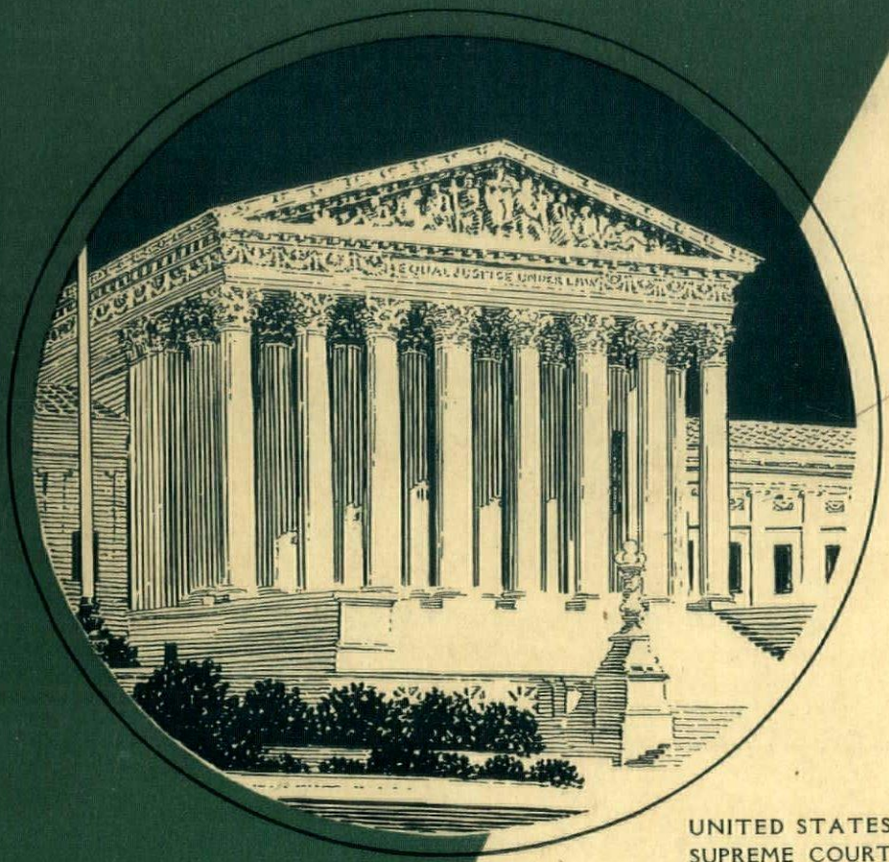


UNITED STATES
SUPREME COURT
BUILDING

Thirty-five pages
in this issue

Shutters &
Blinds

ARCHITECTURE

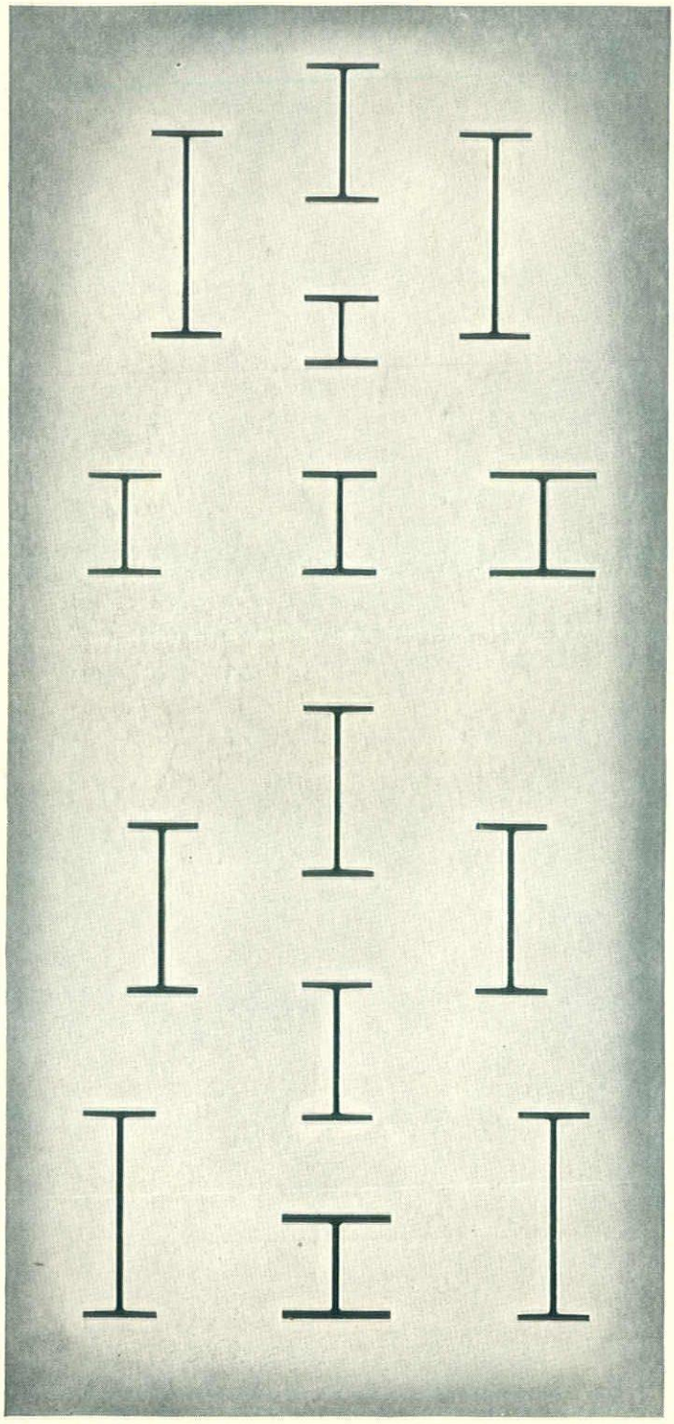
DECEMBER, 1935

FIFTY CENTS

CHARLES SCRIBNER'S SONS

BETHLEHEM LIGHT SECTIONS

The Key to important economies in design



FREQUENTLY it is desirable to have close spacing of structural members with relatively light loads which do not call for the amount of steel involved in the use of regular heavy sections. Bethlehem Light Sections are the solution of this problem.

One of the best examples of the advantages offered by Bethlehem Light Sections is to be found in the floors of buildings designed for relatively light live floor loads. To use regular heavy beams efficiently they would have to be spaced widely apart. This would mean a thick floor slab—not only expensive in itself but also making extra dead load for the steel to carry.

With the use of Bethlehem Light Sections, beams can be spaced closely and still use only as much steel as the load dictates. Economical thickness of floor slab, reduced dead load, follow.

Bethlehem Light Sections also afford worth-while economies when used for purlins and struts between columns, as well as for columns in upper stories where loads are lighter.

Bethlehem District Offices are located at Atlanta, Baltimore, Boston, Bridgeport, Buffalo, Chicago, Cincinnati, Cleveland, Dallas, Detroit, Houston, Indianapolis, Kansas City, Milwaukee, New York, Philadelphia, Pittsburgh, San Antonio, St. Louis, St. Paul, Washington, Wilkes-Barre, York. *Pacific Coast Distributor:* Pacific Coast Steel Corporation, San Francisco, Seattle, Los Angeles, Portland, Salt Lake City, Honolulu. *Export Distributor:* Bethlehem Steel Export Corporation, New York.

BETHLEHEM STEEL

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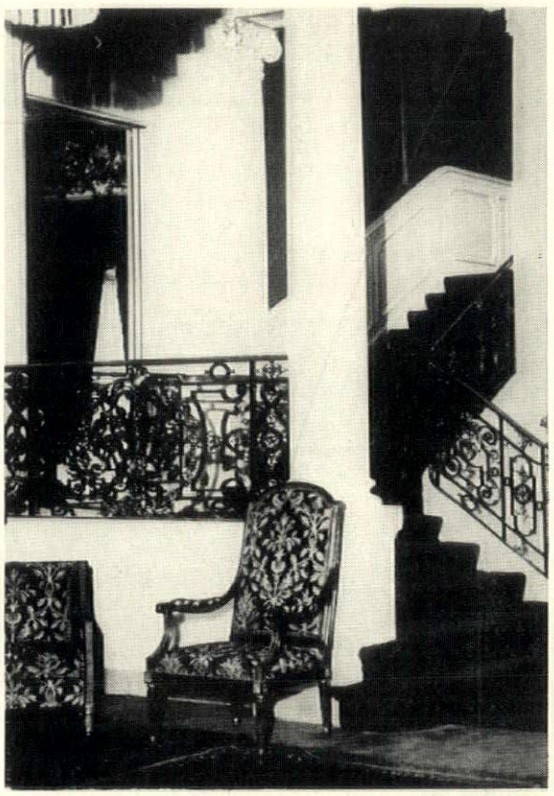
SOVIET EMBASSY, WASHINGTON, D. C.

Interior Architects: EUGENE SCHOEN & SONS

Collaborators: **W. & J. SLOANE**



ABOVE: *Drawing-room in Louis XV and XVI periods.*

RIGHT: *Stairway covered with rich broadloom carpeting.*

Eugene Schoen & Sons, interior architects, found the Soviet Embassy at Washington an interesting project. The architecture must remain the same, and there were certain prized possessions which must be retained in the decorative scheme; yet a new freshness, simplicity and warmth were needed for today's background. Summing up a few of their problems, the architects comment as follows: "In reconstructing the Soviet Embassy, we had to take into consideration the classical backgrounds of the Louis XV and XVI periods; and therefore in furnishing it, we used furniture of the period. We found some of the most interesting models in W. & J. Sloane, and worked with them on all the furniture.

"When the problem of the carpets came up, we found that we had to harmonize in the plain carpets the rich colors of the Beshir Bokhara rugs with which the Embassy is furnished. These are among the most beautiful in existence, and a perfect harmony was established with the various red broadloom colors that were obtained from Sloane's.

"We found Sloane's very cooperative and understanding in all phases of the work."

* * *

The facilities of W. & J. Sloane . . . available to architects through the Sloane Contract Department . . . include furniture, draperies, office partitions, wall-covering or floor-covering, and collaboration by Sloane consultants with architects on the decorating and furnishing phase of any project. Complete information on request.

•

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THE BULLETIN-BOARD

THE ROME PRIZES

THE American Academy in Rome has announced its annual competitions for fellowships in architecture, landscape architecture, painting, sculpture, and musical composition.

In architecture the Daniel H. Burnham fellowship is to be awarded; in landscape architecture the Garden Club of America fellowship; in painting the Jacob H. Lazarus fellowship of the Metropolitan Museum of Art, New York, established by Mrs. Amelia B. Lazarus and Miss Emilie Lazarus; and in musical composition the Frederic A. Juilliard fellowship.

The competitions are open to unmarried men not over thirty years of age who are citizens of the United States. The stipend of each fellowship is $1250 a year with an allowance of $300 for transportation to and from Rome. Residence and studio are provided without charge at the Academy, and the total estimated value of each fellowship is about $2000 a year.

The Academy reserves the right to withhold an award in any subject in which no candidate is considered to have reached the required standard.

The term of the fellowship in each subject is two years. Fellows have opportunity for extensive travel and for making contacts with leading European artists and scholars.

The Grand Central Art Galleries of New York City will present free membership in the Galleries to the painter and sculptor who win the Rome prize and fulfill the obligations of the fellowship.

Entries for competitions will be received until February 1. Circulars of information and application blanks may be obtained by addressing Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York.

OCTOBER BUILDING PERMITS

BUILDING permits issued during October in 215 cities of the United States were valued at $67,013,939, according to the monthly report compiled by Dun & Bradstreet, Inc. This was the largest monthly total reported so far this year and set up a new high mark in the building industry since October, 1931. The October figure compared with $47,479,944 in September and $37,501,122 in October, 1934. There is here shown an increase of 41.1 per cent over September, which greatly exceeds the normal seasonal gain of about 2.5 per cent expected for this period.

The group totals of building permit values for the 215 cities for October, this year and last, together with percentage changes, are shown in the following table:

Group:	*October, 1935*	*October, 1934*	*Change per cent.*
New England	$3,851,657	$2,830,449	+ 36.1
Middle Atlantic	27,412,801	11,884,904	+130.7
South Atlantic	6,623,210	4,981,569	+ 33.0
East Central	12,863,602	5,747,051	+123.8
South Central	4,490,091	3,275,155	+ 37.1
West Central	2,898,956	2,010,112	+ 44.2
Mountain	1,166,102	611,689	+ 90.8
Pacific	7,707,520	6,160,193	+ 25.1
Total U. S.	$67,013,939	$37,501,122	+ 78.7
New York City	$21,474,945	$8,360,972	+156.9
Outside N. Y. C.	$45,538,994	$29,140,150	+ 56.3

The dollar volume of building permits during every month of 1935 has shown considerable increase over the corresponding months of 1934. This has resulted in an estimated building outlay for the first ten months this year amounting to $477,466,315, against $299,805,958 last year. This was the largest for any similar period since 1931, and represented an increase of 59.3 per cent above the corresponding ten months of 1934.

MODERNIZING COMPETITION

IN the recent contest conducted by *The Architectural Record*, with Kenneth K. Stowell as professional advisor, prizes were offered by the Libbey-Owens-Ford Glass Company in each of four classifications of modernizing old business buildings. J. Andre Fouilhoux was chairman of the jury, other members being Albert Kahn, Melvin T. Copeland, William Lescaze, John W. Root, F. R. Walker, and Kenneth C. Welch.

The prizes were $1,000 for the first award in each of the four classifications, with $750 and $500 each, second and third prizes in each group. The first was a food-store modernization: G. Foster Harrell, Jr., New York, first; A. Waldorf and S. T. Katz, Brooklyn, second; J. R. Sproule, Seattle, Wash., third. Drug store modernization: M. R. Swicegood, New York, first; G. Foster Harrell, Jr., New York, second; N. B. Vassilieve, New York, third. Apparel-shop modernization: Suren Pilafian and Maurice Lubin, New York, first; Lester Cohn, Chicago, second; R. L. Dubrul and H. J. Trivisonns, New York, third. Automobile sales and service station modernization: Alfred Clauss, Knoxville, Tenn., first; Suren Pilafian and Maurice Lubin, New York, second; Isadore Shank, St. Louis, Mo., third. Forty other entrants received Honorable Mention and $50 each.

CHICAGO ARCHITECTURAL CLUB'S TERRA-COTTA WALL BLOCK COMPETITION

THE Chicago Architectural Club announces the winners of the Terra-cotta Wall Block Competition, under the joint sponsorship of the American Terra Cotta Company and the Norwestern Terra Cotta Corporation. The two separate design problems required by the competition program called for the design of a one-story shop building with 100-foot frontage and also a two-story shop and office building with 50-foot frontage. The program required the use of machine-made terra-cotta blocks in any color, with an allowance of 20 per cent of terra-cotta area for ornament.

The awards for the one-story shop building were as follows: First prize, Evald Young; second prize, George Recher; third prize, Roy Anderson; Honorable Mention, A. A. Zakharoff; Mention, A. A. Zakharoff; Mention, C. Koncevic; Mention, G. W. Murison, Jr.

The awards for the two-story shop and office building were as follows: First prize, A. A. Zakharoff; second prize, Herbert Rodde; third prize, Charles Koncevic.

The jury of awards: Alfred Shaw, Andrew Rebori, Hugh Garden, Oscar Gross, and F. O. Turper-White.

FHA MODERNIZATION CREDIT

THE bulk of the work being done under the Modernization Credit Plan of the Federal Housing Administration is concentrated on single-family residential property. A breakdown of loans reported during August and September to the Housing Administration from financial institutions making modernization loans indicates that 57.1 per cent of the total amount of money involved is being spent on this type of property.

(*Continued on page 16*)

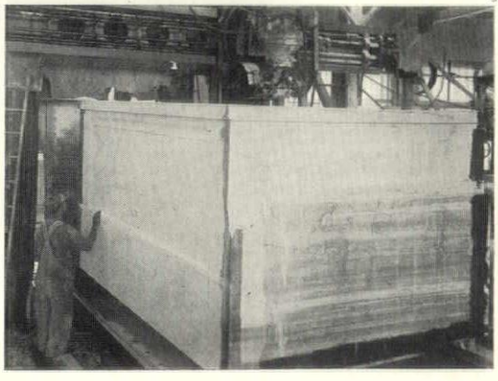
ARCHITECTURE, published by CHARLES SCRIBNER'S SONS, 597 Fifth Avenue, New York, N. Y. December, 1935. Volume LXXII, No. 6. Published monthly on the 28th of the month preceding date of issue. Entered as second-class matter, March 30, 1900, at the Post-Office at New York, N. Y., under the Act of March 2, 1879. Yearly subscription rate to members of the architectural and allied professions, $3; to all others, $6; add $1 for Canadian postage and $2 for foreign postage. Single copies, $.50.

Vermont Marble *for* Supreme Court

Deep in the tunnels at Danby, Vt., began the work of constructing the new home of the Supreme Court. The upper picture shows a wire saw which has been working underground on a 250-ton quarried block. The marble, after it had passed through the shop, was transformed under the direction of the sculptor, James Earle Fraser, into the gigantic figures which guard the Court's main entrance.

From the Heart of the Vermont Mountains Came the Nation's Temple of Justice

Aside from its rare beauty, the recently opened Courthouse at Washington is a striking example of large work in marble. No other American building has called for so many blocks of unusual size. It's to the credit of the Vermont quarries that the marble came through on time and went together without defect or delay.



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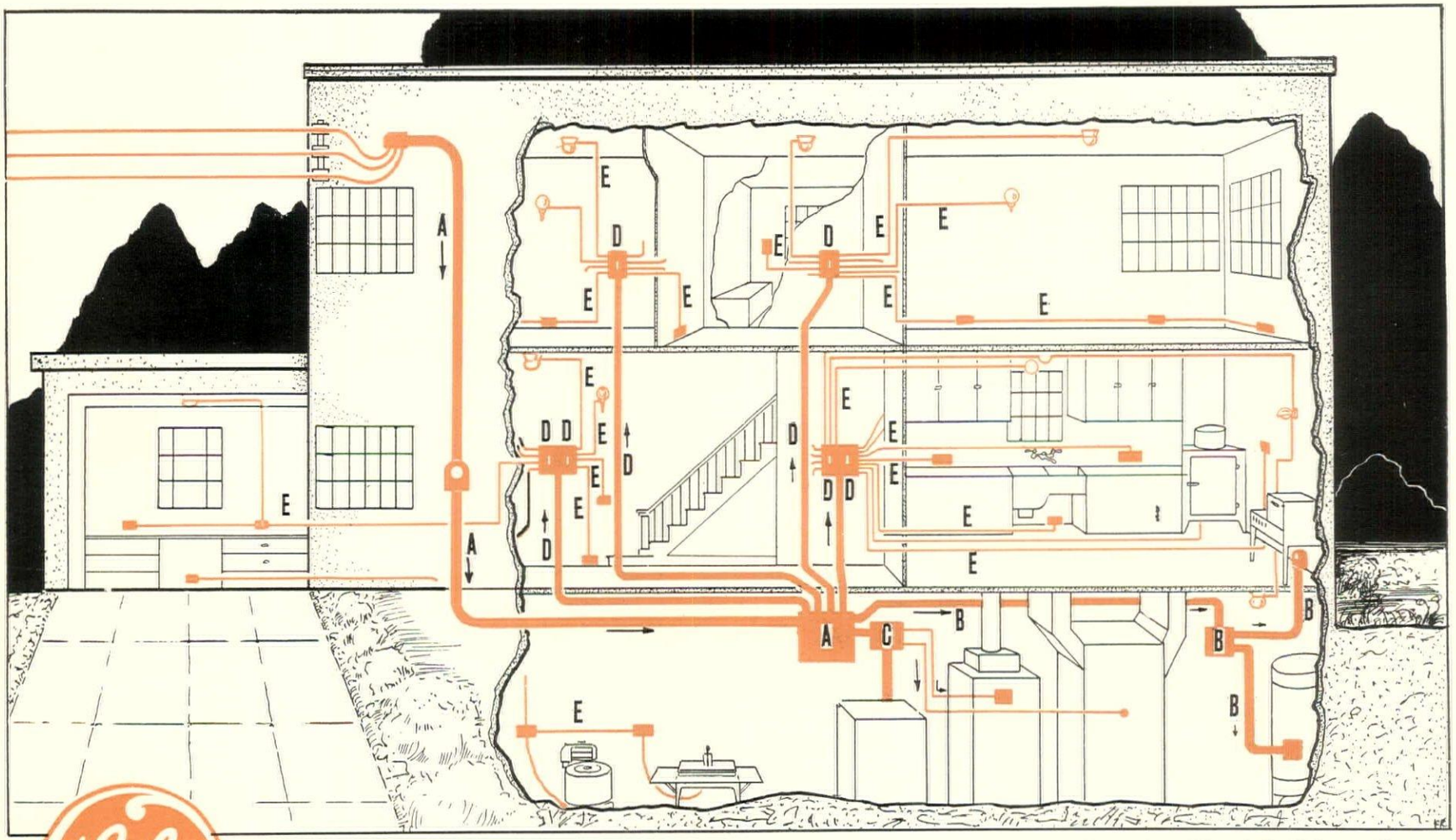

GENERAL ELECTRIC WIRING SYSTEM

PRESENTING

THE G-E RADIAL WIRING SYSTEM

To Satisfy The Electrical Requirements of Your Modern Homes

On drawing boards of architects the country over, modern homes are being designed. Whether their architecture is modern or traditional, they have one thing in common . . . They are all-electric homes. Your clients demand electric kitchens, laundries, air-conditioning, and other labor-saving appliances. Perhaps they cannot install them all now, but they want all-electric homes as soon as possible. To do that economically and efficiently, the architect must carefully plan the wiring system, through which the electricity flows, . . . consider the electrical requirements for present and future needs.

To help you meet such broad specifications, General Electric Engineers have developed a revolutionary new wiring system. It is being built into all the General Electric sponsored "New American" Homes now under construction throughout the country.

The New G-E Radial Wiring System

The G-E Radial Wiring System offers many advantages to home owners. It is simple in design and construction. It reduces voltage losses to the minimum, making the current paid for do useful work without waste. It provides new-type, efficient circuit breakers at convenient points throughout the house. These circuit breakers act also as switches and are so compact as to actually fit in standard outlet boxes. And when additions or changes are necessary in the future, they can be made easily and inexpensively. The Radial Wiring System is based on the principle of sub-circulating branch circuits arranged in radial runs from circuit breakers. This decentralized distribution system eliminates the obviously poor practice of placing a large number of outlets on a branch circuit. It substitutes back feeders to convenient points throughout the house where it places controls for the radial circuits. It is adequate in copper, using wire sizes suited to modern loads. All details, of course, conform to National Electrical Code requirements.

In the schematic drawing, you can see exactly how the G-E Radial Wiring System functions. The specifications call for an all-electric home with major fixed appliances and a complete outlet and lighting system with modern switching. The wires marked A designate the service entrance cables going through the meter to the Totalizing Unit in the cellar. For all-electric homes, these should never be less than three No. 4's. The circuit marked B is a sub-feeder to the range and water heater made up of not less than three No. 8 conductors properly fused at the Totalizing Unit. A limiter device in this circuit cuts off use of water heater while range is in operation. The sub-feeder circuits C of No. 10 wires lead from Totalizing Unit A to the Air-conditioning Panel from which the air-conditioning equipment is run.

The risers, labeled D consist of No. 10 conductors. They lead direct from the Totalizing Unit A to all Flush Branch Circuit Breakers. These Circuit Breakers or control units must be of suitable capacity to properly protect the wires which fan out into the devious circuits over the house. You thus see that we have 4 points of sub-control conveniently located around the house. These breakers are no more obtrusive than is the standard switch in the circuits of today. The home owner does not object to them because in their operation of protecting the circuit there is no fuse blowing — they are operated the same as a switch. The Circuit Breaker locations are centered to minimize all circuit lengths.

These sub-circuits of No. 12 conductors, labeled E are fanned out from the Circuit Breakers to the lighting or convenience outlets. Wherever possible, convenience outlets are circuited separately from lighting outlets.
The kitchen circuiting is particularly noteworthy. Appliance outlets are protected by a 20-amp. Circuit Breaker served by one of risers D. From it, sub-circuits are fanned out to individual appliance outlets. Thus each of the No. 12 wires are subjected to the load of only one outlet.
Such is the basic design of the G-E Radial Wiring System. Additions and modifications can be made to meet all conditions encountered in specific designs.

The Advantages

The sub-circulating of branch circuits and radial runs, which are characteristic of the G-E Radial Wiring System, is adequate from every standpoint. There are full provisions for fixed electrical appliances for lighting and convenience outlets. There is copper adequacy which prevents voltage losses in the system. Electricity is carried efficiently to appliances and outlets with minimum loss of current. Another important advantage is the ease of remodeling and extending the system in the future. The problem of breaking into a limited sub-circuit and its rerouting is simpler than where a long circuitous, concealed run must be revamped to suit changes.

This G-E Radial Wiring System utilizes only General Electric Wiring Materials. A booklet has been prepared giving detailed specifications of the new G-E Radial Wiring System as applied to one of the smaller "New American" Homes. Send for a copy of this manual at once. Write Section CDW-2210, Merchandise Department, General Electric Company, Bridgeport, Connecticut.

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WIRING MATERIALS

GENERAL ELECTRIC COMPANY, MERCHANDISE DEPARTMENT, BRIDGEPORT, CONNECTICUT

Sloane-Blabon

LINOLEUM

"a medium of decoration"

For the floor of the Starlight Café of the S.S. Columbia, world's largest cruise ship, Walter M. Ballard Co., interior decorators and architects, specified Sloane-Blabon Linoleum.

Here is what Walter M. Ballard Co. says of this installation:

"The Starlight Café is almost completely finished in white pigskin, including walls, furniture upholstery and outside of the bar. The ceiling is an atmospheric blue; the floor is black, highly polished Sloane-Blabon Linoleum. Draperies are black, white, brown and orange. On the dance floor the Sloane-Blabon Linoleum admirably stands the stress and strain of a boat at sea, which is a severe test. Sloane-Blabon was not used as a linoleum but as a medium of decoration."

The S. S. Columbia is but one of many recent outstanding Sloane-Blabon installations. We shall be glad to send you a list of others, together with linoleum samples and any information you may require. Write W. & J. Sloane Selling Agents, Inc., 577 Fifth Avenue, New York.

EMPIRE STATE BUILDING

Architects

Shreve, Lamb & Harmon

Pipe . . . conduit . . . steel sheets . . . reinforcing bars . . . Youngstown's major contributions to architecture . . . play, for the most part, unseen

THE YOUNGSTOWN SHEET & TUBE COMPANY

Manufacturers of Carbon and Alloy Steels

COLOUR
IN INTERIOR DECORATION

BY JOHN M. HOLMES

Lecturer in Decoration at the Architectural Association School of Architecture, London

HERE at last is a book on colour which recognizes the fact that the colour of the physicist—the beam of light broken by a prism—is an entirely different matter from colour as used by the painter and decorator in pigment form. For instance, there is no separate colour purple, nor blue-green, in the solar spectrum. Then too, the spectrum colours are colours in the raw, not colours with which to work.

Here is an abandonment of the solar spectrum primaries for a new series of twelve pigment primaries, which make easily understandable an intelligent use of colour.

Moreover, the twelve colours which form the pigment primaries are not theoretical, but are colours that may be bought "in the tube."

Nor is the author satisfied with making clear the various relationships between these pigment colours. He connects them up with the colours of woods, marbles, fabrics and the other materials used by the decorator, bringing them all on one palette. In all the literature of colour, there has been no such book as this, sound in theory, but also practicable in making easy a proper use of colour.

The volume consists of 92 pages, 8¾ by 12¼ inches, profusely illustrated in full colour. There are supplementary illustrations of colour schemes by well-known architects and decorators for various interiors. $7.50

CHARLES SCRIBNER'S SONS, New York

ARCHITECTURE AND ARCHITECTURAL BOOKS

© *Wurts Bros., N. Y.*

This illustration shows one end of the Main General Reading Room of the United States Supreme Court building, Cass Gilbert Jr., architect. The paneling from floor to ceiling, including entablature, pilasters and carved woodwork, was executed by Matthews Bros.

Paneling in the UNITED STATES SUPREME COURT BUILDING

WASHINGTON, D. C.

Wood paneling throughout this magnificent building is American Quartered White Oak. All of it was built, finished and erected by —

MATTHEWS BROS.

MANUFACTURING COMPANY

Fine Woodwork

PORT WASHINGTON ROAD - MILWAUKEE, WIS.

GLASS

DOMINATES DESIGNS FOR MODERNIZATION

Premiated drawings in Modernize Main Street Competition suggest the effective use of Libbey·Owens·Ford Polished Plate, both plain and colored, Vitrolite, Tuf-Flex and Blue Ridge Figured and Wire Glass.

● The architectural profession generally acclaims the Modernize Main Street Competition recently sponsored by Libbey·Owens·Ford one of the most interesting and helpful efforts of its kind in many years.

To make the results even more far-reaching, the 52 prize-winning designs have been published in book form and are now being distributed to logical prospects for modernizing. This should result in even more business for architects, for, while floor plans, specifications and other pertinent data are included, there are no working drawings and each store operator or real estate owner is urged to retain an architect in working out his individual problem.

A generous use of glass dominated practically all designs submitted by the 3,000 and more architects and designers who entered the competition. Since there is a Libbey·Owens·Ford product for almost every purpose where flat glass can be employed, architects specifying it are assured of one undeviating standard of higher quality throughout. The L·O·F label on every light guarantees your client's satisfaction, as well as your own. Look for it. It is advisable to instruct contractors and builders to leave the labels on until final inspection has been made.

LIBBEY·OWENS·FORD GLASS COMPANY . . . TOLEDO, OHIO.

LIBBEY·OWENS·FORD

Quality Glass

THE BULLETIN-BOARD *Continued*

(*Continued from page 4*)

Next in line is other residential property, including apartment houses, hotels, and similar structures. The amount spent on these is 25.7 per cent of the total. The amount being borrowed for the improvement of retail stores is 7.8 per cent; that going for the improvement of commercial property, 3.4 per cent; for industrial property, 2.5 per cent; and for institutional property, .7 per cent. The remainder of the money, 2.8 per cent, is going for the modernization and repair of miscellaneous property not falling within the above classifications.

FHA APPOINTMENT

HOWARD LELAND SMITH, of New York, has been appointed chief architect of the Federal Housing Administration, succeeding F. Leo Smith, who died recently.

Howard Leland Smith is a graduate of Carnegie Institute of Technology. Returning to the United States after service in France, Mr. Smith entered the architectural offices of Cass Gilbert. In 1921 he opened his own office, and was made consulting architect for the Hudson River Bridge Company; he also holds the honorary position of Advisory Architect of the National Council on School Building Problems in America.

A. S. T. M.

ON the recommendation of a number of standing committees of the American Society for Testing Materials, there has been approved for publication as tentative, twenty-eight new proposed standards and fourteen approved revisions in existing tentative specifications.

Recommendations on new standards were submitted by committees functioning in the following fields: steel, iron-chromium-nickel and related alloys, copper and copper alloys, cement, hollow masonry building units, paints, petroleum products, road and paving materials, textile materials, methods of testing.

Architects will be interested in the recommendations of Committee C-10 on Hollow Masonry Building Units, a revision involving the tentative specifications for structural clay load-bearing wall tile, which provides for the inclusion of the following:

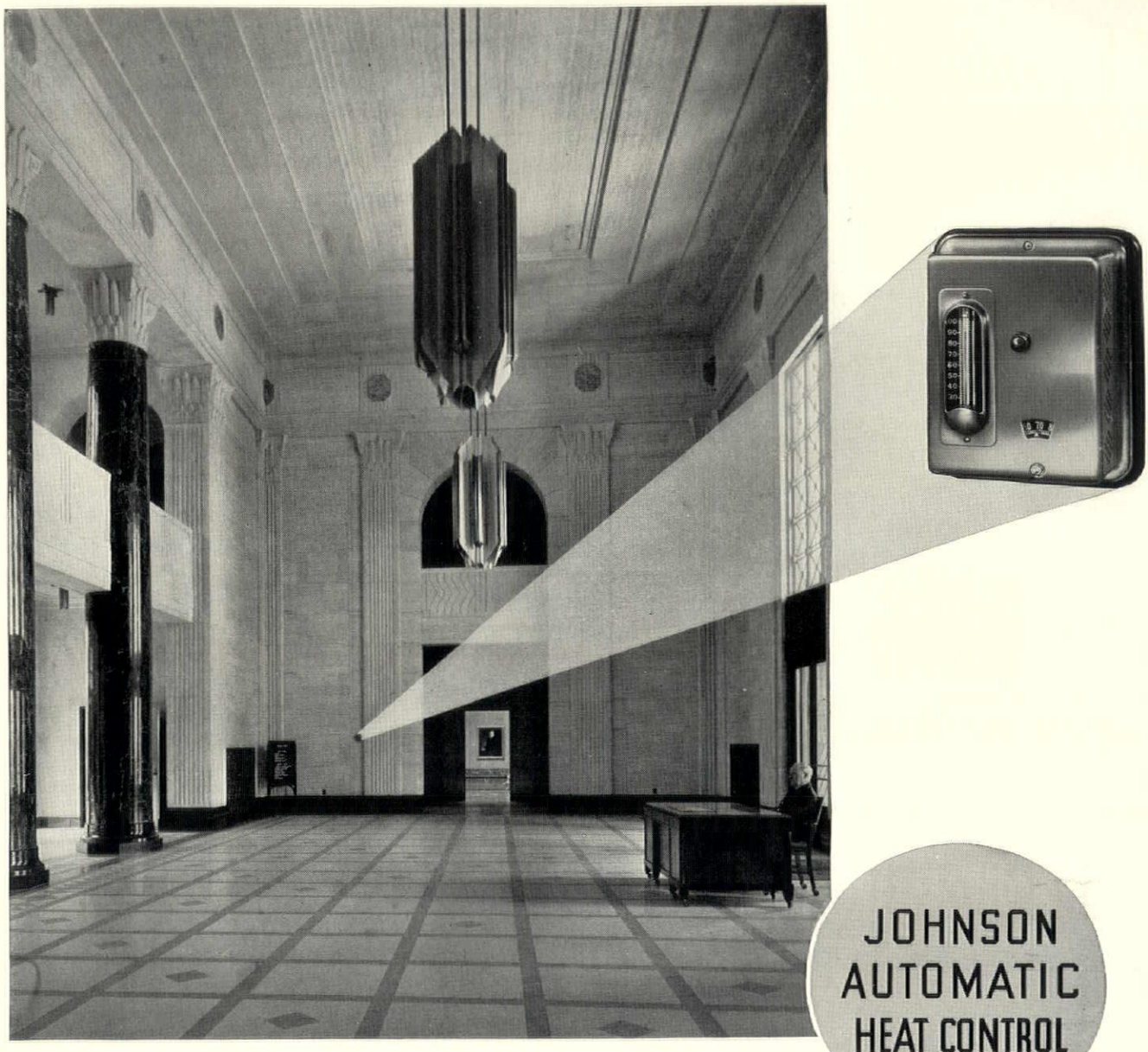
"Where tile is used in interior construction or as back-up for exposed walls with a facing of 3 inches or more of stone, terra-cotta, brick or other facing, the requirements for average and individual maximum absorption shall be waived unless otherwise specified by the purchaser."

AMERICAN WATER COLOR SOCIETY EXHIBITION

THE Sixty-ninth Annual Exhibition of the American Water Color Society will be held in the galleries of the Fine Arts Society, 215 West 57th Street, New York City, from Friday, January 3, to Tuesday, January 21, inclusive.

Exhibits received at 210 West 58th Street, New York, on Satur-

(*Continued on page 24*)



JOHNSON AUTOMATIC HEAT CONTROL

JOSLYN MEMORIAL, *Omaha, Nebraska*, JOHN McDONALD & ALAN McDONALD, *architects; Engineering Service Company, mechanical engineers, Omaha, Nebraska*

For Protection and Economy!

ECONOMY, COMFORT, CONVENIENCE! Those are the results usually sought when automatic temperature control apparatus is considered. Incidentally, those are the results attained when the regulation equipment is JOHNSON. But beyond that, there are many instances where accurate dependable control of temperature and humidity is essential for *protection*. Museums, art galleries, and certain industrial processes are examples of such applications, where exhibits and products must be protected against insufficient or excessive temperatures and humidities. . . . In the beautiful Joslyn Memorial, a gallery of valuable art treasures, some 120 JOHNSON *dual* thermostats operate JOHNSON valves on 244 direct radiators. A comfortable temperature during occupancy periods and a safe, reduced temperature at other times! Humidifying and ventilating are JOHNSON controlled, as well.

JOHNSON SERVICE COMPANY: Milwaukee, Wis. and Direct Branches in all Principal Cities

Service Records show where to SPECIFY *Wrought Iron*

Office of HOLLIS FRENCH

PIPE services differ—no one pipe material will fit all conditions. Substituting some other material for the job wrought iron has done so well for years is an expensive mistake. Neither should fine buildings be made a "testing ground."

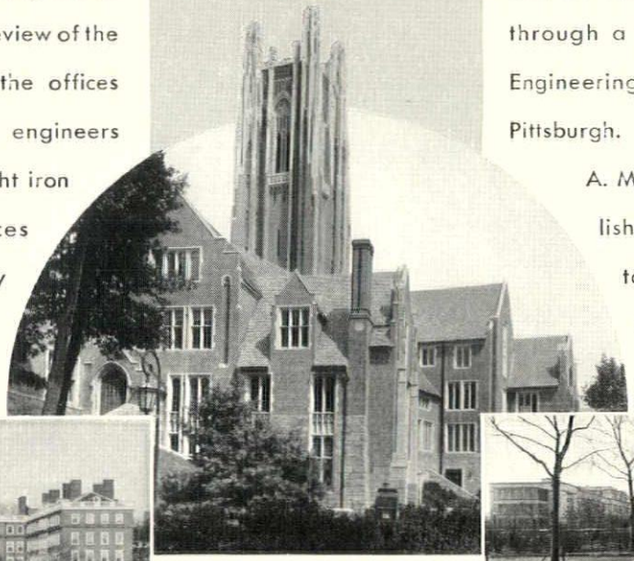
Back of every pipe material should be a service record showing where it should be specified. A review of the specifications written in the offices of leading architects and engineers will show you that wrought iron is used in those services where its long, satisfactory record proves it best and most economical.

Examples of "PIPE PRESCRIPTION" from the OFFICE OF HOLLIS FRENCH Boston

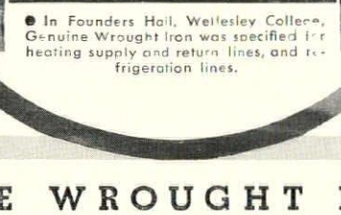
Illustrated are examples from the office of Hollis French where specifications are based on service records—we call this engineering procedure, "Pipe Prescription."

Specifications from the offices of other leading architects and engineers covering practically every section of the country are available through a Byers engineer or our Engineering Service Department at Pittsburgh.

A. M. Byers Company, Established 1864. Pittsburgh, Boston, New York, Washington, Chicago, St. Louis, Houston.



● Genuine Wrought Iron was specified for all waste lines and vents, gas and refrigeration piping and heating supply and return lines in John Winthrop House—Harvard University.



● In Founders Hall, Wellesley College, Genuine Wrought Iron was specified for heating supply and return lines, and refrigeration lines.

● Genuine Wrought Iron was specified for main water supply, hot, cold and drinking water, sterilizer lines, waste lines and vents, fire and refrigeration lines; also heating supply and return lines in the Buffalo City Hospital.

