

ARCHITECTURE

March 1930



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RAYNE ADAMS

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LEWIS MUMFORD

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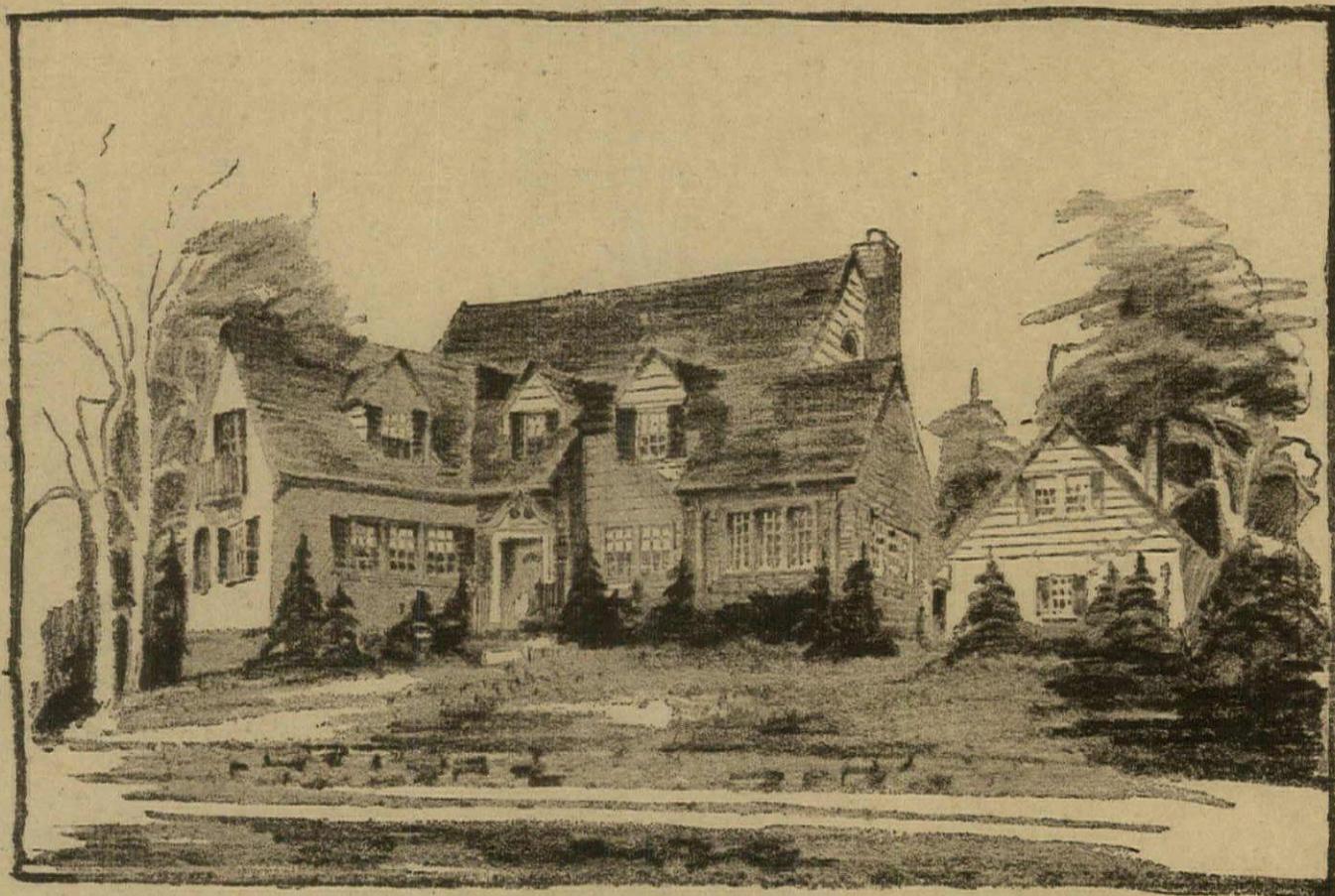
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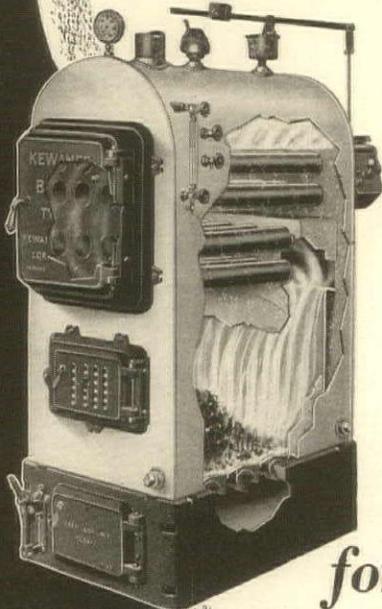
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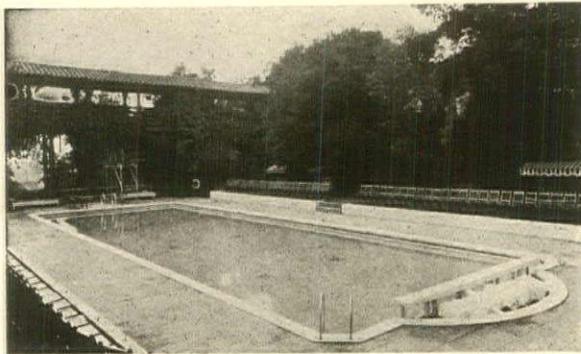
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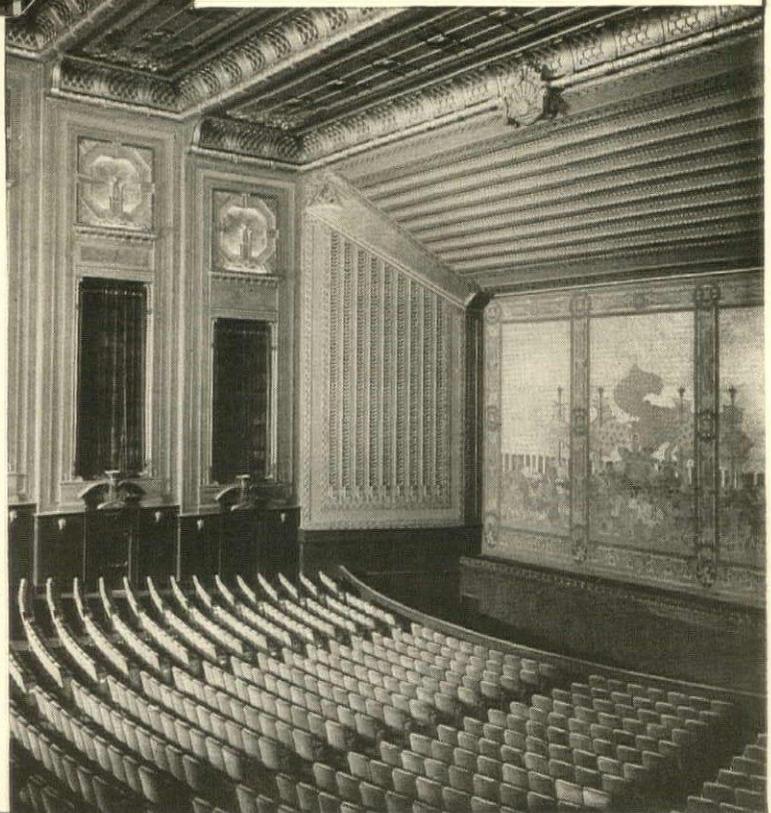
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*Below:
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Number of Piles—491. Total Lineal Feet—6798
Architect—Bley & Lyman. Contractors—Dwight P. Robinson
Owner—Walbridge Building Corp.*

RAYMOND

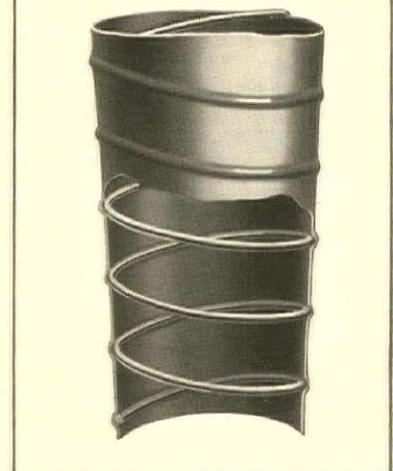
CONCRETE PILE FOUNDATIONS

are beneath this typical apartment building — typical in that it is just one of many on which owner, architect and engineer agreed that speed, economy and dependability of foundation work were of primary importance — hence logically, Raymond.

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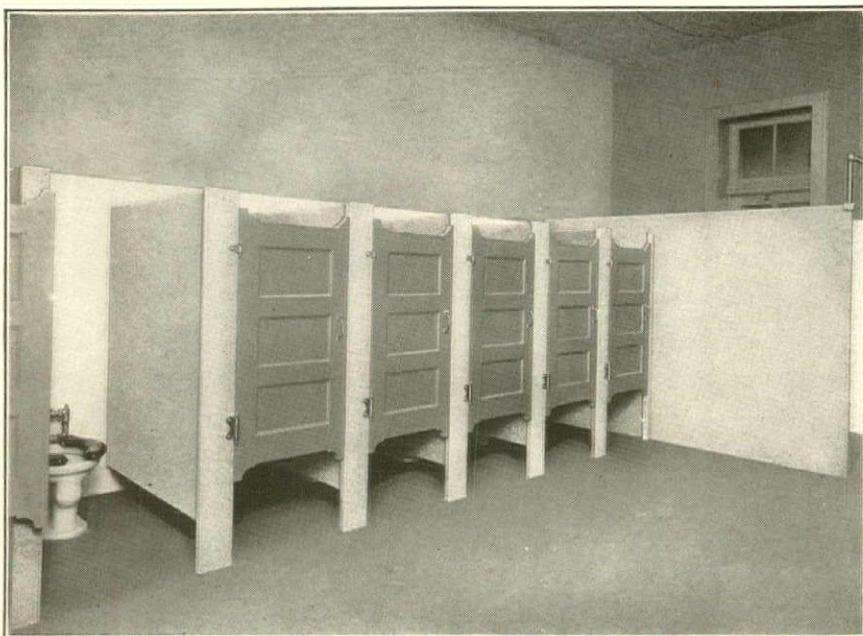
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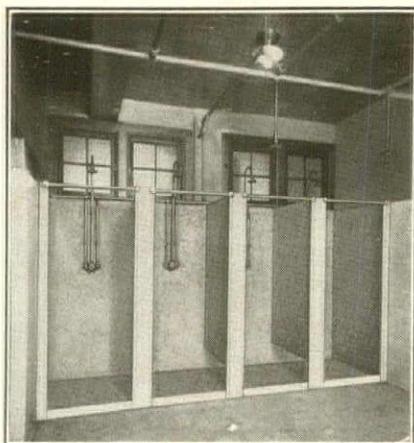
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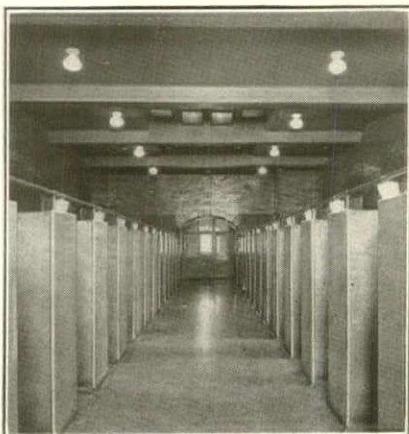
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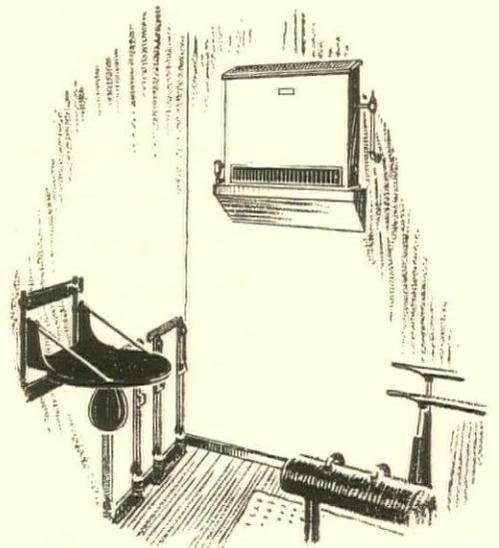
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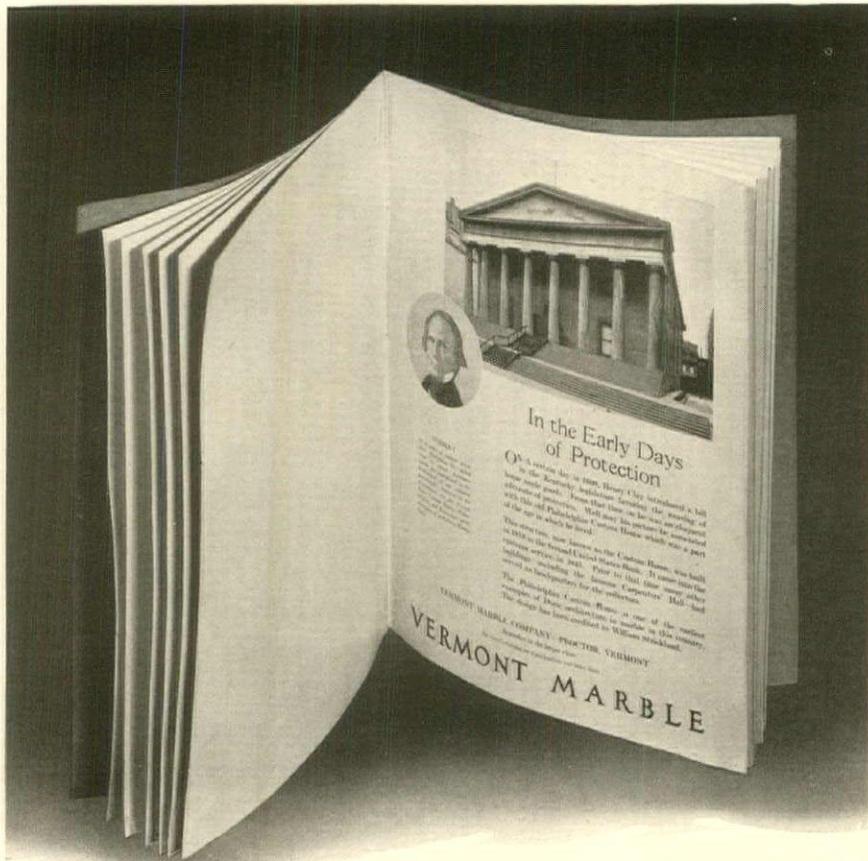
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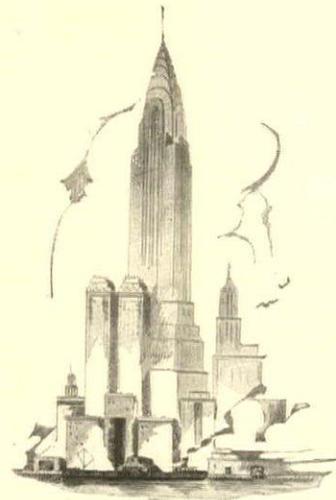
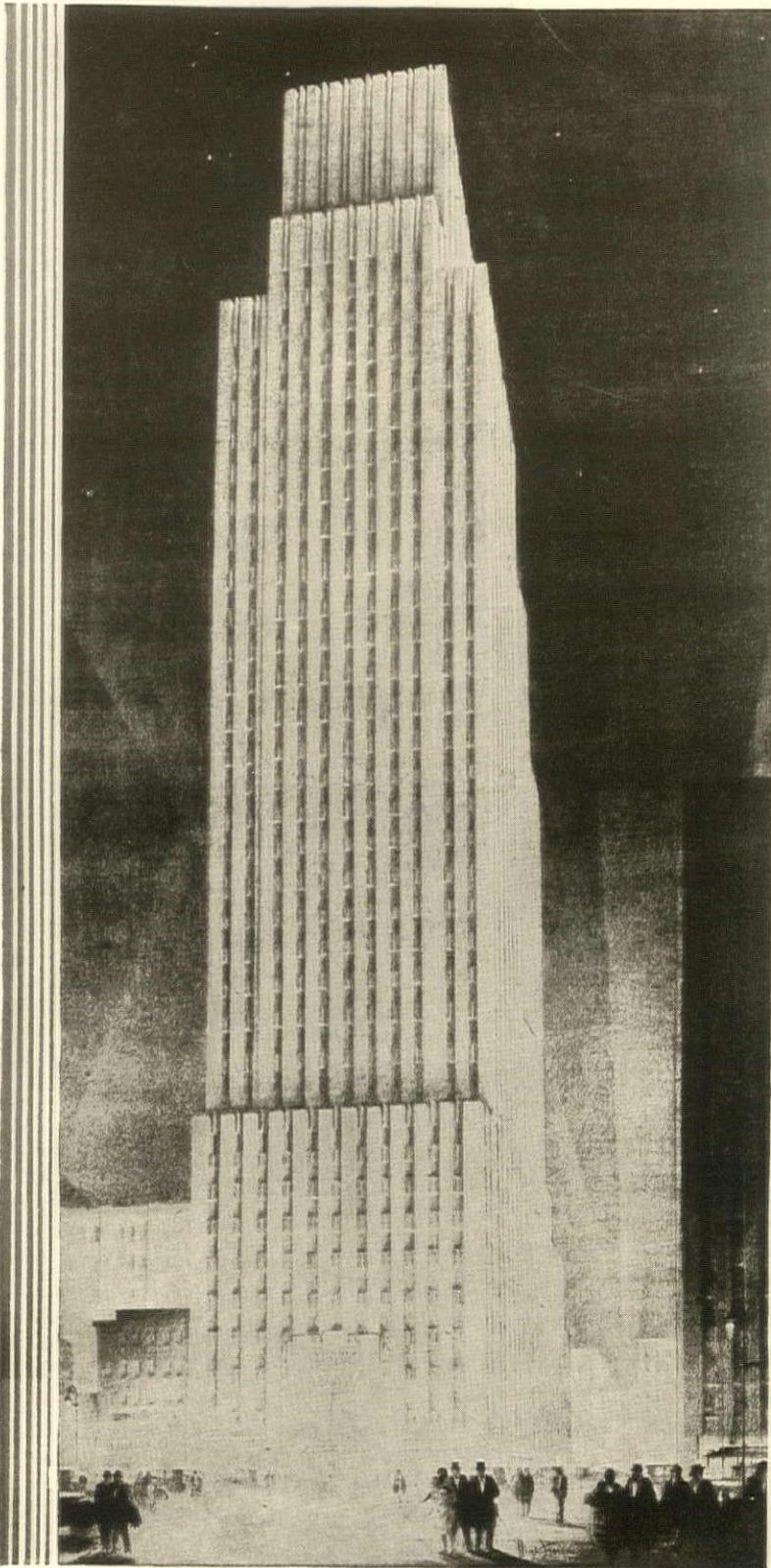
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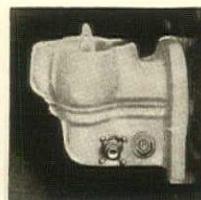
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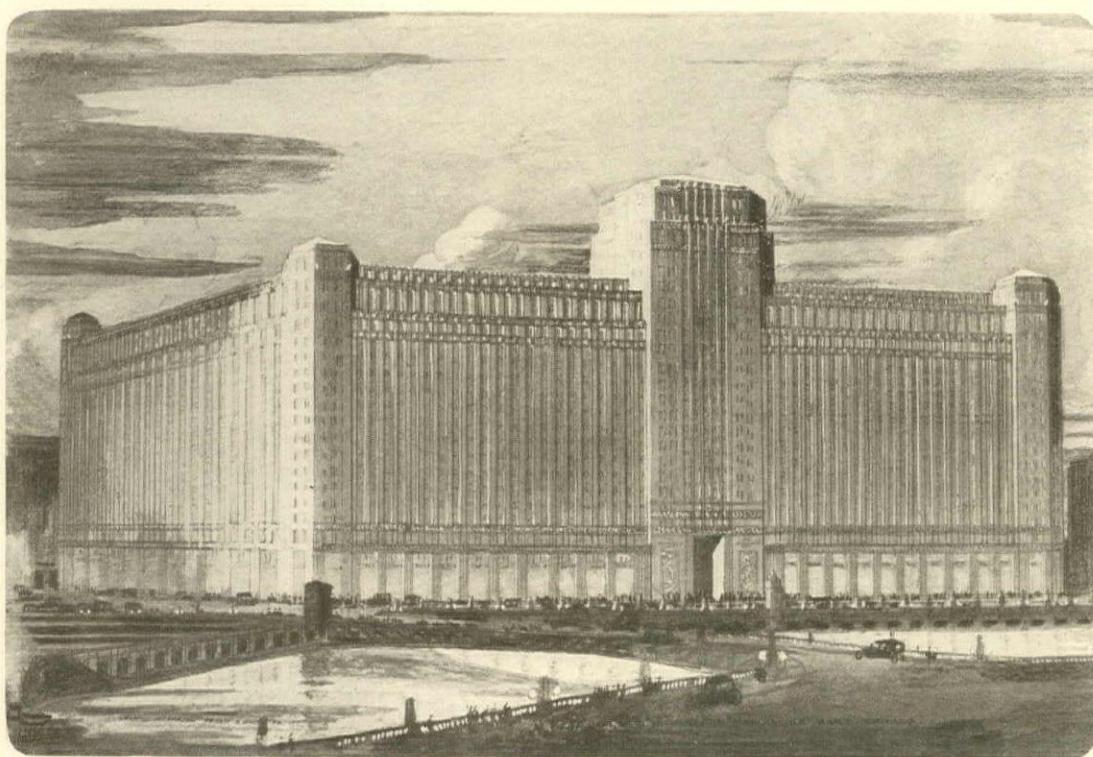
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Rendering by the Architects—Graham, Anderson, Probst and White

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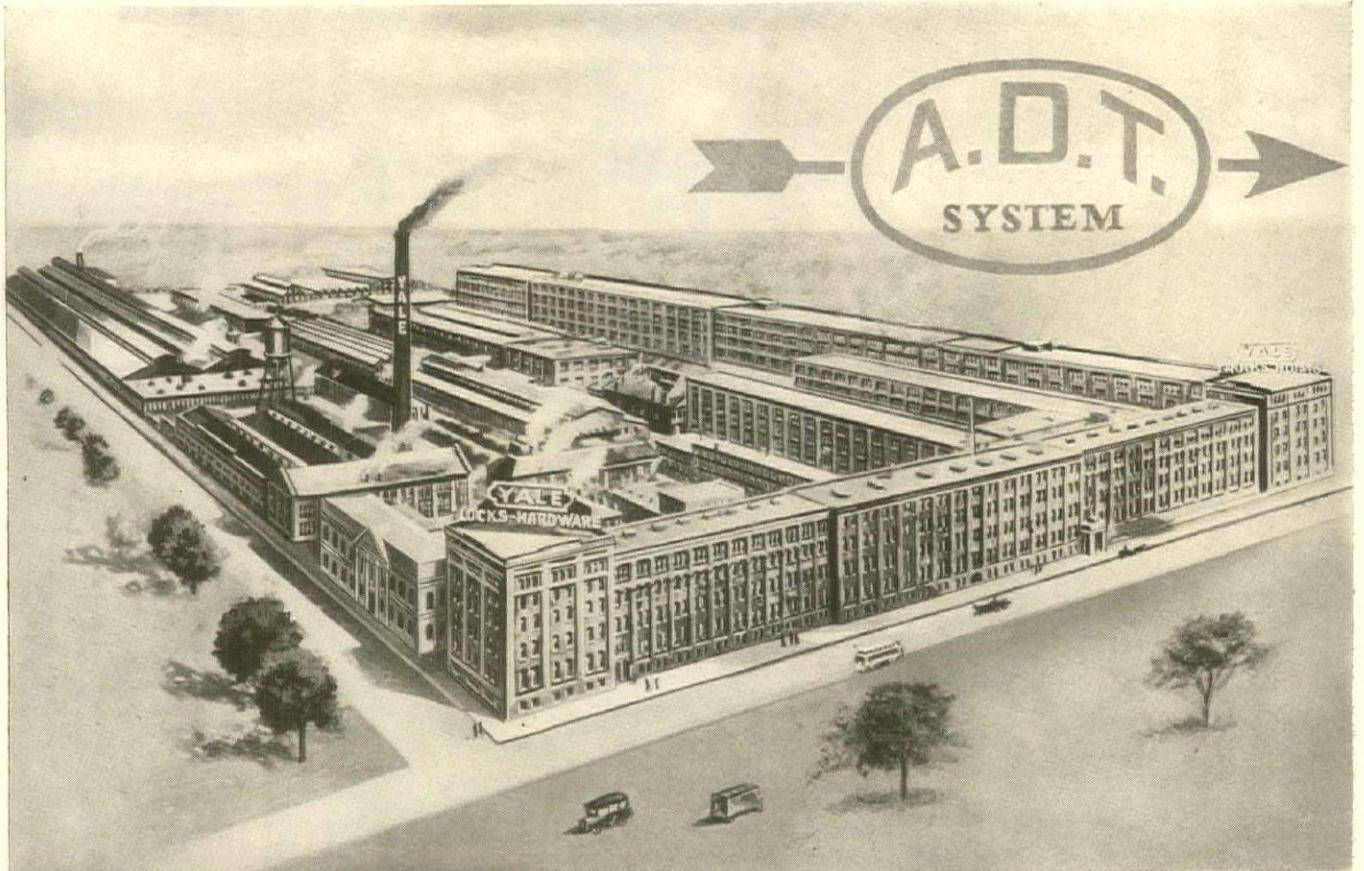
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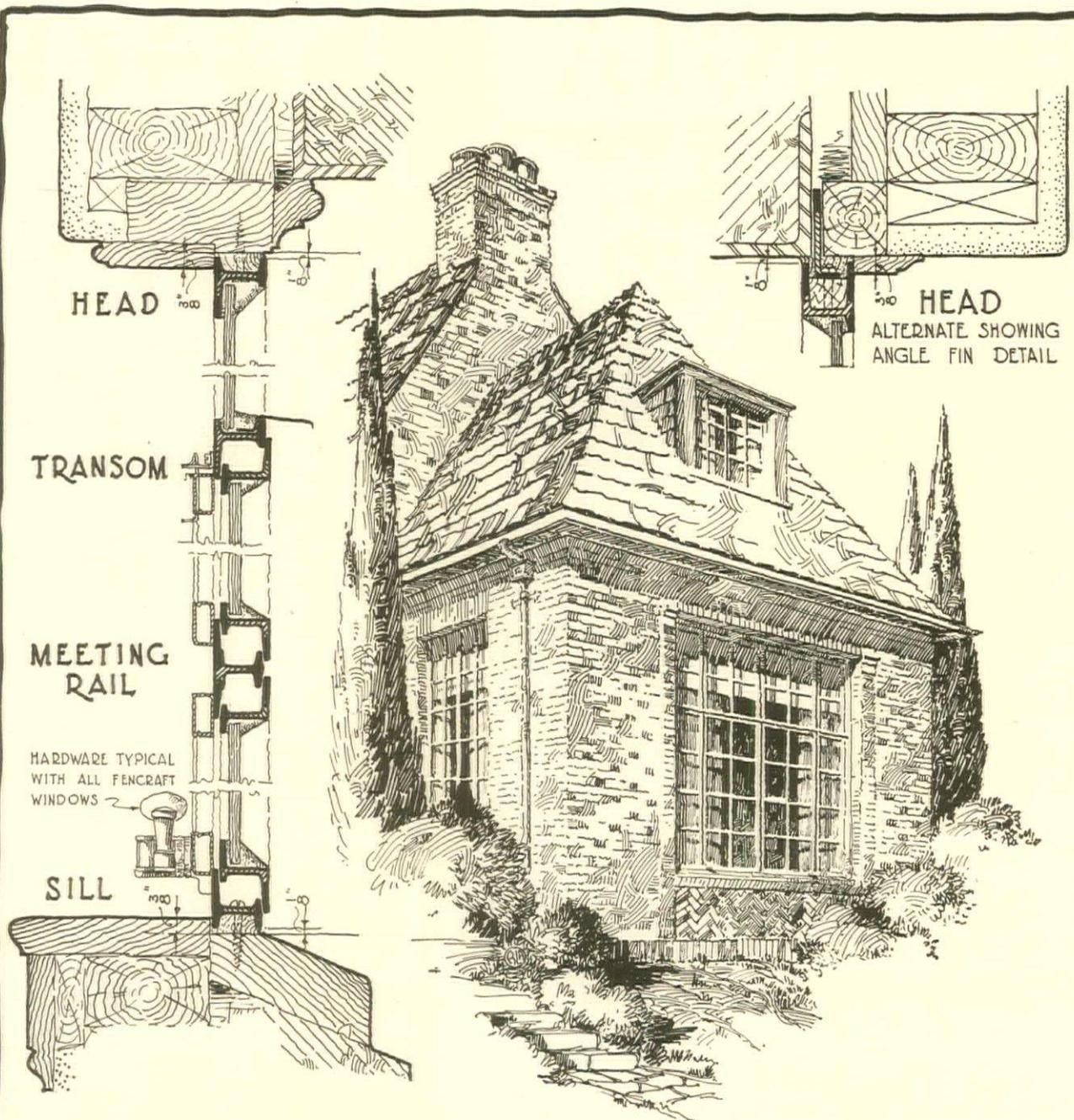
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GEORGIA MARBLE

The Henry Ford Museum

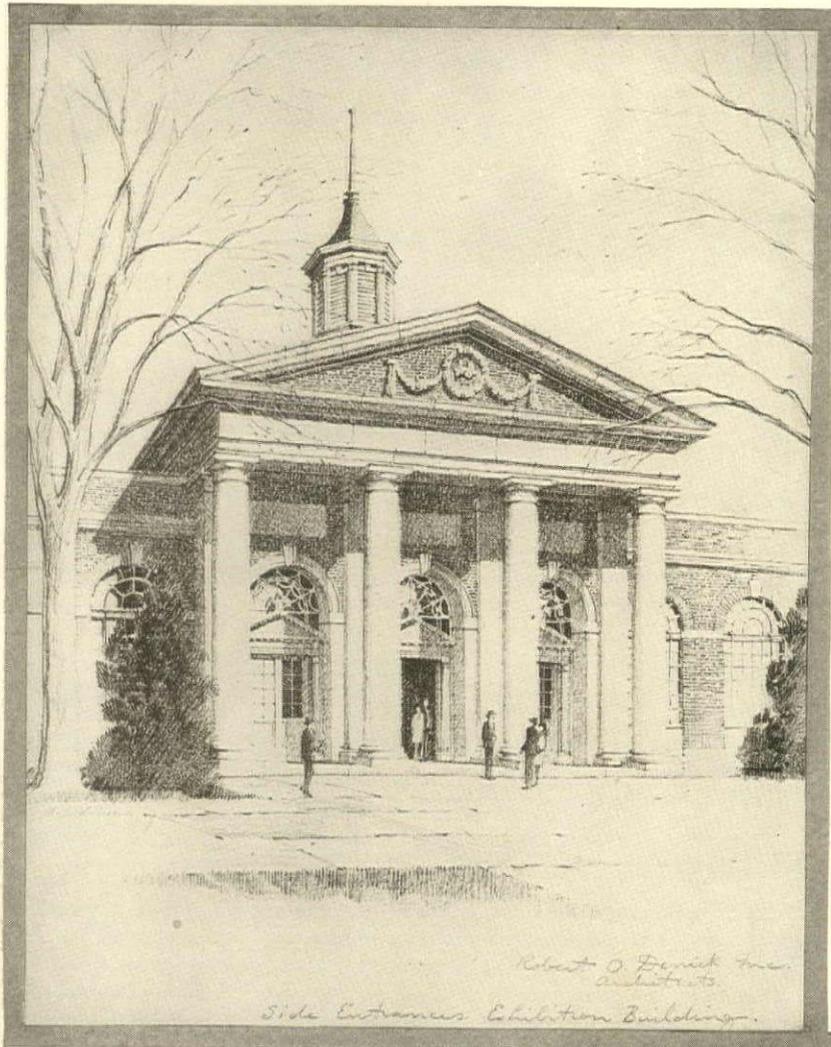
Dearborn, Michigan

ROBERT O. DERRICK, Inc., Architects

The Henry Ford Museum is to contain a most complete exhibit of American progress, — therefore the group of buildings housing this collection is an architectural expression of National character and tradition, following closely the Independence Square Group at Philadelphia.

The museum group (see below) consists first of five administration buildings, which, connected by arcades form an interesting facade; back of this is a secondary group, — auditorium, school, five arcades, and the main exhibition building which is a single room 800' x 450'.

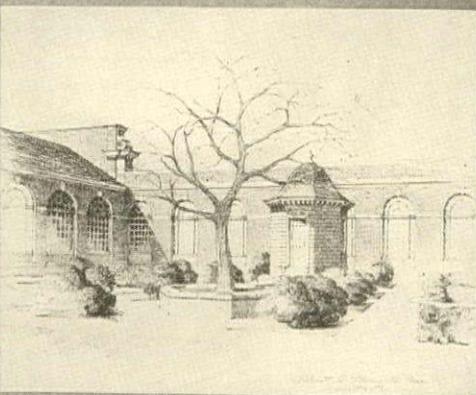
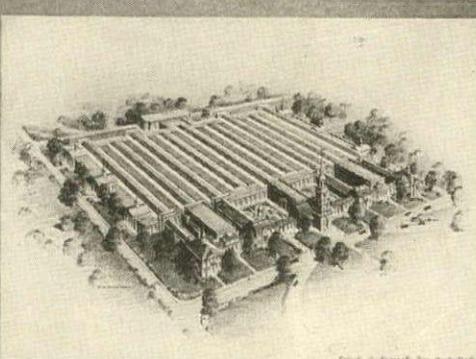
The exterior features are the ten large entrances, four of which are especially impressive, being flanked with monolithic Doric columns of Grey Georgia Marble. These buildings are constructed of steel and concrete, and all exterior walls, which are of solid masonry, are trimmed for the most part in Grey Georgia Marble.



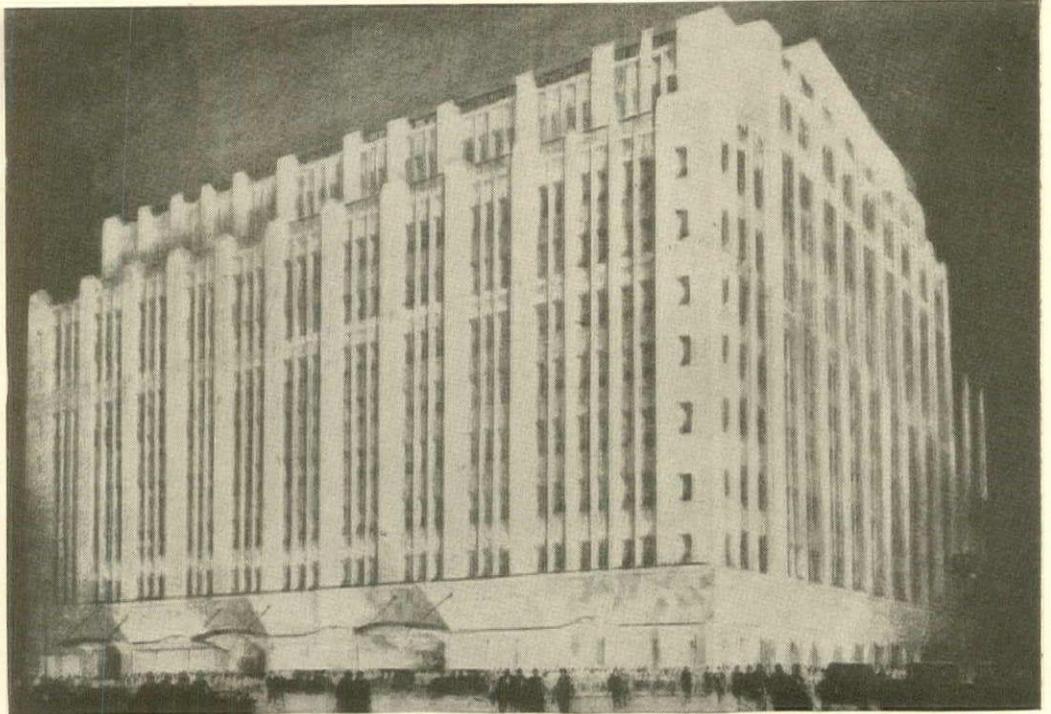
FORD MUSEUM

Georgia Marble trim is the perfect choice for this building development . . . *First*, the marble itself is structurally and architecturally right . . . *Second*, with our eight quarries and three finishing plants operating 12 months in the year, we planned and carried through a delivery schedule on finished marble that earned the appreciation of the architects and general contractors.

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 NEW YORK ATLANTA CHICAGO DALLAS CLEVELAND



"In the heart of Brooklyn, on a site long familiar to millions of people, we are erecting one of the most beautiful buildings in America, devoted exclusively to retailing merchandise. The year 1929 will witness the completion of the first unit of a great structure that will eventually cover almost this entire block, a block with the largest frontage in the city" from statement by Simon F. Rothschild.



The New Abraham & Straus Building, Brooklyn. . . . From Drawing by Hugh Ferriss - Arch. Messrs. Starrett & Van Vleck

A MOST INTERESTING INSTALLATION of TEMPERATURE CONTROL

The Johnson System Of Heat & Humidity Control is installed throughout this impressive, new structure, now in its first stage of completion.

Direct radiators are along the outside walls, as usual. Johnson Thermostats, are placed on piers between the radiators, each thermostat controlling from one to two radiators. Parallel with the outside walls, partitions about nine feet high are erected, a passageway thus formed to make easy access for merchandise to all parts of the store. Inside of these partitions, or in the store space proper, Johnson Pilot Thermostats are erected on columns. The branch lines from these Pilot Thermostats supply air to the Thermostats on the outside wall between the radiators, which in turn operate the valves on the radiators in accordance with the temperature requirements in the store space proper, beyond the partitions.

The store's ventilating apparatus is controlled by Johnson Cold Air Thermostats, placed in the cold air inlet duct and operating the diaphragm valve on the first row of the heated coil. Johnson Multiple Thermostats are placed in the fan discharge, controlling the inner rows of the heater coils. Johnson Model Indicators are installed with the ventilating apparatus, operating the cold air inlet and recirculating dampers: so that the supply of cold and recirculated air can be modulated as may be necessary.

The store's vestibules are heated and ventilated with recirculated air: taken from the store, passed through heater coils and delivered into the vestibules. The heating coils here are controlled by Johnson Two-Point Insertion Thermostat, placed in the diaphragm of the fan and operating the diaphragm valves on the heater coil—in conjunction with the pilot thermostat in the main store near the vestibule. If the thermostat at that point becomes too low, the Pilot Thermostat releases air from the Two-Point Thermostat and the full capacity of the heater coils is used for the purpose of heating the vestibule to a temperature sufficiently high to prevent cold drafts in the store space adjacent to the vestibules.

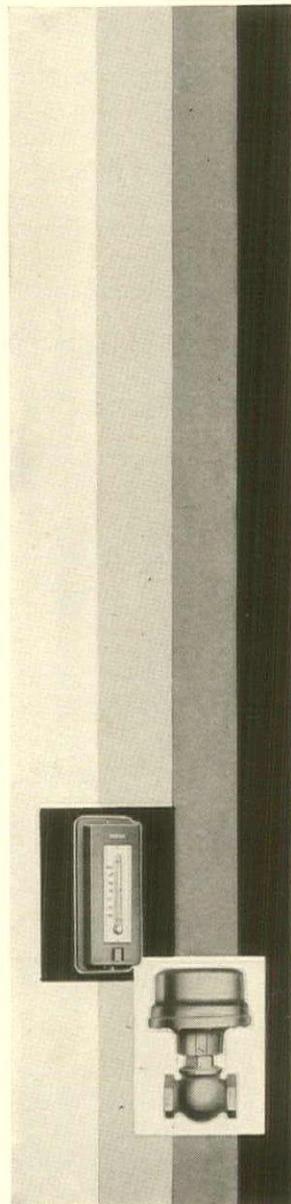
Thus is given another impressive example of the broad utility of Johnson Heat and Humidity Control and the recognized value of Johnson Control on buildings' heating and ventilating apparatus: for maximum efficiency and minimum cost.

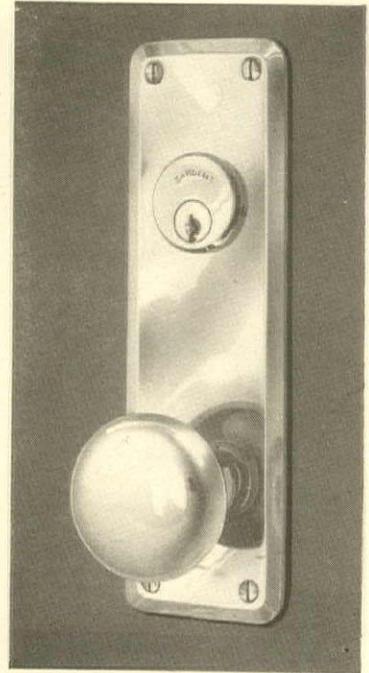
JOHNSON SERVICE COMPANY

MILWAUKEE, WISCONSIN

ESTABLISHED 1885

JOHNSON HEAT AND **CONTROL**
HUMIDITY





The Passavant Hospital, Chicago; Holabird & Root, architects; equipped throughout with Sargent Hardware. The appropriateness and simplicity of the design in chromium plate may be judged from the one item shown above.

Built for Service . . .

THE BEST possible service to suffering humanity—this is the aim of the modern hospital. Its cost is unrestricted by expected profit on the investment. Each step of planning, building, equipping demands the highest skill available. Every installation must be of the finest. Where such excellence is imperative Sargent Hardware is a natural selection. For many years Sargent Hardware has been installed in outstanding structures of the country—hospitals, office buildings, educational buildings, hotels, apartments. Appropriate designs of Sargent Hardware add materially to the beauty and service of each. Perfect operation is assured for every moving part. Sargent & Company, New Haven, Connecticut; 94 Centre Street, New York; 150 North Wacker Drive (at Randolph), Chicago, Illinois.

