

# The ARCHITECTURAL RECORD

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Volume 62, Number 3

Serial Number 348

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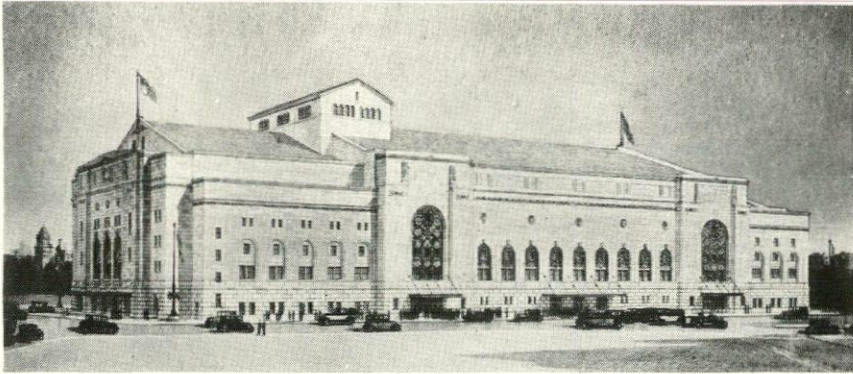
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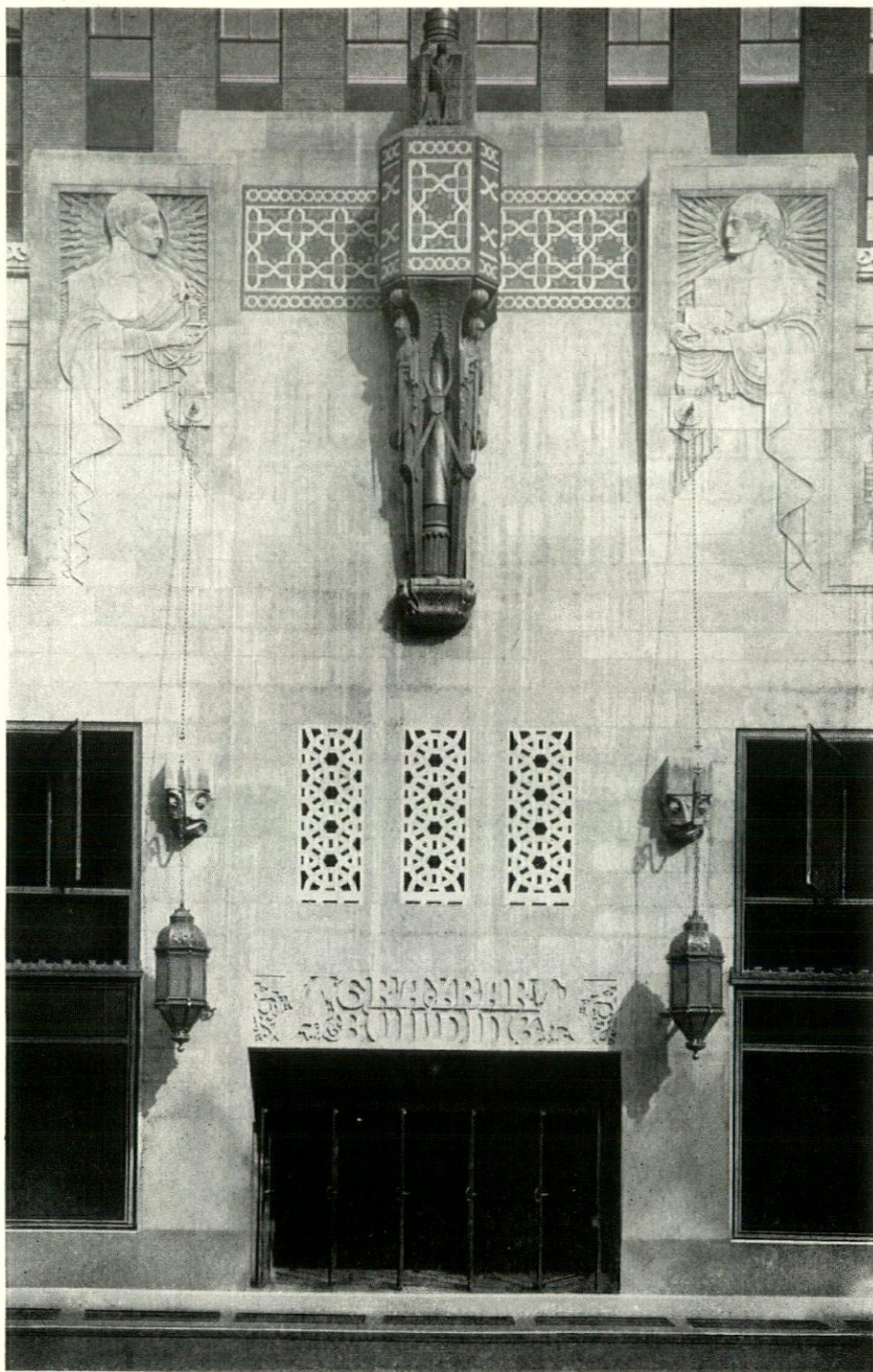
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*The Architectural Record*

September, 1927

MAIN ENTRANCE, THE GRAYBAR BUILDING, NEW YORK CITY

Sloan & Robertson, Architects

Photo. Sigurd Fischer

# The ARCHITECTURAL RECORD

VOLUME 62

SEPTEMBER, 1927

NUMBER 3

*The* GRAYBAR BUILDING, *New York City*

SLOAN & ROBERTSON, *Architects*

*By*  
*S. J. Vickers*

THAT IMPORTANT DISTRICT centering about Grand Central Station, which has recently witnessed such stupendous building activity, has a new and significant acquisition in the form of the Graybar Building.

This prodigious structure, occupying the entire plot between Lexington Avenue and Depew Place, 43rd and 44th Streets—an area of more than an acre and a half, rising 400 feet above the street and descending 90 feet into the rock—has the distinction of being the world's largest building of its kind.

In planning this structure, the architects were confronted with a double problem. Here was an excavation 90 ft. deep to be filled with railroad facilities, the tracks and platforms requiring column spacing and the huge 30-story structure above to be carried independently to prevent vibration. Because of this condition, and the wide concourse on the first floor, girders were necessary for the support of 67 columns on the lower floors.

It was found that the entire column load over the concourse was too great to be carried on girders at the third story level; girders were therefore introduced on the 17th floor, relieving these columns of the weight above that line.

The building columns supporting the railroad structure are carried down through the lower floors quite independent of the steel; their footings rest on a grillage of concrete and steel which in turn rest on a vibration mat made up of five layers of sheet lead, asbestos, and galvanized iron.

Three of the columns were of such great size that it was decided to ship them in two longitudinal pieces and erect these pieces in the field. The heaviest column was 44 ft. long, weighing 1450 lbs. per lin. ft. The longest was 73 feet, weighing 45 tons. There are a number of heavy trusses supporting columns, one of which weighs 40 tons and is 25 feet in depth, with a span of 30 ft.

The steel was fabricated at three plants,

and the work was carried on in double shifts. Perhaps the most spectacular time-saving expedient resorted to was the carrying of plans by air-plane between the various plants and New York. The erection above ground was completed in less than three months. This unusual speed was necessary on account of the tremendous overhead expense. There are 22,500 tons of steel in the entire building.

Situated as the Graybar Building is, in direct communication with the Grand Central Concourse, it has perhaps the most strategic location in the city. Not only the New York Central and the New Haven lines, but the East Side and Queensboro Subways bring dry-shod throngs to its ample portals. Passengers from the Pennsylvania Station

may also arrive at the building under cover, via the West Side and Shuttle subway trains. Four large hotels and a dozen important office buildings may also be reached without stepping on the sidewalk.

These advantages have been a factor in securing for the building a number of important tenants, chief of which is the Graybar Electric Company, which grew from a partnership formed in 1869 by Elisha M. Gray and Ennis W. Barton for the manufacture of electric appliances. This huge concern, which handles the entire output of the General Electric Company, occupies, with the J. Walter Thompson Company, the Turner Construction Company, the American Agricultural Chemical Company, The Conde Nast Publications, Inc., and the Robert Gair Company, the greater part of the rentable space, and the employees in these great concerns go far toward making up

the building's population of 12,000 or more workers,—a small city beneath a single roof.

Should anyone chance to glance at this description a few decades from this time, he will perhaps be amused at the stress which has been laid on the size of this building, with its three acres of glass windows, its thirty-one acres of floor space, and the ten million brick within its walls, if the prognostications of certain seers

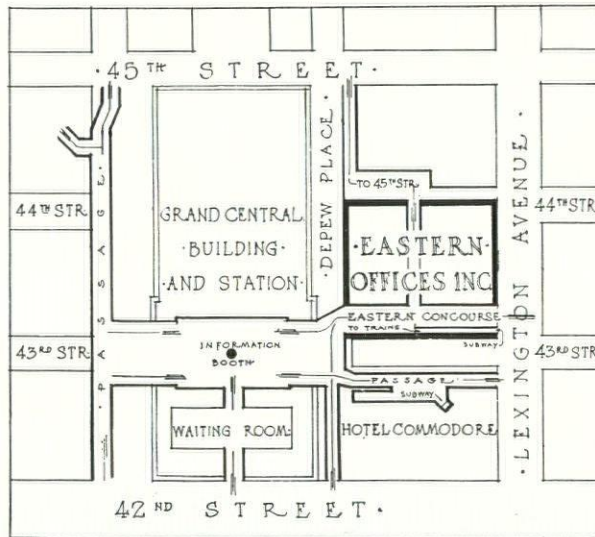
with an architectural background approach fulfillment. Men with vision see greater and still greater expansion of business, with New York as the metropolis, which will demand bigger and yet bigger buildings.

One of the most important features in determining the success of any

office building is not only adequate but the highest class of elevator service. In many cases the popularity of an office building can be directly traced to the attention given by the owners to providing safe, rapid, and comfortable vertical transportation for the tenants. Each building is a problem in itself which must be worked out by competent engineers having sufficient data at hand so that the offices on the upper floors will be adequately served by express elevators in such a manner that these floors will be just as accessible as the lower floors.

In designing the Graybar Building, full consideration was given to the latest and most improved type of elevator equipment available, which would provide elevator service unsurpassed in any structure in the world. The system installed appears to meet every requirement.

The main portion of the building is

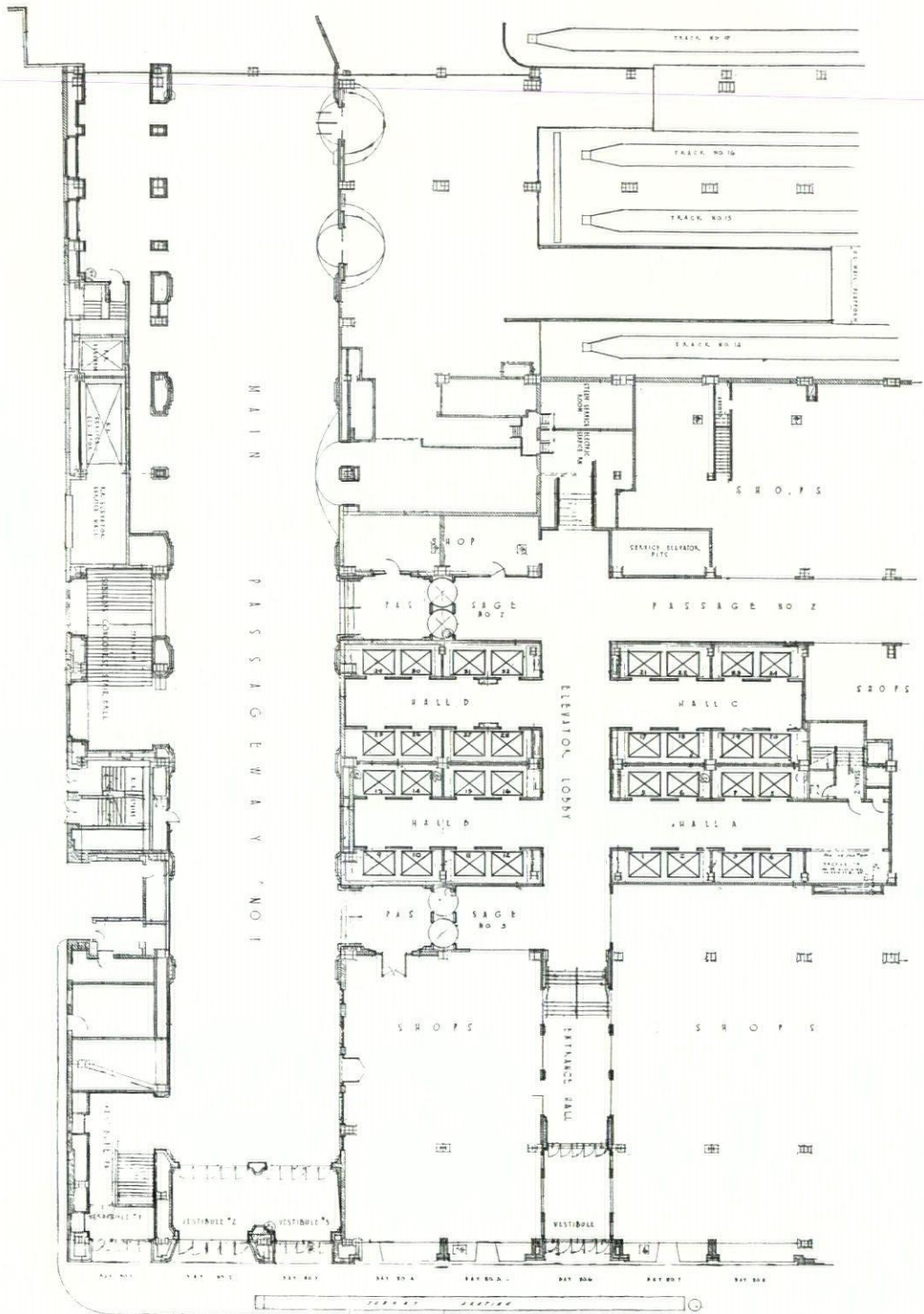




*Photo, Sigurd Fischer*

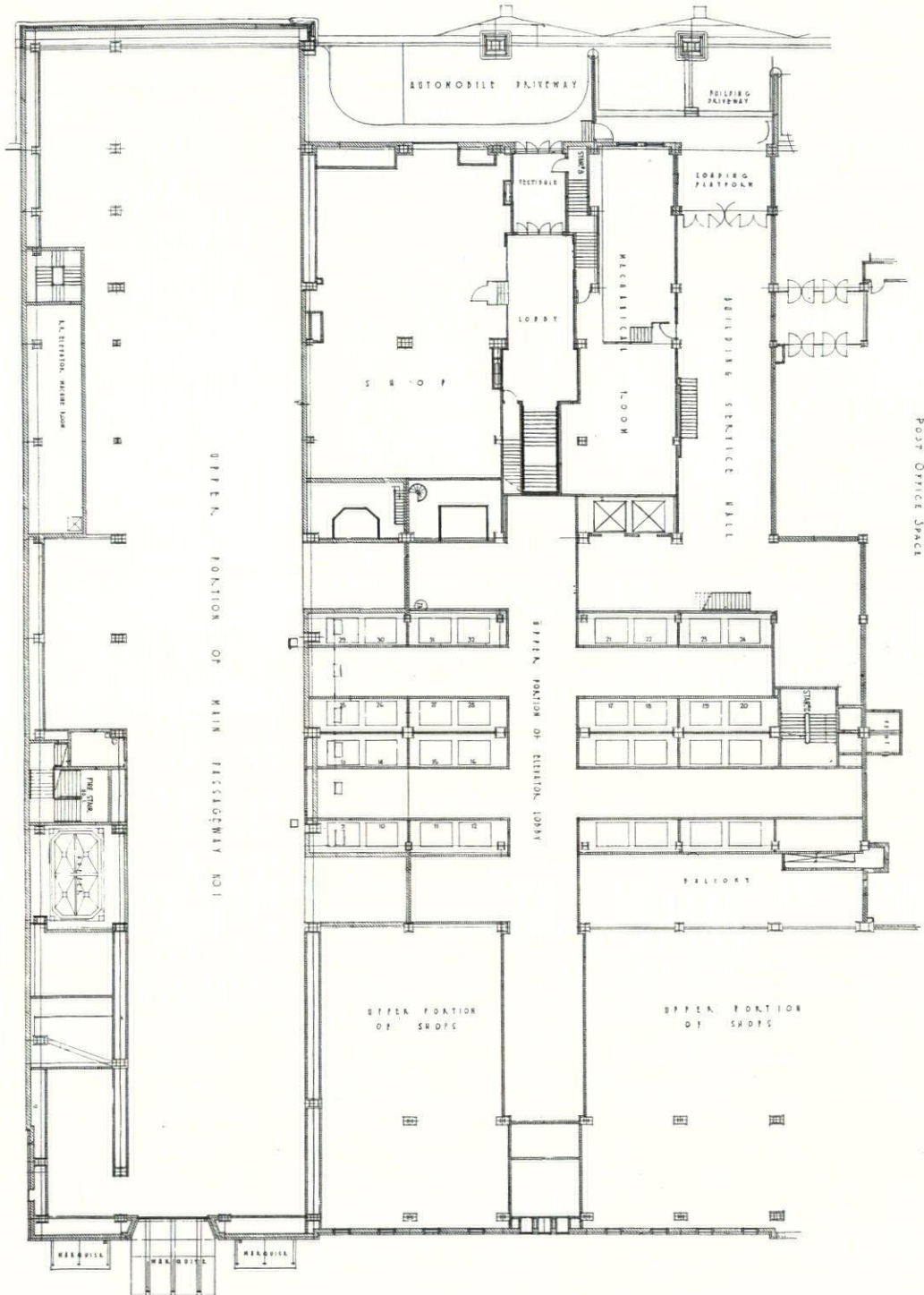
GENERAL VIEW OF THE GRAYBAR BUILDING, NEW YORK CITY

Sloan & Robertson, Architects



GROUND FLOOR (SOUTH HALF), THE GRAYBAR BUILDING  
Sloan & Robertson, Architects

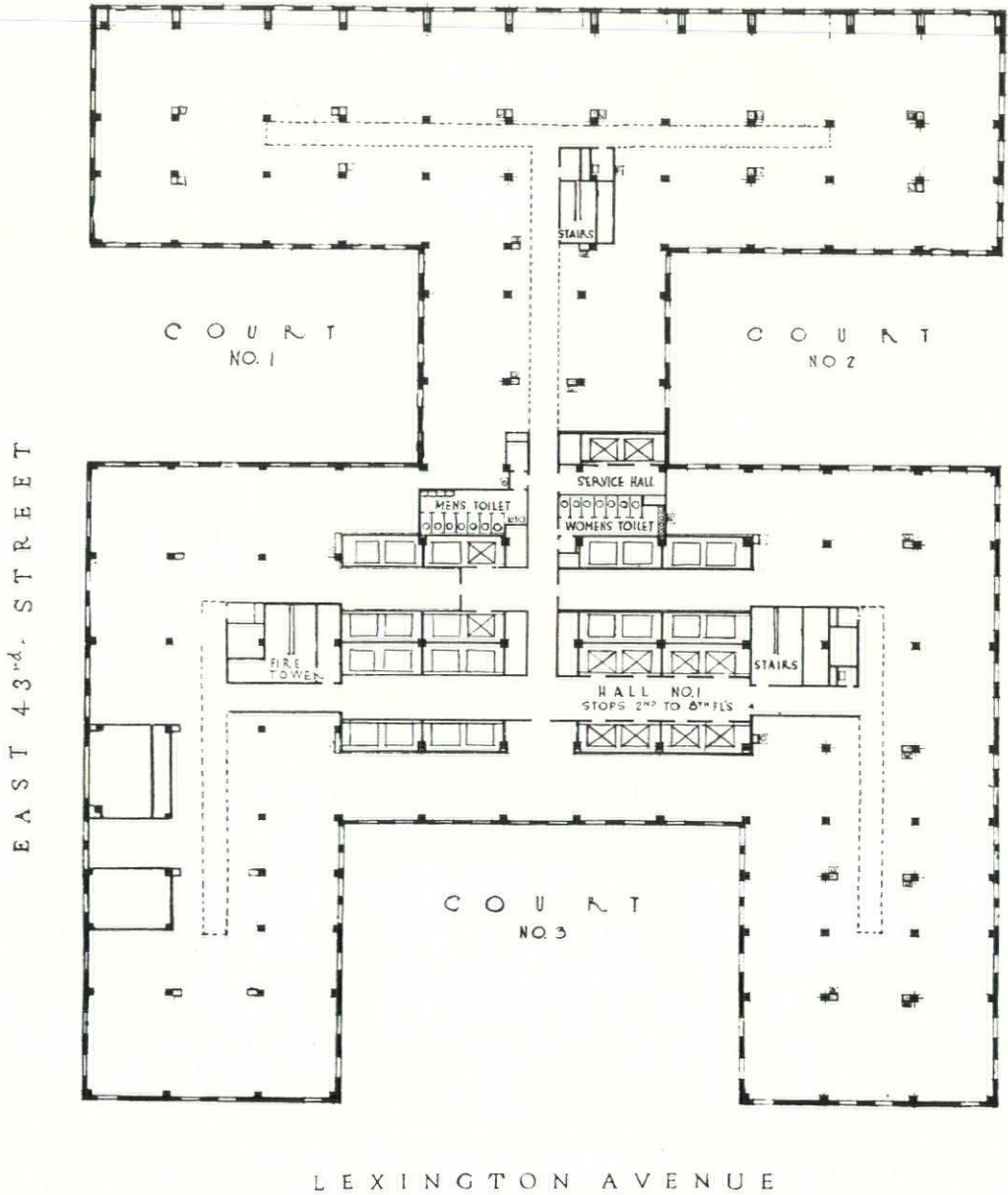




DEPEU PLACE ENTRANCE LEVEL (SOUTH HALF), THE GRAYBAR BUILDING

Sloan & Robertson, Architects

D E P E W P L A C E

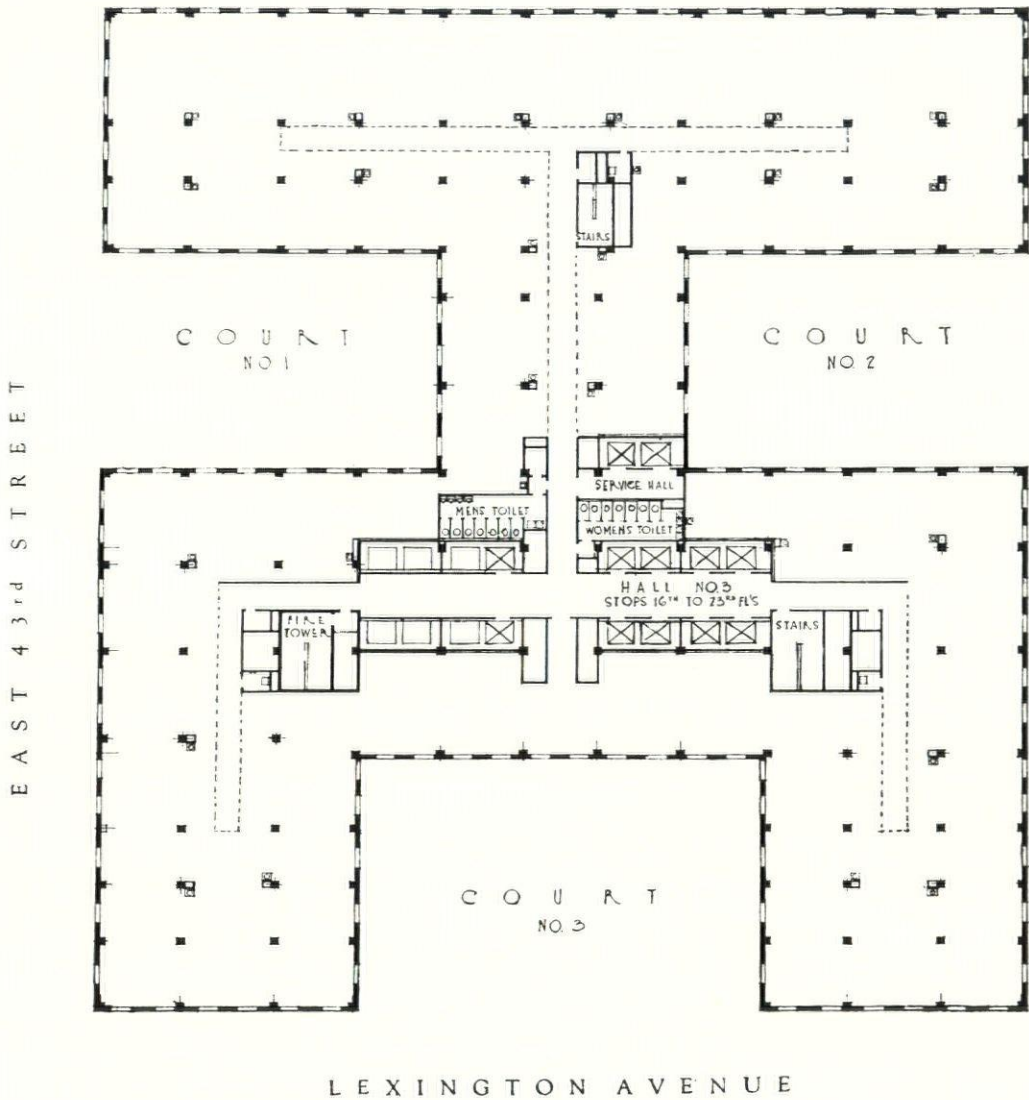


PLAN OF SECOND FLOOR

The above is typical also of all floors up to the fifteenth

THE ARCHITECTURAL RECORD

D E P E W P L A C E



PLAN—NINETEENTH TO TWENTY-SECOND FLOOR

This plan shows the setback of the entire Lexington Avenue front. Plans for the floors above are similar, save for the second setback in the pavilions at the twenty-third floor. The elevation on Depew Place runs to the twenty-ninth floor only, hence the upper two stories are reduced in area.



