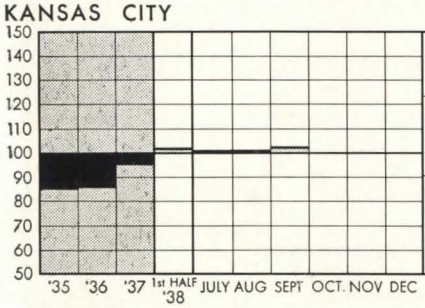
	Sep.'37	Sep.'38
Residences		
Frame	117.7	111.0
Brick	120.7	111.4
Apartments		
Br. & Wood	115.2	106.3
Br. & Conc.	116.0	114.7
Br. & Steel	115.3	113.1
Comm. & Fact.		
Frame	121.3	113.4
Br. & Wood	111.8	107.9
Br. & Conc.	117.4	116.0
Br. & Steel	118.8	115.7

DETROIT



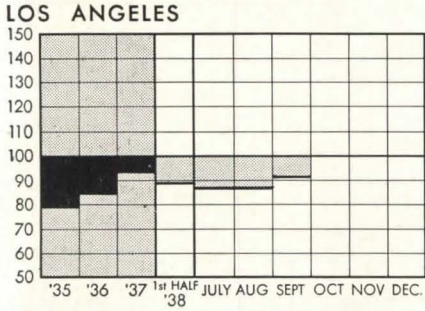
	Sep.'37	Sep.'38
Residences		
Frame	98.3	96.2
Brick	105.4	100.8
Apartments		
Br. & Wood	102.2	101.1
Br. & Conc.	108.6	108.1
Br. & Steel	107.2	107.1
Comm. & Fact.		
Frame	98.4	95.8
Br. & Wood	102.7	103.0
Br. & Conc.	110.8	109.4
Br. & Steel	112.4	111.9

KANSAS CITY



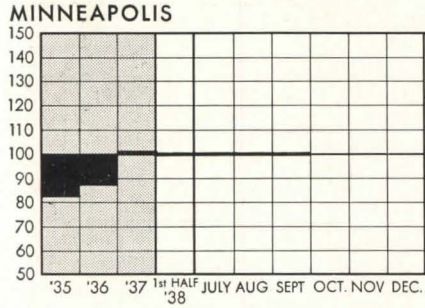
	Sep.'37	Sep.'38
Residences		
Frame	96.5	102.1
Brick	105.0	107.9
Apartments		
Br. & Wood	101.8	107.7
Br. & Conc.	109.7	118.0
Br. & Steel	107.7	115.0
Comm. & Fact.		
Frame	95.0	101.6
Br. & Wood	104.9	110.9
Br. & Conc.	112.4	121.3
Br. & Steel	113.6	119.1

LOS ANGELES



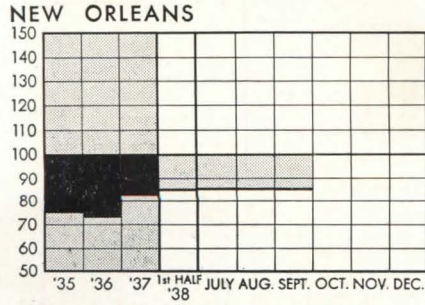
	Sep.'37	Sep.'38
Residences		
Frame	94.5	91.1
Brick	98.6	96.9
Apartments		
Br. & Wood	95.3	96.8
Br & Conc.	98.8	103.1
Br. & Steel	101.1	104.0
Comm. & Fact.		
Frame	95.7	95.6
Br & Wood	93.4	95.5
Br. & Conc.	98.6	104.1
Br & Steel	104.2	103.2

MINNEAPOLIS



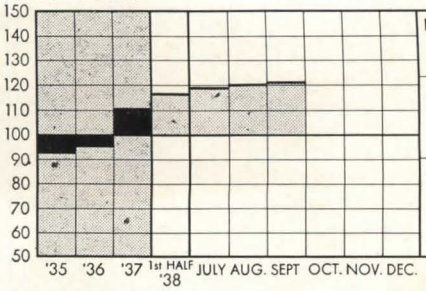
	Sep.'37	Sep.'38
Residences		
Frame	105.1	100.4
Brick	111.2	106.4
Apartments		
Br. & Wood	106.9	103.2
Br. & Conc.	113.1	112.7
Br. & Steel	111.4	110.5
Comm. & Fact.		
Frame	106.8	101.2
Br. & Wood	105.0	102.8
Br. & Conc.	116.3	116.3
Br. & Steel	116.0	114.3

NEW ORLEANS



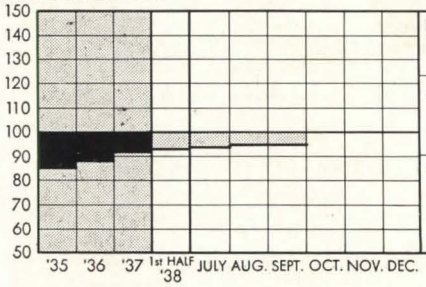
	Sep.'37	Sep.'38
Residences		
Frame	85.3	86.8
Brick	88.6	87.9
Apartments		
Br & Wood	86.4	89.0
Br. & Conc.	88.2	92.8
Br. & Steel	92.0	96.0
Comm. & Fact.		
Frame	85.0	85.5
Br. & Wood	86.2	89.6
Br. & Conc.	86.4	91.9
Br. & Steel	93.9	96.0

NEW YORK



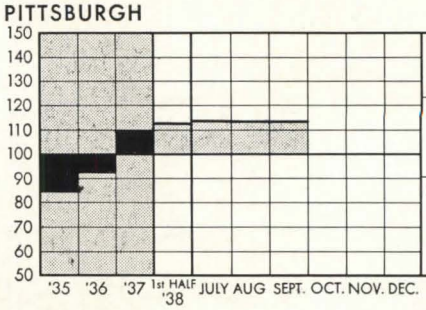
	Sep.'37	Se
Residences		
Frame	118.4	1
Brick	123.9	1
Apartments		
Br. & Wood	119.0	1
Br. & Conc.	127.3	1
Br. & Steel	123.5	1
Comm. & Fact.		
Frame	121.1	1
Br. & Wood	116.4	1
Br. & Conc.	128.5	1
Br. & Steel	127.6	1

PHILADELPHIA



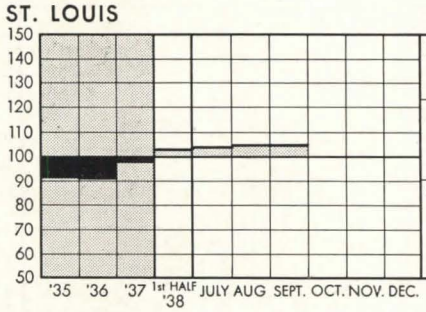
	Sep.'37	Se
Residences		
Frame	91.3	9
Brick	98.6	10
Apartments		
Br. & Wood	96.1	10
Br. & Conc.	99.1	10
Br. & Steel	99.4	10
Comm. & Fact.		
Frame	89.0	9
Br. & Wood	98.9	10
Br. & Conc.	101.4	10
Br. & Steel	101.9	10

PITTSBURGH



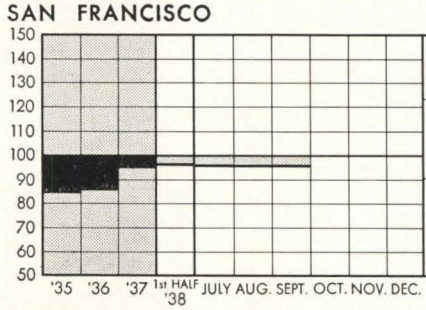
	Sep.'37	Se
Residences		
Frame	115.5	11
Brick	123.3	11
Apartments		
Br. & Wood	118.7	11
Br. & Conc.	118.8	11
Br. & Steel	115.6	11
Comm. & Fact.		
Frame	115.1	11
Br. & Wood	120.7	11
Br. & Conc.	120.4	11
Br. & Steel	118.5	11

ST. LOUIS



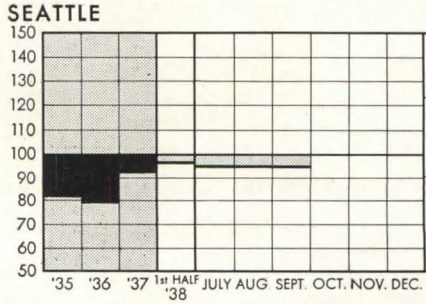
	Sep.'37	Sep
Residences		
Frame	100.6	10
Brick	109.0	10
Apartments		
Br. & Wood	105.9	10
Br. & Conc.	115.0	11
Br. & Steel	113.5	11
Comm. & Fact.		
Frame	100.7	10
Br. & Wood	107.2	10
Br. & Conc.	119.3	11
Br. & Steel	119.4	11

SAN FRANCISCO



	Sep.'37	Sep
Residences		
Frame	104.2	9
Brick	110.6	10
Apartments		
Br. & Wood	106.7	10
Br. & Conc.	117.6	11
Br. & Steel	114.4	11
Comm. & Fact.		
Frame	103.0	9
Br. & Wood	109.9	10
Br. & Conc.	120.5	12
Br. & Steel	117.5	11

SEATTLE

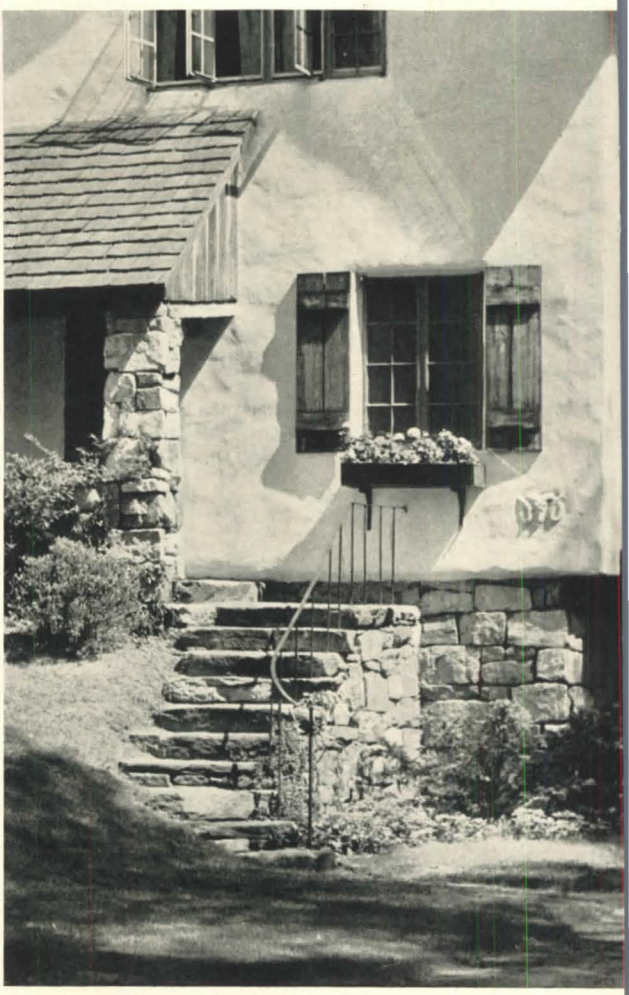


	Sep.'37	Sep
Residences		
Frame	98.0	9
Brick	108.6	10
Apartments		
Br. & Wood	105.3	10
Br. & Conc.	122.5	11
Br. & Steel	116.4	11
Comm. & Fact.		
Frame	95.8	9
Br. & Wood	109.6	10
Br. & Conc.	126.7	12
Br. & Steel	122.1	12

way to residence, Beverly Hills, California, designed by Gordon B. Kaufman

OUTDOOR STAIRWAYS

Photos by Ph. B. Wallace



1

George H. Van Anda

2

George H. Van Anda

5

George H. Van Anda

6

George H. Van Anda

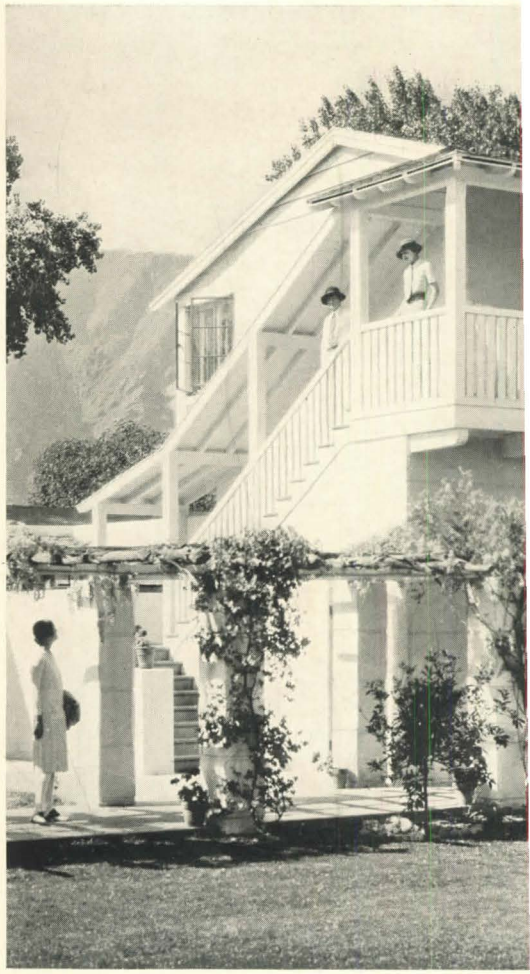
7

facing page: 1 is in Phila-
phia, Pa., R. R. McGoodwin,
itect; 2 was designed by H. E.
odsend for a residence in
riman, N. Y.; 3 is in Cob Cob,
nn., H. E. Woodsend, architect;
4 is in Los Angeles, Calif.,
Selden Price, architect.

this page: 5 is a covered stair-
at Lake Sunapee, N. H.,
igned by Prentice Sanger. 6,
Mamoroneck, N. Y., is the work
James Bevan; and 7 is at
enwich, Conn., H. E. Wood-
d, architect.

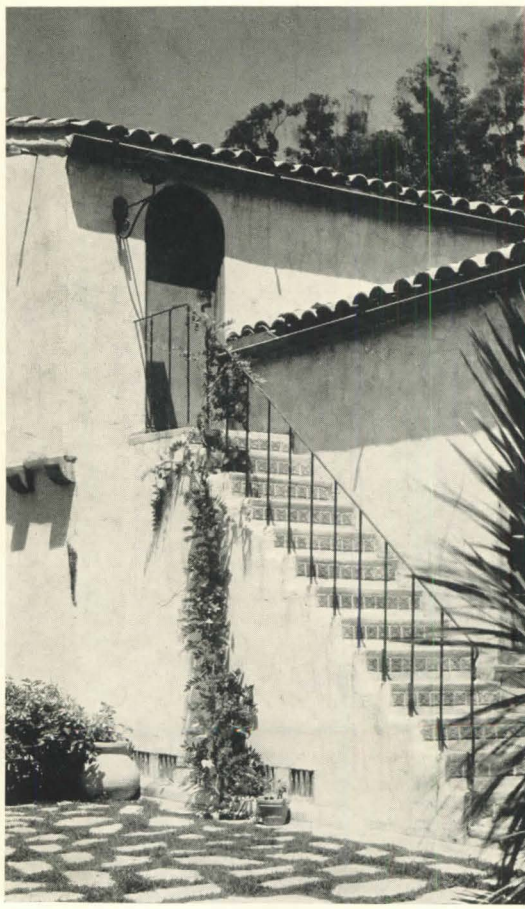
Mott Studios

8



Tebbs & Knell, Inc.

9



Mott Studios

12

Lucy Lamar

13

Miles Berne

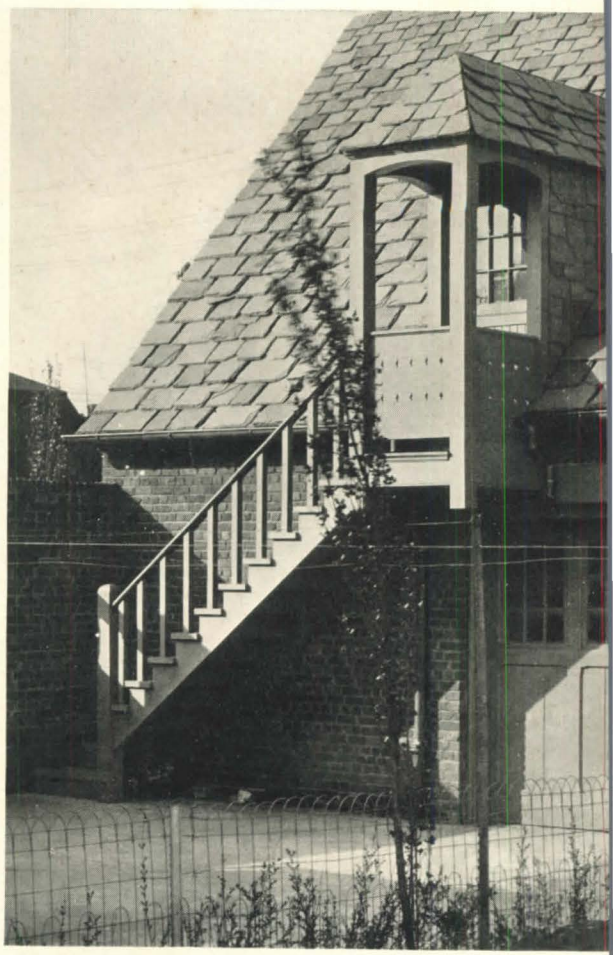
14

facing page: 8 is a stairway at
ywood, Calif., designed by Carl
s Weyle; 9 is at San Antonio,
as; 10 is in Palm Springs, Calif.,
on Hunt, architect; and 11, de-
ed by John Byers, is in Holly-
d, Calif.

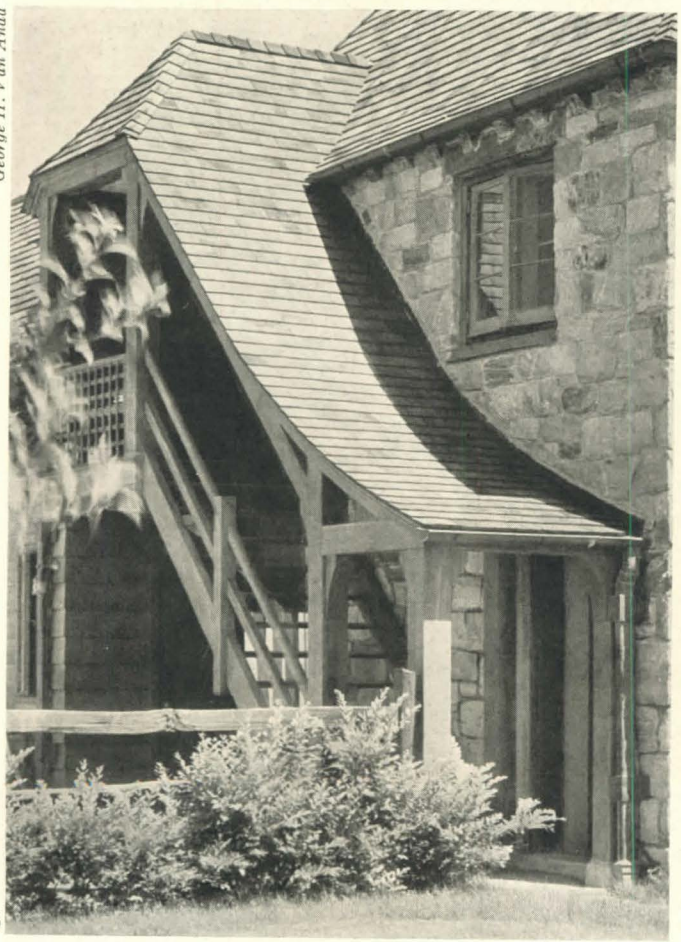
this page: 12 is at Beverly Hills,
f., of which George Washington
th was the architect; 13 is at East-
pton, Long Island, and was de-
ed by Robert Tappan; and 14 is
Beverly Hills, Calif., Roy Seldon
e, architect.