SARGENT
LOCKS AND HARDWARE

ASHTONE

TRADE MARK REGISTERED

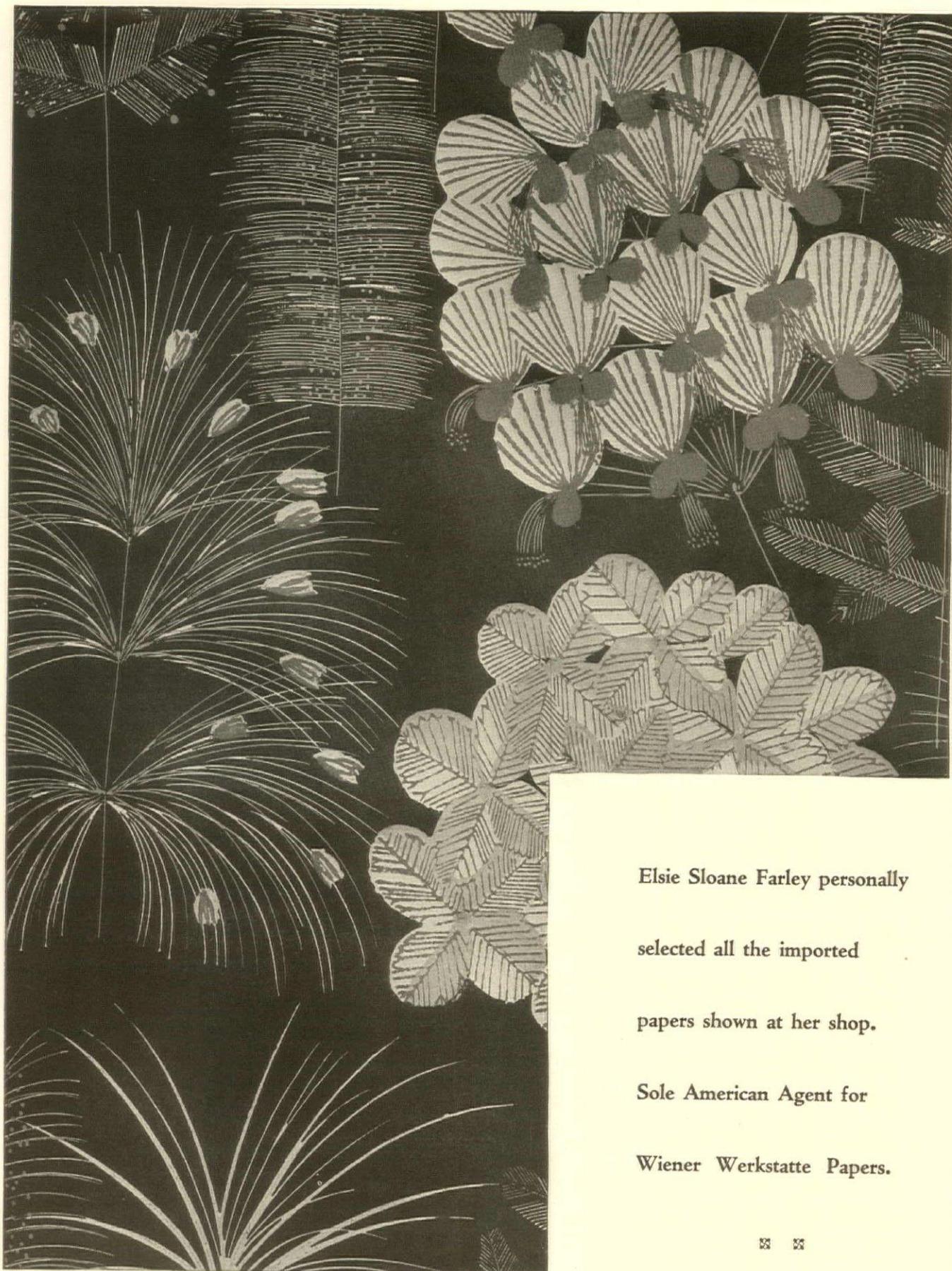
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GO BACK and look at that beautiful home you built five years ago. Is it as attractive now as it was then? It would be if it were faced with ASHTONE—even more so than when new. For ASHTONE, beautiful when first laid up, increases in dignified charm as the years pass. This vital fact has done much to establish the high favor with which ASHTONE is now viewed by leading architects and builders.

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Massillon Bar Joist Fire-
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John M. Moore, Architect.
W. H. Yates Construc-
tion Co., Contractors.*

Bar Joists by Macomber Simplify Construction Work

THE work of the architect planning a building with Massillon Bar Joist Fireproof Floors is simplified because the joists are made in standard sizes to meet all span and load requirements. No part is less than $\frac{1}{4}$ inch thickness.

Working with our safe loading tables he can readily lay out his floors, even in irregular shaped buildings, giving his client the best fireproof floors possible to build and at moderate cost.

As originators of the bar joist it has fallen to our lot to also design many accessories that hasten the completion of the building and simplify the work of the contractor.

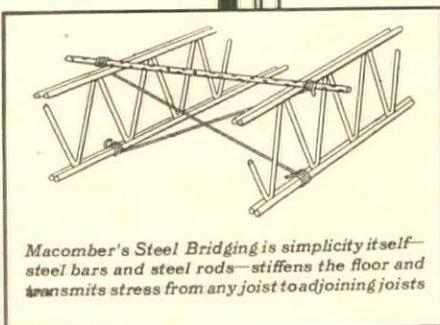
The Macomber method of attaching metal lath with wedges—of clipping and anchoring joists to beams and walls—and the simple and rigid form of steel bridging—all have proven practical through years of experience.

Have you copies of our safe loading tables and designing data?

THE MACOMBER STEEL COMPANY
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Massillon Products are manufactured and distributed in Canada by the
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MASSILLON BAR JOISTS



*Macomber's Steel Bridging is simplicity itself—
steel bars and steel rods—stiffens the floor and
transmits stress from any joist to adjoining joists*

THE BULLETIN - BOARD

MAJOR L'ENFANT

NO portrait exists to show us the features of the great French engineer who planned Washington. W. W. Corcoran, of Washington, who knew him, left a brief description of his appearance. An ideal likeness of L'Enfant has been created by Leon Chatelain, a young Frenchman of Washington, and appears in the form of a medallion on the new Chevy Chase Savings Bank in Washington.

"When I showed a photograph of the medallion to Cass Gilbert of New York," said Charles Moore, chairman of the National Commission of Fine Arts, "he thought it was the work of Houdon. Of course, a closer examination would disclose that it was not, but the general impression given by the medallion is excellent. If L'Enfant did not look like it, he ought to have done so.

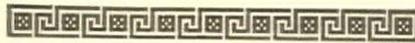
"In the same manner Daniel Chester French has designed for Harvard University a statue of John Harvard, which has taken its place as the portrait of the founder of the University."

ARCHITECTURAL LEAGUE AWARDS

THE Architectural League of New York, upon the occasion of opening its Annual Exhibition, awarded the following medals and other honors:

The Gold Medal of Honor in Architecture went to the firm of Holabird & Root, Chicago, "for the great distinction and high architectural quality they have achieved in the solution of the American office-building." Honorable mention was given to Mayers, Murray & Phillip, New York, "for the excellence of their work in the varied fields of ecclesiastical, monumental and domestic architecture"; and to Julius Gregory, New York, "for the distinguished qualities in design and charm in his residential work."

Boardman Robinson received the Gold Medal of Honor in Decorative Painting, "for his mural paintings in the Kaufman store in Pittsburgh, in consideration of the sincerity of conception and treatment of a living subject-matter. His mastery of these unusual elements in form, line and pattern marks a real contribution to modern American decoration." Honorable mention went to Suzanne Miller, New York, for her painting "The Waterfall," and to



D. Putnam Brinley, New York, for his decoration, "Brooklyn, Past, Present, and Future," in the Brooklyn Savings Bank.

Marian Coffin, New York, received the Gold Medal of Honor in Landscape Architecture, "for her design of the grounds of Mr. and Mrs. Edgar Bassick and of Mr. and Mrs. T. Morgan Wing, as exhibited in the forty-fifth annual exhibition of the Architectural League, and also for other distinguished work well known to members of the jury."

Richard F. Bach of the Metropolitan Museum of Art, won the Michael Friedsam Medal, which is awarded to the individual who has contributed in the greatest degree toward the development of art in industry. The jury expressed the opinion that Mr. Bach's "sound, fundamental conception of design, and his constant and well-directed efforts have made him a creative factor of great service in establishing co-operation between industry and art."

The Birch Burdette Long Memorial Prize for Rendering went to Ernest Born for "drawings, sound knowledge of composition and great skill in presentation."

The Avery Prize for small sculpture was won by Albert T. Stewart, for his bronze entitled "Leda."

A. W. BROWN TRAVELLING SCHOLARSHIP

ANNOUNCEMENT is made of the third competition for the selection of a beneficiary for the A. W. Brown Travelling Scholarship, this competition to be held under the direction of a committee of the American Institute of Architects. Programmes will be mailed to approved applicants about March 14, 1930, drawings to be delivered on or about April 14, 1930.

The value of the scholarship is \$2,000, to be used toward defraying expenses of a year of travel and study in Europe by a worthy and deserving architect or architectural draftsman.

An award of \$250 will be made to the person whose design is placed

second in the competition; \$150 to the person whose design is placed third; and \$100 to the person whose design is placed fourth.

The general requirements of the problem given for the competition will be similar to those of the Class A problems issued by the Beaux Arts Institute of Design. In making the award of the scholarship the committee will give due consideration to the personal qualifications of the competitors as well as the excellence of the designs as judged by the jury.

This scholarship was awarded in 1928 to Edmund J. Ryan, of Chicago, and in 1929 to Edgar F. Birsak, of New York. Full particulars may be had from Wm. Dewey Foster, 25 West 45th Street, New York City.

DAN EVERETT WAID

D. EVERETT WAID, New York architect, has been awarded the 1929 Medal of Honor of the New York Chapter of the American Institute of Architects for "distinguished work and high professional standing."

"Mr. Waid is among the foremost of those men," said the citation, "who by long years of unselfish devotion, sound judgment and high integrity have notably contributed to the advancement of their profession."

"To these services he has added great personal generosity. In the practice of his profession he has occupied a position of heavy responsibility, discharging the trust reposed in him with marked ability. This medal is awarded as a lasting recognition of his architectural accomplishments, and as testimony to the esteem in which he is held by a profession which is in so many ways his debtor."

The Medal of Honor has been awarded annually since 1904. Until 1914 it was given for "a distinguished work of architecture represented at the annual exhibition of the Architectural League of New York." Among its recipients were the firms of McKim, Mead & White, Pierre L. Le Brun and Michel M. Le Brun, York & Sawyer, Carrère & Hastings, Pell & Corbett, Trowbridge & Livingston, Cram, Goodhue & Ferguson, and Charles A. Platt.

Since 1914 the Medal of Honor has been bestowed largely upon individuals in recognition of outstand-

(Continued on page 33)





Westinghouse Electric and
Manufacturing Company
District Offices, Warehouse
and Service Headquarters
Los Angeles, Cal.

Gray Telephone Pay Station Co.
Hartford, Conn.



In Plants Where Speed is Essential —and permanence with economy a factor

Such great manufacturers as the Westinghouse Electric and Manufacturing Company, whose plants and branches are spread all over the country — and whose experimental and laboratory facilities unerringly determine the best in materials and design — have repeatedly specified St. Louis Freight Elevator Doors in their different plants.

Among their recent installations is the six story Los Angeles district warehouse and service headquarters shown above. Three elevator shafts, equipped with a total of twenty-four "St Louis" Doors, here operate to speed up vertical transportation from one department to another.

Somewhat parallel — at the other side of the country — is another carefully selected installation in the Gray Tele-

phone Pay Station Company, at Hartford, Connecticut. This large manufacturer supplies Coin Pay Station equipment to telephone companies throughout the country. Here again, is an installation selected by experienced engineering talent, whose choice is solely based on established performance.

For more than a quarter of a century the St. Louis Fire Door Company has striven to embody the same principles of high-grade materials, design and workmanship into its products as the architect incorporates in his own plans and specifications, to accord with the best standard practice of equipment in modern high grade commercial structures. This equipment is used in many notable commercial structures in different parts of the country. All erection is supervised by our own engineers.

Detailed descriptive literature regarding St. Louis Fire Doors is at the service of architects and others interested in construction work. Special engineering cooperation is offered freely to the architectural profession.



PAGES
1042 to 1047

ST. LOUIS FIRE DOOR CO., 1136 S. 6th St., St. Louis, Mo.
Manufacturers of all kinds of Fire-Proof Doors and Electric Operators
"MORE THAN A QUARTER CENTURY OF SUCCESSFUL SERVICE"
Offices in Principal Cities

THE BULLETIN-BOARD *Continued*

ing contributions to architecture. Its recipients have included Whitney Warren, Henry Bacon, John Russell Pope, Benjamin Wistar Morris, C. B. J. Snyder, C. Grant LaFarge, Bertram Goodhue, John W. Cross, William Alciphron Boring, William Mitchell Kendall, and the firms of Delano & Aldrich and Tracy & Swartwout.

Mr. Waid is a past president of the American Institute of Architects and of the New York Chapter of the Institute. As chairman of the Building Committee of the Institute, Mr. Waid is actively directing a movement to raise \$600,000 among the architects of the United States to develop The Octagon as the national centre of architecture and the allied arts.

PRIZES FOR ENTRANCE DESIGNS

THE William and Matilda Sparks Foundation, Inc., comprises 465 acres of land in Jackson, Mich., which during the next three years will be developed into a recreation centre. The designs wanted in this competition are for the entrance to the Prado. The cost of the entrance must be between \$5,000 and \$10,000, without buildings or high towers. Designs must be received before April 15, 1930. The judges will be three competent architects or engineers. The prizes will be as follows: First prize \$250; second prize \$100; third prize \$50. Further particulars may be had from A. W. D. Hall, chief engineer, The Wm. & Matilda Sparks Foundation, Inc., 313 Carter Building, Jackson, Mich.

BILL BOARDS

THE abolishing of bill boards and kindred forms of outdoor advertising through the United States, excepting within limited areas, is demanded by the board of directors, A. I. A.

"This selfish desecration of the landscape," a resolution adopted by the board declared, "has aroused the antagonism of those whose journeys by boat, train, and automobile are rendered disagreeable and dangerous by such blatant and obtrusive ugliness.

"The Institute, through its Chapters and its individual members resident in all sections of the country, is convinced that this type of advertising is highly objectionable to a great majority of good citizens.

"The board hereby calls to the attention of the civic organizations of the country, the public, the press, and the legislative bodies of the several States a national condition which we regard as inexcusable on either æsthetic or economic grounds.

"The board earnestly urges that those agencies which are properly concerned with the cultural and spiritual welfare of the American people, as well as those concerned with their material well-being and safety, take vigorous action through the various means at their command, to bring about by regulation, legislation, or the force of public opinion, the complete removal of bill boards, signboards and related structures from the roads, highways, and boulevards of the country, except in such limited areas as may be set aside for such advertising by direct action of the proper authorities."

PHILADELPHIA, CITY OF HOMES

THE Philadelphia Housing Association reports that Philadelphia, at least, is still a city of individual homes. Many apartments are being built, of course, but these are few in comparison to the great number of single and double houses erected in the last few years.

Since 1924, the report states, the dwelling construction programme within the city shows 57,202 housing structures of which only 490 were apartments and 413 two-family houses. The number of family accommodations provided for was 70,141 of which 13,016 were in multiple buildings or 18.5 per cent of the total.



SIR LAWRENCE WEAVER

SIR LAWRENCE WEAVER, well known in the architectural world on both sides of the Atlantic, died of heart disease at his home in St. John's Wood on January 10. Sir Lawrence was a great friend of the late Earl Haig, and was associated with him in aiding disabled ex-service men. He organized the pottery manufacture at Ashted in Surrey. As president of the Design and Industries Association, Sir Lawrence put into effect a co-operation with eminent designers so that the pottery succeeded not only financially, but artistically as well. Sir Lawrence had been director-general

of the Land Department and second secretary in the Ministry of Agriculture from 1919 to 1922, and had served in the Anti-Aircraft Corps, and as controller of Unpaid Food Supplies in the war.

Among his books were: a life of Sir Christopher Wren, "Houses and Gardens by Sir Edwin Lutyens (1890-1912)," "Small Country Houses: Their Repair and Enlargement," "Small Country Houses of Today," Series I, and a second volume, Series II, "Cottages: Their Planning, Design, and Materials," "Memorials and Monuments: Old and New," "English Leadwork: Its Art and History."

PERSONAL

Lucius R. White, Jr., architect, announces the removal of his offices to the Court Square Building, Baltimore, Md. With Mr. White are associated Charles M. Schroter, Robert E. Myers, and William A. White.

The firm of Henry J. McGill-Talbot F. Hamlin, 415 Lexington Avenue, New York City, has been dissolved. Mr. McGill is continuing the practice of architecture at 415 Lexington Avenue. Mr. Hamlin has opened a new office for the practice of architecture at 11 West 42d Street.

A. J. Daidone, architect, announces the removal of his offices to 189 Montague Street, Brooklyn, N. Y.

John Jerome Tucker and James Milford Burgess announce the formation of the firm of Tucker & Burgess for the practice of architecture at the Bishop Building, Norwalk, Conn.

John Hanifen, architect, of Ottawa and La Salle, Ill., has opened a branch office in the Murray Building, Streator, Ill.

Francis Y. Joannes and Francis S. Marlow, have opened offices for the practice of architecture under the firm name of Joannes & Marlow at 420 Lexington Avenue, New York City.

Mauran, Russell & Crowell, architects, of St. Louis, announce that W. Oscar Mullgardt has been admitted to partnership in the firm.

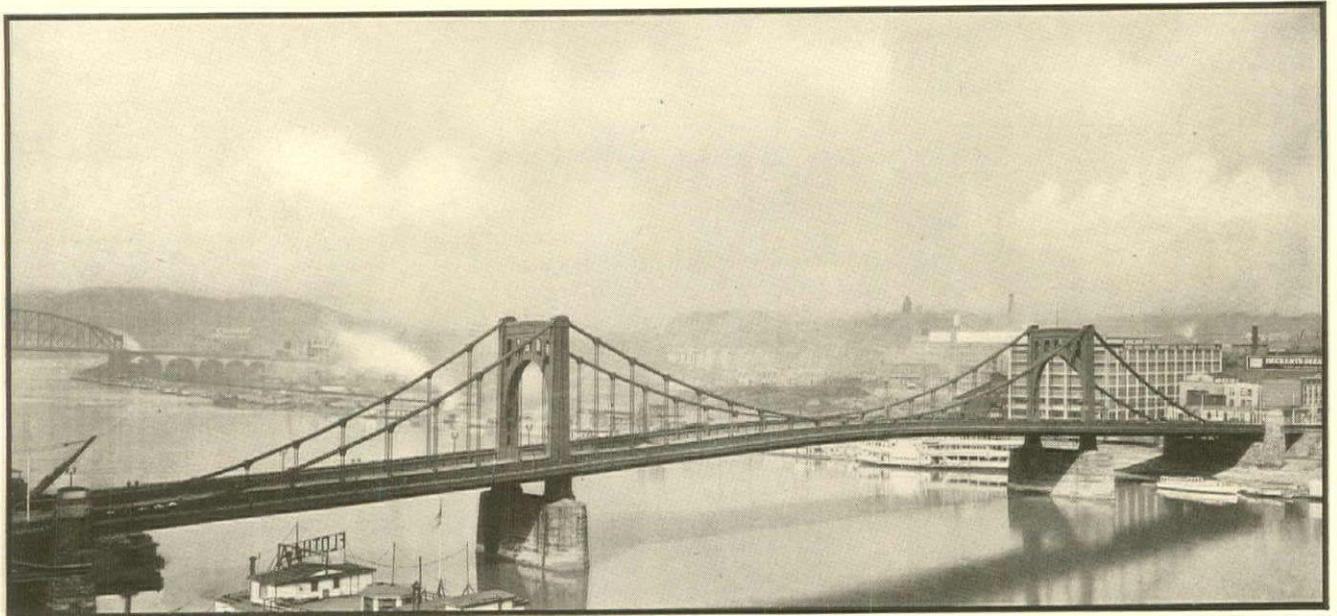
Schwab, Palmgreen & Merrick, associated architects, announce the removal of their offices to The Koppers Building, Pittsburgh, Pa.

Walter W. Ahlschlager, Inc., announce the removal of their offices to 10 North Clark Street, Chicago, Ill.

STRUCTURAL STEEL CREATED THE SKYSCRAPER

The Sixth Street Bridge over the Allegheny River at Pittsburgh was selected by a national jury for the 1929 award in the competition established by the American Institute of Steel Construction, Inc. These awards are made annually for the most beautiful steel bridge completed during the preceding year. They are in response to the growing interest of architects and engineers in the aesthetic design of bridges.

Among other things, the judges said: "A very difficult situation has been met with restful and attractive design and by a frank use of the structural adaptability of steel." . . . "In a singularly clear way it expresses the construction of the bridge without unnecessary ornament." . . . "It demonstrates that bridges of steel fully satisfy the requirements of beauty without undue cost in fabricating and building."



STEEL

LENDERS COURAGE TO DESIGN

STRENGTH . . . safety . . . security . . . these spell *Steel!* They are factors determined not only through experience, but by careful test and analysis at every step in manufacture. And because steel is also so adaptable, so versatile, it offers full artistic expression in the design and construction of bridges large or small.

Steel bridges and buildings can be erected more



speedily, with less regard for weather and with greater economy than when any other material is used. They can be kept secure, or can be modernized, reinforced, altered and even removed faster and more economically.

A Technical Service Bureau is at the disposal of architects, engineers, owners and others who have need of information concerning steel.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

The co-operative non-profit service organization of the structural steel industry of the United States and Canada. Correspondence is invited. 200 Madison Avenue, New York City. District offices in New York, Worcester, Philadelphia, Birmingham, Cleveland, Chicago, Milwaukee, St. Louis, Topeka, Dallas and San Francisco. The Institute publishes twelve booklets,

STEEL

INSURES STRENGTH

AND SECURITY

one on practically every type of steel structure, and provides also in one volume, "The Standard Specification for Structural Steel for Buildings," "The Standard Specification for Fireproofing Structural Steel Buildings," and "The Code of Standard Practice." Any or all of these may be had without charge, simply by addressing the Institute at any of its offices.

ARCHITECTURE

REG. U. S. PAT. OFFICE

THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOLUME LXI

NUMBER 3

March 1930

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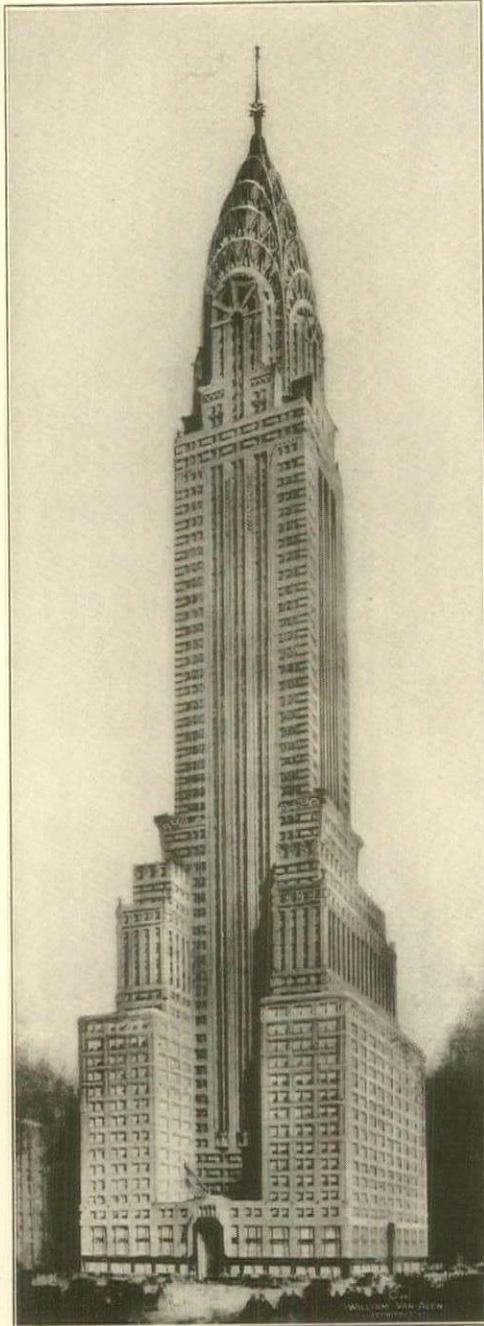
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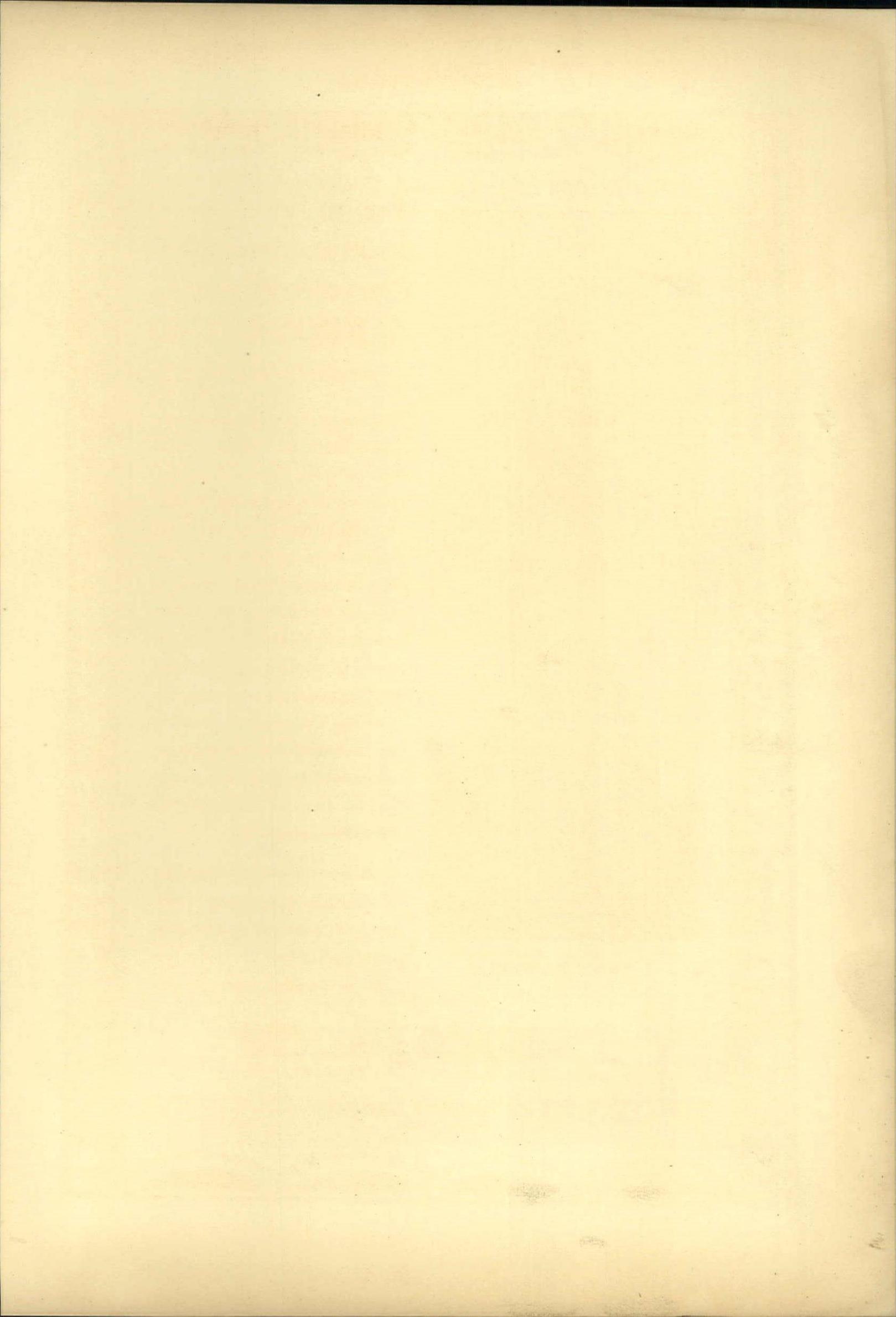
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CHIPPING CAMPDEN
A lithograph by Gerald K. Geerlings

ARCHITECTURE

❖ VOLUME LXI

MARCH 1930

NUMBER 3 ❖

A Confidential Guide to the Contents

Facing us on your left, we have the pleasure of presenting another original lithograph. This is not a reproduction in one of the usual zinc or halftone processes, but an original print of the subject in its own medium.



When an architect prescribes for himself he is rather apt to write a very detailed and involved formula—particularly if he has little money to spend, which is practically always the case.

p. 130



A Fifth Avenue jewelry store has got to have in its make-up a strong tincture of the haughty, and the further uptown one goes, the haughtier the ensemble. Here is the newest and furthest north.

p. 137



Our English brethren are not likely to go to the extremes in design that frequently appear from the Continent. There usually is a strong flavor of conservatism and structural form. Nevertheless the lid is off—at least of the color-box—in this house in Mayfair.

p. 141



New York seems to be coming rapidly to the one-room-and-bath scheme of life. The utilization of every possible inch of serviceable space has become an equivalent of the crossword puzzle for the apartment-house architect.

p. 145



Possibly we have reached a point where we can look back over some of our recent creations in design and assay them in something approaching true perspective. We have in mind the comparison of designs of to-day in pottery, wall-paper, furniture, typography, textiles, silverware, and a few other such accessories, with some well-established examples of past eras.

p. 149



Lewis Mumford is not awarding an annual booby prize this month, unless it be for our professional blindness in not seeing clearly from whence we have come and whither we are going.

p. 151



A few dreams still in the preliminary stages; some achievements which probably please most people more than they please their own designers.

p. 154



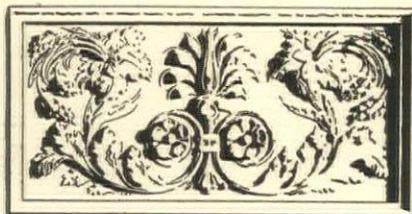
With all that we know, and think that we know, to-day, some one usually finds it possible to give us a lot of new information on the printed page.

p. 156



Once a year the landscape architects bring the most luscious fruits of their labors to the New York Show so that the world may see and marvel. Here is a pictorial pre-view which contains not all the good ones, but what we think are representative high spots.

p. 157



F. R. Yerbury sends his monthly mail-pouch of photographs, and this time we are glad to find that he has apparently run out of Continental group-housing schemes.

p. 163



John D. Rockefeller, Jr., has recently set aside a half-million dollars in the cause of research into the early architecture and other arts of our own Southwest. Meanwhile, here are some photographs of work down there, long since completed and possibly too soon forgotten.

p. 171



If you wonder what an automobile body builder thinks about when he is creating his summer home, have a look at Mr. W. A. Fisher's place near Detroit.

p. 177



The Editor's life is an open book.

p. 181



However extensively the modern building may consist of a lot of precisely similar unadorned lofts, the architect usually wangles enough money out of his client to make a prepossessing entrance—nor is the operation a particularly difficult one in these days when business buildings vie with one another for the strongest appeal to patronage.

p. 183



In all this talk of design it behooves us to give a thought to some of the practical means by which achievement is more easily reached.

p. 191



The six-room house is outside the range of architectural practice, excepting in group design, but its tendencies have some lessons that may be of value in larger work.

p. 192





Not the least among the advantages of the site are the many changes of level, affording opportunities for terraces and stone walls

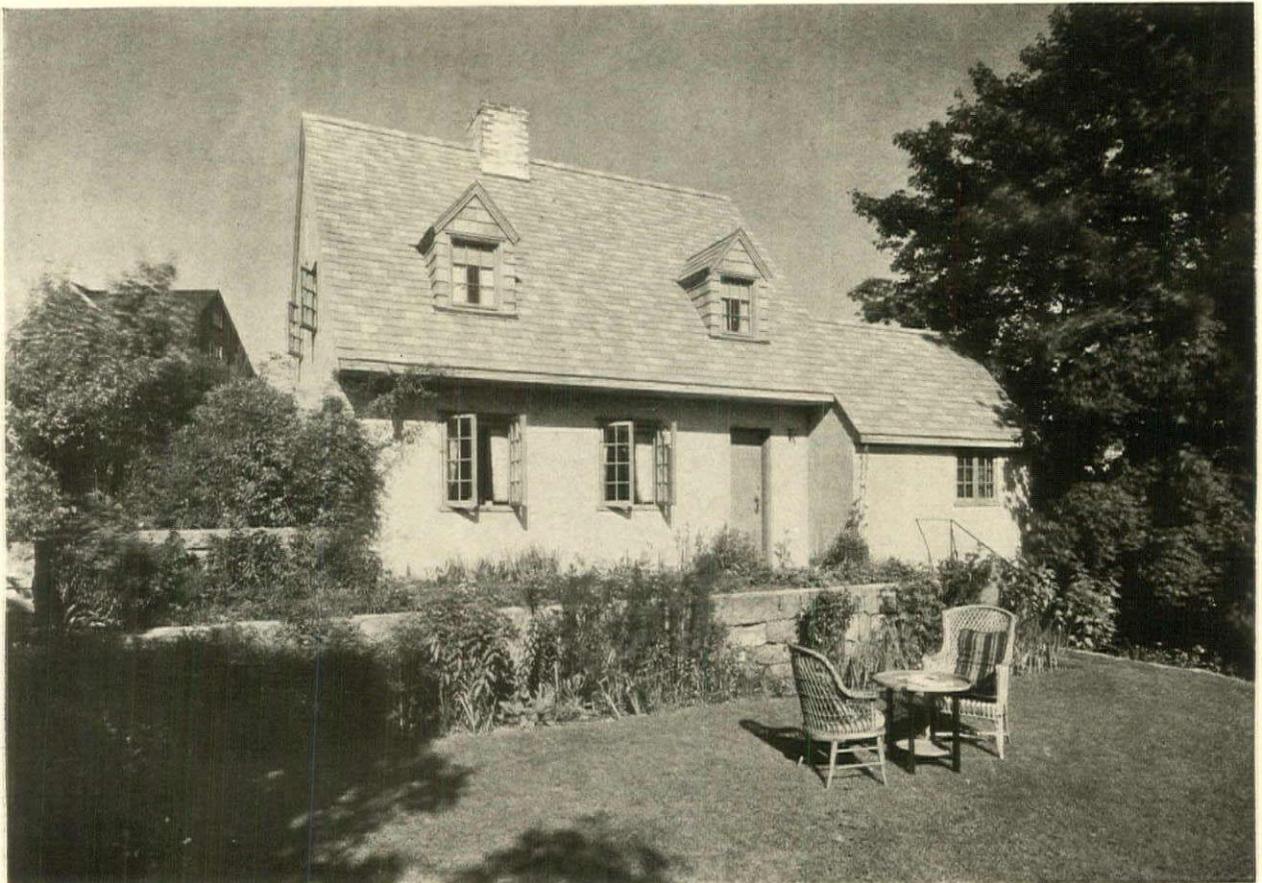
The walls are of hollow tile covered with very light stucco. The roof is of fireproof bevelled shingles, tan, gray, and slate-purple

An Architect's

BEING A CASUAL ACCOUNT OF THE DESIGNING AND BUILDING OF A SMALL HOUSE OF LASTING CONSTRUCTION IN WHICH THE BUILDING MATERIALS ARE

IT is curious that in the large collection of fables ascribed to Mr. Æsop there is not one which has for its theme an architect who attempted to build his own house. Somehow, it seems, there would be an excellent opportunity for the tire-some old man to have used, for its moral, the Greek equivalent for the expression "hoist with his own petard," which, being interpreted, means, the trapper trapped. It is so much easier to make decisions for another than to make them for one's self. When the client is none other than the architect's *alter ego*, what a thicket of perplexity comes upon him. This time he must choose whether it shall be double-hung, or casements opening in, or casements opening out—and this time it is he, not a mere client, who has got to put up with the evils inherent in whichever type of window he chooses.

However, each one of us has his season of



Summer Home

GIVEN FRANK EXPRESSION. THE HOUSE WAS DESIGNED BY RAYNE ADAMS, ARCHITECT, AND IS LOCATED AT ANNISQUAM ON THE MASSACHUSETTS SHORE

spring time, and in terms of his vitality he seeks adventure everywhere. And the building of one's own house has substantial compensations, even though one be graced with the absence of an all-healing egotism.

The small house shown with this article was born of Hans Christian Andersen. You will recall the passage in which the story-teller asks: "Shall it be the story of Humpty Dumpty or the story of Ivedi Avedi?" And since the listeners clamored for the banal story of the Hero of the Wall, the story of Ivedi Avedi was never told. So we decided to tell it. And the story, placid and uneventful, of the building of the small house, is the story of Ivedi Avedi. That is its name, and if the details which follow seem to reflect little of the romantic associations which an Andersen story should have, nevertheless, those who have undertaken similar ventures can understand that, viewed in retrospect,



A detail in the living-room—just opposite the fireplace

The living-room, with its frank use of white pine treated with a yellow ochre stain. The floor is of spruce plank, splined. The ceiling shows the underside of second-story splined flooring which is supported by 6 x 8 beams



all its elements—the concrete foundations, the tile walls, the splined floors, even the septic tank, because of their mutual interdependence in the working out of a deep desire which is so common—the desire for a roof-tree of one's own—acquired a certain emotional content quite over and above their specific characteristics as sheer building materials.



So, about the house. As the site lay, prior to the building of the house, its chief assets were a huge Norway maple and a boulder even more huge. The site happened to be located on the north shore of Massachusetts, where great gray boulders and ledges give a character to the landscape which only the Titans would have understood. It is this rough and dour aspect of its rocky fields and shores which gives the hardy vegetation of the region a certain heightened effect; contrasts which the Garden of Eden, in all its gracious perfection, could not boast. So we planned the small house in relation to the maple-tree and the boulder, the one serving as a sort of Bo-tree of solace, the other as the protecting fortress which would guarantee, in the manner of fairy stories, security from wolves and the outer darkness of things alien.

Have you ever noticed that in fairy stories all houses fall in two classes—the enormous palace of the king or the bad ogre, or the tiny cottage of the charcoal burner? The size of our lot obliged us to choose a house which would fall in the latter class. Yet, a small house, properly planned, may be made most livable, but it presents a problem which requires an amount of study which is in inverse ratio to its size.



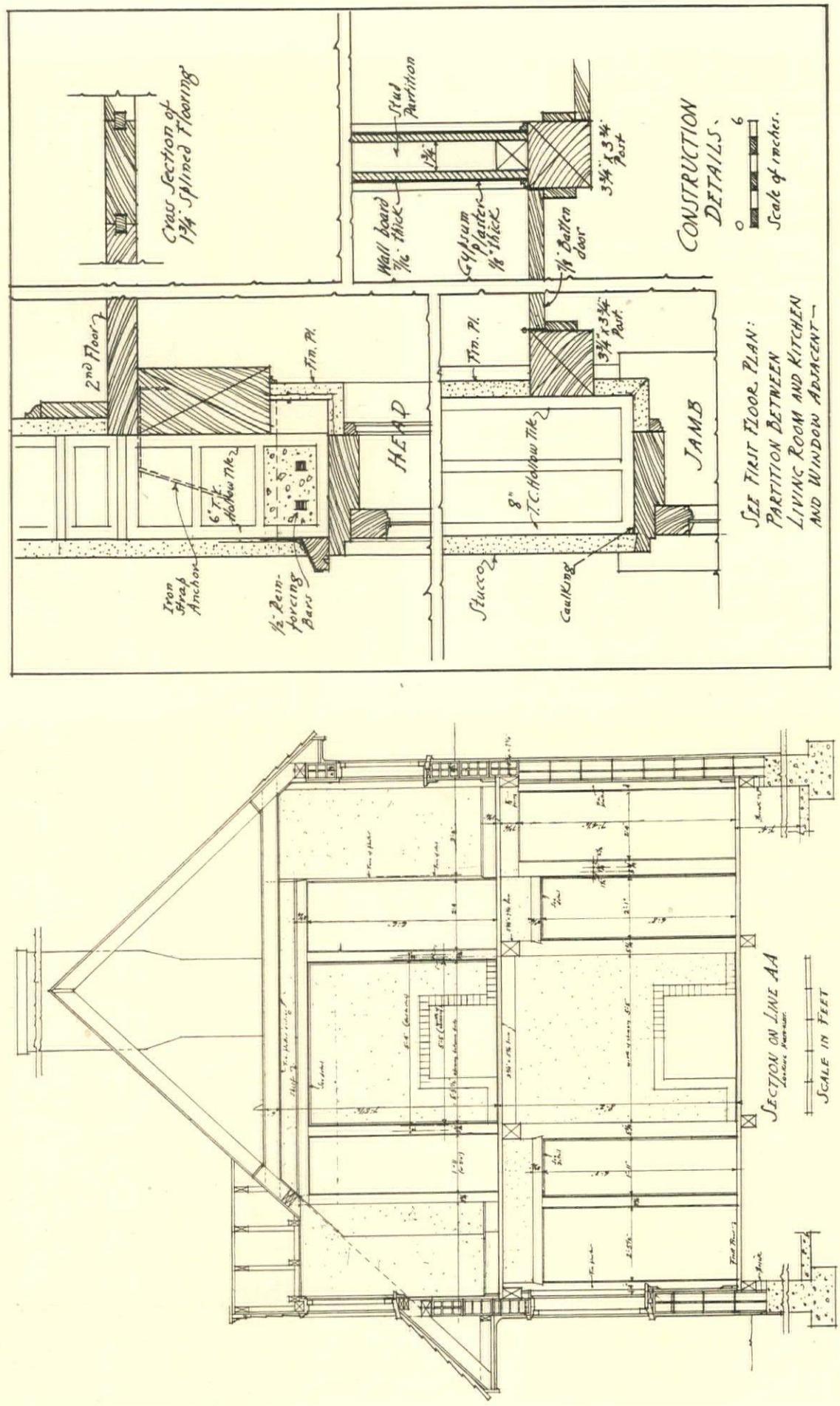
At best our building materials are things transitory and slight. The hand of time, armed with frost and fire, with wind and water, plays havoc with them. The wooden buildings of the colonial period, even though they were built of white pine, which was the soul of integrity, face the danger of destruction by fire; and the consciousness of this danger serves to place a bad angel in their garrets. So we decided to use a type of construction which would grant more security—though all security in this world be vain—and we came thus to use hollow tile and a modified type of mill construction for the house.

As shown by the details, the walls of the first story and of the gable ends are of eight-inch hollow tile. The eight-inch walls rest on twelve-inch concrete foundation walls. At the first floor a continuous sill is bolted to the foundations and the flooring is spiked to this sill. The flooring is made of spruce planks, six inches wide, with loose splines, $\frac{3}{4}$ inch by 1 inch, and this splined flooring, $1\frac{3}{4}$ inches thick, runs the full width of the house. It is supported by two intermediate beams, making the widest span somewhat less than six feet. The splined planks act as continuous girders, and the deflection, when the floor is given its normal live load, is slight. The construction of the second floor is similar, and the photographs of the interior of the living-room indicate the construction clearly. This type of floor construction has certain distinct advantages: compared with the usual type of wood floor-beam construction it gives greater available head-room; it does away with the necessity of plastering the ceiling; in place of the unsightly series of narrow floor-beams it provides a real beamed-ceiling effect; it is slow-burning; and it requires no more material than does the usual type of floor construction. If desired, the splined flooring may be covered with cane-fibre wall-board, and on this may be placed a thin finish floor of wood. In this way sound deadening and added rigidity may be obtained. The interior doors, it may be added, are of $\frac{7}{8}$ -inch knotty white pine, of the batten type. Latches are used in place of knobs.

It is one's inalienable privilege to forestall criticism—especially when the criticism is just—and the confession may fittingly be made that the construction of the third floor should properly have been of splined planking also. But perfection is not of this world; and the satisfactory working out of the splined floor construction where it was used only serves to remind us that the aberration of judgment is the fruit of our inhibitions. So, with this Augustinian confession we may pass to a consideration of the construction of the interior partitions.