Photo. Sigurd Fischer

FRONT FAÇADE, THE GRAYBAR BUILDING

Sloan & Robertson, Architects

provided with the following elevator equipment:

Eight local passenger elevators, traveling from 1st to the 8th floor, a distance of 99 ft. These elevators are rated at 2500 lbs., with a speed of 800 ft. per minute, provided with automatic signal control.

Eight low-rise express passenger elevators, traveling from the 1st, express to the 8th floor and local from the 8th to the 16th floor, a distance of 179 ft. These elevators are rated at 2500 lbs., with a speed of 800 ft. per minute, provided with automatic signal control.

Eight intermediate express passenger elevators, traveling from the 1st, express to the 15th floor and local to the 23rd floor, a distance of 264 ft. These elevators are rated at 2500 lbs., with a speed of 800 ft. per minute, and provided with automatic signal control.

Eight high-rise express passenger elevators, traveling from the 1st, express to the 23rd floor and local from the 23rd to 30th floor, a distance of 346 ft. These elevators are rated at 2500 lbs., with a speed of 800 ft. per minute, and provided with automatic signal control.

Two of these elevators are arranged with openings at all floors so as to provide night service.

Two Service Elevators, traveling local from ground to 30th floor, a distance of 335 ft. These elevators are rated at 3500 lbs., at 450 ft. per minute, and provided with car switch control.

All of the passenger elevators are automatic self-leveling type, insuring level landing of the car at any floor, entirely eliminating the usual admonition of the operator to "step up" or "step down."

These passenger elevators are all provided with the Otis Unit Multi-Voltage type of control which provides varying voltages during the periods of starting and stopping and permits the highest possible rate of acceleration and retardation with perfect safety and comfort to the passengers.

The eight local passenger elevators are provided with the usual type of car switch control; the remaining twenty-four passenger elevators, however, are provided with Automatic Signal type of control, of which the following gives a brief description of the cycle of operation:

The car contains a panel which is provided with a push button corresponding to each of the floors served. As the passengers enter the car at the ground floor and call the floors at which they desire to alight, the attendant presses the buttons bearing the corresponding numbers. When the starter's signal is given, the car and landing doors are gently and firmly shut by a slight motion of the attendant's hand on the lever at his side, and with no other motion on the part of the attendant the elevator starts upward and continues to the first floor for which the button has been pressed, where it stops automatically and the hatch and car doors open automatically. As soon as the passenger at this floor has alighted, the attendant again moves the lever at his side, and the doors automatically and quietly close, and the car resumes its upward flight until it reaches the next floor for which a button has been pressed, and the cycle of operation is there repeated. Thus it continues without interruption unless a passenger at an intermediate floor desires to go up and has pressed the button in that direction, automatically registering his desire on the controller of the first elevator traveling in that direction, which automatically stops at this floor to take on the passenger and then resumes its course.

On the downward trip, the car will stop automatically at each floor for which a hall button has been pressed, also at any floor for which the attendant may have pressed a button as desired by any passenger in the car. The simple pressing of a button by a passenger at a floor,

automatically stops the first car traveling in the direction he desires without the knowledge of the attendant and without the loss of a fraction of a second in unnecessary mechanism. There is no shooting beyond the landing, no exasperating effort in leveling the elevator with the floor, and no passing the floor with a waiting passenger,—all possible human errors and thoughtlessness have been eliminated.

In addition to the above, the building is equipped with the following elevators:

One railroad mail elevator, having a capacity of 8000 lbs., at a speed of 100 ft. per minute, traveling from railroad mail platform to the post office, a distance of 23 ft., and provided with usual switch control.

One private service elevator for the Louis K. Liggett Company, with a capacity of 1000 lbs., at 100 ft. per minute, traveling from the ground floor to the mezzanine, a distance of 24 ft., and provided with the usual push button control.

One private passenger elevator for the Chase National Bank, with a capacity of 1500 lbs., at a speed of 199 ft. per minute, traveling from the ground to the safe deposit floor, a distance of 19 ft., provided with push button control.

One combination passenger and freight elevator for the Savarin Restaurant, with a capacity of 1500 lbs., at 100 ft. per minute, traveling from the kitchen to the receiving room, a distance of 11 ft., and provided with the usual switch control.

Three freight elevators, for the New York Central Railroad, one with capacity of 5000 lbs. at 150 ft. per minute, traveling from the boiler room to the street level, a distance of 76 ft., provided with switch control; one with a capacity of 10,000 lbs. at 100 ft. per minute, traveling from the turbo-generator floor to the street level, a distance of 56 ft., provided with switch control; and one baggage elevator with a capacity of 8000 lbs. at a speed of 100 ft. per minute, traveling from the express platform to the track concourse, a distance of 13 ft., and provided with switch control.

In this connection, it may be of interest to call attention to the ash-lifting device called the "skip-hoist." The boil-

ers furnishing the heat for the building are located several stories beneath the street. A huge bin was constructed extending from the 2nd to the 5th floors on the 43rd Street side. A conveyor carries the ashes to the top of the bin, and there is a trap door at the bottom. At night trucks are backed beneath the bin and loaded by opening the door, thus avoiding the heavy labor, the noise, and the nuisance of the sidewalk lift.

Although we have discarded the stage-coach as a means of locomotion, men have laid aside powdered wigs and lace sleeves, and ladies no longer affect the crinoline, yet many well-known architects who eagerly accept modern equipment still cling to an architectural style which has long prevailed, serving its purpose well enough before the dawning of the day of the skyscraper.

There is, however, another group of architects who recognize the futility of draping exteriors with old, shopworn architectural forms. A glance at the Lexington Avenue front should convince the reader that Messrs. Sloan and Robertson belong to the latter group. Here is a front composed of two pavilions connected by a low structure with three distinct and imposing entrances. As one approaches from the north or south, he observes the pavilion rising unrestrained to a sheer height of fifteen stories, to the first setback. This unbroken treatment appears to jump over the roof and continue up and ever up to the building's very top. The limestone of the lower stories merges with the buff brick of the upper stories in a manner altogether unconventional and pleasing.

It is indeed gratifying to observe that the designer has outgrown his training, as no distinct or continuous horizontal lines appear on the entire front. In contradistinction, the height of the pavilions is emphasized by the introduction of black brick between the central windows, creating, in a sense, piers on either side.

The entrance to the southerly pavilion leading to the concourse is a large rectangular opening about 4 ft. deep (Page 184), the soffit and jambs of which are constructed of carved stone at an angle of about 45 degrees. A marquise of metal

and glass extends over the walk. Three heavy metal supporting rods run up to the sloping soffit.

A unique bit of ornament decorates each of these rods. On close inspection this decorative protuberance appears to be a rat whose climb up the rod is arrested by a funnel or baffle. This is a curious nautical conceit. Sailors, it is said, are superstitious with respect to this otherwise unwelcome rodent. They wish to keep on the ship the old inhabitants, but resent the intrusion of raw recruits. In order to keep the desired equilibrium, metal funnels are placed on the hausers. The analogy is carried still further, for it is observed that the ring of sculptured ornament on the stonework about the rods is composed of heads of this small, pestiferous beast.

The big marquise is flanked on either side by a smaller marquise. The southerly one covers the entrance to the subway; the northerly one covers an additional entrance leading into the concourse. The large square panel over the marquise is filled with a cast iron grille, of geometric design, set in a bronze frame.

The ornamental features terminate in the sculptured figures in the stone piers on either side of the entrance, at about the fourth story.

The treatment of the northerly pavilion is similar; the large entrance is for the exclusive use of the bank.

Another worthy and much-worshipped architectural idol has been dethroned in creating a central motive two stories less in height than the flanking bodyguards. (See frontispiece). Here we have a rectangular opening entirely unadorned save for the incised lettering on the lintel, and a pair of suspended ornamental lamps. Directly above are three pierced limestone grilles of geometric pattern and, as a crowning member, a flagstaff, the base of which is richly ornamented in bronze and colored terra cotta. The terra cotta extends on either side, forming a broad band between the piers. This band, together with the stone grilles below and the bronze grilles at either side, are executed in excellent Moorish patterns.

The most significant detail of this mo-

tive, however, is the pair of sculptured figures in the piers at either side of the Moorish band, representing Transportation and Electricity, symbolic of the twin forces responsible for the creation of the building. Similar figures over the north and south entrances represent the four elements, Earth, Air, Fire, and Water.

These low relief figures, growing, as they do, out of the flat surface of the stonework, count as an integral part of the masonry. They were conceived and designed by the architects, modelled by Ricci and Zarri, and executed by John Donnelly. The nobility of profile and the significance of line are a tribute to all who shared in the creation of these highly specialized potential gods.

The building above these features towers its 30 stories unadorned. The restraining hand of the designer has mercifully spared us the order, the pediment, the cornice, and the cartouche, without which, a decade or two ago, no building was complete.

The Graybar may be classified as a modern building. The purist, however, may object to the hints of Classic, of Romanesque, and of Moorish in a single elevation, charging that the designer failed in consistency. The evidence of freedom in the mind of the designer, however, is of greater significance. He dared to defy the conventions, and he roamed the entire architectural realm, choosing what he would. An open mind and a fearless attitude towards the God of Convention is perhaps the designer's best asset when he attacks the problem of supplying proper architectural clothing for the tall office building.

The big concourse (Page 188) is the most conspicuous feature of the ground floor. Its side walls and arches are of Travertine. The large intersecting elliptical arch rings at the column points extend, unbroken at the imposts, down the side walls as unadorned pilasters. The lesser arch rings of the ceilings and side wall are supported on half-pilasters with interestingly carved caps of Romanesque origin.

The ceiling of each of these bents is a groined arch painted in soft cloud effects, which harmonize very well with the walls.

One of the vaults, however, is distinguished by a number of colorful industrial scenes in oil, executed by Edward F. Trumbull. One would like to see the entire ceiling done in color; the vaults are sufficiently isolated to permit of individual treatment. The floor is of terrazzo, laid off in large squares with bronze strips.

The low arched ceiling of the lobby is done in Craftex and covered with aluminum leaf. A cornice at the springing line of the arch conceals the lights. While this cornice makes a very effective screen, one would like to see another kind of ornamental device or motive that would be more in keeping with the modern spirit of the building.

The ceiling over the vestibule to the lobby, (Page 189) is a thing of joy and beauty. The design is a replica of one of the pure old Moorish patterns from the Alhambra, than which there is no finer example of geometric design. This exquisite pattern is painted in brilliant blue, green, red, orange, and yellow, and in paler tints of these same colors.

Whether or not this is the most appropriate ornament for a modern building is a question. There is no question, however, of the success of this ceiling as an individual piece of design. The only regret is that the ceiling is rather high. In order to see one must ungracefully crane the neck as did those plebeian spectators in the Eternal City, to see great Pompey pass.

Mention has been made of the failure of certain architects to grasp the idea that the design of tall buildings is a problem which cannot be solved by the application of a number of conventional architectural motives. There is, however, an ever-growing number of progressive architects who do appreciate the fact that the tall building is a problem crying out for a new and original treatment.

This progressive movement in Architecture which is manifesting itself in the vertical or potential line, in contradistinction to the horizontal or static line, has been attributed to the zoning law, which calls for the setback. It would seem, rather, that the time was ripe for a new architectural expression. This is evi-



*Photo. Sigurd Fischer*

CONCOURSE, THE GRAYBAR BUILDING

Sloan & Robertson, Architects

denced by the fact that profound changes have affected all the other arts,—painting, sculpture, literature, drama, the stage and the settings of the stage.

When we are asked whither the new ideas are leading us, we are reminded of the melancholy soliloquy of Dunsany's Captain Shard: "I wish I knew more



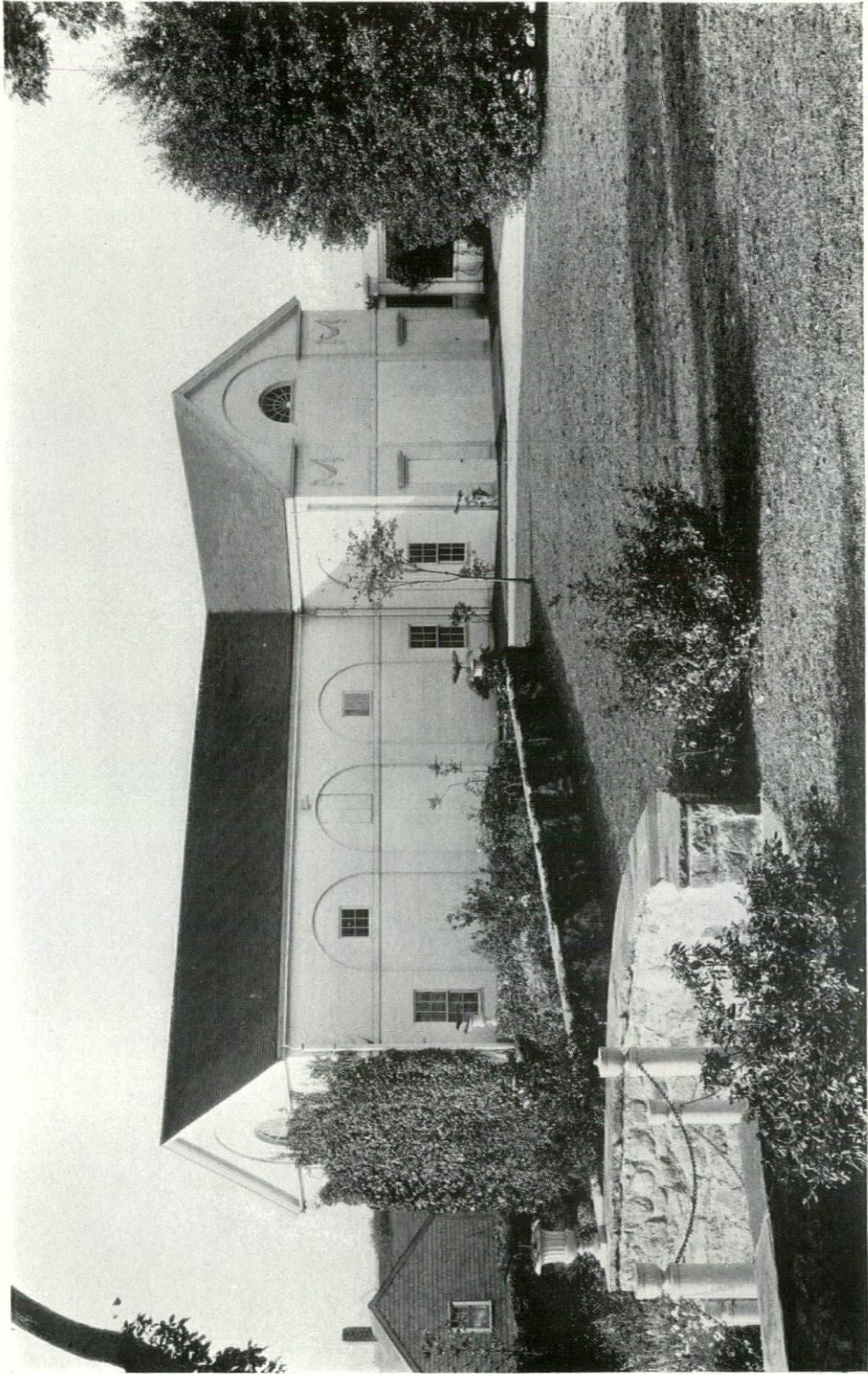


*Photo. Sigurd Fischer*

VESTIBULE AND LOBBY, THE GRAYBAR BUILDING  
Sloan & Robertson, Architects

about the ways of Queens!" We would like to know more about the gentle arts.

There are signs, however, that the architecture of these huge Towers of Babel will more and more symbolize the energy responsible for their existence, and for the growth, prosperity, and enterprise of the time in which we live.



September, 1927

THE STABLE, MOORS' END, NANTUCKET, MASSACHUSETTS  
Fiske Kimball, Architect

*The Architectural Record*

# MOORS' END NANTUCKET, MASSACHUSETTS

By

*Jiske Kimball, Architect*

GIVEN A SUPERB early American house, the effort was to restore and furnish it with artistic sympathy and historic accuracy, while at the same time seeking the fullest comfort and convenience for modern living. The house and other buildings, the garden, the interiors and furnishing were all under the single artistic control of the architect, but many collaborated with him and worked in harmonious collaboration.

First, an owner in a thousand—Edward F. Sanderson, who, while wisely insisting the result should be thoroughly livable, was eager to respect the style of the house and accept its farthest implications, to secure nothing but the finest of the period in furniture and accessories—constantly supporting the effort to make the whole as perfect as possible. In the choice of an architect he consulted R. T. Haines Halsey, creator of the American Wing of the Metropolitan Museum, who generously helped in many other matters. As representative of the architect, Mr. Erling H. Pedersen followed it from inception to completion, not only over the draughting boards, but, for over a year, on the ground during construction, wrestling with the difficulties of realizing the vision on a remote and inaccessible island. Miss Amy Coggswell served as garden consultant, and is responsible for the planting, which Huyser, the Dutch gardener, has brought to such beautiful cultivation. As general contractors, the Sawyer Construction Company of Boston entered admirably into the spirit of the task, coordinating the labors of the island masons, carpenters, and painters in an effort to work in the old style. The design and execution of the painted whaling wallpaper

was the work of the mural painter, Stanley Rowland. The character of the rugs was determined by Dr. R. M. Riefstahl, who personally selected them in three months' search of the Near East. In assembling and finishing the furniture, Morris Schwartz did yeoman service, as did Ernest Lo Nano in his loving execution of the curtains and upholstery, and Edward Maag in making the beautiful trimmings. As the labor of a year and a half neared completion, many of these were working side by side in the house, with some of the spirit of enthusiasm and emulation which animated the epic days of Hunt, Bitter, and their crew long ago at Biltmore. When in May of 1926 the owner returned from five months in Europe to take possession, the garden was in bloom, his books filled the great library and lay on the tables, and he found himself at home.

The background is Nantucket, that unique island over whose moors the house, at the edge of the unspoiled, immaculate town, looks out, past the old windmill on Town Hill. The Nantucket to which the house belongs is not that of the early struggles, but of the height of whaling prosperity, when splendid mansions rose, and life on shore for the ship owners and master mariners was one of dignity and elegance.

Moors' End is the oldest of the nine great brick houses of similar type, of which the three Starbuck houses, standing side by side on Main Street, are the best known. It was built by Jared Coffin, of the great island family of the Coffins. He acquired the land at the corner of Pleasant and Mill Streets in 1819-20 and was living in the house certainly before 1834. The great conservatism of the

island gave the detail the character of a much earlier time, and particularly the arched doorway has the aspect of Bulfinch's work in the years just after 1800. Old views show the house at this time with a retaining wall to the lower lot close to the southwest corner, and with the second story of the ell reached by an outside wooden stair.

In the 'nineties the house was purchased by "off-islanders" and elaborated with many well-meant additions intended to be harmonious in style. These included a great porch in two stories at the south and others at the rear, a sleeping porch, a fake Palladian window over the garden door, and wooden sheds at the end of the ell. The parapet walls at the ends of the main roof were pulled down and the roof balustrades removed. Three great dormers were built at the rear to enlarge and light the attic rooms. The simple old stable was glorified into a model of some admired Venetian church, and a gardener's house built in carpenter's Colonial. The grounds were extended by acquiring the lower land to the end of the block on the south, which was turned into a large garden, walled and latticed toward the streets. Attractive in itself, this was marred by lack of any relation to the house. Its boundary, edged by wooden "Italian" balustrades, zigzagged aimlessly and was devastated by a multitude of pergolas, a

pool and a clumsy wooden sundial. Inside the house, two of the old mantels were replaced with pretentious "Colonial" ones, some partitions were moved, and plate glass doors were inserted in the old window openings, leading out to terraces of matched boarding.

The architectural task in the recent work was to preserve the amenities of some of these features, while restoring the character and atmosphere of the old work. The new features had to be pulled

off and put back again, with a difference. The principal fresh modification was necessitated by providing for the owners' large library. To take care of this without disturbing the main house, the library was placed upstairs in the ell, which was somewhat lengthened. The two rooms to the right of the hall, downstairs, already modified, were thrown into one to make a long hospitable dining room. By the aid of

shoehorns, baths were squeezed in, while the characteristic Nantucket arrangement of bedrooms, with closets and a small passage between, was restored on one side. To replace the lost mantels, an agent of Mr. Sanderson's was fortunate in securing two from the dismantled Hersey Derby house, unique in being the only surviving work in which New England's master architect and carver, Charles Bulfinch and Samuel McIntire, collaborated.

On the exterior the parapets were re-



The Doorway, Moors' End, Nantucket, Massachusetts

stored, and the wide cornice of 1900 replaced by one suggested by the Starbuck houses. As Moors' End is older, however, the detail was kept somewhat more delicate. In the restored eaves' balustrades the clumsy Starbuck balusters were not followed, but, instead, a pierced interlace found in some of the designs of Bulfinch and his followers. The attic dormers to the rear were too useful to be wholly sacrificed, but they were cut down and painted the color of the slate, so that they almost disappear behind the white railings.

The garden was simplified in form and brought into relation to the house by relocating its stone retaining wall, using this as the foundation for the porch terraces of brick, and carrying along it the arches of the basement. The Venetian campanile of the stable was pulled down and the building given a simple treatment along the lines used by Bulfinch's successors. The cottage and the new farm group on neighboring property were handled in the simple manner of the native vernacular of the island.