Mott Studios

15



George H. Van Anda



16

Courtesy Museum of Modern Art

20

21

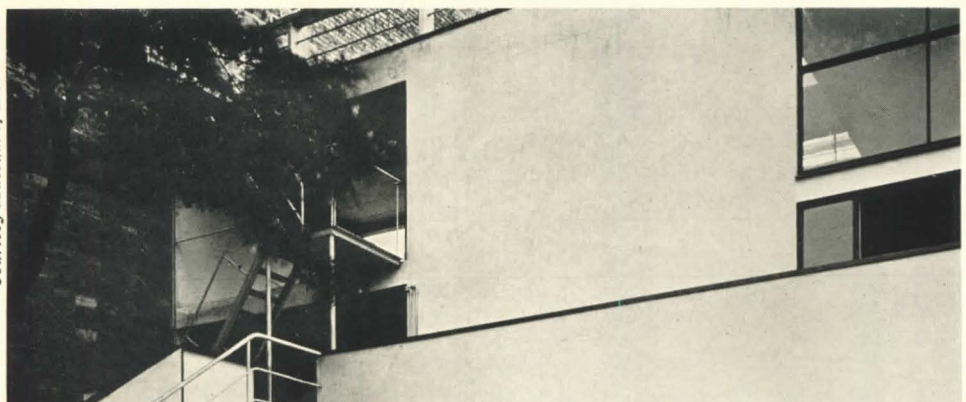
acing page: 15 is in Brentwood
nts, Calif., John Byers, architect;
t Greens Farms, Conn., was de-
d by Walter Bradnee Kirby;
in Richmond, Va., Duncan Lee,
tect; and 18 is in Wychwood,
, Ray O. Peck, architect.

his page: 19 is in New York
Lawrence Peck, architect; 20 is
erkeley, Calif., William Wilson
ter, architect; and 21 was de-
d by Eugene Schoen and Sons
house in Washington, D. C.

Courtesy Museum of Modern Art

22

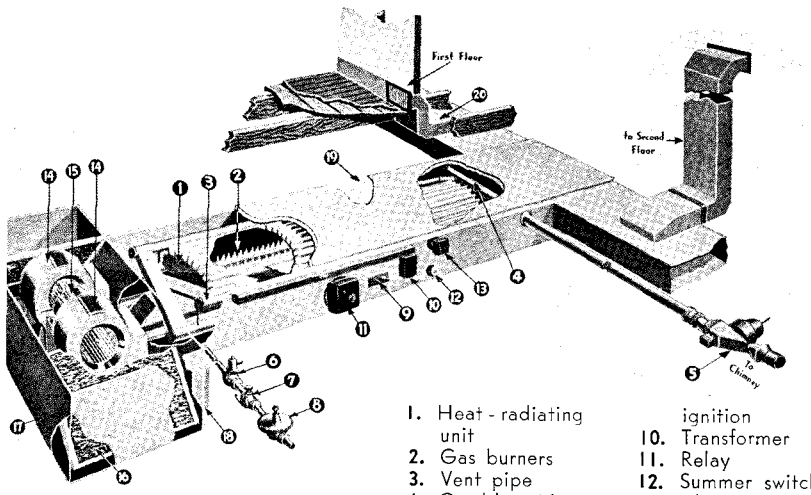
Courtesy Museum of Modern Art



23

22 is a spiral stairway on
roof of a villa at Savoye-
Seine, France, designed
Le Corbusier and Jeanne
23, also designed by Le C
busier and Jeanneret, is
Paris, France. 24 is ano
spiral stairway for a reside
at New Hartford, Co
Howe and Lescaze, archit

end Notes (*Continued from page 76*)



1. Heat-radiating unit
2. Gas burners
3. Vent pipe
4. Collecting header
5. Draft blower and motor
6. Automatic gas valve
7. Main gas valve
8. Pressure regulator
9. Electrodes for ignition
10. Transformer
11. Relay
12. Summer switch
13. Blower, limit control
14. Double blower
15. Blower motor
16. Filters
17. Blower housing
18. Blower control
19. Air-cell insulation
20. Take-off pipes

rnace hung from eiling . . .

OUGH THE DEVELOPMENT of g equipment has forged steadily in recent years, so that by con- refinement the stove of yester- as become the complex heating ne of today, it remained for naire, Inc. (3255 Goldner Ave., it) to dramatize the morphology e lowly stove. Introduced last was their gas-fired Overhead *naire* (above). Dropping even utward form of a furnace—ich gas-fired units as a rule stubbornly clung—*Gasconaire* is d a horizontal organization of ments required to automatically heat, humidify, and circulate . Suspended from the basement , the lightweight factory-built enclosed in their own insulated s constitute—as the manufac- proudly state—the first furnace an walk under". . . . Also with to the value of basement space e new gas-fired winter air-con- rs announced by Surface Com- n Corporation (Toledo, O.). ed for the low cost housing new models conform to all cations of SCC's *Janitrol* line. emphasis, however, is laid on saving qualities: vertical model only 22" x 25½" floor area, horizontal one is only 52" high. . . . Even the fireplace refuses to be obsoleted: latest addition to this field is Majestic Company's (Huntington, Ind.) new circulating fireplace. This prefabricated unit of electrically welded 3/16" steel plate will sell at prices low enough to put it within range of the low-cost home.

Claimed by Herman Nelson Corporation (Moline, Ill.) for its new propeller-fan type unit heater are all the advantages of the *hiJet* line plus larger face area, quieter and smoother operation, increased efficiency. Entire heating element is one-piece brass, eliminating weakened construction due to contraction and expansion. . . . Link-Belt Company (Chicago) has out a new model commercial stoker which can handle up to 3,500 sq. ft. radiation. Increased efficiency is claimed for *Power-Flex* burning head, which burns both low-fusion, non-caking bituminous and high-fusion caking coals. . . . Carrier Corporation (Syracuse, N. Y.) has announced a moderate-cost room ventilator which filters, circulates and mixes outside and inside air. Coming in two sizes, ventilator fits any window, requires only an electric plug.

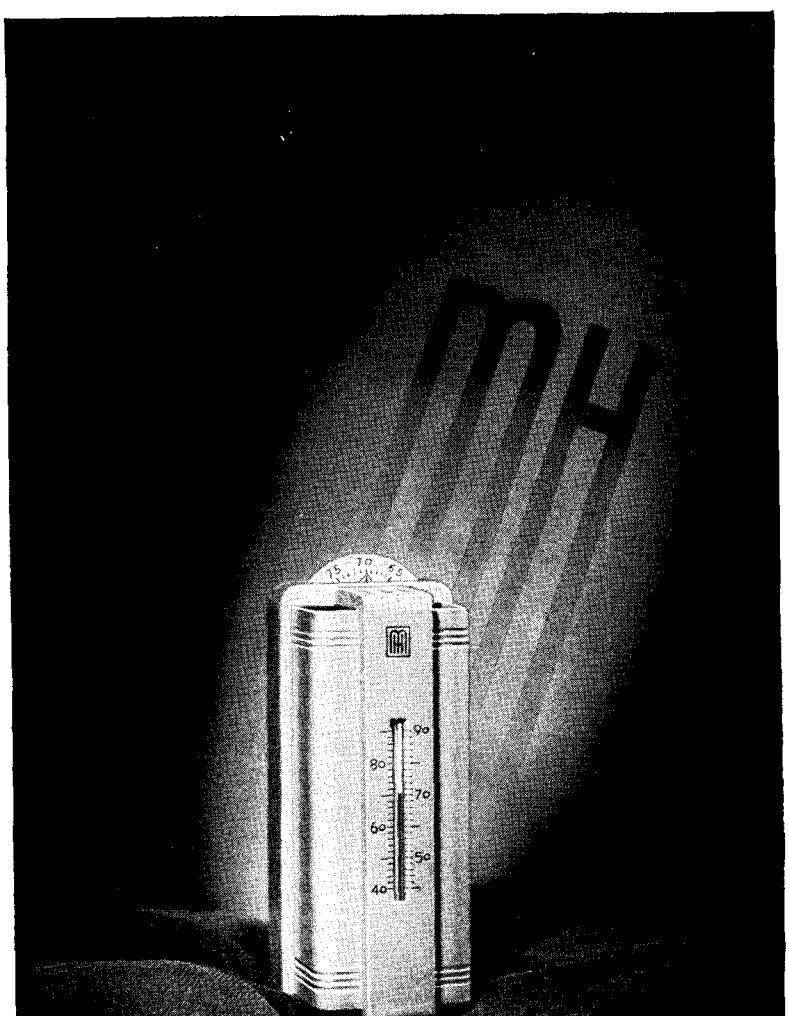
Temperature control checks corrosion

HAVING ALREADY DRAFTED her hot springs to heat her greenhouses and warm her swimmers, Reykjavik—capital of tiny, frigid Iceland—has now laid plans for harnessing more of the natural hot water. Recently drawn plans call for a system adequate to heat half the dwelling units of the capital city at the start. . . . But hot water, however heated, is destructive to the water supply system. Engineers, estimating that corrosion activity doubles with every 10° rise in temperature, have evolved such methods of combating corrosion as the electrolytic process described in AR, 8/38, p. 57. Another method of at least checking the effects of corrosion has recently been perfected by Anthracite Industries, Inc. (New York City), the use of a *water temperature regulator.* Said AII engineers: hot-water systems unequipped with automatic regulation undergo alternate increases and decreases of temperature. The consequent surges of circulation stir up rust. A simple, inexpensive regulator now available permits water to heat at a steady rate, precipitate rust.

Paints that "blush" and smell . . .

RECENT DEVELOPMENTS in finishing and surfacing materials indicate many potentialities for the future. Already reported are paints that extinguish fires (AR,11/37,p.37): but now, according to *Nation's Business,* we are to see paints that get so excited in the face of rising temperatures that they change their colors! A series, designed to register temperatures from 104° to 464° F., is shortly to be marketed. Some of the colors are retroactive, some change permanently. . . . From *National Painters* comes word of the immediate practicability of both deodorized and reodorized paints. A commercial deodorizer is already available which, when mixed with paint, effectively kills its characteristic odor. Moreover, according to *NP*, it is now possible to reodorize

(*Continued on page 132*)



THE *Symbol* OF

THE NEW AUTOMATIC HEATIN

Recent improvements have revolutionized automatic heating. The Symbol of these improvements and of the seldom seen control system that actually makes Automatic Heating automatic is the smartly styled Acratherm. More than a thermostat, the Acratherm embodies the exclusive "M-H" Principle of Heat Acceleration. The new Automatic Hea equipment, with the new Minneap Honeywell Controls, will bring you free winter comfort. Though they more than ordinary controls, dealers supply them as standard, but slight extra cost. Look for the " Symbol. It means you are getting the

The above advertising message will be carried to millions of readers through the pages of The SATURDAY EVENING POST and TIME Magazine . . . Minneapolis-Honeywell controls will lend prestige to every job.

MINNEAPOLIS-HONEYWEL

BROWN INDUSTRIAL INSTRUMENTS
NATIONAL PNEUMATIC CONTROLS
MINNEAPOLIS-HONEYWELL REGULATOR
COMPANY...MINNEAPOLIS, MINNESOTA

Control Syste

BUILDING TYPES

F. S. Lincoln

HOUSES . . . . . $15,000-$25,000

FORTHCOMING 1938 STUDIES: Houses ($25,000 and up) — November; Office Buildings — December. PRECEDING 1938 STUDIES. Apartments — September; Hospitals — August; Theatres — July; Factories — June; Schools — May; Houses ($7,500-$15,000) — April; Houses ($7,500 and under) — March; Retail Stores — February; Hotels — January.

ARCHITECTURAL
RECORD
COMBINED WITH
AMERICAN ARCHITECT AND ARCHITECTURE

The $15,000-to-$25,000 House

This is the third of four studies on residences to be presented in the RECORD during 1938. In March the small one-family house, costing not over $7,500 was presented; and in April, houses ranging in price from $7,500 to $15,000. Next month, Building Types will be devoted to residences above the $25,000 limit.

TOPICAL INDEX

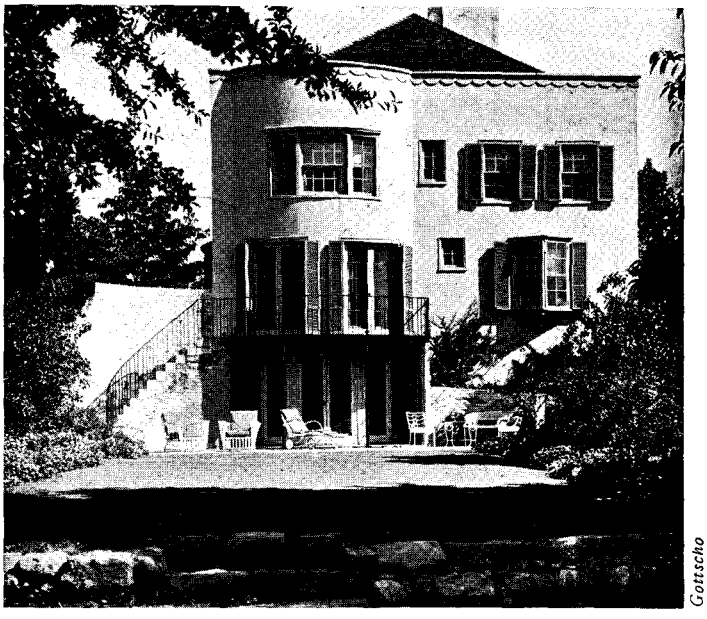
SINCE EVERY house design is based on human requirements specification for family living—a designer selects materials equipment and evolves a form, within necessary limits of s and cost, to meet the specification. Variations such as cost size do not materially change the fundamental problem nor method by which it is finally solved; though either factor or may complicate it.

Because cost is so generally recognized as a broad classifica of types, it has been used to designate the four parts of RECORD's 1938 studies on homes. The survey of $7,500 hou published in April, revealed that the small individually desig house is, apart from surface appearance, largely a standard type. Judging from designs submitted to the RECORD this stand is acceptable to many owners who pay twice or three times amount for their houses.

Where minima govern sizes, number and arrangement of spa and equipment of the small one-family house, larger houses, m ing the same fundamental specifications, provide greater a more spaces often more comfortably arranged, and more eq ment designed to lessen the labor of housekeeping. Within limitations imposed by a $25,000 top, such expansion seldom ta place in all directions simultaneously.

Some of the types of expansion noted in the houses sele for study in the following pages include: increased dimensions added living areas such as "quiet" rooms, hobby or playroo bars, gardens, terraces, and other outdoor living areas. Expan in equipment or utilitarian spaces may include: built-in furnit more completely engineered and equipped heating or air-condit ing systems, more expensive plumbing fixtures, tailor-made rad and the like. A garage, usually for two cars, is an almost versal adjunct.

Time-Saver Standards based upon minimum clearances and mensions of commonly used furniture, and equipment and requ ments for service systems, have been presented in earlier stud Time-Saver Standards in this study are devoted to fundame outdoor design problems.



Gottscho

At left, garden terrace, house of Frank Beetson, Flintridge, Calif.; Marston & Maybury, architects. Above, terrace, house of William H. Baldwin, New Canaan, Conn.; Cameron Clark, architect.

utdoor Living Areas

LOPMENT OF outdoor areas for ; purposes requires as much as do those within-doors. The mpanying checklist is intended call to the designer purposes to rved in providing such outdoor . The list may be reorganized, ed or amplified at will.

is recognized that many schemes be evolved for a given plot, each actory in that it fulfills a set quirements. Therefore precise and recommendations are not n the scope of this study.

areas

narrow definition of outdoor areas eliminates all but those tely planned for dining, relax- playing, entertaining, reading, Placement of such areas in re- to the house is a matter for in reference to: ease of access indoors; convenience for serv- In relation to outdoor factors, ollowing are important: place- for sun, shade, summer breezes; e of privacy desired; utilization easant outlook; circulation. De- ng on the importance assigned e preceding factors, house and cape design may be modified to ome or enhance existing natural tions.

In planning, constructing, and equipping outdoor living areas, the following are important: sizes, dimensions, and clearances adequate to contain furniture, equipment, and persons using them; foundation, structure, and surfacing of areas to suit their purpose; and furniture and equipment for lighting, shade, radio, water supply, and similar services.

Time-Saver Standards on the following pages present methods of constructing common outdoor units. Data have been assembled from material compiled by A. D. Taylor, Landscape Architect, President, American Society of Landscape Architects. All information reflects common practise.

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Art of Home Landscape, by M. E. Bottomley. A. T. De La Mare, New York. 1935. 239 pages, illus.

Design of Small Properties, by M. E. Bottomley. Macmillan Co., New York. 1926. 233 pages, illus.

The Garden Handbook, by Mary Rutherford Jay. Harper & Bro., New York. 1931. 284 pages, illus.

Landscaping the Home Grounds, by Leonidas W. Ramsey. Macmillan Co., New York. 1930. 169 pages, illus.

Landscape Garden Series, edited by Ralph Rodney Root. The Garden Press, Davenport, Ia. 1921. 10 vols., 400 pages, illus.

CHECKLIST for OUTDOOR AREAS

TYPES OF AREAS

Public areas
Lawn, planting area, entrance drive, etc., facing on public highway

Utility areas
Service court; service entry; drying yard; refuse disposal area; garage; kitchen or vegetable garden; children's play area; tool and equipment storage space

Living areas
Porch—living or dining; terrace—living or dining; seclusion area; cooking area—outdoor fireplace, grill, barbeque; sunbathing area—deck, garden, etc.; exercise area; hobby area; game area, court; pleasure garden; pool—fish, lily, reflecting, swimming; court, patio; lawn; garden house; arbor, trellis

BOUNDARIES, CIRCULATION

Walls, fences
Retaining; boundary; ornamental

Walkways
Entrance; service; garden

Roadways
Entrance drive; service drive; private road; bridle path

SERVICE SYSTEMS

Water supply
Lawns; planting areas; gardens—vegetable and pleasure; pools—fish, lily, reflection, swimming; service, as car-washing, etc.; garden structures, outbuildings, etc.; hobby areas

Drainage
Subsurface; surface; garden structures, outbuildings, pools, etc.

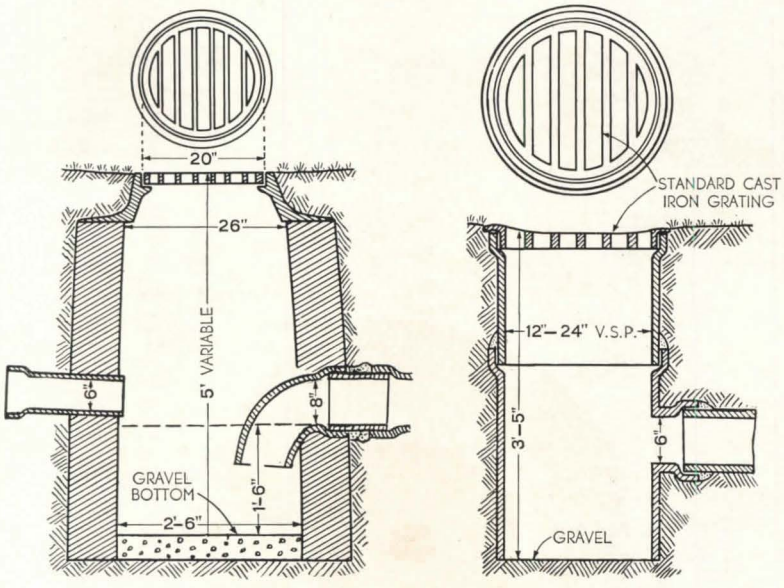
Lighting and power
Entrances; garages, outbuildings, hobby areas; roadways, walkways; garden and grounds

OUTDOOR AREAS — DRAINAGE DETAILS

INFORMATION contained in the notes and drawings on this and the following three pages is based on common practice. However, other methods than those illustrated will often prove entirely satisfactory; the data are intended to serve as guides in developing solutions to individual problems.