In order to conserve space and to do away with unnecessary door trim, the partitions are set between posts which, generally, measure $3\frac{3}{4}$ inches square, though these posts vary to meet special conditions. The simplicity and strength of this construction, together with the rustic and

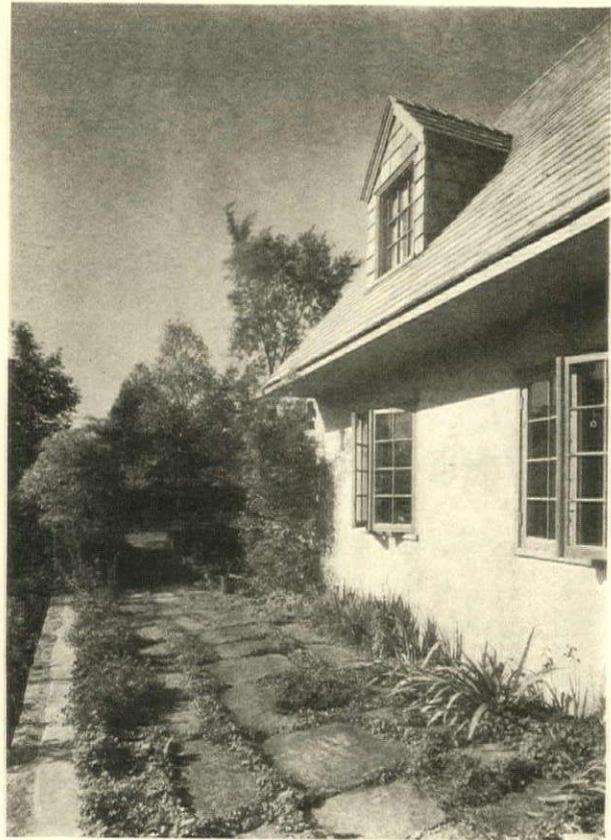


Among the working drawings there were no finished elevations, but complete construction diagrams and sections at large scale, together with full-size details, were furnished

primitive character which it gives to the interior treatment, has much to commend it. In this connection it is proper to note that the partitions are built of cane-fibre wall-board, set against studs and plastered with gypsum plaster. The entire interior surface of the exterior hollow-tile walls was painted with water-proof paint and plastered with lime plaster; this in turn was finished with gypsum plaster, floated to give an irregular modulated surface. After a lapse of two years, during which the house was permitted to do all the comfortable settling and twisting which all houses enjoy (and there was surprisingly little in this case), the interior walls and partitions were painted with two coats of lead-and-oil paint. It is worth noting, though it will not be believed by many, that no cracks or joints of the wall-board are visible. Apparently the fact that the gypsum plaster, as applied to the wall-board partitions, is only $\frac{1}{8}$ inch thick

The casements are white pine and open out. A climbing rose is being trained along the eaves. The terrace is flagged with rusted seam-faced granite

The furniture throughout the house, as is consistent with the locality, is of early colonial type





The larger bedroom. Throughout the house the floated plaster walls are of a slightly warmed white color.



This high-ceilinged room is used as a study. The curtains throughout the house are of chintz.

is responsible for this happy result. Whatever the reasons may be, the fact remains that no joints are visible.

And thus—most abruptly—we come to the end of the written story; the rest is all told by the photographs, and what they don't tell must be imagined, just as we have to imagine many things in all fairy stories. Yet it would be a sad ending if one should not pause to note that more than half the fun of building this small house lay in the planning of the garden, and in the planting which makes its background. For, after all, while the house, in terms of its substantial material, remains through the years to buffet the storms with a certain stoical impassiveness, the trees and flowers surrounding it recreate each spring a new fairy story to replace those which have been lived through.



Photographs by Sigurd Fischer

A view of the store looking toward the front entrance. The walls are largely of walnut in the flat checker-board pattern of strongly marked grain, almost without mouldings. On the floor there is a carpet of several shades of beige and brown. Display-cases, like the one in the centre, are lined with peach velvet. The lighting fixtures are of fused quartz and glass with silver

JEWELRY STORE OF VAN CLEEF & ARPELS, INC., FIFTH AVENUE, NEW YORK CITY
BUCHMAN & KAHN, ARCHITECTS

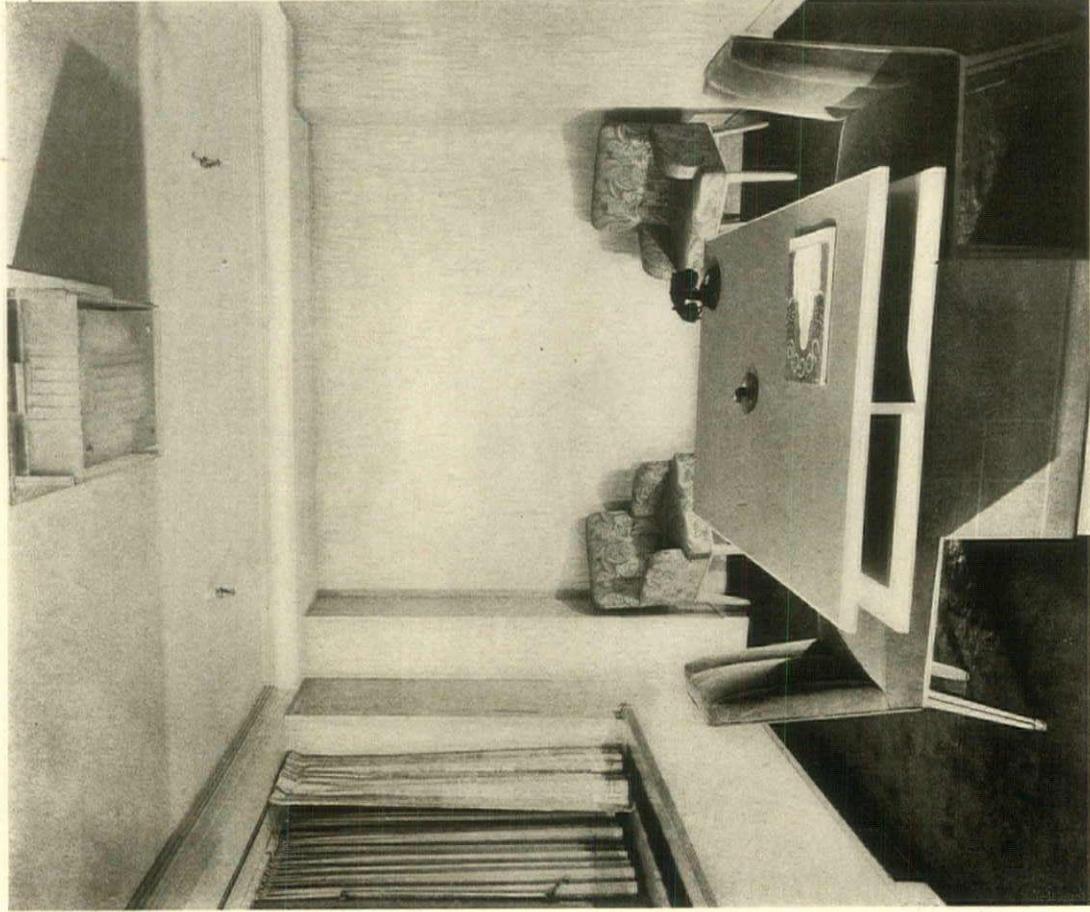


A secluded display-room with walls of golden finish bird's-eye maple; carpet of deep plum color; metal work of silver; hangings, designed by Mr. Kahn, in soft peach color



A detail view of the main store, showing one of the two or three display-cases, the carved ventilation panels of walnut, and the restrained use of moulded surfaces breaking the flat plane of the walls

ARCHITECTURE



Private display-room in which the walls are of light orange and straw color material made of striped bamboo, and the furniture of wavy maple with holly inlays. Fabrics of lavender and deep rose, floor of deep russet. At the right a detail of the private showroom with bird's-eye maple walls. Carpet of deep plum color, metal work of silver, marble, black and gold

JEWELRY STORE OF VAN CLEEF & ARPELS, INC., FIFTH AVENUE, NEW YORK CITY. BUCHMAN & KAHN, ARCHITECTS

Inside a Modern House in London

Designed by R. W. Symonds and Robert Lutyens

The hallway has on the walls gilt Chinese tea-box paper, varnished cream ceiling, black-and-white marble floor, doors of Pompeian red lacquer

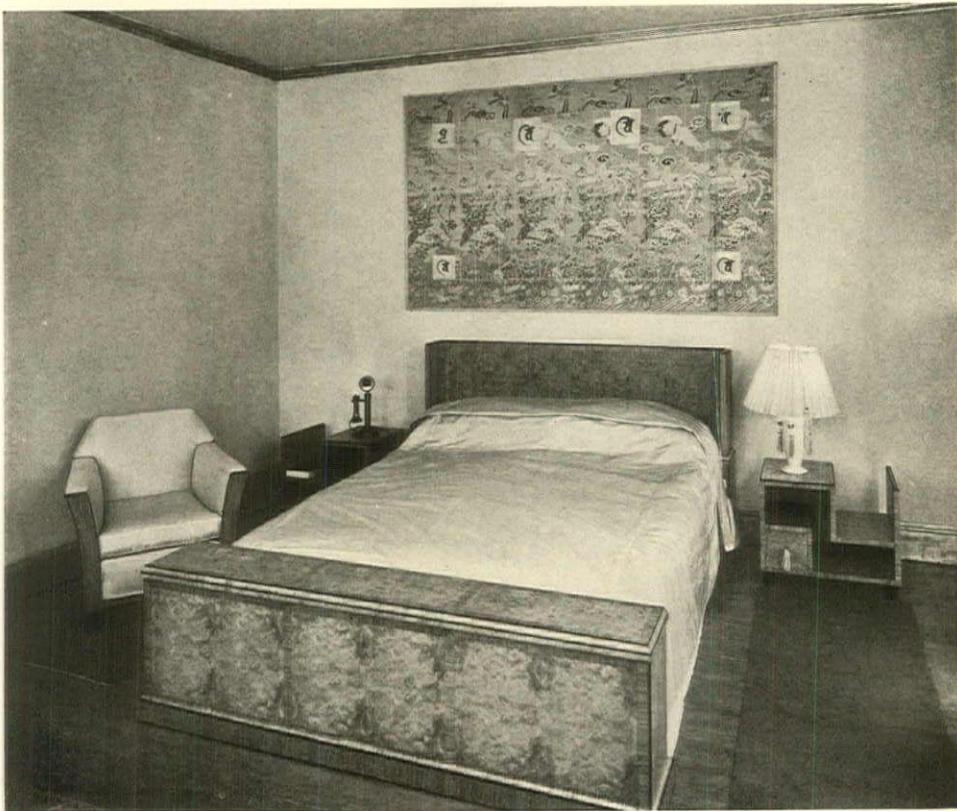


The dining-room, incorporating Korean and Chinese antiques. Walls a light Pompeian red; pilasters black glass, leaded, with green capitals; niches gilded and lighted from within; floor and rug dark green





The drawing-room. Columns are painted malachite, with bronze caps and bases; curtains copper taffeta; rug yellow Samarcand; niche gold with malachite architrave



Bedstead in the owner's bedroom. The furniture is of burr-walnut veneer with a straight-grained banding and ebony moulding lines; peach-colored brocade over bed



The owner's bedroom. Floor a gray lacquer; walls azalea pink; base, architraves, and cornice same color over silver leaf; ceiling light rosy cream varnished; curtain flame pink taffeta



A small sitting-room. The floor is a red lacquer, walls and door an oyster-shell gray; ceiling black, highly varnished; sofa covering black taffeta with white piping



Owner's bedroom looking toward dressing recess behind wrought-iron doors, lounge of straight-grained walnut with ebony moulding lines and covering of biscuit taffeta. The niche has an architrave like base and cornice—pink-glazed over silver leaf



The drawing-room door from the stair landing. The base is black, architrave and column malachite, the door painted with copper paint having a metallic luster



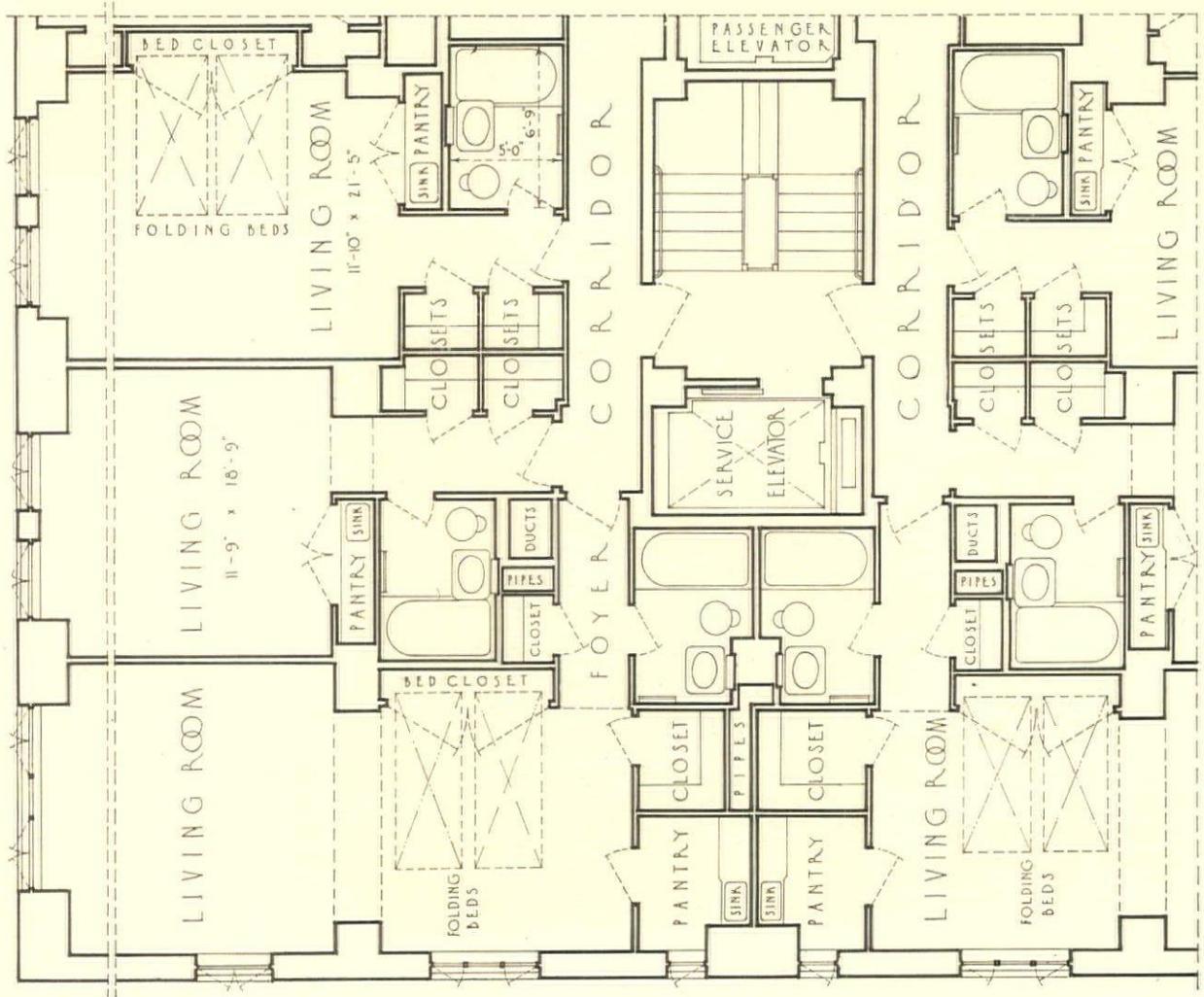
Paul Bedian

A TYPICAL APARTMENT AT 312-314 EAST 42D STREET, NEW YORK
FRED F. FRENCH CO., ARCHITECTS.

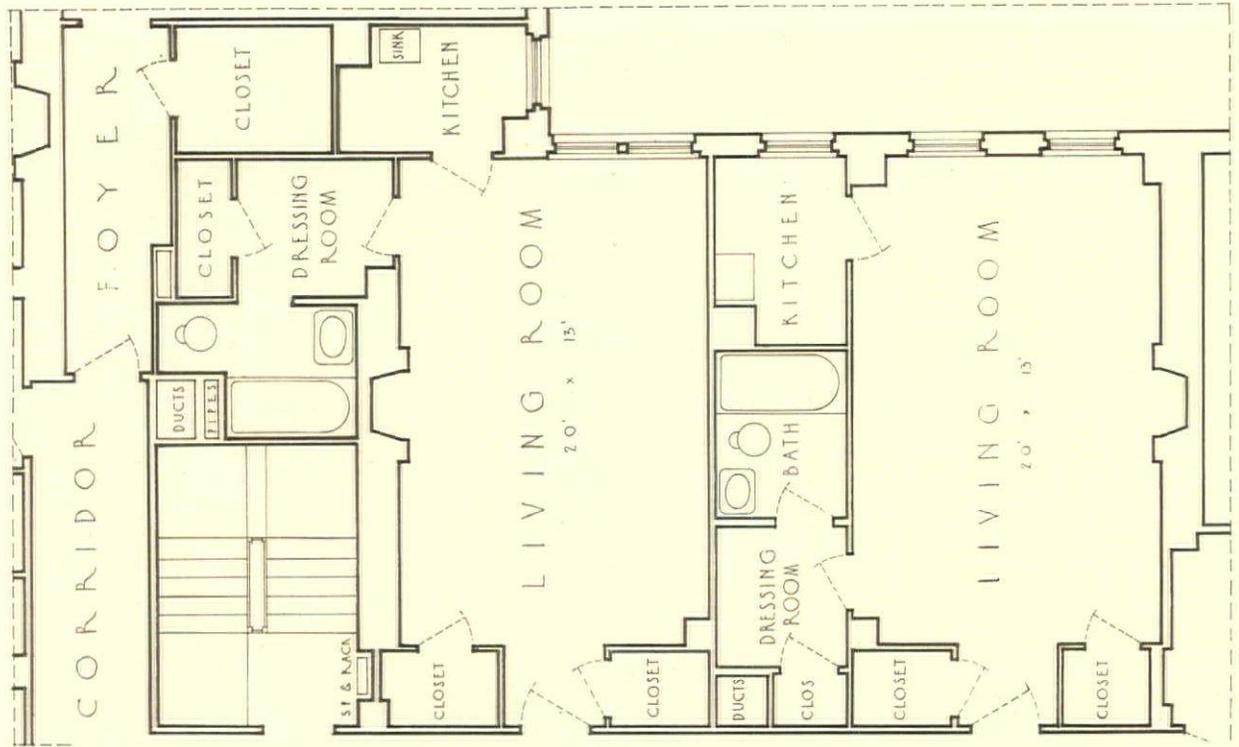


Richard Averill Smith

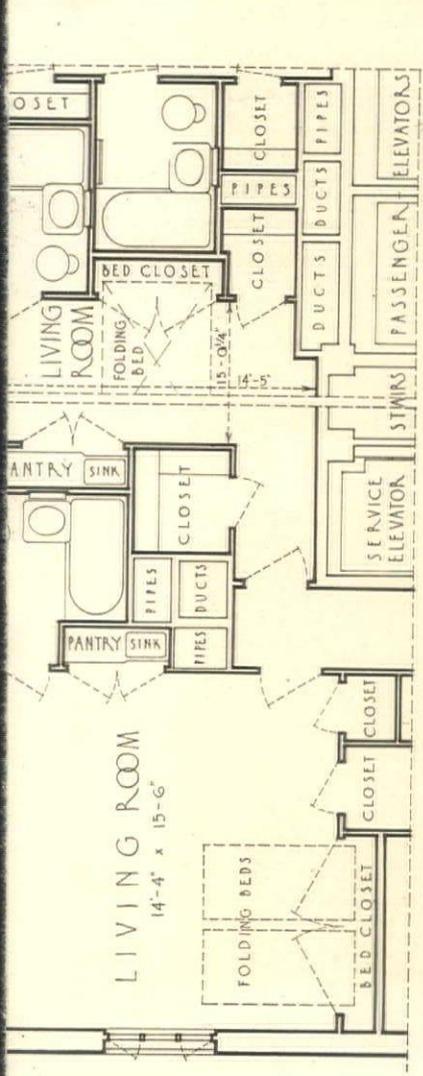
A TYPICAL APARTMENT AT GROVE STREET AND WASHINGTON PLACE, NEW YORK
EMERY ROTH, ARCHITECT



PART PLAN, TYPICAL FLOOR (2ND-14TH FLOORS) INC. APARTMENT-HOTEL, 312-324 E 42ND STREET (TUDOR CITY), NEW YORK CITY

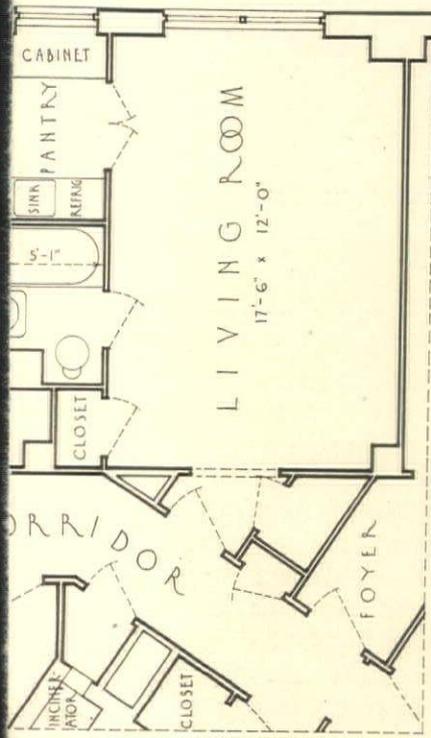


PART PLAN, TYPICAL FLOOR (2ND-9TH INC.) MULTIPLE DWELLING HOUSE, HUDSON & W 17TH STREETS, NEW YORK CITY



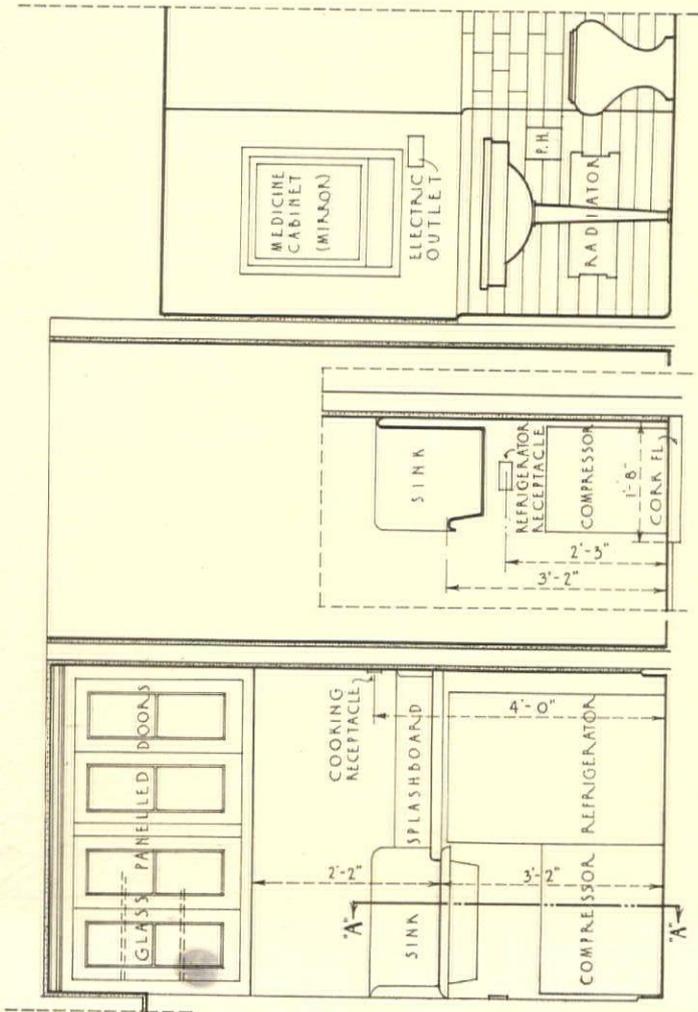
PART PLAN, SETBACK FLOOR (25TH & 26TH FLOORS)
 APARTMENT-HOTEL, 312-324 E 42ND STREET (TUDOR CITY), NEW YORK CITY

1/8" = 1'-0"



PART PLAN, TYPICAL FLOOR
 APARTMENT-HOTEL, GROVE ST. & WASHINGTON PLACE, NEW YORK CITY

1/8" = 1'-0"



ELEVATION OF PANTRY SECTION 'A-A' DETAIL OF BATH ROOM
 PANTRY & BATH ROOM DETAILS

FRED F. FRENCH COMPANY, ARCHITECTS

FRED F. FRENCH CO., ARCHITECTS

PLANS AND DETAILS OF ONE-ROOM APARTMENTS

EMERY ROTH, ARCHITECT

NOTES

PLANS AND DETAILS OF ONE-ROOM APARTMENTS

(See other side of sheet)

FRED F. FRENCH COMPANY, ARCHITECTS

EMERY ROTH, ARCHITECT

Living-rooms:

In general the sizes in New York City vary from about 11' to 13' in width and 17' to 20' in length. Needless to say, the outside perimeter of the building is always at a premium, and the smaller dimension is that which is parallel to the outside wall. Where there is sufficient space, and where higher rents can be charged, in addition to the living-room there are the usual bath, an adjoining dressing-room, as well as a small kitchen or pantry in a separate room (see upper right corner of drawing overleaf). Where the living-room is as large as 13' by 20', folding-beds are often omitted, and the tenant supposedly provides himself with an inconspicuous day-bed with which to camouflage the identity of the room.

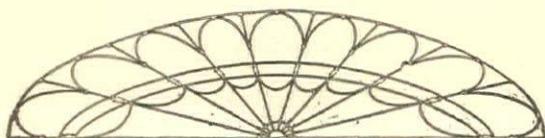
Where there is more limited space, the living-room is provided with folding-beds which collapse in a bed closet behind regular doors (see plans on left half of drawing overleaf). Also hidden behind regular doors is a pantry, in a most condensed form. There is no dressing-room, but a number of closets, preferably opening from the entry space or foyer, which also gives access to the public corridor, living-room, and bath.

Baths:

Economic planning demands the centralizing of plumbing lines, with the bathrooms nestling in a group, and with pantries adjacent to bathrooms (see upper left corner overleaf). Where the cost of forced ventilation equipment is cheaper than losing exterior wall space, and where depth permits, interior bathrooms are provided; these can be economically contained within a space of 5' by 6' 9". Where there is insufficient depth, or where for other reasons outside baths are preferable in plan, an excellent arrangement is shown on the drawing overleaf in the middle plan, left side. In this same plan the pantries have been skilfully dovetailed with the other requirements.

Pantries:

Because of the New York code permitting only electric outlets in this type of building, the condensed pantry as shown on the bottom of the drawing is the result. In other cities, where gas is permitted, the solution may develop natural variations. Here, however, the maximum equipment has been reduced to a minimum of space, with condenser and refrigerator under the sink, and dresser above the sink.



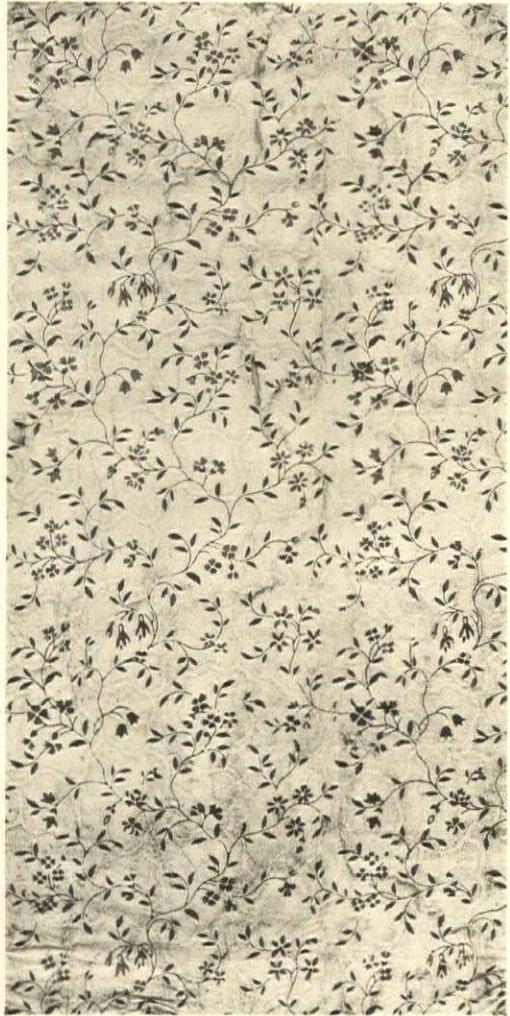
Yesterday and To-day

A GLANCE AT SOME OF THE MINOR ARTS—OUR PRESENT-DAY EFFORTS
COMPARED WITH SOME OF THE RECOGNIZED ACHIEVEMENTS
OF PAST ERAS—THIS MONTH, WALL-PAPERS

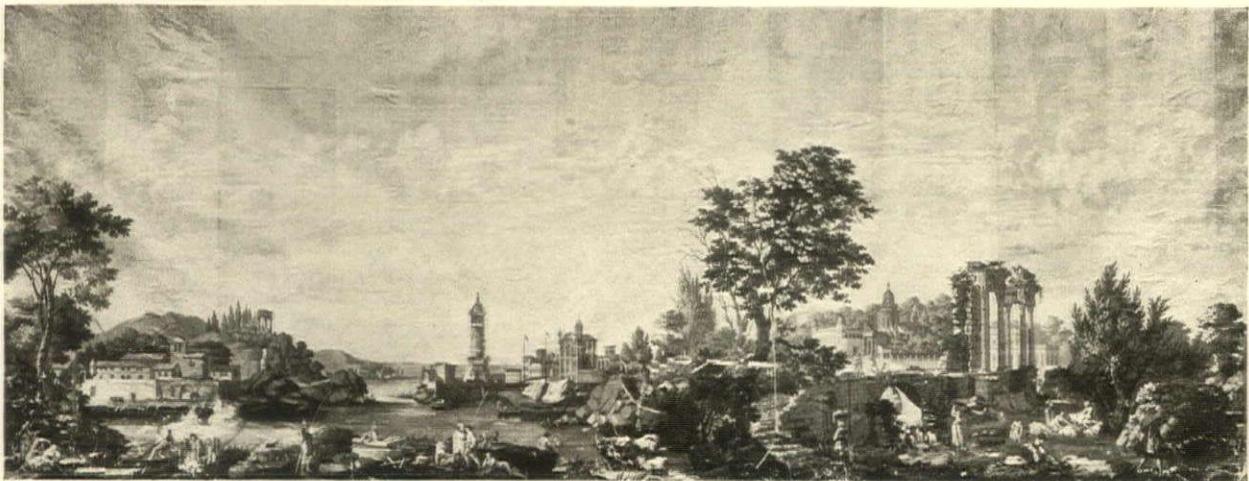


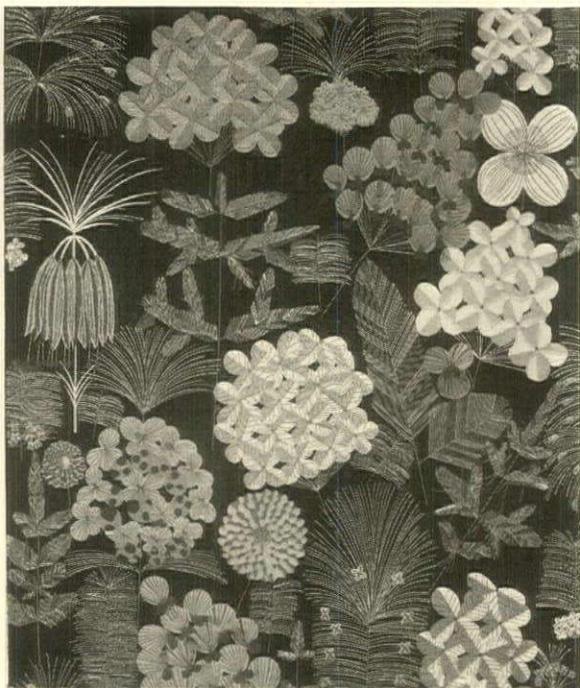
*Les Oiseaux,
printed in Eng-
land after a
Chinese pattern
in the eighteenth
century*

*A French wall-
paper designed
by Simon of
Paris about
1814*

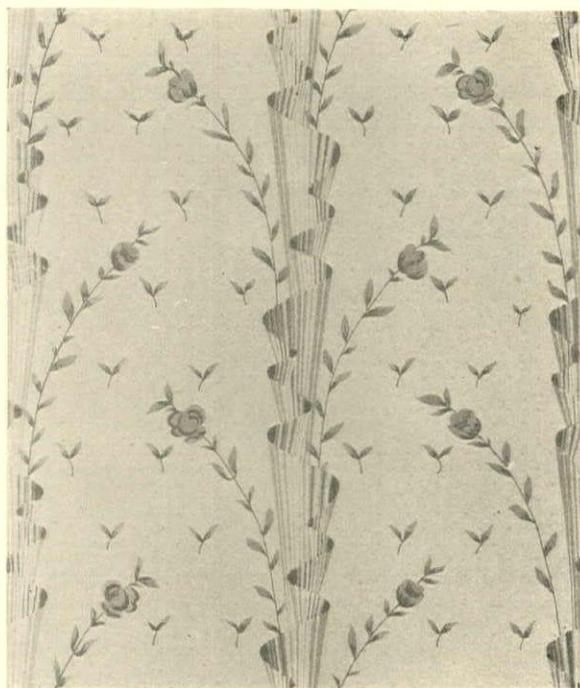


*A French pattern
of the early nine-
teenth century in
sepia, black, and
white. The illus-
trations on this
page are reproduced
by courtesy of the
Metropolitan Mu-
seum of Art*





From Elsie Sloan Farley
A paper in white, gray, and black designed and produced by the Wiener Werkstatte



From Elsie Sloan Farley
Another product of the Wiener Werkstatte in gray, green, yellow, and silver on a gray ground

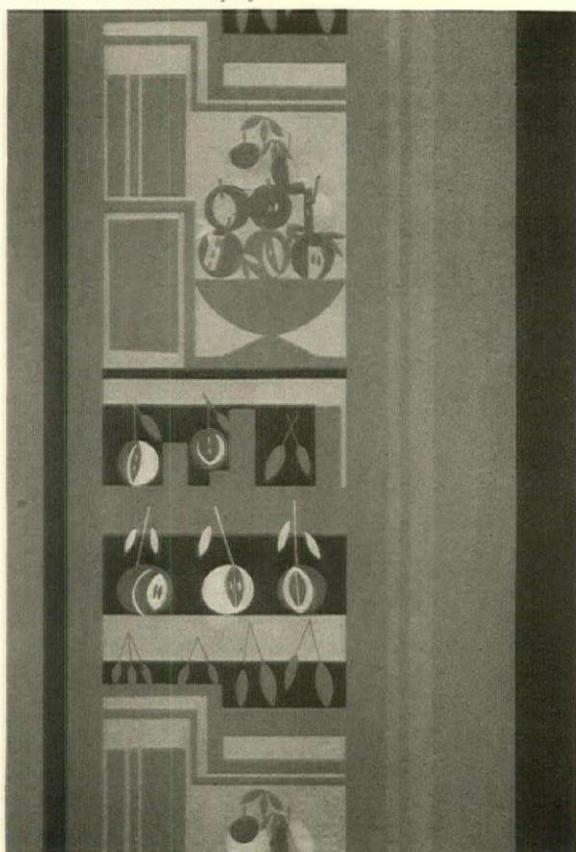
Gold, silver, blue, and red striping on a grayish brown background

From Frederic Blank & Company



Three shades of gray in the broad striping with peach and silver on a cream ground

From Frederic Blank & Company



Form in Modern Architecture

III. THE SOCIAL CONTRIBUTION

By Lewis Mumford

IRON and glass, fabricated materials, standardized parts, new methods of construction, the influence of the engineer's exact technic—all these things have laid a basis for modern form in architecture. What has been called modernism during the last decade has been chiefly a recognition of this mechanical and technical factor—a recognition of the potential designs which the conventional designer spent endless ingenuity in obliterating. But the technic of building is not the only thing that has changed during the last three hundred years; and each fresh outburst of form has had, latent or explicit in it, a programme for incorporating in structure the new institutions of society. The shift in social emphasis from the monumental to the domestic, from the luxurious to the utilitarian, has an important effect upon design; and we should have only a truncated conception of modern form if we overlooked the changes dictated by new standards of living, new customs, habits, interests, conventions, and by the new arts of hygiene and applied psychology. Let us examine these transformations.



The first great social change that affected modern design was the differentiation of functions. For the sake of simplicity let us consider this solely in domestic building, although it has its counterpart, of course, in every phase of construction. We begin with a common room in a farmhouse. Here, at the open fire, meals are cooked; near by, children crawl around on the floor or are nursed at the mother's breast; food is eaten at a table in the same room, flax is spun or cloth woven there, and at night the tired members of the household sleep on a pallet laid on the floor. The first prime change takes place when the upper floor of the house is used for the master and the mistress and their daughters, while the floor below is reserved at night for the boys and men. Next, the curtained four-poster bed, or the recess in the wall, gives the master and his wife a privacy which the other members

do not yet enjoy; from the private bed it is but a step to the bedroom.

These changes did not become wide-spread in England or America until the seventeenth century, although centuries earlier the lord and lady in their castle had, as a sign of their rank, private sleeping-apartments and a private toilet. What is important to remember is the fact that the division of services and functions, which finally gave us the intricate plan of the nineteenth-century house, with its separate sleeping-quarters, its kitchen insulated completely from the dining-room, was conditioned, not by architectural invention, but by a change in social manners. Privacy became a luxury, first enjoyed by the rich, later even by the middle classes: it went along with that breach between the literate and the illiterate, the gentleman and the boor, which is so much more marked between Dickens' characters than between Chaucer's. The hall, once the common meeting place of the whole household, became the narrow passage that separated the private chambers. The boudoir is literally the sulking-room; and various acts which used to be performed cold-bloodedly in public have now their separate architectural sanctums, except in the slums, where many obsolete practices linger in housing as in medicine. A hundred years ago a belated traveller in the American backwoods thought nothing of sharing a bed at the inn with a stranger; in the same town to-day, he may not even share the same toilet.

These changes may have been in various degrees desirable, but the important point to remember is that we paid for them. The first effect of this differentiation of functions was to destroy the unity of design, that unconscious unity which was due to the communal mode of life rather than to the overt intention of the builder. In a panelled mansion of the seventeenth century there is still no great difference in treatment between the bedroom, the dining-room, and the library: the difference has to do with tools, fixtures, utensils. During the next two centuries the gap steadily widened. In town houses the kitchen was relegated to the basement, and became dingy, hideous; and there was



"The old-fashioned farmhouse was frequently built around a chimney."

*West Boxford,
Mass.,
kitchen in the
American Wing,
Metropolitan
Museum of Art,
New York*

no common denominator between the other rooms of the house, except their desire for "individuality" and privacy. In the splitting up of the rooms ungainly shapes resulted: who cannot remember the urban parlor of the 'nineties, so long and narrow that no hostess could manage to bridge the distance between the groups at either end? The existence of the "living-room" was an eloquent verbal reminder of the character of all the other rooms in the house.

A generation ago there seemed to be no limit to this differentiation; but to-day there are plenty of signs that we have overpassed it and are returning to a more elementary series of relationships.

What are these signs? For one thing, the dining-nook, in the smaller house or apartment, has become part of the kitchen; and the kitchen, in turn, has recovered its original smartness and beauty. With a ventilating fan and a partly concealed sink there is no more æsthetic need to remove the kitchen from the dining-room than there is to remove the book-shelves from the library; and in the autonomous small-family apartment there is, in fact, good reason for bringing them together. Again, among the less conventional members of the middle class, the distinction between the living-room and the parlor has been lost: for the sake of extra space the two are merged into one, or for the sake of economy only one is provided. Hence the architect should face a new problem in design.

In the old-fashioned house each room was distinct; it had its own kind of wall-paper—geometrical in the dining-room, floral in the bed-

room, blue-and-gold in the drawing-room, green or brown in the sitting-room—moreover, each room had its specific kind of furniture, ornamented, upholstered, so as to fit one purpose and background alone. This convention, too, is becoming obsolete. Only the very well-to-do can afford the luxury of idle rooms, under our present conventions of property and credit; for most people it is more satisfactory to have one large room performing two purposes than to have two small ones, one of which is used, like the old dining-room, only two or three hours in the twenty-four. The sliding wall is one solution, and it brings back into the design of rooms that common background that they so long lacked.

Not alone plan and construction, but also interior decoration will be profoundly affected by this solution, and the lack of experiment in this department in America is laughable. The architect has accepted the shrinkage of the modern apartment without taking a single step to counteract it.

It is not financial constriction and small families alone that have simplified the modern house, wiping away unnecessary differentiations; another important factor in modern design is the part played by domestic economy and hygiene. The old-fashioned farmhouse was frequently built around a chimney: it would be fairly accurate to say that the modern house is built around the plumbing. Here again we are dealing with new social habits, habits which make the modern household more hygienic than the best of hospitals were fifty years ago, and which restore the culture of the body to a place it had not

"It would be fairly accurate to say that the modern house is built around the plumbing."

Kitchen in the F. L. Furden house, Kansas City, Mo.



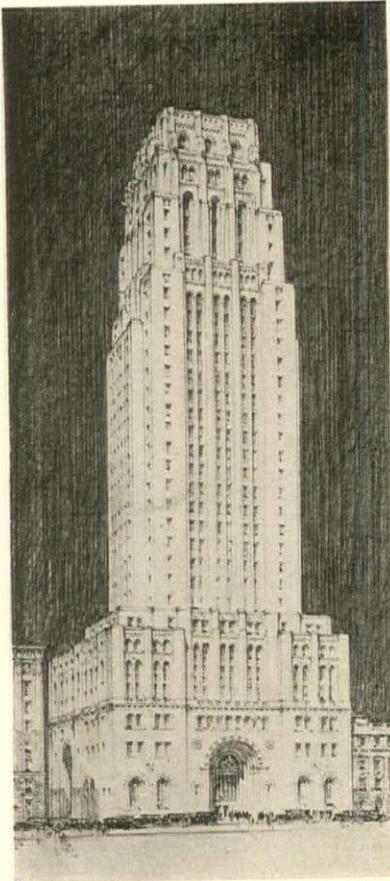
had in Western civilization since the dissolution of the Roman Empire. Running water, heating apparatus, methods of waste-disposal, to say nothing of the standard fixtures of bathroom and kitchen, absorb money and resources that once went into the structure itself. Is there any sign that these demands will decrease? On the contrary; already in Germany the open sun-porch for naked sun-bathing has become a standard requirement for the modern house; and the house or apartment without such a porch will presently seem as obsolete as a house without a bathroom.

The architect who fully faces the hygienic necessities of the modern house, and who seeks to integrate them into his design, has a canon of form much more rigorous and comprehensive than any of the earlier counsels of modernism. His hatred of dust will make him eschew mouldings, even those of "fresh" design, since menials for wiping away dust are no longer glutting the market at starvation wages; his regard for women's clothing, and for skin unbuttressed by corsets, will cause him to be wary of coarse, porous-textured walls; his interest in the simplicities of housekeeping will cause him to seek in the manipulation of wood, linoleum, or cork—plus an adequate heating system—the warmth once dependent upon rugs and carpets. So down the line his choices in design will be guided, not merely by the available materials and technics, but by those larger choices which make up the social habits and manners, even the morals, of our own time. When he pays attention to these requirements, his touch inevitably becomes modern, as in the bathroom and the kitchen;

when he forgets them, he becomes lost in a bog of reminiscent design, and has no foothold which will enable him to climb out. To think of sunlight, cleanliness, utility, absence of menial service will not, by itself, produce fine designs; but to think of formal beauty by itself is to be reminded of other formal designs, and is no guarantee of ever achieving sunlight and efficiency. The first method is at least a sound beginning; and it is sufficient praise of modern architecture in Europe to say that it has begun to build again from the bottom up.