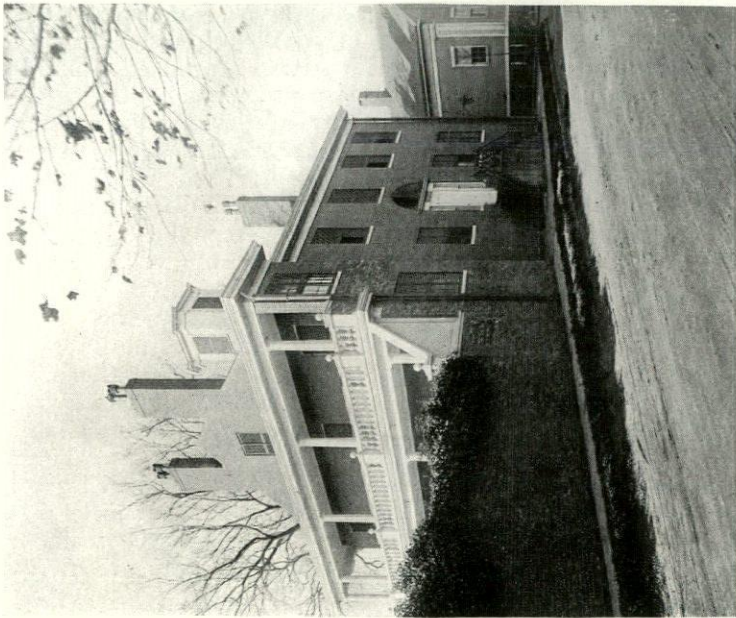
On the general treatment of the interior a few general words may be in place. No attempt was made to keep everything exactly of one precise moment of the early American style. It was recognized that in a family which had been prosperous for generations like the Coffins, many pieces would have descended from an earlier day, even before the Revolution. Accordingly we find early Georgian walnut and mahogany, as well as such fine Sheraton and Hepplewhite and some Directoire and early Empire pieces. Many of these pieces came from the Myers collection which Mr. Sanderson bought jointly with the Metropolitan Museum of Art. In general, however, these have been grouped in different rooms, which have been draped in harmony with the furniture. In the old house the greatest care has been taken to introduce no English pieces, except of metalwork, glass, or other articles which were scarcely produced in early America and were always imported. No modern works or reproductions were employed except for some

of the textiles and lighting fixtures, of which some are antique, some modern. A particular study was given to the matter of rugs. It is now well appreciated that rugs were common in the fine houses of America even before the Revolution, on the stairs as well as in the rooms. Many of them were oriental—the "Turkey carpet" of contemporary writers. As the name implies, these were from Asia Minor, and were Anatolian, not Persian, Indian, or Chinese. They thus included especially the Oushaks (of which the red and yellow harmonize particularly well with the mahogany and satinwood of the Hepplewhite period), the Bergamas, Melas, Kulas, Kubas, with some Ghiordes and Kis Ghiordes. These are the types which have been employed at Moors' End.

The approach to the house from the brick sidewalk of Pleasant Street is by a double flight of sandstone steps, perhaps the first brought to the island, bordered with a rail of wrought iron, unique product of some old island smith.

We enter a long hall extending through to the garden door. At one side rises the stair, with mahogany rail ending in a scroll, topped with turned ivory. On the walls is the scenic paper, *El Dorado*, found in the house, to which the long painted settee also belongs. The painted floor, with lozenges, marbled, follows an old American precedent.

To the left, overlooking the lower garden, is the parlor. Here, in memory of the distant voyages of the Nantucket ships, is the Captain Cook wallpaper—an original set preserved entire since its making in 1806, never yet hung. The room, in harmony with its fine McIntire mantel with relief ornaments, is filled with early Republican furniture of mahogany and satinwood. Particularly noteworthy are the carved sofa, formerly in the Prouty collection, the pair of shield-back chairs and the two inlaid card tables with their delicate fluted legs. The olive damask of the curtains picks up the green of the foliage on the walls, and carries it to the pale gray green of the woodwork.



*The Architectural Record*

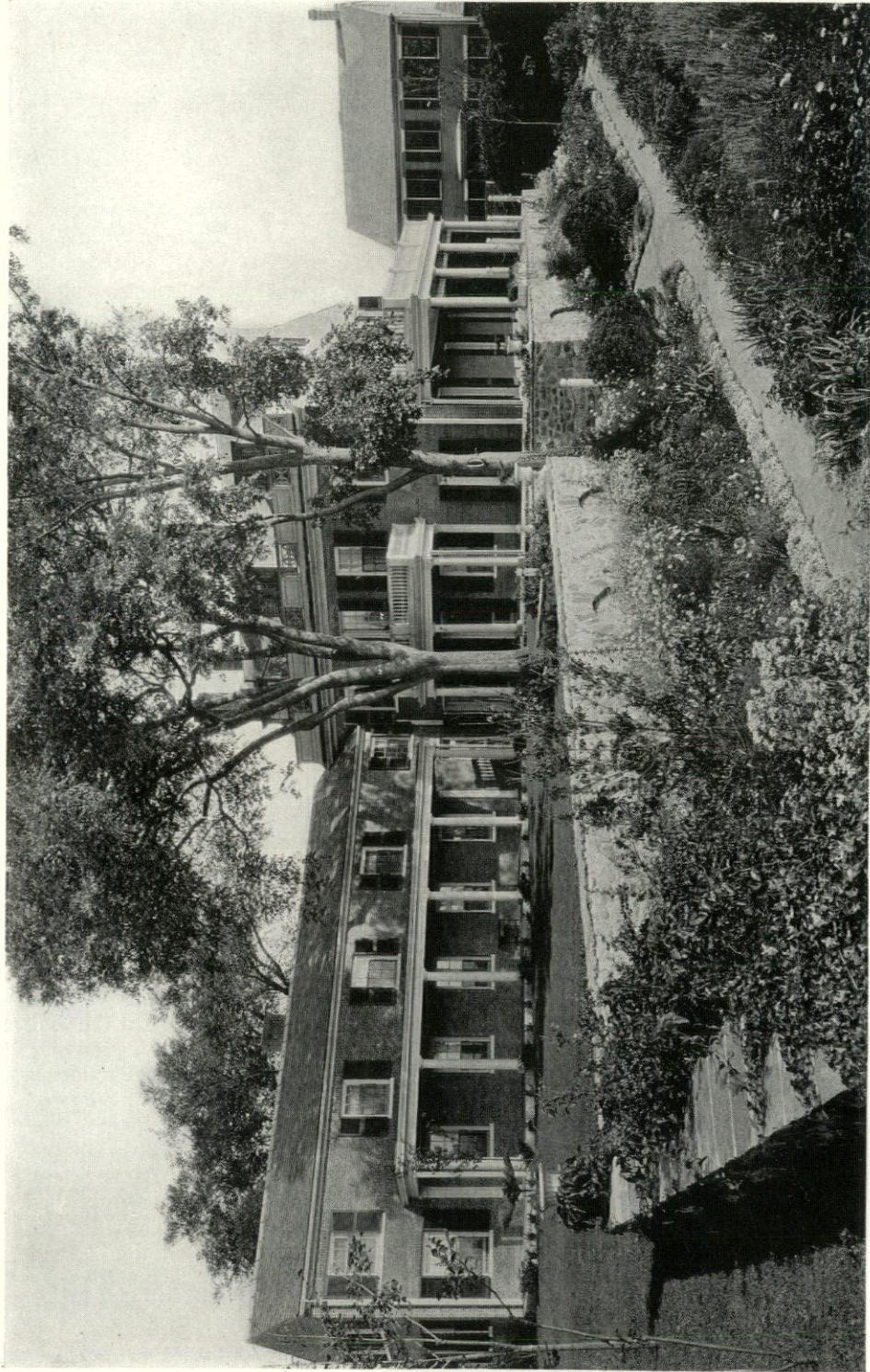
The House Before Restoration



*September, 1927*

The House As It Appears Today

MOORS' END, NANTUCKET, MASSACHUSETTS  
Restoration by Fiske Kimball, Architect



VIEW FROM GARDEN, MOORS' END, NANTUCKET

Restoration by Fiske Kimball, Architect

Amy L. Coggswell, Garden Consultant

September, 1927



THE PARLOR, MOORS' END, NANTUCKET  
Fiske Kimball, Architect

Behind the parlor is the study, in Georgian slate blue, with curtains and upholstery in blue damask. It is completely lined with books, above a broad panelled dado of cupboards for folios. Two splendid early Georgian wing chairs harmonize with the magnificent carved block-front desk by John Goddard, once the property of Eugene Bolles, placed in the window embrasure which looks out over the rear lawn. Old colored whaling lithographs, "The Chase" and "The Capture," hang over the mantels in these two rooms. The rug is a particularly fine seventeenth century Oushak.

Across the hall is the long dining room, of which the most striking feature is the unique whaling wall paper painted by Stanley Rowland. On the two chimney breasts opposite the doors are the ships setting out and returning home, the town of Nantucket lying in the foreground of

one of these panels, with its gilded steeple rising at one side. At either end of the room are the Arctic and the Antarctic fisheries for the right and the sperm whale. All the "varieties of whaling" are here, boats on the chase and in tow, dead whales riding the waves with their flags, whales being cut in at night by the glare of burning oil. On the long wall between the doors is the crowning episode of the capture. The immense table, a well known example, eighteen feet in length, and the superb six-legged sideboard of Hepplewhite inlay, are notable.

Upstairs the chief room is the long library, completely cased in unfinished pine and lined with books from floor to ceiling. The owner has had the courage to allow the architect to leave the pine alone, to darken naturally. Simple pilasters divide the sections and mark the chimney breast and opposite projection.





THE LIBRARY, MOORS' END, NANTUCKET  
Fiske Kimball, Architect

Beyond is a little sun room, unnoticed on the exterior, hung with glazed chintz of cool green.

The upper hall is curtained with a gay *Indienne*, with which harmonize three matched Melas rugs, on a floor painted in the old "hitamiss," still to be seen in the Macy house on Main Street. One or two early walnut highboys stand against plain walls hung with lithographs of the "lost fleet" and other whaling subjects.

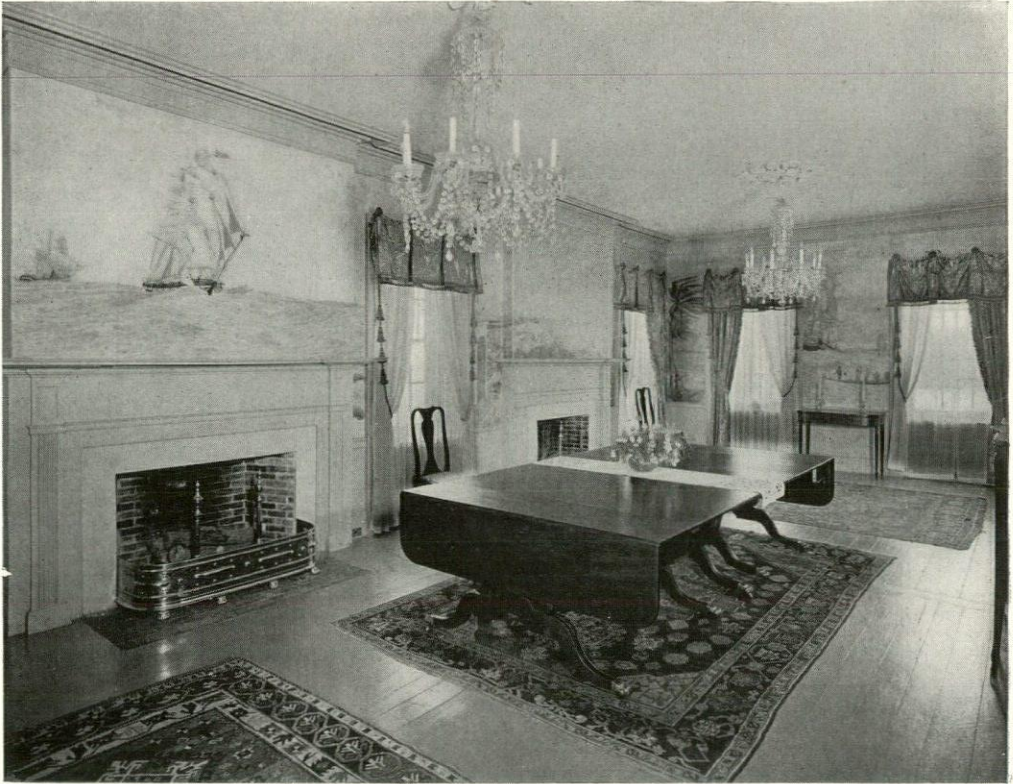
It is hard to choose between the four bedrooms on this floor. In the owner's room over the parlor, is gathered the finest of the Hepplewhite, richly inlaid with satinwood. A superb secretary, once forming part of the Bolles collection, vies with the serpentine front bureau. The high-post bedstead, carved and fluted, is draped with antique *toile de Jouy*: "L'hommage de l'Amerique à la France." The windows are similarly

draped with a modern fabric, falling from mahogany cornices which match that of the bed. On the walls is a simple figured paper in gray matching the woodwork.

In the room behind are two narrow maple field beds, hung with flowered chintz, with which the Kula and Kuba rugs in yellow, green and brown make an admirable harmony.

In front, across the hall, is a room in rose and gold: Woodwork, mahogany color, gold flock-paper on the wall, curtains and bed-hangings of rose-and-gold damask. The furniture here is early Georgian, with a ball-and-claw fourposter, walnut high and lowboys, and fine Georgian mirrors.

The little room behind is in many ways the most attractive. It is loosely hung throughout with a golden Directoire damask of medallions, which appears also



DINING ROOM, MOORS' END, NANTUCKET  
Fiske Kimball, Architect

in the seats of the fine Phyfe lyre-back chairs. The lyre bed has also its coverlets and bolsters of gold satin. At its head is the circular light-stand of Directoire style, with its unique screw top, made for the painter Sully.

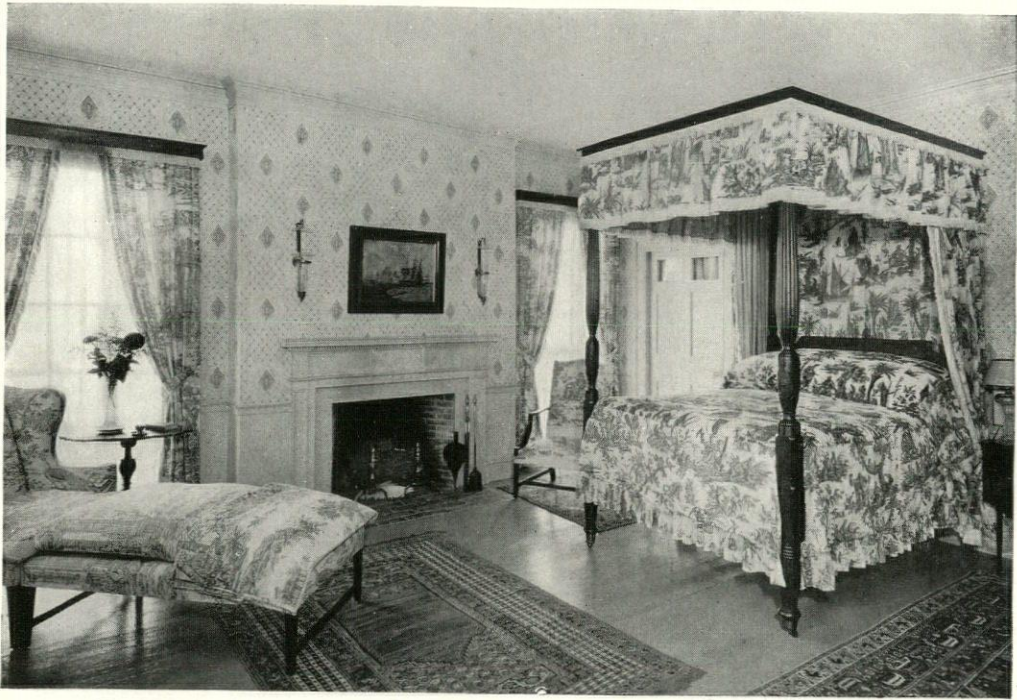
The bathrooms, always a problem in the Colonial house, and too often foreign bodies in it, here deserve particular mention. Instead of the usual aggressively sanitary and modern treatment, they have received one such as they might have had in the Colonial period itself—indeed such as some rooms at the time actually did have. The suggestion came in London, as the designer stood before Vermeer of Delft's exquisite "Young Lady Standing at the Virginals," in a room with chequered marble floor and plastered walls with a base of Dutch tile. With infinite patience enough tile were assembled for

bathrooms in three different color schemes, the blue, the puce, and the polychrome (orange, green and violet).

In the service wing we find everything the quintessence of modernity.

On the porches and terraces, overlooking lawn and garden, the furniture is of old pine with Windsor chairs. Venetian blinds, as at Monticello, afford privacy and shelter from the sun.

From the house one steps out directly across the brick terrace to the upper lawn. In the planting, the modern irregular massing of shrubs has been eschewed for a more formal, old-fashioned scheme. The garden, not quite rectangular, is divided into an inner and outer zone by a hedge of tree box. The inner flower garden, reached through latticed arches, surrounds a stone fountain adapted from an old Philadelphia model. The beds of



TWO BEDROOMS IN MOORS' END, NANTUCKET

Fiske Kimball, Architect



BEDROOM, MOORS' END, NANTUCKET

Fiske Kimball, Architect

old-fashioned flowers are bordered with dwarf box and sweet william.

At the further end of the garden rises the end of the stable, treated much as were McIntire's stables for the Derby

family. Shallow arches of plain flush boards make a composition depending on harmony of proportion which would be severe if it were not for the touch of graciousness lent by the carved garlands.

P O R T F O L I O  
C V R R E N T - A R C H I T E C T V R E



RESIDENCE OF C. A. MOORE, ESQ., ROUND HILL, GREENWICH, CONN.  
Henry W. Rowe, Architect

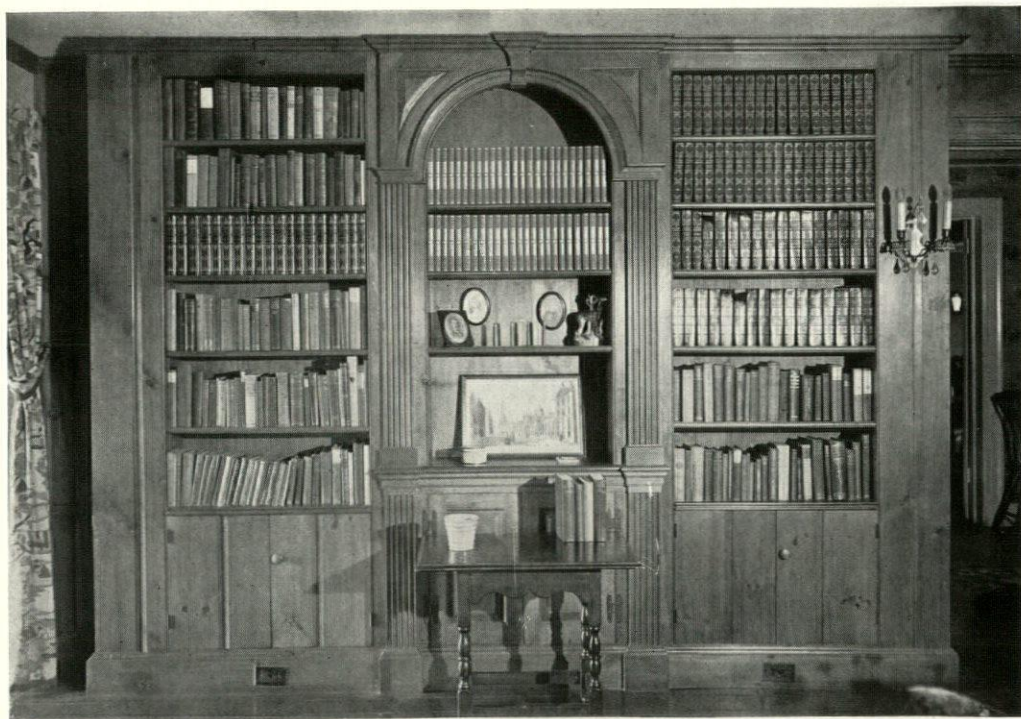
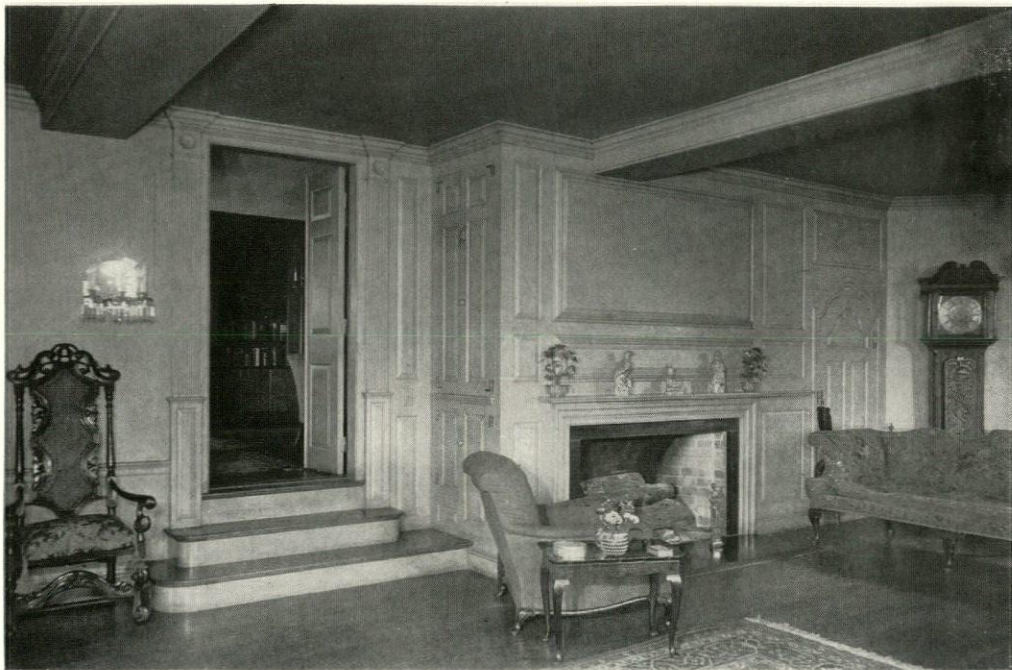




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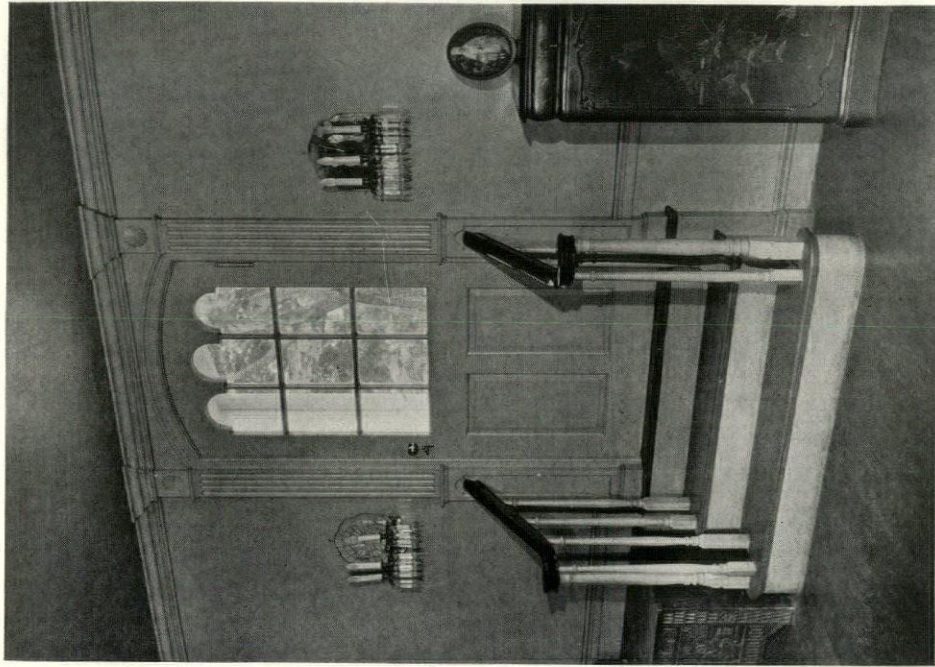
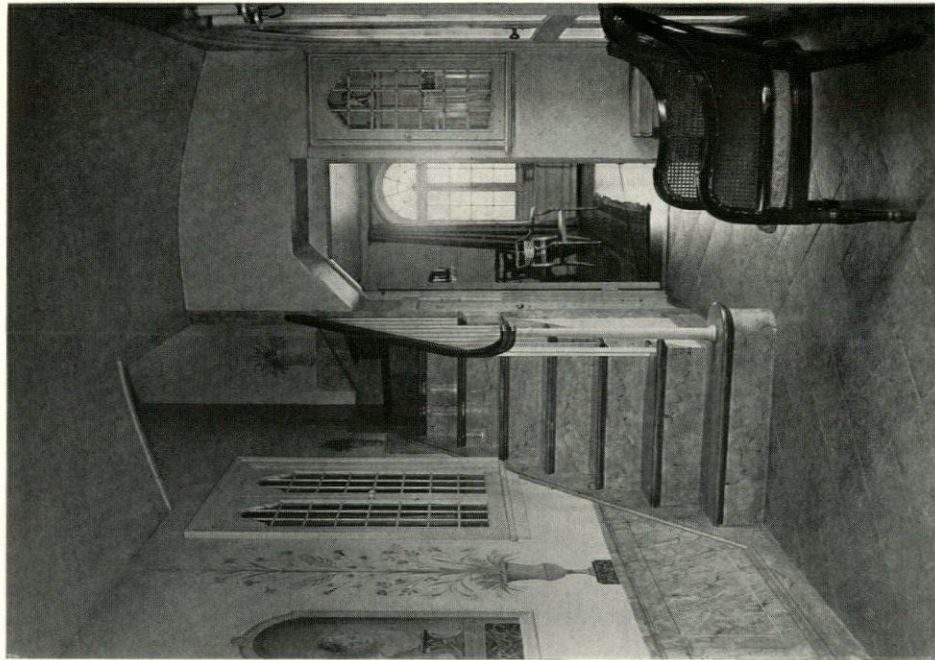






