

# The ARCHITECTURAL RECORD

Vol. LIII  
No. 3

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MARCH, 1923

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PUBLISHED MONTHLY BY  
THE ARCHITECTURAL RECORD COMPANY

115-119 WEST FORTIETH STREET, NEW YORK

T. S. MORGAN, Pres.

M. A. MIKKELSEN, Vice-Pres.

E. S. DODGE, Vice-Pres.

J. W. FRANK, Sec'y-Treas.

Yearly Subscription: United States, \$3.00; Foreign, \$4.00; Single Copies,  
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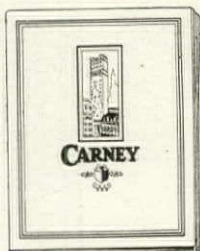




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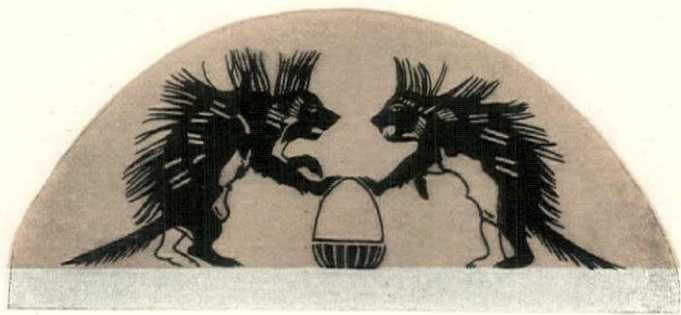














# *The* ARCHITECTURAL RECORD

VOL. LIII

MARCH, 1923

NUMBER 294

## *The* DENVER CIVIC CENTRE



*By Theo Merrill Fisher*

WE find the beginnings of the Denver Civic Center coincident with the organization of "The City and County of Denver" which was effected in 1904, when half a dozen smaller, adjoining municipalities were consolidated with Denver proper. This administrative unification of what had in all other ways been practically one community, stimulated a finer civic spirit, which was provided with many avenues of concrete expression through the new charter. One of these was the Art Commission created by the charter. Provided with powers subject to very broad interpretation, this body was free to function in a constructive rather than a merely critical way, and under the chairmanship of Henry Read, a Denver artist, it at once set about the planning and actualizing of a "Greater Denver," which would be in point of controlled develop-

ment a reflection of a proper understanding of the utility of beauty in the life of the growing city.

With this large conception of its function, the Art Commission soon found that the advice of an expert was needed and in the following year arranged to have Charles Mulford Robinson survey the entire situation and make a report on "Proposed Plans for the Improvement of the City of Denver." While the usual problems of new city platting, streets and boulevards, parks and play grounds, and the like, were treated, the outstanding feature of the Robinson report was its recommendation for a civic center. Henry Read had given the first suggestion for such an enterprise, backed enthusiastically by Mayor Robert W. Speer, with the result that Robinson made definite proposals for actualizing the idea.

Of the Robinson recommendations we



need note only the contemplated acquirement for a civic center of the area two blocks wide and three long between the State Capitol and the County Court House. The first occupied a site on the newer city platting, which was laid out on compass lines, while the latter lay within the area of the old, original down-town section, which in this vicinity joined the other at an angle of forty-five degrees. The failure to reconcile the discrepancies in relative position among these buildings, which would be terminals of the principal axis of a civic center so laid out, eventually led to the abandonment of the Robinson scheme; it had, however, in the interval served the useful purpose of focusing public attention, and formed the basis of subsequent planning.

We should now go back to the relation of the State Capitol to the entire matter. Although dating from a period when official architecture was far from handsome, it has the interest given it by its mass and its situation on the slight elevation east of Broadway. The superb view of the Front Range Rockies from its western portico was largely spoiled, however, by the immediate neighborhood as it was at that time, a variegated assortment of ancient dwellings, a large power house and a fire department station occupying the foreground. To establish the legitimate dominance of the Capitol and clean up this conspicuously unlovely section, were primary objects in all that followed in planning for a civic center.

Actual work on the project awaited the arrival of Frederick MacMonnies, who came to Denver in 1907 in connection with his execution of a commission for the "Pioneer Fountain." The site for this lay within the bounds proposed for the Civic Center, so it was quite natural that his advice should be sought about the larger problem.

MacMonnies quickly saw that the only feasible solution of the difficulties inherent in the conflict of city plattings, was to change the axis of the Civic Center scheme from that established by Robinson, to a line directly west from the Capitol, and so bring the latter into proper relation to it.

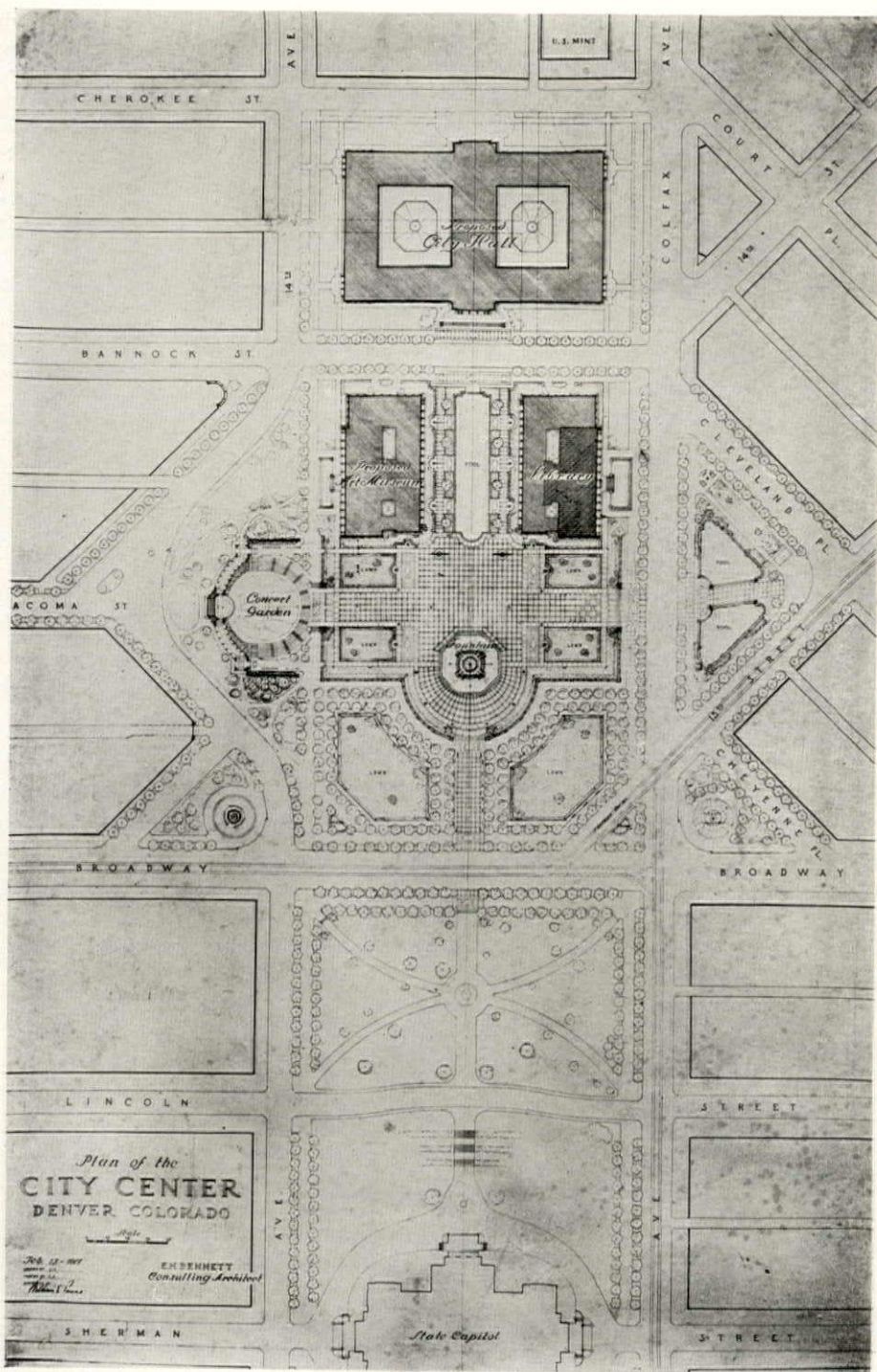
Now follows a five year period in which the details of the MacMonnies plan were debated, approved, and the land for the Civic Center acquired. The objections to bonding the entire city to pay for the site were met by making its improvement a part of the East Denver Park District development program. The bond issue for this was finally sold in 1912, after long-standing litigation on the part of property owners and others; of the total expenditures, something like one million eight hundred thousand dollars was used for acquiring the thirteen acres of ground for the Civic Center.

Immediately subsequent stages of progress included the clearing away of the old buildings on the area and its landscaping after plans of Frederick Law Olmsted and Arnold W. Brunner. These men established the general pattern of walks, lawns, tree planting, and ornamental lighting.

What would otherwise be a delightful night scene is now largely spoiled by excessive illumination. Denver would save materially and greatly increase the impressiveness of the Civic Centre by reducing the number and power of the lights used.