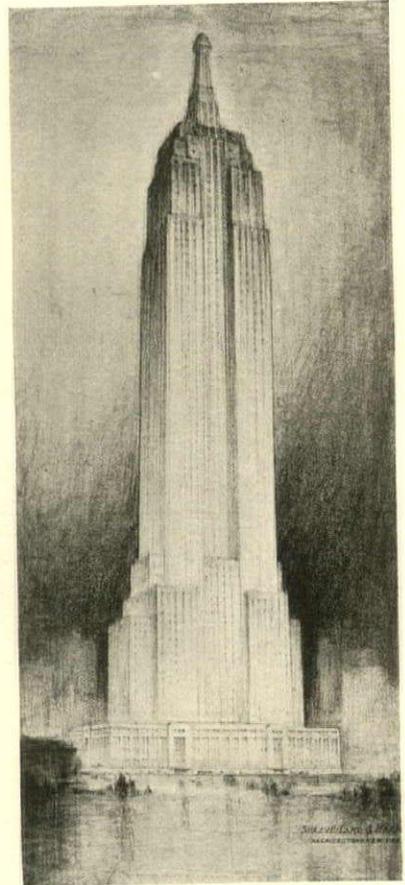
This stripping of the structure to its essentials brings architecture into line with the whole social movement of our generation: a movement as obvious in physics as in psychology, in education as in morals. First: a denial of old values. Second: chaos. Third: the experimental building up of an order, based not upon stereotyped values and uncritical assumptions, but upon a more generous pattern of experience. The architect must not merely be released from the old; he must be inwardly disciplined toward the new; his problem is not to acquire a new bag of tricks, but to place himself at the centre of those ideas and social movements which are now working below the surface toward a common manifestation in life. For form is the spirit that pervades the architect's materials when they are brought together and harmonized for a humane purpose, and the source of that synthesis is society itself. It is no accident that the purest and finest modern forms are to be found, not in skyscrapers, mere temples of Mammon, but in workers' dwellings and garden cities.

Architectural News in Photographs

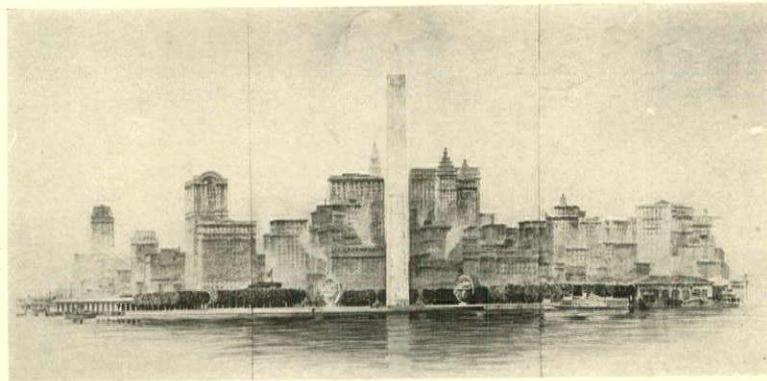


The proposed Canadian Bank of Commerce Building for Toronto. Darling & Pearson, architects; York & Sawyer, consulting architects

Ex-Governor Al Smith's New Empire State Building, now starting on the old Waldorf site, New York. Shreve, Lamb & Harmon, architects

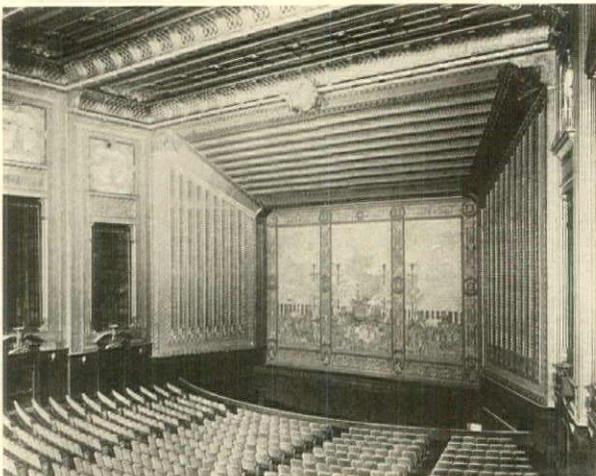


The proposed development of the southern tip of Manhattan Island, with a park at the Battery containing an 800-foot monument and two great armillaries. Eric Gugler, architect



Inside the Chicago Civic Opera House recently completed under the direction of Graham, Anderson, Probst & White, architects

Black - and - gold terra-cotta bank in Los Angeles. Morgan, Walls & Clements, architects

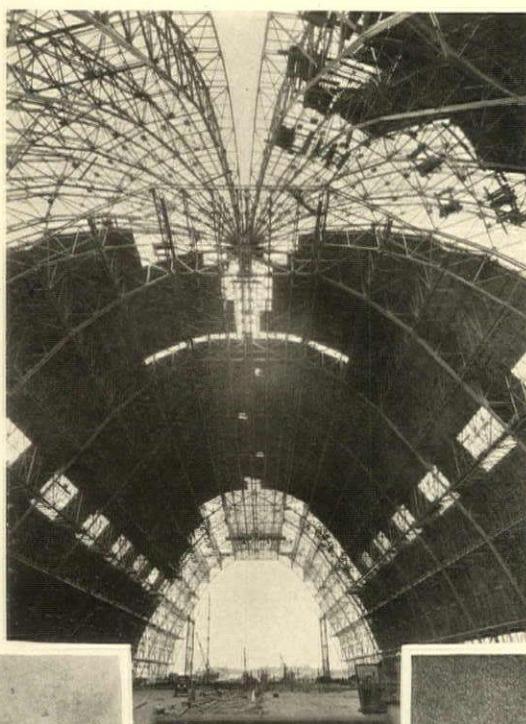




University of Michigan's League Building, for the women of the institution, Ann Arbor, Mich. Pond & Pond, Martin & Lloyd, architects



The John Pierpont house (1767), New Haven, Conn., recently restored by John Frederick Kelly, architect, for the Yale Faculty Club



San Francisco's proposed new home for the Olympic Club in the heart of the business district. Arthur Brown, Jr., John A. Baur, and John Bakewell, Jr., associated architects

Another proposed apartment-house—San Remo Towers—facing the west side of Central Park, New York City. Emery Roth, architect



The Goodyear-Zeppelin Airship Factory and Dock, Akron, Ohio. Wilbur Watson & Associates, architects and engineers



BOOK REVIEWS

MODERN ARCHITECTURE. By BRUNO TAUT. 212 pages, 8¾ by 11¼ inches. Illustrated with photographs and drawings. Printed in Great Britain. New York: 1929: Albert & Charles Boni, Inc. \$12.50.

A presentation of principles to govern the architecture of to-day, as formulated by one of the best-known contemporary protagonists.

THERMAL INSULATION OF BUILDINGS. 11 pages, 6 by 9 inches. Pamphlet binding. Bureau of Standards, Washington: 1929: U. S. Government Printing Office. 5 cents.

THE PLASTER-MODEL METHOD OF DETERMINING STRESSES APPLIED TO CURVED BEAMS. By FRED B. SEELY and RICHARD V. JAMES. 36 pages, 6 by 9 inches. Pamphlet binding. Urbana, Ill.: 1929: University of Illinois Engineering Experiment Station. 20 cents.

Based upon the fact that pottery plaster has approximately a straight stress-strain diagram up to the ultimate or breaking stress, its behavior is approximately the same as the elastic behavior of a ductile material such as steel.

THE METROPOLIS OF TOMORROW. By HUGH FERRISS. 140 pages, 9 by 12 inches. New York: 1929: Ives Washburn, Inc. \$7.50.

A new collection of Mr. Ferriss's characteristic drawings. There are three sections of the book—one devoted to "Cities of Today," one to "Projected Trends," and the third to "An Imaginary Metropolis."

THEATRES. By JOSEPH URBAN. 48 pages, 9½ by 12 inches. Illustrated from prints, drawings, and photographs. New York: 1929: Theatre Arts, Inc. \$7.50. (\$10 autographed.)

Mr. Urban knows a lot about theatres and, like all real scholars, is acquiring more knowledge each day. His analysis of foreign and domestic theatre design is shown chiefly in the form of drawings and photographs with descriptive captions.

BRIDGES. A Study in Their Art, Science, and Evolution. By CHARLES S. WHITNEY. 363 pages, 9 by 12 inches. New York: 1929: William Edwin Rudge. \$20.

Mr. Whitney, who is an engineer, has brought together a surprisingly extensive collection of bridges which he shows in photographs, drawings, and old prints. His text reflects a point of view with regard to bridge design that will meet the approbation of architects generally.

THE PINE FURNITURE OF EARLY NEW ENGLAND. By RUSSELL HAWES KETTELL. Foreword by EDWIN J. HIPKISS. 229 plates from photographs with descriptive captions and 55 plates of detail drawings, 9¼ by 12 inches. New York: 1929: Doubleday, Doran & Co., Inc. \$35.

A notably sumptuous volume which is in keeping with the deep affection inspired by the humble furniture of this country's early years. The volume, after preliminary discussions of material, construction, hardware, and finish, is divided into sections of plates showing wall boxes, chests, stools and benches, stands and tables, desks, shelves and cupboards, signs and weather-vanes, mirrors and lights.

CHURCHES OF FRANCE. By DOROTHY NOYES ARMS. 179 pages, 9 by 11½ inches. Illustrations from 51 etchings and drawings by JOHN TAYLOR ARMS. New York: 1929: The Macmillan Company. \$20.

Mrs. Arms's text is a particularly charming and intimate accompaniment to John Taylor Arms's lovely etchings. The latter are reproduced in a process which simulates very closely the originals.

INTRODUCTORY HANDBOOK TO THE STYLES OF ENGLISH ARCHITECTURE. Part II. Tudor and Renaissance. By ARTHUR STRATTON. 32 pages, 5½ by 8¼ inches. Illustrations from line drawings. Printed in Great Britain. Philadelphia: 1929: J. B. Lippincott Company. \$1.

A booklet designed to accompany a set of wall diagrams for the use of teachers in elementary and secondary schools.

PRACTICAL ART LETTERING. By E. G. LUTZ. 193 pages, 5 by 7½ inches. Illustrations from many diagrams and alphabets. New York: 1929: Charles Scribner's Sons. \$2.

Mr. Lutz is the author of many books on drawing and possesses to an unusual degree the ability to convey information to his readers.

MECHANICAL EQUIPMENT OF BUILDINGS. Vol. I. By LOUIS ALLEN HARDING and ARTHUR CUTTS WILLARD. 963 pages, 6½ by 9 inches. Illustrated from diagrams, tables, etc. New York: 1929: John Wiley & Sons, Inc. \$10.

This is the second edition, revised and enlarged, of a two-volume handbook for engineers and architects—Volume I covering heating and ventilation. Volume II treating of power plants and refrigeration. A thoroughly comprehensive and detailed work.

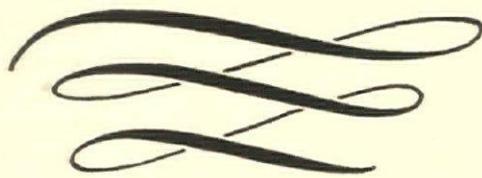


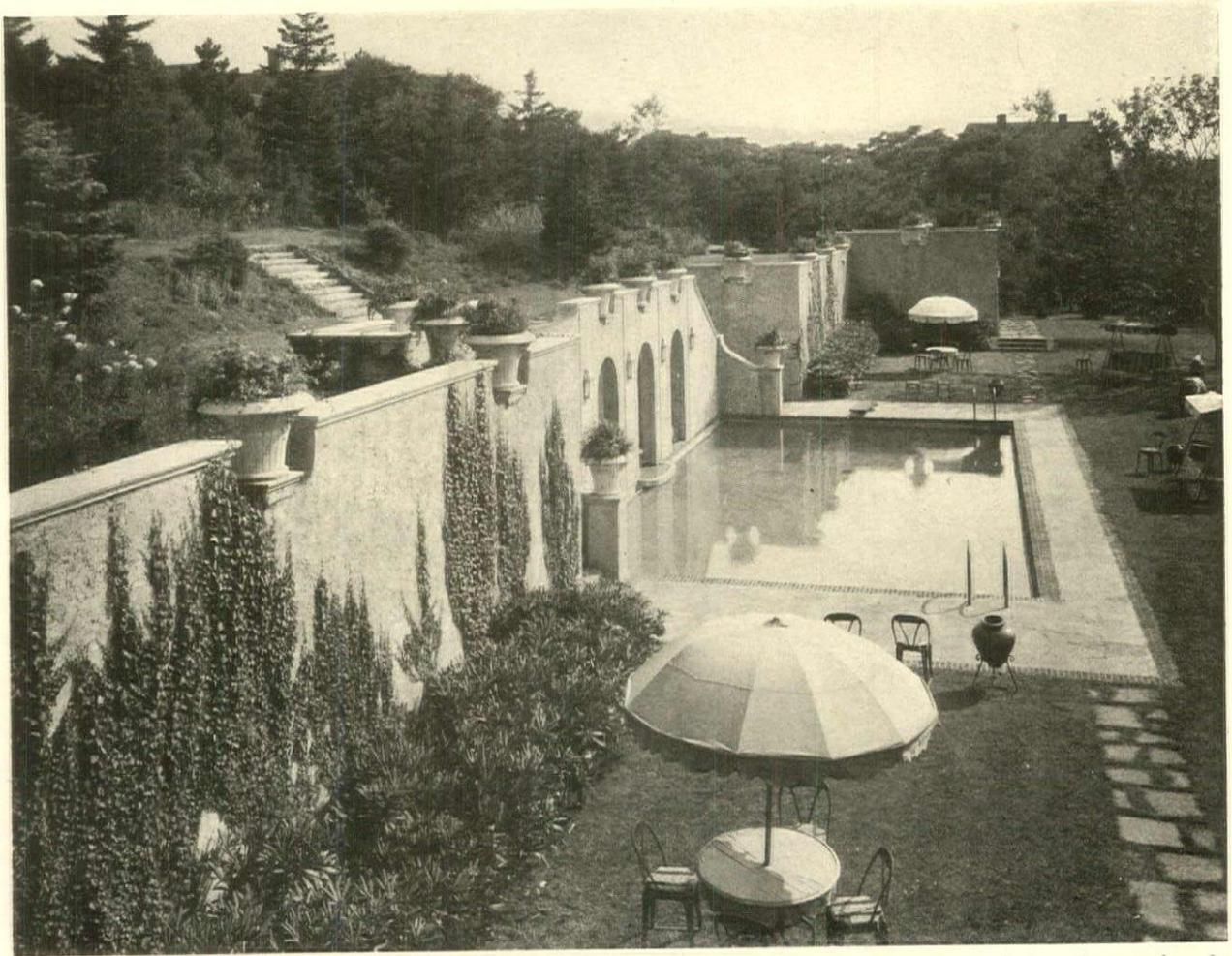
© Anemysa

Stepping-stone causeway between large and small lakes, water gardens of Mr. and Mrs. J. Morgan Wing, Millbrook, N. Y. Marian C. Coffin, Landscape Architect. Miss Coffin received The Architectural League's Gold Medal this year

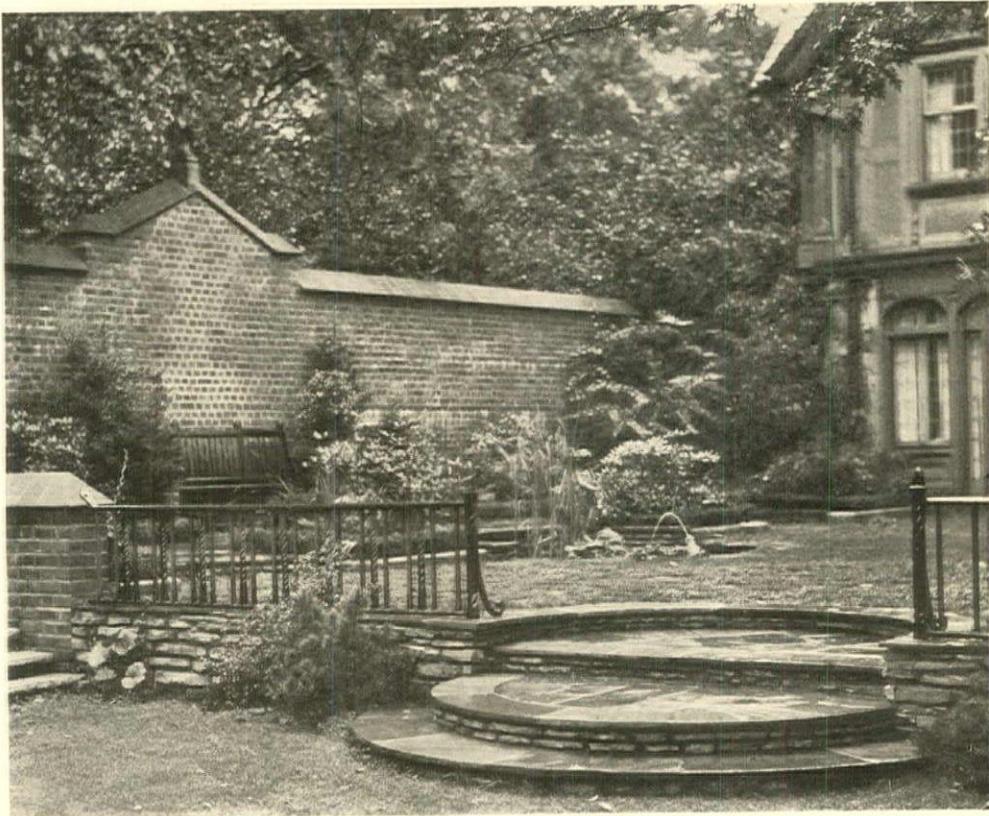
Landscape Gardening

A PICTORIAL REVIEW OF THE SEVENTH ANNUAL EXHIBITION OF THE NEW YORK CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, OPENING AT ARDEN GALLERY, NEW YORK, MARCH SEVENTEENTH





Swimming-pool on the estate of S. Fullerton Weaver, East Hampton, Long Island. Jacob John Spoon, Landscape Architect; Schultze & Weaver, Architects



The garden terrace, estate of S. M. Flickinger. Eric J. Reeves, Landscape Architect



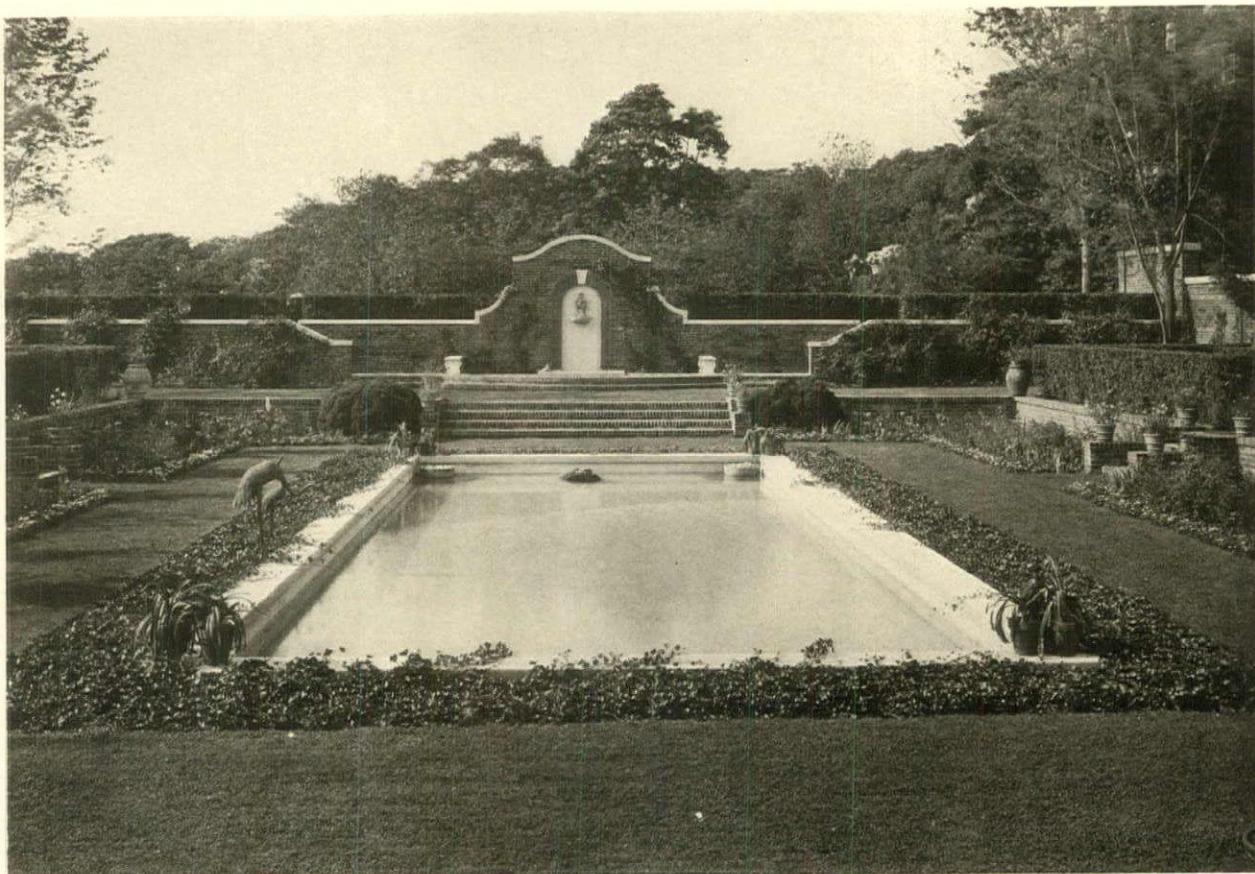
Samuel H. Gottscho

The terrace pool on the country place of Mrs. John A. Vietor, Locust Valley, Long Island. Ferruccio Vitale and Alfred Geiffert, Jr., Landscape Architects



Henry R. Head

A bridge in Enfield Glen State Park. Herbert E. Blanche, Landscape Architect



Mattie Edwards Hewitt

The blue garden, Ballyshear, estate of Mrs. Charles E. Van Vleck, Southampton, Long Island. Annette Hoyt Flanders, Landscape Architect



Mattie Edwards Hewitt

Entrance court, country house of Mrs. J. B. Ward, Irvington-on-Hudson, N. Y. Delano & Aldrich, Architects; Robert L. Fowler, Jr., Landscape Architect





Samuel H. Gottscho

Walled garden at Dellwood, the country home of Louis Wilputte, New Rochelle, N. Y. Clarence Fowler, Landscape Architect



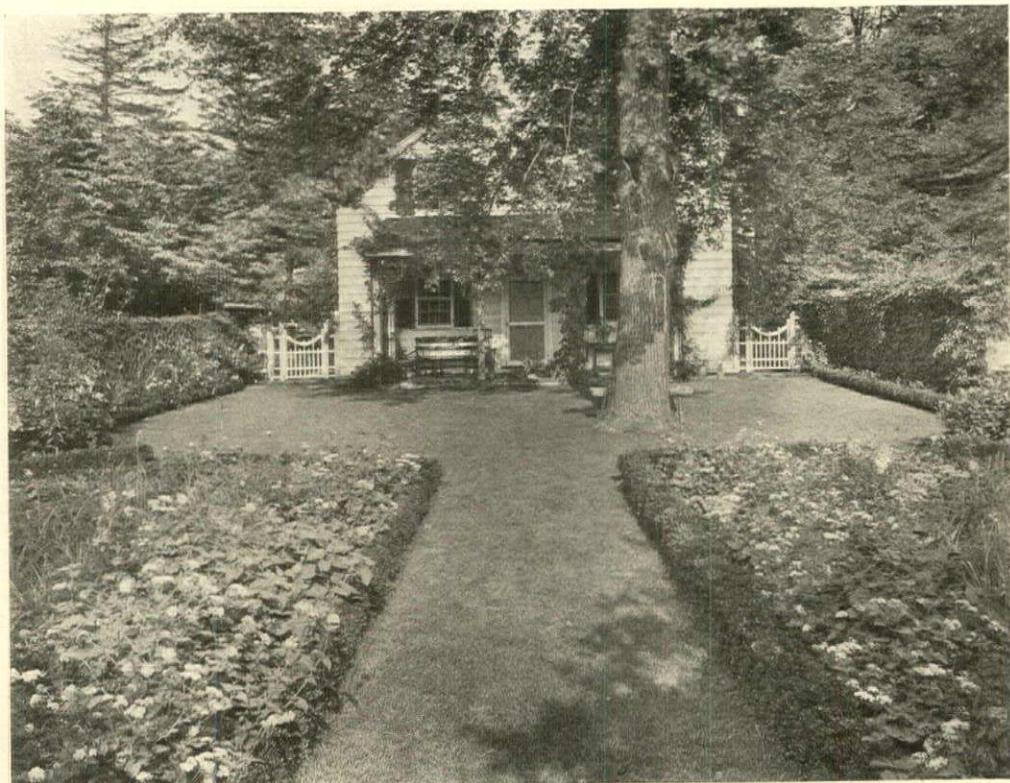
R. F. Smutny

Garden terraces, estate of Newcomb Cleveland, Scarsdale, N. Y. Charles Wellford Leavitt & Son, Landscape Engineers





John Wallace Gillies, Inc. Entrance approach, house of S. W. Corman, Bronxville, N. Y. Lewis Bowman, Architect; A. F. Brinckerhoff, Landscape Architect



Richard Averill Smith Garden of Mrs. Warren C. Kinney, Morristown, N. J. Ruth Dean, Landscape Architect



A Pictorial Review of Modern Architecture in Europe



By F. R. YERBURY, HON. A. R. I. B. A.



Fountain in a housing group, Oslo, Norway

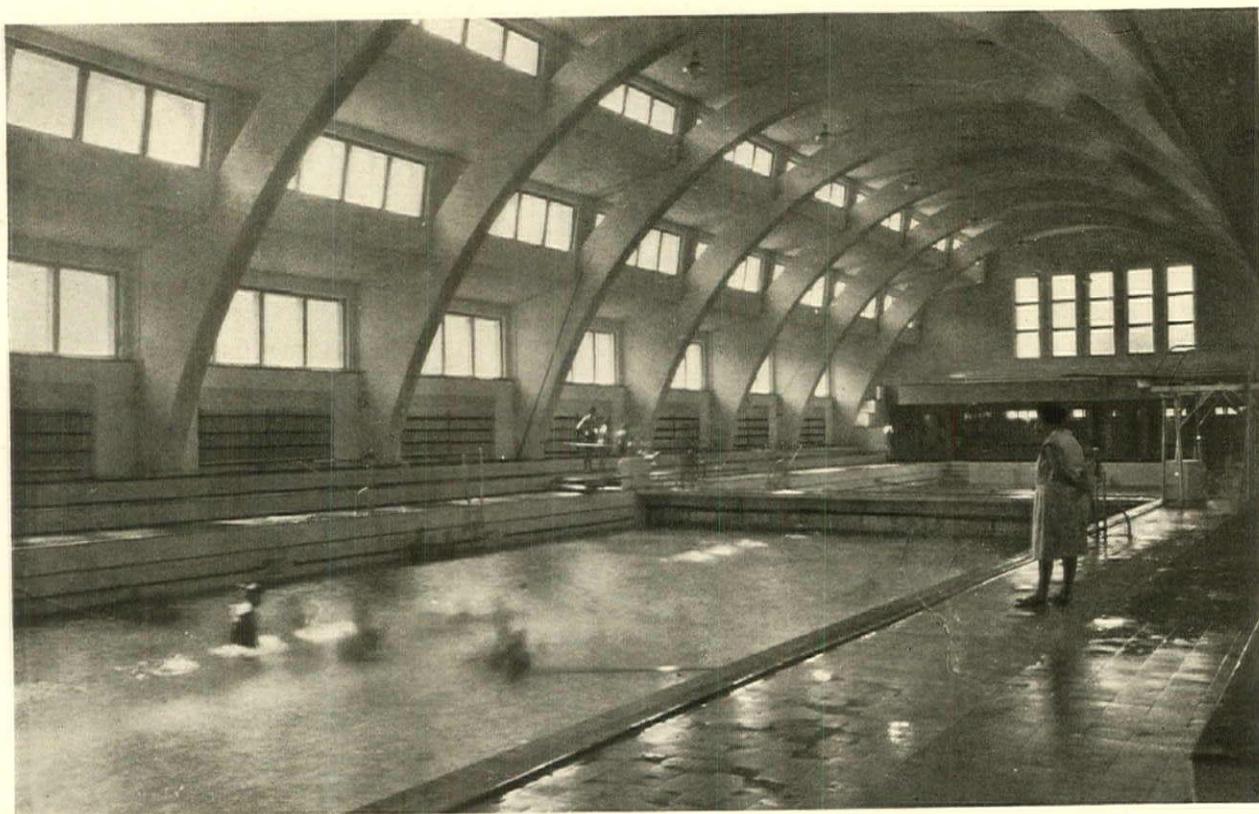
Asbjorg Borgfeld, Sculptor

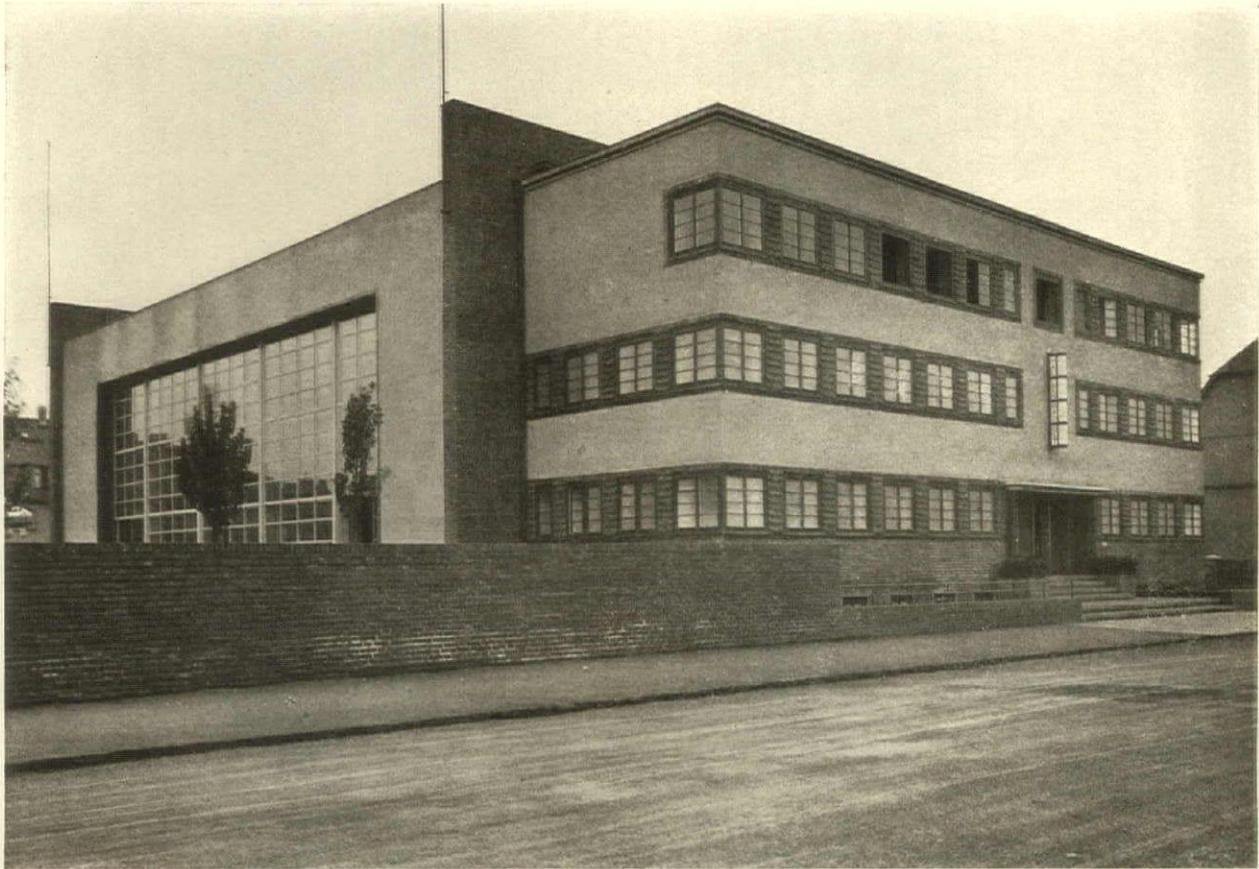


Filling-station, Hamburg, Germany

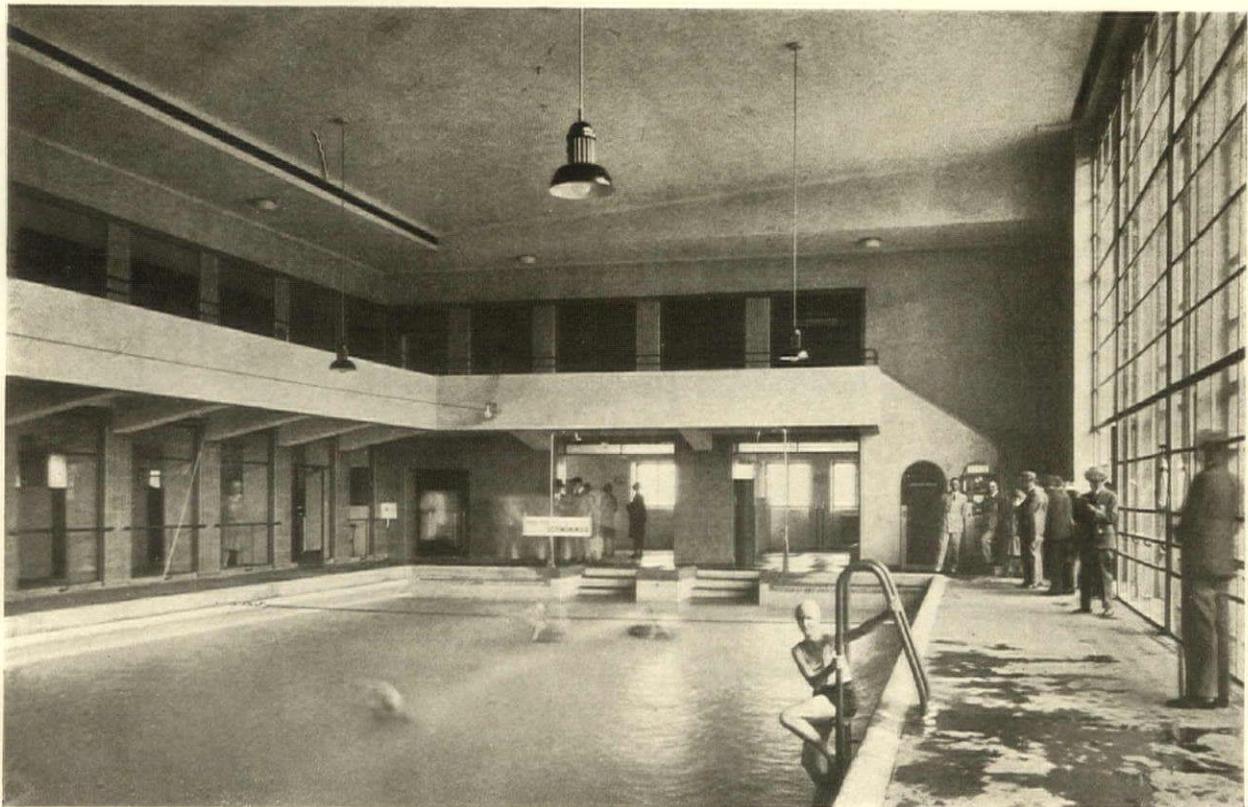


*Public baths, Stuttgart, Germany
Baudirektor Cloos, Architect*





*Public baths, Frankfort, Germany
J. Fuchs, Architect*



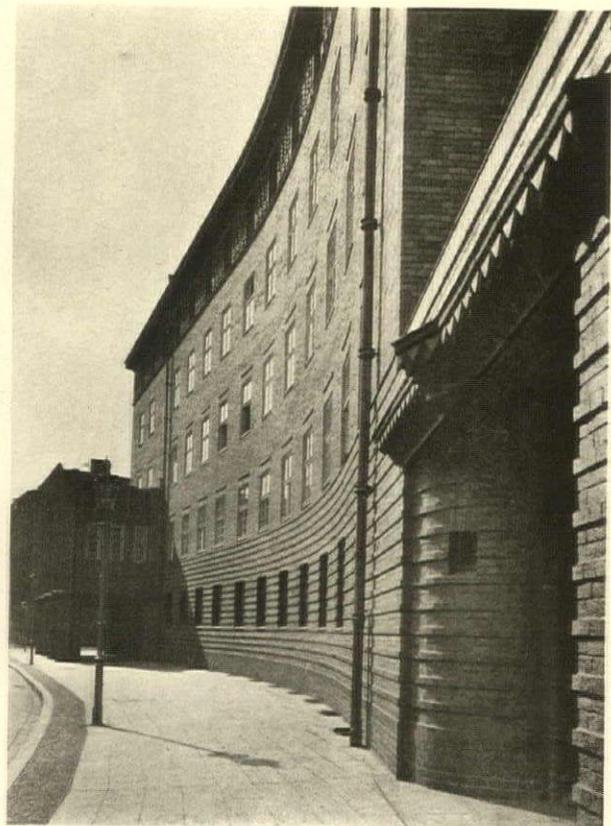


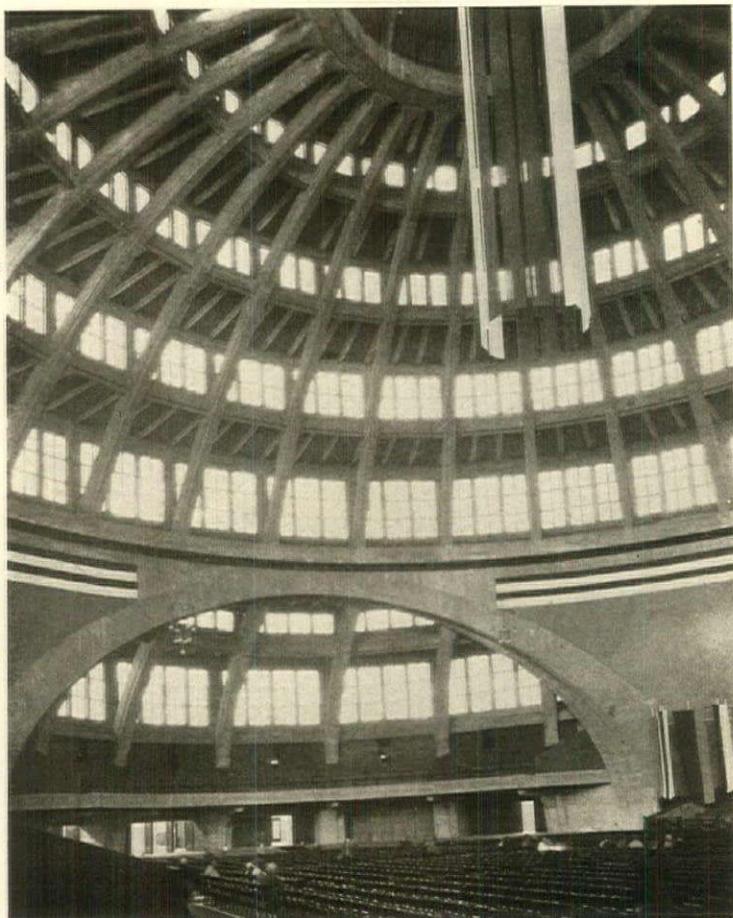
Police Building, Breslau, Germany

The Municipal Architect



*Police Building, Breslau, Germany
The Municipal Architect*

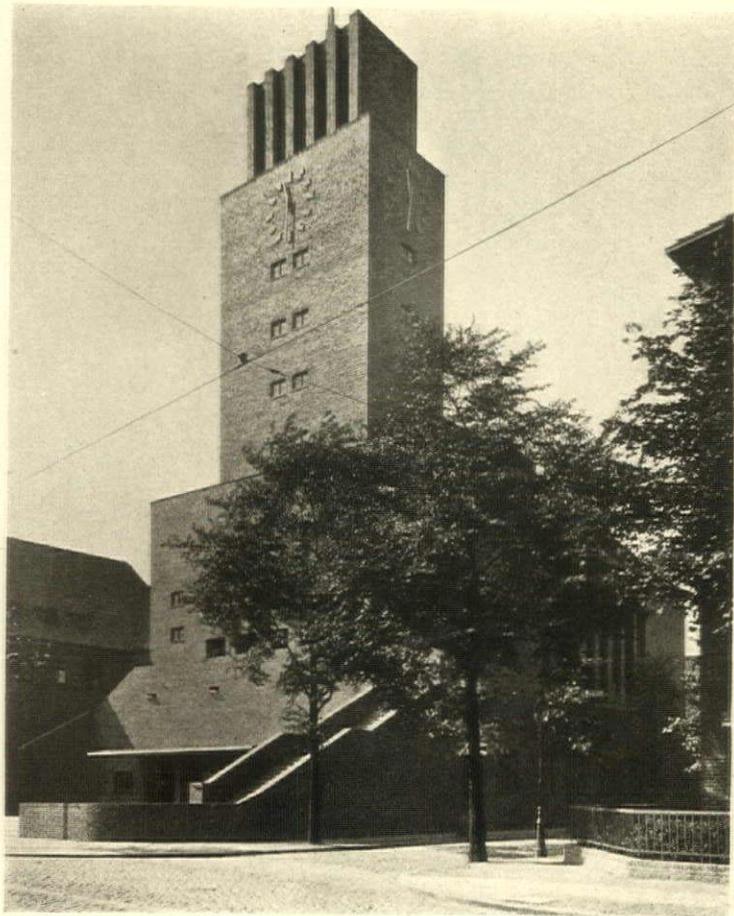




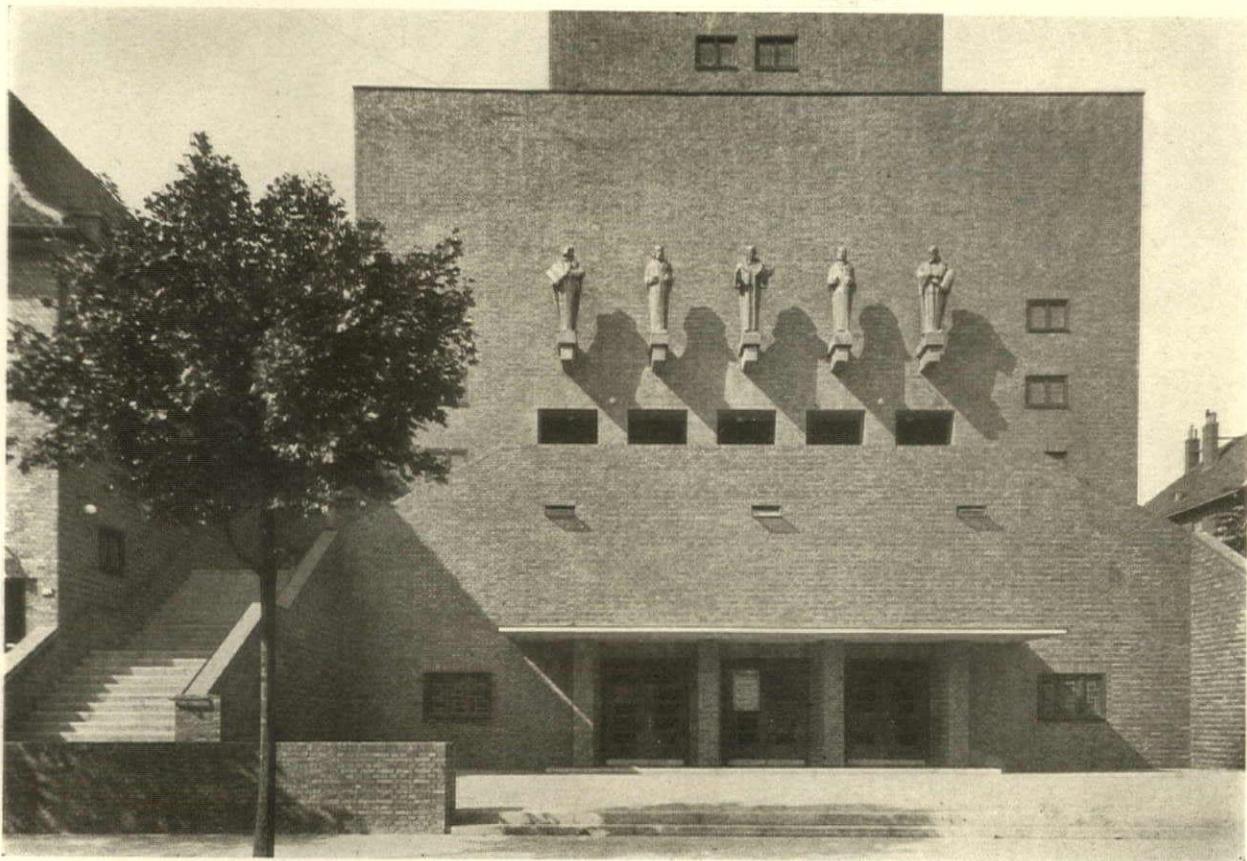
*Centennial Exposition Hall,
Breslau, Germany*

