# THE ARCHITECTURAL FORUM

IN TWO PARTS PART ONE

## ARCHITECTURAL DESIGN

MAY 1931

# *The Decorative Possibilities of*

## CONCRETE, BRICK AND MASONRY

THE architectural beauty of buildings built with brick, concrete, or concrete building units can be greatly accentuated and enhanced through the use of Medusa Portland Cement Paint as an interior or exterior finish. ◆ The base of Medusa Portland Cement Paint is Medusa White Portland Cement specially prepared, with which we have ground chemicals and color pigments of a permanent nature. It contains no glue, lime, casein or any other material affected by the chemical action of lime, alkalies or water. ◆ Do not confuse Medusa Portland Cement Paint with ordinary paint. It is more than a color coating for concrete, brick and masonry surfaces. It actually becomes a homogeneous part of the wall, providing a hard cement-like finish that is damp-proof. ◆ Medusa Portland Cement Paint can be obtained in White, Blue, Green, Stone Gray, Pearl Gray, Cream and Red. ◆ Let us send you a copy of our book *"How to Paint Concrete and Masonry Surfaces"* A. I. A. File Number 25-c-2. ◆ Medusa Portland Cement Paint is ideal for swimming pools.

MEDUSA PORTLAND CEMENT COMPANY
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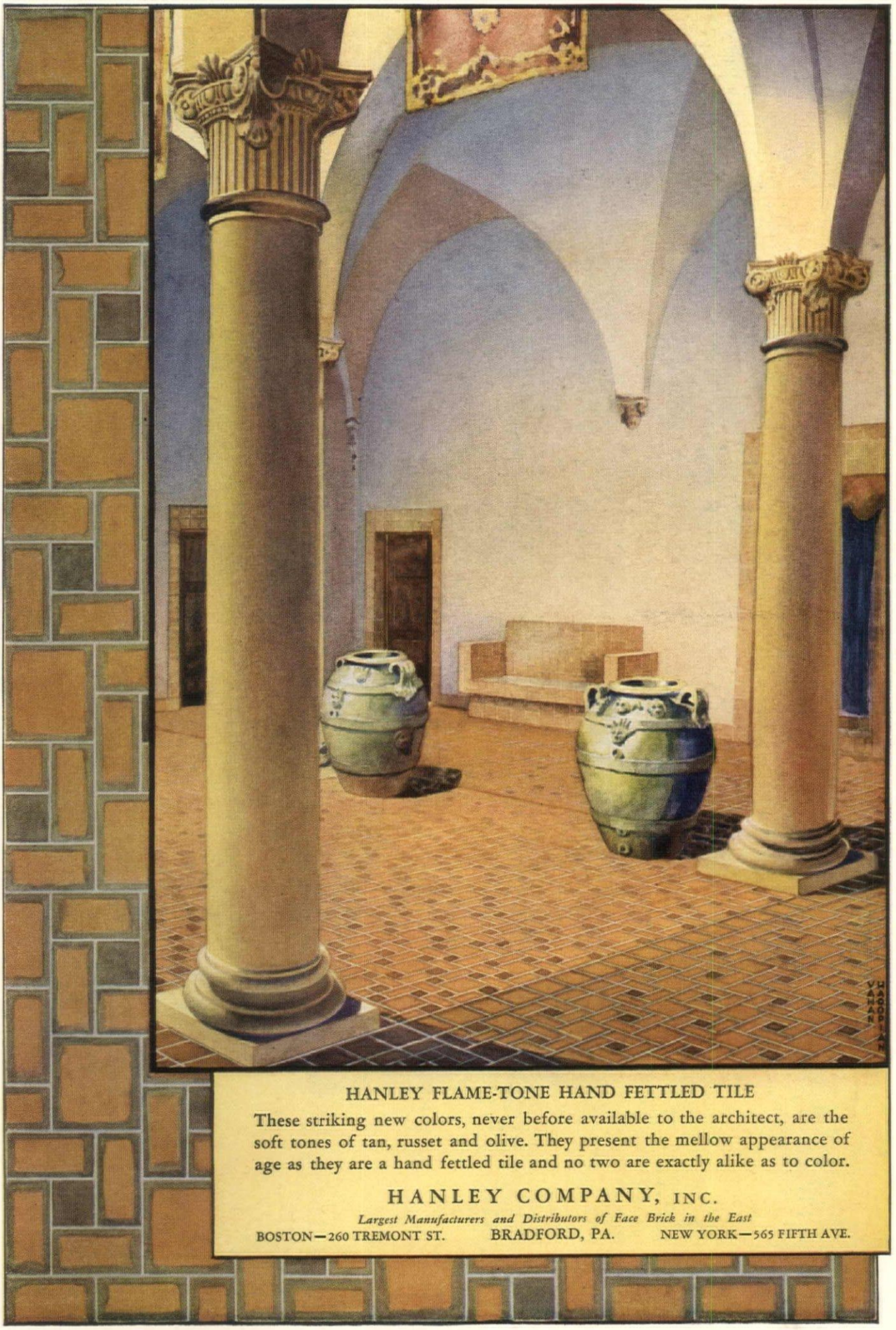
*Manufacturer of Medusa Gray Portland Cement (Plain and Waterproofed) . . . Medusa Waterproofing (Powder or Paste) . . . Medusa White Portland Cement (Plain and Waterproofed) . . . Medusa Portland Cement Paint . . . and Medusa-Mix, the Masonry Cement.*

# MEDUSA PORTLAND CEMENT PAINT



HANLEY FLAME-TONE HAND FETTLED TILE

These striking new colors, never before available to the architect, are the soft tones of tan, russet and olive. They present the mellow appearance of age as they are a hand fettled tile and no two are exactly alike as to color.

HANLEY COMPANY, INC.

*Largest Manufacturers and Distributors of Face Brick in the East*

BOSTON—260 TREMONT ST. BRADFORD, PA. NEW YORK—565 FIFTH AVE.

# LUTTON SOLAR V-BAR GREENHOUSES

LUTTON SOLAR V-BAR GREENHOUSES ON ESTATE OF S. Z. MITCHELL, BROOKVILLE, L. I.

## Double Protection . . .

*Reduced Maintenance—Longer Life—*

The metal parts of a Lutton Solar V-Bar Greenhouse are heavily galvanized, even bolt holes and ends, and are then finished in Aluminum paint. The reasons for this are obvious. Hot galvanizing is the best and longest lived protective agent known. When properly done it absolutely prevents rust. Aluminum paint further protects and adds life to a greenhouse structure. It reflects light and adds life to growing plants. It adds beauty and a sense of airiness. In our experience as the only builders of private greenhouses exclusively it is the ultimate in greenhouse paint. These are but two of many features that have made Lutton Solar V-Bar greenhouses the choice of the country's leading estates. Write us for complete details, or see Sweet's.

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REG. U.S. PAT. OFF.
V-BAR
GREENHOUSES

*Some Architects For Whom We Have Built Solar V-Bar Greenhouses*

McKIM, MEADE & WHITE . *New York City, N.Y.*
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The only makers of private greenhouses exclusively.
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THE ARCHITECTURAL FORUM

Published Monthly by National Trade Journals, Inc., 521 Fifth Avenue, New York, N. Y.
Yearly Subscription: U. S. A., Insular Possessions and Cuba, $7.00. Canada, $8.00. Foreign Countries in the Postal Union, $9.00. Single copies: Quarterly Reference Numbers, $3.00; Regular Issues, $1.00.
Entered as Second Class Mail Matter at the Post Office, New York, N. Y., under the Act of March 3, 1879.


VOLUME LIV
Number 5

BACHMAN RESIDENCE,
NASHVILLE, TENN.

ARCHITECT: HENRY C. HIBBS,
NASHVILLE, TENN.

# OLD EUROPE
(HAND-MADE)
## SHINGLE TILE

For the higher class, better designed homes, there is an ever-increasing demand for character in the roof, consistent with the desired atmosphere of the whole scheme.

No better proof of the "fitness" of Old Europe Shingle Tile can be asked than the growing recognition as evidenced through the specifications of this unique product, by leading architects of the country. Although thoroughly vitrified and resistant to any climatic condition, it presents texture and soft toned color values equalled only by the time-toned tiles of Old Europe.

Miniature or full sized samples will be gladly sent on request, by addressing Dept. F, Daisy, Tenn.

**B. Mifflin Hood Company**

**KIL-KRAFT TILES**
TRADE MARK
DAISY, TENNESSEE

*Above all things use Hood Roofing Tile*

# Wizardry

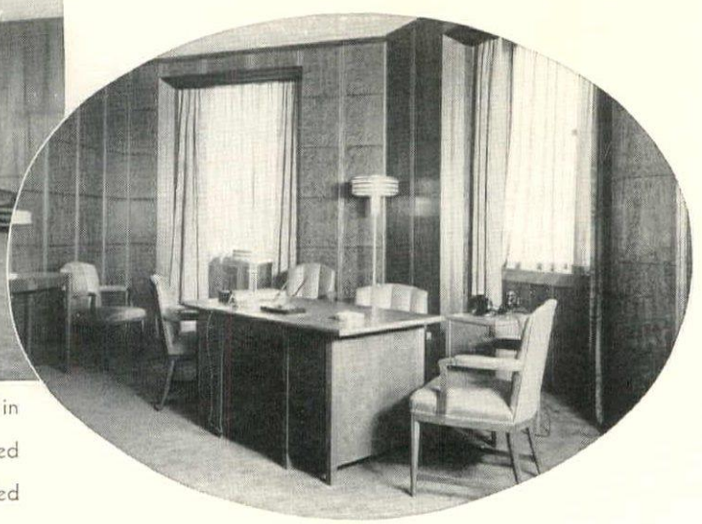
## HENRY KLEIN & CO., INC. INSTALLS ALL THE ARCHITECTURAL CABINET WORK —IN FLAIMPRUF WOOD—IN NEW HOME OF IRVING TRUST COMPANY, NEW YORK . . .

UPPER PHOTO: Section of executive suite, 5th Floor, paneled in Yuba Wood.
LOWER PHOTO: Section of officers' room, Main Floor, paneled in Teakwood.
IN OVAL: Corner of private office, Chairman of the Board; paneled in Teakwood.

THE paneled interiors in the new quarters of the Irving Trust Company are a source of genuine pride to Henry Klein & Co., Inc. Embracing 9 floors in the new 50 story building at Number One Wall Street, they present one of the largest installations of architectural cabinet work in New York.

The execution of this unusual job is an expression of 3 indispensable factors: *Experience*—22 years of experience in the manufacture of wood products. *Facilities*—A 5½-acre plant at Elmhurst, N.Y., which is one of the most up-to-date woodworking plants in the East. *Research*—Extending over many years and culminating in the development of Flaimpruf Wood which can neither flame nor spread flame. All the paneling for the new home of the Irving Trust Company is of Flaimpruf Wood.

In office buildings, homes, apartments, or aboard ship . . . wherever you contemplate the installation of fine architectural cabinet work . . . the unique resources of this organization compel consideration.



# in Wood!

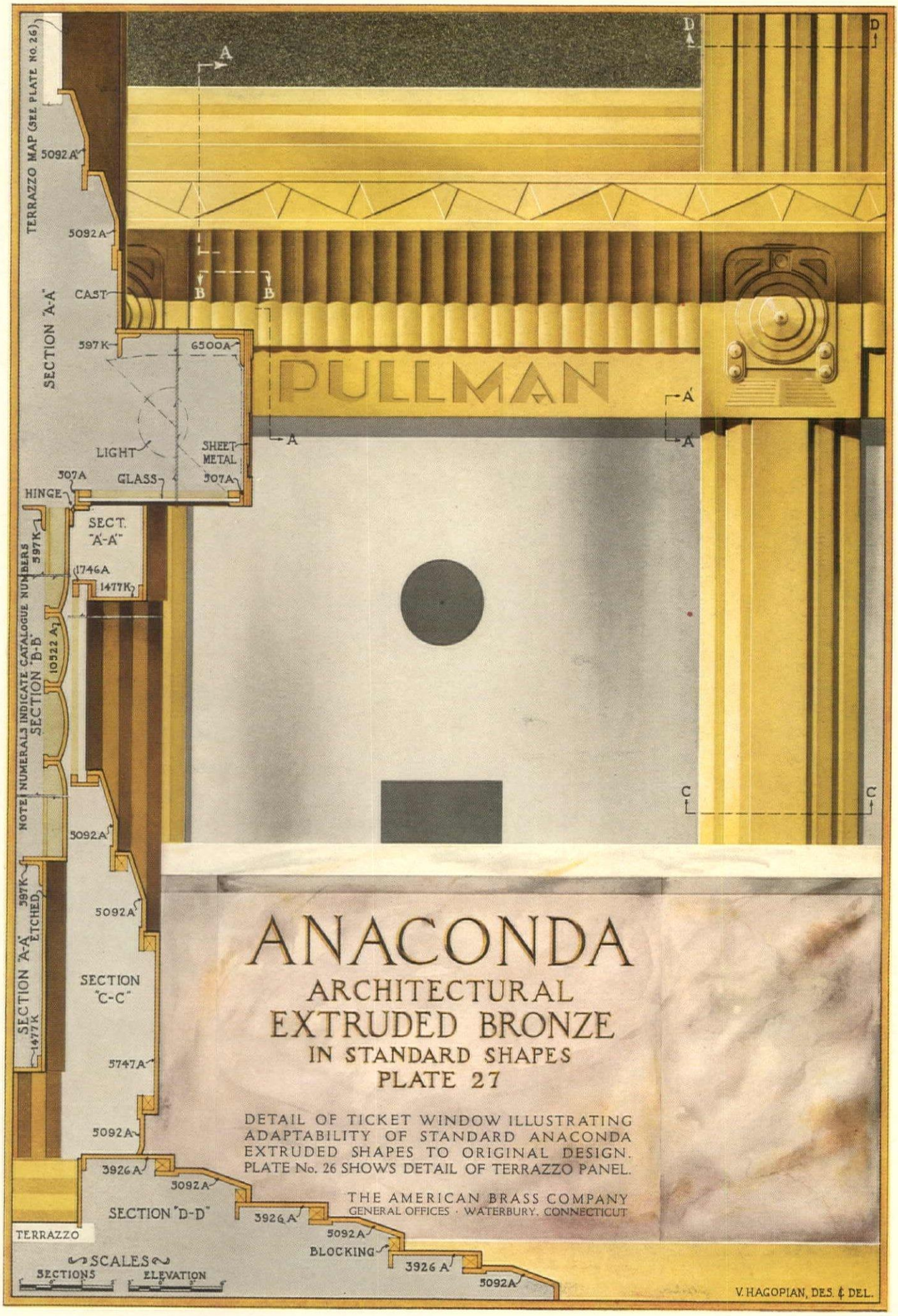
ABOVE: General view of Directors' Room, 47th Floor, paneled in Teakwood. Photo at left shows close-up detail of wall behind Chairman's dais.

NUMBER ONE WALL STREET
HOME OF IRVING TRUST CO.

Architects: Voorhees, Gmelin & Walker
Builder: Marc Eidlitz & Son, Inc.

## HENRY KLEIN & CO., *Inc.* (EST. 1909)

40 to 46 West 23rd Street, New York  Plant: Elmhurst, N. Y.




# ANACONDA

## ARCHITECTURAL EXTRUDED BRONZE IN STANDARD SHAPES

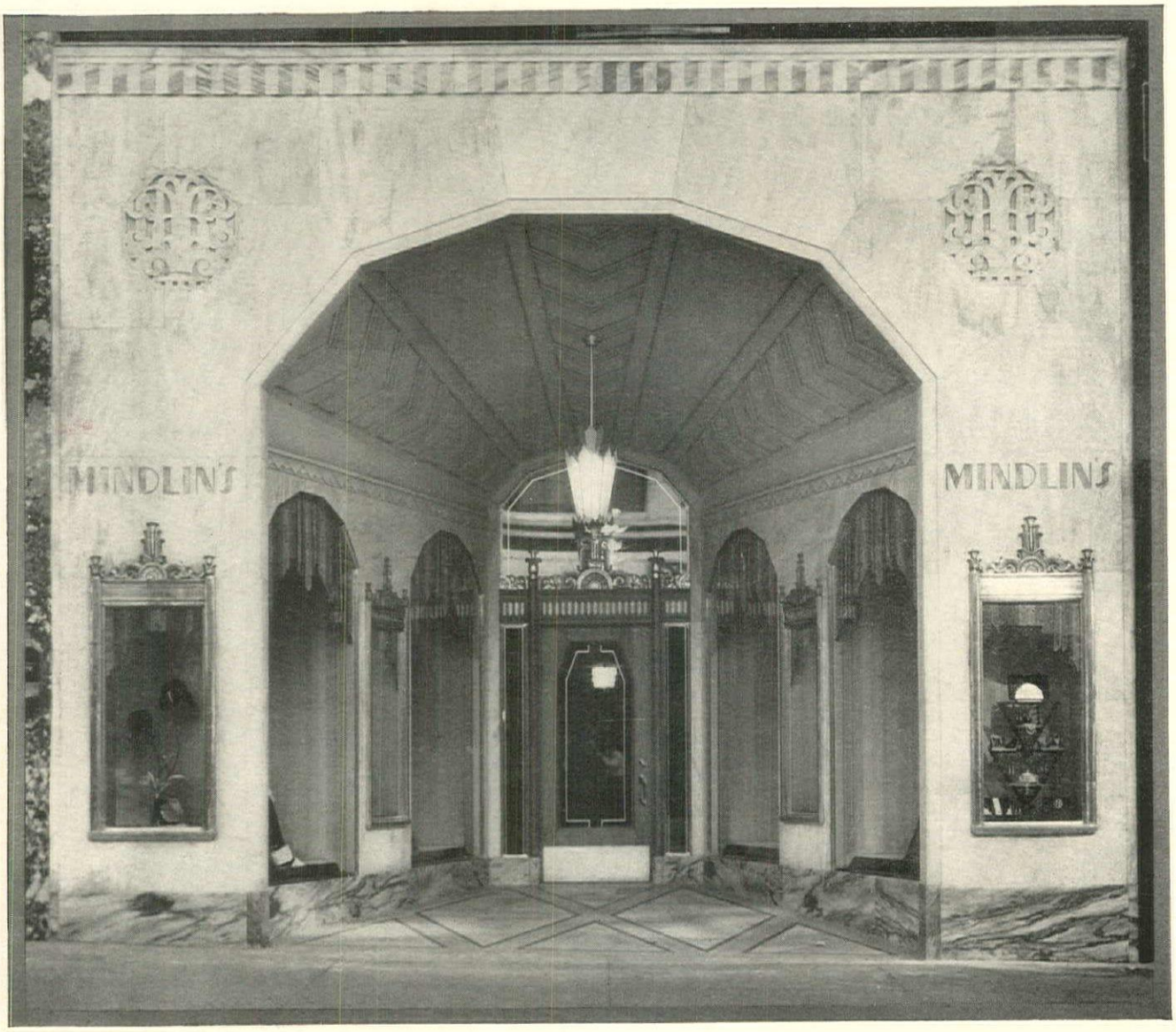
## PLATE 27

DETAIL OF TICKET WINDOW ILLUSTRATING ADAPTABILITY OF STANDARD ANACONDA EXTRUDED SHAPES TO ORIGINAL DESIGN. PLATE No. 26 SHOWS DETAIL OF TERRAZZO PANEL.

THE AMERICAN BRASS COMPANY
GENERAL OFFICES · WATERBURY, CONNECTICUT

V. HAGOPIAN, DES. & DEL.

# GEORGIA MARBLE




"MINDLIN'S," KANSAS CITY, PINK GEORGIA MARBLE
Greenbaum, Hardy & Schumacher, Kansas City, *Architects*

## Prize-Winning Commercial Building

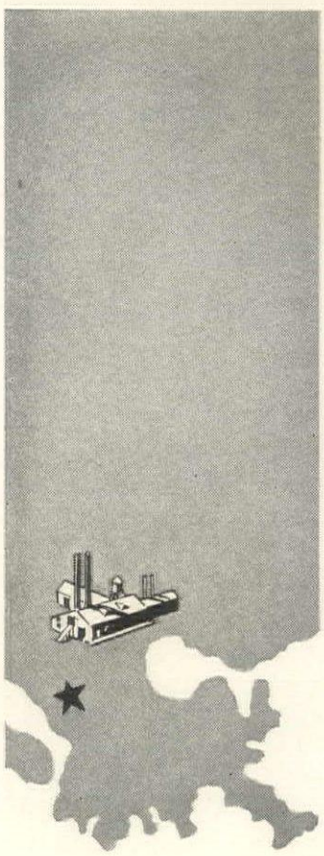
Kansas City Chapter A.I.A. gave 1930 Award for best commercial building to Mindlin's Store . . . The front is Etowah Pink Georgia Marble axed finish above the base—the base being polished . . . Georgia Marble, in addition to being a durable exterior material, is *in itself* a *decoration* which needs no costly enrichment.

THE GEORGIA MARBLE COMPANY · TATE · GEORGIA

| *1328 Broadway* | *814 Bona Allen Bldg.* | *648 Builders' Bldg.* | *622 Construction Industries Bldg.* | *1200 Keith Bldg.* |
|---|---|---|---|---|
| NEW YORK | ATLANTA | CHICAGO | DALLAS | CLEVELAND |

# *Announcing..*

## FLORIDA-LOUISIANA RED CYPRESS Co.



BUYERS and users of cypress throughout the country will be interested in the formation of the Florida-Louisiana Red Cypress Company. This company, which is to serve as a marketing organization, is a progressive and forward action which gives distributors of Tidewater Red Cypress a service upon which they can always depend.

The Florida-Louisiana Red Cypress Company will market the entire cypress output of the following mills:

Wilson Cypress Company,
Palatka, Fla.

Putnam Lumber Company,
Glenwood & Shamrock, Fla.

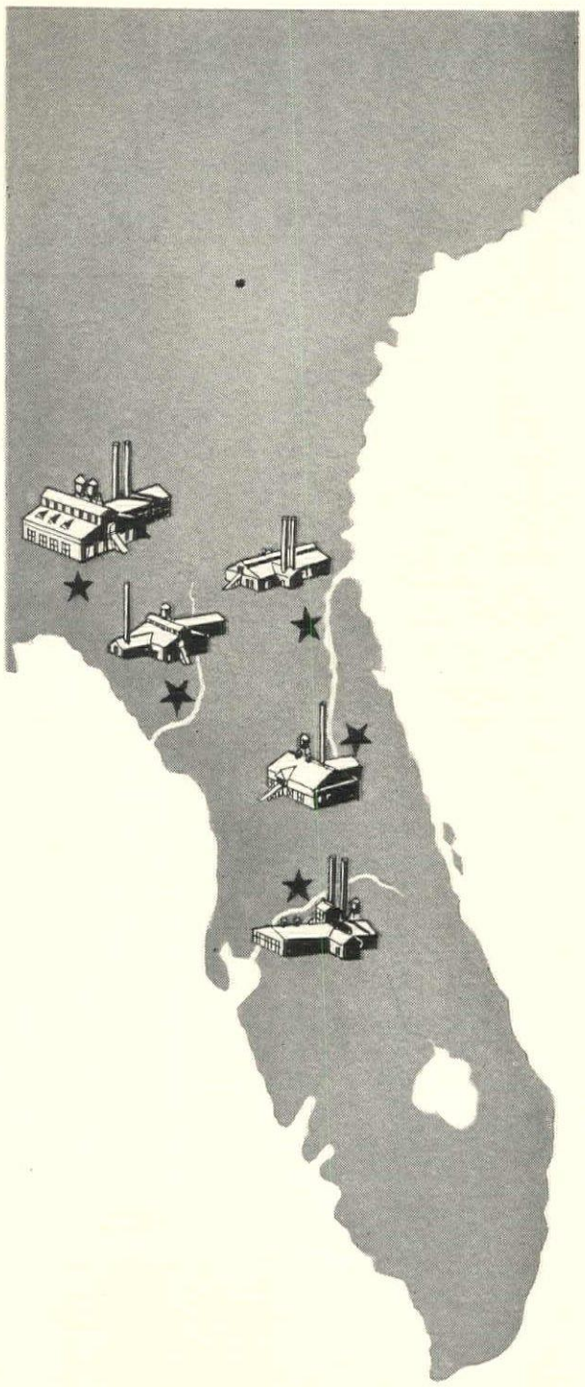
Cummer Cypress Company,
Lacoochee, Fla.

A. Wilbert's Sons,
Plaquemine, La.

Brooks-Scanlon Corporation,
Foley, Fla.

All cypress cut by these mills comes from the deep swamps of the Suwanee, the St. Johns and the Withlacoochee Rivers in Florida and the Atchafalaya in Louisiana . . . the world's most noted cypress growing regions.

Whether you live in Maine or California, New York or Ohio, you may look to the Florida-Louisiana Red Cypress Company for everything you need in cypress. The vast resources and exceptional facilities of this organization assures you of a steady supply of the finest Tidewater Red Cypress you can buy . . . now and for many years to come.




*Symbolic of the strength of Tidewater Red Cypress, this woodsman now speaks the pledge of the Florida-Louisiana Red Cypress Company. Now, and years to come, you can get all the cypress you need.*

FLORIDA-LOUISIANA RED CYPRESS COMPANY

JACKSONVILLE, FLA.

# Lupton makes two noteworthy

## AN IMPORTANT ADVANCE IN SCREENED CASEMENTS

NOW casement windows can be opened, closed or locked without removing screens. Now screens can be removed and replaced for washing windows without disturbing shades or draperies.

Lupton has achieved all this in the new Screened Casement Windows. A beautifully designed Locking-Latch replaces the usual window handles. The new Lupton Undersreen Operator attached to the window frame at the sill line opens and closes the window and locks it in any position.

The new Lupton All-aluminum screens lie flat against the window frame. Each screen is held in place by two spring clips near the head and by two corner brackets at the bottom. Only a few seconds are required to insert or remove the screens—which can be done without moving the latch or operator and without disturbing shades or draperies.

The screen frame, of extruded aluminum, is only 7/16 x 5/8"—so slender that it does not cover the glass opening. Though extremely light, the frame is far stronger than is required for lifetime service. Screen and frame cannot rust or corrode and will not stain woodwork or masonry. Screens are supplied in wire brush satin finish. They may be painted to match interior decorations.

Lupton Screened Casements are offered in two standard grades—the new Master Casement announced on the page opposite and the Screened Residence Casement illustrated here. The Screened Residence Casements, equipped with fine hardware and all-aluminum screens are lower in cost than previous Lupton casements with the former less convenient screens and equivalent hardware. No other low-cost steel casement offers the superior hardware, all-aluminum screens and the simplicity and convenience of Lupton Screened Residence Casements.

Write to David Lupton's Sons Company, Philadelphia, Pa. for the booklet "Screened Casements—by Lupton".

*The new Lupton Screened Casement—as simple in operation as in design.*

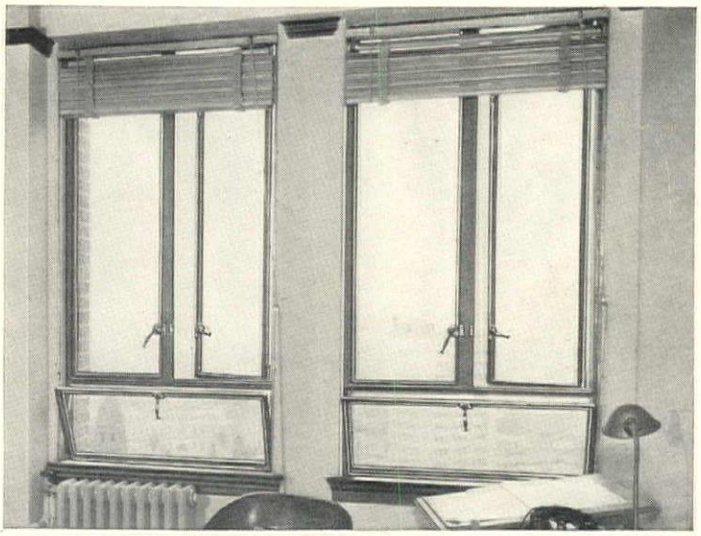
*Screens can be inserted or removed without disturbing shades or draperies.*

# Lupton Steel Windows

# *announcements:*

## 2

### THE MASTER CASEMENT OF A NEW HEAVIER SECTION—WITH A COMPLETE COMPANION LINE OF OFFICE AND INSTITUTIONAL WINDOWS



*Lupton Combination Window—one style in the new line of windows of heavier section that Lupton has developed for office and institutional use.*

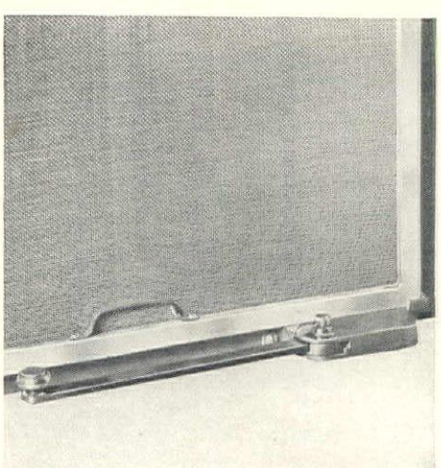
FOR fine residences and apartment houses, Lupton has created the new Master Casements of somewhat heavier section than the Residence Casements pictured on the opposite page. The Screened Master Casements have the same graceful, all-aluminum screens, the new Locking-Latch and Under-screen Operator, and the simplicity and convenience of the Lupton Screened Residence Casements. The hardware has a coin-bronze finish instead of the natural gray of nickel-zinc alloy employed on the Residence Casements

The same new rolled steel sections have been used to create a complete, new line of office, school, hospital and other commercial and institutional windows. All standard types of windows with side-hinged or projected ventilators in eleven styles and a wide variety of sizes are available to fit all desired window openings. Send for new catalogue of Lupton Master Casements.

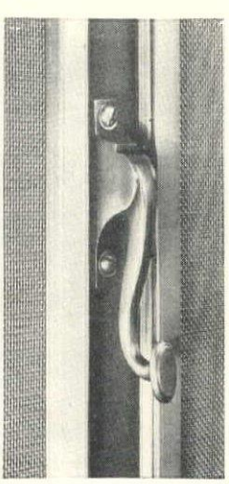
*Striking proof of the strength of the extruded aluminum screen frame.*

*Two more important announcements!*

In the next issue of this magazine, Lupton will announce two other notable achievements. One is the new "Georgian" window by Lupton (double hung); and a new Lupton service that will save the architect an incalculable amount of time and expense.

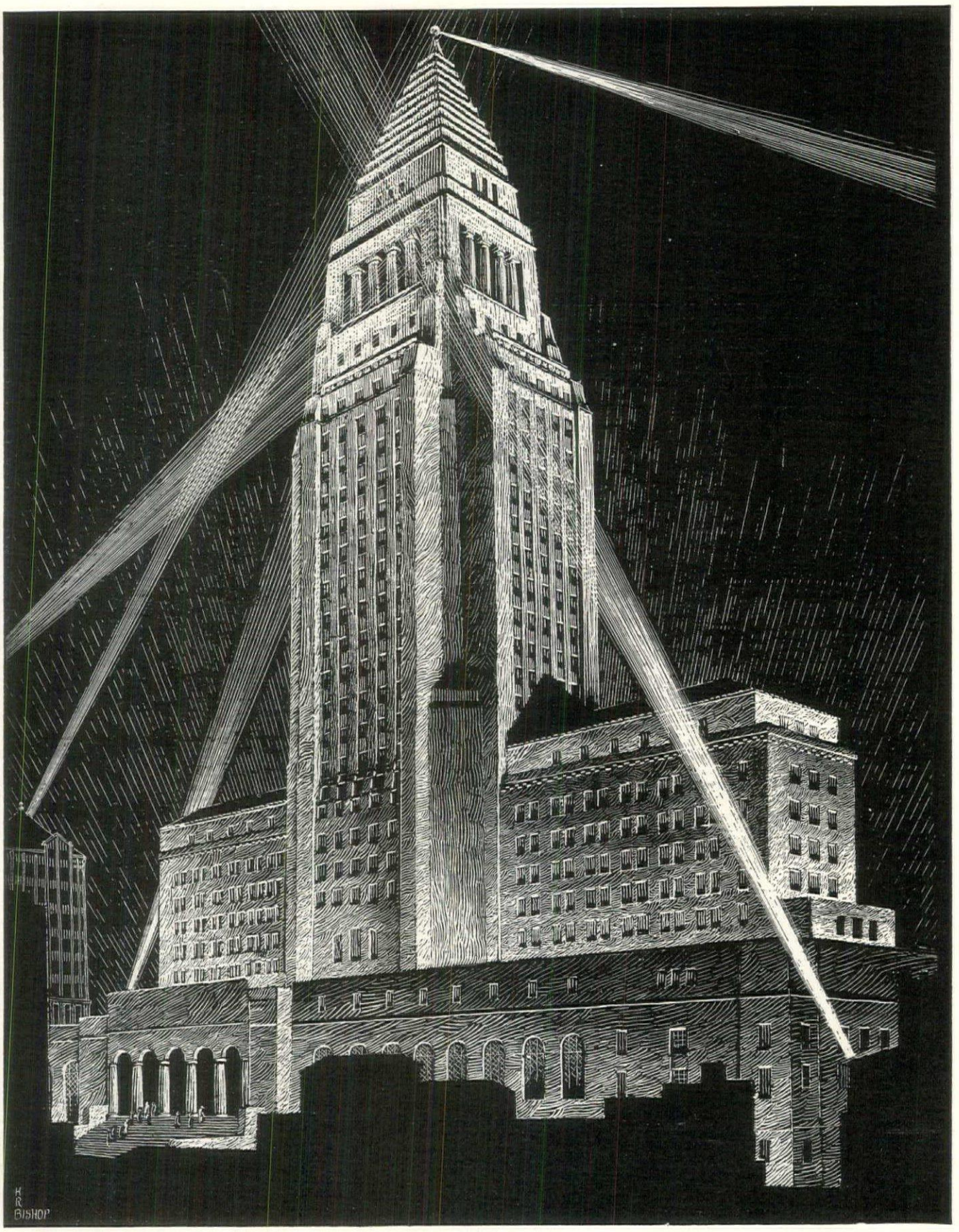


*The new Lupton Under-screen Operator opens or closes the casement and locks it securely and silently in any position.*



*Set in the window frame, the Locking-Latch releases or locks both casements.*

DAVID LUPTON'S SONS COMPANY
PHILADELPHIA, PENNSYLVANIA




**LOS ANGELES CITY HALL • ALLIED ARCHITECTS • LOS ANGELES, CAL.**

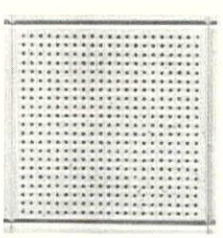
**PLANNED WATERPROOFING: A separate division of the specifications, covering all requirements for waterproofing, dampproofing, caulking, etc., will assure maximum effectiveness per dollar expended. MINWAX offers a complete service. See Sweet's.**

MINWAX

A BIT of California's own beauty and warmth was instilled by architects Parkinson and Parkinson in the colorful Acousti-Celotex ceiling of the First National Bank, Beverly Hills.

Acousti-Celotex sound absorbing tile was used throughout—in the banking, conference, and directors' rooms; in the safe deposit lobby, booths, passages, and telephone room.

There is no acoustical tile quite like Acousti-Celotex . . . it alone can be *decorated repeatedly with any kind of paint* without loss of acoustical efficiency. The Celotex Company, 919 North Michigan Ave., Chicago, Illinois. In Canada: Alexander Murray & Co., Ltd., Montreal. Sales distributors throughout the world. Acousti-Celotex is sold and installed by Acousti-Celotex contracting engineers.

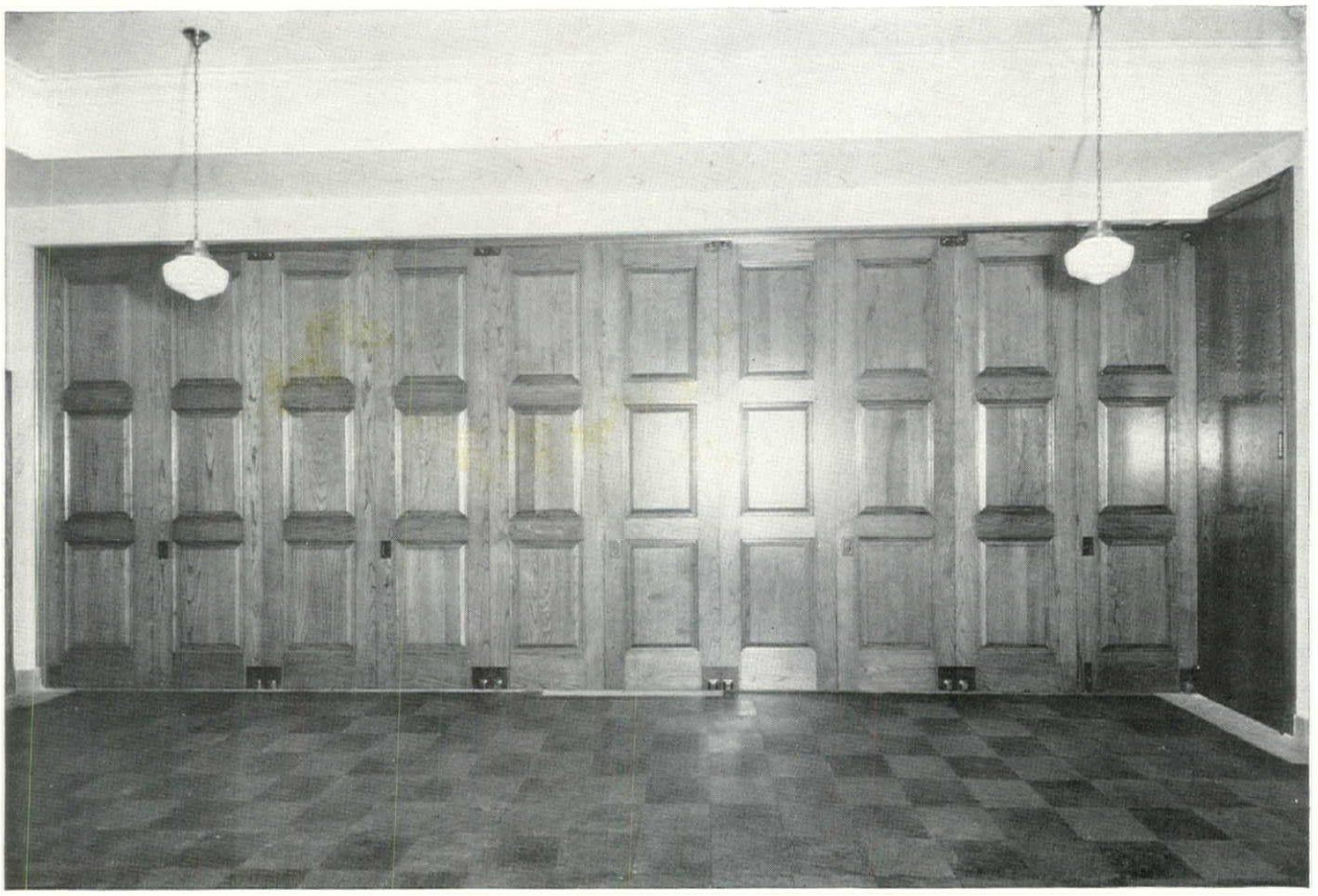


*Acousti-Celotex comes in single, finished units. They are quickly applied to ceilings and walls in new or old buildings.*

**ACOUSTI-CELOTEX**

FOR LESS NOISE—BETTER HEARING

The words Celotex and Acousti-Celotex (Reg. U. S. Pat. Off.) are the trademarks of and indicate manufacture by The Celotex Company



*Second Presbyterian Church, St. Louis, Mo.*
*Architects: La Beaume & Klein, St. Louis, Mo.*

# HANDSOME FOLDING WALLS

## THAT ARE ALSO FLAWLESS IN PERFORMANCE

Circle A Folding Partitions are built on sound engineering designs to give year after year of trouble-free performance. They operate with unequalled smoothness. Quietfold and Standardfold are overhead supported—require no floor track—and remain straight and true for the life of the installation. Pairfold type operates on a floor track and has an especially rigid construction to withstand the vertical stress that every floor-supported door is subject to.

Any of the three types are finished in the finest of panelled surfaces—cabinet work that is outstandingly beautiful—or in canvas finish for service where panelled walls are not required. Insulated or non-insulated construction. Throughout, the hardware is of finest quality and most durable construction. All three types are installed by Circle A Engineers and guaranteed against faulty operation or construction. Write for new file-size catalog.

Circle A Products Corporation, 650 S. 25th Street, Newcastle, Indiana. Also manufacturers of: Circle A Rolling Partitions, Sectional Partitions, School Wardrobes, Portable Wood or Steel Bleachers, Portable or Permanent Steel Grandstands.

**CIRCLE A FOLDING PARTITIONS**

*Quietfold . Standardfold . Pairfold*

# BOOK FORUM

**MODERN ARCHITECTURE. By Frank Lloyd Wright. 115 pages, illustrated, boards. Price $4.00. The Princeton University Press, Princeton, N. J.**

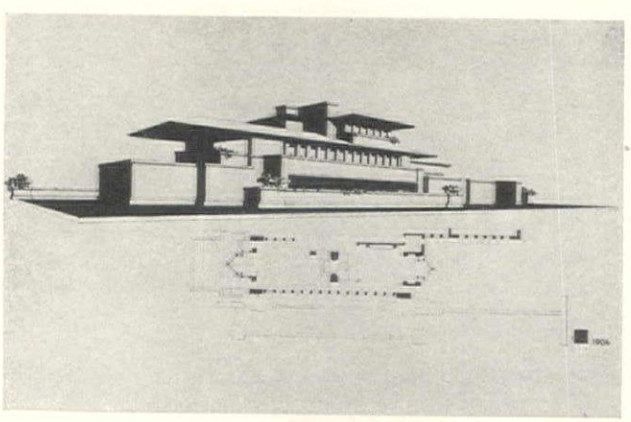
FRANK LLOYD WRIGHT has had so many commentators recently, both competent and incompetent, that it is a pleasure to read what the man actually thinks himself. Having been "taken up" by the young intelligentsia, his views have often been distorted by clever phraseology into theories which he himself would scarcely recognize. It is the penalty of being known as a leader of modern architectural thought. Modern architecture has so many illegitimate offshoots that no man would welcome recognition as the father of them all.

Fearing to fall into the same error of misinterpretation which marks some Wright champions, no attempt shall be made here to translate his opinions. Despite his apology that he speaks better "with a hod of mortar and some bricks," he presents his theories clearly and interestingly. He does not mince words, nor conceal their meaning with circumlocution. In one chapter, for instance, entitled, "The Cardboard House," he relates in detail the principles underlying the design and construction of the houses he built in 1893, "dedicated to the Ideal of Organic Simplicity." There were nine points, nine motives rather, which guided him in working out his plans, including reduction of the number of necessary parts and rooms to a minimum, association of design with the site by emphasis of the parallels, elimination of major divisions in the house, getting unwholesome basement above ground, harmonizing fenestration, substitution of different materials for one material in construction, incorporation of heating, lighting and plumbing to become constituent parts of the building, incorporation of furnishings as organic architecture, and elimination of the decorator. So far as words are able to express it, that seems to be Mr. Wright's theory of home building.

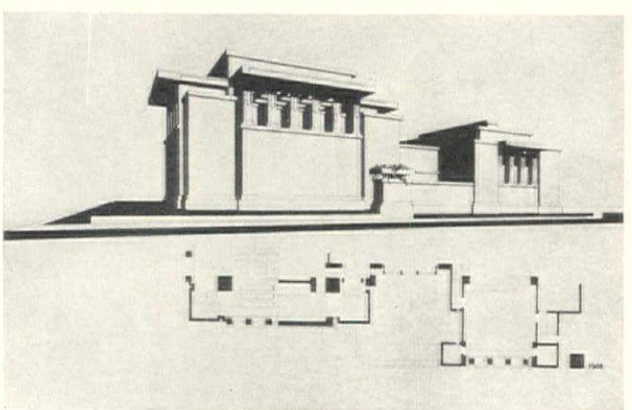
Mr. Wright's other theories embrace a wide range of subjects, as indicated by the titles of the chapters: Machinery, Materials and Men; Style in Industry; The Passing of the Cornice; The Tyranny of the Skyscraper, and The City. These were all lectures delivered at Princeton University, lectures, according to the preface by E. Baldwin Smith, to which students flocked in increasing numbers, and from which they returned filled with the spirit of organic architecture. From the printed words, it is evident that he has the quality of inspiring his readers to think—either to think with him or think against him. Mr. Wright offers no middle ground in anything that he says.

One delightful feature of the book is the quotability of so many of the phrases, which, by the way, have undoubtedly helped to establish him as one of the great thinkers of the time. Some of them are startling in their apparent perplexity; for instance, "Chewing gum, the rocking chair, and picturizing are habits valuable to modern art." Or, "A matter of taste is usually a matter of ignorance." Here is another, "Death is a crisis of growth." Interwoven in the pattern of his thinking, they are fraught with meaning, but lifted bodily from the related text, they are apt to appear as Mr. Wright likes to appear—enigmatic.

Regardless of the attitude which one holds in regard to Mr. Wright, the book will be found interesting by anyone who is at all concerned with the development of architecture in this country. It represents, as accurately as words can, modern architecture from a point of view that is providing many with inspirational vistas.



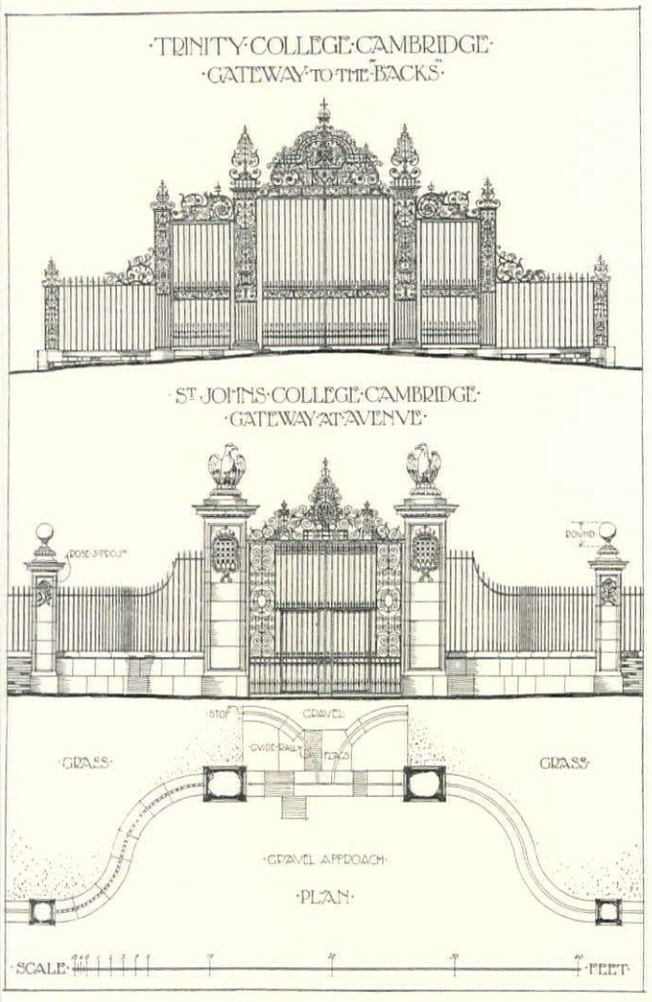
An illustration from Mr. Wright's book, showing a house he designed in 1906, embodying his principle of horizontals



Another house by Mr. Wright, this one designed in 1908. Here again we find him dispensing with vertical feeling

**YEAR BOOK OF THE BOSTON ARCHITECTURAL CLUB, 1930. Introduction by Charles D. Maginnis. 112 pages, 10½ x 13½, illustrated, boards. Price $5.00. Boston Architectural Club, 16 Somerset Street, Boston, Mass.**

THE 1930 Year Book, in its 108 pages of plates, illustrates examples of metal work of various kinds. The new importance of metal work in architectural design makes this especially timely. Among the metals represented are, of course, iron and bronze and the newer metals, monel, aluminum and chromium. The examples of old metal work are selected from sources not found usually in architects' libraries. These old examples, regardless of design, are valuable in illustrating the technique employed in their production which will always retain its beauty and interest. The modern work illustrated is a good representation of our best practice. The details of modern work are a valuable part of the presentation. This is a usable book in every architectural office. Below is an illustration from it.




**CLAY PRODUCTS MANUAL. 282 pages, 4¼ x 7¼, illustrated, leather. Price $3.00. Clay Products Institute of California, Los Angeles, California.**

THE importance and value of clay products in connection with building work is known. The collection of authoritative information in one manual contributes to the convenience of architects, engineers and contractors. The chapters are devoted to mortar, brick, load bearing tile, partition tile, terra cotta, roof tile, chimneys and gas vents, sewers, drain tile, general data and building code regulations. The materials are described and specifications for their use and working details illustrated. It is a comprehensive treatise on the subject.

Riverside Church
New York City

Pelton, Allen & Collens
Architects

The Narthex ceiling as well as many of the other ceilings in the Riverside Church is constructed of Timbrel tile vaults . . . all masonry . . . and designed with a soffit course of Akoustolith sound-absorbing artificial stone to match the color and texture of the adjoining stone work.

# R. GUASTAVINO COMPANY

**40 COURT STREET, BOSTON, MASS.** **225 WEST 34th STREET, NEW YORK, N. Y.**

R. GUASTAVINO CO., OF CANADA, Ltd., New Birks Building, Montreal, P. Q.

**GARGOYLES, CHIMERAS, AND THE GROTESQUE IN FRENCH GOTHIC SCULPTURE. By Lester Burbank Bridaham, with preface by Ralph Adams Cram. 208 pages, 9½ x 12½, illustrated, cloth. Price $18.00 net. Architectural Book Publishing Company, Inc., 108 West 46th Street, New York.**

IT must have been great fun for those medieval stone cutters to carve the gargoyles and chimeras that are so beautifully illustrated in this work. That architecture is a representation of the social and economic characteristics of the current times is demonstrated in these illustrations. It is not conceivable that a contemporary architect would incorporate in his designs those old time griffins and monsters that were very real mentally to people of that age. One note, however, does hold over to this day—"Blowing up the Purse"—representing a person with a hand bellows blowing up the other's purse, from the Misericorde at Presles. Illustrating exaggeration in money matters, it is decidedly reminiscent of the fall of 1929.

One thing noticeable in these illustrations is the fact that so many of these sculptures are incorporated into the structure. The gargoyle has now lost its purpose to us as a water spout because we have a better system of roof drainage, and the monsters and religious terrors have been relegated to the limbo of the Dark Ages. This work has an interest to others than architects, especially to those who are conversant with the history and customs of the middle ages.

A chimera from the Palais de Justice, Beauvais, France. One of the interesting illustrations from the book on "Gargoyles, Chimeras and the Grotesque in French Sculpture"

**ANNUAL OF AMERICAN DESIGN, 1931. Edited by M. D. C. Crawford and C. Adolph Glassford. 176 pages, 9 x 12, illustrated, cloth. Price $7.50. Ives Washburn, Inc., 119 West 57th Street, New York.**

THIS is an interesting publication as it records the progress of the new schools of design in their efforts to make over America artistically. More than 300 engravings illustrate the work of the members of this organization, which includes practically every phase of industrial art and a dash of architecture. Of course, the element of beauty and appropriateness can be appraised by each individual, that is an inherent right, and the factor of economics is not involved usually. In other words, a good or an atrocious design of wallpaper, fabric or lighting fixture can be produced with the same cost, —there is no waste of capital. With architecture, however, it is different, because the building structure must be financially successful, if it is of the commercial income producing type.

