ARCHITECTURAL RECORD

1935

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THE

ARCHITECTURAL RECORD

VOLUME 78 NUMBER 3 SEPTEMBER, 1935

HOUSE IN ZURICH, SWITZERLAND. Max Ernst Haefeli, Architect. Foto Finsler

Frontispiece

RESIDENTIAL CONSTRUCTION A NEW FACTOR IN THE 1935 RECOVERY TREND

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PORTFOLIO OF SPECIAL BUILDING TYPES

New York Terminal of Greyhound Lines-Thomas W. Lamb, Architect • Beauty Clinic for Cosmetic Demonstrations by Good Housekeeping Magazine, New York-Eleanor Lemaire, Designer • Art Center School in Los Angeles, California—Alterations by Kem Weber, Designer • Study and Dressing Alcove for Mr. Oscar Moss, Los Angeles, California—Edgar Bissantz, Architect • A Field House for a Park-Maynard Lyndon, Architect • Parque de la Revolucion, Guadalajara, Jalisco, Mexico-Luis Barragan, Architect; Juan Luis Barragan, Civil Engineer • Atlantic Big Bear Market, Hollis, New York-B. Sumner Gruzen, Architect • Diving Tower and Bathing Pavilion, Wiesbaden, Germany-Franz Schuster and Edmund Fabry, Architects; Wilhelm Hirsch, Landscape Architect • Theater, Oslo, Norway—Gudolf Blakstad and Jens Dunker, Architects • Stadium— Arthur J. Barzaghi, Engineer • Sports Building, Kent School, Kent, Connecticut—Willis N. Mills, Architect • Chapel in Pargas, Finland— Erik Bryggman, Architect • "The Pewter Mug" Lunch Room, Kent, Connecticut—Designed by Allan McDowell • Offices, Editorial Publications, Inc., New York-William Lescaze, Architect . Boys' School, California Military Academy—Richard Neutra, Architect • Patterson Park Junior High School, Baltimore, Maryland—Wyatt and Nolting, Architects

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OPPORTUNITIES IN SCHOOL MODERNIZATION. A SURVEY OF SCHOOL CONDITIONS AND PROSPECTS IN SCHOOL CONSTRUCTION. By William G. Carr, Director, Research Division, National Education Association

201-204

THE WORKS-RELIEF PROGRAM. By L. Seth Schnitman, Chief Statistician, F. W. Dodge Corporation

21-24 (adv.)

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13 (adv.)

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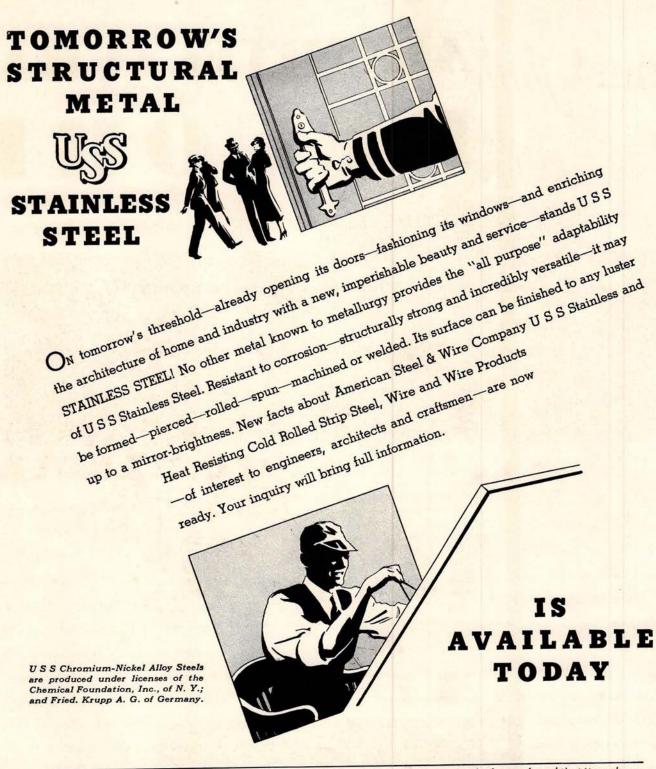
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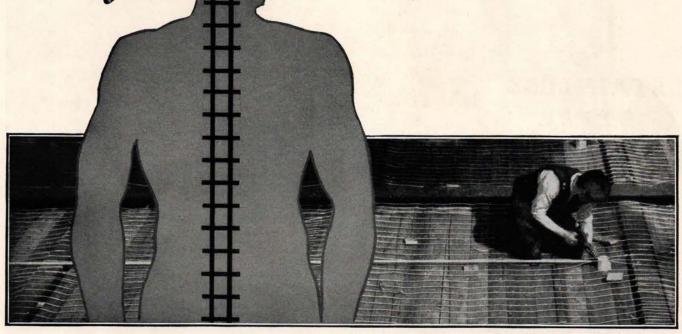
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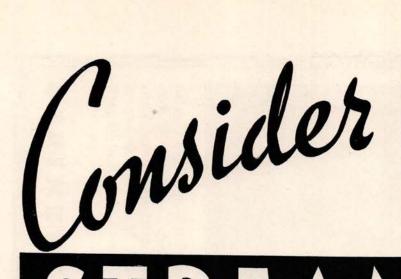
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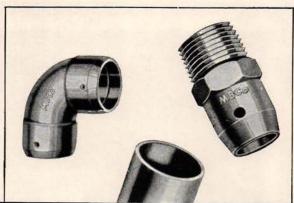
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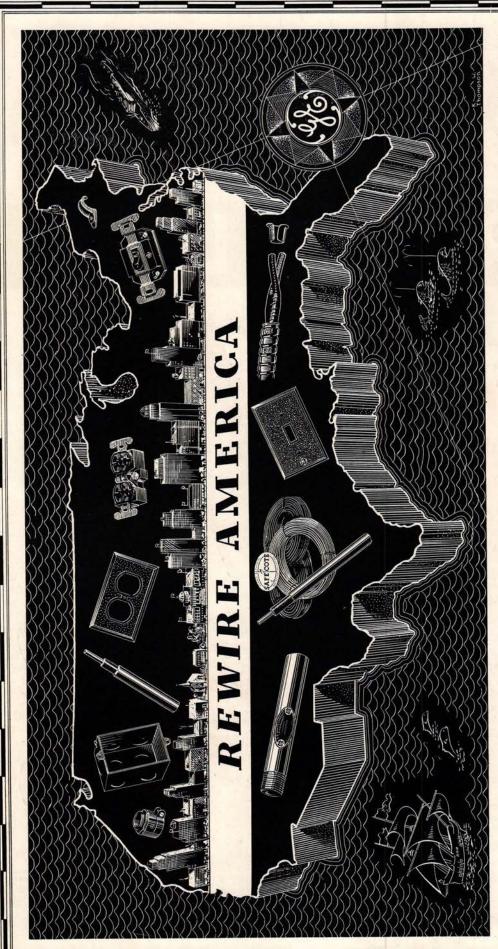
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Formica Cocktail Lounge in a Big London Hotel.

The British like Formica for wall covering and table tops well enough to import it for really fine jobs; the pictures show what they do with it, after they get it.

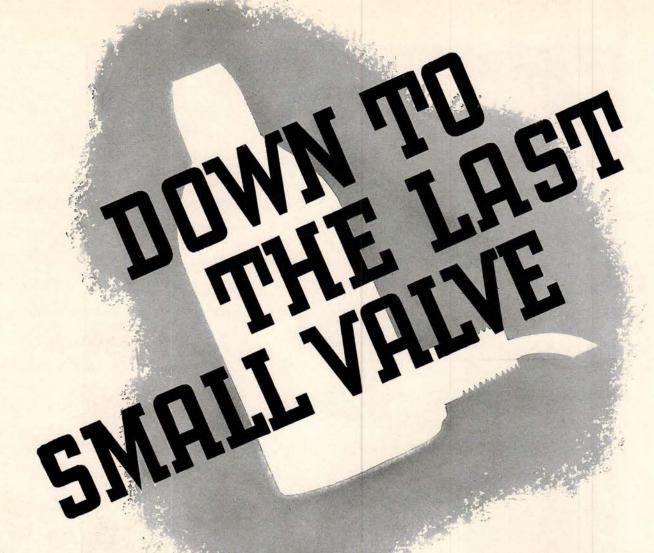
This is a new cocktail lounge in the Regent Palace Hotel, in Picadilly Circus, designed by Oliver P. Bernard, a well-known London Architect. The walls are Formica in alternate stripes of black, red, and gray. The table tops are blisterproof with inlays made at the Formica factory.

Nowhere is there a more handsome, more modern wall paneling available than you can get in Formica; nor more durable blisterproof table tops.

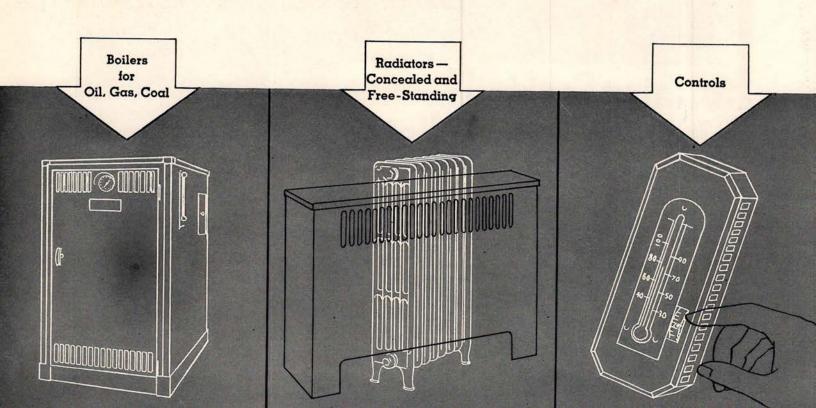
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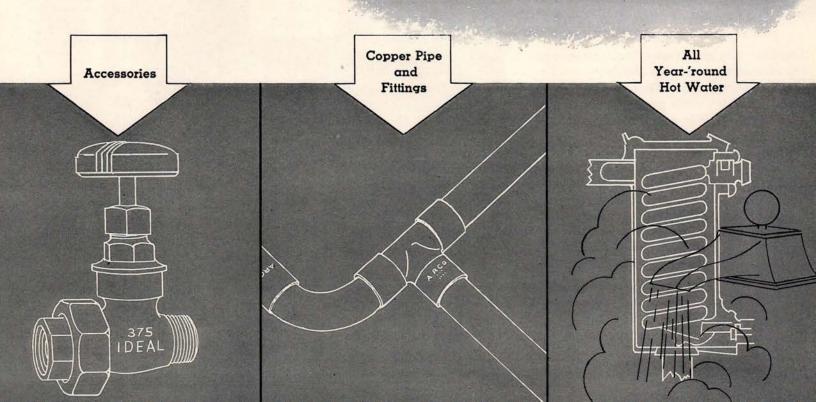
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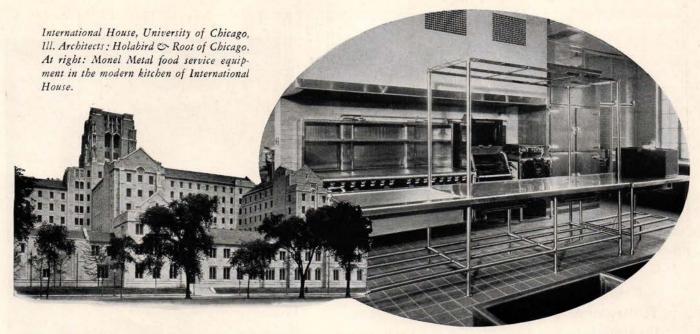
IN THE ROOFING BUSINESS ?



*Nation-wide contest among architects by General Electric and Architectural Forum for best homes for modern living.







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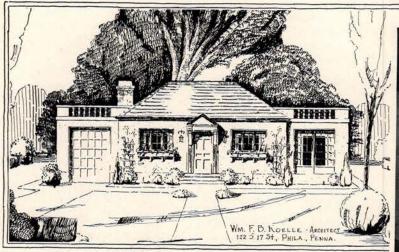


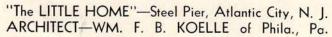
Monel Metal is a registered trade-mark applied to an alloy containing approximately two-thirds Nickel and one-third copper. Monel Metal is mined, smelted, refined, rolled and marketed solely by international Nickel.

Above: The Monel Metal kitchen in the Administration Building of the Board of Education, Philadelphia, Pa. Architect: Irwin T. Catharine, Philadelphia, Pa.

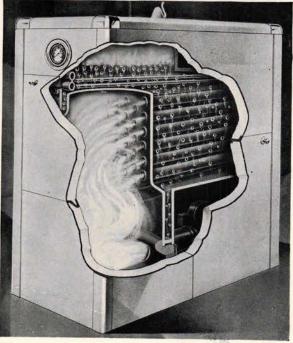
From this spacious Monel Metal kitchen comes the food which helps keep Notre Dame's famous athletes in championship condition. Note the 58foot Monel Metal canopy over the range. Architects: Maginnis and Walsh, Boston, Mass.







This is the first structure completed under direction of the Federal Housing Administration in its campaign to stimulate home building. A striking example of today's low-cost home-building possibilities, it also constitutes



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The features of the OIL-EIGHTY AUTOMATIC which decided its selection, are given in the column at the left. Including as they do, everything that could be desired in a boiler for domestic oil heating, they argue compellingly for the selection of this boiler for any home, large or small, be it a new project or one of modernization.

OIL-EIGHTY Catalog A gives the full details. A copy is yours for the asking.

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SWEDISH COOPERATIVE WHOLESALE SO-CIETY'S ARCHITECTS' OFFICE. Kooperativa Förbundet Bokförlag, Stockholm. 148 pages. Illustrated. \$2.50

In Sweden cooperation is an economic popular movement. Its foremost aim is to provide for members food-stuffs and other necessaries in the best and cheapest way. Local societies are spread over the whole country under the central organization, the Cooperative Wholesale Society, which erects industrial plants, offices, shops and business premises, warehouses, popular restaurants, and apartments for employees and in some instances for members of the wholesale and retail societies.

In order to look after these building operations when voluntarily desired by the societies, the Architects' Office was established, constituting a collective group of ten architects under the direction of Eskil Sundahl, chief architect. A civil engineer is at the head of the constructors and costing clerks. About 2,000 shops have already been erected or remodeled, and some thirty warehouses and factories. In some cases, packages, labels, and so on, have also to be designed. Many apartments have been built and this has led to experiments in the production of low-priced furniture and household utensils.

The book, celebrating the Office's tenth birthday, contains numerous illustrations of different kinds of shops, warehouses, factories, houses, meeting halls, cafeterias, restaurants, theaters, also furniture and glassware.

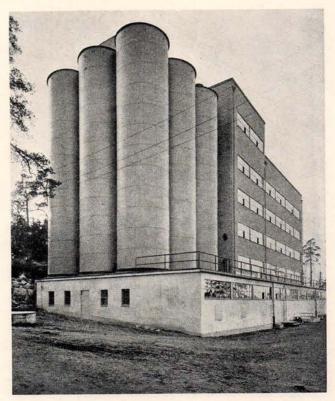
PARISH CHURCHES OF ENGLAND. By J. Charles Cox, LL.D., F.S.A. Edited, with Additional Chapters, by Charles Bradley Ford. Charles Scribner's Sons, 597 Fifth Avenue, New York. 118 pages. Illustrated. \$2.75

The text tells in non-technical language the story of some ten centuries of building, extension and worship, dealing in turn with planning, structural design and interiors. Dean Inge, in a foreword, says: "It is the great merit of this admirable book that it takes us into every part of England, and through every stage of English history."

It is pointed out that nearly all parish church plans may be ultimately traced back to one of three fundamental types in use during the twelfth century. These are: (1) the nave and sanctuary (two-cell type); (2) the nave, chancel, and sanctuary (three-cell type); and (3) the cruciform or cross church, with nave, transepts, sanctuary and central tower. Churches of these types are described and illustrated, including plans and perspectives, and the evolution traced from these to other types. Informative paragraphs are included on towers, spires and steeples, porches and doorways, exterior stonework, vaults and roofs, fittings in stone, wood and metal, tombs, monuments and brasses, wall paintings, stained glass.

SYMBOLS FOR DESIGNERS. By Arnold Whittick. Crosby Lockwood & Son, Ltd., Stationers' Hall Court, London. 168 pages. Illustrated. 12s.6d. net

The book opens with a chapter on the meaning of symbolism in the senses accepted by authorities in language, mathematics, psychoanalysis, art and painting, leading into a section on architectural symbolism in which the author expresses the opinion that the shapes of a building are the symbols of the thought that created the building. The title page reads, A handbook on the application of



OATMEAL MILL AT KUARNHOLMEN, SWEDEN KOOPERATIVA FORBUNDET ARCHITECTS' OFFICE

symbols and symbolism to design for the use of architects, sculptors, ecclesiastical and memorial designers, commercial artists and students of symbolism.

YEAR BOOK, 1935, NEW YORK SOCIETY OF ARCHITECTS, 101 Park Avenue, New York City. 320 pages

This annual, now in its twenty-fourth edition and published for the use of practicing architects in New York, contains all laws, rules and regulations pertaining to building work in the metropolitan area. The bulk of the book is devoted to the Multiple Dwelling Law and the Building Code of the City of New York, both of which are given in complete detail. At the end of the book there is a series of useful tables and charts as well as a list of manufacturers, dealers and contractors. A list of architects is also given.

PROCEEDINGS OF THE CONFERENCE ON LOW COST HOUSING. Under the auspices of the Department of Architecture, Georgia School of Technology, The University System of Georgia. Georgia School of Technology, Atlanta, Ga. 126 pages

Transcripts of the speeches on the Tennessee Valley Authority housing program, subsistence and rural housing, public housing, and urban housing, delivered at the Atlanta Conference on May 3 and 4 of this year.

THE HOUSE OF HEALTH: HOW TO BUILD IT. By Odd Albert, C.E., M.S. Opla Company, P.O. Box 66, East Orange, N. J. 80 pages. Illustrated. \$1

A series of articles on house construction and equipment, written and edited for the layman.

DER KONSTRUKTIVE HOLZHAUSBAU. By Dr. Ing. Franz Klimscha. Franz Deuticke, Leipzig and Wien. 57 pages. Illustrated. M 3.20

A study of wood frame construction.

CALENDAR OF EXHIBITIONS AND EVENTS

September 16 Closing date for entries in "Terra Cotta Wall Block Competition," sponsored by Chicago Architectural Club, 1801 South Prairie Avenue, Chicago.

October 10-19 Architectural Lead

-19 Architectural League Exhibition, Grand Central Palace, New York City.

October 15 Closing date of eighth annual small house competition conducted by House Beautiful magazine, 572 Madison Avenue, New York City. Rules

and conditions sent on application.

January 27-31 Fourth International Heating and Ventilating Exposition, Chicago.

NEWS OF THE FIELD

Carl C. Ade, architect and engineer, formerly located at 80 East Avenue, has moved his offices to 52 James Street, Rochester, N. Y.

Harold L. Curtiss, landscape architect, has changed his address from 208 Engineering Building, University of Wyoming, to U. S. Forest Service, Ogden, Utah.

Wallace P. Beardsley is contining the practice of the architectural firm of Hillger and Beardsley, Seward Block, Auburn, New York. His partner, Samuel E. Hillger, died July 18.

Allen John Strang and Hamilton Beatty announce the opening of an office for the practice of architecture and city planning at 610 State Street, Madison, Wisconsin, under the name of Planning Associates.

CAPE COD BRIDGE

A stainless steel plaque, designating it as the most beautiful monumental steel bridge built last year, has been attached to the highway bridge across Cape Cod Canal. The plaque was awarded by the American Institute of Steel Construction. The bridge was designed by the engineers, Fay, Spofford and Thorndike, in collaboration with the architects, Cram and Ferguson.

HOUSE BEAUTIFUL COMPETITION

House Beautiful Magazine announces its eighth annual small house competition. This competition which closes October 15 is for photographs of actual houses. These are divided into three classes and any architect or architectural designer may submit as many houses as he wishes in each class. The first class includes new houses of eight rooms and under; the second class new houses of nine to twelve rooms; the third class is for remodeled houses of not more than twelve rooms. These houses must have been recently built or remodeled and not published in a national magazine (architectural magazines excepted).

Two prizes of \$500 and \$300 are offered in the first two classes; and one prize of \$300 in the third class. In addition several houses will be selected for publication, for which an honorarium of \$50 will be paid.

The competition will be judged by a jury consisting of Arthur H. Samuels, editor of *House Beautiful*; Ethel B. Power, who is conducting the competition, and three members of the American Institute of Architects.

Further details can be obtained by addressing House Beautiful, 572 Madison Avenue, New York City.

HOUSES, INC.

General Electric Company has organized a separate company known as Houses, Inc., according to a joint statement by Gerard Swope, president, and Owen D. Young, chairman of the board of General Electric. It will be the purpose of Houses, Inc., to cooperate with others in the development of houses of any type which seem worthy and promising; to conduct research work; and to assist in the management and financing of such enterprises.

Charles E. Wilson, vice president of the General Electric Company, will be chairman of the board of the new enterprise; Foster Gunnison, who has been associated with Houses, Inc., since its inception, will be president; James L. Hagar and J. A. Olson, vice presidents. The directors, in addition to Messrs. Wilson, Gunnison, and Hagar, will include P. D. Reed, J. W. Lewis, and Vice President T. K. Quinn of the General Electric Company. Offices will be located in the General Electric Building, New York.

Since it is primarily concerned with the interior mechanism of the house, General Electric Company has not been, nor will Houses, Inc., be, the proponent of any particular type of construction inclosure, it was announced, whether it be prefabricated, partly prefabricated, or the traditional inclosure.