Max Berg, Architect





*A church in Hamburg,
Germany*
H. Hiene, Architect



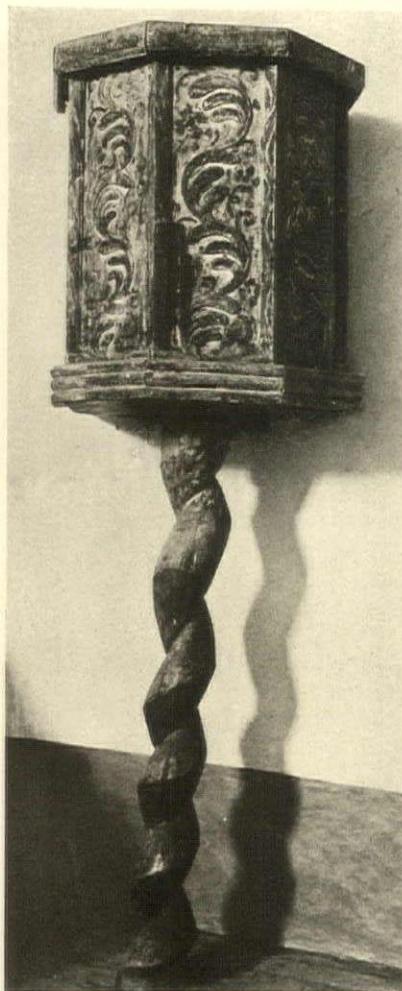


Siemenstadt, Berlin, Germany
H. Herlein, Architect



Architectural
Details of

Our Own
Southwest



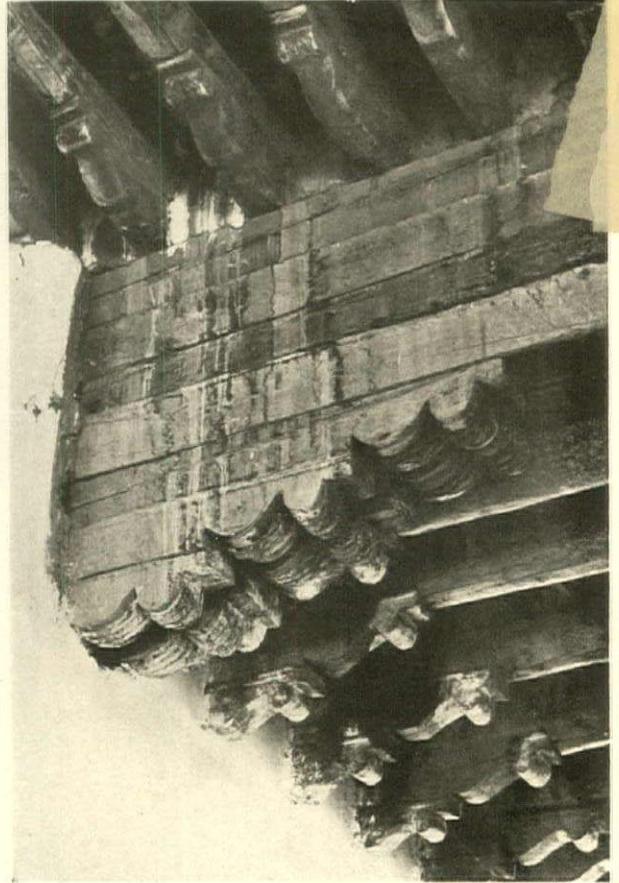
The pulpit shown above to the right is a carved wooden one from the old church in Trampas

Below, balcony railing and brackets for the chair loft, church at Santa Cruz





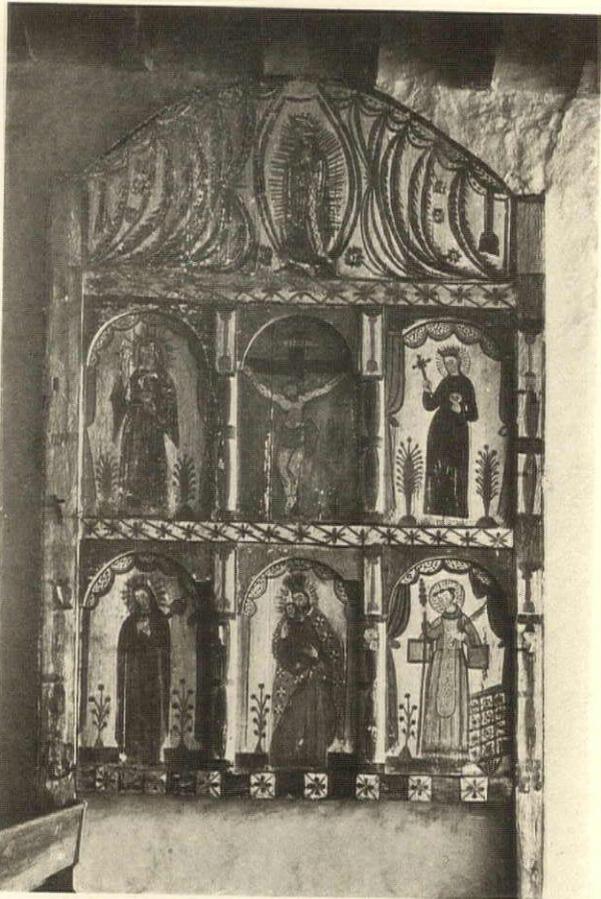
Porch of a 'dobe house at Isleta



Corbels and vigas (beams) of the church at Santa Cruz

The altar of the old church at Trampas



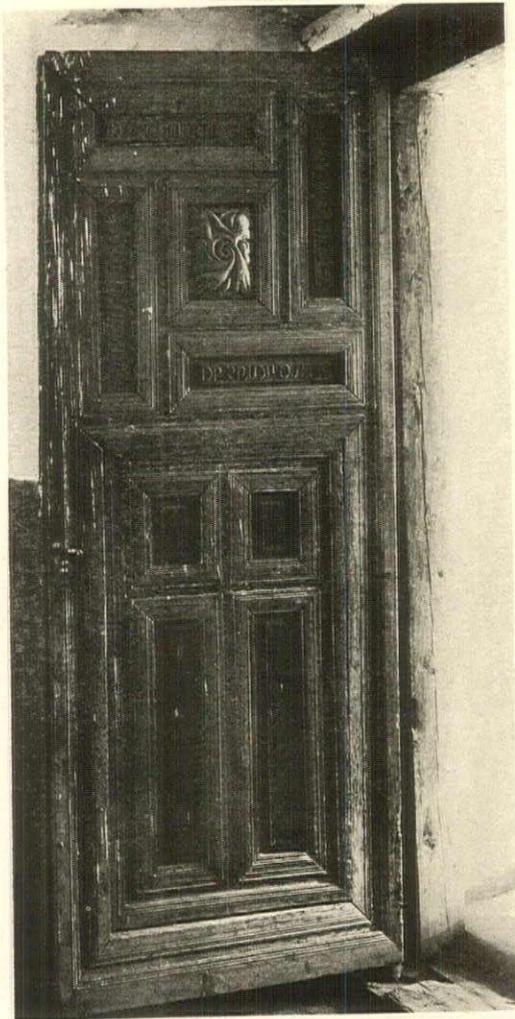


The very crude woodwork in an old portal at Santa Cruz

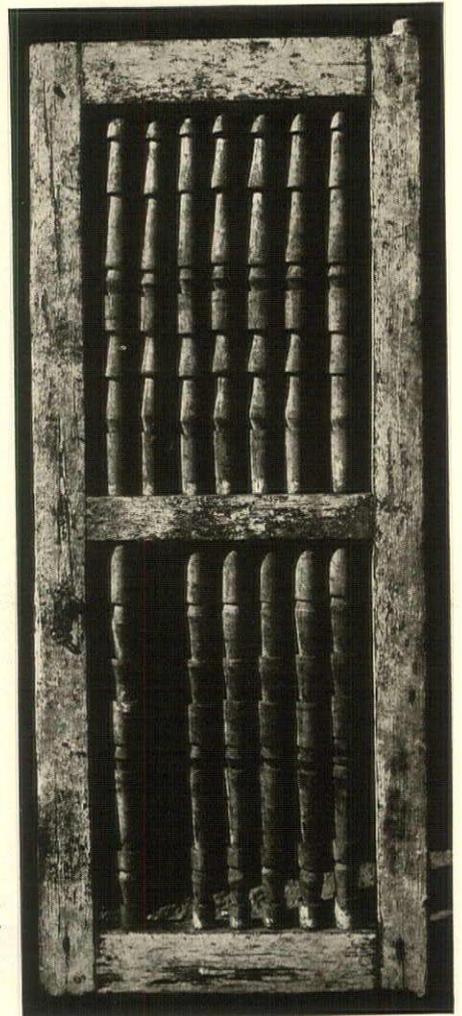
The altar paintings at Santa Cruz, typical of many

The sanctuary behind its wood railing at Chenango





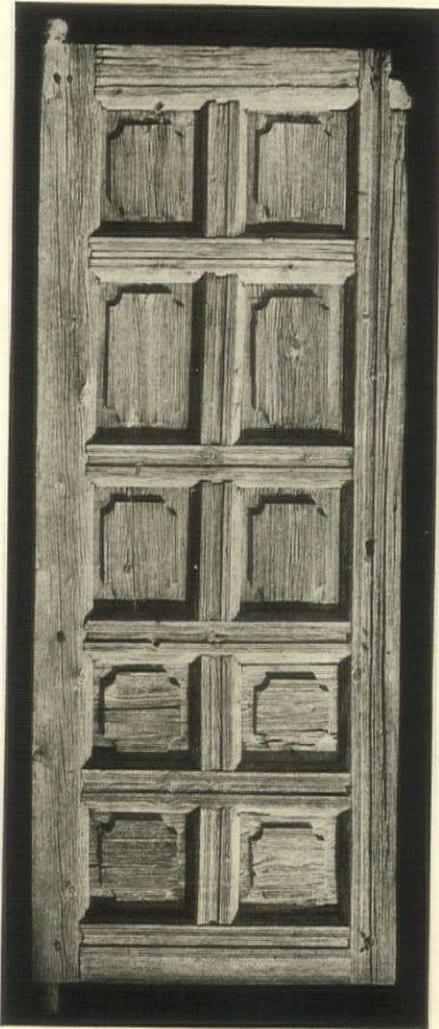
A door opening into the sanctuary at Chenango



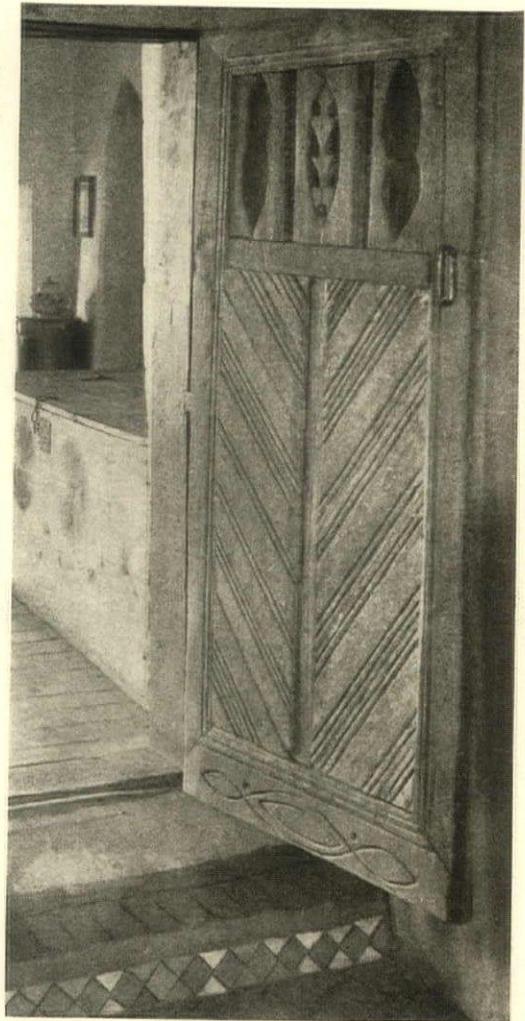
An old sanctuary door with its crudely turned balusters



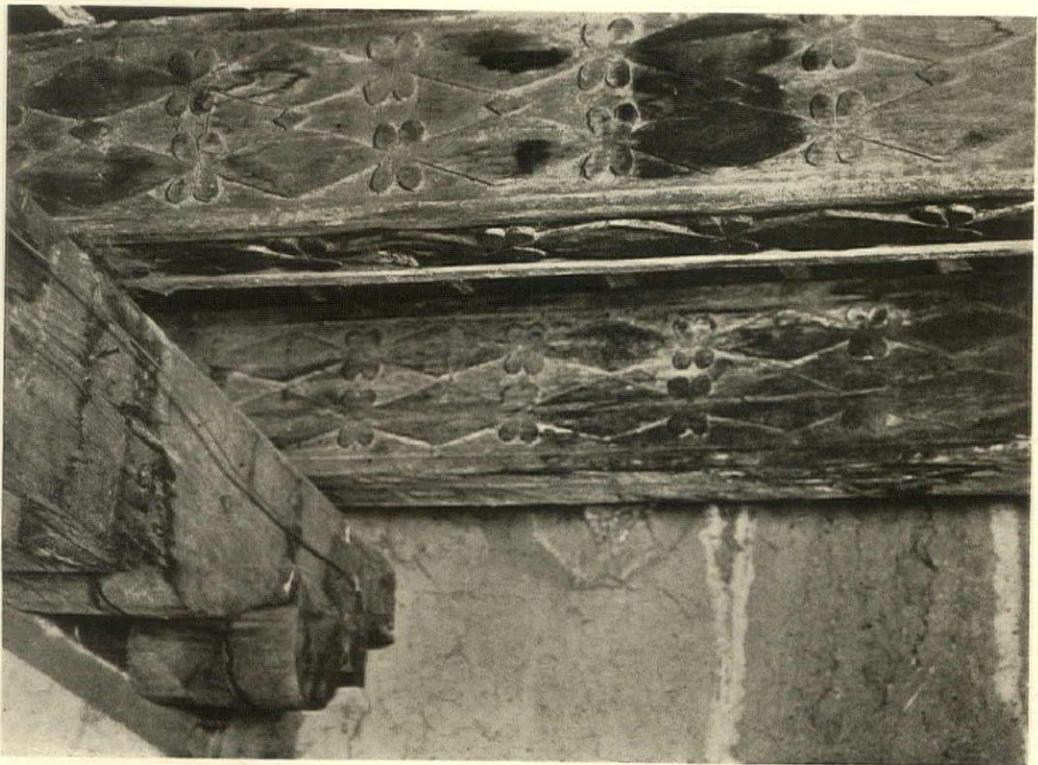
Carved timbers from San Ildefonso, one of the Hopi Indian pueblos



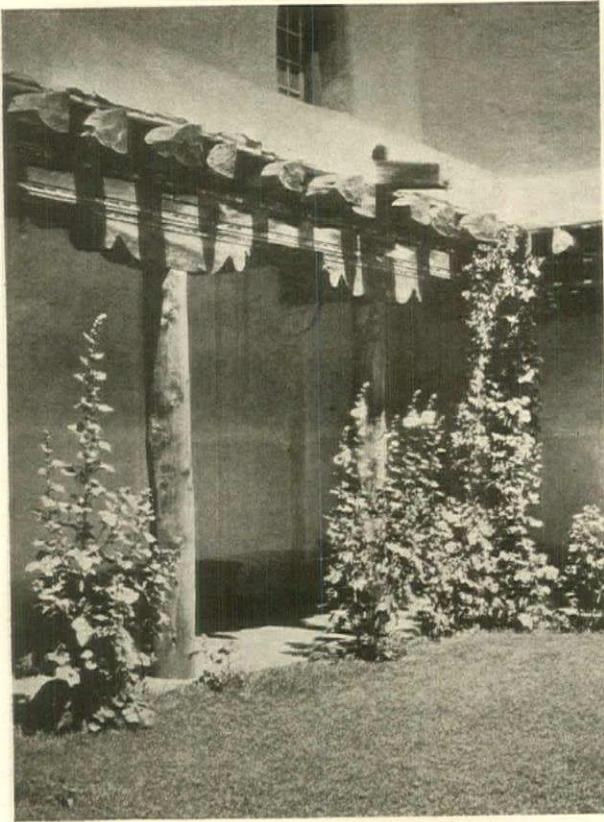
A door in the J. W. Lockwood house at Taos, N. M.—modern work based upon the old



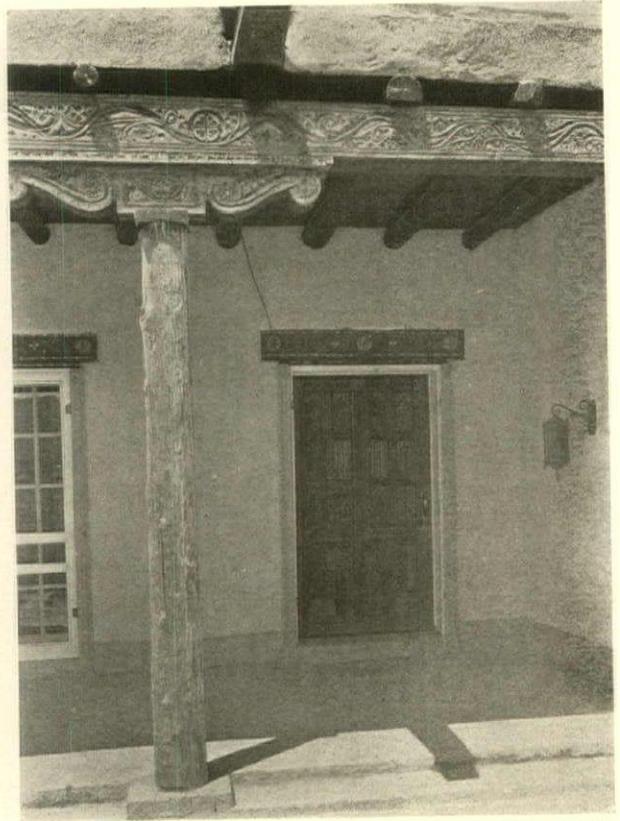
A door from Santa Clara Mission (photographed horizontally, which explains the shadows)



Details of carving on large wooden beams at San Ildefonso

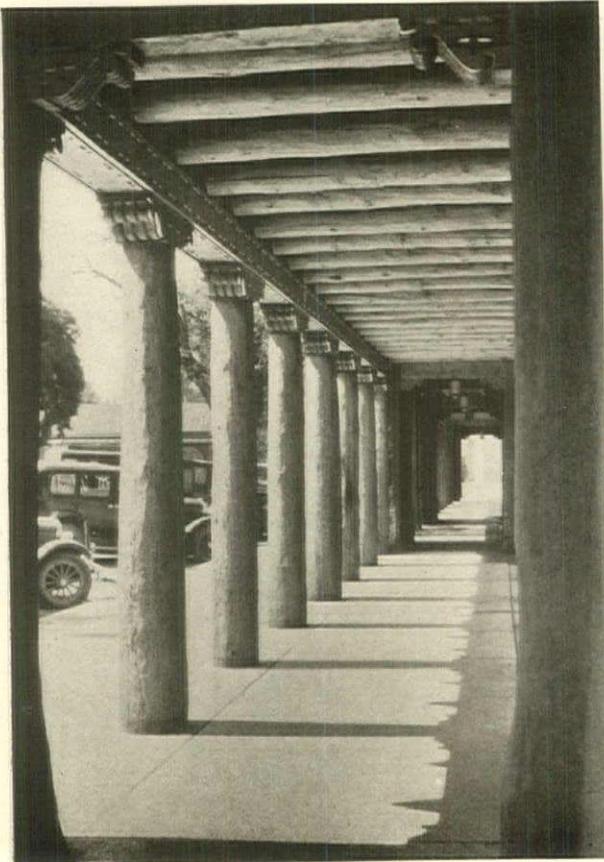


*Interior court, Art Museum, Santa Fé, N. M.
I. H. Rapp, Architect*

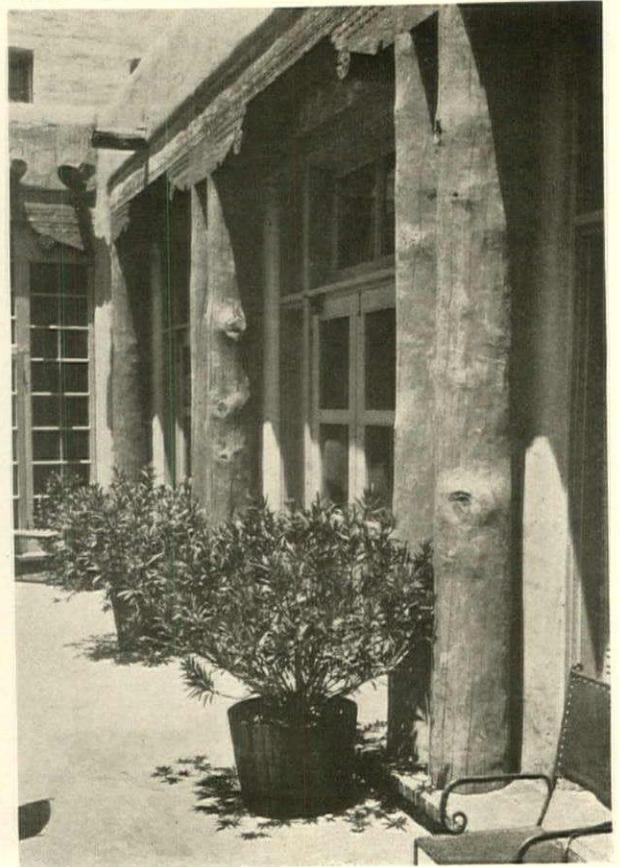


*Modern carving, house of B. J. O. Nordfeldt,
Taos, N. M.*

*Street colonnade along the front of the new
post-office building, Santa Fé, N. M.*



*Details in patio, Hotel La Fonda,
Santa Fé, N. M.*



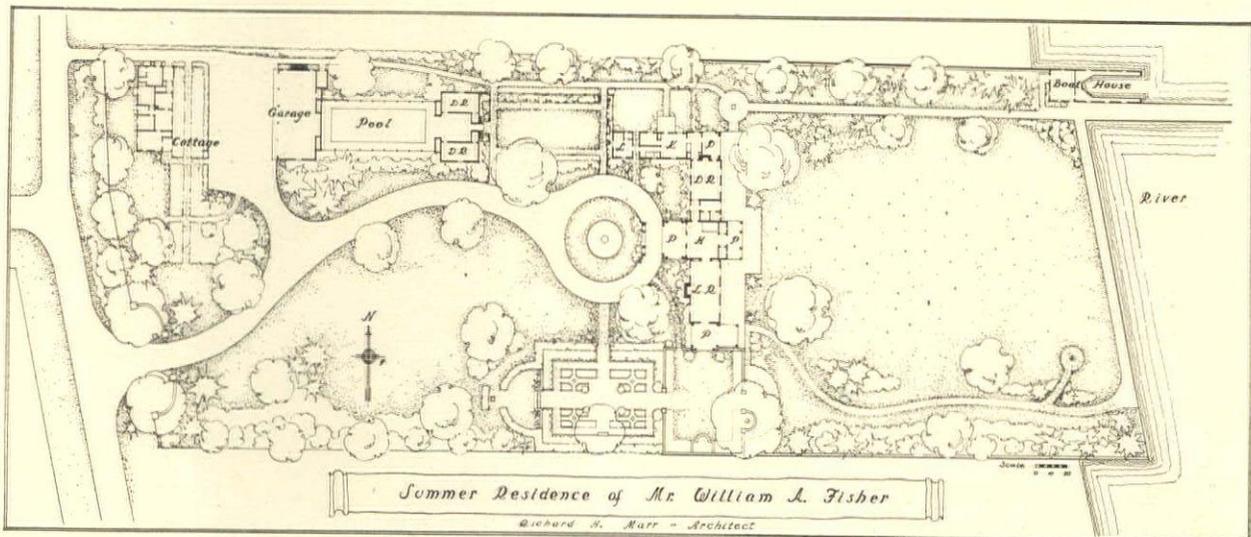


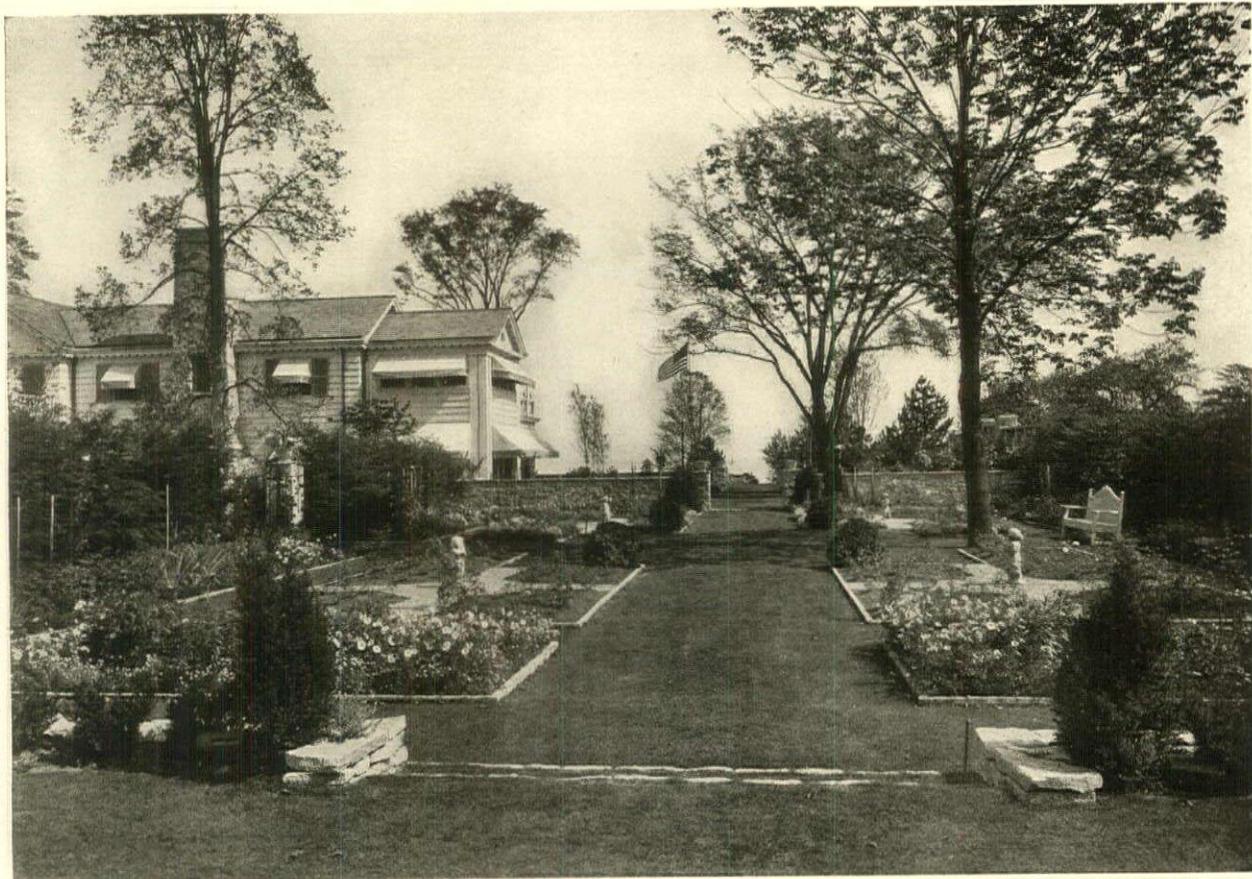
The house from the boat landing

HOUSE OF WILLIAM A. FISHER,
DETROIT, MICH.

RICHARD H. MARR, ARCHITECT

Photographs by Thomas Ellison





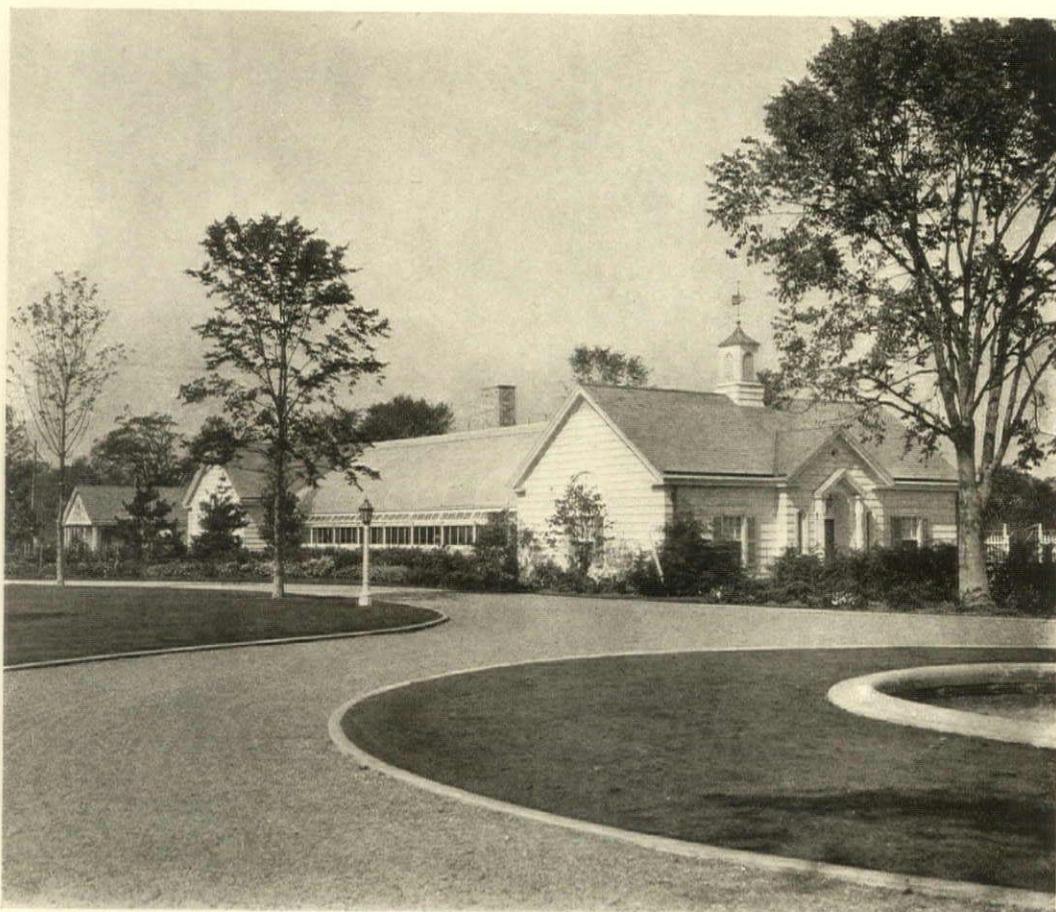
*Looking east
across the
flower-garden
past the
southern end
of the house*



*The
swimming-
pool is in a
separate glass-
roofed building
with dressing-
rooms at the
near end*



The west entrance front of the house from the driveway



The swimming-pool building. At the far end of it are the garage and the service cottage group



The dining-room

The hall



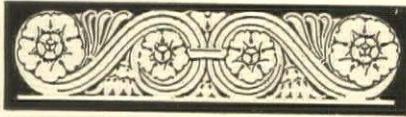
HOUSE OF WILLIAM A. FISHER, DETROIT, MICH.

RICHARD H. MARR, ARCHITECT

Saturday, December 28.—Spent a generous luncheon hour with Leon Solon discussing a possible book on color which has engaged his thought and pen for some five years or more. There are plenty of books on color harmony, in which inter-relationships of primary and secondary colors are formulated, but the physiological and psychological elements of color perception, the use of color in the knowledge of these elements—in a word, the scientific employment of color for æsthetic effect—is still largely a matter of haphazard use and vague rule-of-thumb systems. We can measure and record a sound, and its effect on the human ear is governed largely by the one dimension of intensity. Not so with color and its effect on the eye. Not only is the latter affected by factors of hue, intensity, tone, juxtaposition, background, etc., but we have no sure means of knowing that the reaction on one pair of eyes is like to that on another pair. The effect of a certain shade of red upon one man's retina may be totally unlike the effect of the same color upon my own. Altogether, it is perhaps not to be wondered at that we use color in our architecture so ineptly and with such lack of conviction.

Monday, December 30.—Lunched with Maurice Heaton and Robert Weinberg, looking over some photographs of two houses of moderate size designed by the latter architect in a manner properly designated modern. Here was no striving for the merely bizarre, the angular, the emasculation of bald functionalism. Rather had Weinberg striven for a freedom from the shackles of stylistic clichés, an honest development of plan in accordance with the needs of to-day, and a logical and restrained envelopment that expressed that plan and was given all the grace in harmonious fenestration and in the disposition of masses and voids that could be devised. The result was in marked contrast to the functionalism that is kept bald and untouched by grace, such as that in which many of the German and French designers apparently delight.

Tuesday, December 31.—In connection with a remark by Bassett Jones, quoted in the Diary for October, referring to the growing difficulty in high buildings of making a lower tier of floors pay its way, Horace L. Smith, Jr., an architect and engineer of Richmond, Va., points out a feasible solution. By means of arcades he utilizes the ground floor of a block-square building entirely for stores. In the centre is a sealed fire-proof elevator shaft surrounded by a double spiral auto ramp which extends through a lower block of stories and provides motor-car storage. Above is an office-building with its successive setbacks. From opposite the middle points of the shorter façades the auto entrance and exit ramps begin at the street level,



The Editor's Diary

and are above the elevator lobby by the time they meet in the central spiral. Some such utilization of lower floors for car storage has been worked out in the professional building at 450 Sutter Street, San Francisco, designed by Miller & Pflueger, architects.

Thursday, January 2.—Called upon H. Van B. Magonigle to see samples of the mosaic tile with which he is putting a delicate color emphasis about the openings and elsewhere in the pure white stucco of his Tokyo chancery, ambassador's residence, and other governmental structures. His planting plans are worked out with an amazing grasp of the significance and subtle values which, in the gardens of Japan, never fail to captivate the Western observer. When I asked him where he got his knowledge of Japanese landscape design and plant material, he said that it was the fruit of a two months' visit to the island kingdom. Which shows what an important faculty the trained architect possesses in his ability to observe and to use what he observes in the matrix of an instinctive feeling for design.

Saturday, January 4.—Washington, D. C., is soon to lose its famous old National Hotel—once Gadsby's Tavern—which has been in continuous use since 1827 when John Gadsby came up from Alexandria to open it. The Calvert family, which has owned the famous hostelry from the beginning, sold it to the government the other day for something over half a million dollars, and it will be torn down to make room for the new civic centre. With the exception of the Capitol and the White House, possibly no building in America has been more intimately connected with American history. Every President from Jackson to Lincoln enjoyed the far-famed hospitality of the old hotel. Clay and Webster, Calhoun and Hayne, Crittenden, Stephens and Taney feasted on its terrapin and quaffed its old vintages. Charles Dickens, Thackeray, Trollope visited it and wrote of it. Gadsby got an English architect to design it, but, as might be expected of this particular period, its architectural character was far less notable than its cuisine and its guests.

Monday, January 6.—The architects and engineers have had to solve a rather neat little problem in the new Waldorf-

Astoria which is to straddle the New York Central tracks underground. To avoid any possible vibration, a series of mats are being put on top of the pier footings. These consist of, from the bottom up, a sheet of lead $\frac{1}{8}$ in. thick, $\frac{3}{8}$ in. of compressed asbestos, a thin sheet of galvanized iron, $\frac{3}{8}$ in. of compressed asbestos, and $\frac{1}{8}$ in. of sheet lead. The footings are kept clear of surrounding concrete or rock. Steel grillages rest on the vibration mats and on these the steel columns with their iron-slab bases. I suppose the vibration mats must be confined laterally in some manner that will keep the lead from squeezing out.

Wednesday, January 8.—The architectural editors' luncheon for the month, held at The League, discussed the large questions of financing big buildings. Mr. Jack Laun, a vice-president of S. W. Straus Company, and Mr. Ely Jacques Kahn were our guests. Two particularly interesting points were brought out: 1. That it is no longer the custom to limit a loan to a certain percentage of the cost of the work; rather should the loan be based upon the conservatively estimated earnings of the building. 2. It is conceivable that if the heads of various companies loaning money for large municipal building projects were to work together, they could make a city such as New York develop in the direction or in the particular locality agreed upon. This, however, is never likely to come about, by reason of the factor introduced by the speculative builders. One point that became particularly obvious in the discussion is that with the exception of the few architects constantly engaged in large urban projects, the architectural profession is rather sadly uninformed as to the close relationship between financing, economic return, and design.

Thursday, January 9.—Stephen Frank Voorhees, with an office of some three hundred men and the job of designing telephone and other buildings for the United States, finds time hanging rather heavily upon his hands. One of his diversions is the cinema, and tonight he converted a lot more architects, sculptors, painters, and what not to his hobby. At The Architectural League he showed us two films, both of them amateur productions, neither of them resembling what we think of when we hear the term "motion picture." One of these two is a sort of prelude, or pictorial epitome, of "The Fall of the House of Usher." It is not a pictorial narrative at all; rather it is an attempt to arouse, by more or less abstract design in moving-light patterns, the emotions aroused by Poe in his great story. The other film, "H₂O," is an attempt to record the endless variation of water in its many manifestations—falling, rushing, stagnant, reflecting wavering shadows of reeds or clouds. Both of these films point to a new road and new possi-

bilities in the field of creative design with light in motion.

Saturday, January 11.—Mr. John D. Rockefeller, Jr., adds to his long and diversified list of public benefactions with a gift of \$200,000 for the erection and equipment of a museum and laboratory for the study of American Indian life in the heart of the cliff-dwellings near Santa Fé. He also devotes the income of a fund of \$300,000 toward the institution's budget for five years. John V. Van Pelt, of the New York Chapter, A. I. A., conducted a competition for the group of buildings and the design of John Gaw Meem, of Santa Fé, was selected by a jury composed of John Mead Howells, New York architect; Dr. A. V. Kidder, Carnegie Institution, Washington; Jesse L. Nusbaum, superintendent of Mesa Verde National Park; Bronson M. Cutting, senator from New Mexico; and Kenneth M. Chapman, of the Indian Arts Fund. Judging from what I saw on a hurried visit to the Santa Fé country last summer, there is a fertile field there for anthropological, archaeological, and minor arts research, hitherto much retarded by lack of adequate means.

Thursday, January 12.—The executive committee of the New York Chapter, A. I. A., entertained at dinner Mr. Alistair MacDonald, son of England's prime minister, now visiting America to study our architecture. At the general chapter meeting afterward the topic for discussion was the schedule of minimum charges. As President Delano said, the subject is one that probably aroused the pyramid designers and undoubtedly will perplex the architects of the year 2030, so why not us? An evening of debate resulted in an apparent agreement that a schedule of charges is a useful document in the early conferences between architect and client, and that it should state not only what the client should pay but also what he might reasonably expect in the way of professional services. The details of the latter statement were left to a committee who will attempt to say a great deal in a very few words.

Monday, January 13.—House-heating by electricity seems to be looming up over the horizon. Chester I. Hall, electrical engineer, pictured some new possibilities before the American Institute of Electrical Engineers in Philadelphia tonight. Our light and power generating equipment has necessarily been developed for peak-load service, leaving a considerable part of the twenty-four hours when it is practically idle. Hall's suggestion is the transfer of heat units to water in these off hours, the water being confined in an insulated house-tank of sufficient capacity to supply the radiator system. Automatic-control switches would permit the water to be heated only when the lighting service

was not appreciably taxed. It is to be expected, of course, that vastly improved insulation methods will soon be practised in residential work, so that the number of B. t. u. required will progressively decrease, whether generated by electricity or by any of the other accepted methods.

Tuesday, January 14.—Harry Leslie Walker joined Mark Barr, Magonigle, and me at luncheon to ask a question: In a problem of design, such as the elevation of a Gothic tower, do the best designers depend upon some rule or set of rules governing the fenestration, the setbacks, etc., or do they work toward a satisfactory result by the old process of trial-and-error? Magonigle's answer seemed rather pat: If you'll agree that the Doric columns of the Parthenon represent one of man's highest achievements in design, consider how these came about. Not as the result of a formula, not as the result of one particular designer's inspiration, but as the climax of a long series of efforts—Pæstum, Syracuse, Corinth, Agrigentum, Assos, Segesta, Olympia. That being an accepted fact, is the Doric column of the Parthenon an appropriate form for use to-day as a supporting shaft? No. That particular form was as nearly right for its place and time and people as we can conceive, but it is just as surely not the right form for some other place, some other time, some other people. The Greeks themselves tell us that, for even in the Parthenon an end column is not the same as an intermediate one; its diameter is different, its vertical axis is inclined, its distance from its neighbor is not the same.

Wednesday, January 15.—To-day is ARCHITECTURE's thirtieth birthday—the anniversary of the appearance of Volume I, Number I. Founded and conducted by the late A. Holland Forbes, the publication was acquired by Charles Scribner's Sons and first brought out under their imprint with the issue for August, 1917.