The introductory chapter decries, and with much justification, the artistic and architectural "past" of America. After studying the "present" as illustrated in this work, one might be tempted to question its assumed quality. Merely being different is not a virtue and much of the work shown is certainly "different." All of the merits of the new school are definitely ascribed to the ideas and work of certain Europeans and Frank Lloyd Wright. It is freely admitted that the new movement is now in a transition period. This book shows the trend.

The 12 articles included are written by Lewis Mumford, Kem Weber, Paul T. Frankl, M. D. C. Crawford, Lee Simonson, Richard F. Bach, Frank Lloyd Wright, Hugh Ferriss, Norman Bel Geddes, M. F. Agha, Edward Steichen and C. Adolph Glassgold. This work is a record of the current American design of this particular school and as such should find its place both in the reference and the working library.

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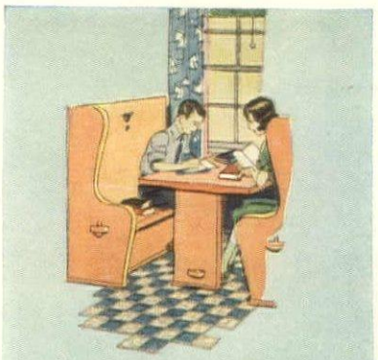
**SCHOOL BUILDINGS OF TODAY AND TOMORROW. By W. K. Harrison and C. E. Dobbin, edited by R. W. Sexton. 233 pages, 7 x 10, illustrated, cloth. Price, $5.00. The Architectural Book Publishing Co., New York.**

AN architect, a superintendent of school buildings and an architectural editor combine to make this book on secondary and high schools one of practical and theoretical value. Discussing first the general considerations in designing a modern school, the text touches on modern European schools, and considers thoroughly the problems of standardization.

While most of the material has been gleaned from New York schools, of which Mr. Dobbin is deputy superintendent, the attempt is made to derive general applications from specific examples. Under the subject of standardization, the three divisions of the so-called lower education are treated—secondary schools, junior high schools and high schools.

The most valuable sections of the book are those dealing with the standardization of types and the standardization of architects' details. New York's three types of schools are outlined and explained with an abundance of photographs, plans, elevations and details. The last score or so pages of the book are given over to specific details, showing the result of twenty-five years' effort to standardize the work in all the New York schools.



Bright tiles of blue and cream seem especially suited for the breakfast-nook. The pattern used here is "ANTIBES"—Sealex Linoleum No. 7313.

# New and interesting development in floor design

Mrs. Wright selected "MAPLETON"—an exclusive new embossed effect for this sun-porch. Observe the beveled edges and interesting shapes of the tiles. Sealex Linoleum No. 2907.

***Agnes Foster Wright,*** *famous New York Interior Decorator, whose lovely sun-porch creation you see at the left.*

At the left, we present for your approval a totally new type of embossed inlaid linoleum. The unique feature of this new Sealex product is that there are no mortar lines. The Karnean marbling is actually visible in the depressions—as if each tile had been slightly beveled on the edges. A very unusual and interesting effect . . . now offered for the first time in a variety of artistic patterns and colors.

It is impossible to reproduce the appearance of this new embossing in a small scale illustration. The lines which look like mortar joints in the picture on the left are merely lights and shadows in the depressions.

This new linoleum possesses all the standard Sealex advantages. The Sealex Process makes it much easier to clean than old-fashioned linoleum. A Sealex Floor is insulation—helps to hold down coal bills; unlike other flooring, it never requires scraping, varnishing or painting.

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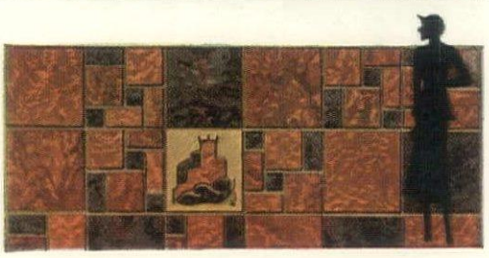
Left—"DELPHI" (No. 2952) is one of the six new Veltones. No tiles, no mortar lines, no repeats of any kind. When laid, Veltone is apparently seamless—an unbroken flow of mellow color from wall to wall. Below—"CASTLE" (No. 3534) is a rich, embossed pattern with novel insets.



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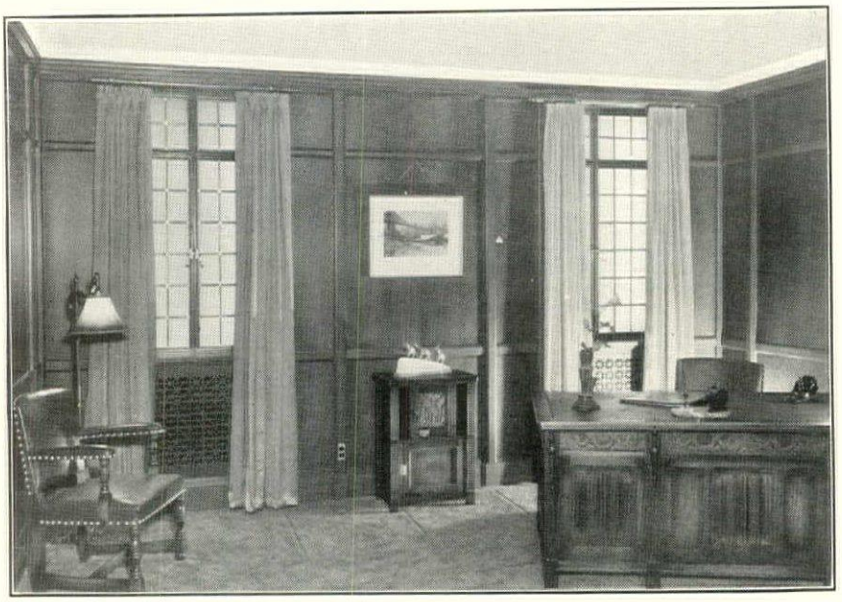
*Name*..... *Address*.....

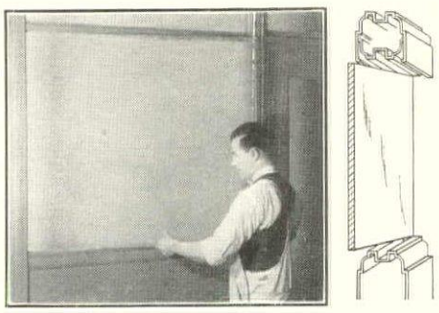
[ This is No. 5 of a series of advertisements setting forth things to look for when considering partitions ]

# TELESCOPIC GLAZING » » » »

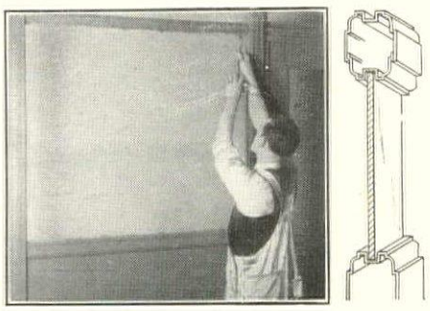


This photograph illustrates how outside walls are made to harmonize with interior partitions. Note the attractive window encasements and ornamental radiator enclosures.

GLASS LIGHTS are easily and quickly installed or replaced in Hauserman Partitions. A telescopic glazing member slides up to admit the glass, then slides down to hold it securely in place.



First putty is palmed into the grooves, then it takes only a moment to slide the glass into position.



After the glass is inserted, a simple downward pull on the telescopic member retains it in place. The putty is scraped smooth, the glass is cleaned, and the job finished.

There are no glass stops to remove or become loose, no screws to mar the appearance of the partition or to catch threads from the cleaners' cloths. Removing a light of glass from a Hauserman Partition panel is easily accomplished in four minutes. Doors are glazed by sliding the glass through a slot-way in the top of the door.

Hauserman Partitions for office and plant subdivision meet every industrial requirement.

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# HAUSERMAN MOVABLE STEEL PARTITIONS

# NOTICES AND EVENTS

## WILLIAM A. DELANO ELECTED TO ACADEMIE

WILLIAM ADAMS DELANO of New York has been elected a corresponding member of the Academie des Beaux Arts Institute of France. Mr. Delano, a Fellow of the American Institute of Architects, received his diploma from the Ecole des Beaux Arts in Paris in 1903.

He is a member of the National Fine Arts Commission and of the Board of Architectural Consultants for the development of the Triangle Area in the City of Washington, and a past president of the New York Chapter of the American Institute of Architects.

## COURSE IN ITALIAN ARCHITECTURE

A SUMMER course in Italian architecture, prepared especially for visiting foreigners will be given in Rome, Italy, from July 5 to September 5, according to an announcement made by the Italian Tourist Information Office at 745 Fifth Avenue, New York City.

Although the courses will be given in Italian, the lectures will be profusely illustrated by lantern slides and written summaries of each lecture, in English, French or German, will be distributed before the lecture to students unfamiliar with the language.

Courses will be given in, The Archæology and Art of Ancient Rome; Italian Architecture in the Middle Ages and the Renaissance; Technique of Roman Construction; The Science of Building Applied to Anti-seismic buildings, and Italian Town Development, Ancient and Modern.

In addition, lectures on the following special subjects will be given:—Italian Scenography; The Architectural Character of Italian Art; Natural Materials in Italian Architecture; Bramante, Barozzi and Palladio; The Italian Garden and the Workmen's Housing Problem in Italy.

## ECONOMIC CONFERENCE

STEVENS Institute of Technology and Columbia University Engineering Alumni are perfecting plans for an Economic Conference for Engineers to be held late this summer at the Stevens Engineering Camp in northern New Jersey. The plans include a two-fold program—one, a course of lectures and seminars on some of the fundamentals of finance in engineering; and the other, a series of round table discussions on "The Business Cycle" by men of national reputation in the field of economics.

## LE BRUN SCHOLARSHIP WINNERS

BRUNO JOHN BASIL, Brooklyn, New York, was announced winner of the 1931 Le Brun Traveling Scholarship. Mr. Basil is employed in the office of Cass Gilbert. First honorable mention was awarded to Carl Bertel Lund, New York, who is employed in the office of John Russell Pope. Second, third, and fourth honorable mentions were given to Ralph Aubrey Jeffers, Elkton, Maryland; Simon Breines, Brooklyn, New York; and George Daub, Forest Hills, Long Island, respectively.

The drawings were for a working boys club. Judges were Chester H. Aldrich, chairman, Eric Gugler, Frederic R. King, and Oliver Reagan.

## ECOLE DES BEAUX-ARTS REUNION

SEVENTY architects, composed of former students of the Ecole des Beaux-Arts and members of the A.I.A., will sail this month for France to present to the Ecole a commemorative flagpole with a bronze base designed by Frederic C. Hirons. Kenneth M. Murchison, New York architect, has been largely responsible for the organization of the trip, and will probably act as spokesman for the group at the presentation of the flagpole. He was recently made a Chevalier of the Legion of Honor. The party will sail on the "American Shipper" on May 21 and will be back in New York on June 20.

## AUDAC EXHIBITION

AN exhibition of modern decoration and design by the members of the American Union of Decorative Artists and Craftsmen is to be held at the Brooklyn Museum, in Brooklyn, New York, beginning May 3. The exhibition will include house, office, and apartment furnishings, textiles, typography, and other categories of applied art.

Among the exhibitors will be Frank Lloyd Wright, Rockwell Kent, Lee Simonson, Joseph Urban, Paul T. Frankl, Kem Weber, Donald Deskey, Wolfgang and Pola Hoffman, Alexander Kachinsky, William Harrison, Gilbert Rohde and many others prominent in the field of architectural, decorative and commercial art.

THE
ARCHITECTURAL
# FORUM

VOL. LIV, No. 5 MAY, 1931

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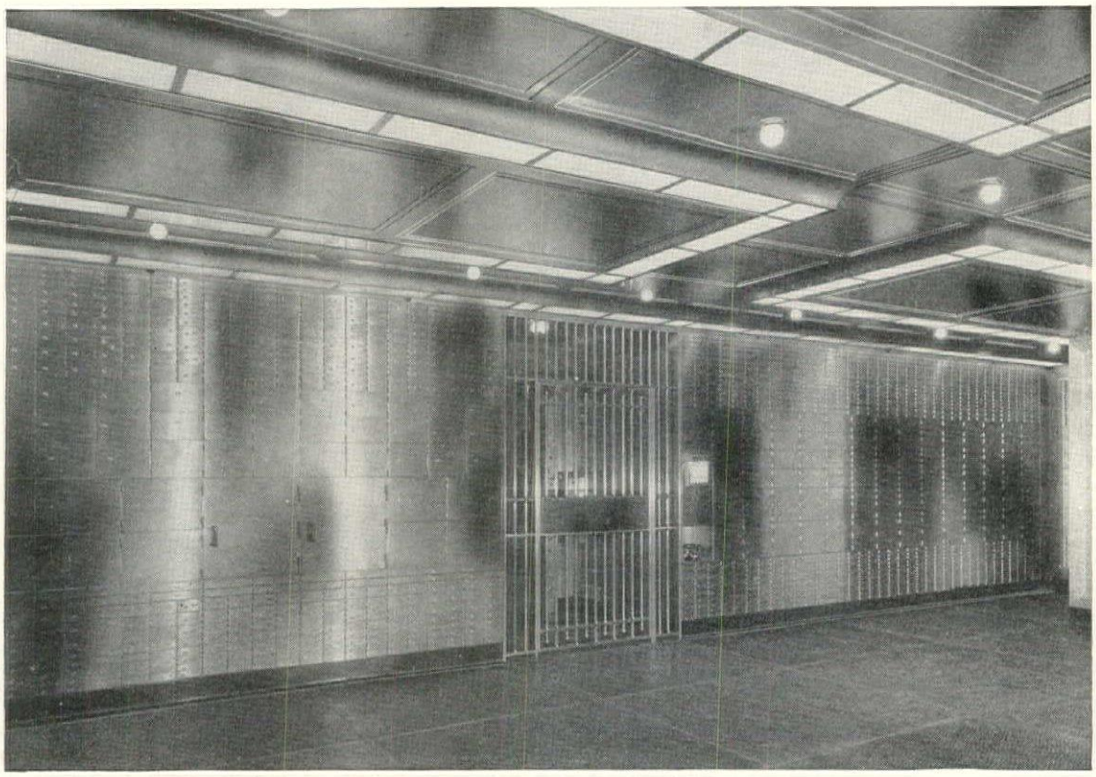
### PART II—ARCHITECTURAL ENGINEERING AND BUSINESS





THE ARCHITECTURAL FORUM is published monthly by National Trade Journals, Inc., 521 Fifth Avenue, New York, Wheeler Sammons, Chairman of the Board; H. J. Bligh, President; E. J. Rosencrans, Treasurer.
Yearly Subscription, Payable in Advance. U. S. A., Insular Possessions and Cuba, $7.00. Canada, $8.00. Foreign Countries in the Postal Union, $9.00. Single Copies: Quarterly Reference Numbers, $3.00; Regular Issues, $1.00. All Copies Mailed Flat. Trade Supplied by American News Company and its Branches.



*Monel Metal was used for all interior trim of this vault in The Canadian Bank of Commerce, Toronto. Architects: Darling & Pearson, Toronto. Consulting Architects: York & Sawyer, New York. Fabricators: Goldie & McCullough Co., Ltd., Galt, Ont., and J. J. Taylor, Ltd., Toronto.*

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*Courtesy of Macbeth Galleries*

THE NEW YORK STOCK EXCHANGE

FROM AN ETCHING
BY LOUIS RUYL

THE
ARCHITECTURAL
FORUM

VOLUME LIV NUMBER FIVE

MAY, 1931

# THE LOS ANGELES STOCK EXCHANGE

SAMUEL E. LUNDEN, ARCHITECT
JOHN AND DONALD B. PARKINSON,
CONSULTING ARCHITECTS

IT is not difficult to rationalize the planning and design of a building *after* the last workman has departed and the key is ceremoniously handed to the owner. It is often done; and many have been hailed as prophets who, shortly before, were hardly conscious of good reporting. More unusual, however, is a preliminary analysis, a unity of conception, and a sustained effort toward a rationale of the finished whole. It is admittedly a dangerous thing to claim such a procedure today; for any building is, upon completion, immediately caught up in a welter of architectural controversy and drawn down into the vortex of critical annihilation.

## THE FIRST ANALYSIS

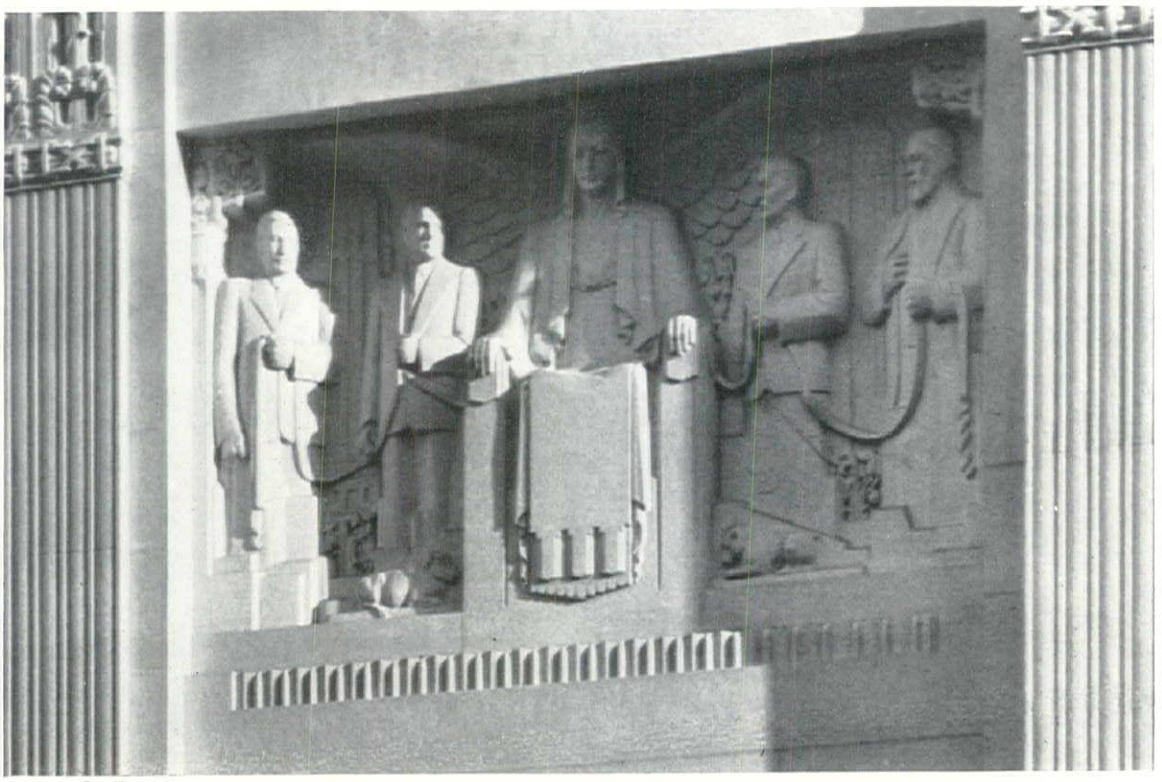
It seems beyond the possibilities of reasonable human effort to attain an architectural scheme of any coherence without first establishing a standard of design and planning principles as a basis from which a logical development may spring. In the Los Angeles Stock Exchange Building a two-fold standard was set up; first, a structural and mechanical provision to house most comfortably and efficiently an institution with an intricate and variable program of activity; second, the aesthetic expression of the physical and psychological characteristics of that institution. The development of a plan from these standards, their translation into a structure practical from all standpoints, was based primarily upon a thorough understanding of the business activities common to the organization concerned.

If a commercial enterprise may be said to have a general theme that pervades its entire organization, it would be logical to claim conservation of time as one of first importance to the business transactions of a stock exchange. Time, or the loss of it, means much on a trading floor, and during an active market may spell the difference between a heavy loss or a substantial profit. Throughout the plan this factor has been dominant. Space has been organized, equipment installed and various systems of communication and conditioning provided to meet every emergency and to eliminate, as far as possible, a disorganization of daily routine.

In design the building has been conceived as a unit of modern life, rooted, however, in the definite background of older customs, and, just as the temporal element influenced the space arrangement, so this attitude has had a bearing upon the appearance of the structure. The general mass of the building has shaped itself from the imposition of practical requirements. The detail has been executed as a further graphic expression of these requirements. Material, color, texture and form have been combined to symbolize the place of the Stock Exchange in the community, its intimate link with industry and commerce, and the abstract qualities of the organization.

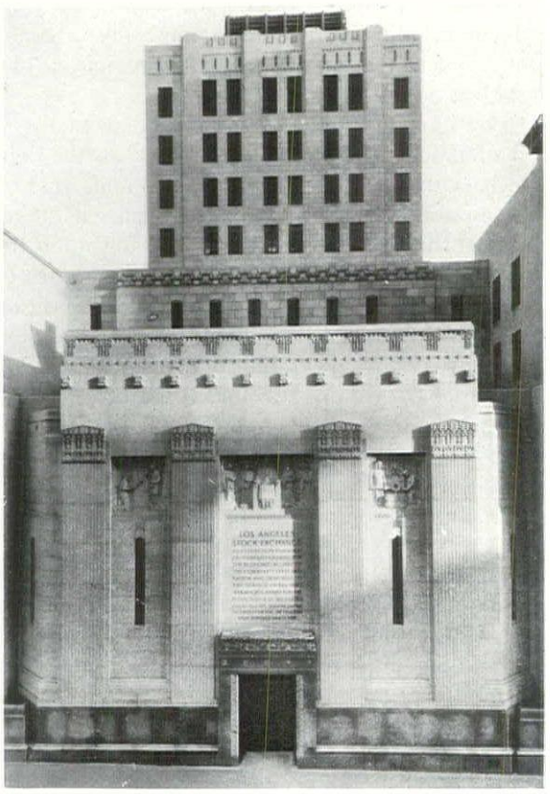
## ARCHITECTURAL STYLE

The design problem of the facade has been solved to present an indication of the purpose of the building, and to suggest the relative power and organization of the institution that it serves. Stability is expressed by the choice of the materials, granite and bronze, the first being the most durable of all building materials, and the second admirably suited to withstand the ravages of the elements.



*Putnam Studios Photos*

**The central panel on the facade which symbolizes the activities of the Stock Exchange. It was carved in place by Salvatore Cartaino Scarpitta, sculptor under the direction of the architect**



**Front elevation of the building, the character of which is derived from the qualities of the Exchange**

The quality of strength is shown in the use of simple and massive forms. Accuracy and precision are evidenced in the disposition of parts as well as in the decisive character of the ornament executed with as few accidents of hand and tool as possible. The single massive doorway and the narrow windows with heavy grilles are witness to the private and secure nature of the exchange. Over the entrance door interlaced stems express the inter-relation of the activities of the members of the organization. The ornament throughout the building is based principally on plant life, expressing only the essentials, life and growth. All traces of the actual plant forms which can be recognized by leaf or flower have, in keeping with the architectural style, been suppressed. The carved bosses in the upper part of the facade represent bundles of reeds, in ancient times the symbol of authority; and the pattern of the parapet suggests the battlements of a castle, the strength to resist assault.

The three carved panels in the upper part of the facade symbolize modern industry, the left being Research and Discovery, the central panel Finance, and the one at the right Production. The central panel, really representing the Stock Exchange, itself, has an interesting symbolism. The dominating figure is a personification of exchange, impassive alike to those who buy and sell. The

figure is seated on a throne on the base of which are carved the bull and the bear, current symbols of the rising and falling markets. At either side stand figures representing the men who finance research and production. The tape, a symbol of the physical activities of the exchange, passes through the hands of all three figures, while in the background rise office buildings. The whole is protected by the wings of the American Eagle. The panels, as well as all the other ornament on the facade, were carved in place. By this method it was possible to relate the progress of the ornament to the entire facade. Both designer and workmen were forced to realize that they were working on the surface of the building, not on an isolated block of stone, the result being a strength of execution impossible to achieve by any other method.

In an institutional building of this character, it is possible to maintain a consistency in design that is typical of the organization. First, the impression created by the exterior is one of dignity, security, and integrity. There are no false forms, no flimsy ornament, no shallow prettiness that is often characteristic of the strictly commercial building. This same effect is carried through in the sculptural ornament both on the interior and exterior. Even the choice of such a revered material as bronze connotes the conservative quality usually associated in thought with financial institutions.

## THE BASIS OF THE PLAN

But more important than this expressiveness of the purpose and character of the institution is the completeness with which the problems of housing its specialized activity were solved. In a stock exchange, where decisions of an instant, involving huge sums of money, are being made constantly, where rapid communication is an actual element in the success of the business being conducted, the architect's responsibility for the proper functioning of his building as a machine is doubled. Aided by ingenious mechanical equipment, the plan of this stock exchange does conform to the pattern of activity, and so fulfills its real purpose as a building.

The planning problem divided naturally into three general types of units.

1. Service space, which may be expanded to include the space for mechanical installations, the vault, elevators and the necessary public lobbies and concession space on the ground floor.
2. Trading space which includes the board room and all other spaces used in direct connection with it, and—
3. General work space for the clerical force, legal staff and the various experts concerned with the business of the exchange.

The development of the general plan grew from a consideration of the relative importance of these units and their placement toward the end of the greatest ease and flexibility in business routine. The emphasis on this point is intentional. Each part of the project was established in detail to provide the most efficient space in which to work, and in every case the type of activity determined the plan, equipment and finish of the space involved.

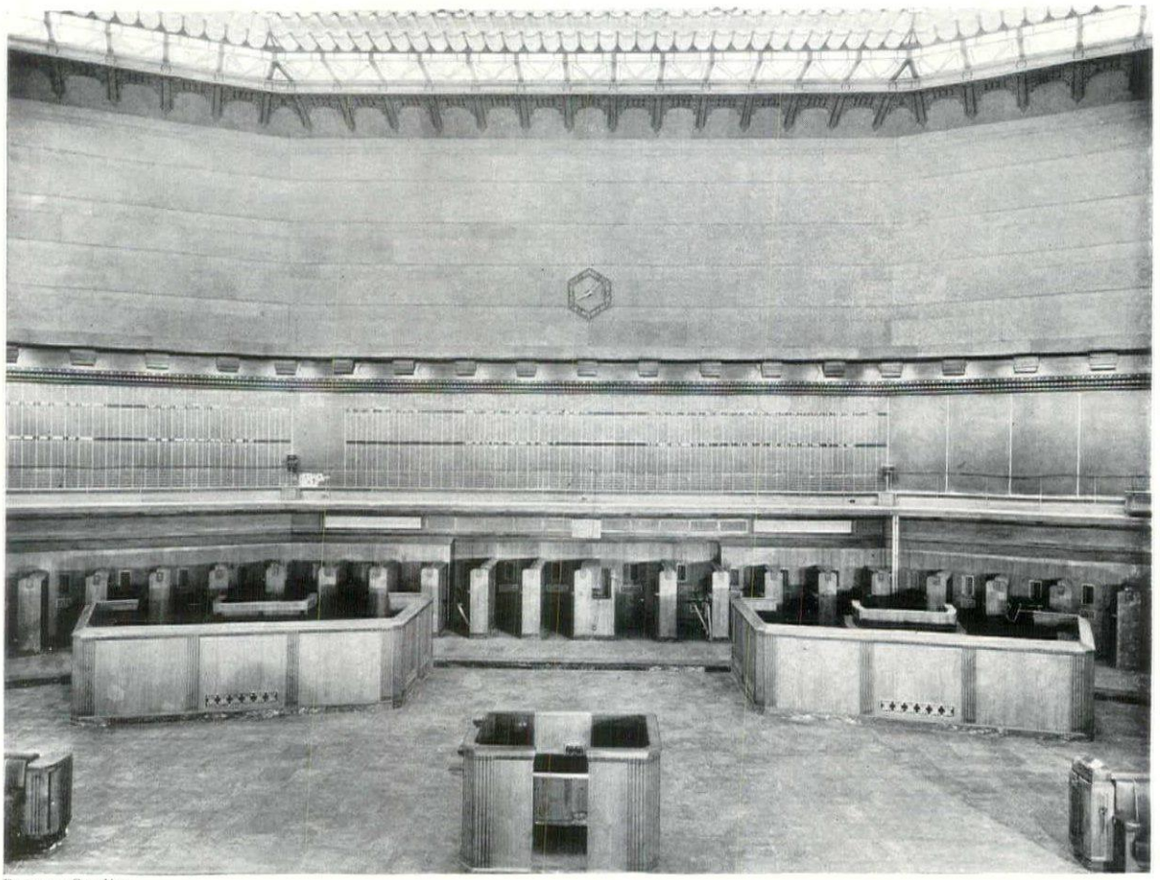
## THE FOCAL POINT

The obvious center of the entire scheme had to be the board room, where the major business of the exchange is conducted. The area required for trading and the size of the plot approximating each other, it was essential to devote practically an entire floor to the board room, including, of course, the comparison room, the floor manager's office, toilet facilities, and a lounge. The intensely swift pace at which business is conducted on the floor of an exchange practically dictated the character of the room. It had to be free from columns, of sufficient height to aid in the absorption of sound, in the even distribution of light from a comfortable height, and in the convection of conditioned air without setting up a noticeable current. It was further necessary to provide a quotation board that would be readily legible from almost every spot in the room. Of the three possibilities, the circular, oval and polygonal plans, the last because of its adaptability to other requirements of that floor, was decided upon.

Easy access to the street, a central position in relation to other dependent departments, and the limitations of structural design demanded that the board room be situated on either the ground or the first floor. Choice of the former was vetoed because telegraph offices, entrance lobby and elevator corridor utilized too large a percentage of the total area of that floor. In addition, location on the first floor permitted the most direct communication with the clearing house above as well as with the telegraph offices on the ground floor.

## DEPENDENT FACILITIES

With the location, size and character of the board room determined, the problem of rapid communication between it and other departments, and between the various booths in the board room, asserted itself as the determining factor in the grouping of departmental units about the trading floor. Because it is almost an integral part of the board room, the comparison room was the first unit to be considered. Of the three available areas behind the truncated ends of the octagonal board room, one at the rear was selected, leaving the remaining two similar sections to be used for



*Putnam Studios*

**The board room, ticker transmitter in the foreground, trading posts on either side in rear, members' booths behind, board above. The edge of the ceiling light panel may be seen, and below it the sound-proofed walls**

toilet facilities. Its location there became all the more plausible when the central pneumatic tube station was located directly beneath it on the ground floor. Space also had to be provided for the floor manager's office, whose constant attendance on the floor or in close proximity to it, was essential for smooth running of the institution's organization.

The intensive activity on the floor and the need for a quiet space off the floor for hurried business conferences made it essential to provide space for a lounge on this level. One other small but important provision had to be made—for outside telephone communication.

Three other requirements demanded locations as near the board room as possible—telegraph offices, the clearing house, and the tabulating room. Since only the first of these required easy access to the street, and since there were other departments which had prior claims to a ground floor position, it was decided to place the clearing house and the tabulating room on the floor above the trading room, leaving abundant space for future expansion of the clearing house.

The ground floor plan practically worked itself out because the requirements were so definite. In addition to the three telegraph offices, locker and toilet rooms for employees, members' locker room, and a central station for the pneumatic tube system were the requisites that shaped the plan. The logical position of the telegraph offices near the street as well as near the board room has already been mentioned. Since location of the locker rooms on the same floor as the board room was prohibited by lack of space, the ground floor became the obvious place. Members and employees were thus able to reach the trading floor, after doffing their coats, without using the elevators, which meant a considerable saving of space in that two high speed elevators became adequate to serve the rest of the building. While they did not influence the plan of the building, it might be mentioned that sufficient area was left to provide for a lunchroom, a barber shop, and one or two other concessions, which, while they produce revenue, justify themselves mainly by the convenient service they offer to members of the exchange.

Besides the necessary service areas, the basement had to contain a safe deposit vault. Of the other related departments, which make up an exchange and yet which are not influential in the

actual conduct of business, the printing department seemed to adapt itself better to a basement location than any of the other departments. The remainder were of such character that they could be distributed through the other floors in the building, leaving two floors for future expansion, with possibly a recreation center on the top floor.

While under ordinary circumstances, a pneumatic tube system and the telephone system are classified strictly as equipment, their importance in the planning of a stock exchange is such that they had a significant bearing on the plan. Both of these are discussed fully in the second section of this issue, but a brief outline here is necessary to present a complete analysis. The telephone system consists of a P. A. B. X. with P. B. X. switchboard on the third floor, and the main frame and switching equipment, etc., in the main terminal room in the basement. Each member's booth is equipped with a telephone turret board of ten station capacity, providing direct dial connections with other booths as well as with home offices outside the building. Light signals are used instead of bell signals.

Each booth is equipped with pneumatic tube connections to all trading posts, the comparison room, and to all three telegraph offices. From the comparison room, there are connections to all trading booths and to the clearing house. In addition, all departments have tube communication direct to the central station on the ground floor.

## THE BOARD ROOM

Although a general analysis of the board room plan has been given, it is of such an interesting and unusual character that a more detailed description will be helpful. The room is widest at the floor level since the board itself overhangs the walls below it, and the walls above it step out and gradually slope toward the ceiling, pitching in sharply near the large ceiling light panel. A continuous band of hyloplate, 8 feet high, carries around the room as an integral part of the wall design. This gives ample space for present quotations and allows for maximum expansion without the necessity of alterations in the design or structure of the room.

Just below the board on the north and south walls there are two galleries for listing clerks. The galleries are 2 feet 8 inches wide, with a bronze cable attached to verticals to form a protective railing without obstructing the view. They are reached by bronze ladders. A track is sunk in the floor as a guide for a special movable stool, which contains drawers for chalk, cleaning paraphernalia, etc. Two tickers are located on each gallery. The galleries and board are so constructed that they can be replaced by an automatic board whenever such a device shall have been perfected. Translux screens, call money rate panels, and annunciator panels are placed under the gallery where they are shielded from general illumination of the room.

Surrounding the trading floor are sixty-four member booths, 4 feet deep, 3 feet 8 inches wide, and 5 feet high. In each booth is a counter 15 inches deep and 3 feet 10½ inches long, under which are two foldaway stools. A switchboard is located directly over the desk with ample facilities for communication. The annunciator board is placed in the upper right-hand corner of the booth with the time stamp directly below it. On the wall at the end of the booth, there are five pneumatic tube sending stations, with the necessary carriers below. Provision is made for trading slips, records, etc., in pigeon holes and drawers of the counters.

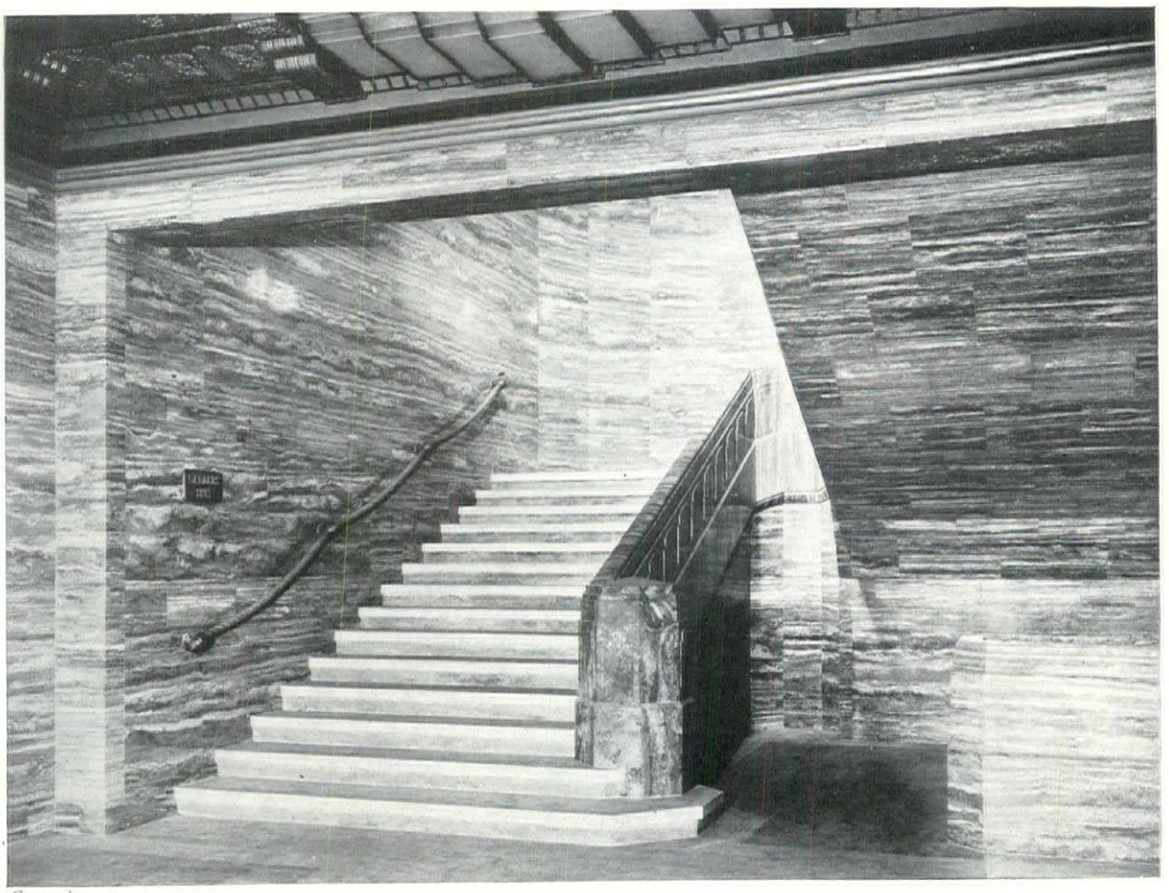
In the center of the floor are four large trading booths, each one a "U" shaped enclosure 4 feet 9 inches high, 16 feet wide, and 9 feet deep. A push button annunciator box is located at the center of the front enabling members to call their traders. Five dealers are situated in each booth, each having a special box built into a 14-inch counter that runs around the inside of the booth. Within each booth is a smaller "U" shaped desk containing pneumatic sending and receiving stations, time stamps, and telephones.

A booth is provided in the center of the floor for transmitting the quotations. Trading slips are stamped here and then placed on a moving belt which passes in front of the ticker transmitter operator, and in front of the announcer who is in direct communication with the board operators. Two long, heavily cushioned seats, and a drinking fountain are also located on the floor.

Above the board on the two sides of the room are large clocks, electrically controlled, with which the time stamps are synchronized. The warning, opening and closing signals are sounded on a bell concealed in the board room and controlled from the manager's office.

## STRUCTURAL CHARACTER

With the plan and communication equipment definitely fixed to provide the utmost convenience to members and employes, the structural character of the building took its logical form. The exceedingly large size of the board room, 74 feet wide, by 94 feet long, by 40 feet high, coupled with the entire absence of interior columns, made it necessary to carry all loads on the wall columns except at the extreme front and rear portions of the building. In each of these locations, it was possible to get two rows of columns clear across the lot. All of the structure that exists over the board room, including the 7-story tower, had to be carried across to the wall columns. The tower was



*Carwood*

**Stairway leading from the entrance lobby to the board room. Walls and balustrade are of polished Sienna travertine, the newel post is carved of solid material. The stairs are of Roman and Colorado travertine**

carried to a truss which extends through the fifth story, and supports not only the columns over it, but girders which carry the row of columns adjoining it. These heavy loads concentrated on the wall columns made it necessary, in order to eliminate the eccentricity on the footings, to carry heavy twin steel girders entirely across the building under the basement floor.

The building rises 60 feet from sidewalk line to the first set-back at the fifth floor level, and sets back again at the sixth floor, at which point a five-story tower rises, capped by an elevator penthouse, and a cooling tower for the air conditioning apparatus. The main portion of the facade does not extend the full width of the site, but is flanked by a slightly lower structure which cuts back at an angle from the street, thereby setting the building apart from adjoining structures.

## TYPICAL FINISH

The typical offices throughout the building are finished with hard plaster on walls and ceiling, which are painted with a stipple finish. The trim is Philippine Bataan hardwood stained and varnished, and typical doors in all public spaces are of Bataan with inlaid mouldings of ebony and curly maple. In the more important parts of the building, this design has been carried out in walnut with the same inlays. In all but the private offices, which are carpeted, office floors are linoleum. The elevator lobbies have rubber tile flooring. Polished black marble is used for the window stools, the windows themselves being steel casement equipped with bronze hardware including special friction adjustors. Typical hardware throughout is specially designed bronze.

The entrance lobby, elevator corridor and stair hall have walls of polished Sienna travertine, with floors of Colorado and Roman travertine. The reddish browns and tans of the first, combined with the varied color of the second, and the creamy color of the third produce a rich tone throughout. The same materials are used for the board room lobby. The ceilings and cornices are of acoustical plaster, the latter being richly modeled and cast, decorated in gold leaf and color. Bronze trim, because of its harmonious blending with the travertine colors, was used throughout the corridors. Lighting fixtures, cast in the same material, are designed as an integral part of the cornice; the semi-indirect light sheds a soft light that makes for homogeneity.

# THE MEETING OF THE MINDS

A Report of the 64th Annual Convention of The American Institute of Architects, held at San Antonio, Texas, April 14th, 15th and 16th

BY

KENNETH KINGSLEY STOWELL

EACH gathering of the delegates and members of the A. I. A. differs from the previous one; the atmosphere differs, the interests change, and the personnel varies considerably. The place in which the convention is held often has a marked influence on the prevailing spirit, and San Antonio was no exception. There was predominant an air of cordiality and a notable lack of nervous tension. The tempo of the convention seemed even and unhurried; it was actually one of rapid accomplishments. The despatch of business without rush or confusion was undoubtedly due to the prodigious amount of thoughtful work accomplished by the Board of Directors and the various committees. The Report of the Board of Directors is an example of the ability of these architects to think clearly and to the point, weighing each consideration carefully and arriving at definite, constructive conclusions. The main business of the convention was, of course, the consideration of, and the action upon this report, which embodies, briefly, the questions and recommendations of all the activities of the Institute as reported by the various committees.

Four things, closely related, occupied the major time and thought of the convention: *First,* the necessity of a comprehensive coöperation with all factors in the building industry "toward a new kind of functional democracy" and "a better economic and political organization in the future"; *Second,* the attitude and action to be taken in relation to the Federal Building Program; *Third,* the proposal to bring about a unification of the architectural profession through the collaboration with the various state societies; *Fourth,* the expansion and trends of education.

The first of these is undoubtedly the most important, and it is sincerely to be hoped that the implications of the thoughts expressed in President Kohn's address will lead at once to a comprehensive survey of the problems involved and the establishment of a committee to prepare a program of action to bring about the desired ends. Mr. Kohn emphasized the necessity by saying in his address, which we quote only in part: "We have stated that our profession can only maintain, much less strengthen, its own position by developing coöperation with the other elements of the industry of which it is a part; that the architect to be effective must coördinate his work with those other elements; that he must understand the inter-relation of his function with all other aesthetic and technical functions that are essential to the process of building; and that he must make these other functions realize their inter-dependence upon each other. In other words, we have tried to make the architects of America realize that their right to be the directors of the building process can only be based on an actual leadership in a movement toward the development of a new kind of functional democracy within (and eventually outside) the building world of America. . . .

"WE must ask ourselves what is the place of the architect as a citizen in this changing world by reason of his being an architect. If the group of which I am a part be right, then our effort must be to make every architect conscious of the importance of the function he performs, of the opportunities it offers and the obligation it imposes in every civic relationship, and conscious of the reforms that must be brought about in his own function in order that he may meet his obligations to those other many inter-related and inter-dependent functions. And we must make him capable of using the light gained through this study of his more intimate problems to give him insight into the ways in which all of industry must eventually be changed if we are to move toward a better economic and political organization in the future.

"For without such improvement in the architect's understanding of his functional relationship to the world at large, its effect upon that world and the reaction therefrom, there can be no permanent progress, in my opinion, in the Art itself. As a prime article of our faith, as Artists, we are indeed fundamentally interested in the aesthetic perfection of our Art. After all is said and done,

it is that which is nearest to our heart. While we know that structural integrity is essential to any development, our real dream is to find some new and thrilling beauty. But we know that neither of these things can be advanced, permanently advanced, except the profession as a whole advance in a world that is not distraught by economic strife and scattered in its efforts by class separation. That is why some of us do violence to our yearning to devote ourselves solely to our search for the beautiful. We may not do so—in the long run it will not avail us. . . .

"We pledge ourselves to keep the faith in our Art—to try to advance that Art; to help others to advance in it, and to make it serve in the cause of social progress. We pledge ourselves to remain professional men, that is to say, to work primarily for the advancement of the quality of our service rather than for the money incentive. And above all, we pledge ourselves so to practice our Art as to make us ever more worth while as citizens; eager to change ourselves and our way of working if thereby we can involve others in that cooperation based on function which we are convinced is essential to progress. . . ."

MORE immediate than this question was that of the action of the convention in the matter of the Federal Building Program. The Institute has adopted the stand that the country is entitled to the best architectural service in the design of its buildings, and that such service can be enlisted only by the commissioning of architects in private practice in the various localities. The Board of Directors made a strong case for this belief, substantiated by statements of Franklin MacVeagh (former Secretary of the Treasury), Ex-President Coolidge and President Hoover. A resolution was adopted ratifying the report and directing the incoming Board "to transmit the views of the Institute to the proper legislative and executive branches of the Government, and to take such other measures in coöperation with the chapters of this Institute and related organizations, as may be necessary to accomplish the aims expressed herein." Whether or not "such other measures" will include steps to sponsor the development of a Federal Department of Public Works, remains to be seen. The Board of Directors was in favor of such a department which would have "one executive head, presumably of Cabinet rank, with two assistant secretaries, one in charge of engineering projects, the other in charge of architectural projects." The functions of this Department would be solely administrative and supervisory. This was referred back to the Board with power.

In order to expand the usefulness and influence of the Institute, and to unite the entire profession for the good of all, the Board was authorized to formulate a plan, in collaboration with state societies, whereby such a unification of these societies with the Institute can be brought about. We have every reason to believe that such a plan will prove not only feasible, but one of the greatest steps forward yet taken in the cause of the profession.

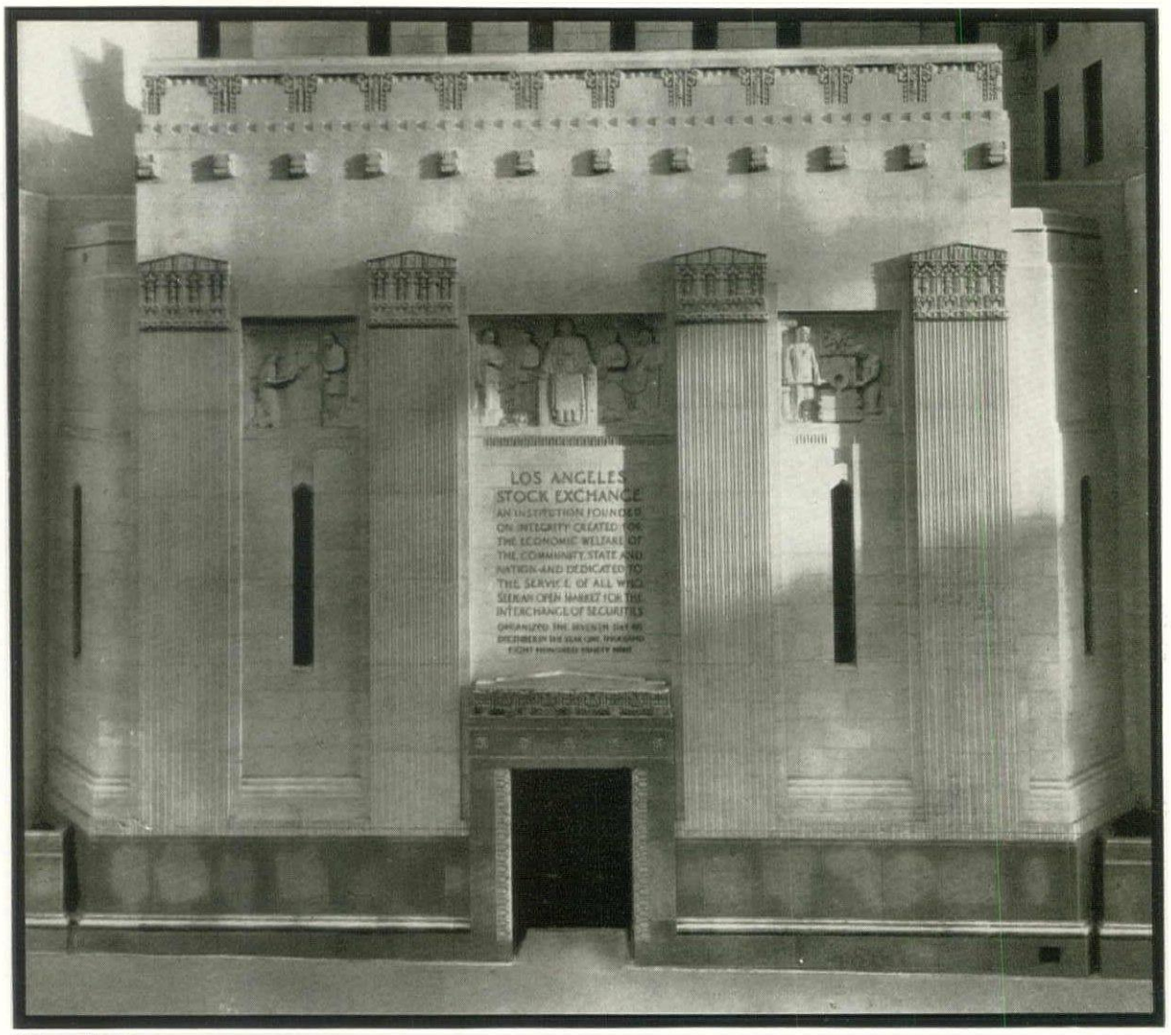
Eliel Saarinen has had a pronounced effect on the architecture of America, largely through his executed works and his design for the Chicago Tribune Tower. The architects at this convention were therefore fortunate in hearing Mr. Saarinen on the Wednesday evening devoted to Architectural Education. Speaking slowly (and sometimes almost inaudibly) his thoughts followed one another with that clarity, directness and logic which give beauty and meaning to his designs. It could hardly be otherwise. As Architecture is the problem of Architectural Education, so Architecture was the subject of his thoughts. His breadth of vision and his toleration do not preclude sharpness of perception in detail. Strong in his convictions, he emphasized the need of artistic intuition rather than the rule and rote of theories and, sometimes with subtle humor, he proved his points.

Neither time nor space here allows of more than mention of the many interesting addresses and discussions, most of them practical, several of them inspiring, such as those on the "Growing Scope of the Architects' Functions": William T. Warren's perfectly delivered, expressively human account of the architects' problems and successes in the smaller communities; Ellis F. Lawrence's breadth and depth of vision in showing the serious social, economic and political problems with which the architect must be concerned; and the thoughtful and helpful addresses of Frederick W. Garber and A. P. Grunsfelder, the latter stressing the coöperation between designer and constructor.

The newer aspects of land and building development were discussed under the direction of William Stanley Parker, the various aspects being brought out by Frederick Bigger, Hugh Potter, Charles H. Cheney, Thomas S. Holden and Henry Wright, with much of the discussion centering on the type and method of the architectural control of real estate subdivisions. After Charles Butler's Report of the Committee on Education, and Eliel Saarinen's address, the Fine Arts Medal was awarded to Frederick Law Olmstead for distinguished achievement in landscape architecture, and the Craftsmanship Medal was awarded to Leon V. Solon for distinguished achievement in ornamental terra cotta and faience. The announcement of the fellowship elections followed. The Open Forum, devoted to the Practical Problems of the Architect, under the direction of M. H. Furbringer, brought out many interesting aspects of architectural fees, free sketches, chapter organization, job-getting, etc.