BYERS GENUINE WROUGHT IRON PRODUCTS

PIPE - WELDING FITTINGS - RIVETS - SPECIAL BENDING PIPE - O. D. TUBES
PLATES - SHEETS - CULVERTS - FORGING BILLETS - STRUCTURALS - BAR IRON

Specify Byers Genuine Wrought Iron Pipe for your corrosive services and Byers Steel Pipe for your other requirements

ARCHITECTURE

REG. U. S. PAT. OFFICE

THE PROFESSIONAL JOURNAL

VOL. LXXII No. 6 — DECEMBER 1935

CONTENTS

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CHARLES SCRIBNER'S SONS, PUBLISHERS

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NEW YORK: 597 FIFTH AVENUE AT 48TH STREET

THE BUILDING TREND

By E. L. Gilbert

SUBSTANTIAL gains in all three main classifications of building are shown by the October figures for the whole United States. Residential building, higher by more than 100 per cent compared with last year, leads the gainful showing for all branches of the industry. Commercial, industrial and related work revealed substantial improvement over both last year and last month, while heavy engineering, public and miscellaneous projects—classified as "Other Work"—increased slightly over last month's report. Total construction, approximately 50 per cent greater than for October, 1934 or 1933, reached a new high for the six months' period at $2.29 per capita. The sustained upward movement in all branches of building construction at this season indicates, perhaps, an exceptionally strong background for 1936 volume, especially in privately financed construction.

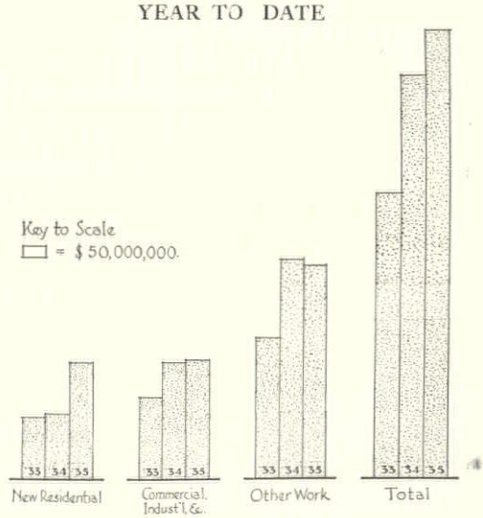
MONTH OF OCTOBER
(DOLLARS PER CAPITA, ENTIRE U. S.)

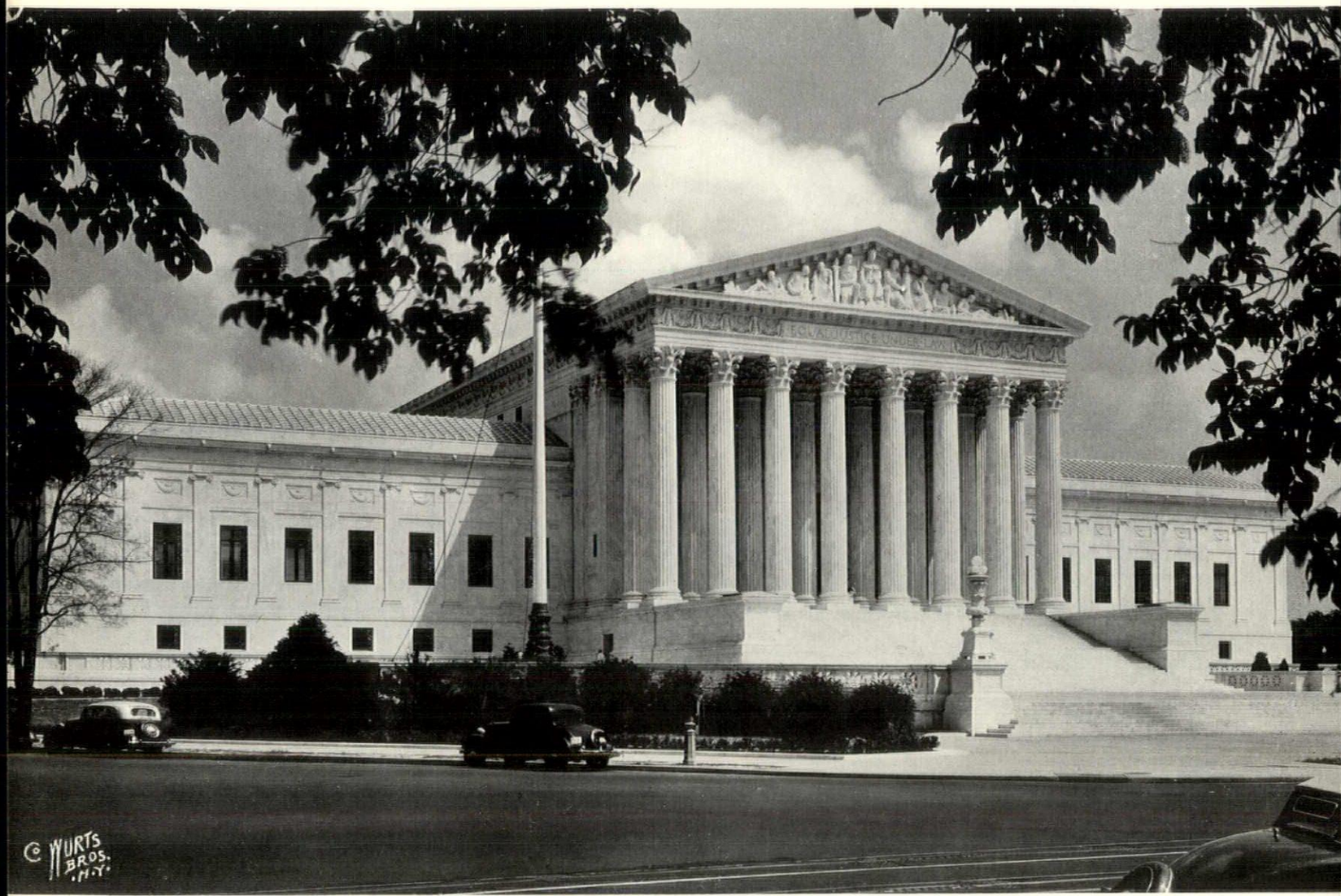
CLASSIFICATION	1933	1934	1935
New Residential . .	$.23	$.29	$.59
Commercial, Industrial, etc.	.28	.39	.54
Other Work	1.04	.85	1.16
Totals . . .	$1.55	$1.53	$2.29

Building Material Prices, U. S. Dept. of Labor, first week in November*	83.8	84.9	85.6

* Index number based on 1926 = 100.

YEAR TO DATE





UNITED STATES SUPREME COURT BUILDING

The west front from Maryland Avenue.
Sculpture in the pediment, by Robert Aitken

ARCHITECTURE
VOLUME LXXII NUMBER 6
DECEMBER, 1935

The UNITED STATES SUPREME COURT BUILDING

By Cass Gilbert, Jr.

TO attempt to describe the beauty of the new Supreme Court Building in Washington, D. C., would require the experience and knowledge of a master writer, just as the production of the building required the experience and ability of a master designer. Only through illustrations can the beauty be depicted.

In 1928, an Act was passed by Congress providing for a Supreme Court Building Commission. The late Chief Justice William Howard Taft was the first chairman, and upon his death he was succeeded by the present Chief Justice, Charles Evans Hughes. The other members of the Commission are Associate Justice Willis Van Devanter, Senator Henry W. Keyes, former Senator James A. Reed, Richard N. Elliott, former Chairman of the House Committee on Public Buildings and Grounds, now Assistant to the Comptroller-General, Fritz G. Lanham, Chairman of the House Committee on Public Buildings and Grounds, and David Lynn, Architect of the Capitol, who is Executive Officer of the Commission.

The first contract awarded by the Commission was for the design, which included a model to be made in plaster to show what the building would look like. This contract was awarded to Cass Gilbert.

There were many discussions, during the course of making the designs, regarding the location, and the site finally selected is somewhat triangular in shape bounded by First Street, N.E., on the west side, Maryland Avenue on the north side, Second Street, N.E., on the west, and East Capitol Street on the south. The main axis of the building is located on the continuation of the east-west axis of the pediment of the Senate Wing of the National Capitol.

After the type and style of the building had been determined and the site had been selected, a subsequent contract was made by the Supreme Court Building Commission for architectural services, which was signed by Cass Gilbert, Cass Gilbert, Jr., and John R. Rockart. Work was started in 1931, and the building is now virtually completed. On October 7 the United States Supreme Court held its first session in its new home.

As yet the site lacks trees and other planting to give the building its proper setting, but landscaping plans in contemplation give promise that this lack will be remedied.

In the structure itself, Mr. Gilbert developed an adaptation of the Greek classic, with an impressive approach to the building from the west. A short flight of steps, between white marble candelabra, leads to a broad terrace upon which are two monumental flagpoles with sculptured bronze bases.

Dominating the west façade and framing the main entrance facing the Capitol is a double row of sixteen white marble Corinthian columns supporting a sculptured pediment.

Inside this west entrance one enters the Main Hall, monumental in its proportions, lined on both sides with white marble columns against white marble walls. It leads directly east on the main axis through an entrance vestibule to the massive doors opening into the Supreme Court Chamber. The location of the Chamber itself, in the very heart of the structure, symbolizes the

importance of the room in which the Court presides. Contrasted with the old Court Room in the Capitol, the new chamber has 60 per cent more floor area with seating for 238 spectators —about 10 per cent more than in the former quarters. The Chamber, which is 82 by 91 feet from wall to wall, and 44 feet high, is dominated by the Bench at the east end facing the entrance, and by twenty-four Ionic columns—four flanking the entrance to the room, four directly behind the Bench, and two rows of four columns each on either side. Although the Court Room is nearly in the center of the building, it lacks no sense of openness and light, for the side colonnades open upon courtyards.

Just in front of the Court Room a transverse corridor divides the building from north to south. On the west, the building is devoted to offices to which the public may have constant access. On the east, the building is given over to the Court Room itself and to offices and conference rooms of the Justices, to which portion of the building the public is not admitted except on specific business. On the first floor these suites of offices for the Justices surround the east half of the Court Room. In the center, immediately in the rear of the Supreme Court Room, is the suite of offices occupied by the Chief Justice, together with a conference room in which the members of the Court meet for their private deliberations. Each Justice has a suite of three rooms, one of which is his private office, a room approximately 20 feet square, with walls finished in American oak from floor to ceiling and with a wood-burning fireplace at one end. Another room of the suite is for the secretary to the Justice, and the third room is for his law clerk. There is a toilet, lavatory, and shower for each suite.

In addition to the conference room of the Court, which adjoins the suite of the Chief Justice, there are two other large conference rooms in proximity to the Justices' suites, but for the present these will probably be seldom used. These rooms are designed for international conferences or arbitrations.

One particularly interesting feature of the plan lies in the fact that the Justices are assured of complete privacy, not only in the building, but upon their arrival and departure. Their automobiles proceed directly down a ramp into the basement and are there parked, while the Justices ascend in private elevators to a corridor closed to the public, connecting all the suites and the Court Room itself. Their dining-room is on the second floor.

The building has the traditional classic mass of a comparatively low building, yet there are four floors and a basement. On the first floor, reached by the monumental approach from the west, there is the Court Chamber, the Justices' suites, offices for the Attorney-General and Solicitor-General when they come to court, conference rooms, a robing room, rooms for the Clerk, the Marshal, and rooms for various other purposes.

On the second floor the law library is housed, with its stack and document rooms, the librarian's offices, dining-room, court reporters' offices, conference and reading-rooms for members of the bar. For the first time, the library of the Court is brought together under one roof. Hitherto the many volumes that comprise it have been scattered over Washington. Some of them have been in the basement of the Capitol, some in the Office Building of the House of Representatives, and some in the Congressional Library. Incidentally, there is provided an underground passage leading to the Congressional Library, together with pneumatic tube service, providing quick access to information which the Law Library may not afford.

On the third floor are large reading-rooms, with open shelves, together with further rooms for the use of the Bar, and several conference rooms.

The fourth floor is reserved for future stack rooms.

On the ground floor are the storage and filing rooms, the cafeteria and kitchen, rooms for minor officers and employees of the Court, and space for the press.

For the first time, at the insistence of the late Chief Justice Taft, adequate provision for the press is made in the Court Room and below stairs. Directly in front of the Bench there is a space for as many as six press association members. Each correspondent has a chair and a table, to which latter is attached a pneumatic tube leading to a space reserved for the press on the ground floor. Obviously, this pneumatic-tube service had to be specially designed for absolute noiselessness and, incidentally, the messages it carries are outgoing only. Correspondents of individual newspapers have provided for them three tables with four chairs each, located be-

tween the columns at one side of the room, and there is similar pneumatic-tube service here. On the ground floor, adjacent to the wire service, are two press rooms, one for correspondents of the press associations, the other for correspondents of individual newspapers. Both are equipped with chairs, tables, lounge furniture, lockers, telephones, and bookcases.

Public buildings usually are profusely inscribed, giving assurances of one kind or another to various constituencies. In the Supreme Court Building there are only two brief inscriptions: one over the main entrance on the west, EQUAL JUSTICE UNDER LAW; and, over the center of the east façade, JUSTICE, THE GUARDIAN OF LIBERTY. Originally an inscription had been contemplated for the Court Room, in accordance with the tradition that similar rooms in great public buildings usually provide for inscriptions upon the walls. None has been written for the Supreme Court Room. The Court speaks for itself.

In accordance with the ruling thought that the home of the Supreme Court must be as enduring as man can build it, the entire exterior is of white Vermont marble, the pieces varying in size from two hundred pounds to sixty-six tons, and averaging nearly a ton apiece. These larger stones appear in the sculptured pediments. In the courtyards Georgia marble has been used.

The marble for the interior of the building is from Alabama, with the exception of the marble in the Supreme Court Room itself. Here, because of Mr. Gilbert's desire for a warm color tone, Ivory Veine was used for the walls and frieze, and Old Convent Quarry Siena marble was used for the columns. Mr. Gilbert personally went to the Old Convent Quarry and examined many of the drums for these columns to be sure that only the suitable material might be selected.

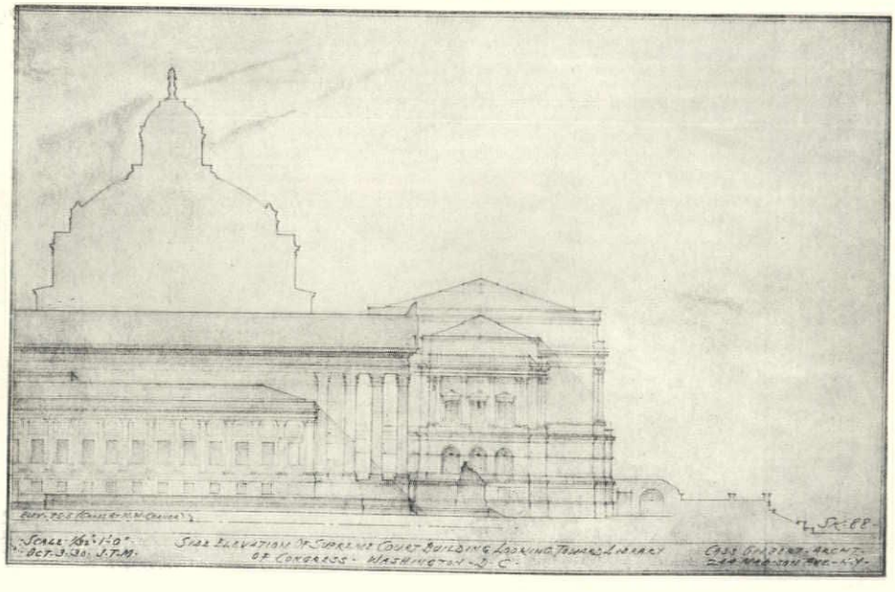
In the larger offices the walls are panelled in American white oak, and the floors are of the same material. In fact, all the materials, with the exception of the marble in the Supreme Court Room itself, are American, and even the imported materials were finished in the United States.

Congress appropriated for the general construction of the building the sum of $9,740,000. Construction cost was approximately $9,000,000. On the authorization of Congress, the furniture and furnishings of the building were bought out of the unexpended balance, and the total cost of the building ready for occupancy was more than $500,000 under the original appropriation for construction alone.

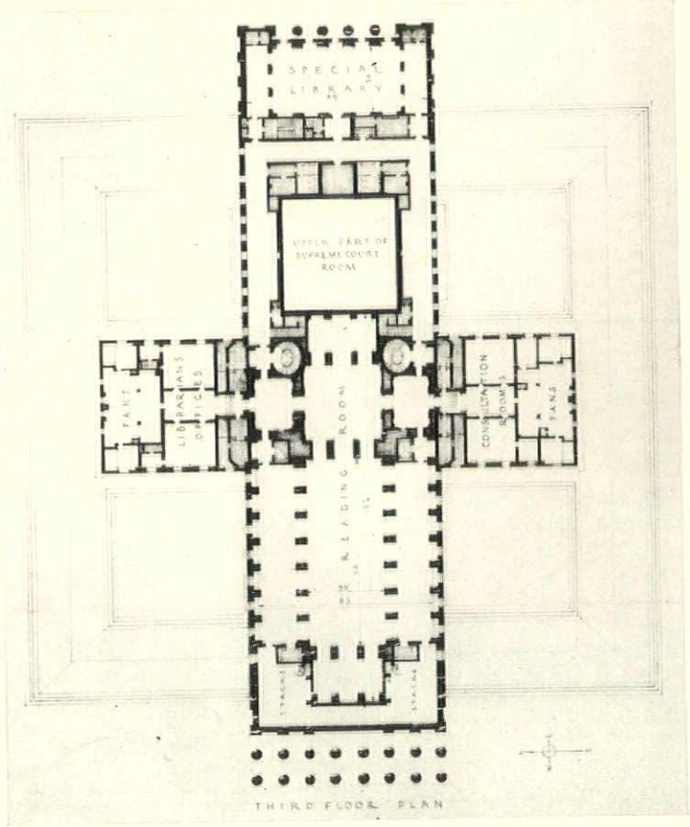
How well Mr. Gilbert interpreted the United States Supreme Court in his design and decoration of its new home was expressed by Chief Justice Hughes to his colleagues on the Building Commission in deploring the death of Mr. Gilbert in 1934: "The country is deeply indebted to Mr. Gilbert for what he has done in the United States Supreme Court Building, the last monumental work of his career. The building will be a lasting memorial to his great ability which has placed him in the front rank of architects not only of this country, but of the world."

One of Mr. Gilbert's early sketches for the west front—dated June 11, 1928

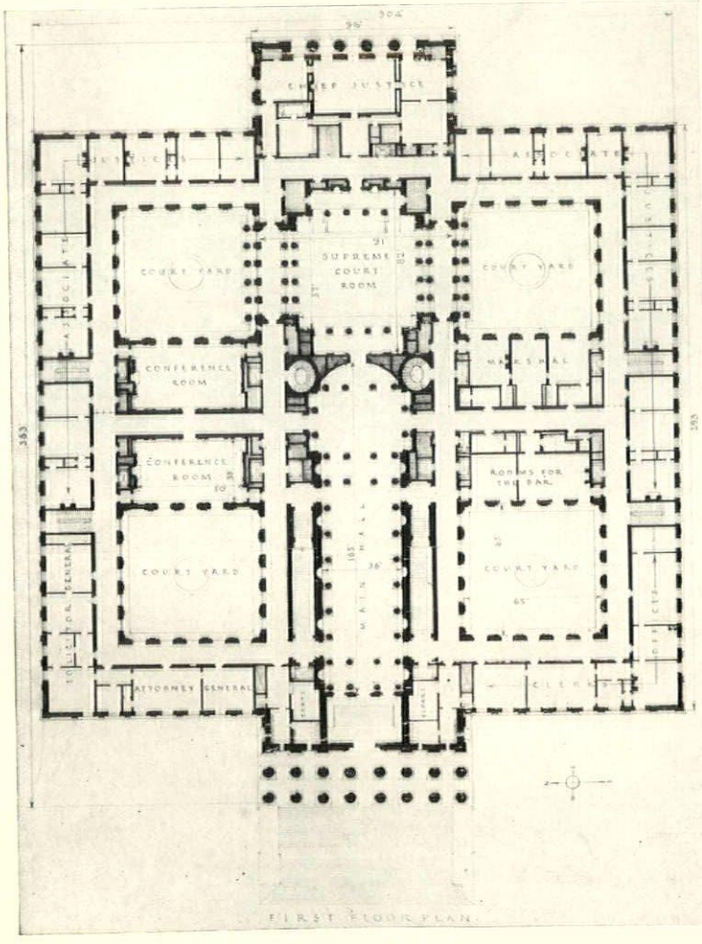
A preliminary study to show the relation between the Supreme Court Building and the Library of Congress to the south



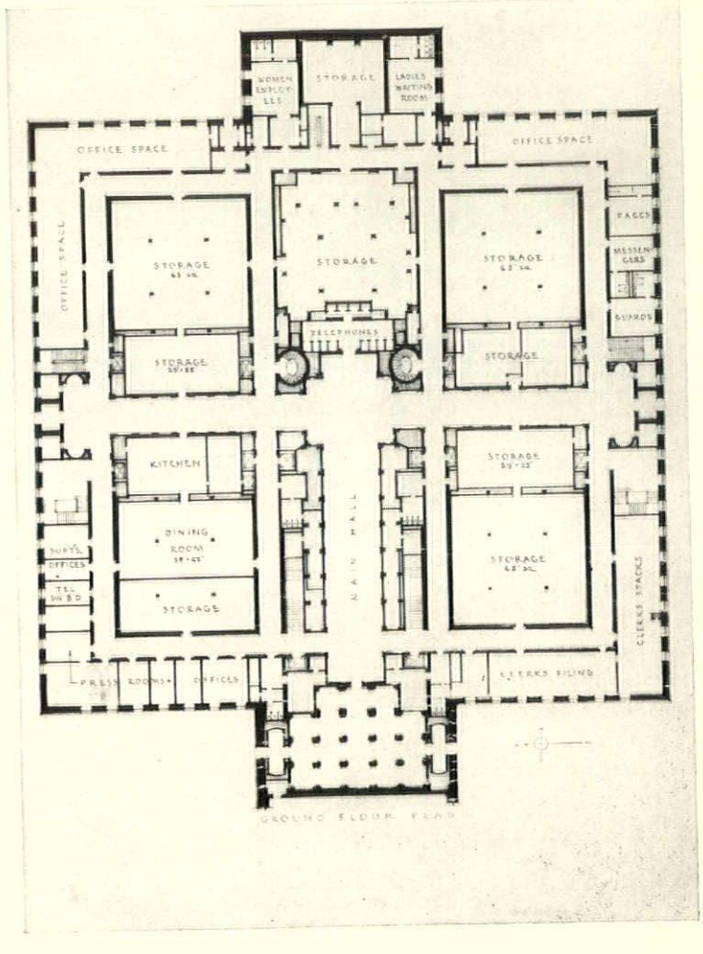
Plan of the third floor, given over largely to the General Reading Room, open to members of the Bar. In the Special Library at the east end a collection bequeathed by Senator Gerry of Rhode Island is housed

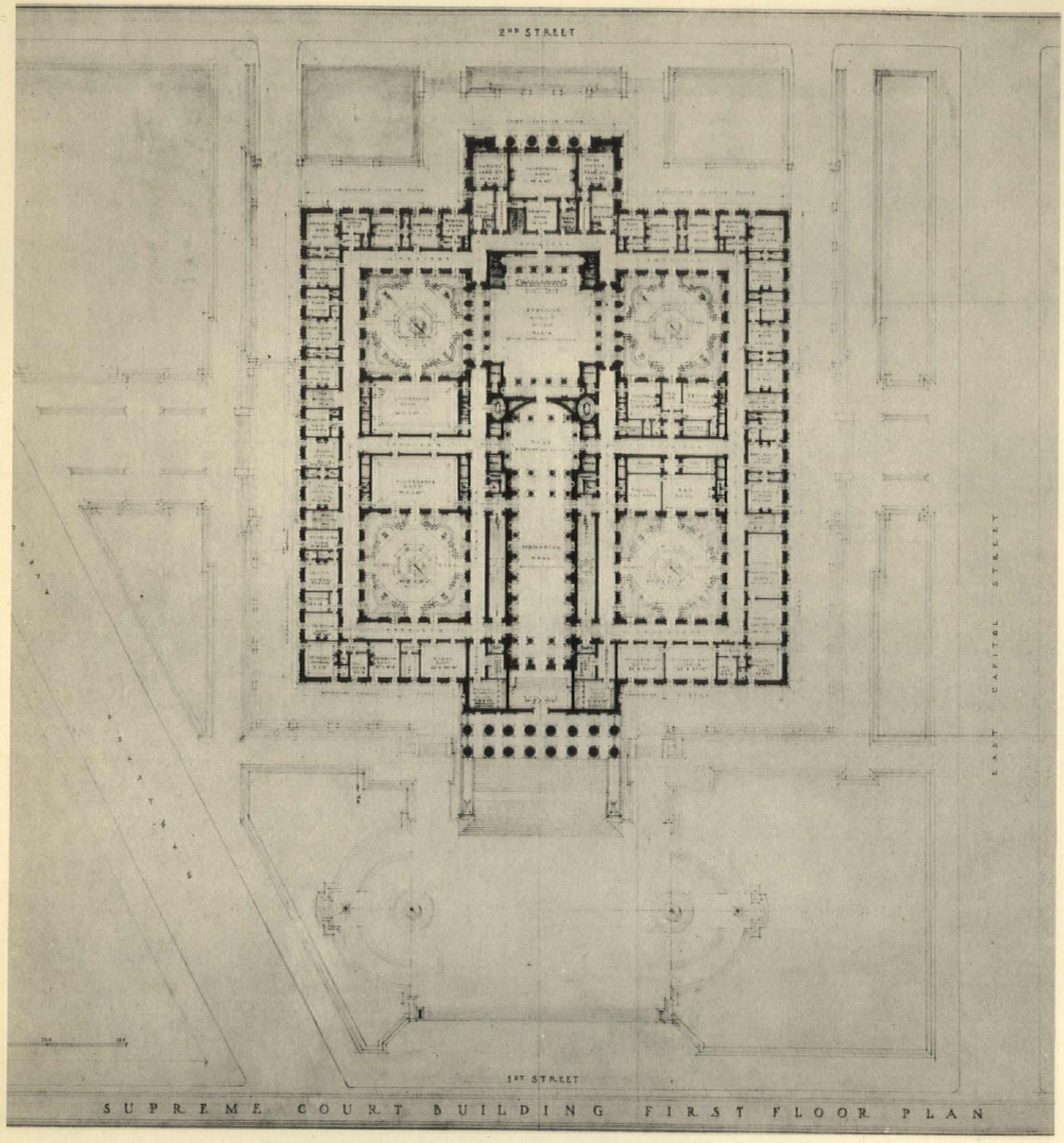


Below, plan of the first floor

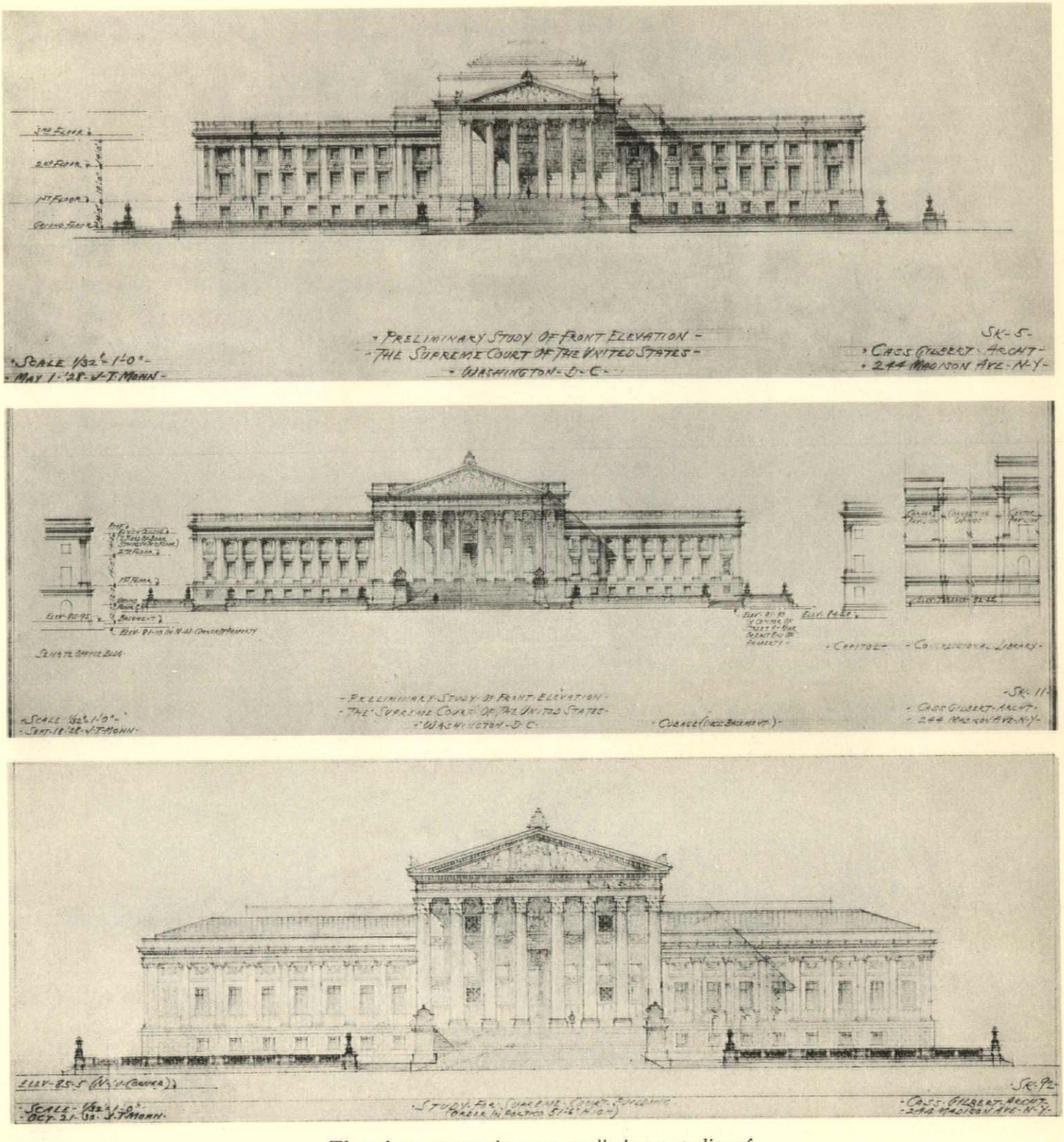


Below, plan of the ground floor

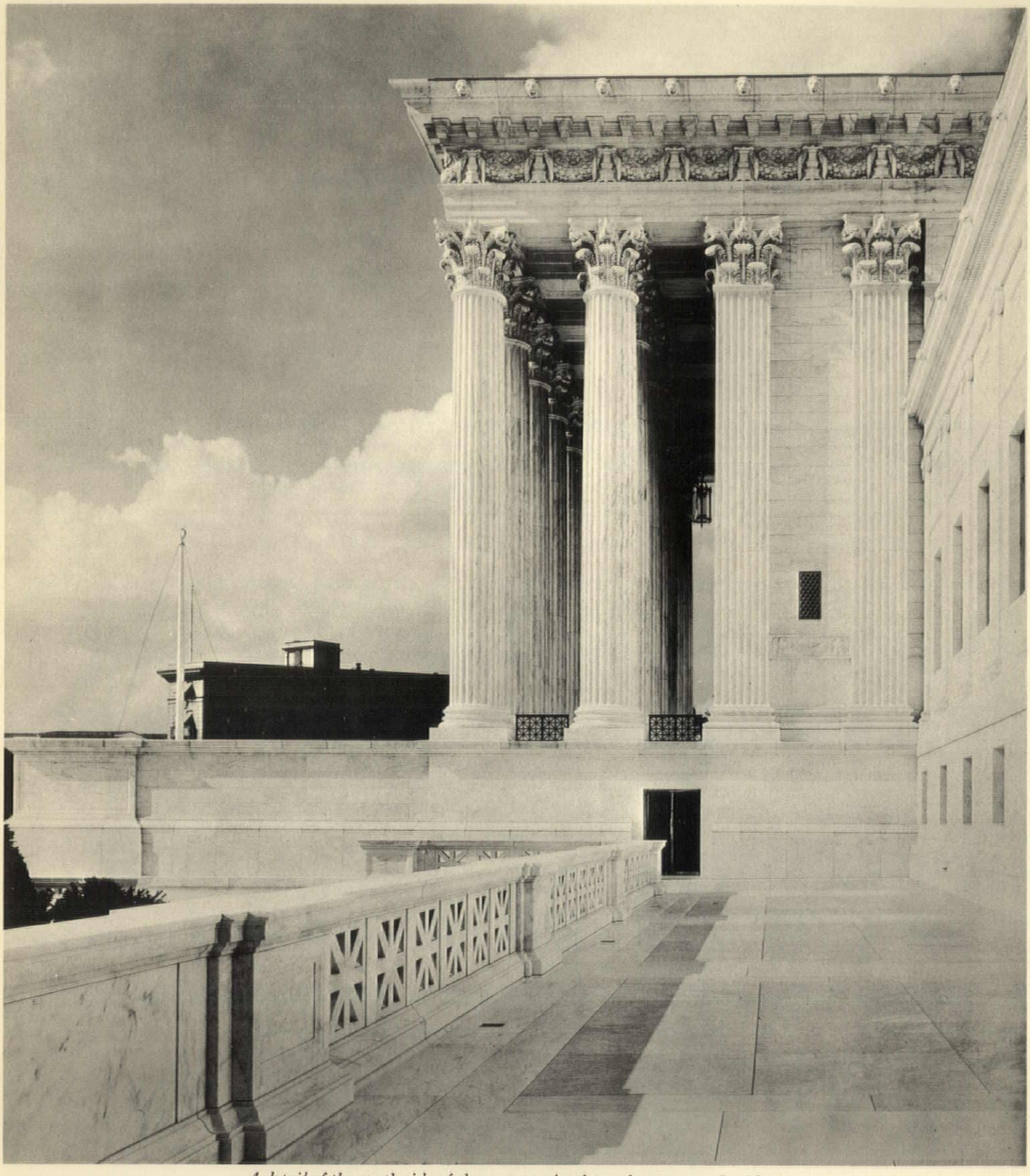




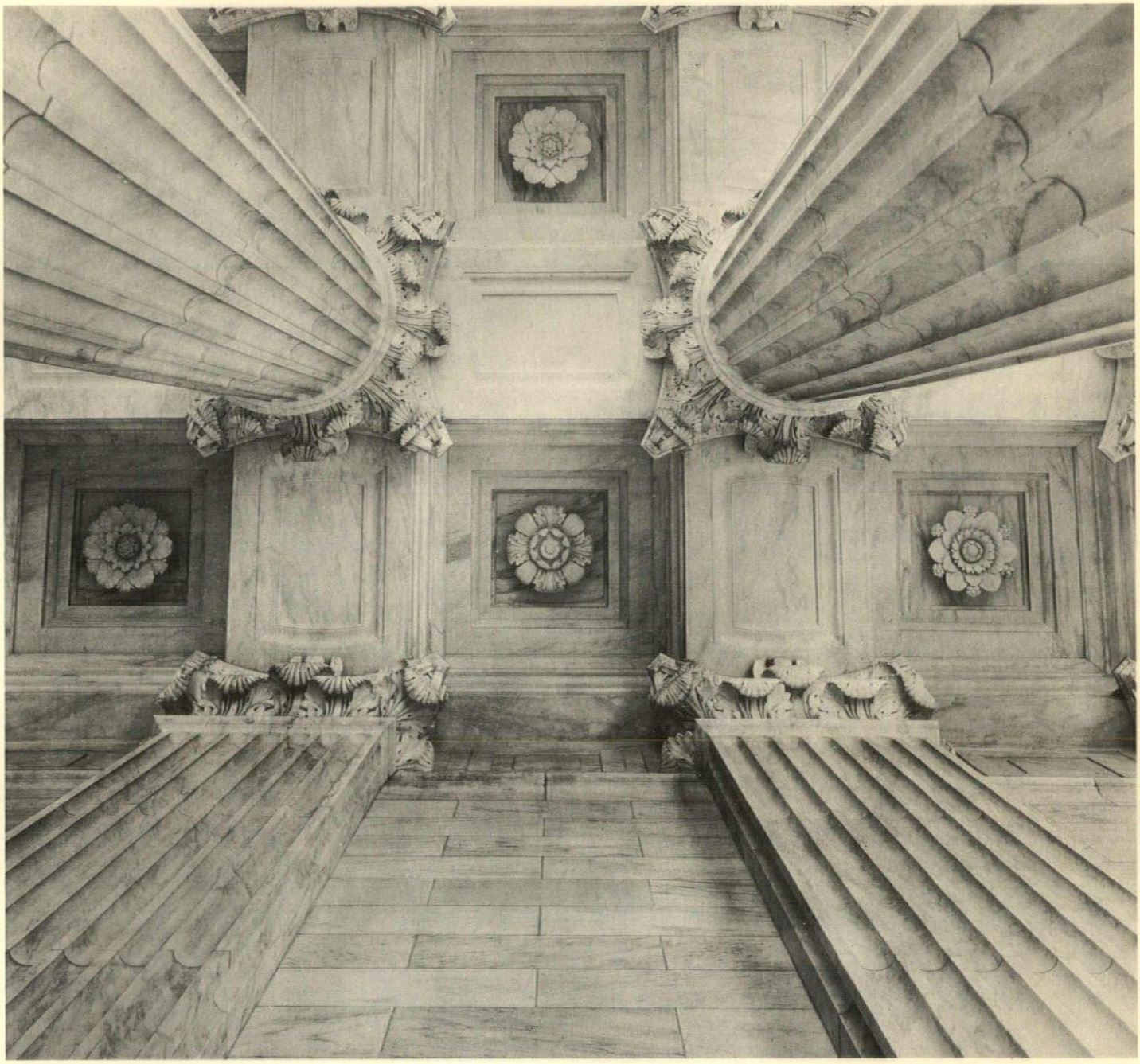
Plot plan and first floor. The east-west axis extending from First to Second Streets is a continuation of the axis of the entrance to the Senate wing of the Capitol. On the first-floor plan it will be noticed that the Supreme Court Room is the heart of the whole composition, flanked on either side by a courtyard and reached from the main entrance on First Street through the impressive Memorial Hall



Three from among the many preliminary studies of the front elevation, in pencil on tracing paper. It will be noticed that on the upper one of these there was a flat dome provided in the composition. Each successive step in the study is marked by simplification and by the omission of decorative detail; the acroteria of the pediment, for example, disappeared before the building was erected

