From Boston's classicists, a new use of Greek Revival...
A Boston firm, long famous for precise rendering of the Colonial and Georgian vernacular at Harvard University, has recently completed the new building for the Fitchburg (Mass.) High School. Shifting the medium somewhat, the architects here employed a greatly simplified Greek Revival, which permits juxtaposition of Classic and contemporary detail (pedimented doorways alongside horizontal spandrels and muntins) in such a fashion as materially to reduce the "fussiness" of found in designs employing the Colonial vernacular.

Plan of the building—which replaces an earlier school destroyed by fire—was determined by a small and irregular plot. Although a street separates them, the school overlooks and its students use the city park to the south. The slope of the plot is such that direct access to both auditorium and gymnasium is provided to the north, while main entrances and classroom areas are on the lower level to the south. This ground floor is largely given over to administrative, staff and gymnasium activities, with classroom areas concentrated along the southern front of the third floor. A maximum student population of 1,600 is thereby provided.

Exterior walls of the school of red water-struck brick with Fitchburg granite trim. The cornice is leaded copper with wood and cupola; soffits of all cornices are painted vermilion. The entire structure is second-class fireproof construction, fully sprinkled, with first-class fireproof construction in all corridors and stairways. The school is almost entirely heated by warm air circulated by ducts from a central heating plant.
FITCHBURG HIGH SCHOOL

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.
ACH PARK IN SWITZERLAND CLAIMED FROM BOTTOM OF LAKE

ARCH PICCARD
Architect

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.
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.
Men's cabins at ground level, women's cabins above, sun terrace on top; spiral stairways at regular intervals.

One of the many paved and shaded areas for nonbathers.
SWISS BEACH PARK

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

Section of pool

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

BUILDING NEWS
47
The advantages of reinforced concrete construction have been utilized most fully in the design of living room and dining room. The latter has a 6-ft. cantilevered bay permitting an unobstructed view in three directions. The living room has only two bear walls. On the sunset side is a 9 x 20 ft. clear glass curtain opening onto a narrow balcony. Opposite are steel and glass accordion doors, 8 x 16 ft.; these open on a terrace cantilevered 5 ft. above the rim of the precipice.

An iron spiral stair rises from the terrace to roof, where a roof shelter provides space for outdoor living in the California climate. A dumbwaiter leads from guest kitchen to roof, and meals be served here without inconvenience.

All ceilings, like walls, floors are of reinforced concrete. Floors are integrally colored. Walls and doors are soundproofed, assuring privacy to the two women who live here.
ing wall, hooked back into bed-
y concrete beams. Parking and
round space is provided above.

View from south

View from east

Photos by Carl Fogler
ABOVE: Living room, looking west. The elevated concrete hearth merges into three concrete steps crossing the width of the room. Hearth steps provide seating for a relatively large number of guests, without cluttering the room too many chairs. LEFT: Dining room, seen from balcony; bay is cantilevered over canyon.
CALIFORNIA HOUSE

Gallery, looking southeast

Master bedroom

Guest bedroom
Waiting room, eastbound platform

PLATFORMS

Elevation

Plan
WAITING ROOM of the Ealing Station in London commands an unobstructed view in all directions; east- and west-bound trains on all tracks can be observed with ease.

Particular interest is the construction of the roof, which supports the waiting room and platform. Timber rafters and beams are covered with asbestos and supported by a welded steel frame. The underside is lined with "Test" fiberboard and finished with flat oil paint. The roof slopes slightly downward to the center to a series of pipes along the platform, emptying into an existing hole.

Plan

Section
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.
Main Shelter offers minimum obstruction to traffic

HOLGER BLOM
Architect

E. WRETBLAD
Engineer

Main shelter constructed by the City of Stockholm, under, performs its function with minimum obstruction to pedestrian traffic. In form like an inverted umbrella, it slopes downward slightly toward the center where an outlet carries off the water. Below grade the octagonal pillar passes through a bed of clay, its base resting on a substratum of fine sand more than 8 feet underground.

The material, cast in a form of hardened masonite, is reinforced concrete throughout. Reinforcing of the slab is arranged as a network radiating from the center. 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 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 storage.
PRODUCTION INCREASED BY SEGREGATION OF AUXILIARY AREAS

DEIGGS MANUFACTURING COMPANY

Designers

R. WYLIE

Superintendent of Construction

THE PLANT of the Briggs Manufacturing Company in Detroit, Michigan, is interesting for its separation of auxiliary facilities—lunchrooms, lavatories, elevators, stairways, etc.—from working spaces. Previous experience had demonstrated that continuity of production areas brought increased efficiency.