Spent the night in the fine old Dutch homestead of stone and clapboards, over in northern New Jersey, that Rutherford Boyd remodelled and restored for his own use some years ago. Boyd's work in pattern design, using the equiangular spiral, has reached an amazing total of achievement, an examination of which held us far into the night. In the next issue we shall have the privilege of showing some of these patterns. Science has had a finger in most human activities during the last decade or so; Boyd reasons that there is nothing to prevent its having a finger in art as well. Perhaps art may be all the better for it.

Thursday, January 16.—Miss Theresa Helburn, executive director of the Theatre Guild, and Kenneth Magowan, dramatic critic, producer, and author of

"Continental Stage Craft," told us tonight what is happening to the theatre. Architects who crave to design theatres need not give up hope; they will have more jobs in the future rather than less, but the jobs will be smaller. The legitimate theatre of commerce is at the turn of the road. The movies and the talkies have driven it to a last stand in a few large cities. The "road" is no more. And yet the love of mankind for the drama is far too deeply seated to be dried up. All over the land there are little theatres springing up, amateur groups, organizations in educational institutions. Soon there will scarcely be a high school in the United States without its stage and its dramatic organization. No, the theatre is not dead, it is rising phoenix-like from the ashes of commercial effort, to be nurtured for its own sake rather than merely for its profits.

Miss Helburn sees the abandonment by the legitimate stage of the lower intellectual levels of entertainment. Already the comic opera is being crowded off by the motion-picture substitute. Quantity production must inevitably displace piece work, but there will always remain the higher levels of stagecraft, the productions appealing to the few rather than to the many, to which quantity production is automatically barred. In order to appeal to the multitude a product must be a least-common-denominator-of-art sort of thing. To please the many it must carefully avoid displeasing every possible group—racial, religious, ethical, geographical, educational. To be a nation-wide commercial success, a motion-picture's producers must subject it to a censorship far more drastic than any legislative body would offer. Therefore, above the plane of the motion-picture there will remain higher levels of intellectual appreciation upon which the spoken drama should find an uninterrupted growth and development.

Saturday, January 18.—Thomas Adams, director of the Regional Plan of New York, makes clear the fact that those responsible for the Plan are by no means opposed in principle to high buildings, though these appear listed as one of several causes of congestion. The board never has imagined that any yardstick method of limiting the skyward development of a city would prove a remedy. "The major problem in city building is to secure ample space about buildings for purposes of health, safety, convenience, and business efficiency." In Manhattan the main trouble is not that some buildings are too high but rather that too much of a block is covered by building. The emphasis should be placed on the necessity of getting a proper balance between building bulks and the spaces about them. "It seems better to have high towers and more three- and four-story buildings than a uniform mass of ten-story buildings."



ARCHITECTURE'S PORTFOLIO OF ENTRANCES TO BUSINESS BUILDINGS



(A future Portfolio will show Entrances to Bank Buildings)

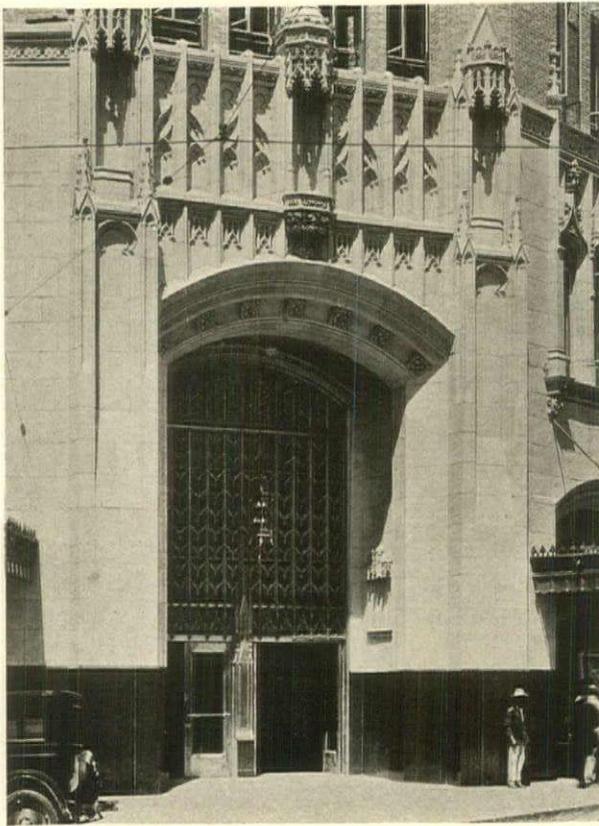
❖ ❖ ❖ *Subjects of Previous Portfolios* ❖ ❖ ❖

DORMER WINDOWS—	Nov., 1926	GARDEN GATES—	June, 1928
SHUTTERS AND BLINDS—	Dec., 1926	STAIR ENDS—	July, 1928
PANELLING OF THE ENGLISH TYPES—	Jan., 1927	BALCONIES—	Aug., 1928
STAIRWAY DETAILS (GEORGIAN, EARLY AMERICAN, ETC.)—	Feb., 1927	GARDEN WALLS—	Sept., 1928
STONE MASONRY TEXTURES—	Mar., 1927	ARCADES—	Oct., 1928
ENGLISH CHIMNEYS—	Apr., 1927	DECORATIVE PLASTER CEILINGS—	Nov., 1928
FANLIGHTS AND OTHER OVERDOOR TREATMENTS—	May, 1927	CORNICES AND ENTABLATURES OF WOOD—	Dec., 1928
TEXTURES OF BRICKWORK—	June, 1927	DOORWAY LIGHTING—	Jan., 1929
IRON RAILINGS—	July, 1927	FIREPLACES OF ENGLISH TYPES—	Feb., 1929
DOOR HARDWARE—	Aug., 1927	GATE-POST TOPS—	Mar., 1929
PALLADIAN MOTIVES—	Sept., 1927	GARDEN STEPS—	Apr., 1929
GABLE ENDS—	Oct., 1927	RAIN LEADER HEADS—	May, 1929
COLONIAL TOP-RAILINGS OF WOOD—	Nov., 1927	GARDEN POOLS—	June, 1929
CIRCULAR AND OVAL WINDOWS (CLASSIC AND RENAISSANCE)—	Dec., 1927	QUOINS—	July, 1929
BUILT-IN BOOKCASES—	Jan., 1928	INTERIOR PAVING—	Aug., 1929
CHIMNEY TOPS—	Feb., 1928	BELT COURSES—	Sept., 1929
DOOR HOODS—	Mar., 1928	KEYSTONES—	Oct., 1929
BAY WINDOWS—	Apr., 1928	AIDS TO FENESTRATION—	Nov., 1929
CUPOLAS—	May, 1928	BALUSTRADES—	Dec., 1929
		SPANDRELS—	Jan., 1930
		CHANCEL FURNITURE—	Feb., 1930

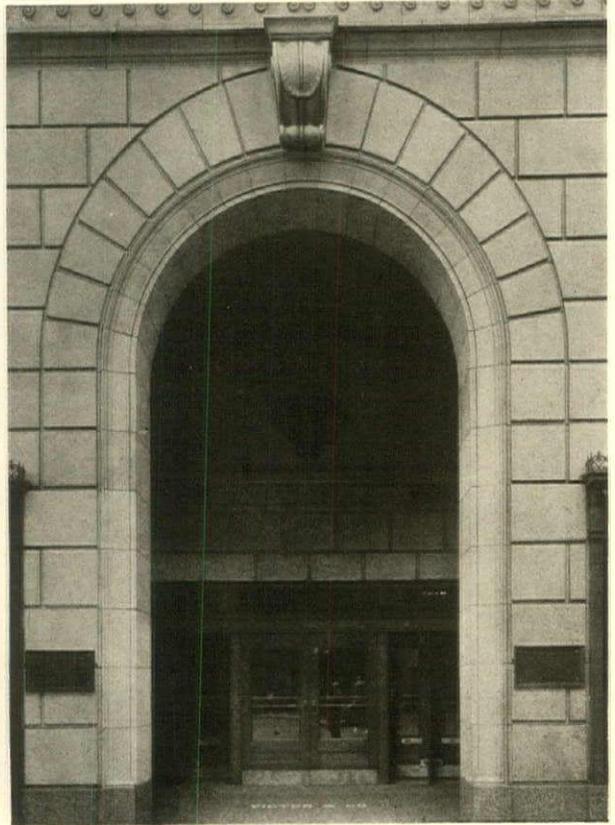
SUBJECTS IN PREPARATION FOR FUTURE ISSUES

Bank Check Desks	Corbels	Flèches	Patios
Bank Screens	Domes	Garden Shelters	Second-story Porches
Banking-room Furniture	Driveways, Entrance	Gothic Doorways	Stucco Textures
Brick, Moulded	Elevator Doors	Gothic Niches	Treillage
China Cupboards	Entrance Porches	Hanging Signs	Urns
Circular Gothic Windows	Fences	Organ Cases	Verandahs
Clock Towers	Finials	Outside Stairways	Weather vanes
Concealed Radiators	Fireplaces, Spanish	Over-mantel Treatments	Window Grilles

Photographs showing interesting examples under any of these headings will be welcomed by the Editor



ATLEE B. AND ROBERT M. AYRES



HUDSON & HUDSON

GOODWILLIE & BESSELL

WALTER B. CHAMBERS





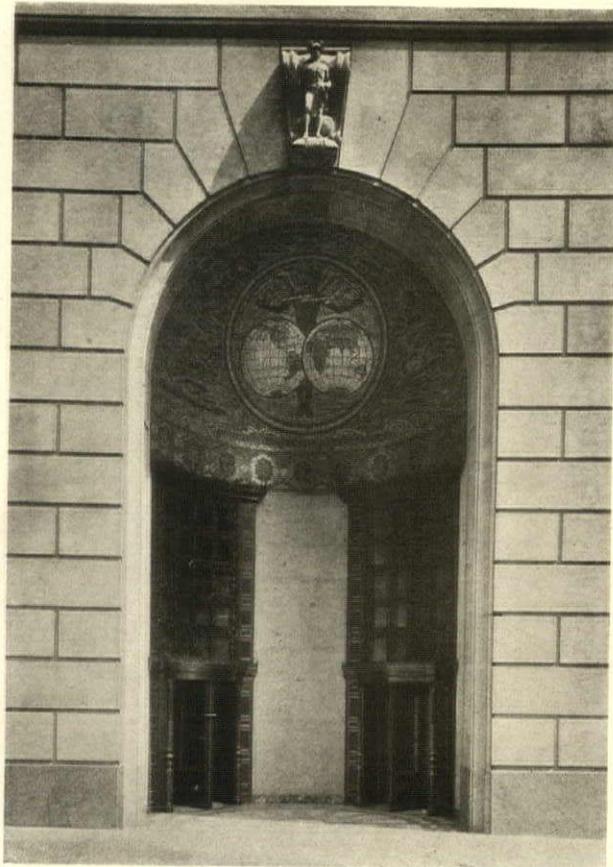
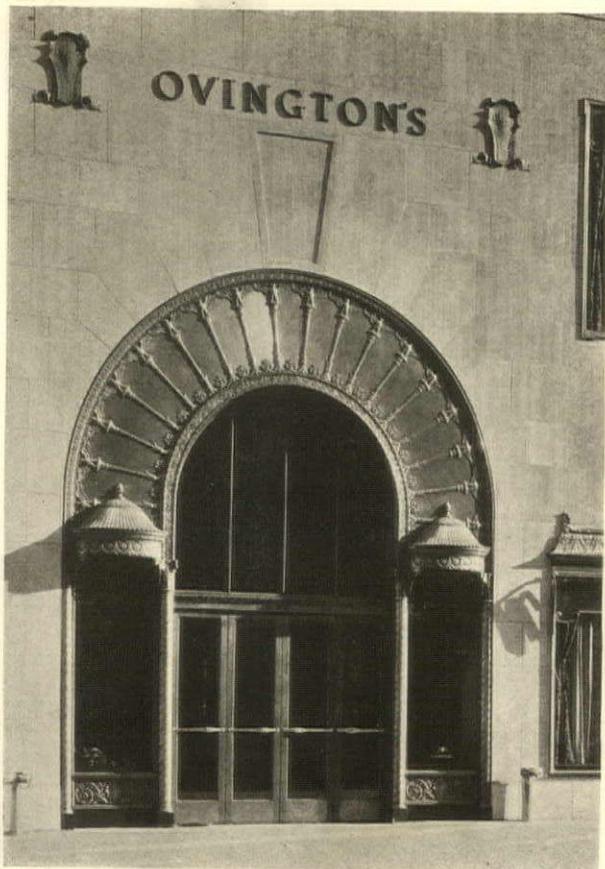
ALBERT KAHN



MORGAN, WALLS & CLEMENTS

FRANK H. HUTTON

BUCHMAN & KAHN





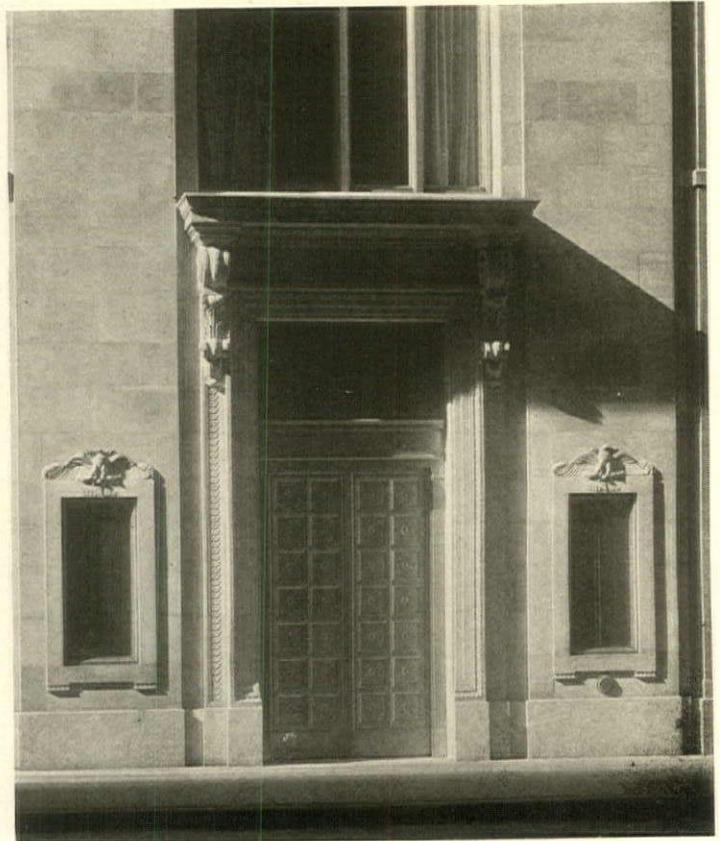
A. H. ALBERTSON
JOS. W. WILSON, PAUL RICHARDSON, ASSOC.



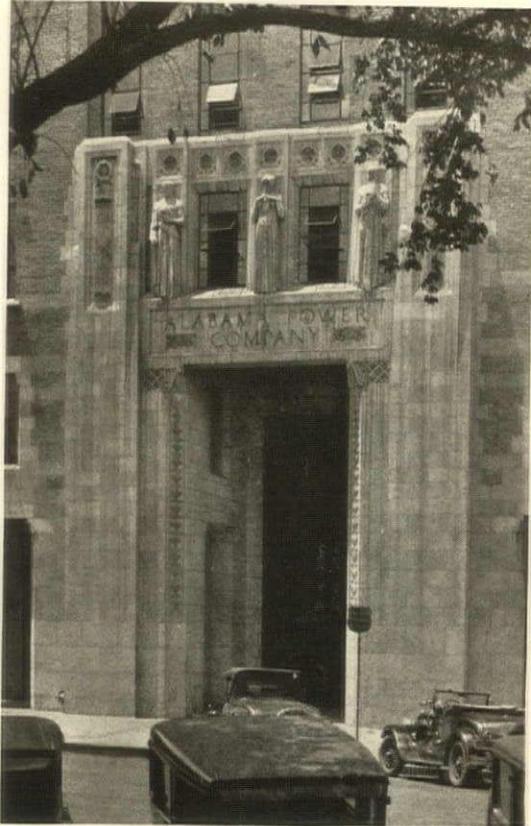
JOHN AND DONALD B. PARKINSON



CASS GILBERT



JOSEPH H. FREEDLANDER



WARREN, KNIGHT & DAVIS

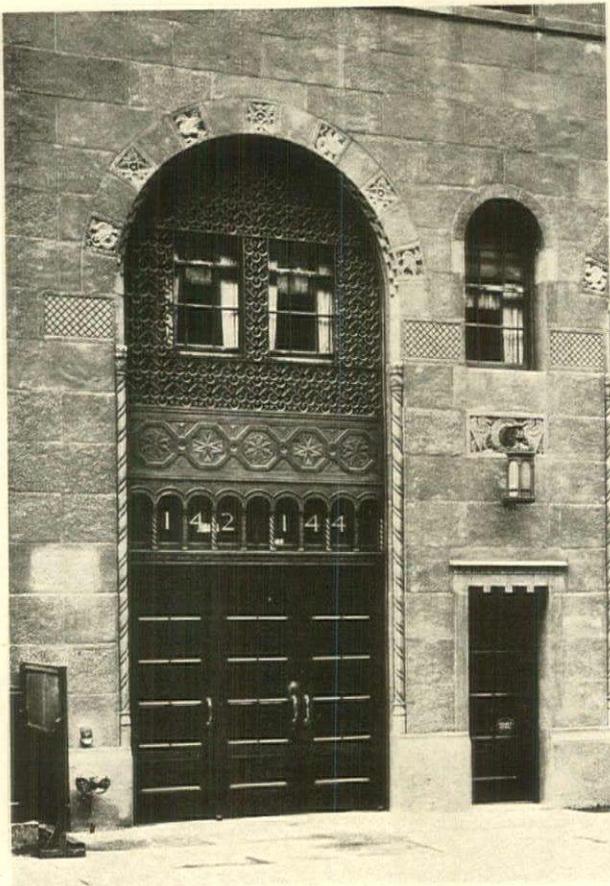


SLOAN & ROBERTSON

BUCHMAN & KAHN

CASS GILBERT





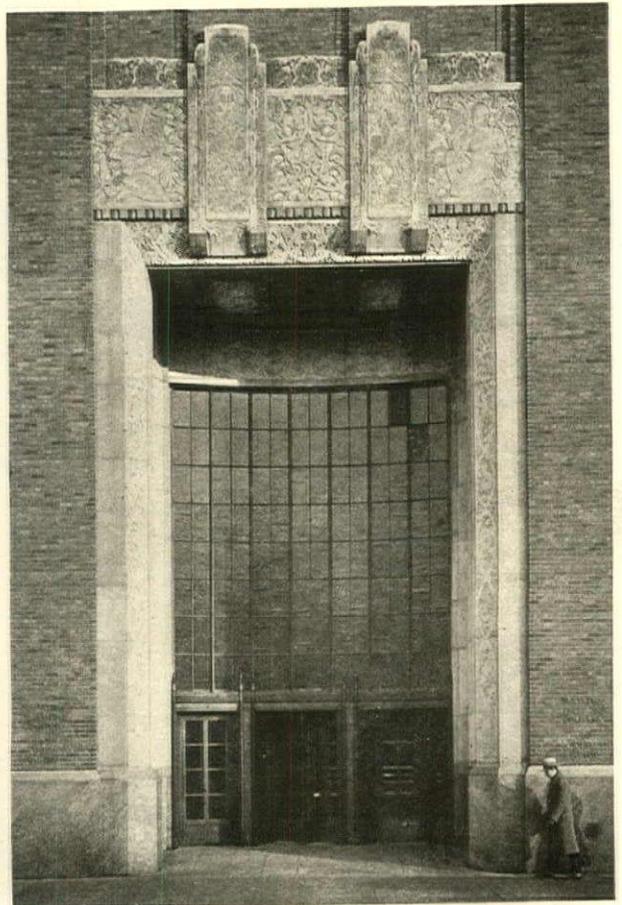
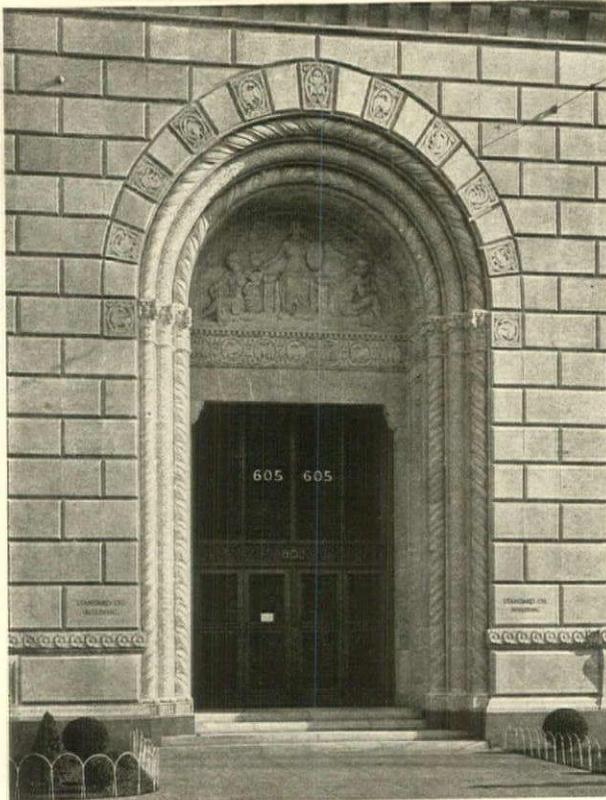
ANDREW J. THOMAS



VOORHEES, GMELIN & WALKER

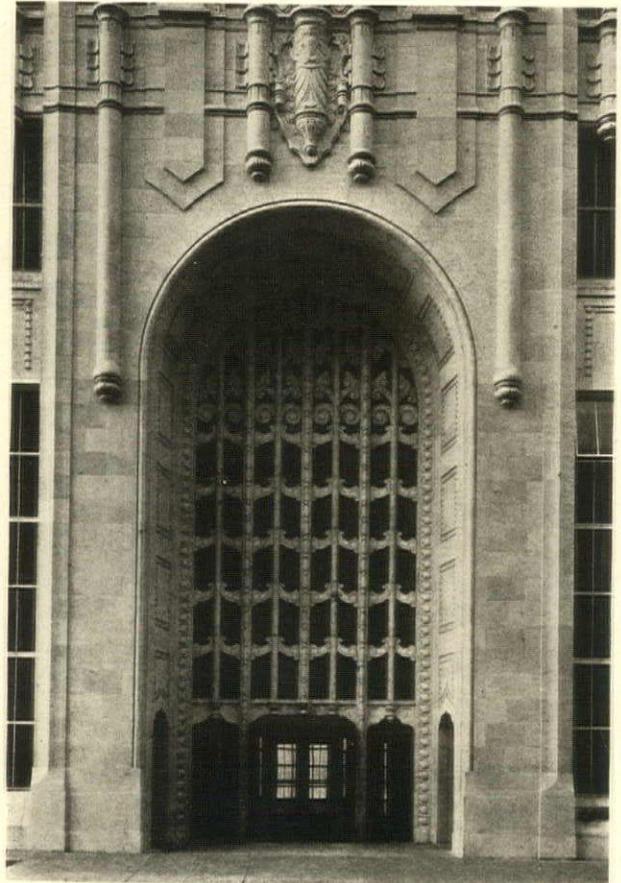
VOORHEES, GMELIN & WALKER

CURLETT & BEELMAN



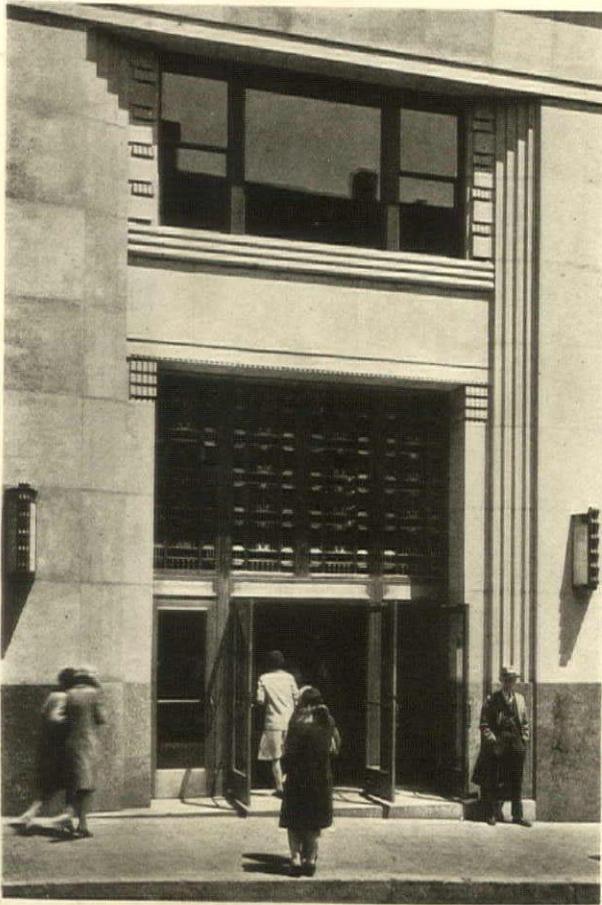


VOORHEES, GMELIN & WALKER



MILLER & PFLUEGER

BUCHMAN & KAHN

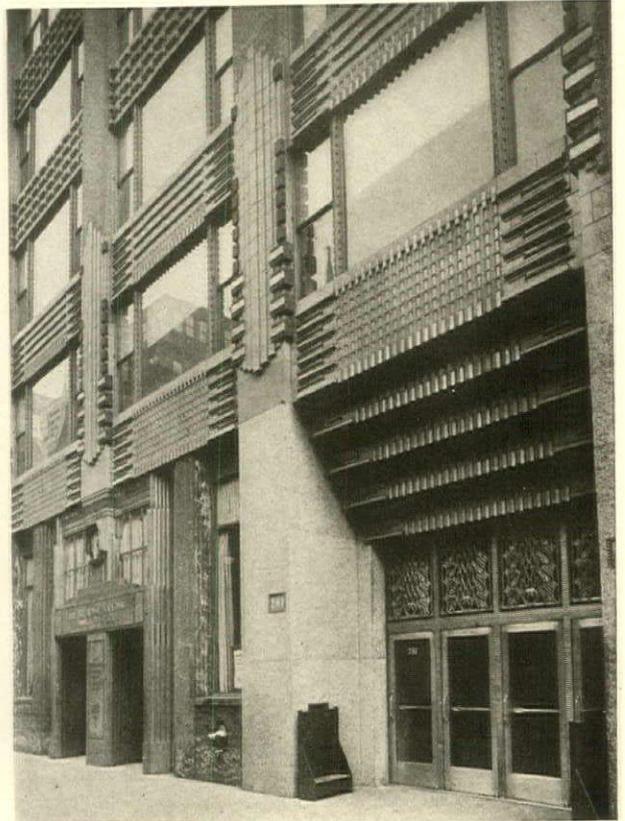


CASS GILBERT





YORK & SAWYER

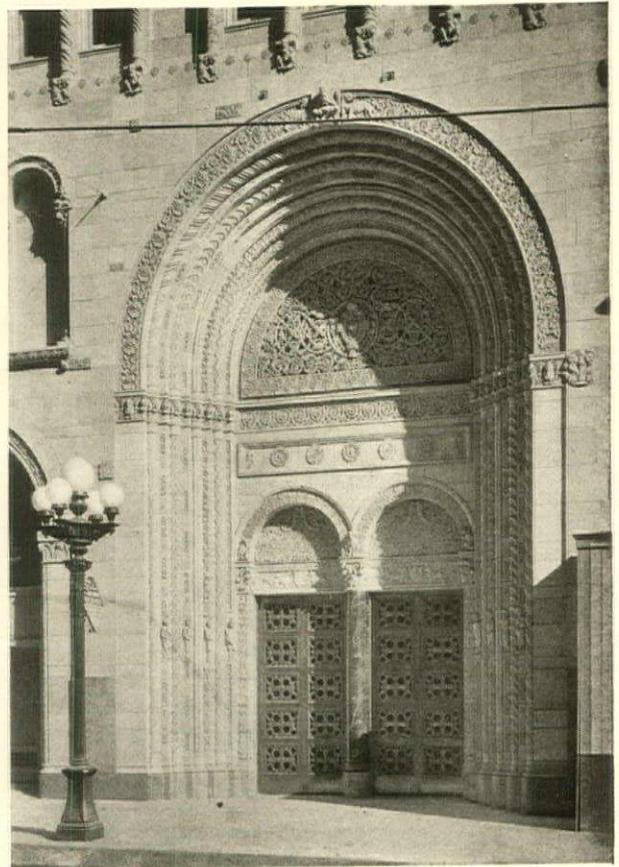


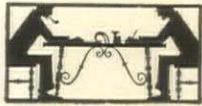
BUCHMAN & KAHN

ANDREW J. THOMAS



WALKER & EISEN





CONTACTS

DEVOTED TO A BETTER UNDERSTANDING OF THE BUSINESS SIDE
OF ARCHITECTURE AND ITS RELATION TO THE INDUSTRIES



Standard Specifications for Concrete

By Robert Seth Lindstrom

THE writer, having spent several years actively engaged in the Portland cement industry, thereby coming into close contact with architects, engineers, contractors, building material manufacturers and dealers, has found that there are many different interpretations of the exact meaning of the wording in architects' and engineers' specifications. There are, as a result of this, great variations in estimates and costs from contractors to architects and owners, also variations in prices by building material manufacturers and building material dealers.

There are probably no two architects or engineers who write their specifications alike for the same kinds of building materials. In many instances, architects specify trade names of materials made by manufacturers who have gone out of business.

For example, take the various materials that are mentioned in Portland cement concrete specifications: Portland cement, sand, and coarse aggregates, such as gravel, crushed stone or trap rock. All of these require more specific and detailed information regarding fineness, grading from fine to coarse, etc., and quality of each material.

First, let us consider Portland cement. The writer has found as many as a dozen brands of Portland cement specified, among them being "Chicago A.A.," which brand has not been on the market for a number of years. In addition to specifying brand and name of manufacturer of the Portland cement, several pages of technical specification are written, giving methods of manufacture, which is a waste of time and money on the part of the architect in these times of standardization in building materials.

All Portland cement manufacturers aim to meet the Standard Specifications for Portland cement as promulgated by the American Society for Testing Materials, also the United States Government Standard Specifications for Portland cement.

Consequently, if the architects or engineers will simply specify the item of Portland cement as follows, they will obtain a standard Portland cement. The proposals from the contractor and material dealer in the locality of the contemplated building will be based on

the costs of the manufacture, coupled with the cost of transporting the cement from the manufacturers and their representative dealers to the particular locality or the site of the job.

SPECIFICATION FOR PORTLAND CEMENT

"Portland cement shall be that manufactured and sold in accordance with the Standard Specifications for Portland cement of the American Society for Testing Materials."

The manufacturer, or brand name of Portland cement to be used shall be agreed upon when awarding the contract.

The next item for concrete specifications is the sand. Most architects specify sand as "clean, sharp torpedo sand, free from loam and impurities."

The word "torpedo" happens to pertain to some of the sand obtained in the Chicago market, but has nothing to do with the proper grading of the sand. Therefore, in writing a concrete specification, the grading of the sand from fine to coarse is more important for a sand specification than the word "torpedo," or any other name pertaining to the quality of the ingredients contained in the sand.

It so happens that the so-called torpedo sand obtained in the Chicago market has a uniformity of grading that meets with Fuller's formula for ideal sands, except that after being washed no percentage of fine sand passes a one-hundred-mesh sieve.

Some architects and engineers specify that a certain percentage of fine sand shall pass a one-hundred-mesh sieve. Therefore, it becomes necessary to manufacture a sand having the proper grading and fineness which shall also pass a certain percentage through a one-hundred-mesh sieve.

Some producers in the Chicago district are now engaged in arranging and setting up their machinery preparatory to producing a sand of standard specification similar to a standard Portland cement specification, so that in specifying sand or fine aggregate, the architect or engineer will be able to specify and obtain a standard manufactured sand, meeting with their specifications for Portland cement concrete.

For the present, the following speci-

fications will serve as a standard specification for sand:

SPECIFICATION FOR SAND OR FINE AGGREGATE

Sand shall be washed, clean, sharp sand, free from all impurities and silt, graded in fineness by percentage in weight passing through standard sieves with square openings as follows:

4	mesh to the inch	passing	100	per cent
8	"	"	75	"
14	"	"	50	"
28	"	"	25	"
48	"	"	15	"
100	"	"	5	"

The third item is coarse aggregate, and whether it be of gravel, crushed stone, or trap rock, like the sand or fine aggregate it should also meet with a standard specification of grading. The following specifications are recommended:

SPECIFICATIONS FOR COARSE AGGREGATE

Coarse Aggregate.—Each grain shall be clean, hard, durable, and free from alkali, organic or other deleterious matter, and also free from dust, and graded or ranging in size from one inch down to one-sixteenth, according to percentage by weight passing through standard sieves with square openings as follows:

1	inch	mesh	passing	100	per cent
1/2	"	"	75	"	"
3/4	"	"	10	"	"
1/8	"	"	5	"	"
1/16	"	"	0	"	"

QUANTITY OF EACH MATERIAL

The amount or quantity of each material required: aggregate, together with a quantity of water, and mixing time, will depend upon the tensile and compressive strength required in the finished product.

The above recommended standard of specifications and standard practice is based on results obtained by actual tests of materials in the laboratory as well as in the field.

Uniformity and standard specifications for concrete materials will simplify supervision and testing methods of these materials, at the same time saving money for the owner, architect, contractors, manufacturers, and dealers.

New Trends in Small House Design

By James S. Taylor

Division of Building and Housing, Bureau of Standards, Department of Commerce

I CANNOT hope to pose as an expert on detailed matters of style or sales appeal. I cannot tell you how the last \$150 to be spent on a house to sell at \$5,950 might best be divided up among inlaid flooring, a fireplace that has no chimney, tile on the bathroom walls, a colored kitchen sink, an electric button that opens the back cellar door from the kitchen, hand-forged hardware for the front door, and dozens of other items that are used in all sorts of combinations to help create individuality.

The automobile, besides permitting residences to spread out into suburban areas, has affected the size, shape, and features of the lot and of the house. In Washington, for example, the proportion of row houses being put up is much smaller since the war than before. New residential building consists more of apartments and of detached houses.

The front porch, a more or less distinctive American institution, is rapidly going out of style, and the rear of the house is coming more and more into its own. Alleys are becoming passé, although many of them have already been laid out in unbuilt territory and some cities still cling to them tenaciously.

The built-in garage has worked its way down from the more expensive houses into the medium-priced field.

A sun parlor at the rear has become fairly common, and the rear living-room is no longer a curiosity.

In row houses the built-in basement garage seems to be a prerequisite in Philadelphia and San Francisco, but it was found in less than half the houses visited in Washington and Baltimore. Local customs or practices governing block and lot sizes, carried over from before the days of the automobile, seem to account for the difference.

Modern labor-saving devices and housekeeping accessories have come to be demanded in most new houses, and absorb a considerable part of the cost of the house. This has created a pressure to cut down on the cubical contents, and has meant somewhat smaller room sizes, lower ceiling heights, and greater attention to economical arrangement of space.

Some prophets foretold the passing of the dining-room in the small house, arguing that, being used only two or three times a day, it was the most expensive space in the house. A good breakfast nook, and well-planned arrangements for serving meals at one end of an enlarged living-room, so they said, would suffice, but there is no proof yet that they were right. In our survey we found many small houses where a break-

Mr. Taylor made an address on this subject before the Homebuilders' and Subdividers' Division, National Association of Real Estate Boards some months ago. From this address we have picked out a few of the bare facts only, with apologies to Mr. Taylor for having to omit the context. Members of Mr. Taylor's staff visited some thirty-eight cities in the course of the year, studying small house construction—houses mostly of five or six rooms. These men have obtained records, among other things, on about three hundred details of typical small houses in as many subdivisions.—EDITOR.

fast nook was added, but almost none where the dining-room was omitted.

Kitchens were more nearly alike in size than any other room. Most of them contained about one hundred square feet, with the width about three-quarters of the length.

Living-rooms from 11 to 15 feet wide and 15 to 22 feet long were most frequent.

Dining-rooms tend to be more nearly square, with about half again as large an area as the kitchens.

Bedroom sizes run distinctly larger in two-story than in one-story houses. The owner's bedroom in many two-story houses is over the living-room and of about the same size.

Ceiling heights are usually greater in the south than in the north. In houses above the lowest price range there is an increasing tendency to obtain a higher ceiling in the living-room by keeping the floor one or two steps lower than the remainder of the house. Provision of a fireplace, which is found in a large majority of cases, whether it be wood, gas or electric, shows that the home has not altogether surrendered as a place for social life. The radio is doing its part to keep people at home, and may have some connection with the fairly frequent provision of sun parlors and sun porches, which can be used as a second down-stairs living-room, or as a porch, according to the weather.

In new subdivisions gas and electricity are both common, but where there is only one it is more apt to be electricity. Most recently it is used for heating by means of large hot-water storage tanks which consume current, provided at special rates, during the hours after midnight when other power requirements are at a minimum. All this involves more expensive wiring, and additional electric outlets, and leaves less of the owner's dollar for the structure of the house itself. Gas is very general for cooking and for heating hot water, is

used for space heaters, and is being developed as a fuel for furnaces, and for refrigeration.

The bathroom is one of the most conspicuous features of many new small houses. Of the houses covered in our survey, three-fourths had tile floors in the bathroom; and about one-half, tile wainscoting.

Use of more expensive fuels in house heating creates a greater incentive to use adequate weather-stripping and heat insulation.

Types of floor covering have been in evolution ever since the passing of the old-fashioned carpet. Hardwood floors down-stairs and a good grade of matched flooring up-stairs are usual, with linoleum common in the kitchen.

One of the most important and recent trends to have a marked effect is the increasing vogue for color.

Lumber is still the basic material for dwelling construction since it is prevalently used for interior framework, floors, stairways, and exterior and interior trim, even in houses whose walls are built of other materials.

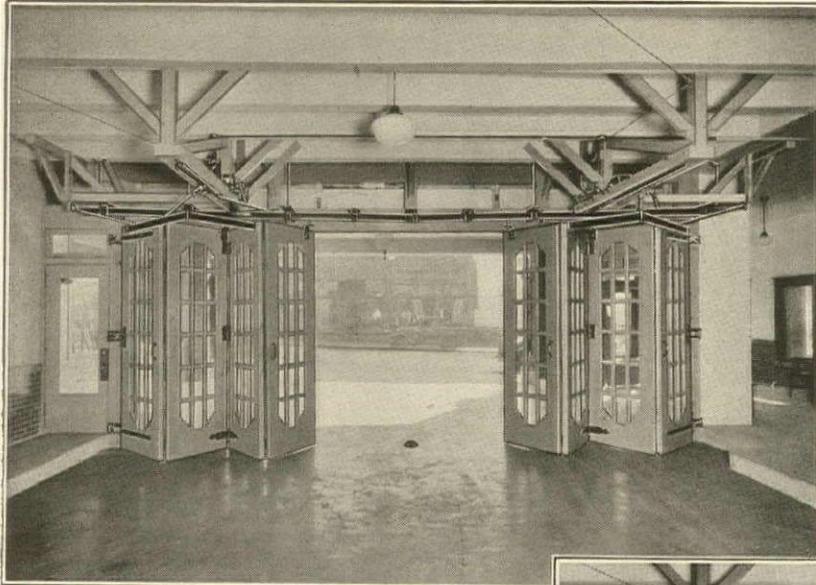
Intense competition is evident in roofing, and in partition work, among composition boards, plaster boards, etc.

The lowest-priced houses now being built in quantity in the larger cities today are of five and six rooms, with one-story construction apparently predominating for the five-room, and two-story for the six-room size. The six-room, two-story house is favored more in Eastern cities, whereas in cities of the middle and far West, the five-room bungalow is in the lead in the lowest-priced group. In the latter cities, however, the two-story house usually has six rooms. The popularity of bungalows in the lowest priced class of detached dwellings seems to continue in spite of the arguments of those who maintain that a family gets more for its money in a two-story house than in a single-story dwelling.

Many local codes prevent use of economical types of brick walls. The plumbing codes more often than not prevent using three-inch plumbing soil pipe, which is fully as sanitary as the four-inch.

American domestic architecture is on the mend. The more expensive houses are usually designed by architects. More operative builders appreciate the importance of good architectural service, and employ architects on their staff or as consultants. The Architects' Small House Service Bureau has done a great deal to set higher standards in the small-house field.

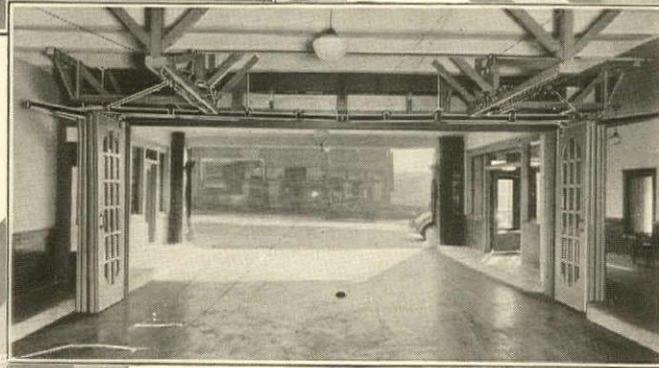
These 8 doors open and close with clockwork precision



Capitol Garage, Kansas City's largest, NEVER keeps a patron waiting. Only R-W equipment assures such service.