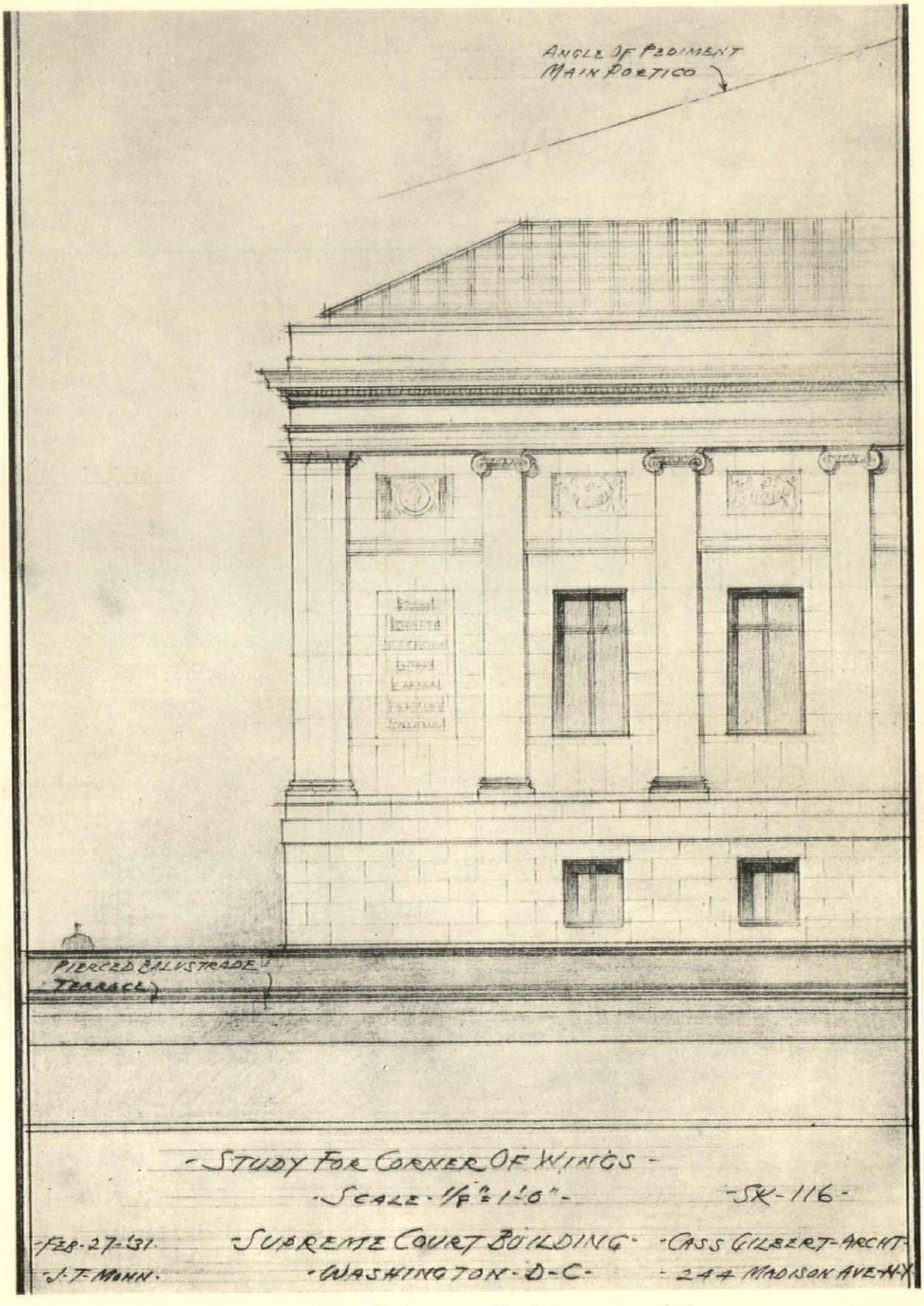


A detail of the south side of the west portico from the terrace. Incidentally, the marble paving of this terrace and the others is laid with an open joint of one-quarter inch between the slabs, to provide for expansion and contraction

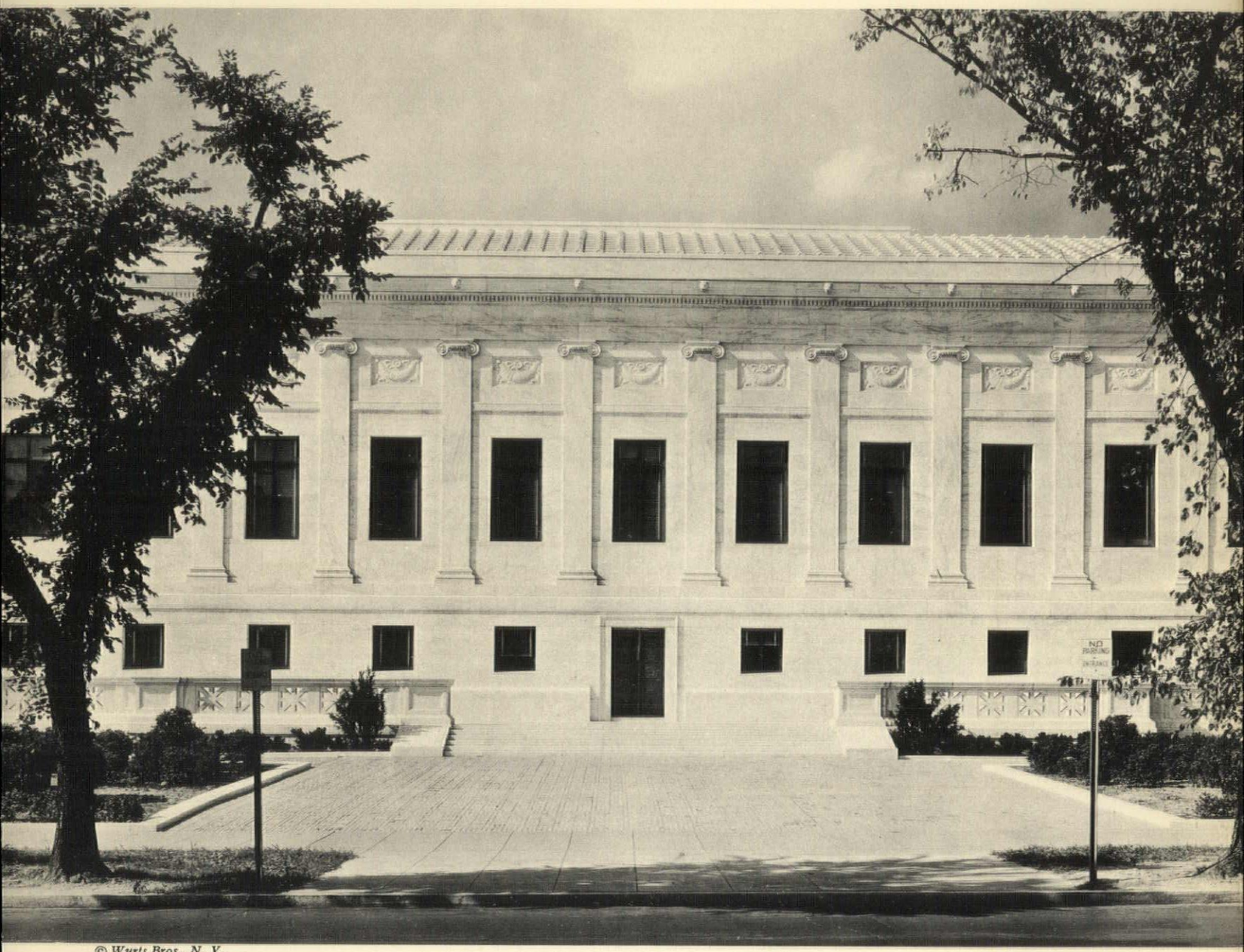


Looking straight up into the ceiling of the west portico. White Vermont marble is used throughout the exterior of the building—Imperial Danby

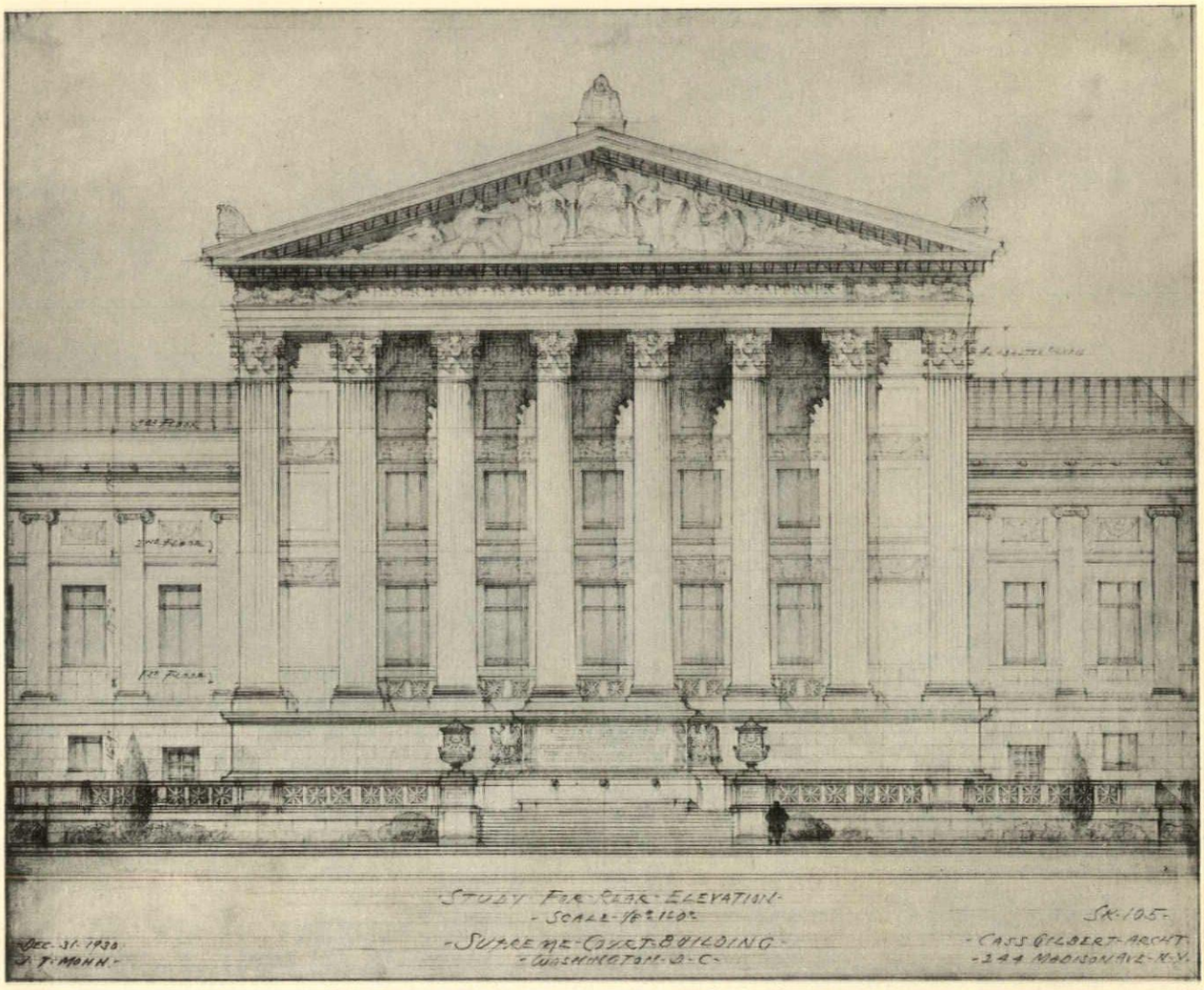
One of the marble candelabra flanking the west front entrance steps. Modeled by John Donnelly, Jr., in collaboration with the architect



One of the preliminary studies for a corner of the wings. It was felt that the slope of the tile roof would approach closely the angle of the pediment in appearance when viewed from the street. Compare this with the photograph of the wing on the facing page

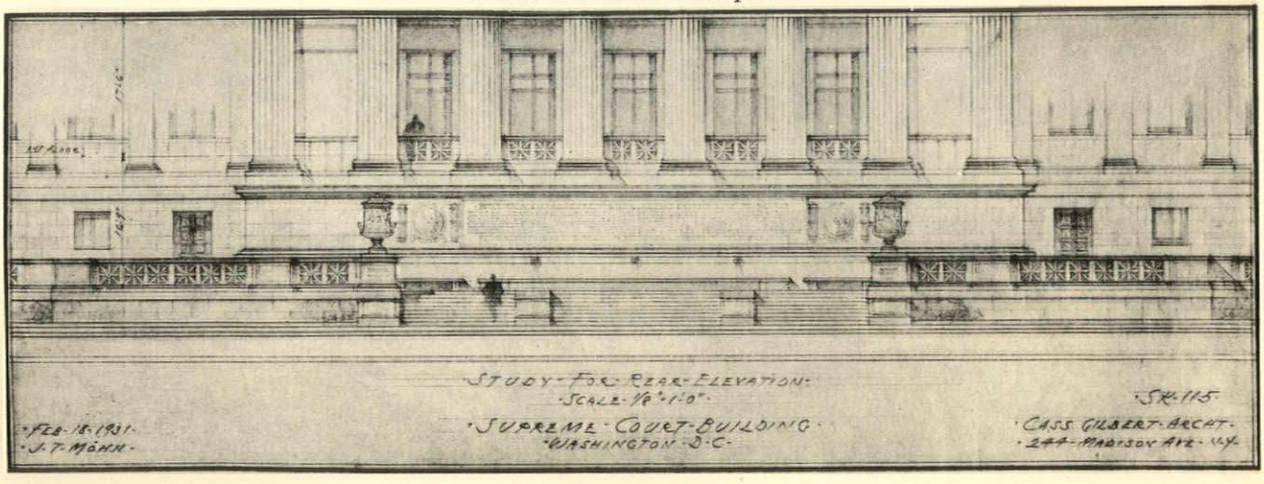


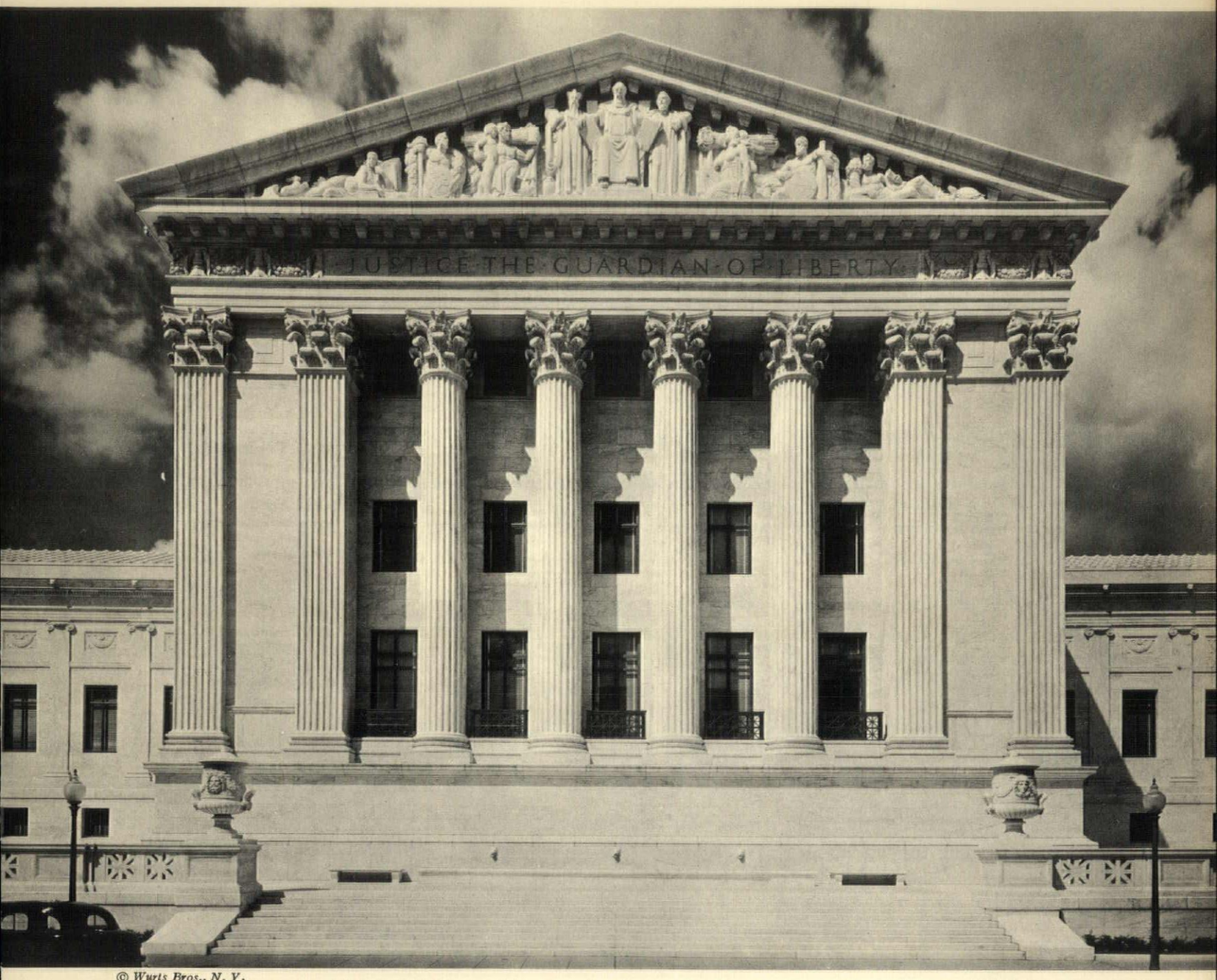
The south entrance on East Capitol Street, leading to the ground floor. The Maryland Avenue entrance opposite is identical



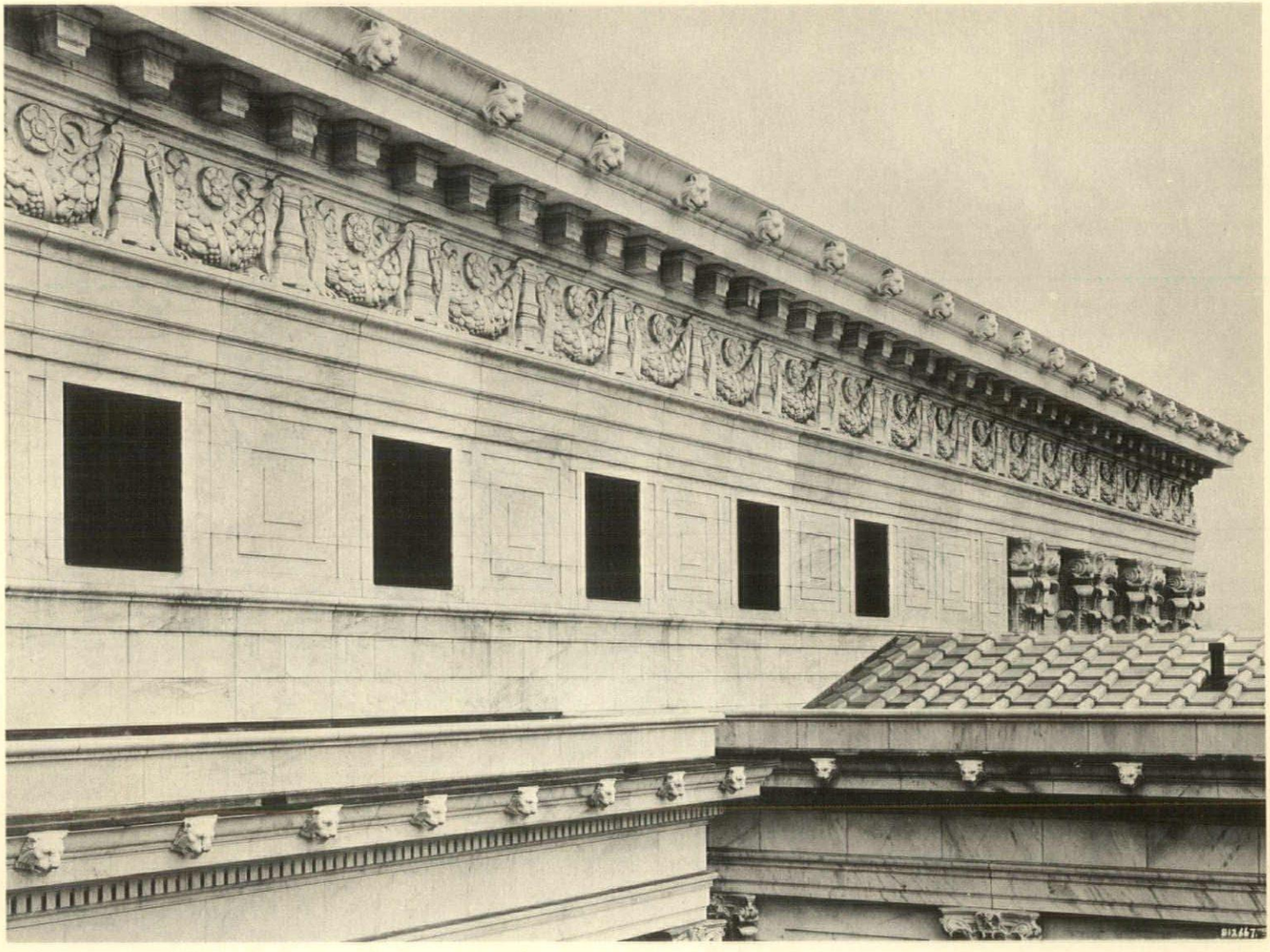
It is interesting to compare this study for the rear or east elevation with the photograph opposite. The photographer has caught the shadows at almost the same angle as those mechanically cast in the drawing

A later study of the lower portion of the rear elevation, widening the steps and inscription on the base. Compare with the photograph, which indicates a later decision to omit the inscription





The east end of the main building. The sculptured pediment is the work of Hermon A. MacNeil

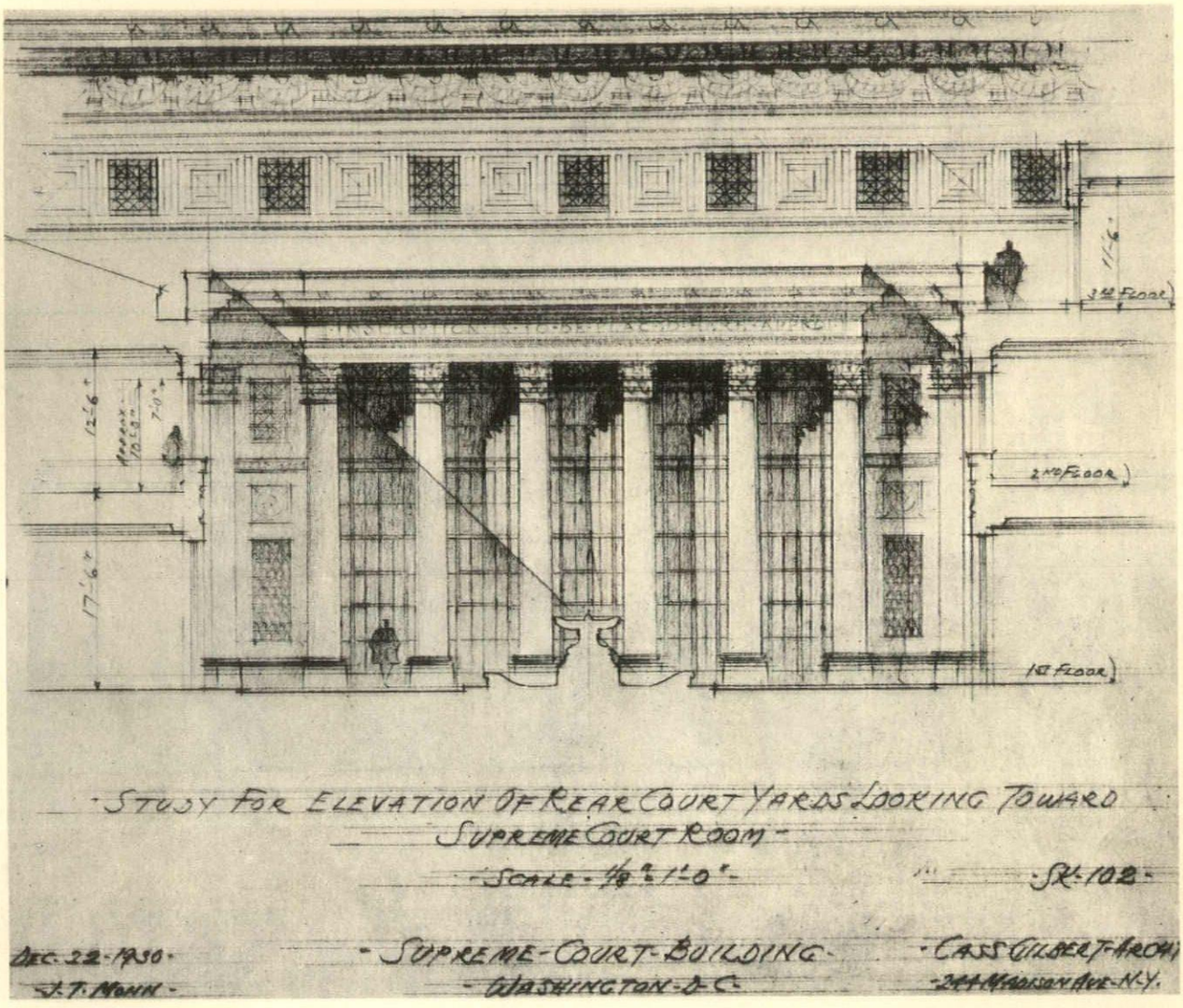


A detail of the main cornice where a wing joins the main structure. The photograph is taken from the roof of the wing looking over one of the courts

One of the flagpole bases on the west terrace—sculptured in bronze on a marble base. Modeled by John Donnelly, Jr., in collaboration with the architect

A detail of the urn, steps, and balustrade flanking the east entrance. Urn modeled by John Donnelly, Jr., in collaboration with the architect

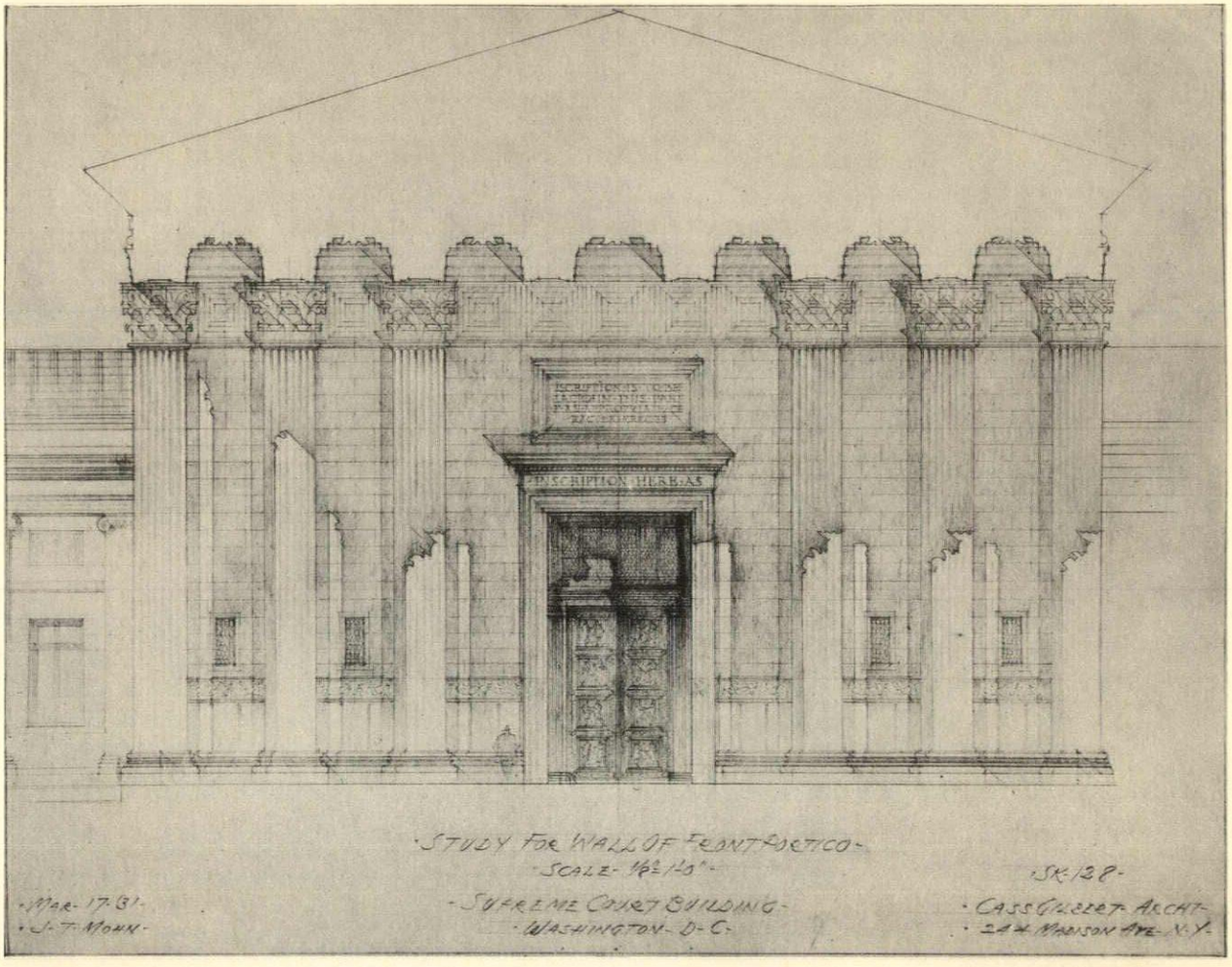
The east end of the main building, showing the juncture of the lower portion with the higher, taken from Second and A Streets, N.E.



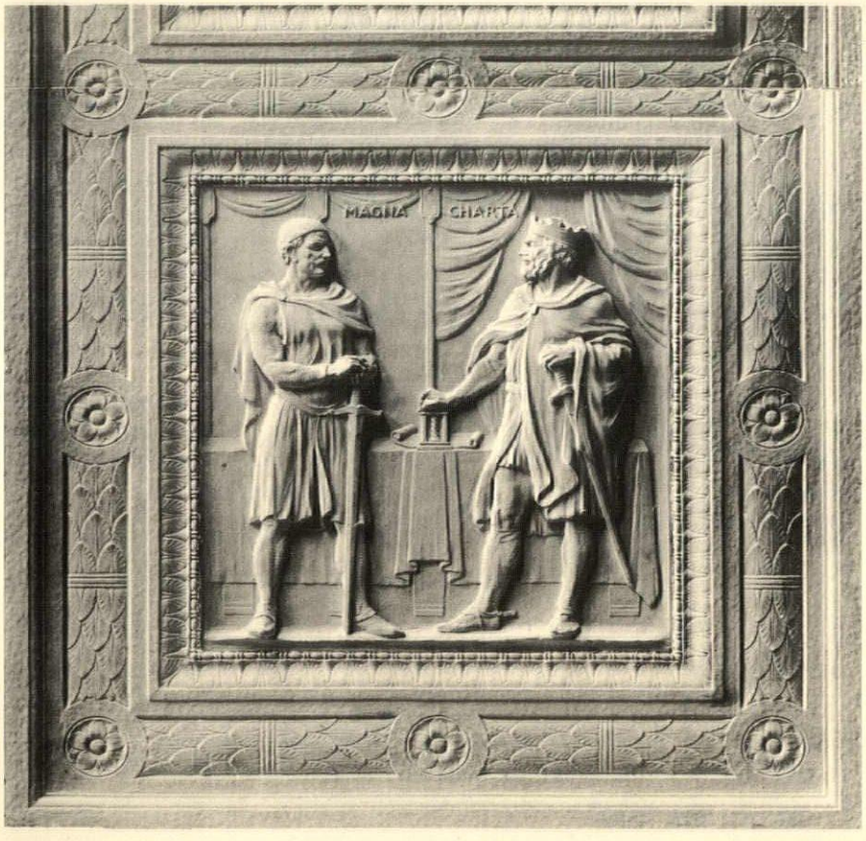
A preliminary study in pencil for the elevation of a rear courtyard. Behind the free-standing columns of Georgia marble is the Supreme Court Room

© *Wurts Bros., N. Y.*

In the southeast courtyard, looking toward the Supreme Court Room. There is an indication on the plan (page 305) that a simple treatment of planting was contemplated in these courts

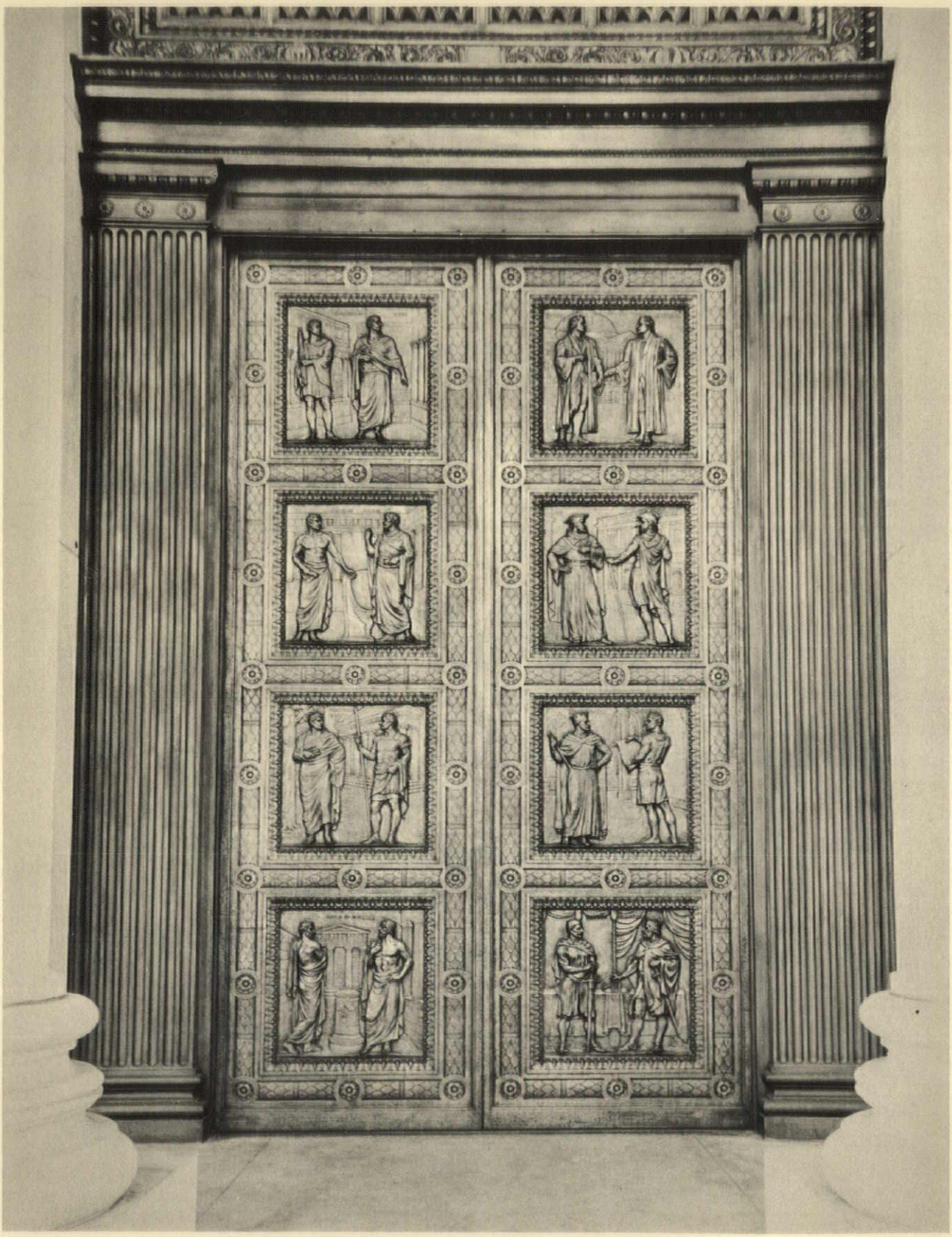


A preliminary study in pencil for the wall of the front portico. In front of it there is a double row of columns. Here again the projected inscriptions were finally omitted

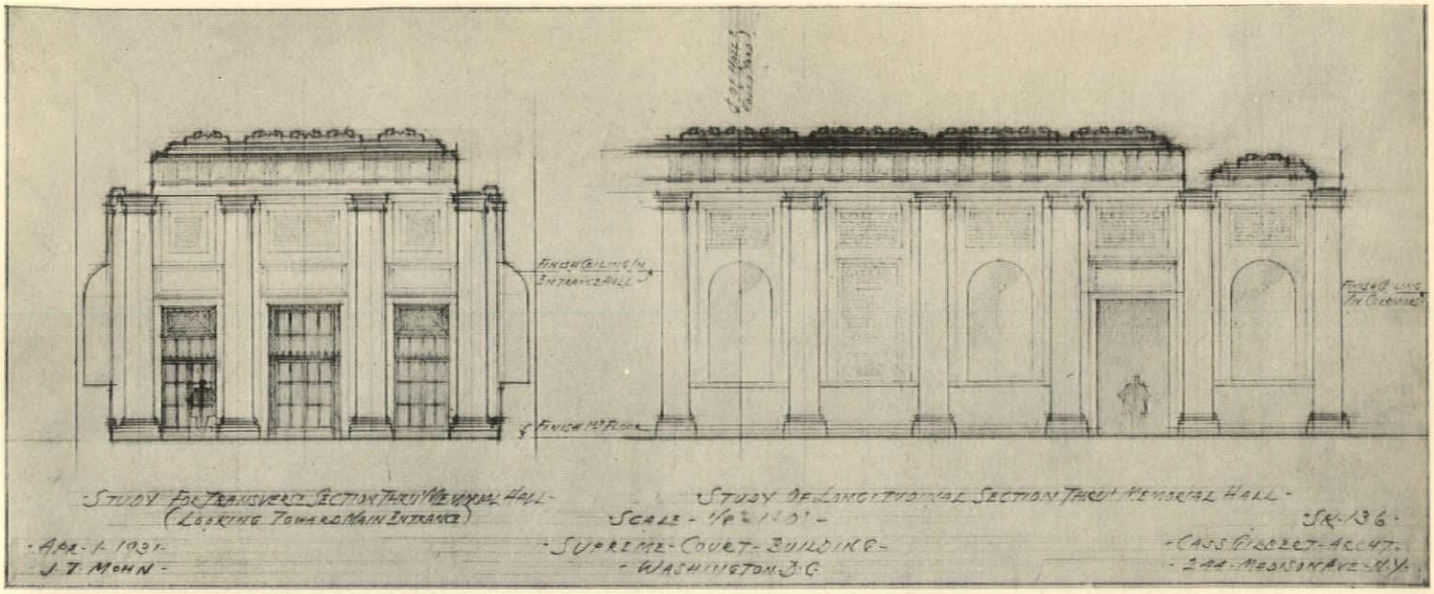


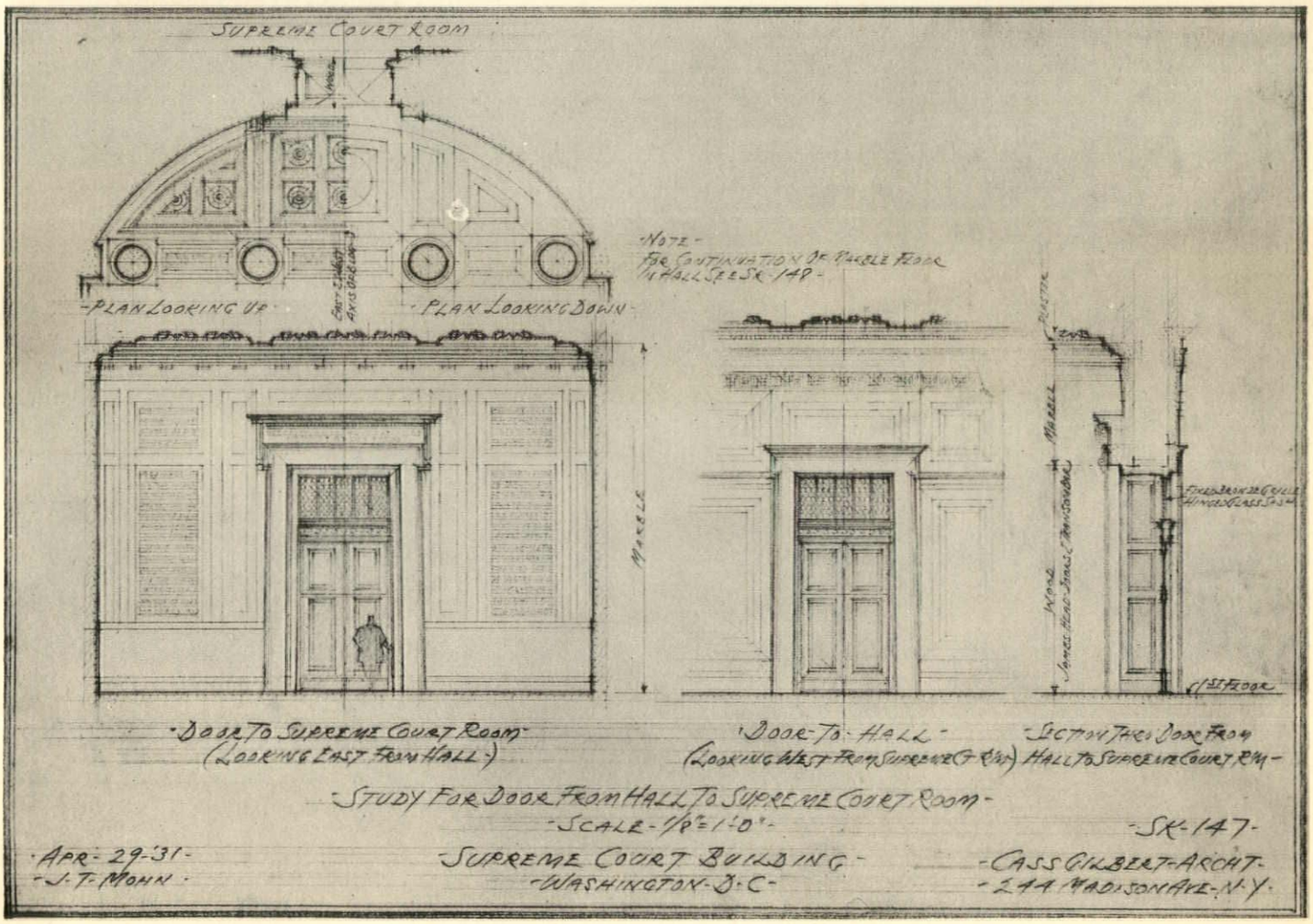
Photograph by Louis H. Dreyer

A close-up detail of the bronze doors in the west front, as shown on the facing page