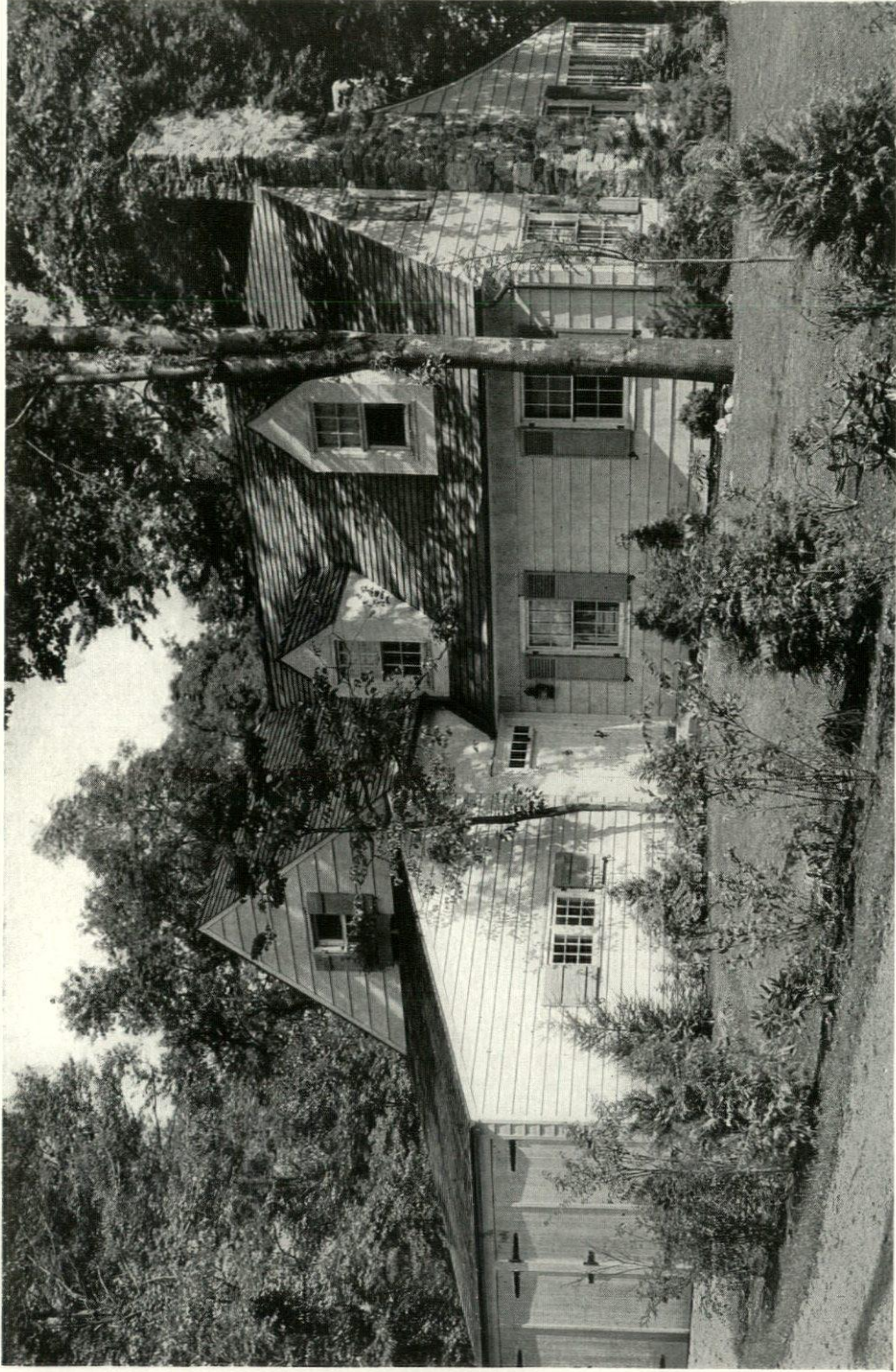
RESIDENCE OF C. A. MOORE, ESQ., ROUND HILL, GREENWICH, CONN.  
Henry W. Rowe, Architect.





RESIDENCE OF C. A. MOORE, ESQ., ROUND HILL, GREENWICH, CONN.  
Henry W. Rowe, Architect





*Photo. Gillies*

RESIDENCE OF W. F. STUBNER, ESQ., GREAT NECK, L. I.  
F. Albert Hunt and Edward Kline, Architects



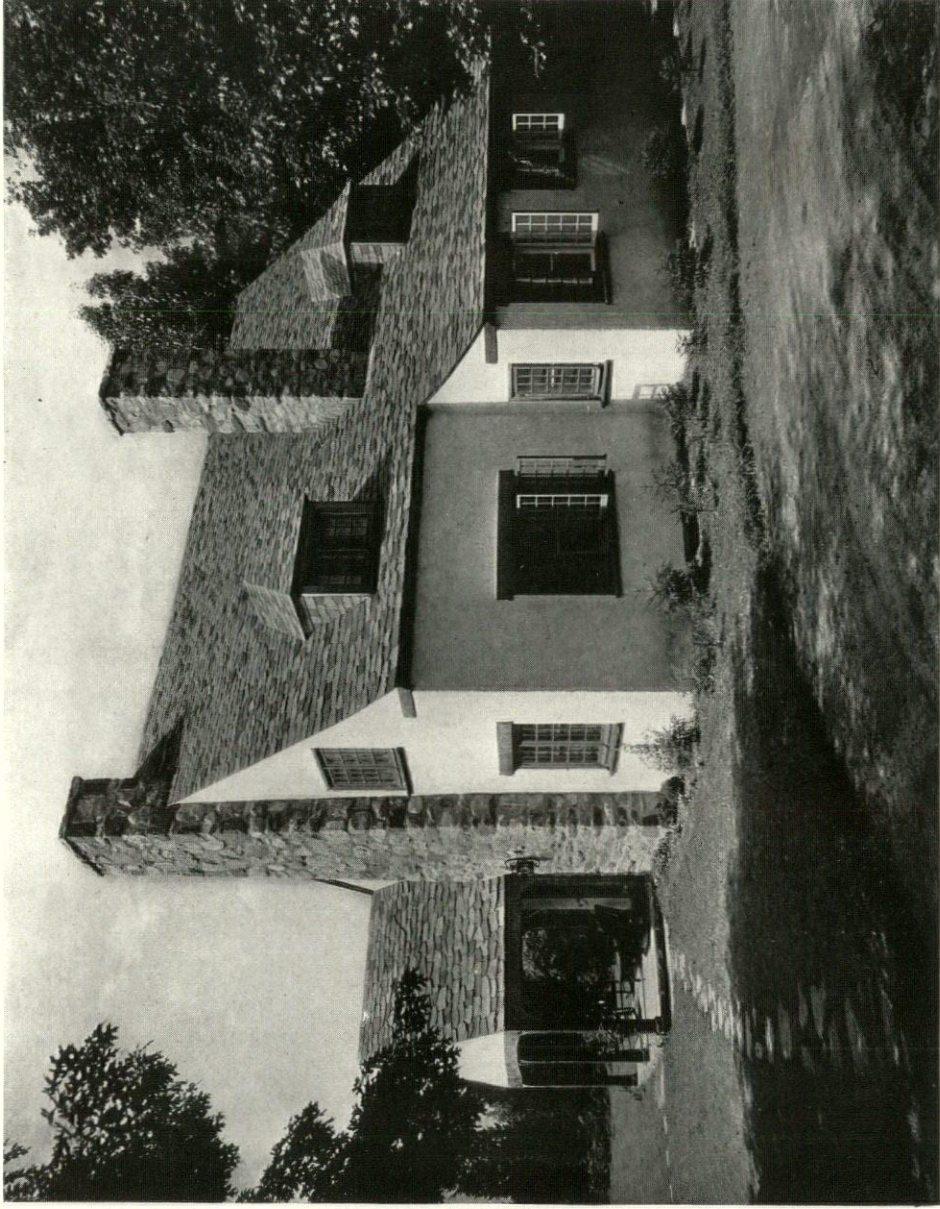


*Photo. Gillies*

RESIDENCE OF W. F. STUBNER, ESQ., GREAT NECK, L. I.  
F. Albert Hunt and Edward Kline, Architects







*Photo. Gottscho*

RESIDENCE OF E. J. SEAMAN, ESQ., SMITHTOWN, L. I.  
Peabody, Wilson & Brown, Architects

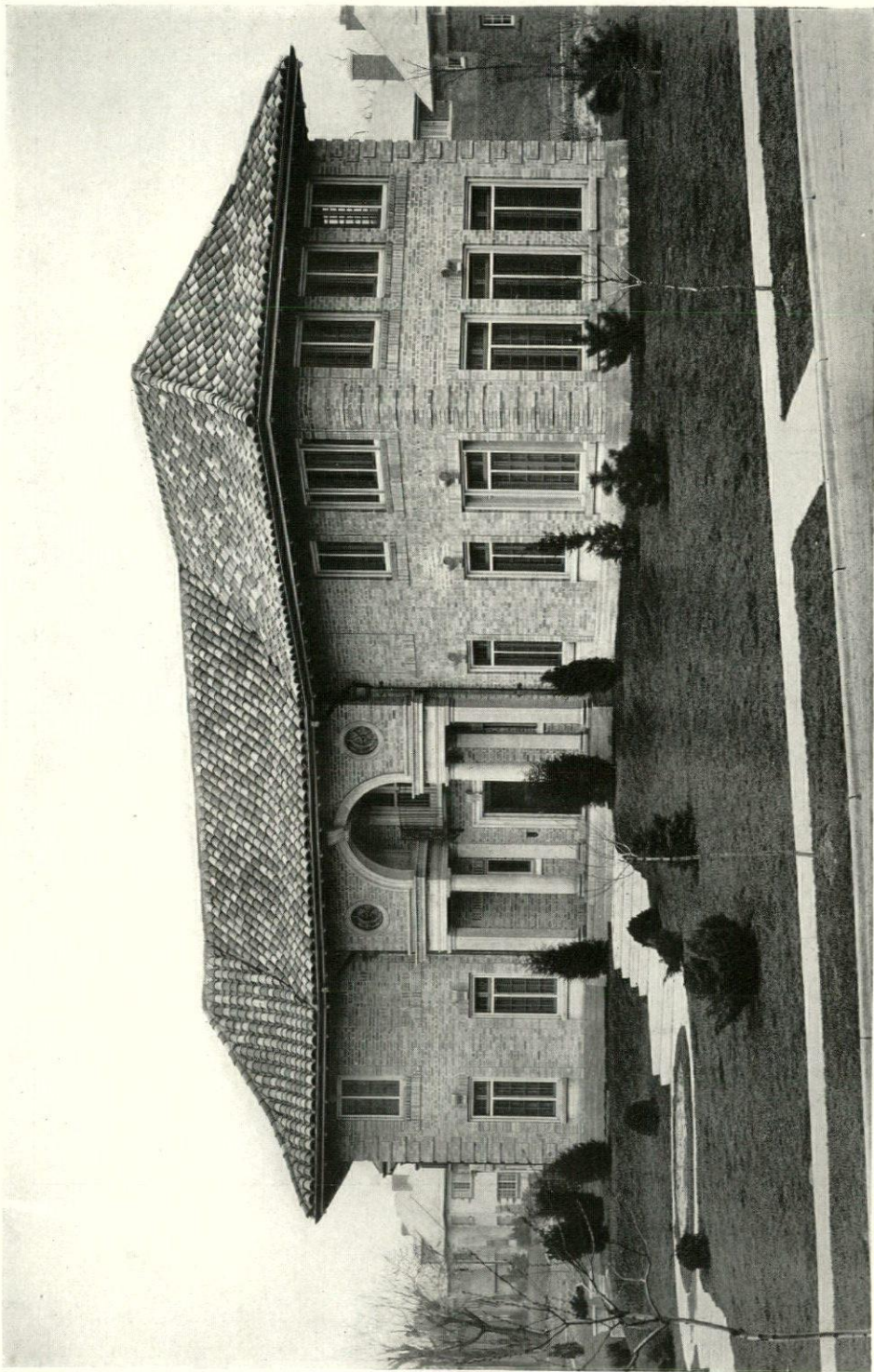




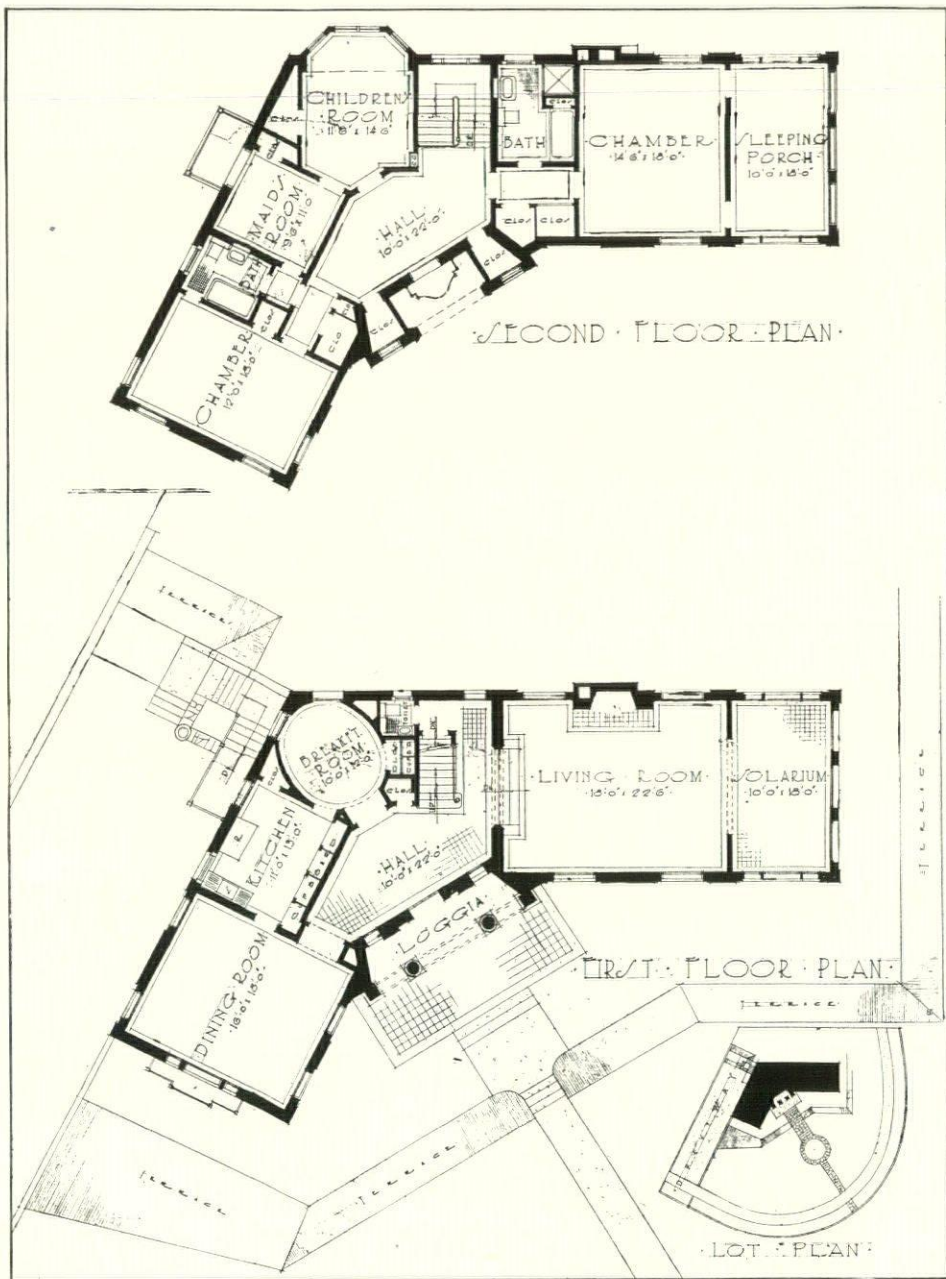
*Photo, Gottscho*

RESIDENCE OF E. J. SEAMAN, ESQ., SMITHTOWN, L. I.  
Peabody, Wilson & Brown, Architects





RESIDENCE OF EARL STANZA, ESQ., UNIVERSITY HILLS., ST. LOUIS, MO.  
T. P. Barnett Co., Architects.



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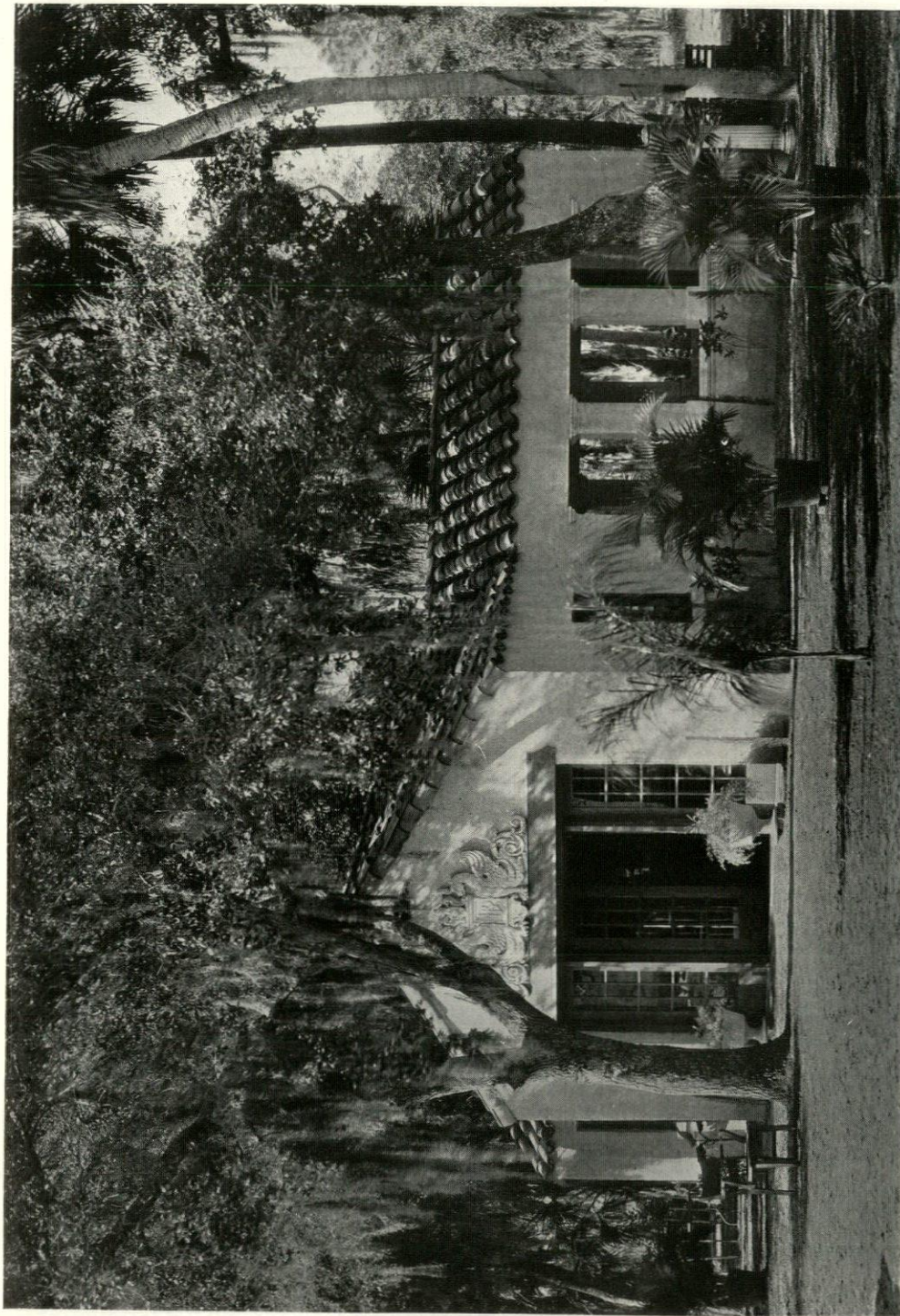
T. P. Barnett Co., Architects



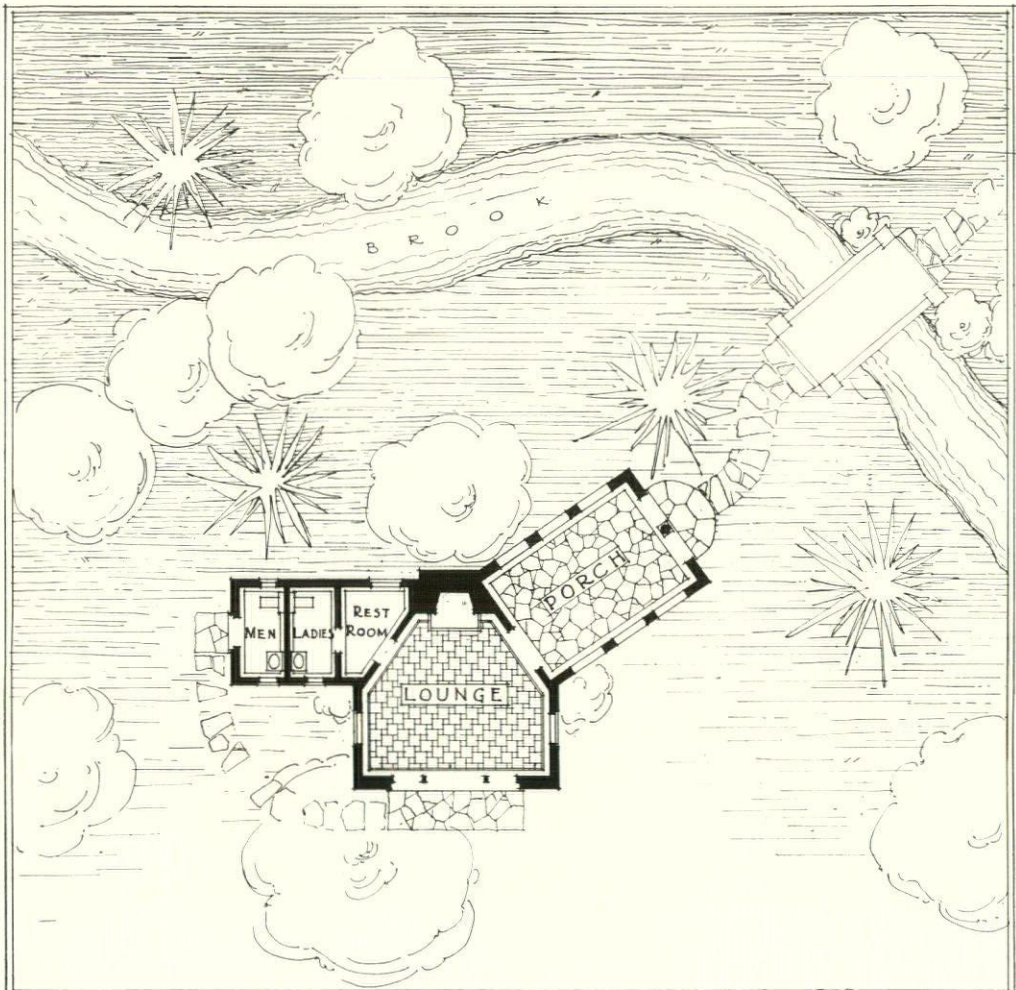
RESIDENCE OF EARL STANZA, ESQ., UNIVERSITY HILLS, ST. LOUIS, MO.  
T. P. Barnett Co., Architects.