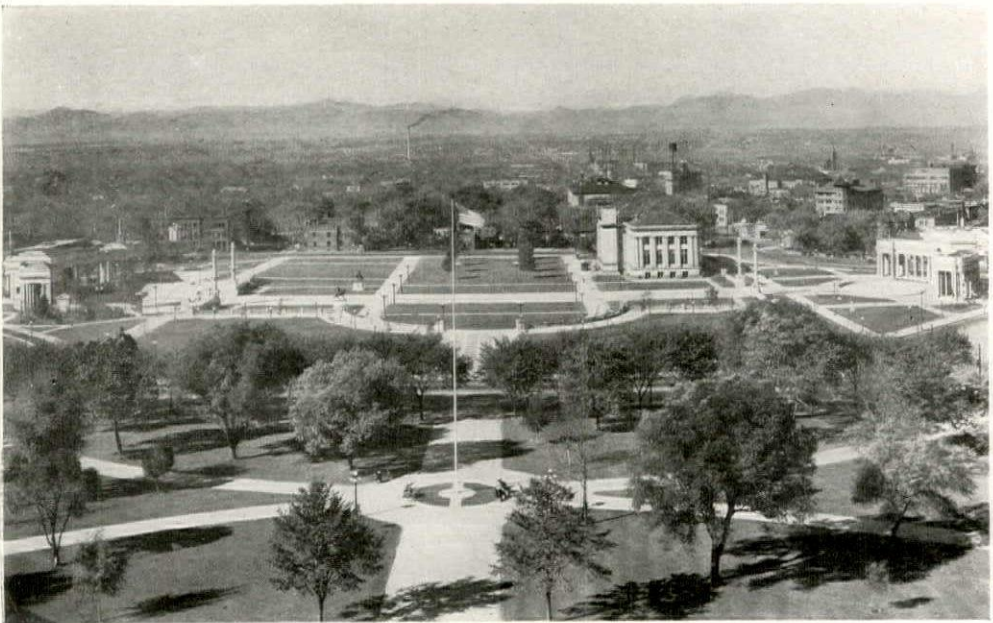
The Civic Center remained in this open plaza state until Speer again became Mayor in 1916. Denver people had seen that very little was being accomplished in pushing this community undertaking to completion by those who followed him in office since 1912, and this was a prime factor in seeking Speer's leadership again. Prompt action was forthcoming, as E. H. Bennett, the landscape architect of Chicago, was soon summoned to Denver to perfect a plan on which all could agree. His proposals and the subsequent developments are made clear by the reproduction herewith of his design, which is made the basis for discussion. To MacMonnies' recommendations he added a new and vitally important element in the establishment of a secondary, transverse axis, for the south terminus of which he determined on the placement of the first of the improvements which followed. This was the "Open Air Theatre and Colonnade of Civic Benefactors" which Mayor Speer







Architect's Perspective  
William E. and Arthur A. Fisher, Architects



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General View  
DENVER CIVIC CENTRE, DENVER, COLORADO  
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had long contemplated as one of the adornments of the Civic Center. It should be noted that one of Speer's thoughts as mayor was to inoculate wealthy citizens with the idea "give while you live," and so to beautify Denver with museums, fountains, ornamental gateways, statues and other examples of civic art.

The names of such donors, together with those of others who had made bequests for like purposes, were to be perpetuated by inscription in a special Hall of Fame to be called the "Colonnade of Civic Benefactors." This structure was unified, when later completed after plans of Marean and Norton, Denver architects, with the open air concert garden to be used chiefly for the summer programs of the Municipal Band. The joint structure has two semi-circular double colonnades which terminate in square pavilions, with a central pavilion or archway whose floor becomes a stage when the glass and bronze curtain background—to be noted on the plan—is lowered. Two murals by Allen True, a Colorado artist, adorn the curved wall panels at the inner ends of the colonnades. These, the gift of Mrs. Charles Hansen Toll in memory of her husband, depict "The Miner" and "The Trapper."

The special committee to which had been entrusted the task of determining the first list of names for the "Civic Benefactors" memorial and the particular form of commemoration, has recently arrived at a decision in the matter. The record will be made not with the usual bronze tablets, but with individual bronze letters attached to the enclosing walls of the Theatre section. Robert Garrison, the Denver sculptor, is to design the alphabet for this use. On the plaza near by have been placed two equestrian statues in bronze, the creation of A. Phimster Proctor; "The Bucking Bronco," the gift of J. K. Mullen and "The End of the Trail," that of Stephen Knight.

Bennett contemplated a minor architectural treatment of the Bates Triangle at the other end of the secondary axis, his plan showing only two ornamental pools. A really adequate balance for the "Open

Air Theater" was, however, made possible by J. H. P. Voories' bequest to the City of practically his entire estate. The "Archway or Entrance to the Civic Center" stipulated in his will as the object for which the funds were to be expended, has recently been actualized in the "Voories Memorial," an archway and semi-circular double colonnade in the same order and of the same gray, "Turkey Creek," Colorado sandstone, as the "Colonnade of Civic Benefactors." William E. and Arthur A. Fisher, Denver architects, were the designers. The site, like that of the "Open Air Theater," has been unified with the central Civic Center area by closing an intervening street on its direct east and west course and carrying it around. An oval pool on the inner curve of the colonnade is a part of the scheme; in it two green bronze water jets by Robert Garrison have been placed.

Originality of motive and simplicity and boldness of treatment characterize the series of ten murals which Allen True has lately executed for the "Voories Memorial." Colorado natural life has provided the subjects and so we find depicted in the smaller lunettes of the colonnades, the Timber Wolf, Porcupine, Beaver, Antelope, Mountain Lion, Coyote, Mountain Sheep, etc., and in the two larger lunettes of the center archway, the Elk and the American Buffalo or Bison. We show the Elk design in its architectural setting and both these last-named murals in the colors of the originals. Antique Greek vase paintings have, in treatment and coloring, been the direct inspiration of Mr. True's work here; three colors only, a stone gray, a terra cotta red, and a black having a hint of lavender in it, are employed. The smaller designs are in the lavender black against a terra cotta ground, while in the two larger murals the artist combined these tones in his rendering and employed the stone grey as a background.

Denver has long needed an Art Museum, and since Bennett made provision for one at the northwest corner of the Civic Center, as a balance for the Public Library, this site has been generally regarded as by far the most desirable. Al-



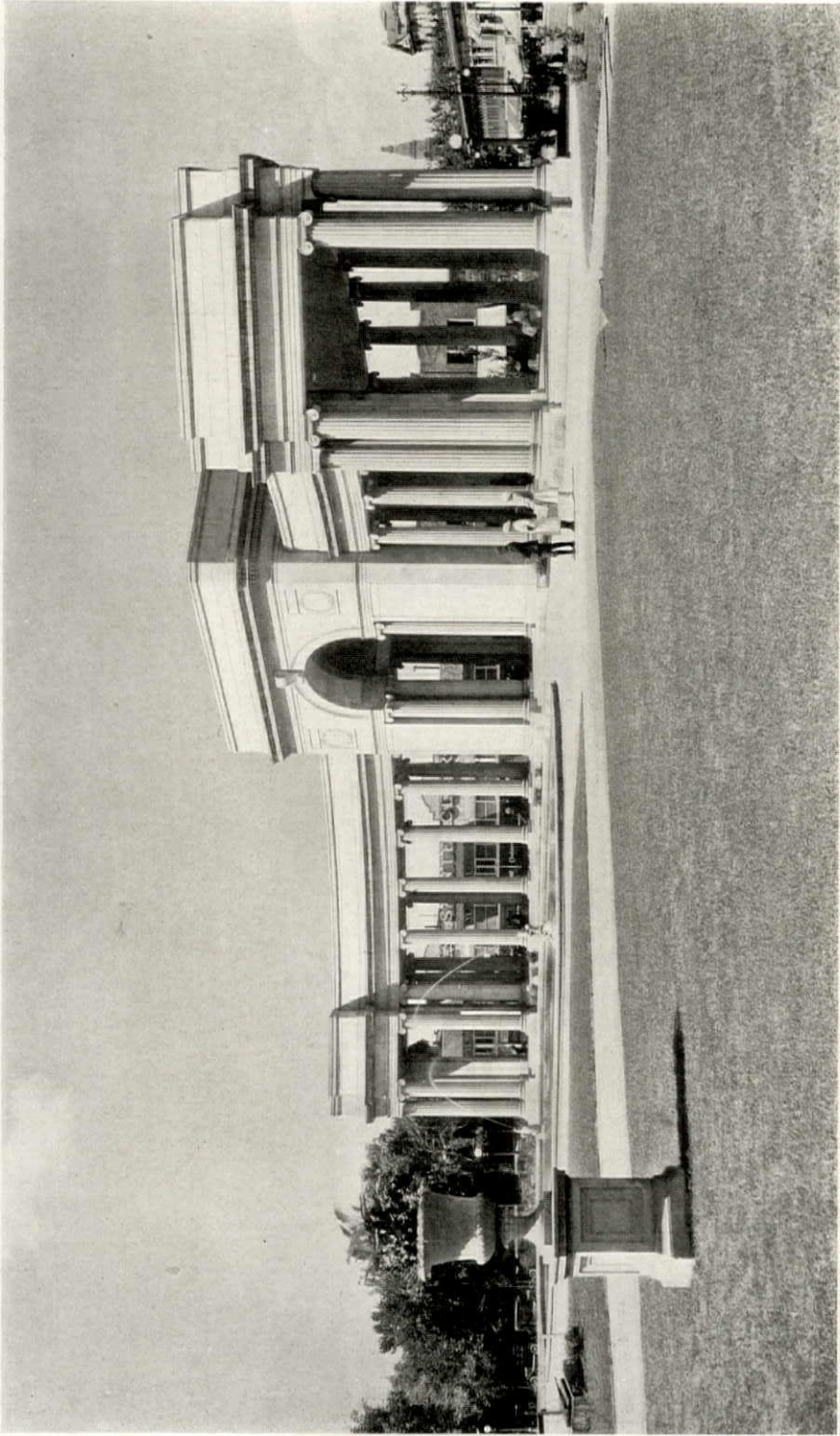


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Open Air Theatre and Colonnade of Civic Benefactors  
DENVER CIVIC CENTRE, DENVER, COLORADO  
Marcan and Norton, Architects