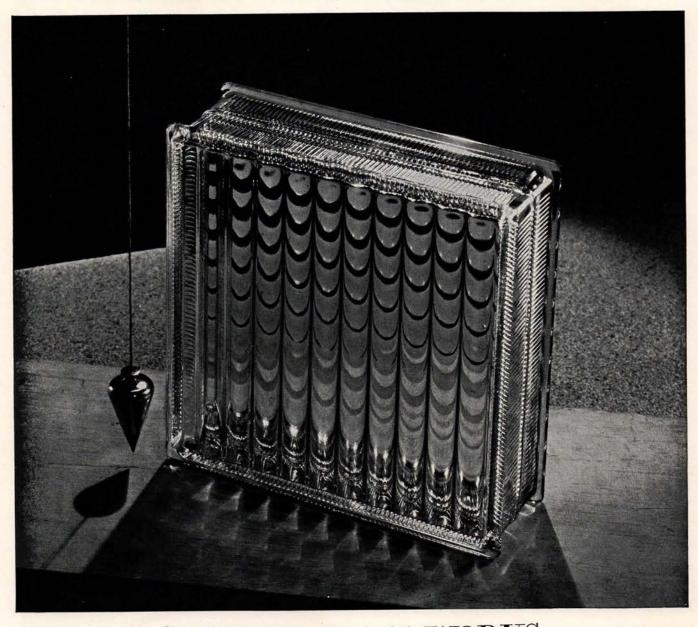
ARCHITECTS PLEDGE AID TO ROOSEVELT

Urging the use of "every technical and artistic resource," the American Institute of Architects has pledged its aid to Federal, state, and municipal governments in creating a public architecture which will advance the cultural standards of the nation, according to an announcement by Stephen F. Voorhees of New York, president of the Institute.

The Institute, through its officers, chapters, and committee on public works, is ready to cooperate "in the development of methods and policies for improving and perfecting the planning, design, and construction of government buildings," and has so informed President Roosevelt, the appropriate committees of Congress, and the heads of the departments and independent agencies of the government concerned with the planning of government structures.

THE NEW PYREX GLASS CONSTRUCTION UNIT

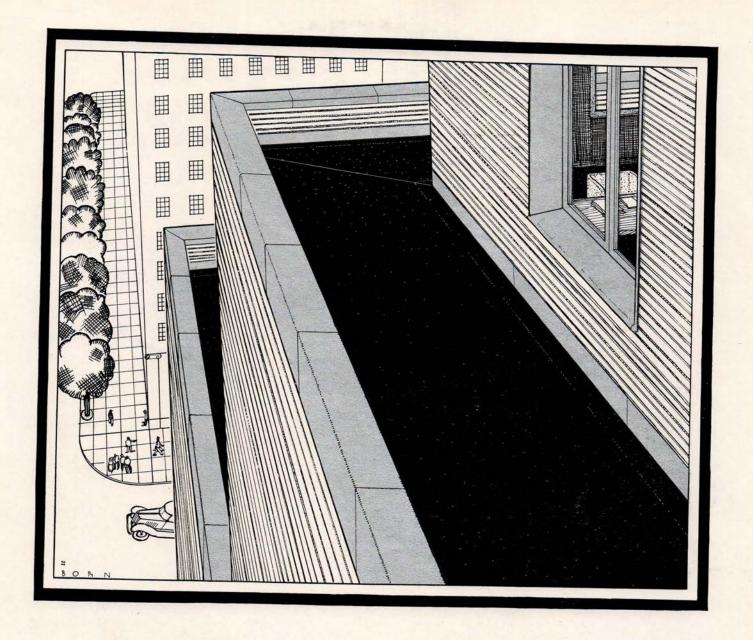
• Scientifically designed fluting on inside faces of unit provides ever-changing decorative effect—high diffusion of light—obscures images—produces no lens effect—made of Pyrex Brand heat-resisting glass with a coefficient of expansion second only to natural quartz—partial vacuum—size 11¾" x 11¾" x 4".



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Architectural Division, Corning, N. Y. 748 Fifth Avenue, New York

SLOANE-BLABON LINOLEUM for small homes ABOVE: Kitchen. INSET: Living-room RIGHT: Hall and bathroom The variety of patterns, colors and qualities available in Sloane-Blabon Linoleum gives you an opportunity to create a really distinctive floor, no matter how small the room. Illustrated are a few small-home rooms which owe their distinctiveness in large part to the use of Sloane-Blabon Linoleum. For pattern reproductions, samples, etc., write Sloane-Blabon Corporation, 577 Fifth Ave., N. Y.



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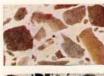
The inherent characteristics of Alcoa Aluminum point the way to eliminate maintenance on copings. The metal itself defies the corrosive attack of the atmosphere and its burden of smoke and fume. The manner of construction forever eliminates the cost of pointing \star Requirements of individual design may be attained either in castings or extruded shapes that are light in weight \star The amazing versatility of this metal gives the designer full scope at a cost that is entirely comparable with that of the more traditional materials. Aluminum Company of America, 1867 Gulf Building, Pittsburgh, Pennsylvania.





Fine Atlas White terrazzo floor, photographed in full natural color, in U. S. Customs House and Appraisers' Store, Philadelphia. United Marble Company, terrazzo contractor.

Ritter and Shay, architects. Both of Philadelphia. In panels below, at left and right, are actual-size, true-color terrazzo samples which illustrate marble and pigment combinations similar to those used for this floor.







SOMETIMES you want quiet dignity in the fine terrazzo floors you design. Then you select from the wide color range in marble and pigment precisely those colors which will give that tone. And from your own experience you make the design which completes the picture. In fine terrazzo (made with white portland cement) any effect you desire—from bright, vivid colors and bold patterns, to the most subdued tones and design—is simply a matter of your choice and judgment and skill. Fine terrazzo is a true architectural medium. See Sweet's for details, or ask any good terrazzo contractor. Or write direct to Universal Atlas Cement Co. (United States Steel Corporation Subsidiary), 208 South La Salle Street, Chicago.







FEATURES IN THE OCTOBER ISSUE:

Prize-winning designs in the Modernize-Main-Street store front competition sponsored by the Libbey-Owens-Ford Glass Company of Toledo and conducted by The Architectural Record. Accompanying the portfolio of prize winners and honorable mentions will be the report of the jury—Melvin Thomas Copeland, Professor of Marketing, Harvard University; J. André Fouilhoux, New York; Albert Kahn, Detroit; William Lescaze, New York; John W. Root, Chicago; F. R. Walker, Cleveland, and Kenneth C. Welch, Grand Rapids, Michigan.

Editorial and articles on the modernization program of the Federal Housing Administration. Possibilities indicated by the extension of modernization loans up to \$50,000 are appraised.

A portfolio of commercial buildings and stores selected as typical projects eligible for insured loans under the FHA modernization plan.





THE

ARCHITECTURAL RECORD

RESIDENTIAL CONSTRUCTION A NEW FACTOR IN THE 1935 RECOVERY TREND

The spurts of recovery in 1932, 1933 and 1934 were checked mainly because real estate and mortgage conditions remained unfavorable to building. These conditions have now undergone a fundamental change. Rents and real estate values are on the upturn, the Federal reorganization of the home mortgage market has been completed by the action of some forty State Legislatures this spring, and the insured modernizationloan plan has been extended to include loans up to \$50,000 on apartment houses and other income-producing property. In response to improved real estate and mortgage conditions, the building contracts for owner-occupied dwellings have increased uninterruptedly for nine months while residential construction as a whole (apartment houses and hotels as well as all types of dwellings) for the first seven months of 1935 has had a gain of almost 70 per cent over the total for the corresponding period of 1934.

It is this sustained advance in residential construction by private capital, not present in 1932, 1933 and 1934, which accounts for the belief that permanent recovery is now in sight. The building industry is the key to sustained recovery and for the first time since the depression set in private capital is freely supporting a class of construction which normally constitutes 50 per cent of the total volume of building.

Priming the pump, so far as the building industry is concerned, presupposes restored rents and a restored supply of mortgage money. Until this spring the well was too nearly empty to respond to priming, but the chances are that the Work-Relief program of 1935 will actually prime the building pump. The belief that this year's priming will be effective is based on the knowledge that private capital has already set up a revival

in residential construction. This revival is a new factor in the business situation. It differentiates the 1935 recovery trend from those of 1932, 1933 and 1934, and gives a new significance to the Work-Relief program of 1935.

The Act allocated \$900,000,000 to non-Federal public works projects by States, cities and other political units, consisting of airports, auditoriums, hospitals, schools, parks, sewage disposal plants and the like. The Public Works Administration is offering 45 per cent grants to the local governments, which may obtain the remaining 55 per cent by borrowing from the Administration at 4 per cent or by borrowing in the investment market at lower rates.

The non-Federal public works allocation directly affects the building industry and is the largest allocation under the Work-Relief program. Projects amounting to \$25,000 or more will be carried out by the contract method customary in the building industry. Other allocations, though affecting the building industry less directly, are nevertheless important. The purpose of the program is to put an average of 3,500,000 people back to work for one year. Of this number about 500,000 will procure direct employment in the building industry. For each person reemployed in the building industry it is estimated by the Public Works Administration that two will be reemployed by private enterprise in the service and other industries. Given the favorable mortgage and real estate conditions that have made themselves definitely felt this year, the Work-Relief program should have a cumulative or priming effect-increased employment accelerating the rise in rents and expanding the demand for private construction.

PORTFOLIO OF SPECIAL BUILDING TYPES

NEW YORK TERMINAL OF GREYHOUND LINES: Thomas W. Lamb, Architect.

BEAUTY CLINIC FOR COSMETIC DEMONSTRATIONS BY GOOD HOUSEKEEPING MAGAZINE, NEW YORK.

Eleanor Lemaire, Designer.

ART CENTER SCHOOL IN LOS ANGELES:
Alterations by Kem Weber, Designer.

STUDY AND DRESSING ALCOVE FOR MR. OSCAR MOSS, LOS ANGELES: Edgar Bissantz, Architect.

A FIELD HOUSE FOR A PARK: Maynard Lyndon, Architect.

CHILDREN'S PLAYGROUND—PARQUE DE LA REVOLUCION, GUADALAJARA, JALISCO, MEXICO. Luis Barragan, Architect; Juan Luis Barragan, Civil Engineer.

ATLANTIC BIG BEAR MARKET, HOLLIS, NEW YORK:

B. Sumner Gruzen, Architect.

DIVING TOWER AND BATHING PAVILION, WIESBADEN, GERMANY:

Franz Schuster and Edmund Fabry, Architects; Wilhelm Hirsch, Landscape Architect.

THEATER, OSLO, NORWAY:

Gudolf Blakstad and Jens Dunker, Architects.

STADIUM DESIGN:
Arthur J. Barzaghi, Engineer.

SPORTS BUILDING, KENT SCHOOL, KENT, CONNECTICUT: Willis N. Mills, Architect.

CHAPEL IN PARGAS, FINLAND: Erik Bryggman, Architect.

"THE PEWTER MUG" LUNCH ROOM, KENT, CONNECTICUT:

Designed by Allan McDowell.

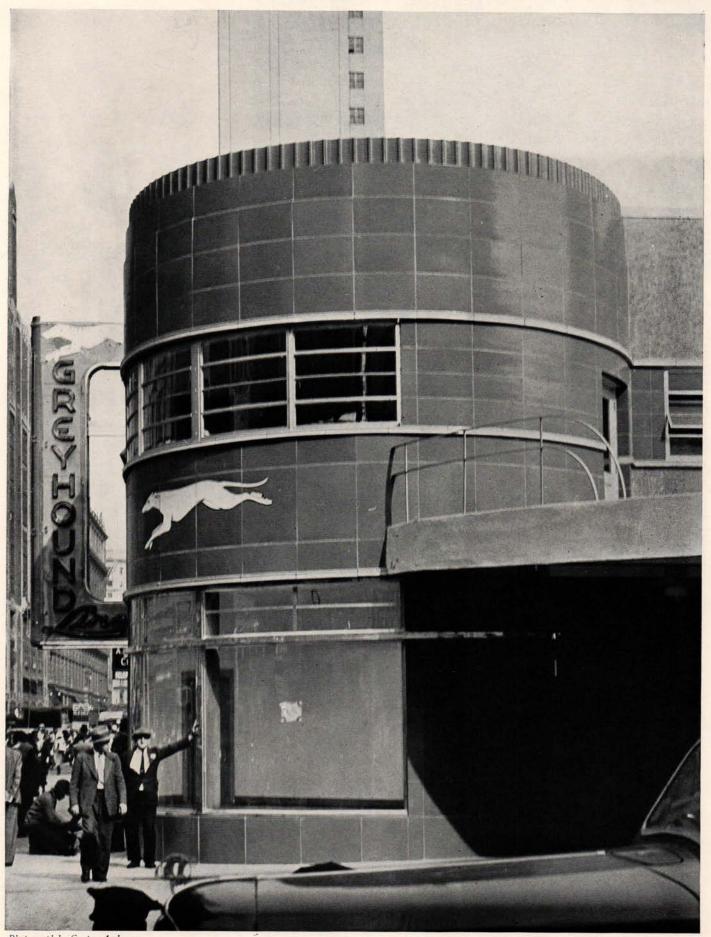
OFFICES, EDITORIAL PUBLICATIONS, INC., NEW YORK: William Lescaze, Architect.

CALIFORNIA MILITARY ACADEMY: Richard Neutra, Architect.

PATTERSON PARK JUNIOR HIGH SCHOOL IN BALTIMORE, MARYLAND: Wyatt and Nolting, Architects.

BUS TERMINAL

NEW YORK TERMINAL OF GREYHOUND LINES . . . THOMAS W. LAMB, ARCHITECT

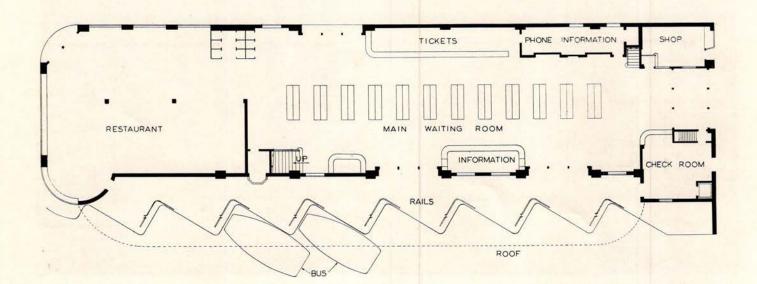


BUS TERMINAL





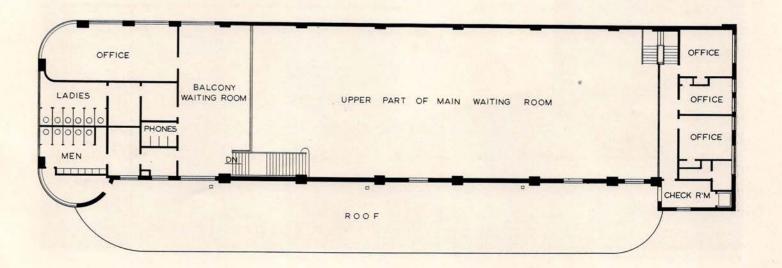
Photographs by Max Zimmerman





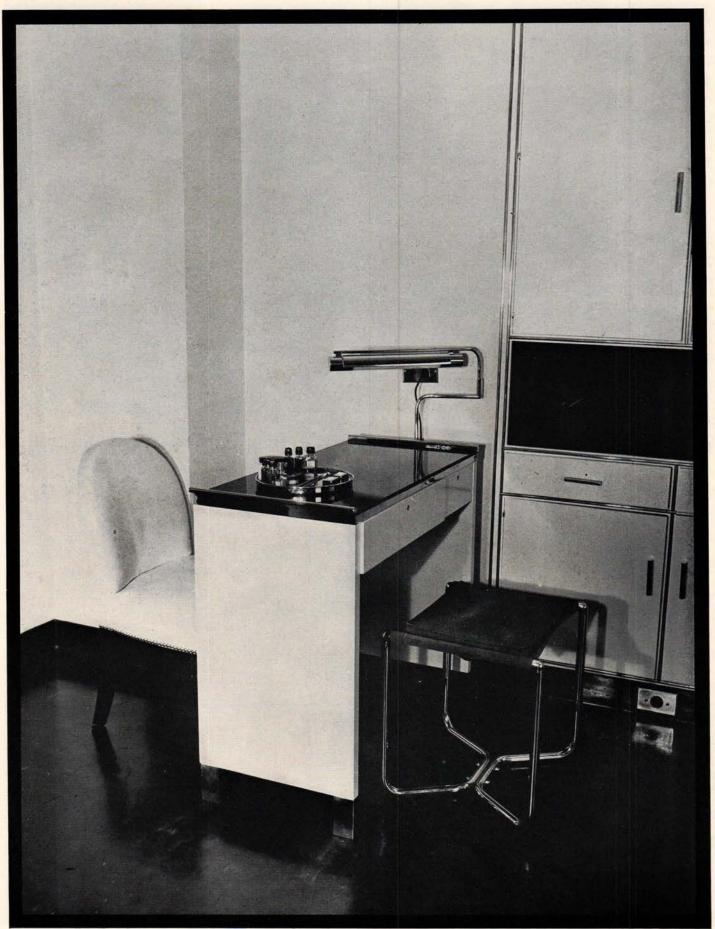
Photograph by Gustav Anderson

NEW YORK TERMINAL OF GREYHOUND LINES . . . THOMAS W. LAMB, ARCHITECT

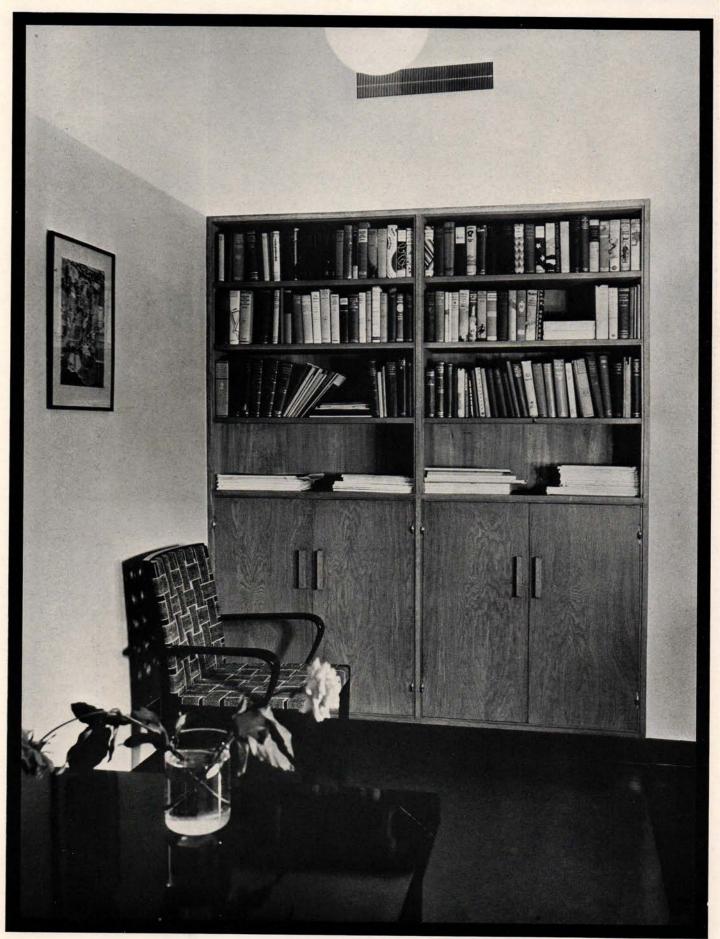


BEAUTY CLINIC

FOR COSMETIC DEMONSTRATIONS BY GOOD HOUSEKEEPING MAGAZINE, NEW YORK



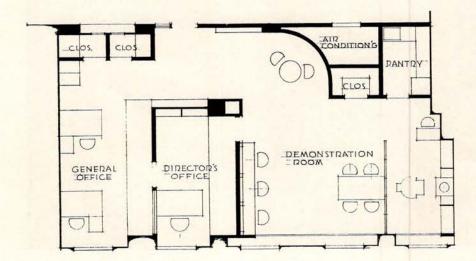
Photographs by Max Zimmerman





Photographs by Max Zimmerman

BEAUTY CLINIC . . . ELEANOR LEMAIRE, DESIGNER GOOD HOUSEKEEPING MAGAZINE, NEW YORK



An important feature of the demonstration room is the long make-up table and its accompanying mirrors with shadowless lighting.

Existing exterior windows are concealed by a glazed partition of sand-blasted glass. The space between the outer wall and this screen has overhead illumination which gives the effect of daylight.

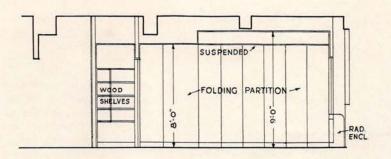
The treatment room which contains an allpurpose beauty chair and wash basin is separated from the demonstration room by a Horn folding partition lacquered in white. This permits privacy for actual testing in the treatment room. A large group may watch a demonstration when the screens are folded back.

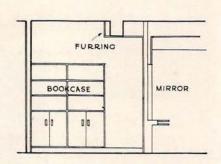
The floor is black linoleum. The walls are white, the doors blue lacquer, and the furred ceiling at entrance citron yellow.

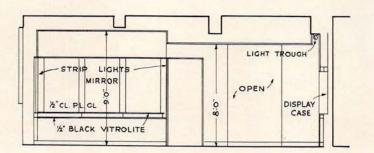
The ceiling conceals unsightly beams and also contains the air conditioning ducts.