Employee facilities are contained in towers, three stories in height, adjacent to the plant itself; each tower can accommodate 250 workers at one time. Elevators have been eliminated; ramps are used instead: these have been designed with removable center railings and with gradient that will permit electric trucks to carry to the second floor those materials which cannot be handled by conveyor lines. Snow or ice formations on ramps are not expected to cause trouble; the lower areas must usually be cleared away. If necessary, steam can be used to clear ramp surfaces—there is a steam outlet under each ramp.

Space under ramps can be used for storage tanks or for other objects which cannot conveniently be kept inside the building.
Talbott Realty Building. Structure is a combination of reinforced concrete and steel framing. Exterior is limestone.

There is a parking area at the rear of the building.
The design of the Talbott Realty building in Dayton, Ohio, has been influenced strongly by air-conditioning requirements. Exterior walls include large panels of glass block and metal: glass block for maximum light and insulating value, metal sash for on and access to outside air—still psychologically necessary to many tenants.

For winter conditioning, steam coils are driven from mains in the street to blowers and duct systems through which air is filtered, tempered, and distributed. In summer, air is led by well water pumped through coils and delivered by the same blowers and duct systems. The well water is then ejected upon the roof, covering the entire area three inches deep and providing additional cooling for top offices.

On the west wall of the building, glass block is again used generously on the ground floor, admitting daylight to the corridor and into the rear aisles of retail shops.

The basement includes two large p areas, one of which is fully equipped and furnished for cafe or coffee-club purposes.
TALBOTT REALTY BUILDING

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.
Transom Lighting Brings Increased Business to Cleveland Stores

T. MASTERSO
architect

M. POTTER
minating Engineer

ransom lighting of two newly remodeled store-
its in the Cleveland area is credited with hav-
ught quick rentals and increased sales. As a
rt of the work of modernization, "hung-on"
tric neon signs have been removed and con-
os transom lighting has been substituted.

A system of illumination is said to give greater
ility and to avoid glare and blur.
Metal horizontal-sliding window-frame introduced

RECENTLY INTRODUCED in Belgium is a metal window frame which slides horizontally, and which can also be tilted forward at the top admitting air but not rain. To open, one sash is pushed out, the other is pulled in; each is then in a different plane and can slide one behind the other. When closed, both sashes are in the same plane and the window is said to be absolutely weathertight. Hinges and weights are unnecessary, as the operating mechanism is contained in sash. Among the advantages claimed for this window are the following: that it can be cleaned more easily than vertically sliding sash; that it can be opened without removing articles inside; that it can be mounted without tools to admit furniture or other large equipment; that it will not move and clatter in a strong wind.

American patents have been applied for, but no distribution licenses have yet been granted here. Licenses have been made to some foreign manufacturers, including Canadian and British firms. The firm of John Thompson Beacon Windows Ltd., Beacon-Works, Waltham, England, holds the British license.

Window combines casement and double-hung sash

THE SUPREME WINDOW, manufactured by the Supreme Window Sales Corporation, 45 W. 57 St., New York, N. Y., acts both as double-hung sash and as casement. Normally, it operates as a double-hung window; but when the lower sash is raised to within a few inches of the top and the upper sash is completely lowered, the two sections can be swung into the room and moved up and down to any position desired. When swung in, cleaning, reglazing and painting are made safer and easier. The window comes in stock sizes and in special sizes in wood and in metals, assembled knocked down.
DESIGN TRENDS

PRAGUE—An ancient background for modernism
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.

The history of Prague is the history of the ancient Kingdom of Bohemia and, in a certain sense, the history of Central Europe. Ever since the Premyslide princes fortified a rocky eminence on the lower banks of the Vltava River, Prague has been important as a factor in the economic, political, and architectural development of Central Europe.

Under Charles IV (1346-1378) of the house of Luxembourg, Prague became the largest city of Central Europe and the cultural center of the Holy Roman Empire. For over a century Prague developed as a center of Gothic architecture; but late in the 15th century the city’s character changed under the influence of the Italian Renaissance. In 1540 a rebellion against the ruling House of Hapsbourg was followed by a Catholic Restoration that converted Prague into a Baroque capital. This period that ended about the close of the 18th century. Prague became Germanized as a provincial town of the Austro-Hungarian Empire until the Czech element reasserted itself in 1861.