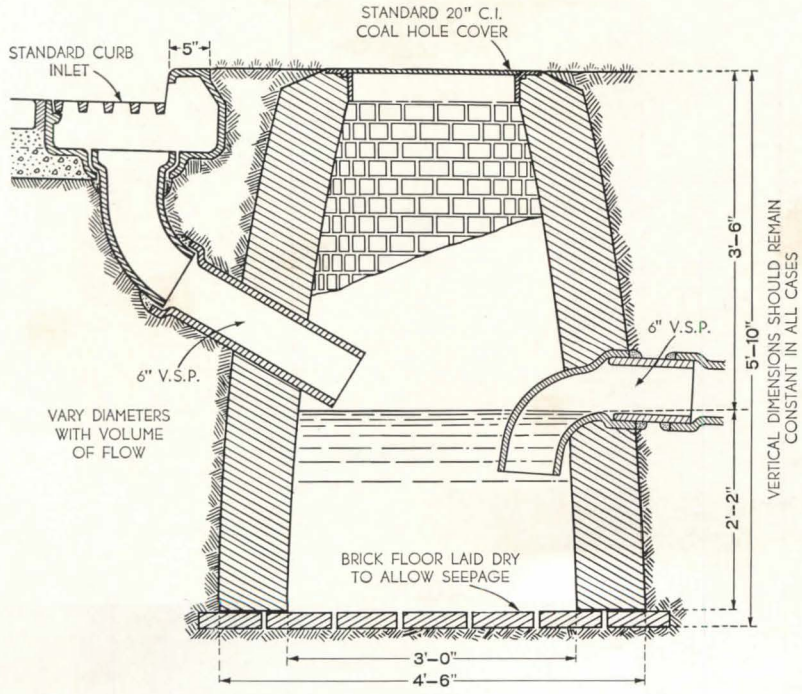
In some cases data may be adapted to other tures than those expressly indicated. Walkway st ing, for instance, is similar to terrace st ing.

CATCH BASINS



BRICK OR CONCRETE

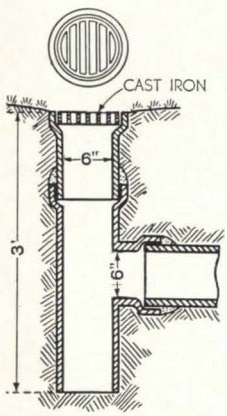
VITRIFIED SEWER PIPE



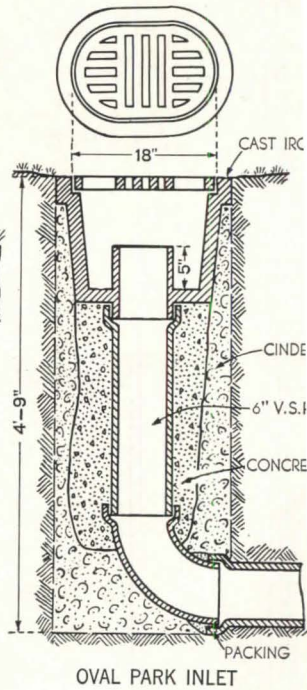
CATCH BASIN WITH CURB INLET

SCALE: $\frac{1}{2}$" = 1'–0"

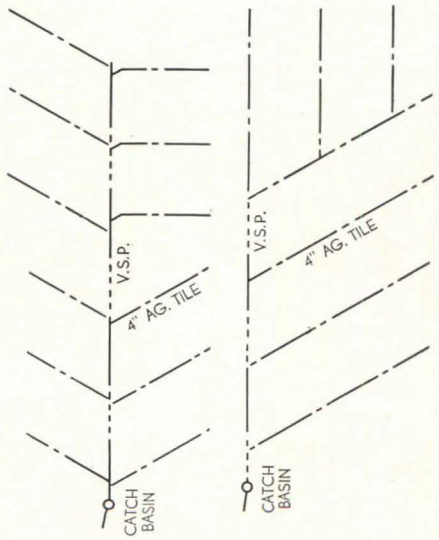
INLETS



VITRIFIED SEWER PIPE



OVAL PARK INLET



TYPICAL PIPE FIELD LAYOUTS

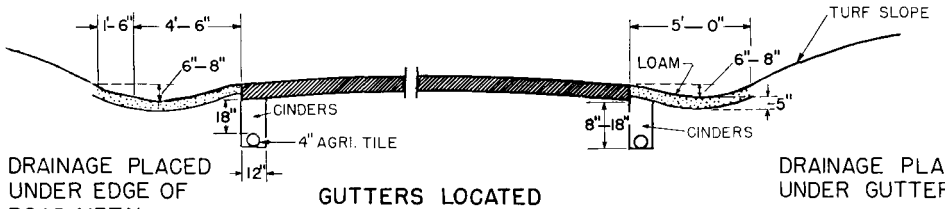
NO SCALE

Prepared by A. D. TAYLOR LANDSCAPE ARCHI

OUTDOOR AREAS –

GUTTER AND CURB CONSTRUCTION

IRF GUTTERS
.E 1/8"= 1'-0"

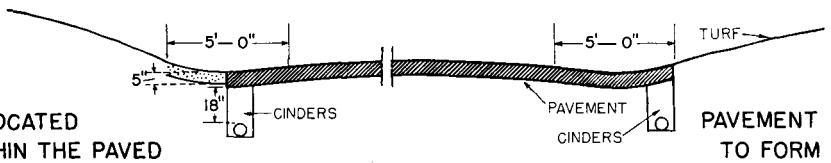


DRAINAGE PLACED UNDER EDGE OF ROAD METAL

GUTTERS LOCATED OUTSIDE OF PAVEMENT

DRAINAGE PLACED UNDER GUTTER

TENDED VEMENT
.E 1/8"= 1'-0"

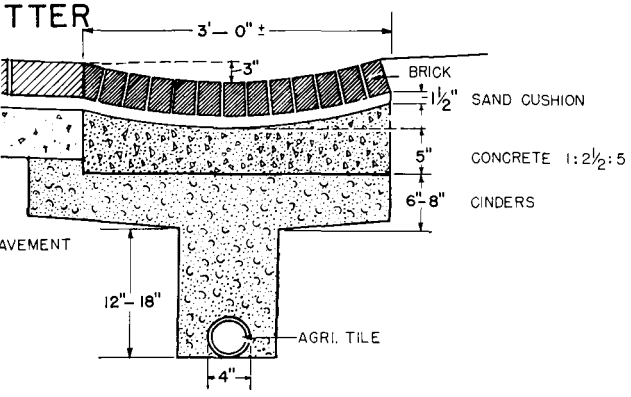


GUTTERS LOCATED ONE HALF WITHIN THE PAVED ROAD SURFACE

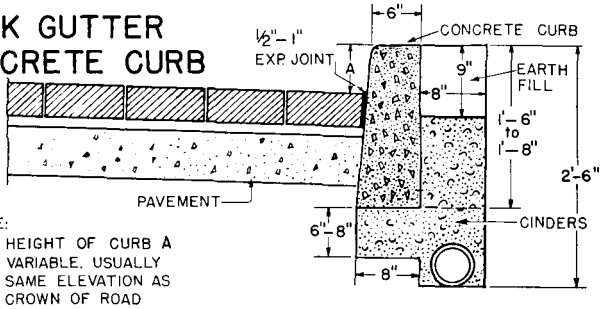
Note: This type not ordinarily practical

PAVEMENT EXTENDED TO FORM GUTTER

ICK TTER

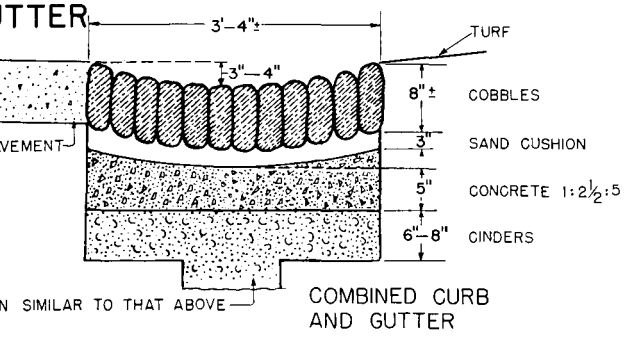


BRICK GUTTER CONCRETE CURB



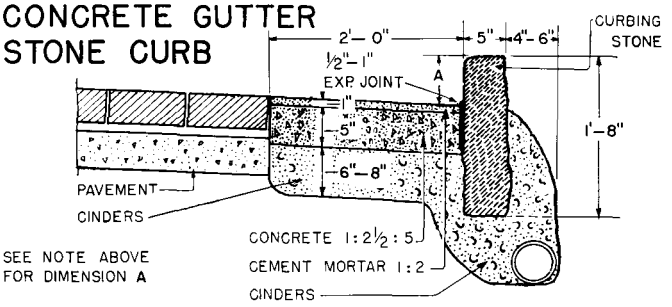
NOTE: HEIGHT OF CURB A VARIABLE. USUALLY SAME ELEVATION AS CROWN OF ROAD

OBBLESTONE TTER



COMBINED CURB AND GUTTER

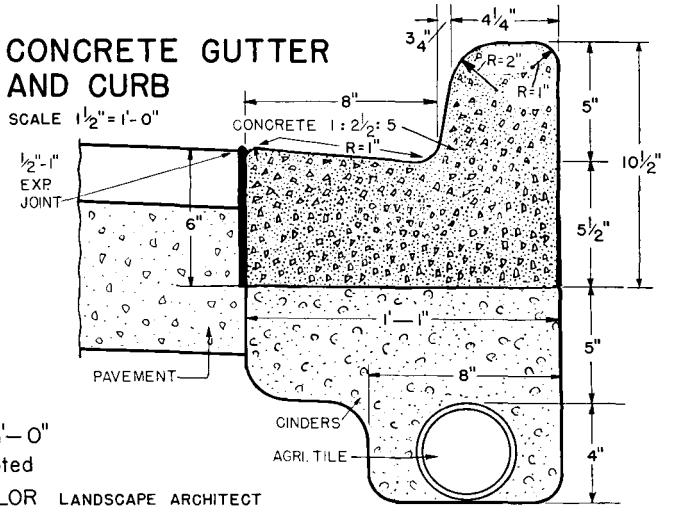
CONCRETE GUTTER STONE CURB



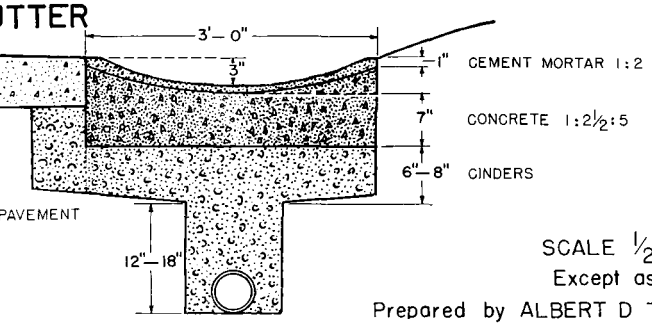
SEE NOTE ABOVE FOR DIMENSION A

CONCRETE GUTTER AND CURB

SCALE 1½"= 1'-0"



ONCRETE TTER



SCALE ½"= 1'-0"
Except as noted

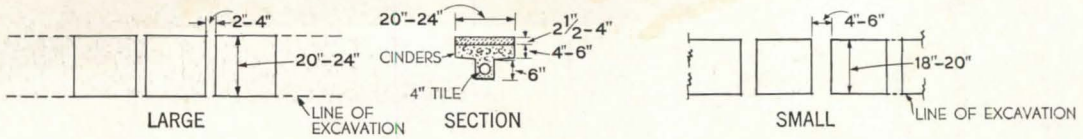
Prepared by ALBERT D TAYLOR LANDSCAPE ARCHITECT

TIME-SAVER STANDARDS

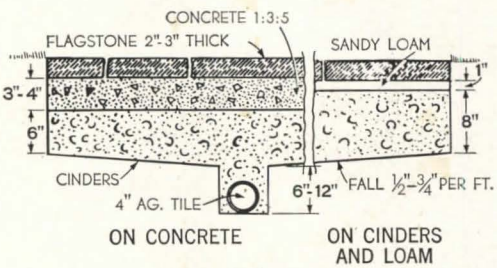
OUTDOOR AREAS— WALKWAY CONSTRUCTION

STEPPING STONES

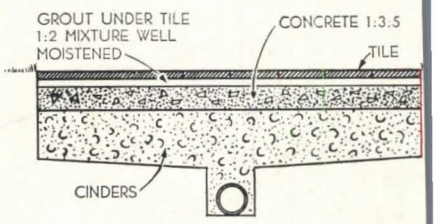
SCALE: $\frac{3}{16}$" = 1'–0"



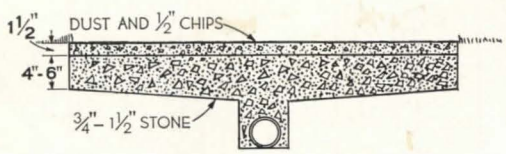
FLAGSTONE



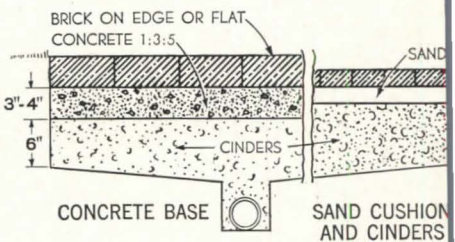
TILE (CONCRETE BASE)



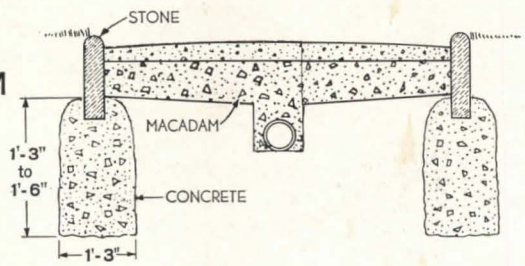
MACADAM OR GRAVEL



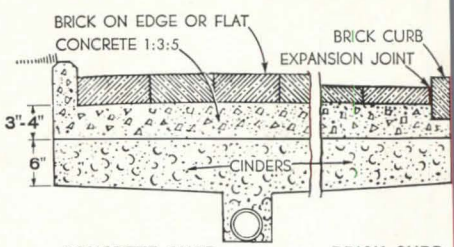
BRICK



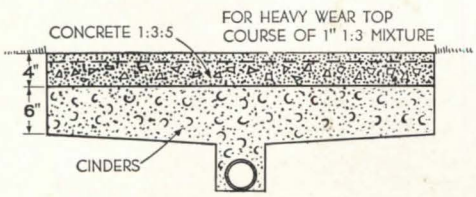
MACADAM (WITH CURBS)



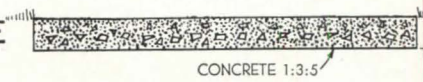
BRICK (WITH CURBS)



CONCRETE (FROST RESISTING)

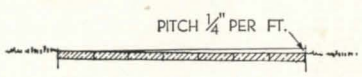


CONCRETE (NO FREEZING PROBLEM)

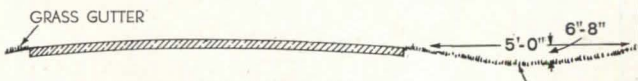


SCALE: ½" = 1'-0"

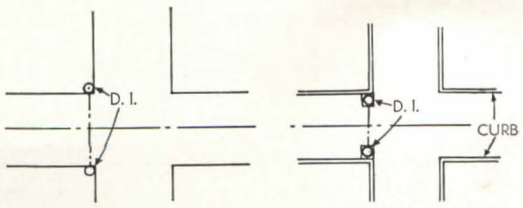
WALK DRAINAGE



SURFACE PITCHED LATERALLY

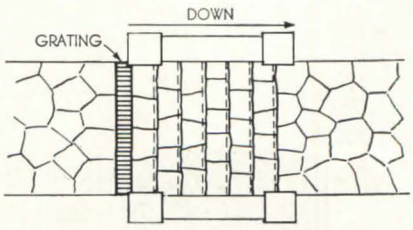


SURFACE CROWNED (WIDE WALKS)



WALK WITHOUT CURB WITH CURB

NO SCALE



GRATINGS ON SLOPING WALKS

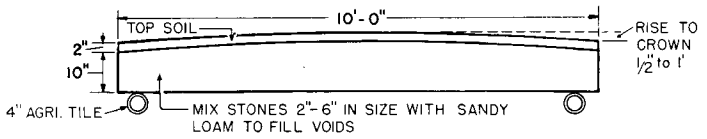
DRAIN INLET LOCATIONS

Prepared by A. D. TAYLOR LANDSCAPE ARCH

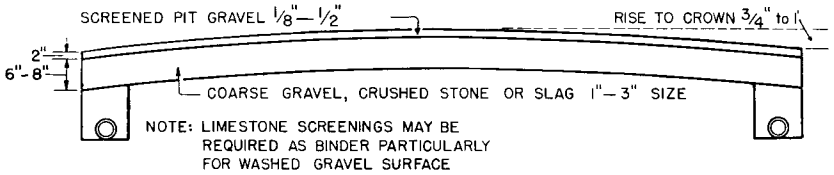
OUTDOOR AREAS–

DRIVEWAY CONSTRUCTION

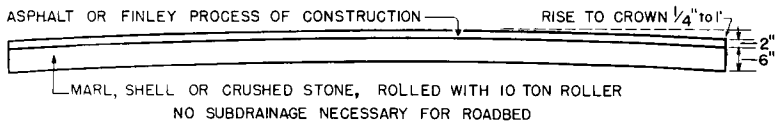
TURF DRIVE



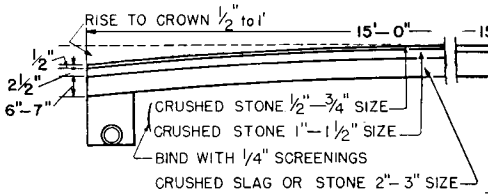
GRAVEL



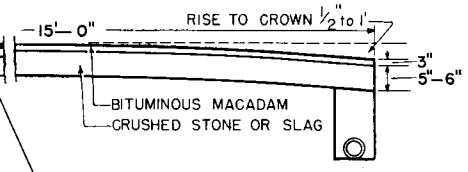
ASPHALT (OR FINLEY PROCESS)



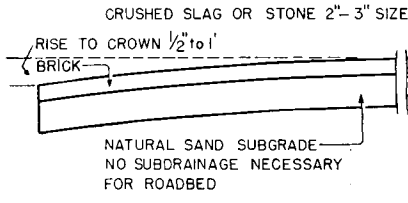
MACADAM WATERBOUND



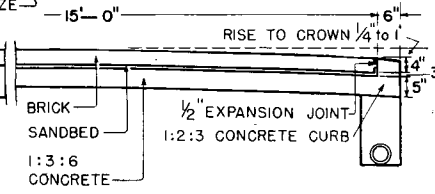
MACADAM BITUMINOUS



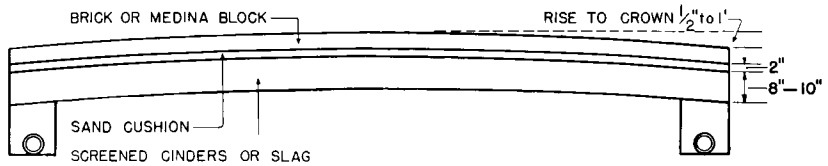
BRICK ON NATURAL SAND



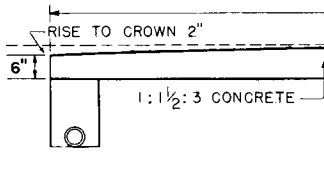
BRICK CONCRETE BED



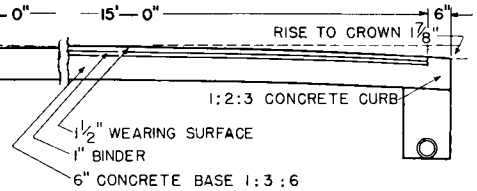
BRICK OR MEDINA BLOCK ON CINDERS



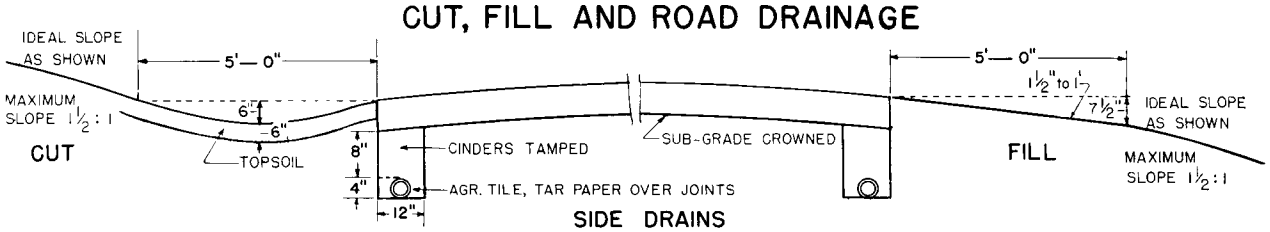
CONCRETE PLAIN



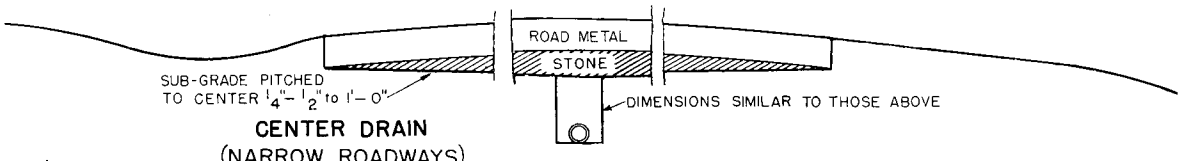
CONCRETE BITUMINOUS



CUT, FILL AND ROAD DRAINAGE



SIDE DRAINS



CENTER DRAIN (NARROW ROADWAYS)