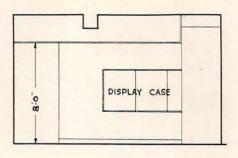


DEMONSTRATION ROOM









ART GALLERY



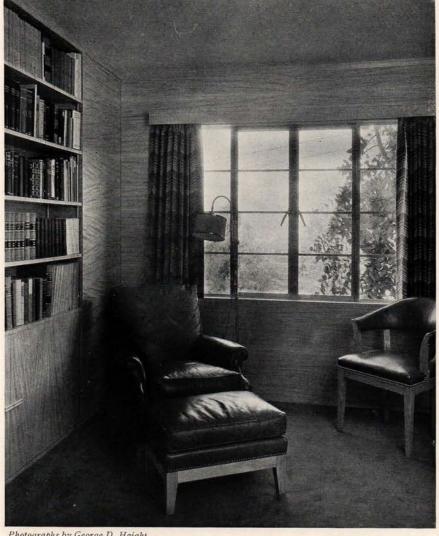
BEFORE ALTERATIONS

ART CENTER SCHOOL IN LOS ANGELES ALTERATIONS BY KEM WEBER, DESIGNER

AFTER ALTERATIONS



ASTUDY





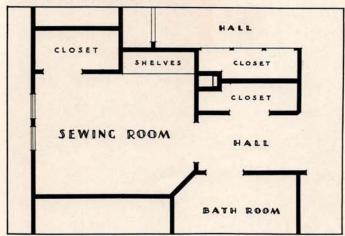
Photographs by George D. Haight

STUDY FOR MR. OSCAR MOSS, LOS ANGELES . . . EDGAR BISSANTZ, ARCHITECT

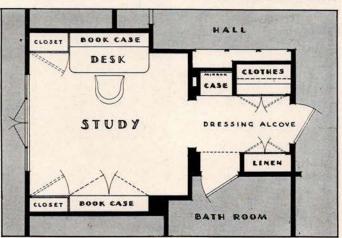
The owner, an attorney and income tax counsellor, needed a private study where he could retire to work or read. A small room, built for a sewing room but used mostly for general storage, was utilized for this purpose, as shown on the plans. The resulting study is larger than the original sewing room, and has adequate shelves and storage space for books, and a convenient dressing alcove. All woodwork is Prima Vera, bleached with oxalic acid and filled

with a clear lacquer, then waxed. The lighting fixtures, blotter pad and desk set are made of polished brass. The chairs were designed for the room, and are upholstered with light tan leather. The ceilings are plastered off-white in the study and chartreuse green in the small dressing alcove. Door knobs are Catalin and brass. The rug is brown and the curtains are olive green and gray. The window is a steel sash unit with rolling screen.

PLAN BEFORE ALTERATIONS



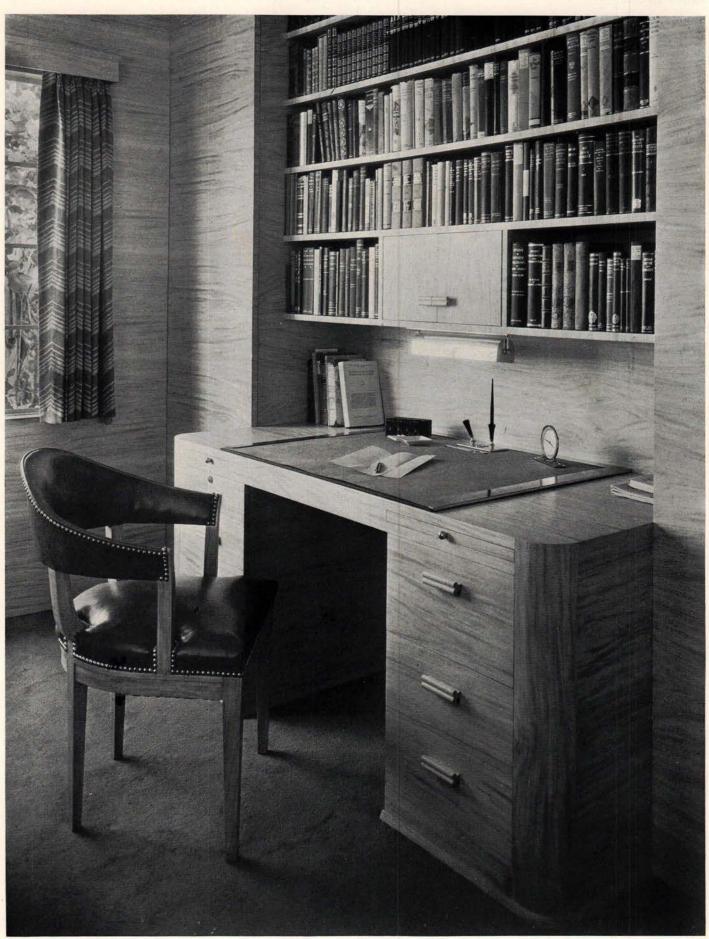
PLAN AFTER ALTERATIONS



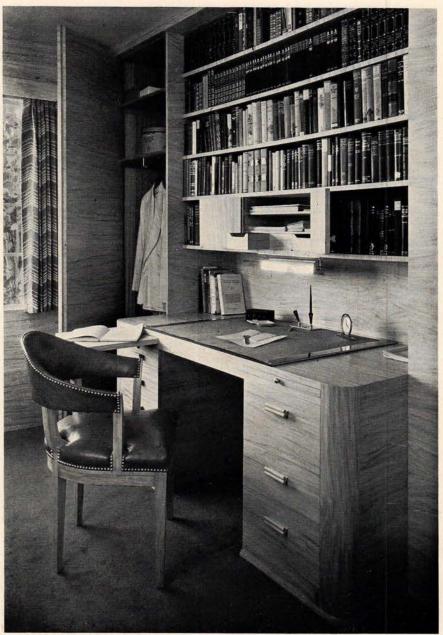
STUDY AND DRESSING ALCOVE

FOR MR. OSCAR MOSS, LOS ANGELES

DETAIL OF DESK





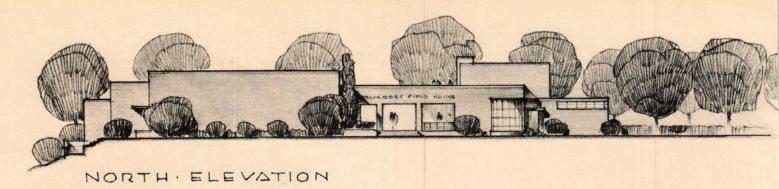


Photograph by George D. Haight

STUDY FOR MR. OSCAR MOSS, LOS ANGELES ALTERATIONS BY EDGAR BISSANTZ, ARCHITECT

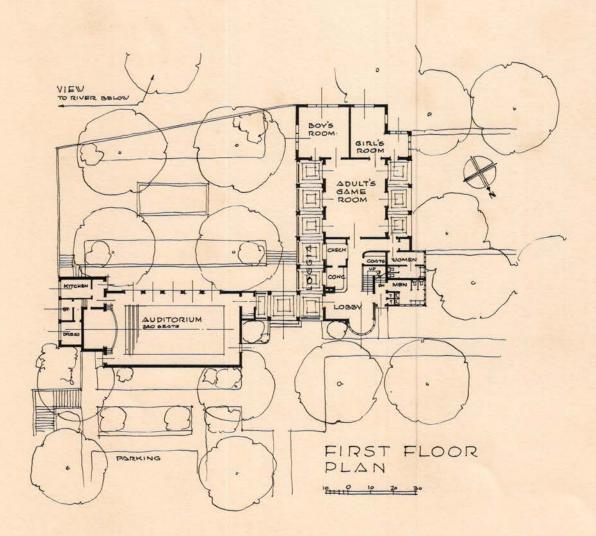
A FIELD HOUSE FOR A PARK DESIGNED BY MAYNARD LYNDON, ARCHITECT

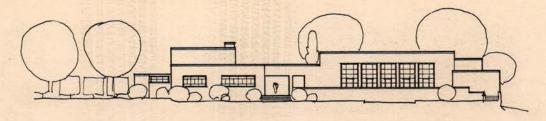




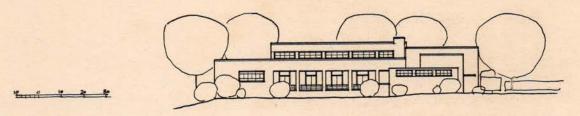


PERSPECTIVE

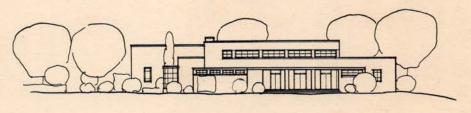




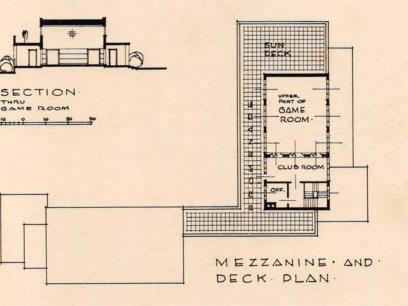
SOUTH - ELEVATION .



EAST . ELEVATION .



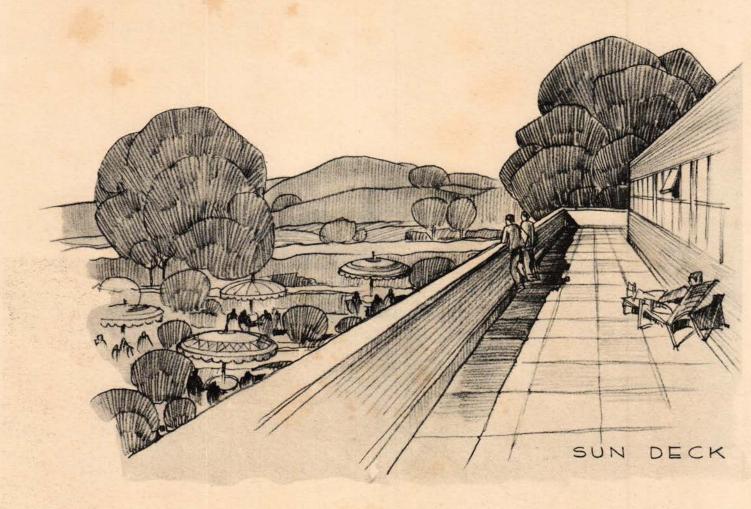
WEST . ELEVATION .



A FIELD HOUSE FOR A PARK DESIGNED BY MAYNARD LYNDON, ARCHITECT

A FIELD HOUSE FOR A PARK

DESIGNED BY MAYNARD LYNDON, ARCHITECT







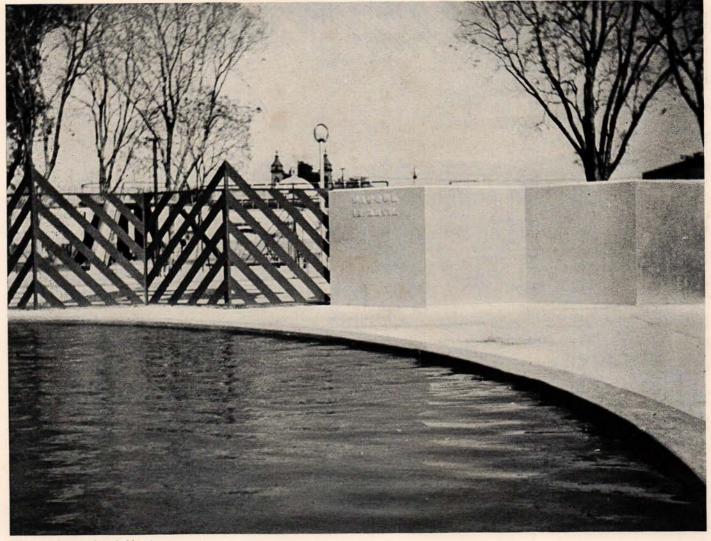


STREET LAMP

CHILDREN'S PARK

PARQUE DE LA REVOLUCION GUADALAJARA, JALISCO, MEXICO DESIGNED BY LUIS BARRAGAN, ARCHITECT JUAN LUIS BARRAGAN, CIVIL ENGINEER

ENTRANCE TO PLAYGROUND AND POOL: PAINTED ALUMINUM WALL, VERMILION GRILLE



CHILDREN'S



SEE-SAWS AND SLIDES

PARQUE DE LA REVOLUCION AT GUADALAJARA, JALISCO, MEXICO



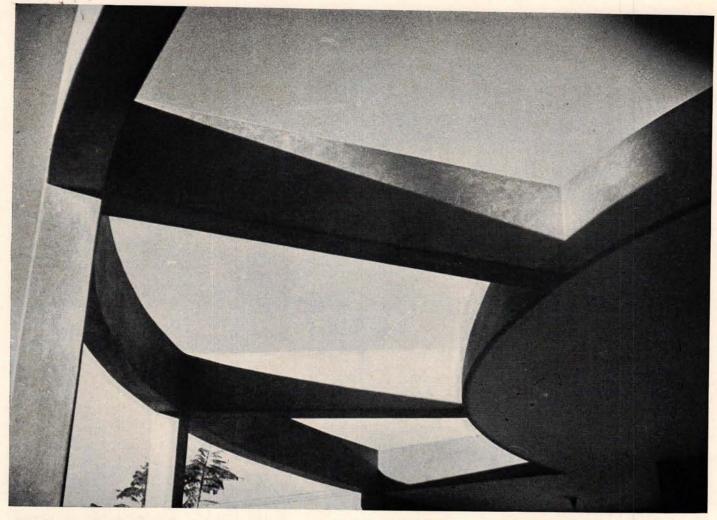
PLAYGROUND



PLATFORM FOR SLIDES

LUIS BARRAGAN, ARCHITECT . . . JUAN LUIS BARRAGAN, ENGINEER





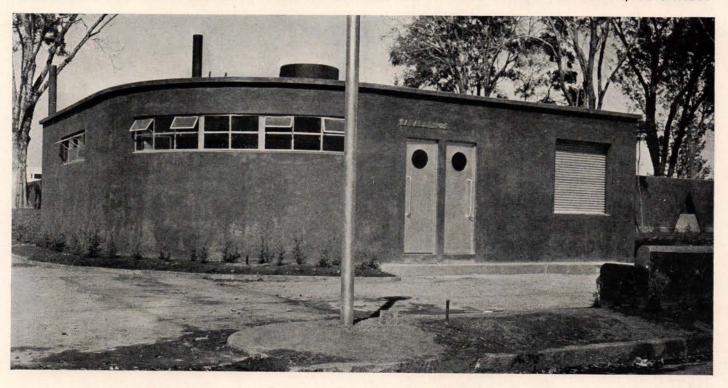
DETAIL OF PERGOLA

SUN AND RAIN PROTECTOR



CHILDREN'S PLAYGROUND

PARQUE DE LA REVOLUCION, GUADALAJARA, MEXICO . . . LUIS BARRAGAN, ARCHITECT



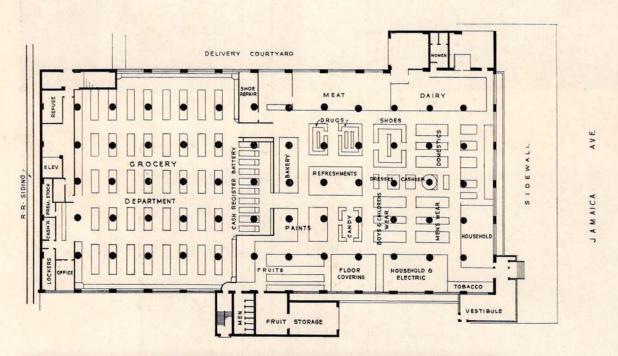
COMFORT STATIONS



FOOD MARKET

ATLANTIC BIG BEAR, HOLLIS, NEW YORK . . . B. SUMNER GRUZEN, ARCHITECT







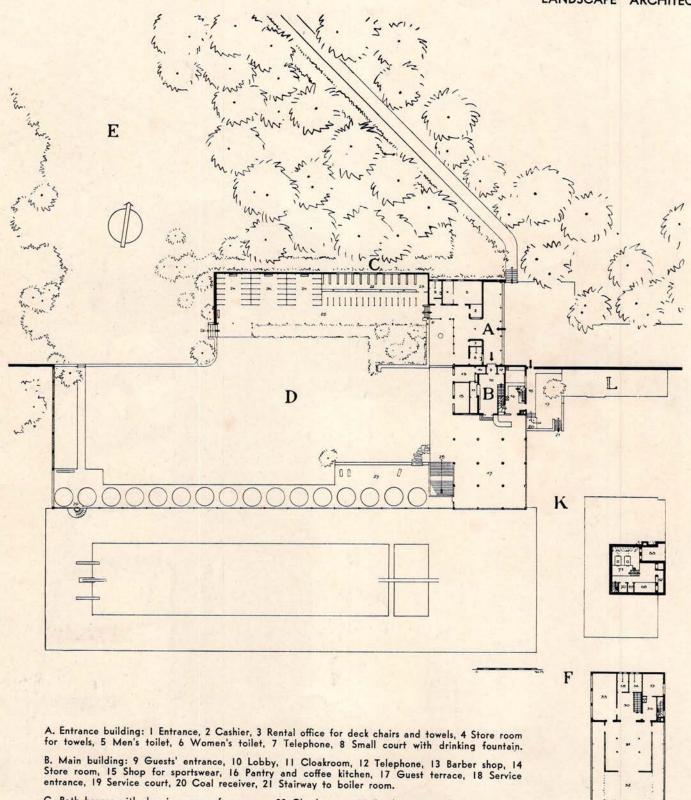
DIVING TOWER

WIESBADEN, GERMANY . . . FRANZ SCHUSTER AND EDMUND FABRY, ARCHITECTS



BATHING PAVILION

WILHELM HIRSCH LANDSCAPE ARCHITECT



- C. Bath houses with dressing rooms for women: 22 Check room, 23 Employees, 24 Court with individual bath houses, 25 Pergola, 26 Stairway to sun lawn.
- D. Lower sun lawn: 27 Terrace for beach umbrellas, 28 Main stairway to bathing terrace and women's dressing room, 29 Spiral stairs.
- E. Upper sun lawn.
- F. Top floor, main building: 30 Top hall, 31 Glass veranda, 32 Terrace with pergola, 33 Club room, 34 Service room, 35 Women's toilet, 36 Men's toilet, 37 Office.
- K. Heating plant: 68 Pumps, 69 and 70 Control and motor room, 71 Heating plant.

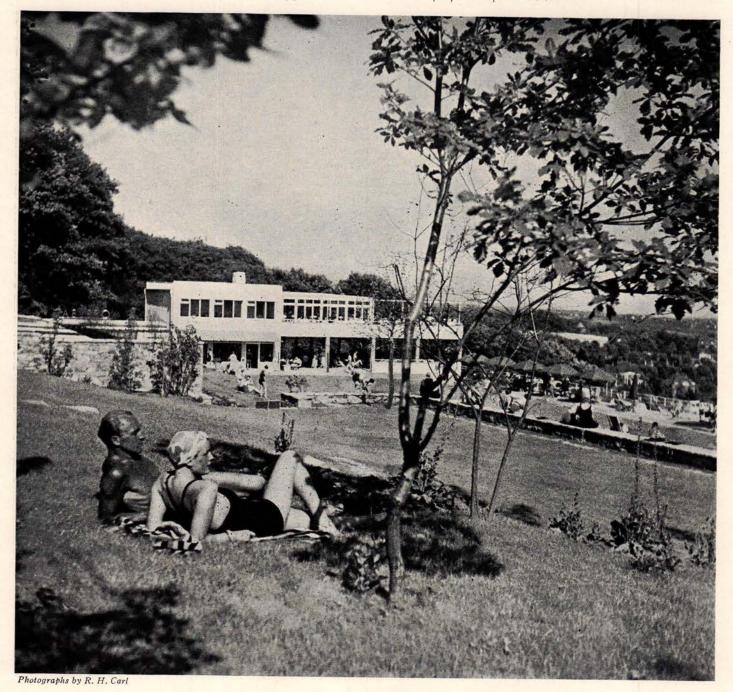


SPIRAL STAIR at the lower bath houses connects the bathing terrace with the sun lawns.



BATHING PAVILION AT WIESBADEN, GERMANY

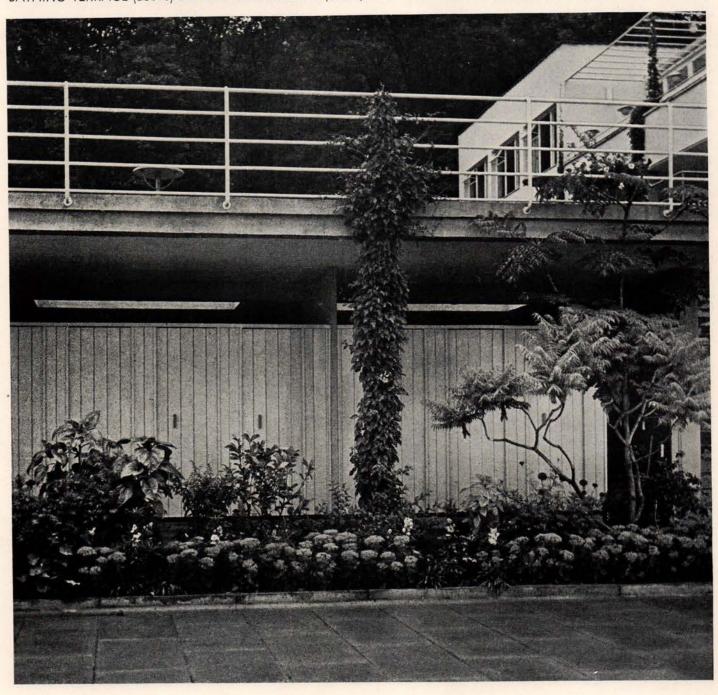
VIEWS toward the main building from the upper sun lawn and from play and sports field.



FRANZ SCHUSTER AND EDMUND FABRY, ARCHITECTS



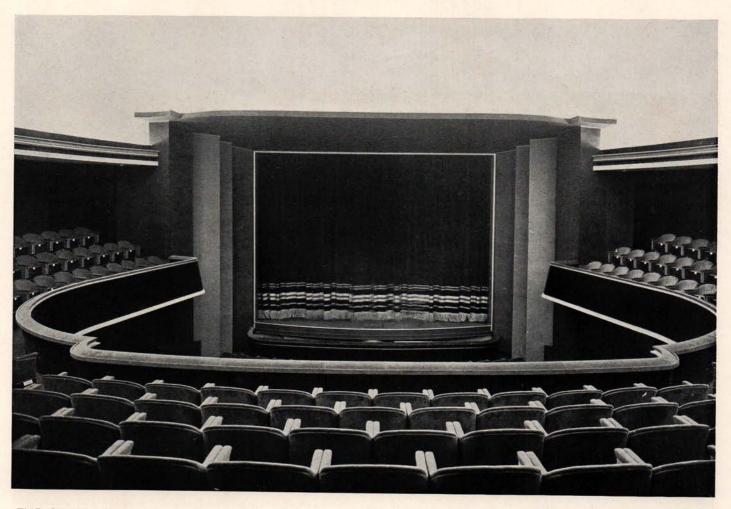
BATHING TERRACE (above) and DRESSING ROOMS (below): Flower beds border passageway to pool.