FIELD OFFICE OF THE BEACH PARK COMPANY, OLD TAMPA BAY, FLORIDA  
Franklin O. Adams, Architect; Jefferson M. Hamilton, Associate



ST. PETERSBURG HIGHWAY

FIELD OFFICE  
 of  
 THE BEACH PARK COMPANY  
 ON OLD TAMPA BAY  
 TAMPA FLORIDA

FRANKLIN O. ADAMS ARCHITECT ~ J.M. HAMILTON ASSOCIATE



OFFICE BUILDING OF INSURANCE COMPANY OF NORTH AMERICA, PHILADELPHIA, PA.  
Stewardson & Page, Architects



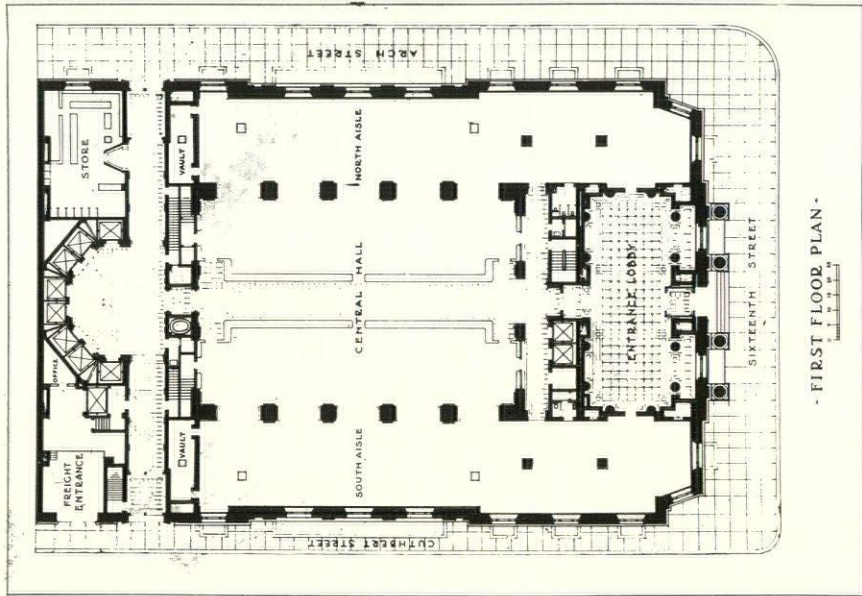


OFFICE BUILDING OF INSURANCE COMPANY OF NORTH AMERICA, PHILADELPHIA, PA.  
Stewardson & Page, Architects.

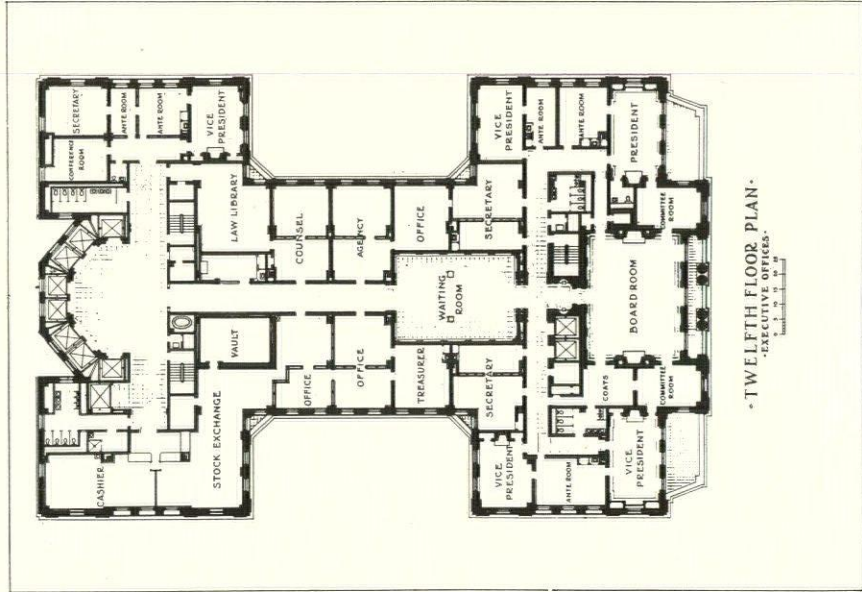




OFFICE BUILDING OF INSURANCE COMPANY OF NORTH AMERICA, PHILADELPHIA, PA.  
Stewardson & Page, Architects



- FIRST FLOOR PLAN -

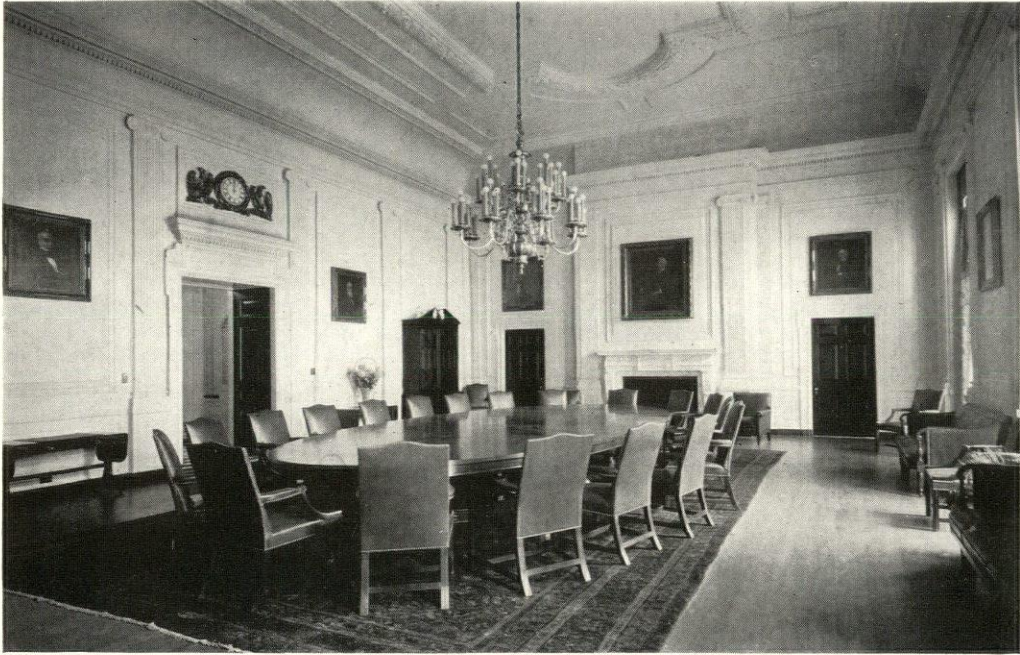


- TWELFTH FLOOR PLAN -  
- EXECUTIVE OFFICES -

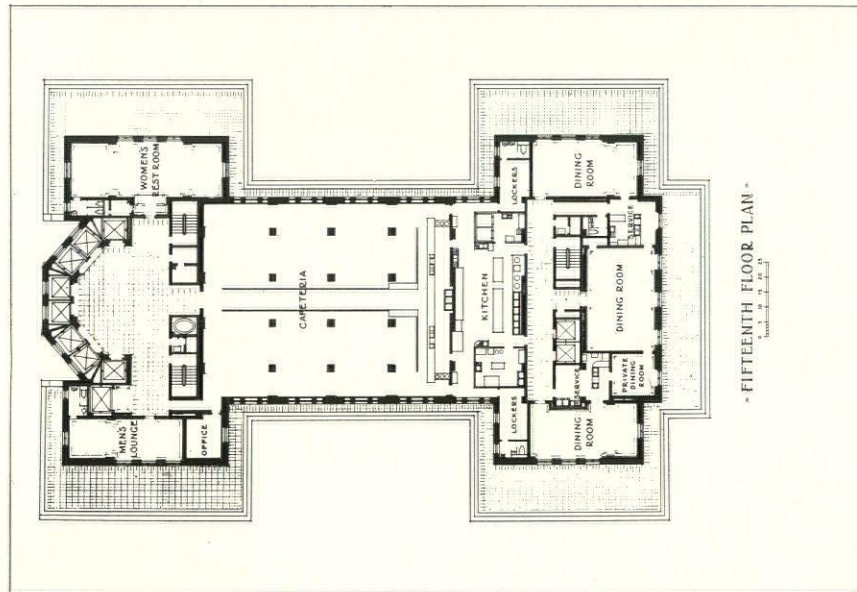
OFFICE BUILDING OF INSURANCE COMPANY OF NORTH AMERICA, PHILADELPHIA, PA.

Stewardson & Fago, Architects

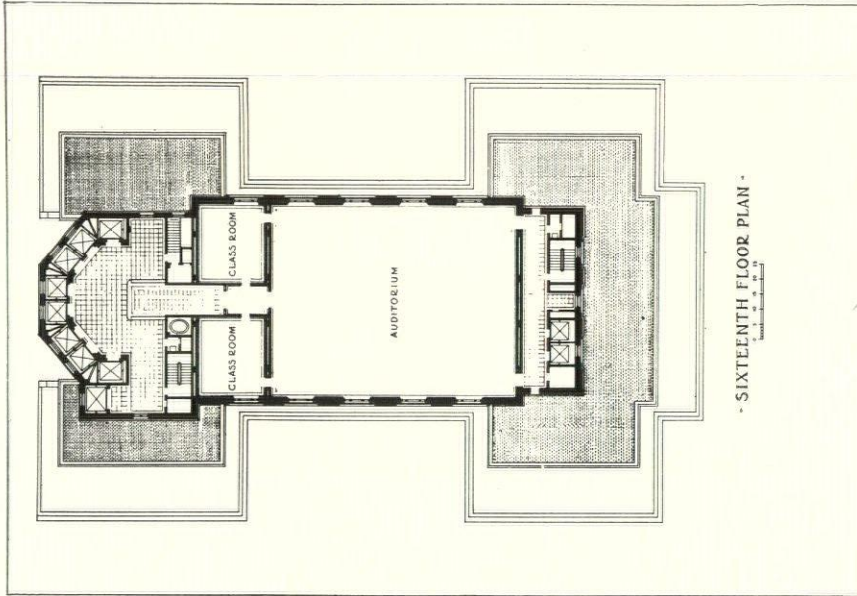




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Stewardson & Page, Architects.

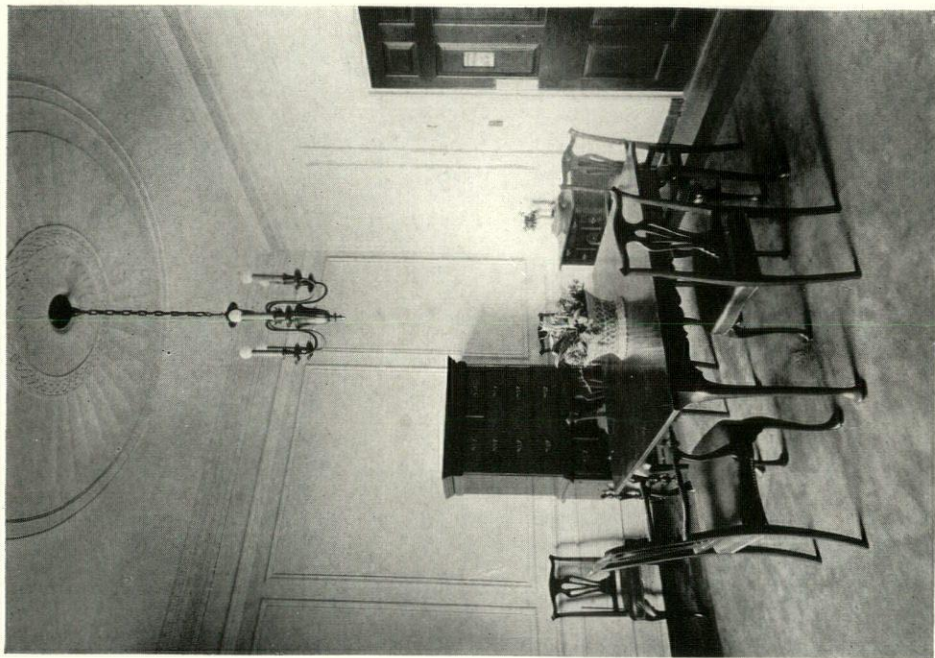


- FIFTEENTH FLOOR PLAN -  
Scale 1/8" = 1'-0"



- SIXTEENTH FLOOR PLAN -  
Scale 1/8" = 1'-0"

OFFICE BUILDING OF INSURANCE COMPANY OF NORTH AMERICA, PHILADELPHIA, PA.  
Stewardson & Page, Architects



OFFICE BUILDING OF INSURANCE COMPANY OF NORTH AMERICA, PHILADELPHIA, PA.  
Stewardson & Page, Architects





The

## MORRIS COUNTY COURT HOUSE MORRISTOWN, NEW JERSEY

*By Harold Donaldson Eberlein*

THE MORRIS COUNTY COURT HOUSE, at Morristown, New Jersey, belongs in the category of early American civil architecture and worthily represents a phase of building that has generally received less attention than it deserves. Dating as it does from the early years of the nineteenth century, along with most other buildings of its period, it has escaped the all-inclusive admiration for *venerable* antiquity which public sentiment has a long time been accustomed to lavish somewhat indiscriminately upon structures erected prior to 1800 and to withhold from those built afterward.

Now that the turn of the century has become less significant as an arbitrary limit for the age of romantic

glamour and sentimental esteem, public consciousness has grown readier to accept the things of later date purely on their own merits while the halo of approval as "early American" invests even the products of 1840 or 1845.

Built in 1827, the Morris County Court House has not until very recently shared to any degree in the keen local pride that has always attached to some other buildings of historic import in the vicinity, although architecturally the Court House is of equal or even greater moment. This long-continued lack of appreciation was doubtless due in large measure to the effects of the ill-treatment that for many years concealed the real character of the structure.

Originally, the Court House shewed red

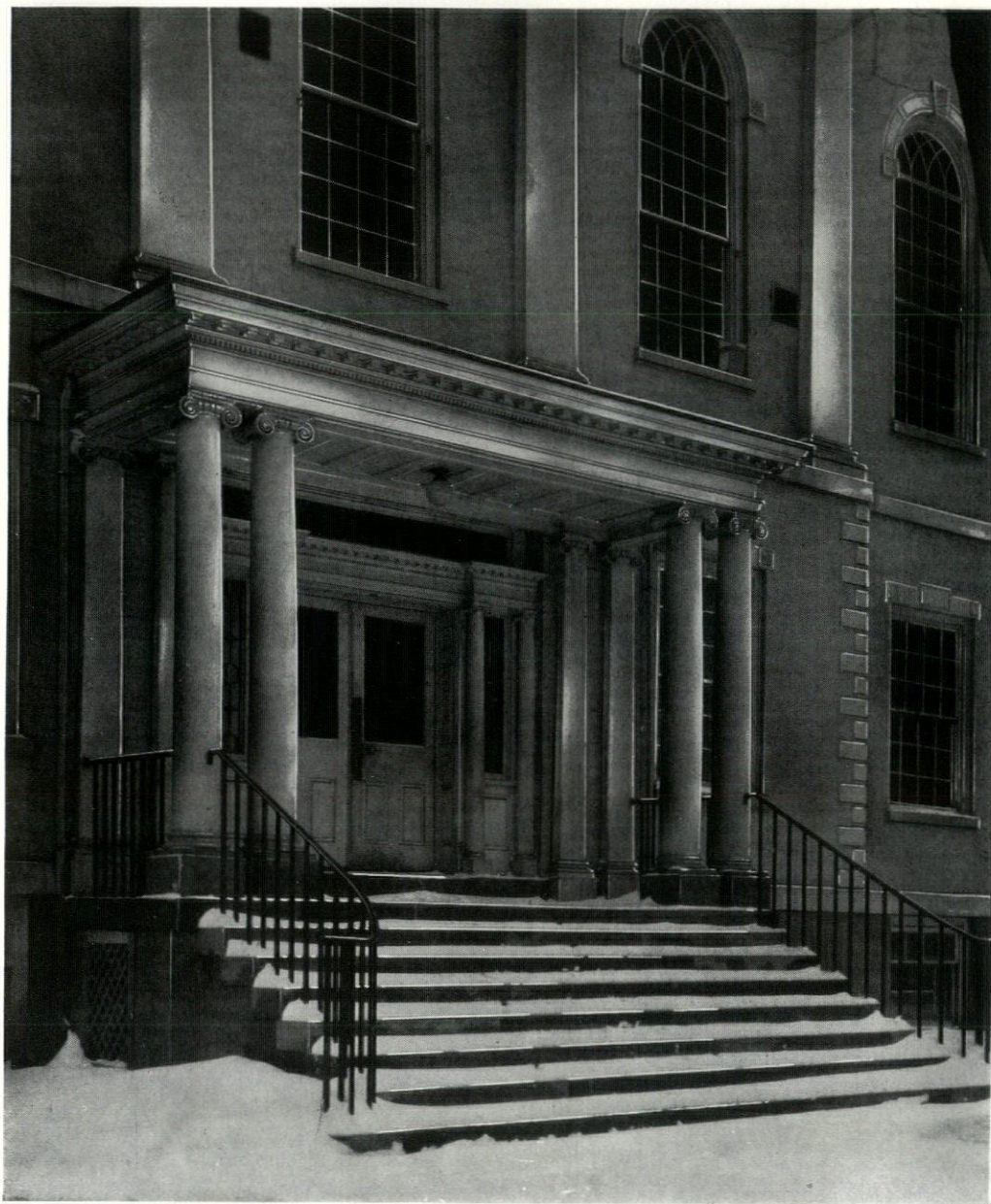
brick walls with the trim fashioned from the brown stone quarried in the neighborhood. At an early period the whole exterior was painted grey, thus blotting out all the articulation of the design. Subsequently, the need for more room to accommodate various county offices led to the erection of a separate building at the rear of the Court House; later still, the demand for further space resulted in further building which connected the annex with the body of the Court House. Sometime in the 'fifties the County Gaol, also, was attached to the rear of the original building. Although the construction to the back and at the side was carried out with some notion of making it conform in style with the Court House itself, the result was to ruin the balance of the composition when seen from the east or northeast. The last step towards destroying the distinction of the building was taken when the whole structure was painted a dirty brownish red and the original stone steps with wrought iron handrails, before the main entrance, were replaced by a concrete flight, devoid of any particular character, flanked by imitation stone piers. Under the circumstances, it is scarcely to be wondered at that the Court House excited neither interest nor admiration on the part of the public; it was generally looked upon, in fact, as a "shabby old thing," whose demolition would cause no regret. More than usual keenness of vision for architectural merit was needed to penetrate the disguise.

So matters remained till 1907 when a new Justice of the Supreme Court of New Jersey came to preside in Morris County and live in Morristown. The newly arrived justiciar had more than the common interest in architecture, perceived the true merit of the Court House, silenced the talk of its destruction, and began a programme of gradual restoration and repair. The first move in this reconstruction policy was to paint the brick walls a light cream yellow and all the stone trim and exterior woodwork white. The immediate effect of this external transformation was to awaken a spirit of appreciative interest. The people of the county, thanks to the object lesson given them,

began to realize that the Court House was something worth preserving. Thenceforth talk of demolition ceased; the project of restoring the building to its pristine state no longer aroused ridicule, and a certain amount of co-operation towards this end could be counted upon.

The ceiling of the Court Room, which had sagged and threatened to fall, was carefully brought back to its proper position and the timbers supporting it were adequately re-enforced by steel trusses. Leading up to the portico before the main entrance, the brown stone steps with their iron handrails have been restored. The cupola, parts of which were much decayed, has been put in thorough repair; the dome has been gilded through the generosity of an anonymous citizen; and on the dome has been set a weathervane in the form of a plough, a device appropriately enough derived from the arms of the State of New Jersey. In the Court Room, the dismal oak-graining of the woodwork has given place to the original white paint, and an ugly iron chandelier of wholly unsuitable design has been removed. In short, so far as was possible, the scars and mutilations of an unthinking era have been obliterated and the former appearance restored. In this work of rehabilitation the county authorities have responded with appreciative support and private individuals have manifested substantial encouragement.

The process of restoration has gone on gradually, one might almost say unconsciously, since 1907. Not a great deal has been done at any one time, but whatever has been undertaken has been a move in the right direction. Inside the building there had been more or less change from time to time before any considerable sense of appreciation had been aroused, but fortunately no irreparable blunders had occurred. The panelling, for example, was long ago removed from the main hall and a pressed metal dado substituted in its place. Panelling preserved elsewhere in the building, however, supplies all the details requisite for faithful restoration. The rest of the woodwork in the hall, the staircase and all the decorative plasterwork, by great good fortune,



Portico, Main Entrance  
MORRIS COUNTY COURT HOUSE, MORRISTOWN, NEW JERSEY

are intact. So it is throughout the structure; the fundamental features are preserved and, wherever regrettable alterations have been made, clear indications can easily be found to guide the course of the restorer.

It is recorded that the architects of the Court House were Lewis Carter, of Chatham, and Joseph Lindsley, of Morristown. The latter was also the builder, keeping alive in this double capacity the early tradition under which so many ex-



Court Room, General View  
MORRIS COUNTY COURT HOUSE, MORRISTOWN, NEW JERSEY

cellent buildings were designed and erected during the Colonial era. Joseph Lindsley afterwards became Sheriff and was for a long time one of the official occupants of the Court House he had built.

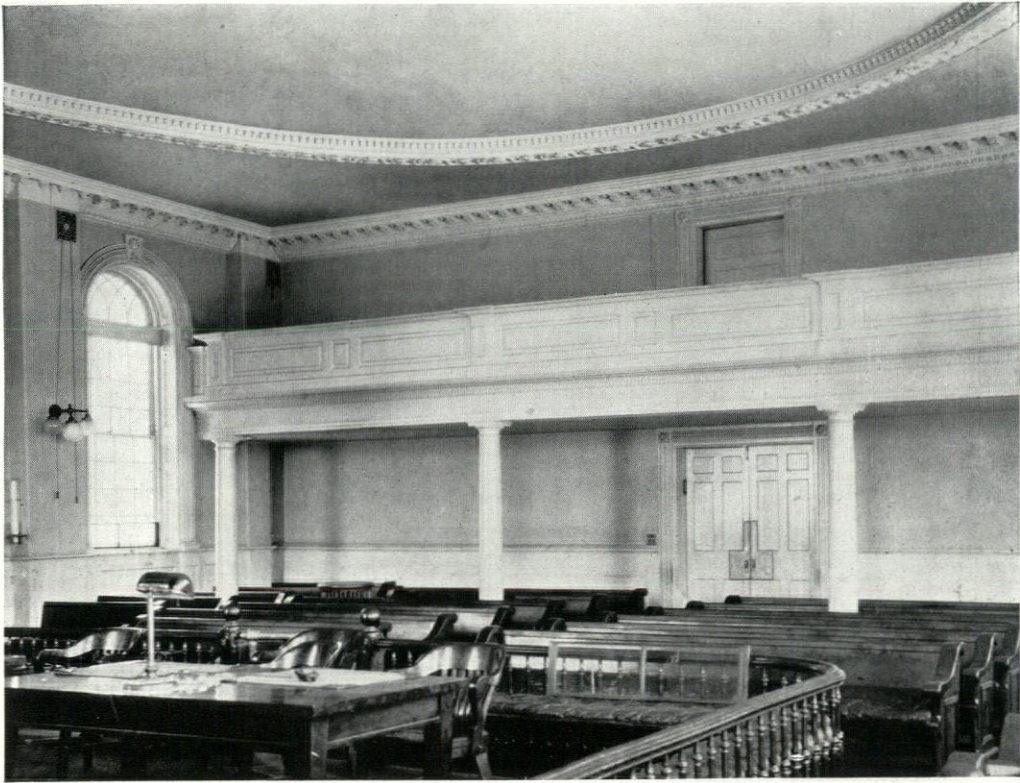
What may have been the architectural training of Messrs. Carter and Lindsley, or what may have been the particular influences that had shaped their taste, we have now no means of discovering from any documentary source. We can only rely upon internal evidence afforded by a study of the building itself. There we find much that is illuminating.