# LOS ANGELES STOCK EXCHANGE

## LOS ANGELES, CALIFORNIA




*Putnam Studios*

The street facade has been built entirely of gray granite, the base course and the door enframement being of a darker color, highly polished. The decoration has been designed to express the scope and modernism of organized trading, and has been executed throughout with modern methods and tools. The sculptured panels between the columns of the facade represent, on the left, Research; in the center, Finance; and on the right, Production. They were carved in place from solid blocks of stone

SAMUEL E. LUNDEN, ARCHITECT
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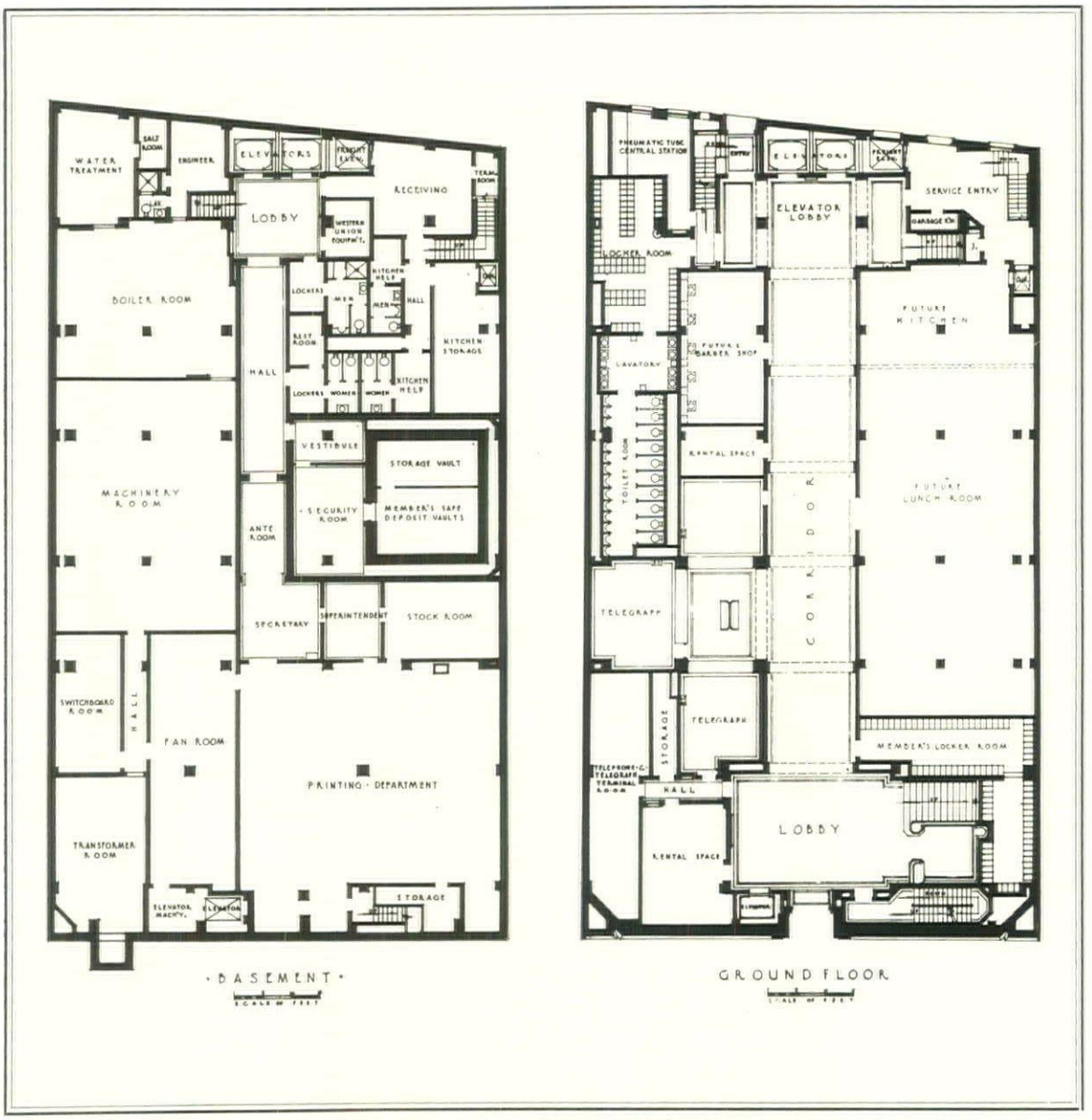


The outer doors of the main entrance, shown on the opposite page, are of solid bronze, and have been hung to form ornamental panels when they are open against the jamb or closed in a normal position. The entrance is eight feet wide by twelve feet high, and each door leaf was poured as a single casting, four inches thick, weighing about 2,000 pounds. The ornament was finished by hand

LOS ANGELES STOCK EXCHANGE
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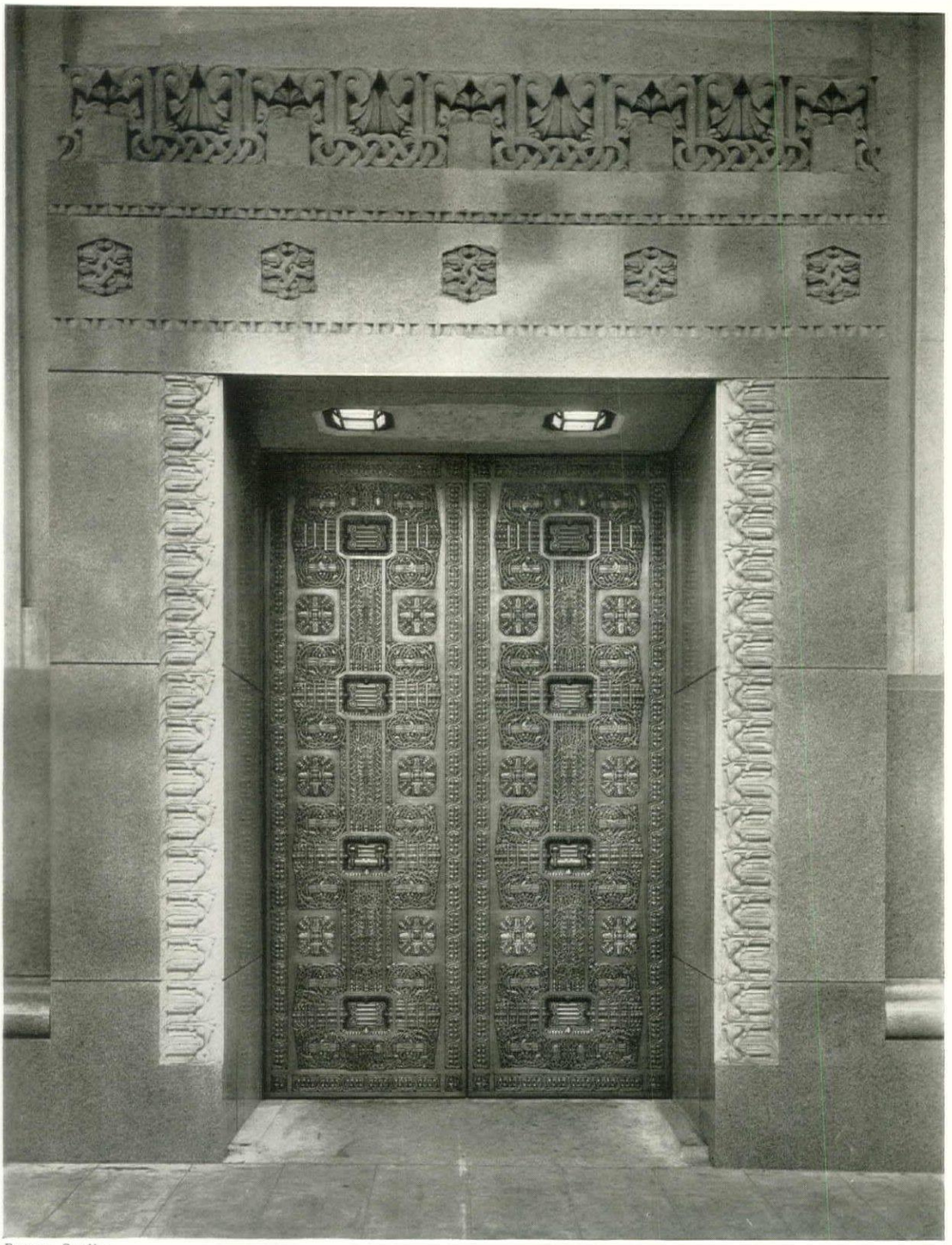

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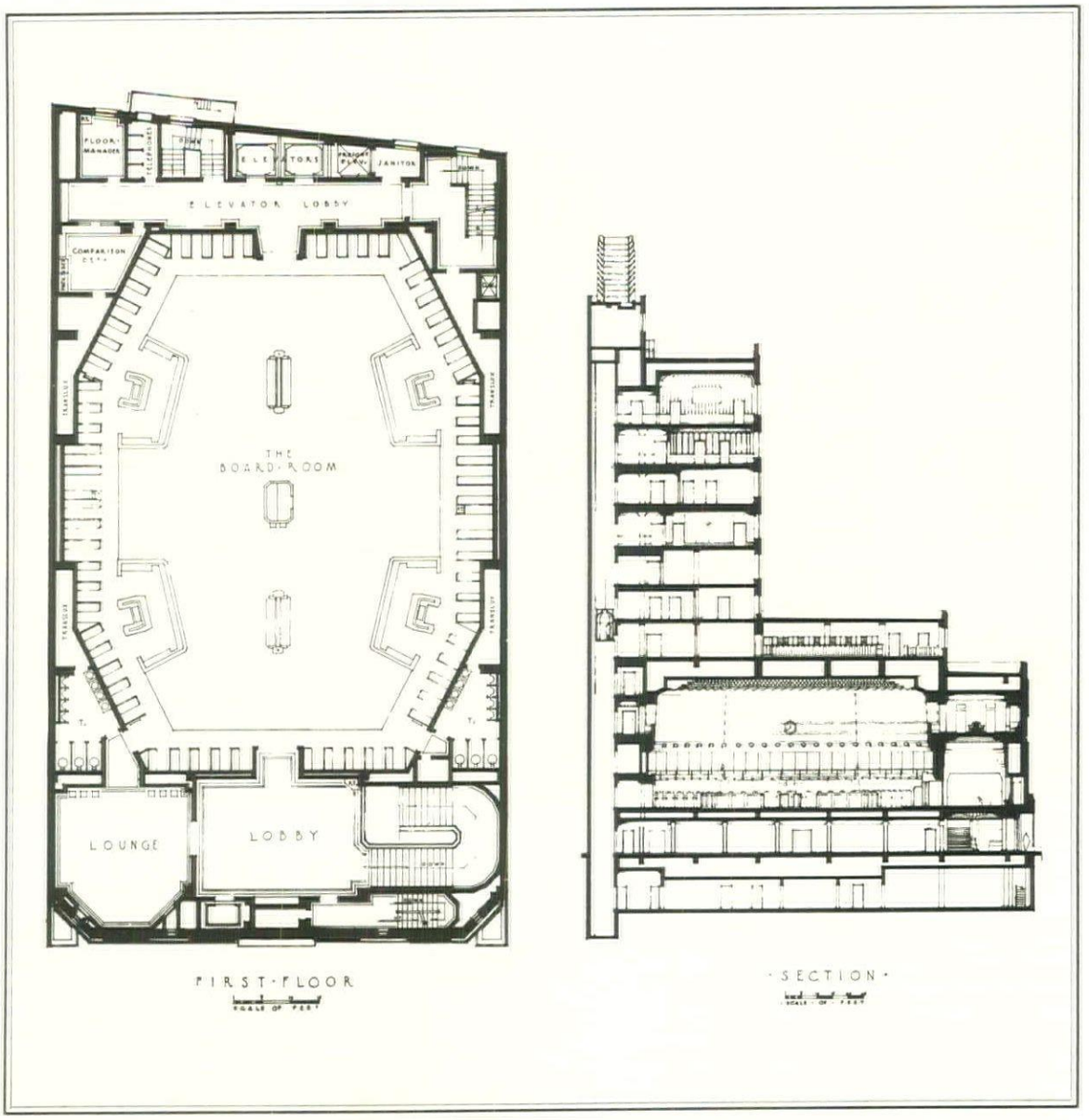


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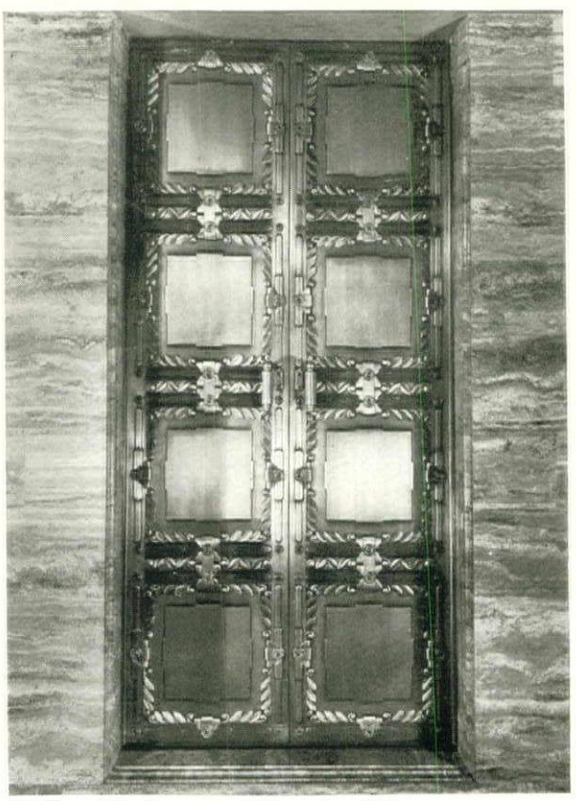
*Putnam Studios Photos*

The entrance lobby has walls of Sienna travertine and a floor patterned in Roman and Colorado travertine. The ceiling is made entirely of acoustic plaster, the ornament being cast of this material and then decorated in gold leaf and color. The panel under the light is of yellow Verona marble. The lighting fixture is of solid bronze. The small doors are of polished bronze



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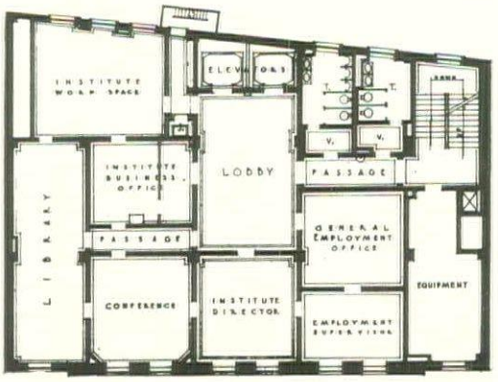
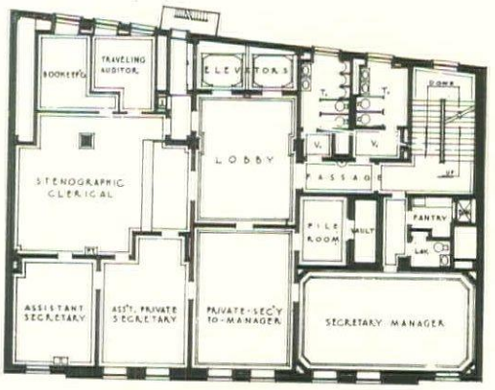
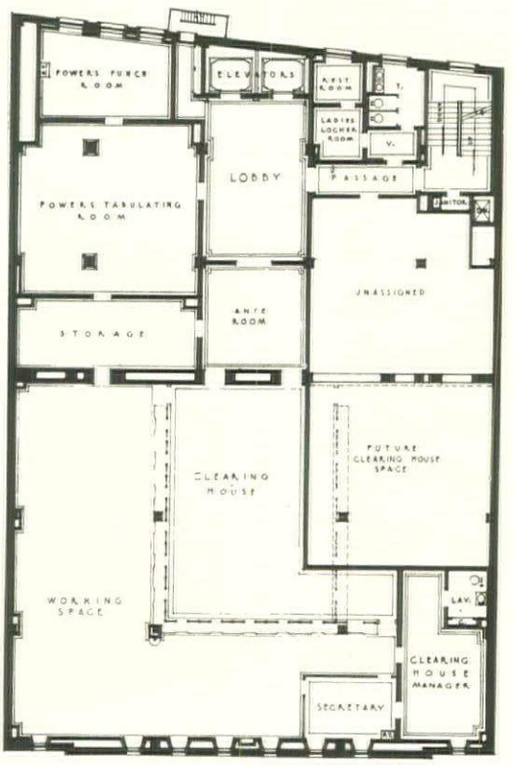


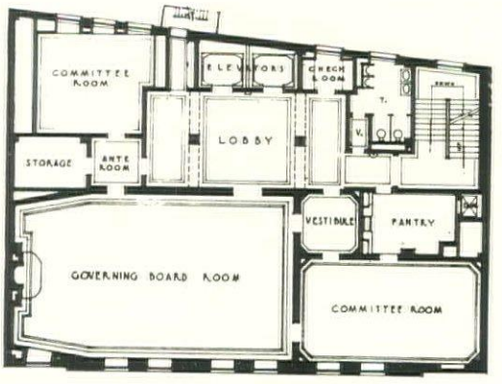

6th Floor



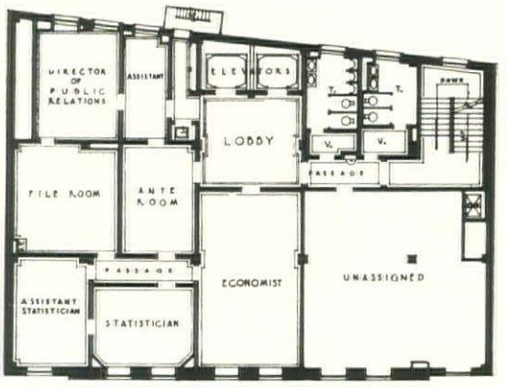

9th Floor




5th Floor




8th Floor




7th Floor

LOS ANGELES STOCK EXCHANGE
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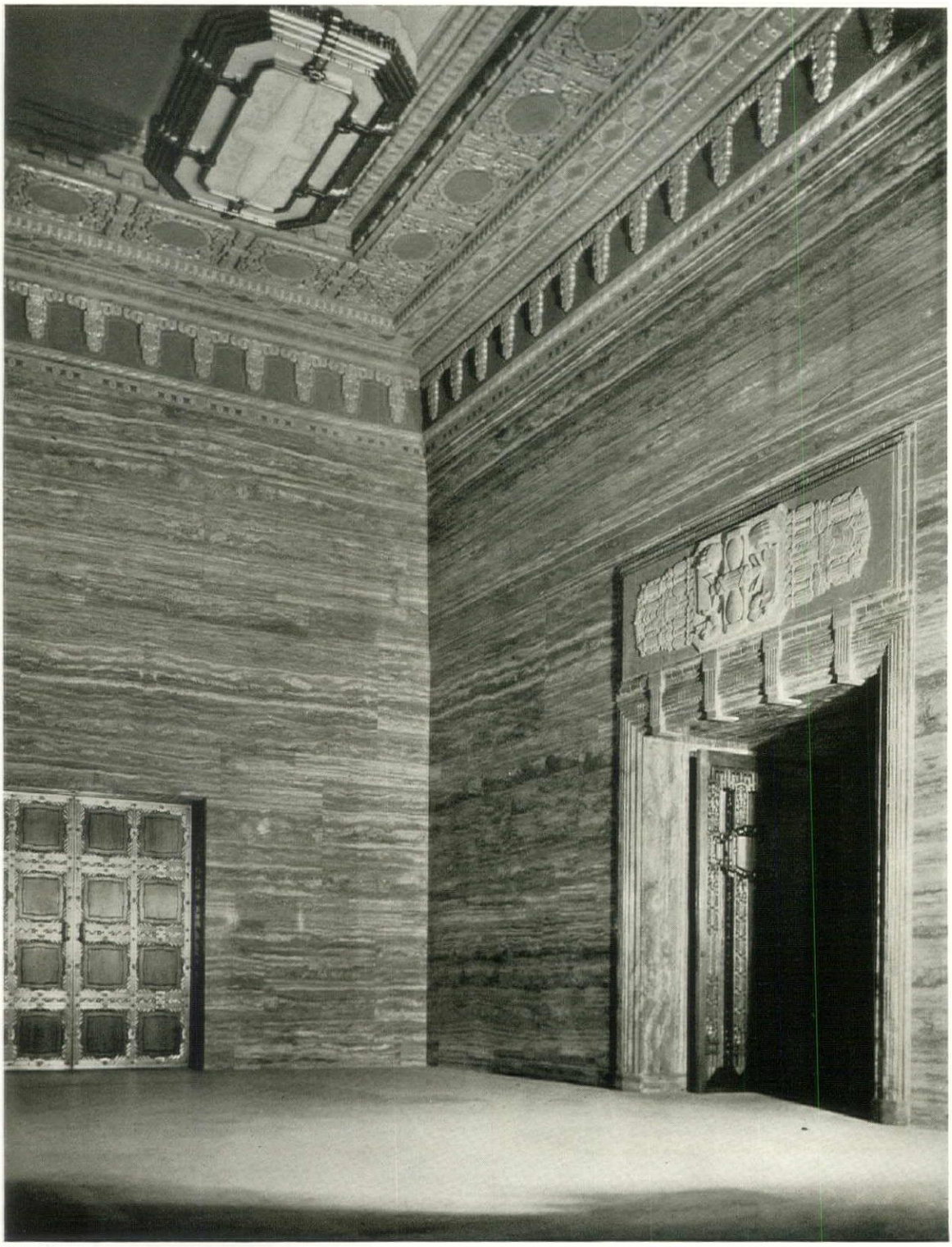

*Cawood*

LOS ANGELES STOCK EXCHANGE
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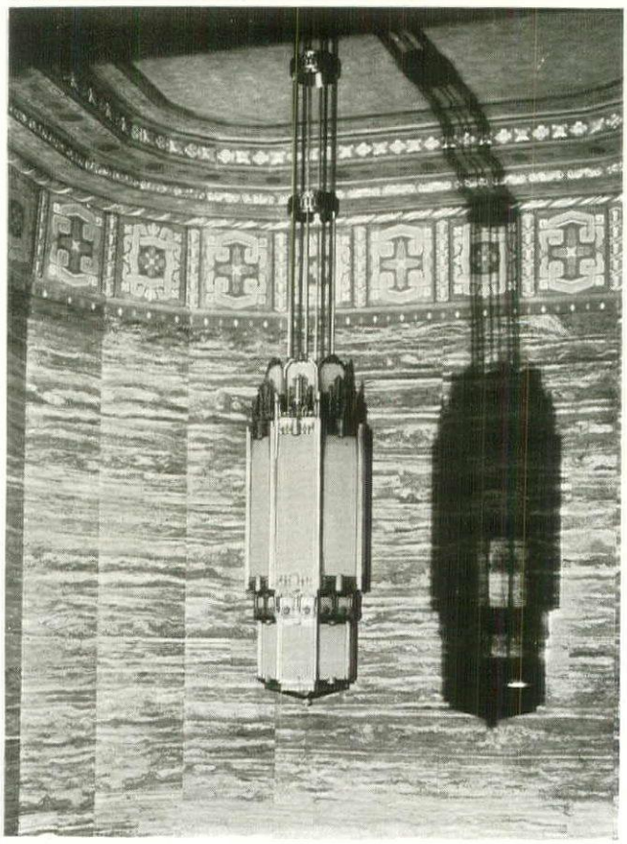
*Catwood*



One of the four decorative panels incorporated in the design of the cornice, which is of acoustical plaster covered with gold leaf. At the left is a cast and chased bronze chandelier with sandblasted glass in the boardroom lobby. On the opposite page is the entrance to the board room. The architrave is of carved Sienna travertine; the seal of the Exchange is carved in yellow Verona marble. The door itself is of cast, polished bronze and plate glass

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The board room. The upper portions of the walls and the ceiling are composed of two different types of acoustical tile. The board itself is of *Hyloplate* and the walls of the members' booths are of walnut. Alternating patterns and colors in the rubber tile floor are deep brown in tone. The members' booths and the trading booths are walnut with bronze trim. The double seat is of walnut with deep leather cushions, and the drinking fountain has a walnut stand with a French Napoleon marble basin. The visitors' gallery at the far end of the room is finished in zenitherm, with acoustic ceiling and rubber tile floor

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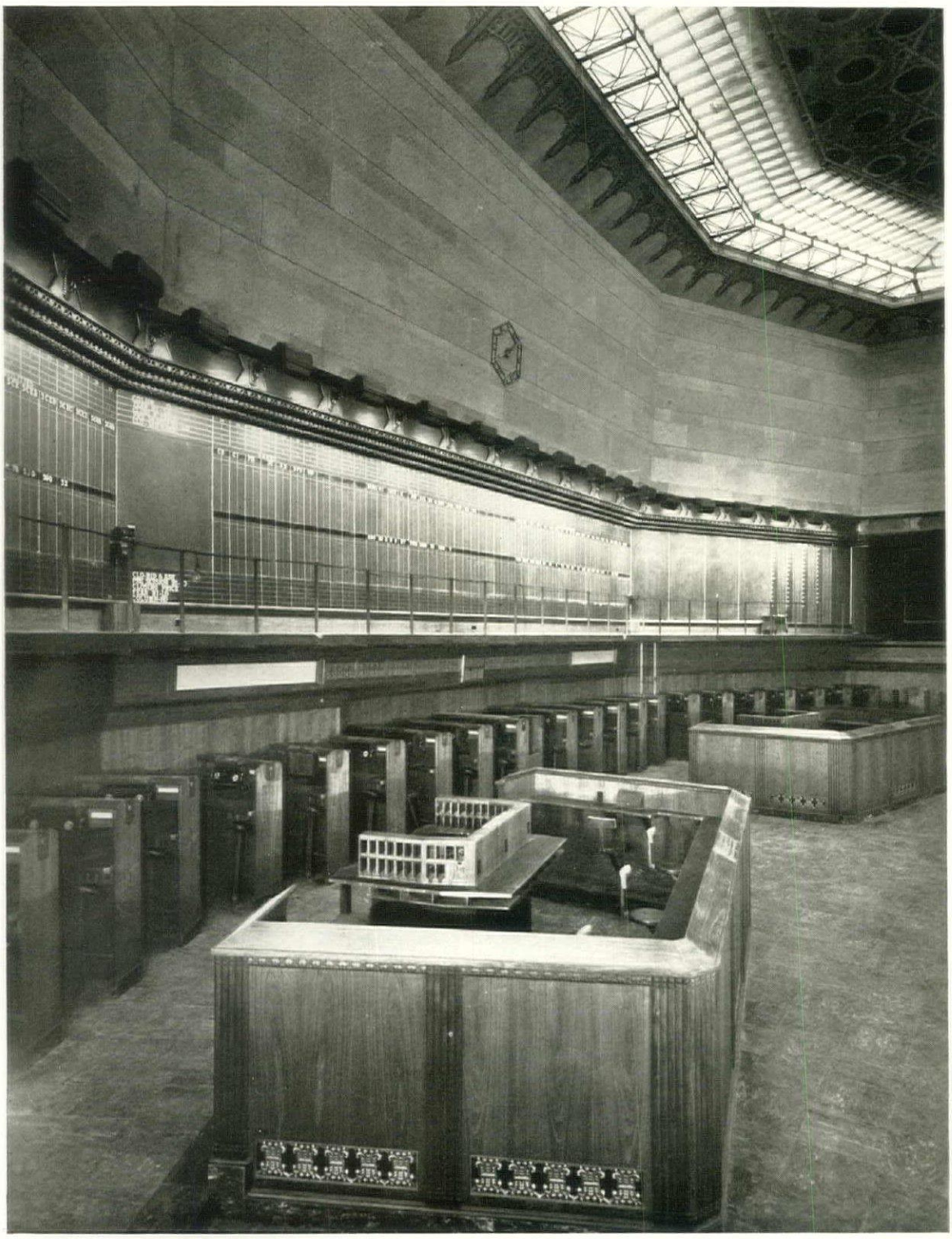

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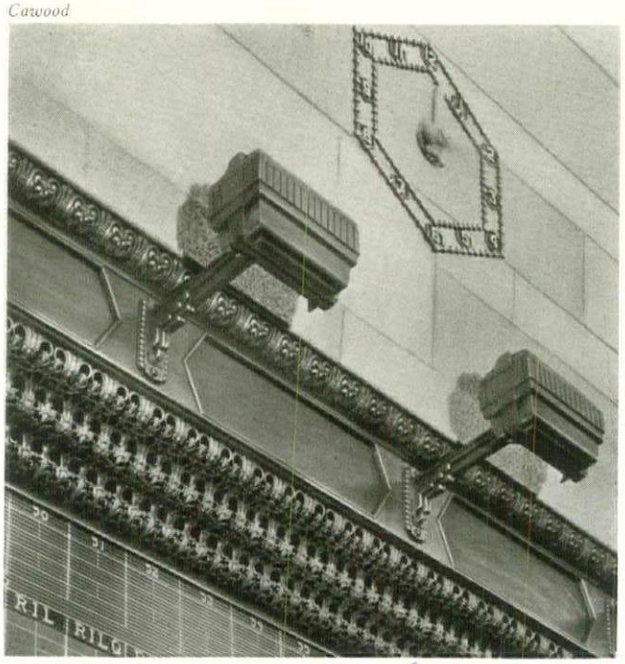
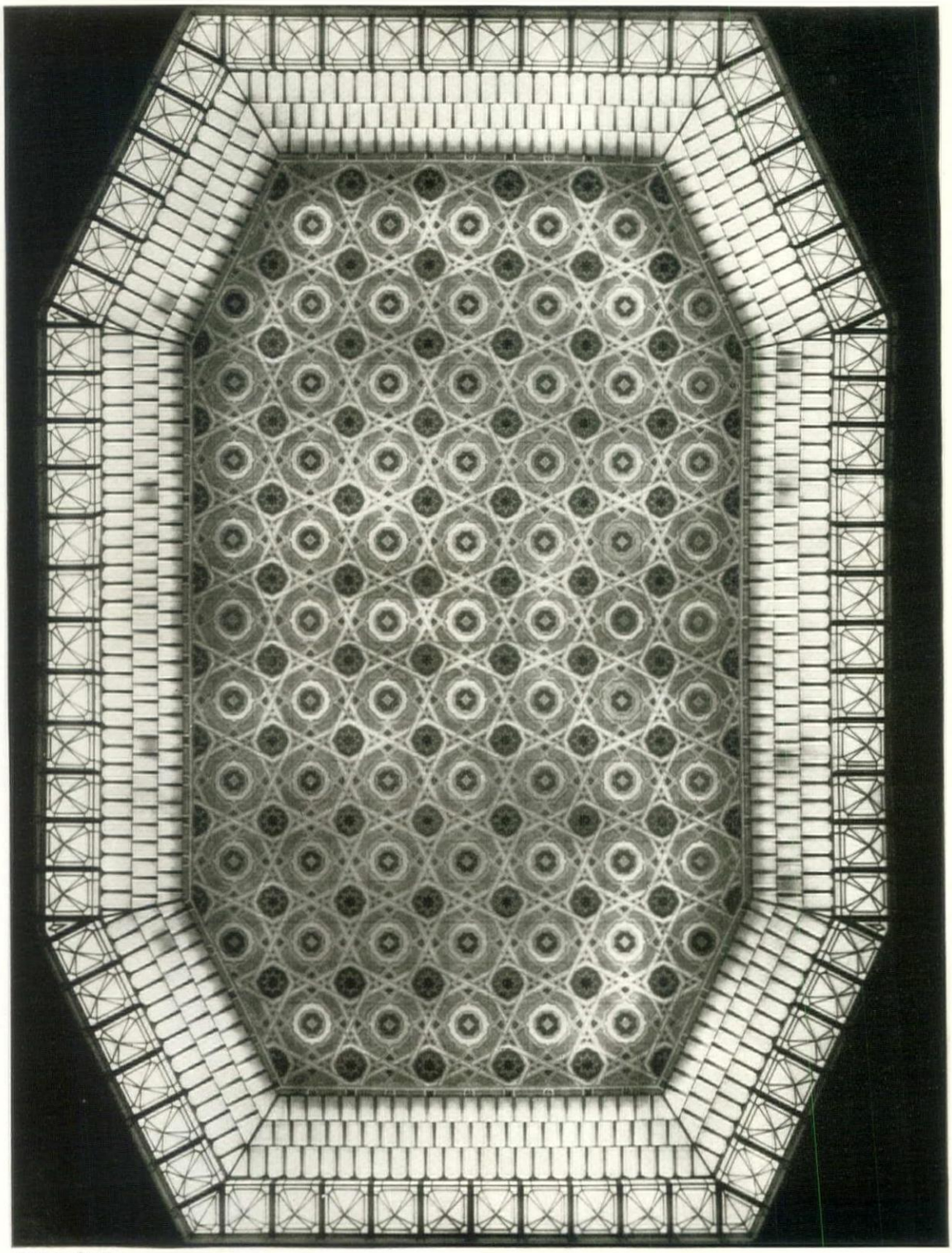


Hone finished glass framed in aluminum painted steel conceals the ceiling light installation. The bracket fixtures above the board are cast bronze. The ceiling is composed of acoustical tile, decorated with a pattern suggested by the angles of the splayed walls. The design is painted with dyes to avoid interference with the acoustics, and is subdued in color. A band of ornament occurs below the light pyramids



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*Carwood*

The walls of the governing board room are of walnut, with a projected baseboard. The cornice grille, decorated with silver leaf, conceals a ventilating duct. The ceiling is covered with sound absorbing felt covered with a porous fabric. Lighting fixtures are of bronze. The mantelpiece is executed in yellow Verona marble with Virginia Greenstone for the lining, and under fire. The carved panel depicts the growth of the Southwest. The furniture was designed by the architect, the table being ebony with satinwood inlay and the chairs of walnut, upholstered in leather

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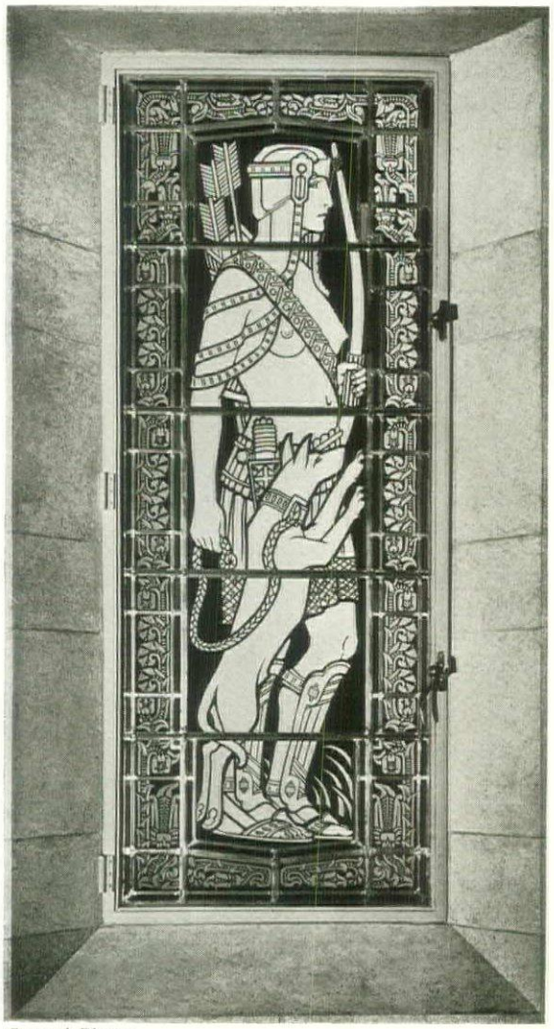

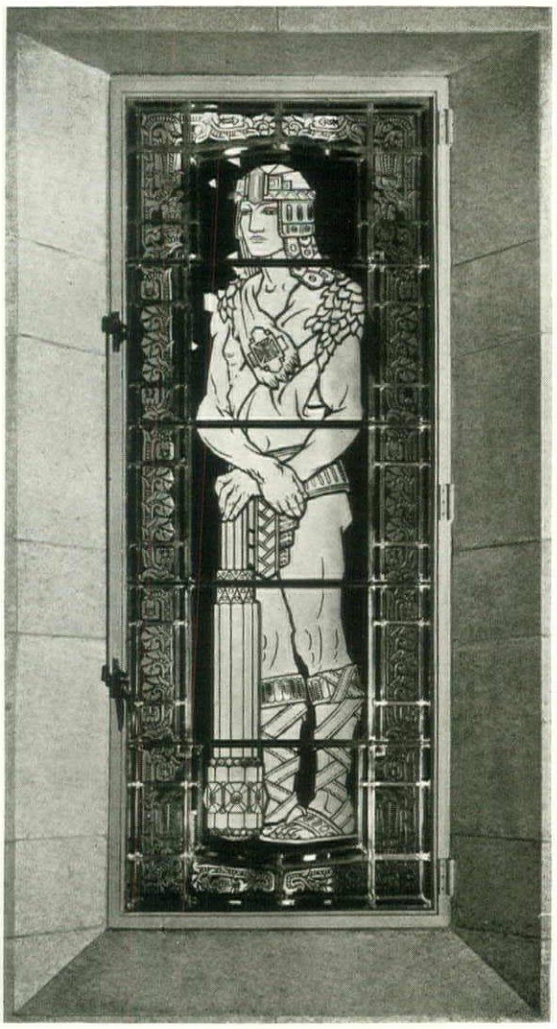

*Cawood Photos*

Two colored glass windows in the lounge, Diana on the left and Hercules on the right. The glass is neither stained nor painted, but is flashed glass, that is, clear glass covered with a colored film. The design is sandblasted on, and further enriched by application of acid. Walls are of zenitherm. The lounge in which these windows occur is of necessity a well lighted room; and since light from outdoors is largely obstructed by heavy bronze grilles, the windows were designed to be most effective in both reflected and transmitted light

LOS ANGELES STOCK EXCHANGE
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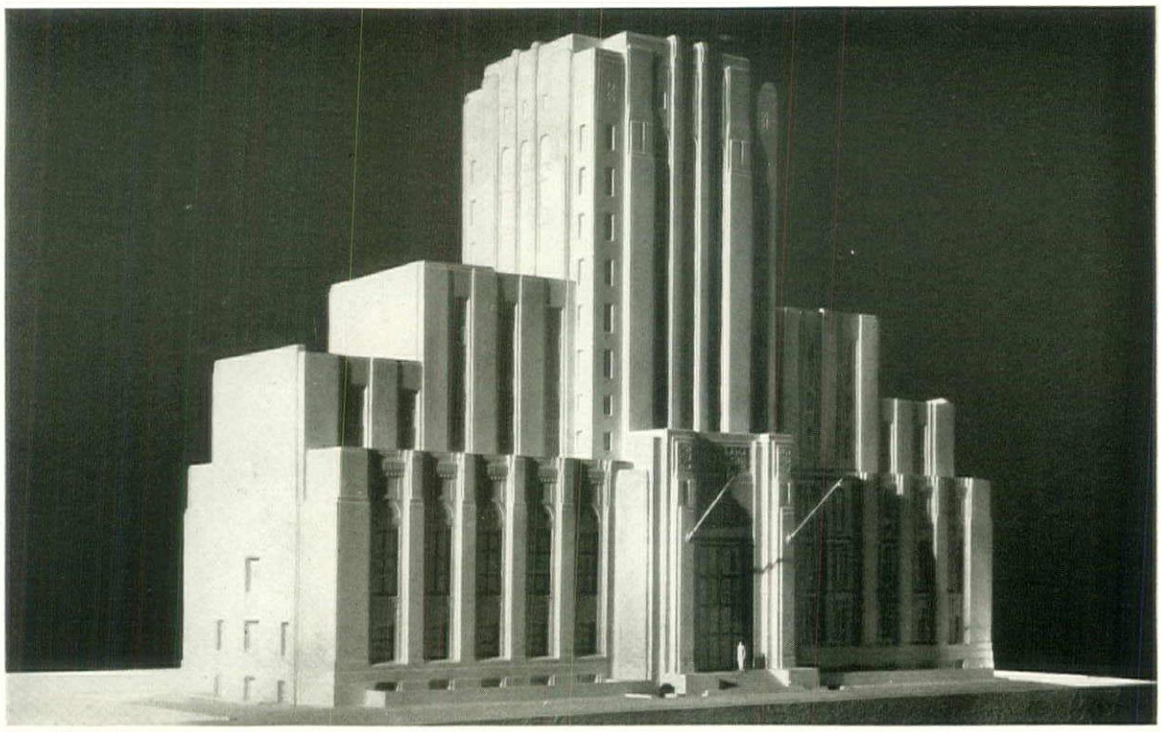
# A COUNTY COURT AND JAIL BUILDING

*White Studio*

CUYAHOGA COUNTY CRIMINAL COURT BUILDING
CLEVELAND, OHIO
WARNER AND MITCHELL, ARCHITECTS

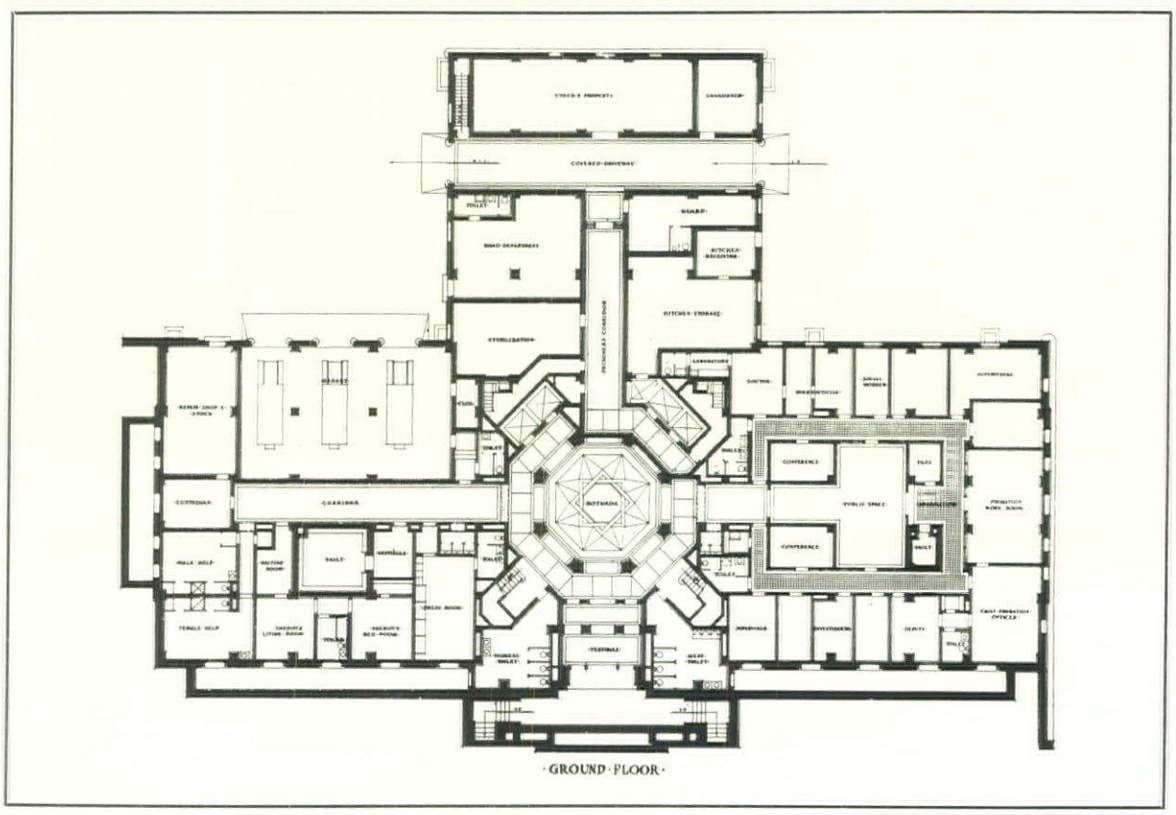


*Barnhill Studio*

## CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS

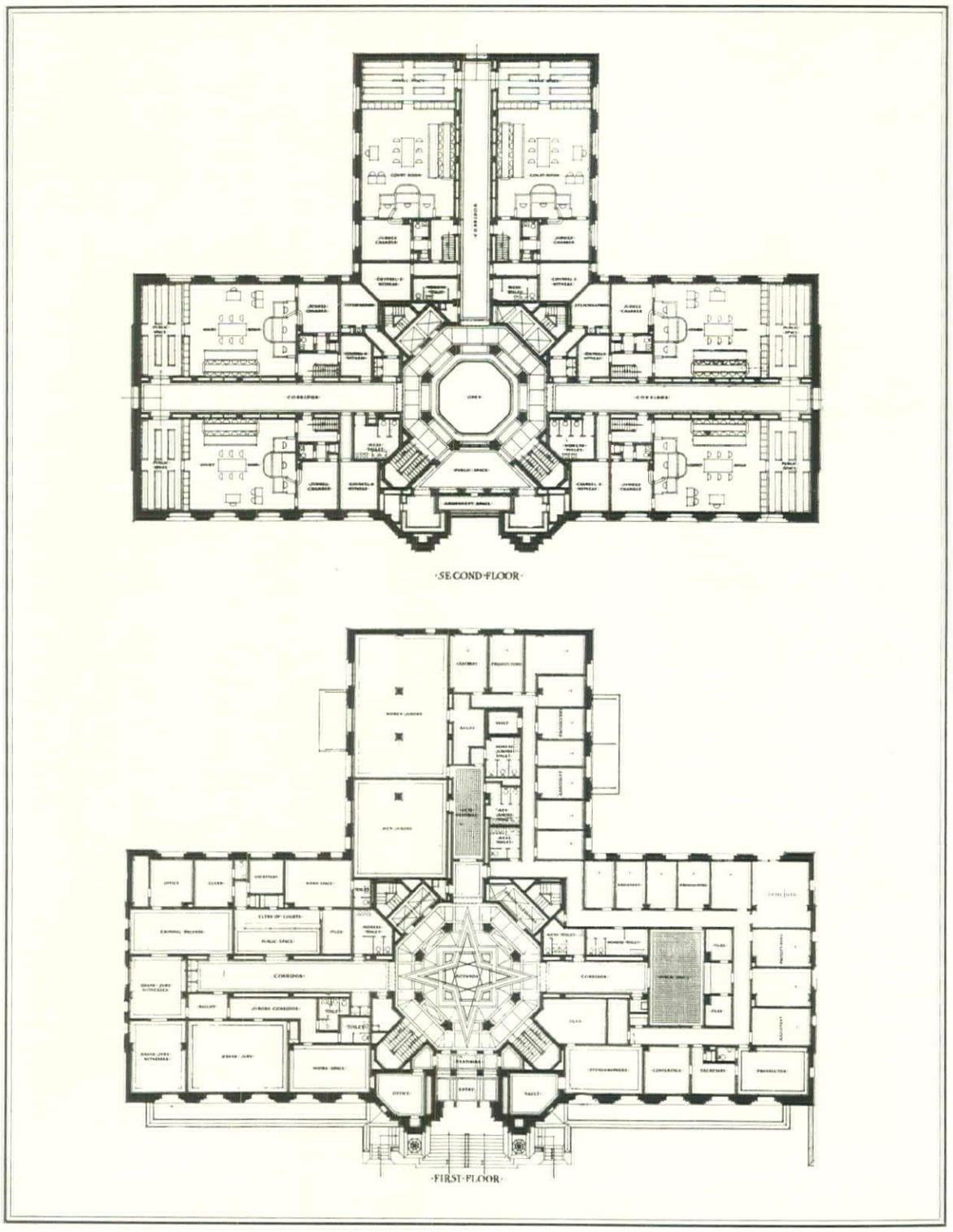



*White Studio*

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS




CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

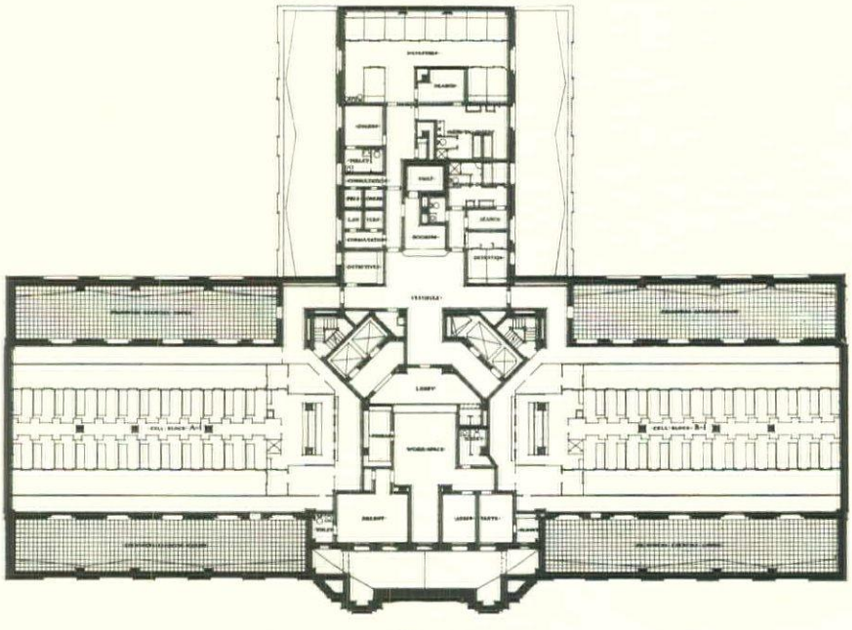
WARNER AND MITCHELL, ARCHITECTS

*White Studio*

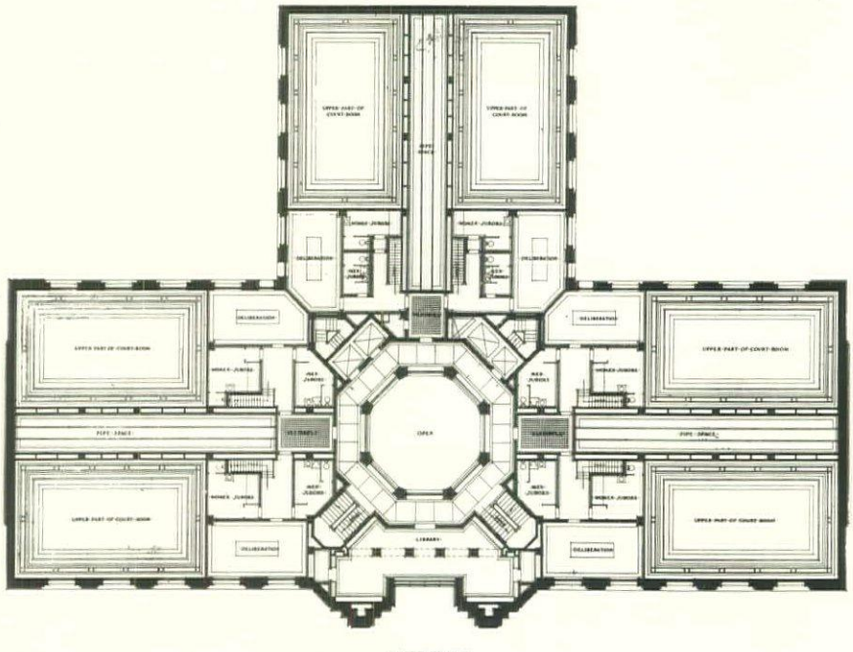
CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS



FOURTH-FLOOR



THIRD-FLOOR

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

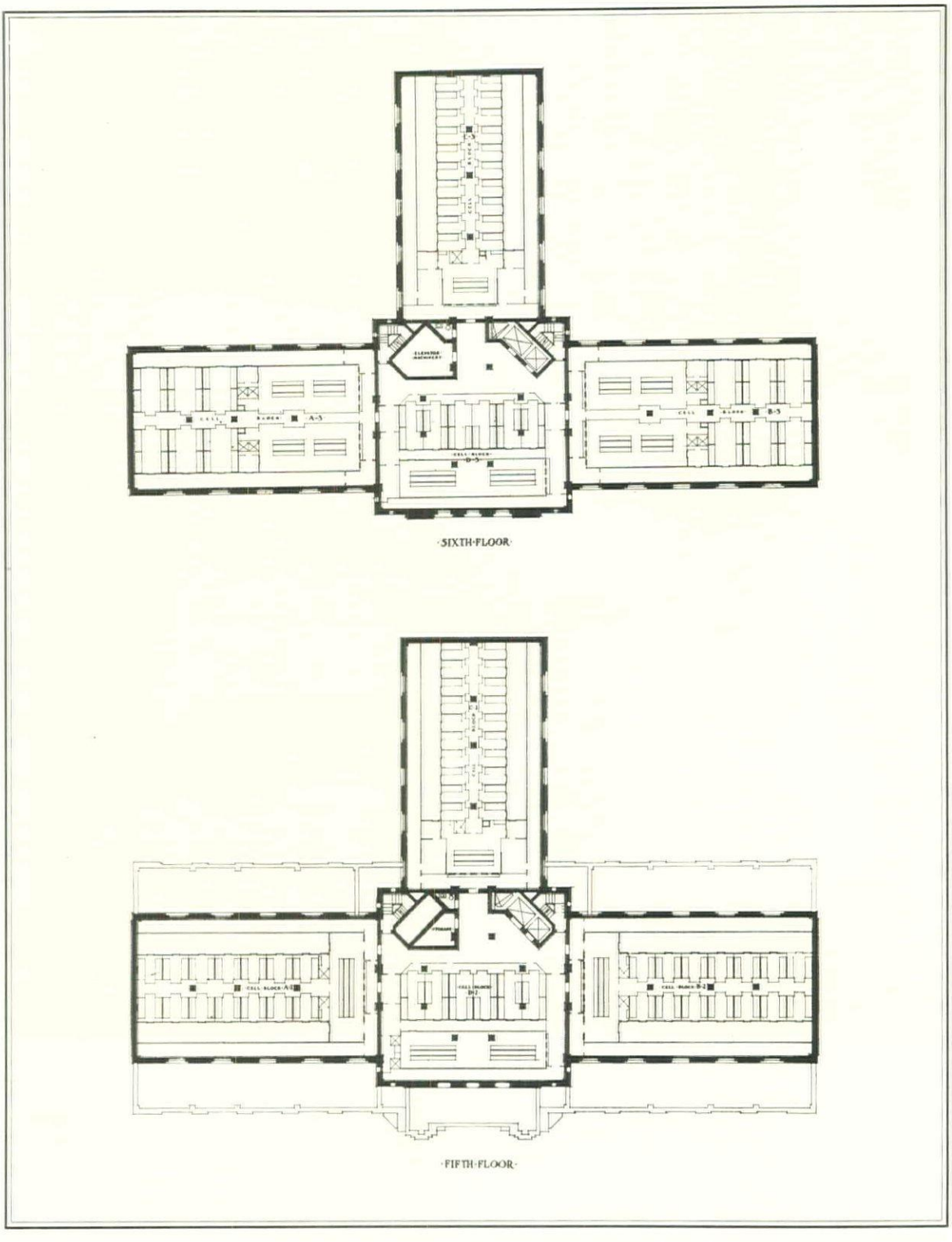
WARNER AND MITCHELL, ARCHITECTS

*White Studio*

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS




CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS

*White Studio*

The rotunda on the ground floor. It serves as a waiting room to various offices as well as an area of circulation. The floor is terrazzo, the walls stucco, and the woodwork stained oak

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS

*White Studio*

A typical court room, located on the second floor. The floor is laid with cork of two shades, the material being chosen as much for resiliency and quietness as for durability and appearance. All woodwork and furniture are of English oak, specially designed, and stained to a rich, golden brown. The walls above the wainscot are of plaster, stippled; ceilings are of acoustic material and plaster. Windows, which in all cases are opposite the jury box, are glazed with amber cathedral glass, and the lighting fixtures are of Belgian case glass and bronze. The room is two stories high. The wall behind the bench conceals a judge's room, a counsel room, and above these a jury room with toilet facilities for both men and women

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

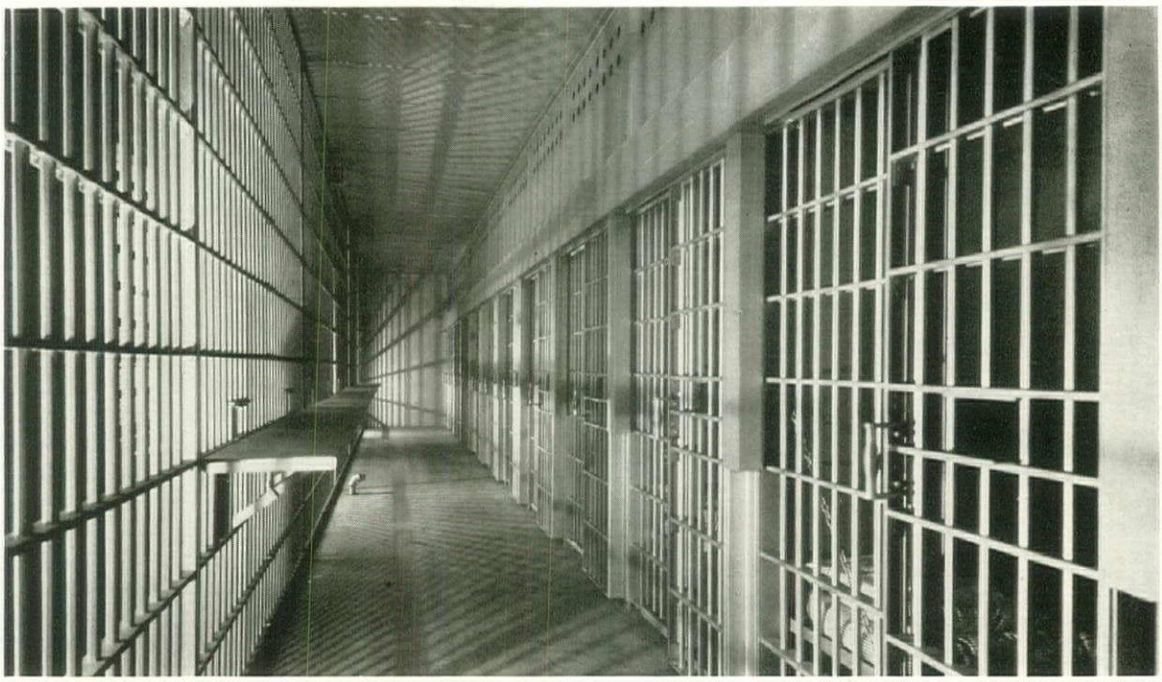
WARNER AND MITCHELL, ARCHITECTS

*White Studio*

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

WARNER AND MITCHELL, ARCHITECTS



*White Studio Photos*

TYPICAL CELL BLOCK

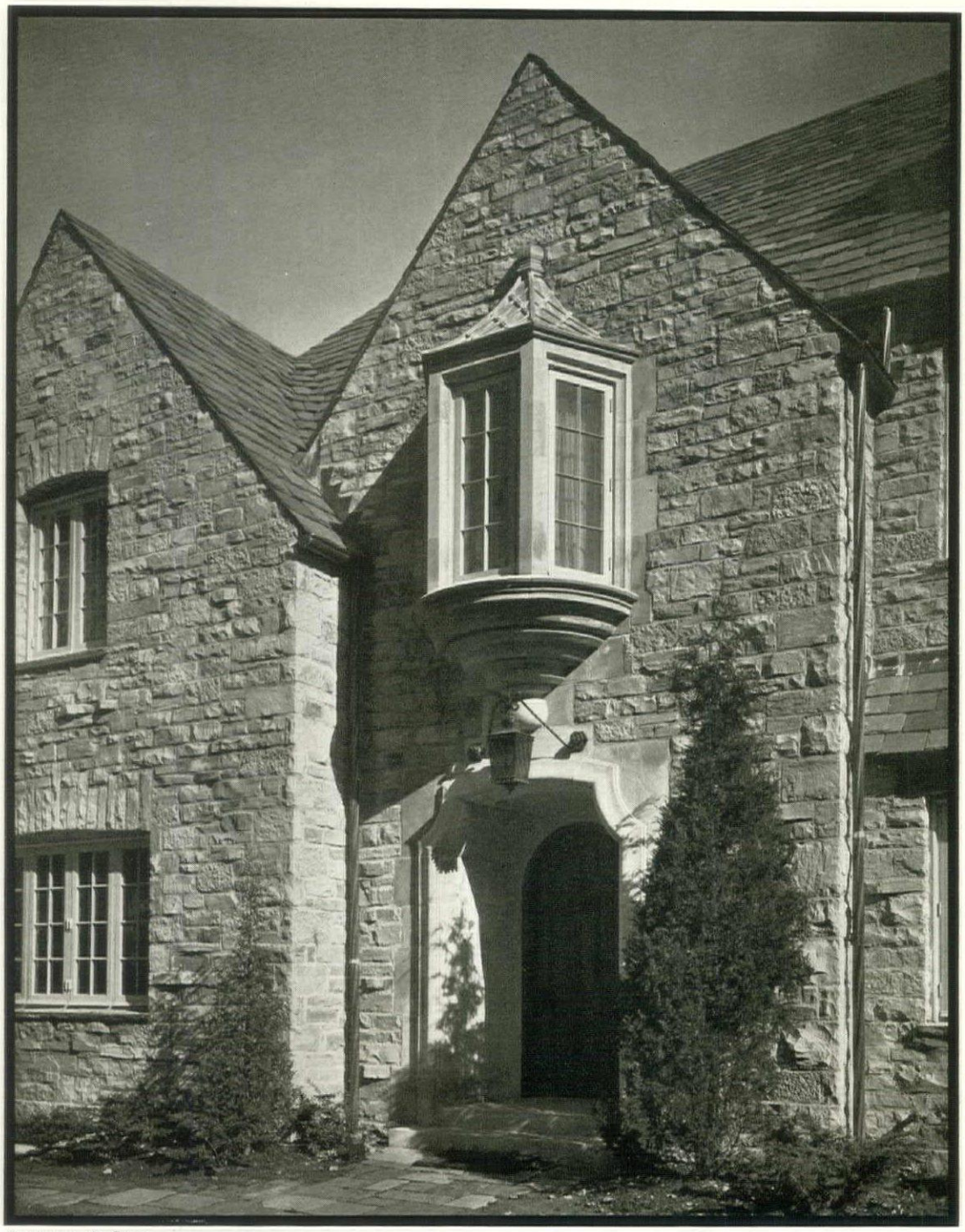
TYPICAL DAY ROOM

CUYAHOGA COUNTY CRIMINAL COURT BUILDING

CLEVELAND, OHIO

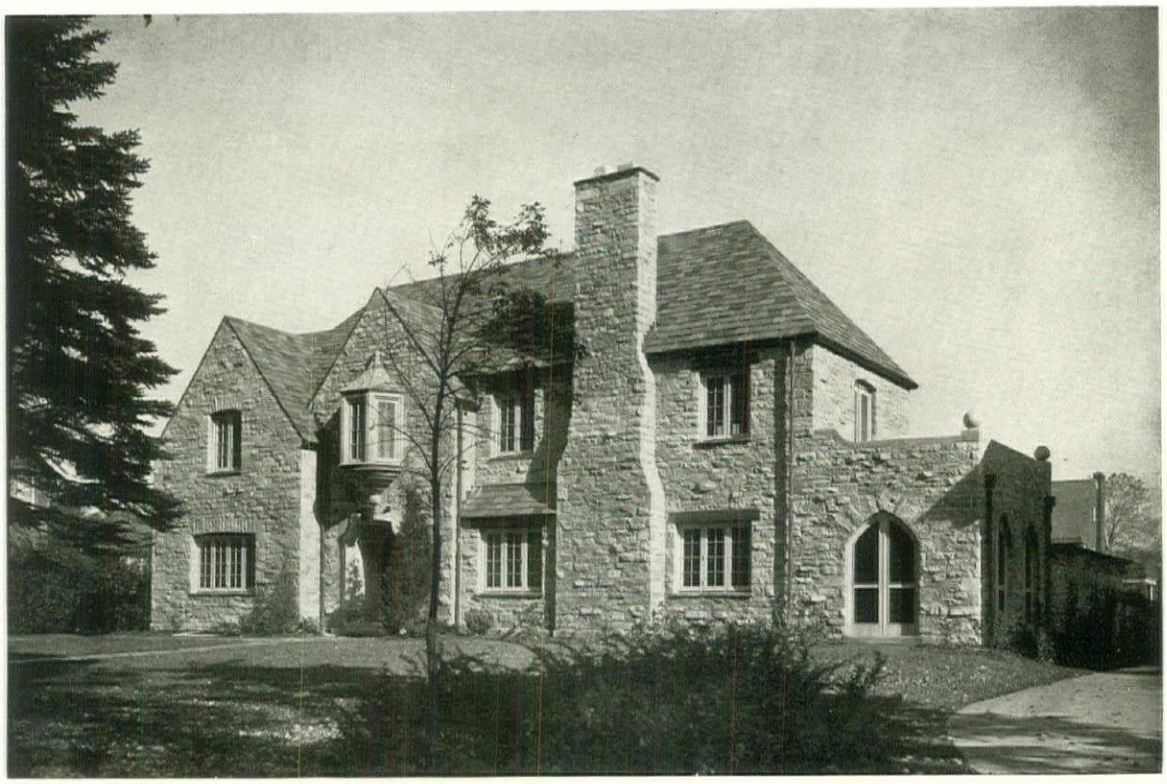
WARNER AND MITCHELL, ARCHITECTS

# A RESIDENCE IN ILLINOIS



*Fuermann & Sons*

HOUSE OF MR. F. B. McKINNON
KENILWORTH, ILLINOIS
FREDERICK HODGDON, ARCHITECT



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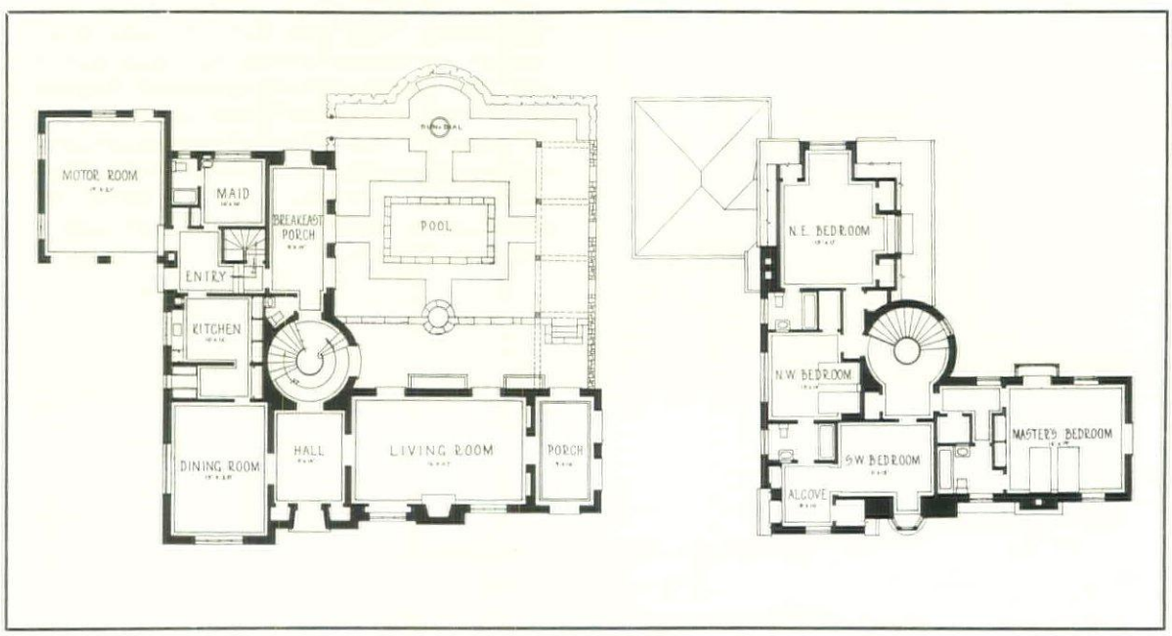
VIEW FROM
THE STREET

HOUSE OF MR. F. B. McKINNON
KENILWORTH, ILLINOIS
FREDERICK HODGDON, ARCHITECT

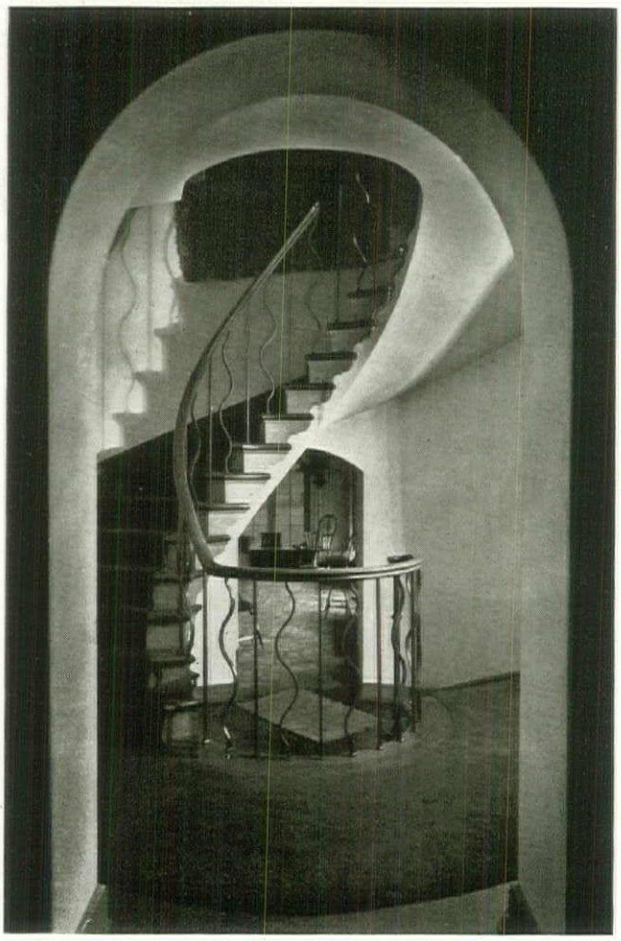


*Fuermann & Sons*

The house contains 78,000 cubic feet and is built of solid masonry walls, wood joist floors and wood stud, plastered partitions. The exterior is of variegated buff Wisconsin limestone, random jointed and backed with brick. The roof is of variegated slate. The pool, pergola, and garden were designed in the office of the architect to develop privacy and provide a pleasant outlook from the most used portions of the house. Pool, terraces, and steps are of Pennsylvania blue stone

HOUSE OF MR. F. B. McKINNON
KENILWORTH, ILLINOIS
FREDERICK HODGDON, ARCHITECT

*Fuermann & Sons Photos*



The simple character of the main rooms was achieved by the use of white, palm-finished plaster, simple plaster cornices and floors of dark oak. The fireplace in the living room, which is shown above, is of Bedford stone. The bedroom walls are covered with decorative wall paper, and the bathroom walls are of colored tile

HOUSE OF MR. F. B. McKINNON
KENILWORTH, ILLINOIS
FREDERICK HODGDON, ARCHITECT

# EDITORIAL

## POLICY AND OPINION

### ACCOMPLISHMENTS

THE value of any enterprise is judged by results, and on this basis the Sixty-fourth Annual Convention of the American Institute of Architects must be considered as one of most importance to the profession. It was important, for at this convention definite steps were taken toward increasing the influence and usefulness of the profession. Probably the most far-reaching in its ultimate effect is the movement to develop a plan for the closer coöperation of the various architectural organizations, the state societies of architects, and the A.I.A. As usual, when something so logical is presented the question is asked, "Why hasn't this been done before?" The unification of the professional architects, in order that they may work together more effectively toward common ends, is one of the first steps in furthering the integration of the building industry. The development of a practical plan for the accomplishment of this is in competent hands, and the next year will undoubtedly see a larger and more influential body of architects working throughout the country.

THAT organized architects cannot work out their own problems without taking into account the larger problems of the industry of which they are a part, is well understood by the leaders of the profession. This was brought out by the consideration in the convention of the growing functions of the architect and the architect's place in the development of real estate. A comprehensive study of the functions of each factor in the industry would seem wise at this time in order that the efforts of all may be coördinated in making buildings more functionally efficient, economically sound and æsthetically satisfying. In this connection, the experience of those actively engaged in the work of Building Congresses is of inestimable value. The expansion of this movement of local coöperation throughout the country is a real accomplishment and augurs well for a national movement to correlate the activities of all those engaged in building.

MORE immediate than this unification of the profession was the action of the national organization in stating, in no uncertain terms, the conviction that the effective conduct of the Federal Building Program demands that architects in private practice be engaged in this work; that architects be chosen solely on the basis of professional fitness; and, so far as possible, that such architects be resident in the communities where the buildings are to be erected. Almost at the time this stand was taken, a firm of architects was commissioned to do important work for a government project over two thousand miles from their present office. It is to be hoped that the transmission of the views of the Institute to the proper legislative and executive branches of the government will have its effect in the immediate future, and that such other steps as may be necessary will be taken by those so empowered at the convention. The views and desires of the architects of the country are based on the conviction that this action is necessary for the public good. The ways and means of carrying out the expressed views are largely in the hands of the Board of Directors of the Institute, and whatever program is formulated should have the support and coöperation of every member of the profession.

WHAT can be accomplished in view of the present form of governmental administration and control of public building projects remains to be seen. It is felt by many that a more efficient and equable form might be developed by the creation of a Federal Department of Public Works, having one executive head. Engineering projects and architectural projects would be separately administered and supervised. The work of all government construction agencies would be thereby correlated in this Department, which would function only in an administrative and supervisory capacity—delegating the actual architectural, engineering and constructing functions to those engaged in such as private profession or business. Such a change in governmental organization would take a considerable period of time, involving, as it does, legislative action. The thought and efforts of architects in this critical time are concentrated on ways and means of bringing about the desired ends under existing forms and conditions of government.

The expression of unanimity of view and aim is accomplished. The task of bringing about governmental accord with those aims in practice has been delegated to those who have already given themselves unselfishly to the cause, and who have been best known for their accomplishments.

Kenneth K. Stowell

EDITOR.

# WHAT IS GOOD ARCHITECTURE?

Further discussion regarding the editorials appearing in our January issue, one of which was concerned with the definition of Good Architecture. The other emphasized the need for business methods in successful practice. These paragraphs are excerpts from many letters, some others of which appeared in the April issue. Although not all of them are in accord, they indicate a genuine interest in the fundamentals of good architecture.

"I AGREE with what you have said as far as it goes: that we should strive primarily for Good Architecture; that Good Architecture is more than economics, mechanical efficiency, materials, workmanship, methods; that we should lead, as far as we may, in the direction of well-balanced Good Architecture.

"I have long felt though that it is the people rather than the architects who really make architecture, and that the changing, turbulent, law-breaking life of these post-war years is finding true expression in the architecture of the day.

"One fundamental human need is submerged in this mad rush and has disappeared from current architecture: dignity and repose; repose not for sleep only, but for meditation.

"Every great architecture of the past has been an enduring architecture, but we are consciously building today with the thought that within a generation the structures we rear will be razed to make room for something more modern. Perhaps we are building no less substantially on that account, but instead of waiting for that charm, which comes only with the mellowing influence of time, we are resorting to all sorts of subterfuges to imitate age. We are glorifying the machine, as doubtless we should do, and at the same time desperately imitating hand craftsmanship, and the cruder the craftsmanship, the better.

"If we are to have a modern architecture, let it be sincere, and make it the best and most natural that the machine can produce out of the new materials at hand."

CHAS. C. WILSON
*Columbia, S. C.*

## PLANNING MOST IMPORTANT

"The money saved in the operation of a well planned building with departments properly correlated is unfortunately a somewhat intangible or obscure item, but it is there. This aside from and in addition to the comfort and feeling of well-being in occupying such a building whether it is your work-place where you live during the day or in your home where you are at night, or rather where you should be at night.

"Work on your floor plans first. In your mind live in it, work in it, do business in it, manage it. Then decide on the materials. Then turn it over to your chief draftsman. He will probably make a better job of the exterior than you would anyway, but don't let him throw money away. He will soon catch on and will be delighted with the appearances.

"This will help us all and will get the public away from the idea that an architect is an artist with his brains knocked out."

BEM PRICE,
*Birmingham, Ala.*

## BALANCE

"It is my opinion that good architecture will be the rule rather than the exception only when architects use good business methods, good logic, good engineering and good taste.

"There is a lack of balance between art and science. It is generally conceded that good engineering is a fundamental quality. Good taste is also a fundamental quality and should be generally recognized as such. Right now we are apt to lose sight of the quality of beauty while there is so much being thought and said concerning tradition and modernism. If we are as logical as the Early American Builders, we will not disregard precedent or fail to make the best use of modern materials and methods. The present-day demand for the sensational and dramatic is apt to throw architects out of balance. We should keep our feet on the ground and our eyes straight ahead, and one hand in the clouds and one in the ground."

CHAS. I. BARBER,
*Knoxville, Tenn.*

## DETRIMENTAL BUSINESS

"With all its changes, which are, after all, changes in detail and methods, Good Architecture must always remain what it has always been, and I think that you define it adequately and well. We do, however, take exception to the remark in your second paragraph, that it 'becomes more and more apparent that the practice of architecture has become a business.' If this is so, I hope that things are not always what they appear to be. An architect is often forced to become a business man to the detriment of his architecture. The essential thing is that the business man should recognize that he should not demand in others all the qualities and experience that he possesses himself, but that in going to an architect or to any professional man, he should recognize that the quality of the professional advice that he will receive will be in direct ratio to the amount of experience and time that the professional man has devoted to his own profession, and further, that it often is in inverse ratio to the amount of time the professional man indulges in the unnecessary study of the activities of others.

"A good common sense business head is required in all architects but the moment that architecture becomes a business, Good Architecture can no longer be produced.

"We must always bear in mind the human limitations of the productive mind. If the demands of business require the expenditure of excess energy on the part of the architect, it is only natural that the architecture itself, which you so aptly define, will suffer from lack of attention, both in time devoted to it and from lack of inspiration."

WILLIAM G. PERRY,
*Boston, Mass.*

## SINCERITY AND TASTE

"I read the article with a great deal of interest and feel that you have struck a very definite and sound keynote, especially in the last paragraph where you mention 'more truly functionally efficient, economically sound and aesthetically satisfying,—in other words,—Good Architecture.'

"Sincerity coupled with taste (if there is such a thing) is probably about all that a man can sail by in these disturbing times. An article such as yours will do a great deal of good, I feel sure, to steady the whole movement and remind us of the fact that good architecture is based on those very fundamental words at the end of your paragraph."

GORDON B. KAUFMANN,
*Los Angeles, Calif.*

## WHAT PROFIT?

"Good architecture in a building is that character which makes the building beautiful, practical and profitable! Not always can the profit be reckoned in money. Frequently, it must be reckoned in satisfaction to the soul, delight to the eye, or inspiration to the spirit. But I rank all of those reactions under 'profit.'

"The architect who does not make his buildings practical, that is, planned for efficient, profitable operation, will soon find himself out of practice. That's true, too, of the architect who does not bring the element of analysis and finance into his practice. He, too, will pass, since this is essentially an age of money."

GILBERT STANLEY UNDERWOOD,
*Los Angeles, Calif.*

## HUMANIZED OR HIDEOUS?

"The architects of the present and future undoubtedly must have a knowledge of formulating a financial plan which would make possible successfully carrying through a project. . . .

"The so- and self-styled 'modernists' have entirely missed the mark as described in your definition 'good architecture is humanized.' The diminutive modern Napoleons, who have done so much to make the City hideous, have failed entirely in making architecture 'expressionistic.' "

WM. H. GOMPERT,
*New York, N. Y.*

## DESIGN THE PIVOTAL POINT

"The need of 'emphasis' varies from year to year. For a long time we have placed emphasis on design and construction, places where emphasis has been needed and where its benefits have shown in a gratifying manner.

"Without relaxing in that respect in these two fields, it has seemed to me lately that much attention should be given to those things that fall properly within the realm of business administration. This thought is advanced with the continued belief that design is the pivotal point about which architecture must always revolve, but with the growing belief that administration, as the handmaiden of good architecture, has been allowed to lag behind."

W. J. SAYWARD,
*Atlanta, Ga.*

## BAD DRAWINGS, BAD BUSINESS

"As I read your editorial, I am glad to note your reference to the fact that business enters into the architect's practice. Many architects seem to think they need to know little or nothing of construction, trade practices, etc., with the result that their drawings are incomplete and do not tell a contractor what or how he is to build his work. The result is the architect loses the respect and good will of the contractor which he, the architect, can ill afford to lose. The architect needs to have a practical knowledge of building to enable him to make his drawings so they will be what they are supposed to be—a guide for the contractors in the execution of a contract."

J. C. LLEWELLYN,
*Chicago, Ill.*

## APPROPRIATENESS AND IMAGINATION

"As I see it, architecture is the art through which is produced structures appropriate to their use. The understanding of what is appropriate, is the crux of good architecture.

"You have pointed out the danger of the swallowing up of the *art* of architecture in what may be termed its *science*. The latter has to do with the tangibles; while in its complete fruition, the former has to do with much that is intangible.

"A design may be broken down into color, form, composition, texture, scale,—and yet beyond all these a great work of art has imagination and a suggestive quality which baffle complete analysis."

ELECTUS D. LITCHFIELD,
*New York, N. Y.*

## LIFE AND ARCHITECTURE

"Good architecture is only arrived at by a thorough understanding and creation of a condition of life to be lived within a building or group of buildings. Only by building up the life and having it for an inspiration can one interpret the modern architectural problems.

"The materials, mechanical equipment and architectural expression are merely tools for perfecting a building which functions around life, and only by this careful analyzing of the life to be led within a structure can we come at, in any sense at all, true modern architecture.

"Too much has been said to make it appear that modern architecture is merely external or internal clothing of the structure. To my mind, modern architecture is the creation and finding out of conditions which make for the most advantageous use and structurally sound principles, which, through our architectural craft, allow a building to express beauty and use as one."

J. FREDRICK LARSON,
*Hanover, N. H.*

## THE SKILLFUL DREAMER

"Architecture is the art that seeks to create buildings according to sound principles of construction and that will fulfill the requirements of utility and express their purpose in beautiful form. Good Architecture therefore demands that we must seek to harmonize in a building the requirements of utility and beauty. So architecture becomes the art of erecting expressive and beautiful buildings which will contribute to man's mental health, poise and pleasure.

"And in the final analysis it should not be overlooked that the one who is to produce good architecture must be a dreamer of dreams and a builder of air castles, yet withal he must have the technical skill and the proper knowledge to reproduce those dreams in lasting materials."

ALEXANDER C. GUTH,
*Milwaukee, Wis.*

## INCONSISTENCY

"I am very much of the opinion that present-day radicalism in architecture as well as in most other lines of thought is inconsistent and temporary. I have just as little interest and faith in a reactionary point of view."

JOHN LEONARD HAMILTON,
*Chicago, Ill.*

## FUNDAMENTALS REMAIN

"I agree with you heartily and appreciate the stand you have taken, inasmuch as there has been so much ill-considered talk regarding so-called 'modern architecture.' The fundamentals of good architecture are the same today as in the past."

C. HERRICK HAMMOND,
*Springfield, Ill.*

# THE ROYAL HORTICULTURAL HALL

## LONDON, ENGLAND

*F. R. Yerbury*

The Royal Horticultural Hall, the result of an unusual competition, illustrates new methods in design and construction to meet modern requirements. This article explains a few of the problems involved and discusses briefly their solution. The illustrations are from sketches by the author

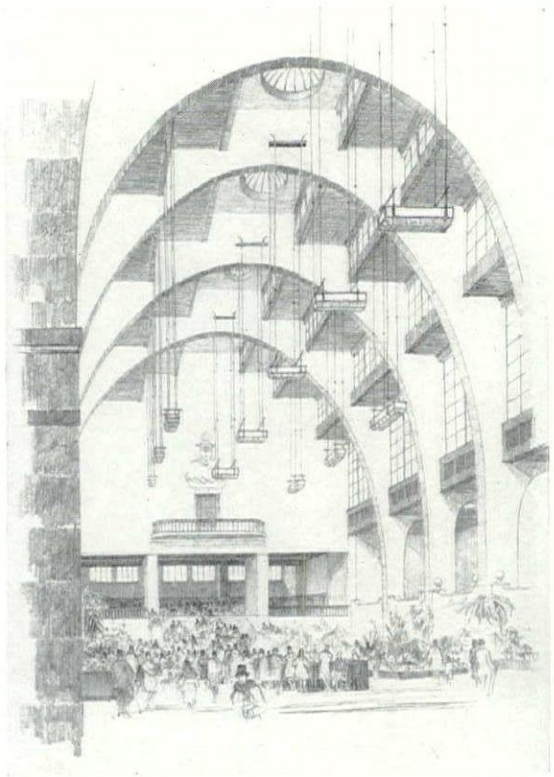
BY

GERALD K. GEERLINGS

ALTHOUGH one may be warmly sympathetic toward the sane and sensible current Continental architecture, a surveyal often leaves the impression that much of it has been *moderne* for the sake of being *moderne*. The approving trumpeting from a supporting band of enthusiasts sometimes seems to have guided the pencil and judgment of the architect in his eagerness to employ "fresh, invigorating forms." This conscious "playing to a gallery" has not served to endear considerable Continental architecture to the American architect, any more than has forced inventiveness, which results in extravagant *motifs*. The frank usage of materials in steel and concrete structures is a much bruited virtue of Northern Continental buildings, yet the verbal case in its favor is not always happily supported by actual examples. Concrete has shuffled along in a stodgy sort of way, brusque if not clumsy, and without cutting many cultured capers. While one may gladly subscribe to the idea of exposing constructional forms without vainly trying to disguise them in the raiment of Renaissance palazzos, unless it be done with some degree of grace and *finesse*, it is difficult to refrain from thinking: Honest, yes—but stupid!

With such ruminations it is all the more pleasant to explore current London. Turning into Elverton Street from Vincent Square on a first visit to the Royal Horticultural Hall by Easton and Robertson, architects,—even after having seen photographs of it,—takes one off guard with its greeting in new, clear phraseology, amid the muffled surrounding Victorian jargon. The interior tells its story in an even more specialized vocabulary. Certain minor syllables which are unfamiliar arouse questions, but the evident study which the entire composition has undergone, definitely restrains inward criticisms before knowing the requirements which had to be met, and the limitations which were set. Not many modern buildings have that faculty, nor do they seemingly answer one's questions with succeeding visits. After a little prowling about and sketching, the elements which at the first blush seemed dubious, gradually appeared to be the logical solutions, or at least one of a possible few equally good solutions.

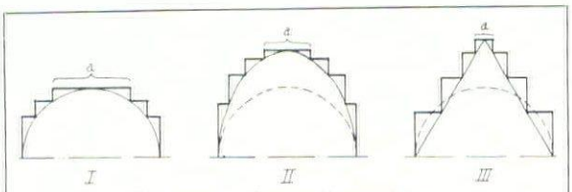
The problem, briefly stated, required that a large exhibition hall suitable for the display of flowers, with administration and restaurant facilities adjacent, be accommodated to a converging site approximately 212 by 127 feet. The heating, ventilating, and economy in erection costs were of prime importance. A competition among six architectural firms resulted in the scheme submitted by Easton and Robertson being selected. While there was an "assessor", or professional advisor, retained to draw up the terms of the competition, the actual judgment was conducted



View toward the mezzanine end of the Great Hall

by the Society itself after reports had been received by experts as to the relative lighting merits of the various schemes. The award was made very largely because of the satisfactory results given by the model of the accepted scheme, as regards the distribution and source of light. It is significant that this practical outlook by the Society in judging the competition on almost purely practical ground, has been the source of the main interest infused into the solution of the building as built. A dyed-in-the-wool architectural jury might conceivably have "played safe" by selecting a version of Diocletian's Baths, veneered by a hackneyed catalogue facade, with no more interesting or cheerful results than the present old Horticultural Hall nearby, its central skylight—which to use an apt expression of Paul Cret, makes one feel like "being at the bottom of an aquarium."

The problem of lighting the hall so as to approximate daylight, without the disadvantage of looking directly into the source of light when trying to observe exhibits, was the crux of the whole problem, and therefore is well considered first. Horizontal lighting in skylights was ruled out because of the poor diffusion near the floor, as well as the cheerless atmosphere it creates. The Society had specified a high hall, so that a low, glass-roofed conservatory type of building was out of the question, as well as deserving the




Diagrams of possible sections

objection of heating a structure having its entire roof of glass.

The architects frankly admit their enthusiasm for wood structure at Göteborg (or Gothenburg), Sweden, with its laminated wood trusses in elliptical form, and stepped clerestories. But, acknowledging their indebtedness to a wood precedent detracts in no degree from the success and ingenuity with which they have for the first time gracefully interpreted this form in concrete. There is an open spaciousness which neither photograph nor sketch could fully portray, an upward "lift" of the subtly curved parabolic arches and vertical hanging rods of the electric lights which no description could justly convey, a lightness and grace to the concrete which is admirable to see and difficult to believe. As far as the lighting of the hall is concerned, it was felt by the architects that it would be unpleasant to look directly into windows at a low level, consequently the side aisles came into being with low overhead light, while the exit-end was effected by rendering the lower part of the wall opaque, and diminishing the glass area.

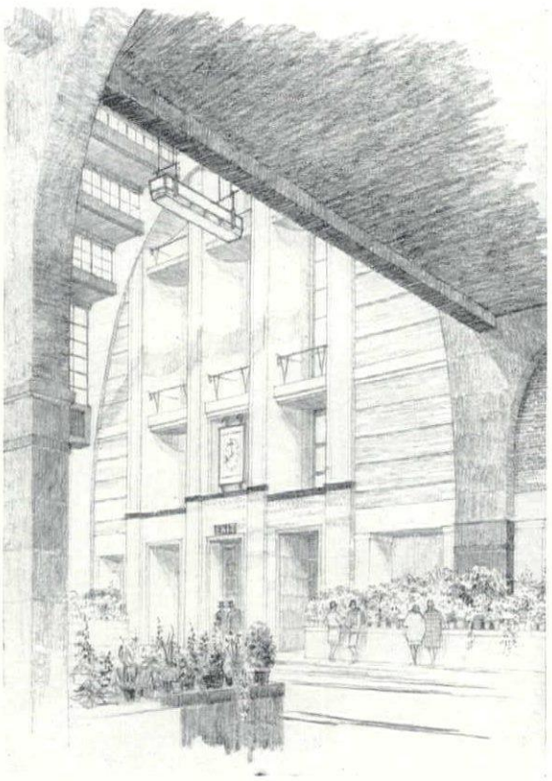
Their investigations into the combined problem of heating and ventilating led them to adopt the scheme as executed, having the heat emanate from horizontal panels, while the windows were confined to the vertical panels in the stepped clerestories. Theoretically, a semi-circular section instead of a parabolic one would have served the same purpose of attaining alternate horizontal and vertical panels tangent to it, as in *I*, as well as in *II*. (See diagrams, page 568.) But it is at once evident that the top slab at *a* in *I* is far greater in width than *a* in *II*, and since horizontal panels were to be solid, it reduces the light-source area to a great extent when the length of the hall is considered. In theory, a triangular section, *III*, approaches the ideal condition in greatly diminishing the obscure top horizontal panel.

Coincident with the solution of the lighting problem, was that of the heating and ventilating. The object was to secure a moist heat which would prolong the life of the cut flowers on display as long as possible, and yet which would not interfere with the plenum ventilating system. While many exhibition halls are without forced ventilation, the London building regulations re-

quired fresh air to be supplied, although they did not insist on exhaust ducts. In the usual type of furred structure the air ducts can be camouflaged between the actual and visible walls, but in this building where there are only the actual, necessarily solid slabs without any furring whatsoever, it became a serious problem—unless the pipes or coils were to show.

The solution as built, after much consultation and research, resulted in the horizontal air ducts supplying fresh air of about 60 degrees, being located along the top of the aisles' slabs and under the roof, with the large vertical ducts from the basement fan room rising in the corners of the hall (within the front administration-unit of the building). The clerestory roofs above the side aisles consist of a single slab of concrete, insulated above with 1½ inch of cork, and covered by 1⅛ inch of asphalt roofing. The "heating panels," as they are called, are in accordance with a system employed in England for some time past, but which as yet is not commonly used in America: that of placing the heating pipes within the walls or ceiling, and letting the surface serve as the radiator. The heating pipes in the form of serpentine coils are put in the forms before the concrete reinforcing rods are placed, about 1½ inches above the under side of the slab. The joints are welded and the system thoroughly tested before pouring. It is hoped that with the low-pressure, hot-water system in use, not more than several gallons of water will need to be replaced during the year, and that corrosion will be negligible. There are heating panels on all the horizontal slabs except the topmost, center one. The fact that the entire slab must necessarily become thoroughly heated before it can radiate any heat to the air, as well as the sorry predicament in case of a leak, makes it an interesting treatment well worth observing. The milder climate of London compared to the more rigorous changes in the United States, and the fact that 60 degrees is considered par instead of 70, also makes an appreciable difference, of course.

The plan seems to be solved in the obvious way —which is the highest tribute which can be paid it. In spite of the irregularity of the site on the entrance street (Greycoat), it was utilized in a symmetrical solution as far as possible by the curved entrance hall at the sidewalk level, and the mezzanine opening from the great hall above. The two flanking pavilions are not on the same line, but bear the same relation to the part of the facade between them; the one at the corner of the two streets manages to give the building a right angle where it turns. The hall is 124 feet wide, including the aisles, by 150 long. At the end opposite to the entrance hall, are provided two exit doors, with a ten percent ramp leading

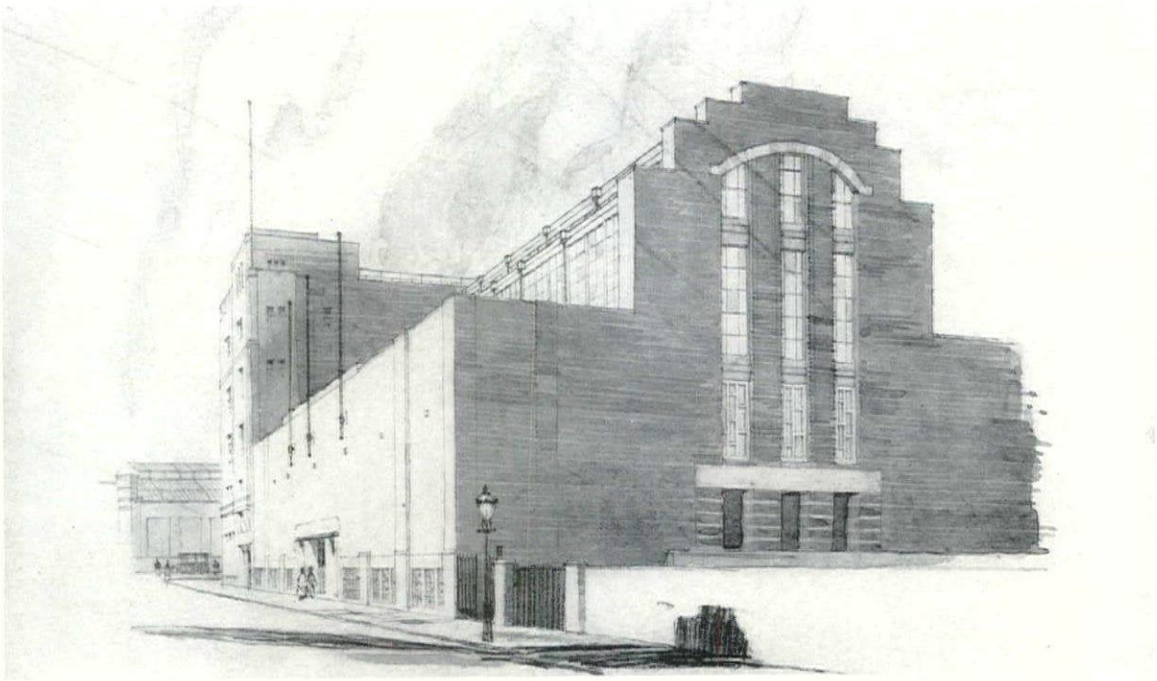


View toward the rear or exit end of the Great Hall

to the street level. Bulkheading the windows along the Elverton Street side out into the great hall permits them to run from the sidewalk level to the under side of the wall beam of the ground floor slab and incidentally forms a wide platform for exhibition purposes.

The open mezzanine at the entrance-end of the hall affords a pleasant and light vantage gallery to lounge and observe the exhibit floor. For special functions it serves as a part of a large platform which is continued out over the steps by temporary staging, while for other requirements sliding doors can shut off the mezzanine completely, leaving only the platform-staging over the steps projecting into the hall.

Some English critics have made the point that there might be an easier transition on the side elevation between the front administration block, and the receding clerestories which butt against it. With the Society's requirements such as they were, this could hardly be accomplished without unduly sacrificing a room at each end of the top floor, and whether this would have been a greater gain than loss in perspective, is debatable. On the contrary, it seems a very honest and sensible thing to indicate frankly on the outside what is transpiring on the inside. Moreover, the side street is relatively unimportant and narrow, providing no station-point from whence one can secure a comprehensive view of the side in ap-



**This view of the rear of the building gives a general idea of its mass, fenestration, and exterior treatment**

proximate elevation. Only at the end of the next block toward the rear does one get a satisfactory chance to turn around and see the end and side of the hall in conjunction with the front-block, and then the latter has become foreshortened until it seems only to be the logical abutment for the clerestories. (See sketch above.) The latter appear in stepped formation, but give no sense of the supporting parabolic arches which are assertive features in the interior.

The entrance facade is obviously the product of much sincere study. It is difficult to make any mental alterations for its improvement, the rest of the building remaining as it is. Shearing off the curved entrance and mezzanine, or running the curved facade up the entire height, are both losses. The windows at the very top are pivoted and divide quite differently from any others, and scarcely seem as happily solved as other elements; but after all, they are only minor details. The facade on the whole seems appropriate to London tradition, with dignified restraint and simplicity, with vertical wndows surmounted by square ones, with a stone band course, and with a simple parapet wall. The narrow stone window reveals serve to reflect light into the room, after the manner of the early nineteenth-century brick jambs painted white.

In character with the skillful planning and design is the usage of materials. The most original and effective, perhaps, is the concrete on the interior. The aggregate was mixed fairly dry, with stone varying between 3/16 to 3/4 inch mesh; when the forms were removed it was bush-hammered by pneumatic force. The result is that the concrete does not have to depend on any mixture clinging to it, or any superficial texture, but on the other hand, preserves the nature of its poured origin by the slight ridges between the forms still showing on the surface. By the concrete aggregate being relatively fine and carefully puddled, there are neither holes nor large stone faces showing on the surface, but an overall, coarse grained monolithic stone texture. The brick on the interior embraces a long range of greys, tans, buffs, into soft blues made from a red brick which is treated with a vitreous glaze at a high temperature, thus converting it into a washable ceramic product. The plaster at the two ends of the hall is of an acoustic nature, yellow in color. The exterior store is treated as a veneer or revetment, and in no sense does it try to palm itself off as comprising the fabric of the building. The exterior brick does not impress one as being as fortunate in color as it would be were it the more usual Town-red, for the mustard tone of the actual building is not as successful as the photographs indicate. The iron stair details, both inside and out, are done with fine, fresh feeling for the fitness of both the material and its purpose. The same may be said for the lead marquise over the three front entrances, with the ornament in gilded relief. Lighting fixtures have been designed with a wholly original outlook, resulting in sensible and stimulating forms which are in keeping with the *ensemble*.