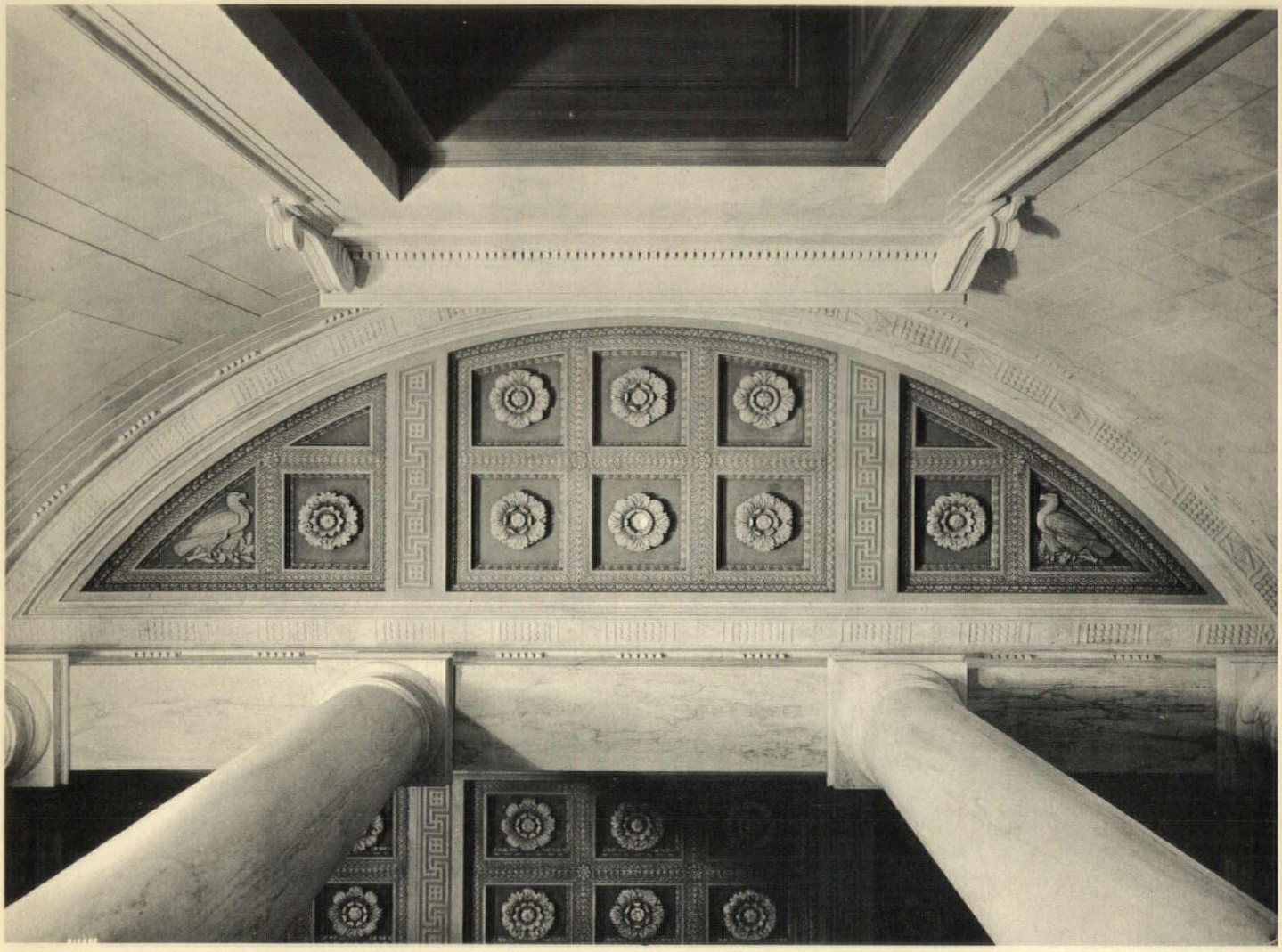


The bronze doors of the main entrance on the west front. Modeled by John Donnelly, Jr., in collaboration with the architect





Preliminary studies for Memorial Hall—the main approach to the Supreme Court Room



Looking directly up to the ceiling immediately in front of the entrance to the Supreme Court Room. The marble throughout the interior, with the exception of that in the Supreme Court Room, is Alabama marble

In the main entrance hall, first floor. At the left, a main transverse corridor extends across the building

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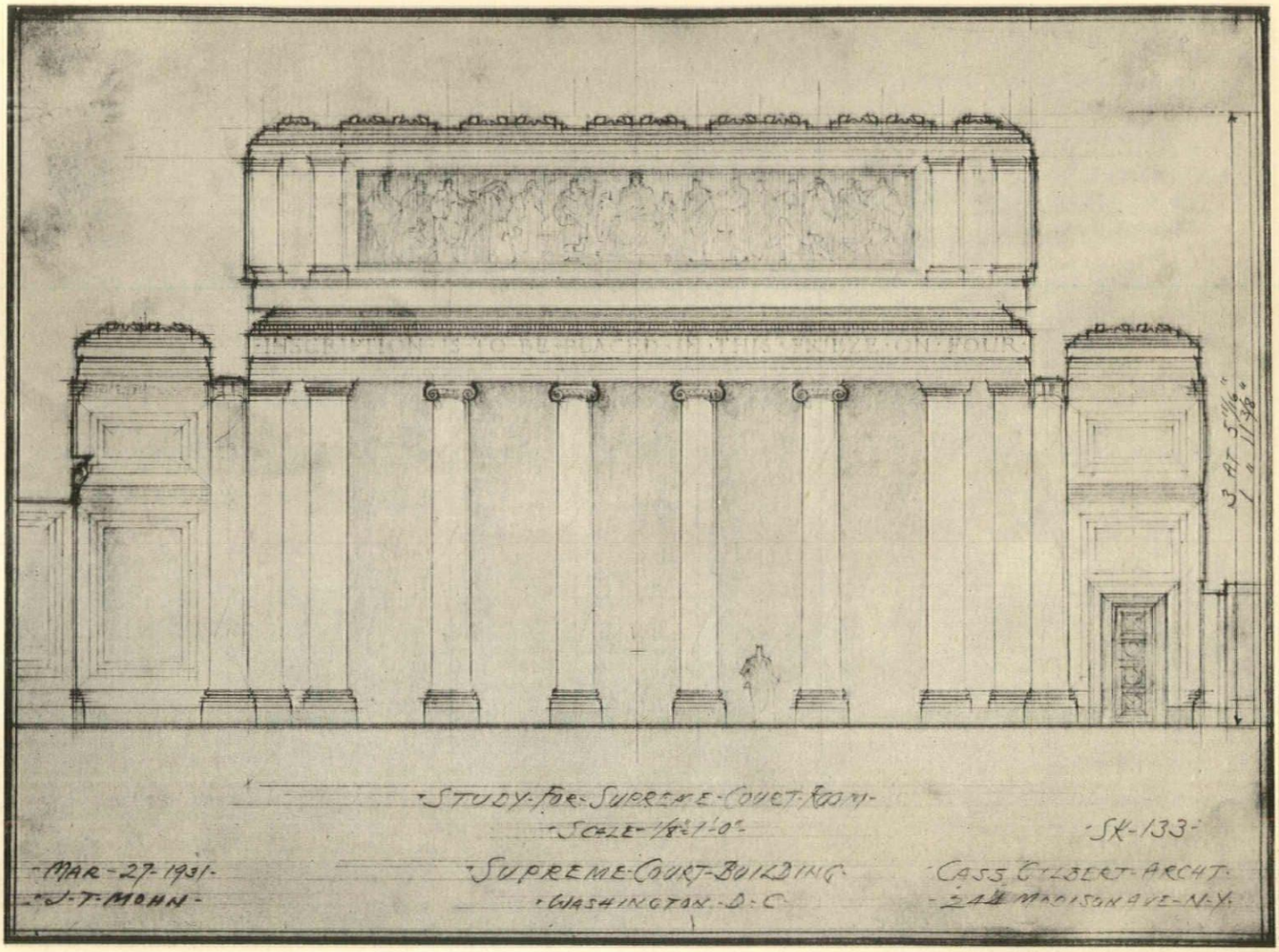
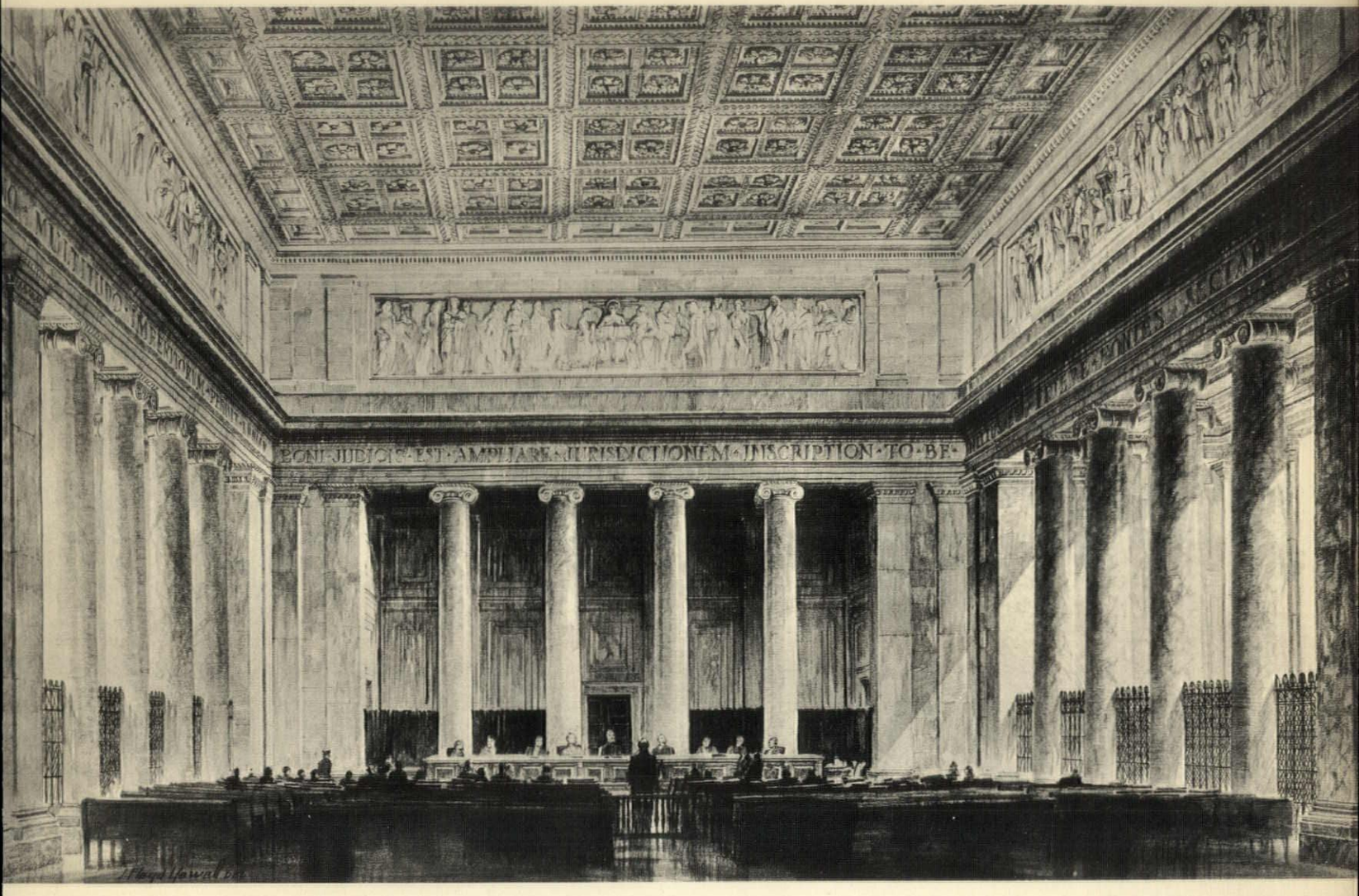
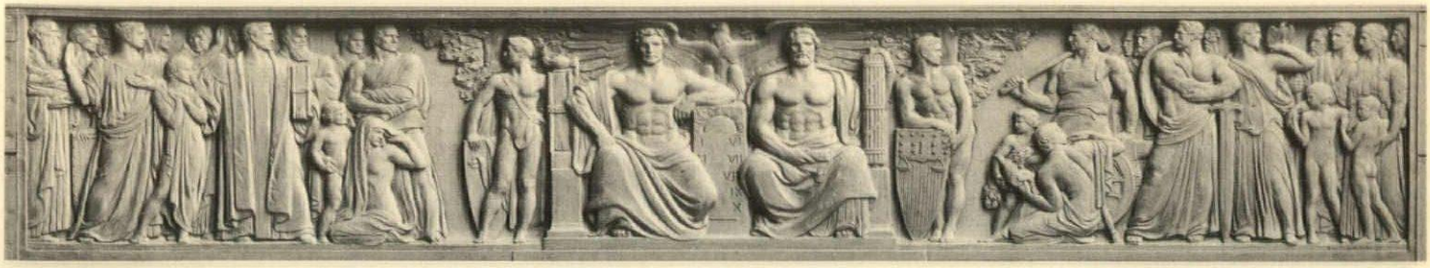
A general view of the Memorial Hall from the entrance door at west. At the far end is the entrance to the Supreme Court Room. The ceiling decoration is by Paris & Wiley

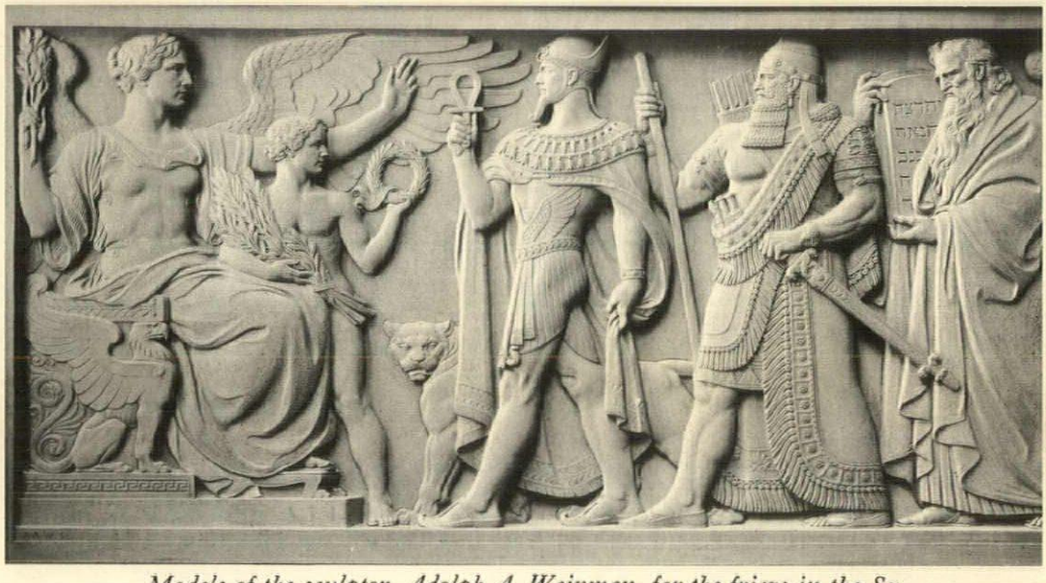


A preliminary study for the Supreme Court Room. Here again the idea of an inscription on the frieze of the order has been abandoned



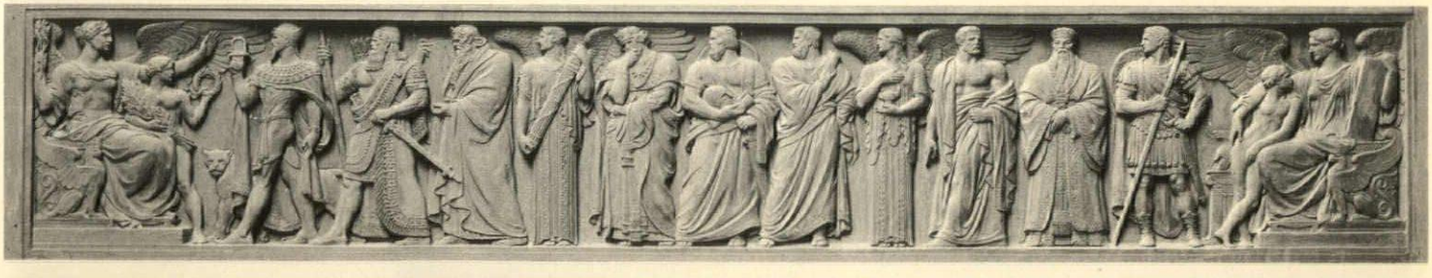
A preliminary perspective of the Supreme Court Room. The drawing was made by J. Floyd Yewell

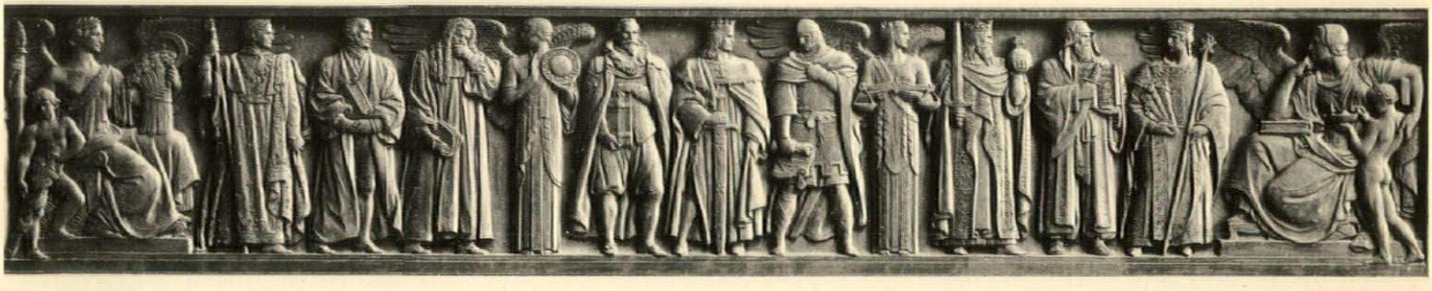




Models of the sculptor, Adolph A. Weinman, for the frieze in the Supreme Court Room. At top of page, "Majesty of the Law and Power of Government" (over the east wall above the Bench). Next below, "Triumph of Justice with Divine Guidance." In the center, a detail of "The Lawgivers." Below, two panels, "The Lawgivers"

Photographs by De Witt Ward





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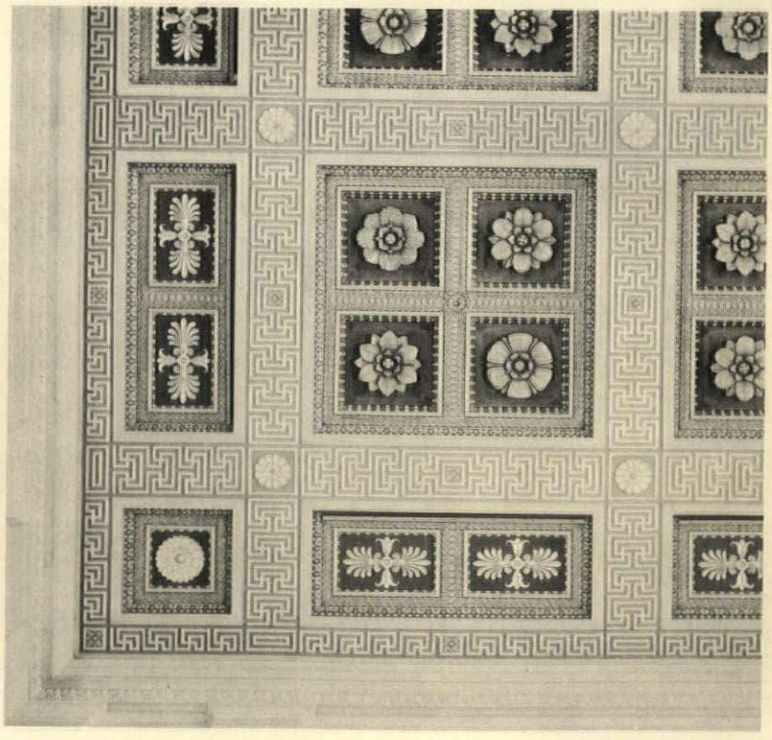
The Supreme Court Room, looking toward the Bench on the east side. In the furnishing of the room, draperies have been hung behind the columns at the rear of the Bench. The room is dominated by twenty-four Ionic columns of Light Siena Old Convent marble; walls are of Ivory Veine. The column bases and a border running around the walls are of darker marble, Levanto. The sculptured frieze is the work of Adolph A. Weinman



A detail of the ceiling in the Supreme Court Room. Decoration by Paris & Wiley

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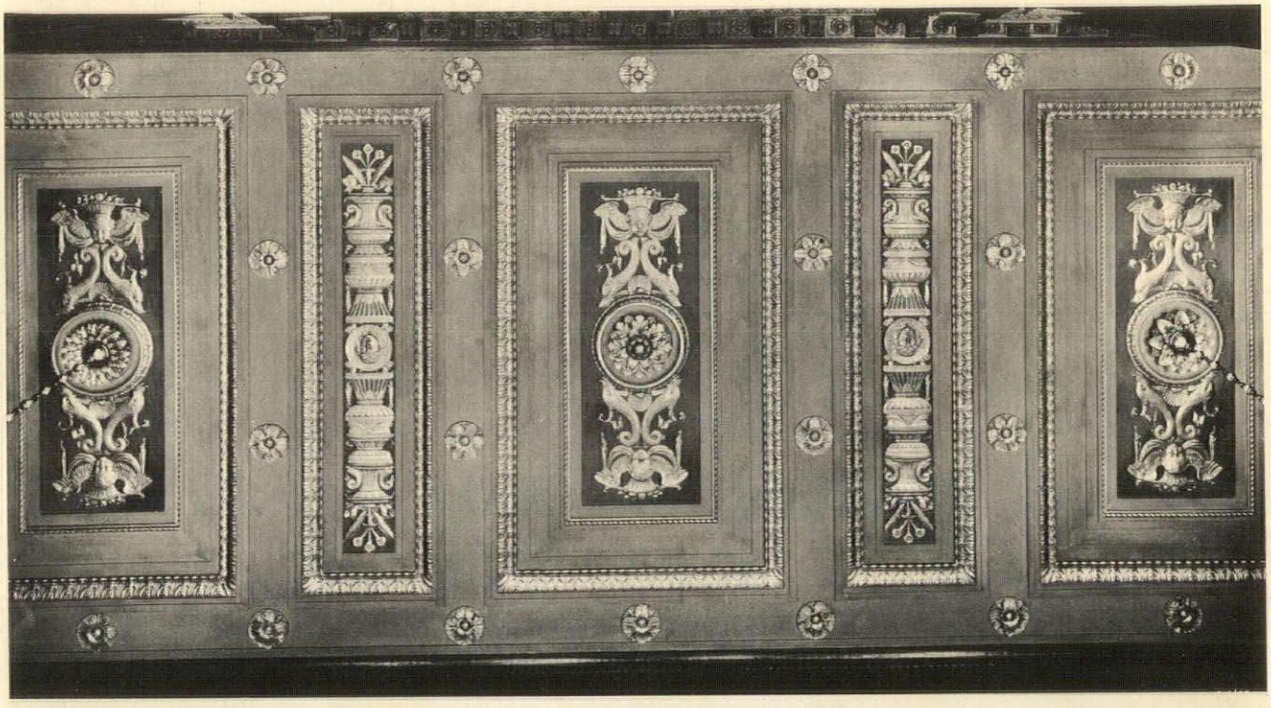
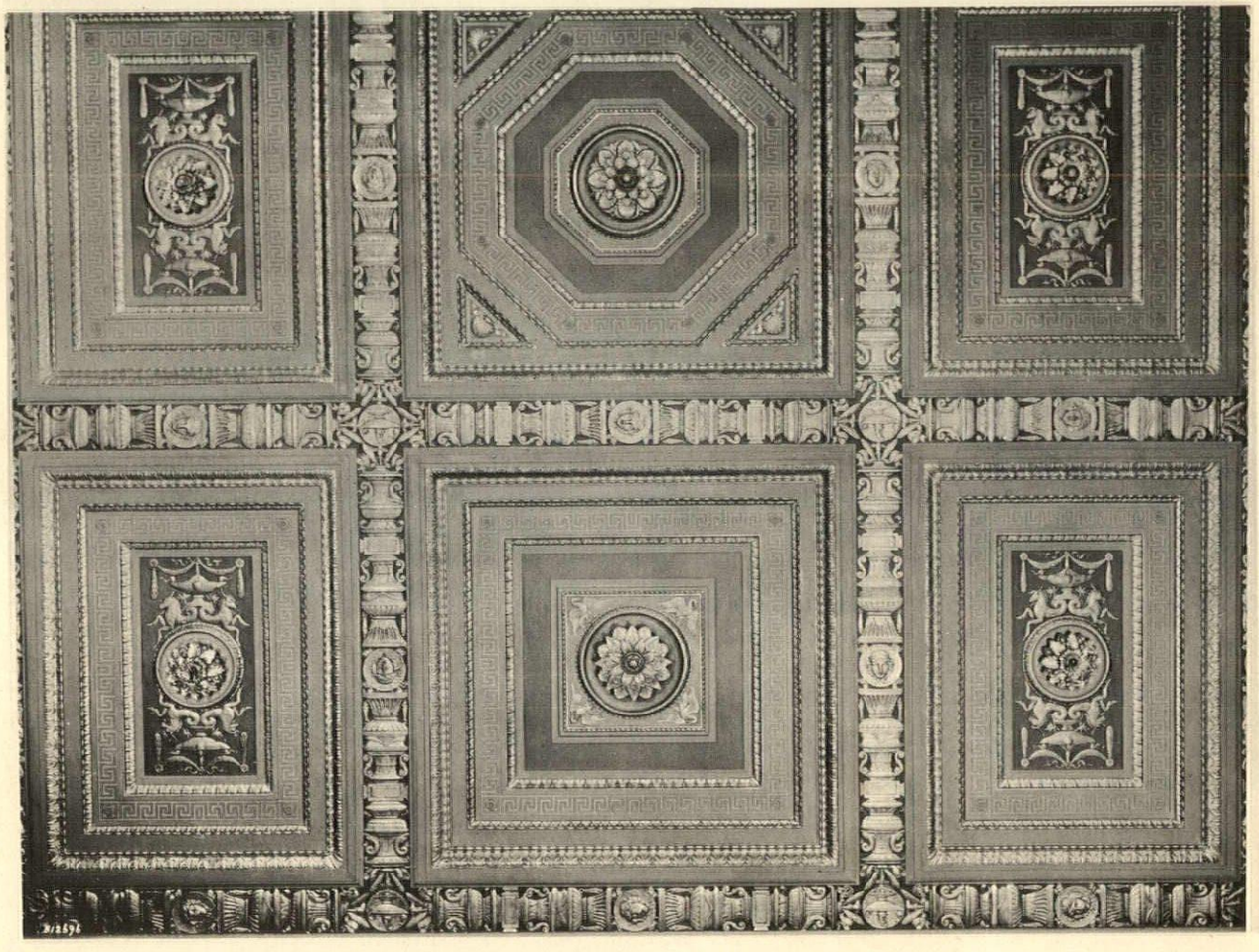
One of the side aisles of the Supreme Court Room. At the right, bronze grilles and gates separate this from the Court Room proper. At the left a central doorway opens upon one of the rear courts

A detail of one of the two self-supporting marble staircases of oval form, running from top to bottom of the main central portion of the building

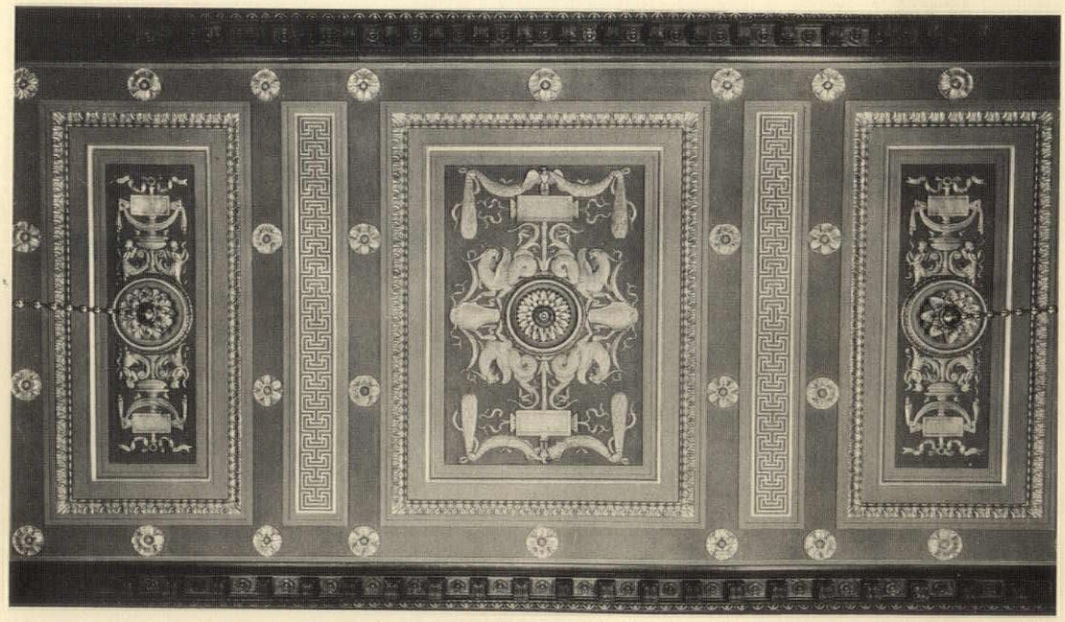




Details of two portions of the ceiling in the Main General Reading Room on the third floor

© Wurts Bros., N. Y.

In the Main General Reading Room the walls are of American white oak. Ezra Winter has brought to this room a ceiling rich in color



Another detail of the ceiling in the Main General Reading Room

Special Library on the third floor, east end. Walls are of American white oak. The ceiling, decorated by Mack, Jenney & Tyler, is in shades of brown to harmonize with the oak and gilded ornament

One of the two main conference rooms on the first floor on the north side of the building. Woodwork is slightly darkened American white oak. The ceiling, decorated by Angelo Magnanti, has dull gold rosettes in coffer soffits of varying blue and old rose

RECENT DEVELOPMENTS *in* DWELLING CONSTRUCTION

TECHNICAL REPORT NO. 1 (*Continued*), AS PREPARED BY THE TECHNICAL DIVISION, FEDERAL HOUSING ADMINISTRATION

The building industry, particularly in the realm of dwelling construction, is a seething cauldron of experiment and development. What is to come out of the pot, to change our ancient methods, few men have the temerity to predict. Meanwhile, in spite of the old saw—"a watched pot never boils"—architects will want to keep a wary eye out for what may emerge. The Technical Division, FHA, herewith presents the second part of a general survey. The first part, which appeared in the November issue, summarizes the general findings. In this continuation of the report the Technical Division classifies, under headings pertaining to materials, the specific efforts that have come under its notice, directed towards finding new and better types of dwelling construction.

In the issues immediately to follow we propose examining, without prejudice and without protagonism, some of the individual systems now aborning.—EDITOR.

Wood

In spite of its cheapness and ease of handling, the advantages of wood for more complete factory fabrication would not seem to have been realized.

Ready-cut wood frame houses have been on the market for a number of years. These are usually ordered from a catalogue or plan and the seller ships all the wood (and in some cases other materials also), with each individual piece cut to length and size. While a large number of such houses have been built, their market has been mainly in rural localities and small towns and villages where the immediate supply of building materials and labor is small.

Factory fabricated panels have been largely used for portable buildings. These generally follow the usual wood framing methods. Various modifications of this idea are coming into use for factory fabricated houses.

In Sweden, the City of Stockholm, in its housing development, uses large factory fabricated panels, one and two stories high, consisting of two-inch-thick tongue-and-groove planking, wood-chip insulation, sheathing paper, and siding, the panels being made up complete with windows and doors.

While large sheets made of pressed wood pulp, fiber, or of plywood are finding increasing use as interior finishes, the new technique has, until quite recently, generally neglected the use of wood. Now, with the development of thermosetting artificial resin glue and hot presses especially adapted to its use, plywood and other laminated wood construction can be made more durable and weather resistant.

Structural units made of plywood glued to opposite sides of a wood frame develop much greater strength than nailed-up panels having the same size members. Such construction utilizes the "stressed covering" principle used in aeroplane construction, and permits of much lighter construction. Such units in large panels are used for the structural enclosures of buildings, forming, either in connection with steel framing or without other framing, the walls, floors, and roof with the plywood acting as interior and exterior finished surfaces if desired. Insulation is usually included within the units.

Structural units may also be formed of plywood panels and strip-steel channels, the flanges of the channels being restrained in grooves in the edges of the plywood.

The objection raised against wood is that, unless treated, it is combustible, subject to attacks by rot and termites, and it shrinks and warps. Much work is being done today in the field of wood preservation to overcome these objectionable features, but the durability of such treatments and of the synthetic resin glues remains to be proven.

Aladdin Company, Bay City, Mich.; Louis Bossert & Sons, Inc., Grand Street and Newton Creek, Brooklyn, N. Y.; Bennett Homes & Lumber Co., Inc., North Tonawanda, N. Y.; International Mill & Timber Co. (Sterling System Homes), Bay City, Mich.; Lewis Manufacturing Company, 23d and Michigan Avenue, Bay City, Mich.; National Mill & Lumber Company, 400 High Street, Oakland, Calif.; Pacific System Homes, 5800 South Boyle Avenue, Los Angeles, Calif.; Sears Roebuck & Company, Chicago, Ill.; Tumwater Lumber Mill Company, Olympia, Wash. Ordinary wood frame construction of the ready-cut type.

Dally Construction & Engineering Co., Lloyd Building, Seattle, Wash. Structural enclosure of glued-up plywood structural units joined by splines. Light roof trusses of wood using timber connectors.

Forest Products Laboratory, U. S. Department of Commerce, Madison, Wis. Structural enclosure of glued-up plywood structural units, joined by splines. Experimental.

Haskelite Manufacturing Corp., 208 West Washington Street, Chicago, Ill. Structural enclosure of plywood. Inner and outer walls, floors, and ceilings held together and stiffened by 18-gauge strip-steel channels and "I's" whose flanges fit into grooves in the edges of the plywood sheets.

Hodgson Company, Boston, Mass. Structural enclosure of panels made of wood frames covered with a wood finishing material on one side and insulation board on the other. Additional insulation and waterproof paper may be included in the panel. A large number of such houses built over a considerable period of years.

Jasper Wood Products Company, Jasper, Ind. Structural enclosure of glued-up plywood structural units, bolted together.

Corwin Willson, 418 Welch Boulevard, Flint, Mich. Structural enclosure of plywood concealing a wood frame specially designed to transmit loads to corners of building. Asphalt composition pressed onto plywood for floors and exterior surfaces. One house built at Flint, Mich.

Concrete

Many systems have been developed using precast concrete units, usually reinforced. They may be divided into certain general classes as follows:

Systems using bearing units laid up as a masonry wall—usually without reinforcing.

Systems using small thin slab units—up to a few feet long or high—secured to steel, or poured-in-place or precast concrete studs. Similar construction is used for floors.

Systems using large thin reinforced panels—a story high and any width—sometimes an entire wall. Similar construction for floors.

In the two latter systems, flanges are often cast on the units, and these sometimes serve as a form for poured-in-place concrete studs or columns, or act as studs or joists themselves.

Other systems use stucco or concrete applied to metal lath secured to a steel frame or reinforcing members, or to poured-in-place concrete studs or columns, beams, and joists.

The Portland Cement Association's "Report on Survey of Concrete House Construction Systems" contains extensive lists and descriptions of concrete systems, and only those systems not included in that report are listed here.

Dextone Company, New Haven, Conn. Precast slabs resting on precast joists.

John J. Earley, 2131 G Street, N.W., Washington, D. C. Large precast wall slabs fastened to poured-in-place studs. The concrete is made from colored aggregates with the aggregates exposed on the outside surface as a decorative finish. Two houses built near Washington, D. C.

Goldsmith Metal Lath Company, Cincinnati, Ohio. Panels of metal lath secured to metal pans which act as forms for poured-in-place columns, beams, and floor joists and slabs. Stucco and plaster is applied to the metal lath.

Haco Construction, Harry Cole, 4954 West Pine Boulevard, St. Louis, Mo. Small precast slabs with steel channel flanges cast in the slabs, bolted to steel framework.

Insulrock, John F. Downing, 150 Hughes Avenue, Buffalo, N. Y. Precast slabs for inner and outer walls and ceilings used as plaster and stucco base and secured to precast studs and joists.

Makeco, Matthews & Kenan, Smith-Young Tower, San Antonio, Tex. Double bearing walls of large thin slabs tied together.

Arthur H. Olmsted, Rye, N. Y. Precast studs around which concrete exterior wall is poured and to which interior finish is fastened.

J. A. Twachtman, Connecticut Precast Building Corp., Greenwich, Conn. Precast slabs and studs. One house built at Greenwich, Conn.