March, 1923





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VOORHES MEMORIAL, DENVER CIVIC CENTRE, DENVER, COLORADO  
William E. and Arthur A. Fisher, Architects

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Central Arch of Voorhes Memorial

DENVER CIVIC CENTRE, DENVER, COLORADO  
William E. and Arthur A. Fisher, Architects





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Open Air Theatre

DENVER CIVIC CENTRE, DENVER, COLORADO  
Marean and Norton, Architects

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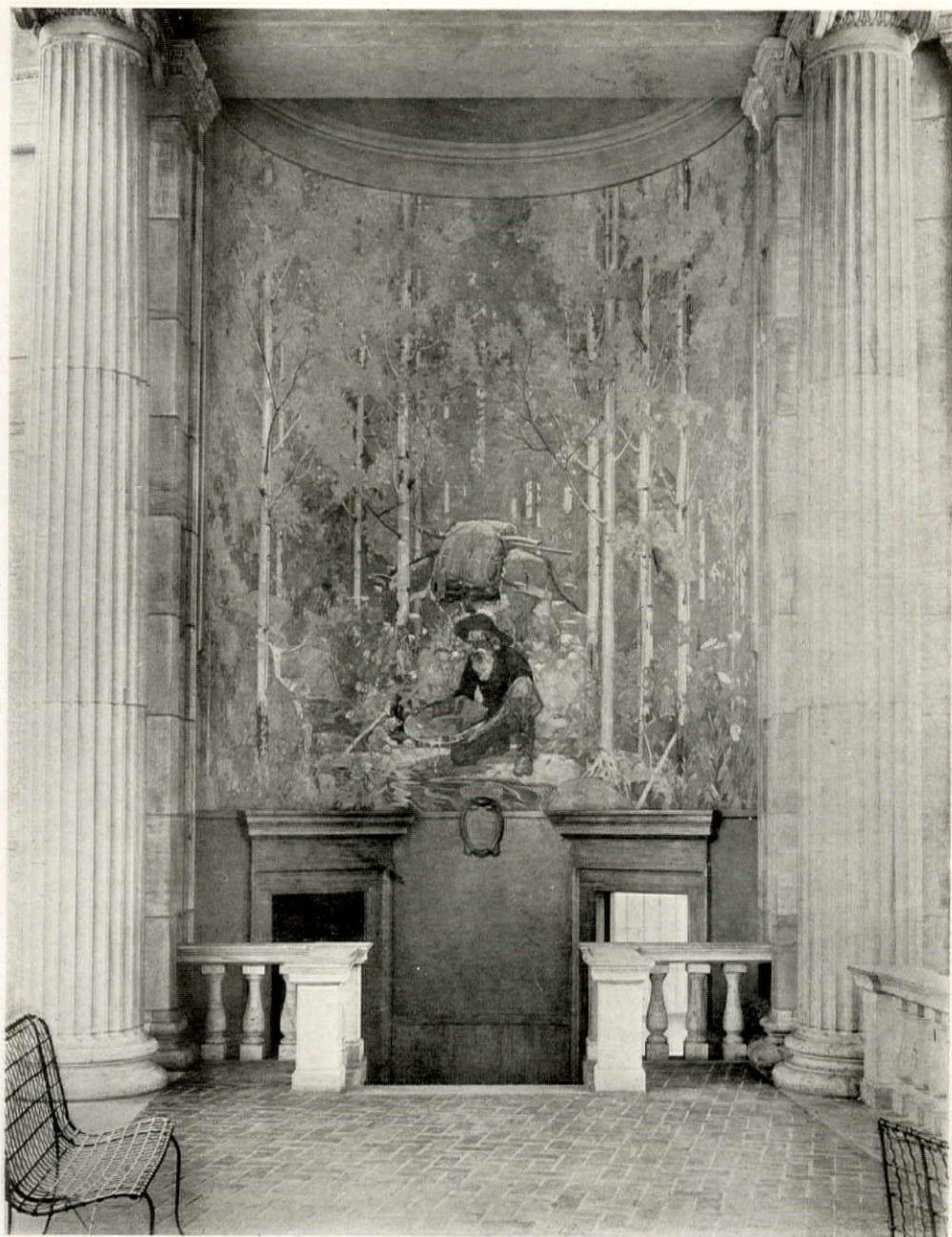
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Voories Memorial

DENVER CIVIC CENTRE, DENVER, COLORADO  
William E. and Arthur A. Fisher, Architects





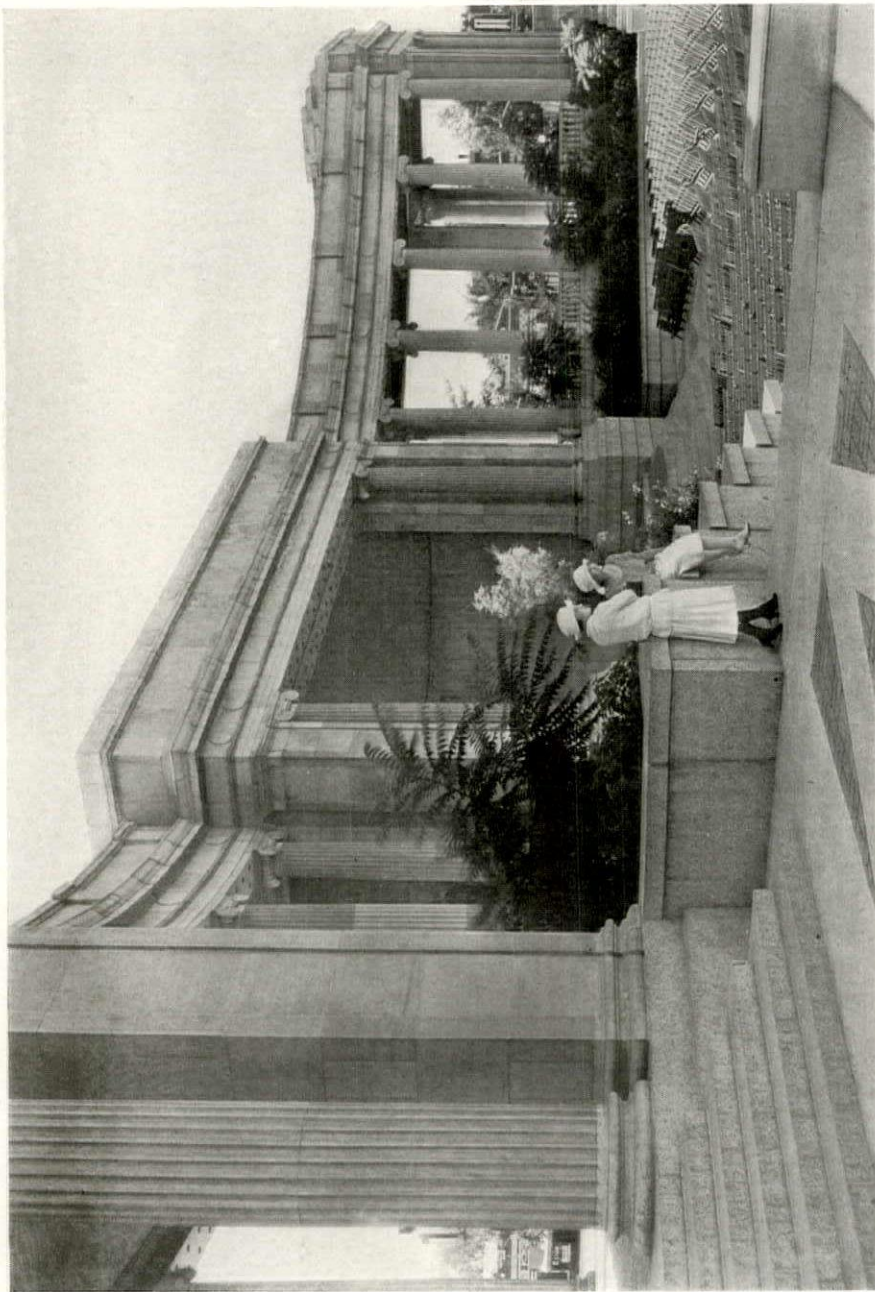
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Open Air Theatre

DENVER CIVIC CENTRE, DENVER, COLORADO  
Marean and Norton, Architects

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Open Air Theatre  
DENVER CIVIC CENTRE, DENVER, COLORADO  
Marean and Norton, Architects

March, 1923



though too restricted to permit of material expansion from modest beginnings, the Denver Art Association now has in hand plans for a museum development which meets in a unique way, the conditions of site and contemplated growth.