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

Throughout this development the Czechs have sought the newest post-war architecture changed from “cubism” to “the plastic-decorative style” into what is now generally called “modern.” Spurred by post-war pioneer architects of Holland, Russia, France, and Germany, Czech architects rapidly mastered a technique of their own. The following pages report recent solutions to a variety of design problems. The buildings suggest the trend of Prague’s future development. They also provide a commentary on the influence that availability of materials, equipment, and services—here as well as in Central Europe—is having on solutions to current problems of building design.
On wooded slopes of suburban Prague modern houses provide a startling contrast to the fortified castles of the ancient Czech nobility. This one, designed by Ladislav Zak, architect, is part of a small country estate that includes a garage and a greenhouse. The terrace elevation faces south giving the second-floor living rooms the greatest amount of sunshine and a clear view of the entire estate.
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.
View from living room toward dining room (left), kitchen (center), and study (right).

Dining room. Terrace beyond bay is an open-air living dining room.
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.
Prague, wherein is located the oldest university in Central Europe, numbers among its modern educational plants, the Reform Grammar School which corresponds generally with a commercial high school in this country. Owned and administered by the State, it was designed by Eugen Linhart, architect. Its modern technical equipment includes a small astronomical observatory part shown in the picture below.
Several other modern structures in Prague, this school is faced with light stucco colored a deep buff. A recreation terrace on the roof, shown in detail on the facing page, is faced with tan-colored terrazzo. This page, right, is a typical corridor lined with well-lighted and ventilated locker spaces.
In the newer portion of Prague is the General Pension Institute, designed by J. Havlicek and K. Honzík, 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.
YEARS AGO there came out of Chicago an inventor a small-scale model of an extraordinary sort of thing—an hexagonal-shaped affair suspended by cables a central utility tower mast—which he argued could -story-fabricated in quantities so large that the econ- would be like those in the auto industry. The : was called the Dymaxion—a term coined from “amic” and “maximum.” Soon, he predicted, it 1 be in production.

decade has gone by. The Dymaxion House still ins an idea, but the world of architecture has red considerably. If the changes seem revolutionary haracter, 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 angile 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-d all as a single compact unit.

pens a book on the Dymaxion philosophy, and 

prediction that before July 12, 1948, the mass pro-

on of mechanical chassis of dwellings will attain r 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 s as population shifts, a mechanical stock exchange.

"Nine Chains to the Moon. R. Buckminster Fuller. Pub-

lished by J. B. Lippincott Company, Philadelphia and New . 406 pages; maps, charts, diagrams, including aology of scientific events from antiquity up to 1936. $4.

A review of Nine Chains to the Moon

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 21/3 billion people were to stand one upon another's heads, they would make nine complete chains to the moon. Com- pacted, 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."

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 selec-

tion 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,
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-spans 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 long-ing 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, condems finance capitalism (conveniently dramatized into wicked old "Fincap", who typifies fear), announces the impending socialization of the plentitudinous categories of production, throws in the sponge for the patent memorates 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, condems finance capitalism (conveniently dramatized into wicked old "Fincap", who typifies fear), announces the impending socialization of the plentitudinous categories of production, throws in the sponge for the patent...
EUROPE RE-HOUS ED. By Elizabeth Day. W. W. Norton & Co., Inc., New York, 1938. 284 pages. 6 x 9 in. over 100 illustrations, including plates. Price, $3.50.

For eight years of experience in slum clearance and rehousing work in England, the author of this book has held a research fellowship for the study as a whole. She has visited thirteen countries, but has not her study to six of them—two losers: Holland, Sweden, and Walter H. Blucher; the two winners: France, Italy, and Holland.

This book contains very little statistical material and the statistics included are seldom comparable. It is a valuable experience for the reader, a series of scattered descriptions of specific projects in the countries visited. These, to be sure, are without value: many of the donors described and illustrated offer useful suggestions to American designers, who, on a larger scale, have begun the work of slum clearance and rehousing in this country. Walter Gropius has written a foreword to the book in which he declares that scattered efforts, however great, must be integrated to be effective.


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. Faby; 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.