Gypsum and Other Plastics

Precast gypsum units have been made which are generally similar to concrete units. Gypsum, however, when used in an exterior wall or roof, must be covered with a waterproof finish of other material.

Gypsum is also cast into thin sheets or boards for wall finishes and as a backing for plaster.

Boards or slabs made of insulating material coated with plastics of various kinds, such as asbestos cement, are used for curtain walls, the plastic acting as interior and exterior finish.

Thin sheets of synthetic resinous materials are used for wall finishes.

Reinforced Brick

Steel reinforcing rods are used in the brick joints to increase strength and make possible the use of thinner walls.

One system uses precast brick panels one brick thick, made on the site by laying the brick and reinforcing rods in a form laid horizontally on the ground and pouring mortar in the joints.

In another the brick are laid up in the wall with reinforcing rods in the joints. Reinforced brick columns, beams, and curtain walls are thus formed.

Holsman & Holsman, 140 S. Dearborn Street, Chicago, Ill. Reinforced brick walls made of precast panels.

Judson Vogdes, 334 South 19th Street, Philadelphia, Pa. Reinforced brick columns, beams, and curtain walls.

Foreign Practice

Great Britain

Thorncliffe Iron Works, Newton Chambers & Company System, Sheffield. Exterior of cast-iron plates, combined with a wood frame.

G. & J. Weir, Ltd., Glasgow. Steel sheet on wood frame. A great many of these built.

Atholl Steel Houses, Ltd. $\frac{3}{16}$-inch steel plates with angle and tee frames. About 650 such houses built.

Braithwaite and Company, Telford System, West Bromwich. $\frac{1}{8}$-inch steel plates on wood frame.

Doorman, Long & Company, Middleborough. Gunite on wire mesh and steel frame.

France

Forges et Ateliers de Commentry-Oissel, Paris. Cellular concrete blocks combined with steel frame.

Société des Forges de Strasbourg, Paris. Units of corrugated steel sheets on steel frame.

Société de Construction Multicellulaires, Paris. Panels of cellulose, asbestos, and silica on corrugated steel box sections, filled with sawdust insulation with interior panels of sawdust and binder.

Société de Constructions Metallique Fillod, Paris. Story-high steel pans with steel tubing, frame, and sawdust insulation.

M. M. Mopin. Exterior walls of precast reinforced concrete panels secured to steel frame.

Germany

Heinrich Blecken, Duisburg. $\frac{1}{4}$-inch steel pans and steel framing. Over 700 houses built.

United Upper Silesian Iron Works Company. Steel sheets on steel frame.

Hirsch, Kupfer & Messingwerke, Finow, Hamburg. Copper sheets on wood frame.

The Reflecting Pool

Edwin Bateman Morris

IN the August Reflecting Pool I made what I thought was a very clear statement in regard to the matter of architectural huts dressed up with modern improvements to give them the semblance of civilized homes. I have reread it—a painful process—and I discover that I said I simply did not approve, either from a sociological or from an architectural standpoint, of houses so compact and so tiny that they were neither comfortable, nor decently private, nor in any way suitable for the functions and purposes of a home.

But what do I find? They are still going on building such houses. A news note furnishes the information that in a certain city five men erected the entire steel frame for a residence complete in thirteen hours.

There is another news item which furnishes the information that one of the mail-order firms offers a prefabricated house that can be erected and finished in two weeks. This baby-grand house is not much for size, or number of rooms, or place to receive guests, but it has steel kitchen cabinets, automatic hot water, winter air conditioning, automatic oil-fired heating, complete with humidifying, filtering and forced circulation of air. Just as beautifully equipped as a Pullman car and about as spacious!

It really is difficult to know what to do about the matter. When one takes all the trouble to explain that houses ought to be bigger, then there they go making them smaller. Sometimes I think people don't understand what they read.

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About ten years ago, when in Savannah, a casual acquaintance explained that the only improvement in that city in the previous twenty years was a shuttle-car that ran from the street-car line to the boat. I hope that is true. At any rate, they have now discontinued the shuttle-car, which lends an air of verisimilitude to the item.

Savannah is really one of the most comfortable towns. I don't know how they keep it just like that. It feels as though its citizens had decided that they would like to have it always be like Savannah, and not like any other town.

You walk through a square at intersecting streets, not formally planted (and with signs "Grass! Please!") but gently shaded and arranged so that it is easier to go through it than not. You have the pleasant feeling of having been invited to walk through someone's private grounds.

Then there is a bit of city and presently another square at an intersection of streets, somewhat like the first square. There is no statue to kill its sylvan aspect—no monument to the Second Division or similar cemetery reminder. I think it would be a good idea for these Resettlement fellows who are building up cities to go down and look around Savannah.

I went there to see a Federal building in which a scheme of wall facing had been used that is a very effective Yankee way of getting something really expensive for a relatively small outlay of money.

If you are required to build a marble building, as in the case of this Savannah structure, for the price of a limestone one, make the ashlar of marble and the ornamented work of terra-cotta finished to match marble.

It is the scheme Hornbostle used in the New York State Educational Building, but it is still good—gets better with every trial perhaps. The Savannah building has been constructed for four or five years and it requires the utmost concentration and use of technical experience to make certain which is the terra-cotta and which is the marble.

Care has to be taken in using the two materials in juxtaposition not to let any weight be transferred from the marble to the terra-cotta, as very unfortunate things result, such as chunks of terra-cotta bouncing down to the sidewalk. This did happen in the case of the Educational Building, and to a minor extent at Savannah, in places where the joints were filled solid or some of the lesser steel did a better job of shrinking than the terra-cotta.

I think it would be an excellent idea, next spring or next fall, for a lot of us to jump on a boat and go down to Savannah and plant a tree in a selected spot in one of the squares to commemorate the end of the Depression.

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A nice young fellow, with a degree in architecture from one of the foremost universities, came to see me the other day and made the statement that while he was more than glad to have the job he did have, working alone on minor architectural work for a large institution, he felt that he was stagnating, out of touch with his fellow architects, and making no professional progress whatsoever.

I hastened to tell him, though he could by no means agree with me, that he was, on the contrary, having some of the best months of his educational career, since he was in a position where he could make drawings and see the drawings put into excution, where he could get the three-dimensional feel of structural growth.

This is especially true now with the *bacillus modernus* floating about ready to enter the system of any young unprotected person. The *bacillus* carries with it a high fever and a frenzied urge toward functionalism, which is a word that reads big to youth. The word is forward-looking and pregnant with change, but they are unable really to understand it because they have only the gossip and not the feel of function.

A man who wishes to live healthy with *Moderne* and even to thrive upon it must know functionalism and not merely converse about it. If he desires to prune out illogical forms of the past, he must know the logic of the present. He must have an outdoor knowledge of the qualities and erection possibilities of stones and steel sash, tile, marble, and terra-cotta. *Moderne* is not a thing that can be taught in the schools. When a man begins improvising in any art, he has to have the background, not the mere theory.

BOOK REVIEWS

A HOUSING PROGRAM FOR THE UNITED STATES. Report prepared for the National Association of Housing Officials. Foreword by CHARLES S. ASCHER. 42 pages, 7¾ by 10½ inches. Publication No. 48. Pamphlet binding. Chicago: 1935: Public Administration Service, 850 East 58th Street. 50 cents.

It will be recalled that in 1934 three distinguished European housing experts came over, and, with Henry Wright and Ernest J. Bohn, visited nearly forty cities to study our housing problems. Over twenty-five thousand copies of a summary of their findings have been distributed. Here, however, is the complete report as made to the National Association of Housing officials.

ART IN NEW YORK. A Guide to Things Worth Seeing. By FLORENCE N. LEVY. 135 pages, 3½ by 6¼ inches. Illustrated from photographs. Pamphlet binding. New York: 1935: The Municipal Art Society. 30 cents.

CHECK LIST OF CONSTRUCTION, CONSTRUCTION MATERIALS, AND EQUIPMENT. By GEORGE W. SPAULDING. 323 pages 7 by 10½ inches. Semi-looseleaf flexible binding. Denver: 1935: George W. Spaulding, 814 East 18th Avenue. $7.

This is not a skeleton specification, nor a list of selected trade names, nor an attempt to indicate the superiority of one material over another. It is a comprehensive check list, conveniently arranged with alphabetical and classification tabs, designed to be used as a reminder of items to be considered and also for final checking purposes against specifications, estimates, or bills of materials.

THE NEW ARCHITECTURAL SCULPTURE. By WALTER RAYMOND AGARD. 124 pages, 6 by 9¼ inches. Illustrations from photographs. New York: 1935: Oxford University Press. $3.

Professor Agard, who is in the Department of Classics at the University of Wisconsin, has interested himself in the sculpture of today which is directly related to buildings, rather than to sculpture which falls frequently in the line of classic, Renaissance, and Gothic prototypes. Professor Agard includes also some of the modern memorials. In a word, the book concerns itself with the closer relationship of architecture and sculpture along the lines of work that is being done by such men as Lee Lawrie, Eric Gill, Rene Chambellan, Henri Bouchard, Hans Panzer, and others.

BETHLEHEM ALLOY AND SPECIAL STEELS —Bars, Billets, Blooms and Slabs. 375 pages, 6 by 9 inches. Illustrations from photographs, microphotographs, and diagrams. Bethlehem, Pa.: 1935: Bethlehem Steel Company. $1.

In these days when new alloys of steel are bringing into use a host of what are practically new metals, this volume is particularly timely and helpful. It is a scientific treatise dealing with the various grades of steel; the particular kinds of steel used for specific purposes; testing and properties of the metal; the working of steel; and many reference tables, definitions, and other concise information that will insure the volume an easily accessible place on the shelves of the architect's and engineer's working library.

BEHAVIOR OF HIGH-EARLY-STRENGTH CEMENT CONCRETES AND MORTARS UNDER VARIOUS TEMPERATURE AND HUMIDITY CONDITIONS. By LOUIS SCHUMAN and EDWARD A. PISAPIA. 25 pages, 6 by 9¼ inches. Illustrations from graphs. Research Paper RP799. Pamphlet binding. Washington, D. C.: 1935: U. S. Department of Commerce. 5 cents.

A COMMUNITY-PLANNING PRIMER FOR ILLINOIS. By KARL B. LOHMANN. 24 pages, 6 by 9 inches. Vol. XXXII. No. 50, University of Illinois Bulletin. Pamphlet binding. Urbana, Ill.: 1935: University of Illinois.

SIMPLIFIED DESIGN OF CONCRETE FLOOR SYSTEMS. 72 pages, 6 by 9 inches. Illustrations from photographs and diagrams. Pamphlet binding. Chicago: 1935: Portland Cement Association.

A concise compilation of data for use in the design of concrete floor spans of various types, together with recommendations for live loads, tables of building material weights, etc.

THE STRENGTH OF MONOLITHIC CONCRETE WALLS. By FRANK E. RICHART and NATHAN M. NEWMARK. 36 pages, 6 by 9 inches. Illustrations from diagrams and photographs. Bulletin No. 277. Pamphlet binding. Urbana, Ill.: 1935: University of Illinois. 40 cents.

ART IN THE U. S. S. R. Edited by C. G. HOLME. Introduction by A. Y. AROSEV. 138 pages, 8¼ by 11¼ inches. Illustrations from photographs and drawings, some in color. Printed in Great Britain. New York: 1935: The Studio Publications, Inc. $4.50, cloth; $3.50, wrapper.

A survey by *The Studio* of the arts in Soviet Russia; architecture, painting, sculpture, poster and cartoon, theatre, cinema, and handicrafts. To each section a Soviet authority contributes an article describing the changes that have taken place in these arts during the Soviet régime. The section on architecture makes clear the fact that every architectural production in the U. S. S. R. is now carried out in accordance with a unified general plan. Most of the new architecture, of course, consists of public buildings and residential groups. In this category of shelter, the Soviets neither build skyscraper tenements nor individual cottages, but rather several types of residential housing.

BETTER PRACTICE

By W. F. Bartels

ELECTRICAL WORK

1—GENERAL

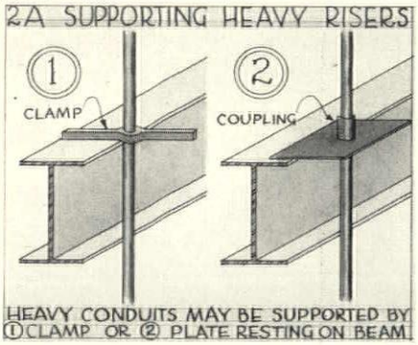
ONE of the truisms in the building trades is that "you find out mistakes at your own expense." Much of this useless expense can be avoided if electrical specifications are not copied verbatim from previous jobs. This does not mean that certain helpful general clauses should not be used, but the architect should try to visualize and then accurately describe the entire electrical work of the building.

The electrical contractor must be made responsible for turning on and off the current during construction. This will include turning current on for motors, pumps, and other apparatus and equipment. The electrician must be made responsible for all apparatus and equipment that he switches on; too often electricians will burn out motors, bearings, and other parts when not made responsible for them. The electrician must also be made responsible for the maintenance of temporary light and power, and the lighting of bridges if these are necessary. He must comply with the rules of the Electrical Code, as well as with the local ordinances. The architect should ascertain to what place the utility company brings in their service. He should inform the electrician whether or not he must remove his own rubbish and whether or not he is to do his own cutting and patching. It is desirable that the electrician do all his own cutting for the proper installation of his work, but in patching or repairing the damage done, he had better employ the services of the contractor whose work is so damaged. The electrician should be informed whether or not the owner will provide a watchman. But even if one is provided, it should be definitely stated that despite this the owner will not assume the liability for the loss of, or damage to, tools, materials, personal property, etc.

2—SPECIFICATIONS

The architect should remember that low maintenance costs are the result of good wiring and good insulation. Too often the phrase is used: "The wiring shall be of sufficient size to carry the load intended for it." The architect should make it his business to find out what size is required, and call for it to be installed. The complete specification should be ready for the electrician when the job is first started. In many cases work is held up because lines that are to be buried in concrete cannot be placed because of lack of information. A good grade of wire should be called for in order that proper insulation may be obtained. If the job can afford it, it is more desirable that conduit work be used rather than the more common armored cable. The cable or conduit should be properly supported as called for in the code, and the heavy risers be supported by regular hangers. In running heavy risers in steel or concrete buildings, they may very readily be supported by means of a plate pierced with holes the size of the risers. The risers should be joined immediately above the plate by a coupling which supports them. The plate may rest on the concrete of iron beam (Fig. 2A).

2A SUPPORTING HEAVY RISERS



HEAVY CONDUITS MAY BE SUPPORTED BY ①CLAMP OR ② PLATE RESTING ON BEAM

The architect should make sure to specify everything that is to go in the job. Twin base or wall outlets should be included. Pull chains should be eliminated as far as possible. Some local ordinances go so far as to prohibit pull chains in bathrooms. Convenience outlets should be properly spaced, the interval depending on the type of room. The desirable dimensions for these may be obtained from any of the electrical manufacturing companies. Transformers should be called for in place of the usual dry-cell batteries for bells, annunciators, etc. Flush plates, while a small item in themselves, should be ordered to harmonize with the room in which they are placed; there are many kinds available. Provision should be made for unit prices on work done and that not done, so that at the end of the job there is less conflict about extras and allowances. Besides furnishing all certificates and approvals, the contractor should be required to furnish 10 per cent cartridge fuse containers with 25 per cent refills and 25 per cent screw plugs. It might be well for the architect to call for the approval by his superintendent of the position of panel boxes, fuse boxes, bells, annunciators, etc., in order that they will come out properly in relation to kitchen cabinets, etc.

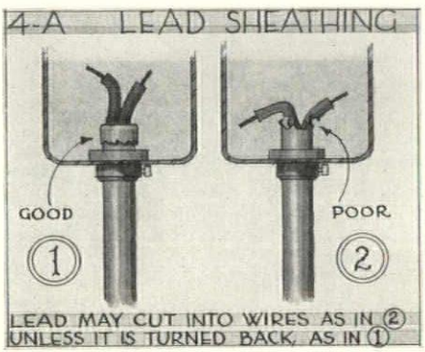
3—PLANS

Plans for electrical work, it seems necessary to add, should be so laid out that switches will be conveniently placed. Switches should be provided to control wall brackets. Doors should swing so that switches will not be placed behind them, or in other equally inaccessible places. Likewise, radiators should be shown, so that on completion of the electrical work it will not be found that base outlets are behind them.

Base-plugs and wall outlets are doubly useful when of the duplex type. In locating basement light outlets, it is important that one be placed near the water gauge of the boiler so that there will be no excuse for letting the water level become dangerously low. Lights are a great boon in closets that do not have a reasonable amount of natural light when the doors are open. Fuses or circuit-breakers should be placed in convenient and handy places, such as in foyers, so that in case of a short circuit they may be readily accessible. In the panel box there should be a typed list showing which rooms are on each circuit so that in

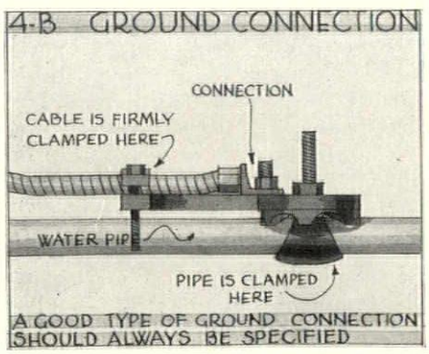
replacing a burned-out fuse a series of experiments is not necessary. No panel boxes should be located in stair halls, fire towers, etc., nor should they be allowed on temporary walls, such as might occur in lofts or office buildings. It is desirable to use at least two circuits for each large room or apartment, and it is preferable not to have base or wall outlets on the same circuit as the fixed lights.

The service switch should be located in an accessible place. In private houses it is sometimes desirable to have the electric meter readable from the outside. Some owners often desire to have the meter in a small room off the cellar, but it must be remembered that the electric meter must be located at least six feet from the gas meter. Independent break-down service should be



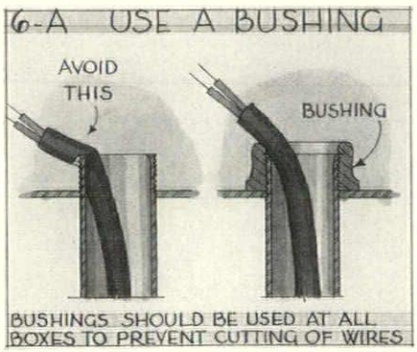
shown if required, as it may be in hospitals, schools, and other institutions. When transformer vaults are shown, it might well be noted on the plans or in the specification that they are to be for the building service only, so that the electric company does not utilize the owner's space to provide some one else with service.

Where remote-control switches are required, such as for movie booths, oil burners, etc., these should be distinctly noted on the plans. The



architect must give the location of all furred ceilings, etc., so that the electrician will know definitely where his outlets are to be placed. Adequate sizes should be specified and shown on the plans, as too often long runs are made with under-sized wires. The architect might more readily realize this if he thought to compare the flow of electric current with water in a garden hose. A long length means comparatively little output at the end due to friction, etc.

All switches should be 4′ 6″ from the floor. A good height for wall brackets in domestic work is 5′ 9″ to center from floor. Switches should not be located where there is



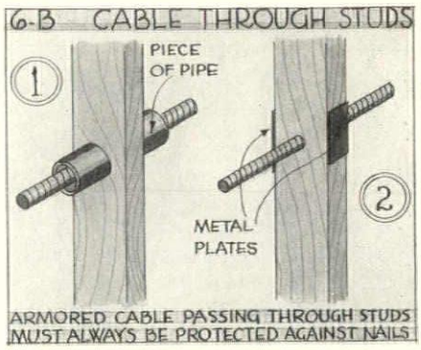
danger of any one receiving a shock, such as in operating a switch while immersed in the bathtub.

Raceways should be installed in all cases where it is probable that individual electric service may be desirable or necessary, such as in offices. However, raceways should be of such a type that the circuits may be kept to themselves by means of a barrier. It is not allowable to place low-voltage wires, such as those for telephone annunciators, etc., in the same compartments with lighting wires.

The architect should call for the contractor to submit drawings for circuit wiring, riser diagrams, and detailed arrangement of panel boards. He should carefully check these drawings, because they often bring to light certain details he may have overlooked in his own floor plans.

4—MATERIALS

The quality of materials going into a job is important. The conductivity of the copper, the quality of the rubber, and the type of insulation all are important. Lead sheathing is absolutely essential if there is apt to be any moisture present. The improper connection of this cable in the box may damage the rubber insulation. To avoid this, the lead is rolled back on itself (Fig. 4A). In conduit work the type and size should be specifically mentioned. Whether the conduit is to be black or galvanized should be specified. That buried in concrete must be galvanized. Stranded wires are preferable, and are required where larger sizes are



needed. Outside lights should have moisture-proof outlets, lead-covered wires, and moisture-proof glass covers when erected outside. Moldings of metal for wire raceways should be submitted for approval. Bells for doors, dumbwaiters, etc., should be shown. Conduits placed in damp places should be painted. Proper ground connections should be specified. One of the more desirable types is shown in Fig. 4B.

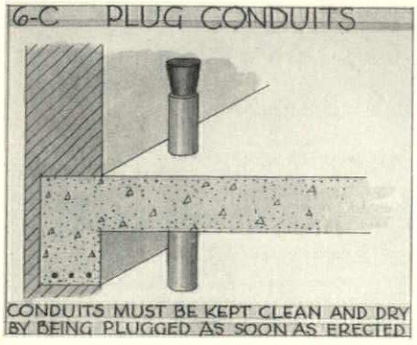
5—SIZES

In figuring mains and feeders they should never be computed for less than the full load. The feeders should also be large enough to take care of normal future loads.

In plumbing, a percentage of the total possible load is figured for the water supply to be used; but it must be remembered that there is only inconvenience at stake should there be no water; with electricity figured undersize there is danger. The false economy of using small wires cannot be stressed too much. Where the run is long, a size larger than normal should be used, particularly where the distance is 80′ or more. Where power loads or loads requiring high

starting current are present, separate circuits should be provided. Extra conduits should be installed in stores which may be used as barber shops and in apartments which may be used by physicians, dentists, etc.

Provision should also be made for telephone wires. It is preferable in low-tension work to use the same size wiring as for the electric work. It must be remembered that there is also considerable inconvenience entailed when the low-voltage system is out of order, as well as when the high-voltage system does not work.



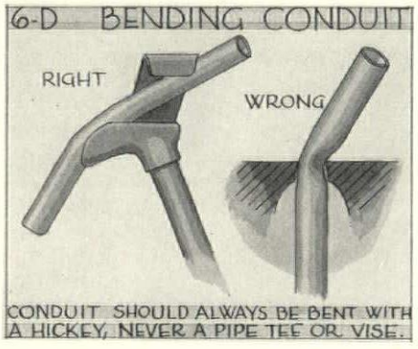
6—WORKMANSHIP

Provided proper materials are used, the success of the installation of an electric system depends on the workmanship. The architect should therefore call for and permit only first-class labor to be used on his job.

In using BX cable, difficulties generally originate at the boxes, due to improperly spliced wires or poor insulation. Proper bushings should be installed in the boxes to prevent damage to the wires (Fig. 6A). No loose cables should be allowed in shafts or similar places. This is particularly true in repair work, where the slip-shod electrician will take the easiest course regardless of future safety from short-circuits.

Where BX cable is run through stud or beam where there may be danger of nails penetrating it, the cable should be protected by means of pipe or iron plates (Fig. 6B).

Conduits should be installed as a complete system and no splices allowed within them. Where conduits are used in reinforced concrete arches, they should be placed above the reinforced mesh and not under it. Then, too, they may be placed between sleepers if these are present, or along the walls in a chase if possible. All electrical lines should be kept clear of plumbing and heating lines. The conduits should be kept clean and dry by being capped or suitably plugged as soon as they are installed (Fig. 6C). Conduits should be securely joined to boxes. In conduit work, only such bends or offsets as are absolutely necessary will be permitted. Where they are required they should be made by an approved bending machine or hickey, and in no case should they be allowed to be made with a pipe tee or vise. Bends should have not less than a 3½" inside radius (Fig. 6D). Conduits should be cut with a hacksaw and have the ends reamed after



threading, instead of having the burrs brushed off with nippers as many mechanics are prone to do (Fig. 6E). All connections should first be made mechanically secure without solder, and then should be soldered. Only graphite should be used to ease the pulling of the wires in conduits. The use of grease should be strictly prohibited, because it will cause the eventual rotting of the covering and of the rubber. Cables in vertical risers should be held by cone-shaped plugs made especially for this use (Fig. 6F).

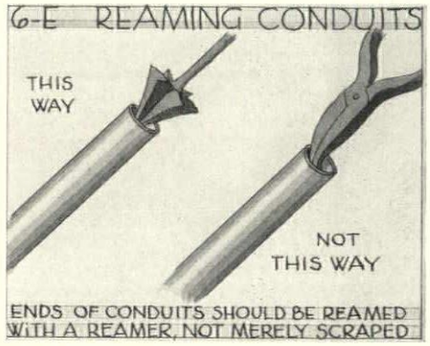
Before acceptance the architect should call for a complete test of the system to prove that it functions properly and is free from grounds and shorts. At the time the test is made it would be well for the architect to have one of his men check up on the system to see that all outlets have been installed, since it is not uncommon for contractors to leave jobs without completing all their work.

7—PRECAUTIONS

Where outlets are provided for ironing-boards, such as in the basements of apartment houses, care should be taken so that the cords will not come in contact with a wet or damp floor; in other words, a wood floor should be provided.

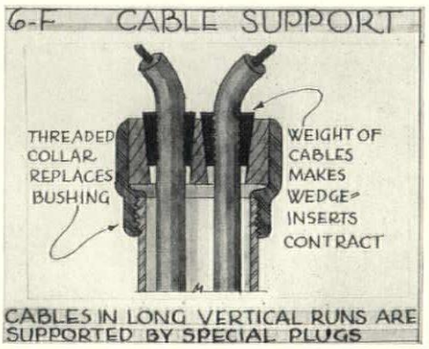
Where ground clamps are put on water lines, they should be installed on the street side of the meter or valve. Failure to do this may result in a ground not being provided when the water supply is disconnected for the winter (Fig. 7A).

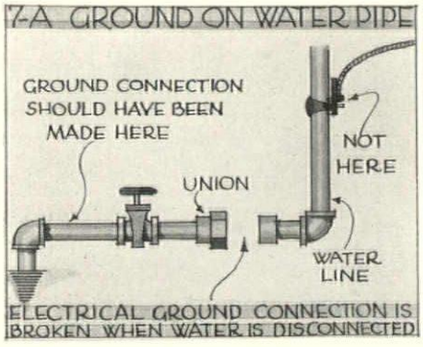
Electric grounds should never be attached to gas lines. While the architect should call for a test to be made to prove that the work is free from grounds, some electricians are not above employing a subterfuge that will make the splicing of an armored cable difficult to detect. This is done by connecting the armor of the cable with a wire (Fig. 7B). Nor should the architect be fully satis-



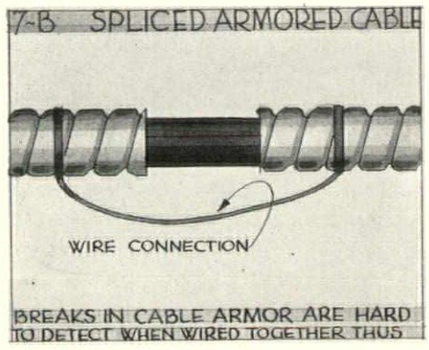
fied without further investigation when a ground is suddenly eliminated by the electrician. This he often does by reversing the polarity, and in reality the evil has not been corrected (Fig. 7C).

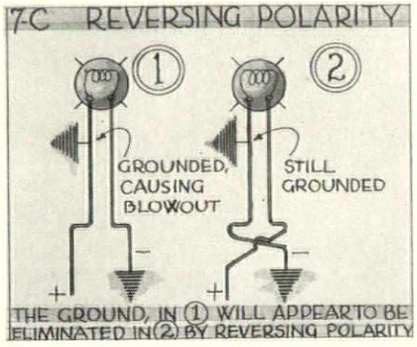
Where an architect has called for two lights on one circuit to be controlled by individual switches, and finds that this has not been done, he must be very wary when the electrician suddenly informs him that he has taken care of the matter. Probably all that has been done is to take





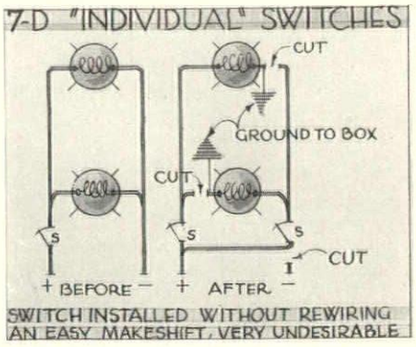
both switches off the "hot leg" (the positive wire), and merely ground the negative wire of the fixtures to the box (Fig. 7D). Besides being decidedly poor practice, it is dangerous as well. The architect must also beware where a receptacle is installed through a switch if the receptacle is installed after the fixture. Some electricians unworthy of the trade may carry the "hot leg" down to the receptacle, and, instead of connecting the neutrals, ground the receptacle to the outlet box. This again is undesirable and unfortunate (Fig. 7E).



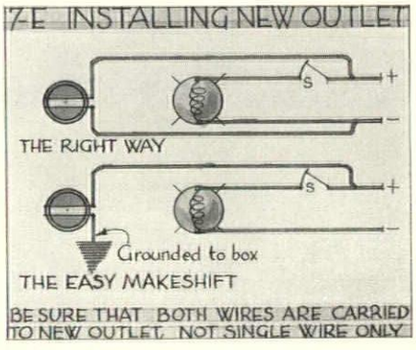


8—FIXTURES

Even though the architect calls for the fixtures to be furnished by the owner, and stipulates a certain amount to be set aside for the fixtures, it should be definitely set forth that the electrical contractor shall hang them or allow a certain stipulated amount for not doing so.



On large jobs the metal gauge of the fixtures should be stated. It should be specified whether they are to be cast or spun. So too, when fixtures are made of compositions, the percentages of the alloys should be definitely mentioned.



For the convenience of those who wish to refer occasionally to specific sections of the Better Practice series, these were published as follows:

Brickwork	February, 1934
Carpentry	September, 1934
Clay Products, Cinder and Gypsum Blocks	July, 1934
Dampproofing, Waterproofing and Calking	July, 1935
Doors and Windows	June, July, 1935
Excavation	June, 1934
Flooring	August, 1934
Granite, Stone, Marble and Slate	March, 1935
Hardware and Glazing	August, 1935
Heating	November, 1934 December, 1934
Kitchen Specialties	October, 1935
Painting	April, 1935
Plastering	March, 1934
Plumbing: (A) Roughing	October, 1933
Plumbing: (B) Water Supply	November, 1933
Plumbing: (C) Hot Water; Covering; Plans	December, 1933
Plumbing: (D) Chiefly About Fixtures	January, 1934
Renovations	November, 1935
Roofing	January, 1935
Steel and Miscellaneous Iron	February, 1935
Tiling	April, 1934
Wall Board	May, 1935

The Editor's Diary

Tuesday, October 1.—Philip Sawyer packs a lot of wisdom into a few words when he says: "If a designer is convinced that his allotment of the divine afflatus will enable him to create unquestioned masterpieces, he should lock himself in a room as a protection from all outside influences, and produce the said masterpiece. If, however, he has any doubts as to his ability to do this, it would seem only the part of wisdom for him to look about the world a bit to see what other good men have done."

Thursday, October 3.—Samuel Yellin was telling me today of a fine old fourteenth-century lock that had come into his possession, lacking, however, its key. He made a key for it, and was surprised and gratified to find that every spring in the lock's action was as effective, apparently, as it had been five hundred years ago. "That," said Samuel Yellin, "is what I would honor by the name 'Functionalism.'"

New York City is fairly bristling with new bars and new restaurants. This evening I went up to Madison Avenue at 59th Street for a preview of the new Longchamps which Winold Reiss and Albert C. Schweizer, in collaboration with Louis A. Abramson, have just produced. As new as this morning's newspaper, its brilliance and sparkle depend not so much on the clichés of bright metal, rounded corners, and the like as upon an intrinsically interesting combination of American Indian motifs, of which Weinold Reiss is such an able interpreter.

Saturday, October 5.—The Simonds Saw & Steel Company built a windowless factory; Sears, Roebuck, a windowless department store; and now the Hershey Chocolate Corporation is to put up a factory without windows. They are very thoroughly convinced of the reasonableness of such a structure from many viewpoints: the lack of windows makes for cheaper heating; the equable lighting made possible by mercury-vapor and incandescent-filament lamps, approximating daylight; and the complete utilization of floor space without regard for outside lighting. They are even going to have a series of signals that appear over the clock, announcing to the workers what the weather is outside.

Air conditioning continues to march upon us with all the trappings of a conqueror. Almost overnight it has become perhaps unthinkable that one would design enclosed space for public occupancy without adequate provision for air conditioning. It has its bright side—one thinks of the happy day when, in the subway, one will be required to breathe only laundered air. And yet the prospect has also its dark side—I should hate to think that we were coming into a time when all the air we breathe will be 99 per cent pure. What is going to become of us if they take away some of the smells which make life decidedly better worth living: burning leaves on a crisp autumn day; the salt tang off the tidal basins; the freshly upturned spadeful of earth in the spring; the smoke from an apple-wood log on the hearth; the fragrance of old manure being spread on the lawn; the roasting of chestnuts over charcoal; the smell of the impalpable dust from the field where grain is being cut? Of course, the air-conditioning manufacturers may anticipate our unwillingness to lose some of these enjoyable accompaniments to air by incorporating a drop of whatever essence we may prefer at the moment, though I should think it might be rather difficult to create synthetically what we have outdoors for the sniffing.

Monday, October 7.—Meanwhile, Mr. H. G. Wells says that the city of the future, with the exception of a few skyscrapers, will be half-subterranean. Windows, if and when used, will be of flexible glass. Interiors will have artificial sunlight and manufactured climate, and will be completely soundproof. All of which does not seem to be going very far into the future in comparison with some of Mr. Wells's previous prophecies, since we have most of these things now.

Wednesday, October 9.—Concerned by a rumor that Clarence Stein had abandoned all of his activities in connection with housing, I lunched with him today to learn about the facts. Far from giving up his interest in housing, he tells me that the resignation of R. B. O'Connor and himself from the Red Hook architectural group appointed by the New York City Housing Authority was prompted by the thought that this action might further the cause of housing.

The resignations were offered to Commissioner Langdon Post because of a combination of circumstances which, in the opinion of Stein and O'Connor, made it impossible for the architects of the group to produce satisfactory results. Some of these circumstances were: P.W.A. refuses to sign a contract with the architects now, nor will they indicate what form of contract they may eventually sign; P.W.A. will take no responsibility for the cost of producing drawings, though these drawings must be completed, under the President's executive order, in time for letting contracts by December 15, 1935; the Housing Authority will not make itself responsible for more than a limited part of the cost of preparing drawings, and, moreover, it would probably be necessary to prepare the drawings with draftsmen from the relief rolls—a handicap of uncertain scope; in spite of the short time for the preparation of drawings, these are required to be on linen and inked, a method that is not customary in private practice; even if drawings could be made within the time limit, the architects are not permitted by P.W.A. to supervise the work even to the extent of seeing that it is carried out in appearance in accordance with the design.

This whole experience is corroborative evidence that housing cannot properly be carried out as an emergency measure; it should be a long-range, carefully studied, and systematically promoted effort.

Saturday, October 12.—William Orr Ludlow's article, "Are We Building too Well?" seems to have roused a number of his readers to comment. Anthony F. Inserro, a New York architect, feels that practically all of the blame should be laid upon antiquated building codes, and that there should be some way of putting an official stamp of approval upon new materials and methods that will avoid the delays and other red tape involved in carrying a question up to the Board of Appeals in the Building Departments.

Monday, October 14.—A talk with D. C. O'Connell reinforced my conviction that the designers of America must come from the ranks of those trained in architecture. O'Connell, who works in the studios of Lurelle Guild, designing everything from silver spoons to hot-water boilers, says that the most difficult phase of the work is the abrupt changes in scale required by the variety of products. The man who can turn readily from the job of designing the exterior appearance of an electric locomotive to that of a bit of table glassware, must necessarily have a grounding in the fundamentals of design that, in the present makeup of the world, is to be had only in the educational system we have evolved to create architects.

Wednesday, October 16.—Robert D. Kohn is telling a story of a recent experience in Paris, which has a real significance for the architectural profession here. He called on the telephone a well-known French architect to ask for an appointment, and was told that the architect had so many appointments that he would not be able to see him

until late in the afternoon. When Kohn finally reached the inner office, he ventured to say that he was glad to know an architect so busy—what was it, architectural jobs or outside activities that had filled his day? "Interviews with clients, ten or twelve in all," was the reply. It seems that the architect had developed a practice not unlike that of the general practitioner in medicine. The clients were entirely free to consult him about the painting of an outbuilding, the laying of a small concrete pavement, the renewal of Venetian blinds—all minor problems which, of course, entailed only a minor fee.

Saturday, October 19.—Upon seeing the reproduction of the painting which received the thousand-dollar prize at the Carnegie Exhibit in Pittsburgh, one casually muses upon the reasoning and somewhat startling preferences of juries. It is difficult to find, in a representation of a young, dark-skinned couple seated on an Empire sofa—much in the manner of a honeymoon photograph of the late 90's—the elements of a great work of art. However, our own architectural juries do some inexplicable things too, for I see that the small house which has been chosen most frequently from among the results of the recent G. E. Small House Competition, is a house by Royal Barry Wills which, at the hands of the eminent jury, received neither prize nor honorable mention.

Monday, October 21.—Hobart Upjohn, as president of the New York Chapter, A. I. A., has what seems to me a great scheme for the Chapter's activities during the coming year. We do a lot of talking about how impossible Manhattan Island is getting to be as a place in which to live, but apparently, as Mark Twain said of similar endless discussion about the weather, "nobody does anything about it." Hobart Upjohn thinks it is possible for the Chapter to tackle the problem as a whole, leaping all hurdles of law, tradition, various entrenched interests, etc., to make a workable plan for this island. Of course, probably nothing will ever be done about carrying out the plan, but we shall have some fun in making it, and besides, isn't it the sort of thing the public has a right to expect of the profession?

Tuesday, October 22.—Harry Francis Cunningham is most apologetic for having said in his appreciation of Harold VanBuren Magonigle that the latter was the first Doctor of Architecture in America. The degree was conferred upon him by the University of Nebraska in 1931. However, it now appears that our good friend Irving K. Pond was honored with the degree of Doctor of Architecture by the University of Michigan in 1930. At any rate, the matter of chronology is decidedly less important than the fact that both men were so fully deserving of the honor.

Thursday, October 24.—I dropped in at a regular meeting of the Architects' Emergency Committee today after lunch to join in the cheering when the Committee presented Julian Levi with a beautifully engrossed expression of the Committee's appreciation of his loyalty, devotion, and unselfish services in the interests of the unemployed draftsmen during the last few years.

Incidentally, as I listened to the reading of a summary of the Committee's routine activities by its present chairman, Lucian Smith, there appeared the best news I have heard for many a long day. The Emergency Committee has had registered on its rolls for assistance, in regular or made work, over 4500 draftsmen and architects. The enrollment has now dwindled to 164, of which number not one man is in need. In other words, the emergency, in so far as architectural draftsmen in the Metropolitan District is concerned, seems to be over. This does not mean that the Committee's work is at an end, by any means, for most of its activities now, instead of finding jobs for draftsmen at their request, consists in finding draftsmen for jobs at the architect's request.