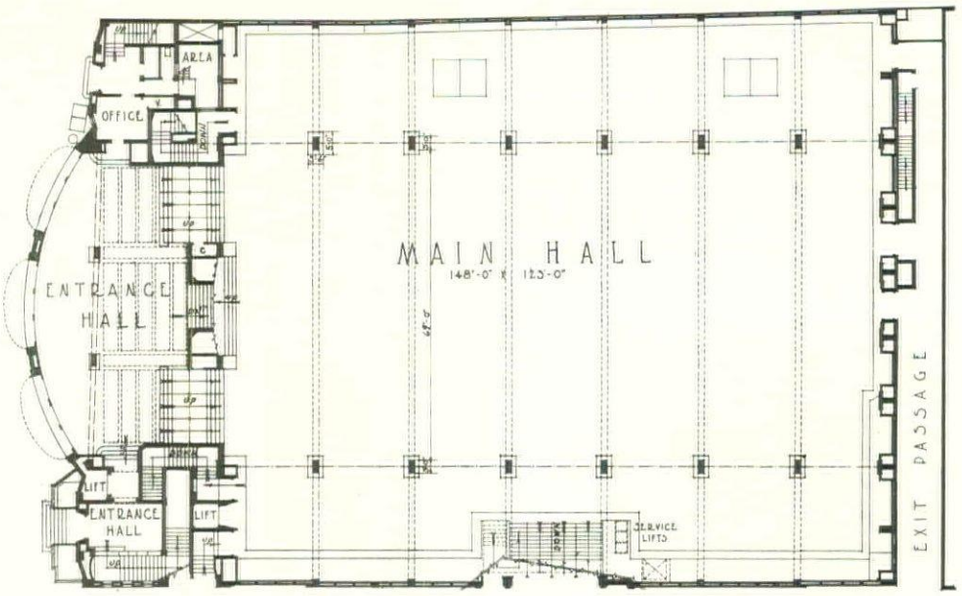
# THE ROYAL HORTICULTURAL HALL

## LONDON, ENGLAND

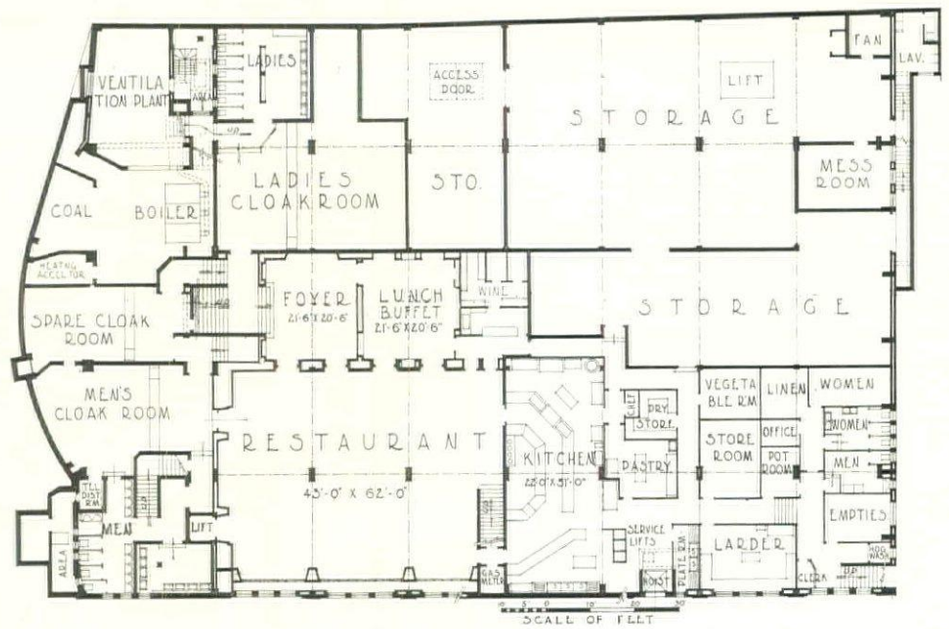
*F. R. Yerbury*

View of the main entrance front. The lower stories are of stone veneer and the upper stories are faced with brick of a mustard color. The window jambs and band course are also of stone. The hoods over the entrances are of lead with ornament in gilded relief. The railing is of hand-wrought iron

EASTON AND ROBERTSON
ARCHITECTS




GROUND FLOOR PLAN




BASEMENT FLOOR PLAN

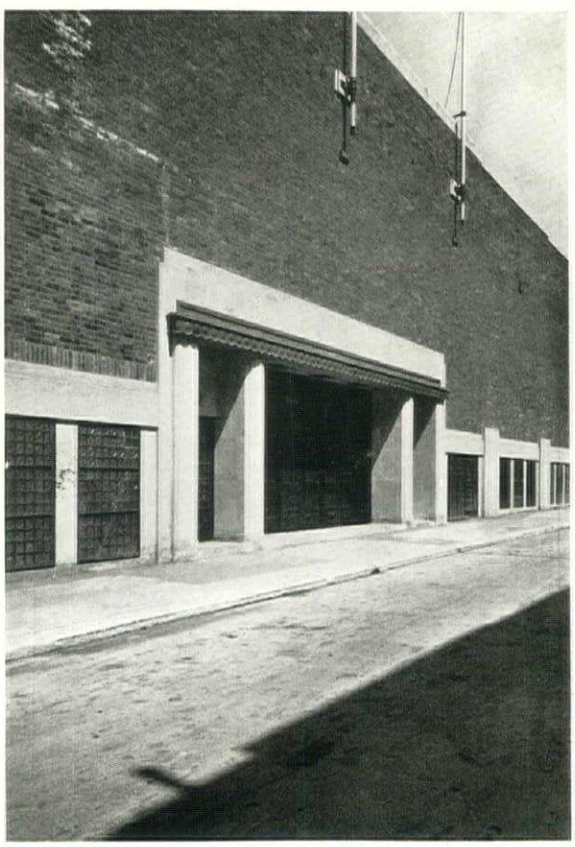
ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

EASTON AND ROBERTSON, ARCHITECTS

*F. R. Yerbury Photos*

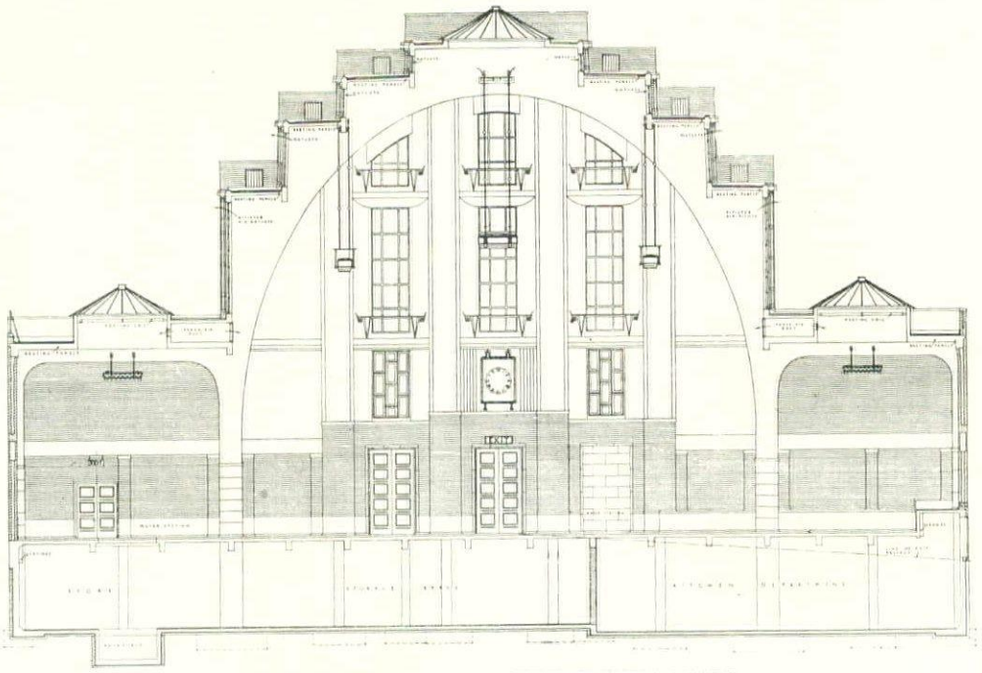
Two entrance details. The upper photograph is of the main entrance and the lower is of the exit on the side elevation. The windows shown in this detail extend from the sidewalk level to the under side of the wall beams of the ground floor slab, and the resulting interior bulkhead forms a wide platform which is used for exhibition purposes



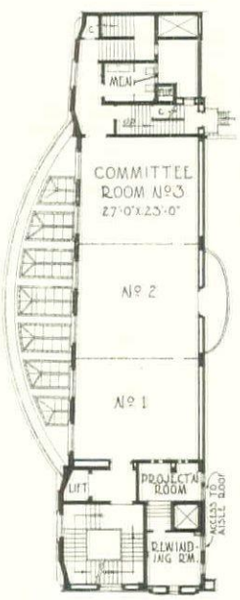
ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

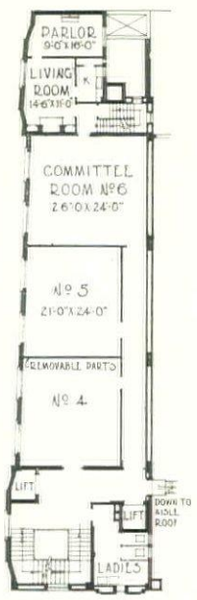
EASTON AND ROBERTSON, ARCHITECTS



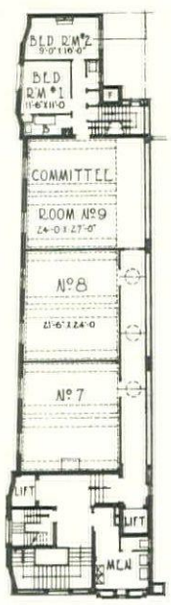
SECTION THROUGH THE MAIN EXHIBITION HALL




FIRST FLOOR PLAN




SECOND FLOOR PLAN




THIRD FLOOR PLAN

ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

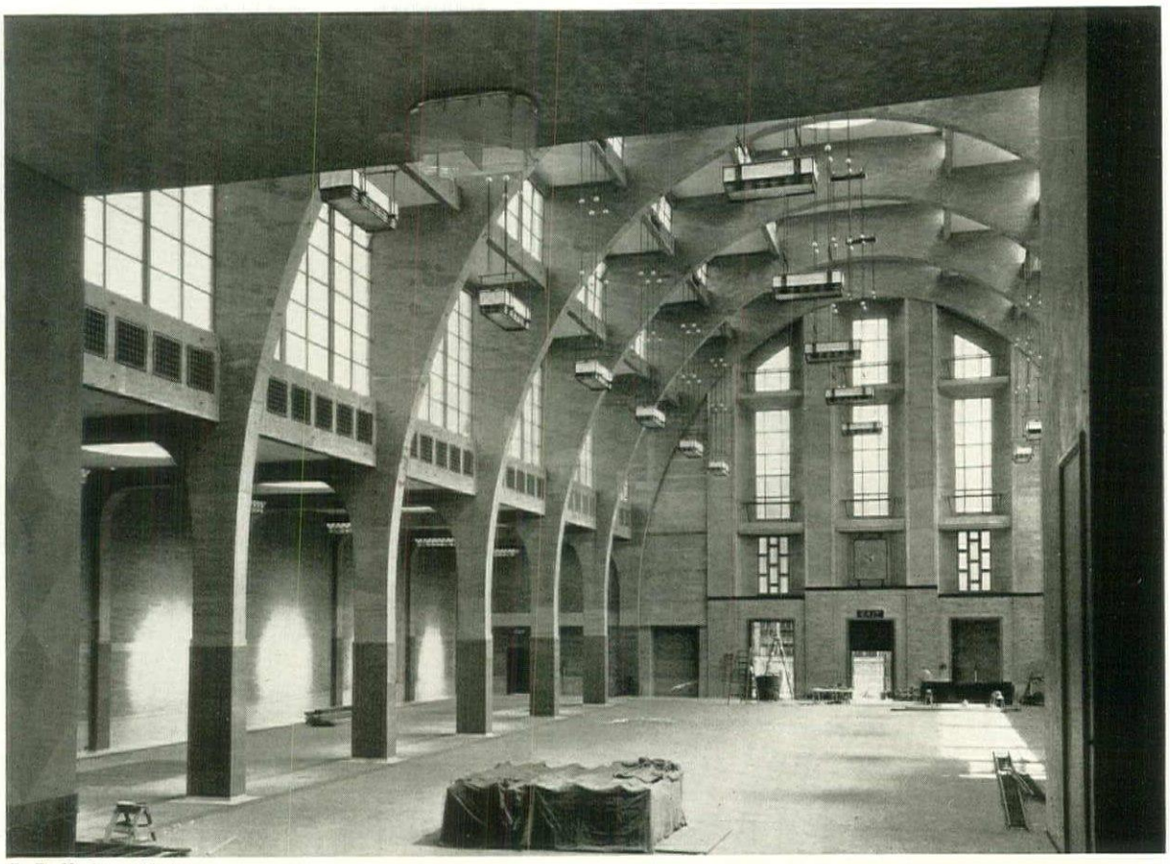
EASTON AND ROBERTSON, ARCHITECTS


*F. R. Yerbury*

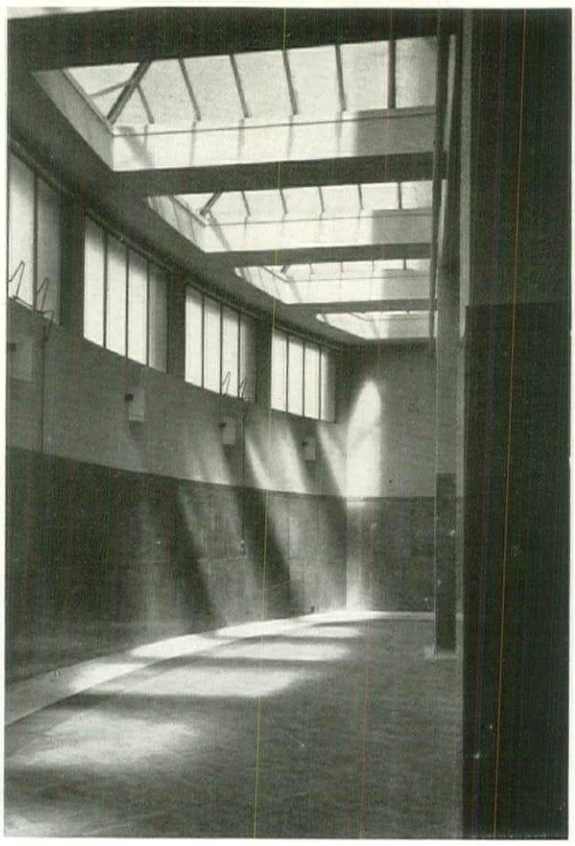
ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

EASTON AND ROBERTSON, ARCHITECTS



*F. R. Yerbury Photos*



The parabolic arches shown in the upper illustration are of natural concrete with a bush-hammered surface; the end wall is coated with acoustic plaster of a yellow tone; soft greens and lavenders, together with gilt have been used to accentuate some of the ornament. Heating panels, consisting of pipes in serpentine coils, have been placed in all of the roof slabs except the topmost. The lower detail is of the rear of the mezzanine platform

ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

EASTON AND ROBERTSON, ARCHITECTS


*F. R. Yerbury*

ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

EASTON AND ROBERTSON, ARCHITECTS

*F. R. Yerbury*

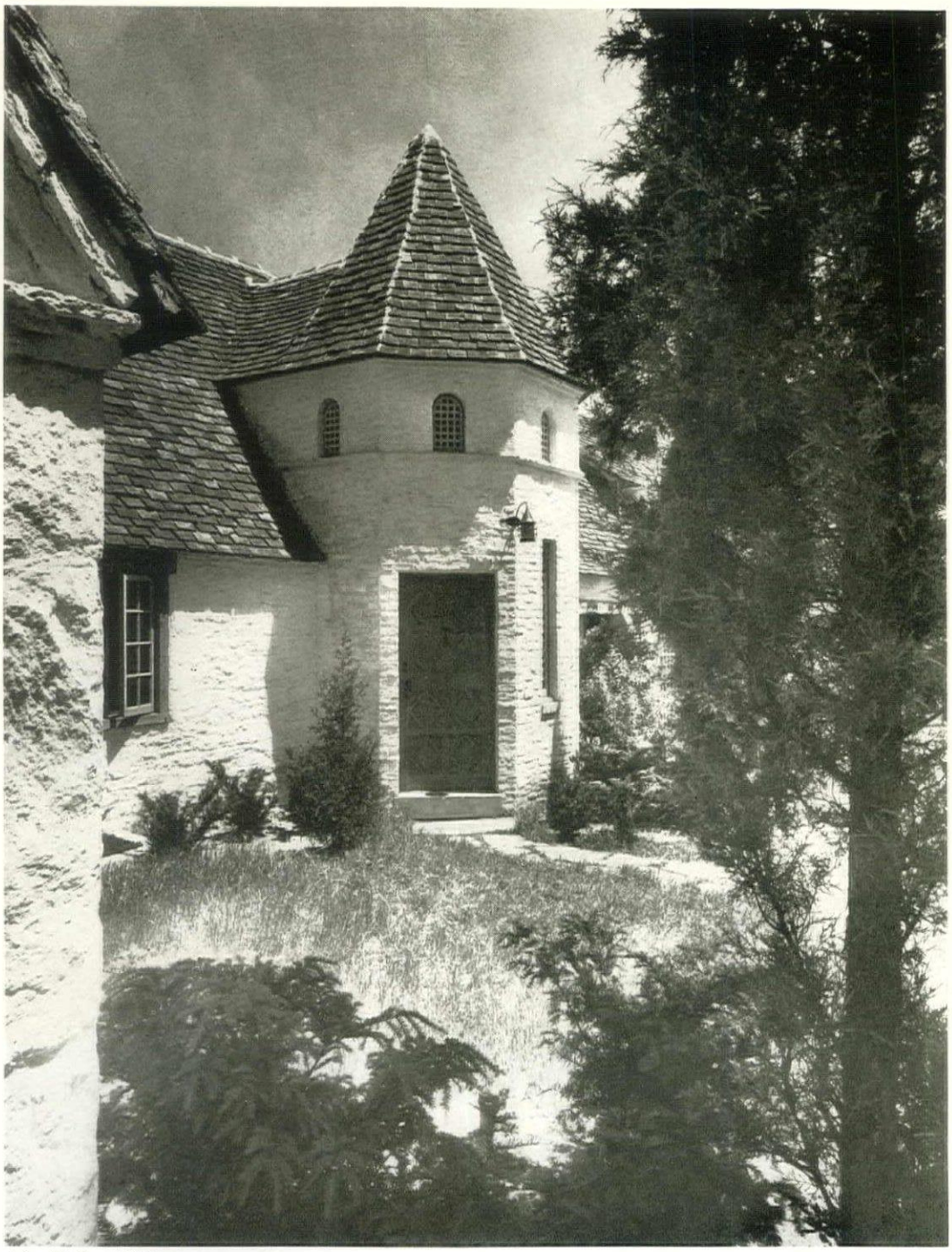
The piers are faced with marble, and the ceiling is white plaster. The glazed brick on the wall is in various shades of grays, buffs and light blues. The base and the border on the floor are of gray cast stone and the floor is of wood

ROYAL HORTICULTURAL HALL

LONDON, ENGLAND

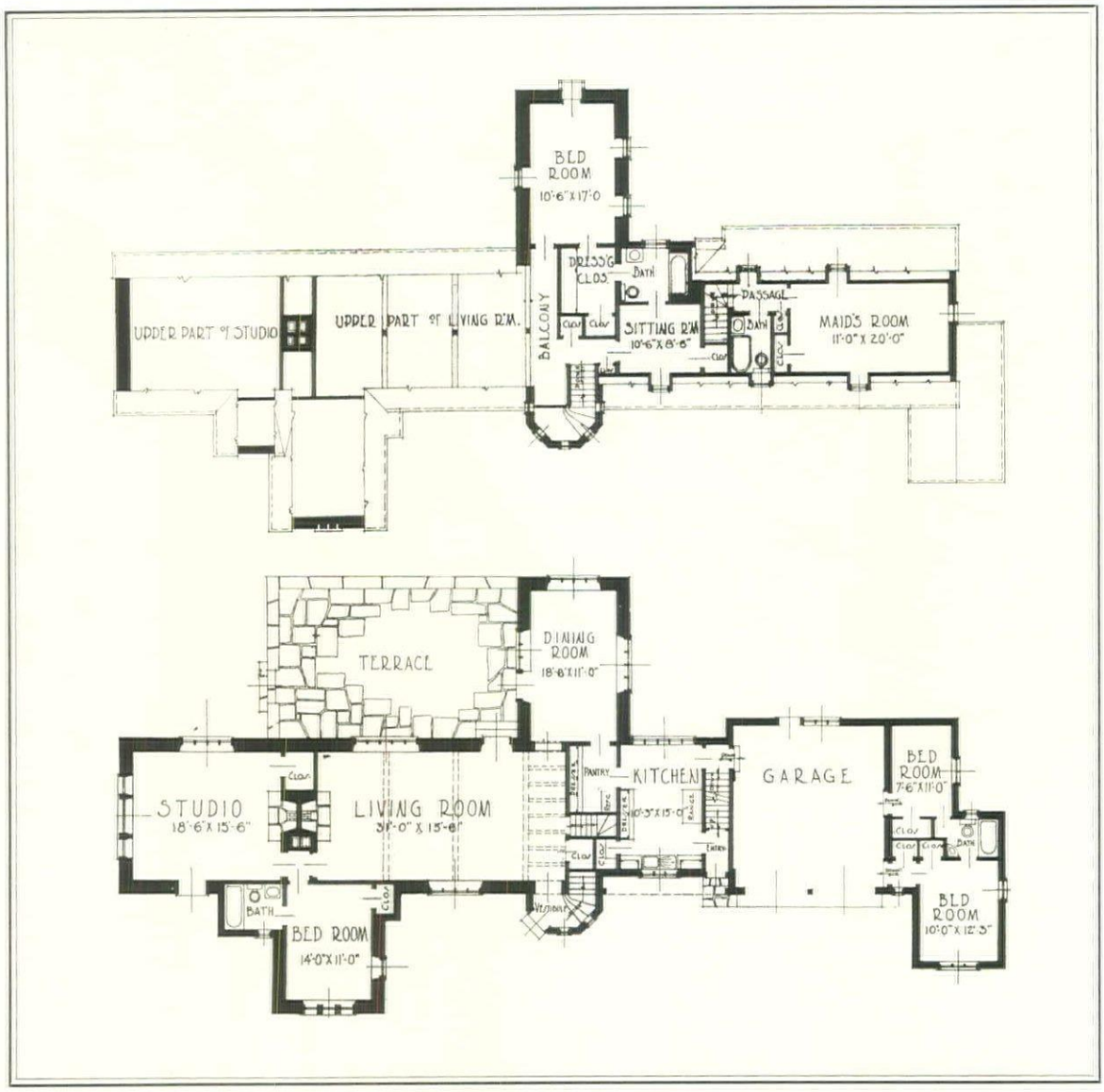
EASTON AND ROBERTSON, ARCHITECTS

# A STUDIO IN NEW ENGLAND



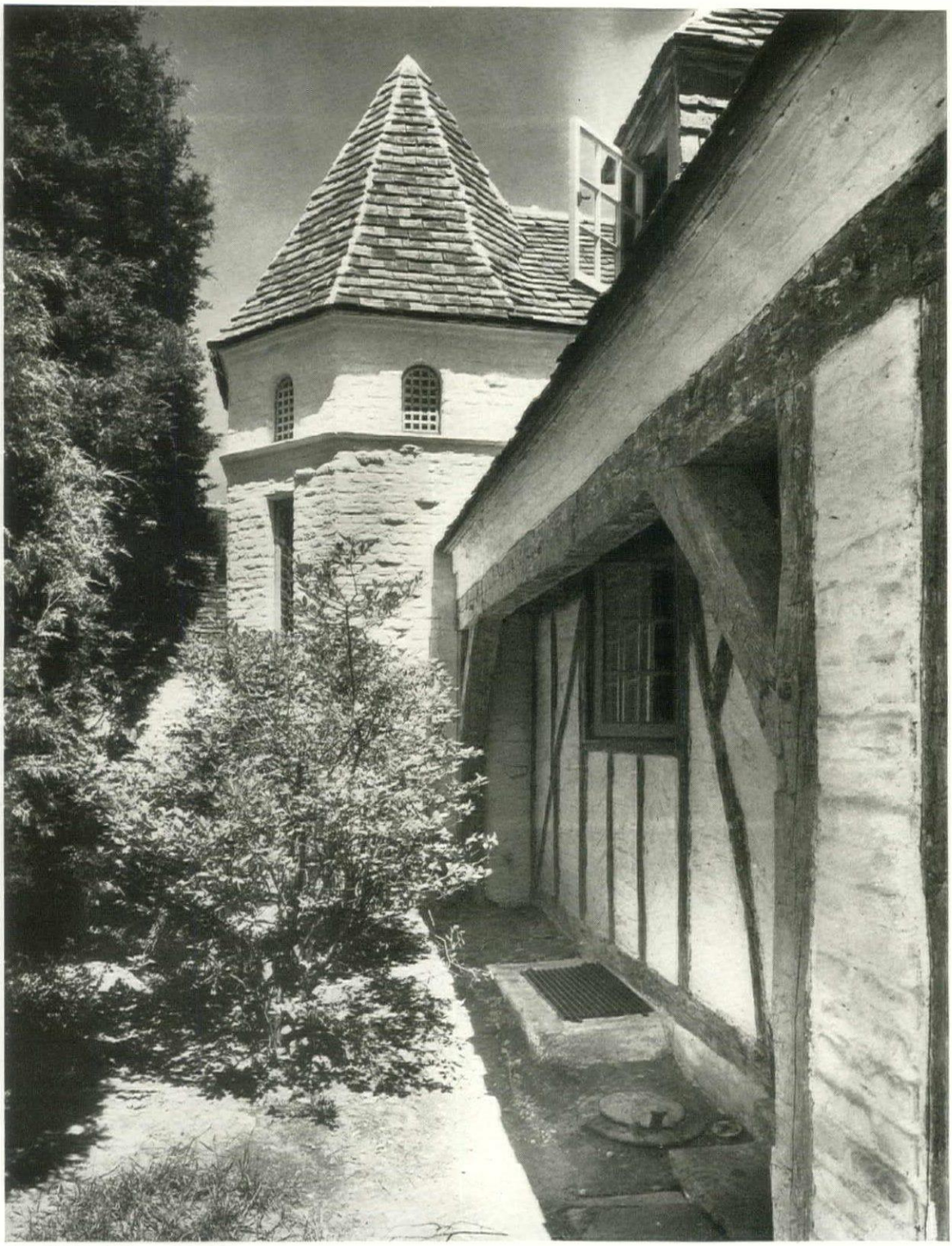
*John Wallace Gillies*

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT



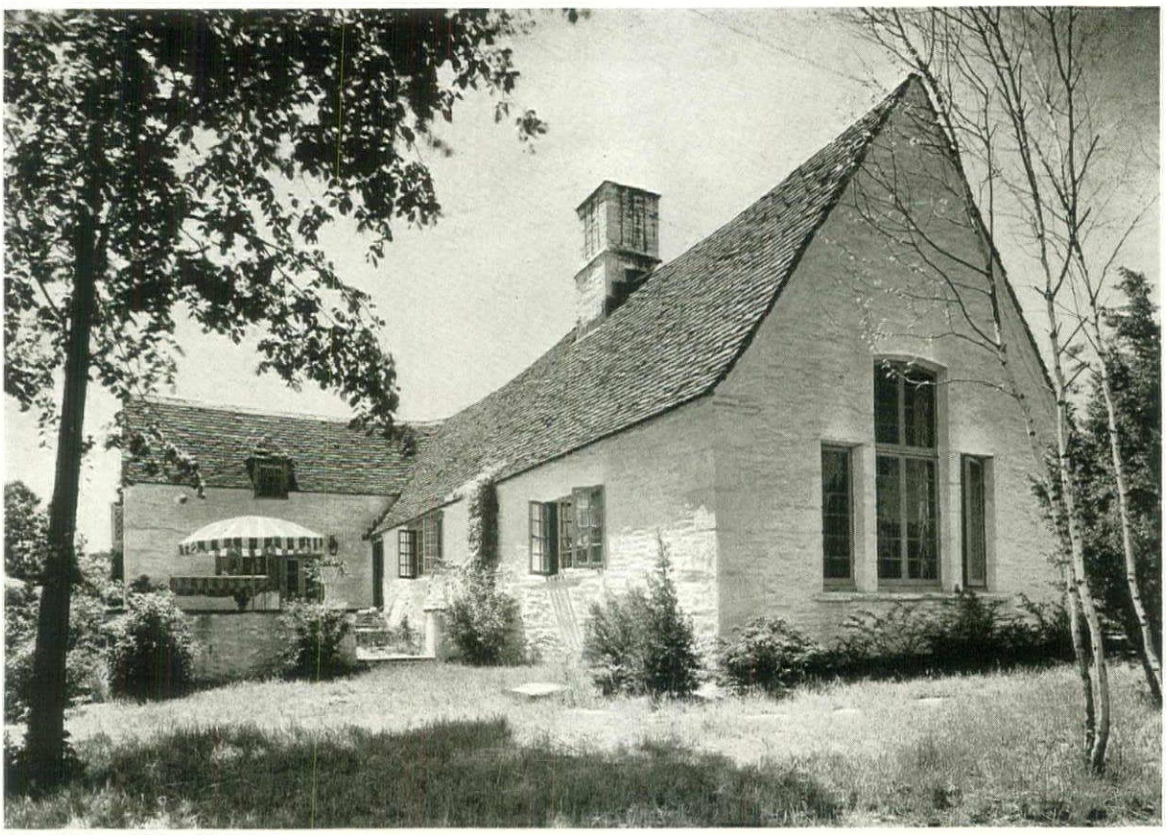

Completed in 1929, the house contains 48,215 cubic feet and is built of solid masonry with structural woodwork of solid oak. In the main portion the material is flat field stone laid with parged joints; the stair tower and service portions are of common brick. The exterior, except the roof, which is of hand-made tile, was given two coats of whitewash, the woodwork being first stained with a preservative. The chimney is of stone with a cut base and cap. The gable eaves and cornices are of projecting stone courses, and the roof tiles are cemented on ridges and hips. The terrace, laid with large stones set in sand, is enclosed by a low stone wall

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT

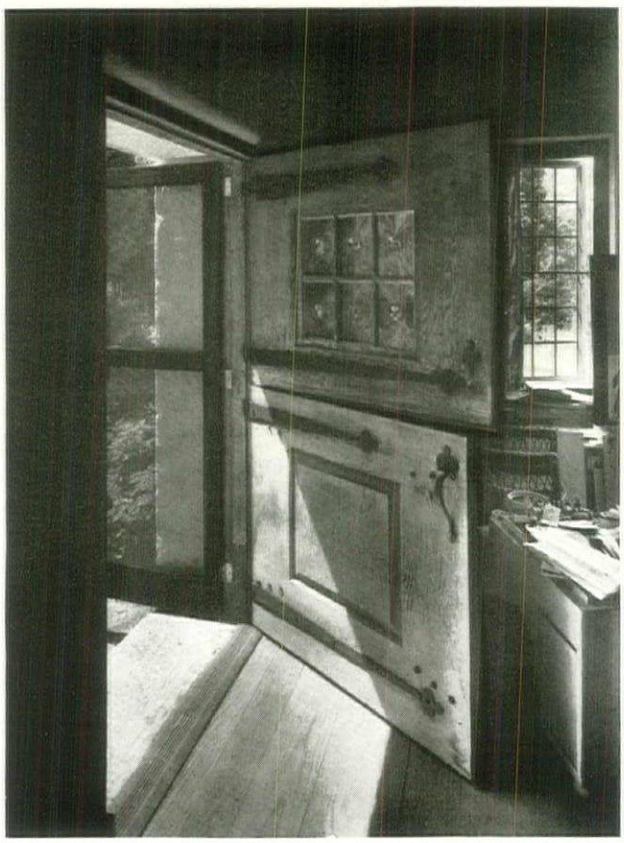


*John Wallace Gillies*

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT



*John Wallace Gillies, Photos*



The Dutch door of the studio entrance is glazed with bullion lights; the hardware is of hand-wrought iron. The siding of the gable at the right is pine, stained and whitewashed, above half timber of solid oak with common brick nogging

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT

*John Wallace Gillies*

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
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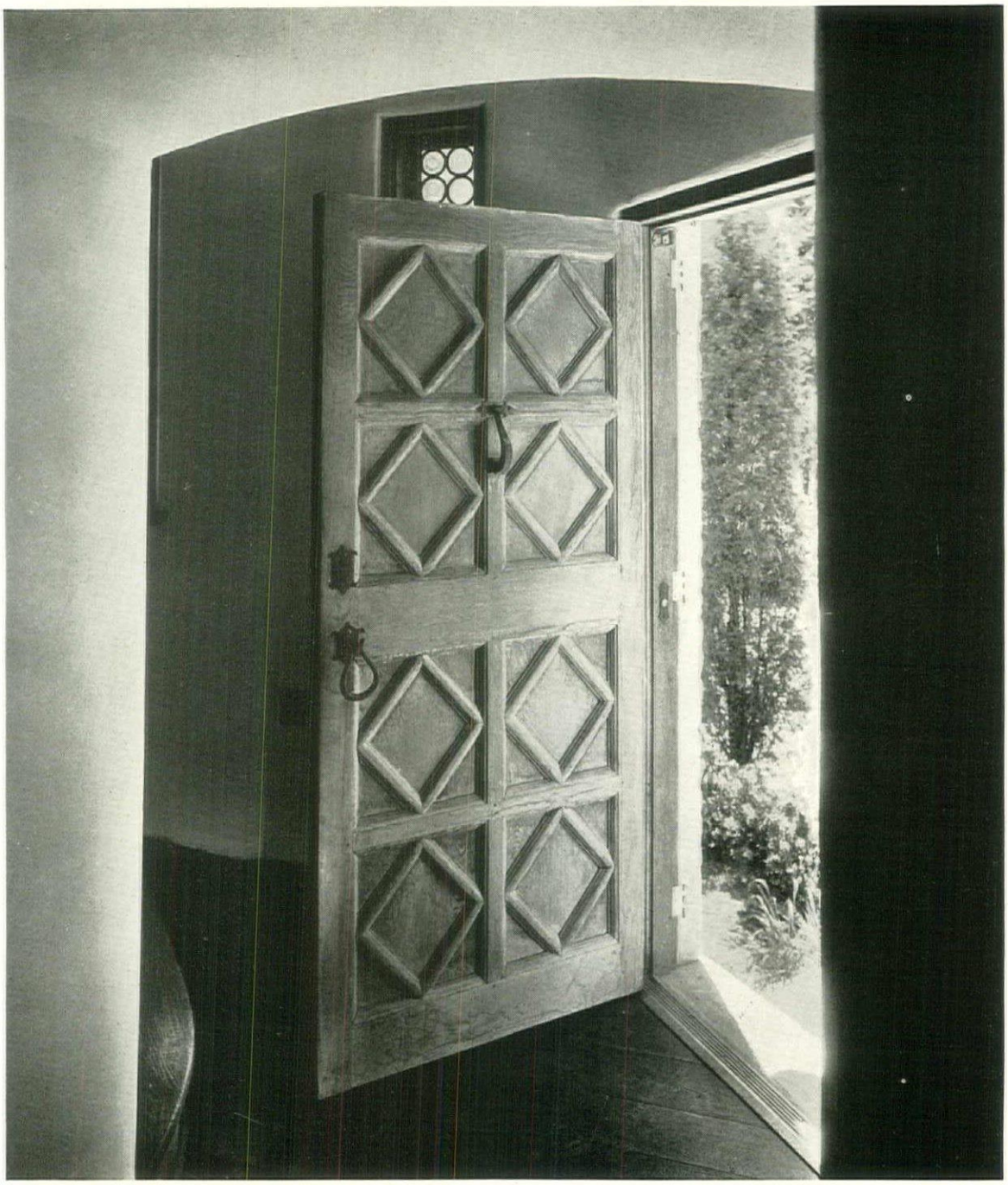


*John Wallace Gillies*

The main entrance door. It is oak with wrought iron hardware. The window lintels and the trusses in the living room are solid oak timbers, stained and finished with a coat of lime whitewash. The floor is random width oak planking, stained to a dark brown, filled, and waxed. The dining room floor is of hexagonal red quarry tile

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT

*John Wallace Gillies*

HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT

*John Wallace Gillies*

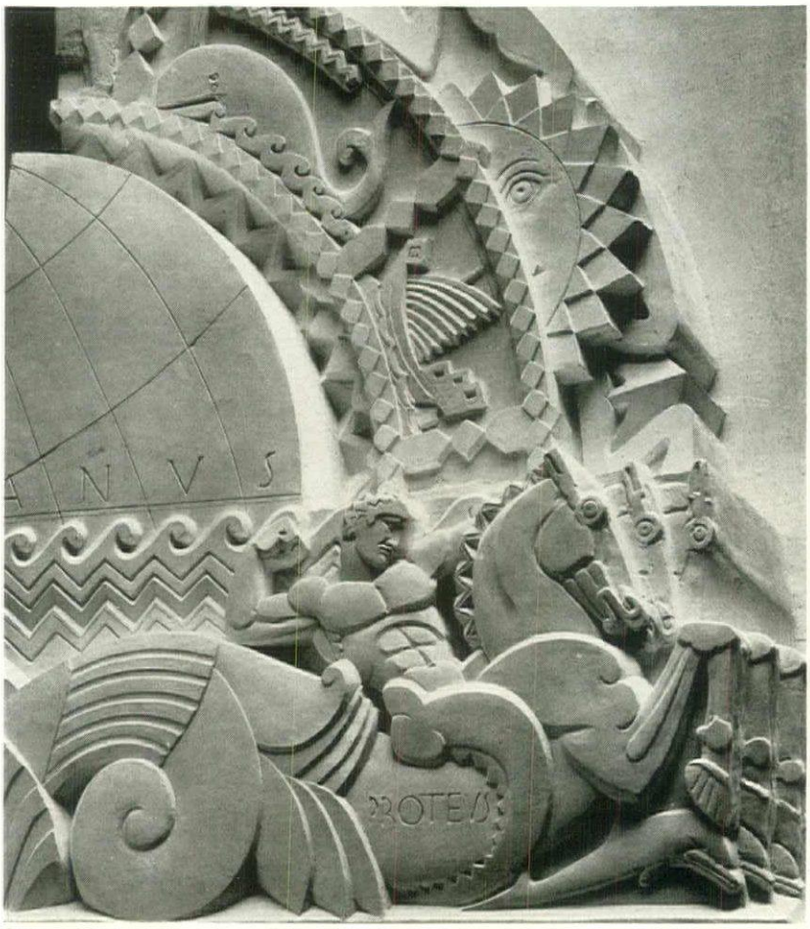
HOUSE OF JAY BARNUM, ESQ.
SILVERMINE, CONNECTICUT
FRANK J. FORSTER, ARCHITECT

*Smutny*

"The Track Racers," a panel over the south entrance of the Los Angeles Public Library

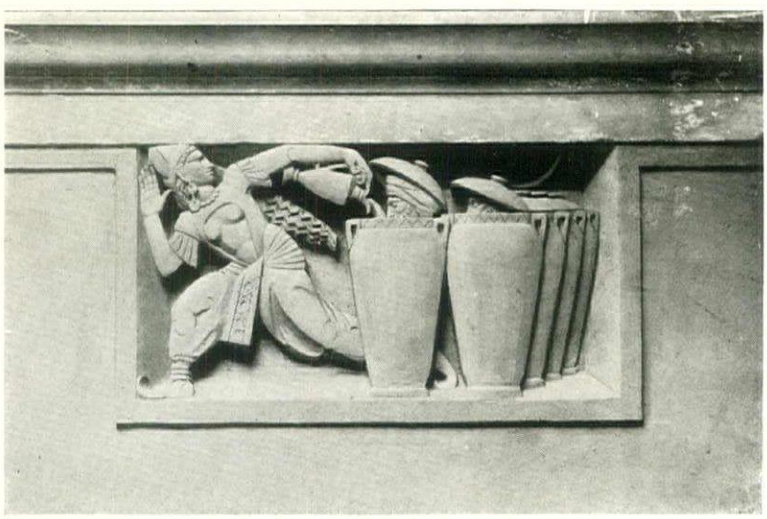
SOME EXAMPLES OF HIS LATTER WORK AS DESCRIBED IN THE ARTICLE BY HARTLEY BURR ALEXANDER

# THE SCULPTURE OF LEE LAWRIE



*Smutny Photos*

Detail of the model for the hemisphere. Children's Entrance of the Los Angeles Public Library



"Ali Babi," one of a series of panels in the Children's Court of the Los Angeles Public Library

## THE SCULPTURE OF LEE LAWRIE


*Dapprich*

THE SCULPTURE
OF LEE LAWRIE

*Smutny*

"The Patriarchs." A model for the portal,
Church of St. John The Divine, New York

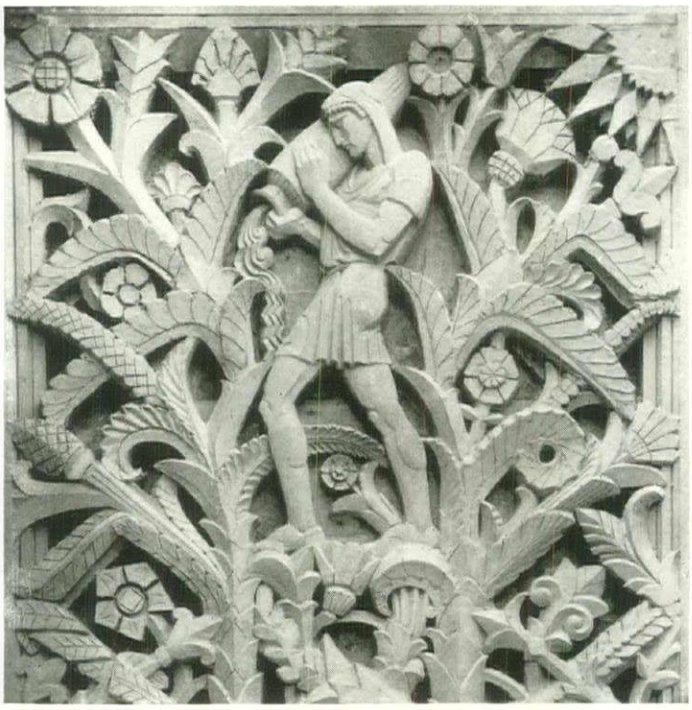
## THE SCULPTURE OF LEE LAWRIE

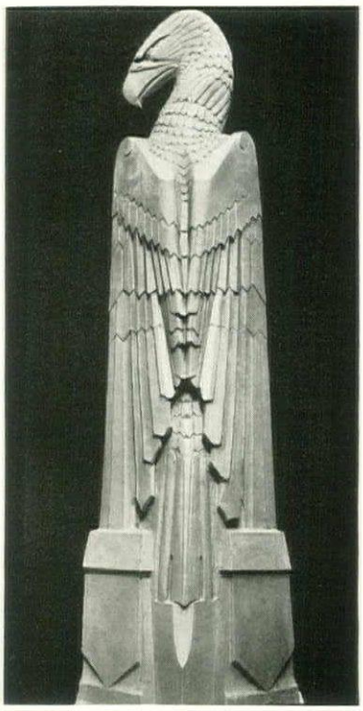

*Mott Studios*

Window Buttresses with termini of Herodotus, Vergil and Socrates. Below is a model for a fountain in the Los Angeles Public Library

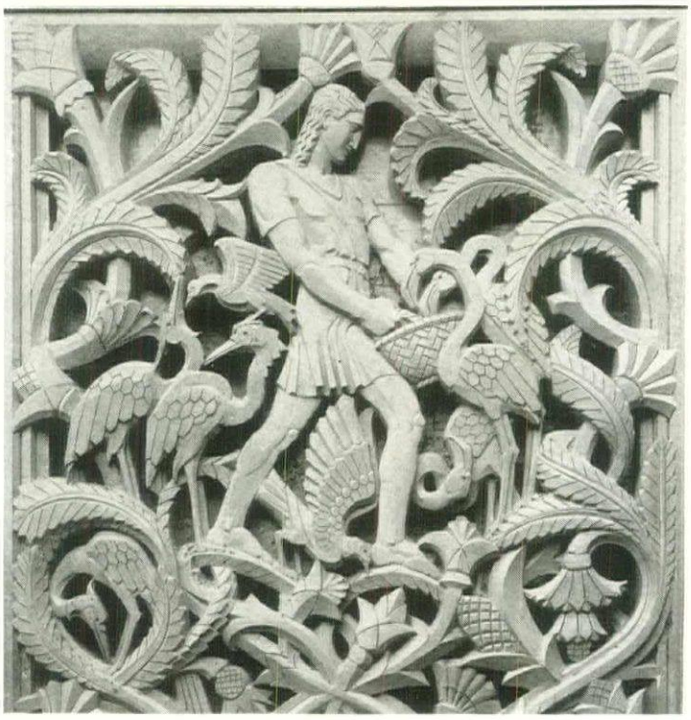
*Swaby*

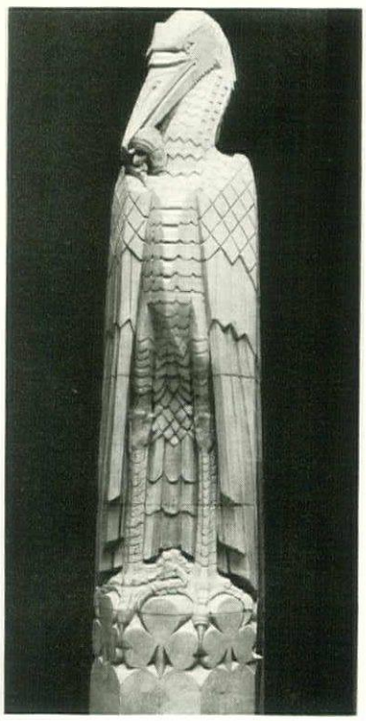
## THE SCULPTURE OF LEE LAWRIE





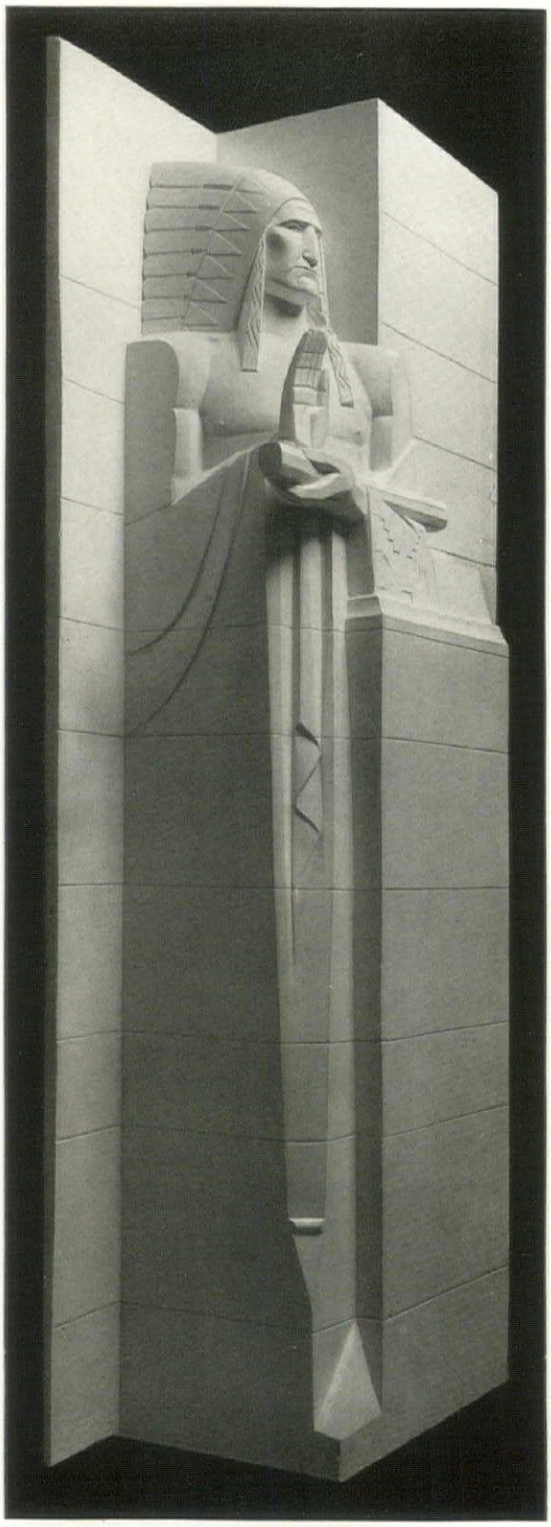
*Smutny Photos*





Window grilles and finials for The Carillon Tower, Mountain Lake, Florida

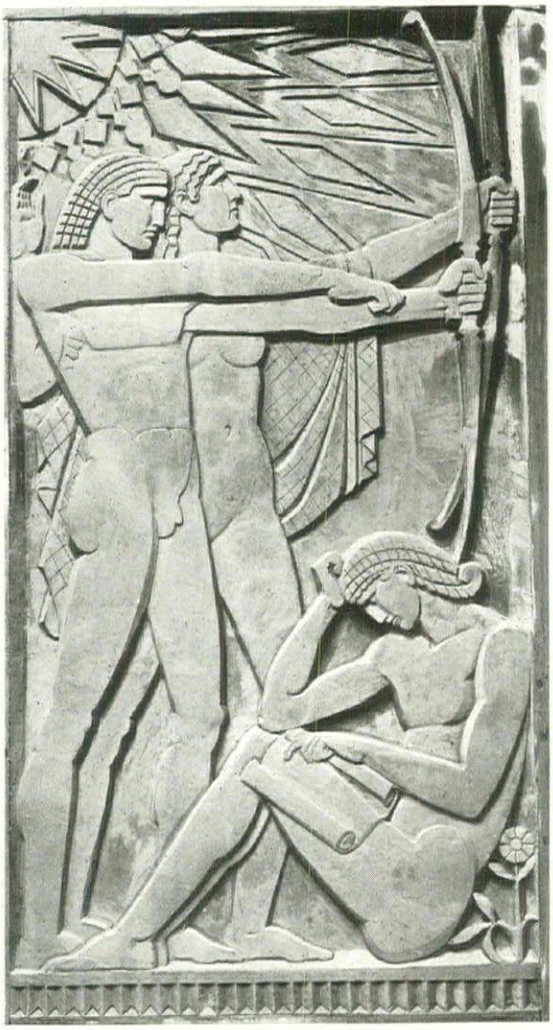
## THE SCULPTURE OF LEE LAWRIE

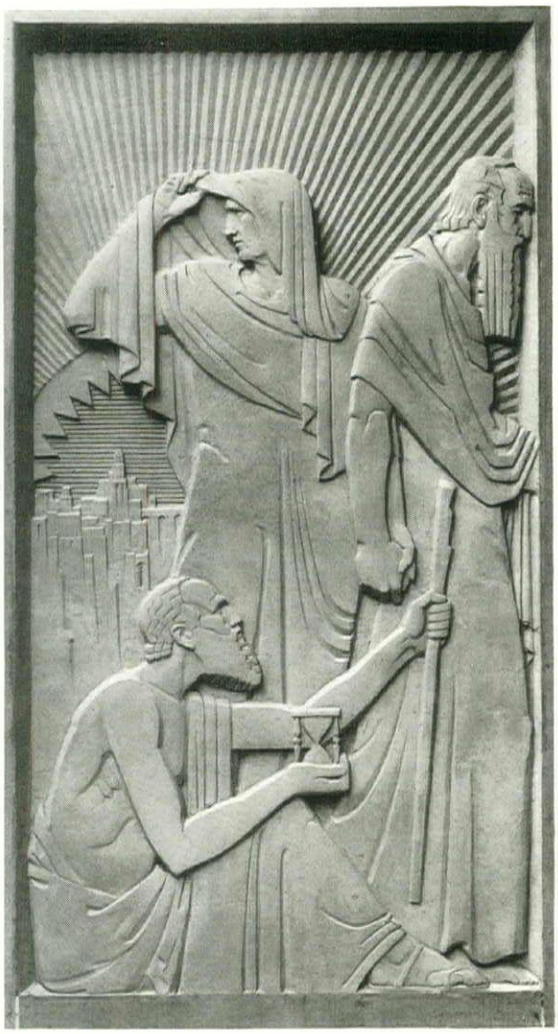



*Smutny Photos*

Two models for the Nebraska State Capitol. The one at the left is in the Senate chamber; the other terminates a buttress on the exterior

## THE SCULPTURE OF LEE LAWRIE





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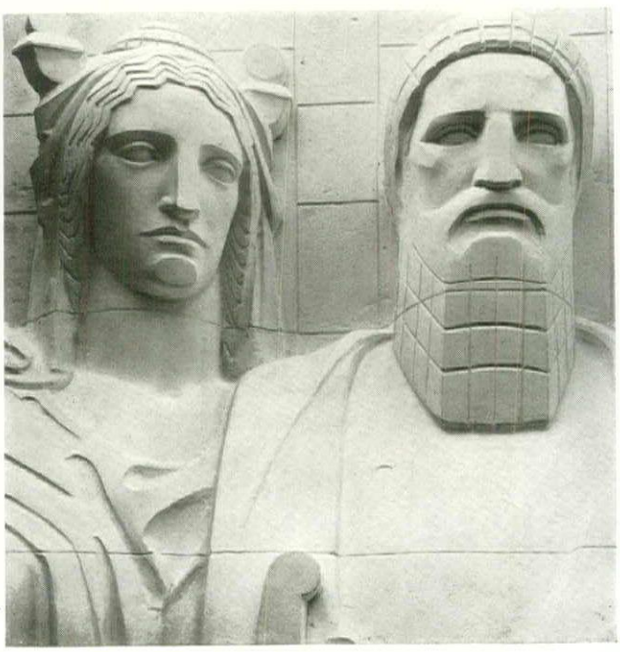


"Youth," "Age," and the heads of "Wisdom" and "Justice." Sculptor's models for the Nebraska State Capitol

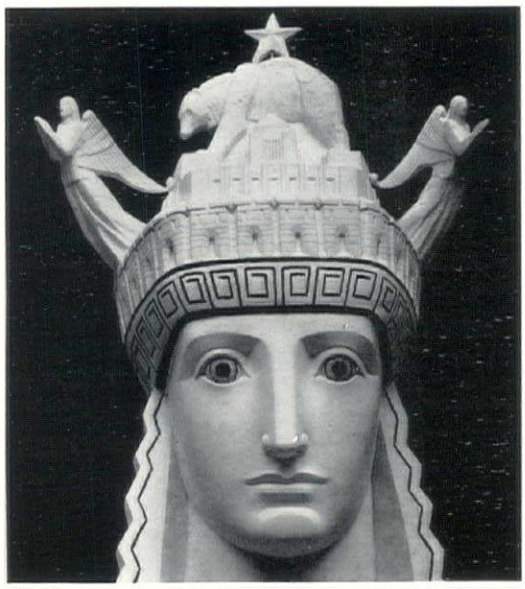
THE SCULPTURE
OF LEE LAWRIE

# THE SCULPTURE OF LEE LAWRIE

## AN APPRECIATION OF HIS LATTER WORK

BY

HARTLEY BURR ALEXANDER



*Smutny*

THE glory of art is the unrepeatable freshness of each of its greater revelations. Other forms of expression tie into the reiterations of experience; indeed they seize and define as their truths chiefly what is most often repeated, and they make their plea of intelligibility in appeals to the familiar,—as when law appeals to its precedents, science to its metric forms, morals to its old customs. But the work of the imagination is vital only if it be vital with surprise and it is illuminating only when to the familiar it gives strangeness, at once breath-taking and emancipative, like the expanse of a new order of earth formation caught from the summit of a mountain pass.