One in a series of photographic studies on the minor domestic architecture of England. This is the first volume to be compiled by Mr. Inge-
**Design for Time-control . . .**

Little interested as most building designers may be in what the archeologist of 6938 may think of the future of 1938, the “time capsule” (left), which Westinghouse sunk recently on the site of its exhibit building at the New York World’s Fair has certain implications for building design. For the “time capsule,” late a series of scientific “cornerstones”, is an ambitious attempt to project some record of modern man 5 years into the future. And to achieve this, two things were essential: a compact collection of data on present-day science, art, and industry (mostly on microfilm) and a truly permanent structure for “housing” the information. This last became a design problem of the first importance, and it is significant that Westinghouse engineers were forced to abandon the usual materials to which the average building designer has been accustomed. Instead, they used a metal—Cupaloy*—for the outer capsule, a new fire-resistant glass for the inner one, glass tape for packing, and an atmosphere of inert gas instead of air. Could they, in this particular “building type”, rely on methods of production ordinarily used in the building field? The alloy had to be produced and the capsule fabricated under controlled conditions with precise instruments . . . Scarcely though commissions for buildings to last 5,000 years may be, the architect may keep an eye on such “stunts” as these, for time-control 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 silver, stir well while metal heats in a crucible to 2500° Fahrenheit. Cast a mold and machine. Result is an alloy hard as steel which—receives deposits instead of being eaten away by corrosion.

**Heat without hotness . . .**

Another tour de force from the publicity world to be ignored by the building field was General Motors’ “Parade of Progress”—a national auto caravan to build up interest in G-M’s exhibit at the Fair. Carried length and breadth of the land (in eight streamlined transport trucks already described in AR, 4/36, p. 30) were a series of demonstrations of recent developments from G-M’s research laboratories. Of immediate interest to the building designer was a “cold stove” (lower left) on which eggs could be fried, water boiled without scorching an interposed newspaper. Scarcely enough of this apparent contradiction was a new inductor furnace which, by magnetism, creates enough “molecular friction” in the pan to heat it. Although G-M’s promotion men eagerly pointed out that it also “flashes” sparks and makes aluminum rings jump into the air, building designers with new problems on their hands might do worse than to follow such developments.

(Additional Trend Notes on page 87)
Current Trends of Building Costs

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

These indicate control trends in combined material and labor costs in the field of residential frame construction, the monthly curves being extension of the local cost aver-sages during the years 1935, 1936, and 17. 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.

**INSTRUCTION COST INDEX**

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

### ANTONIO

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**DESIGN TRENDS**

Combined with AMERICAN ARCHITECT and ARCHITECTURE
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way to residence, Beverly Hills, California, designed by Gordon B. Kaufman

OUTDOOR STAIRWAYS

inced with AMERICAN ARCHITECT and ARCHITECTURE

DESIGN TRENDS
DESIGN TRENDS

OCTOBER 1938 issue of ARCHITECTURAL RECORD
facing page: 1 is in Philadelphia, Pa., R. R. McGoodwin, architect; 2 was designed by H. E. Woodsend for a residence in Yonkers, N. Y.; 3 is in Cob Cob, Conn., H. E. Woodsend, architect; 4 is in Los Angeles, Calif., Selden Price, architect.

this page: 5 is a covered stairway at Lake Sunapee, N. H., designed by Prentice Sanger. 6, Mamaroneck, N. Y., is the work of James Bevan; and 7 is at New Haven, Conn., H. E. Woodsend, architect.
facing page: 8 is a stairway at 
lywood, Calif., designed by Carl 
is 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-
yd, Calif.

this page: 12 is at Beverly Hills, 
if., of which George Washington 
th was the architect; 13 is at East-
ton, Long Island, and was de-
ed by Robert Tappan; and 14 is 
Beverly Hills, Calif., Roy Seldon 
se, architect.
Facing page: 15 is in Brentwood Shores, Calif., John Byers, architect; 17 at Greens Farms, Conn., was designed by Walter Bradbee Kirby; 19 in Richmond, Va., Duncan Lee, architect; and 18 is in Wychwood, London, Ray O. Peck, architect.