As a west terminal of the principal axis and its proper closing, MacMonnies and all succeeding planners have anticipated the construction of a Municipal Building or group on the block west of Bannock Street. There has long been obvious need of replacing the old City Hall and County Court House, between which the municipal offices are now divided, with a common and more adequate housing. The site mentioned would in all practical ways serve admirably, and at the same time complete the Civic Center scheme in an impressive manner.

Although public opinion is clearly in favor of the project, selfish interests have been fighting it, and for a while it looked as if the opportunity to acquire the site

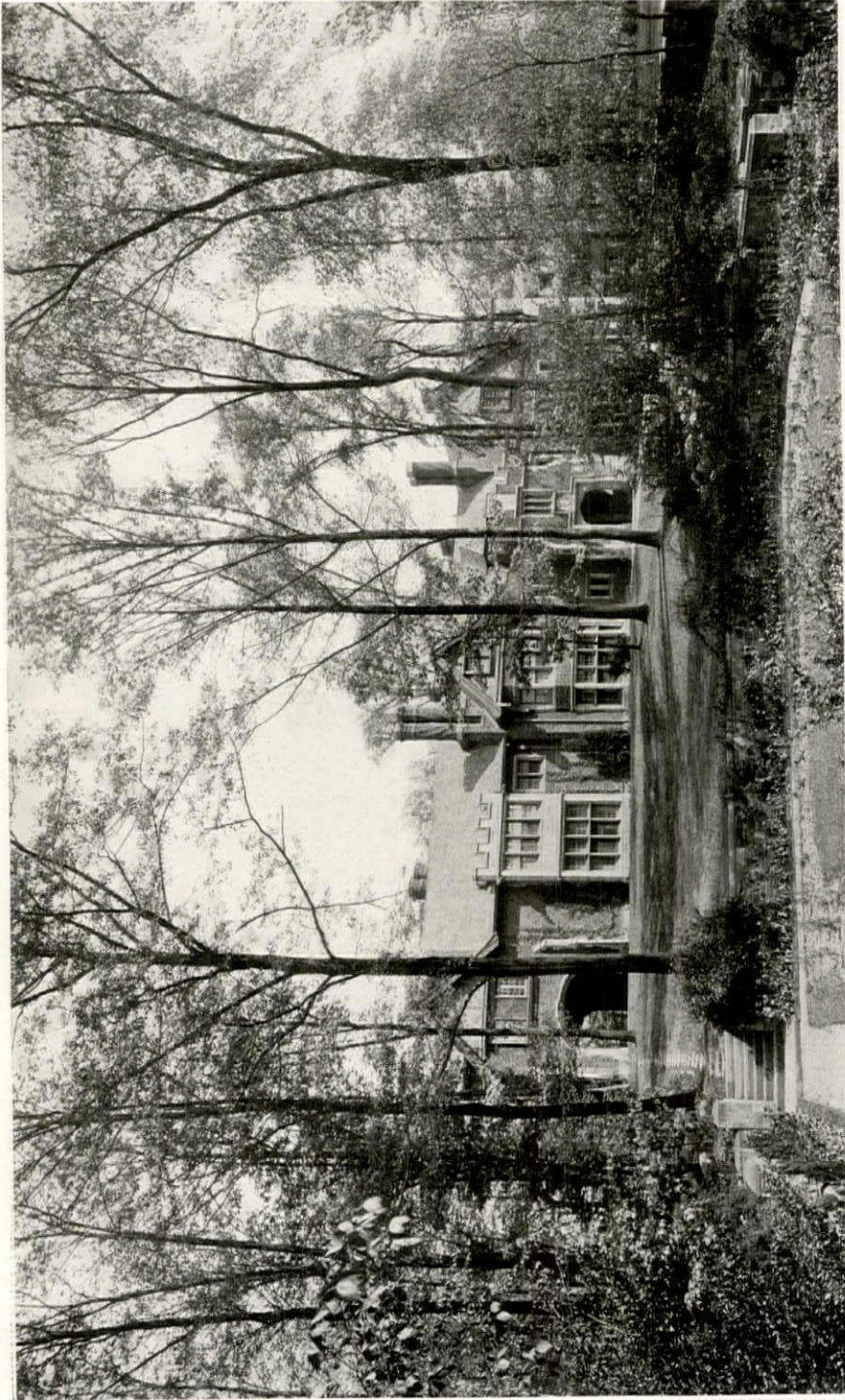
would be lost through the purchase of the land by those who recognized its value for office buildings. City officials, hitherto indifferent to the danger of delay, have in recent days been convinced of the need of decisive action to protect the public interest and have taken steps through condemnation proceedings to keep control of the situation.

Denver was a pioneer in the whole movement for city planning, as we generically term it, and its Civic Center is an outstanding example of noble ideals greatly accomplished, for it is much nearer completion than the similar programs of other cities, which for the most part are still in the "paper stage." It stands as a most adequate and fitting monument to the memory of Robert W. Speer, a city executive who in his career gradually became revealed as a civic leader of a type and kind very different from the usual politician.



"THE BUCKING BRONCO"  
A. Phimster Proctor, Sculptor





March, 1923

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South Elevation

RESIDENCE OF WARREN BICKNELL, ESQ., CLEVELAND, OHIO

Frank B. Meade and James Hamilton, Architects



The RESIDENCE of WARREN BICKNELL, Esq  
— CLEVELAND, OHIO —

FRANK B MEADE & JAMES HAMILTON, ARCHITECTS  
OLMSTED BROTHERS, LANDSCAPE ARCHITECTS.

By I. T. Frary

IN THE BETTER class of residences to-day there is an increasing tendency to emphasize the atmosphere of home, to make them more comfortable and to avoid the theatrical. The home of Mr. Warren Bicknell illustrates this tendency; it is commodious, to meet the requirements of a man of affairs; it is dignified, as befits his social standing; it is undoubtedly costly, yet is restrained and decorous, and is withal a comfortable place in which to live.

A most delightful location was chosen for it on the ridge which was formerly Cleveland's official eastern boundary. From below it stretches the solidly built up city, while to the east continues the great, new Heights residential district: yet it seems isolated, and the elevation and the setting of trees give to it a secluded, rural atmosphere. The commanding height and the spaciousness of the setting carry the eye over the roofs and the busy highway below, out over the city, and afford glimpses on a clear day of distant Lake Erie.

It is a marvelous site and one to which only a house of exceptional character and individuality would be suited. The Bicknell house seems to meet these demands. It has that rare quality of belonging and of having belonged always. Its lines are broad and simple, and its horizontal effect has been continued interruptedly in the wide stretches of open lawn with which it is surrounded and which afford a typically English setting for an English house.

The brick, stone and timber work seem to bear the mark of time, and there is a freedom in the way the brick is laid, the stone cut and the timber worked up that makes one feel that the designer knew what he wanted and had workmen who knew how to give it to him and to have a