THEATER

OSLO, NORWAY . . . GUDOLF BLAKSTAD AND JENS DUNKER, ARCHITECTS

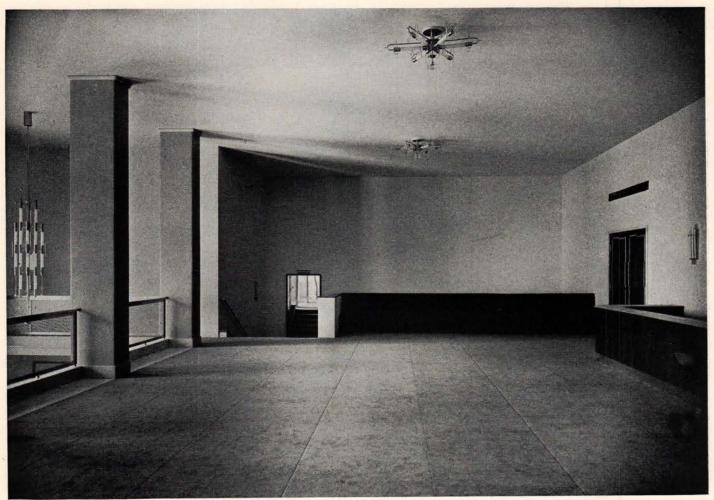




THE GROUND FLOOR of the theater proper contains box office and checking facilities for all persons to check and collect their wraps without delay.

THE AUDITORIUM is reached by stairs, so placed that exit delays are eliminated. There are two foyers, one for the main floor and the other for the balcony. The seats are about 775 in number. The walls that lie in shadow are a subdued red brown. The seats are covered in flame color, brilliantly illuminated by indirect light reflected down from the cream-colored ceiling. In contrast to this warm scale of color, the balcony curve, the columns under the balcony, and the doors are lacquered in black with a scant use of green and gold.





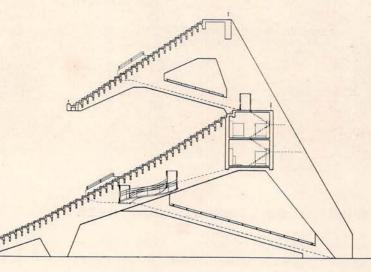
Photograph by O. Vaering

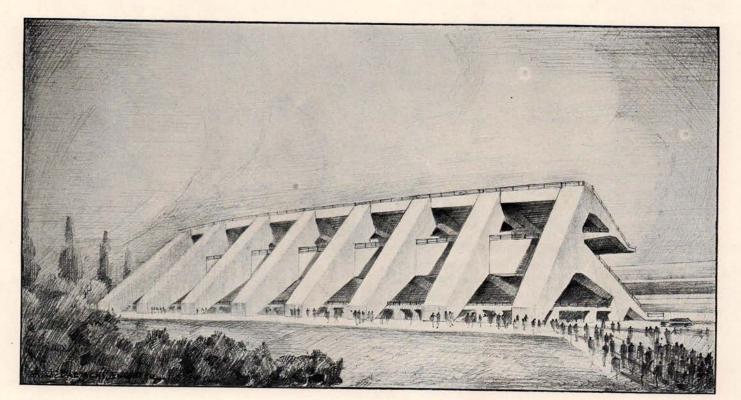
FOYERS AND STAIRWAYS are simple, stress being laid on plain surfaces. The color is light, thus making a contrasting note to the auditorium. During intermission the groups of promenaders chatting or gathering at the refreshment bar give life and movement to the foyers.

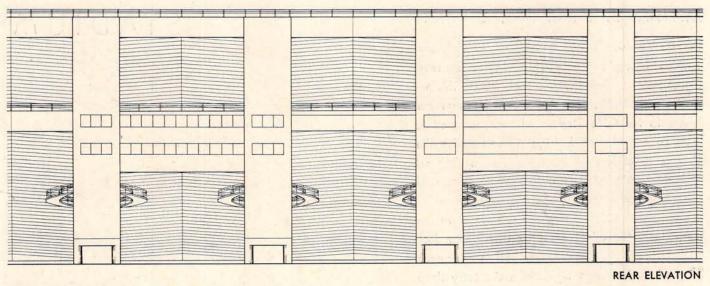
ARTHUR J. BARZAGHI, ENGINEER

STADIUM

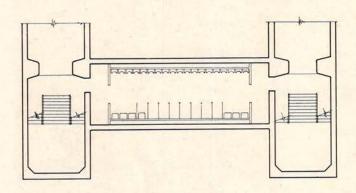
The stadium was originally laid out to inclose a standard Olympic athletic field and to have a seating capacity of from 100,000 to 120,000. This necessitated a double deck stadium, similar in general layout to the Ohio Stadium. It was designed to have no columns which might interfere with the view of spectators on the lower tier; a diagonal strut was designed instead to support the upper tier. Entrance at each portal is by means of an inclined ramp which brings the spectators to the lower deck. Those having seats on the upper deck go out around the circular ramp and re-enter each bent, where two short flights of stairs carry them up to the inclined strut, which also acts as a ramp The utilities and concession booths have been placed between each row of structural bents and the inclosure walls of these spaces act as lateral bracing for the structural bents. Each bent is spaced approximately 70 feet apart and consists of a large hollow section, giving great strength with a minimum amount of material. The seats are supported by the risers of the stadium, which act as cantilevers, balanced for dead load with a possible unbalancing of live load, which is taken up by the ability of each bent to take care of the torque.

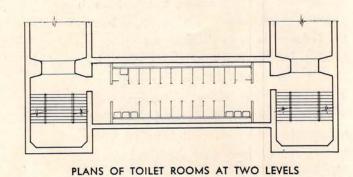






STADIUM





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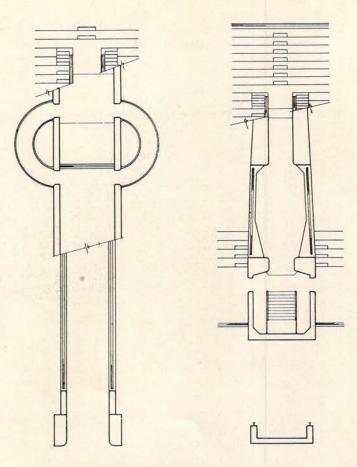
The proposed method of construction: Light structural steel bents would be constructed, capable of carrying, at high working stresses, the loads of the forms and plastic concrete. Such bents would have auxiliary reinforcing steel, attached before pouring concrete. The forms would be hoisted by means of Gantry cranes, and when the concrete has been placed, cured and set, the structure becomes a composite section. This method is the Melan System. The inclosure walls of the large hollow sections should be no thicker than required by structural analysis.

ARTHUR J. BARZAGHI, ENGINEER

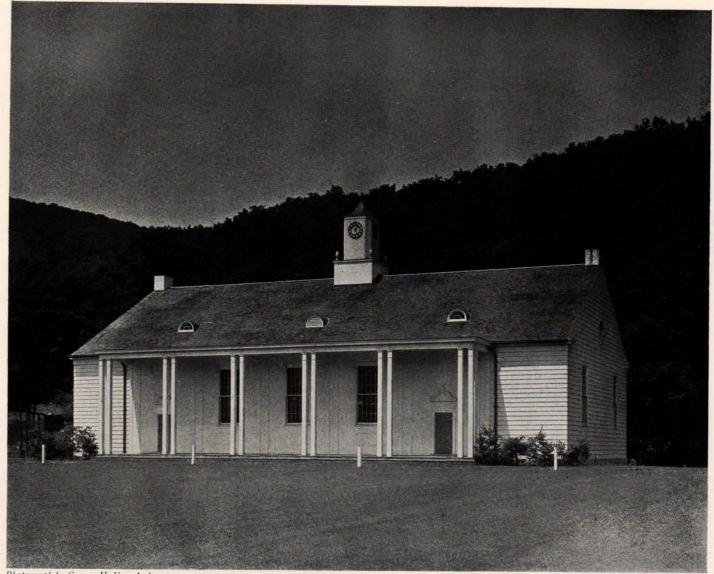
It is estimated that these walls will not be more than 8" in thickness. The general principle of large hollow sections combining great strength with a minimum of material represents the most recent European practice. The best known example of this is the Albert Loppe Bridge, at Brest, designed by E. Freyssinet.

Complete circulation is provided around the stadium at the walk around at the top of the upper deck; and complete circulation could be provided at the top of the lower deck if required. The inclined ramp to the lower deck could be modified in design so as to allow automobile circulation throughout the under part of the stadium if required.

Smaller stadiums could be built in accordance with this design, using the upper tier, which might be transferred into a roof design over the tribunal portion of the stadium.



PLANS OF LOWER AND UPPER RAMPS



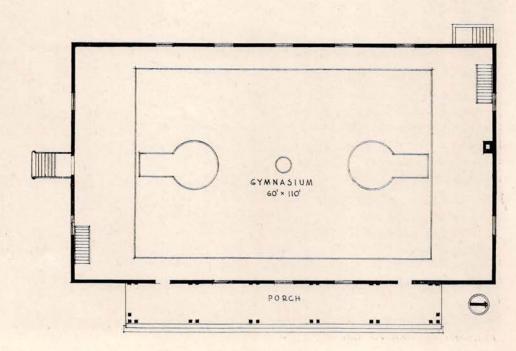
Photograph by George H. Van Anda

KENT SCHOOL, KENT, CONN. WILLIS N. MILLS, ARCHITECT

SPORTS BUILDING

The building has one regulation size basketball court with movable bleacher space for about 300 spectators, two handball walls, indoor tennis court. The basement includes wrestling room 30' x 30', two locker rooms, two shower rooms, toilet facilities, boiler room, storage space. The building will also be used for dances and dramatics (with temporary stage). The porch flanking the football field gives shelter to the stands during football games.

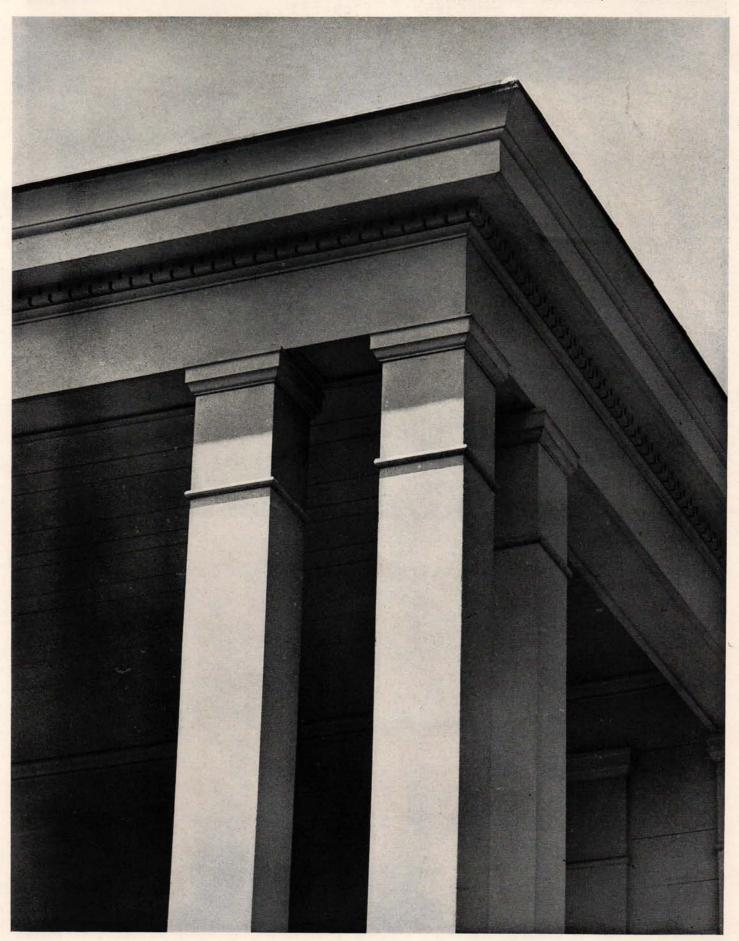
The total cost of the building, including sewage disposal system was \$28,800, or 11.3c a cubic foot.



KENT SCHOOL AT KENT, CONNECTICUT

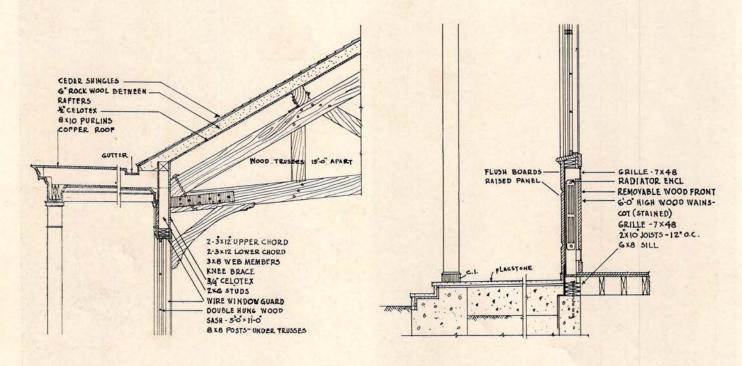


Photographs by George H. Van Anda





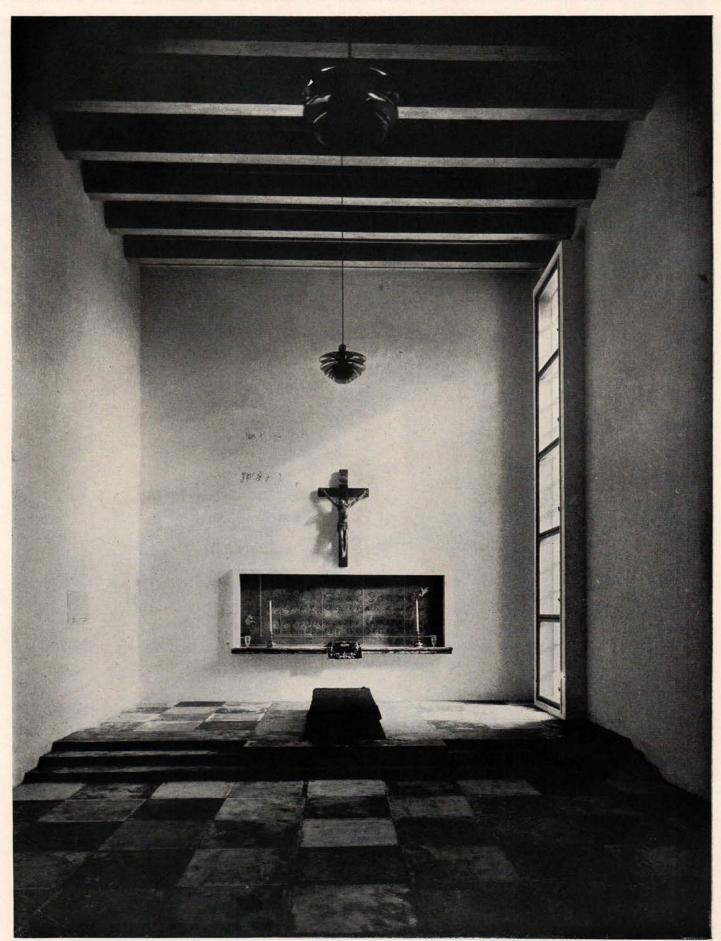
Photograph by George H. Van Anda



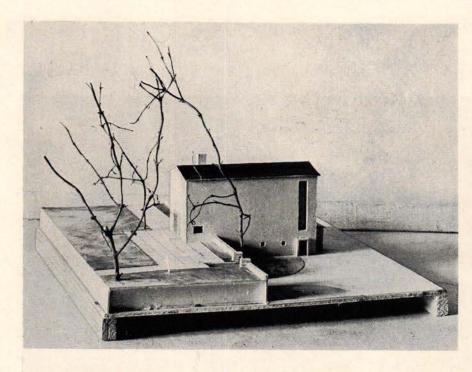
SPORTS BUILDING AT KENT SCHOOL, KENT, CONN., DESIGNED BY WILLIS N. MILLS

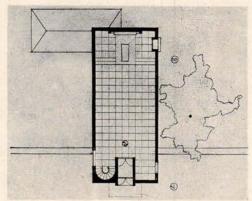
CHURCH

CHAPEL IN PARGAS, FINLAND ... DESIGNED BY ERIK BRYGGMAN, ARCHITECT

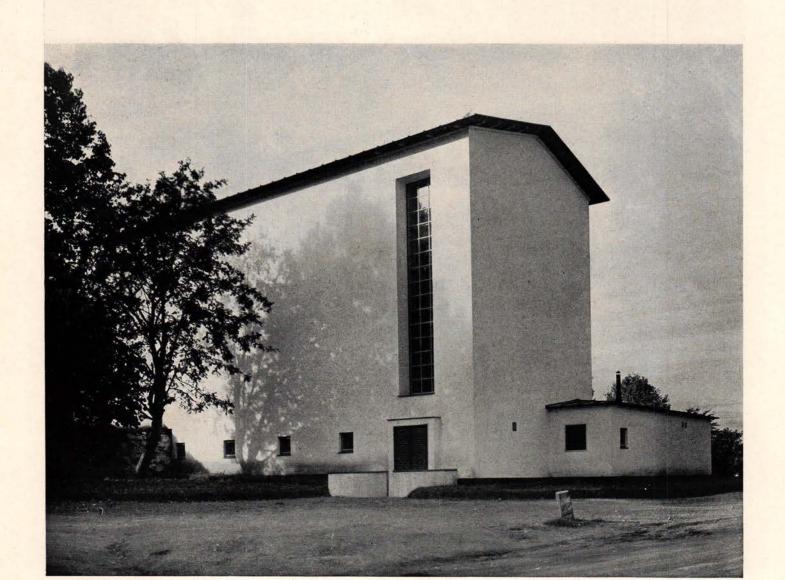


SMALL CHURCH





CHAPEL IN PARGAS, FINLAND ... DESIGNED BY ERIK BRYGGMAN, ARCHITECT



LUNCH ROOM

"THE PEWTER MUG" AT KENT, CONN.

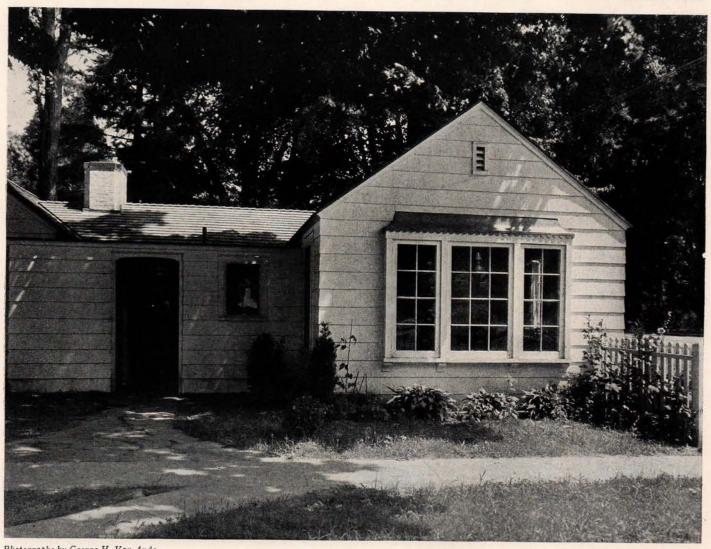
TEA ROOM KITCHEN LUNCH ROOM TINT BLOCK SHOWS ORIGINAL STRUCTURE

DESIGNED BY ALLAN McDOWELL

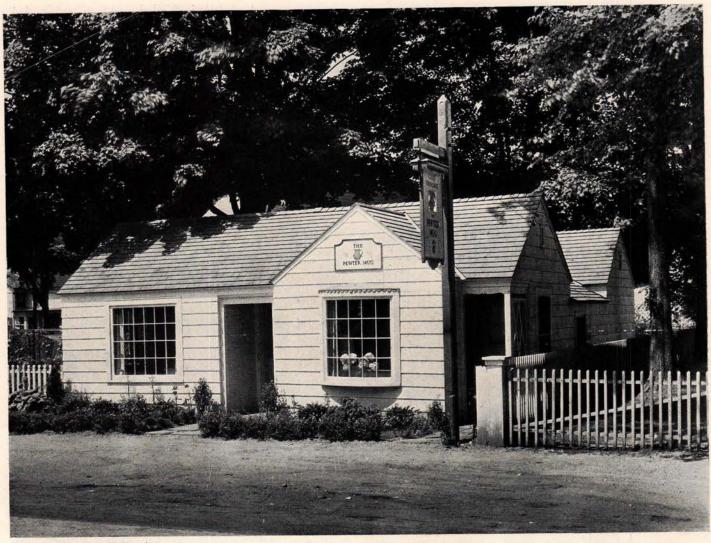


BEFORE REMODELING

AFTER REMODELING



Photographs by George H. Van Anda



Photograph by George H. Van Anda

"THE PEWTER MUG" AT KENT, CONN. . . DESIGNED BY ALLAN McDOWELL

The original lunch room was considered an eyesore on the village street. In an effort to stay in business, the proprietor decided to sell beer and improve the appearance of the place. With limited funds he had to make use of the existing structure. The cost of remodeling and new equipment was just over \$2,000. Side walls: white shingles. Roof: gray shingles. Blinds and outside ceiling: horizon blue. Light fixtures: handmade by local tinsmith. Wrought iron latches by local blacksmith. Back bar and bar: soft gray green. Lunch room: white trim and gray green and white wall paper.