This page: 19 is in New York City, Lawrence Peck, architect; 20 is in Berkeley, Calif., William Wilson, architect; and 21 was designed by Eugene Schoen and Sons for a house in Washington, D.C.
22 is a spiral stairway on roof of a villa at Savoye-Seine, France, designed by Le Corbusier and Jeanneret, also designed by Le Corbusier and Jeanneret, is Paris, France. 24 is another spiral stairway for a residence at New Hartford, Cor Howe and Lescaze, archite
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 All 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, some change permanently. A series, some change permanently. A series, 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)
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 Heat equipment, with the new Minneapolis-Honeywell Controls, will bring you complete winter comfort. Though they may be more than ordinary controls, dealers supply them as standard, at but slight extra cost. Look for the "M-H" Symbol. It means you are getting the best.
BUILDING TYPES

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.
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

TIME-SAVER STANDARDS DATA Page
Outdoor Living Areas.............. 91
Drainage—Surface, catch basins, inlets 92
—Gutters .................. 93
—Subsurface, walks and drives .......... 94, 95
Curb and gutter construction .......... 93
Walks—construction, surfacing .......... 94
Driveways—construction, surfacing ...... 95

ILLUSTRATED CASE STUDIES Page
Far West
Lincoln house, San Marino, Calif.... 96
French house, Palm Springs, Calif.... 96
Kershner house, Los Angeles, Calif.... 100
Ross house, Seattle, Wash........... 103

Middle West
Heppes house, Hinsdale, Ill........ 104
Reynolds house, Glencoe, Ill........ 106
Jarre house, Grosse Pointe, Mich..... 108
Scheu house, St. Louis Co., Mo.... 110

South
Akerman house, Orlando, Fla....... 112
Greeno house, Biltmore Forest, N. C... 114

Northeast
McLaughlin house, Germantown, Pa.... 116
Williams house, Madison, N. J....... 118
Hohe house, Larchmont, N. Y........ 120
Melnick house, Brookline, Mass...... 122
Smith house, New Canaan, Conn...... 124

BUILDING TYPES

90

ARCHITECTURAL RECORD combined

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

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

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

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

Time-Saver Standards based upon minimum clearances and dimensions of commonly used furniture, and equipment and requirements for service systems, have been presented in earlier studies. Time-Saver Standards in this study are devoted to fundamental outdoor design problems.
development of outdoor areas for purposes requires as much as do those within-doors. The
spanning checklist is intended to call to the designer purposes to served 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
requirements. Therefore precise
and recommendations are not n the scope of this study.

areas
narrow definition of outdoor
areas eliminates all but those
ightly planned for dining, relax-
playing, entertaining, reading.
Placement of such areas in re-
to the house is a matter for
reference to: ease of access
indoors; convenience for ser-
In relation to outdoor factors, 
following are important: place-
for sun, shade, summer breezes;
eca of privacy desired; utilization
asant outlook; circulation. De-
ing on the importance assigned 
e preceding factors, house and
cape design may be modified to come or enhance existing natu-
ations.

in planning, constructing, and
quipping outdoor living areas, the
following are important: sizes, dimen-
sions, and clearances adequate to con-
tain furniture, equipment, and persons
hing them; foundation, structure, and surfaced areas to suit their
purpose; and furniture and equip-
ment for lighting, shade, radio, water
upply, and similar services.

ne-Saver Standards on the fol-
ages present methods of con-
strucing common outdoor units. Data
have been assembled from material
illed by A. D. Taylor, Landscape
itect, President, American
ociety of Landscape Architects. All
formation reflects common practise.

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At left, garden terrace, house of
Beatson, Flintridge, Calif.; Mar-
 Maybury, architects. Above,
terrace, house of William H. Baldwin,
New Canaan, Conn.; Cameron Clark,
architect.

CHECKLIST for OUTDOOR AREAS

Traffic
Public areas
Lawn, planting area, entrance drive, etc.,
acing on public highway
utility areas
Service court; service entry; drying yard;
refuse disposal area; garage; kitchen or
etable garden; children’s play area;
tool and equipment storage space
Living areas
Porch—living or dining; terrace—living or
dining; seclusion area; cooking area—out-
door fireplace, grill, barbecue; sunbathing
area—deck, garden, etc.; exercise area;
obby area; game area; court; pleasure
gardens, pools, fish, lily, reflecting, swim-
ing; court, patio; lawn; garden house;
bor, trellis

BOUNDARIES, CIRCULATION
Walls, fences
aining; boundary; ornamental
Walkways
Entrance; service; garden
Roadways
Entrance drive; service drive; private road;
idle path

SERVICE SYSTEMS
Water supply
Lawns; planting areas; gardens—vegetable
and pleasure; pools—fish, lily, reflection,
imming; service, as car-washing, etc.;
arden structures, outbuildings, etc.; hobby
areas
Drainage
Subsurface; surface; garden structures, out-
buildings, pools, etc.