Lee Lawrie's sculpture is like that. No matter how familiar its theme, it is never open to preconception, but in the execution is full of surprise and of that admiration in which amazement is interfused with delighted recognition. In the works of the greater artists there is something more than style; it is a something that passes beyond habit in thought or mode in execution; it transforms rather than forms, and it commands understanding through an intimacy that derives from the very structure of mind itself, with no alloy of mere memory. We call this the "creative" power, but of it we know no more than that those men of genius through whom it is manifest are too fecund to be bound by any style, too intent to remember any past; the known modes, if they make of them their instruments, are so instantly altered under their hands that these modes can never again be known in a former fashion, but are always and vividly shaped into something fresh—like a more renewing dawn, illuminating all that has opened into days gone by.

Fresh in this way is Lawrie's Gothic. It is a Gothic pensive with the past, at once intellectual and tender; the thirteenth century is there, there in St. Thomas on Fifth Avenue, but with its six centuries' remove from our own day; it is unfading, with all the old pieties and humors, yet with all of them redeemed by that renaissance of humanism which lies between our own and the Mediæval time,—yes, actually, even the gargoyles seem to have become humane and tinged with tragedy, though the bite of Hell is in them. Lawrie's is a Gothic that has forgotten the Divine Justice (as our time has forgotten it),—or perhaps has re-assessed this Justice, somehow remembering, with Dante, that in the divine mind Love was its creative fellow. It is this in the artist's saints and sinners that startles and holds us, and tells us, as only art can tell, how time means transfiguration.

When the architect whom Lawrie loved received from the American Institute of Architects the gold medal with which was recognized the reredos of St. Thomas's Church, Mr. Goodhue sent back the medal in order that the sculptor's name might be inscribed upon it beside his own,—a generous and genuine intimation that only collaboration of genius could have made possible so perfect a thing as was this triumph of their united powers. The event, as it happens, marked the virtual close of a period in the artistic thought of each. A brief while later, speaking of the Nebraska Capitol, quizzically, Goodhue said to Lawrie: "I am expected to name a sculptor,—but you are Gothic, and needless to say the de-

This figure, "An Angel Crying With a Loud Voice," in the Cathedral of St. John the Divine, New York, illustrates the strength and simplicity of line in Lawrie's latter Gothic sculpture

sign will not be Gothic." Actually the architect had never a thought of another than Lawrie as possible for the carrying through of the conception he had in his mind. He was looking forward to the using of a new language in architecture, and he knew that it involved a new language in sculpture also; his confidence that his long-time associate in the Gothic was the one man gifted for the discovery and expression of this new eloquence of plastic form was from the first assured. Indeed, Goodhue's early conferences in the west left the impression that he was almost more zealous to impress upon his patrons that the capitol would be monumental only with Lawrie's aid than to assure himself of their comprehension of the structural thought which he himself had conceived and which it should express. His attitude was, at heart, an eager recognition of the intimate, the inherent interdependence of the two shaping arts.

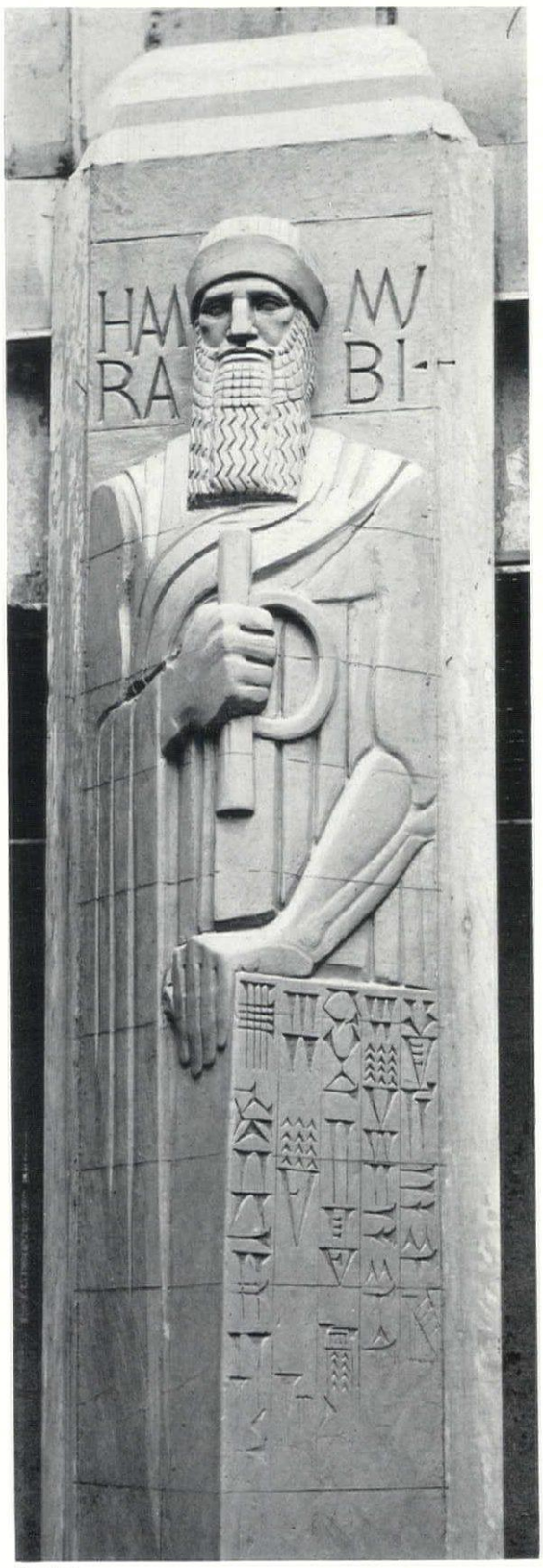
Nevertheless, even with the impetus of this initial determination to discover for it a new language of design, the pattern for the sculpture for the Nebraska Capitol shaped itself only gradually. In the first drawings there were free groups, niched figures, and some concern for decoration as such,—although from the outset the rule that all decoration must be significant was rigid. But as the work progressed from drawings to execution, the final criterion readily defined itself; the sculpture must be integral with the building, as truly structural as the primary masses, so that the whole should be the expression of a single thought, complex and many-shaded, but never emergent. The decoration is actually sparse, being employed only where an accent is needed to arrest the eye or where a contour calls for softening; nowhere is there an interruption that says, "This is pedestal, that is image." Every carved element is the completion of an architectural line, the qualification of a plane, or the definition of a mass. This is true of the internal as well as of the external structure. On the entire building there is but one free image, the great bronze "Sower" at the summit, and this is itself but the logical finial of the edifice, the flash with which the crest of the dome greets its sky. Certainly in the Gothic style there is an intimate alliance of the sculptural and the architectural elements: the two are far more interdependent than on any Classic structure. Yet surely the Gothic is more modeled and less inscribed, less temperate, than this Nebraska style; in this newer mode it is an older and a more Egyptian quality that is brought back into a life which is both fresh and speaking.

The development of the style is typified by the succession of ideas for the treatment of the bison images which flank the north portal. In the pre-

liminary sketches pedestaled bronzes above the balustrade were indicated. Next, there were modeled great engaged buffalo bulls, analogous to the winged genii guarding the gate of Persepolis. But the thing that is actually created is panels in hollow relief, little more than pictographic in depth, much more like the reliefs of the Maya Indians of Yucatan than like anything of the old world; the ornament (as with Maya ornament) is completely *within* the structural masses of the building itself. This same development of the sculptural thought may again be traced *in situ* in the splendid series of termini which complete the buttresses, north and south. The earlier of these, such as the Solon or the Moses and Akhnaton, for all their majesty, are softer in line, less hewn and more moulded than are the neighboring Solomon and Hammurabi,—toward three years later in execution,—whose every plane proclaims the architects of the Temple and the Law. For the similar termini on the window buttresses of the Los Angeles Library (Goodhue's second and last work in this architecture), Lawrie has employed the softer, the more literary technique, and with beautiful effect,—eloquence, one might call it; but his outstanding triumphs are certainly the Nebraska figures, especially the Hammurabi, the colossi of Wisdom and Justice at the north portal, and the great buttress images of Socrates and Abraham Lincoln at the base of the tower,—this Lincoln, as the rail-splitter, destined to become one of the classics.

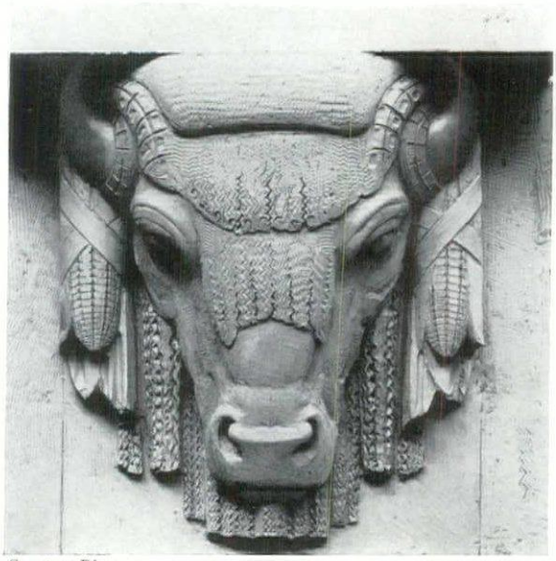
Have Lawrie's termini any equals in modern architectural sculpture? Certainly it is with ancient masterpieces that they immediately invite comparison and proclaim affinity. It is significant, too, that in the artist's returns to the Gothic their influence is evident, for the Abraham, Joseph and Moses for the portal of St. John the Divine, in their blocked forms and squared planes, show clearly how the newer sense has passed into the sculptor's hand, giving a quality which is modern without succumbing to modernisms.

A like thing is true of the reliefs created first for Nebraska and Los Angeles. These are all coelanaglyphic, — carved out of the structural stone,—and for the most part in shallow cutting. Their superb and universal characteristic is their power of suggesting depth and perspective,—ideal, not immediate,—within the very shallow planes which the architectural demands have permitted. In such panels as "The Heavens declare the Glory of God," in Los Angeles, or "Childhood" and "Youth" for the foyer at Nebraska, Lawrie's mastery of values is uncanny. He succeeds in creating the tableau, varied and unified and significant, without the slightest deviation



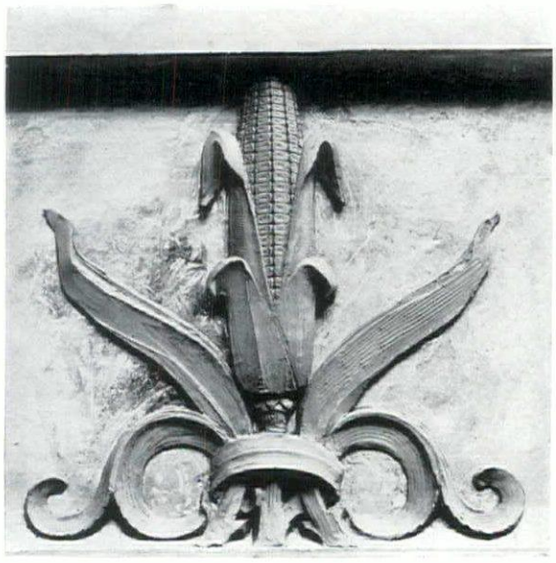

*Smutny*

**A buttress terminus on the Nebraska State Capitol, at Lincoln, Nebraska. The "Hammurabi," one of many similar figures, is an outstanding example of Lawrie's work in this building**



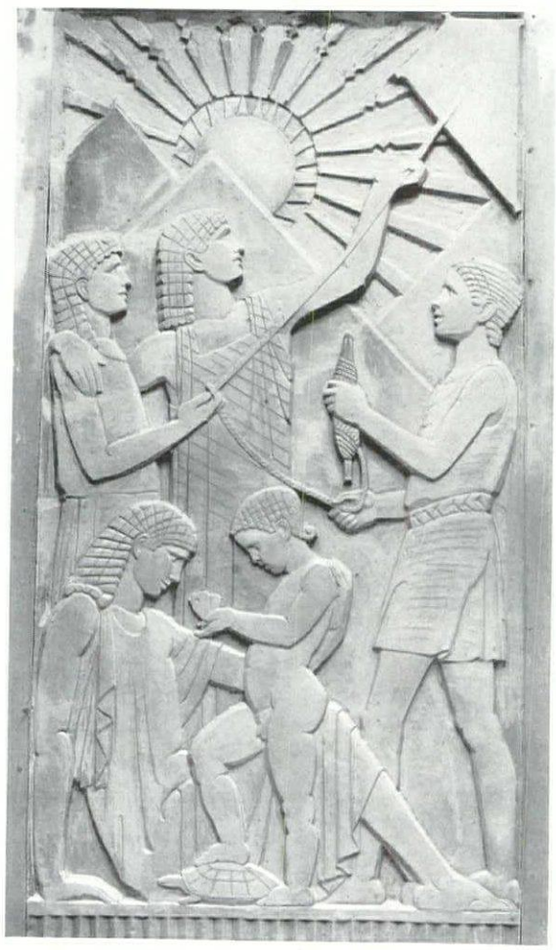
*Smutny Photos*

Bison head



Indian corn

The three pictures on this page are from photographs of models executed for the Nebraska State Capitol at Lincoln, Nebraska, for which Bertram G. Goodhue was the architect. They have been chosen as typical of Lee Lawrie's forceful work on this building where it is concerned with the smaller problems of design



"Childhood," one of the panels in the foyer of the Nebraska State Capitol

from architectural sense and plane, giving to his art that double joy which springs from the recognition of congruity of placement and meaning, both at the sunburst. Lawrie's coelanaglyphs vary from mere inscription, almost etched stone, such as the war memorial in St. Thomas, to deep-cut relief, utilizing the heaviest shadows, as in the Torch Race panel of the Los Angeles Library; but whatever may be the structural limitations, there is never lost this satisfying sense of position, making of the decoration an essential definition of the builder's elements.

What is fascinating in it all is the wide play of imagination and of self-expresson which the sculptor obtains within the architecture. His feeling for the edifice is obviously not a trammel, but an inspiration. This is evident in the relief panels. Indeed, there is something astonishing in the adaptability of an imagination which can compass, as it were in a breath, the Biblical, the Classical, the Romantic and the Modernist of the panels just named. To take but the Modernism of the "Childhood" and "Youth" for Nebraska,—the mere radiance of these images is superb. The conventionalized sun's rays form in each the key to the symbol, but this key, or signature, is developed into a multitude of linear subtleties and into a shimmering patina of color, caught in the values, which manifolds each surface with meaning. Another example is the corbels of the Children's Door at Los Angeles, solid supports for the lintel and at the same time speaking emblems of the Hemispheres sustaining Earth's globe. The sculptor's skill in expres-

sive line and surface cleaned down to a last economy, reaches near perfection in the masks of these two figures—which are dramatically vivid emblems of the Old World and the New even while they are also telling decorative moments. Meantime, the ornamental arc above the door shows at once Lawrie's playful skill in the handling of motive and his power of symbolic generalization. Not only has he framed his hemisphere in beautiful renderings of cloud and wave, the sun sinking into one, the moon rising from the other, but he has given a sense of adventure in frigate and junk, sea-beast and Ursa Major, which no child can miss. It is perfect introduction to that Children's Court which the artist's humour has adorned with irresistible Ali Babas, Sinbads, Alices, and Mother Goose fantasies.

Along with this thematic sculpture Lawrie has been developing varied and original ornament. There has blossomed out a whole series of new capitals and corbels and an occasional cornice employing plant and animal motifs, especially maize and wheat and bison skulls. Some of the earlier examples are still variants of the Classic orders, with new materials introduced; but in the end these have all been transformed. What capital is superior to his wheat-sheaf (Nebraska), or what corbel to the bison-head with lateral maize ears? But it is probably in more geometric forms that his best design is realized. Maya forms have been employed in some of the latest capitals for Nebraska, giving designs of an entirely classical purity, while the band in which arrowhead and feathered nock alternate is as good as any egg-and-dart.

But it is not in the Goodhue buildings that the sculptor has achieved his richest effects in ornament, for Goodhue in his final works was Puritan in restraint. The sculptor's real florescence in ornament is in work achieved more particularly in connection with two other buildings, the Fidelity Mutual Life Insurance offices in Philadelphia and the Singing Tower of the Mountain Lake Sanctuary in Florida, Edward Bok's gift to the American people, of which Milton Medary was the architect. In these again the decoration is rigidly consistent, inherent in the structures, but as the architects were thinking in rich and almost florid terms, the sculptor's addition is accordingly varied. On the Fidelity Mutual building there is parti-color in stone, metal panels, grilles, plaster relief, each material with its own demands; and the response to this varied demand has been with a modernity of spirit quite out of calculation. The first glance spells geometry, and an age of metals ductile and still resilient. Yet examination shows within the wealth of new geometrical patterns a multitude of shrewdly introduced conventionalizations of plants and animals, — lilies in the interstices of zigzag, floral cornices, fields sown with bees, animal head brackets, and most interesting of all the subtle accommodation of human figures to varied geometrical frames, angular and curvilinear. The similar style is carried yet further on the Singing Tower with such opulent patterns as are formed from the interweaving bodies of flamingoes and pelicans and swans in the ornamental frieze, such bowers of leaf and bloom as design the window grilles, or the impressive eagles and herons of the finials; the whole a fairyland of bird-and-flower-form transfixed into marble.

The very profusion of Lawrie's invention makes it baffling of criticism. Undoubtedly it is not all even in quality; there are question marks. Is the thing local? Has fantasy now and again run out of bounds? Is this after all but another mask of a Gothic imagination, riotous as of old? But whatever questions may chance, none can deny that the artist's work is continuously and amazingly alert, fresh at every turn; nor will any hesitate repeatedly to interject, Beautiful! After all Lawrie is not a re-masked Gothic; rather he is of the Renaissance, filled with the exuberance


**A decorative panel in the Jewish Theological Seminary in New York**

of a Cellini and rising into the visions of an Angelo,—for we are greeted in every scale, from the grandiose to the miniature, with such sense of energy as only the Age of the Humanists can match.

There is a quality which is, in the same moment of silence, moving for the heart and uplifting for the intelligence in Lawrie's finest creation. This is the cenotaph to Bertram Grosvenor Goodhue in the Chapel of the Intercession in New York. The chapel is Gothic, and the memorial remembers this architecture, in which the two men, mutually inspiring, worked long in collaboration. But only in memory is the Gothic present,—in the straight recumbancy of the figure, in the stiff repose of the draperies, in the echo of heraldry. Something has happened to the hand of the sculptor, even since the death of this great associate, so that we can say of this monument that it is in place with the Gothic, and yet is no longer of it. This something is the impress of an architecture that was grasping after, and was discovering, the meaning of life in the future here in America,—the prophetic spirit that is in all great art. It is unmistakable. There is the architect's head, pillowed on the books he loved, delicate, dreaming; there is the draftsman's hand, still quick with creation, emerging from the stark pall; there is the beautiful Pegasus, castle-crowned, recumbent at his feet, but wakened, alert; and above there is the frieze that is composed of dreams made real, the architect's edifices. These are the symbolic elements, undisguised in their proclamation. And yet all these, and the whole design, are caught into a temper of expression that is unsullied in its architectural feeling, and this a feeling for just the architecture which Goodhue himself was discovering,—as if indeed the spirit of it had descended upon the sculptor. It is moving in that one cannot but sigh for the glorified joy with which Goodhue would have greeted such an attainment of sculptural expression, which is yet made possible only as a memorial of love. It is uplifting in that it proclaims how human comradeships, at their summits of creative thought, defy death's separations.

*Smutny*


A panel in the Fidelity Mutual Life Insurance Building, Philadelphia, Pa. Zantzinger, Borie and Medary, Architects

# THE QUESTION OF RADIO CITY

". . . Radio City is significant beyond the influence upon an immediate locality. As the embodiment of forces that are common to an urban existence it has become of national moment." Some of the reasons for that significance are suggested in this article, and the universal character of the problems involved is briefly discussed

THE proposed development in New York, popularly called Radio City, named Metropolitan Square by the owners, and known to those concerned with it as the Columbia Leasehold is the most important single project in active progress at the present time. This does not even except the ambitious plan for the World's Fair to be held in Chicago in 1933. The latter is undoubtedly first in the matter of size and lavish expenditure. Much has been promised for it in the way of architectural dazzlements; and its promoters are hopeful that it will point the way to new and higher reaches of structure and design. But, fundamentally, it constitutes the stage setting for a large and elaborate show. Most of the structures are temporary; economy of space, time, or money has not been a guiding factor in the plans; effective showmanship has been the object of the design throughout. However ingenious may be the grouping of the various buildings and whatever the influence of light, structure, and material on future projects, the World's Fair attempts no solution to the pressing problems of city planning. It is envisaged as a playground, and its development is unconcerned with urban congestion or the complexities of social economics.

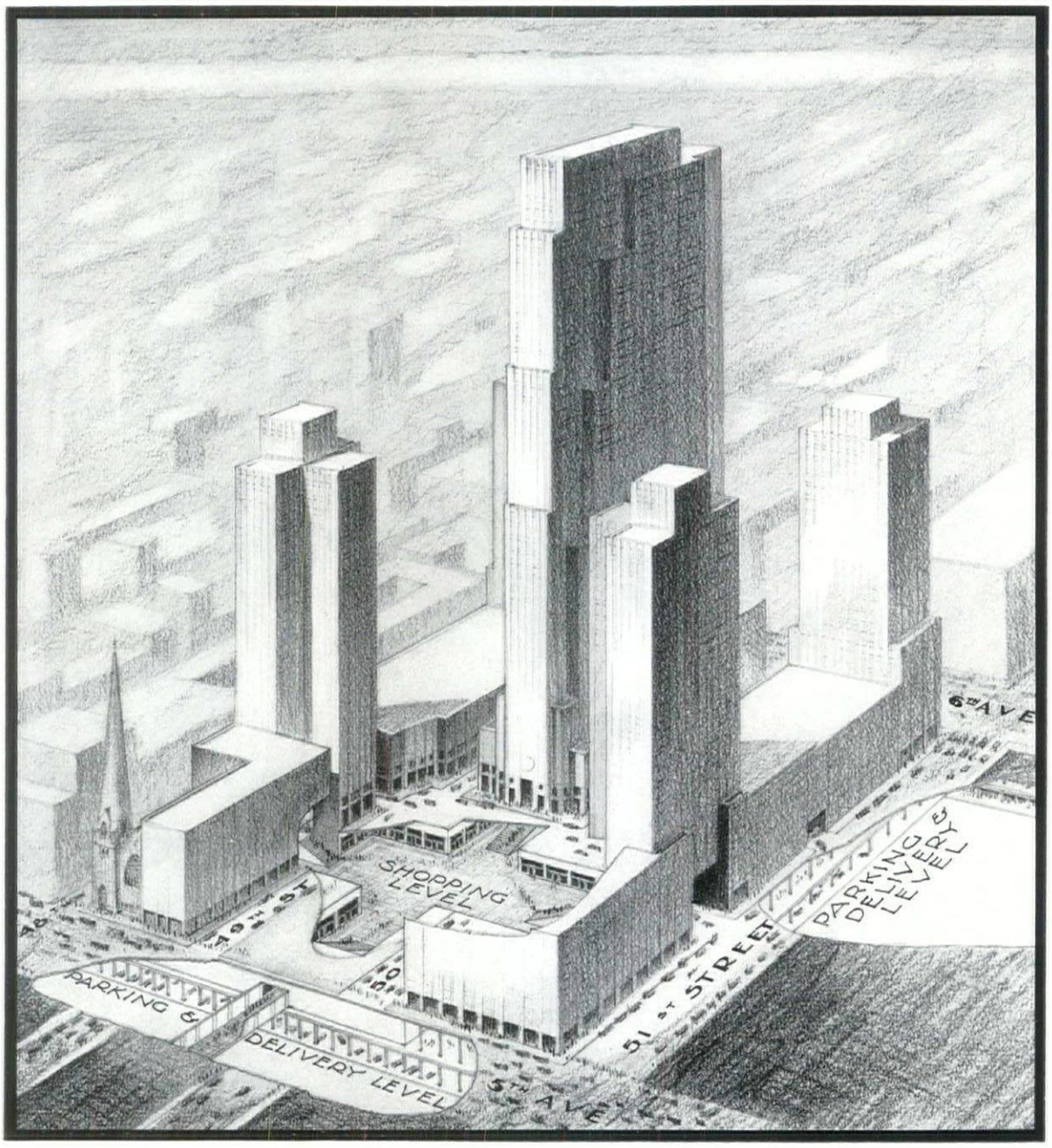
Radio City, however, is strictly an urban project in which these questions are inevitably present. It is difficult to state whether it was conceived as a measure imposed by high land values and the presence of inadequate buildings or whether it was instituted as a speculative enterprise.

HOWEVER grave this determination may be from a purely social standpoint, what is even more important is the fact that Radio City was conceived at all. The program calls for the development, as a unified scheme, of most of three blocks in the heart of the largest city in the world. The "owner" is an individual. The present scheme has been projected by the combined efforts of three architectural firms with the coöperation of a builder acting in the capacity of the owner's agent. They have had an opportunity, unhindered by a lack of capital or the vagaries of a narrow-minded client, to resolve into a unity of tremendous size the economics that influence planning, the sciences that regulate structure, and the dynamic currents of practical aesthetics. The opportunity of Radio City signifies the vestment of a power and many sided responsibility seldom accorded so small a group of individuals. It is inevitable that the exercise of this power in the accomplishment of the program will exert a strong influence on similar projects in the future.

FOR these reasons Radio City is significant beyond the influence upon an immediate locality. As the embodiment of forces that are common to an urban existence it has become of national moment.

The progress of the development should be watched keenly by every architect in the country, for in many ways Radio City marks the passing of the old order. In contrast to the present general practice of constructing isolated buildings, apart and unrelated, it marks an attempt to plan for the coördination of large urban building units toward the common ends of coherence in design, economics and structure.

It indicates an effort to achieve an orderly control of an urban commercial center notably upon private initiative. This fact, coupled with the size of the entire project, opens at least an interesting field of speculation, if not actually pointing the way to a fundamental change in practical city planning. It is unusual, due to the existence of high land values and the almost insuperable difficulties of a public land control, to find, in the heart of a teeming metropolitan city, a scheme which has for its object the planning of a group of buildings to form a complete and self-sufficient unit of city life. It may be said from an idealistic viewpoint that the possibilities of such a scheme are unlimited in their scope and form. From this point of view it would appear that the opportunity of Radio City has not been fully utilized.




TRAFFIC AND SHOPPING LEVELS
OF THE
NEW RADIO CITY DEVELOPMENT

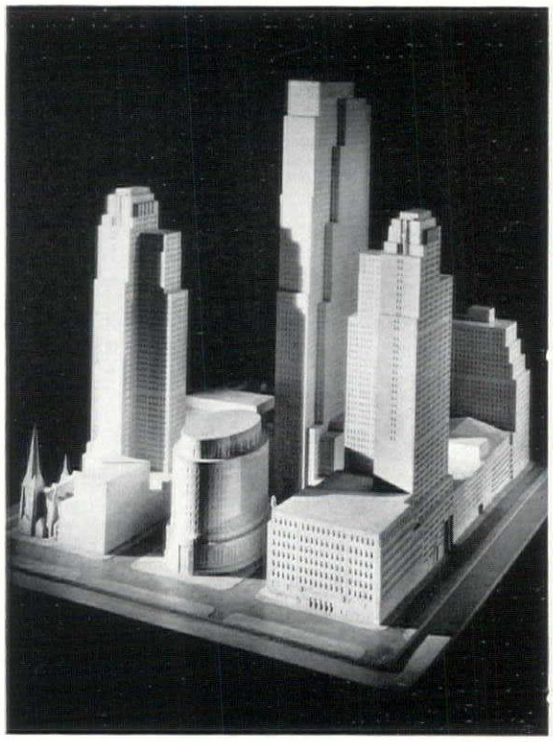
Sketch showing the proposed method of handling crowds and traffic on the street level and on two levels below ground. In this plan, it will be noted, the oval bank building is not present; it has been replaced tentatively by two low buildings with a street entrance between, thereby giving an unobstructed view of the plaza and central building from Fifth Avenue. The first level below the street is to be devoted to a vast concourse extending below the full area of the development. Shops and stores of every description will line its many arcades, courts and corridors. One corridor will extend from the opposite side of Fifth Avenue to the opposite side of Sixth Avenue. Below the shopping level will be the parking and delivery level, access to which will be afforded by ramps leading down from Fifty-first Street and leading up again into Forty-eighth Street. Space will be provided here for trucks serving the offices and stores in the various buildings as well as for parking the cars of people doing business in them. It is also possible that one or more bus terminals will be located there, with probable connection with present and future subway lines

There are those who have visioned the scheme as exercising absolute control of traffic areas, space, air, light and all the utilities which make for the proper functioning of such a scheme. In the mind's eye they have seen the buildings flung into a thrilling combination of horizontals and indefinitely extended verticals; they have pictured wide areas of translucent glass and steel walls, arcaded walkways, bridged streets, roof terraces, and the hundred other things that have been intimated as within the realm of structural and material possibilities. To such individuals, Radio City is a distinct disappointment. They feel that neither promoters nor architects have properly envisaged the possibilities of the site, and are prone to condemn the whole development on these grounds.

GRANTED that such ideas establish a sound criterion for a group of modern structures, and that their critical judgment will ultimately be upon a factual basis, it is nevertheless true that many of the things that they have wished to see cannot legally be built at present. It would be well, perhaps, if the architects of Radio City were accorded the power to set a standard for a new city within the area of these three blocks. In such a case new programs and ordinances might be accomplished through the force of logical analysis; the numberless benefits of scientific knowledge and research could be used to the fullest extent, and the group might be able to establish, through the supervision of coördinated effort, a higher criterion of social, economic and aesthetic worth. It is entirely conceivable that a disregard of existing traffic areas and a junketing of both zoning ordinances and the building code might have made possible a conception of Radio City beside which the present scheme would pale to insignificance. But legal inhibitions are strong. They are necessary; and the yielding of even a small portion of a police power is a thing not lightly to be considered.

One thing, however, is certain: that the influence of Radio City on the technique of city planning will be positive. It will be positive even if it constitutes a negation of the very possibilities visioned by its critics because of the legal inhibitions already mentioned. If it does nothing else than stimulate constructive thought regarding this, it has justified, in a large measure, its own excuse for being.

It may be that the idea of Radio City in concrete form is the forerunner of a de-centralized city. If this is true, it is also true that the project as indicated lacks many of the necessary elements that such a de-centralization implies. After all it is within a comparatively small area and is unavoidably linked with the stream of city activities



*Lazarnick*

**A recent photograph of the model looking southwest. The point of view here is similar to that from which the sketch on the opposite page was made**

outside its boundaries. To achieve even a measure of self-sufficiency, its dependence upon other portions of New York must be admitted, and the necessary physical means to provide transportation and exercise complete traffic control must be made before any such independence can be established. Obviously this means that a new analysis of civic inter-dependence must be made before a standard of a practical de-centralization can be established. The ramifications that are intimated in this analysis are important indeed.

IF good architecture calls for structures that are functionally efficient, economically sound and aesthetically satisfying, a criticism of Radio City must be made from still another approach. These pages are perhaps not the place to discuss the economic justification of such a civic group. However, it is interesting to note, in this connection, a few facts. It has been estimated by a competent authority that New York City can absorb approximately 3,000,000 sq. ft. of new office space every year. The Empire State Building, within a mile of the Radio City project, and just now completed, already contains this area. In addition there have recently been erected in the locality of 42nd Street, and 38th Street, and in the financial district near Wall Street, many other tall buildings, the total floor area of which aggregates possibly three times the total

of the Empire State Building. It is common knowledge that much office space is now empty in these buildings, and it would be at least interesting to learn in detail the economic justification of the additional 5,000,000 sq. ft. of rentable area contained in the Radio City group.

GOING on the supposition, however, that the promoters have found a market for their spatial product, and that the architects have achieved a commercially practical plan, there still remains a question as to whether or not the economic influence should dictate, as conclusively as it seems to, the appearance of the various buildings and their placement upon the plot. Much comment has been put forth against what is characterized as the lack of "unity, majesty and rich architectural interest" of the Radio City buildings, and those connected with the project have been the recipients of much criticism for the appearance of their work as indicated in the model of the scheme.

The architects and the promoters of the scheme have countered this criticism with statements that such considerations as rentable area, traffic, light, and air were the dominating influences of both plan and elevation of all the buildings in the project. It is obvious that the model of Radio City recently exhibited does not indicate the architectural treatment of any of the buildings and a statement has been put forth by both the architects and the owner's representative (in this case the builder of the group) that several radical changes are under serious consideration. However, it has been stated that the relation of the buildings to one another was definitely fixed. The defense of the boxlike appearance of the group as shown in the model may be dismissed, for it is obvious from one glance that much further study is necessary. The plan of the group, however, raises the serious question as whether or not the requirements of air, light and traffic control have been adequately met in this scheme.

EVEN in the face of the legal restrictions of the site, which have already been spoken of, it is doubtful whether the plan reaches the best possible economic solution to the problem. Even admitting the contention of the architects that the fenestration reaches the maximum efficiency for a 27 ft. office depth, still it seems that the triangulation of the three largest building units serves as a negation of the light and air requirements instead of utilizing these factors to their fullest extent. As planned, the 68 story tower, containing 100,000 sq. ft. more of floor area than is enclosed by the Empire State Building, is arbitrarily placed in the middle of the group to achieve a superficial symmetry of plan that will not be obvious after actual construction. The two 48 story towers are placed in such a relation to the large one that the morning sun will make the area dark by shadows from the east and the afternoon sun will accomplish the same thing by shadows from the west, even though the streets within the area have been widened by 15 ft. and even with the small open space which fronts the highest tower. The three tall towers present only one solution to the economic problem of the group. It has been advocated by at least two members of the architectural firms employed on this project that the sound solution to planning units of this type lies in the construction of a huge, isolated tower, surrounded by low structures which serve as a base and permit a circulation of air and light calculated from the orientation and the prevailing conditions of the location.

THOSE who have attacked Radio City on the grounds of aesthetic expression alone, seem to have missed these important points. In a project of this size the aesthetic approach must of necessity relate itself to the larger questions of social and economic importance. It occurs naturally after these questions have been solved, and since with an isolated tower it is only the lower stories that are visible in any case, as far as architectural detail is concerned, the ornamentation is more or less a minor matter. As every architect knows, the aesthetic factor is a thing that is peculiar to every job, and in a development like Radio City is especially important. It may be accomplished, however, in a variety of ways and is to be judged not from the basis of a traditional attitude, but from the peculiar adaptability of the aesthetic scheme to the exigencies of the problem as a whole.

It is too early to know what the detailed appearance of Radio City will be. The possibilities are apparently limitless, and if the architects have taken their responsibility seriously, they will ultimately achieve an architectural treatment that compels the highest respect as a logical outgrowth to the expression of the fundamental influences behind the scheme.

ROGER WADE SHERMAN

*Patteson*

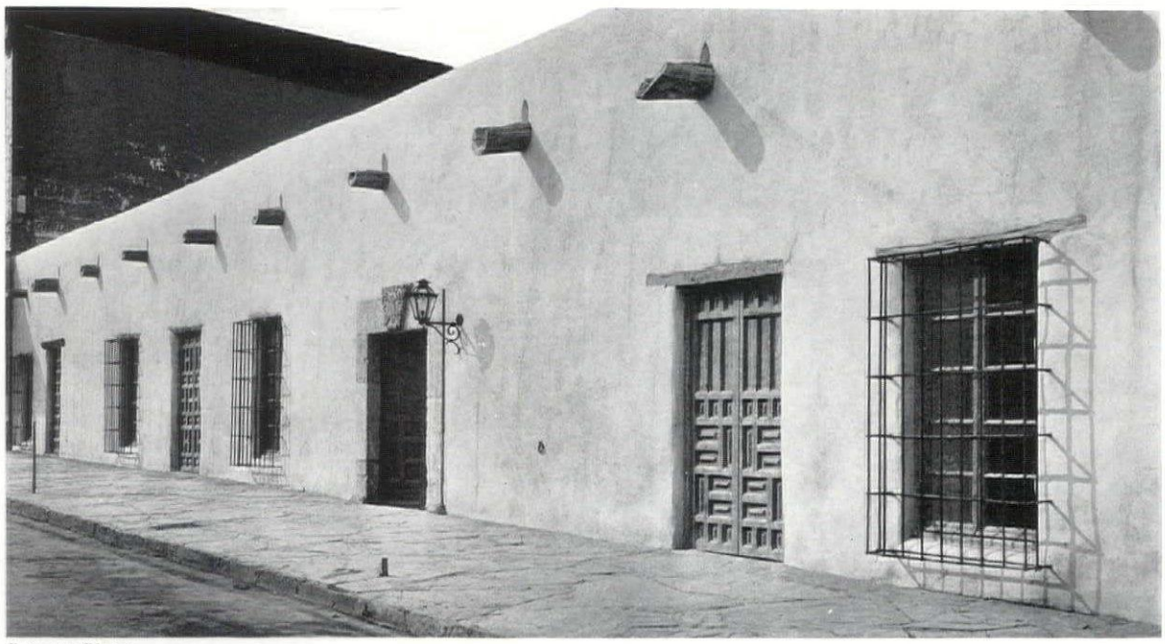
THE ORIGINAL BUILDING WAS ERECTED IN 1749. THE RESTORATION, COMPLETED IN 1930, PRESERVES BOTH THE SIMPLICITY AND SPIRIT OF THE OLD PALACE

# THE GOVERNOR'S PALACE AT SAN ANTONIO

HARVEY P. SMITH, ARCHITECT FOR THE RESTORATION

*Patteson*

THE GOVERNOR'S PALACE
SAN ANTONIO, TEXAS
HARVEY P. SMITH
ARCHITECT FOR THE RESTORATION



*Patteson Photos*

A general view of the street facade and a detail of the main entrance. The utter simplicity of the wall, the wooden waterspouts, and the iron grilles forms an effective contrast to the rich, dark panelling of the doors. On the opposite page is a detail of a stair hall near the interior court. Notice the absence of a railing and the lack of ornament; also the skillful combination of the simple, sturdy materials

THE GOVERNOR'S PALACE

SAN ANTONIO, TEXAS

HARVEY P. SMITH

ARCHITECT FOR THE RESTORATION

*Patteson*

A view of the patio. The brilliancy of the sun and the prevalence of hot, dry winds made necessary an interior court for all buildings of this type. The court was used for relaxation from the heat and many of the ordinary household tasks, and for a place of recreation on days of ceremony. Notice the fountain, the paved court, the outside oven, and the planting in contrast with the extreme plainness of the street facade shown on page 607. The Governor's Palace is an interesting example of a building which has been designed, whether consciously or not, to serve, most pleasantly and efficiently, the interests of its inhabitants

THE GOVERNOR'S PALACE
SAN ANTONIO, TEXAS
HARVEY P. SMITH
ARCHITECT FOR THE RESTORATION

# DYNAMIC ENERGY AND MODERNISM

BEING A THUMBNAIL SKETCH OF RALPH THOMAS WALKER OF THE FIRM OF VOORHEES, GMELIN & WALKER

BY

GEORGE H. ALLEN

IF you are ever startled by seeing a short, stocky man in a grey topcoat, wearing a slouch felt hat and a cherubic smile, tearing down the street in the vicinity of 101 Park Avenue, it, nine chances out of ten, is "Squabby" . . . alias Ralph Thomas Walker.

Someone (I believe it was Kenneth Murchison, that versatile tosser of *bon mots*) once characterized Ralph Walker as the persistent "anaesthetist" of the League. His colleagues settle back in mild complacence when he rises to his feet, hooks a thumb under the lapel and begins his: "This seems an opportune time in the discussion of architecture . . . "

Walker is the achievement of a personality gained through the triumph of intelligent application.

The fundamental key to this man is his amiability. Few architects are amiable enough. Their perpetual smiles and glad-hands are adulterated with minds clogged with conferences, working sketches and contractor delays.

Walker is a never-tiring dynamo of energy. His ability to sell himself is amazing. The more you analyze him, try to see what it is that gets him by, the less perplexing it becomes. For his success is one of those things that naturally would happen.

He first saw the light of day 42 years ago in Waterbury, Connecticut, and at a tender age he started in the office of Hilton and Jackson in Providence, later going to Massachusetts Tech for two years.

Then on to Montreal, where he worked evenings in what was termed the "Beaver Atelier", by reason of the many Tech men there. In the ensuing years, he was with James T. Ritchie, York and Sawyer, Bertram G. Goodhue and finally—McKenzie, Voorhees and Gmelin.

*Underwood & Underwood*

RALPH THOMAS WALKER

**". . . If you can't take anything off without hurting the fabric of the design, you have the ideal structure."**

His father is Scotch and his mother is of Yankee and English extraction.

His candid countenance is as open as an Ingersoll watch.

He has a young-looking face, whose light blue eyes and expansive smile relieve the sternness of his sharp nose and tight-lipped mouth. His high forehead is surmounted by light brown hair that always has the appearance of never having been carefully combed.

Has an unusual repugnance to hair cuts, as he has a habit of running his hand through his hair when in deep thought.

His short, stocky figure has an astonishing grace of movement and he moves very rapidly. He is a trigger-quick thinker. He doesn't talk very fast but he arrives at conclusions almost immediately.

His fingers are thick and strong looking, destroying again that fallacy that artists always have long, slender fingers.

He is not obsessed with favorites.

With two exceptions—bacon and eggs and a "Daquiri" cocktail. He detests the wearing of jewelry in any form.

He is pretty easy going and has an even temperament. Things do not have to be unusually striking to win his approval. He is not an Extremist.

Has an Ampico piano, and being fundamentally interested in design, he studies the structure and design of the music as it unrolls into sound.

He shadows his enthusiastic and affable nature, at times, by wearing dark and conservative clothes.

He was probably one of the first men in New York to wear colored shirts—just imported.

Likes to read when traveling. Regulates his fiction according to the journey. If he has a short trip, it will be a magazine . . . if a long one, it will be two or three and maybe a book.

He would discard reading in very short order, for a chance to get into a good poker game. He enjoys playing red-dog or poker, but he doesn't play them seriously.

In fact, he dislikes intensely competitive sport, such as golf or tennis. If he did play golf, he wouldn't bother to keep score. Results are inconsequential.

Prefers trout fishing to anything else because: "You can either fish really for the fish . . . or just lazy-like, fish for the sake of fishing!"

ONCE every year he re-reads Hugo's "Les Miserables" and the "Rise of the Dutch Republic" by Motly. The interesting thing to him in "Les Miserables," however, is not the book, but the introductory prologues to each chapter.

At home he reads five or six books at the same time.

Will only wear loose clothes. He has started to wear, for comfort, a double-breasted coat with no vest. If it were possible, he would rather have clothes standardized, the only variation being in the color.

He is fond of driving alone through the country, in his roadster.

Is keen about Napoleon brandy and thinks Dijon the most picturesque town he has ever seen.

At home he always wears a camel hair sweater, gabardine trousers and well-worn shoes.....for comfort.

In the past he has done an enormous amount of sketching, but very little in the last five years. The Wolf crayon and the Stylo pen, are his favorite mediums.

Lives in the country, in a long, low rambling house, most of which was formerly an old, heavily timbered barn. The house, of no one particular style, has here and there, the inevitable touch that sets it apart from the rest.

His love for comfort is reflected in his immense living room which contains an enormous fireplace, a great soft rug and two huge davenports that swallow up the sitter to his full satisfaction.

Enjoys early morning "tubbing" in a pool, in the rear of his home, during the summer.

His (secret) ambition is to have a large Roman outdoor pool full of hot water, where he could lie in it and loll around comfortably.

Reads the New York Times.

Favorite restaurant is Mori's. He and Raymond Hood can sometimes be seen there, sitting over in a corner, smoking cigarettes and probably discussing "extended verticals."

Smokes Dunhill cigarettes in the office, and Camels at home. Consumes about 25 a day. Will only smoke half a cigarette then throw it away.

His menagerie consists of an Airedale, a large German police dog, a beautiful black Persian cat, and, going from the sublime to the ridiculous, two more felines of the backyard variety.

Weighs 165 pounds, but if he is not careful, weight will skyrocket upwards.

Finds life extremely interesting. He is always turning corners and discovering new vistas.

At present he is collecting original etchings, painting murals, and planning ambitiously for an outdoor studio.

In contrast to his vitality in the office, he takes things extremely easy at home. His wife has to eject him from the house to get him to take a walk, but when he *is* out, he actually takes a long walk.

In talking, he will sit around in the most comfortable chair he can find, and with rising enthusiasms, discuss architecture.

His architectural formula is: "If you can't take anything off without hurting the fabric of the design, you have the ideal structure."

His day has no "peak load" . . . it's all peak.

He does not, as a great many men of numerous affairs do, relax during the noon hour. . . . He invariably lunches with a business guest, takes only half an hour to eat, and rushes immediately back to the office, or perhaps to a conference in another part of the town.

He doesn't hold anger long. But if he is hurt or rebuffed, it is not so quickly shaken off.

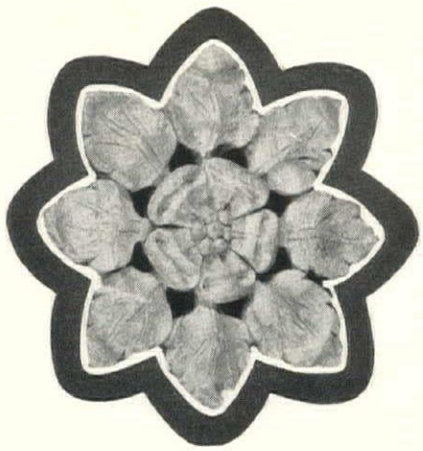
He detests anyone who appears too forward, blustering, or overbearing.

At one time, he was sensitive to the manner in which his speeches were received, but he has arrived at the point of not caring how much the others are bothered. He talks well in public.

Has had as high as 325 draftsmen in his office —one of the largest forces in the country.

When young, he admired Frank Lloyd Wright and Henry Hornbostel, and still does . . . who are dissimilar as day is from night.

Irrational . . . the old-guards call him. An idealist . . . counter his friends. But nevertheless an adaptable, dynamic, and, at times, incomprehensible individual.



*Among the users of*
a.c.f. *architectural woodcarvings will be found the following:*

ARCHITECTS: Carrere & Hastings, J. Walter Cope, Cram & Ferguson, Chas. L. Klauder, Delano & Aldrich, John M. Deibert, Tilton & Githens, Raleigh C. Gildersleeve, Henry F. Hornbostel, Charles Platt, John Russell Pope, Albert H. Spahr, Warren & Wetmore, and Zantinger, Borie & Medary.

BUILDERS: John W. Barnes, Inc., duPont Engineering Co., Longwood Farms, Matthews Construction Co., Smyth Construction Co., James Stewart & Co., Inc., James L. Stuart.

ARCHITECTURAL
WOOD CARVING

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AMERICAN CAR AND FOUNDRY COMPANY • WILMINGTON, DELAWARE

*Main Dining Room with dance floor of clear American walnut mastic squares laid diagonally.*

# WOOD-MOSAIC MASTIC

*Hall of Mirrors (Main Ball Room) floored with Wood-Mosaic mastic blocks of quarter-sawed white oak in cluster herringbone pattern.*

*Pavilion Caprice (Night Club); dance floor in mastic blocks of quarter-sawed white oak, herringbone pattern. Note star motif in center panel reproduced in satinwood and teak.*

*Starrett's Netherland-Plaza, Cincinnati, Ohio. W. W. Ahlschlager, Architect; Delano & Aldrich, Associate Architects; Starrett Bros., Inc., General Contractors. All wood floors designed and installed by Cincinnati Floor Co.*

# BLOCKS IN NETHERLAND-PLAZA

IN rooms where the highest degree of serviceability, fireproof construction and genuine beauty must be combined, Wood-Mosaic Mastic Wood-Block Flooring is the logical selection today. This was again demonstrated by the fact that these blocks, adapted in both wood and design to various architectural schemes, were used in the main dining room, main ball room and night club of the new Netherland-Plaza, Cincinnati.