REMODELED LUNCH ROOM



EDITORIAL OFFICES

EDITORIAL PUBLICATIONS, INC., NEW YORK . . . WILLIAM LESCAZE, ARCHITECT





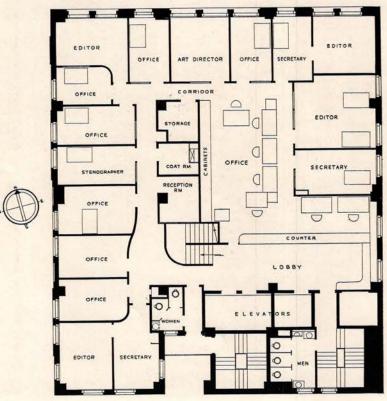
Photographs by F. S. Lincoln

EDITORIAL OFFICES

EDITORIAL PUBLICATIONS, INC.
NEW YORK

WILLIAM LESCAZE, ARCHITECT

PLAN OF 15TH FLOOR

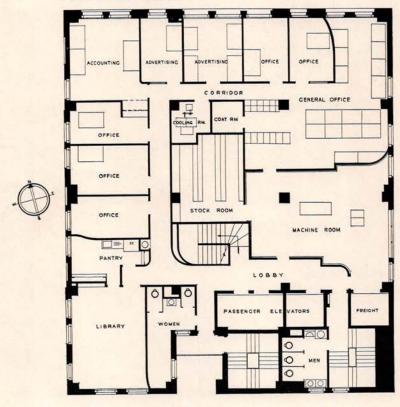




The offices occupy two floors. The fifteenth floor is given over entirely to the editorial departments of the four magazines—The New Republic, Theatre Arts, Antiques, and Asia. The central portion of this floor is a general office for stenographic and clerical workers connected with the editorial departments, and for switchboard operator and receptionist. This is separated by a long receiving counter from the elevator lobby which serves as a general reception room. There is also a small alcove for receiving visitors whose business does not require that they be taken into one of the private offices.

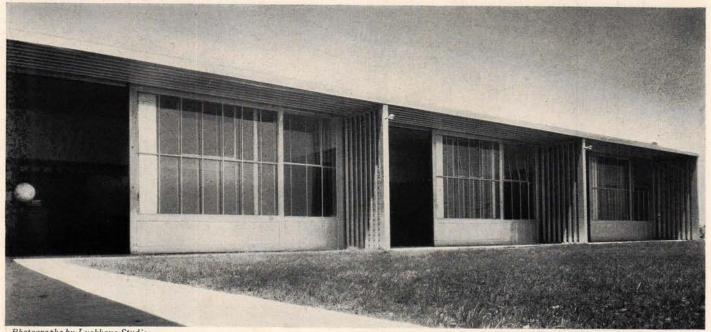
A stairway leads down to the fourteenth floor. On this floor are the business staffs of the four magazines, including a general office for workers in the subscription department, and a separate soundproof room for the machinery used in addressing; a stockroom and rest room for women employees, and the machinery used for ventilating both floors. There is also in the southwest corner of this floor a room which combines the functions of general library and dining room, where lunches are held almost daily, at which the editors of the several magazines meet and entertain guests. Adjoining this room is a small pantry and kitchenette.

PLAN OF 14TH FLOOR



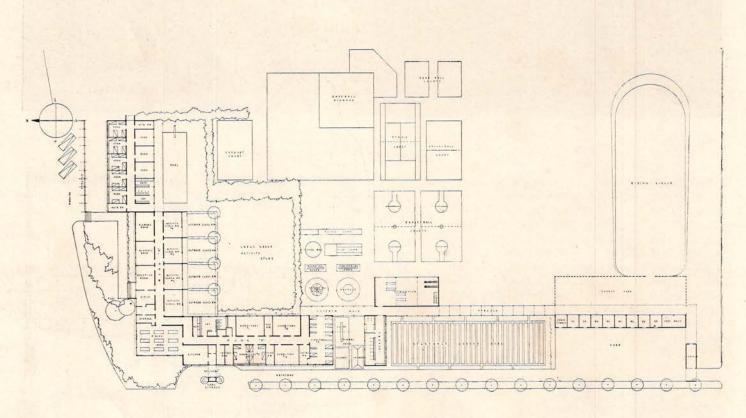
BOYS' SCHOOL

CALIFORNIA MILITARY ACADEMY . . . RICHARD NEUTRA, ARCHITECT



Photographs by Luckhaus Studio

CLASSROOM WING

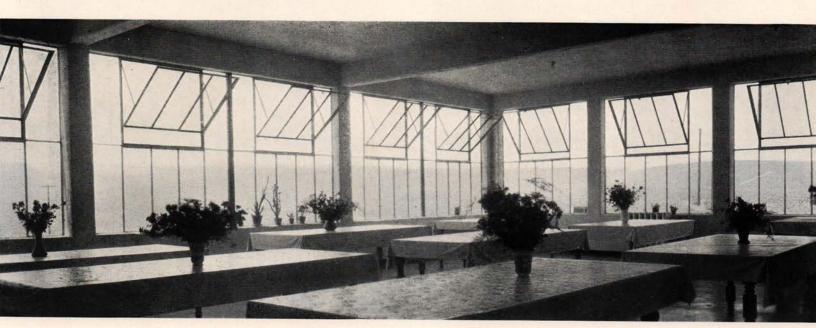


GENERAL PLAN

THIS PREPARATORY SCHOOL for boys is located in the Baldwin Hills, overlooking the plain of Los Angeles, the elevations of the San Bernardino mountains on the east and the ocean on the west. The first phase of the building program included dormitories for boarding students of elementary school age, dining room with kitchen, private rooms for educators, administration offices, classrooms for activity and academic study, tub baths, showers, lavatories, toilets, horse stables and riding ring. The second building phase, now under way, adds dormitories for older boys, a pool and a gymnasium. Most physical exercise is carried on outdoors on the extensive playgrounds.



ACTIVITY ROOMS open by means of wide sliding metal glass doors into open-air classrooms, partly protected by root overhangs. Robertson cellular steel was chosen as structural and wall forming material. The steel construction follows principles of Palmer Steel Buildings, Inc., and was executed by this company. Sixteen-gauge copper-bearing cellular steel is used for bearing walls, cantilevering up out of grooved concrete footings, and for the roof. Joints are caulked with Horn's plastic compound, applied with a gun. All exterior surfaces are made heat-reflecting by a spray coat of aluminum. Metal lath, celotex lath and cement form interior non-bearing partitions and ceilings. Continuous monitor skylights give distributed illumination to classroom and dormitory corridors.



BOYS' SCHOOL

CALIFORNIA MILITARY ACADEMY

EAST ENTRANCE



Photographs by Luckhaus Studio



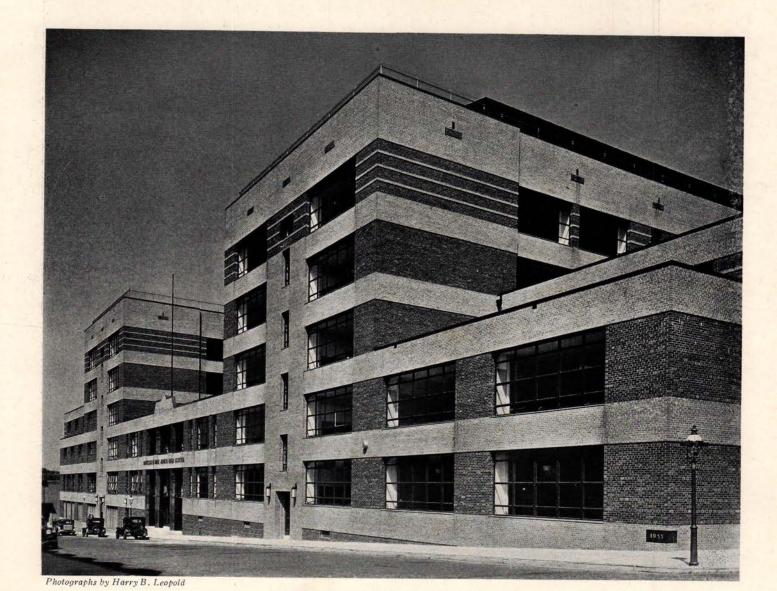
HIGH SCHOOL

This school covers an entire city block, and is seven stories high, the cafeteria being located on the top floor. The building is equipped with two elevators, one running from the basement to the cafeteria (8 floors) and the other from the shop floor (7 floors). These elevators are completely automatic and embody all logical safety appliances.

The contract was let in October, 1932, for the sum of \$714,000. The building was intended to accommodate 3,185 pupils, making a building cost per pupil of \$224.89. The cubic foot cost was 21.6 cents.

The cost of this building was taken from a \$10,000,000 School Loan, passed by the 1927 General Assembly (Chapter 470) and an ordinance of the Mayor and City Council (No. 1054) ratified by the people in the same year. It was built under the jurisdiction of the Public Improvement Commission, a specially appointed municipal agency for the expenditure of loan funds. The actual construction was supervised by the Bureau of Construction of this agency, under the direction of Herbert J. Leimbach, supervising engineer.

This building is heated by direct cast-iron radiation, set behind metal inclosures in each window panel; the auditorium by fans operating over coils. The cost of this installation was approximately \$1.38 a foot for radiation, and represented 10.7% of the contract. The plumbing includes pupils' toilets and teachers' rooms on all



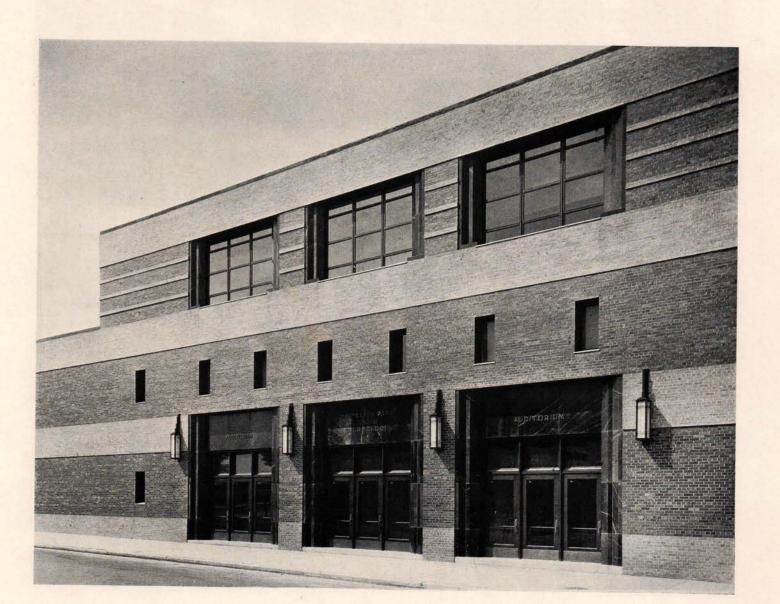
PATTERSON PARK JUNIOR HIGH SCHOOL IN BALTIMORE, MARYLAND DESIGNED BY WYATT AND NOLTING, ARCHITECTS

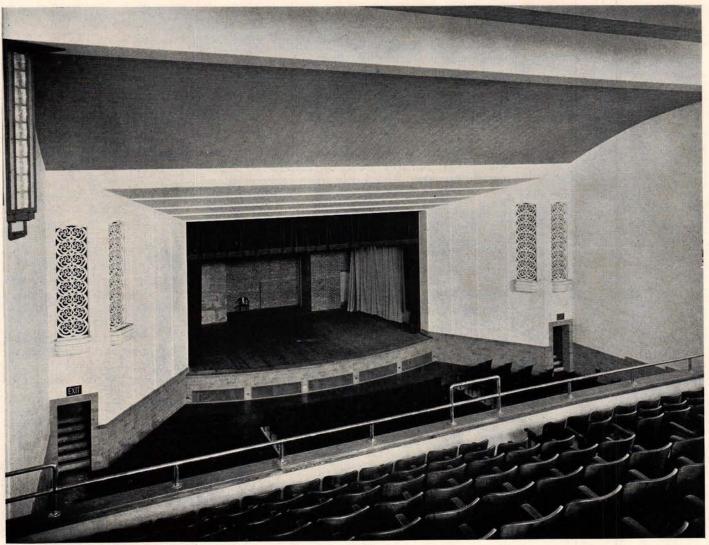
floors, with groups of help wash rooms on the cafeteria and boiler room floors; and represented 7% of the contract.

The school is completely fire-resistive, except for certain trim and floor finish. It has brick bearing walls over concrete footings, with reinforced concrete and steel columns; steel trusses and beams, concrete beams and Schuster slab floor construction.

The exterior walls are of selected red brick with bands of black brick and are trimmed with Alberene stone. The exterior steps and platforms are granite. The windows are steel of architectural grade, and are generally of the projected type with hopper vents at top and bottom. The interior walls and partitions in the stair towers, toilets, cafeteria, gymnasiums, shops, drawing rooms and cooking rooms, and the wainscot in the corridors, locker alcoves and lobby are finished in light buff salt glazed bricktile. The roof at the cafeteria level has been arranged for a play area, being of promenade tile. It is partly sheltered with asbestone roofing on a steel framework. Interior stairways are steel with precast terrazzo treads.

Floors of toilet rooms, entrance halls and auditorium lobby are terrazzo; the cafeteria kitchen, passage, pantry, etc., are promenade tile; corridors, cafeteria, locker alcoves have mastic tile finish, and the drawing rooms and shops have wood block floors. All other instruction rooms, health suite, office suite and auditorium aisles are finished with linoleum; in general all other floors have cement finish.



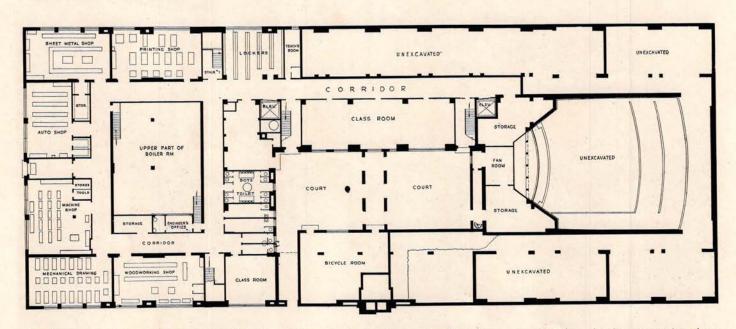


Photographs by Harry B. Leopold

AUDITORIUM

HIGH SCHOOL

BALTIMORE, MARYLAND

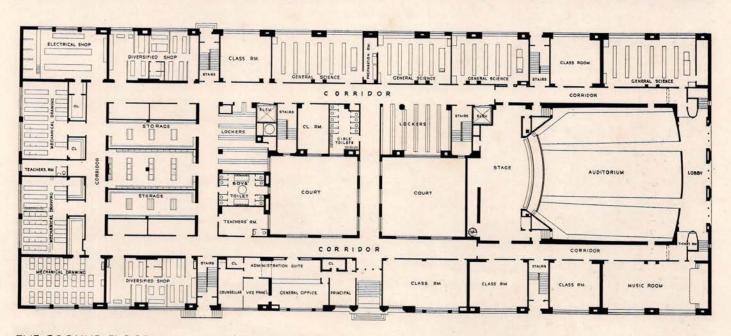


The basement takes advantage of the descending grade to the north. The shops are placed in this basement (windows of which are entirely above grade) and in the north end of the ground story which is the lowest story completely above grade. These two stories of shops are under the gymnasiums and locker rooms and thus isolated from the classroom section of the building.



LIBRARY

PATTERSON PARK JUNIOR HIGH SCHOOL . . . WYATT AND NOLTING, ARCHITECTS



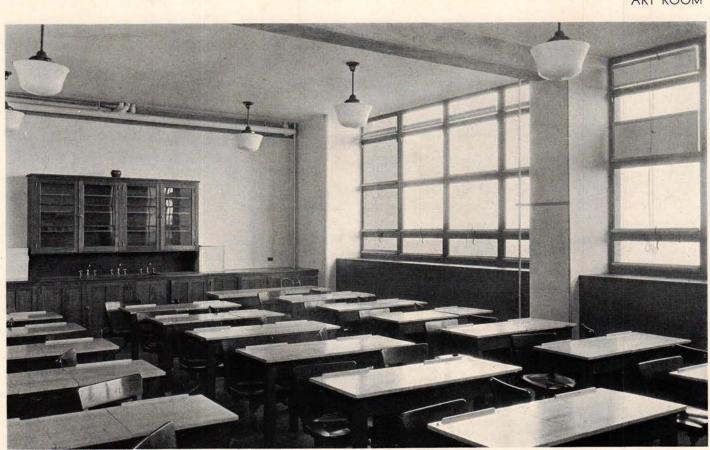
THE GROUND FLOOR is given over largely to administration, auditorium, music room, shops, and a few special rooms. The gymnasiums (2) and their accessory rooms occupy the first and second stories of the north end of the building. The auditorium occupies the core of the south end of the building and extends through the ground, first, and second stories.



CAFETERIA

PATTERSON PARK JUNIOR HIGH SCHOOL
BALTIMORE, MARYLAND
DESIGNED BY WYATT & NOLTING, ARCHITECTS

ART ROOM



OPPORTUNITIES IN SCHOOL MODERNIZATION

SURVEY OF SCHOOL CONDITIONS AND PROSPECTS IN FUTURE SCHOOL CONSTRUCTION

By WILLIAM G. CARR, Director, Research Division, National Education Association

The average high school graduate has spent about 13,000 hours within the walls of a public school building. These 13,000 hours are potentially the most impressionable and valuable hours of his life. Quite apart from the formal educational processes, the physical school environment during these hours is bound to make a profound impression on the growing child. Through this environment eyesight may be conserved or injured, life-long health may be developed or endangered, tastes for beauty or for ugliness may be developed, and the whole costly process of education may be encouraged or nullified. The school building is the tangible and visible evidence of the attitude of the public towards education. Suitable school buildings are indispensable to an efficient system of general education at public expense.

The current situation with regard to school housing needs is by no means gratifying to those who realize that learning can proceed in a normal manner only when children are housed in safe, clean, and comfortable quarters and that desirable attitudes and character traits are developed with difficulty, if at all, unless the school environment is gracious and wholesome. A conservative estimate indicates that school building costs in the United States since 1918 have been more than a billion dollars below the reasonable needs of our rapidly expanding school system.1 During the depression years this school building deficit has increased at an alarming rate which has resulted in completely unsatisfactory school-housing conditions in thousands of American public schools.

Since 1930, the construction of school buildings has been all but abandoned. Figure I shows how sharply capital outlay expenditures have fallen during the depression years, from nearly \$371,000,000 in 1930 to approximately \$100,000,000 in each year since 1933.

The cessation of building activity has occurred in both urban and rural areas. One of the reports of the United States Office of Education shows that between 1931 and 1934, in 262 city school systems, capital outlays declined 80.1 per cent.2 Another report from that office, based on questionnaire returns received from 1,111 county superintendents during the autumn of 1933, cites 1,425 building projects in rural areas where the need was urgent but construction was being postponed because of lack of funds.3

Figure II shows graphically the trends since 1926 with respect to school enrollments, expenditures for school buildings, and total expenditures for all school purposes. By going back to 1926, the effect of the depression on prevailing trends is revealed. This diagram makes it clear that the decrease in school building construction cannot be explained in terms of a stationary school population-enrollment is increasing steadily. The growth in high school enrollment especially stands in sharp contrast to the rapid drop in capital outlay.

A recent survey covering 31 states, the District of Columbia, and 153 cities over 30,000 in population indicates that:

Approximately 1,400,000 pupils are enrolled in 12,300 buildings which have actually been condemned as unsafe or insanitary.

Approximately 600,000 children are able to attend school only part time because of inadequate building facilities.

Approximately 1,000,000 children are housed in tents, portable and temporary schools, or in rented quarters.

About 8 per cent of all school buildings now in use date back to the Civil War period; more than 40 per cent are more than 35 years old; less than 5 per cent have been built

Approximately 16,000 rural school districts could be advantageously consolidated if funds were available for building the new consolidated school, thus improving the economy and effectiveness of the education of over 2,300,000 children.

Some of these conditions are shown graphically in Figure III. It should be remembered that the above figures do not cover the many cases of serious overcrowding in schoolrooms, insufficient lighting, and semihazardous school plants which perhaps ought to be condemned but which have not formally been designated as unfit for use. Incomplete as these figures are, they surely indicate a definite need for a school plant program on a large scale. Whether such a program will be forthcoming remains to be seen. Considering school finance conditions in the nation as a whole, it is clear that local funds for this purpose cannot usually be made available in sufficiently large amounts to meet the needs. When the Federal Works Progress appropriation was before Congress, an amendment was introduced by Senator Neely of West Virginia earmarking \$500,000,000 for school building purposes. Since the amendment was defeated by a close margin, there remains only the possibility of securing Federal aid for school building projects in competition with all other public works. As this article is written, it appears unlikely that under existing conditions Federal funds will be made available in large amounts for the building of needed new public schools.

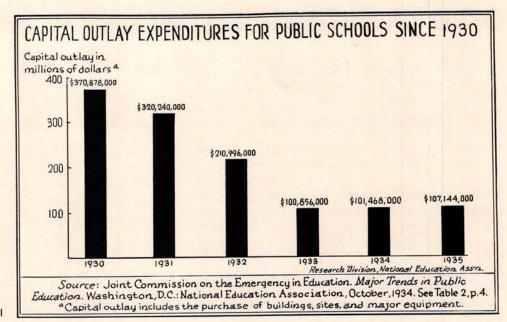
It thus appears probable that school finance is doomed to repeat an unfortunate cycle. During the World War

¹Space does not permit description in detail of the method of deriving this estimate. Briefly, it is based on an assumed average useful life of fifty years for school buildings and on an average expenditure of \$400 per additional pupil for capital outlay purposes. For details, consult: National Education Association, Research Division. "The Nation's School Building Needs." Research Bulletin 13: 1-36; January, 1935. Washington, D. C.: the Association.