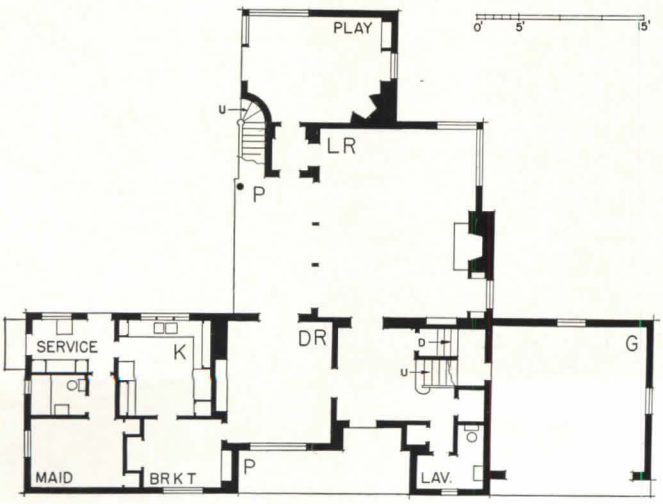
SCALE: ¼" = 1'—0"

Prepared by A.D. TAYLOR LANDSCAPE ARCHITECT

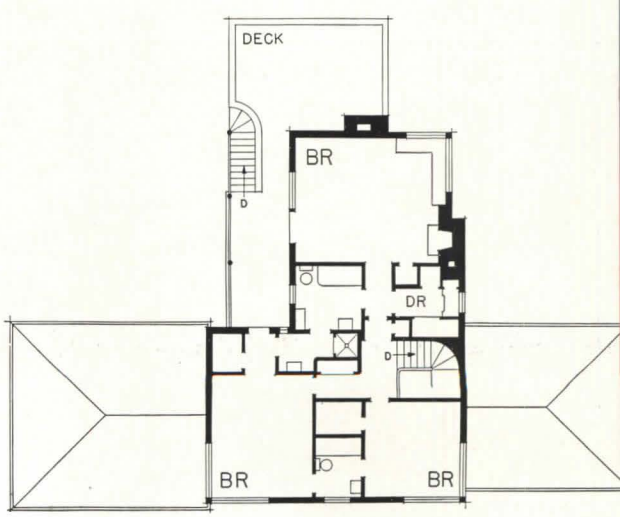
Photos by Geo. D. Haight

House for Chester Lincoln, SAN MARINO, CALIFORNIA

H. ROY KELL
Archit



First floor



Second floor

Above, the patio, equipped for outdoor living and dining. At left, stairhall looking through the living room to the porch. An outdoor stair leads directly from the second floor balcony to the patio.

MATERIALS AND EQUIPMENT

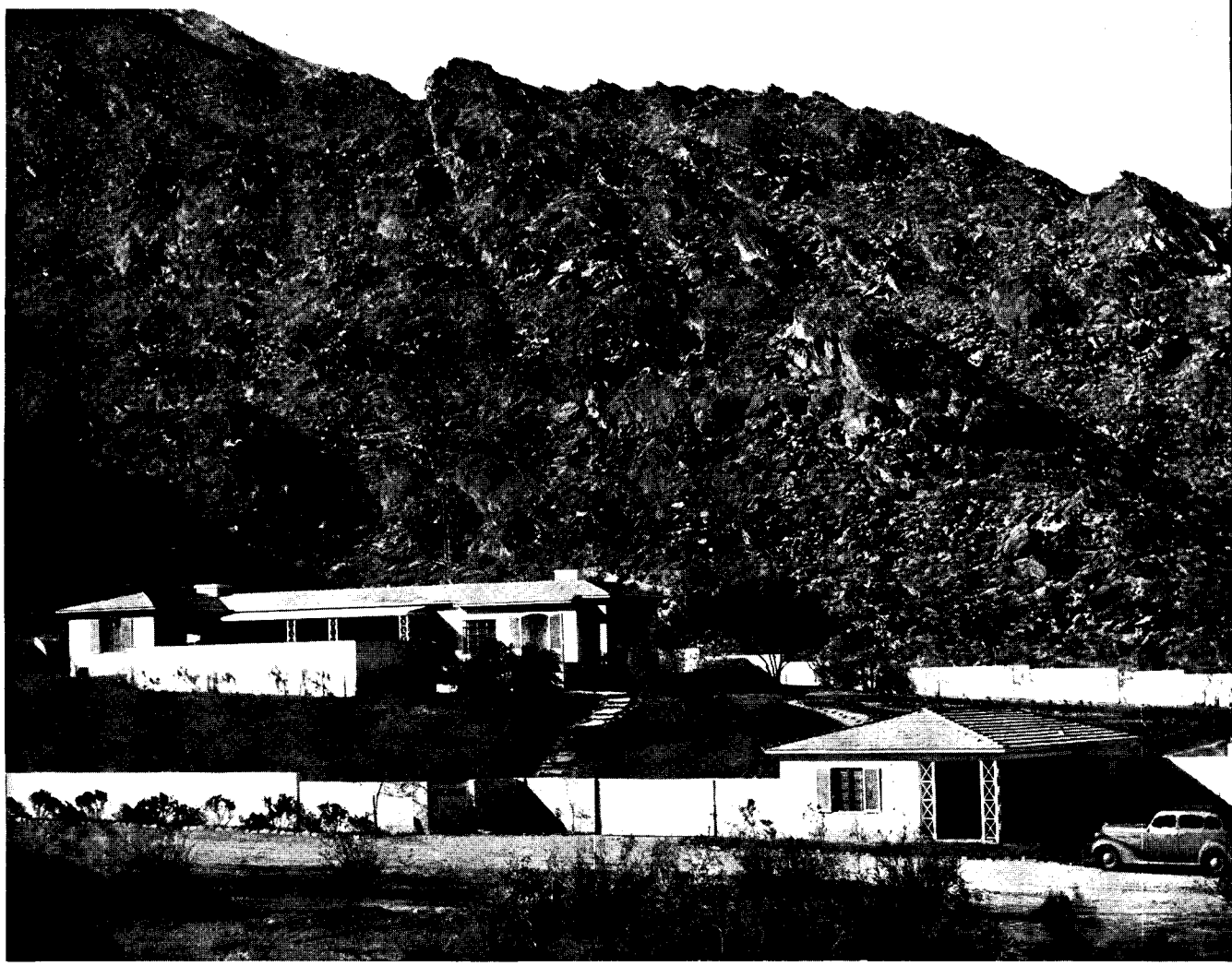
FOUNDATION
Concrete

EXTERIOR
Walls: Cement stucco, brick veneer over wood studs
Roof: Red cedar shingles
Insulation: Celotex lath, Celotex Corp.
Sash: Steel casements

INTERIOR
Walls: Wood studs and gypsum plaster; living room walls and trim, Philippine mahogany
Floors: Oak
Trim: White pine painted

EQUIPMENT
Heating: Hot-air furnaces
Plumbing: Fixtures, Standard Sanitary Mfg. Co.; galvanized steel pipes
Electrical installation: Conduit and safecote wire

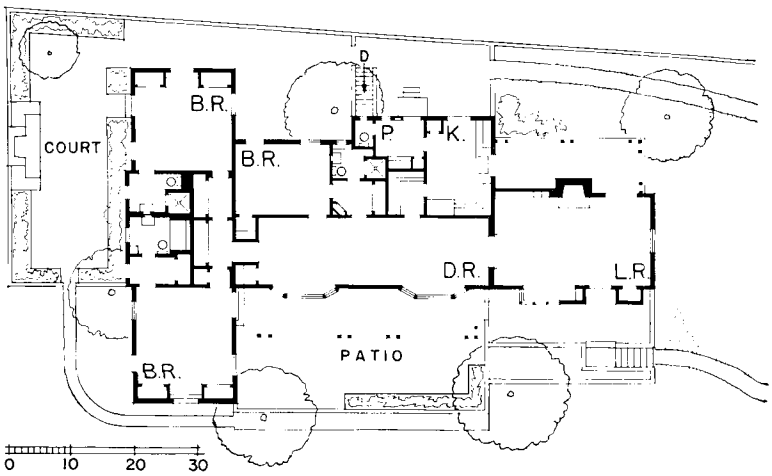
Actual cost, 36c per cubic foot. Architect estimates present cost at 42-44c



Photos by Matt Studio

House for J. E. French, PALM SPRINGS, CALIFORNIA

CHARLES O. MATCHA
Archite



First floor and partial plot plan

MATERIALS AND EQUIPMENT

FOUNDATION
Concrete

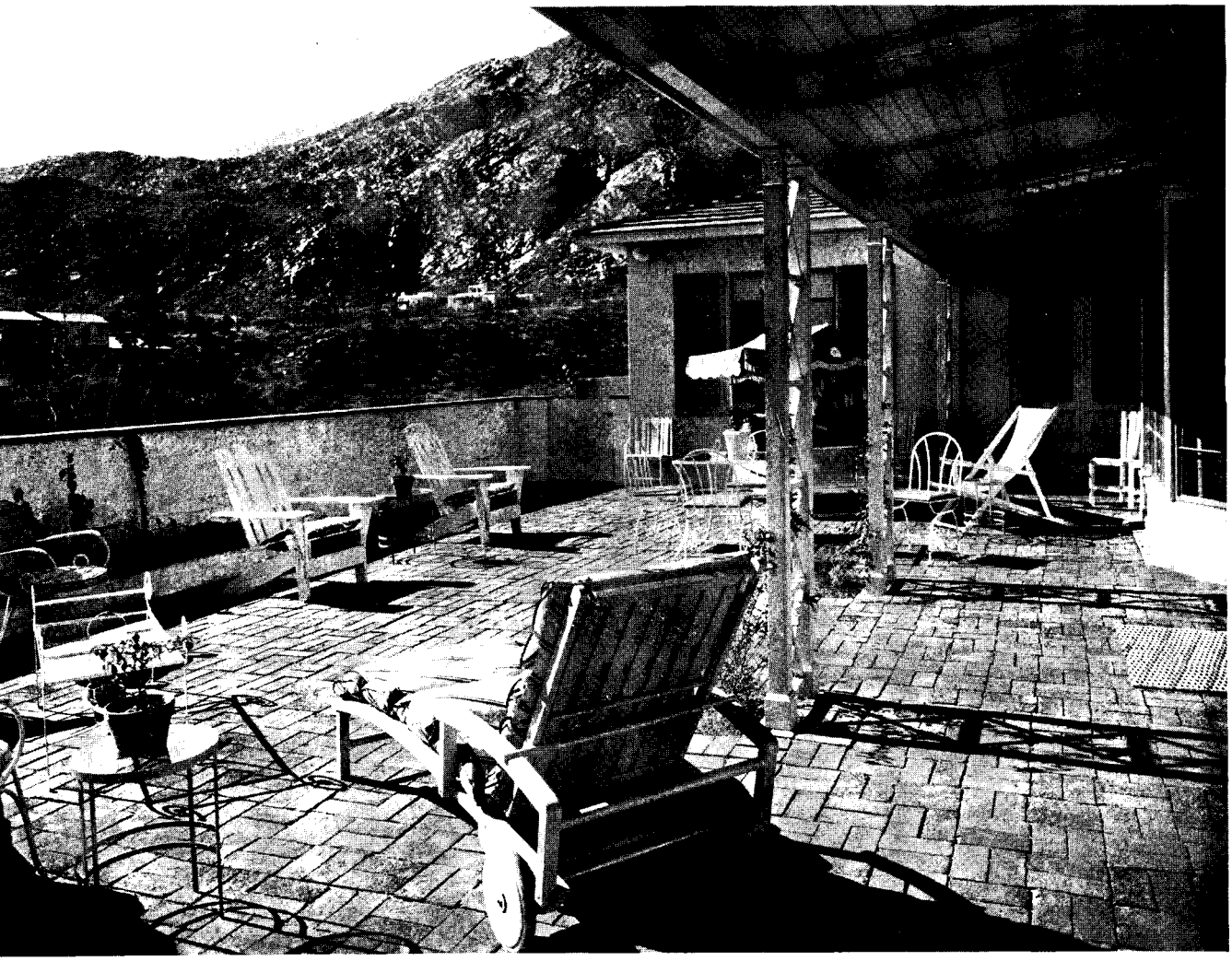
STRUCTURE
Wood frame

EXTERIOR
Walls: Garden, hollow cement tile, Palm Springs Build Supply Co.
Roof: Tile, Gladding, McBean & Co.
Sash: Steel, Truscon Steel Co.; awnings, wood louvr Shutter Awning Co.
Insulation: Coast Insulating Co.
Doors: Garage, Overhead Door Co. of Southern C fornia

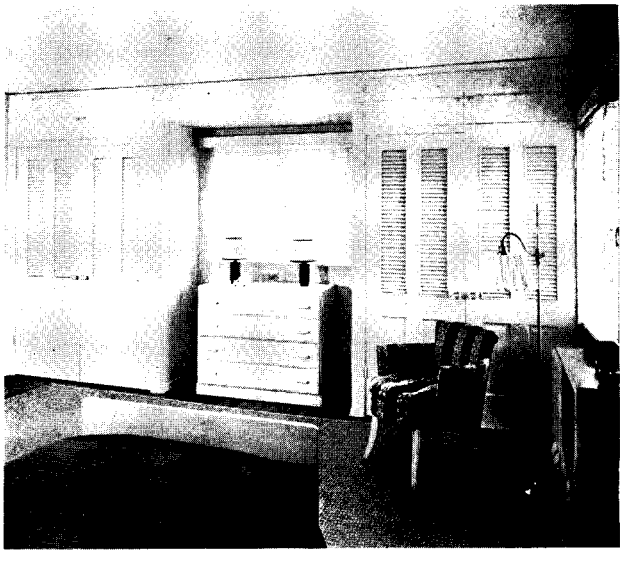
INTERIOR
Walls: Plaster board lath, U. S. Gypsum Company; t Pomona Tile Co.; vertical boards in living room
Ceilings: Exposed rafters, plaster between, in living roo plaster elsewhere

EQUIPMENT
Heating and ventilating: Gas, forced air, Payne Furnace Supply Co.; gas hot water heater, General Wa Heater Co.
Plumbing: Fixtures, Standard Sanitary Mfg. Co.
Glass: Carrara, Pittsburgh Plate Glass Co.
Electrical installation: Lighting fixtures, Solar Light Fixture Co.
Linoleum: Armstrong Cork Co.

Cost, including garden walls, garage and servants' quarters over garage: $18,000

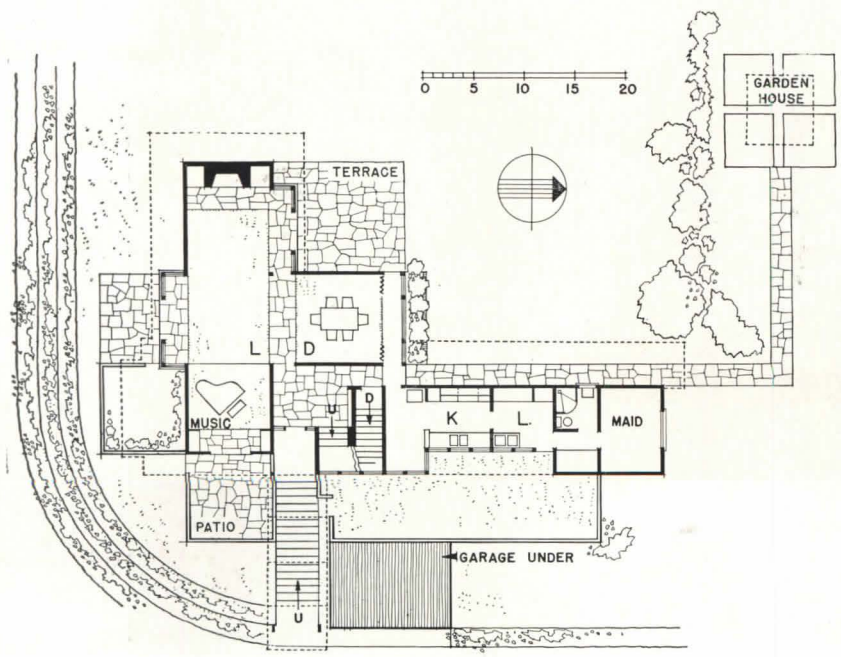


arage seen in photo on opposite page also contains rvants' quarters. Above, patio; below, left, dining bay; ght, bedroom interior.