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

RICHARD ARCHITECT and ARCHITECTURE
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 features than those expressly indicated. Walkways, for instance, is similar to terracing.

CATCH BASINS

VITRIFIED SEWER PIPE

INLETS

VITRIFIED SEWER PIPE

OVAL PARK INLET

BUILDING TYPES

ARCHITECTURAL RECORD
OUTDOOR AREAS – GUTTER AND CURB CONSTRUCTION

GUTTERS LOCATED ONE HALF WITHIN THE PAVED ROAD SURFACE
Note: This type not ordinarily practical

TENDED VEMENT E 3/8" = 1'-0"

GUTTERS LOCATED OUTSIDE OF PAVEMENT

ICK TTER

BLESTONE ITTER

Bóbblestone ITTER

N SIMILAR TO THAT ABOVE

CONCRETE GUTTER

CONCRETE AND CURB

SCALE 1/2" = 1'-0"
Except as noted
Prepared by ALBERT D TAYLOR LANDSCAPE ARCHITECT

BUILDING TYPES 93
TIME-SAVER STANDARDS
OUTDOOR AREAS—
WALKWAY CONSTRUCTION

STEPPING STONES
SCALE: \(\frac{3}{16}'' = 1 - 0''\)

FLAGSTONE
SCALE: \(\frac{3}{16}'' = 1 - 0''\)

MACADAM OR GRAVEL
SCALE: \(\frac{3}{16}'' = 1 - 0''\)

MACADAM (WITH CURBS)
SCALE: \(\frac{3}{16}'' = 1 - 0''\)

CONCRETE (FROST RESISTING)
SCALE: \(\frac{3}{16}'' = 1 - 0''\)

WALK DRAINAGE

GRASS GUTTER

DRAIN INLET LOCATIONS

Prepared by A. D. TAYLOR LANDSCAPE ARCHITECT

OCTOBER 1938 issue of ARCHITECTURAL RECORD
OUTDOOR AREAS—
DRIVEWAY CONSTRUCTION

TURF DRIVE
- 4' AGRI TILE
- MIX STONES 2'-6" IN SIZE WITH SANDY LOAM TO FILL Voids
- RISE TO CROWN 1'-6"

GRAVEL
- SCREENED PIT GRAVEL 3'-6"
- COARSE GRAVEL, CRUSHED STONE OR SLAG 1'-3" SIZE
- NOTE: LIMESTONE SCREENINGS MAY BE REQUIRED AS BINDER PARTICULARLY FOR WASHED GRAVEL SURFACE
- RISE TO CROWN 3'-6"

ASPHALT (OR FINLEY PROCESS)
- ASPHALT OR FINLEY PROCESS OF CONSTRUCTION
- MARL, SHELL OR CRUSHED STONE, ROLLED WITH 10 TON ROLLER
- NO SUBDRAINAGE NECESSARY FOR ROADBED
- RISE TO CROWN 4'-6"

MACADAM WATERBOUND
- CRUSHED STONE 1'-2"-3" SIZE
- BITUMINOUS MACADAM CRUSHED STONE OR SLAG
- BINDER WITH 1/4" SCREENINGS
- CRUSHED SLAG OR STONE 2'-3" SIZE
- RISE TO CROWN 4'-6"

MACADAM BITUMINOUS
- BRICK SANGEBED 1:3:1 CONCRETE CURB 6" CONCRETE BASE 1:3:6

CONCRETE
- 1:1:2:3 CONCRETE 6" CONCRETE BASE 1:3:6

CUT, FILL AND ROAD DRAINAGE
- CINDERS TAMPED
- AGR. TILE, TAR PAPER OVER JOINTS
- CENTER DRAIN (NARROW ROADWAYS)

SIDE DRAINS
- 1:4" = 1'-0"

Prepared by A.D. TAYLOR LANDSCAPE ARCHITECT
House for Chester Lincoln, SAN MARINO, CALIFORNIA

H. ROY KELL
Architect

First floor

Second floor

BUILDING TYPES

96

ARCHITECTURAL RECORD combined
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
Electrical installation: Conduit and safecote wire

Actual cost, 36c per cubic foot. Architect estimates present cost at 42-44c
House for J. E. French, PALM SPRINGS, CALIFORNIA