²Covert, Timon: Foster, Emery M.; and Herlihy, Lester B. City Schools and the Economic Situation. Circular No. 124, October, 1933. Washington, D. C.: U. S. Dept. of the Interior, Office of Education, 1933. p. 4. (mimeo.)

Washington, D. C.: O. S. Dept. of the Interior, Office of Education, 1933. p. 4. (mimeo.)

**Gaunnitz, W. H. Some Effects of the Economic Situation upon the Rural Schools. Circular No. 80, February, 1933. Washington, D. C.: U. S. Dept. of the Interior, Office of Education, 1933. 18 p. (mimeo.)



FIGURE

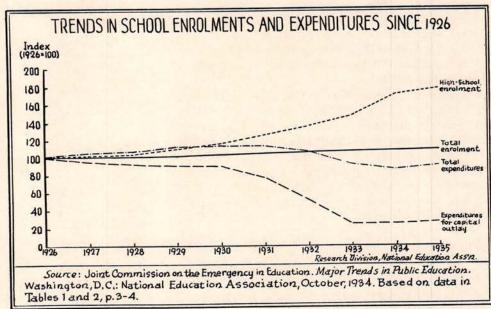


FIGURE II

there was a practical cessation of school house construction, just as there has been since 1930. The War also increased school enrollments, just as the depression has done. When the War was over school districts were compelled to build their way back to normalcy on borrowed money. Large bond issues for schools were the general rule. By 1924 the building program could become somewhat more normal and steady in scope and cost. By 1928 capital outlays for schools seemed to be fairly well stabilized at about \$400,000,000 a year. Then came the depression, starting off again the cycle of suspended building programs, building shortages, borrowing, repayment. Many of the present serious fiscal problems of school districts can be traced in large part to the heavy cost of debt services arising from bonds issued shortly after the War. Apparently the only factor which could now check this unfortunate cycle would be a truly adequate Federally-financed program of school building construction. Desirable as such a program would be, it does not seem, at present, to be "in the cards."

This is not to say that a limited amount of Federal funds under WPA will not be usefully allocated to school districts. It is probable, however, that under existing rulings of the Administration the greatest opportunity for school building improvement will be in the remodeling and modernizing of existing plants. School officials and architects may well be alert to the possibilities of thus improving the housing of the children in their care. Out of the many opportunities for such work, a few possibilities will be indicated here.

There are many opportunities for the improvement of school grounds so as to make them more attractive, safe and usable. This work can often be done at little or no cost for materials. The barren ugliness of many school sites is difficult to justify either from the aesthetic or from the strictly educational viewpoints. As playgrounds and other school grounds are regarded as primarily *educational* centers, comparable in importance to the classroom, the shop, the library, and excel-

ling these indoor places in certain important respects, the importance of the outdoor school plant is bound to increase. The school grounds can become, not merely a convenient place to deposit the children, but one of the main educational centers of the school. There is a real opportunity here for cooperation among architects, landscape architects, and students of both general and physical education.

The increasing use of school buildings for late afternoon and evening meetings calls attention to another possibility both in improving existing plants and planning new ones. Many small schools have no adequate light for use after daylight hours. Other schools have such harsh lighting that they appear at night as unattractive as a prison. Inviting and adequate lighting of schools at night can greatly increase their service for a wide variety of community activities. Such use is desirable since it tends to make for wholesome relations between the public and its schools, to stimulate educational activities among adults, to lift the cultural level of the community, and to get a greater use from the public investment in the school properties.

In rural areas there arise certain special needs and opportunities. The bad condition of many small rural schools is notorious. Some of these schools should be abandoned for larger consolidated schools.4 Where this arrangement is impossible for financial or geographic reasons, much can still be done to improve the school buildings attended by rural children. Many of the state departments of education can supply excellent suggestions on this topic. Some of the needs and possibilities in the rural school building field, exclusive of the consolidation problem, are suggested by the following recent reports:

Colorado. A 1934 survey of building needs in 47 counties shows that among one-room schools alone, 41 needed new roofs; 153, new foundations; 160, new floors; and 420, paint-

Kentucky. The 1933 report of the State Educational Commission summarized conditions in the rural schools as follows: Most of the small rural schools of the state are poorly planned, box-like structures, with windows on both sides and the flue in the center. In many instances, the school building consists of four bare walls, with no provision for pupils' wraps, or any built-in shelving, or other special features so essential to a desirable school program. A large percentage of the smaller schools are set on locust posts, or stone or concrete piers, without other underpinning. Only in a few instances is there a solid foundation or a sub-floor. Consequently, these schools are very uncomfortable in severe weather to both teachers and pupils. The old-fashioned, unjacketed stove is still the principal source of heat. It is usually placed in the center of the room and those children immediately around the stove scorch with the intense heat while those in the far corners suffer from the cold. . . . In some cases, the building has never received a coat of paint, the roof leaks, the walls are marked and open, window panes are shattered, and the floor is rough and uneven. . . Rural school sites are invariably small. . . . Very often school grounds are acquired simply because the character of the soil renders it worthless for any other use.6

Mississippi. A school plant survey dated 1934 shows the following conditions among the schools (chiefly rural schools) of this state: No water supply, 1,681 schools; surface water draining into water supply, 157 schools; no toilet facilities whatever for boys, 1,693 schools; for girls, 1,044 schools; no publicly-owned school plant whatever, 1,506 schools.7

⁴There are especially cogent reasons favoring Federal financing of a nationwide program of rural school rehousing. See: U. S. Office of Education. National Survey of School Finance. Research Problems in School Finance. Washington, D. C.: American Council on Education,

1933. 164 p.

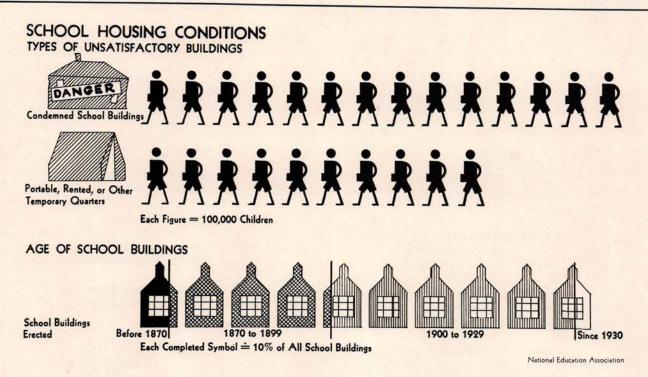
Scolorado State Department of Education. Summary of Buil Survey, State of Colorado, 1934. Denver: the Department, 1934. (typewritten).

**Kentucky Educational Commission. Report of the Kentucky Educations.

**OKentucky Educational Commission. Report of the Kentucky Educational Commission. Educational Bulletin, Vol. 1, No. 8, Frankfort, Kentucky: State Department of Education, October, 1933. Ch. V, "School Buildings and Grounds," p. 121-34.

**TMississippi State Department of Education. Some Facts Derived from the School Plant Survey. Jackson: the State Department, 1934. 7 p.

FIGURE III



South Carolina. An informal report written in 1934 contains the following statements: "Approximately one-half of the rural school buildings are in such dilapidated condition or of such poor type of construction as to be unfit for school use. To replace these buildings would require \$5,000,000. The local districts being dependent entirely upon agricultural income are unable to pay the cost of this program. No state or county aid is available. Approximately 1,200 negro schools are being operated in lodge halls, churches, and tenant houses not owned by the district. None of such buildings is suitable for school purposes. To replace these buildings would require \$4,000,000. To remodel, repair, and replace village schools so as to provide an adequate educational program would require an outlay of approximately \$5,000,000. To provide adequate classroom facilities for city schools would require the construction of approximately 500 new general and specialized classrooms at a cost of \$2,000,000, and the remodeling of 1,000 classrooms at a cost of \$2,000,000.8

West Virginia. In 1929, among the one-room schools of this state, 34 per cent had unsatisfactory floors; 41 per cent, unsatisfactory blackboards; 63 per cent, no bulletin board; 27 per cent, no bookshelves or cases; 33 per cent, no water supply on the grounds; 25 per cent, bucket-and-dipper water supply; 54 per cent, unsatisfactory toilet facilities.

These examples show what some of the unsatisfactory conditions are and suggest points to be considered in remedying them. Many of the needed repair and modernization projects could be carried out with relatively little cost for material.

Another important area of school building repair and modernization concerns fire protection. The importance of such measures from the standpoint of safety needs only to be mentioned. Worthwhile economies in lowering insurance premiums are also possible by removing fire hazards. 10 The cost of removing such hazards often amounts to less than the annual saving on insurance premiums. Heating apparatus, storage vaults, flues and chimneys, electrical wiring, electric machines, ash heaps, and rubbish heaps should be subjected to careful study, primarily because of added safety to the children, but also as a means of lowering the insurance premiums. The presence of a regularly organized local fire department lowers premiums required for fire insurance. Rates can often be lowered by installing the ordinary type of small chemical fire extinguisher. These should always be on hand in laboratories, furnace rooms, kitchens, and the other places where fire is used. Automatic sprinkler systems may also be effective in reducing both hazards and premiums. The secretary of one school district cut \$1,000 per year from insurance costs by correcting hazards about the schools.

Attention may well be given also to sound-proofing in the modernization of school plants. Recent studies of the psychological and physiological effects of noise strongly suggest that this problem should be given adequate consideration in school plant programs.

The foregoing are only a few of the many suggestions which might be given regarding the improvement of school buildings. Even if funds are not at the moment available for a truly adequate school housing program, there is yet much that can be done to make the school environment better serve the safety and welfare of the boys and girls who are in attendance. It must be emphasized in closing, however, that such remodeling and modernization will in no way bring about a final solution to the current school building problem. That solution must await a program of Federal, state, and local financing commensurate with the needs and importance of the public schools.

In announcing the formation of a partnership by Norman Bel Geddes and George Howe in the July issue of The Architectural Record some architectural jobs were credited to Mr. Howe during the period of partnership with Mr. William Lescaze. The Record has been informed by Mr. Lescaze and Mr. Howe that the design responsibility on all jobs completed by the firm of Howe & Lescaze is allocated as follows:

HOWE & LESCAZE: Oak Lane Country Day School; House for Frederick V. Field; Hessian Hills School; House for William B. Curry; Philadelphia Saving Fund Society's Garage: Wilbur Library, Brooklyn: Chrystie-Forsyth Street Housing Development.

GEORGE HOWE: House for J. M. R. Sinkler; American Battle Monuments; House for H. R. S. Stikeman; House for M. J. Speiser; House for Mr. Welsch; House for William Stix Wasserman.

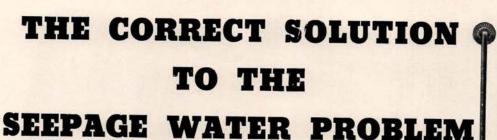
WILLIAM LESCAZE: House for Roy F. Spreter; House for Mr. Lescaze, 211 East 48th Street, New York; Columbia Broadcasting; House for R. C. Kramer; House for B. J. Buttenwieser; All new English work; All new work in Brooklyn Museum; Editorial Publications; S. Philadelphia Housing; Boston Small House; Unity House.

^{*}SLetter from S. P. Clemons, Director of the Division of Schoolhouse Planning and Construction, South Carolina State Department of Education. April 7, 1934.

*Holy, Thomas C. School Buildings. Survey of Education in West Virginia, Vol. 3. Charleston: State Department of Education, 1929.

Ch. 2.

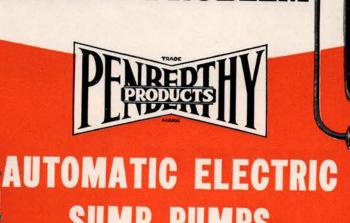
National Education Association, Research Division. "Constructive Economy in Education." Research Bulletin 11: 57-90; September, 1933. Washington, D. C.: the Association. Ch. VIII, "Economy in the School Insurance Program," p. 81-83.



MODEL 33
Made in 1 size only
Maximum Capacity
1400 Gals. per Hour
Retail Price
\$39.50 f.o.b. Detroit

MODEL K

Made in 5 sizes. Maximum Capacity 3600 Gals. per Hour Retail Price (Size No. 1K) \$65.00 f.o.b. Detroit



SUMP PUMPS

Copper and Bronze Throughout

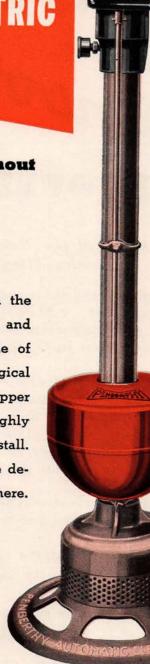


The architect who is confronted with the problem of removing seepage water and keeping a basement dry, will find one of these Penberthy Pumps to be the logical solution. Ruggedly constructed of copper and bronze throughout, they are thoroughly dependable, compact and easy to install. They are carried in stock for immediate delivery by plumbing wholesalers everywhere.

PENBERTHY INJECTOR COMPANY

Manufacturers of Quality Products Since 1886

DETROIT MICHIGAN WINDSOR ONTARIO





Smooth



"The Doors of the Nation Swing on Stanley Hinges"

This simple statement frequently used to express the place occupied by Stanley Hardware in the building picture, demonstrates the facilities offered by Stanley to assist in the solution of any door problem.

The moving parts of any structure invariably function with the assistance of some type of Stanley Hardware Equipment. It is the smooth, easy, dependable functioning of this hardware which results in the smooth operation of doors in every type of building-from the smallest cottage to the tallest skyscraper.

Descriptive literature will be furnished covering any type of Stanley Hardware Equipment.

> THE STANLEY WORKS New Britain, Conn.





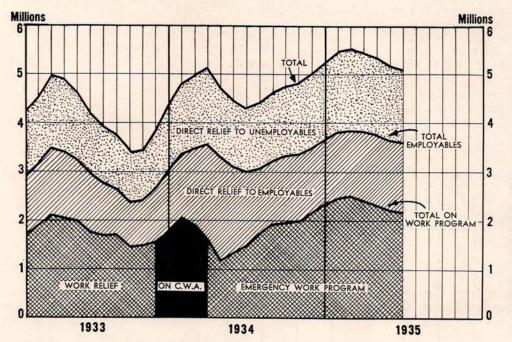


STANLEY ARDWARE

DOOR TYPE EVERY FOR

THE WORKS-RELIEF PROGRAM

On April 8, President Roosevelt approved the Emergency Relief Appropriation Act of 1935 which provided the sum of \$4,880,000,000 for sundry construction projects of enumerated types and for the extension of various relief measures previously undertaken. Because of the dual purposes of this law it has come to be known as the Works-Relief Act. To understand the reasons for the legislation is to comprehend the broad outlines of the program of execution. Simply stated, the law was conceived as a means of providing work to persons on relief. In the charts which follow the relief situation is portrayed.



The changing status of relief cases is here traced. A relief case covers either an entire family or a single person receiving public emergency relief.

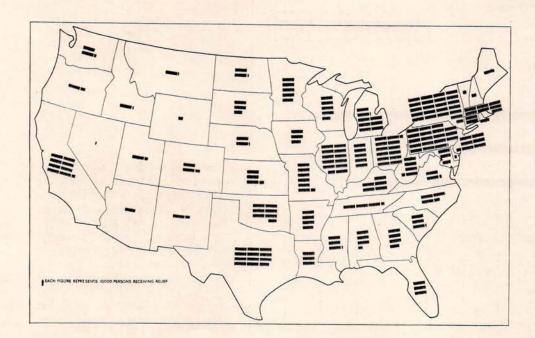
By L. SETH SCHNITMAN
Chief Statistician,
F. W. Dodge Corporation

Charts and Information
Courtesy of Works Progress
Administration

RELIEF CASES

(Families and Single Persons)

About 3,500,000 persons on relief in mid-1935 were employable. Of this number, roughly two-thirds were actually engaged on work projects; the remainder received direct relief payments. The new Works Program is an attempt to provide work for these employable recipients of direct relief and to afford works projects for the extension of employment to those employables now on work programs. Such projects would include highways, roads, streets, grade crossing eliminations, irrigation and reclamation, housing, projects of states and self-liquidating projects of public bodies thereof, forestation, reforestation, flood control, rivers and harbors and miscellaneous sanitation projects of almost every description, all these in addition to work-assistance for educational, professional and clerical persons and to an extension of the Civilian Conservation Corps.



The geographic distribution of persons on relief is shown in this map. Here the 20 million individuals who were on relief during the winter peak have been spotted by states. The concentration of the relief problem rather closely parallels the distribution of total population by states.

PERSONS ON RELIEF

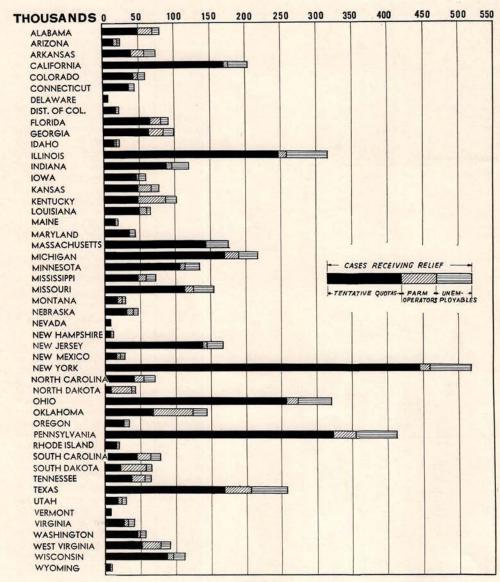
(Total of Individuals)

No state has been spared the task of providing emergency relief to its population in distress. Taking the country as a whole, some 15 per cent of the entire population is on relief, either direct aid or work-projects. This percentage was somewhat higher during the winter load and varies widely between states. States making the best showing on a relative basis include Delaware, New Hampshire, Vermont and Virginia; in these states, 10 per cent or less of the respective populations are receiving relief benefits. There are several states where upwards of 20 per cent of the total population is on public relief, two or three even exceeding 30 per cent. In each of the states a proportion of the persons on relief were engaged on FERA work projects.

Emergency work or made-work programs are at best never entirely satisfactory. Nor have all work projects been of the boondoggling or leaf-raking varieties. Literally hundreds of useful and otherwise beneficial projects have been undertaken—many of which have already been completed—in order to provide work for employable persons on relief. Such projects have ranged from mattress-making and food-canning for the unemployed to the construction and reconstruction of the village schoolhouse, from the erection of rural electric power plants to the physical moving of a \$100,000 public building for a distance of two city blocks.

Approximately 281,000 fewer families were on relief throughout the country in June 1935 than in May, a drop of about 6.5 per cent. For non-family individuals a drop of about 88,000 or about 10.3 per cent occurred between the two months. The total number of persons on relief in June, including the heads and all members of their families, as well as the non-family individuals, decreased 6.8 per cent, from approximately 19,250,000 in May to about 17,937,000 in June but this was about one million greater than the June 1934 total. The highest point in the winter relief load was reached in January, last, when the total amounted to 20,669,647 individuals.

The regulations laid down with reference to the new Works Program provide that all workers be drawn from the relief rolls. In this manner it is expected that quota objectives can be realized.



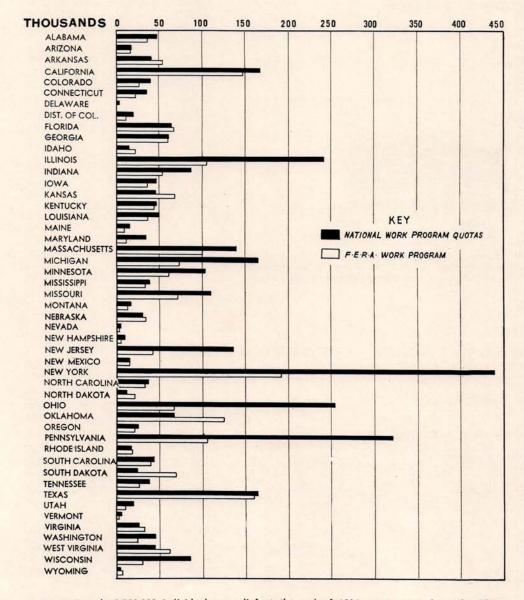
It is the announced plan to employ 3,500,000 on the new Works Program. A distribution of this total by states is given above, the black sections of the bars designating the tentative work quotas. In addition, the state distribution of farm operators and unemployables on relief is shown to complete the picture of the current problem.

How many workers will be engaged on construction projects to be authorized under this program is not possible to state. However, some \$2,500,000,000 have been ear-marked under the Act for construction purposes. If all of this sum is so used it would mean an important extension of waning construction activity under the old PWA program which has long since passed its peak.

Under the work program of the Civil Works Administration (November, 1933, to May, 1934) approximately 150,000 projects for the construction, repair and maintenance of public buildings were undertaken and completed. These represented Federal expenditures of some \$133,000,000 which went chiefly to pay for labor costs. Were material costs to be added—which, incidentally, were largely defrayed by the local governments—the construction volume under CWA would have totaled materially greater.

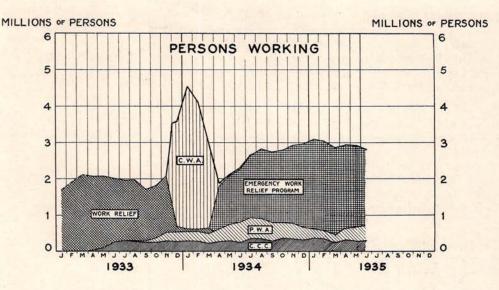
In the field of recreational projects alone, where rather detailed data are available, it is of interest to note that under FERA work programs almost 150 new stadiums have been undertaken with about 75 additional ones improved. More than 300 new swimming pools were constructed and about 100 additional ones modernized; practically 2,500 new playgrounds have been built with almost 4,500 others undergoing improvement. These are only a part of the gains in recreational facilities and are exclusive of similar projects started and completed under the Civil Works Administration.