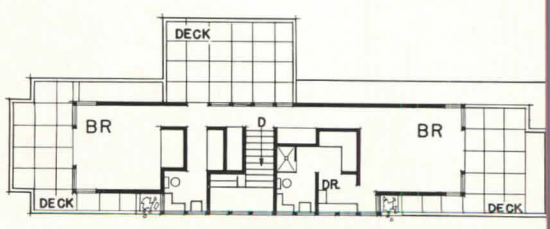


Photos by Fred R. Dapprich

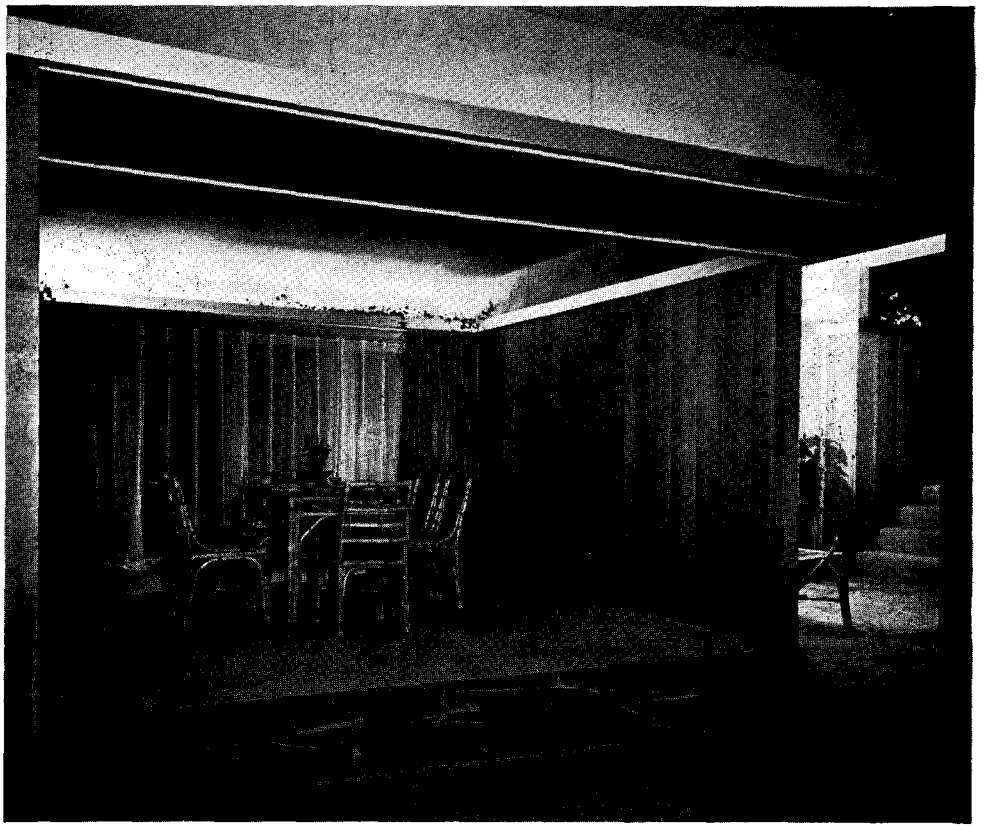
House for Miss Helene Kershner, LOS ANGELES, CAL. **HARWELL HAMILTON HARR**
Design

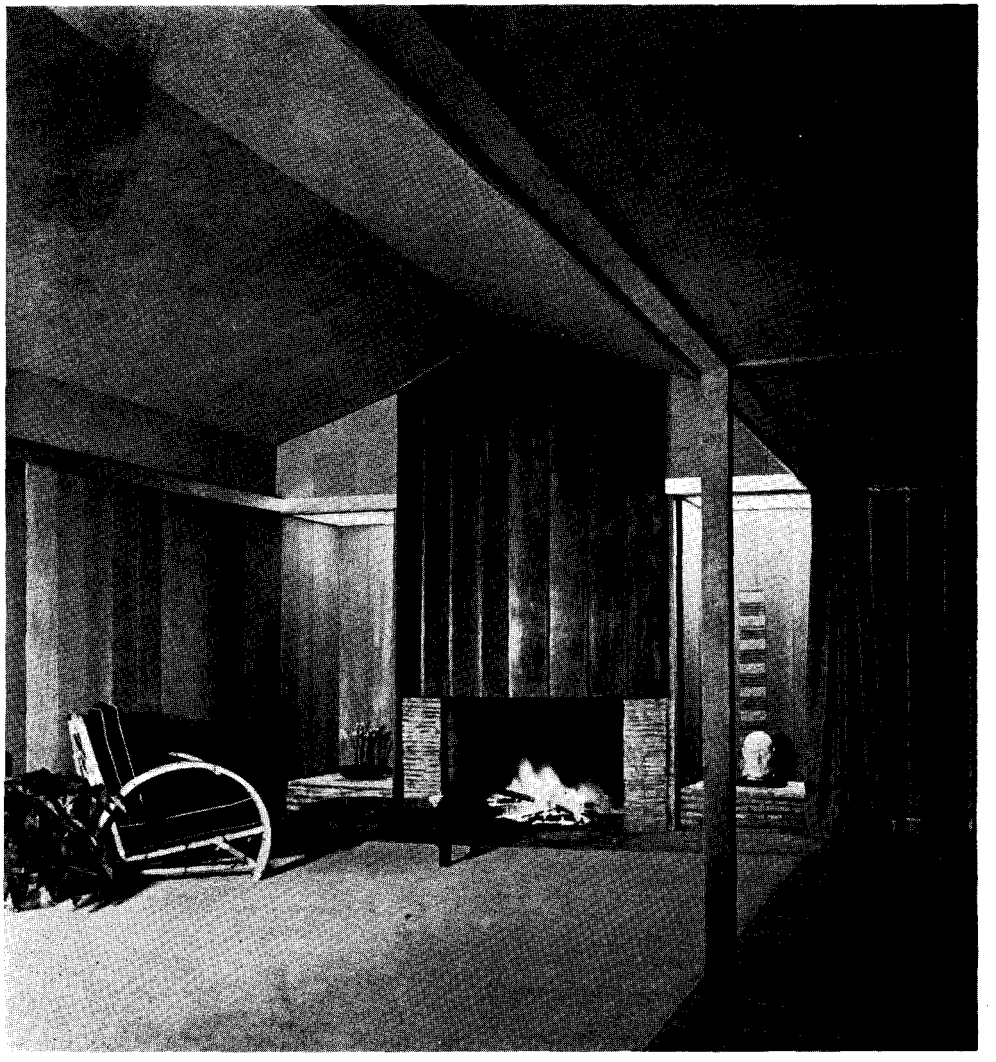


THE LARGE WINDOWS shown in plan, and the u
of flagstone within doors, serve to tie the hou
to the surroundings. Yet privacy from the hig
way is maintained, as can be seen above. T
house crowns a hilltop; the living room's sou
bay overlooks a wide valley. The "garden hous
contains guest accommodations, and is seclud
behind planting.



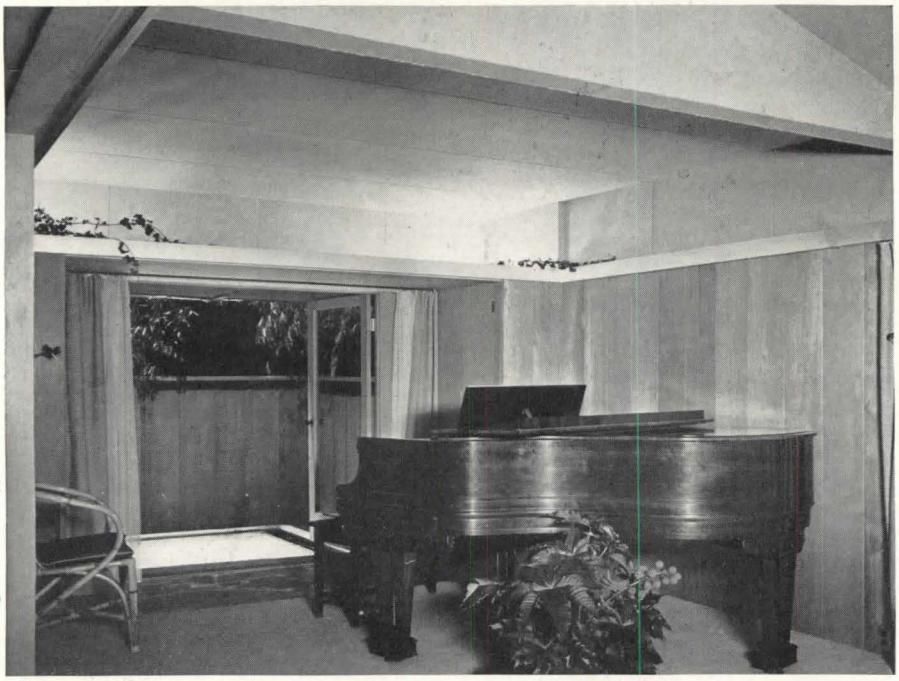
At left, first floor and plot plan; above, second floor plan



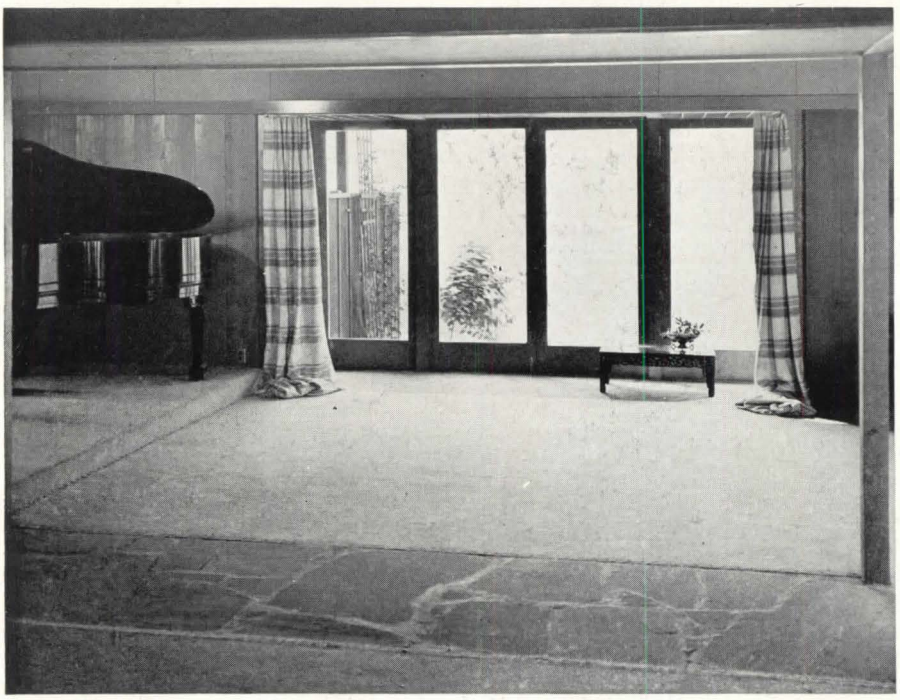


nged ceiling levels and nges from carpet to flag- e on the floor divide the ces, rather than partitions. e the use of cove lighting he dining area (top). At t, fireplace end of the eral living space.

KERSHNER HOUSE, LOS ANGELES



Photos by Fred R. Dapprich



Top: the music room also serves as a stage. Its floor is slightly raised; the French door drapes can be drawn, or the doors opened so that the patio beyond forms the setting. Photo below also shows the south living room bay.

MATERIALS AND EQUIPMENT

FOUNDATION
Concrete

EXTERIOR
Walls: 12" redwood vertical boards and battens
Roof: Redwood shingles 4½" to the weather
Insulation: Celotex Corporation
Sash: Outswinging wood casement

INTERIOR
Walls: 10" T. & G. vertical redwood board walls, natural finish
Ceilings: "Celotex", Celotex Corporation.
Floors: 4" T. & G. Douglas fir

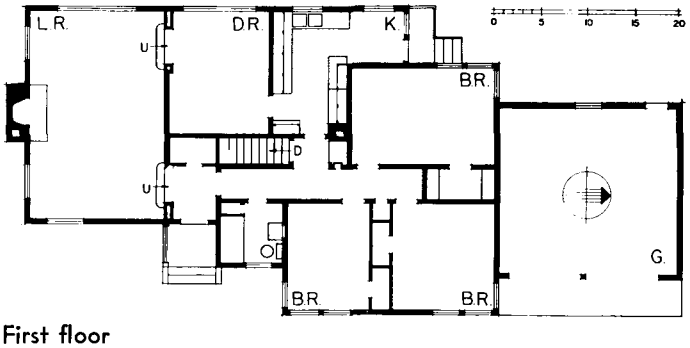
EQUIPMENT
Heating and air conditioning: "Thermador" electric radiant and convection heaters; "Thermador" electric water heater, Thermador Electrical Mfg. Co.
Plumbing: Pipes, galvanized iron; fixtures, Standard Sanitary Mfg. Co.
Kitchen: Refrigerator; electric range; water softener; washing machine; ironer
Electrical installation: Custom built radio and record playing system; lighting, integral reflector troughs and panels

Cost, including guest cottage, planting, etc., $15,000

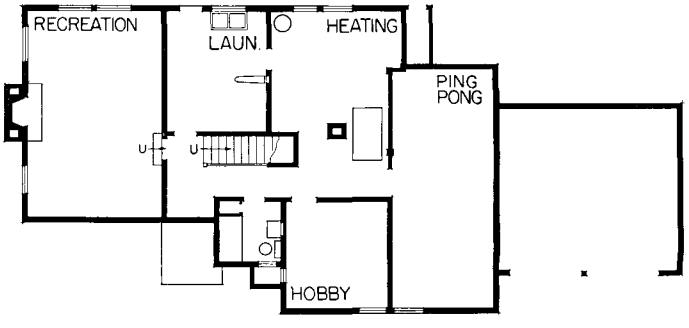
use for L. W. Ross, SEATTLE, WASHINGTON

SMITH, CARROLL and JOHANSON
Architects

A SLOPING LOT, all living areas are here ated on the top floor, most of the base- nt being used for recreation areas.



First floor



Basement

TERIALS AND EQUIPMENT

NDATION
crete

ERIOR
ls: Beveled ¾" x 10" cedar siding
f: 16" Certigrade cedar shingles left natural
ation: Celotex lath on ceilings, Celotex Corpora-

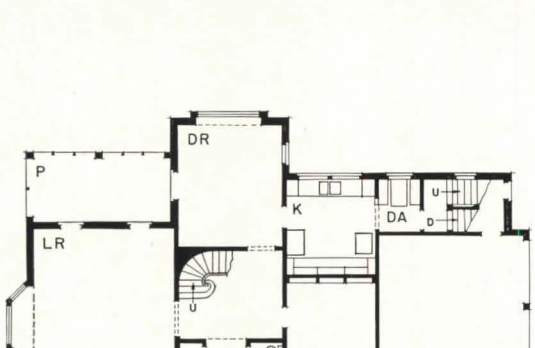
: Wood

ERIOR
ls: Blue Diamond plaster on wood lath and studs
rs: Oak in living portion; tile in bath; linoleum tchen, Armstrong Cork Products Co.
h: Fir, painted

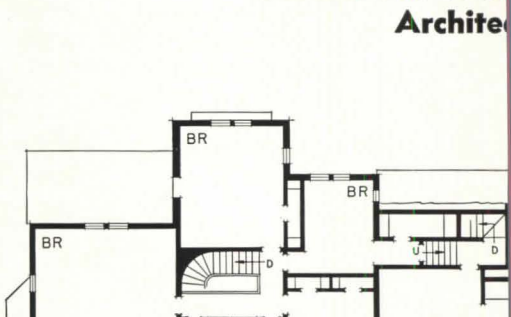
IIPMENT
ting and air conditioning: Rossoe
bing: Pipe, galvanized iron; fixtures, Standard tary Mfg. Co.
nen: Range; refrigerator; provision for dish- er
ellaneous: Illumination of grounds; firehose for rgency use
ting and wiring: Knob and tube system
Cost: 29c per cubic foot

House for J. O. Heppes, HINSDALE, ILLINOIS

CHILDS and SMI
Archite



First floor



Second floor

MATERIALS AND EQUIPMENT

FOUNDATION
Plain concrete

STRUCTURE
Wood studs and wood roof framing

EXTERIOR
Walls: Wide wood siding and common brick veneer, first floor

Sash: Wood

Roof: Asphalt shingles

Insulation: Exterior walls and roof, wool batts, U. S. Gypsum Co.

Painting: Wood siding and frames, three coats lead and oil paint; common brick, first floor and chimneys, three c
Bondex, The Reardon Co.

INTERIOR
Floors: First floor hall, dining r
kitchen, dining alcove, rear entry, l
tory, bath rooms, children's playr
asphalt tile, The Tile-Tex Co.; c
floors, straight-sawed red oak

Walls: Kitchen, lavatory, bath ro
asphalt wall tile, The Tile-Tex Co.; st
Nu-Wood, Wood Conversion Co., c
walls, smooth plaster.

Trim: enameled wood; study, strai
sawed white oak finished with two c
of Minwax, The Minwax Co.

, above, dining room; below, all.

g: Walls and ceilings, three coats nd oil paint: walls of living room, dining room and bedrooms, pa- walls and ceilings of kitchen, om and lavatory above wainscot, led.

MENT

g: Oil-fired warm-air furnace with duct system, General Electric any.

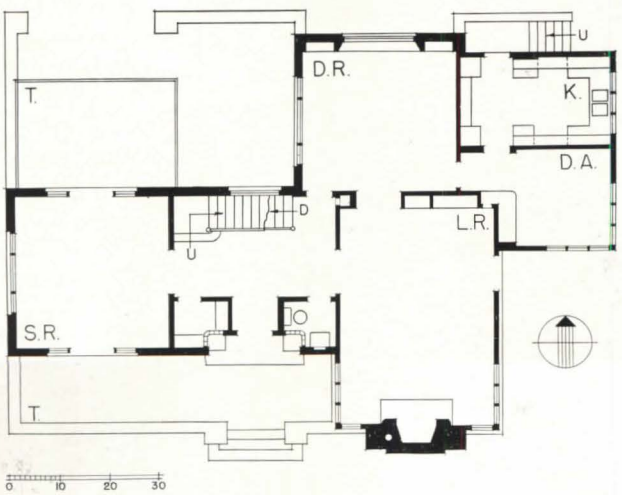
ng: Fixtures, Kohler Co.

cal Installation: Wiring and fix- Cox Electric Co.

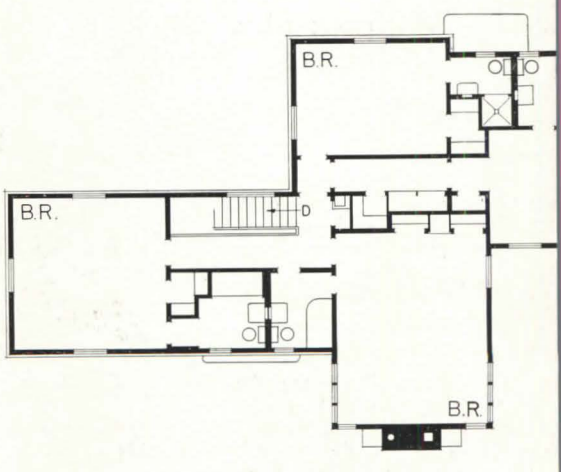
are: Sargent & Company

Photos by Hedrich-Blessing Studio

House for Mrs. Fred J. Reynolds, GLENCOE, ILLINOIS **PERKINS, WHEELER and W**
Archit



First floor



Second floor

At left, living terrace in the corner between dining and sun rooms; the screened porch awning roof is supported by the screen frames. Left, below, dining room.

MATERIALS AND EQUIPMENT

FOUNDATION

Continuous concrete walls and footings; waterproofing, A. C. Horn Co.

STRUCTURE

Wood frame

EXTERIOR

Walls: Hard burned select common brick; 1" x 8" cypress
Roof: Red cedar shingles, 5" to weather; Y. P. sheathing spaced 2"; flashing, gutters and leaders, 26 ga. "Toncan", Republic Steel Corp.
Sash: Wood double hung and casement
Doors: White pine; garage, lift type, McKee Door Co.
Insulation: Exterior walls, knee walls and roof, 3½" batts, U. S. Gypsum Co.
Painting: Lead and oil

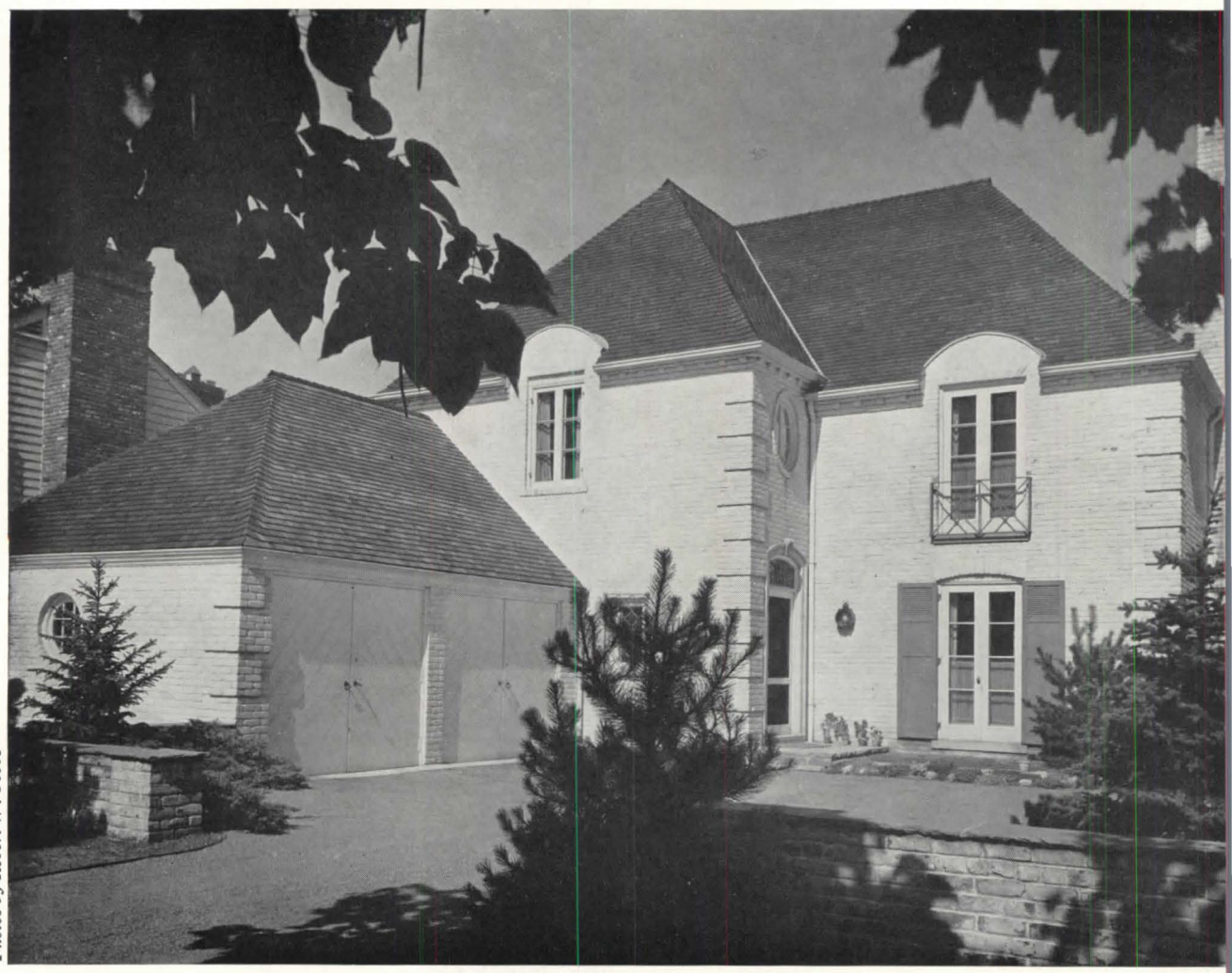
INTERIOR

Walls: ⅜" Rocklath, 3 coats gypsum plaster; painted and papered
Floors: Living room, bedrooms and halls, 25/32" clear red oak; kitchen, edge grain fir; baths, ceramic tile, baths 1 and 2, edge grain fir, bath 4 and lavatory; porches, concrete; kitchen, bath 4 and lavatory, linoleum, Armstrong Cork Products Co.
Trim: White maple in principal first floor rooms, poplar elsewhere; doors, "Rezo" stock maple and birch, Paine Lumber Co.
Painting: Walls, lead and oil; kitchen and baths, enamel; ceilings, kalsomine; floor, stained and varnished; trim (maple), clear lacquer, (poplar), flat paint