Despite the approaching dominance of the Greek Revival at the time when the Court House was designed and built, its fashion was little affected by the overwhelming passion for meticulous and arid archæology that ruled nearly everything not long afterwards. The building pre-

sents a curious combination of desire to follow Græco-Roman precedent along with independence in the manner of its interpretation. The architects apparently wished to follow somewhat—especially in the matter of their details—the Græco-Roman fashion as interpreted by Benjamin Henry Latrobe and his pupils, so far as they were acquainted with it. Where their knowledge failed them in this respect, they fell back upon their familiarity with earlier tradition and produced a composite result possessing a good deal of originality. In their general scheme of composition, their reliance upon the earlier types for inspiration is evident.

It is in the composite aspect of their work that the Court House displays features not commonly found elsewhere, and it is this aspect that makes the building worthy of close examination. The panneling details are particularly deserving of



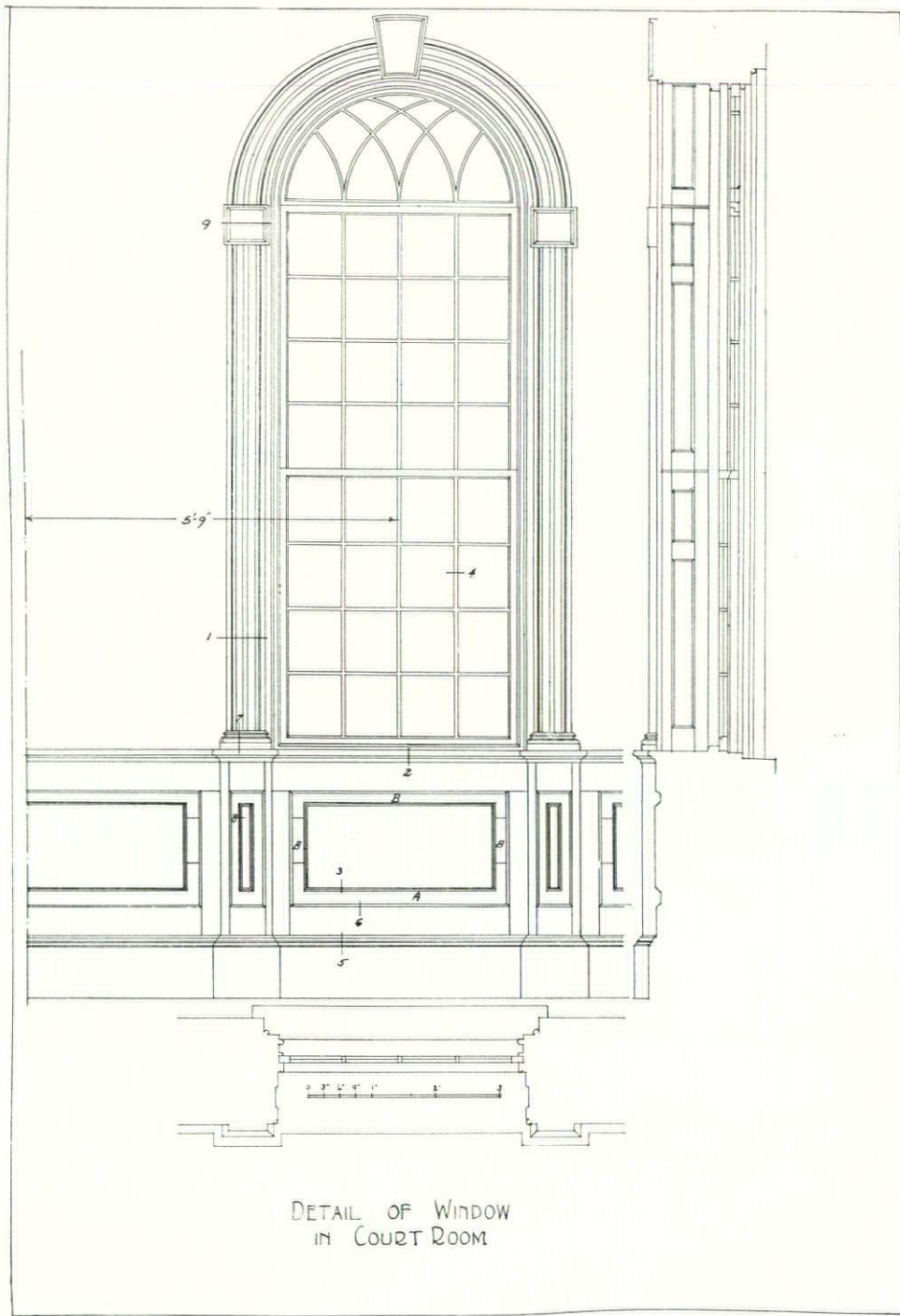


The Gallery, Court Room  
MORRIS COUNTY COURT HOUSE, MORRISTOWN, NEW JERSEY

notice. In what is now the Prosecutor's Office, on the upper floor, there are enough remains of the original panelling in the window recesses to shew the unusual system followed and the delicate contour of the mouldings by which the panels are defined. Beneath each window is a curious quintuple arrangement of two shallow horizontals over three long verticals. The same arrangement apparently, at one time, extended around the whole room. Again, in the Court Room, the panelling of the dado arrests attention, both by its system of divisions and also by the details it exhibits. As all of these minutiae are shewn in the accompanying plates of measured drawings, there is no occasion for comment further than to note the comparative rarity of *any* panelling precedents of this particular era, when panelling and dadoes were rapidly falling into disuse, and to suggest their

value as sources pregnant with material suitable for adaptation. The panelling behind the Judge's desk, too, and likewise the panelling on the front of the gallery have an interest distinctly their own. The panelling and other details in connexion with the window at the head of the stair are all quite in accord with the established usage of the period, but the *ensemble* is so agreeable that a detailed drawing is justified.

In several instances the architects exhibited originality in the treatment of their ornament, whimsical, perhaps, but none the less pleasant in the result. Their key-blocks above the windows in the Court Room, with the honeysuckle-like device set within a panel surrounded by lamb's-tongue moulding, are curiously reminiscent of the decorated key-blocks so common in Worcestershire. The palmette band around the front of the

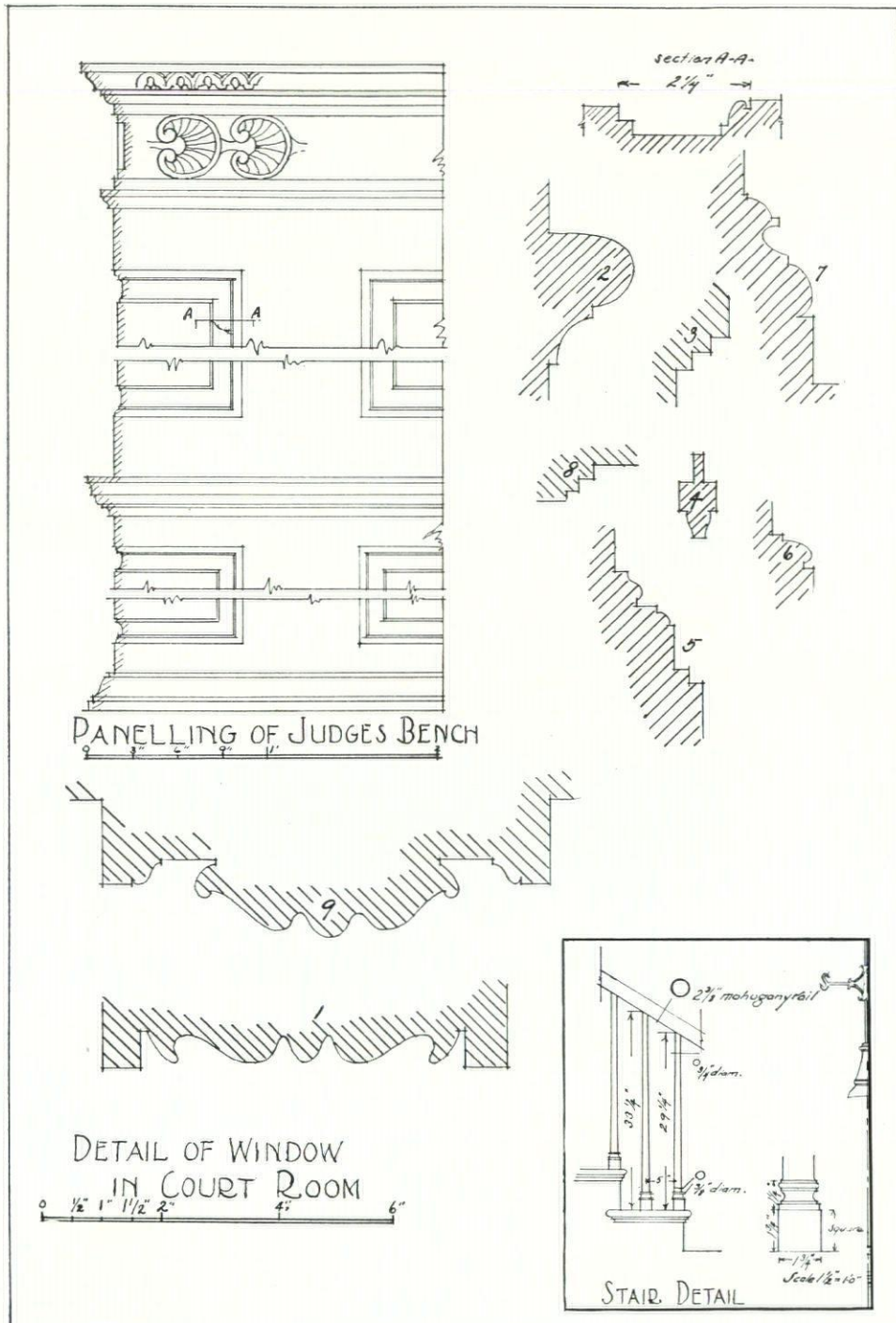


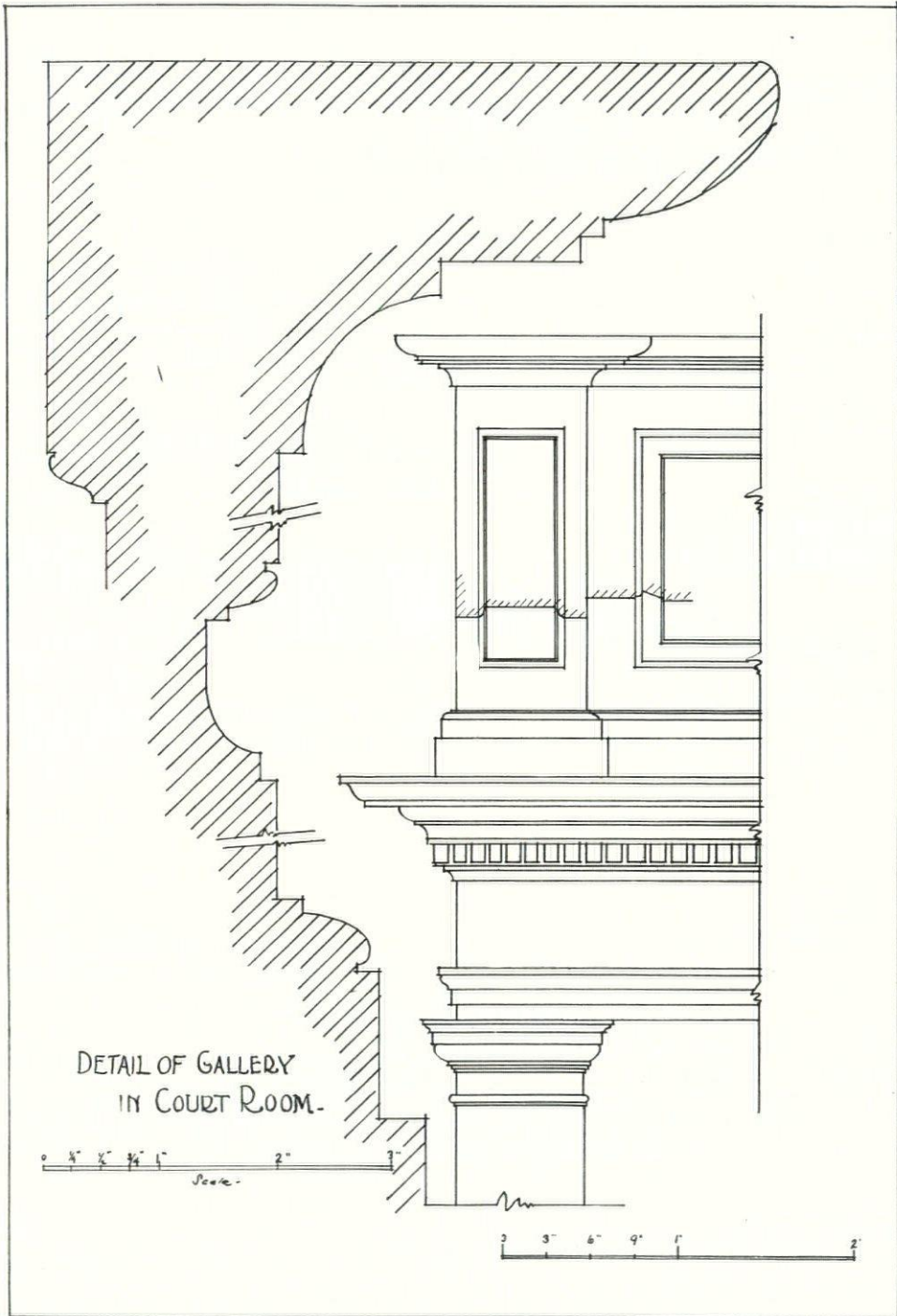


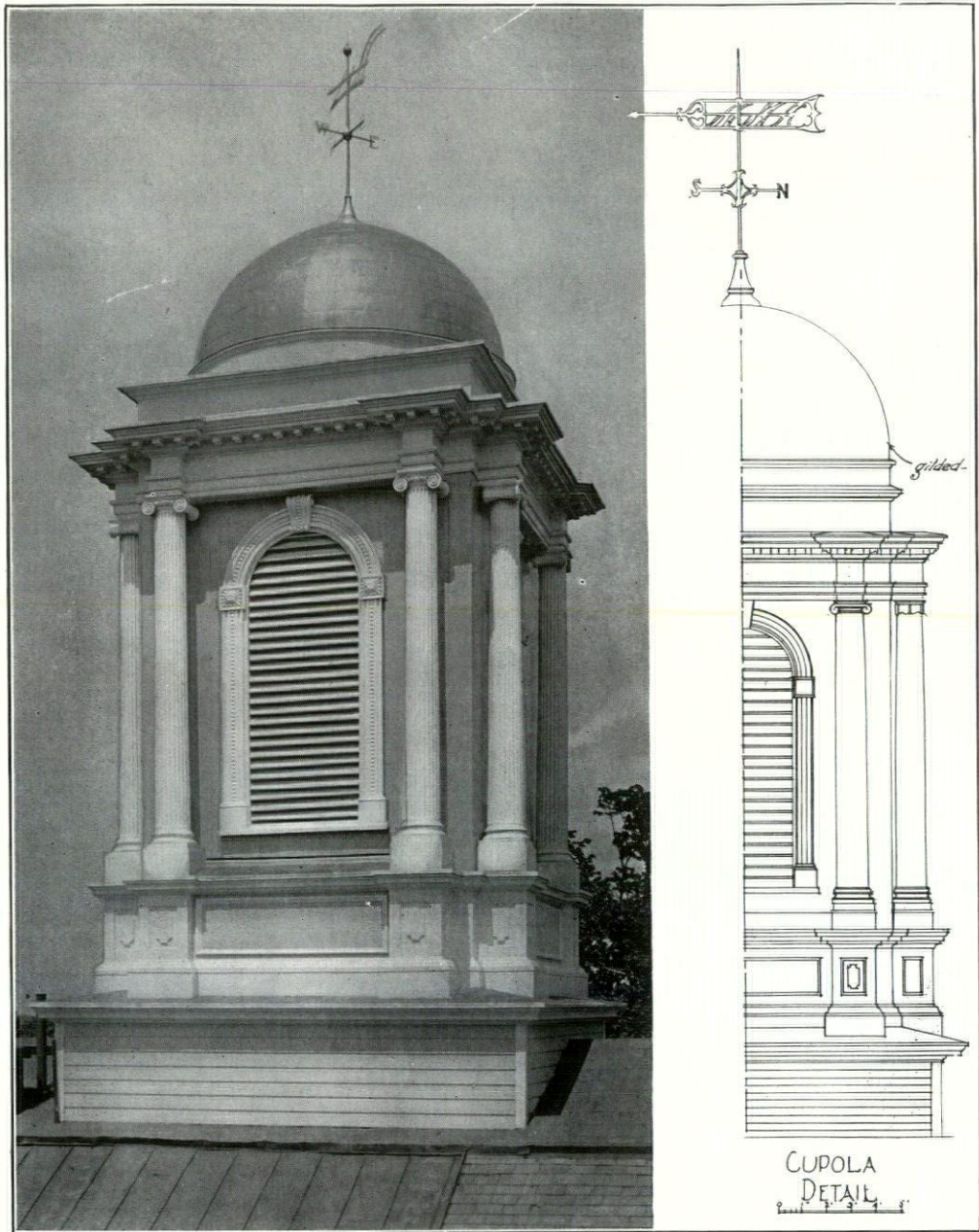
*The Architectural Record*

September, 1927

Window in Court Room  
MORRIS COUNTY COURT HOUSE, MORRISTOWN, NEW JERSEY  
[239]





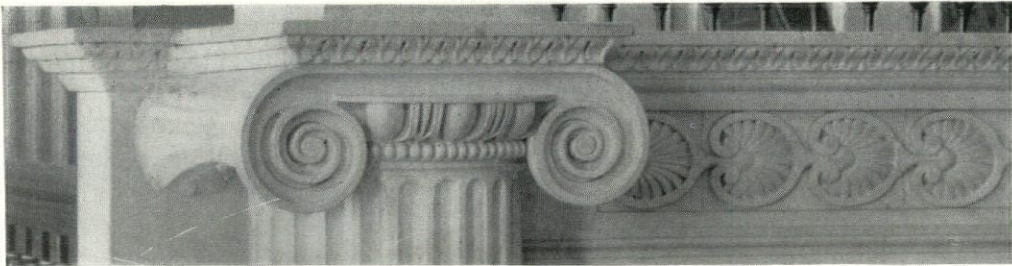


CUPOLA OF MORRIS COUNTY COURT HOUSE, MORRISTOWN, NEW JERSEY

Judge's Desk, too, is both agreeable in its effect and original in the manner of its employment. Another feature of uncommon character is to be seen in the detail of the spindles of the stair balustrade,

where the whole spindle tapers upward from a simply moulded base.

Throughout the building the moulded plaster ornament is exceptionally pleasing. The great circle in the Court Room ceil-



Detail, Front of the Judge's Desk in Court Room

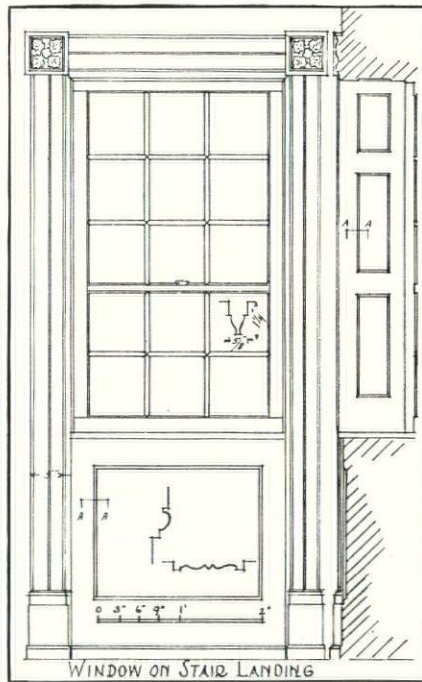
ing, with boldly modelled Greek honey-suckles, and the smaller inner circle with its flowing grapevine design are both admirable examples of the manner peculiarly characteristic of the era. The bands in the hall ceiling, too, are of excellent quality.

The Morris County authorities have recently acquired more land back of the Court House group in view of enlargements that may have to be undertaken at a future time. It is not too much to hope perhaps, that in any ultimate programme of reconstruction and enlargement the later structures immediately attached to the Court House may be removed and the old building restored to its pristine condition without as well as within. The Court House would then unquestionably become again, as it once was, one of the architectural treasures of North Jersey.

No more immediately appropriate step in pursuance of a general programme of reconstruction and restoration could be taken than the restoration of the Court Room to its early condition. This would now be a comparatively simple matter since so much has already been accomplished. The removal of certain unnecessary ven-

tilating shafts, which mar the continuity of the wall spaces; the replacement of the pews by others patterned after the original pews which remained in the gallery; the enclosure of the jury box and the installation of proper seats; the placing of lighting fixtures more in keeping with the character of the room; and the introduction of consistent railings, tables and chairs in the space before the Judge's Bench would work a complete transformation.

The change of public feeling towards the Morristown Court House deserves mention. The former attitude of contempt has given place to one of interest and pride. This very significant change, it is only just to say, was entirely due in the first instance to the appreciative perception of the building's merits on the part of one layman, Justice Charles Wolcott Parker, who, from the beginning of his residence in Morris County, has unfailingly made every effort in his power to bring this representative early American civil architecture back to its rightful state. Through his persistent endeavors in this direction he has rendered a valuable public service towards the maintenance of the national architectural heritage.



Morris County Court House, Morristown, N. J.

TABLE I—ANALYSIS OF CONSTRUCTION PLANNED BY ARCHITECTS

*All Construction*

Year	Territory Analyzed	(A) Planned No. Projects	by Architects Cost	(B) Total No. Projects	Total Construction Cost	(C) Percentages by Architects of Total Projects	Total	(D) Estimate for Entire U. S. By Architects
1920	27 States	....	\$1,466,700,000	.....	\$2,564,500,000	....	\$3,337,600,000	\$1,902,400,000
1921	No Analysis	42,900	.....	107,636	3,344,221,800	....	3,068,900,000	.....
1922	27 States	22,155	2,044,269,400	58,502	1,881,847,900	40%	4,329,700,000	2,641,100,000
1923	36 States (Second Half)	49,559	1,074,141,700	133,156	4,479,307,000	38%	*4,768,100,000	*2,717,800,000
1924	36 States	55,409	2,710,665,100	162,886	5,821,068,400	37%	5,237,100,000	3,194,600,000
1925	36 States	56,117	3,510,810,400	170,722	6,349,915,000	34%	6,622,600,000	3,973,600,000
1926	37 States	22,937	3,667,526,100	73,064	2,555,513,300	33%	6,870,000,000	3,984,600,000
1927	37 States (1st Five Months)	.....	1,515,994,900	.....	.....	31.4%	.....	.....

TABLE II—SAME AS ABOVE, OMITTING PUBLIC WORKS AND UTILITIES

Year	Territory Analyzed	(A) Planned No. Projects	by Architects Cost	(B) Total No. Projects	Total Construction Cost	(C) Percentages by Architects of Total Projects	Total	(D) Estimate for Entire U. S. By Architects
1920	27 States	....	\$1,319,500,000	.....	\$1,998,200,000	....	.....	.....
1921	No Analysis	42,317	.....	97,210	2,782,355,500	....	.....	.....
1922	27 States	21,957	2,002,131,500	52,857	1,558,742,700	44%	.....	.....
1923	36 States	49,188	1,051,845,900	123,192	3,745,396,300	42%	.....	.....
1924	36 States (Second Half)	55,193	2,667,128,200	152,067	4,935,336,400	40%	.....	.....
1925	36 States	55,795	3,452,443,300	157,461	5,241,817,000	36%	.....	.....
1926	37 States	22,798	3,620,874,800	66,290	2,109,921,700	35%	.....	.....
1927	37 States (1st Five Months)	.....	1,487,188,600	.....	.....	34.4%	.....	.....