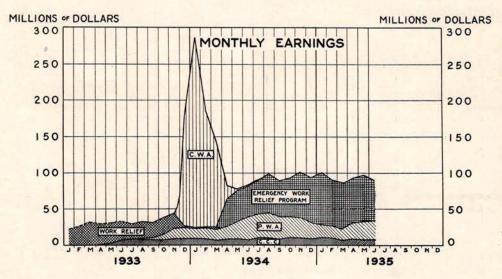
There has been no regional or sectional concentration of these and other construction work projects. While naturally some of the largest projects have been undertaken in the larger centers of population, towns and villages—even rural areas—by the hundreds have benefited by the new facilities. If the new works program follows the broad outline of the old FERA program considerable additional benefits should follow.



Unfortunately no comprehensive statistics are available, at the present writing, to indicate the full extent of construction activity on FERA work projects. That there has been considerable there is no denying. One fact is certain and that is that most construction enterprises which have been undertaken are useful, fulfilling, for the most part, long-standing needs.

Approximately 2,500,000 individuals on relief at the end of 1934 were engaged on the FERA work program. The white bars show the distribution of this total by states. For comparison, the tentative quotas for the new Works Program are also charted. With but few exceptions the new state quotas exceed the respective work totals of the old program.

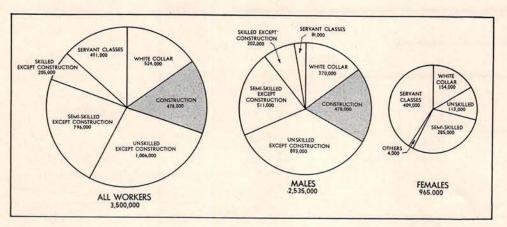




In addition to the Emergency Work Relief Program of the FERA, there have been other work programs in simultaneous operation. In the above charts these are depicted, indicating the distribution by program types, and showing the number of individuals and their aggregate monthly income.

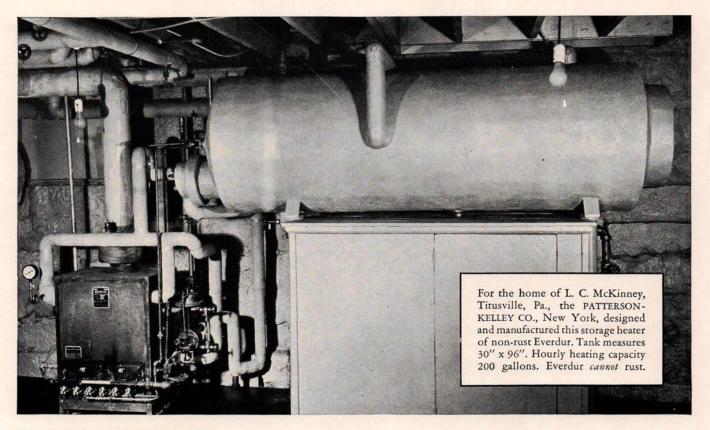
As already observed, the concept of work relief for the unemployed is not new. Approximately 1,750,-000 persons were engaged on work programs as early as January, 1933. In April of that year the Civilian Conservation Corps came into being; despite this, total employment gradually dropped until September when direct employment on the PWA program was undertaken. By November, 1933, only about 300,000 were engaged on construction under the PWA. It had then become apparent that men were not going back to work as quickly as had been expected. This gave rise to the development of the Civil Works Administration. During its duration, work-relief under CWA virtually superseded all other workrelief except that under the CCC and the PWA. With winter needs met, the CWA was sharply curtailed; by April, 1934, it was virtually abandoned as a major works program. In the process of curtailment persons previously on CWA projects were absorbed in the Emergency Work Relief Pro-

OCCUPATIONAL QUOTAS—NEW PROGRAM



The objective of the new Works Program covers 3,500,000 workers as already has been indicated. The above charts give the quota distributions as between men and women, arranged by major occupational classifications. The quota for construction workers, both skilled and unskilled, is indicated by the shaded portions.

The new program will absorb those previously engaged on FERA work projects. The CCC, it is expected, will be expanded to some 600,000. Employment on PWA and highway projects, housing, and so on, it is believed, will afford work for additional persons not now engaged, but all this is necessarily limited by the quota of 478,000 construction workers that has been set up. It is doubtful if the new program will at any time during its operation provide work for a total number of persons as great as that shown at the peak of the old CWA but it is believed that a proportionally larger total will be engaged on construction projects of every description than has been the case heretofore.



In the Home, too...

Storage Heaters of EVERDUR METAL assure plenty of rust-free hot water indefinitely

In hospitals, stores, public and semi-public buildings...in small homes and large residences, storage heaters of Everdur Metal have proved the economy of this strong, not-rust metal of moderate cost.

Nearly all copper, alloyed with silicon, Everdur possesses the strength of medium carbon steel. Since it is readily welded by all commonly used methods, this unusual Anaconda Metal fulfills *all the requirements* for durable, rustless storage heaters, domestic storage tanks and tank units in automatic heaters. And all are available today from leading manufacturers.

Equally successful is the use of Everdur for airconditioning equipment, drains and ducts, electrical conduit, smoke washers, masonry anchors, window cleaner bolts, etc. Additional data on any specific use of Everdur furnished on request.

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EVERDUR METAL

"Everdur" is a registered trade-mark identifying products of The American Brass Company, made from alloys of copper, silicon and other elements.

EVERDUR METAL for TANKS

NEW MATERIALS AND EQUIPMENT

NEW CATALOGS
RESEARCH REPORTS
MANUFACTURERS' LITERATURE

J51
COLOR INDEXING APPLIED TO VALVES

Color as an indexing device is now being applied to valves in the form of a new type of valve wheel molded of colored plastic materials. The improvement, developed by Jenkins Bros., makes it possible to distinguish easily and surely valves for steam, water, air or any other fluids and gases by colors. Five standard colors—blue, red, black, green and gray—are offered, unmarked and with five standard service markings molded in relief. In the descriptive bulletin (available on request) manufacturer claims that they are strong, cool to the touch, easy to grasp, sanitary, permanent in color and unusually pleasing in appearance.

Architects are invited to use the coupon on this page as a convenient means of obtaining manufacturers' publications describing in detail the products and materials mentioned

J52
REPUBLIC WIRE NAILS AND
WIRE PRODUCTS

A new catalog is released by Republic Steel Corp. Containing 40 pages of up-to-date information on Republic wire, wire nails and fence posts, the catalog is profusely illustrated. A copy will be sent on request.

J53 NEW COPPER SHINGLE

The New Haven Copper Company, Seymour, Conn., announces a new copper shingle being marketed under the trade name "Kenmar Copper Shingle." It is claimed that



this shingle offers all the advantages of sheet copper plus greater opportunities for pleasing architectural effects with ease of application and moderate cost. A booklet, "Beauty and Permanence with Ken-

AN OFFER TO ARCHITECTS PRACTICING IN UNITED STATES

TO OBTAIN FURTHER INFORMATION

about any products mentioned, write the index numbers in space below. For literature about products advertised in this issue, give name of the product and manufacturer. Return coupon to The Architectural Record, 119 West 40th Street, New York, N. Y.

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DEPENDABLE

Duriron has met the test of actual use for so many years that it has become the standard by which corrosion-resistance is judged. For enduring satisfaction and economical installation specify

THE DURIRON COMPANY, Inc.

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See Our Catalog in Sweet's

DURIRON ACID PROOF DRAIN PIPE

SUBDUE

AND CORRECT ACOUSTICS WITH

ACOUSTI-CELOTEX



Acousti-Celotex on the ceiling subdues noise in the Diet Kitchen of Murphy Memorial Hospital, Whittier, Calif.

Sound quieting and acoustical treatment are gaining considerable headway in public buildings of all types. This is borne out by the fact that more than 50% of the installations are in existing buildings.

Schools, hospitals, churches, office buildings, auditoriums, theatres-wherever people gather to learn, work or pray, for amusement, inspiration, medical aid or to convalesce-Acousti-Celotex is used.

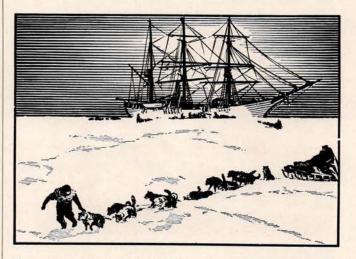
Acousti-Celotex absorbs noise at its source, provides clearer hearing. It is quickly installed and easily adaptable to any type of interior. Patented perforations permit repeated painting without loss of acoustical effectiveness. Cleaning and maintenance are simple and economical.

Four types of Acousti-Celotex Sound Absorbing Tiles cover the entire range of absorption needed on any noise-quieting job. Acousti-Celotex contracting engineers in your locality will gladly cooperate in analyzing jobs and preparing estimates. Or write direct for information.

THE CELOTEX COMPANY, 919 No. Michigan Ave., Chicago.



NOISE KOH-I-NOOR Again Triumphs at the Pole!



We congratulate Admiral Richard E. Byrd upon the successful culmination of his latest South Pole Expedition.

Surmounting unlooked-for obstacles, perils and discouragements, he and his entire crew of brave men are safely home.

Koh-I-Noor pencils, of course, played an important role in his latest venture as they have in other expeditions of note. His records, maps and drawings will be preserved for posterity, the Admiral being just as careful in his choice of lead pencils as he was in the matter of food, clothing or other equipment.

It is a matter of record that Koh-I-Noor pencils have accompanied every important expedition in the past decade, literally to the ends of the earth. It is also a matter of record that notes made under the trying and extreme conditions of the Poles, remain legible. Andree, the noted Norwegian explorer, used a Koh-I-Noor. It was found 33 years after his death, buried with his diary under Arctic snows and ice, the writing still plain and legible.

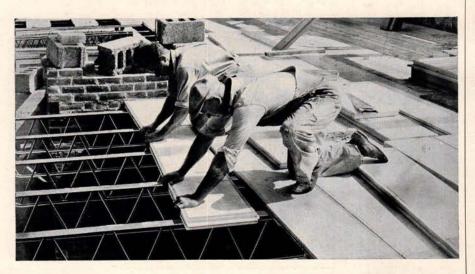
Whether it be in an air-conditioned office, in the Arctic's cold or the Equator's heat, Koh-I-Noor serves and serves well. Koh-I-Noor Pencil Company, Inc., 373 Fourth Avenue, New York, N. Y.





FOR FIRE-RESISTIVE FLOORS

GYPSTEEL PLANK* ON LIGHT STEEL JOISTS



BECAUSE

- PLANK floors reduce dead loads 15 to 30 pounds per square foot. Joists may be spread farther apart or reduced in size.
- **2** PLANK saves tonnage in girders and columns as well as joists.
- Speeds construction. Handles like wood—cut, sawed, nailed or bored.
 Can be erected in any weather.
- Reduces field supervision. Readymade for immediate installation.

 Assures uniform, level surface suitable for wood flooring without fill.
- Published price list defines cost before bids are taken. Reduces gamble on both materials and labor.

GYPSTEEL PLANK is manufactured in several forms for fire-resistive floors and roofs. Write for literature.

*The term PLANK as applied to cementitious building products is a registered trademark of the American Cyanamid & Chemical Corporation.

GYPSTEEL PLANK

U. S. Pat. No. 1,854,396 Canadian Pat. No. 328,519 Other U. S. and Foreign Patents Pending

STRUCTURAL GYPSUM DIVISION
AMERICAN CYANAMID AND CHEMICAL CORPORATION
30 Rockefeller Plaza New York, N. Y.

mar Copper Shingles," recently issued by the New Haven Copper Company, gives complete information about this new product. A copy may be obtained on request.

J54 SHOWERS AND PLUMBING FIXTURES

The new catalog, K-1, released by Speakman Company describes in detail types of Speakman showers and fixtures especially adapted for such large buildings as institutions, industrial plants and similar installations. In addition to the regular specifications quoted, the catalog contains blueprint drawings showing plan and sectional views with measurements. Other information includes data on shower piping, flush valve and valve construction, together with tables showing rate of water discharge of shower heads and other fixtures. K-1 does not take the place of the Speakman general catalog; only a portion of the Speakman line is illustrated and described, but this catalog was designed to assist those who are technically interested in problems pertaining to showers or any kind of brass plumbing fixtures. A copy of the catalog will be furnished on request.

J55 SOUND AND VIBRATION ABSORPTION

Reducing the noise produced by mechanical equipment through the use of sound-dampening or soundabsorbing materials and by isolating vibrating mechanisms is the subject of a brochure recently published by Johns-Manville. It contains an instructive discussion of the problem of sound control in air conditioning systems, mechanical refrigerators, oil burners, metal furniture and other equipment, as well as a description of the various materials used in typical installations. Special treatment is given the subject of vibration isolation platforms designed for motors, fans and the like. A copy of this illustrated brochure, "Sound Control of Mechanical Equipment," is available on request.

Johns-Manville also announces Air-Acoustic Sheets, a new product designed to reduce or eliminate the noise transmitted through ducts in air conditioning and ventilating systems. These sheets are a soundabsorbing material in rigid block form made of rock wool and a suitable binder and are primarily used as duct lining. They will not smoulder or support combustion and are highly moisture resistant. They have good sound-absorbing efficiency and they serve as heat and cold insulation.

J56 AN IMPROVED BOILER-BURNER UNIT

The National-Williams Oil-O-Matic is a boiler burner unit combining good appearance (jacket designed by Lurelle Guild) and utility. Made in various sizes for residential use the unit is said to burn several grades of oil, employs the "projected flame" principle, is insulated against sound, is designed to supply hot water with or without house heating, and in construction is very compact, requiring a minimum of installation space. Colorful folders about this unit are offered by National Radiator Corp.



THIS REPRESENTATIVE JURY

MELVIN T. COPELAND, Professor of Marketing, Harvard University, Cambridge, Mass.

J. ANDRE FOUILHOUX, A.I.A., of Hood and Fouilhoux, Architects, New York, N. Y.

ALBERT KAHN, F.A.I.A., Architect, Detroit, Michigan.

WILLIAM LESCAZE, A.I.A., Architect, New York, N. Y.

JOHN W. ROOT, A.I.A., of Holabird and Root, Architects, Chicago, III.

F. R. WALKER, A.I.A., of Walker and Weeks, Architects, Cleveland, Ohio.

KENNETH C. WELCH, A.I.A., Expert in Store Planning and Equipment, Grand Rapids, Michigan.

is judging the HUNDREDS OF DESIGNS submitted in the MODERNIZE MAIN STREET

Competition

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and conducted by The Architectural Record, with Kenneth K. Stowell, A. I. A., as professional adviser.

• We take this opportunity to thank the entire architectural profession for the helpful interest that has been shown in this competition as evidenced by the many drawings submitted, and to extend our appreciation to all competitors for the thought and effort they have expended in

what we sincerely believe is a worthwhile and constructive endeavor to visualize for the retail merchant the possibilities and advantages of intelligent modernization. The October issue of this magazine will announce the competition awards. Libbey • Owens • Ford Glass Company, Toledo.



HIGGINS' INK ATELIER

CONDUCTED BY ARTHUR L. GUPTILL, A.I. A

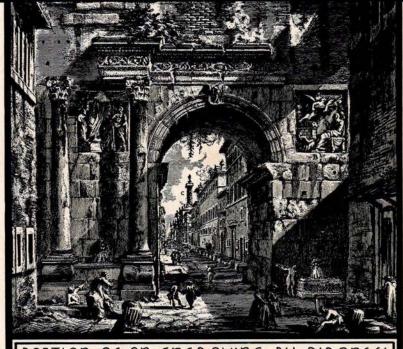
.as we turn to HISTORIC FRAGMENTS

AMONG the many historic documents of value to the student of design are the volumes of engravings of the architecture of ancient Rome, by Glovanni Piraness.

Reproductions of these are available in manyarchitectural libraries.

Whether one's leaning is towards the "modernistic" or the traditional, he can scarcely afford not to learn the lessons that these convey.





PORTION OF AN ENGRAVING BY PIRANESI

CHAS.M. HIGGINS & CO., Inc. BROOKLYN, N.Y.

PRESENT-day renderings (especially the Analytique and Archaeology problems of the Beaux-Arts Institute of Design) are often based on these antique examplesoUsually they are drawn in HIGGINS' BLACK DRAWING INK. either the Water proof orthe General" (soluble). A bit of the waterproof BROWN ink may be added to enrich and soften the effecto



J57 GENERAL ELECTRIC COMPANY AIR CONDITIONING

General Electric Company has developed a new direct-fired warm air conditioner, combining the functions of heating and air conditioning in one compact oil-burning unit. It is designed for the small home of about six rooms and will be priced ror that market. The unit is housed in a rolled sheet steel jacket in two-tone gray, with black and chromium trimmings. It is described as quiet, clean and free from vibration, and is automatically regulated by electrically operated controls.

Another General Electric announcement describes the new self-contained room cooling unit said to be the first which operates without using special power lines or water supply and drain piping. Filling the need for a summer air conditioning unit which operates on an ordinary A.C. electric circuit and which does not require extensive installation work, the new conditioner, listed as Type FC-2, may

be installed simply by adjusting its duct connection to the nearest electrical outlet. Operating on a 110-volt current, it is air-cooled and the first such unit which does not require connection to a special power supply. The unusual construction and operation of this unit are described in a bulletin offered by the manufacturer.

J58 NEW PLASTERING SYSTEM

The U S G Resilient Plastering System is an improvement in lathing and plastering. The manufacturer is United States Gypsum Company. By a simple and inexpensive method, Rocklath (gypsum lath) is attached to studs and joists so that the lathing base floats free from the structural background, permitting movement in structural members without cracking the plaster. Instead of being tied immovably to structural members, as is the case with typical wall and ceiling construction, the lath and plaster are suspended or held away

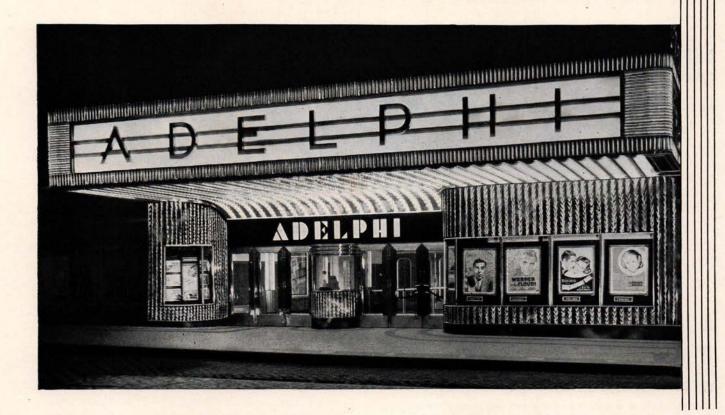
from the studs and joists by resilient springs. Rocklath supported on springs and covered with a half inch of gypsum plaster forms a full floating unit. Three principal advantages are claimed: It is crackproof against all ordinary movement; it has a soundproofing value equal to many special soundproof constructions; and it reduces the streaking of outside walls and ceilings that commonly shows up in lath marks and joist marks caused by a difference in conductivity values. An illustrated folder will be supplied on request.

J59 THE ECONOMY OF COPPER-BEARING STEEL

An interesting folder devoted to Inland copper-alloy steel, published by the Inland Steel Company, advances proof that copper-bearing steel is an exceedingly economical material for combating corrosion. It cites several specific applications where loss from corrosion has been minimized. Copies of the folder are available.

Stainless Steel =

FOR MODERNIZING THEATER FRONTS



• An attractive theater front draws patronage. Hence modernization of theater fronts with stainless steel is good business as well as good taste. It brightens the patron's outlook as well as the theater's.

Stainless steel will not rust, tarnish, or stain. It does not pit, chip, or peel. Hence stainless steel trim keeps the theater front permanently bright and attractive. It can be washed as easily and quickly as glass. No polishing or protective

coating is required to maintain its gleaming surface. The initial investment is more than compensated by enduring beauty without maintenance. Stainless steel is new forever.

Practical and unbiased information on stainless steels and their uses is offered by Electromet, pioneer in the field of ferro-alloys and alloy steels since 1906. Your request for this information will receive prompt attention. A letter today will bring it without obligation.

ELECTRO METALLURGICAL COMPANY

Unit of Union Carbide and Carbon Corporation

CARBIDE and CARBON BUILDING, 30 EAST 42nd ST., NEW YORK, N.Y.

Electromet Ferro-Alloys & Metals Duracal, available in eight colors and white, is washable calcimine in powder form. When dissolved in water it may be applied to plaster, concrete, brick, stone, wallboard or primed wood surfaces. It is self-sizing and is specially adapted for use over new plaster as it is not affected by lime. The colors are said to have excellent hiding power. Duracal dries quickly and forms a smooth coat that will not chip, flake or rub off. It can be cleaned by washing or by using a prepared cleaner. It is a product of United States Gypsum Company. Folder showing color samples will be mailed on request.

BUILT AS GOOD AS THEY LOOK

U. S. Pat. 1.970,105



At Last
A UNIT
HEATER

WITH HANDSOME CABINET DESIGN

Architects can now forget the old idea that unit heaters can only be installed in factories. Fedders' handsome, sturdy cabinets and quieter operation make them at home in commercial surroundings. Mail coupon for illustrated catalog No. 527.

FEDDERS MANUFACTURING COMPANY

57 Tonawanda St., Buffalo, N. Y. AR935

Please send me Name
Unit Heater
Catalog 527 Street City

SAFETY TROPHY DEDICATION

The Buffington plant of Universal Atlas Cement Company has won the Safety Trophy which is awarded annually to that plant which during the year has sustained the least number of accidents. Dedication was made on Thursday, June 27, 1935, on which occasion addresses were delivered by Arthur H. Young, Vice-President, United States Steel Corporation and by other executives.

THE A. M. BYERS COMPANY

Announcement has been made that Byers *steel* pipe will be manufactured in addition to the present complete line of wrought iron products by this company which has specialized in wrought iron products for many years. Byers steel pipe will be made in the company's modern pipe mills under the same executive supervision as exists on wrought iron pipe.

DOMESTIC-HILL

Two manufacturers, Hill Laundry Equipment Company, Inc., and Domestic Laundry Machinery Repair Corporation, have combined facilities and organized the Domestic-Hill Laundry Equipment Company, Inc., with offices in Long Island City, N. Y. The new company is equipped to serve residences, clubs, institutions and apartment buildings. Its service includes the manufacture, installation, maintenance and repair of clothes driers, washers, ironers, boilers, tables and other laundry equipment.