EQUIPMENT

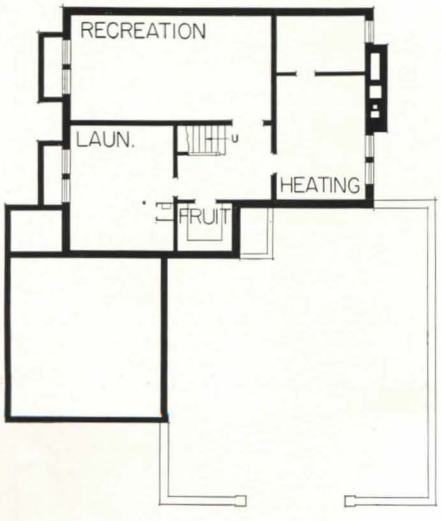
Heating and air conditioning: Forced warm air filtered, oil fired system, Herman Nelson Corp.; hot water heater, Williams Oil-O-Matic Heating Corp.; thermostat, Minneapolis-Honeywell Regulator Co.
Plumbing: Fixtures, Kohler Co.; supply pipes, galvanized steel; sump pump in basement, Chicago Pump Co.
Weatherstripping: Doors and windows, Chamberlain metal weatherstrips
Glass: Pittsburgh Plate Glass Co.; glass brick, Owens-Illinois Glass Co.
Hardware: Solid brass, Yale and Towne Manufacturing Co.
Electrical Installation: Rigid conduit wiring system; switches, Pass & Seymour, Inc.; fixtures, Walter G. Warren & Co.

Cost including fees, excluding land, landscaping, furnishings: $24,300

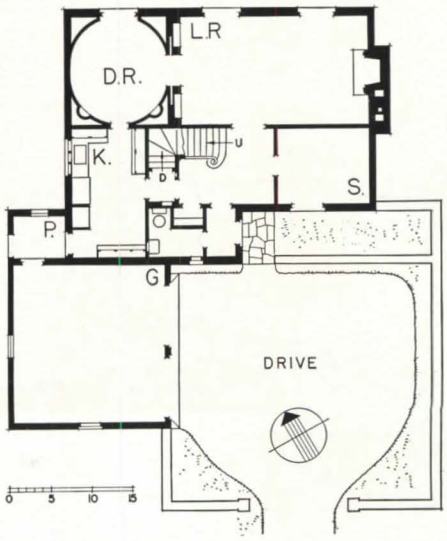


Photos by Robert W. Tebbs

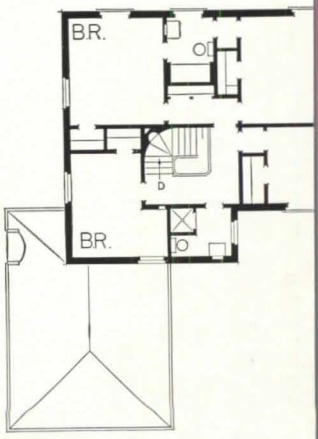
House for Dr. H. A. Jarre, GROSSE POINTE FARMS, MICH. **HEWLETT and LUCKENBA**
Archit



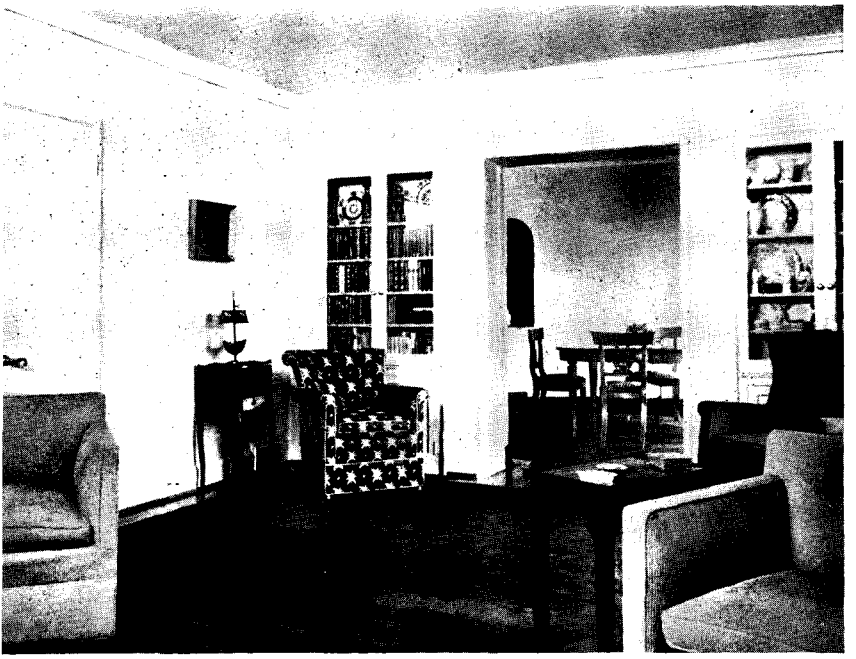
Basement



First floor



Second floor



e, living room interior
w, stair detail

MATERIALS AND EQUIPMENT

FOUNDATION
Concrete block

STRUCTURE
Wood frame

EXTERIOR
Walls: Brick veneer
Roof: Wood shingle; "Toncan" sheet metal, Republic Steel Co.
Insulation: Side walls and second floor ceiling, rock wool, Johns Manville
Sash: Wood casement and copper screens
Painting: Exterior masonry, Medusa cement paint, Medusa Portland Cement Co.

INTERIOR
Floors: Oak strip finish; main hall, black asphalt tile; master bedroom, oak block; stair treads and nosings, sheet rubber; kitchen, linoleum
Painting: Main hall, light gray; study, turquoise blue; ceiling, off-white; kitchen walls, light gray, yellow ceiling; black floor in dining room. Pittsburgh "Wallhide" for interior undercoat, Pittsburgh Plate Glass Co.; "Ripolin" enamel, The Glidden Company; "Minwax" floor finish, Minwax Co., Inc.

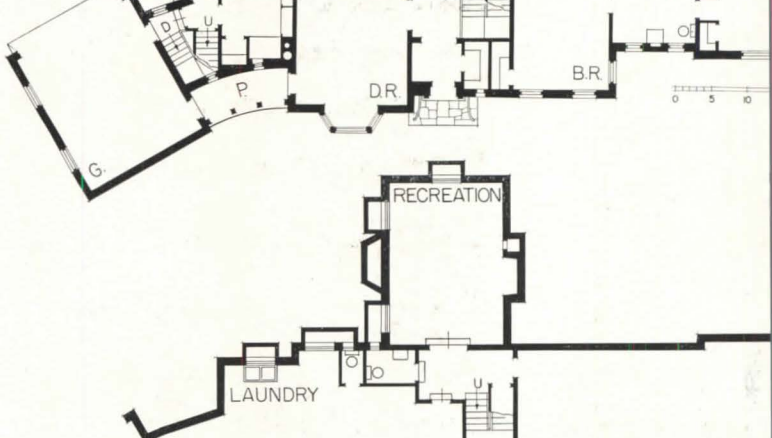
EQUIPMENT
Heating: Air circulation, humidification, Gilbarco Air-Conditioning, Gilbert & Barker Mfg. Co.
Waterproofing: Asphaltic, exterior basement wall
Hardware: Dull chrome
Cost, house only: 37c per cu. ft.

Photos by Alexander Piaget

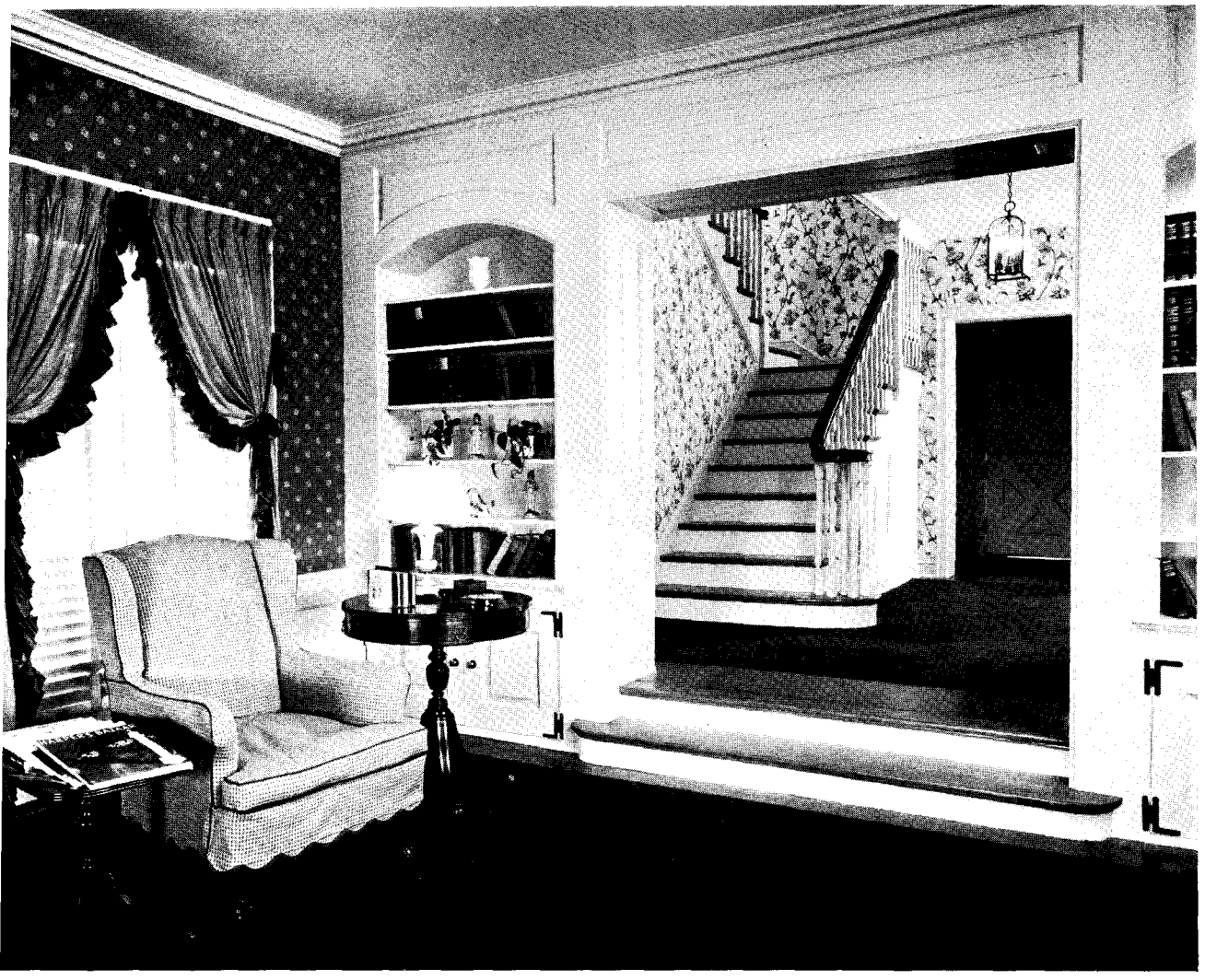
House for Albert J. Scheu, ST. LOUIS COUNTY, MISSOURI

GRAY and PAU
Archit

First floor

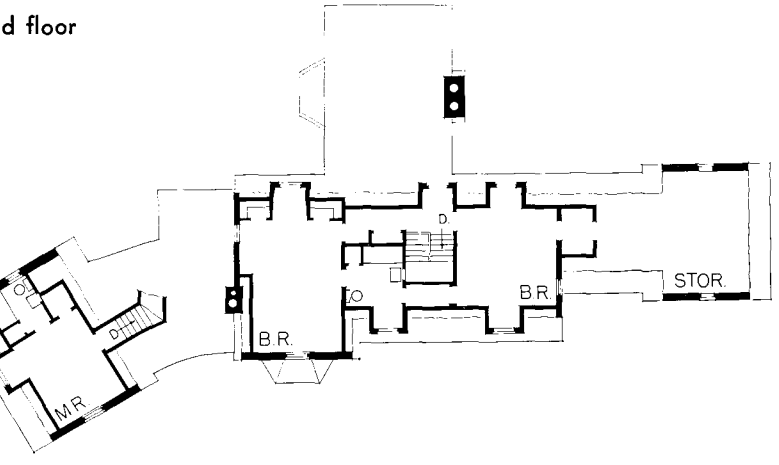


Basement



room interior

d floor



MATERIALS AND EQUIPMENT

FOUNDATION

Concrete walls

STRUCTURE

Reinforced concrete slab over entire first floor and garage; frame and veneer walls; wood roof framing

EXTERIOR

Walls: Brick, Hydraulic Press Brick Co.
Roof: Slate, weathering green; 16-oz. cold rolled copper sheet metal work
Insulation: Gimco rock wool batts, General Insulation & Manufacturing Co.
Painting: "Creo-Dipt" white brick paint, Creo-Dipt Co., Inc.

INTERIOR

Floors: Random width oak flooring on first floor; second floor, oak strip flooring. First floor, Wood Mosaic Co.; baths and lavatory, National Tile Co.
Trim: Poplar, enameled
Partitions: Wood with metal lath and plaster. Lath, Northwestern Expanded Metal Lath Co.; plaster, Acme Certainteed Products Co.
Doors: Overhead garage doors, McKee Door Co.

EQUIPMENT

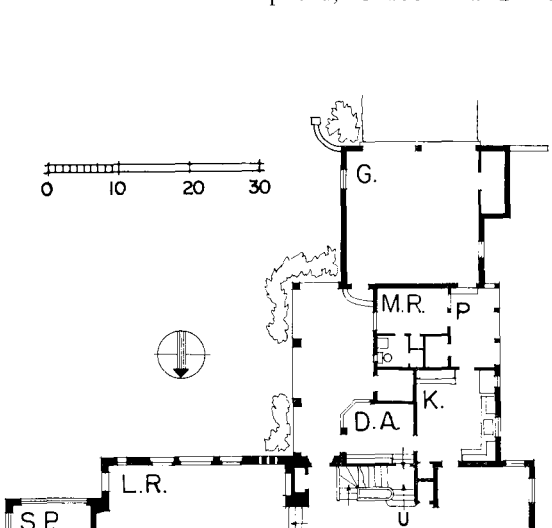
Heating: AFCO warm-air system with Century oil burner, American Furnace Co.; hot-water heater, Williams Oil-O-Matic Corp.
Weatherstripping: Monarch Weatherstrip Co.
Plumbing: Fixtures, Standard Sanitary Mfg. Co.

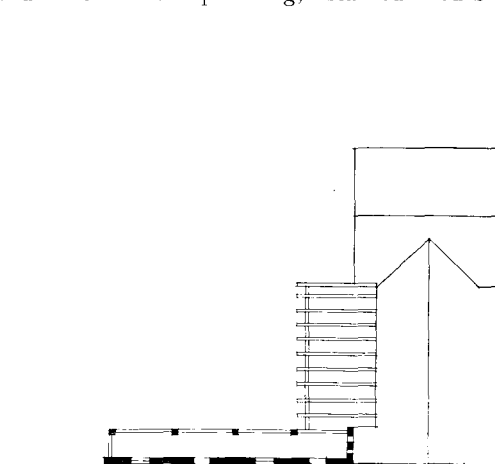
Cost, including fees: 41.9c per cubic foot

House for Hugh Akerman, ORLANDO, FLORIDA

MAURICE E. KRES
Archi

THIS HOUSE lies between the road and Spring Lake; hence the principal living areas open toward the water view. Concrete block walls are exposed, indoors and out, and are painted. The color scheme is st sash being blue inside and out; v white; roof, variegated reds; and ings, formed by the exposed sec floor planking, stained red-br





At left, first floor; above, second floor

facing page, lake front; above, entrance front; below, view
ugh living room toward stair hall

MATERIALS AND EQUIPMENT

FOUNDATION

Concrete

STRUCTURE

Concrete block and frame

EXTERIOR

Walls: Specially textured concrete block generally, 4" x 16" face showing; second story cypress boards and battens
Sash: Metal casements, screened, Hope's Window's Inc.
Roof: Wood frame; pastel red variegated cement tile finish, Pittman-Sipple Tile Co.
Insulation: Roof, "Celotex", Celotex Corp.

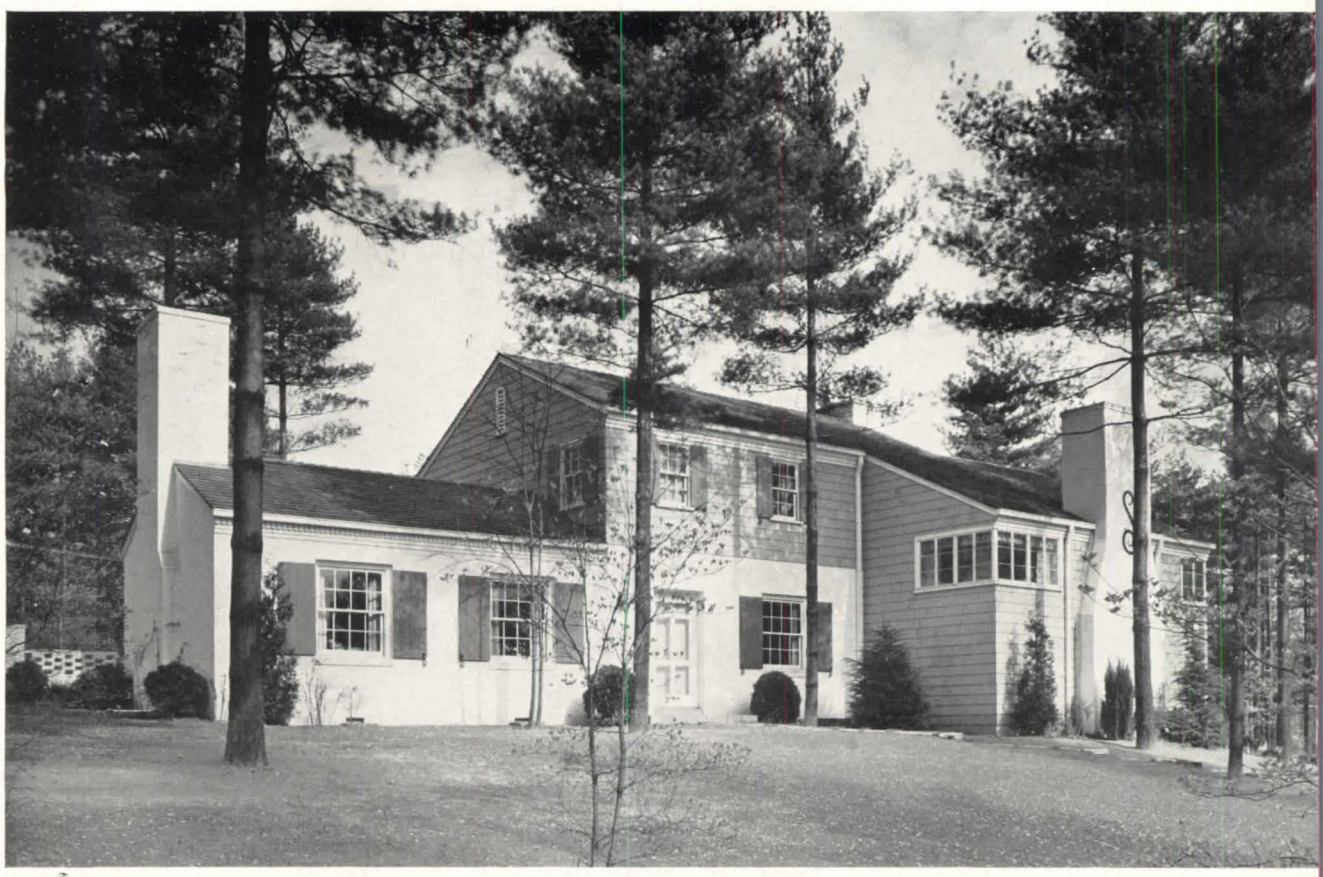
INTERIOR

Floors: On fill, 8" concrete slab; suspended, wood frame
Walls: Concrete block exposed and painted; baths, tile and plaster; remainder, plank and plaster
Ceilings: First floor, exposed beams and floor planking
Stairs: Solid Y.P. logs, wrought iron rail

EQUIPMENT

Heating: Waterman Waterbury furnace; A. B. C. blower; Williams Oil-O-Matic burner; Minneapolis-Honeywell temperature contros "Solar" hot-water heater, General Electric auxiliary
Plumbing: Copper piping; fixtures, Standard Sanitary Mfg. Co.
Hardware: Russell & Erwin Mfg. Co.