CHARLES O. MATCHATE
Architect

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 louver, Shutter Awnings Co.
Insulation: Coast Insulating Co.
Doors: Garage, Overhead Door Co. of Southern California

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

EQUIPMENT
Heating and ventilating: Gas, forced air, Payne Furnace Supply Co.; gas hot water heater, General Water Heater 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

BUILDING TYPES

ARCHITECTURAL RECORD combined with
Garage seen in photo on opposite page also contains servants' quarters. Above, patio; below, left, dining bay; right, bedroom interior.
THE LARGE WINDOWS shown in plan, and the use of flagstone within doors, serve to tie the house to the surroundings. Yet privacy from the highway is maintained, as can be seen above. The house crowns a hilltop; the living room's south bay overlooks a wide valley. The "garden house" contains guest accommodations, and is secluded behind planting.

At left, first floor and plot plan; above, second floor plan
Laided ceiling levels and ranges from carpet to flagone on the floor divide the ces, rather than partitions.  

The use of cove lighting the dining area (top). At nt, fireplace end of the several living space.
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.
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
The house for L. W. Ross, Seattle, Washington

SMITH, CARROLL and JOHANSON Architects

A SLOPING LOT, all living areas are here located on the top floor, most of the basement being used for recreation areas.

MATERIALS AND EQUIPMENT

CONSTRUCTION

Exterior
- Beveled 3/4" x 10" cedar siding
- 16" Certigrade cedar shingles left natural

Interior:
- Celotex lath on ceilings
- Celotex Corporation lath and studs
- Wood: Blue Diamond plaster on wood lath and studs
- Oak in living portion
- Linoleum in kitchen
- Armstrong Cork Products Co.
- Fir, painted

EQUIPMENT

- Heating: Roscoe
- Plumbing: Pipe, galvanized iron; fixtures, Standard Mfg. Co.
- Lighting: Range; refrigerator; provision for dish washer
- Miscellaneous: Illumination of grounds; fire hose for emergency use
- Heating and wiring: Knob and tube system
- Cost: 2.9c per cubic foot

RICAN ARCHITECT and ARCHITECTURE

BUILDING TYPES

103
House for J. O. Heppes, HINSDALE, ILLINOIS

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

INTERIOR
Trim: Enameled wood; study, straight-sawed white oak finished with two coats of Minwax, The Minwax Co.
Above, dining room; below, hall.

Walls and ceilings, three coats and oil paint: walls of living room, dining room and bedrooms, papered; walls and ceilings of kitchen, room and lavatory above wainscot, painted.

M E N T:
- Oil-fired warm-air furnace with duct system, General Electric company.
- Fixtures, Kohler Co.
- Installation: Wiring and fixtures, Cox Electric Co.
- Hardware: Sargent & Company
House for Mrs. Fred J. Reynolds, GLENCOE, ILLINOIS

PERKINS, WHEELER and W ARCHITECTURAL RECORD combine

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"x8" cypress
Roof: Red cedar shingles, 5" to weather; Y. P. sheathing spaced 2"; flashing, gutters and leaders, 26 ga. "Tancan"; Republic Steel Corp.
Sash: Wood double hung and casement
Doors: White pine; garage, lift type, McKee Door Co.
Painting: Lead and oil

**INTERIOR**
Walls: ½" 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, kalomira; 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.

Cost including fees, excluding land, landscaping, furnishings: $24,300
House for Dr. H. A. Jarre, GROSSE POINTE FARMS, MICH.  HEWLETT and LUCKENBILL, Archit.
MATERIALS AND EQUIPMENT

FOUNDATION
Concrete block

STRUCTURE
Wood frame

EXTERIOR
Walls: Brick veneer
Roof: Wood shingles; "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 "Wall-hide" for interior undercoat. Pittsburgh Plate Glass Co.; "Ripolin" enamel, The Glidden Company; "Minwax" floor finish, Minwax Co., Inc.

EQUIPMENT
Waterproofing: Asphaltic, exterior basement wall
Hardware: Dull chrome
Cost, house only: 37c per cu. ft.

CAN ARCHITECT and ARCHITECTURE
House for Albert J. Scheu, ST. LOUIS COUNTY, MISSOURI

GRAY and PAU
Archit
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: Gimo rock wool batts, General Insulation & Manufacturing Co.
Painting: "Creso-Dipt" white brick paint, Creso-Dipt Co., Inc.