HARDWOOD PRODUCTS CORP.

The Hardwood Products Corp. announces acquisition of Riverbank Insulating Door Company, manufacturing doors for the highest sound-insulating requirements. Door interiors are divided, with acoustically inert membranes, into sealed air spaces. Openings are hermetically sealed by gaskets and closing devices that effectively close all cracks when the door is in closed position.



Le Corbusier 1929 — 1934

The leading part which Le Corbusier has taken in the development of a new architecture adapted to new living conditions, new materials and new construction systems, gives a peculiar importance to this comprehensive presentation of his work covering the past six years.



The book makes clear the point of view with which he has approached the problem of developing new solutions for the individual building and for the complete city plan. It contains nearly 600 reproductions of photographs, plans and sketches illustrating residences, office buildings, asylums, theaters, public buildings, clubs, museums, etc.

The detailed descriptions and explanations accompanying the illustrations are in French but the Introduction by Le Corbusier and his chapter "A New Classification of Town Building, a New Dwelling Unity" are printed in English, French and German.

Copies of this timely and important book may be obtained from The Architectural Record at a price of \$8 postpaid in the United States.

THE ARCHITECTURAL RECORD,
119 W. 40th St., New York, N. Y.

Enclosed is \$8 for which send me a copy of "Le Corbusier,
1929 - 1934."

Name

Address

City and State....



THE HUMAN VOICE can carry only so far. That's why we have such things as microphones and loudspeakers, and radio. And that's why wiring for sound is such an important part of the equipment of modern public buildings.

You'll find RCA Victor Sound Systems in schools and churches, hotels and restaurants, court rooms and legislative chambers. Sometimes the equipment is visible, sometimes cleverly concealed within harmonizing decorations.

Of course it is preferable to include the system in the original plans, and make the actual installation during the erection of the building. There is an RCA Victor Commercial Sound System Distributor near you who is able to assist you in planning an adequate system for any building now on your boards. He has at his command the world's greatest and richest experience in sound recording and reproduction—RCA Victor's. Write us and we will send you his name and address.

RCA MANUFACTURING CO., Inc., CAMDEN, N.J.

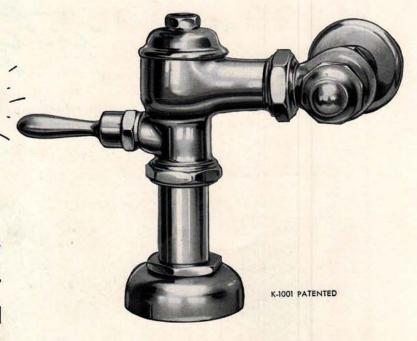
A RADIO CORPORATION OF AMERICA SUBSIDIARY



Hush valves should be seen



This is true of the Speakman Si-Flo Flush Valve, which is so quiet in operation it cannot be heard outside the bathroom.



It is not necessary to take our word for this. Merely operate a Speakman Flush Valve and your own ears will give you proof that it is a *silent* flush valve.

Furthermore we would like to tell you about its construction. The valve is heavy cast brass throughout, finished in sparkling chromium plate which will never tarnish. The compact piston unit, shown here, is the only part of the Si-Flo Valve that is subject to wear, and if renewal is ever necessary, the entire unit can be replaced in a few minutes at a purely nominal cost.

We shall be glad to send you a copy of our booklet K-68, which illustrates and describes fully the construction and silent operation of the Speakman Si-Flo Flush Valve.

SPEAKMAN COMPANY, Wilmington, Del.

We have been making quality fixtures since 1869

Refer to Sweet's Architectural Catalogs, Section 25, Catalog 9

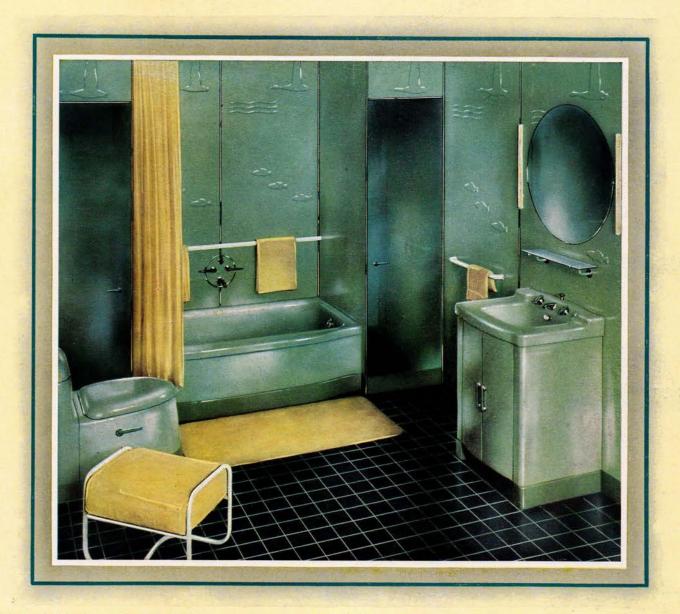


The compact piston unit. The only moving part of the Si-Flo Valve. This unit can be replaced in five minutes at a nominal cost.



SPEAKMAN Showers & Fixtures

ARCHITECTS FIND A NEW ALLY IN BRIGSTEEL eaulyware



Advance in the fields of ceramics and metal working combine, in this revolutionary new type plumbing ware, to provide an interesting and more flexible medium for achieving unusual effects in bathroom design.

Striking effects, such as the bathroom illustrated, formerly possible only in the more pretentious designs, are now well within the limits of today's most modest budgets.

New colors and pastel shades cost but little more in the Brigsteel line than plain white in

cast iron ware. Color combinations and color trim not obtainable in any other type of ware are available at a very slight increase over the cost of solid colors. High lustre porcelain enamel finish is furnished at no addition in cost. All designs are ultra modern and include many new convenience features. Construction costs are substantially reduced when Brigsteel Beautyware is used because it is but one third the weight of cast iron. Ruggedly built to withstand the hardest usage, these beautiful

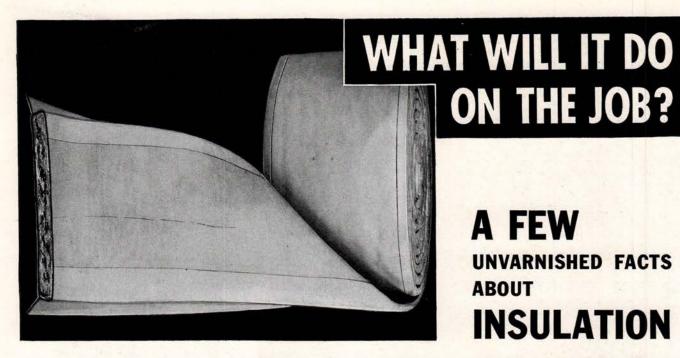
new fixtures will outlast the building in which they are installed.

Architects are cordially invited to write for complete catalogues containing specification data, working drawings, etc.

These luxury-type plumbing fixtures, in a wide range of colors and color combinations, cost so little more than ordinary all-white ware that you can use them in the medium and low priced homes that dominate the building field.



The resources of the Briggs



A FEW UNVARNISHED FACTS ABOUT INSULATION

We have plenty of laboratory figures to show why BALSAM-WOOL is better insulation. But your clients don't want laboratory figures. They want insulation efficiency—on the job.

Here are a few questions every architect should ask ... if he is interested in giving his clients more insulation value per dollar:

Moisture-PROOF?

We know-and you know-that moisture destroys the effectiveness of insulation. We know-and you know-that moisture gets into any insulation which is not adequately protected as a whole. BALSAM-WOOL is completely and permanently protected from moisture ... sealed in a waterproof covering. In addition, it is chemically treated to make it verminproof and fire-resistant.

Application?

To be effective, insulation must have no weak spots—leave no loophole for wind, heat or cold to get through. But you cannot be sure of continuous insulation with materials that are merely poured or dumped in by common labor. Balsam-Wool is positive in application—fastened in place by qualified carpenters who know their business. Flanged edges now make it even easier to apply than ever before.

Permanent

Materials that settle or that change their form, cannot be permanently effective. Balsam-Wool lasts as long as the building in which it is applied -stays where it is put and does not change its form.

Offer the RIGHT Thickness for the

For every home and every climate, there is a right thickness of insulation beyond which it does not pay to go. Balsam-Wool comes in thicknesses to fit every insulation need, everywhere.

Let us tell you all of the facts about BALSAM-WOOL. We believe you will find them worth knowing!





Not so long ago, the editor of a leading women's magazine declared a new declaration of independence aimed at a long-suffered and unnecessary household evil—the square corner, that dirt-collecting, hard-to-clean spot in cupboards, stair cases, and at the baseboard. Much progress has been made in establishing the round corner principle. Today Crane Co. presents the housekeeper with round corners in another place where they are badly needed—the laundry tub.

The new Crane Porcelain (all clay) Laundry Tub, its glistening white, hard, glasslike surface impervious to strong alkalies, dyes, and acids, has well-rounded corners, inside and out, which make it as easy to clean as a dinner plate. Its all-clay composition eliminates all danger of rust. One-piece construction, in both single and double styles, is a further aid in cleanliness. Supporting frame is angle iron, but porcelain or painted cast iron legs are also available. The supply fixture is a new Crane development, precisely made, durable, and located above tub rim to prevent back siphonage.

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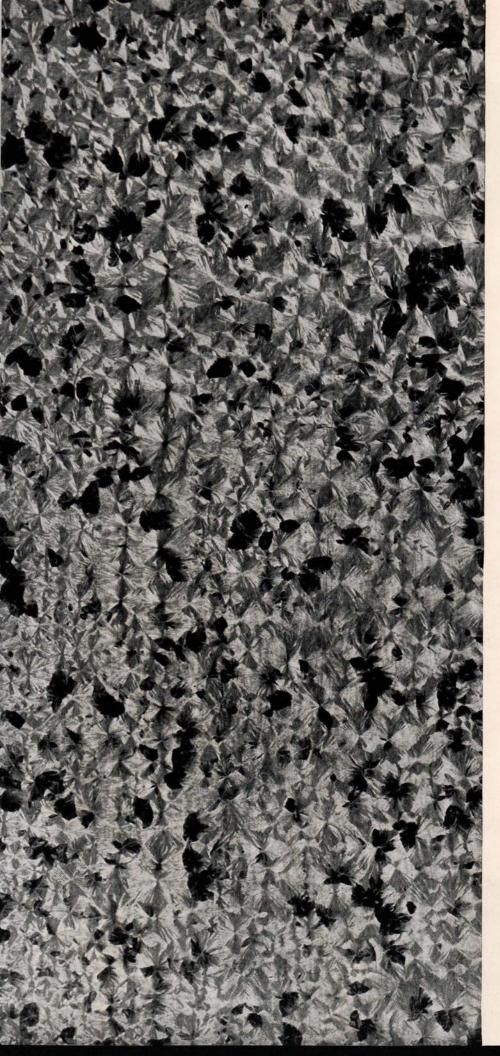
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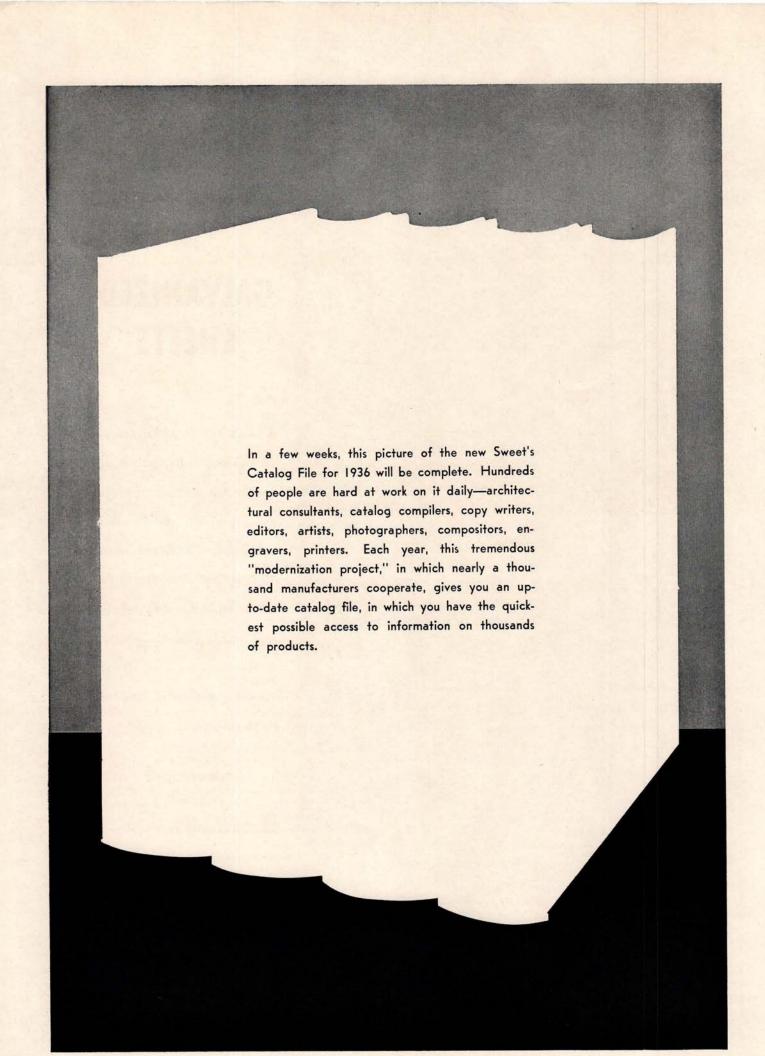


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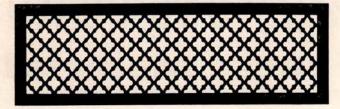




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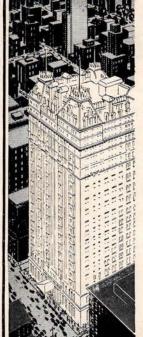
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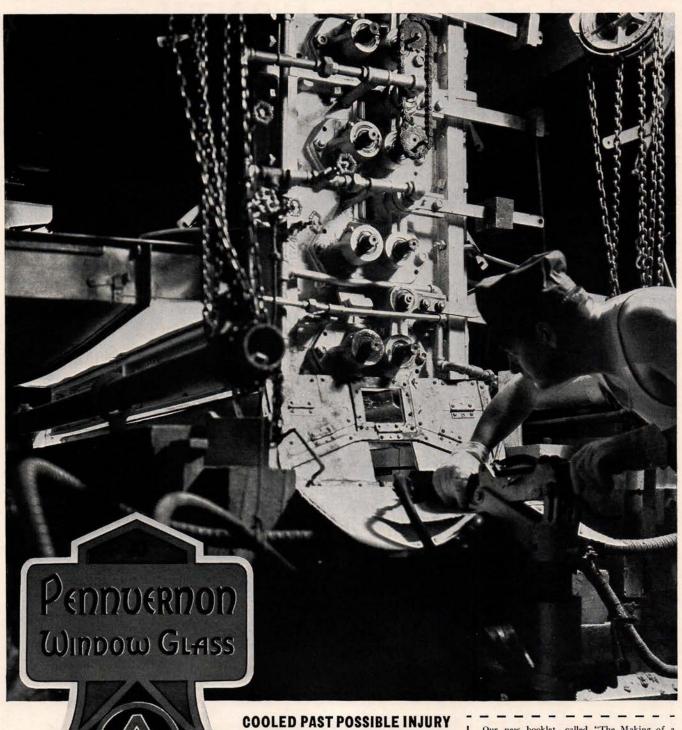
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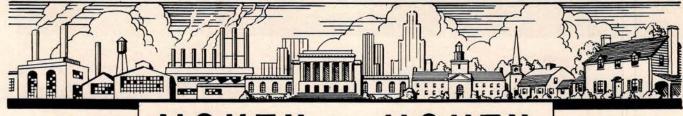
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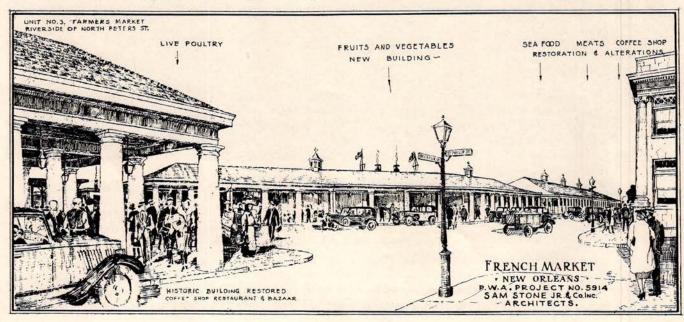
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State Teacher's College, Hattiesburg, Miss. Vinson B. Smith, Jr., Architect

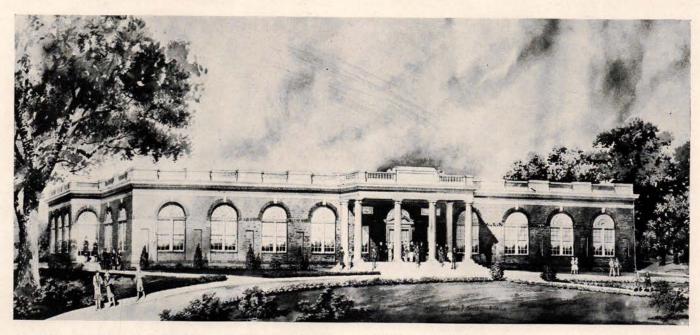
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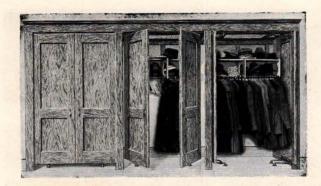
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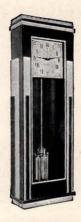
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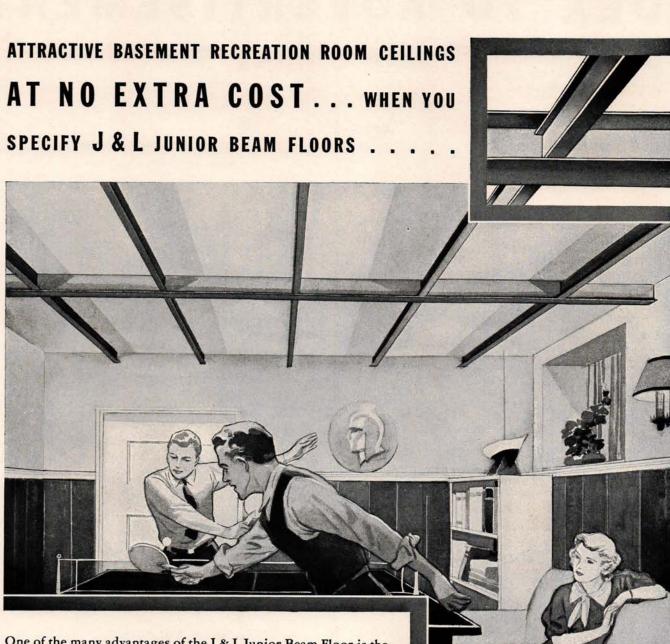
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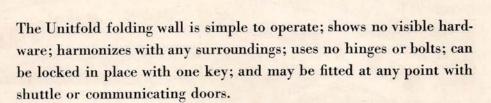
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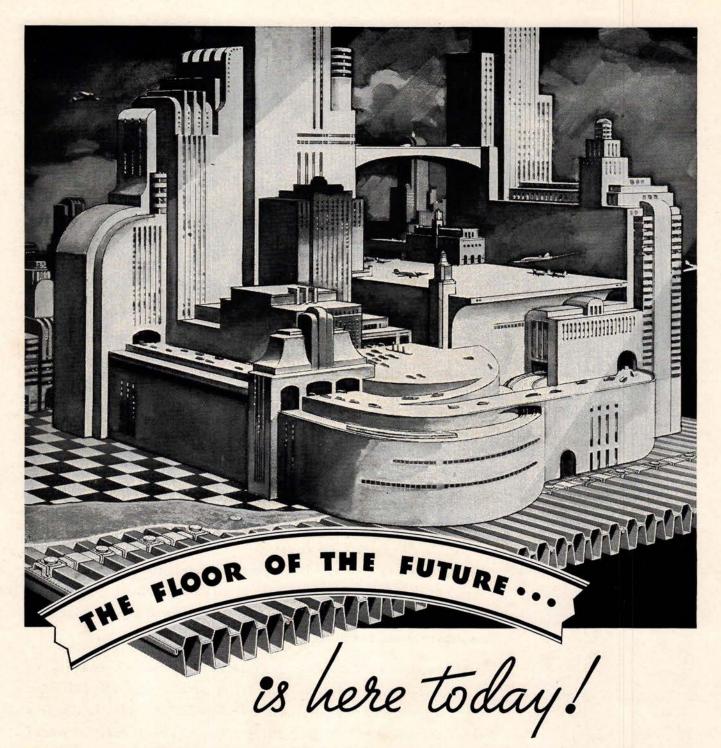
The installation shown above is in the Payne Whitney Gymnasium of Yale University, New Haven, Connecticut; architect John Russell Pope of New York. Other important installations include those in the Yale Graduate School of Yale University; architect James Gamble Rogers of New York; the Parish House of All Saints' Episcopal Church, Great Neck, N. Y.; architect Henry C. Pelton of New York; the Madison Ave. M. E. Church, Park Ave. and 60th St., New York; architects Cram & Ferguson of Boston, Massachusetts; and the Athletic Club of Camden, New Jersey; architect Paul P. Cret, of Philadelphia, Pennsylvania.

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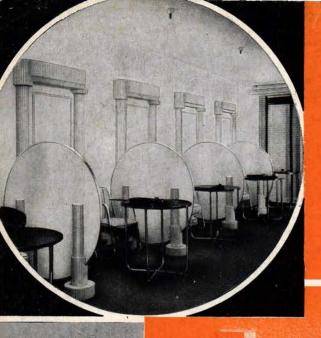


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