\*Analyses for 1923 were made only on the construction contracts recorded in the second half of the year, but the estimate in Section D are for the entire year. No analysis was made for the year 1921.

ANALYSIS BY STATISTICAL DIVISION, F. W. DODGE CORPORATION.



# ARCHITECTS ARE STILL IMPORTANT

By  
*Thomas S. Holden*  
Vice President in Charge of Statistical  
Division, F. W. Dodge Corporation



SPECULATIVE BUILDING ACTIVITY is always an important factor in a period of expanding construction volume and business prosperity. In the past six years of spectacular growth based on unusually favorable money conditions, the expanding building activities of realtors and operative builders have focussed attention upon these people and, apparently, given rise to the idea that their increasing participation in the building business has caused the architect to dwindle into a less important, or even secondary, factor in the business. The extent to which this impression has gained currency is not known to the writer, but it seemed to him a matter of sufficient interest to prompt an investigation of the statistical records on work planned by architects.

Since the year 1920 the Statistical Division of F. W. Dodge Corporation has kept an almost continuous analysis of construction projects started and contracts awarded, recording all the jobs planned by architects, as distinguished from those planned by engineers, contractors, owners or any other parties to the design and erection of buildings. Up to the present time this analysis has covered over 700,000 construction jobs, amounting to 27 billions of dollars. It is a fairly representative analysis. The tables on page 244 show its results in detail.

It should be noted that no analysis was made for the year 1921 or for the first half of 1923. The reason for this was that it was not then considered necessary to have a complete analysis for every year. The percentage results for any year were considered as typical, which they have proved to be for all practical purposes, since the variations in the percentages have been slight.

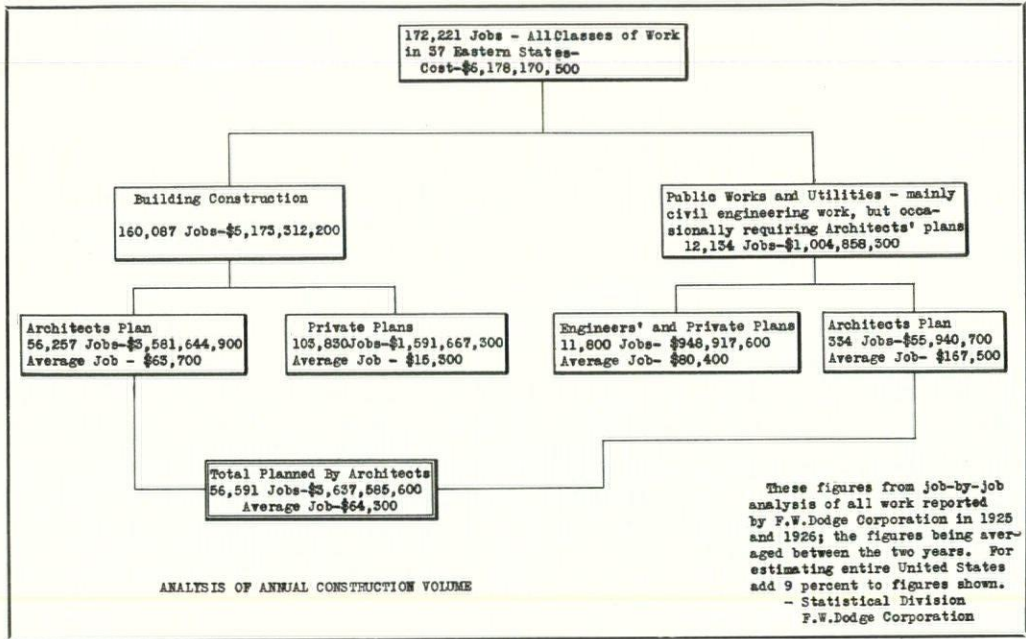
The first analysis, made in 1920, showed that 57 per cent of all construction, as

measured in dollars, was controlled by architects. This percentage later turned out to be the minimum. Since that year, the percentage has varied between 57 and 61 and has averaged a little over 59. These percentages are shown in Section C of Table I. If these percentages are applied to the dollar estimates of total construction in the United States, they give the figures of the second column of section D, Table I, the estimates of total construction controlled by architects in each of the years. The total volume of construction doubled between 1920 and 1925; the total volume controlled by architects also doubled.

It will be noted that the percentage for 1925 was 60; for 1926, 58. There is no reason that this variation be considered any more significant than were the variations between the earlier years. The corresponding percentage for the first five months of 1927 is 59.3, showing a swing back to what may be reasonably called the normal percentage.

It will be seen in the first column of Section C, Table I, that there has been a steady, though moderate, falling off in the percentage of total jobs handled by architects. This is not surprising in a period of widespread prosperity and rapid growth, particularly when residential construction has been the most rapidly increasing class of work, the class that has a large proportion of small structures built, frequently from stock plans, to sell at comparatively low prices. No one expects architects to participate very heavily in this grade of work.

Architects, however, have had more and more jobs to handle, and there has been a steady increase in the size of the average architect-planned job; from \$47,650 in 1922 to \$65,350 in 1926, and to \$66,100 in the early part of 1927. These



two last-named facts account for the maintenance of the normal percentage of dollar totals of architect-planned jobs during a period when the architects were getting a continuously, but not seriously, falling percentage of the total number of jobs.

The facts presented in Table I and discussed in the foregoing paragraphs lead to but one conclusion: as a factor in the construction business, the architect is just as important today as he ever was, and the dollar volume of work he is handling today has exactly kept pace with the increased construction volume of the country.

Since the figures of Table I include construction of the Public Works and Utilities class, which is predominantly engineering in character and only occasionally architectural, it is well to examine the statistical records resulting from the omission of this class of work. These records are shown in Table II, the significant figures being those of the two percentage columns (Section C). Here again is seen a drop in the architects' percentage of total jobs planned and a practically steady percentage of the total

money value. The net result of these very complete analyses of construction planned by architects may be stated as follows: The normal percentage of the total annual construction investment that represents work planned by architects is around 59, and the variations from that figure in the past seven years have been very slight; when buildings in the restricted sense are considered, the normal percentage is 70. This statement is subject to one qualification. It applies to the construction work covered by the Dodge statistical tabulations, which do not completely cover certain low-cost classes of work, such as houses under \$5,000, private garages, sheds, filling stations, etc.

During the recent period of construction expansion the commercial aspect has probably been the predominant feature in designing. Apartment buildings, office buildings, hotels and speculative housing developments have been quite largely responsible for the rapid rise in construction totals; monumental work has been secondary. The influence of the speculator-owner, the real estate investor, and the operative builder has undoubtedly been strong both in the character of de-

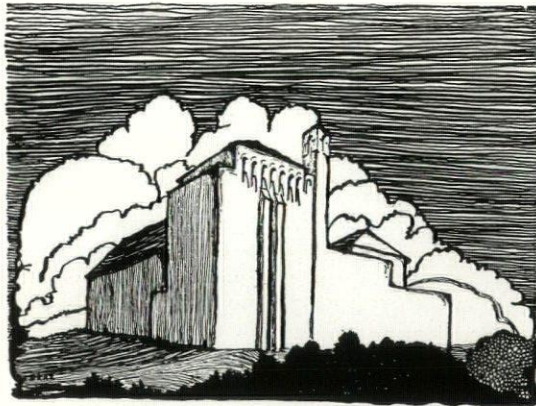
signs and in the specification of materials used. It is, however, true that the owner or builder practically always exercises a strong influence on the design and construction of buildings in which utilitarian and economic considerations are paramount.

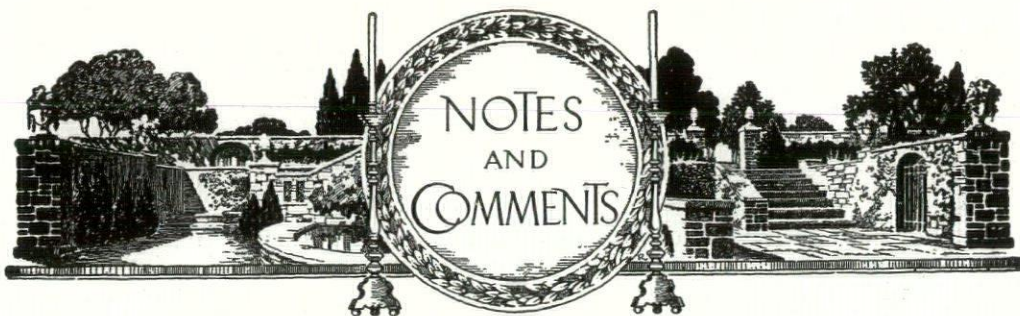
The principal shift that occurred in the various relationships of those engaged in construction was in the general building contractor field. Speculative builders who employed architects to make their plans and specifications have, in a fairly large number of cases, taken bids directly on sub-contracts and let them directly, without employing general building contractors. Consequently, there has been an appreciable decrease in percentages of the total; but actually general building contractors have had big increases in the amounts of business handled, from \$2,600,000,000 in 1922 to \$3,400,000,000 in 1926 (these figures being estimates for the entire country).

Large volumes of speculative residential and commercial construction always characterize periods of building and business expansion. It seems entirely probable that, if analyses for earlier building booms were available, they might show about the same developments as have characterized this most recent expansion

period, except that architects are probably more important in the general scheme nowadays than they were in past decades.

Regarding the future, no one can tell positively, but the chances seem rather to be that architects' planning will be more in demand than ever before, and that the proportionate amount of building work they will control is more likely to remain the same or to increase somewhat than it is to decline. An increasingly prosperous community that has developed a productive machinery ample to satisfy its quantity requirements, is very readily led to demand more and more of the quality element in everything it buys. Current developments in the automotive industry exemplify this trend. Architectural designing problems of the future are apt to involve new problems of style, distinctiveness, space-utilization, group and community planning, and the like, to a greater degree than ever before. These elements of design are the specialties of the architectural profession, whose influence as contributors to the art of successful living and as factors in the business of construction is not in the least likely to diminish, regardless of how important other groups of building entrepreneurs may become from time to time.





### Cooperation

The speakers at the convention of the American Institute of Architects in 1927 were selected to represent the building Fine Arts. The inference was drawn by many hearers that a new departure was being inaugurated by the Institute and nation. It may interest the new members of the Institute to recall some previous efforts and note their results.

Under the influence of Washington, the most capable architects, sculptors, painters and artisans were sought and secured for the United States Capitol. This cooperation in our early history produced the best building of its period.

The joining of the Artistic Elements in the Columbia Exposition, Chicago, 1892-1893, was one of the first efforts of great magnitude tried in this country. Burnham, instead of undertaking the sole control of the fine arts branches of the Exposition as he could have done, was broad enough in the public interest to call upon the best qualified architects, sculptors, painters, and craftsmen. Simmons in his book, "Seven to Seventy," tells us how Frank Millet, Director of Decorations and Pageants, secured the services of the eight most eminent mural painters, which gave us the first public mural painting. The principals of the fine arts branches met regularly, suggested, criticized and discussed the many problems of the Exposition. Although the product of this cooperation was temporary in character, its results and influence were so great that it will always be an epoch in the history of the Fine Arts.

Thomas V. Walter, when president of the American Institute of Architects, in his address before the Institute in 1880, emphasized the importance of cooperation between the allied arts, saying, "Aesthetically considered they are to some extent kindred (to architecture) and it is not to be doubted that a closer affiliation would tend to elevate the standard of Art."

The convention in Pittsburgh (1899), my first convention as Secretary, was staged, after months of preparation, to emphasize the im-

portance of cooperation between the artistic branches of the Building Arts. It was strikingly like the last convention of the Institute in Washington 1927, both having the same end in view. In 1899 emphasizing design was thought important; several prior conventions had been devoted to construction, the larger part of the time being devoted to the futile discussion of Bylaws, while the most important phase of artistic expression was ignored. The intention of the 1899 convention was not to inaugurate something new, but to bring forcibly to the attention of its members old principles which they were apparently forgetting. Speakers were selected, and the discussions were directed to emphasize the importance not only of architectural design, but of the necessary cooperation between the architect, sculptor and painter.

In looking over the Proceedings of this convention we find such titles as "Architecture, the Sister Arts and Artistic Trades." The influence of the French Schools with papers pro and con: mural decorations and sculpture with their relations to architecture.

Though less spectacular, the practical movement of the Institute to this end is more important than the speaking and discussions which take place during the convention.

The Institute has two far reaching movements of this character to its credit: First, fostering and aiding the American Academy in Rome, where well-selected young architects, painters and sculptors learn to cooperate in their work. Although the Academy in Rome was started by that enthusiastic group of artists brought so intimately together in the Chicago Exposition, with Burnham, McKim, Saint Gaudens and Millet as leaders, it was through the American Institute of Architects that a permanent Endowment and a Governmental Charter were secured.

At the Institute Banquet in 1905 (called the McKim Banquet because McKim labored for six months in his endeavors to secure the attendance there of men at the head of science,

literature, the Church, painting, sculpture, of Government officials of all branches, and of many of the wealthiest men of the country), noted speakers, such as Theodore Roosevelt, Ambassador Jusserand, Cardinal Gibbons, Elihu Root, Nicholas Murray Butler, John LaFarge and Augustus Saint Gaudens voiced their views on the importance of study of the Fine Arts. An endowment of six hundred thousand dollars was raised for the American Academy in Rome, thus placing the school on a firm financial basis. After this only a national charter was needed to place the Academy upon a par with the schools of other nations in Rome. For years the efforts to secure a government charter had been futile, but through the zeal and persistence of the Institute, Congress finally granted the American Academy in Rome a National Charter. The fruit of this school is study in cooperation between branches of the Fine Arts.

Another example of the practical side of cooperation is the Washington Park Commission, secured through the efforts of the Institute. Burnham, the great executive and architect; McKim, the accomplished refined architect; Saint Gaudens, our greatest sculptor; Olmstead, the most capable landscape artist, made a cooperative team that was unsurpassed. Their report had a nation-wide effect, as other cities followed the example of Washington and secured plans for artistic development. The example of this cooperative work is still in evidence and will grow according to the needs of the cities and nation.

GLENN BROWN

#### Protection Against Fire in Rural Districts

The following letter refers to a short editorial published on Page 74 of the July, 1927, issue of THE ARCHITECTURAL RECORD.

Editor, THE ARCHITECTURAL RECORD:

My Dear Sir: —

Under the heading, "National Fire Protection Association", you quote certain statements which, though true, are nevertheless misleading.

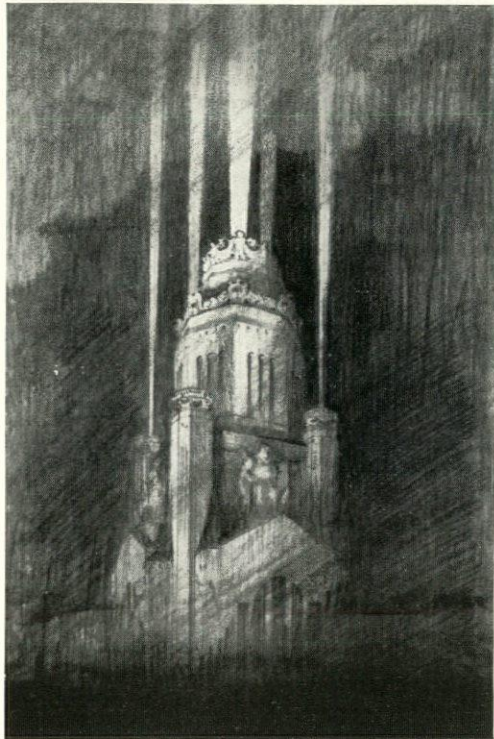
Five years' service as president of a volunteer fire company has shown me that at least

75% of all rural and Main Street fires are caused by defective chimneys, — not by matches or cigarettes. In these districts chimneys are invariably single-brick, unlined; or worse. In a very few years, the brick and mortar disintegrate, just under the rafters, due to dampness and frost. I nearly always find terribly dangerous conditions right there, when remodeling an old house. Wood is the usual fuel, outside the large cities; hence chimney fires are extremely frequent. Such a fire, in a defective flue, is almost certain to break through the crevices and reach the rafters, unless very promptly extinguished. The lack of fire-service in rural communities and very small villages, means a total loss, generally. Every insurance man

knows that risks in such communities are extremely unprofitable, even at very high rates. The American farmer or villager builds with wood and uses it for fuel; the European peasant does not. Hence any comparison is futile.

This condition is very bad, but talking about "matches and cigarettes" isn't going to remedy it. What can be done?

1. As architects, we can do a great deal by *invariably* specifying safe chimney-construction in our rural and semi-rural work; especially alteration work. I always make an inspection of chimneys in a remodeling job and urge the owner to rebuild them if they are at all doubtful. I have converted many rural build-to the use of flue linings in *all* their work,— not just *my* work.



Aerial Lighthouse Designed for the American Insurance Union Citadel Tower, Columbus, Ohio  
C. Howard Crane, Architect

2. As an organization, the A. I. A. can insist that the Underwriters revise their ratings on rural and semi-rural risks, so as to give credit for fire-safe construction. My own country home has properly built chimneys, reinforced concrete ceilings to the cellar, hose-racks and fire-extinguisher; but I receive no credit whatever for these things.

3. As an organization and as individuals, we can take an interest in rural and village volunteer fire departments. Five years ago, Talbot County, Maryland (where I live) had no rural fire service whatever. Today through the efforts of several rural folk, we have very efficient rural fire service, protecting every part of the County.

The National Fire Waste Council (a branch of the Chamber of Commerce of The United States), in co-operation with the National Fire Protection Association, is about to issue a booklet on Rural Fire Departments; this booklet may be obtained by writing to the Agricultural Department, U. S. Chamber of Commerce, Washington, D. C.

Very truly

WILLIAM DRAPER BRINCKLOE, A.I.A.

Member, National Fire Protection Association.  
Chairman, Sub-Committee on Rural Fire Departments, National Fire Waste Council.

#### Market Research Systematized

Upon the orderly progression of "market research," there now breaks a new factor. Up to this time, the study of markets and merchandise distribution in the United States has been a highly specialized activity. In isolated instances, research foundations have prosecuted projects for the common good, as, for example, the studies of income conducted by the National Bureau of Economic Research. In the main, however, each adventure in market exploration has been a self-centered, not to say, selfish, undertaking. Either an individual or corporation engaged in commerce has conducted a study of markets gauged to its specific needs, or a trade association has prosecuted the investigation but has translated the garnered information only in terms of its particular group.

Now it is planned to systematize and "nationalize," if we may be permitted the word, the detached and disjointed structures of market research. The initiative and the routine of the research work will remain largely, as heretofore, in the hands of private enterprise.

The history of this reevaluation of market research is interesting. For some years past the Federal Government has had very near to its official heart, the project for the simplification of industry by voluntary and unanimous

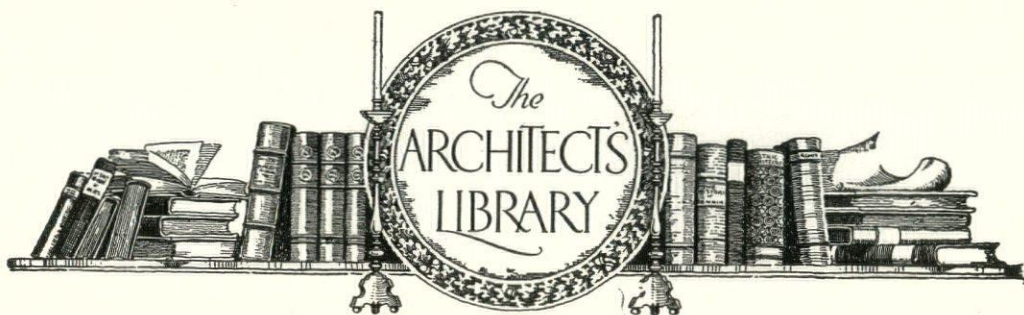
elimination of odd sizes and superfluous varieties of merchandise. So strongly has the ambition been stressed that the executives of the U. S. Department of Commerce have come to think, in all things, in terms of concentration and standardization. Thus it came about that when the U. S. Division of Domestic Commerce entered, a year or two since, upon a country-wide program of market research, the directors became conscious at once of the costly waste and serious loss of time involved in the old system whereby each research agency prosecuted its quest heedless of the parallel activities of other interests with like ambitions. Then was born the movement to align all the public and private forces of market research for sympathetic and, if possible, cooperative effort.

Striking directly at the main objective, the Department of Commerce issued, late in 1926, a call for a Conference on Market Research. The announced purpose was to take the first steps for the formation of a "priority list" of fundamental research projects in the field of marketing, which have common interest and value and should be studied for the good of all. More than one hundred delegates responded representing the Government's various departments, universities, commercial bodies, research foundations, and that wide range of private businesses that have already engaged in market research incident to the organization of sales territories. It was not the expectation that this Conference, at its first session, could evolve any scheme for the integration of the research projects diversely inspired. The Conference did accomplish its purpose, however, in affording the first free and open discussion of the basic purposes of market research and impelling the initial move to reconcile to common objectives the scattered effort of the past.

Since the free forum was, patently, no place to work out the details of a system of coordination of market research, the Conference at Washington, by unanimous vote, set up a permanent Central Committee, the function of which is to take up in all its phases the problem of securing team-play.

Establishment of a closer relationship between national research projects and the studies which are local in scope is an ambition that is bound up with the unfolding project. It is an aspiration pertinent to the new attitude in commerce and industry which refuses to further continue to regard markets as defined by the boundaries of political divisions, such as States and counties, but insists instead upon market areas prescribed by the flow of commerce to and from primary and secondary trading centers.

WALDON FAWCETT



### Bridge Architecture\*

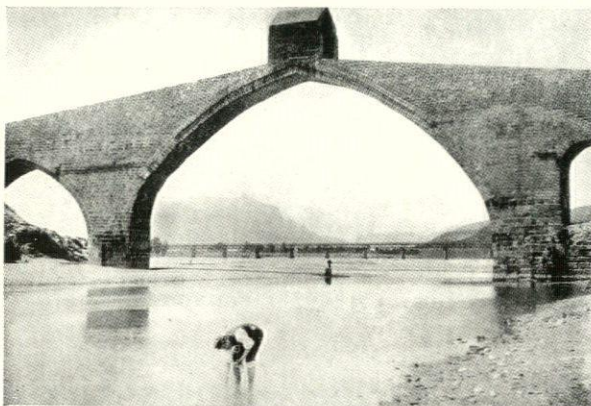
Mr. Watson divides bridges into five types and six periods. The types are: the arch, which depends on the compressive strength or resistance of the material; the simple beam, which depends on bending strength only; the suspension, on the principle of direct tension; the cantilever, which is a beam resting on beams at either end, the latter requiring anchorage; the truss, or combination of compression, tension and beam. They are all of them very old except the last. The fallen tree and the swinging vine are the first beam and suspension bridges. The cantilever is a natural variation of the beam. The first arch bridge may have been Chinese,

if not Egyptian. The truss seems to belong almost exclusively to modern civilization.

The six periods are: The ancient or pre-Roman in Europe, mostly of the beam type; the Roman which introduced the arch; the Middle Ages, when the arches were mainly heavy and crude, though some were bold and slender, and much finer work of the same time was done in China; the Renaissance, of increased refinement, the master builders of the period being both architects and engineers; the Eighteenth century, when the masonry arch reached its greatest perfection; finally the Modern Period, beginning with the railroads about 1830, which utilizes all five types, but is especially notable for the development of the truss of structural iron and steel, though

many of the greatest bridges are steel cable suspension.