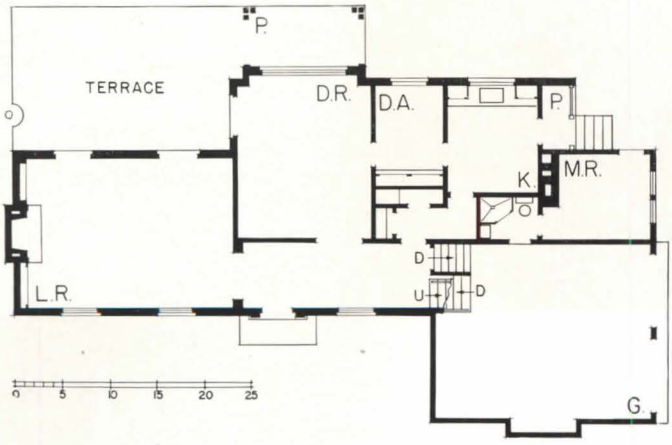
Cost, including fees: $15,500



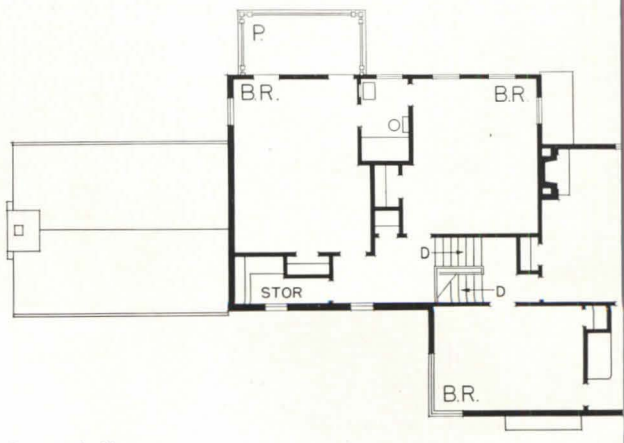
Photos by F. S. Lincoln

House for Miss Dorothy Greeno, BILTMORE FOREST, N. C. **HENRY IRVEN GAIN**
Archite

NOTEWORTHY in these plans are the location of
maid's room, with a private exterior door and acc
through the garage directly to the front hall; and
study-bedroom-bath grouping over the garage.



First floor



Second floor

end of living
n; at right, sec-
floor study

TERIALS AND EQUIPMENT

NDATION
crete footings, common brick walls

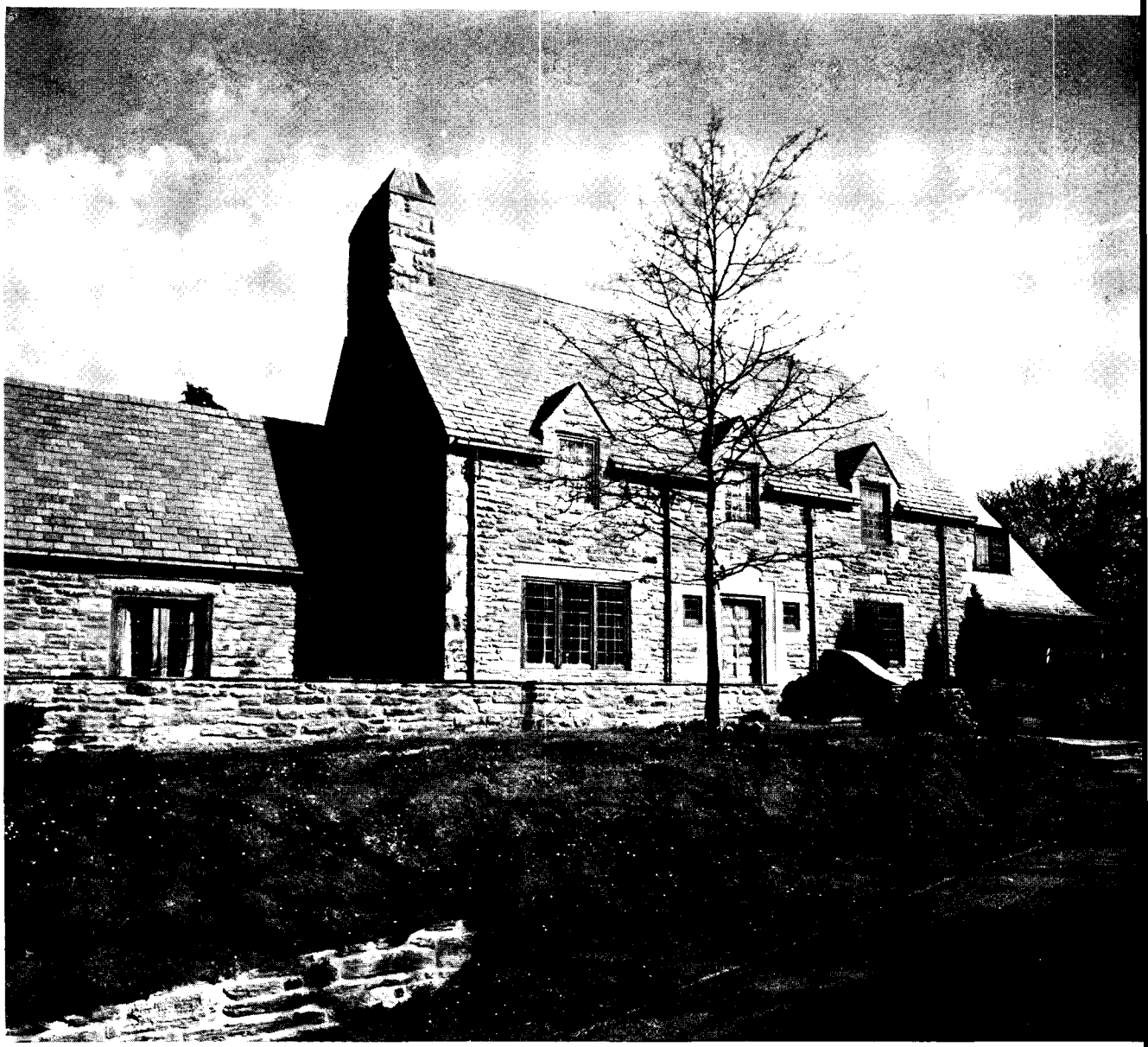
UCTURE
d frame

ERIOR
s: Common brick and red cedar shingles
frame
: Wood windows; metal casements, De-
Steel Products Co.; screens, "Rolscreen",
creen Company
F: Clay tile, B. Mifflin Hood Co.; copper flashing; G. I. downspouts and gutters
Insulation: Rock wool in ceiling area, Johns-Manville
Painting: Shingles, Cabot's stain, Samuel Cabot, Inc.

INTERIOR
Walls: Plaster on wood lath, U. S. Gypsum Co.
Floors: Bathrooms, kitchen and breakfast room, linoleum, Armstrong Cork Products Co.; bathroom bases and wainscots, structural glass; other floors, oak.
Trim: White pine
Painting: Trim, colored "Minwax," Minwax Co., Inc.

EQUIPMENT
Heating: Forced warm air with filters, Fox Furnace Co.; stoker, Iron Fireman Manufacturing Co.
Plumbing: Fixtures, Standard Sanitary Mfg. Co.; kitchen sink, Tracy Mfg. Co.
Hardware: Russell & Erwin Mfg. Co.

Cost: $16,000



Photos by Ph. B. Wallace

House for Marcellus McLaughlin, GERMANTOWN, PA.

RICHARD W. MECASKI
Archite

MATERIALS AND EQUIPMENT

FOUNDATION
Local stone

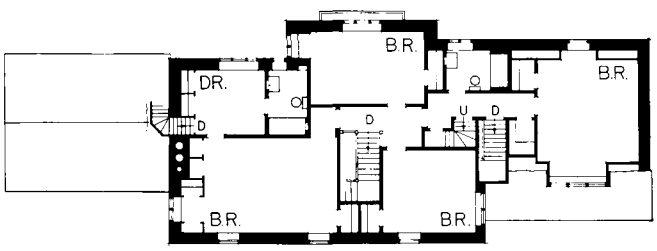
STRUCTURE
Local stone

EXTERIOR
Roof: Slate, variegated thickness and color
Sash: Wood casement with leaded glass; built-in roll screens, Watson Screen Co.
Insulation: Rock wool 2" thick on all exterior walls, 4" over third floor ceiling and garage ceiling.
Painting: Stained and oiled wood work

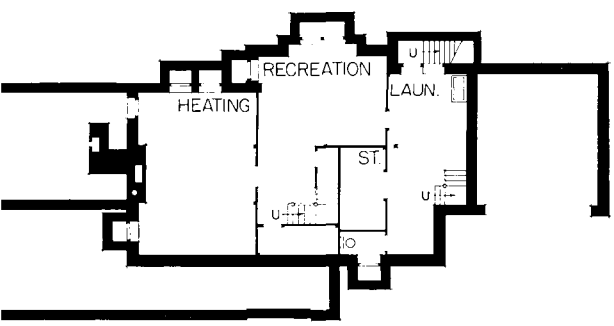
INTERIOR
Floors: Living room, dining room, library and hall, random width oak, screwed and plugged; bedrooms and hall, white oak T & G, 2" t
Painting: Stained and waxed walnut pane library and stair spandrel; all other inte woodwork painted.

EQUIPMENT
Heating and air-conditioning: Air circula and humidification, Gar Wood oil furnace air-conditoning unit, Gar Wood Indust Inc.
Plumbing: Copper tubing; fixtures, Crane
Kitchen: Built-in kitchen range hood; ve lator, "The Range Ventor", Universal Blo Co.
Electrical Installation: Phone system of in communication, Philco
Cost: approx. 32c per cubic foot

rior of library



Second floor



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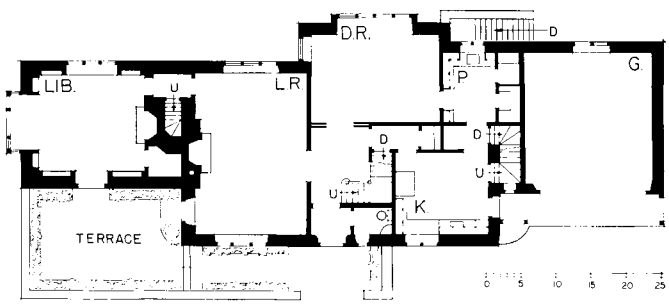


First floor

Photos by George H. Van Anda

House for Dr. Louis E. Williams, MADISON, NEW JERSEY

PAUL W. DRA
Archit

THIS HOUSE includes a doctor's suite consisting of reception ro
office and examination room. The suite has a private entrance, adja
yet subordinated to the front door. The first floor lavatory can s
either doctor's suite or owner's rooms.

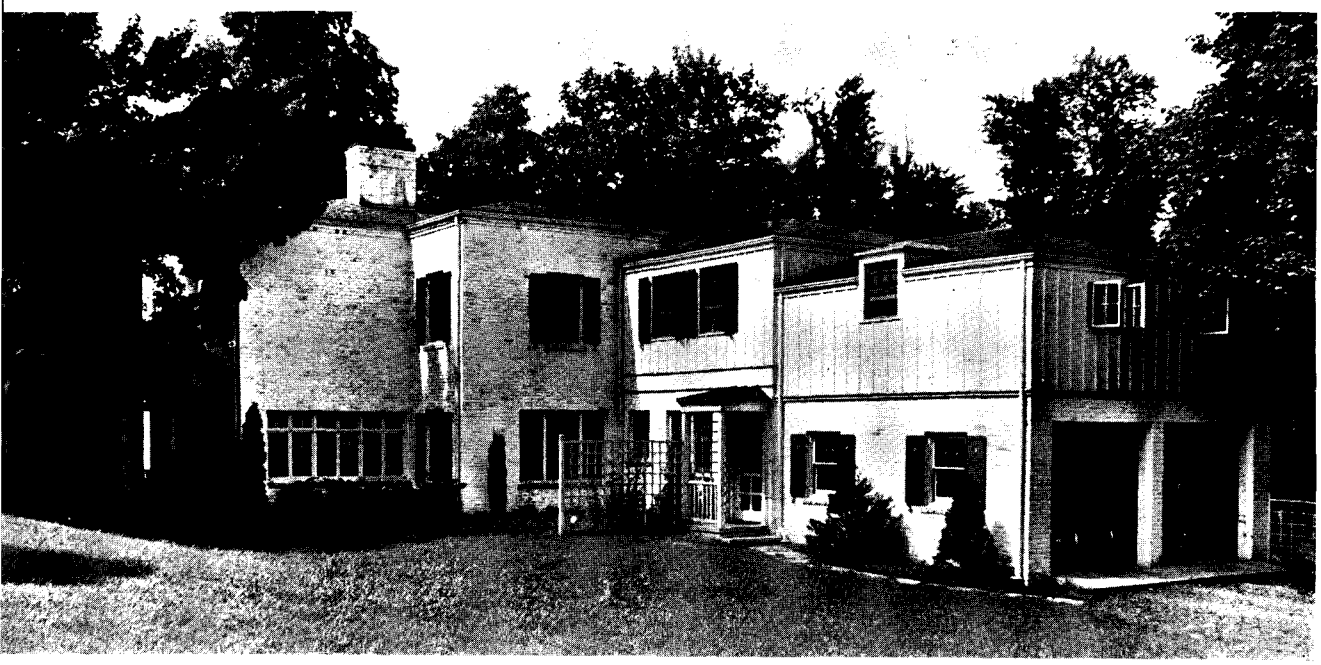
MATERIALS AND EQUIPMENT

STRUCTURE
Frame and brick veneer

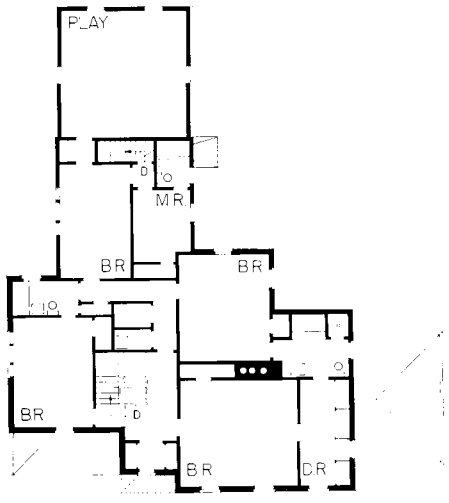
EXTERIOR
Roof: Black slate, "Genuine Hard Vein Bangor," North Bangor Slate Co.; copper gutters, leaders and flashings
Sash: Double hung and casements, Andersen Corp.
Insulation: 4" Capitol rock wool, The Standard Lime & Stone Co.
Doors: Special and six panel Colonial, pine, painted; garage doors, overhead stock with Stanley hardware, The Stanley Works

INTERIOR
Walls: Plastered three coats over wire lath; main rooms papered; baths and kitchen, Franklin tiles; game room, p
cypress
Doors: Special and six panel Colo
pine, painted
Trim: Special and Curtis stock

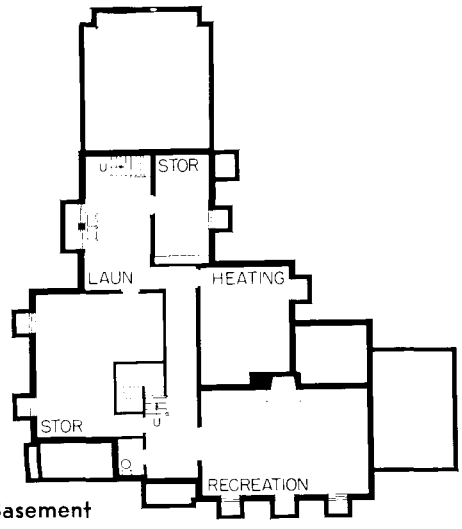
EQUIPMENT
Heating: Gas fired unit, Fox Fur
Co.; winter air-conditioned heat;
perature controls, Minneapolis-Hone
Regulator Co.; gas hot-water hea
Plumbing: Fixtures, Kohler Co.;
piping, American Brass Co.
Weatherstripping: Door and win
metal
Electrical installation: Fixtures, A.
Hendrickson & Co.
Kitchen: Range, gas; refrigerator,
eral Electric Co.
Hardware: Colonial brass
Cost: 42c per cubic foot



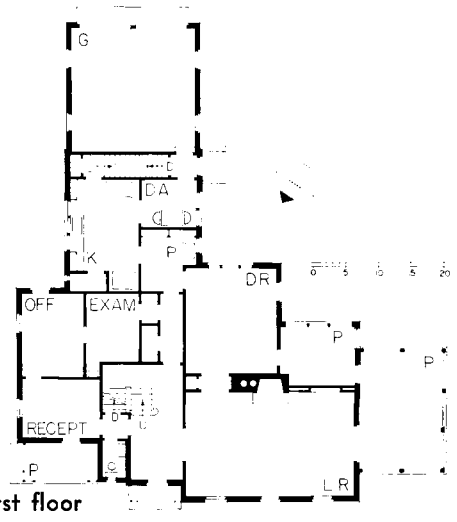
view from the north, above, ws screening of the service y from living portions of house. The small enclosed ch between the dining room living porch is an auxiliary ng area.