Designed and laid by our agents, Cincinnati Floor Co., these noteworthy floors illustrate the type of cooperation and expert facilities for installation available to architects everywhere. . . If you are interested in the natural charm, the wide variety of effects and real economy of fine wood floors, send for our architect's handbook, "Mastic Wood-Block Flooring". *Genuine Wood-Mosaic flat-backed, mastic blocks have been in continuous and successful use for over 25 years.*

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## A MODERN ROOM

*Simplicity is the keynote of modernism. Here is a view of the Ladies' Lounge in the Ned Wayburn Institute of Dancing, New York. The Collins & Aikman Carpet is plain black, and the walls are dark, emphasizing the rich high lights of the furnishings and mirrors. It's easy to imagine how this effect would be spoiled if the carpet were scored by unsightly stitched seams! Architects, Sloan and Robertson.*

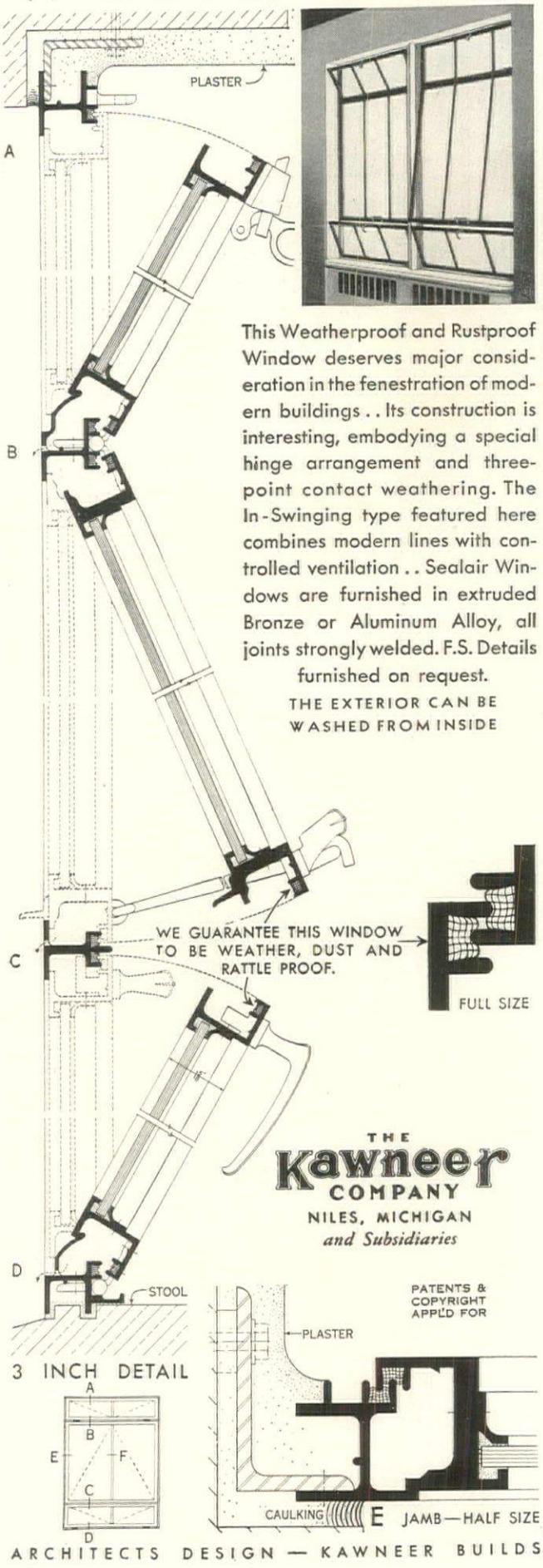
## A PERIOD ROOM

*This photograph illustrates a trend that is being received with marked favor for rooms decorated in the Colonial or Georgian manner. Floors with soft, warm carpet . . . and hooked rugs, or scatter rugs, thrown on top for decorative spots. Here, also, the seemingly seamless appearance of the Collins & Aikman Carpet is a definite contribution to the beauty of the room. Furniture by Erskine-Danforth.*

**Collins & Aikman Carpet gives a broadloom effect at the price of ordinary narrow-width carpet that must be stitched together. It is also possible to create individual color patterns, outside borders, inlay borders or personal designs, and have them made up at reasonable cost—a feature no other carpet can offer. For complete information, write to Collins & Aikman Corporation, 25 Madison Avenue, New York.**

## COLLINS & AIKMAN CARPET

# WINDOWS



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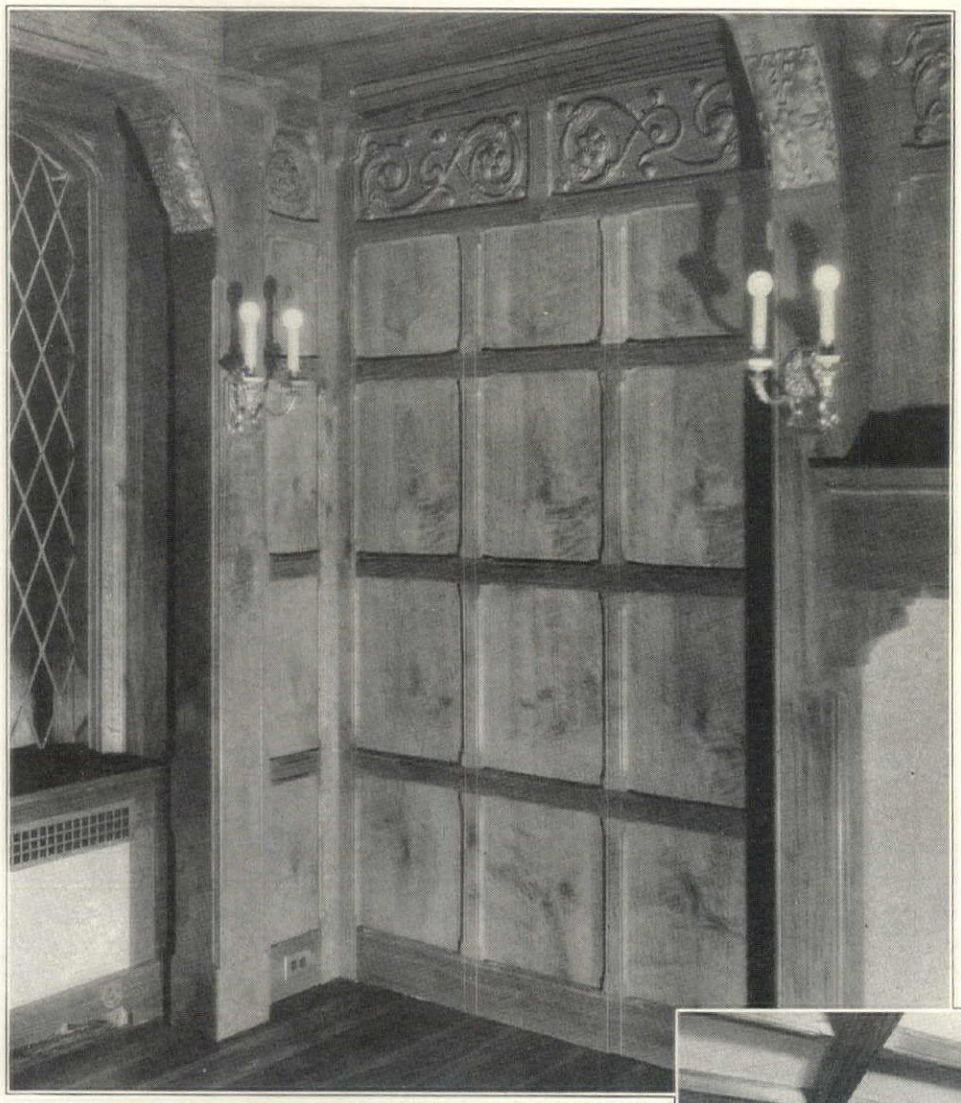
# KNOTTY WALNUT



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*Two views of knotty walnut as used in the library of Mr. D. R. Martin's Buffalo home. Architects: Bley & Lyman. Woodworkers: John Feist & Sons Co.*

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Room 1646, 616 South Michigan Avenue, Chicago, Illinois

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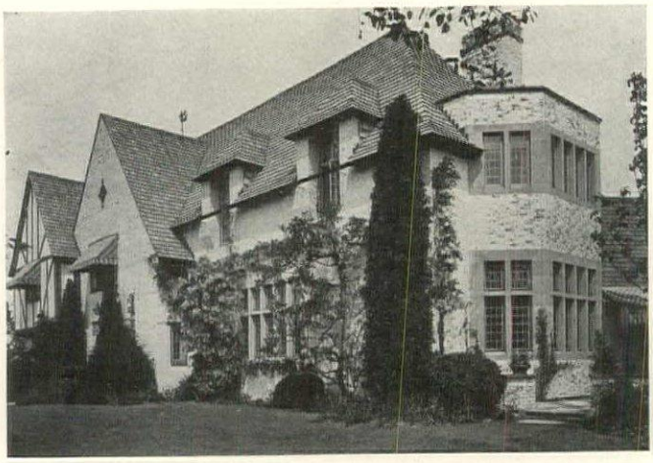

*This beautiful Portland, Oregon, house is covered with Cabot's Hand Split Shakes, stained with Cabot's Creosote Shingle and Wood Stains. The blended colors in grays and gray-greens harmonize perfectly with the brickwork which has been finished with Cabot's Old Virginia White.*

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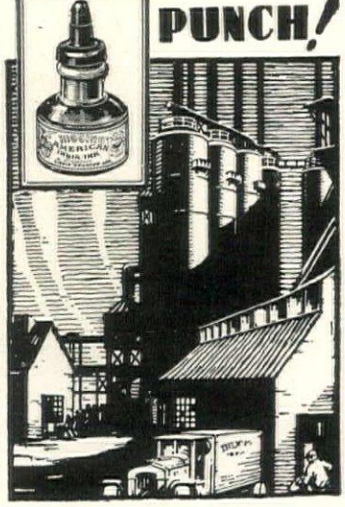

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PHILIP L. GOODWIN, New York, *Architect*

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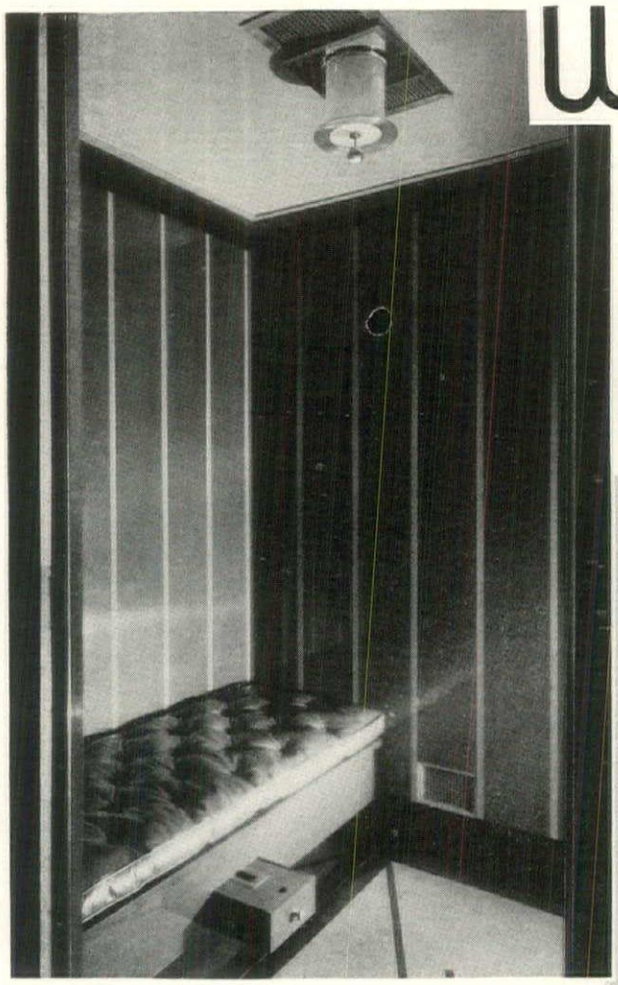
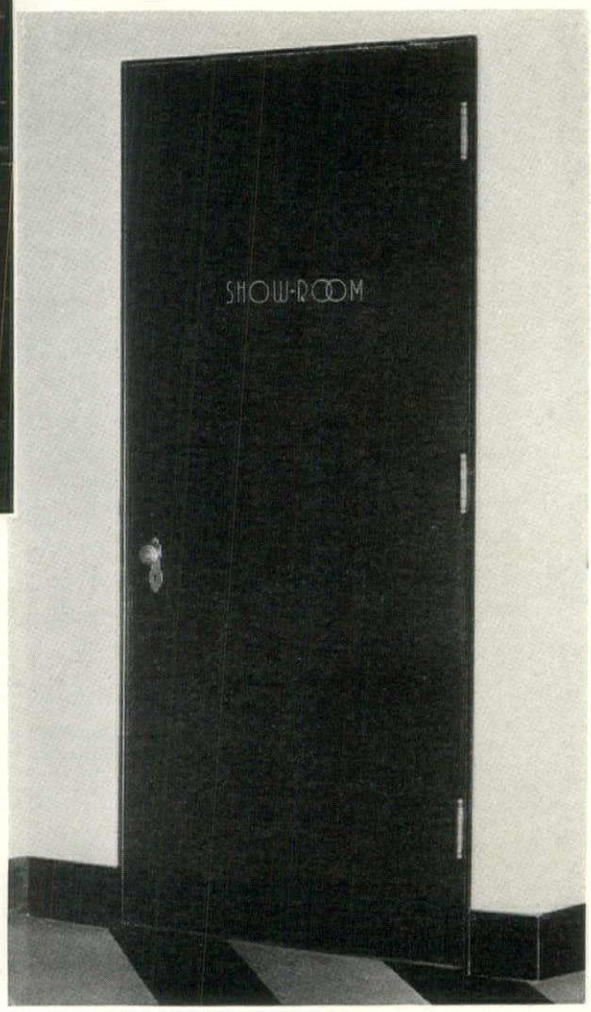


# Wainscoting *and* Door *in* FORMICA




More and more architects are using Formica for paneling in rooms. The photograph shows a waiting room for salesmen in the office of the Otis Elevator Co., Chicago in which Formica is used for wainscoting and a door covered with Formica Veneer in the office of the Cinderella Products Company, Minneapolis.

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**The publications listed in these columns are the most important of those issued by leading manufacturers identified with the building industry. They may be had without charge unless otherwise noted, by applying on your business stationery to *The Architectural Forum*, 521 Fifth Ave., New York, or the manufacturer direct, in which case kindly mention this publication.**

### ACOUSTICS

**R. Guastavino Co.,** 40 Court Street, Boston.

Masonry acoustical materials (AKOUSTOLITH Tile and AKOUSTOLITH Plaster) and Timbrel Arch Construction. Brochure, 14 pages, 8½ x 11 inches. Illustrated.

### ASH HOISTS

**Gillis & Geoghegan, Inc.,** 544 West Broadway, New York.

G & G Telescopic Hoist catalog, 8½ x 11, A.I.A. Standard Classification 30i1 contains complete descriptions, method of selecting correct model to fit the building's needs, scaled drawings showing space requirements and specifications.

### ASH HOISTS—TELESCOPIC

**Gillis & Geoghegan, Inc.,** 544 West Broadway, New York.

G & G Telescopic Hoist catalog, 8½ x 11, A.I.A. Standard Classification 30i1 contains complete descriptions, method of selecting correct model to fit the building's needs, scaled drawings showing space requirements and specifications.

### BRICK

**Hanley Company,** Bradford, Pa.

General Catalog. 16 pp. 8½ x 11 ins. Illustrated.
Bradford Reds. Folder. 8 pp., 3 x 8 ins. Illustrated.

### CABINET WORK

**Henry Klein & Co.,** 25 Grand Street, Elmhurst, L. I., N. Y.

Driwood Period Mouldings in Ornamented Wood. Brochure, 28 pp., 8½ x 11 ins. Illustrated.

Ensemble Offices for the Banker and Broker. Folder. 4 pp., 8½ x 11 ins. Illustrated.

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### CARPETS

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### CEMENT

**Louisville Cement Co.,** 315 Guthrie St., Louisville, Ky.

BRIXMENT for Perfect Mortar. Self-filing handbook, 8½ x 11 ins. 16 pp. Illustrated. Contains complete technical description of BRIXMENT for brick, tile and stone masonry, specifications, data and tests.

**Portland Cement Association,** Chicago, Ill.

Concrete Masonry Construction. Booklet, 48 pp., 8½ x 11 ins. Illustrated. Deals with various forms of construction.

Town and Country Houses of Concrete Masonry. Booklet, 20 pp., 8½ x 11 ins. Illustrated.

Facts About Concrete Building Tile. Brochure, 16 pp., 8½ x 11 ins. Illustrated.

The Key to Firesafe Homes. Booklet, 20 pp., 8½ x 11 ins. Illustrated.

Design and Control of Concrete Mixers. Brochure, 32 pp., 8½ x 11 ins. Illustrated.

Portland Cement Stucco. Booklet, 64 pp., 8½ x 11 ins. Illustrated.

Concrete in Architecture. Bound Volume, 60 pp., 8½ x 11 ins. Illustrated. An excellent work, giving views of exteriors and interiors.

### DAMPPROOFING

**Minwax Company, Inc.,** 11 West 42nd St., New York.

Complete Index of all Minwax Products. Folder, 6 pp., 8½ x 11 ins. Illustrated. Complete description and detailed specifications.

### DOORS

**The Kawneer Company,** Niles, Michigan.

Detail sheet, 8½ x 11 ins., with A.I.A. File No. featuring Heavy Welded Bronze Doors.

**J. G. Wilson Corporation,** 11 East 38th St., New York City, N. Y.

A 72-page catalog on Rolling Steel Doors and Shutters, including specifications, dimensions and other data including illustrations of installations and drawings.

Two catalogs on Sectionfold Doors Operating Overhead, contain complete information, including photographs, details, specifications and an outline of their many uses.

### DOORS AND TRIM, METAL

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**Kalman Steel Company,** Chicago, Ill.

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## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page 39*

### ELECTRICAL EQUIPMENT—Continued

The Bryant Home of Ideas. Contains data and suggestions useful in connection with residence wiring. 8½ x 10 ins. 16 pp.

"KeNeX" and "HooKeX" Bulletin No. 5129. Contains data and specifications pertaining to devices for use in connection with the hanging of lighting fixtures, making such fixtures portable or removable, soldered joints being eliminated. 8½ x 10 ins. 6 pp.

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**The Electric Storage Battery Co.,** Philadelphia.

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**General Electric Co., Merchandise Dept., Bridgeport, Conn.**

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**Ward Leonard Electric Co., Mt. Vernon, N. Y.**

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Otis Geared and Gearless Traction. Elevators of All Types. Descriptive leaflets, 8½ x 11 ins. Illustrated. Full details of machines, motors and controllers for these types.

Escalators. Booklet, 8½ x 11 ins., 22 pp. Illustrated. Describes use of escalators in subways, department stores, theaters and industrial buildings. Also includes elevators and dock elevators.

**Richards-Wilcox Mfg. Co., Aurora, Ill.**

Elevators. Booklet, 8½ x 11 ins., 24 pp. Illustrated. Describes complete line of "Ideal" elevator door hardware and checking devices, also automatic safety devices.

### ESCALATORS

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### FLOOR HARDENERS (CHEMICAL)

**Minwax Company,** 11 West 42nd Street, New York, N. Y.

Concrete Floor Treatments. Folder, 4 pp., 8½ x 11 ins. Illustrated.

### FLOORS—STRUCTURAL

**Truscon Steel Co.,** Youngstown, Ohio.

Truscon Floretyle Construction. Booklet, 8½ x 11 ins., 16 pp. Illustrations of actual jobs under construction. Lists of properties and information on proper construction. Proper method of handling and tables of safe loads.

### FLOORING

**Armstrong Cork Co. (Flooring Division),** Lancaster, Pa.

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**Carter Bloxonend Flooring Co.,** 902 Walnut St., Kansas City, Mo.

Bloxonend Flooring for gymnasiums, assembly rooms, auditoriums, play rooms. Descriptive folder, 8½ x 11 ins. Illustrated. Full details of Bloxonend Flooring including specifications for laying.

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A New Kind of Floor Service. Brochure, 8 pp. Data on Bonded Floors.

Sealex Battleship Linoleum. Booklet, 12 pp. Illustrated. Shows typical installations.

Sealex Treadlite Tiles. Two booklets, 8 and 16 pp. Illustrated.
Colonial Planks. Brochure, 8 pp. Illustrated.

**Goodyear Tire & Rubber Co., Inc.,** Akron, Ohio.

Beautiful Floors, Architects' Reference Book. Brochure, 32 pp., 8½ x 11 ins. Illustrated. Valuable data on flooring.

Rubber Flooring News. Monthly publications, 8½ x 11 ins. Illustrated. Giving data on flooring for buildings of many types.

Manual of Goodyear Rubber Tile Installation Booklet. 7¾ x 10¾ ins. Illustrated.

**Stedman Rubber Flooring Company,** South Braintree, Mass.

Stedman Ray-Proof Rubber. Booklet, 12 pp., 5½ x 8 ins. Illustrated. For X-ray Rooms.

Stedman Tile, The Original Reinforced Rubber Floor. Booklet, 16 pp., 8½ x 11 ins. Illustrated. Valuable data on flooring.

### FURNITURE

**American Seating Co.,** 14 E. Jackson Blvd., Chicago, Ill.

Theatre Chairs. Booklet, 6 x 9 ins., 48 pp. Illustrations of theatre chairs.

**Kittinger Co.,** 1893 Elmwood Ave., Buffalo, N. Y.

Kittinger Club & Hotel Furniture. Booklet, 20 pp., 6¼ x 9½ ins. Illustrated. Deals with fine line of furniture for hotels, clubs, institutions, schools, etc.

Kittinger Club and Hotel Furniture. Booklet, 20 pp., 6 x 9 ins. Illustrated. Data on furniture for hotels and clubs.

A Catalog of Kittinger Furniture. Booklet, 78 pp., 11 x 14 ins. Illustrated. General Catalog.

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The "Weather-Age" surface of Careystone Shingles is only one reason for selecting them. Add to this rugged beauty their colorful shades of Bristol Green, Windsor Gray, Tudor Black, Georgian Red and Weathered Brown, and the artistic value of this new roof is most evident. Next consider that they are made of Asbestos and Portland Cement; Careystone Shingles are literally as fireproof as Asbestos, and as permanent as stone.

The control of asbestos mines, combined with large production by labor-saving machinery, makes it possible to sell Careystone Shingles at prices no higher than those of roofs which are far less permanent and good looking.

We have prepared sets of miniature samples of Careystone Shingles, which we will gladly mail on request.

THE PHILIP CAREY COMPANY ◆ Lockland, Cincinnati, Ohio

Branches in Principal Cities

BUILT-UP ROOFS
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ASFALTSLATE SHINGLES
BUILDING PAPERS

504

## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page* 40

### GREENHOUSES

**William H. Lutton Company,** 267 Kearney Ave., Jersey City, N. J.

Greenhouses of Quality. Booklet, 50 pp., 8½ x 11 ins. Illustrated. Conservatories making use of Lutton Patented Galvanized Steel V-Bar.

### HARDWARE

**P. & F. Corbin,** New Britain, Conn.

Early English and Colonial Hardware. Brochure, 8½ x 11 ins. An important illustrated work on this type of hardware.

Locks and Builders' Hardware. Bound Volume, 486 pp., 8½ x 11 ins. An exhaustive, splendidly prepared volume.

Colonial and Early English Hardware. Booklet, 48 pp., 8½ x 11 ins. Illustrated. Data on hardware for houses in these styles.

Corbin Door Closers, 8½ x 11 ins. A description of the principles of design and performance of Corbin door closers.

Automatic Exit Fixtures, 8½ x 11 ins. A catalog of hardware for exit and entrance doors to auditoriums.

**Cutler Mail Chute Company,** Rochester, N. Y.

Cutler Mail Chute Model F. Booklet, 4 x 9¼ ins., 8 pp. Illustrated.

**Richards-Wilcox Mfg. Co.,** Aurora, Ill.

Distinctive Garage Door Hardware. Booklet, 8½ x 11 ins., 66 pp. Illustrated. Complete information accompanied by data and illustrations on different kinds of garage door hardware.

Distinctive Elevator Door Hardware. Booklet, 90 pp., 10½ x 16 ins. Illustrated.

**Russell & Erwin Mfg. Co.,** New Britain, Conn.

Hardware for the Home. Booklet, 24 pp., 3½ x 6 ins. Deals with residence hardware.

Door Closer Booklet. Brochure, 16 pp., 3½ x 6 ins. Data on a valuable detail.

Garage Hardware. Booklet, 12 pp., 3½ x 6 ins. Hardware intended for garage use.

Famous Homes of New England. Series of folders on old homes and hardware in style of each.

### HEATING EQUIPMENT

**American Blower Co.,** 6004 Russell St., Detroit, Mich.

Heating and Ventilating Utilities. A binder containing a large number of valuable publications, each 8½ x 11 ins., on these important subjects.

**American Radiator Company, The,** 40 West 40th St., N. Y. C.

Ideal Boilers for Oil Burning. Catalog 5½ x 8½ ins., 36 pp. Illustrated in 4 colors. Describing a line of Heating Boilers especially adapted to use with Oil Burners.

Corto—The Radiator Classic. Brochure, 5½ x 8½ ins., 16 pp. Illustrated. A brochure on a space-saving radiator of beauty and high efficiency.

Ideal Arcola Radiator Warmth. Brochure, 6¾ x 9½ ins. Illustrated. Describes a central all-on-one-floor heating plant with radiators for small residences, stores, and offices.

How Shall I Heat My Home? Brochure, 16 pp., 5¾ x 8½ ins. Illustrated. Full data on heating and hot water supply.

New American Radiator Products. Booklet, 44 pp., 5 x 7¾ ins. Illustrated. Complete line of heating products.

A New Heating Problem. Brilliantly Solved. Broadside, 4 pp., 10¾ x 15 ins. Illustrated. Data on the IN-AIRID invisible air valve.

In-Airid, the Invisible Air Valve. Folder, 8 pp., 3½ x 6 ins. Illustrated. Data on a valuable detail of heating.

The 999 ARCO Packless Radiator Valve. Folder, 8 pp., 3½ x 6 ins. Illustrated.

**Bryant Heater & Mfg. Co.,** 17825 St. Clair Ave., Cleveland, Ohio.

Handbook on Heating Buildings with Bryant Gas Furnaces. Booklet, 12 pp., 8½ x 11 ins. Illustrated.

Handbook on Heating Water with Bryant Gas Boilers. Brochure, 20 pp., 8½ x 11 ins. Illustrated.

Handbook on Heating Buildings with Bryant Gas Boilers. Booklet, 20 pp., 8½ x 11 ins. Illustrated.

**James B. Clow & Sons,** 534 S. Franklin St., Chicago, Ill.

Clow Gasteam Vented Heating System. Brochure, 24 pp., 8½ x 11 ins. Illustrated. Deals with a valuable form of heating equipment for using gas.

### HEATING EQUIPMENT—Continued

**D.G.C. Trap & Valve Co.,** 1 East 43rd St., New York, N. Y.

Cryer Radiator Control Valve. Bulletin, 8½ x 11 ins. 12 pp. Illustrated. Explains operation and advantages of this radiator control valve on two-pipe vapor, vacuum or gravity steam systems.

**C. A. Dunham Company,** 450 East Ohio St., Chicago, Ill.

Dunham Radiator Trap. Bulletin 101, 8 x 11 ins., 12 pp. Illustrated. Explains working of this detail of heating apparatus.

Dunham Packless Radiator Valves. Bulletin 104, 8 x 11 ins., 8 pp. Illustrated. A valuable brochure on valves.

Dunham Return Heating System. Bulletin 109, 8 x 11 ins. Illustrated. Covers the use of heating apparatus of this kind.

Dunham Vacuum Heating System. Bulletin 110, 8 x 11 ins., 12 pp. Illustrated.

The Dunham Differential Vacuum Heating System. Bulletin 114. Brochure, 12 pp., 8 x 11 ins. Illustrated. Deals with heating for small buildings.

The Dunham Differential Vacuum Heating System. Bulletin 115. Brochure, 12 pp., 8 x 11 ins. Illustrated. Deals with heating for large buildings.

Dunham Built Dwyer Unit Heaters. Booklet, 31 pp., 8½ x 11 ins. Illustrated.

**The Fulton Sylphon Company,** Knoxville, Tenn.

Sylphon Temperature Regulators. Illustrated brochures, 8½ x 11 ins., dealing with general architectural and industrial applications; also specifically with applications of special instruments.

Sylphon Heating Specialties. Catalog No. 200, 192 pp., 3½ x 6¾ ins. Important data on heating.

**Hoffman Specialty Company, Inc.,** 25 West 45th St., New York, N. Y.

Heat Controlled With the Touch of a Finger. Booklet, 46 pp., 5¾ x 8¾ ins. Illustrated.

How to Lock Out Air, the Heat Thief. Brochure, 48 pp., 5 x 7¾ ins. Illustrated.

**Janette Manufacturing Company,** 556 West Monroe Street, Chicago.

More Heat from Any Hot Water System on Less Fuel. Folder. 4 pp., 8½ x 11 ins. Illustrated. Deals with use of the "Hydrolator."

**S. T. Johnson Co.,** Oakland, Calif.

Johnson Oil Burners. Booklet, 9 pp., 8½ x 11 ins. Illustrated.

Bulletin No. 4A. Brochure, 8 pp., 8½ x 11 ins. Illustrated. Data on different kinds of oil-burning apparatus.

Bulletin No. 31. Brochure, 8 pp. 8½ x 11 ins. Illustrated. Deals with Johnson Rotary Burner with Full Automatic Control.

**Kewanee Boiler Corporation,** Kewanee, Ill.

Kewanee on the Job. Catalog, 8½ x 11 ins., 80 pp. Illustrated. Showing installations of Kewanee boilers, water heaters, radiators. etc.

Catalog No. 78, 6 x 9 ins. Illustrated. Describes Kewanee Firebox Boilers with specifications and setting plans.

Catalog No. 79, 6 x 9 ins. Illustrated. Describes Kewanee power boilers and smokeless tubular boilers with specifications.

**McQuay Radiator Corporation,** 35 East Wacker Drive, Chicago, Ill.

McQuay Visible Type Cabinet Heater. Booklet, 4 pp., 8½ x 11 ins. Illustrated. Cabinets and radiators adaptable to decorative schemes.

McQuay Concealed Radiators. Brochure, 4 pp., 8½ x 11 ins. Illustrated.

McQuay Unit Heater. Booklet, 8 pp., 8½ x 11 ins. Illustrated. Gives specifications and radiator capacities.

**Modine Mfg. Co.,** Racine, Wisc.

Modine Copper Radiation. Booklet, 28 pp. 8½ x 11 ins. Illustrated. Deals with industrial, commercial and domestic heating.

A Few Short Years. Folder. 4 pp. 8½ x 11 ins. Illustrated. Heating for garages.

Dairy Plant Heating. Folder. 4 pp., 8½ x 11 ins. Illustrated.

Industrial Heating. Folder. 4 pp., 8½ x 11 ins. Illustrated.

Modine Unit Heater. Folder. 6 pp., 8½ x 11 ins. Illustrated.

**Nash Engineering Company,** South Norwalk, Conn.

Bulletin 85. Booklet. 12 pp. 10¾ x 7½ ins. Illustrated in color. Describes construction and operation of the Jennings Return Line Vacuum Heating Pump.

### REQUEST FOR CATALOGS

**To get any of the catalogs described in this section, put down the title of the catalog desired, the name of the manufacturer and send coupon to THE ARCHITECTURAL FORUM, 521 Fifth Avenue, New York.**

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# YOU NO LONGER HAVE TO WAIT 100 YEARS » »

Nothing gives more charm to a home than a roof with shingles having that pleasing mossy effect which comes after a century of exposure. But in the past this desired effect came only after the roof began to need renewal. As America's pioneer asbestos shingle manufacturer, Ambler takes pleasure in presenting the new "Weathered Effect" shingle. In this distinctive shingle the charm of an old weathered wood shingle is combined with the lifelong lasting qualities of all Ambler Asbestos Shingles.

The result is a hard, rigid shingle with remarkable long life and protection from fire.

Ambler Asbestos Shingles require no painting, staining or repairs. The Tapered "Weathered Effect" Shingle is 9¼ inches x 18½ inches, and comes in two thicknesses—No. 99, ½-inch butt, and No. 100 with 5/16 butt. Colors: Red, Green, four shades of "Rustic Blend"—soft autumnal browns—and "Lindenwold," a Black Shingle with Mossy Greenish lines.

*Write today for complete data on this shingle, as well as the comprehensive Ambler line, which includes a wide range of colors and styles.*

AMBLER ASBESTOS SHINGLE & SHEATHING CO.
AMBLER, PENNA. ST. LOUIS, MO.

FIREPROOF *Ambler* ASBESTOS SHINGLES

## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page 42*

### HEATING EQUIPMENT—Continued

Bulletin 87. Brochure. 8 pp. 10¾ x 7½ ins. Illustrated in color. Deals with Sizes T and U Jennings Vacuum Heating Pump for 2500 and 5000 square feet equivalent direct radiation.

Bulletin 63. Booklet. 4 pp. 10¾ x 7½ ins. Illustrated. Describes in detail the Unit Type Motor Driven Jennings Condensation Pump.

**National Radiator Corporation,** Johnstown, Pa.

The Crimson Flame. Folder, 6 pp., 4½ x 7 ins. Illustrated.

Contento Brings Contentment to Your Home. Folder, 12 pp., 3½ x 6 ins. Illustrated.

National Jacketed Boiler. Folder, 4 pp., 8½ x 11 ins. Illustrated.

National Super-Smokeless Boiler. Folder, 4 pp., 8½ x 11 ins. Illustrated.

Aero, the National Radiator Sizes and Ratings. Booklet, 16 pp., 5 x 7⅞ ins. Illustrated.

**Sarco Company, Inc., 183 Madison Ave., New York City, N. Y.**

Steam Heating Specialties. Booklet, 6 pp., 6 x 9 ins. Illustrated. Data on Sarco Packless Supply Valves and Radiator Traps for vacuum and vapor heating systems.

Equipment Steam Traps and Temperature Regulations. Booklet, 6 pp., 6 x 9 ins. Illustrated. Deals with Sarco Steam Traps for hospital, laundry and kitchen fixtures and the Sarco Self-contained Temperature Regulation for hot water service tanks.

**B. F. Sturtevant Company,** Hyde Park, Boston, Mass.

Tempervane Heating Units. Catalog 363. Booklet, 44 pp., 8½ x 11 ins. Illustrated. Data on "Heating Every Corner with Maximum Economy."

**U. S. Blower & Heater Corporation,** Minneapolis, Minn.

Blowers, Heaters and Washers. Booklet, 64 pp., 8½ x 11 ins. Illustrated.

### HOISTS, TELESCOPIC

**Gillis & Geoghegan, Inc.** 535 West Broadway, New York.

G & G Telescopic Hoist. Booklet. 24 pp. 8½ x 11 ins. Illustrated complete data on hoists.

Ash Removal. Folder. 8½ x 11 ins. Illustrated. Hoists for removing ashes from basements.

### HOSPITAL EQUIPMENT

**Bryant Electric Co.,** Bridgeport, Conn.

Hospital Signal Devices. Bulletin HS-622-RP. Complete information on hospital signal devices. Pull Control Type. 8½ x 10 ins. 46 pp.

Hospital Signal Devices. Bulletin HS-1023. Magnetic Control Type. 8½ x 10 ins. 26 pp.

**The Frink Co., Inc.,** 369 Lexington Ave., New York City.

Catalog 426. 7 x 10 ins., 16 pp. A booklet illustrated with photographs and drawings, showing the types of lights for use in hospitals, as operating table reflectors, linolite and multilite concentrators, ward reflectors, bed lights and microscopic reflectors, giving sizes and dimensions, explaining their particular fitness for special uses.

**The International Nickel Company,** 67 Wall St., New York, N. Y.

Hospital Applications of Monel Metal. Booklet, 8½ x 11½ ins., 16 pp. Illustrated. Gives types of equipment in which Monel Metal is used, reasons for its adoption, with sources of such equipment.

### INCINERATORS

**Josam Mfg. Co.,** Michigan City, Ind.

Josam-Graver Incinerators. Folder, 4 pp., 8½ x 11 ins. Illustrated.

### INSULATION

**Armstrong Cork & Insulation Co.,** Lancaster, Pa.

The Insulation of Roofs with Armstrong's Corkboard. Booklet. Illustrated. 7½ x 10½ ins., 32 pp. Discusses means of insulating roofs of manufacturing or commercial structures.

Insulation of Roofs to Prevent Condensation. Illustrated booklet, 7½ x 10½ ins., 36 pp. Gives full data on valuable line of roof insulation.

Filing Folder for Pipe Covering Data. Made in accordance with A. I. A. rules.

The Cork-lined House Makes a Comfortable Home. 5 x 7 ins. 32 pp. Illustrated.

### INSULATION—Continued

Armstrong's Corkboard. Insulation for Walls and Roofs of Buildings. Booklet, 66 pp., 9½ x 11¾ ins. Illustrates and describes use of insulation for structural purposes.

### JOISTS

**Kalman Steel Company,** Chicago, Ill.

Steel Joists. Brochure, 20 pp., 8½ x 11 ins. Joists and accessories. Firesafe Floor and Roof Construction. Booklet, 8 pp., 8½ x 11 ins. Joists, lath and accessories.

### KITCHEN EQUIPMENT

**The International Nickel Company,** 67 Wall St., New York, N. Y.

Hotels, Restaurants and Cafeteria Applications of Monel Metal. Booklet, 8½ x 11 ins., 32 pp. Illustrated. Gives types of equipment in which Monel Metal is used, with service data and sources of equipment.

### LABORATORY EQUIPMENT

**Alberene Stone Co.,** 153 West 23rd Street, New York City.

Booklet, 8¾ x 11¼ ins., 26 pp. Stone for laboratory equipment, shower partitions, stair treads, etc.

**Duriron Company,** Dayton, Ohio.

Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings. Booklet, 8½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.

### LATH, METAL AND REINFORCING

**Kalman Steel Company,** Chicago, Ill.

Firesafe Building Products. Booklet, 20 pp., 8½ x 11 ins. Lath, fireplace accessories, beads, etc.

**Milcor Steel Co.,** Milwaukee.

The Milcor Manual. Booklet, 96 pp., 8½ x 11 ins. Illustrated. Data on metal lath and similar materials.

Milcor Metal Ceiling Catalog. Booklet, 288 pp., 8½ x 11 ins. Illustrated. Data on metal ceiling and wall construction.

**National Steel Fabric Co.,** Pittsburgh, Pa.

Better Walls for Better Homes. Brochure, 16 pp., 7¾ x 11¼ ins. Illustrated. Metal lath, particularly for residences.

Steeltex for Floors. Booklet, 24 pp., 8½ x 11 ins. Illustrated.

Combined reinforcing and form for concrete or gypsum floors and roofs.

Steeltex Data Sheet No. 1. Folder, 8 pp., 8½ x 11 ins. Illustrated. Steeltex for floors on steel joists with round top chords.

Steeltex Data Sheet No. 2. Folder, 8 pp., 8½ x 11 ins. Illustrated. Steeltex for floors on steel joists with flat top flanges.

Steeltex Data Sheet No. 3. Folder, 8 pp., 8½ x 11 ins. Illustrated. Steeltex for folders on wood joists.

**Truscon Steel Company,** Youngstown, Ohio.

Truscon ¾-inch Hy-Rib for Roofs, Floors and Walls. Booklet, 8½ x 11 ins., illustrating Truscon ¾-inch Hy-Rib as used in industrial buildings. Plates of typical construction. Progressive steps of construction. Specification and load tables.

### LAUNDRY MACHINERY

**The American Laundry Machinery Company,** Norwood Station, Cincinnati, Ohio.

The Laundry in the Hotel, Hospital, School, Club, Office Building . . . even in the large Residence. Brochure, 25 pp., 8½ x 11 ins. Arranged in convenient file folder. Illustrated. Contains blue prints of prominent laundry installations.

**Troy Laundry Machinery Co., Inc., 9 Park Place, New York City.**

Laundry Machinery for Large Institutions. Loose-leaf booklet, 50 pp., 8½ x 11 ins. Illustrated.

Laundry Machinery for Small Institutions. Loose-leaf brochure, 50 pp., 8½ x 11 ins. Illustrated.

Accessory Equipment for Institutional Laundries. Leather bound book, 50 pp., 8½ x 11 ins. Illustrated.

Dry Cleaning Equipment for Institutional Purposes. Brochure, 50 pp., 8½ x 11 ins. Illustrated.

### REQUEST FOR CATALOGS

**To get any of the catalogs described in this section, put down the title of the catalog desired, the name of the manufacturer and send coupon to THE ARCHITECTURAL FORUM, 521 Fifth Avenue, New York.**

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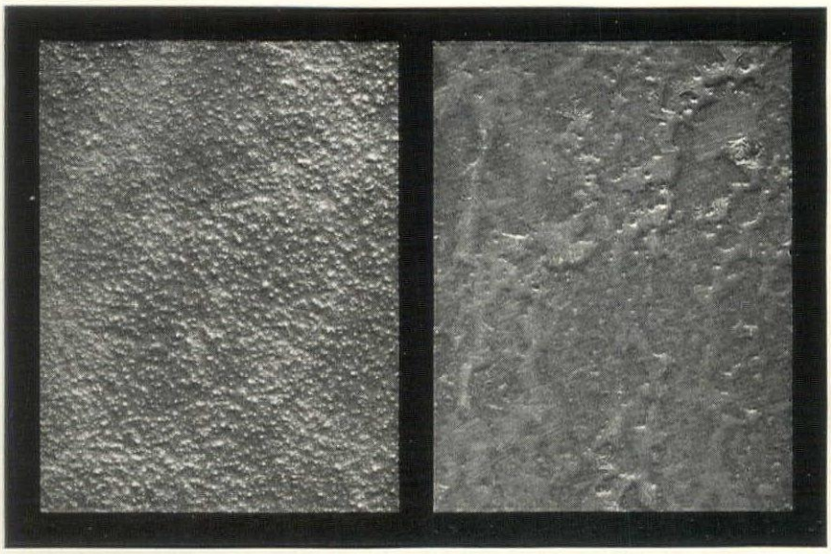

# *New Latitude in* Architectural Use of Lead

How often have you had to do without the mellow charm of architectural lead or to confine too closely its uses . . . because of its weight and its cost?

Now, Revere Leadtex gives you a far freer hand. This lead-coated copper has the beauty and texture of lead combined with the uniform, permanent strength of copper. Its light weight and lower cost are proving a boon to lead-minded designers.

As an example, a leaderhead of Revere Leadtex will be as attractive, if not more so, than one of cast lead. It will be lighter and will cost about one-fifth. On cornices, gutters and down-spouts the saving is proportionately large.

Other uses to which Revere Leadtex is ideally suited include roofings, flashings, spandrels, panelings and soffits. It is equally adaptable for commercial and public buildings, homes and clubs, churches and auditoriums.

Revere Leadtex is Revere Sheet Copper finished with a coating of lead. It was developed after a careful survey of the architectural field, and is available in two finishes. Revere Leadtex is gray when new and tones down to a soft neutral shade. Where such a color is to be preferred to the verde green which copper takes on with age, Revere Leadtex is to be specified.

Revere Leadtex is supplied on copper of any gauge and temper, in three weights: Leadtex Standard, and Leadtex Heavy, (each coated both sides . . . *at right above*). Leadtex Extra Heavy, (Single, coated one side . . . Double, coated both sides . . . *above at left*).

For further information, write Revere Copper and Brass Incorporated, 230 Park Ave., New York.

# Revere Copper *and* Brass

INCORPORATED

Revere COPPER BRASS Products

Baltimore *Division, Baltimore, Md.* Michigan *Division, Detroit, Mich.* Higgins *Division, Detroit, Mich.*
Dallas *Division, Chicago, Ill.* Taunton-New Bedford *Division, Taunton, Mass.* Rome *Division, Rome, N. Y.*

EXECUTIVE OFFICES: NEW YORK CITY
GENERAL OFFICES: ROME, N. Y.

## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page 44*

### LIGHTING EQUIPMENT

**The Frink Co., Inc.,** 369 Lexington Ave., New York, N. Y.

Catalog 415, 8½ x 11 ins., 46 pp. Photographs and scaled cross-sections. Specialized bank lighting, screen and partition reflectors, double and single desk reflectors and Polaralite Signs.

**Westinghouse Electric & Manufacturing Co.,** East Pittsburgh, Pa.
Industrial Lighting Equipment. Booklet, 32 pp., 8½ x 11 ins. Illustrated.

Commercial Lighting. Brochure, 24 pp., 8½ x 11 ins. Illustrated.
Airport and Floodlighting Equipment. Booklet, 20 pp., 8½ x 11 ins. Illustrated.

### MAIL CHUTES

**Cutler Mail Chute Company,** Rochester, N. Y.

Cutler Mail Chute Model F. Booklet, 4 x 9¼ ins., 8 pp. Illustrated.

### MANTELS

**Henry Klein & Co., Inc.** 40-46 West 23rd Street, New York.

Driwood Mantels. Booklet. 12 pp. 8½ x 11 ins. Illustrated. Fine line of eighteenth century English and American mantels.

### MARBLE

**The Georgia Marble Company,** Tate, Ga.; New York Office, 1328 Broadway.

Why Georgia Marble Is Better. Booklet, 3⅜ x 6 ins. Gives analysis, physical qualities, comparison of absorption with granite, opinions of authorities, etc.

Convincing Proof. 3⅜ x 6 ins., 8 pp. Classified list of buildings and memorials in which Georgia Marble has been used, with names of Architects and Sculptors.

Hurt Building, Atlanta; Senior High School and Junior College, Muskegon, Mich. Folders, 4 pp., 8½ x 11 ins. Details.

### METALS

**The International Nickel Company,** 67 Wall St., New York, N. Y.

Monel Metal Primer. 8 folders, 4 pp., 8½ x 11 ins. Illustrated. Valuable data on use of monel in kitchens, laundries, etc.

### MILL WORK—See also Wood

**Klein & Co., Inc., Henry,** 11 East 37th St., New York, N. Y.

Two Driwood Interiors. Folder, 4 pp., 6¼ x 9 ins. Illustrated. Use of moulding for paneling walls.

A New Style in Interior Decoration. Folder, 4 pp., 6¼ x 9 ins. Illustrated. Deals with interior woodwork.

Driwood Period Mouldings in Ornamented Wood. Booklet, 28 pp., 8½ x 11 ins. Illustrated.

How Driwood Period Mouldings in Ornamented Wood Set a New Style in Decoration. Folder.

### PAINTS, STAINS, VARNISHES AND WOOD FINISHES

**Minwax Company, Inc.,** 11 West 42nd St., New York.

Color Card and Specifications for Minwax Brick and Cement Coating. Folder, 4 pp., 8½ x 11 ins. Illustrated.

### PAINTS, STAINS AND VARNISHES—Continued

**National Lead Company,** 111 Broadway, New York, N. Y.

Handy Book on Painting. Book, 5½ x 3¾ ins., 100 pp. Gives directions and formulæ for painting various surfaces of wood, plaster, metals, etc., both interior and exterior.

Red Lead in Paste Form. Booklet, 6¾ x 3½ ins., 16 pp. Illustrated. Directions and formulæ for painting metals.

Came Lead. Booklet, 6 x 8¾ ins., 12 pp. Illustrated. Describes various styles of lead cames.

### PARTITIONS

**Circle A. Products Corporation,** New Castle, Ind.

Circle A. Partitions Sectional and Movable. Brochure. Illustrated. 8½ x 11¾ ins., 32 pp. Full data regarding an important line of partitions, along with Erection Instructions for partitions of three different types.

**Irving Hamlin,** Evanston, Ill.

Hamlinized Folding Partitions Made from Hamlin's Evanston Soundproof Doors, Sectional and Movable. Folder, 4 pp., 8½ x 11 ins. Illustrated.

**Hauserman Company, E. F.,** Cleveland, Ohio.

Movable Steel Partitions for sub-dividing office and industrial space. Folders on complete line, 8½ x 11, giving full data on the different types of steel partitions with details, elevations and specifications. Also 40-page Architects' Portfolio AIA—28A3, containing 20 full page plates of practical office layouts.

Hollow Steel Standard Partitions. Various folders, 8½ x 11 ins. Illustrated. Give full data on different types of steel partitions, together with details, elevations and specifications.

**Henry Klein & Co.,** 25 Grand Street, Elmhurst, L. I., N. Y.

Telesco Partition. Catalog, 8¼ x 11 ins., 14 pp. Illustrated. Shows typical offices laid out with Telesco partitions, cuts of finished partition units in various woods. Gives specifications and cuts of buildings using Telesco.

Detailed Instructions for Erecting Telesco Partitions. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Complete instructions, with cuts and drawings, showing how easily Telesco Partition can be erected.

**Improved Office Partition Co.,** 25 Grand St., Elmhurst, L. I., N. Y. (See Henry Klein & Co.)

**Richards-Wilcox Mfg. Co.,** Aurora, Ill.

Partitions. Booklet, 7 x 10 ins., 32 pp. Illustrated. Describes complete line of track and hangers for all styles of sliding parallel, accordion and flush-door partitions.

**Telesco Office Partition,** 25 Grand St., Elmhurst, L. I., N. Y. (See Henry Klein & Co.)

**J. G. Wilson Corporation,** 11 East 38th St., New York City, N. Y.

Sectionfold and Rolling Partitions, also Light Retarding Rolling Shutters. Thirty-two-page catalog with illustrations, specification details, etc.

### PIPE

**The American Brass Company,** Waterbury, Conn.

Bulletin B-1, Brass Pipe for Water Distribution. A.I.A. File No. 29B4. 8½ x 11 ins., 32 pp. Illustrated. Discusses the economic advantages of permanent plumbing and the suitability of Anaconda 67 Brass Pipe for normally corrosive waters, and Anaconda 85 Red-Brass Pipe for highly corrosive waters. Contains schedule of weights and sizes of seamless brass and copper pipe, recommended specifications and installation suggestions.

**American Rolling Mill Company,** Middletown, Ohio.

How ARMCO Dredging Products Cut Costs. Booklet, 16 pp., 6 x 9 ins. Data on dredging pipe.

**Bethlehem Steel Company, Bethlehem, Pa.**

Bethlehem Wrought Steel Pipe, Catalog P. Booklet, 20 pp., 4¼ x 7¼ ins. Illustrated.

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# Include "QUIET" in your specifications

YOU can prevent noise from destroying the atmosphere of quiet dignity that is so essential to many interiors. In the library of the Fullerton High School the architect has checked many noises at their source with an Armstrong's Cork Tile Floor. These tiles of pure cork hush the sounds of clattering heels, scraping chairs, and all other distracting noises that start at the floor.

In libraries, dining-rooms, auditoriums, wherever quiet is needed, specify a floor of Armstrong's Cork Tile. Your ingenuity has full sway in the creation of a design. For cork tile comes in three blended shades of brown—dark, medium, and light—and a wide variety of sizes. An unlimited number of patterns can be obtained by using the variously shaded tiles in interesting combinations.

For the utmost in quiet, we suggest cork tile floors in combination with walls and ceilings of Armstrong's Corkoustic (panels of pure cork). Echoes and reverberations are completely absorbed in rooms so equipped.

Send for the booklet "Custom Built Floors of Cork." This illustrates in full color how Armstrong's Cork Tile and Linotile Floors can be used in public buildings. And if you have an acoustical or sound-quieting problem, ask for a copy of "Acoustical Correction." Address Armstrong Cork Company, Floor Division, Lancaster, Pennsylvania.

*When you walk across the floor of the library in the Fullerton High School, Fullerton, Calif., you sense at once the quiet and ease that a floor of cork affords. Three shades of Armstrong's Cork Tile have been used in the design.*

*This bedroom in the Illinois Women's College of Jacksonville, Ill., illustrates the freedom of design that Armstrong's Cork Tile provides. Light, medium, and dark blocks of cork tile have been used to secure the unusual effect.*

Armstrong's (A) Product

## *Armstrong's* CUSTOM FLOORS

LINOTILE CORK TILE

MADE BY THE MAKERS OF ARMSTRONG'S LINOLEUM

## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page 46*

### PIPE—Continued

**Clow & Sons, James B.,** 534 S. Franklin St., Chicago, Ill.

Catalog A. 4 x 16½ ins., 700 pp. Illustrated. Shows a full line of steam, gas and water works supplies.

**Duriron Company,** Dayton, Ohio.

Duriron Acid, Alkali, Rust-proof Drain Pipe and Fittings. Booklet, 20 pp., 8½ x 11 ins. Illustrated. Important data on a valuable line of pipe.

**Maurice A. Knight,** Akron, Ohio.

Knightware in the Princeton Chemical Laboratory. Booklet, 16 pp., 6¾ x 8½ ins. Illustrated.

**National Tube Co., Frick Building, Pittsburgh, Pa.**

"National" Bulletin No. 2. Corrosion of Hot Water Pipe, 8½ x 11 ins., 24 pp. Illustrated. In this bulletin is summed up the most important research dealing with hot water systems. The text matter consists of seven investigations by authorities on this subject.

"National" Bulletin No. 3. The Protection of Pipe Against Internal Corrosion, 8½ x 11 ins., 20 pp. Illustrated. Discusses various causes of corrosion, and details are given of the deactivating and deareating systems for eliminating or retarding corrosion in hot water supply lines.

"National" Bulletin No. 25. "National" Pipe in Large Buildings. 8½ x 11 ins., 88 pp. This bulletin contains 254 illustrations of prominent buildings of all types, containing "National" Pipe, and considerable engineering data of value to architects, engineers, etc.

Modern Welded Pipe. Book of 88 pp., 8½ x 11 ins., profusely illustrated with halftone and line engravings of the important operations in the manufacture of pipe.

**Walworth Company,** Statler Office Building, Boston, Mass.

C. N. I. Pipe Manual. Booklet, 18 pp., 4½ x 7½ ins. Illustrated.

Approved Valves and Fittings for Fire Lines in New York. Folder, 6 pp., 8½ x 11 ins. Illustrated.

### PLUMBING EQUIPMENT

**Clow & Sons, James B.,** 534 S. Franklin St., Chicago, Ill.

Catalog M. 9¼ x 12 ins., 184 pp. Illustrated. Shows complete line of plumbing fixtures for Schools, Railroads and Industrial Plants.

**Duriron Company,** Dayton, Ohio.

Duriron Acid, Alkali and Rust-Proof Drain Pipe and Fittings. Booklet, 8½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.

**Imperial Brass Mfg. Co.,** 1200 W. Harrison St., Chicago, Ill.

Watrous Patent Flush Valves, Duojet Water Closets, Liquid Soap Fixtures, etc. 8½ x 11 ins., 136 pp., loose-leaf catalog, showing roughing-in measurements, etc.