INTERIOR
Floors: Random width oak flooring on first floor; second floor, oak strip flooring. First floor, Wood Mosaic Co.; baths and lavatories, National Tile Co.
Trim: Poplar, enameled
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.
Cost, including fees: 41.9c per cubic foot
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 stucco being blue inside and out; walls, white; roof, variegated reds; and floors, formed by the exposed second floor planking, stained red-brown.

At left, first floor; above, second floor.
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 planting
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 controls; "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
House for Miss Dorothy Greeno, BILTMORE FOREST, N. C.  
HENRY IRVEN CAIN  
Architect

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

FOUNDATION
Concrete footings, common brick walls

STRUCTURE
Wood frame

EXTERIOR
Common brick and red cedar shingles, frame
Wood windows; metal casements, Dearborn Steel Products Co.; screens, "Rolscreen," Aluminum Company of America
Clay tile, B. Mifflin Hood Co.; copper flashings; G. I. downspouts and gutters
Insulations: 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
Hardware: Russell & Erwin Mfg. Co.

Cost: $16,000
HOUSE FOR
MATERIALS AND EQUIPMENT

Marcellus McLaughlin, CERMANTOWN, PA.

BUILDING TYPES

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"
Painting: Stained and waxed walnut pan
library and stair spandrels; all other int
woodwork painted.

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

RICHARD W. MECASKI
Architect

PHOTOGRAPH BY H. H. WALLACE
House for Dr. Louis E. Williams, MADISON, NEW JERSEY

Paul W. Dra
Architect

This house includes a doctor's suite consisting of reception room, office and examination room. The suite has a private entrance, adjacent to the front door. The first floor lavatory can serve 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.
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, cypress
Doors: Special and six panel Colonial, pine, painted
Trim: Special and Curtis stock

EQUIPMENT
Heating: Gas fired unit, Fox Furnace Co.; winter air-conditioned heat; temperature controls, Minneapolis-Honeywell Regulator Co.; gas hot-water heat
Plumbing: Fixtures, Kohler Co.; piping, American Brass Co.
Weatherstripping: Door and window metal
Electrical Installation: Fixtures, A. W. Hendrickson & Co.
Kitchen: Range, gas; refrigerator, coral; Electric Co.
Hardware: Colonial brass

Cost: 42c per cubic foot
view from the north, above, vs screening of the service from living portions of house. The small enclosed space between the dining room and living porch is an auxiliary area.

Second floor

Basement

First floor

BUILDING TYPES
House for Mrs. Sonja S. Hohe, HARRISON, NEW YORK

JAMES JENNINGS BEV, Architect

Plot plan

Below, first floor; above, second floor

BUILDING TYPES
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, Lomco, 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
Fireplaces: Dampers, H. W., Covert Co.
Inclinator: Kerner Inclinator Co.
House for Edward Melnick
BROOKLINE, MASS.
SAMUEL GLASER
Architect

Plans: at left, first floor; above, second floor. Top, garden elevation; center, detail front ent

BUILDING TYPES

ARCHITECTURAL RECORD combined
ERIALS AND IMPLEMENTATION

IDATION

ale blocks 12" thick and filled cement.

TURE

concrete, reinforced con­
beams and lintels; pre-cast
ite joists and reinforced con­
ors

IOR

inder concrete walls, cov­
with 1" Portland cement
; skin coat, California Stucco
Co.; glass block, Corning­
ough Plate Glass Co.
Steel, Detroit Steel Products

ich built asphalt shingles
& Son, Inc.; built-up deck

ood to detail

ion: Walls, double airspace
 Reynolds metalization, type B
id Corp.; ceiling under roof
ick wool, U. S. Gypsum Co.

IOR

oleum, Congoleum-Nairn.
; Wood stud, gypsum lath,
d plaster
ngs: Wire lath and painted

; "Razo" flush, Paine Lumber

IENT

ter: Winter air-conditioning
; Moncrief
iur: Fixtures, Briggs steel;
ner hot and cold water supplies
ater: First floor feed, Kerner
ator Co.
em: Electric refrigerator,
; electric range, Westing­
Electric & Manufacturing Co.
ost: 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 liv­
ing 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 cup­
boards.
House for John C. Smith, NEW CANAAN, CONNECTICUT

WALTER BRADNEE KI
Architect

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.
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