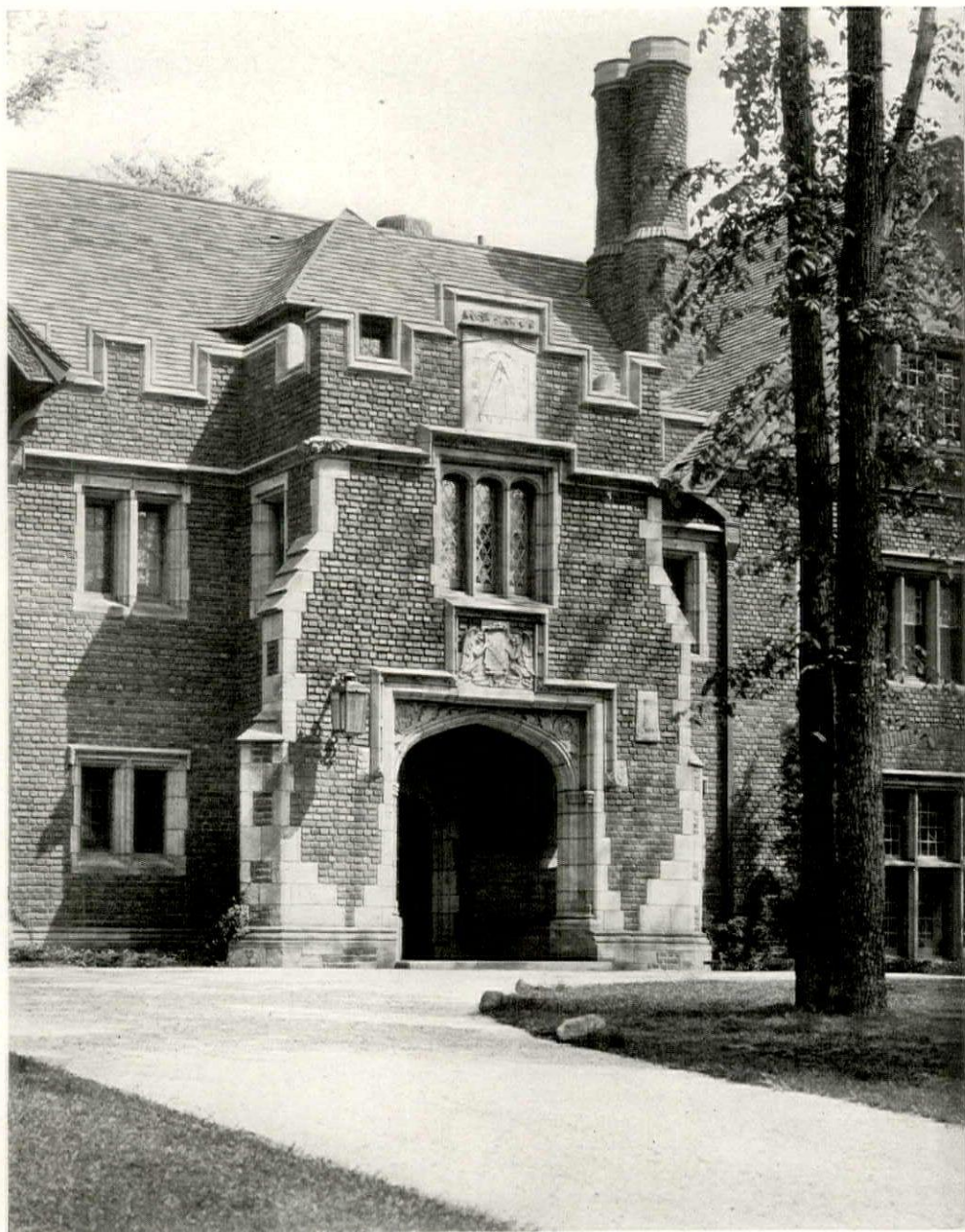
good time doing it. The pattern of grey headers in the wall, the diagonal brick-work between the gable timbers, the grotesques that loll out from corners here and there, the sun dial and cartouche over the south porch and the little lighthouse in low relief beside it, these and other bits give a naïve charm that is delightful and refreshing.

The interior woodwork is dignified and effective; the plaster is roughly trowelled and, where ornamental, is modeled in very low relief; stone is used freely for mantel facings, floors, door casings and even for entire walls.

A sense of quiet and serenity is felt throughout the house, due largely to the soft tones in the color scheme. The rugs are all plain taupe, the plaster is unrelieved by color, the stone-work is buff, warm in tone, the oak and walnut of the trim are finished in soft tones that harmonize and it is only in the draperies, furniture coverings, pictures, tapestries and other accessories that accenting colors are introduced to relieve the monotone and give necessary life to the scheme. In the hall, brilliant crimson draperies lose themselves in the grey shadows; those in the living room are embroidered on a tan ground in richly colored patterns that harmonize with the deeper tones in the furniture coverings.

The hall is spacious, two stories in height, with a stairway running up one side to balconies which are carried around the other three. The fireplace end of the room is entirely of stone below the balcony; wainscot, stone and plaster are used elsewhere. The pierced and carved strap work of the stair and balcony rails is a dominant feature of the room, relieved by the introduction of an arcaded effect on the north balcony. The door to the vestibule has panels of glass, eight





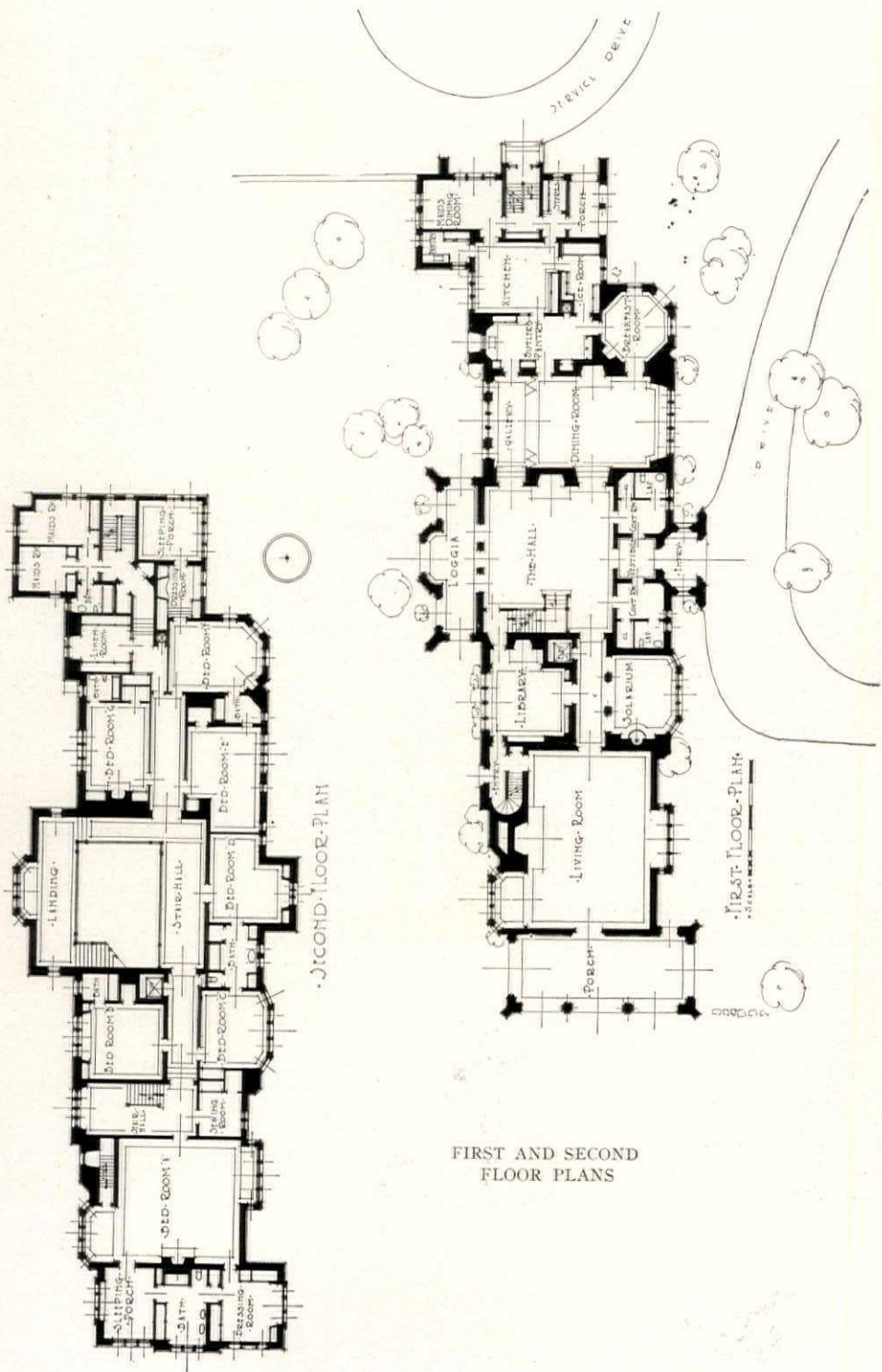
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Main Entrance

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Frank B. Meade and James Hamilton, Architects