**Speakman Company,** Wilmington, Del.

Catalog K. Booklet, 150 pp., 8½ x 10⅞ ins. Illustrated. Data on showers and equipment details.

### PNEUMATIC TUBE SYSTEMS

**G & G Atlas Systems, Inc.,** 544 West Broadway, New York.

12 pp., 8½ x 11. Illustrated booklet of tube systems for retail stores and other buildings.

4 pp., 8½ x 11. Data Sheet showing schematic diagrams for hotel, bank, factory and wholesale buildings, table of sizes, space requirements and preliminary layout steps. A.I.A. 35h21.

### PUMPS

**C. A. Dunham Co.,** 450 East Ohio Street, Chicago, Ill.

Dunham Vacuum Pump. Booklet, 16 pp., 8½ x 11 ins. Illustrated.

**Nash Engineering Company,** South Norwalk, Conn.

Bulletin 52. Brochure. 6 pp., 10¾ x 7½ ins. Illustrated in color. Devoted to Jennings Standard Centrifugal Pumps for house service, boosting city water pressure to supply top stories, for circulating warm water, etc.

Bulletin. 97. Booklet. 16 pp., 10¾ x 7½ ins. Illustrated in color. Describes the design, construction and operation of the Jennings Suction Sump Pump.

Bulletin 11. Brochure. 8 pp., 10¾ x 7½ ins. Illustrated in color. Deals with Nash Hytor Vacuum Pumps for air and gases.

### REFRIGERATION

**The Fulton Syphon Company,** Knoxville, Tenn.

Temperature Control of Refrigeration Systems. Booklet, 8 pp., 8½ x 11 ins. Illustrated. Deals with cold storage, chilling of water, etc.

### REINFORCED CONCRETE—See also Construction, Concrete

**Kalman Steel Company,** Chicago, Ill.

Building for Permanence. Booklet, 8 pp., 8½ x 11 ins. Reinforced concrete products.

**Truscon Steel Company,** Youngstown, Ohio.

Shearing Stresses in Reinforced Concrete Beams. Booklet, 8½ x 11 ins., 12 pp.

### ROOFING

**Johns-Manville Corporation,** New York.

The New Book of Roofs. Brochure, 24 pp., 8½ x 11 ins. Illustrated. Roofing from the Architect's point of view.

**Ludowici-Celadon Company,** 104 So. Michigan Ave., Chicago, Ill.

"Ancient" Tapered Mission Tiles. Leaflet, 8½ x 11 ins., 4 pp. Illustrated. For architects who desire something out of the ordinary this leaflet has been prepared. Describes briefly the "Ancient" Tapered Mission Tiles, hand-made with full corners and designed to be applied with irregular exposures.

**Milcor Steel Co.,** Milwaukee.

Milcor Architectural Sheet Metal Guide. Booklet. 72 pp., 8½ x 11 ins. Illustrated. Metal tile roofing, skylights, ventilators, etc.

Milcor Sheet Metal Handbook. Brochure. 128 pp., 8½ x 11 ins. Illustrated. Deals with rain-carrying equipment, etc.

### SEWAGE DISPOSAL

**Nash Engineering Company,** South Norwalk, Conn.

Bulletin 67. Booklet. 16 pp. 10¾ x 7½ ins. Illustrated in color. Describes Type A Jennings Sewage Ejector for handling Unscreened sewage and raising it from basements below sewer level.

Bulletin 103. Brochure. 16 pp. 10¾ x 7½ ins. Illustrated in color. Deals with small size Type B Jennings Sewage Ejector.

### SCREENS

**American Brass Co., The,** Waterbury, Conn.

Facts for Architects About Screening. Illustrated folder, 9½ x 11¾ ins., giving actual samples of metal screen cloth and data on fly screens and screen doors.

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Clearness—but that's not all. In addition, Pennvernon offers a new flatness, resulting from our new patented process of manufacture. During every moment of its journey from the melting tank up through the drawing machine, Pennvernon is held *perpendicularly flat*. No chance of bending—no chance of any foreign substance touching and marring the brilliant, lustrous surfaces of Pennvernon until the sheet has cooled.

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At the 65 warehouses of the Pittsburgh Plate Glass Company — one in every principal city—and at all leading glass jobbers, Pennvernon is available. Let us submit large or small samples for your inspection, so you may be convinced that there is a new and better window glass. Write, too, for our special booklet on Pennvernon. Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.

PENNVERNON
*flat drawn*
WINDOW GLASS

*The new flatness of Pennvernon, obtained by our special manufacturing process, gives to this glass a clearness of vision unequalled by any other window glass.*

## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page* 48

### SCREENS—Continued

**Athey Company,** 6015 West 65th St., Chicago, Ill.

The Athey Perennial Window Shade. An accordion pleated window shade, made from translucent Herringbone woven Coutil cloth, which raises from the bottom and lowers from the top. It eliminates awnings, affords ventilation, can be dry-cleaned and will wear indefinitely.

### STEEL PRODUCTS FOR BUILDING

**Bethlehem Steel Company,** Bethlehem, Pa.

Steel Joists and Stanchions. Booklet, 72 pp., 4 x 6¾ ins. Data for steel for dwellings, apartment houses, etc.

Bethlehem Structural Shapes Bound Volume, 368 pp., 4¼ x 6¾ ins. Illustrated.

**The Kawneer Company,** Niles, Mich.

Folder with A.I.A. File No. featuring new Shower Door, furnished in Solid Bronze, Chromium Plated or Solid Nickel-silver.

**Lincoln Electric Company,** Cleveland, Ohio.

Studies in Structural Arc Welding. Series of plates, 8½ x 11 ins. Illustrated. Deals with design of arc-welded buildings, details and specifications.

**Steel Frame House Company, Pittsburgh, Pa.** (Subsidiary of McClintic-Marshall Corp.)

Steel Framing for Dwellings. Booklet, 16 pp., 8½ x 11 ins. Illustrated.

Steel Framing for Gasoline Service Stations. Brochure, 8 pp., 8½ x 11 ins. Illustrated.

Steel Frame Standard Gasoline Service Stations. Booklet, 8 pp., 8½ x 11 ins. Illustrated. Three standard designs of stations.

**Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.**

The Arc Welding of Structural Steel. Brochure, 32 pp., 8½ x 11 ins. Illustrated. Deals with an important structural process.

### STONE, BUILDING

**Indiana Limestone Company,** Bedford, Ind.

ILCO Specification Manual. Standard Specifications for the cutting and setting of Indiana Limestone. 8½ x 11 ins., 24 pp.

Volume 1. Series B. 6 x 9 ins., 36 pp. Illustrated. Giving general information regarding Indiana Limestone, its physical characteristics, etc.

Volume 4. Series B. New Edition, 8½ x 11 ins., 80 pp. Illustrated. Indiana Limestone as used in Banks.

Volume 12. Series B. Distinctive Homes of Indiana Limestone. 8½ x 11 ins., 48 pp. Illustrated.

ILCO RIPLSTONE. 8½ x 11 ins., 56 pp. Illustrated.

### STORE FRONTS

**The Kawneer Company, Niles, Mich.**

Catalog M, 1929 Edition, 64 pages, 8½ x 11 ins., with the A.I.A. File No., profusely illustrated. General Catalog.

Detail Sheet and descriptive folder, 8½ x 11 ins., with A.I.A. File No. featuring "B" Store Front Construction, designed along modernistic lines.

Book of Installations featuring modern fronts. Booklet, 32 pp., 8½ x 11 ins.

Detail Sheets. Set of seven sheets in Portfolio, 8½ x 11 inches. A.I.A. File No.

Detail Sheet and descriptive folder, 8½ x 11 inches, with A.I.A. File No., featuring "B" Store Front Construction, designed along modernistic lines.

### TELEPHONE SERVICE ARRANGEMENTS

**All Bell Telephone Companies.** Apply nearest Business Office, or American Telephone and Telegraph Company, 195 Broadway, New York.

Planning for Home Telephone Conveniences. Booklet, 52 pp., 8½ x 11 ins. Illustrated.

Planning for Telephones in Building. Brochure, 74 pp., 8½ x 11 ins. Illustrated.

### TIMBREL TILE VAULTS

**R. Guastavino Co.,** 40 Court Street, Boston.

Masonry acoustical materials (AKOUSTOLITH Tile and AKOUSTOLITH Plaster) and Timbrel Arch Construction. Brochure, 14 pages, 8½ x 11 inches. Illustrated.

### TILE, STRUCTURAL CLAY

**National Fireproofing Corporation,** Fulton Building, Pittsburgh, Pa.

Natco. The Complete Line of Structural Clay Tile. Booklet, 48 pp., 8½ x 11 ins. Illustrated. A General Catalog.

Natco Vitritile Bulletin No. 164. 40 pp., 8½ x 11 ins. Illustrated. Shows color charts, sizes and shapes, actual installations, etc.

Natco Header Backer Tile Bulletin. 8½ x 11 ins. 4 pp. Illustrated.

Natco Unibacker Tile Bulletin. 8½ x 11 ins. 4 pp. Illustrated. Natcoflor Bulletin. 8½ x 11 ins., 6 pp. Illustrated.

Natco Double Shell Load Bearing Tile Bulletin, 8½ x 11 ins., 6 pp. Illustrated.

### TILES

**Flint Faience & Tile Co.,** Flint, Mich.

Vitocraft Tiles, Unglazed. Folder, 4 pp., 8½ x 11 ins. Illustrated. Details of patterns in full color. Ask for Form A-322.

Faience Tiles for Bathrooms. Folder, 4pp., 8½ x 11 ins. Illustrated. Ask for Form A-303.

Faience and Vitocraft, Unglazed. Folder, 4 pp., 8½ x 11 ins. Illustrated. Views of installations. Ask for Form A-304.

Flintcraft Files. Folder, 4 pp., 8½ x 11 ins. Illustrated. Machine-made floor or wall tile. Ask for Form A-363.

**Hanley Company,** Bradford, Pa.

Hanley Quarry Tile. Folder. 4 pp., 5 x 8 ins. Illustrated.

### TRUSSES

**McKeown Bros. Company,** 523 South Keeler Avenue, Chicago.

Truth in Architecture. Folder, 4 pp., 8½ x 11 ins. Illustrated. Deals with use of trusses of wood.

Factory Built Bowstring Trusses. Folder, 4 pp., 8½ x 11 ins. Illustrated.

Timber Trusses. Folder, 4 pp., 8½ x 11 ins. Illustrated.

### VALVES

**C. A. Dunham Co., 450 East Ohio St., Chicago, Ill.**

The Dunham Packless Radiator Valve. Brochure, 12 pp., 8 x 11 ins. Illustrated. Data on an important type of valve.

**Jenkins Brothers,** 80 White Street, New York.

Office Buildings Yesterday and Today. Folder, 8½ x 11 ins. Illustrated. Valves for use in office buildings.

**Walworth Company,** Statler Office Building, Boston, Mass.

Walworth Valves, Fittings and Tools, Catalog 88. Bound Volume giving data on a wide variety of details.

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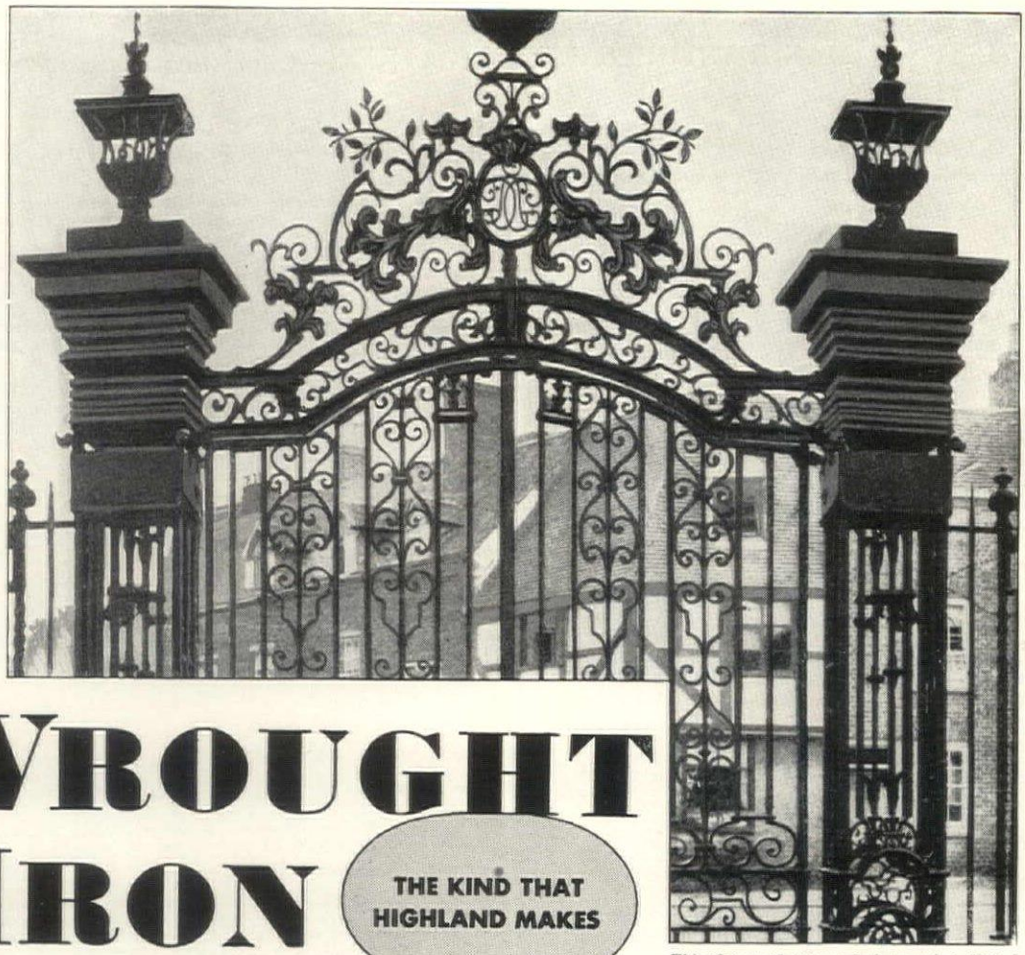

Nearly 200 years have elapsed since William Edney built these gates at the entrance to Tewkesbury Abbey. Since 1734 they have fought the rains and fogs that make England a remarkable testing ground for corrosion-resisting metals. The fine condition of this metal tells once more the Wrought Iron story of endurance—adding one more authentic record to the thousands already reported and confirmed.

*This photograph appears in the recently published work, "Wrought Iron in Architecture" by G. K. Geerlings, Charles Scribner's Sons*

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**If you are a metal buyer or user—if in any way your opinion and advice has an influence on metal purchase—you owe it to yourself to investigate Highland Wrought Iron. For the great industries need enduring metal more than ever. The country's losses through corrosion foot up a half-billion dollars annually. And this is no time to tolerate preventable waste.**

**Will you meet us half way? Write for the metal facts Highland has accumulated. This data points out a simple way to metal savings—a sure method of making your metals last longer—of eliminating repairs and replacements.**

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HIGHLAND Wrought Iron has two broad uses in architectural activities, in both of which it is steadily gaining greater headway.

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| Factory sash | Fences Gates |

**HIGHLAND WROUGHT IRON**

## SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—*Continued from page* 50

### VENETIAN BLINDS

**Columbia Mills,** 225 Fifth Avenue, New York.

A Manual for Architects. Booklet, 6 pp., 8½ x 11 ins. Illustrated.

### VENTILATION

**American Blower Co., Detroit, Mich.**

American H. S. Fans. Brochure, 28 pp., 8½ x 11 ins. Data on an important line of blowers.

**Duriron Company, Dayton, Ohio.**

Acid-proof Exhaust Fans. Folder, 8 x 10¾ ins., 8 pp. Data regarding fans for ventilation of laboratory fume hoods.

Specification Form for Acid-proof Exhaust Fans. Folder, 8 x 10½ ins.

**Herman Nelson Corporation,** Moline, Ill.

Univent Ventilation; The Modern Safeguard of Youth in the Schoolroom. Booklet, 63 pp., 8½ x 11 ins. Illustrated.

Herman Nelson System of Ventilation. Brochure. 103 pp., 8½ x 11 ins. Illustrated.

### WATERPROOFING

**Minwax Company, Inc.,** 11 West 42nd St., New York.

Waterproofing Stadia. Folder, 4 pp., 8½ x 11 ins. Illustrated.

Transparent Waterproofings for All Masonry Walls and Surfaces. Folder, 4 pp., 8½ x 11 ins. Illustrated.

Data Sheet on Membrane Waterproofing. Folder, 4 pp., 8½ x 11 ins. Illustrated.

### WEATHER STRIPS

**Athey Company,** 6035 West 65th St., Chicago, Ill.

The Only Weatherstrip with a Cloth to Metal Contact. Booklet, 16 pp., 8½ x 11 ins. Illustrated. Data on an important type of weather stripping.

### WINDOW GLASS

**Pittsburgh Plate Glass Company,** Grant Building, Pittsburgh, Pa.

Pennvernon Window Glass With the New Flatter Surface. Booklet, 16 pp., 8½ x 11 ins. Illustrated.

### WINDOWS

**William Bayley Co.,** 147 North Street, Springfield, Ohio.

Bayley Pivoted Windows. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Sections, hardware, and other details, and illustrations of installations.

**Detroit Steel Products Co.,** 2250 E. Grand Boulevard, Detroit.

Fenestra Blue Book. Brochure, 75 pp., 8½ x 11 ins. Illustrated. Data on steel windows.

**The Kawneer Company,** Niles, Mich.

Circular, 8½ x 11 ins., with A.I.A. File No. featuring full size details and specifications of Sealair In-swinging windows. The above to be furnished in non-ferrous metals and steel.

### WINDOWS, CASEMENT

**Detroit Steel Products Co.,** 2250 E. Grand Boulevard, Detroit.

Fenestra Casements. Booklet, 14 pp., 8¼ x 11 ins. Illustrated. Discusses casements, particularly for residences.

### WINDOWS, CASEMENT—Continued

Fenestra Screen Casements. Brochure, 16 pp., 8½ x 11 ins. Illustrated.

Decorating With Casements. Booklet, 18 pp., with inserts in color 6 x 8½ ins. Deals with use of decorations, particularly draperies, with casement windows.

**Richards-Wilcox Mfg. Co.,** Aurora, Ill.

Casement Window Hardware. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Shows typical installations, detail drawings, construction details, blue-prints if desired. Describes AIR-way Multifold Window Hardware.

Architectural Details. Booklet, 8½ x 11 ins., 16 pp. Tables of specifications and typical details of different types of construction.

List of Parts for Assembly. Booklet, 8½ x 11 ins., 16 pp. Full lists of parts for different units.

### WINDOW SCREENS

**William Bayley Co.,** 147 North Street, Springfield, Ohio.

Bayley Pivoted Windows Screened. Booklet, 8 pp., 8½ x 11 ins. Data on screening and window ventilation.

### WINDOWS, STEEL AND BRONZE

**William Bayley Co.,** 147 North Street, Springfield, Ohio.

Bayley Steel Window Inserts. Brochure, 8 pp., 8½ x 11 ins. Illustrated Suggestions on correct use of inserts.

**Truscon Steel Company,** Youngstown, Ohio.

Drafting Room Standards. Book, 8½ x 11 ins., 120 pages of mechanical drawings showing drafting room standards, specifications and construction details of Truscon Steel Windows, Steel Lintels, Steel Doors and Mechanical Operators.

Truscon Solid Steel Double-Hung Windows. 24 pp. Booklet, 8½ x 11 ins. Containing illustrations of buildings using this type of window. Designs and drawings of mechanical details.

Continuous Steel Windows and Mechanical Operators. Catalog 126. Booklet, 32 pp., 8½ x 11 ins. Illustrated.

### WOOD—See also Millwork

**American Walnut Mfrs. Association,** 618 So. Michigan Boulevard, Chicago, Ill.

American Walnut. Booklet, 7 x 9 ins., 46 pp. Illustrated. A very useful and interesting little book on the use of walnut in Fine Furniture with illustrations of pieces by the most notable furniture makers from the time of the Renaissance down to the present.

American Walnut for Interior Woodwork and Paneling. 7 x 9 ins. Illustrated. Discusses interior woodwork, giving costs, specifications of a specimen room, the different figures in Walnut wood, Walnut floors, finishes, comparative tests of physical properties and the advantages of American Walnut for woodwork.

### WOOD FINISH

**Minwax Company,** 11 West 42nd St., New York.

Color card and specification for Minwax Flat Finish. Folder, 4 pp., 8½ x 11 ins. Illustrated. Deals with a penetrative, preservative stain finish giving stain and soft wax effect.

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# THE DOORWAY
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Extraneous, planted-on ornament has little to do with straightforward modern design frankly expressed through materials which derive their form from their natural and logical functions.

Kalman Steel Door Frames designed to properly function with the other elements of the wall structure free doorways from casings as a covering for rough framing permitting the same clean-cut lines around openings in plastered walls attainable only with marble veneer.

*Claridge Hotel, Atlantic City*
*Architects: McIlvaine & Roberts, Philadelphia*
*Contractors: Roberts & Roller*

The preference for Kalman Steel Door Frames is constantly increasing. The file of drawings and data on them is available to all interested in these modern doorways.

# KALMAN STEEL DOOR FRAMES

ALBANY · ATLANTA · BALTIMORE · BOSTON · BUFFALO · CHICAGO · CLEVELAND · COLUMBUS · DALLAS · DAYTON
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# REVIEWS OF MANUFACTURERS' PUBLICATIONS

**GENERAL ELECTRIC COMPANY, Schenectady, N. Y. "G. E. Welding Electrodes.' Data on an important subject.**

With the rapid growth of the practice of welding by the building industry there has come, quite naturally, considerable improvement in the materials and devices which are necessary for welding. Nothing probably required for welding is of greater importance than the electrodes which are used, and those manufactured by the General Electric Company are dealt with in this booklet. They are not just "pieces of wire" but the most suitable steel wire, treated by an exclusive process, then tested and inspected. "All types of G.-E. welding electrodes are specifically designed to give complete satisfaction. The wire would operate alone as a satisfactory electrode, but the G.-E. treatment not only drives out the elements which cause sputtering, but also introduces other elements which improve its free-flowing characteristics. Structural welding, tanks, pipe lines, and the general fabrication of steel shapes to replace castings, all require welds which have a tensile strength higher than that usually obtainable with ordinary electrodes. Then, too, spattering of molten metal, so common to most bare wires, is minimized; a free-flowing, stable arc is held, and the making of vertical and overhead welds is facilitated to a marked degree. General Electric Type L electrodes meet all requirements.

"Welded structures must be safe,—must be built with confidence. Only materials, proved by performance and backed by a reliable manufacturer, should be specified. General Electric is playing a prominent role in obtaining the confidence of the construction industry. For welded buildings, Type L electrodes can be specified with assurance. Whatever may be the welding application, there is a correct G.-E. welding electrode quality well suited to the work."

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**CAMPBELL INDUSTRIAL WINDOW COMPANY, INC., New York. "Campbell Weatherstripped Casements."**

Use of insulating materials in walls, roofs and floors will of course do much to conserve heat, and yet much of the good which they might accomplish will be frustrated if heat is allowed to leak out through windows and doors. Both wood and metal are subject to contraction and expansion under the influence of temperature changes, but if use is made of an effective weatherstrip in addition to well made and closely fitted door and window frames, the amount of heat which might escape is likely to be negligible. This booklet illustrates and describes the metal casement windows and doors manufactured by the Campbell Industrial Window Company, Inc.,—*casements,* which are likely to be approved by architects for domestic use because of the architectural character which they always add to a building. "Casement windows are a product of a romantic age,—being first extensively used during that period in architectural history when the beautiful buildings of the Tudor era were being erected. Much of the picturesqueness and beauty of design of these buildings can be attributed to the graceful use of casement windows,—casement windows in many designs with the sash divided into small lights to give that intimate touch of homeliness that we admire so much to this day. The casement window has been modernized,—slim lines of steel in the frames and muntins keep the charm and beauty of this window. It is a window that fits perfectly with any style of architecture and adds much to the architectural attractiveness of the individual building. It is a practical window, allowing maximum of light and ventilation. The Campbell Casement Window is equipped with a patented weatherstrip that assures positive air-tightness and proper weathering. Weatherstripping of these windows results in the elimination of drafts and offers proper protection against the admission of the elements. This feature is exclusive to Campbell Casements. Campbell Casement Weatherstripped Windows of various sizes and types are carried in stock ready for immediate shipment. They are easily erected in any type of wall construction." The brochure gives all the details which could be required for intelligent specifying and installing of these doors and windows, and diagrams and drawings of other kinds making plain the manner of their use. The brochure also deals with the use of wire screens in connection with these casement windows and doors.

**PITTSBURGH PLATE GLASS COMPANY, Pittsburgh. "The New Process in Making Window Glass."**

The Pittsburgh Plate Glass Company has long been noted for the excellence of its glass of different kinds. Its staff of chemists, engineers and research workers has been constantly engaged for years in developing and perfecting its product, and the result is "Pennvernon Window Glass," possessing excellence far beyond that of the window glass usually found on the market. "A great change has taken place in the manufacture of window glass. A change that means far better glass at no greater cost. A change that insures greater uniformity in surface and in transparency. It is the change that has been brought about by the new methods and new processes used in making Pennvernon Window Glass. Gone is the old bowed glass, gone the surface burns, uneven thickness, the stringy, wavy, wobbly effects so long identified with window glass. In their place are flatness and brilliance never before believed possible in fire-finished glass. To the architect and builder the uniformly high quality, the extreme flatness of surface, the clear visibility, the uniform thickness, the freedom from defects in this new glass all mean increased usefulness. But, perhaps, more than all those advantages, the high luster, equal on both sides, now gives to home owners a product more closely resembling polished plate glass than anything heretofore produced. To the glazier these advantages of brighter, clearer appearance have a similar appeal, with others added. The new flatness makes Pennvernon Window Glass easier to cut, easier to glaze. And it may be used either side out, for Pennvernon Window Glass has no wrong side." In an interesting brochure the firm takes a visitor through the plant where Pennvernon Window Glass is manufactured, showing him, first of all, great piles of sand and quantities of lime, soda, etc., and then into various weighing and mixing rooms and to furnaces before going into the departments where the completing processes are gone through, and the product comes forth as finished glass. The text, which by reason of its excellence alone would render the brochure valuable, is supplemented by illustrations which serve to make more plain what the text describes.

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**COMBUSTION OIL BURNER COMPANY, Milwaukee. "Heat with Oil and the Heil Combustion Oil Burner."**

Choice of a fuel for heating one's home must of course be made in view of several considerations, such as the ready availability of the fuel, its cost, the amount of storage space it requires, and a few other considerations. Use of oil is attended with a number of advantages which often turn the scales in its favor, and one reason why it is so often used is that the makers of oil-burning equipment have accomplished wonders with the designing of their apparatus, rendering it free from dust and dirt, and easily operated by apparatus which makes it self-operating, which means that it runs itself without attention from anyone. This brochure deals with use of oil in connection with the Heil Combustion Oil Burner. "The Heil Combustion Oil Burner installed in the home heating system, complete with outside, underground tank and electrically-operated controls, assumes the responsibility of keeping the home comfortably warm during the cool days of fall, cold winter weather, and the damp and changeable spring months. The home fireman is excused from splitting kindling, nursing neglected fires, shaking down, sifting and handling ashes. The coal bin can be dismantled. The basement is ready to serve as a playroom for the children, a laundry, or a recreation room. A thermostat, placed in one of the first floor living rooms, is the tireless watchdog of constant, even temperature in the combustion-heated home. All day long and throughout the night this little mechanism alternately turns the combustion burner on and off, keeping the temperature within one or two degrees of a set figure. Some individuals have the mistaken impression that an oil burner can be installed only in a specially constructed warm air furnace or boiler. The Heil Combustion Oil Burner is a heat-manufacturing apparatus that is entirely self-contained, and it can be installed in any type of heating system by removing the grates and bricking up the firepot walls." The booklet should be in every office.

# SYMPHONIES OF COLOR

## *from an* ORGAN-TYPE SWITCHBOARD

*Left—Interior of Severance Hall, showing lighting arrangement. Architects: Walker & Weeks. Electrical Contractors: Tingle & Clark. Both of Cleveland.*

CONTROLLED from the Westinghouse organ-type switchboard in Severance Hall, nearly 4000 lighting combinations enhance the presentations of the Cleveland Orchestra.

Just as the pipe organist finds pitch and volume of sound at his command, so, by means of vacuum tubes, does the color artist have the hue and intensity of light for stage and auditorium at his finger tips. Thus, for the first time in theatrical history, the complete coordination of color lighting with the stage presentation is possible. The operator, watching the lighting effects, with every circuit under complete control, now has the means of reaching the long sought goal of proportional dimming, with previously set intensities of various groups of lamps retaining their same relative brilliance while being dimmed.

Four complete scenes may be set up in advance; then by the operation of a single master switch, the lighting effects for an entire scene can be run through. And in the new type of control, the intensity of the lighting may be pre-set at the same time as the scene sequence.

*This organ console, electrically-equipped by Westinghouse, can be placed in the most richly appointed auditorium. A flip of a switch transfers the intensity control to a group of foot pedals.*

*Service, prompt and efficient, by a coast-to-coast chain of well-equipped shops*

**Westinghouse**

T 31790

TUNE IN THE WESTINGHOUSE PROGRAM OVER KDKA, KYW, WBZ AND ASSOCIATED N. B. C. STATIONS SUNDAY EVENINGS.

# REVIEWS OF MANUFACTURERS' PUBLICATIONS

**THE WHEELER, OSGOOD COMPANY, Tacoma, Wash. "Laminex Hardwood Doors and Trim."**

Many home owners, and even some people who should know better, still consider the "built-up" or "laminated" door something invented in the interest of economy to take the place of the good old fashioned door of solid wood. They forget that the old fashioned door was subject to endless shrinking and to swelling which caused it to stick, while the laminated door, because of its very nature, can do neither. This brochure deals with the fine line of "Laminex" doors made by this firm. "Laminex doors overcome the troubles that for years architects and builders have been coping with more or less unassisted,—troubles with doors that would twist, swell or open up under trying climatic conditions. Staunchly withstanding the severe tests to which they have been subjected, Laminex doors have become famous the country over as the doors that will not shrink, swell or warp. Once properly hung, a Laminex door never needs to be refitted or planed down. The stiles and rails are built up on cores of stress-neutralizing blocks, welded to rigid edge braces and faced with flawless layers of wood. In the construction of each member there is used a special-formula cement which is absolutely waterproof and actually stronger than wood. Consequently, Laminex doors may be soaked in water for days at a time without buckling, splitting or coming apart. To most people they need no introduction, as they have become standard equipment for American homes, apartments and commercial buildings of every kind or type."

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**J. G. BRAUN COMPANY, Chicago, New York, San Francisco. "Architectural Shapes in ALCOA Aluminum."**

Among the many interesting developments which are taking place in the fields of architecture and decoration is the constantly increasing use of metals, and among the metals so used, aluminum occupies an important place. "Since aluminum has come to be used profusely in the architectural and decorative fields, it may be in order to give some general and specific data. For architectural purposes, aluminum fills a long felt want in supplying the silver-like polish or soft finishes of various types that are now finding such common application. It is obtainable in many commercial forms, such as castings, forgings, rolled, drawn and extruded shapes, the latter of which largely cover the materials shown in this booklet. All of these various forms find use in the building scheme. With the development of various alloys has come the possibility of using aluminum in every direction." One of the reasons for the increasing use of this metal is its comparatively light weight. Brass is 3.06 times the weight of aluminum; copper 3.2; steel 2.88 times that of aluminum. As may be seen, this metal has a weight approximately one-third that of steel, brass or bronze. This brochure, issued by a widely known firm of metal workers, illustrates and describes the architectural details of aluminum which it carries in stock,—handrails, cove, panel, and scribe mouldings; astragals and facings; casement and sash sections; store front sash; window sills; pilaster sections, and other details. The introduction to the brochure says: "We are again taking the lead in offering a service both from stock and from mill in a metal used for many years successfully in many industries but comparatively a newcomer in the architectural field,—aluminum. In approaching this problem, we have decided to attack it from the broadest angle relative to architectural practice. We offer from stock a comprehensive series of sections of all types for architectural and decorative work, and upon this foundation we shall continue to build and develop new sections as the demand will necessitate and carry a still larger range, eventually. From mill we are enabled to furnish sections to an architect's design, thus meeting every requirement. More than ever, we require the helpful suggestions and coöperation both of the architect and of the worker in metal, for without their assistance, progress will be slow. We, therefore, invite frequent comments and helpful criticism." Among other instances of the extensive architectural use of metal, mention might be made of the dome of the Chrysler Building in New York, and of the Empire State Building, where it is used in quantities as spandrels between the windows of the floors.

**GENERAL ELECTRIC COMPANY, Nela Park, Cleveland. "Tendencies in Lighting Practice."**

Architects and interior decorators are greatly indebted to the General Electric Company, which, during many years. has made a special study, backed by considerable research, into the architectural and decorative uses of light, and then, in view of such research and study, supplied equipment by means of which the results of such effort might be made use of. Just now the firm is issuing a series of booklets or monographs dealing with this. "Tendencies in Lighting Practice" deals somewhat generally with the subject, including in its broad survey use of light in the restaurant, ballroom, shop, show window, church and theater; in fact the modern theater began with the "mystery" or "miracle" plays which were performed in churches. Now the Church is apparently learning from the Stage. "Builders of churches are beginning to take advantage of the practices of the theater in using light to grip and hold the attention of the congregation. Glaring sources, particularly wall units behind the speaker, which distract and annoy, are being eliminated. Dimmer control for various portions of the edifice is becoming more common. During the opening section of the service, when the congregation plays its part, the body of the church receives full illumination; as the attention is centered around the altar, the principal lighting is gradually subdued, and the altar is brought up to full brightness; at the beginning of the sermon concealed soft edge spotlights flood the pulpit to a high level, causing the congregation to concentrate its attention on the speaker, at the same time being in a restful, meditative atmosphere. By day our church windows are things of great beauty, with the shafts of colored sunlight streaming through the open spaces. At night, however, they are generally dull, dark, uninteresting areas in the walls, unless equipped with concealed floodlighting from out-of-doors."

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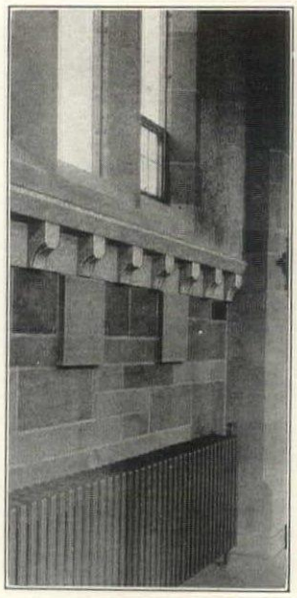
**UNITED STATES GYPSUM COMPANY, Chicago. "Sabinite." A valuable brochure dealing with acoustics.**

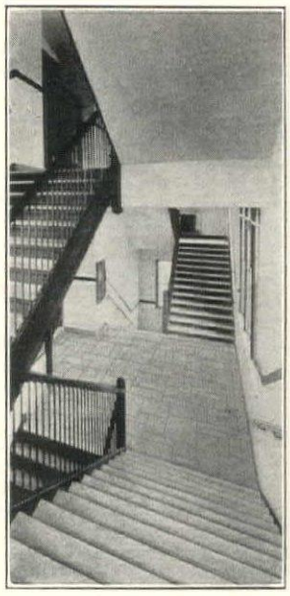
While they are not one and the same, acoustics and soundproofing are related. Acoustics means the control of sound within the area where it originates, either to soften, absorb, or deaden the sound by using certain materials for walls or ceilings, or else to enlarge or increase the volume of sound or to amplify its carrying power, as is sometimes done in churches and lecture halls by using sounding boards and other devices. Soundproofing means the preventing of the passage of sound through walls, floors or ceilings, or in other words to confine sound to the area where it originates, by preventing its passing into other areas. Some materials used to secure favorable acoustics are also sometimes useful to prevent transmission of sound,—to secure soundproofness,—but not always, and since the two subjects are not identical, it is best to recognize the fact and to use to secure either the means which research and study have provided. This booklet deals with the well known "Sabinite," widely used to secure acceptable acoustical qualities. "Today, architects can plan churches, auditoriums, music halls and similar audience rooms with absolute assurance of proper audition. It is now possible to predict accurately the acoustical results in any room and, further than that, to secure correct acoustics by adherence to certain fundamental principles of design.

"The sound absorption of Sabinite is not due to softness or elasticity. Sabinite Acoustical Plaster absorbs sound because of a great multitude of tortuous, minute passages, which have their start in tiny openings at its surface. In these passages sound is repeatedly reflected, losing energy to heat and friction at each bump. These passages are inherent in the material. No skill or art unknown to the commonest plasterer is needed to secure them. Being a plaster, Sabinite does not introduce a new trade in the building. There is no delay. The plaster contractor applies the material in lieu of the usual finish. There are no factional labor disputes, and no waiting for sub-contractors. Sabinite walls and ceilings do not cause comment. There is nothing unusual about them. They look like other walls. There is no objectionable pattern. Where wall treatment is needed, Sabinite serves just like any other plaster. It is not soft, and requires no protection."

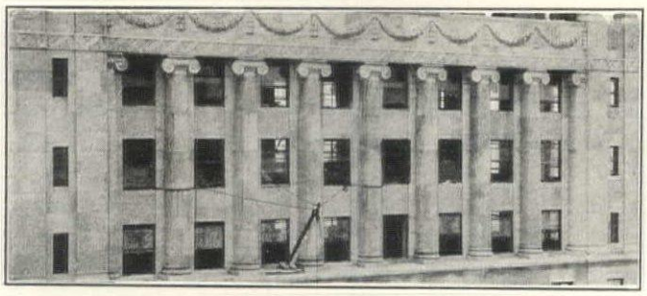


TRIM

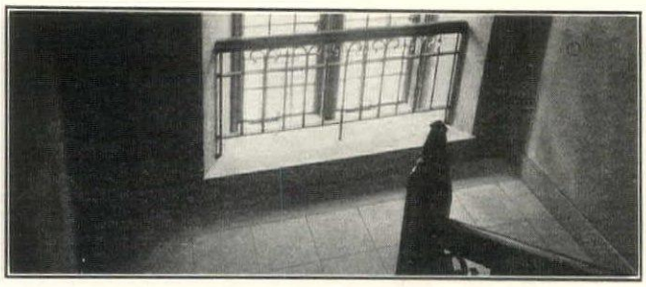
# The unique qualities *of* SOAPSTONE make it an interesting material with which to work



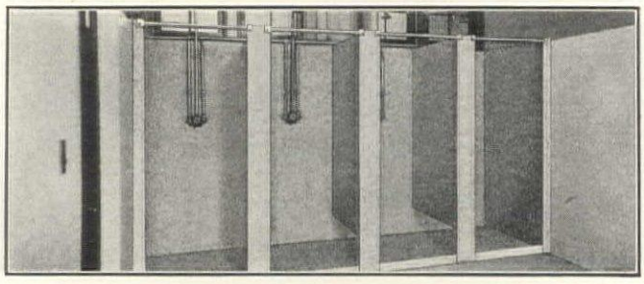
TREADS



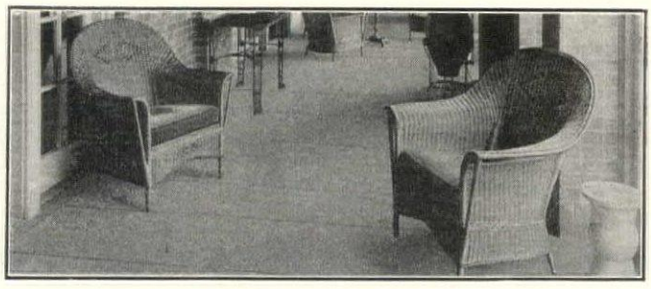
SPANDRELS



SILLS and STOOLS



SHOWER STALLS



FLOORING

The Tennessee marble quarries and mills of the Ross and Republic Marble Company have been acquired by the Virginia Alberene Corporation, and the business will be continued as the Ross-Republic Marble Corporation. Alberene Stone Company continues to act as Sole Selling Agent.

WE solicit inquiries for samples from architects who are not familiar with the various textures and finishes of soapstone, because we believe that this natural non-stratified material has possibilities as an architectural medium that will not be known until its qualities are familiar to all architects.

With knowledge of properties, colors and textures, we are confident that creative minds will see artistic and economic uses as yet unknown.

ALBERENE STONE COMPANY, 153 W. 23rd Street, New York. Branches in Principal Cities. Quarries and Mills at Schuyler, Virginia.

## ALBERENE STONE

THE VIRGINIA SOAPSTONE OF DIVERSIFIED UTILITY

Complete data and plates in full color showing Alberene Stone in conjunction with marbles and other building stones make the brochure "Architectural Alberene" of interest.

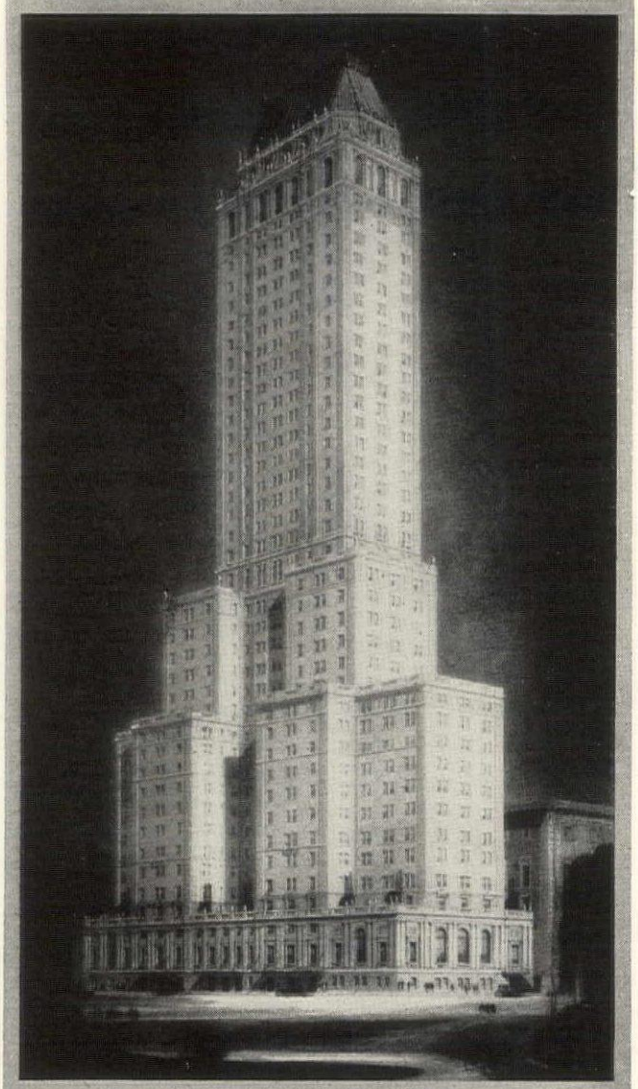
# INDEX TO ADVERTISING ANNOUNCEMENTS

## Part 1—Architectural Design



## Part 2—Architectural Engineering and Business

## HOTEL PIERRE
### NEW YORK



THE Main Ballroom is a typical example of the good taste used in decorating the Hotel Pierre. It is characterized by columns and pilasters of Breche Violet and a painted ceiling in the manner of Angelica Kaufman and Zuchi. The walls are treated in cream and gold, mirrors around the room being an integral part of the decorative scheme. The architects were Schultze and Weaver of New York; the painting contractors, Browning Painting Co.


*Dutch Boy White-Lead is sold in 12½, 25, 50 lb. pails, 100 lb. kegs and comes in heavy paste as well as soft paste form.*

# ..... *where* good taste *and* DUTCH BOY *produce the utmost in decorative*

# BEAUTY

CENTRAL point for the social activities of New York's smartest set, the Hotel Pierre is distinguished by simple, home-like surroundings created by decoration and furnishings in keeping with the finest American traditions.

As in all buildings of a semi-public character, maintenance costs were a consideration in the decoration of the Hotel Pierre. Dutch Boy White-Lead, with its decorative and expense-saving possibilities, was therefore selected.

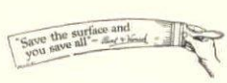
Paint made with Dutch Boy White-Lead gives the interior of the Hotel Pierre the rich, artistic finish its designers desired. Furthermore, this paint provides maximum durability and washability.... assurance that future upkeep costs will be held down to the minimum.

Architects, hotel and building operators specify Dutch Boy because it offers adaptability in addition to its other desirable properties. White-lead is used for making every type of paint....paint for wood, plaster, wallboard or metal—undercoatings for enamel—flat and eggshell interior finishes—gloss paint for exterior use.

For buildings of all types—wherever there is a need for paint—there's a need for Dutch Boy White-Lead. May we send you booklet—"The Decorative Possibilities of Paint"? Address nearest branch.

**NATIONAL LEAD COMPANY**

New York, 111 Broadway—Buffalo, 116 Oak St.—Chicago, 900 West 18th St.—Cincinnati, 659 Freeman Avenue—Cleveland, 820 West Superior Avenue—St. Louis, 722 Chestnut St.—San Francisco, 2240 24th Street—Boston, National-Boston Lead Co., 800 Albany Street—Pittsburgh, National Lead & Oil Co. of Pennsylvania, 316 Fourth Avenue—Philadelphia, John T. Lewis & Bros. Co., Widener Building.

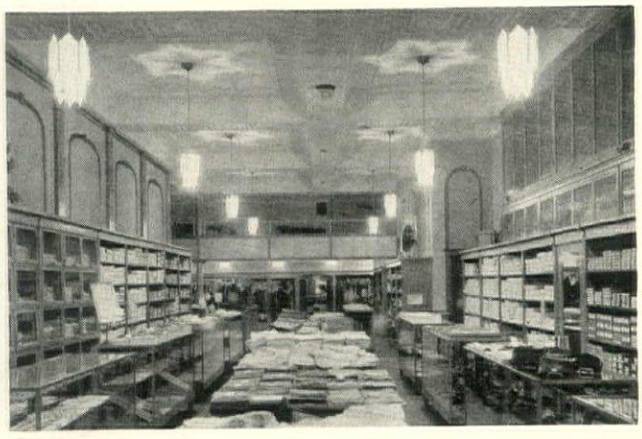



*The well-known brand of Carter White-Lead is also made by the National Lead Company. In purchasing either Carter or Dutch Boy White-Lead, the buyer is assured of obtaining white-lead of the highest quality.*


# DUTCH BOY WHITE-LEAD

# WIRED for the lighting requirements of future decades


*Modern merchandising requires that windows be lighted for effective, attention-attracting display.*



*In the Berkowitz Department Store in Bayonne, N. J., modern scientific illumination helps to make selling easier.*

*By* H. ADELMAN, *Architect*, Bayonne, N. J.

THE forward march of lighting standards can mean only one thing . . . the installation made today, that is to be adequate for 1940, must have ample reserve capacity.

In the design of the lighting installation for the Berkowitz Department Store in Bayonne, N. J., the necessity of providing for the future was recognized. And a satisfactory means for judging future requirements was found in the studies that had been made by the lighting bureau of the local electric service company.

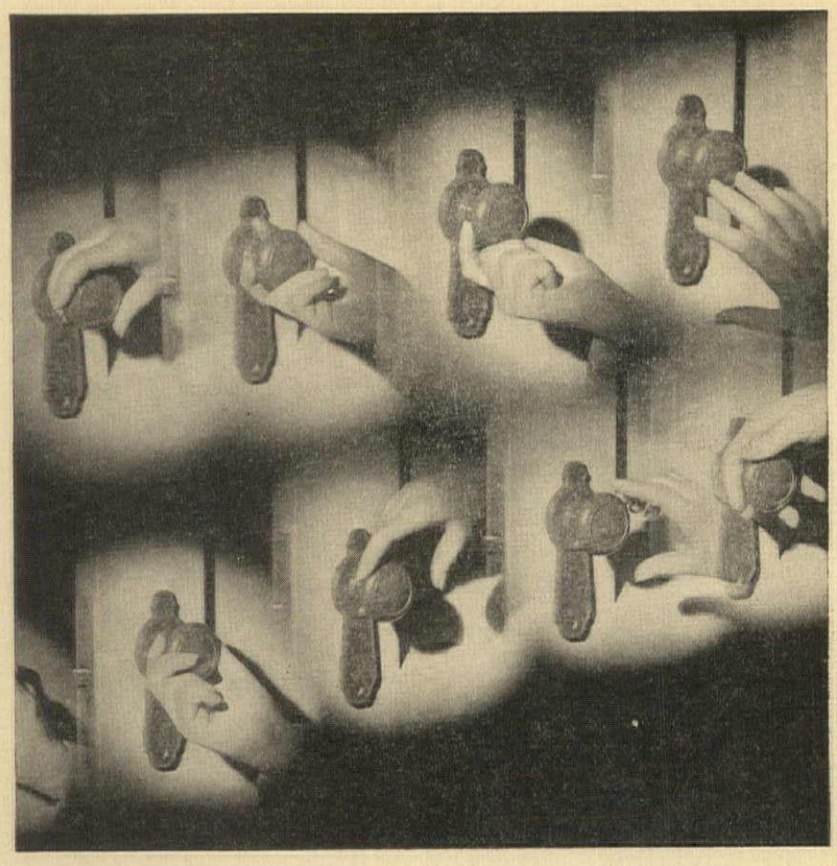
This bureau made available the results of its research and its study of the probable future trends in lighting. Here was a sound basis for its recommendations for a wiring and lighting installation. These recommendations pointed the way to a practical and economical installation that provides ample illumination, judged by the generally accepted standards of the present day. At the same time there is reserve capacity to allow the installation to keep pace, step by step, with advancing lighting standards. In the years ahead the Berkowitz Department Store will not suffer from electrical obsolescence.

In the installation that was made, following the suggestions prepared by the lighting bureau, the windows are lighted for effective attention-attracting display. In the interior of the store modernistic paneled luminaires provide up-to-date illumination at a level of lighting that meets progressive merchandising requirements. Moreover, the lighting throughout the store can be doubled, when future developments in lighting practice make this step advisable, without any change in the wiring installation.

It is not enough to wire buildings for the lighting standards of today only. There is real economy for owners in providing reserve capacity to take care of new uses and advancing standards in lighting, that are to be expected.

*For information about trends in lighting standards and about adequate wiring, call on the lighting bureau of your local electric service company, or write direct.*

NATIONAL ELECTRIC LIGHT ASSOCIATION, 420 LEXINGTON AVENUE, NEW YORK, N. Y.



# The wear of hand after hand—day after day

## *leaves Bakelite Molded knobs unmarred*

Countless hands grasping and turning door knobs; doors swinging wide and slamming shut. Such is the service doors receive in schools, offices, institutions. They need knobs that are durable, that won't tarnish or peel; knobs that are strong, that won't dent or chip—knobs of Bakelite Molded.

Bakelite Molded door knobs eliminate the trouble and expense of constant polishing, for they will not stain or corrode. Their color goes all the way through and will not wear off. In addition, these knobs are easy to keep clean, making them especially desirable for doors in constant use.

Beside door knobs and other hardware items, Bakelite Molded is found in switch and outlet plates, and many other wiring devices. Bakelite Laminated in a variety of colors and finishes is an excellent modern medium for decorative expression in panels, trim, and on counters. Write for further information about Bakelite Materials in the building industry. Ask for Booklets 22M and 22L.

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# America's Foremost Electrical Engineers

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# Accurate Elevator Performance — Westinghouse ELEVATORS

St. Louis Mart and Terminal Warehouse
Westinghouse Elevators installed
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Unsurpassed electrical engineering minds of Westinghouse created the PRECISION LANDING, a decided advancement in vertical transportation. ACCURACY is characteristic of Westinghouse Elevator performance — producing an economical operation — definitely — conclusively.

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