"Quality leaves its imprint"



Slidetite
with
AUT-O-DOR
Electric Operators

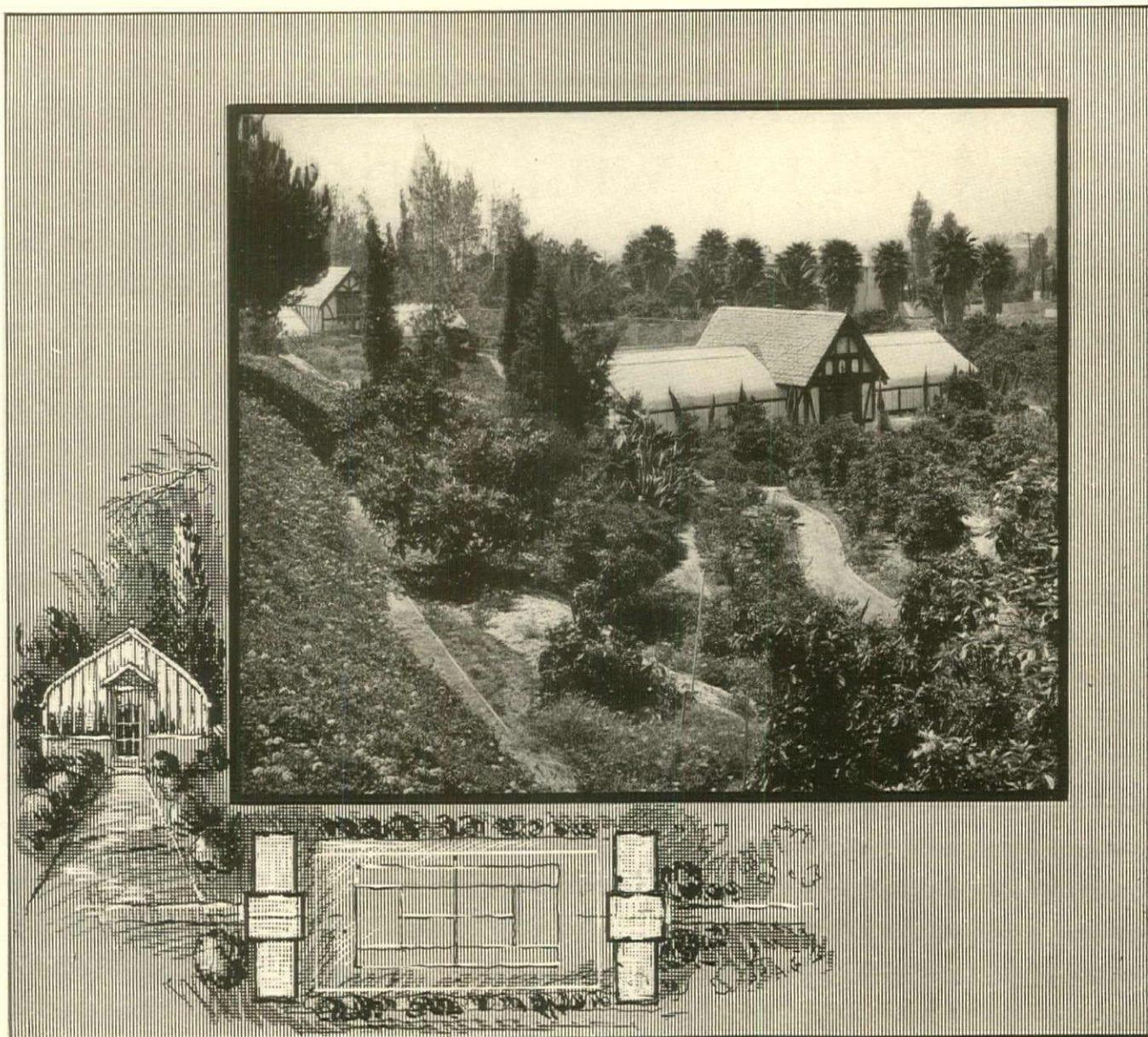
This entire installation—doors, hardware and power—is R-W equipment. The four entrance doors or the four exit doors operate independently—or all eight doors may be opened and shut simultaneously—from any part of the garage or office, by simply pulling a cord or pushing a button, several of which are conveniently located.

Smooth, quiet, certain, trouble-free operation is assured by many *exclusive* engineering features which belong to the R-W Aut-O-Dor Electric Door Operator, R-W Slidetite hardware and R-W laminated panel doors.

The low first cost and low final cost of a complete R-W installation will be a revelation to you. Write for Catalog.

Richards-Wilcox Mfg. Co.
A Hanger for any Door that Slides.

New York AURORA, ILLINOIS, U.S.A. Chicago
Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Des Moines
Minneapolis Kansas City Atlanta Los Angeles San Francisco Omaha Seattle Detroit
Montreal • RICHARDS-WILCOX CANADIAN CO., LTD., LONDON, ONT. • Winnipeg



Two groups of greenhouses flanking the ends of a tennis court enclosure on the Marion Davies Estate at Beverly Hills, California. W. E. Flannery, *Architect*.

Interesting Linking of Tennis Court and Greenhouses

FIRST the group of two wing houses and service building was bought by mail. Close on its heels came a duplicate order. Each of the four modified curved eave greenhouses is our standard 18 by 33 feet. An interesting example, wouldn't you say, of how standard greenhouse units can be effectively linked with your specially designed service building?

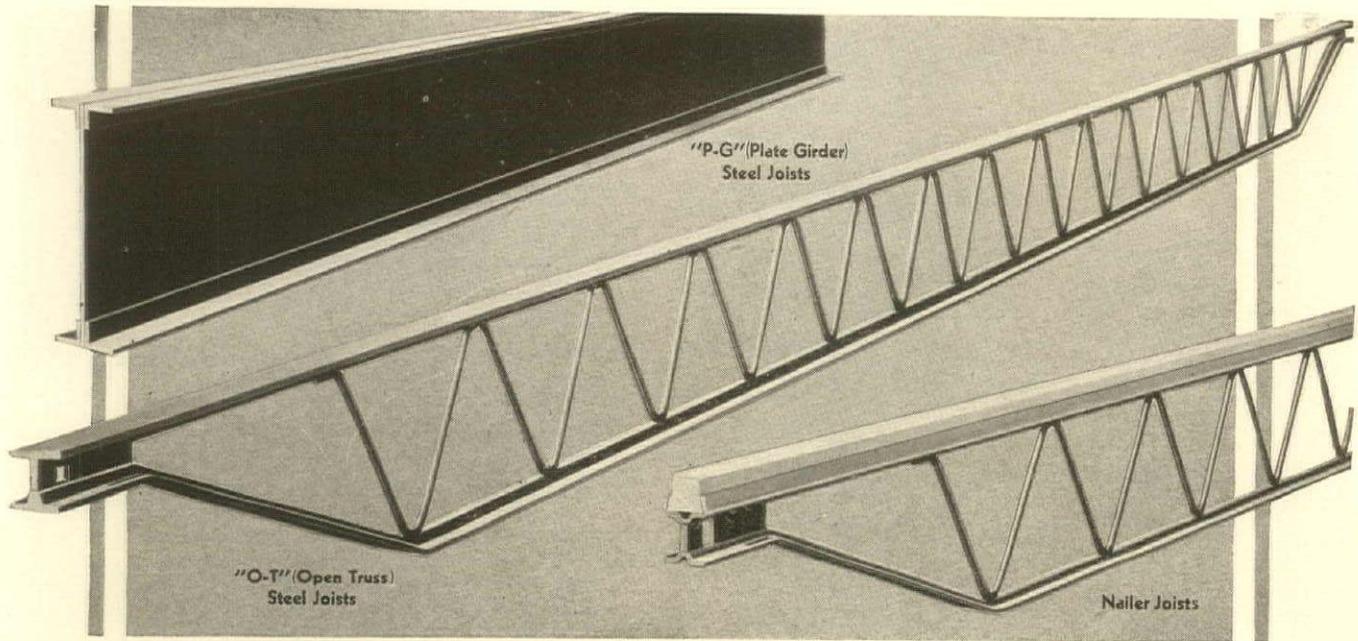
The fact that the entire transaction for these houses was done by mail and wire, evidences to you, our abilities and facilities to do things. And do them promptly.

Lord & Burnham Co.

IRVINGTON, N. Y.

New York	Detroit
Philadelphia	St. Louis
Chicago	Greensboro, N. C.
Boston	Buffalo
Albany, N. Y.	Montreal
Cleveland	St. Catharines
Denver	Toronto

FOR FOUR GENERATIONS BUILDERS OF GREENHOUSES



STEEL JOISTS

Types for Every Condition

Truscon Steel Joists are built to architectural standards in accordance with the specifications of the Steel Joist Institute. They insure quality in permanent floor construction, speed in erection, and economy in cost. Truscon Steel Joists are furnished in three types to meet efficiently every building condition.

"O-T" [Open Truss] Joists allow conduits to pass in any direction through floor.

"P-G" [Plate Girder] Joists represent maximum economy in the use of steel.

Nailer Joists have wood strip to which board floor is nailed.

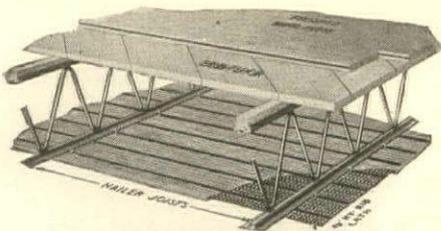
Full information and suggestions on application of joists to any building will be sent on request. Write for new catalog on "O-T" [Open-Truss] Steel Joists, containing latest revisions and new bridging methods.

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO

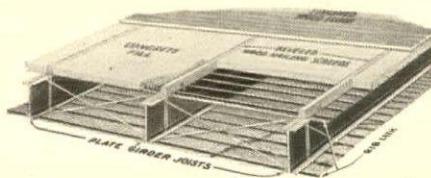
STEEL JOIST DIVISION

Truscon Steel Company of Canada, Limited, Walkerville, Ontario

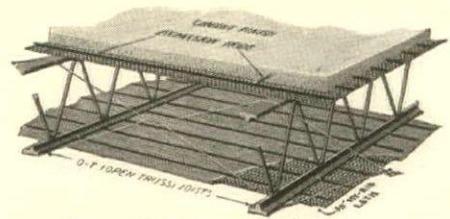
Warehouses and Offices in Principal Cities



Section through floor construction showing wood floor nailed directly to Truscon Nailer Joists and with metal lath and plaster ceiling.



Truscon "P-G" (Plate Girder) Steel Joist construction with wood floor finish. $\frac{3}{8}$ " Diamond Rib Lath for floor and ceiling.



Truscon "O-T" (Open Truss) Steel Joist construction with cement floor finish. $\frac{3}{8}$ " Hy-Rib Lath for floor and ceiling.



The Buildings shown above are:

Palmolive Building, Chicago
 Board of Trade Building, Chicago
 Chicago Daily News Building
 (Exterior and Studios)
 Rand Tower, Minneapolis
 Baskin Stores, Chicago
 Chicago Motor Club
 "333" North Michigan Blvd., Chicago
 (Rena Hartman Shop)
 Michigan Square Building

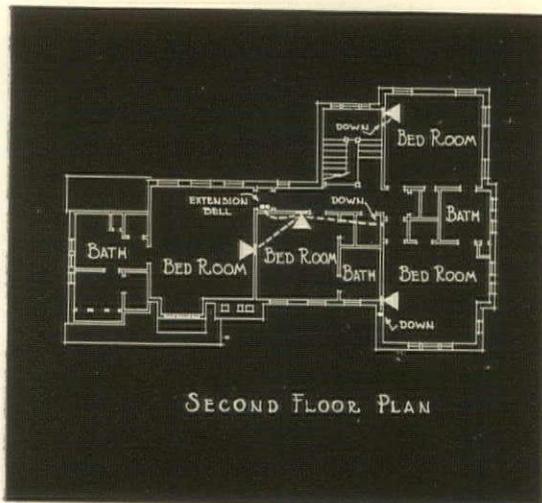
In addition to those shown we have made
 Lighting Fixtures for Holabird & Root
 for the following: Judah Bldg., Michigan
 & Chestnut Bldg., Bal Tabarin of Hotel
 Sherman, Saks Fifth Avenue Store,
 Chicago, and many others.

**The Lighting Fixtures of these prominent
 structures were built by Pearlman from
 designs offered by Holabird & Root** ~

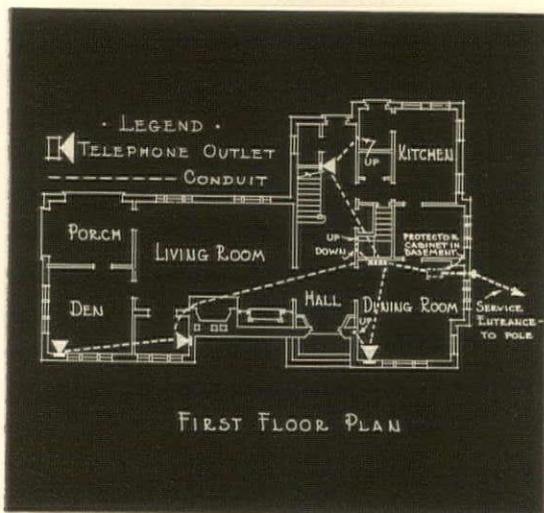
The same service, experience, and ability which have
 made it possible for us to execute these contracts
 satisfactorily are available to the architectural pro-
 fession. We will be pleased to send you the first of a
 series of distinctive interior lighting studies by Pearl-
 man, if you so desire, and to continue to send them
 as they are issued.

VICTOR S. PEARLMAN & COMPANY
 DESIGNERS & MAKERS OF
 DISTINCTIVE LIGHTING FIXTURES
 533-535 SOUTH WABASH AVENUE CHICAGO

Throughout the Country Architects are including Telephone Convenience in their Plans for new Houses



In the home of Mr. Joseph H. Skaggs of Atlanta, Georgia, provision for complete telephone convenience is made by nine telephone outlets, including one in the servants' quarters over the garage. FRAZIER & BODIN, Architects, Atlanta, Georgia.



THE APPEAL of *telephone convenience* is country-wide. In the South . . . as in the Middle West, the Pacific Coast, or along the Atlantic Seaboard . . . architects are planning for it by providing sufficient outlets and conduit for telephone service in the design of new and remodeled residences. Their clients may then have the added ease and comfort that enough telephones give, plus the improved appearance of having the telephone wiring concealed within the walls of the house.

Locations for the telephone outlets are usually determined in conferences between the architect, the client and a representative of the local Bell Company. The home owner can use just those telephone outlets which he needs, and can expand or rearrange the service in the future as he desires.

Architects may consult freely with the telephone company in planning for telephone arrangements. No charge is made for this service. Just call the Business Office.





ARCHITECTURE'S SERVICE BUREAU FOR ARCHITECTS



ARCHITECTS AND EVERY ONE INTERESTED WILL FIND HERE THE LATEST AND MOST UP-TO-DATE INFORMATION ON BUILDING EQUIPMENT AND ACTIVITIES IN THE INDUSTRY. THESE PUBLICATIONS MAY BE HAD BY ADDRESSING ARCHITECTURE'S SERVICE BUREAU FOR ARCHITECTS, 507 FIFTH AVENUE, NEW YORK. OUR SERVICE BUREAU WILL OBTAIN ANY OTHER CATALOGUES OR DATA YOU REQUIRE.

START BUILDING

A good example is established by Creo-Dipt Co., Inc., in pushing forward the nation's programme of construction. They have sent out a group of advance proofs of a vigorous publicity campaign for 1930 setting forth most convincingly the sound reasons why we should "Build and Remodel Now." The advertising of Creo-Dipt shingles plays a secondary part, the main theme being the substantial response to President Hoover's call to leaders of industry.

ESTATE TYPE

The Kerner Incinerator Co. has designed a new model of Kernerator to serve the country estate, as well as large private and public schools, cemeteries, etc. This type was withheld from general sale until it had proven its worth in actual operation over a period of years. A booklet fully describes the Estate Type.

MANUAL ON PINE

A manual of architect's specifications for southern pine lumber, covering uses in residence, store, and factory building, and other types of construction, has just been published by the Southern Pine Association. It is being given an initial distribution of more than 9,000 copies among architects throughout the southern pine consuming area.

EXPANSION

A. M. Byers Company announces a reorganization and expansion of sales and distributing facilities throughout the entire country as a further step in the sweeping programme inaugurated some time ago to meet the steadily increasing demand for Byers Wrought Iron Pipe.

IMPROVED CIRCULATION

Hot water heating systems that are afflicted with "draggy circulation" and "spotty" heat, may be corrected by means of a simple appliance called the Thrush Electric Circulator. Combined as a unit with Thrush Hot Water Heating System it gives the user a closed, completely automatic system with forced circulation.

A GROWING INFLUENCE

White metals have an important place in modern architecture, especially in the handling of ornamental details. Nickel-copper alloy, or Monel metal, is silvery white in color and rust-proof. Bank fittings, elevator doors, wrought hardware, lighting fixtures, and kitchen equipment are among its many uses in architectural work.

BAKELITE APPLICATIONS

In mechanical engineering and electrical fields Bakelite material is popularly known and easily recognizable. Quite recently, however, actual building operations are utilizing more and more extensively the accepted values of Bakelite in sanitation, plumbing, and building equipment. As an element of bathroom furniture, the toilet seat of this resinoid molded structure is uniform throughout in color, texture, chemical and physical properties. A little brochure published by the Bakelite Corporation is at hand.

HANDBOOKS

A half-dozen little books will conduct you through all the departments of Weatherwood instruction. Look for the "Weathercock" symbol of insulation efficiency and the label of inspection and approval on every board. The latest feature of this board is a tongue and groove joint for lath work. It gives an almost seamless surface.

1930 STYLE SHOW

The Artistic Lighting Equipment Association held its convention in Washington, D. C., February 10-15. The business sessions were short, allowing plenty of time for the Style Show at the Auditorium. It was an opportunity for the delegates to see, under one roof, and to compare products of the leading manufacturers of lighting equipment.

HOLORIB

The Detroit Steel Products Company of Detroit, Mich., makers of Fenestra Steel Windows, has purchased Holorib Incorporated of Cleveland, Ohio, including all manufacturing rights and patents to its product, the Holorib Insulated Roof Deck. The entire Holorib personnel will continue intact, the operations of the company being considerably extended through the nation-wide Fenestra sales and service organization.

PERFORATED GRILLES

Standard figures of Hendrick Metal Grilles allow combination designs of great variety. A new illustrated catalogue "Grilles" contains dimension tables and the necessary information as to daylight opening and adaptability to numerous purposes. Economy comes from the low cost, commensurate with the quality of the finished product.

VALUABLE BOOKS

"Practical Planning for Club Food Service" is the fourth of a series of five books covering food service problems in various fields. Any architect who keeps the series will have a valuable set. The John Van Range Co. announces that the fifth book, on Hospital Food Service, will be ready in the near future.

A NEW COMPANY

The business of Atlas Portland Cement Co. and Universal Portland Cement Co. is now conducted by Universal Atlas Cement Co. These two companies have grown up with the cement industry over a third of a century, and they have now been brought together for better productive capacity and sales service over the combined territory. The new company assumes all old obligations.

THREADLESS PLUMBING

The Parker Appliance Company has developed Threadless Copper Plumbing to a stage where it now plays an important part in all industrial activity. Parker Tube Couplings establish a new standard of comparison for economy and dependable performance in piping installations for every purpose. The introductory spread sheet will be followed by a complete booklet, upon request.

CERTIFICATE GUARANTEE

The Pennsylvania Slate Institute, as a result of two thousand scientific tests, has set a standard for the slate of the Association based on A. S. T. M. methods of tests. The certificate gives the architect a specification guarantee that insures his client a lifetime roof.

In this country slate roofing is one of the oldest industries. The first American slate-roofed homes were covered with blue-gray slate imported from Wales. Examples of these houses, still protected by the original roofs, are to be seen to-day even as far west as St. Louis.

During recent years the slate industry has made long strides toward a better technic in quarrying and manufacture, and an endeavor to direct the several types of slate to the uses for which they are best adapted.

"ENGINEERING ACHIEVEMENTS"

With a stunning cover. We learn what Westinghouse accomplished in 1929. Electrical engineering has had an important part in the historical celebrations of the past year. The problem of the distribution of power having been solved, the focus of attention now shifts to wider use and better adaptation to the needs of industry, and such are the achievements recounted. It is interesting to have this review of the many things that are being done by electricity that have not been done before.

SERVICE SHEETS

Four new service sheets of specifications and details of design and construction for Gypsteel are being distributed for architects' files by Structural Gypsum Corporation.

PUMP BUYERS

A series of bulletins will be issued by Goulds Pumps, Inc., during the coming year. The first of the series, now being distributed, is entitled "Goulds Centrifugal Pump Selection Charts." It is a helpful piece of printed matter and will assist in placing centrifugal pumps on a commodity basis.

INNOVATION

Electric welding has passed the experimental stage and has arrived in a position of commercial importance. Noiseless construction of large industrial buildings as a practical proposition, for the first time in the history of the American building industry, is seen in the announcement of the Austin Co. making electric welding of structural steel a regular part of its service. Welding or riveting is optional with the client.

WOOSTER SAFE GROOVE TREAD

A safety tread which will provide a durable and efficient surface has been developed by Wooster Products, Inc. The base is of rolled steel or extruded brass, designed with corrugated surface of open U-shaped grooves and dovetailed grooves which are filled with abrasive grits to form the antislip feature. The filler has been hardened by an exact process so that it will not wear any faster than the walls of the grooves.

SCHOOL architects were among the first to recognize window ventilation, and particularly the principle of the AUSTRAL WINDOW, as the most healthful system of ventilation so far devised.

Q Reports from the New York State Ventilating Commission show that in the schools of one average American city, total absences were 47% less in the window-ventilated buildings.

Q The education of young America depends on its good health, to a broader extent this year than ever before, as it is estimated that nearly one-half a billion dollars will be spent for new school construction.

AUSTRAL WINDOW CO.

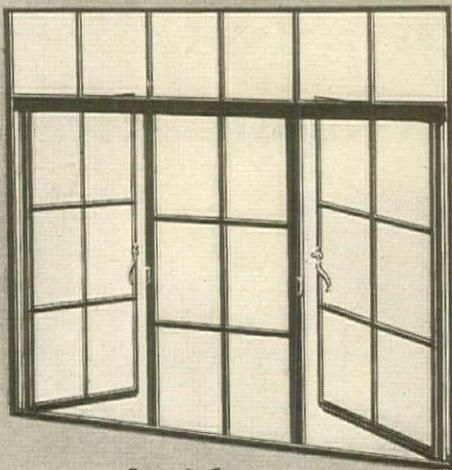
101 PARK AVENUE NEW YORK CITY

SAVE WITH STEEL

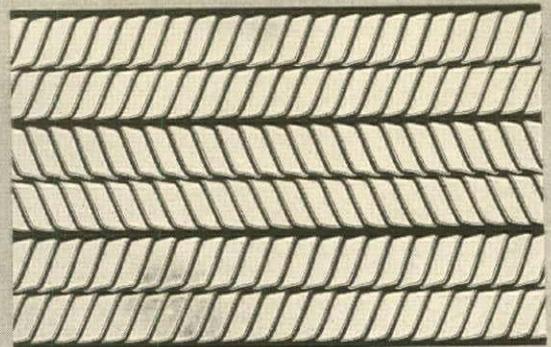
Genfire Steel Building Products effect many important savings. Their standardization simplifies their application to any architectural design. Their arrival on the job ready for installation saves time in erection. Their reduced weight of construction lowers the cost of structural supports and foundations. Their permanence minimizes the expense of maintenance and repairs. Their improved design, high quality and moderate cost effect general economies. Literature on request.

GENFIRE STEEL COMPANY, YOUNGSTOWN, OHIO

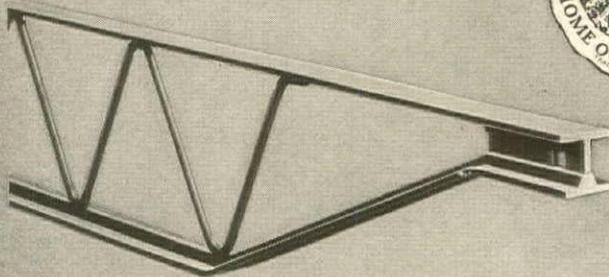
Warehouses and Offices in all Principal Cities



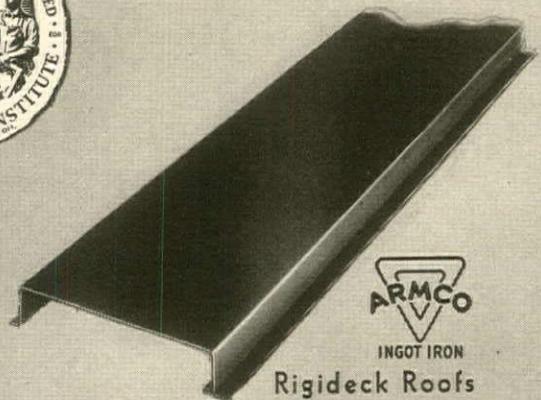
Steel Casements



Herringbone Doublemesh Metal Lath

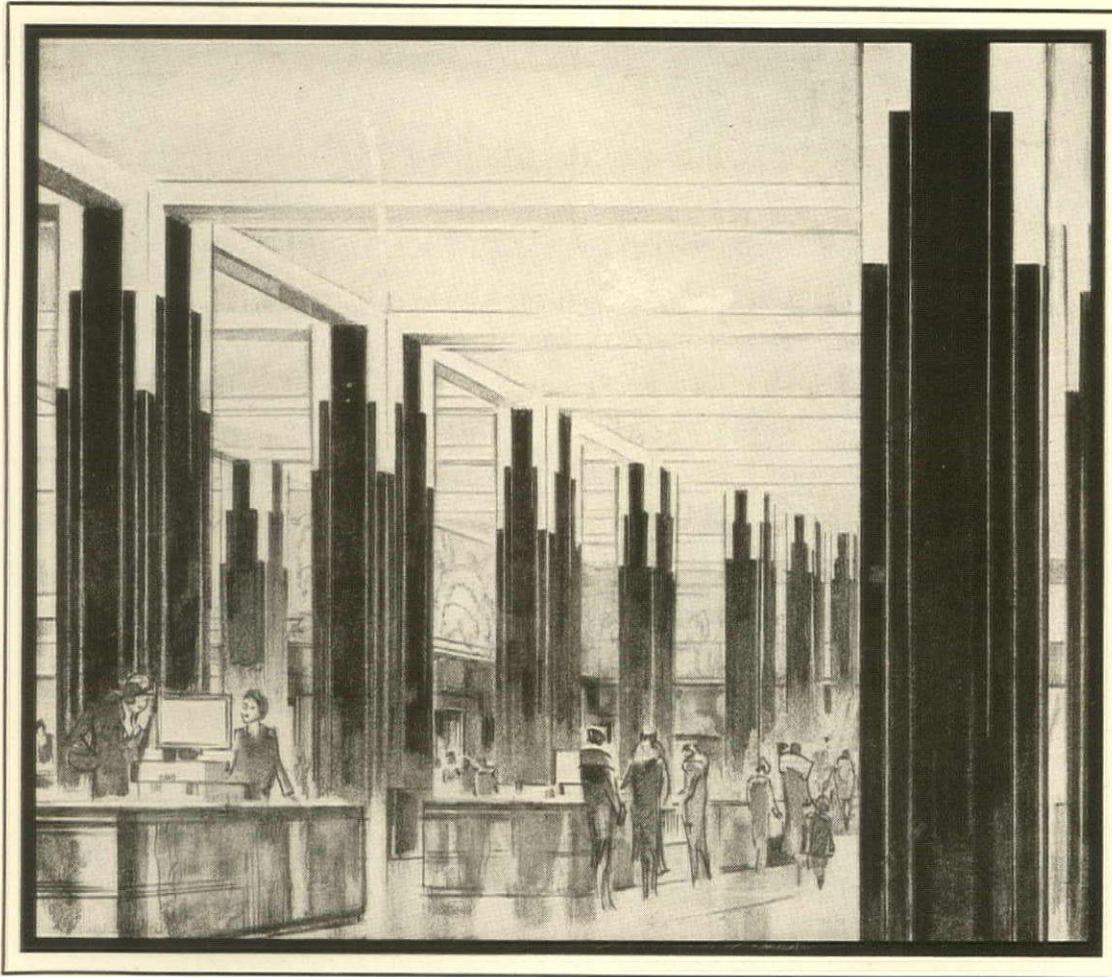


Steel Joists



ARMCO
INGOT IRON
Rigideck Roofs

GENFIRE
FIRESAFE BUILDING PRODUCTS



For this striking new store interior of Kaufmann's in Pittsburgh, Black Carrara Glass was used for the pillars, topped with their interesting lighting devices. Janssen & Cocken, Architects. Mellon Stuart Co., Contractors.

PILLARS OF POLISHED BLACK

Sheer columns, gleaming black, rising straight from floor to the ceiling—what an accent of modern beauty they create in today's interiors—whether store, hotel, theatre, restaurant or residence!

And this beauty, when secured by the use of Carrara Glass, is permanent. Carrara is easy to handle, easy to keep clean and

bright. Its non-porous surface does not stain or lose its polish.

The vogue for black in decoration brings constant need of just such a material as Black Carrara. Let our Architectural Representative give you the complete story of its possibilities and answer any questions you may have.

PITTSBURGH PLATE GLASS COMPANY, PITTSBURGH, PA.

Conveniently available through warehouses in all the Principal Cities of the United States

CARRARA

Polished Structural Glass

Atlantic Terra Cotta

for

New York City Schools

Atlantic Terra Cotta has been used for New York City Schools since 1879, and today the school building that does not use Terra Cotta is a rare exception.

Atlantic Terra Cotta means better school buildings, smaller appropriations and lower school tax rates.

When the box-like "four walls and a roof" and the hideously ornate schools of the Victorian Era gave way to the modern schools of beauty and interest, the use of Terra Cotta increased by thousands of tons a year.

Atlantic Terra Cotta is definitely economical in the first cost and in every other way. The architect's design can be realized in detail, modeling, color and texture at an extremely moderate cost.

School authorities have ample evidence of the practical advantages of Atlantic Terra Cotta in the schools erected years ago.



Atlantic Terra Cotta Company
19 West 44th Street, New York

Atlanta Terra Cotta Company
Atlanta, Georgia



“I don't need a door as good as yours”



Mr. Architect, the difference in price between Jamison and Stevenson Doors and the cheapest Door on the market is only a few dollars. But

is anything gained when you try to save those few dollars? During our last 42 years we have replaced hundreds of doors of the “Just as good” kind—cheaply constructed doors—showing that such doors give only a few years' service. » » » Suppose you paid \$45 for the cheap door and it gave as much as ten years' service. It would cost \$4.50 per year. But if you specified a \$50 door with proved records of twenty years or more—(and Jamison and Stevenson Doors have plenty of such records)—you could figure in advance that the door cost would be \$2.50 a year or less. The cheaper constructed door doesn't save money. It just doubles your clients' yearly door cost, not to mention the necessary extra repair bills, less satisfactory operation, and losses on ruined goods. » » » Jamison and Stevenson Doors by proved performance give a lower yearly cost. They are guaranteed to outlast any other door, at any price, under any conditions. Think that guarantee over, Mr. Architect, when you compare prices. Now, as to this claim of monopoly—

see our advertisement in April, 1930, issue

THE JAMISON STANDARD COOLER DOOR

With Patented Features



Backed by years of experience and study of the problems of shrinking and swelling of wood under refrigeration and the amount and character of insulation to render best protection. “Cabinet-maker” construction—braced with wood or metal as desired. » » » » » It is heavy, because experience has proved this extra weight necessary for the great strength and long service for which it is noted. The hardware weighs 60 lbs.—this extra weight and strength combined with simplicity in design making it practically indestructible. » » » » Write for descriptive catalog.

Jamison & Stevenson Cold Storage Doors



- JAMISON COLD STORAGE DOOR CO. Hagerstown, Maryland, U. S. A.
- STEVENSON COLD STORAGE DOOR CO. Chester, Pennsylvania, U. S. A.
- Branch Offices: 2 W. 45th Street, NEW YORK
- 1832 Builders Bldg., 228 N. La Salle Street, CHICAGO
- 2650 Santa Fe Avenue, LOS ANGELES
- 333 Market Street, SAN FRANCISCO D. E. Fryer & Co.
- SEATTLE & SPOKANE Southern Representatives
- address Hagerstown Foreign Agents: Von Hamm-Young,
- HONOLULU Armstrong Cork Co., Ltd., LONDON
- Okura & Company, JAPAN

SALUBRA



ARE you looking for a wall covering to give *permanence* to your conception of a beautiful interior?

A perfect color tone, an ideal design is a matter of considerable study! It takes time and thought.

What a heart-rending blow then after a brief space of time to see it all ripped off, only because it couldn't stand the ravages of everyday use!

No wonder Salubra is in such demand. Fadeless, washable, sanitary, *permanent*—ten, fifteen or twenty years is by no means an unusual test of its durability.

Salubra is really "paint-by-the-roll"—the equivalent of six coats of oil paint in one—a special process of compounding oil colors and applying them to strong waterproof parchment paper.

Because of its strength and pliability, Salubra can be perfectly butted, and has the appearance of a one-piece wall covering.

Greasy finger marks, ink, dirt, dust, have no effect upon it—a little scrubbing with soap and water and it's just as bright and new as the day it was put on.

Thousands of patterns to harmonize with any decorative scheme.

Write for descriptive literature. FREDERIC BLANK & COMPANY, New York Central Building, 230 Park Avenue, New York, or Marshall Field Annex, 24 North Wabash Avenue, Chicago.

Salubra
REG. U. S. PAT. OFF.

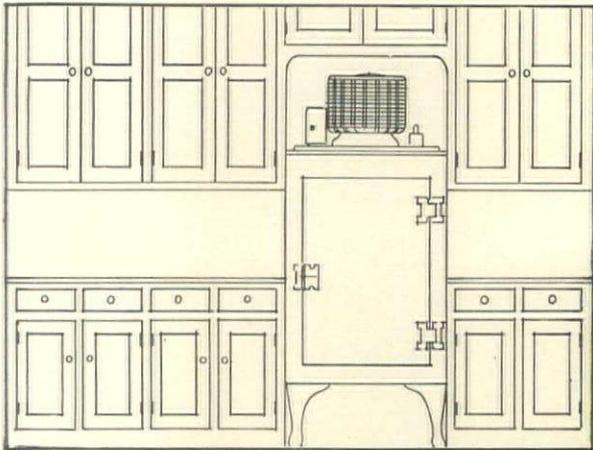
WON'T FADE

WILL WASH



Salubra wall covering in The American Woman's Association Clubhouse, New York City. Benjamin W. Morris, Architect. Barnett Phillips & Co., Decorators.

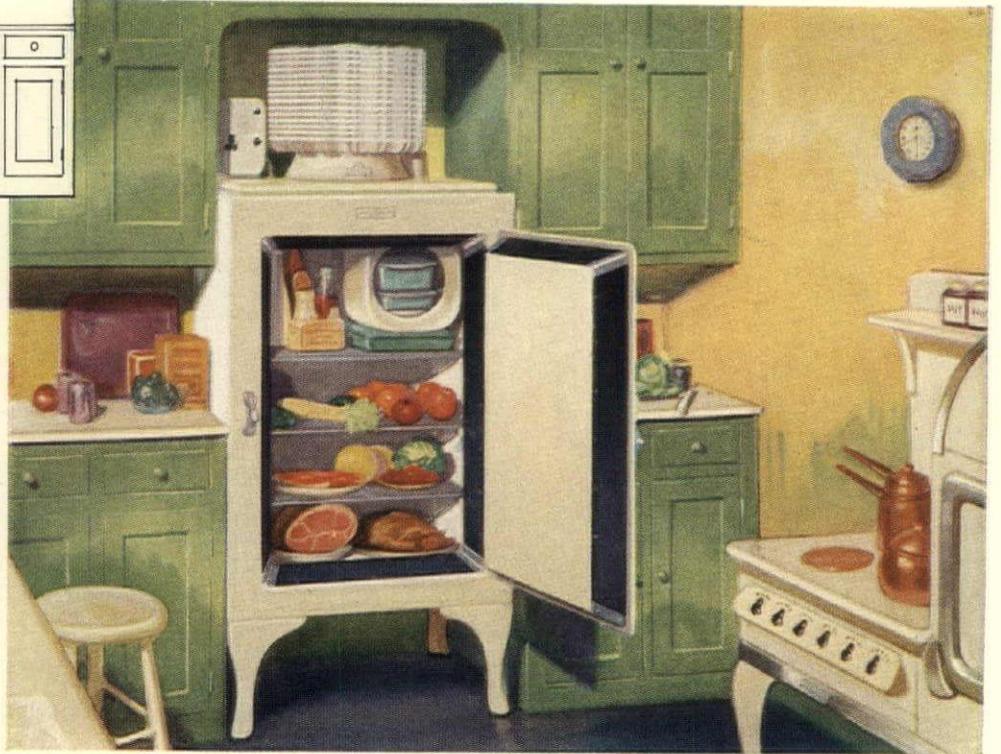
Arrange for a GENERAL ELECTRIC REFRIGERATOR *in the kitchen*



*... it will enhance the value of
the property and make it easier to sell*

THE General Electric Refrigerator shown in the plan is well suited to the average small home of six or seven rooms. This kitchen, while simple in arrangement, includes desired features of good routing and convenient working space.

We have prepared a helpful booklet describing this arrangement in detail, also many others for larger kitchens. The plans include complete first floor arrangements as well. We shall be glad to send you this booklet . . . simply address, Section QSA-3 Electric Refrigeration Department, General Electric Company, Hanna Building, Cleveland, Ohio.



FORESTALL annoying afterthoughts on the part of your clients by anticipating their refrigeration requirements and allow a proper place for a modern electric refrigerator just as you do for radiators, up-to-date plumbing and large closets. Of course your clients will want General Electric Refrigerators—the public preference for them is far greater than for any other make.

But you know how it is: people often forget to mention this or that convenience in time for you to include the space for it in your plans. Then adjustments have to be made.

Why not provide General Electric Refrigerators as *original equipment* in your specifications, as many other architects and builders are doing? The efficiency and economy of General Electric are so outstanding, their quality so

generally appreciated, that their installation readily indicates the rest of the recommended equipment is also of the highest grade.

Builders, owners, selling and renting agents have all found that the cost of General Electric Refrigerators is not so much an addition to the price of the home as an investment enhancing the value of the property.

Their superiority is definitely established through this amazing record . . . of the hundreds of thousands of owners not one has paid a cent for service.

Listen in on the General Electric Hour broadcast every Saturday evening at 9 o'clock, Eastern Standard Time, over a nationwide N. B. C. network.

GENERAL ELECTRIC

ALL-STEEL REFRIGERATOR



Connecticut furnishes two interesting pine rooms for architectural study—the early eighteenth century room in the Morris House at New Haven and the twentieth century library of the modern home at Greenwich designed by H. W. Rowe Associates. Here fireplace cupboards and built-in book shelves combine to create an unusually cozy setting.

PINE WALLS WITH BOOK NOOKS

In designing pine-walled rooms architects take delight in built-in book nooks, odd cupboards and other quaint Colonial conceits. The inviting warmth of knotty pine walls is enhanced by the whimsical charm of fireplace cupboards and ample book shelves where bright bindings shine with friendly radiance.

The pine room illustrated uses simple feather-edged knotty pine boards. Shevlin Pine is especially prepared for this use and is thoroughly kiln dried, carefully milled and finely finished, ready for installation at a minimum cost for labor.

As time goes on, the pine-walled rooms you design will prove not only their decorative sufficiency but their economy of upkeep. They need never be re-finished. Age, sunlight and use only make Shevlin Pine more mellow.

To be sure of getting genuine Shevlin Pine insist on the trade-mark. You need have no difficulty obtaining Shevlin Pine as there is a plentiful supply available in five varieties — Shevlin Northern White Pine, Shevlin Norway Pine, Shevlin California Sugar Pine, Shevlin California White Pine (Pinus Ponderosa) and Shevlin Ponderosa Pine. For complete data, write for the booklet, "Specify Shevlin Pine."

Shevlin, Carpenter & Clarke Company
902 First National-Soo Line Building
Minneapolis :: :: Minnesota



Your dealer can easily obtain Shevlin Pine by getting in touch with the nearest office:

Chicago: 1866—208 South La Salle Street Building

New York: N. H. Morgan, Sales Agent, 1205 Graybar Building

San Francisco: 1030 Monadnock Building

Toronto, Ontario: 606 Royal Bank Building

All Shevlin mills now make grade-marked and trade-marked lumber. Insist on the Shevlin trade-mark. If you have any difficulty getting Shevlin Pine, write and our nearest branch office will see that you are supplied.



TAKING AN IMPORTANT
PART IN ATTRACTIVE
ENTRANCES

National City Bank of New York
Bronx Branch—Busher Bldg.

STARRETT & VAN VLECK
Architects



YOU may have often wondered how one person closed the heavy bronze entrance doors with such apparent ease.

McCabe Hangers are the secret of the seeming strength. Their ease of operation, their noiseless operation, and their economy have led to their specification by architects who have added to the patronage appeal of their buildings by the use of heavy bronze doors in attractive entrance settings.

*Data and Drawings, especially prepared for architects,
will be sent on request.*

THE McCABE HANGER MANUFACTURING CO.

425 West 25th Street, New York City

JOHNS-MANVILLE
JM
 PRODUCTS



The Terminal Tower, Cleveland's tallest structure, is protected by a Johns-Manville Bonded Built-up Asbestos Roof. Architects: Graham, Anderson, Probst and White, Chicago, Illinois.

This roof was applied by the Industrial Asbestos Products Company, authorized Johns-Manville roofing contractors, Cleveland, Ohio.

Johns-Manville
 BONDED
 BUILT-UP ROOFS



Only skilled use of the right materials will produce a good roof

SINCE the life and service-ability of a roof depend so much on the care with which the materials are applied, every Johns-Manville Built-up Roof is applied by an approved roofer picked because he has the necessary skill.

Our seventy years of manufacturing experience enable us to produce materials that we believe will meet your most exacting requirements. When these materials are applied by one of our carefully selected roofers, the result is a roof which assures your client, the building owner, long protection for his property and freedom from maintenance expense.

J-M Built-up Roofs are Bonded

In order to demonstrate conclusively our confidence in Johns-Manville roofing materials and the skilled work of J-M Roofers, we bond our roofs for an agreed-upon term of years. Each bond is backed

by Johns-Manville and by the National Surety Company.

A Choice of Roofs to Meet Every Condition

We recognize that conditions of location, use of the building and its probable life all enter into the choice of roofing. To meet these conditions and the preferences on the part of those who specify or purchase roofs, Johns-Manville offers twenty distinct types of roofs, each embracing the highest grade of the particular materials used.

The men of our Architectural Service Department are always ready to cooperate with architects in considering the possibilities of any of the many Johns-Manville products that are used in building construction. We will be glad to show you samples of these products, or to mail such samples to you. We do not seek to displace any regular source of professional advice, but rather to place at your service all of our experience.



FOR THE BUILDING INDUSTRY

Acoustical Materials
Home Insulation

Asbestocel Pipe Insulations
Insulating Board

Asbestos and Asphalt Shingles
Tile Flooring

Built-up Roofs
Floridene Stone

Johns-Manville

New York Chicago Cleveland
San Francisco Toronto



**KELSEY
BRADLEY**

CONDITIONAIRE

Modern Comfort Demands

AIR-CONDITIONED Homes

Warm Air PLUS... Proper Humidity—Purification—Ventilation

It Burns Gas—the most convenient of all fuels—economically. Scientific construction, zig-zag tubes, greater heating surface and long-fire travel reduce fuel cost to minimum. Can also be equipped for burning oil or coal if desired.

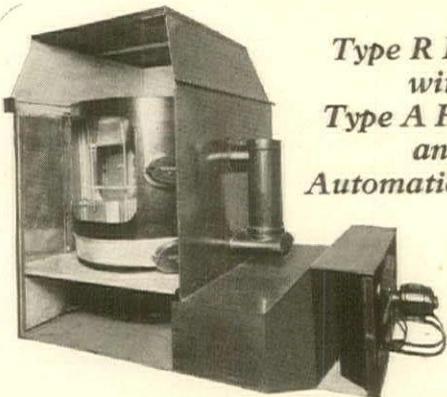
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It is Completely Automatic. Set the thermostat, and perfectly conditioned air goes to every corner of the house. Built in four sizes, to heat any size home.