Lawrence Kocher brought Le Corbusier to the Architectural League for luncheon today, when I had the pleasure of meeting him. The man whose name has been of such significance in the modern movement is here in America for a lecture tour under the auspices of the Museum of Modern Art. Since Le Corbusier knows little English and Lawrence Kocher little French, their continued conversation together at luncheon provoked considerable discussion as to how they were making themselves understood—possibly through the use of seme new international language.

Tonight Le Corbusier, whose real name is Charles-Edouard Jeanneret, lectured in French at the Museum upon his theories of building and town planning. My own difficulty in following his French was somewhat offset by his habit of drawing on a great pad of paper at the rear of the platform, illustrating almost every thought. In this drawing he uses a fistful of colored chalks, and by the time he has covered one of the great sheets of paper behind him, the pattern is interesting even if one does not know just what it is all about.

Saturday, October 26.—Sir Giles Gilbert Scott, who is now president of the R. I. B. A., put a great deal of significance into a very few words when he spoke some months ago before a convention of British architects at Glasgow:

"In architecture there are usually two main schools of thought, due to the importance attached by different individuals to two qualities latent in every human being, the intellect and the emotions. . . . The extremists, being more vocal, form around them schools of thought which I might broadly dub 'The Thinkers' and 'The Feelers'; 'The Thinkers' being those who favor the scientific, logical and practical approach to architecture; and 'The Feelers,' those who are guided more by their instinctive feelings, emotions, and reactions. . . . The old battle of the styles has existed with us ever since a live tradition in architecture ceased to exist—as for instance, the Classic versus the Gothic struggle of my grandfather's time. . . . The present controversy of Modernism versus Traditionalism is the same issue under other names. . . .

"Of course, neither school is entirely right nor entirely wrong. The scientific approach to architecture, in so far as it concerns planning, construction and materials, is essential, but this is not enough; man, being what he is, demands something more than the scientific satisfaction of his material requirements, nor is the purely artistic approach to architecture enough, but it is just in deciding where and how this quality that appeals to man's feelings, call it art or what you will, can be brought in that we find ourselves in difficulties. . . .

"One wonders what escape there is from the apparent *cul-de-sac* into which modernism seems to have found itself. . . . The change that comes from new methods of construction and materials will be too slow to keep pace with the demand for relief from monotony; is it possible that we shall again see the introduction of useless ornamental shapes and decoration eventually developing into a Baroque Functionalism?"

Thursday, October 31.—Langdon Post, Tenement House Commissioner and a member of the New York City Housing Authority, painted a sad picture today at The Architectural League luncheon on the subject of housing. We have been talking for many months now about the great things we hoped and expected to do along the lines of replacing some of New York's unfit dwellings, and the net result is very far below our expectations. Of course, the fundamental trouble has been that housing was seized upon as an emergency measure. It is not that. It is a problem for long-range planning and gradual, rather than spasmodic, accomplishment. Perhaps our disappointment over the meagerness of the results to date may be tempered by the knowledge that we have at least learned a fundamental principle.

NUMBER 110 IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF SHUTTERS & BLINDS

Subjects of previous portfolios are listed below at left and right of page

1926
- DORMER WINDOWS
- SHUTTERS AND BLINDS

1927
- ENGLISH PANELLING
- GEORGIAN STAIRWAYS
- STONE MASONRY TEXTURES
- ENGLISH CHIMNEYS
- FANLIGHTS AND OVERDOORS
- TEXTURES OF BRICKWORK
- IRON RAILINGS
- DOOR HARDWARE
- PALLADIAN MOTIVES
- GABLE ENDS
- COLONIAL TOP-RAILINGS
- CIRCULAR AND OVAL WINDOWS

1928
- BUILT-IN BOOKCASES
- CHIMNEY TOPS
- DOOR HOODS
- BAY WINDOWS
- CUPOLAS
- GARDEN GATES
- STAIR ENDS
- BALCONIES
- GARDEN WALLS
- ARCADES
- PLASTER CEILINGS
- CORNICES OF WOOD

1929
- DOORWAY LIGHTING
- ENGLISH FIREPLACES
- GATE-POST TOPS
- GARDEN STEPS
- RAIN LEADER HEADS
- GARDEN POOLS
- QUOINS
- INTERIOR PAVING
- BELT COURSES
- KEYSTONES
- AIDS TO FENESTRATION
- BALUSTRADES

1930
- SPANDRELS
- CHANCEL FURNITURE
- BUSINESS BUILDING ENTRANCES
- GARDEN SHELTERS
- ELEVATOR DOORS
- ENTRANCE PORCHES
- PATIOS
- TREILLAGE
- FLAGPOLE HOLDERS
- CASEMENT WINDOWS
- FENCES OF WOOD
- GOTHIC DOORWAYS

1931
- BANKING-ROOM CHECK DESKS
- SECOND-STORY PORCHES
- TOWER CLOCKS
- ALTARS
- GARAGE DOORS

Below are the subjects of forthcoming Portfolios

Fireplaces
(MEDITERRANEAN TYPES)
JANUARY

Pediments
FEBRUARY

Balcony Railings
(INTERIOR)
MARCH

Gothic Buttresses
APRIL

Corner Windows
MAY

Self-supporting Stairways
JUNE

Photographs showing interesting examples under any of these headings will be welcomed by the Editor, though it should be noted that these respective issues are made up about six weeks in advance of publication date.

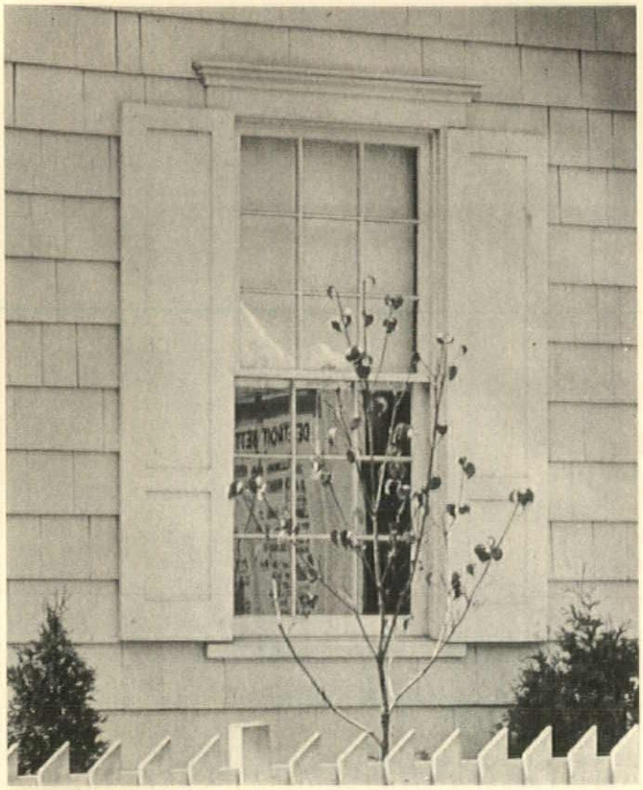
1931—*Continued*
- MAIL-CHUTE BOXES
- WEATHER-VANES
- BANK ENTRANCES
- URNS
- WINDOW GRILLES
- CHINA CUPBOARDS
- PARAPETS

1932
- RADIATOR ENCLOSURES
- INTERIOR CLOCKS
- OUTSIDE STAIRWAYS
- LEADED GLASS MEDALLIONS
- EXTERIOR DOORS OF WOOD
- METAL FENCES
- HANGING SIGNS
- WOOD CEILINGS
- MARQUISES
- WALL SHEATHING
- FRENCH STONEWORK
- OVER-MANTEL TREATMENTS

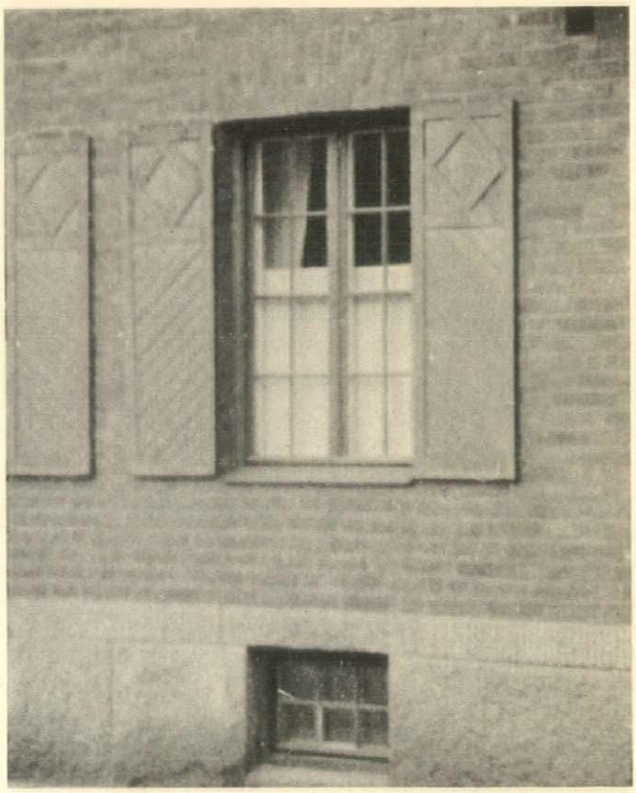
1933
- BANK SCREENS
- INTERIOR DOORS
- METAL STAIR RAILINGS
- VERANDAS
- THE EAGLE IN SCULPTURE
- EAVES RETURNS ON MASONRY GABLES
- EXTERIOR LETTERING
- ENTRANCE DRIVEWAYS
- CORBELS
- PEW ENDS
- GOTHIC NICHES
- CURTAIN TREATMENT AT WINDOWS

1934
- EXTERIOR PLASTERWORK
- CHURCH DOORS
- FOUNTAINS
- MODERN ORNAMENT
- RUSTICATION
- ORGAN CASES
- GARDEN FURNITURE
- WINDOW HEADS, EXTERIOR
- SPIRES
- BUSINESS BUILDING LOBBIES
- ROOF TRUSSES
- MODERN LIGHTING FIXTURES

1935
- CIRCULAR WINDOWS, GOTHIC AND ROMANESQUE
- TILE ROOFS
- MOLDED BRICK
- DORMER WINDOWS
- ENTRANCE SEATS
- OVERDOORS, INTERIOR
- BRICK CORNICES
- SIGNS
- CHIMNEY OFFSETS
- WINDOW HEADS, EXTERIOR, ARCHED
- UNUSUAL BRICKWORK



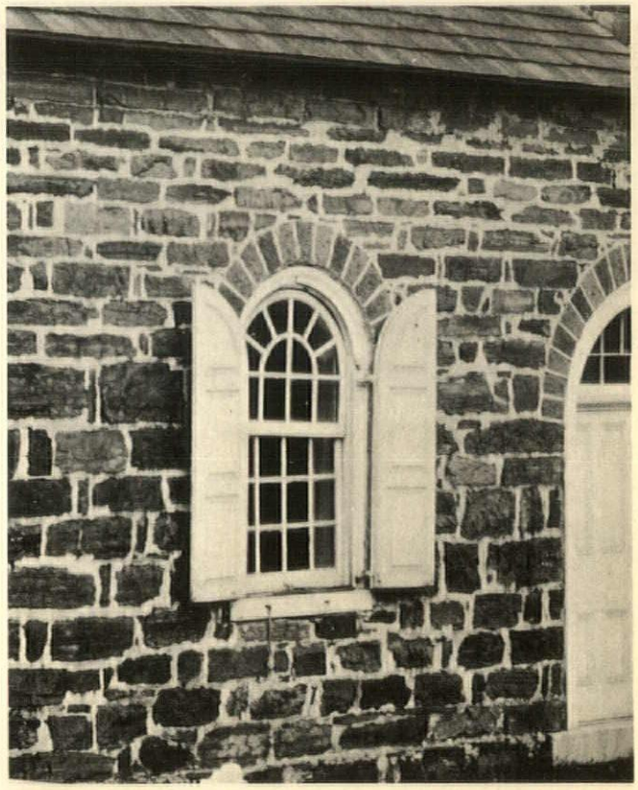
Detroit's modernized demonstration house
D. Allen Wright

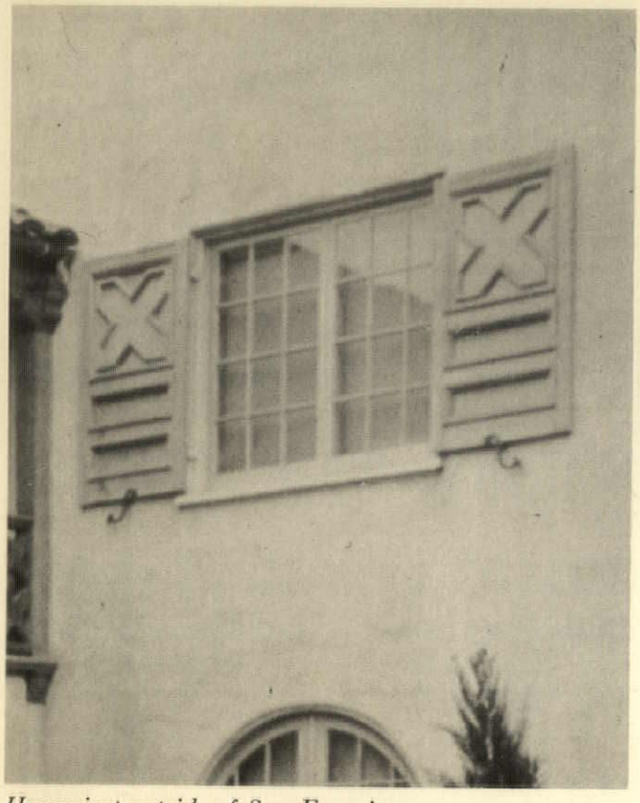


Modern work in
Stockholm, Sweden

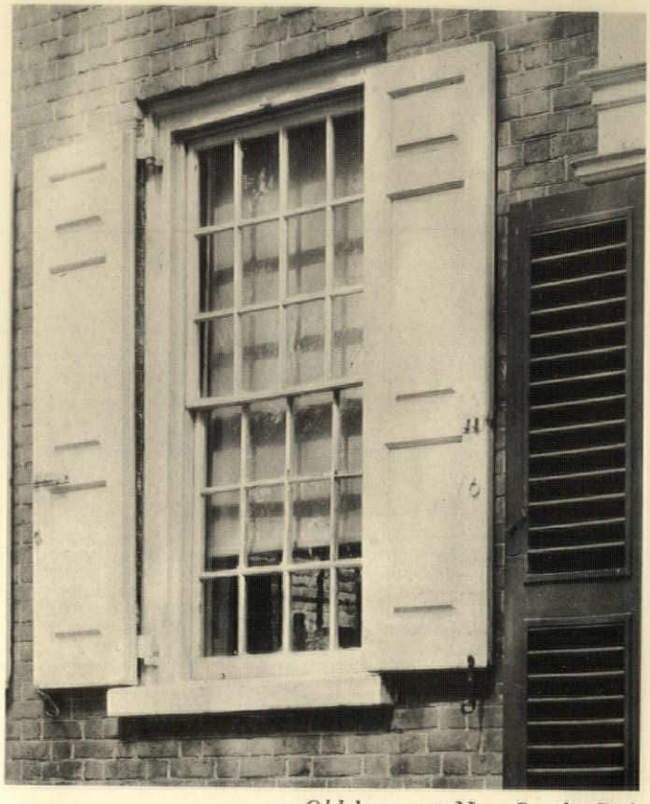
Living quarters over a garage

Old Norristown (Pa.) Presbyterian Church (1710)



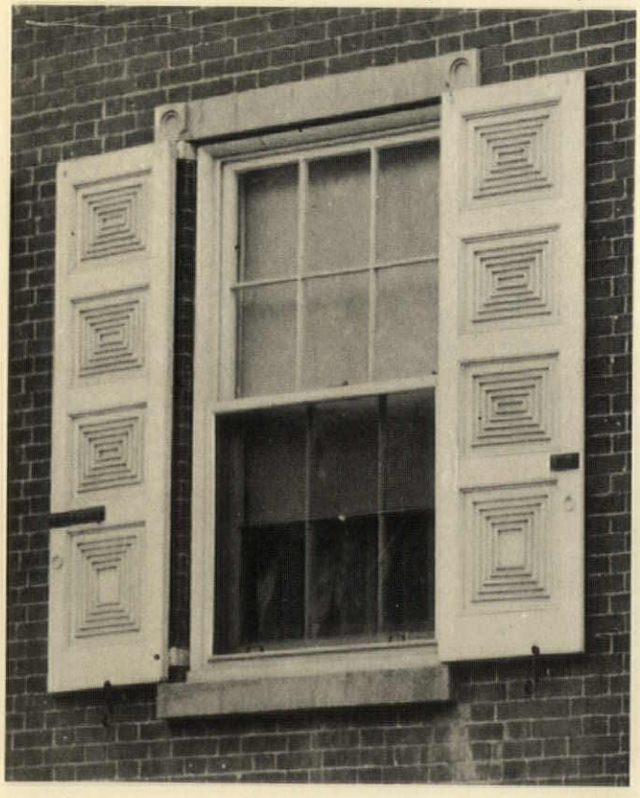


House just outside of San Francisco
Masten & Hurd

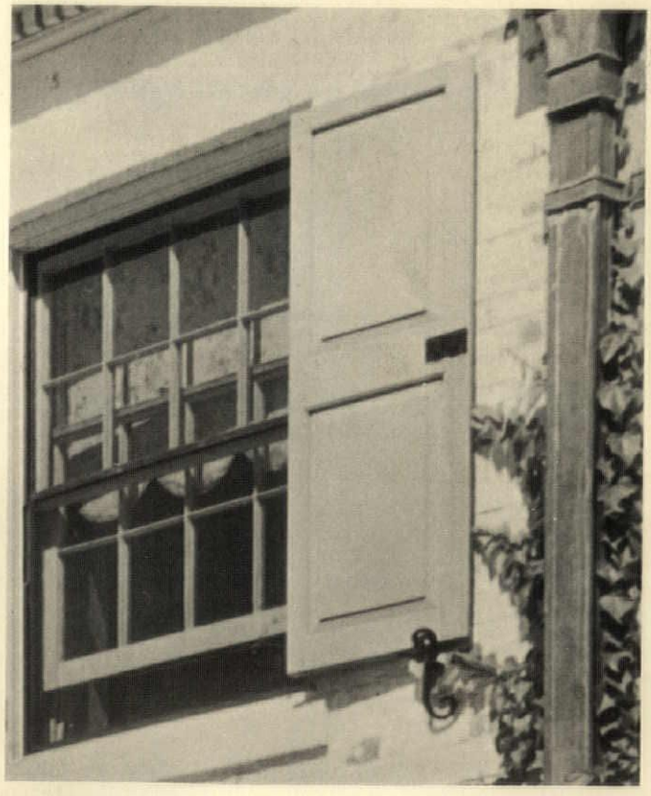


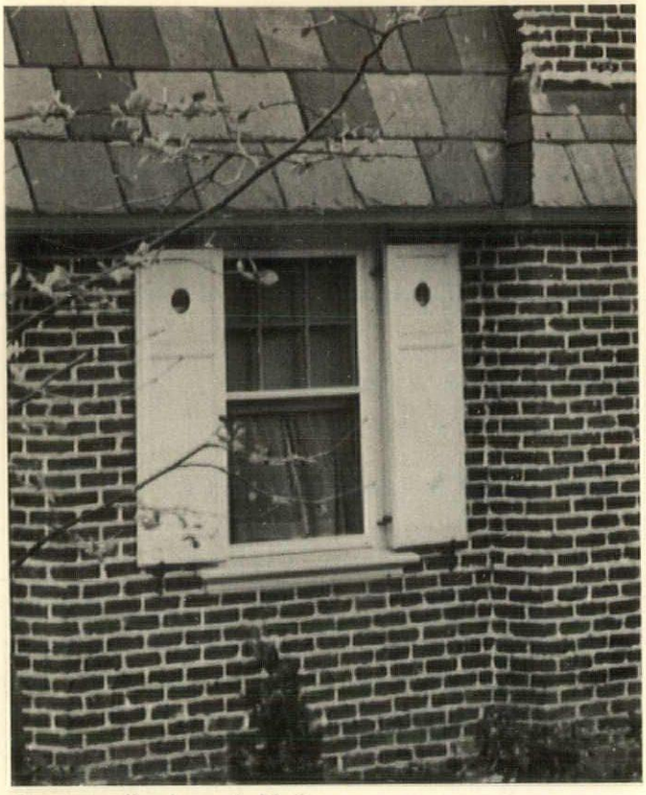
Old house at New Castle, Del.

Unusual panelling, New Castle, Del.

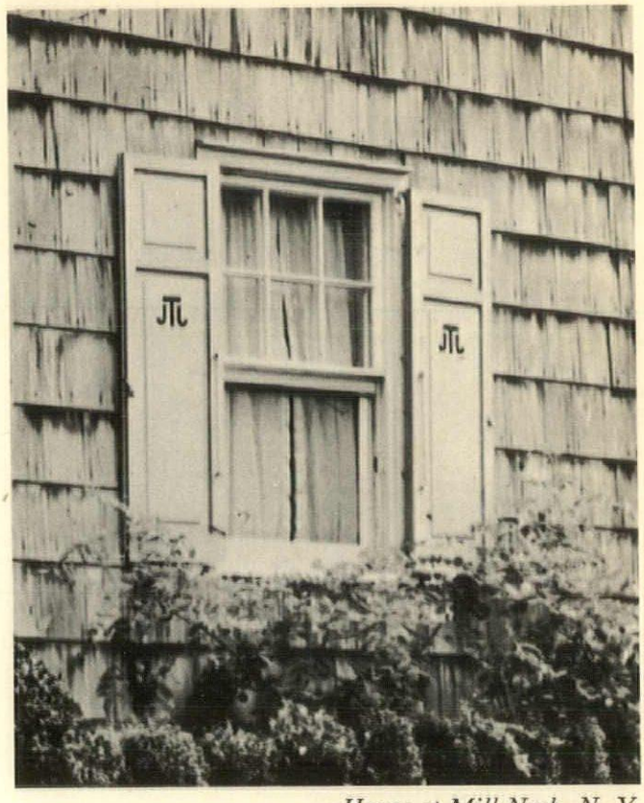


House at Brookville, N. Y.
James W. O'Connor



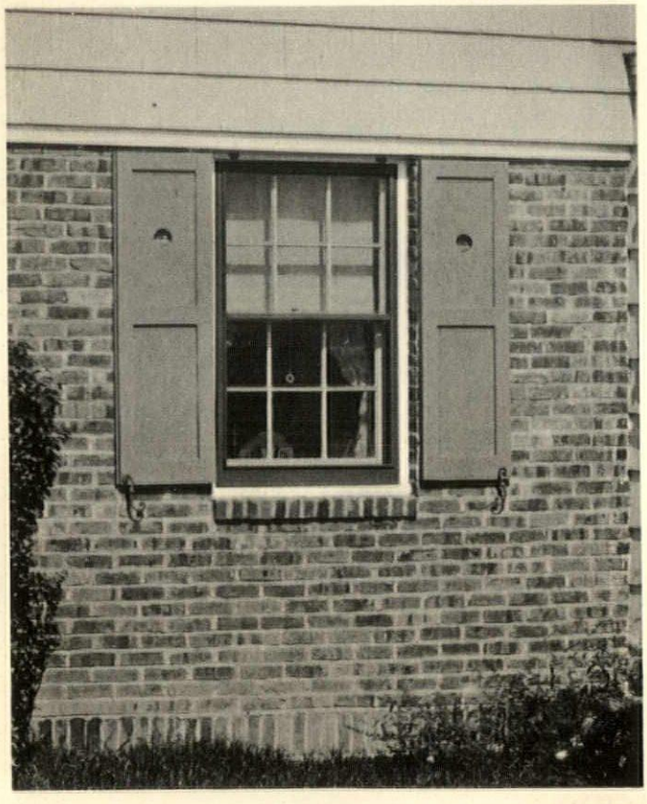


House at Englewood, N. J.
Caretto & Forster

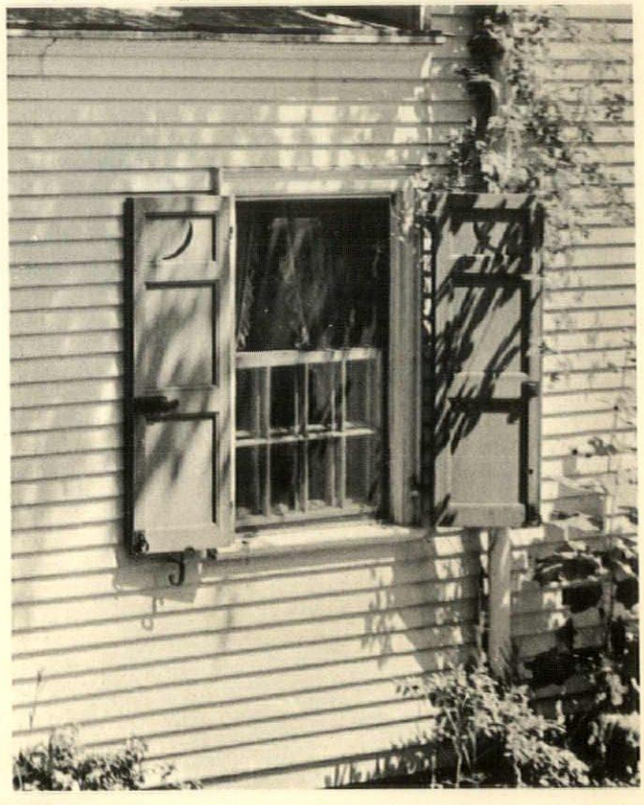


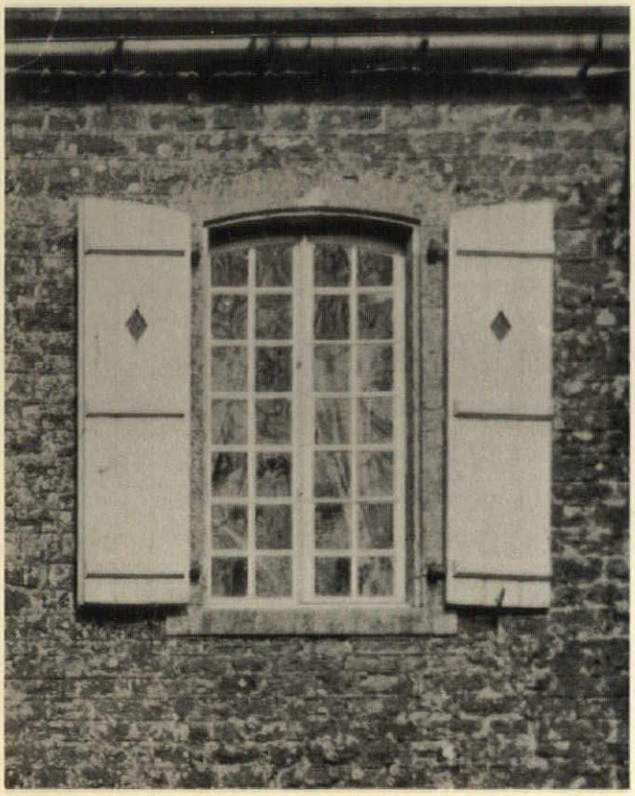
House at Mill Neck, N. Y.
William Lawrence Bottomley

House at Radburn, N. J.
Clarence S. Stein

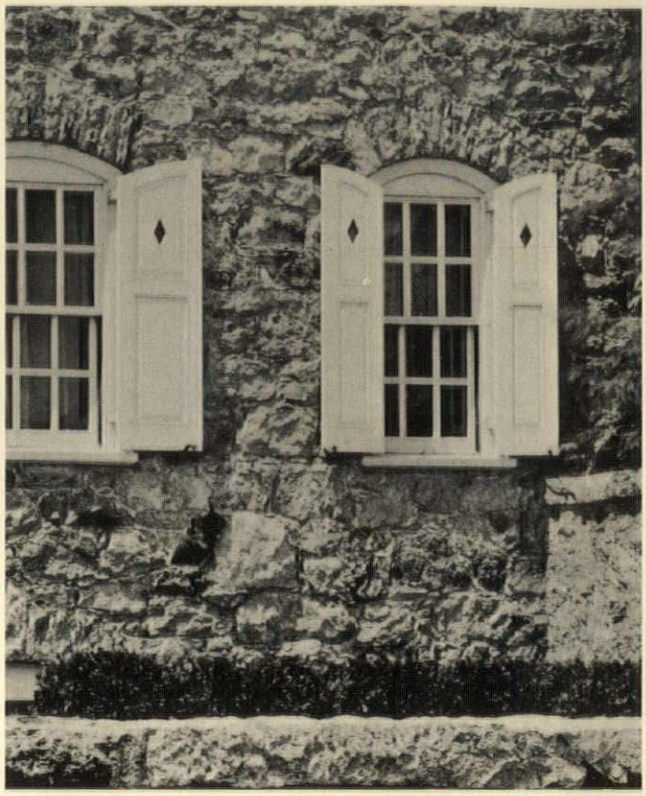


House at Scarsdale, N. Y.
Electus D. Litchfield





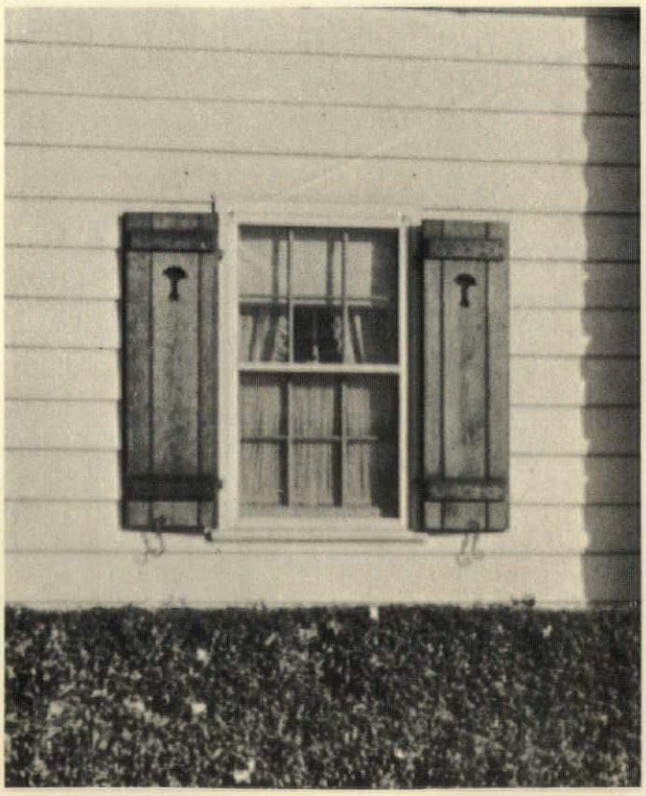
Château d'Odre,
Pas de Calais, France

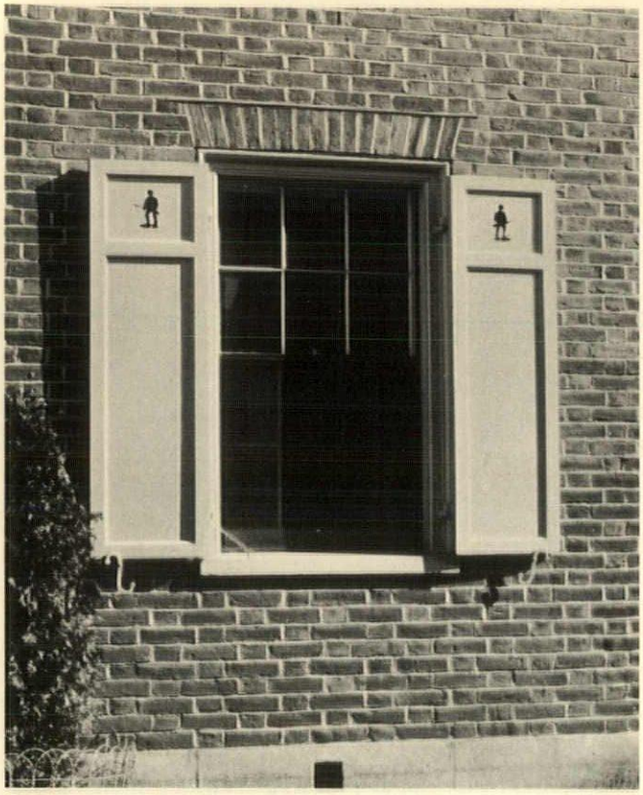


House in Connecticut
Frederick J. Sterner

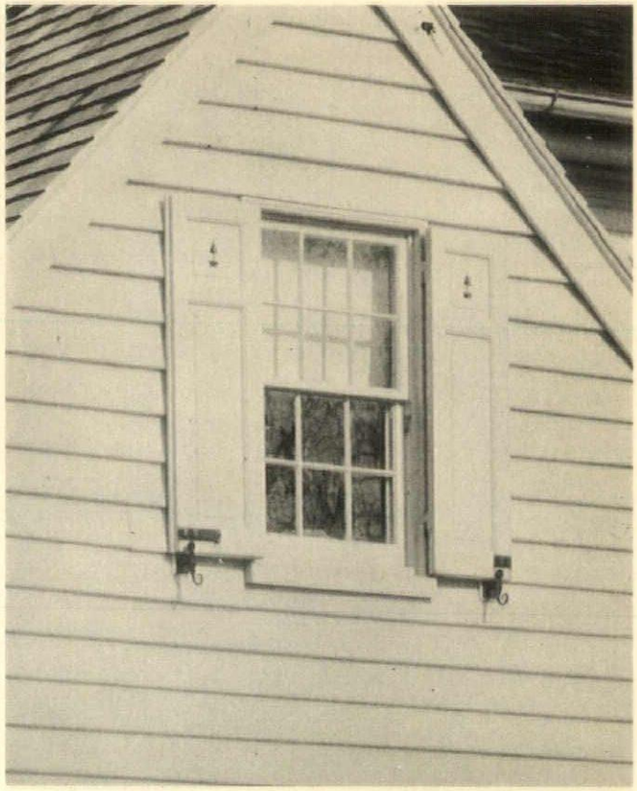
House at Cincinnati, Ohio
Charles F. Cellarius