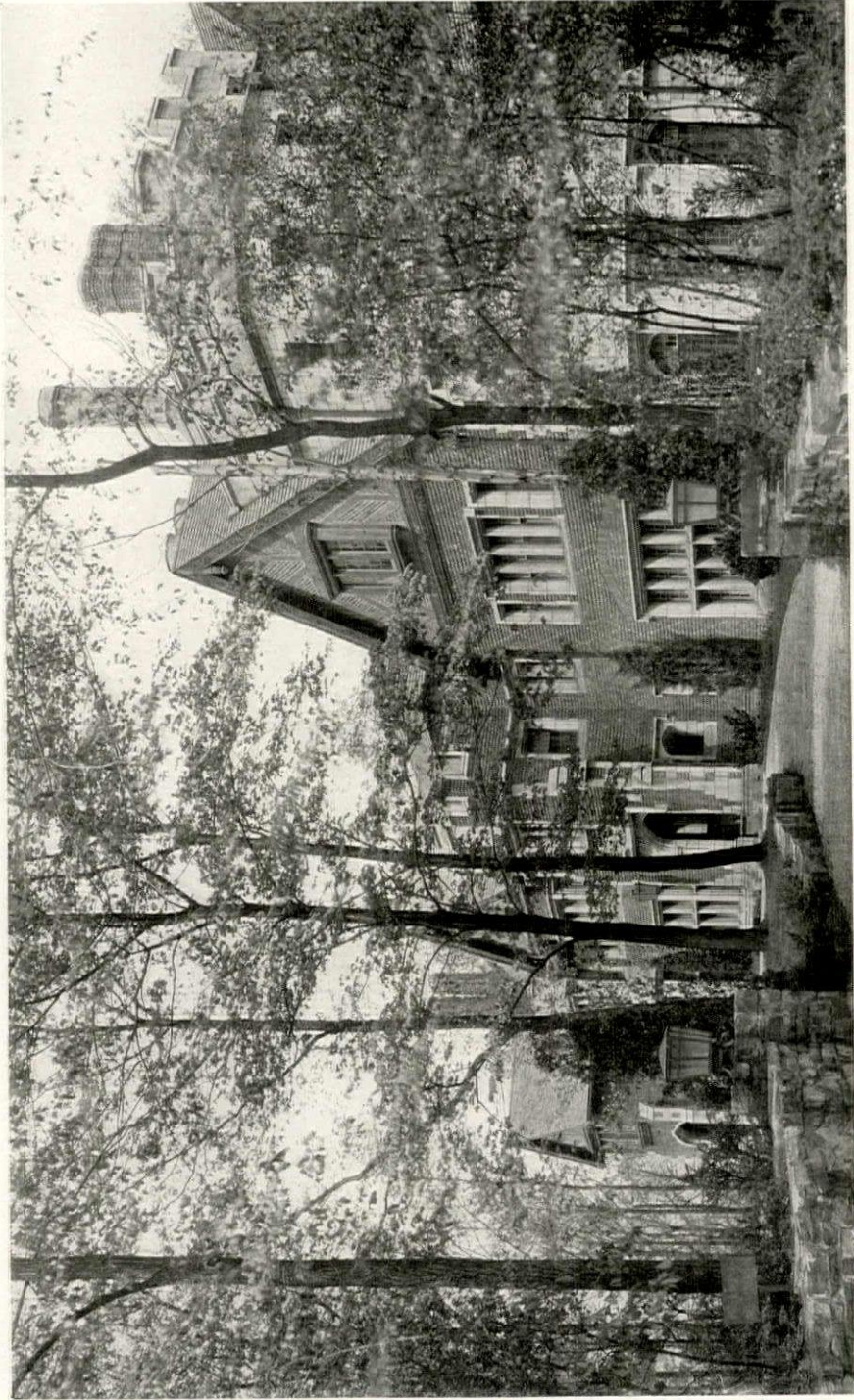


FIRST AND SECOND FLOOR PLANS

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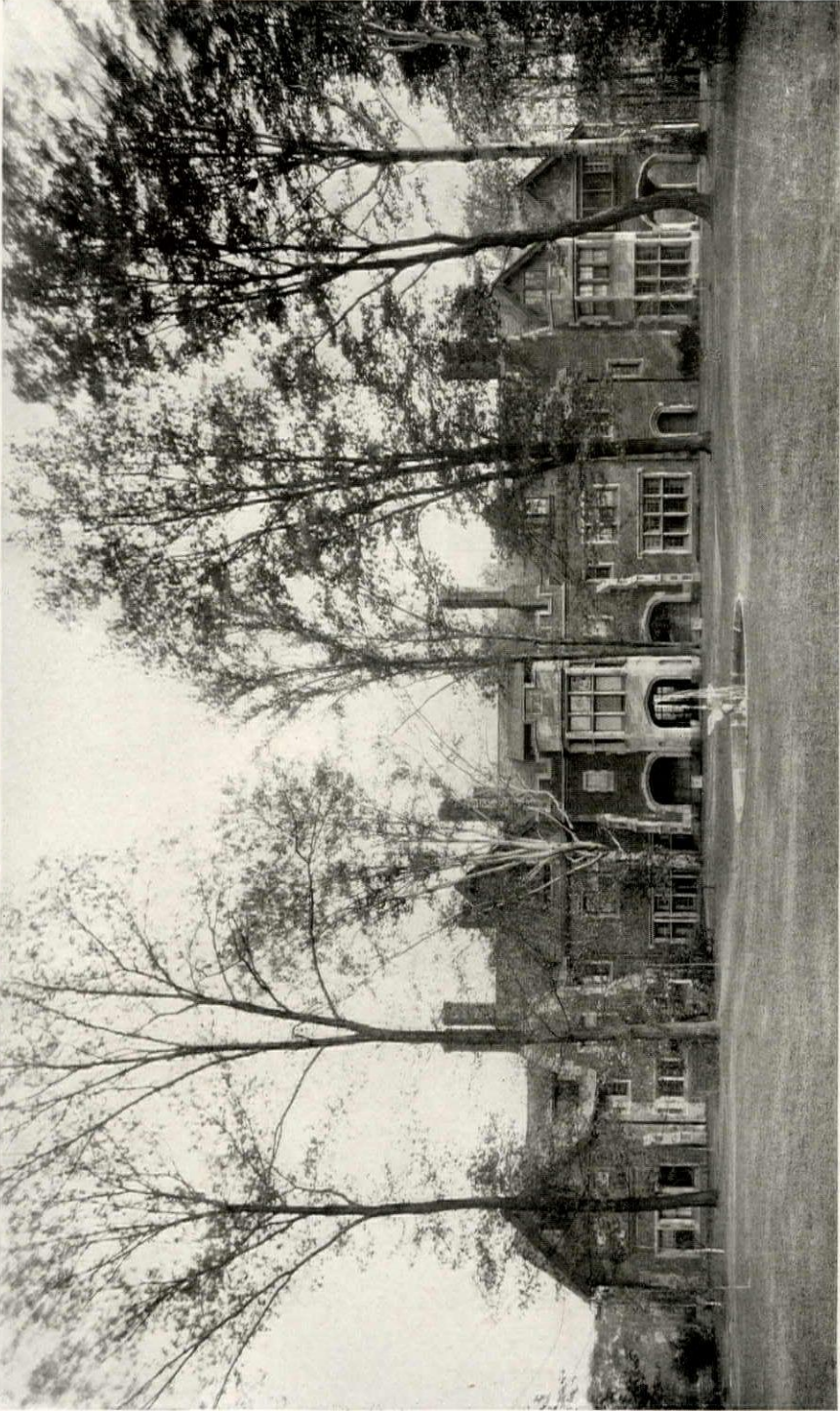


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View from Southeast  
RESIDENCE OF WARREN BICKNELL, ESQ., CLEVELAND, OHIO  
Frank B. Meade and James Hamilton, Architects

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Loggia at Side

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Corridor

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Main Hallway

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Frank B. Meade and James Hamilton, Architects





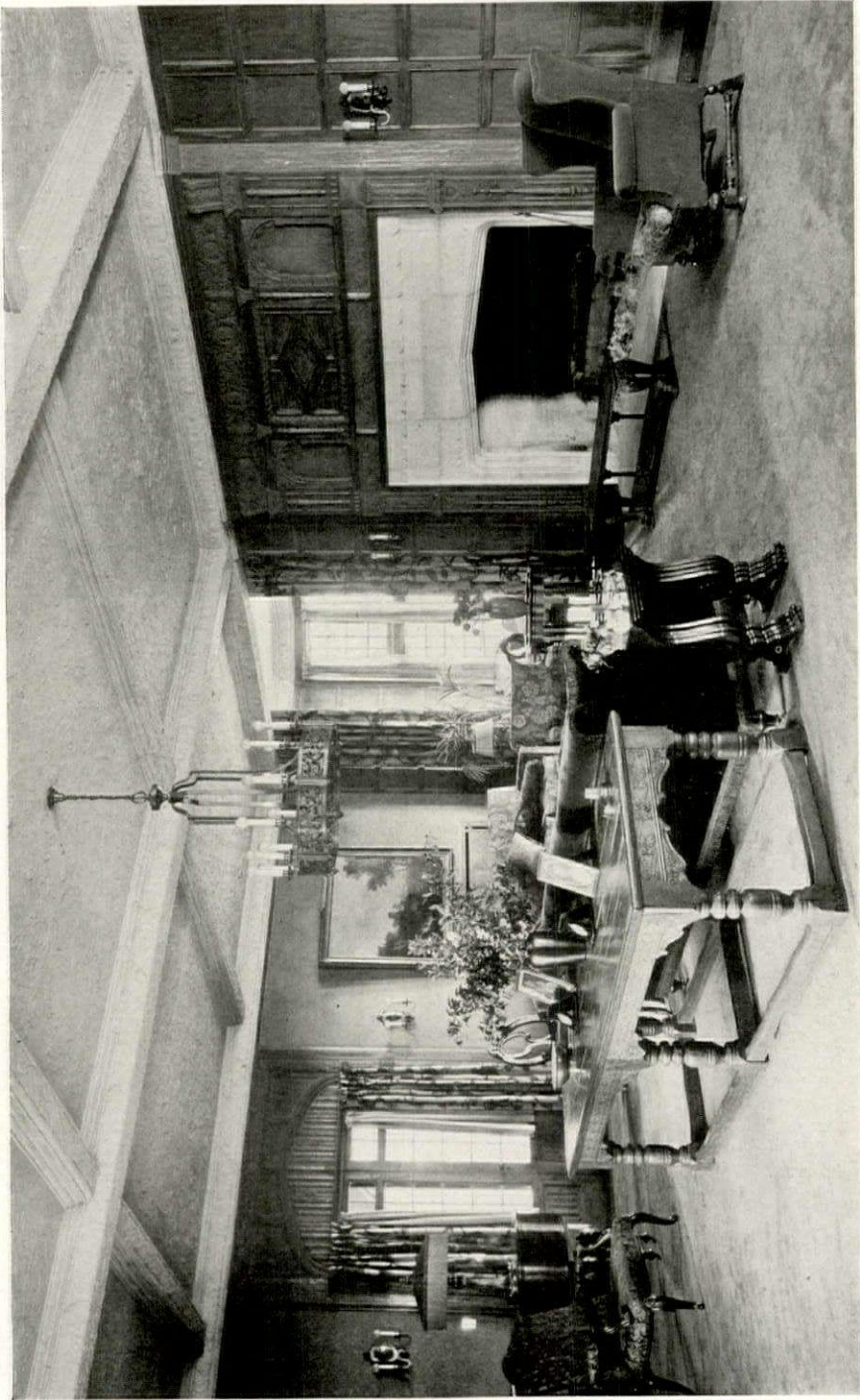
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Main Hallway