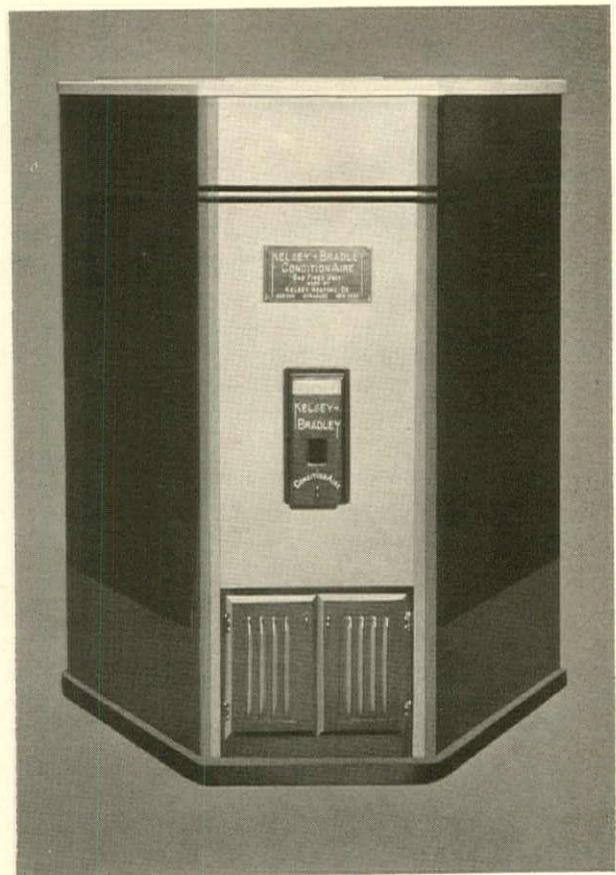
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FRINK Reflectors in the Reception Hall of the Westinghouse Lighting Institute



Illumination in this reception room of the Westinghouse Lamp Company's exhibit comes from the Frink illuminated pilasters . . . The "Solite" glass is evenly illuminated by two vertical rows of Linolite Lamps, particularly well suited for this work because of their continuous filament.

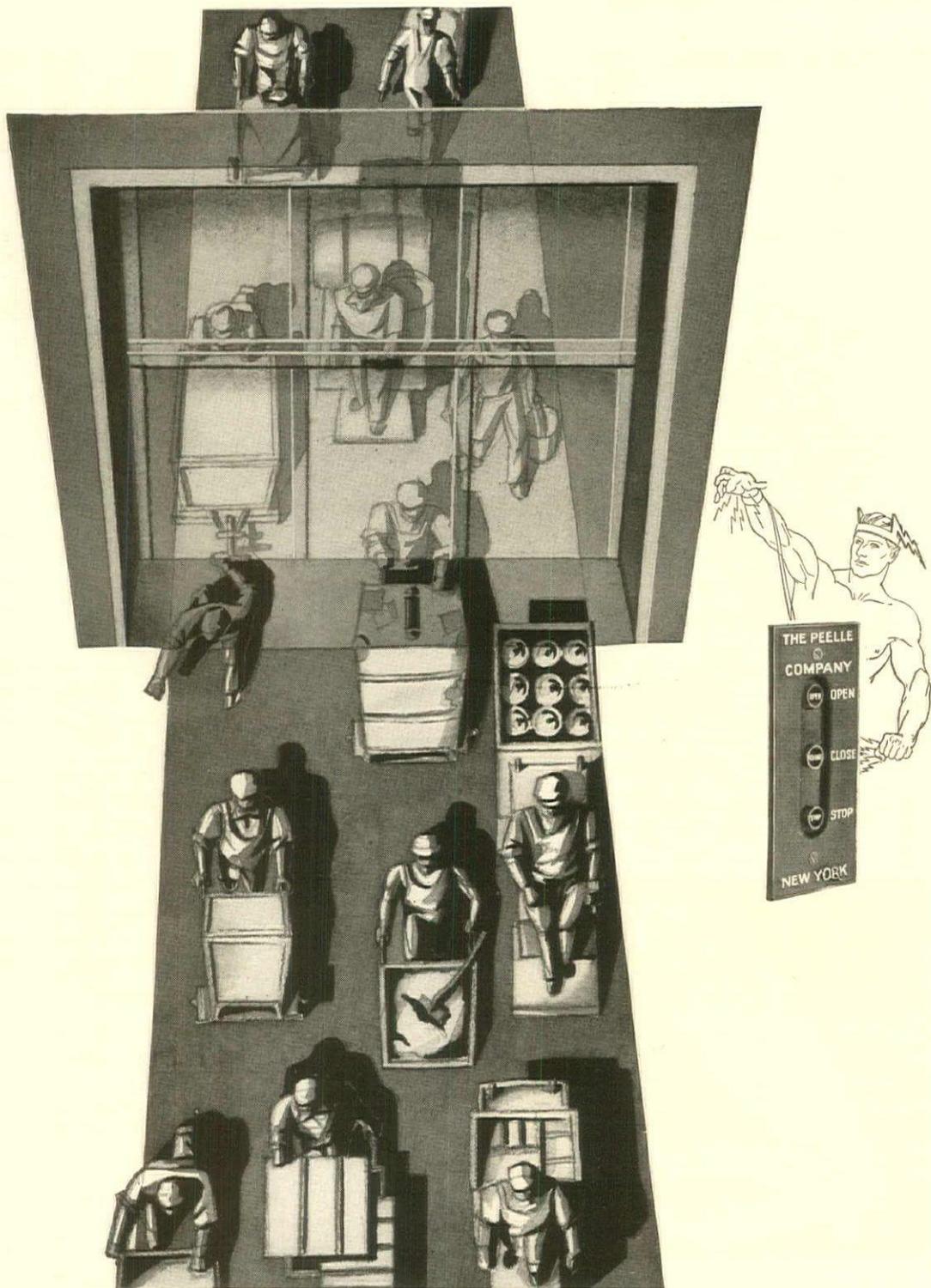
At the Grand Central Palace in New York City the Westinghouse Lamp Company presents an exhibition of the modern uses of light and some amazing glimpses into its future possibilities. In the Reception Hall, where one's first impression is quite naturally received, Frink reflectors and fittings play the graceful, introductory role to the modernity in illumination shortly

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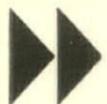
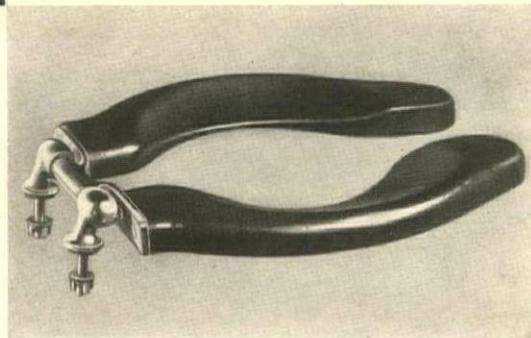
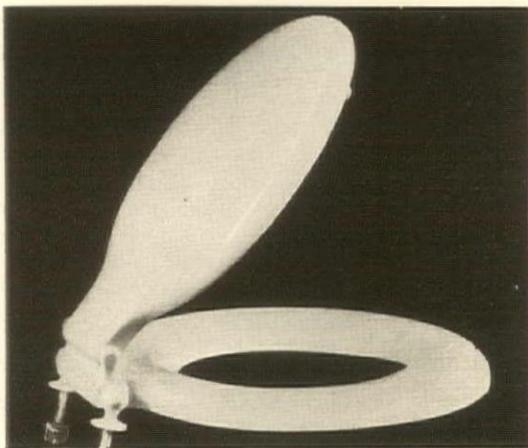
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MacARTHUR, Pedestal Type Piles after one of them had supported 50 tons for 10 days without settlement. Note how compressing of concrete has enlarged shaft in pile at left to fill soft spot in soil.

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Pedestal Type Pile, Practical and Economical

The vacant plot (right foreground of illustration) shows the *water level* to be about *two feet* below the roadway. The *Pedestal Type Pile* is best suited for such a soil condition. Because of the large bulb or *pedestal* formed at the bottom of each pile it was only necessary to drive these piles to an average depth of 28 feet. It would have been necessary to drive any other type of pile much deeper with a consequent cost increase.

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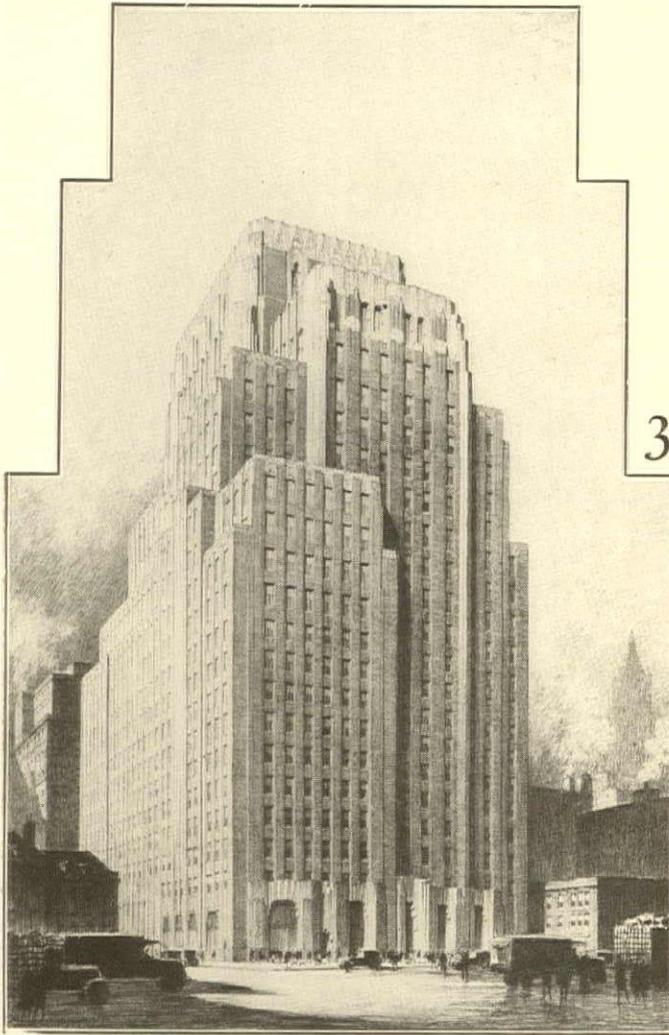
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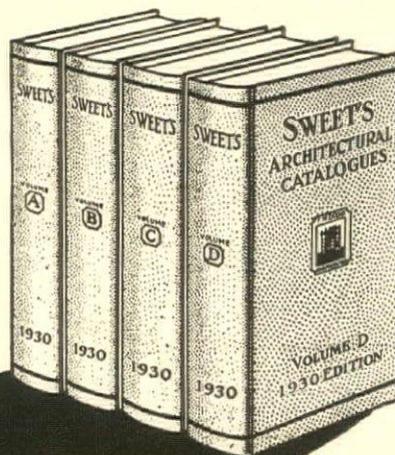
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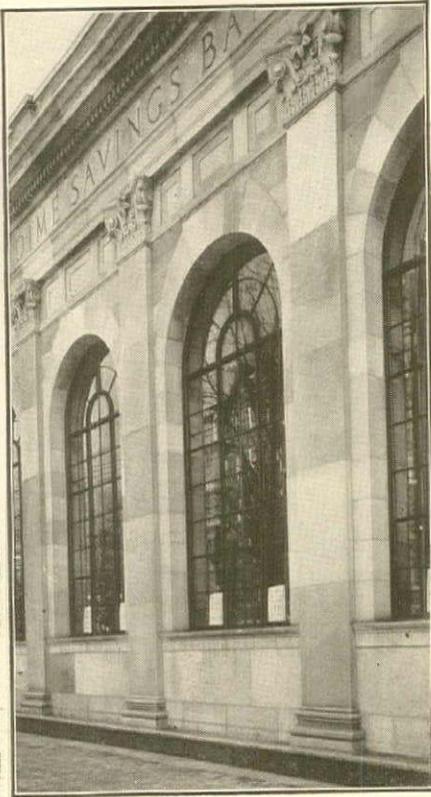
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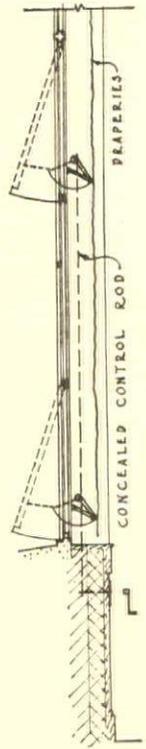
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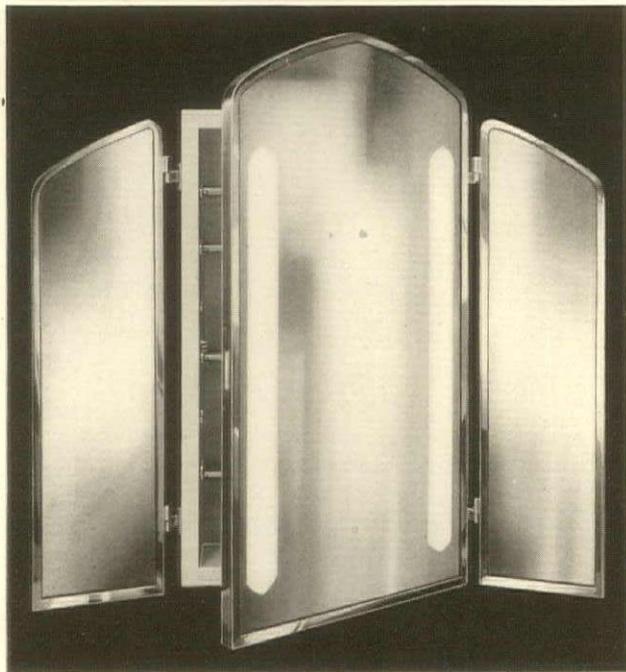


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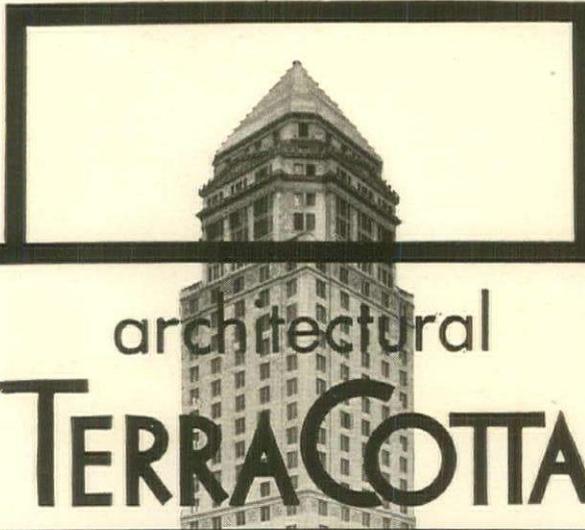
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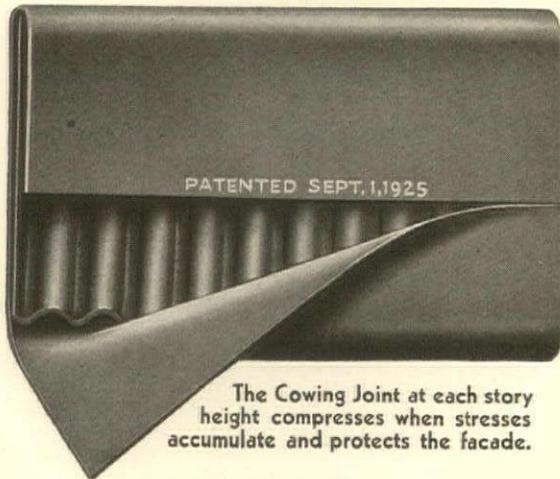
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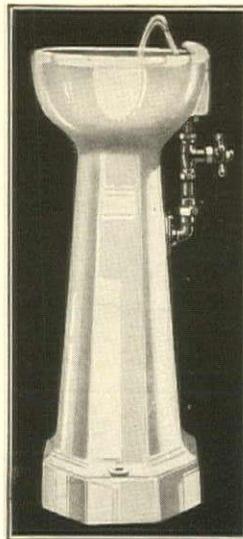
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See "SWEETS" PAGES
A182-183

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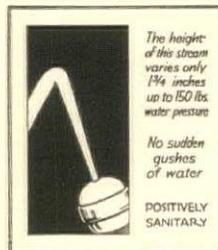
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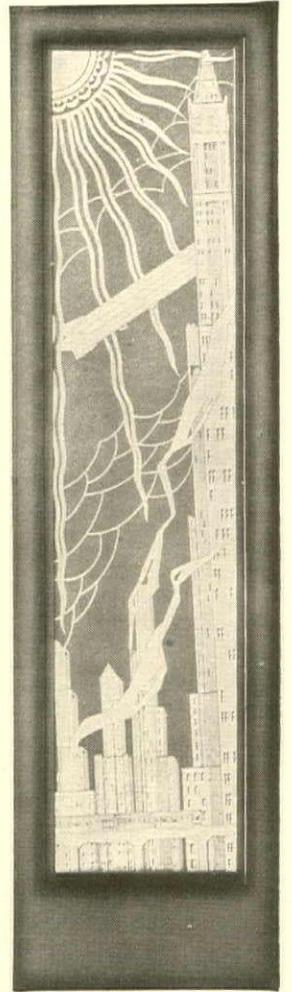
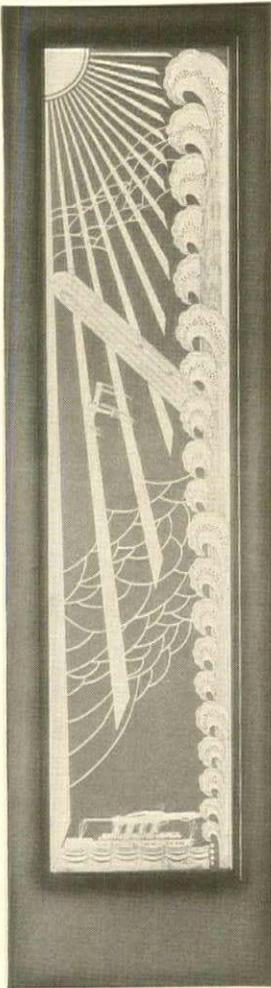
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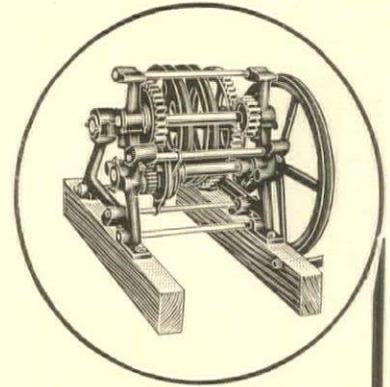
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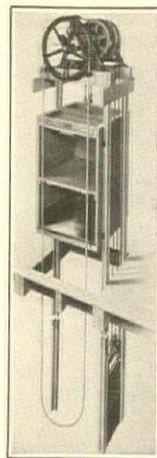
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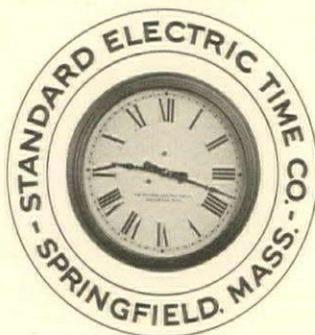
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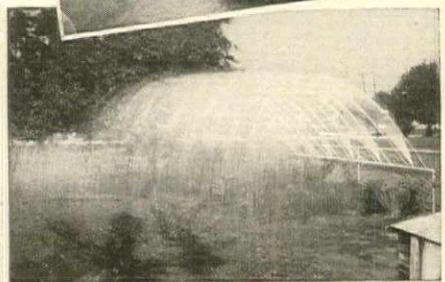
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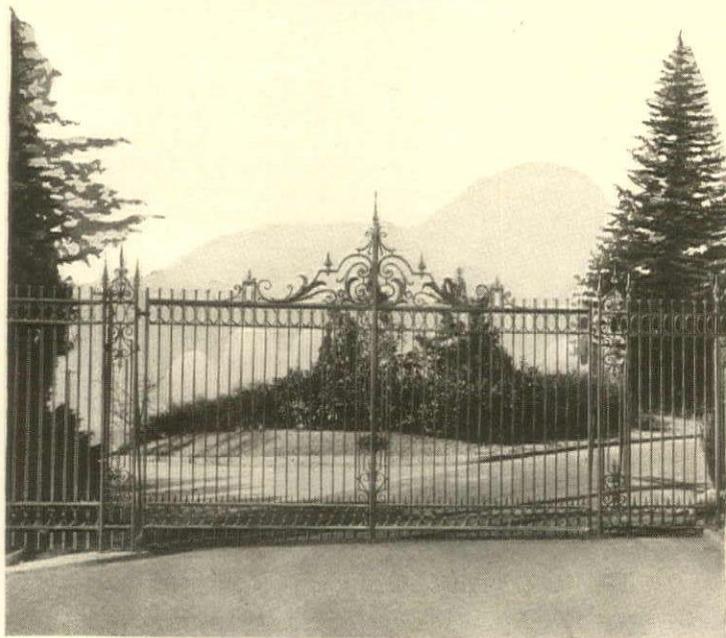
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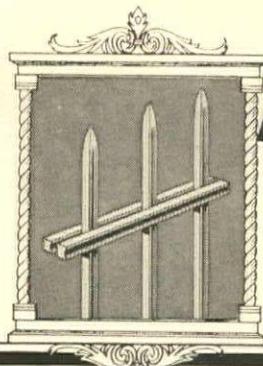
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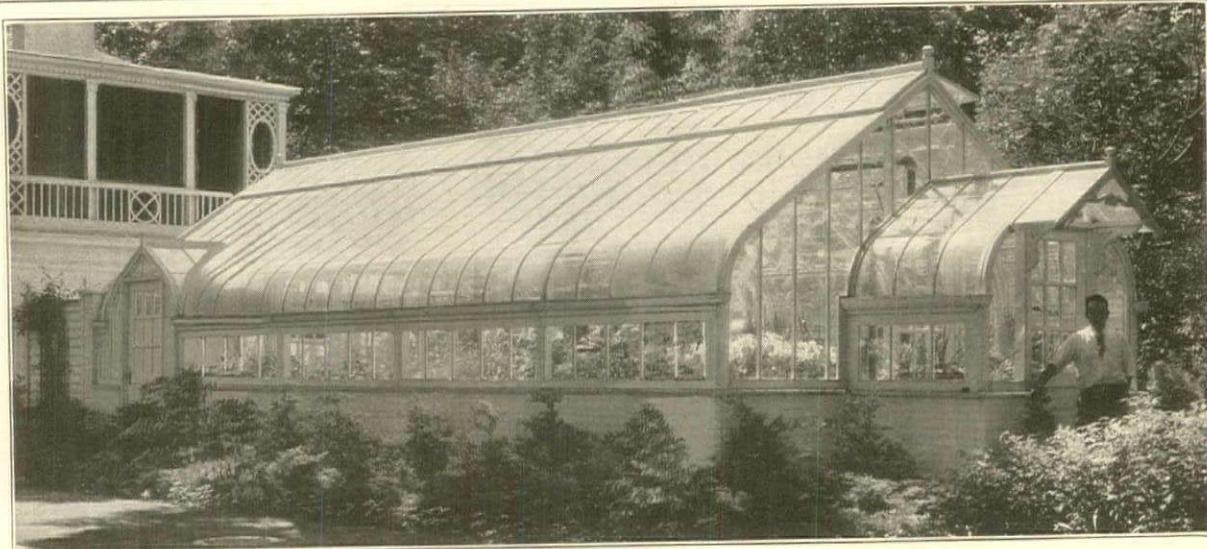
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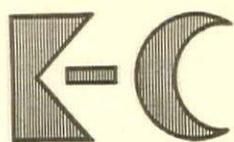
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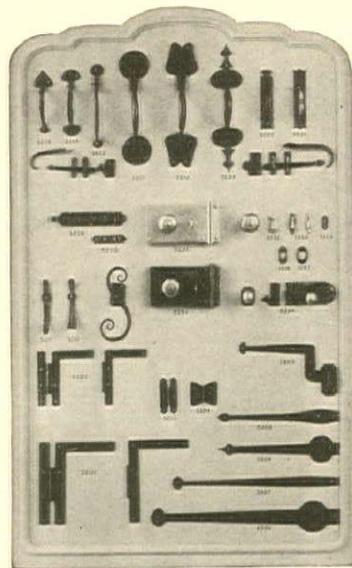
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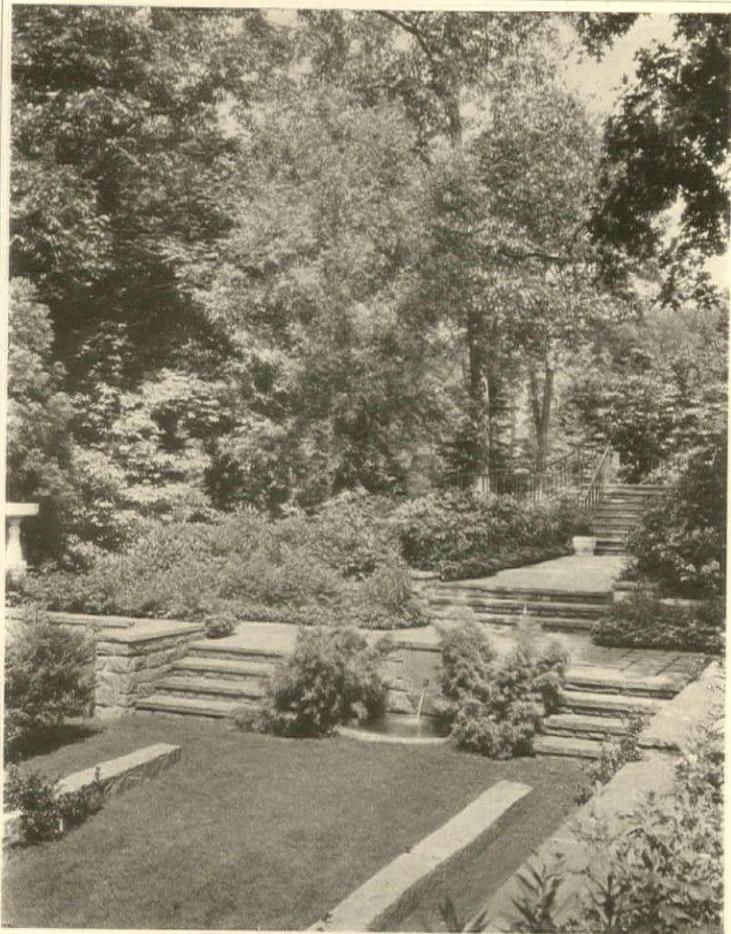


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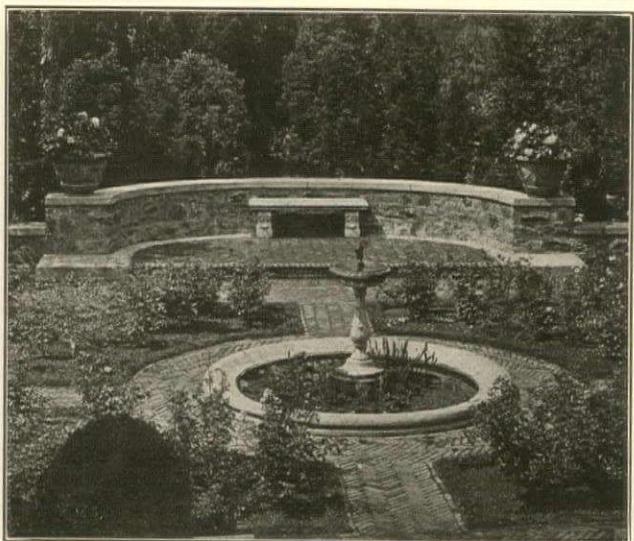
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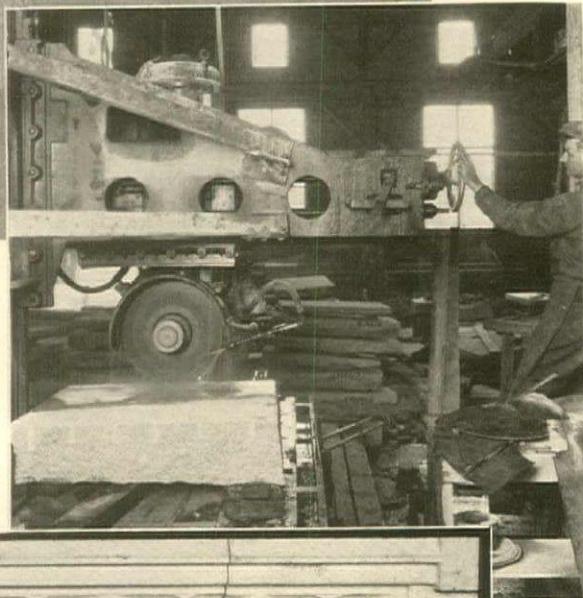
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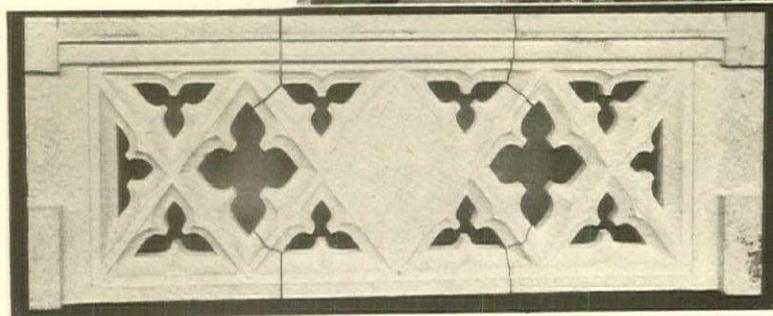
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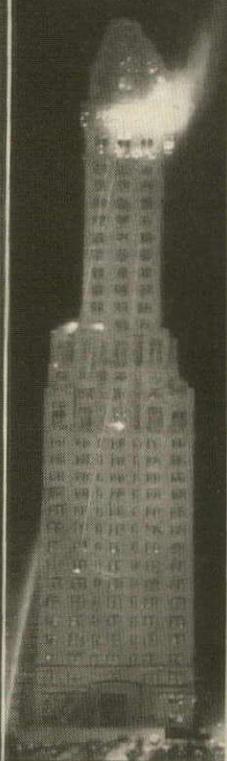
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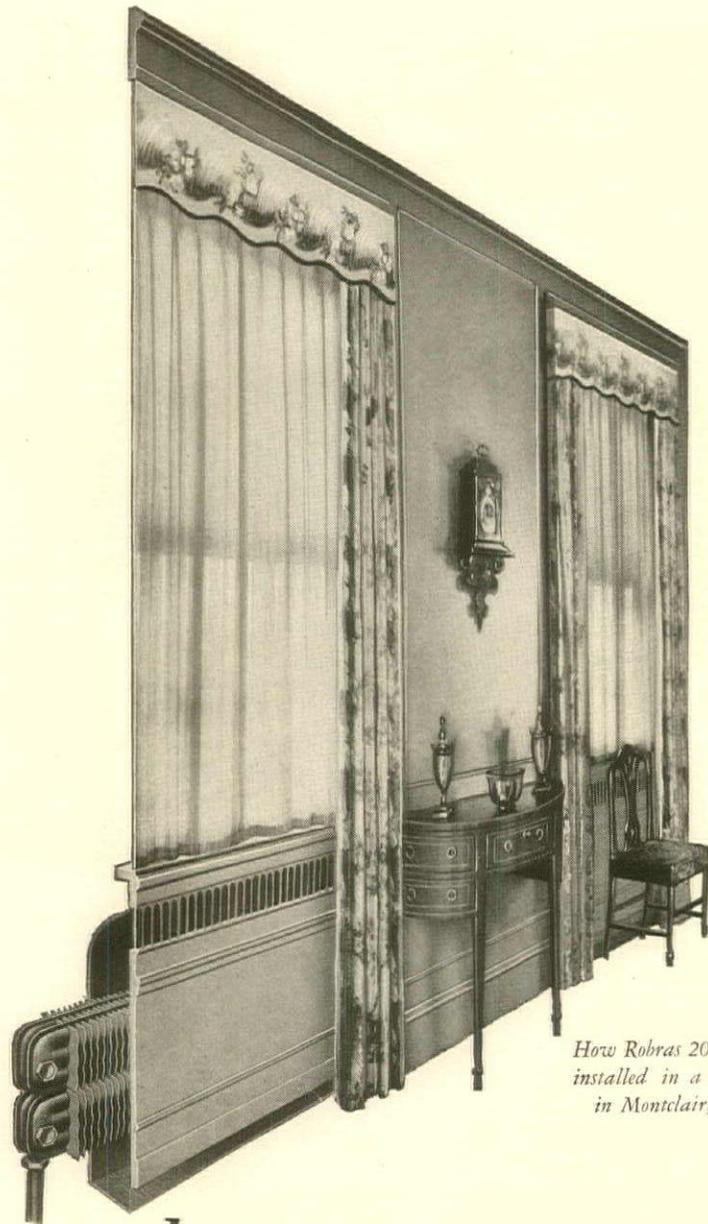
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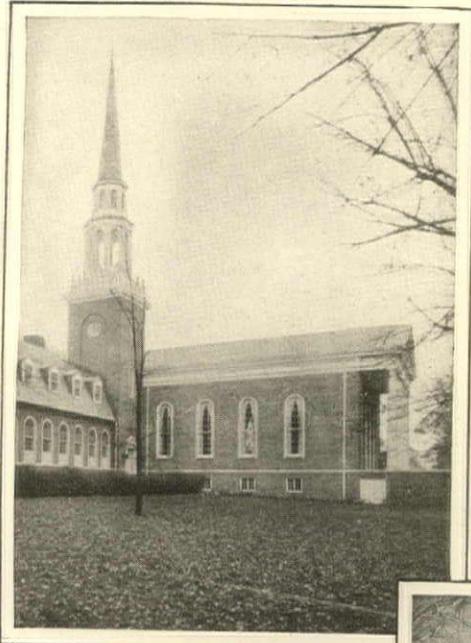
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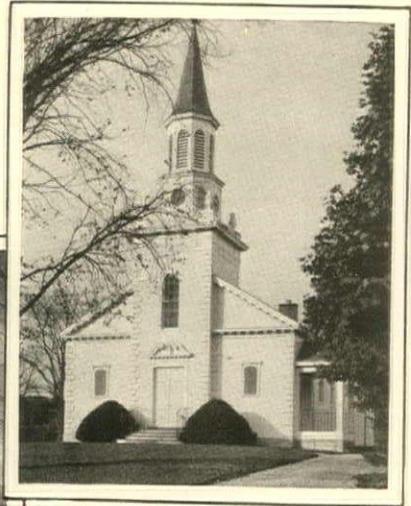
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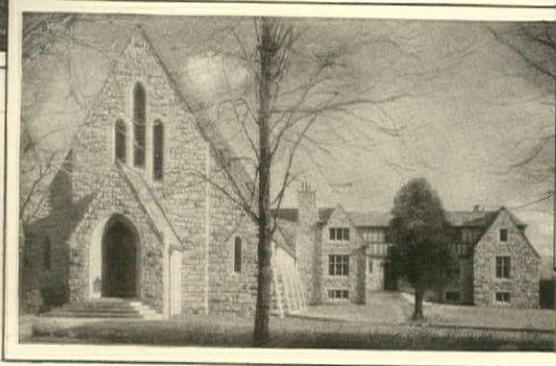


Catonsville Presbyterian Church,
Catonsville, Md. William Gordon
Beecher—Architect

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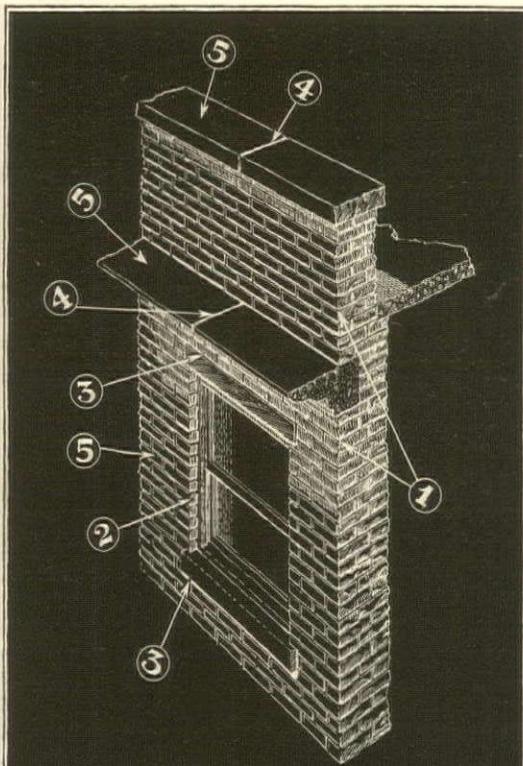
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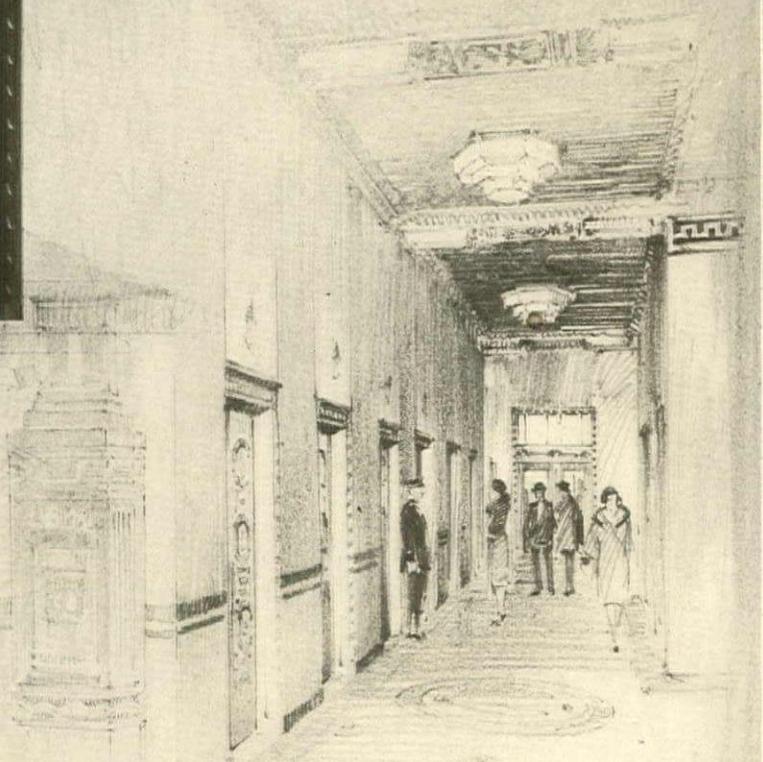


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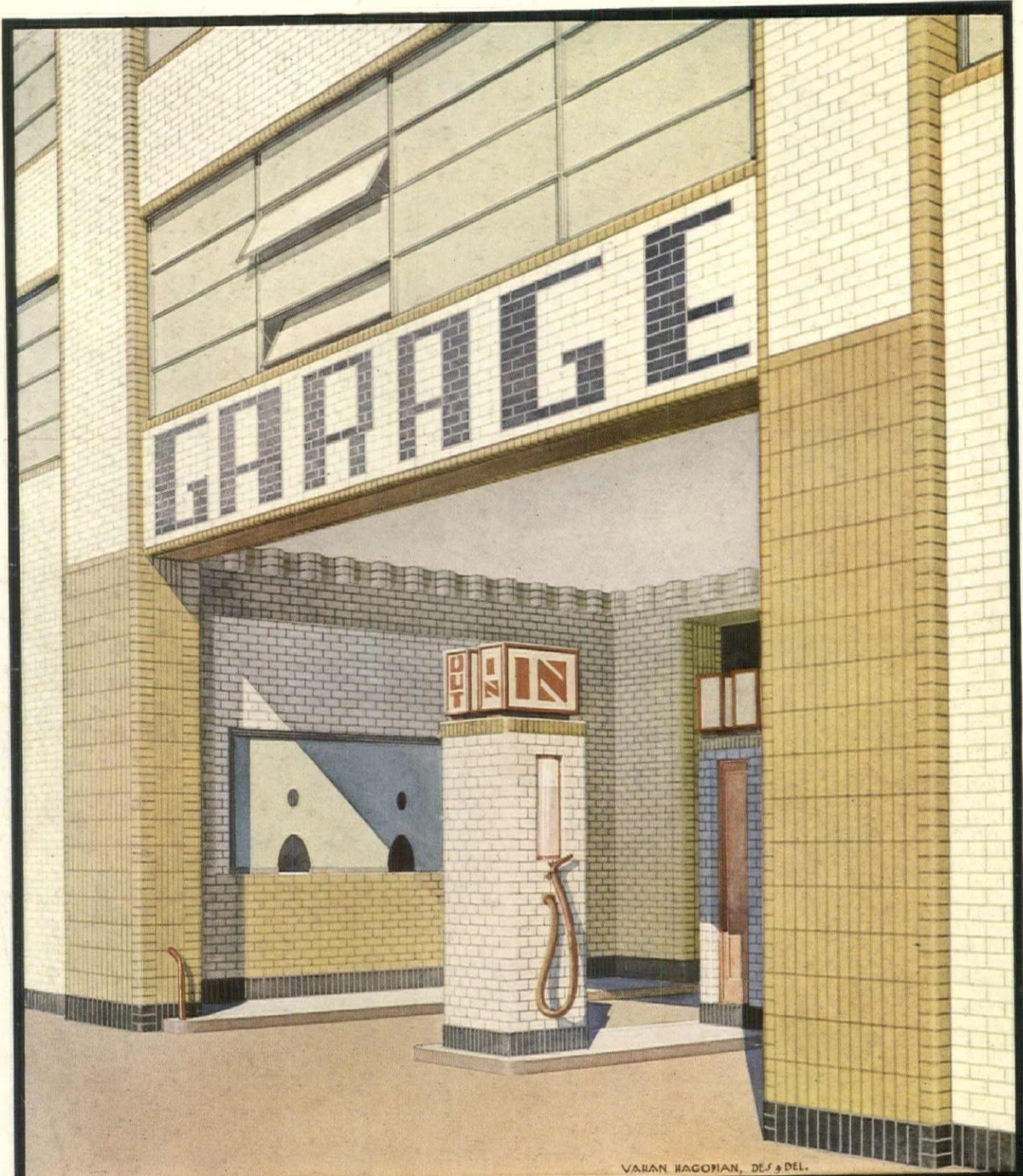
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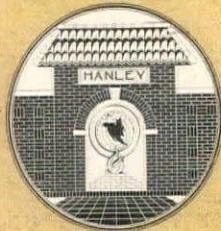
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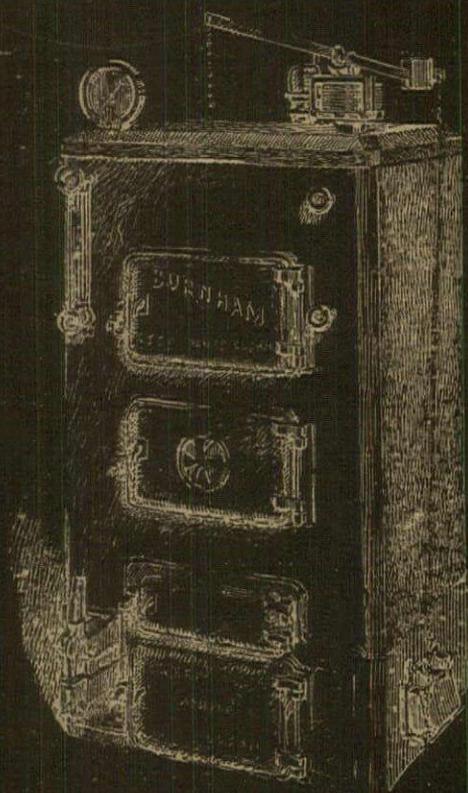
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