House at Pleasantville, N. J.
James Renwick Thomson



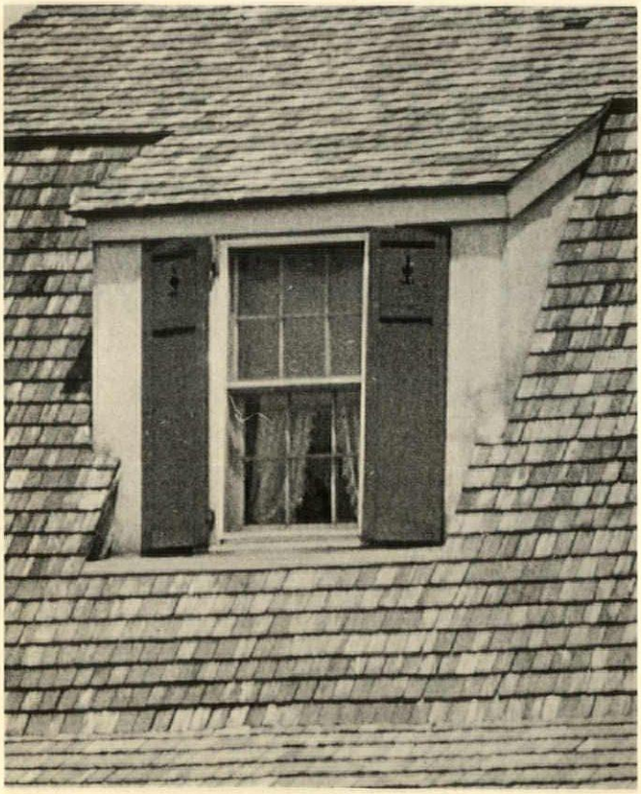


Bank at Lexington, Mass.
Thomas M. James Company

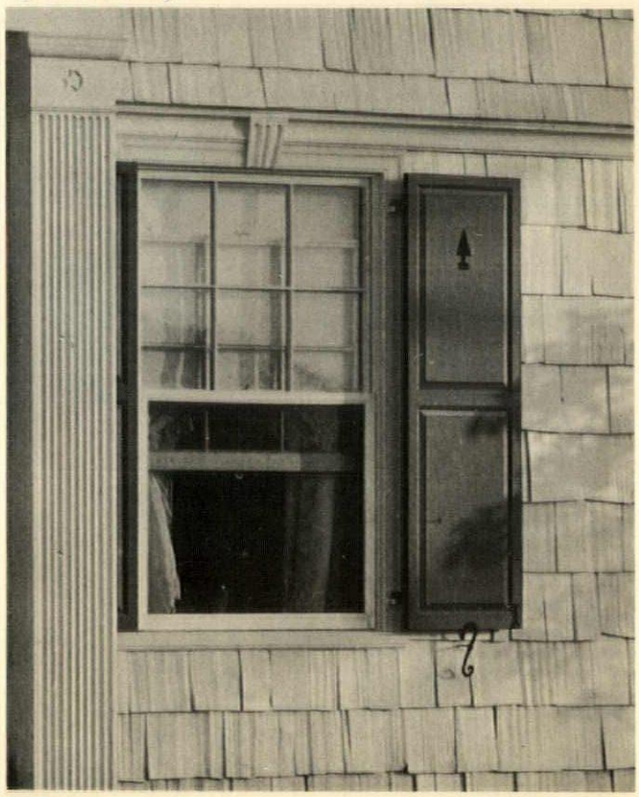


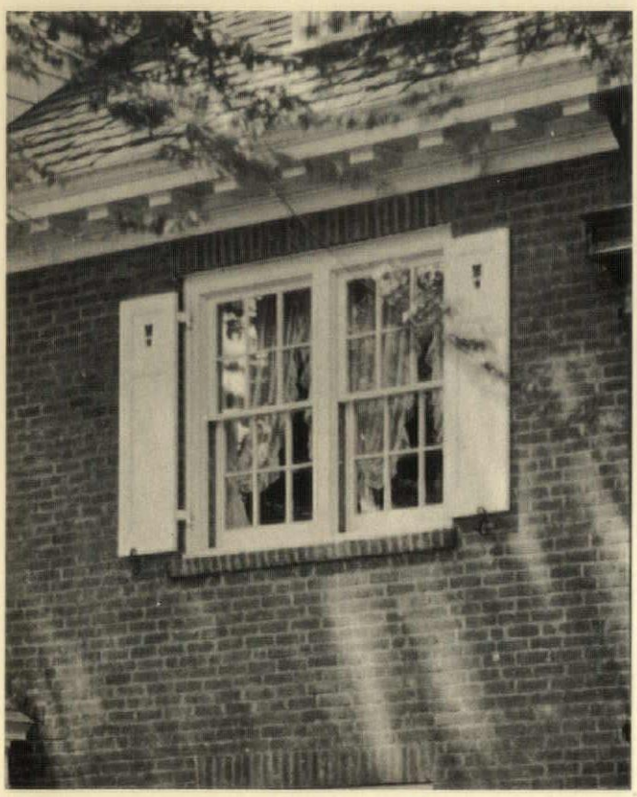
House at Easton, Md.
Henry Hopkins

House at Kingsport, Tenn.
Clinton Mackenzie

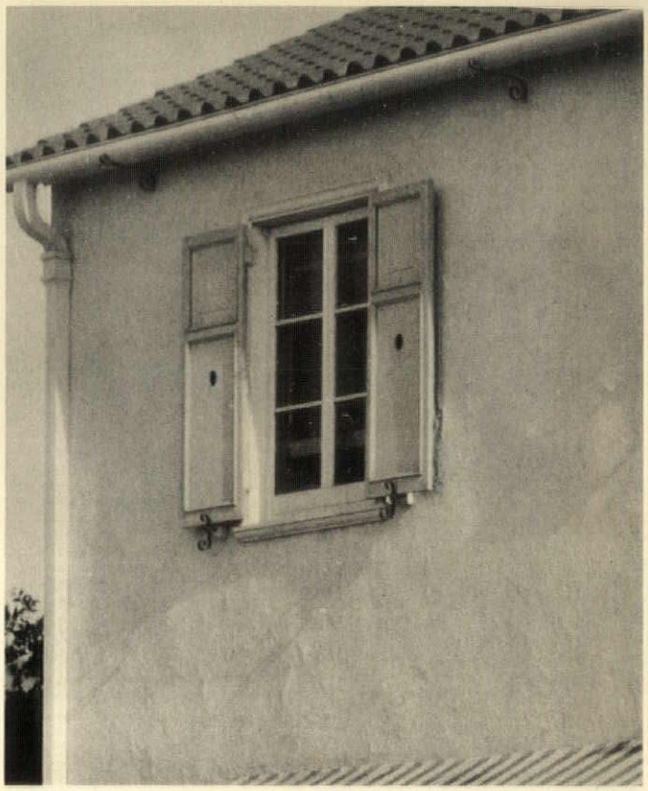


House at East Hampton, N. Y.
Aymar Embury II



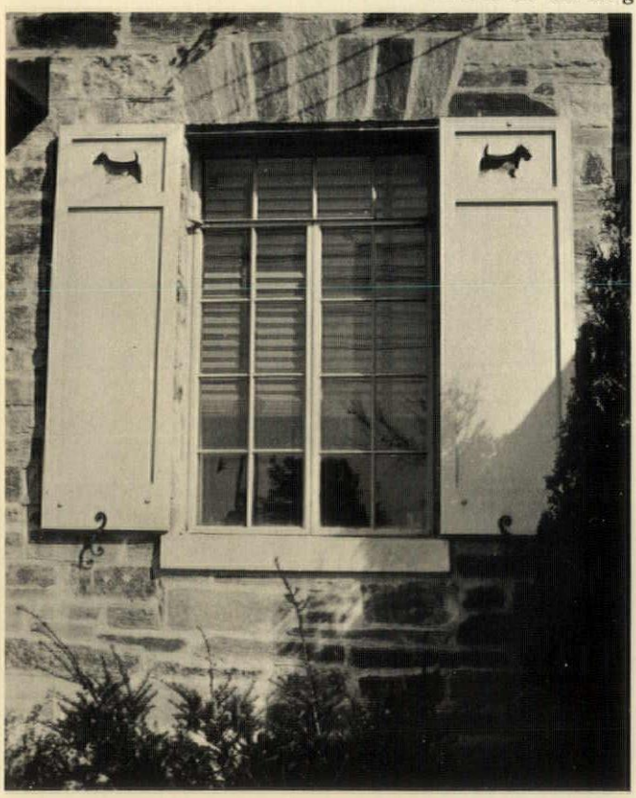


House at Cincinnati, Ohio
Charles F. Cellarius

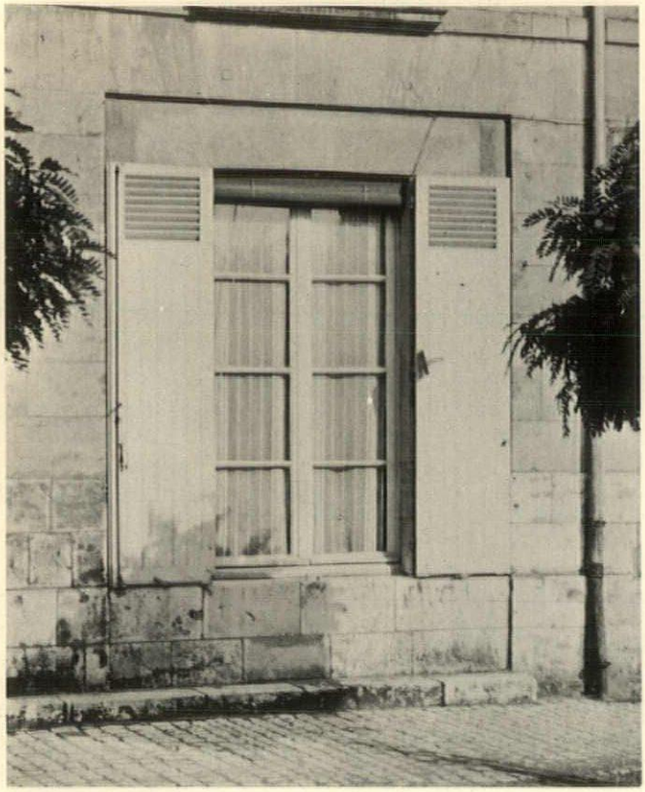


House at San Antonio, Tex.
Adams & Adams

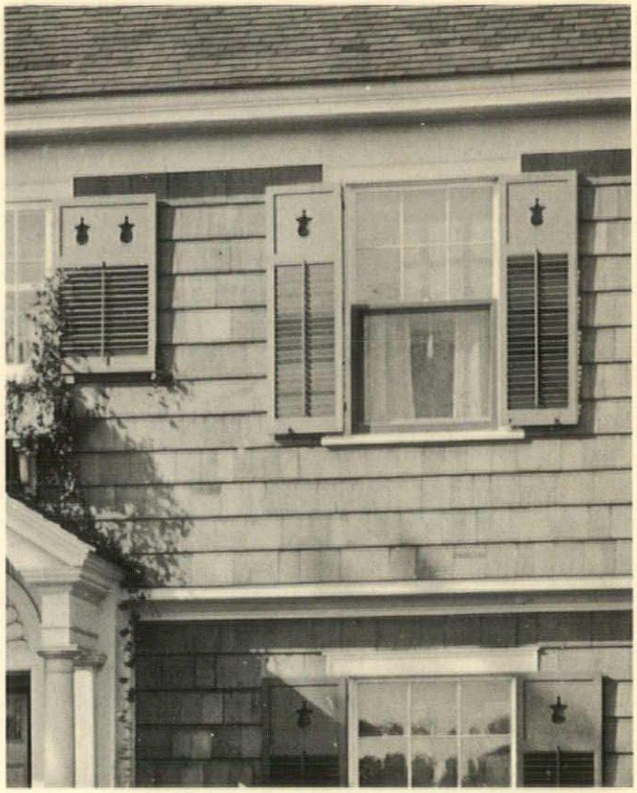
Veterinary Hospital, Washington, D. C.
E. Burton Corning



House at Warrenton, Va.
Bottomley, Wagner & White

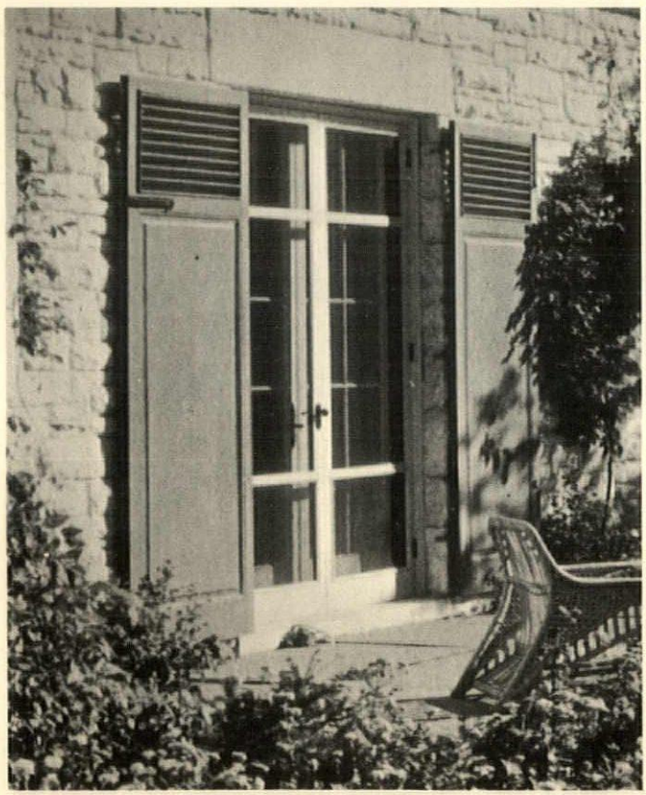


House at Orléans.
France

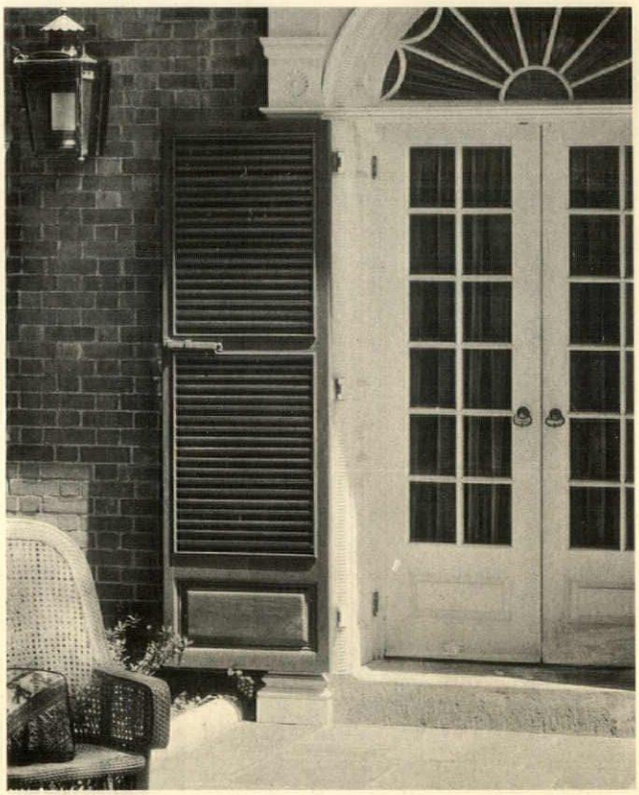


House at Springfield, Mass.
Clifton C. West

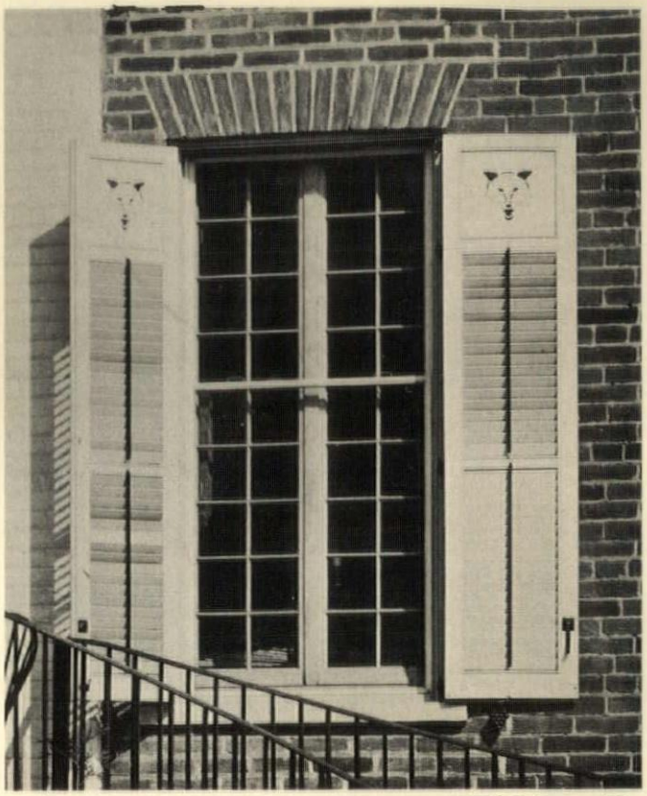
House at Morristown, N. J.
Greville Rickard



House at Pelham, N. Y.
Pliny Rogers

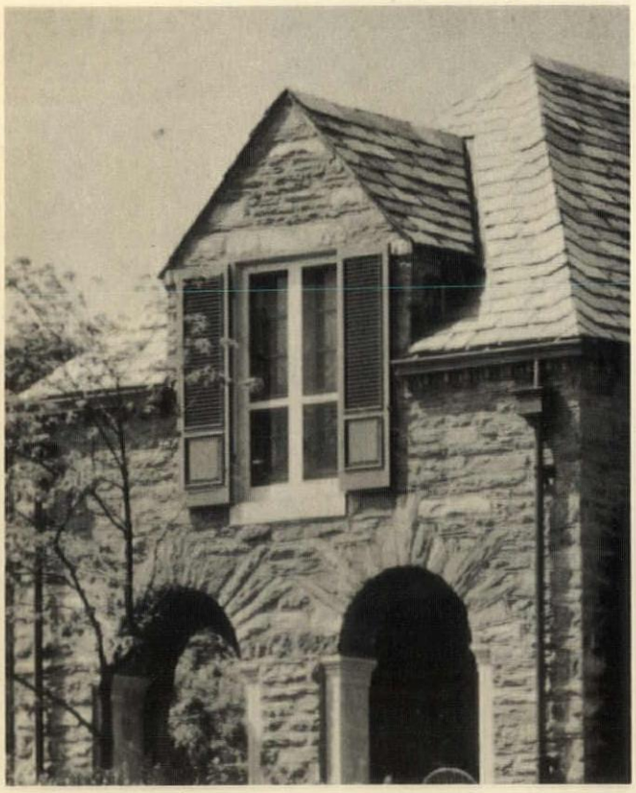


House at Fieldston, N. Y.
Dwight James Baum

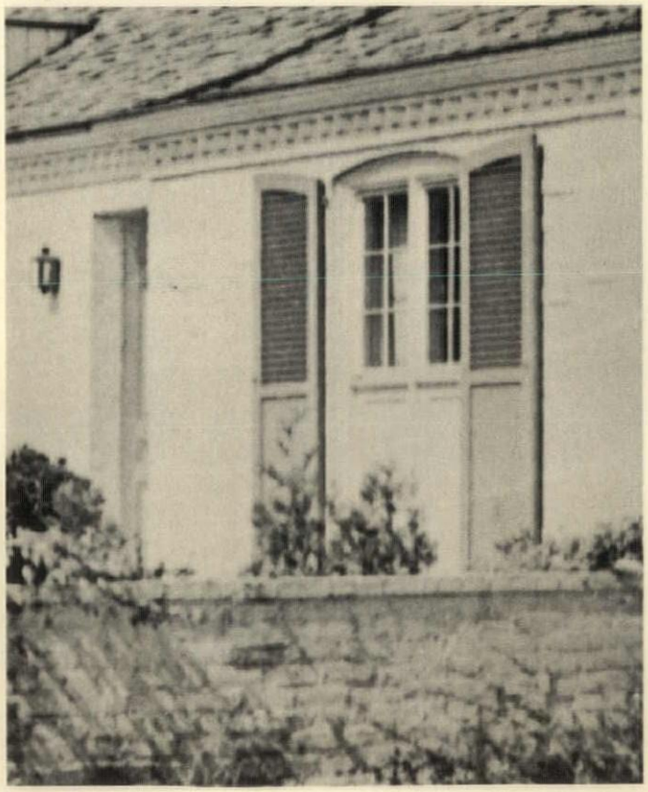


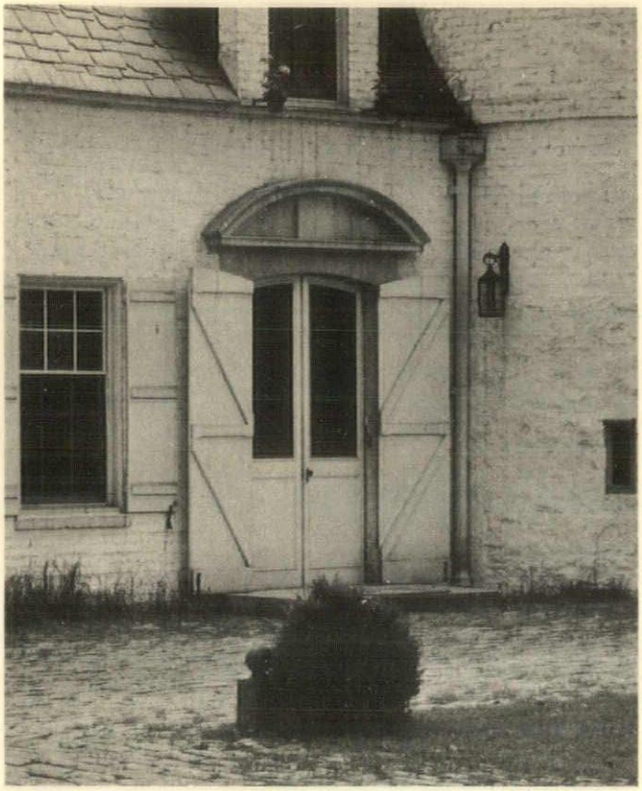
House at Middleburg, Va.
Peabody, Wilson & Brown

House at Wynnewood, Pa.
Henry D. Dagit & Sons

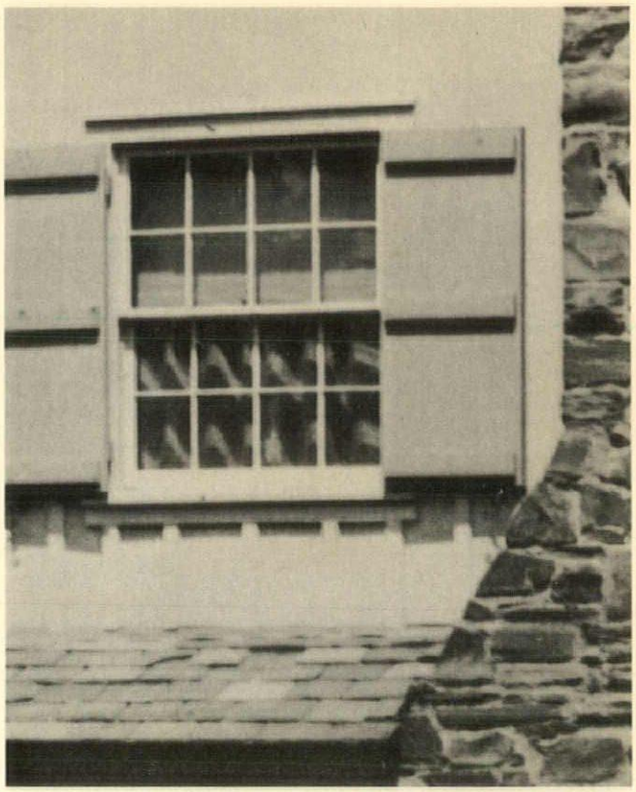


House at Los Angeles, Calif.
Ralph C. Flewelling



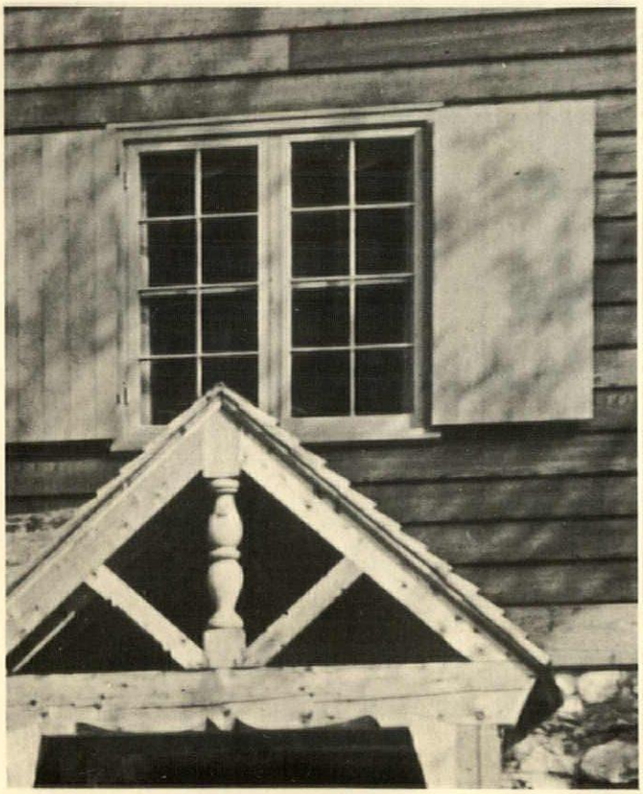


House at Atlanta, Ga.
Hentz, Adler & Shutze

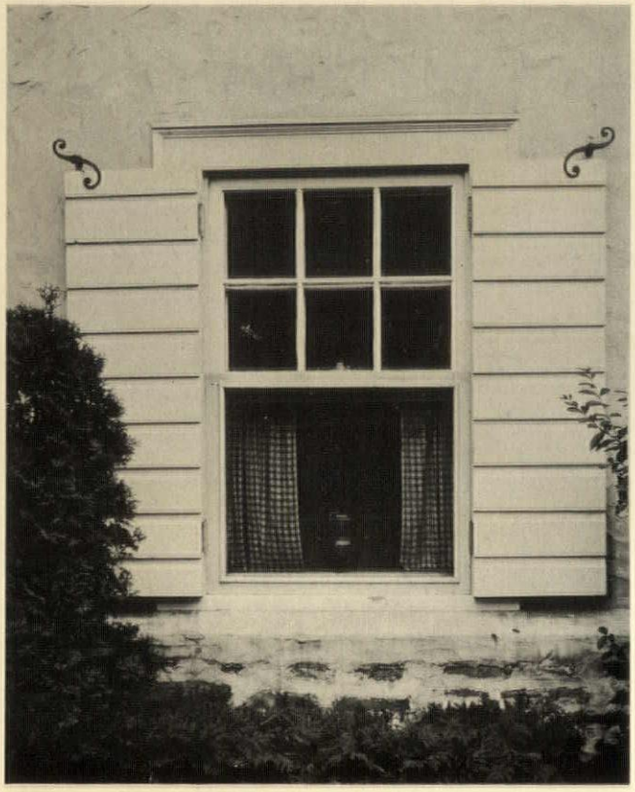


House at Ithaca, N. Y.
LeRoy P. Burnham

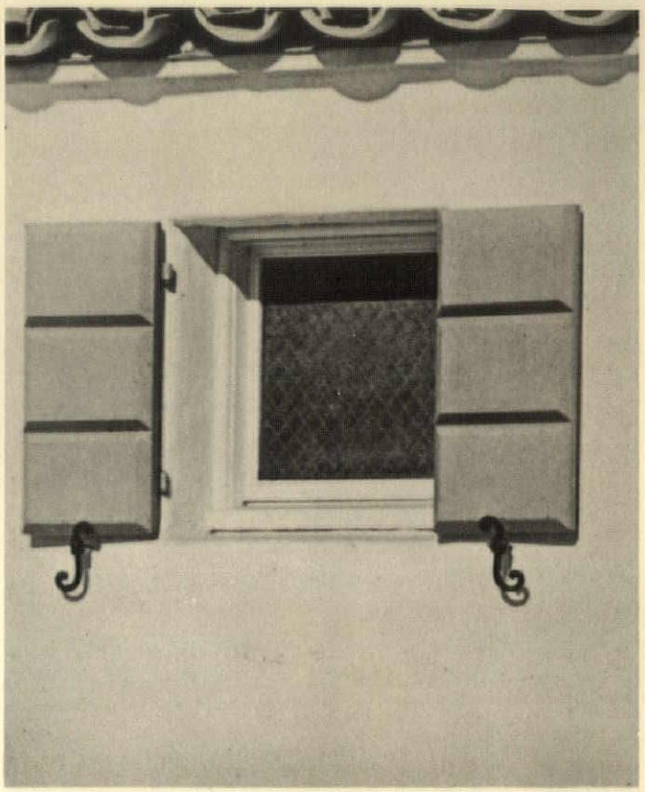
Club house, Lake Sunapee, N. H.
Prentice Sanger



House at Mt. Vernon, N. Y.
Lewis Bowman



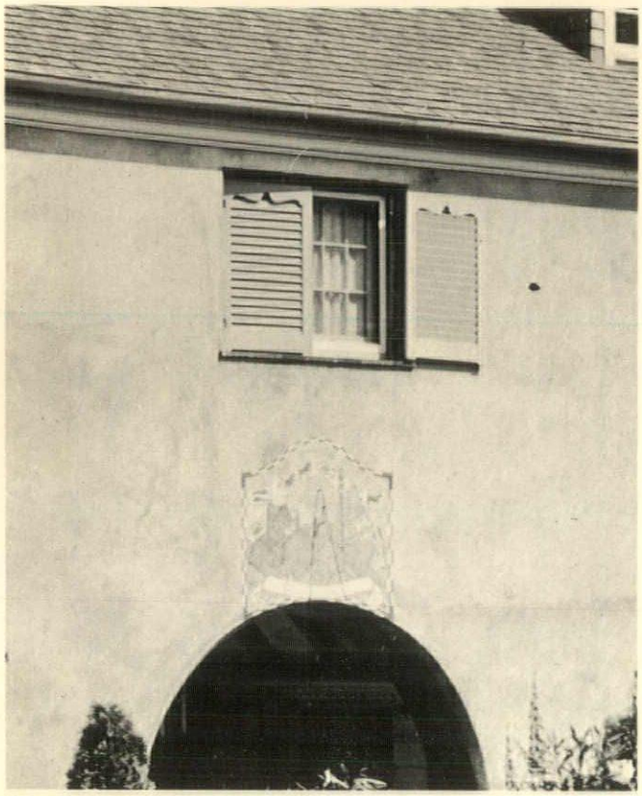
House at Ithaca, N. Y.
LeRoy P. Burnham



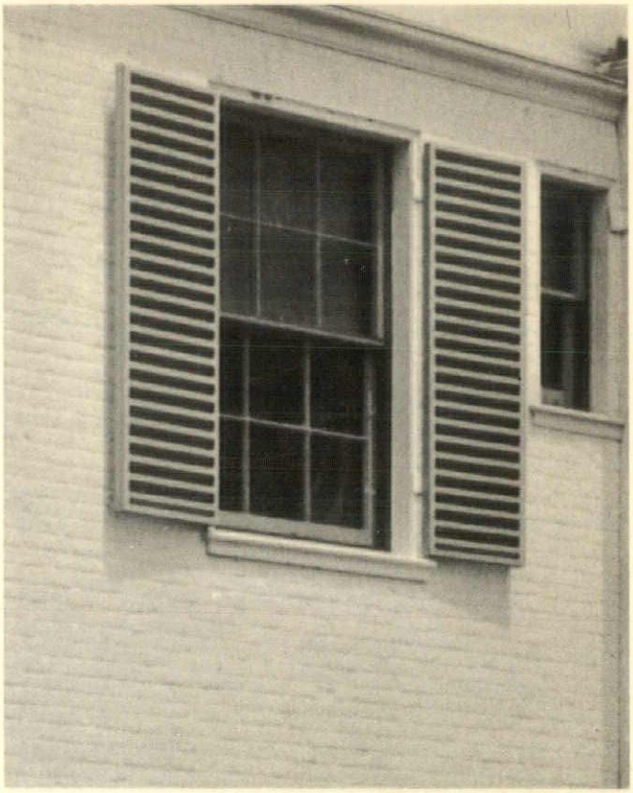
House in Southern California
Gordon B. Kaufmann

House at Scarsdale, N. Y.
Westchester Little Estates, Inc.

House at Needham, Mass.
Charles S. Keefe

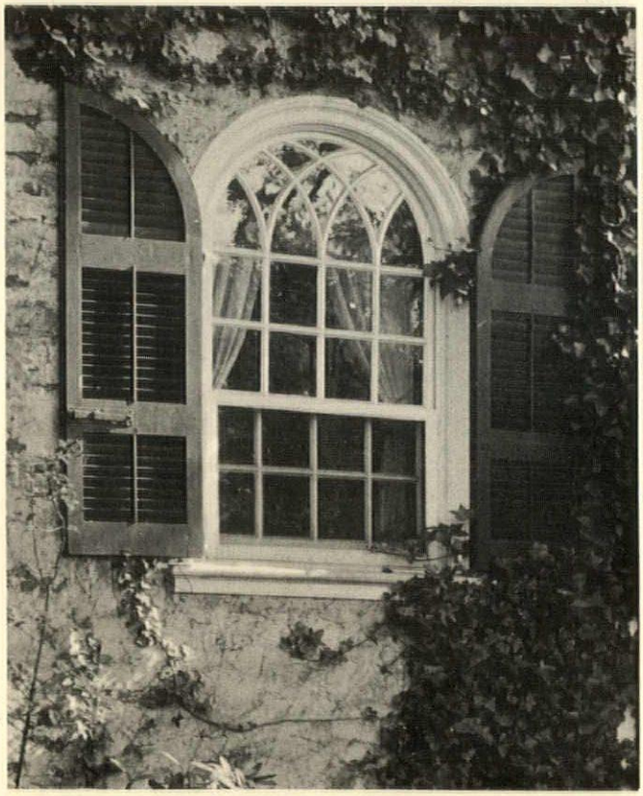


House at Lake Geneva, Wis.
Howard Shaw

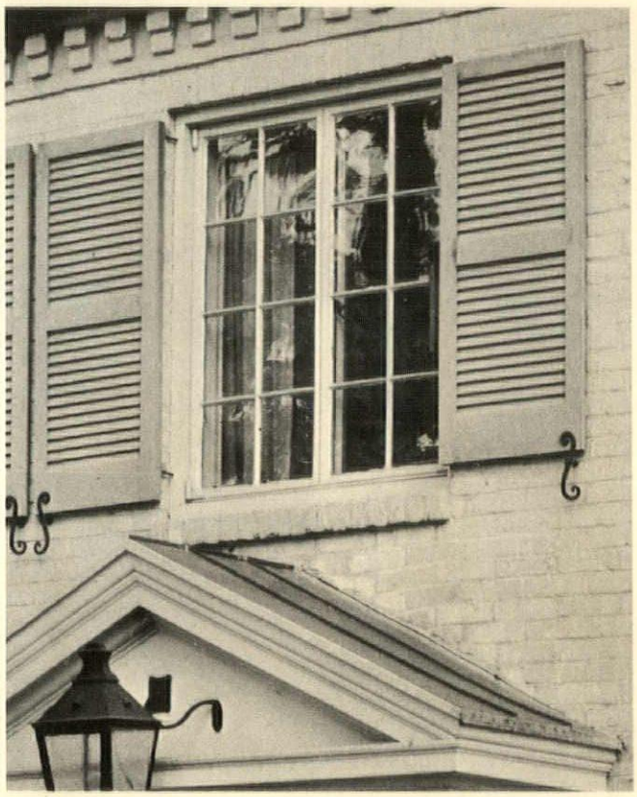


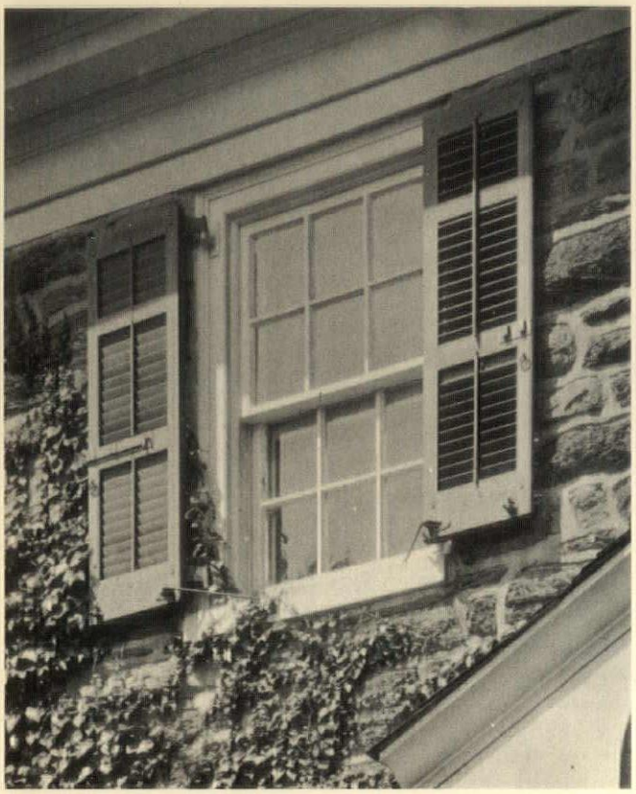
House at West Hartford, Conn.
John M. Bell

House at Oreland, Pa.
Tilden, Register & Pepper

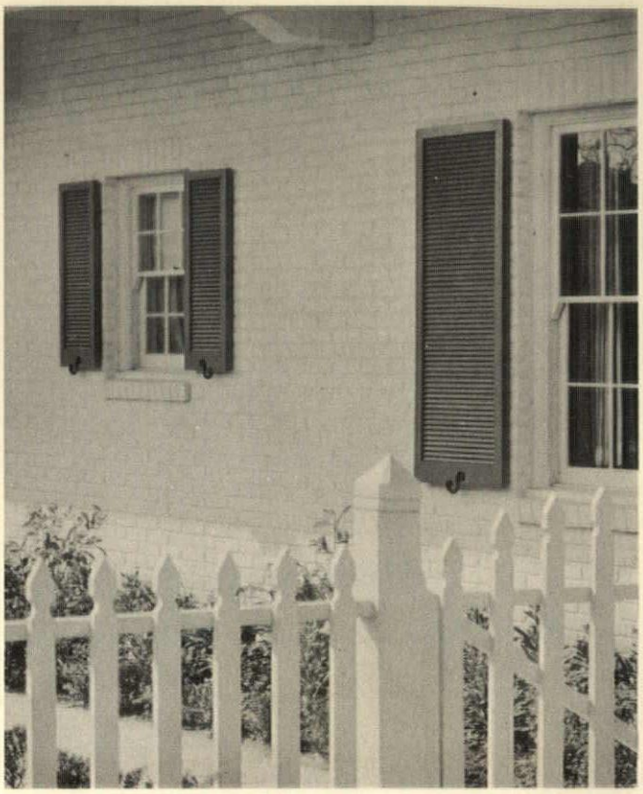


House at Summit, N. J.
Clark & Arms



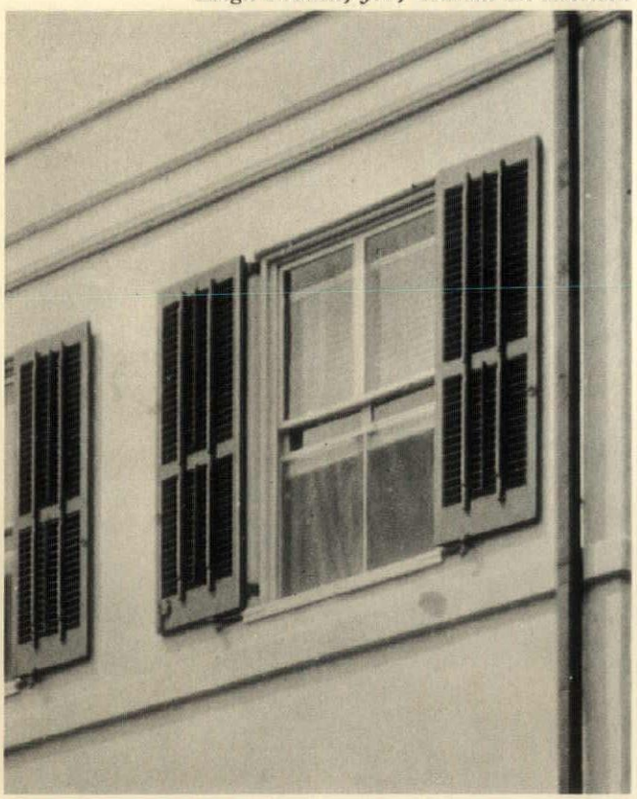


House at Chestnut Hill, Pa.
Magaziner & Eberhard

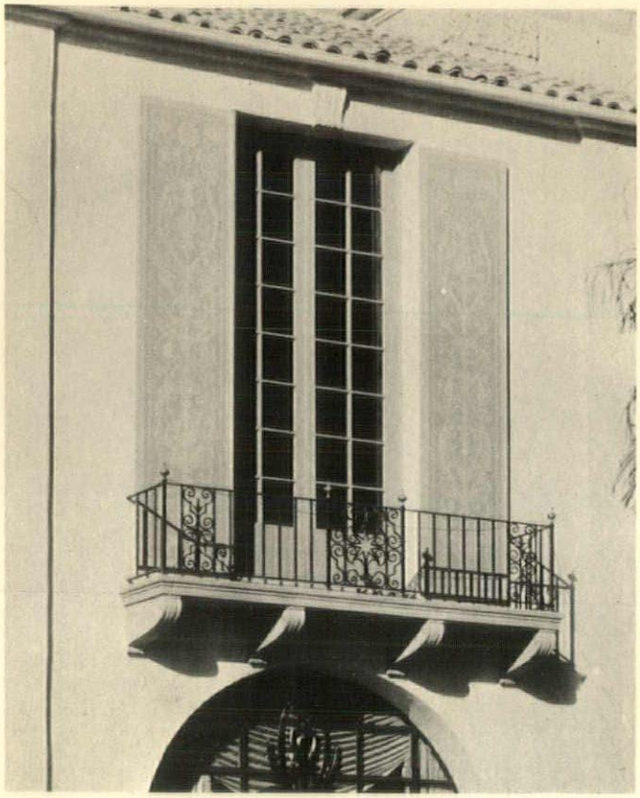


House at Los Angeles, Calif.
Paul R. Williams

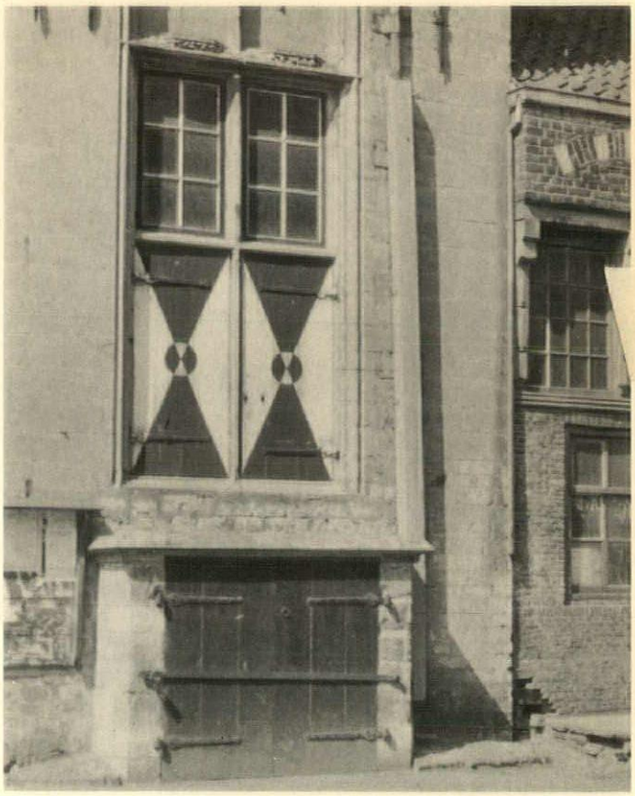
House at Bethayres, Pa.
Leigh French, Jr.; Harold D. Eberlein