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Living Room

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Dining Room

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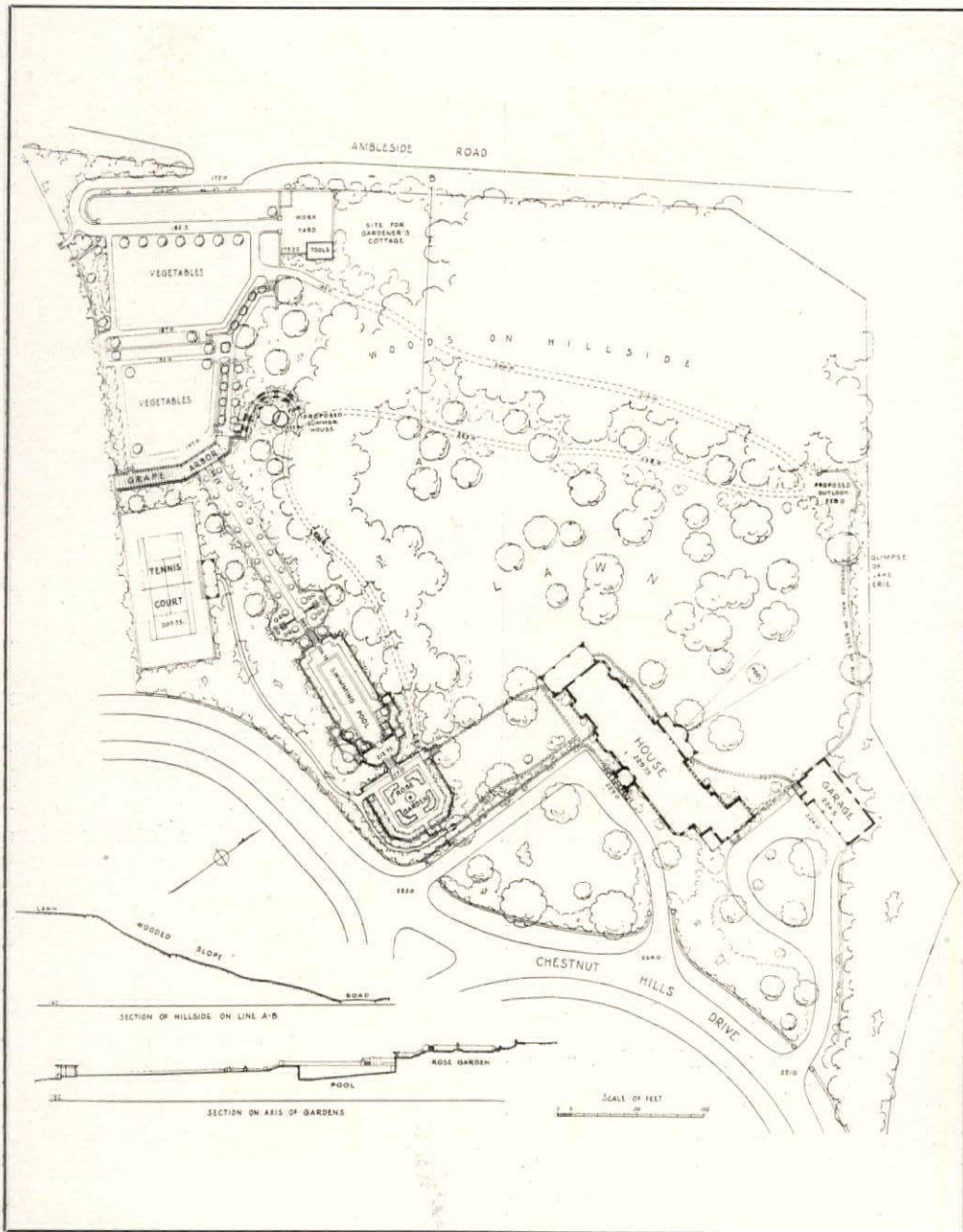
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Library

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Plan of Estate

RESIDENCE OF WARREN BICKNELL, ESQ., CLEVELAND, OHIO  
 Frank B. Meade and James Hamilton, Architects





GARDEN PATH

of which are leaded in patterns which reproduce the carved panels of the outer doors. Beside the vestibule are coat rooms which open into both hall and vestibule, providing an effective circuit for arriving and departing guests. Each has a connecting lavatory.

To the left from the entrance, a passage leads to the living room. On one side of the passage is the library and on the other a stone-walled solarium. The latter is separated from the passage by an arcade of stone and has a fountain and gold fish pool at one end. The library opposite is wainscoted to the plaster cornice with vertical walnut boards, broken by recessed open book shelves, and relieved by a single band of flat ornament which encircles the room and is continued around the door openings. The color scheme is a little livelier here than in the other rooms, to

harmonize with the brilliant bindings of the books.

A distinguishing feature of the living room woodwork is the crude form of linen-fold which is carved on door and window casings, on the mantel and on the arched panels above the openings. The walls, where not wainscoted, are hung with a fabric.

In the dining room richly modeled plaster ornament fills the space above the oak wainscot, and a strapwork design of unusual effectiveness and simplicity of line breaks the ceiling. Walnut furniture contrasts with the oak trim and the colorings of needlework embroidery on the chair coverings afford a final accent. The little breakfast room which opens from it has woodwork in ecru enamel, with fine lines of green emphasizing its mouldings, and linen curtains embroidered with richly colored ornament furnish the cheerful note that such a room requires.

Brick has been used effectively in the basement billiard room and a simple scheme of ornamental plaster worked out in the third floor ball room.

So far as the exterior is concerned, the house has already attained that air of permanency, of belonging, that is so desirable in a home. The interior when photographed was still somewhat incomplete as to its furnishings. It is as a whole most successful; there is an avoidance of theatrical effect; it is quiet, seri-



VIEW OF GROUNDS BEFORE CONSTRUCTION





LOOKING TOWARD THE POOL

ous and dignified, carries out consistently the traditions of a great period and above all gives the impression of being comfortable and homelike.

South of the house a ravine cuts through the hillside and in it has been laid out a formal garden which drops by successive terraces toward the lower level, where the width is sufficient to accommodate a generous vegetable garden, also terraced. The ravine affords an exceptional setting for a garden, its detached location permitting of massed planting without interfering with the prevailing sense of openness about the house site.

The garden is approached from the house by a path of stepping stones leading down across the slope of the slightly formalized lawn. A rose garden forms the connection between lawn and garden and from it is obtained a most effective vista. Slightly below this level is a small formal terrace at the edge of which stands a great stone vase which is a dominating feature of the entire garden. From both sides of this terrace successive flights of steps descend by delightfully erratic courses to the long, narrow swimming pool, which is fed by a stream gush-

ing from a grotesque mask set in the retaining wall at its head. Beyond the pool a single, broad flight of steps leads down to a long walk, flanked by rows of low evergreens, extending to a pergola through which the vegetable garden is entered.

Planting on the slopes at both sides gives the garden a sense of seclusion and shows the fascinating possibilities of architectural arrangements enclosed in natural settings. The plan is essentially formal, yet the character of the stonework and the freedom of the planting produce an effect that is delightfully rustic and informal. Flowering trees and shrubs have been used, but merely as an enrichment to existing vegetation.