The oldest existing bridges are Chinese and Roman, both arched masonry, and upwards of two thousand years old. There are six over the Tiber in Rome, more or less intact. None of any importance built in Europe from the fall of Rome till the Twelfth Century and only



From *Bridge Architecture*—the Devil's Bridge, Spain

four arches of the bridge at Avignon, (1177-78) remain. All the bridge building knowledge for several centuries after that was represented by a Benedictine order of monks called "Fratres Pontifices." The song "Sur le Pont d'Avignon" commemorates the fact that bridges were always popular for dance floors. There are

beautiful Fourteenth century bridges at Cahors and Montauban. Old London Bridge was of timber until early in the Thirteenth century, but the stone bridge finished in 1209 lasted in part nearly to the present day. The medieval Spanish bridges were generally Roman repaired, or on Roman foundations. The Ponte Vecchio in Florence is a reminder how frequently the old city bridges were covered with houses and shops.

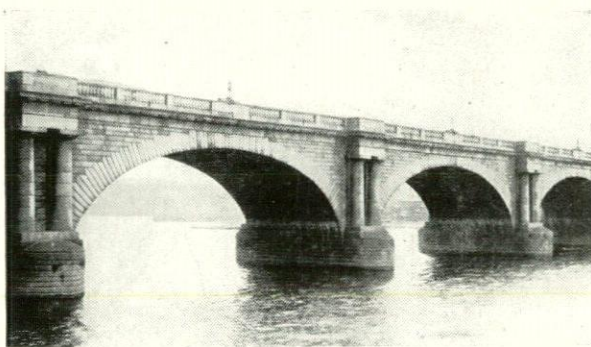
Most of the famous Renaissance bridges in Paris are represented in Mr. Watson's excellent plates, with a reasonably good, but not very detailed, description of each. The first recognized professional bridge engineers were Perronet of France (late Eighteenth century) and Rennie of England, (early Nineteenth century). Perronet built the Pont de la Concorde in 1788, and Rennie built Waterloo

\**Bridge Architecture*, by Wilbur J. Watson. Folio. 200 illus. Helburn. \$17.50.

and the New London Bridge in 1817 and 1831. Waterloo Bridge as well as the Pont de la Concorde have semi-plaster columns at the side, which have no structural value for bridge purposes, and the question of their propriety—at least in Waterloo Bridge—was raised at the time. One William Hopkins declared that: “The usual *materia architectonicae* are entirely out of place and out of character in bridge composition—If a bridge be well composed it can hardly fail to be an agreeable object, for it will possess the essentials to

After all, most buildings are utilitarian. The Capitol and the Library of Congress were built to house legislators and books, just as much as a bridge across the Potomac is built to accommodate people who wish to cross it. With sufficient qualifications Hopkins' principles are sound for any architecture, at least in their general tendency, but they are not exclusively the logic of a bridge. Admitting that some of the factors in the problem are different, nevertheless to deny all architectural composition to bridges or any decorative element not wholly constructive is not logic but dogma. Your dogma applies as well to a hotel or law court or college dormitory.

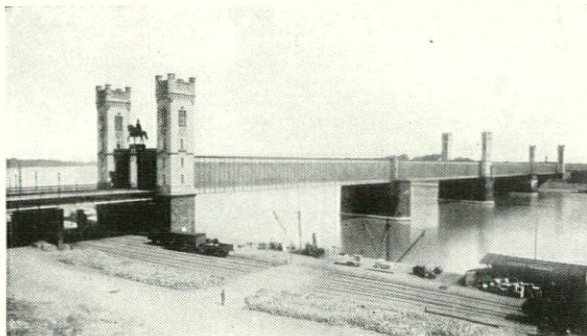
Mr. Watson is an advocate of positive architecture. The impetus of the Modern Era, he says, started from the fact that a locomotive cannot ford a stream, but unfortunately under the steady necessity of things nearly all consideration of beauty has been lost sight of. Many beautiful stone bridges have been built in this era and some beautiful steel ones. Brooklyn Bridge is a fine thing architecturally; the Williamsburg is not; and the Manhattan is better than the Williamsburg.



From *Bridge Architecture*—Waterloo Bridge, London

beauty in architectural composition, simplicity and harmony. The introduction of anything not necessary to the construction will tell injuriously upon the eye.” He maintains that the strictly constructive is all the architecture there should be in a bridge.

Two-thirds of Mr. Watson's book is devoted to modern bridges. The Modern is the great era of bridge construction. Our forefathers were relatively a stay-at-home people, whereas we travel incessantly. William Hopkins had stone masonry only in mind, whereas we are building largely of structural steel. The matter he discusses is very pertinent to us. The typical modern bridge is almost exclusively an affair of engineers, whose purposes are strictly utilitarian. They are not concerned with harmony or composition, and many of their structures might be more agreeable to the eye without injuring their structural strength. As soon as being agreeable to the eye enters in, the problem becomes architectural. To the extent that the engineer thinks of beauty he is an architect, otherwise what beauty he achieves is accidental to him, or incidental from the fact that there is an aesthetic element in structural strength and economy of means.



From *Bridge Architecture*—Railway Bridge Over the Rhine

Reinforced concrete has lately displaced stone for bridges of moderate span and for long viaducts, but it seems very doubtful that it will ever displace structural steel for long spans. Its great possibilities for artistic treatment in respect to bridges are undeveloped.

The automobile is bringing new demands. “The key to our newest civilization seems to be the improved highway.” We are probably entering a great bridge era, and the best interest of bridge architecture lies in the close cooperation of architect and engineer.

ARTHUR W. COLTON



**Small Houses of the Late 18th and the Early 19th Centuries in Ontario\***

The circumstance that the American Colonies after the Revolution were limited at the north by the St. Lawrence has led to the unfortunate general conception that the colonial and post-colonial architecture of America was confined to the region south of the Canadian border. Writers on early American architecture have, in fact, almost entirely disregarded Canada as a field for consideration and investigation. Professor E. A. Arthur of the Department of Architecture of the University of Toronto has prepared a brief text for the first of a series of publications treating small houses and other buildings of the late Eighteenth and the early Nineteenth centuries in Ontario, Canada. The photographs and measured drawings, while almost entirely of Nineteenth century examples, reveal a striking similarity and continuity with the more familiar dwellings and churches of the same period in the "States," and particularly of Western New York. This similarity would be anticipated by one who reflects upon the bordering relationship of the two regions. Most of the material illustrated was gathered in the villages of the Niagara Peninsula, adjoining New York State and the majority of these towns lie within a radius of thirty miles from Buffalo. It is the intention, in later publica-

tions, to go farther afield in the province. One would look for a greater individuality in building methods and expression in the more northerly parts of the province.

In Canadian architecture the English and French attributes are distinctly differentiated. In the older region of Quebec, the early predominance of French population is recognized in the austere one-storied house built of stone,

\*E. A. Arthur, A.R.I.B.A.; *Small Houses of the Late 18th and the Early 19th Centuries in Ontario*. 48 pp., University of Toronto Press; 1927. Photographs and Measured Drawings, 9 x 12 in.

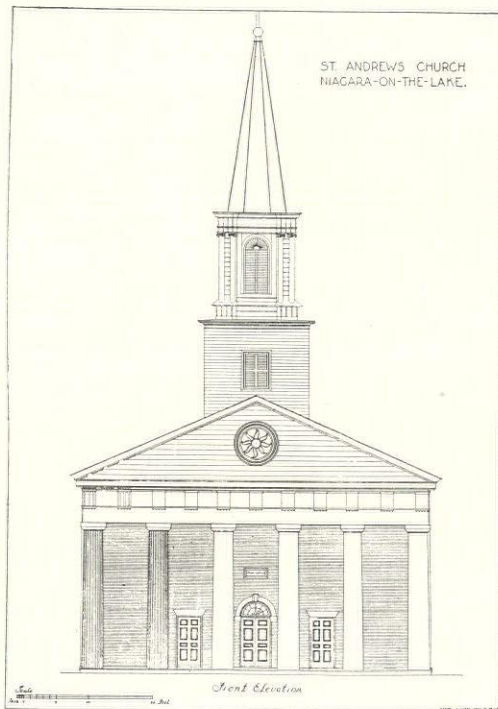
with apartments divided with thick stone walls. The exterior walls were plastered and the outer doors and shutters were painted green in pleasing contrast. On the whole, the French-Canadian lesser dwelling resembled the peasant houses of the rural districts of Northern France. Ontario, on the other hand, was thoroughly English in occupation, and equally British in the aspect and construction of its houses. The earliest houses were of frame, one and two stories high, clapboarded, and with shingled roofs. The use of brick for walls appears to be of a later date.

It was the observation of Peter Kalm, a Swedish traveller in the Colonies in 1749, "that architecture, cabinetwork and turning were not yet so forward (in Canada) as they ought to be; and that the English, in that particular, outdo the French." The chief cause of this he attributes to the unskilled settlers, "that scarce any other people than dismissed soldiers come to settle here, who have not had any opportunity of learning a mechanical trade."

Professor Arthur selects Niagara-on-the-Lake as a characteristic town with its reminiscent Colonial greens, streets and church yard, and where he recognizes just a sprinkling of English atmosphere. He says, "When one walks along its unpaved streets between rows of giant elms which shade the quiet little Colonial houses with

their trim gardens, one's thoughts are carried back more than a hundred years. There is no bustle in Niagara-on-the-Lake; even the people seem to be influenced by the architecture with which they are surrounded. It is orderly and balanced and clean. The English church and churyard might easily be medieval. . . . The stone walls only remain and they are in the grip of an enormous vine."

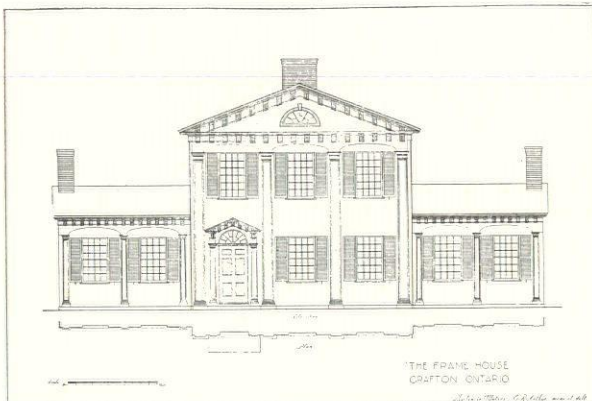
Of the houses illustrated and measured, the one at Grafton is, perhaps, most noteworthy. It is a combination of Adam lightness and



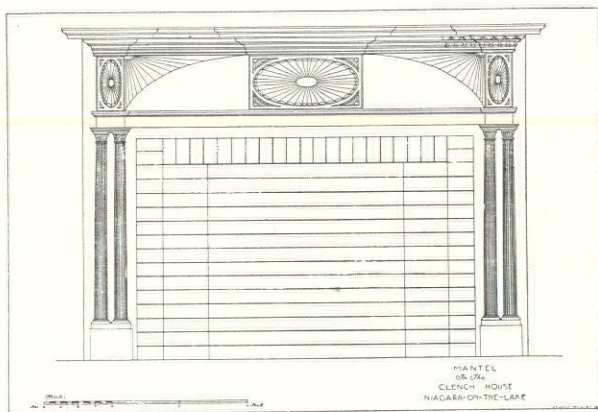
St. Andrew's Church, Niagara-on-the-Lake  
From *Small Houses of the Late 18th and Early 19th Centuries in Ontario*

Greek-revival. A two-story temple-shaped splendor-pavilion is flanked on both sides by wings. The entire front is treated with narrow panelled pilasters which support low elliptical wood arches that are imitative of stone. The cornice is enriched with triglyphs and metopes. Where pegs or guttae were used on the mutule of the Greek temple, on this house holes were bored and the guttae omitted.

Equally interesting and more in what would seem to be a local manner, is the house at St. David's. It is a story and a half in height with French doors flanking the entrance and that open on to a surrounding porch. The porch recalls the "Regency" porches and balconies of London, sup-



The Frame House, Grafton, Ontario  
From *Small Houses of the Late 18th and Early 19th Centuries in Ontario*



Mantel in the Clench House, Niagara-on-the-Lake  
From *Small Houses of the Late 18th and Early 19th Centuries in Ontario*

ported by panels of graceful tracery with arched tops. It is quite unlike the cast iron porches of the 'thirties and 'forties in the "States."

There would be an added value to the plates and illustrations if, in future publications, an attempt were made to include measurements of plans and authentic dates secured where possible.

A. LAWRENCE KOCHER

**A Sketch Book of New York.** By: Fred-eric V. Carpenter. Pelham: Bridgman Publishers. 1927. 1st ed. 63 pp. Ill. 5¼ x 8¾ in. Bound in boards. \$1.00.

Mr. Carpenter has created in his peculiar style of drawing a most interesting and valuable book. To the artist and art student there is a great interest value in studying Mr. Carpenter's technique.

**Moorish Houses and Gardens of Morocco.** Two Volumes. By: Jean Gallotti. New York: Wm. Helburn, Inc. 1927. 1st ed. Vol. I, 120 pp. Vol. II, 94 pp. Ill. 8 x 10 in. Bound in boards. \$15.00.

135 collotype plates with French text supplemented with 157 sketches of plans, elevations and details.

**New Towns for Old.** By: John Nolen. Introduction by Albert Shaw. Boston: Marshall Jones Company. 1927. 1st ed. xxix., 177 pp. Ill. 5¾ x 8½ in. Cloth. \$3.00.

This volume contains a few concrete illustrations of fundamental principles. It shows just what has been done and the methods employed, illustrating by one hundred and fourteen photographs, drawings, and plans. It should be a useful book to the increasing number of people who seek information in this field.

**The Book of Bulbs.** By: Frederick Frye Rockwell. New York: The Macmillan Co., 1927. 1st ed. xvii. 264 pp. Ill. 5¼ x 7½ in. Cloth. \$3.00.

The author looks upon plants from bulbs as a necessary part of the garden scheme and so considers them in this book. Spring-, summer-, and autumn-flowering bulbs, as well as those for winter bloom, are all included. Special chapters are devoted to tulips, narcissus, hyacinths, hardy lilies, gladiolus, dahlias, tuberous begonias, irises and peonies.

**Proceedings of the Twenty-Ninth Annual Meeting.** Vol. 26 (1926). Two Parts. Philadelphia: American Society for Testing Materials. 1926. 1st ed. Part I, 1204 pp. Part II, 691 pp. Ill. 6 x 9 in. Each part, paper-bound \$6.00; cloth-bound \$6.50; half-leather binding \$8.00.

**The Practical Decoration of Furniture.** Vol. 1. Veneering, Inlay or Marqueterie, Gilding, Painting. By: H. P. Shapland, A.R.I.B.A. New York: Payson and Clarke,

Ltd., 1927. 1st ed. xv. 44 pp. XLVIII plates.  $\frac{3}{4}$  x  $11\frac{1}{4}$  in. Cloth. \$5.00.

The plates in this work, which is composed of a series of three books, each sold separately, show numerous beautiful pieces, including many not previously illustrated. They are arranged, under each section, in a progressive sequence from the more simple and primitive examples up to the most elaborate.

**House and Garden's Second Book of Gardens.** Edited by Richardson Wright and Robert S. Lemmon. New York: The Conde Nast Publications, Inc., 1927. 1st ed. 223 pp. Ill.  $9\frac{7}{8}$  x 13 in. Cloth. \$5.00.

Photographs of many gardens with practical explanations on how their flowering is accomplished and maintained.

**Transformations.** Critical and speculative essays on art. By: Roger Fry. New York: Brentano's. 1927. 1st ed. viii. 230 pp.  $8\frac{7}{8}$  x  $11\frac{3}{8}$  in. Cloth. \$10.00.

By the word "transformations" is suggested all those various transmutations which forms undergo in becoming parts of aesthetic constructions. The author discusses Aesthetics, Art and the State, Culture and Snobisms, Some Aspects of Chinese Art, Fra Bartolommo, J. S. Sargent, London Sculptors and Sculptures, Book Illustration, Vincent Van Gogh, Seurat, Modern Drawings and Plastic Color.

**Archeological Observations North of the Rio Colorado.** By: Neil M. Judd. Washington: Government Printing Office. 1926. 1st ed. ix. 171 pp. Ill.  $6$  x  $9\frac{1}{4}$  in. Cloth. \$1.00. (Smithsonian Institution Bureau of American Ethnology, Bulletin 82.)

**Chicago Tribune Book of Homes.** Chicago: Chicago Tribune. 1927. 1st ed. 110 pp. Plates.  $10\frac{7}{8}$  x  $13\frac{3}{8}$  in. Bound in boards. \$1.00.

**Colonial Lighting.** By: Arthur H. Hayward. Boston: Little, Brown, & Co. 1927. 2nd ed. xi. 168 pp. Ill.  $6\frac{1}{2}$  x  $9\frac{5}{8}$  in. Cloth. \$7.50.

Writing with clarity and simplicity and interspersing accounts of lighting devices with a constant flow of comments and historical references to customs and habits, Mr. Hayward has produced what *The Boston Transcript* called "the first authoritative work on a fascinating subject."

**The House Which King Solomon Built for Jehovah,** (from Bible data.) Compiled by: G. Wilton Lewis. Cincinnati: The Standard Publishing Co. 1927. 1st ed. Ill. diags. pt. col.  $10\frac{1}{4}$  x  $13\frac{5}{8}$  in. Cloth. \$1.50.

Drawings and plans with descriptive text compiled from Bible data.

**Artifex, or the Future of Craftsmanship.** By: John Gloag. New York: E. P. Dutton & Co. 1927. 1st ed. 111 pp.  $4\frac{3}{8}$  x  $6\frac{1}{4}$  in. Cloth. \$1.00.

Prefacing his thesis by a short pithy sketch of the important part that hand craftsmanship has played in civilizing the race, the author shows how utterly fictitious is the supposed irreconcilability between the hand craftsman and the manufacturer, and points out the many advantages of a closer contact between the two.

**Foundation Planting.** By: Leonard H. Johnson. New York: A. T. De La Mare Co., Inc., 1927. 1st ed. xviii. 235 pp. Ill.  $7\frac{1}{2}$  x  $10\frac{7}{8}$  in. Cloth. \$3.50.

"All in all this book is unquestionably one of the best thing in horticultural literature that has come before us. Not only is it, pictorially, a real work of art, but it contains so much useful information, that it may be classed among the best of the books available on ornamentals."

**The Practical Book of American Antiques.** Exclusive of furniture. By: Harold Donaldson Eberlein and Abbot McClure. Philadelphia: J. B. Lippincott Co. 1927. 2nd revised ed. iv. 390 pp. Ill.  $6\frac{5}{8}$  x 9 in. Cloth. \$8.50. Boxed.

Published originally under the title of "The Practical Book of Early American Arts and Crafts." It includes a chapter on early lace by Mabel Foster Bainbridge and a chapter on Sandwich Glass by Leonore Wheeler Williams.

**New Backgrounds for a New Age.** By: Edwin Avery Park. New York: Harcourt, Brace & Co. 1927. 1st ed. xiii. 225 pp.  $6\frac{3}{8}$  x  $9\frac{1}{2}$  in. Cloth. \$5.00.

In addition to chapters of general interest the author treats of modern American decorators and craftsmen, American esthetics, the new beauty, possibilities in decoration, etc. His book is for any one interested in decorating, furnishing, or building a home, and it is an exploration into developments in applied arts unknown to the average person. Mr. Park is an artist and architect, formerly assistant professor of architecture in Princeton University, and at present assistant professor of design and architecture in Yale University.

**Color Sketches, Spain, France, England.** By: Charles L. Morgan, A.I.A. Introd. by Rexford Newcomb, A.I.A. Chicago: The Western Architect. 1927. 1st ed. A series of 30 sketches.  $8\frac{3}{4}$  x  $11\frac{3}{4}$  in. Portfolio. \$7.50.

Twenty sketches in full color and ten in duo tone.

#### RECENT PUBLICATIONS

issued by manufacturers of construction materials and equipment.

[These may be secured by architects on request direct from the firms that issue them, free of charge unless otherwise noted.]

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**Nursery Service.** Price list of specials from complete lists, Fall, 1927, including ornamental deciduous trees, evergreens and evergreen shrubs. Evergreens for hedges; shrubs. Prices of roses, fruit trees, vines, etc. F. W. Kelsey Nursery Co., 50 Church St., New York City. 4 x 9 in. 16 pp. Ill.

**Electric Cooking.** A. I. A. File No. 31g4. Book 1. Architect's Handbook of electric cooking for residences, apartments, hotels. Hotpoint electric ranges. Advantages and distinctive features. Automatic timer and heat control. Various types with particulars of oven, surface units, finish, etc. Detailed drawings. Hotpoint water heaters and air heaters. Technical information of interest to architects. Edison Electric Appliance Co., Inc., 5600 West Taylor St., Chicago, Ill. 8½ x 11 in. 32 pp. Ill.

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**Electric Cooking.** A. I. A. File No. 31g4. Book 2. Architects' Handbook of electric cooking for hotels, hospitals, public institutions, clubs, bakeries, etc. Architectural advantages, cleanliness, coolness, low upkeep cost of Edison electric cooking and baking. Costs and savings. The patented Calrod Heating element. Edison automatic electric range, automatic utility range, electric broiler, electric charcoal type broiler; full details and information and floor plans. General specifications for electric bake ovens. Kitchen and dining room layouts. Typical installations. Edison Electric Appliance Co., Inc., 5600 West Taylor St., Chicago, Ill.

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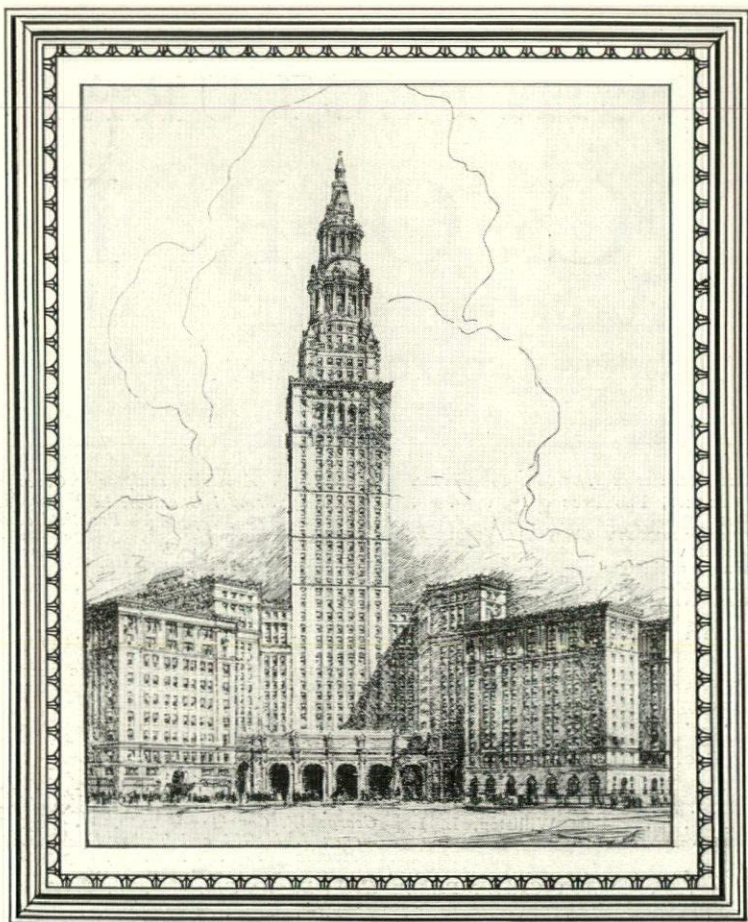
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A WALL of the Cleveland Hotel, which was laid up in Carney Cement ten years ago this winter, had to be wrecked for the purpose of tying-in with the new Union Terminal. Mr. Henritze, the brick foreman gave the following account of the operation.

"They started wrecking the brickwork from the roof with chisels and hammers. The mortar was so tough and hard, and had adhered to the brick so well that they had to resort to air

drills, which they found to be the only possible way to make speed. Several of the wrecked panels were thrown down, thinking that they would break when they hit the ground. No brick could be saved on account of the mortar still adhering to the brick."

If any of the walls of the new Union Terminal ever have to be torn down, air drills will again be needed. Carney Cement was used for this mortar—also during freezing weather.

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