Second floor



Basement

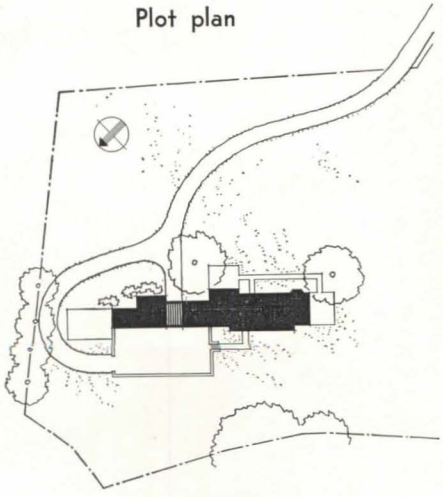


First floor

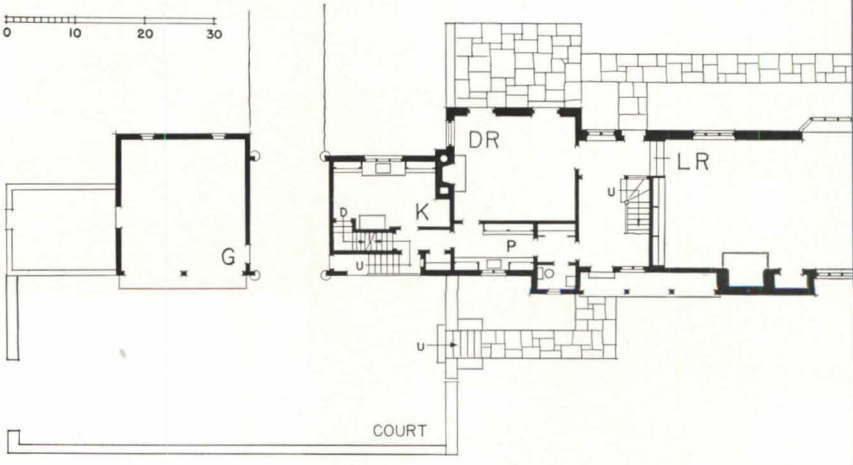
Photos by George H. Van Anda

House for Mrs. Sonja S. Hohe, HARRISON, NEW YORK **JAMES JENNINGS BEV**
Archit

Plot plan



Below, first floor; above, second floor



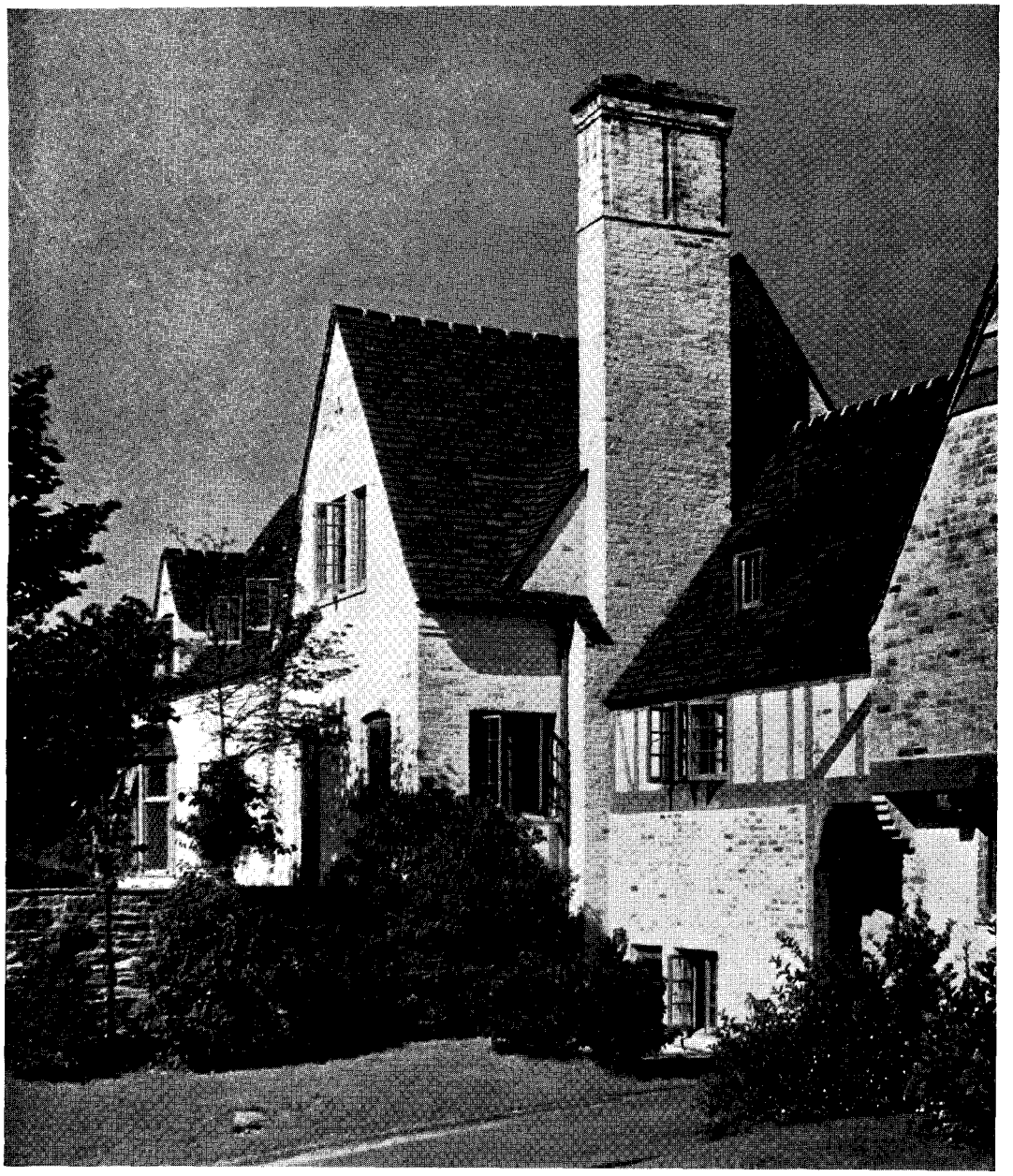


Photo on opposite page shows the courtyard front; above, detail of the entrance front, showing the driveway which passes through the building.

MATERIALS AND EQUIPMENT

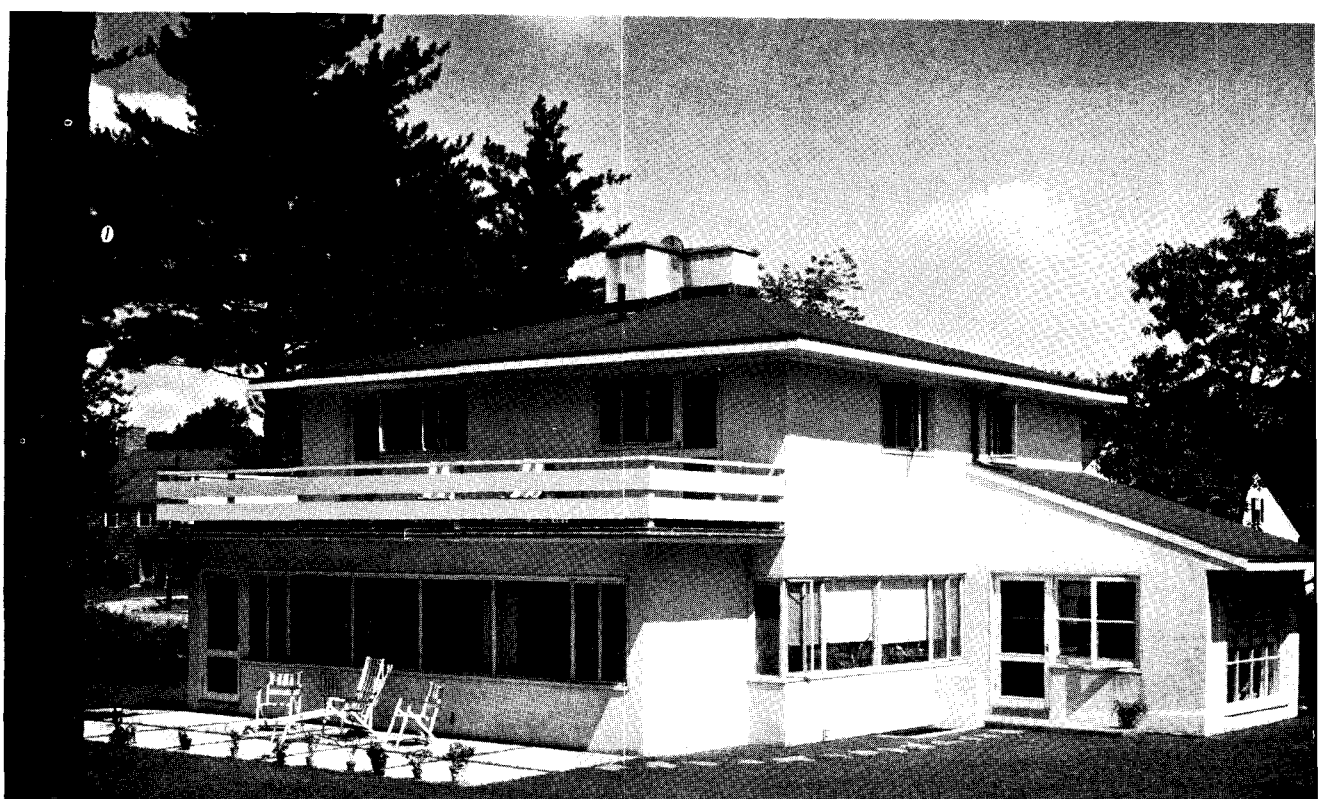
FOUNDATION
Concrete footings and walls

STRUCTURE
Wood frame, brick veneer

EXTERIOR
Walls: Brick facing, painted; stucco at driveway
Sash: Steel casements, Lemco, Croft Steel Windows, Inc.
Roof: Tile, Ludowici-Celadon Co.
Insulation: Balsam-wool, Wood Conversion Co.

INTERIOR
Floors: Garage, cement; kitchen, Armstrong's linoleum; first floor hall, loggia, terraces, flagstone; baths, tile; remainder, hardwood
Walls: 2" x 4" studs and plaster; Jacobson ornament
Ceilings: Exposed oak beams in living room; plaster in remainder

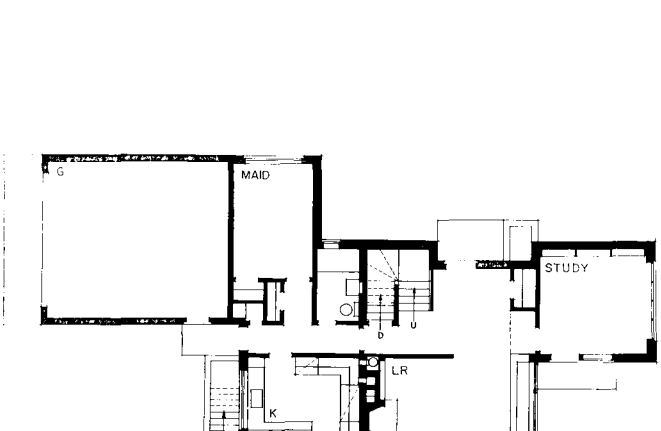
EQUIPMENT
Heating: Boiler, Fitzgibbons Boiler Co., Inc.; radiation, American Radiator Co.; valves, Hoffman Specialty Co., Inc.
Hardware and lighting fixtures: Special, Charles Arcularius
Plumbing: Fixtures, Standard Sanitary Mfg. Co.; medicine cabinets and accessories, Hoegger, Inc.
Fireplaces: Dampers, H. W. Covert Co.
Incinerator: Kerner Incinerator Co.

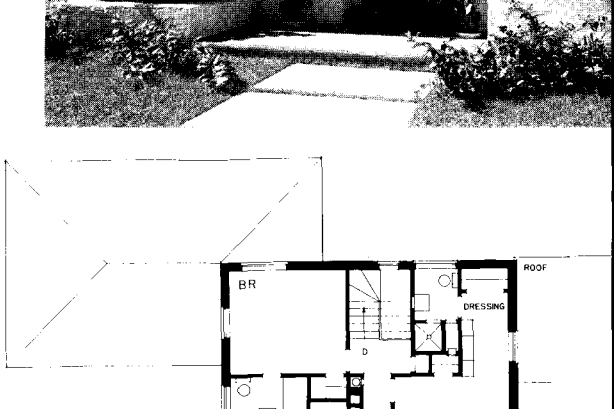


Photos by Rollin W. Bailey

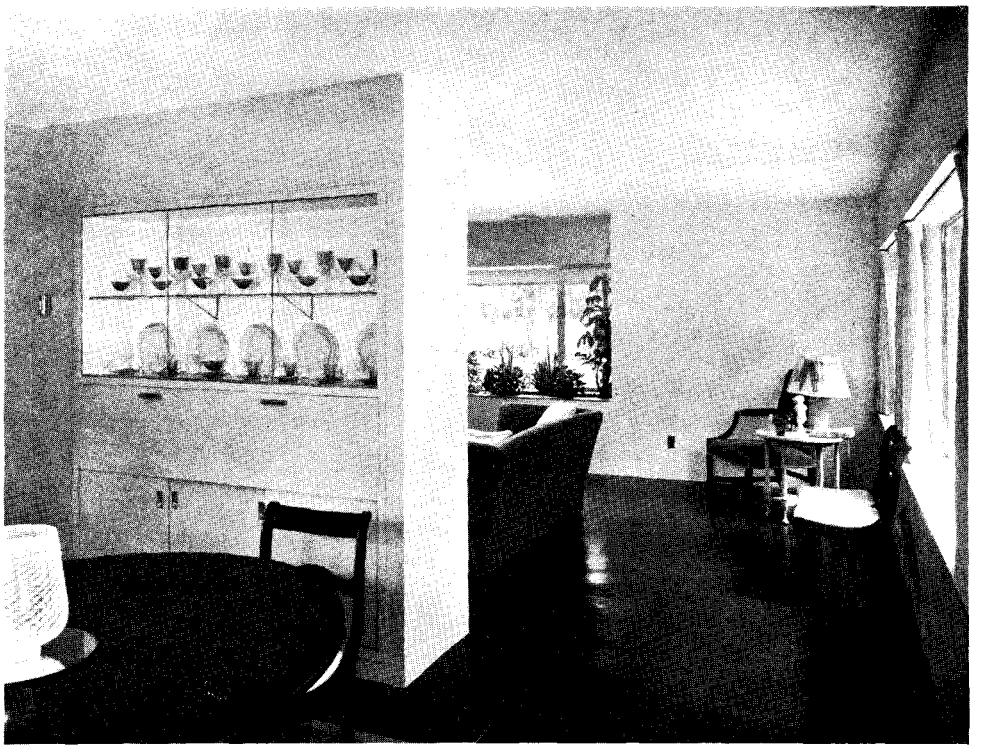
House for Edward Melnick
BROOKLINE, MASS.

SAMUEL GLASER
Architect





Plans: at left, first floor; above, second floor. Ph
top, garden elevation; center, detail front entr



ERIALS AND IPMENT

NDATION
ete blocks 12" thick and filled cement

CTURE
r concrete, reinforced con- beams and lintels; pre-cast ete joists and reinforced con- floors

RIOR
: Cinder concrete walls, cov- with 1" Portland cement , skim coat, California Stucco cts Co.; glass block, Corning- urgh Plate Glass Co.
Steel, Detroit Steel Products

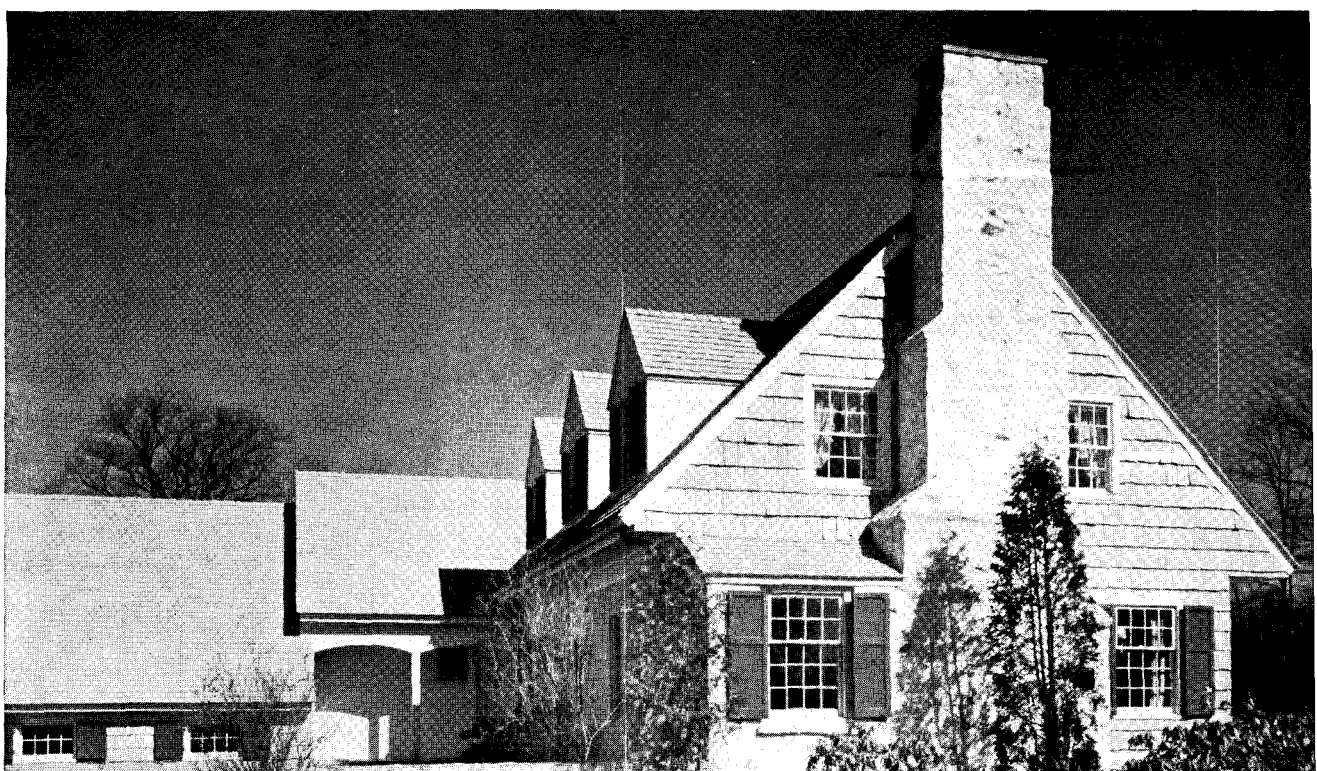
Thick butt asphalt shingles & Son, Inc.; built-up deck
: Wood to detail
tion: Walls, double airspace Reynolds metallation, type B, lds Corp.; ceiling under roof, ck wool, U. S. Gypsum Co.

RIOR
: Linoleum, Congoleum-Nairn,

: Wood stud, gypsum lath, d plaster
gs: Wire lath and painted r
: "Rezo" flush, Paine Lumber

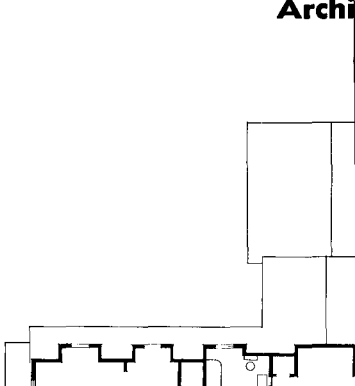
PMENT
ng: Winter air-conditioning , Moncrief
ing: Fixtures, Briggs steel; r hot and cold water supplies
rator: First floor feed, Kerner rator Co.
n: Electric refrigerator, ; electric range, Westing- Electric & Manufacturing Co. Cost: 42c per cubic foot

There are many interesting points about this house. Indicated in the first floor plan: undercover access to garage through a secondary hall; maid's bath, also accessible as first floor lavatory; screen partition between dining and living areas. The built-in flower box in the living room is shown at the top of this page; lower photograph, view from dining into living areas, shows built-in china, linen and silver cupboards.

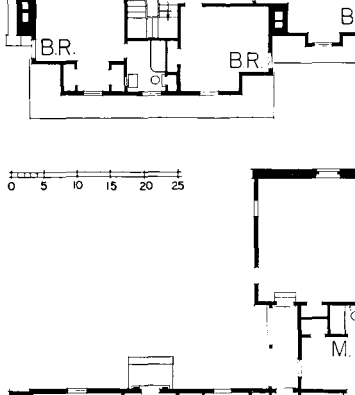


House for John C. Smith, NEW CANAAN, CONNECTICUT

WALTER BRADNEE KI
Archi



Second floor



First floor

MATERIALS AND EQUIPMENT

FOUNDATION
Monolithic waterproof concrete

STRUCTURE
Wood frame

EXTERIOR
Walls: Hand rived cypress shingles
Insulation: Exterior walls and second-story ceiling completely enveloped in rock wool

INTERIOR
Walls: 2" by 4" stud, plastered
Floors: Oak

EQUIPMENT
Heating: Scott Newcomb air-conditioning system, Home Oil Co.
Plumbing: Fixtures, Standard Sanitary Mfg. Co.; brass piping
Electrical installation: Fixtures, Portchester Lighting Fixture Corp.
Kitchen: Stainless steel sinks; metal cabinets, Bradley Kitchen Cabinet Co.; linoleum counter tops; electric range, Westinghouse Electric and Manufacturing Co.; domestic hot-water heater, Westinghouse Electric and Manufacturing Co.

Cost: $22,000