House at Montclair, N. J.
Wallis & Goodwillie

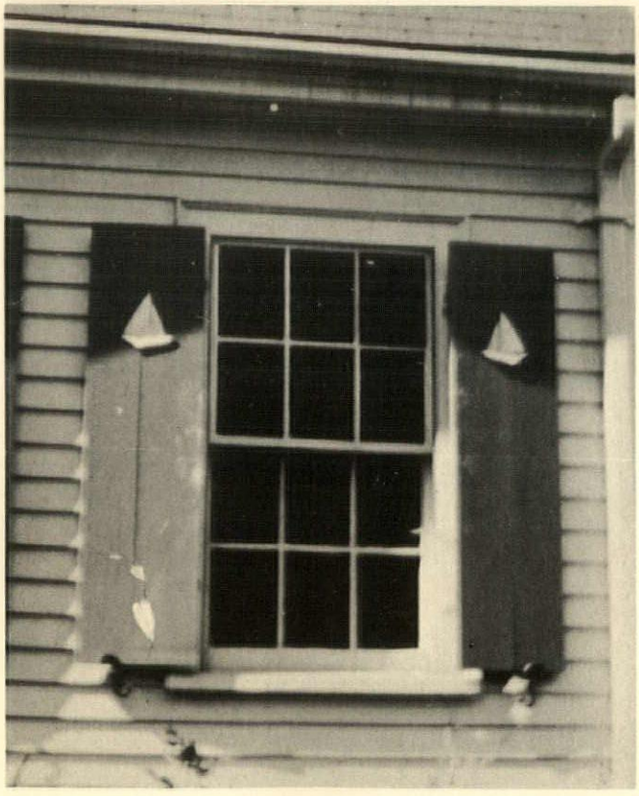


House at Los Angeles, Calif.
Meyer & Holler

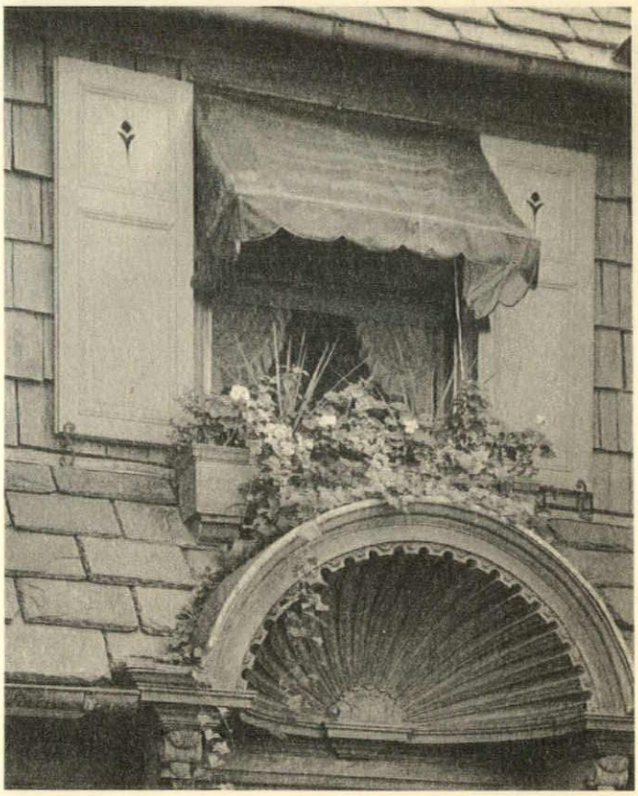


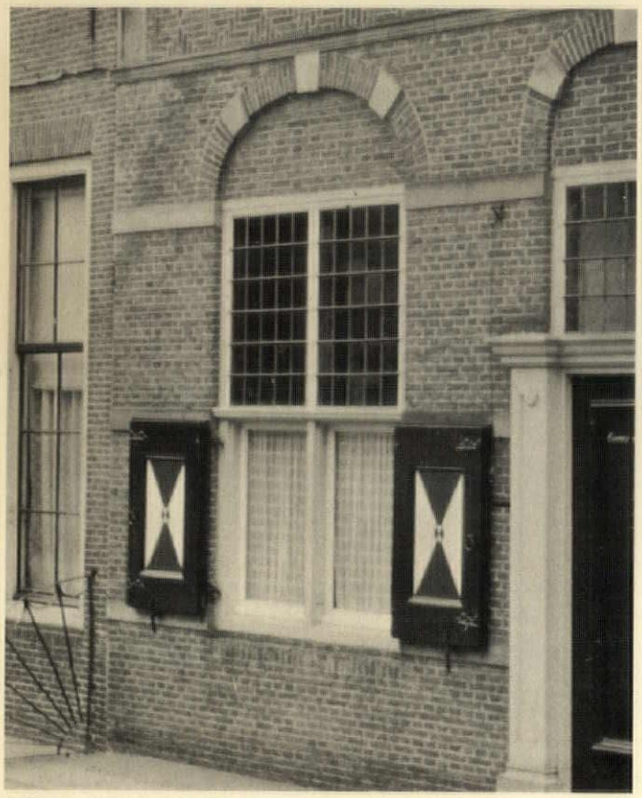
House at Veere,
Holland

House at Winchester, Mass.
Boat design in relief

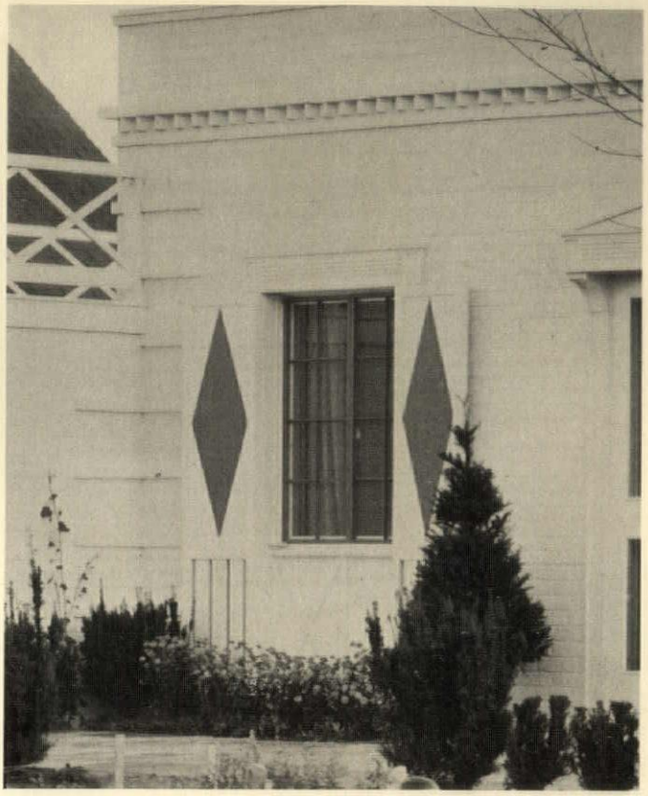


House at East Aurora, N. Y.
Office of John Russell Pope



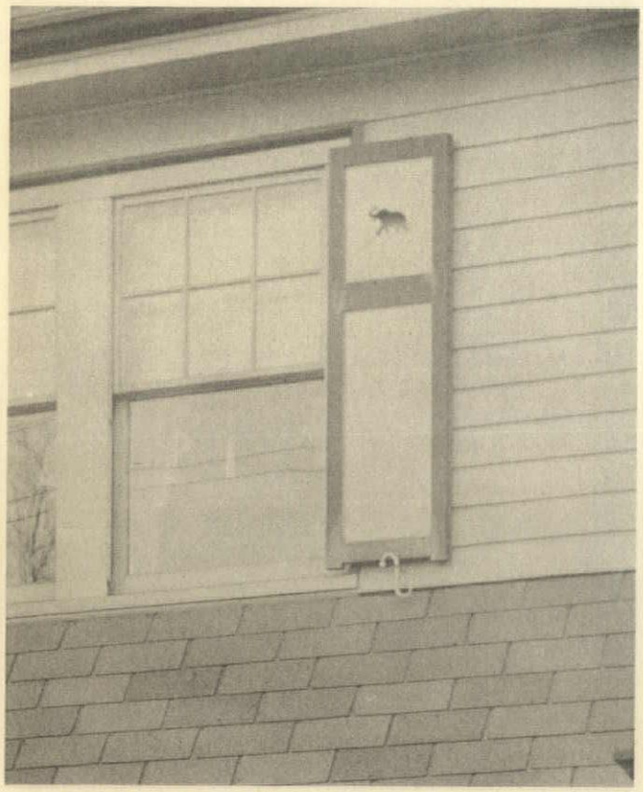


House at Monikendam, Holland

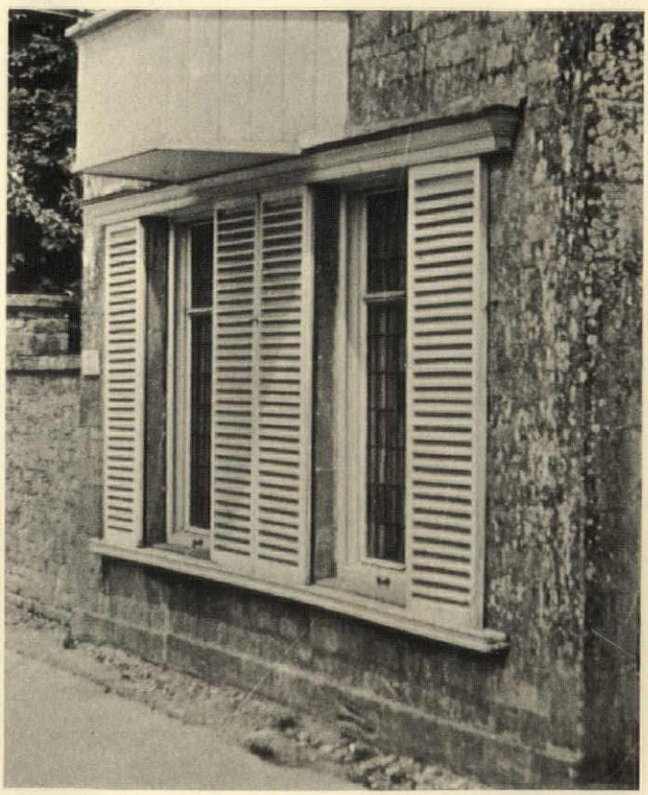


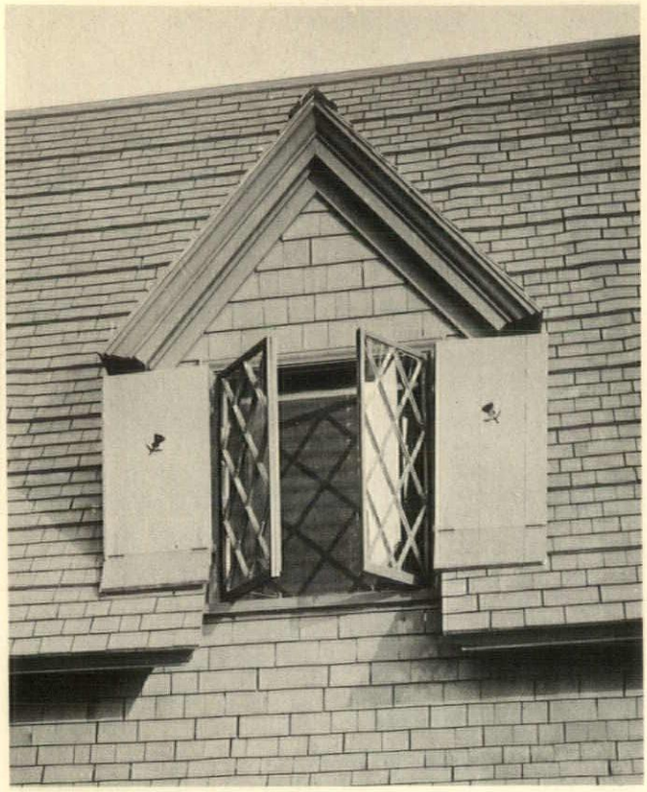
House at Wantagh, N. Y. Walker & Gillette

House at Watertown, Mass.

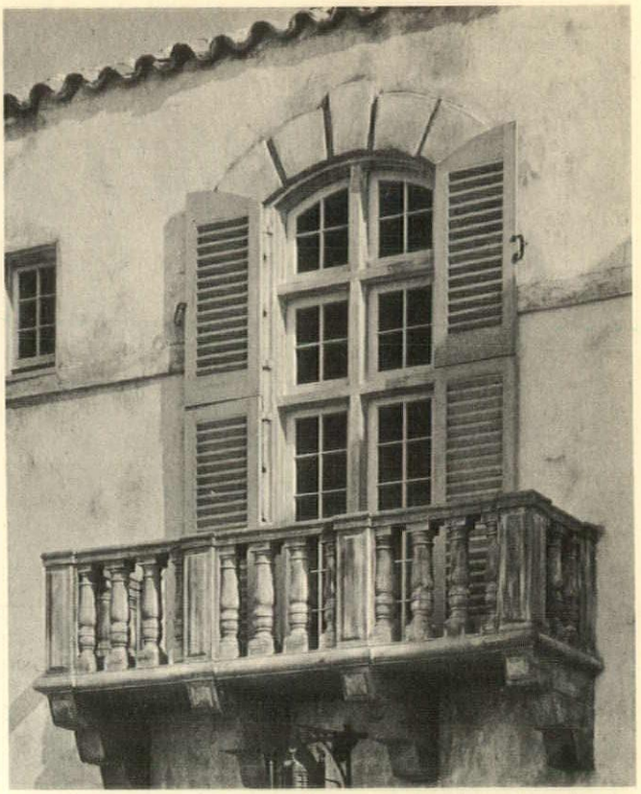


Sliding blinds, Burford, England





House at Gloucester, Mass.
Henry Sleeper



House at Southampton, N. Y.
LeRoy P. Ward

House at Monticello, Calif.
George Washington Smith

House at Enkhuizen,
Holland

DECEMBER, 1935

Building Products' News

DECEMBER, 1935

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[Fill in the file numbers of the desired items and mail the card]

All indications are that the Spring of 1936 will see the real resumption of building throughout the length and breadth of the country. The surfeit of distress realty in the hands of banks, trust companies, insurance companies, building and loan associations, and individuals, is diminishing with each successive week and with the take-over of these properties by responsible purchasers, the shortage of immediately available housing increases. In your community: within your circle of acquaintances there are those who will be glad to know about NATIONAL HOUSING ACT LOANS UP TO $50,000.00 to Modernize Apartments, Multiple Family Dwellings and Stores, Hotels, Hospitals, Schools, Colleges, Orphanages, Manufacturing and Industrial Plants. Shall we send you the very latest information? Address ARCHITECTURE, 597 Fifth Avenue, New York.

Flagg Fittings

Catalog No. 57 supersedes all previous issues. Malleable iron, cast iron, and red brass fittings with full descriptions, dimensions, figures, prices, and complete index. Special products include fuel oil and gasoline storage tank fittings, caps, nozzles, plugs, nipples, boiler stand tees, and concrete hangers. Stanley G. Flagg & Co., Inc. G. 207

Anthracite Institute Reports

No. 1 on the use of anthracite for heating service water compares this method with others, contains heater sizes, prices, and pictures. No. 2 is an impartial and fair report on comparative virtues of anthracite and coke. Technical sub-committee, Anthracite Institute. G. 208

"The Old Company"

Careful study of hot-water supply heating. Anthracite hot-water heaters, diagrams, cost tables, presented by the Lehigh Navigation Coal Co. G. 209

Time Tells the Tale

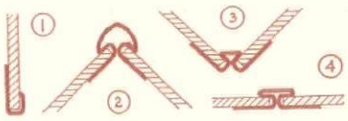
Authentic facts remove the mask of obscurity from certain aspects of the pipe business. Wrought-iron pipe presented fully by Reading Iron Company. G. 210

Catalog "H"

Entire line of heaters in various types and sizes, trade price sheet, specifications, diagrams. Taco-Trol, a forced circulating one-pipe hot-water heating system performing double duty of heating the home during winter and providing hot water the year round, presented in Section II of catalog "H." Taco Heaters, Inc. G. 211

Marshtile

Tile-like wall finish in large sheets for new buildings or remodelling. Colorful, durable, easily installed, waterproof. For kitchens, bathrooms, stores, barber shops, hospitals, hotels, service stations. Marsh Wall Tile Company. G. 212



Lipman Air Conditioning

Partial list of applications, definitions, standard conditions of air conditioning for comfort cooling, performance standards, analysis of five conditioning problems, control equipment, data relating to duct design, grilles and registers, layouts, tables, charts, engineering data, and blueprints. General Refrigeration Sales Company G. 213

Catalin for Architecture

Catalin prepared, shaped, cut, and patterned in all sizes to fit individual specifications by architects for interiors and exteriors of building. Also supplied for sign facias and lighting fixtures. Available in all colors, either opaque, translucent or transparent, plain, mottled or grained. Easily sawed, turned or lathed like hard wood. Fabricated Catalin, Inc. G. 214

Special Boilers

Various types of oil-burning boilers, installation diagrams, ratings, capacities, specifications and foundation pit dimensions. H. B. Smith Co. G. 215

Electrical Refrigeration Products

Air and water cooled compressors, domestic evaporators. Complete descriptions and diagrams of M & E line of refrigeration products. Merchant & Evans Company. G. 216

Vita Glass

Ultraviolet glass having a permanent final transmission of approximately 50 per cent of the short ultraviolet rays in natural light — the rays which tan people. Particulars will be found in two booklets issued by the manufacturers called "Health Through Your Windows" and "New Evidence on the Value of Vita Glass." Vitaglass Corporation. G. 217

Lurie Steel House

New construction bringing finer quality fireproof building within cost range of wood frame. *Not prefabricated.* Combines skeleton steel construction with channel iron and metal lath light steel base for all surfaces. Clear floor space permits unlimited floor layouts. Descriptions and plans for houses, schools, churches, etc. Metal Lath Manufacturers Assoc. G. 218

National Unit Heaters

Advantages, application, photographs, basic ratings. B.T.U. constants, dimensions, piping diagrams, pipe sizes, typical problems. National Radiator Corp. G. 219

Silver Anniversary

Commemorating Twenty-fifth Anniversary of the Bakelite Corp., they have issued a jubilee edition of their *Review*. Traces development and history of Bakelite, especially with relation to the building industry. Various building uses of Bakelite gone into in great detail. Bakelite Corp. G. 220

K-Veniences

Catalog and Price List No. 115. Clothes-closet fixtures for all types of wardrobes; also display and merchandise assortments. Knape & Vogt Manufacturing Co. G. 221

Steel Rolling Grille

Provides reliable safeguard or impassable barrier against trespassing. Permanently installed and accurately counterbalanced, it can be quickly raised or lowered and when closed, securely locked. In various metals to harmonize with any architectural style Coiling above opening in small space, the Grille may be installed on wall face or in reveals provided at the time of building construction. Kinnear Manufacturing Co. G. 222

Landscaping

Price list of trees, shrubs, and plants presented in most complete manner, with descriptions, illustrations, and index. Spray oils and fertilizers also included. Andorra Nurseries, Inc. G. 223

Cellophane for Skyscrapers

Once looked upon as a wrapping material, cellulose film is now being used in the erection of modern skyscrapers. Used in electrical construction, for wrapping wires, and in decoration and painting done before sash has been placed in building instead of cloth sheeting or canvas over window openings, thus admitting plentiful light. Full details from E. I. Du Pont De Nemours & Co., Inc. G. 224

Rusticraft

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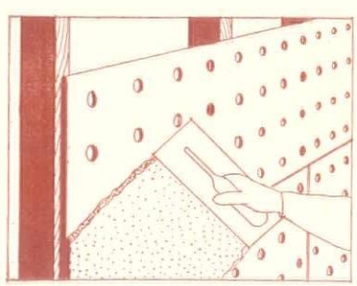
Perforated Rocklath

Unique plaster base. Holds plaster by natural bond and a "mechanical key," making stronger, crack-resisting, interior walls and ceilings, and greater fire protection. Illustrations and description. U. S. Gypsum Co. G. 226



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Alundum Ceramic Mosaic Tile

Volume 10, No. 3, presents mosaic, non-slip tile flooring for swimming-pools, vestibules, shower baths, stores, etc. Field designs and borders in full color shown, also color chart. Norton Co. G. 228

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New! Totally fireproof! Multi-conductor elevator cable, of Deltabeston line, resistant to moisture, oil, and corrosive vapors. Furnished in any required length and with any number of conductors up to and including 37. Dialectric strength of individual conductors tested to better than 25,000 volts breakdown. General Electric Co., Bridgeport. G. 229

Gravelite

Complete story, with pictures, of the saving of over forty million pounds dead weight of the upper deck of new San Francisco-Oakland Bay Bridge by use of revolutionary light-weight concrete, a mixture of ordinary Portland cement and a light-weight aggregate called Gravelite. Gravelite, Inc. G. 230

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Sheet No. X826

Furnace Blower catalog containing full information on Emerson Electric Fans, Blowers, Bonnet Controls, etc. Emerson Electrical Mfg. Co. G. 232

AIA File No. 12C3

Suggestions for galvanized sheet-metal specifications of value to sheet-metal contractors, architects, and plant owners when making up roofing specifications. American Rolling Mill Co. G. 233

"Heatanaire"

To heat, humidify, and filter air, circulating air throughout rooms where conditioning is desired. Either entire house or any part of it may be air conditioned and remainder heated with steam radiation. Also provides year-round hot water from a tankless domestic heater built into "HEATANAIRE" conditioner. Special facilities for close cooperation with architects and engineers provided by manufacturers. May Oil Burner Corp. G. 234

More Shower — Less Water

New idea in shower head economy and performance. Elliptical outlet directs *all* water at bather, thus making definite saving in water. Solid brass, chromium plated, costing less than ordinary shower heads. Easily adjustable to any angle. Crane Co. G. 235

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"Greatest Pipe Show on Earth," sixteen pages, two colors, lists and describes various types of tubular products and is indexed for added convenience. Republic Steel Corp. G. 236

Light Measured

New device which measures light in terms of sight, weighs seven ounces and fits into the pocket. No batteries or outside current necessary. Measures light up to 250 foot candles without use of multiplying accessories. Pictures, description, measurements. Sight Light Corp. G. 237

Westinghouse

Three new booklets, ICE BY WIRE, ALL ELECTRIC KITCHEN and HOME AIR CONDITIONING, now ready. Plans, color, full descriptions. Westinghouse Electric & Manufacturing Co., Mansfield, Ohio. G. 238

General Purpose Heating

Bulletin U-3, "Wing Utility Unit Heaters for General Purpose Heating," is filled with data on general heating, tables, engineering data, and is profusely illustrated. L. J. Wing Mfg Co. G. 239

Fourth Homes Folder

Fourth in a series dealing with proper residential construction and the fuel economies possible following application of proper thicknesses of insulation. Analyzes coal, oil, or gas fuel requirements for typical home and has charted comparisons between insulated and uninsulated construction for each of the four climatic zones in the United States. Insulite Company. G. 240

News Underfoot

October issue shows chart of comparative losses of wax from mopping and gives information on Aerated Rubber-Gloss, the waterproof floor wax. Franklin Research Company. G. 241

Showers and Fixtures

Modern Wildel Trim and Modern Diamond Trim, pictures and descriptions, presented by the Speakman Company. G. 242

Residence Type "R" Boilers

Catalog No. 88g, new edition, includes 83R Series Kewanee Square "R" Oil or Gas Boilers, illustrated in color, with specifications and tabulations; Regular Square Type "R" models, specifications and tabulations for bituminous coal, anthracite, oil or gas, outlined in blue diagrams. May be used as an all-purpose boiler for heat, hot water, and incineration. Kewanee Boiler Corp. G. 243

Air-O-Lizer

Compact unit for schoolroom air conditioning. Has Directional Flow grilles making possible the direction of heated air into room in any desired direction, eliminating cold spots and drafts. New cabinet design, consisting of four removable pieces. Trane Company. G. 244

Woodwork

Complete set of authentic Colonial and English woodwork details as well as details on latest sectional kitchen cabinets. Morgan Woodwork Organization. G. 245

Kitchen Planning

Details on planning service for architects and builders, color suggestions, plans, specifications, photographs contained in new booklet. General Electric Co., Cleveland. G. 246

Innovation in Sash Balances

Important improvement in Spring Sash Balances described and illustrated. Can be adjusted after installation, with ordinary screwdriver, and can be readjusted at any time. Mechanics of device and principles of adjustment clearly shown by illustrations. Pullman Mfg. Corp. G. 247

Electrical Convenience

P&S-Despard Line of wiring devices. Smaller, more compact outlets and switch boxes, also clever little night light. Pass & Seymour, Inc. G. 248

The "Little Squire"

Floor reading stand which holds the biggest book at any height or slope and swings it 90 degrees away at a touch. In sculptured bronze, Swedish iron finish, student and hospital types. Pictured and described, with prices. The Squire Company. G. 249

Condulet Catalog

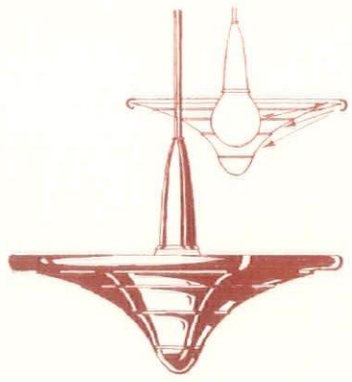
New, most complete Condulet catalog ever published. The publishers are the Crouse Hinds Company. G. 250

Edge-Ray

Made of "Luminax" aluminum, this luminaire uses a reflector ring encircling outer edge to control path of light. Designed by Walter Kantack for Curtis Lighting, Inc. G. 251

Four New Models

Catalog 635 features "direct-from-steam-pipe suspension" in four new unit heaters. New design includes "expansion-bend" feature which makes possible individual expansion of each separate tube. Modine Manufacturing Company G. 252



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This striking treatment—the result of close collaboration with Eugene Schoen & Sons—is one more example of Bigelow's versatility, one more proof that Bigelow goes far beyond "just selling carpets." We try always to understand the architect's ideas—and to give him intelligent aid in working them out.

Perhaps that is why so many architects call us in as Carpet Counsel. Contract Department, Bigelow-Sanford Carpet Co., Inc., 140 Madison Ave., New York.

THE BULLETIN - BOARD *Continued*

(*Continued from page 16*)

day, December 21, only, between the hours of 9 A.M. and 5 P.M.

Only original works in water-colors and pastels which have never been publicly exhibited in New York City are eligible. Monochromes and miniatures will not be accepted.

Further details of the requirements laid down for exhibitors may be had by addressing the Exhibition Secretary, 215 West 57th Street, New York City.

METROPOLITAN MUSEUM LECTURES

AMONG the free gallery talks and lectures at the Metropolitan Museum of Art in New York there is one course now in progress on "Design and Color: Applications." The group assembles on Thursdays at 4 P.M. in Classroom K and the Galleries. The series started on October 24, and concludes with the talk on December 19.

JOHN DEVEREAUX YORK, 1863–1935

MAJOR JOHN DEVEREAUX YORK, architect, died in a hospital in Phœnix, Ariz., October 26. Major York was an associate of Henry Ives Cobb, designing the Fisheries Building at the Columbian Exposition in Chicago in 1893. For several years he was connected with the firm of McKim, Mead & White in New York.

SIR WALTER JOHN TAPPER, 1861–1935

SIR WALTER TAPPER, known particularly for his ecclesiastical architecture, died in London on September 22.

Sir Walter has been surveyor of Westminster Abbey since 1928. Among his best-known works are the London Church of the Annunciation in Old Quebec Street, the War Memorial in the lower chapel at Eton, and the restoration of several of Great Britain's country houses, Penshurst in Kent, being a familiar example.

Sir Walter also held the post of consulting architect to York Minster and the Manchester Cathedral. He was president of the R. I. B. A. in 1927 and 1928.

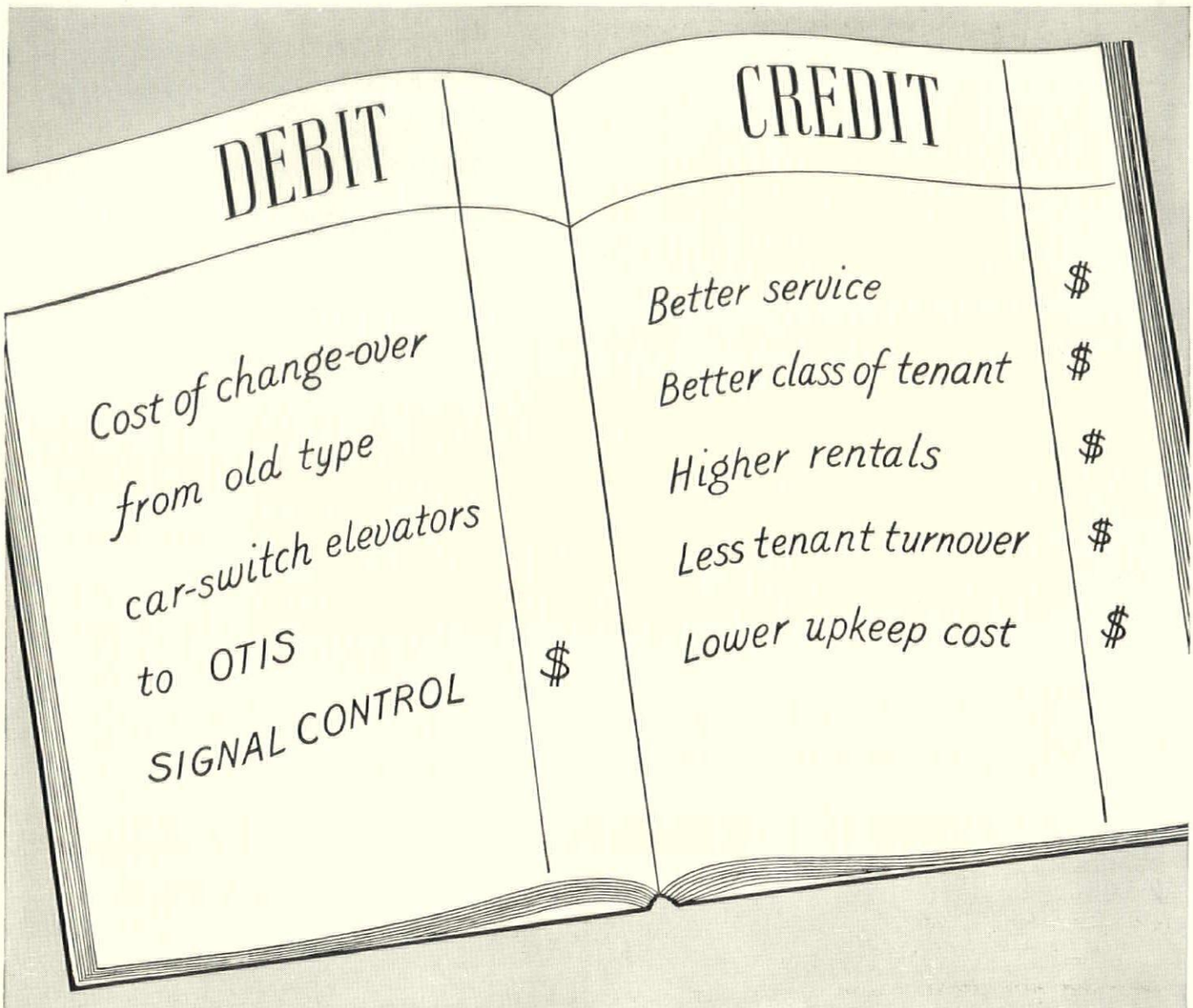
PERSONAL

Clifford H. James, architect, formerly of the firm of James & Zorn, architects, which was dissolved in 1932, has moved his office from Lubbock, Tex., to 1710 Guadalupe Street, Austin, Tex.

Wesley S. Bessell, who has been serving for some months as a designing architect with the Procurement Division in Washington, announces that he has opened new offices at 16 East 52d Street, New York City.

The Department of Architecture, Syracuse University, Syracuse, N. Y., requests that manufacturers' catalogues be sent them for their files.

William E. Hunt, architect of Torrington, Conn., formerly of Waterbury, Conn., died in Torrington on October 13, after a long illness, in his sixty-third year. Mr. Hunt's architectural practice will be carried on by James H. Bruffee, architect, of Torrington, Conn.



Submit this graphic picture to modernization prospects

BUILDING managers who have made the above entry in their ledgers are finding that the credit side soon wipes out the debit.

There are some very definite reasons why the change-over from old type car-switch elevators to Otis Signal Control is a profitable investment. The change brings faster elevator speeds, less waiting time, a saving in stopping time at the various floors, greater comfort to passengers. These obvious elevator improvements put the building on more favorable footing to compete with the newer structures, help attract more tenants, and keep present tenants satisfied with their quarters. The change-over to Signal Control also reduces elevator operating expenses and prolongs elevator life.

We shall be glad to co-operate with you in any way on an elevator modernization project of this character, or, for that matter, any type of elevator modernization problem.

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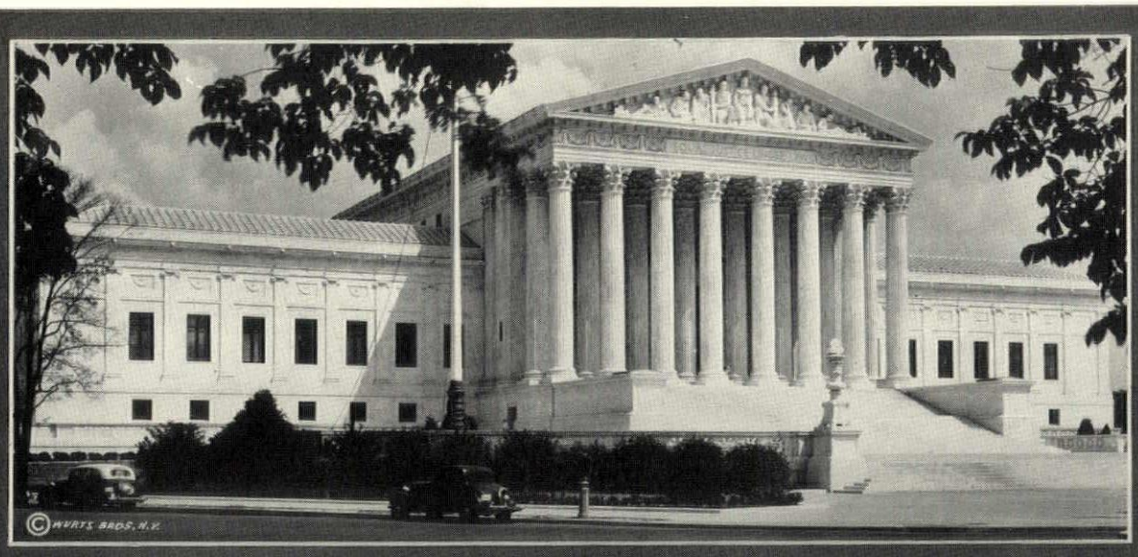

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VOLUME LXXII

JULY THROUGH DECEMBER

1935

NEW YORK: 1935

CHARLES SCRIBNER'S SONS

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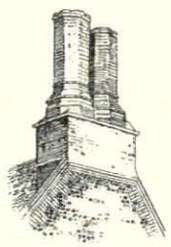


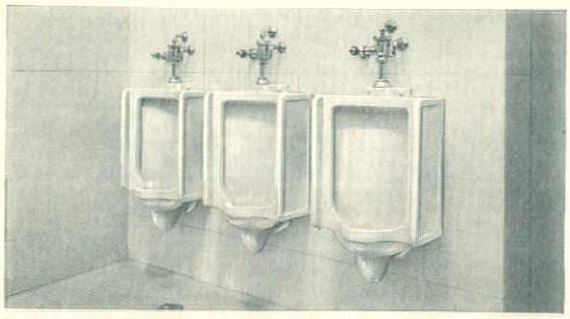
THE UNITED STATES SUPREME COURT

★ ★ ★ ★ ★ ★ ★ ★

The new United States Supreme Court Building is a structure of surpassing beauty which will forever earn esteem for those who had a part in its conception and its construction. Crane Co., supplier of the plumbing fixtures, is proud to be joined with others in the perfecting of this national achievement. There is a pardonable sense of fitness in the association of products, long outstanding for their integrity and quality, with this monument to the principles of American integrity and justice.

(*Left*) A Private Toilet and Bath—*Crane* NORWICH *vitreous china lavatories with liquid soap faucets, ice water faucets,* SECURO *lever-action wastes and* METRO *slow-closing supply valves. Crane shower fixtures. Crane* PURUS JR. *closets with* ALPHA *flush valves.*

(*Right*) Men's Public Toilet No. 1—*Crane* NORWICH *vitreous china lavatories with liquid soap faucets,* SECURO *lever-action wastes and* METRO *slow-closing supply valves.*



Men's Public Toilet No. 1—*Crane* RIO *vitreous china wall urinals with foot-operated* ALPHA *flush valves,* EXPEDIO *wall closets with* ALPHA *flush valves.*

Crane Plumbing in the new United States Supreme Court Building was installed by Riggs, Distler and Company, Inc., Baltimore

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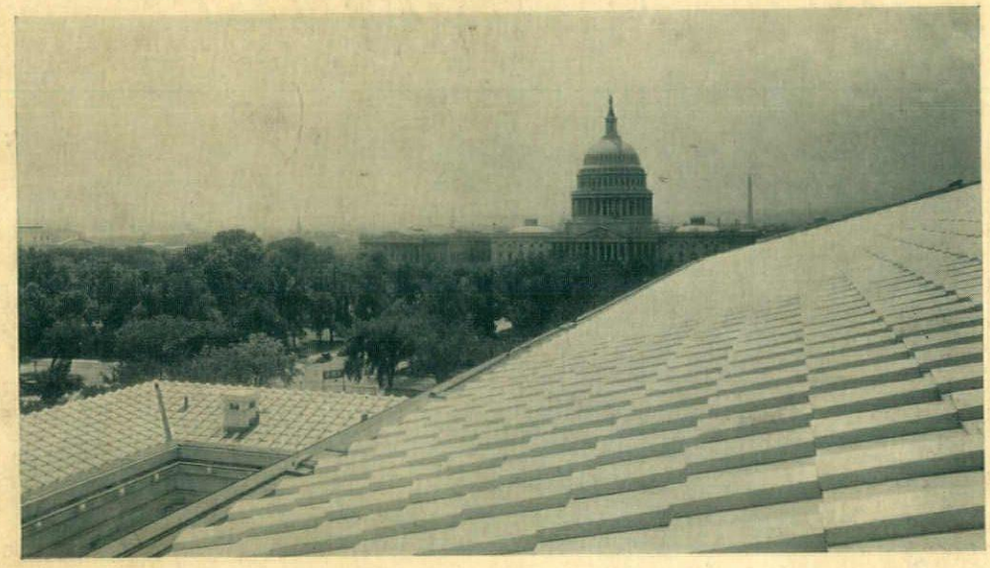
THE SUPREME COURT ROOF

ATLANTIC TERRA COTTA



The roof of this beautiful building, an important architectural feature and integral part of the design, is entirely of Atlantic Terra Cotta. Tiles of unusual dimensions in keeping with the large scale of the building were required. The pan tiles for the main pavilion are twenty-nine and one-quarter inches wide by thirty-five inches in length. The cover tiles are thirty-five inches in length, eleven inches in width tapering to seven inches in width at the overlapped end. The tiles on the roofs of the lower pavilions are slightly smaller.

Color is a warm variegated ivory with matt glaze finish harmonizing with and somewhat darker than the marble facing of the walls. This glaze was specially developed at our Perth Amboy plant under Mr. Gilbert's personal supervision.

The tiles are bolted to a bronze grill framework erected over the copper covered roof slab and the cover tile are anchored by means of heavy copper wire. No mortar is used in the installation and the roof can expand and contract at different seasons of the year. Special shaped tiles are provided to form the ridges, valleys and eaves, all locked, lapped and fastened as securely as the typical tiles.

We will be glad to send detailed information on this and other Atlantic installations of classic roof tiles. Pamphlets describing the splendid golden Terra Cotta roof of the new United States Court House, New York City (for which Cass Gilbert was also the architect), are available to interested architects.

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