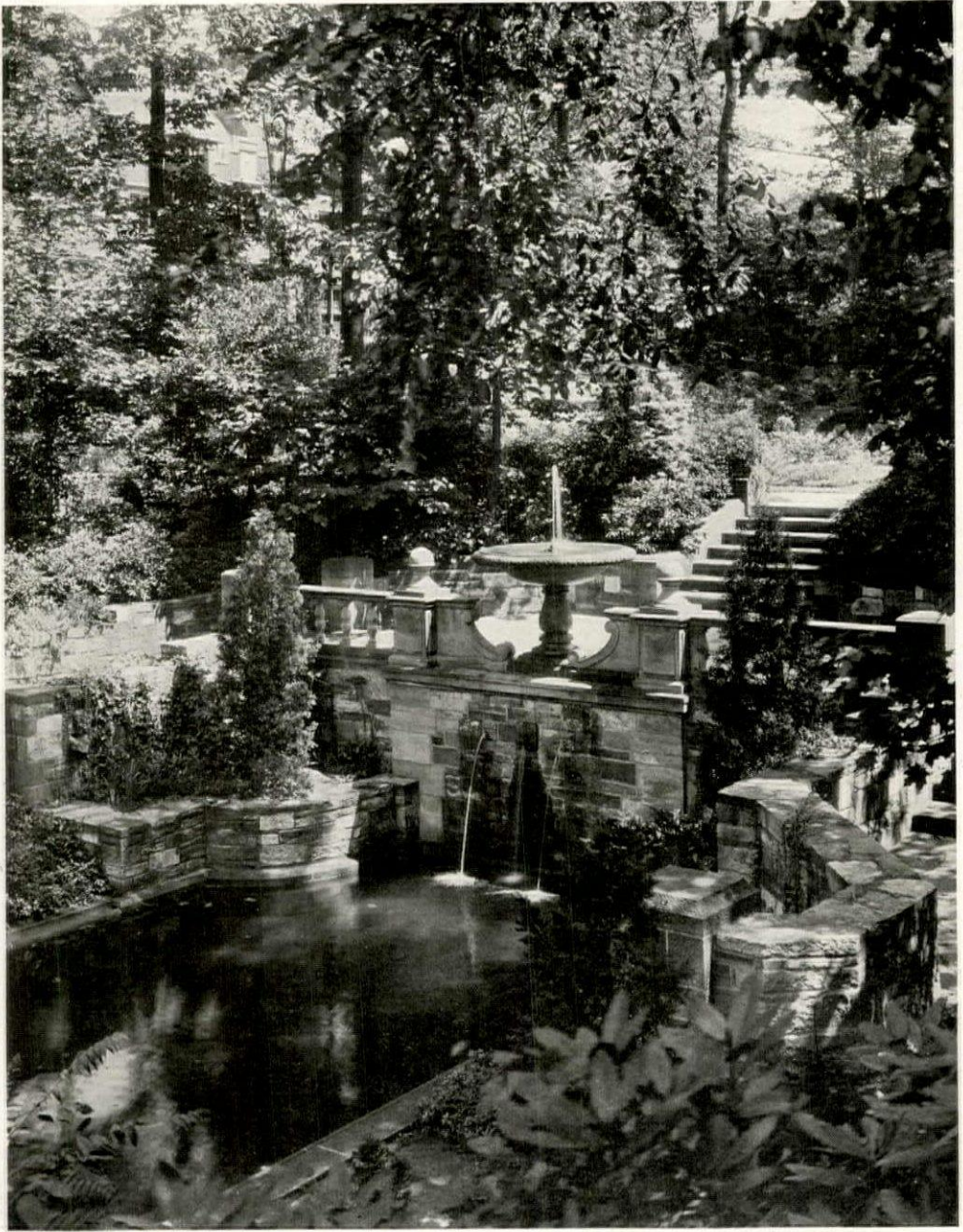
The entire scheme is comparatively small, never more than fifty feet and for the most part only twenty-five feet in width, but an effect of spaciousness is secured that is out of all proportion to the extent of ground treated. By referring to the small view taken before construction was begun, both the difficulties and the advantages of the site may be in some degree appreciated.

On the upper level beyond the garden is a tennis court so concealed by planting that its presence is scarcely suspected, although it actually extends to the very



A CORNER BY THE POOL





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View of the Pool

RESIDENCE OF WARREN BICKNELL, ESQ., CLEVELAND, OHIO  
Olmsted Brothers, Landscape Architects

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View of the Pool

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Olmsted Brothers, Landscape Architects

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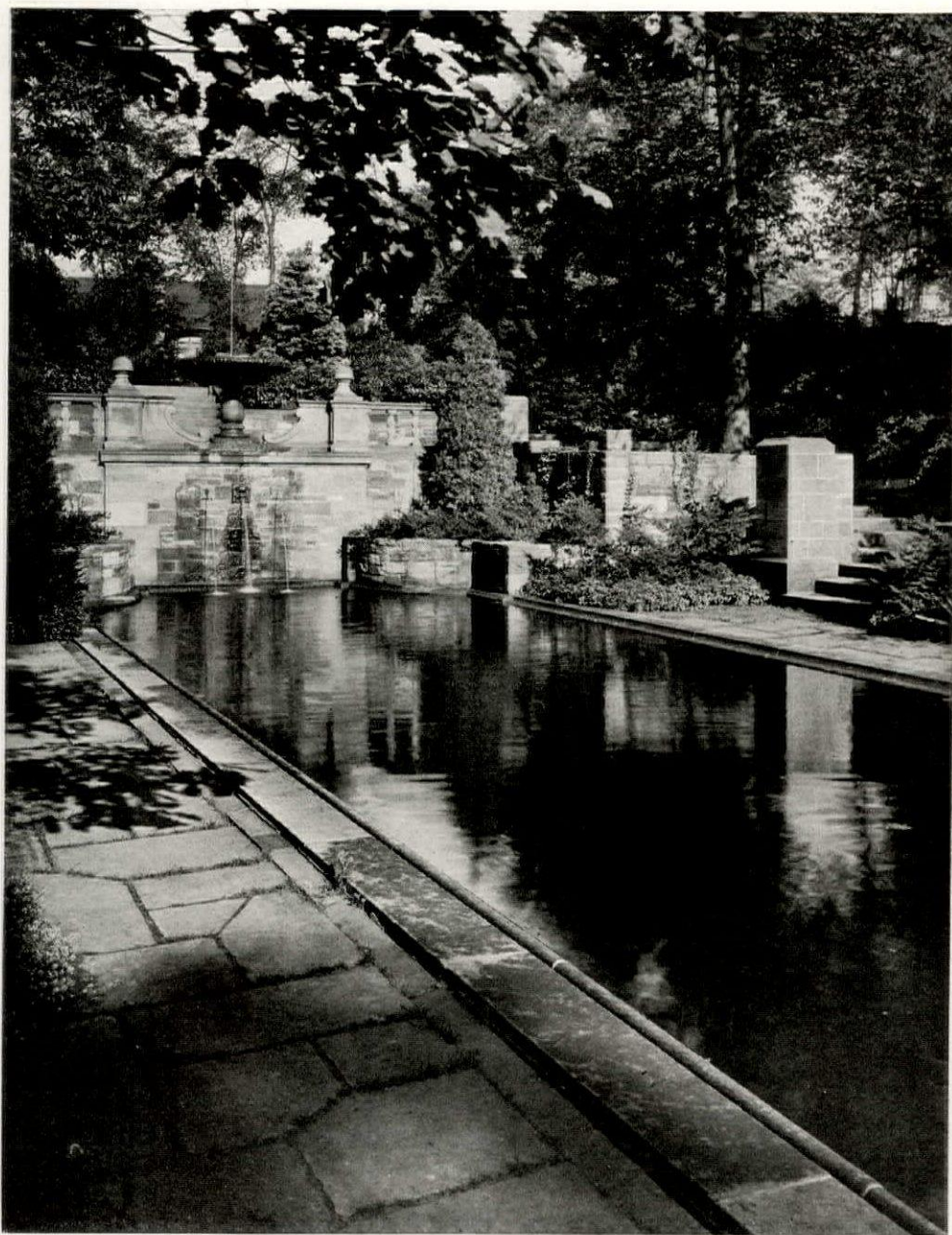
March, 1923

View of the Garden

RESIDENCE OF WARREN BICKNELL, ESQ., CLEVELAND, OHIO  
Olmsted Brothers, Landscape Architects

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*The Architectural Record*

*March, 1923*

View of the Pool

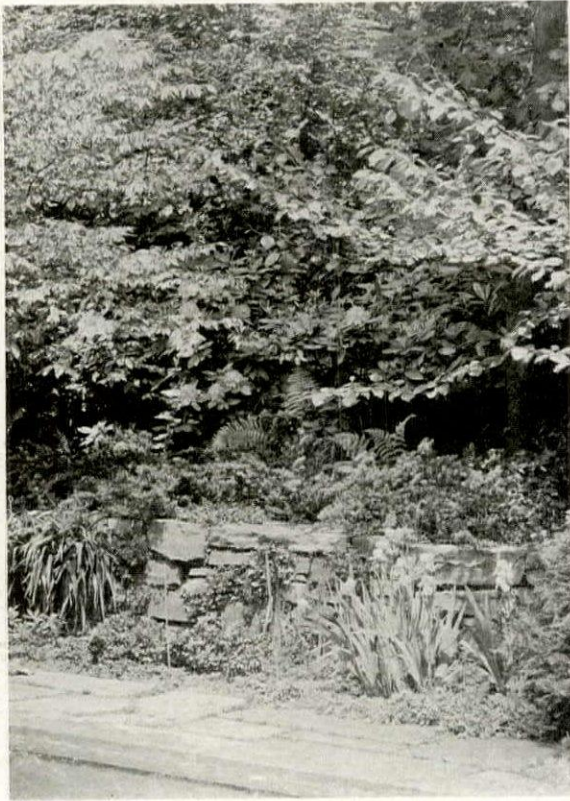
RESIDENCE OF WARREN BICKNELL, ESQ., CLEVELAND, OHIO  
Olmsted Brothers, Landscape Architects

[221]

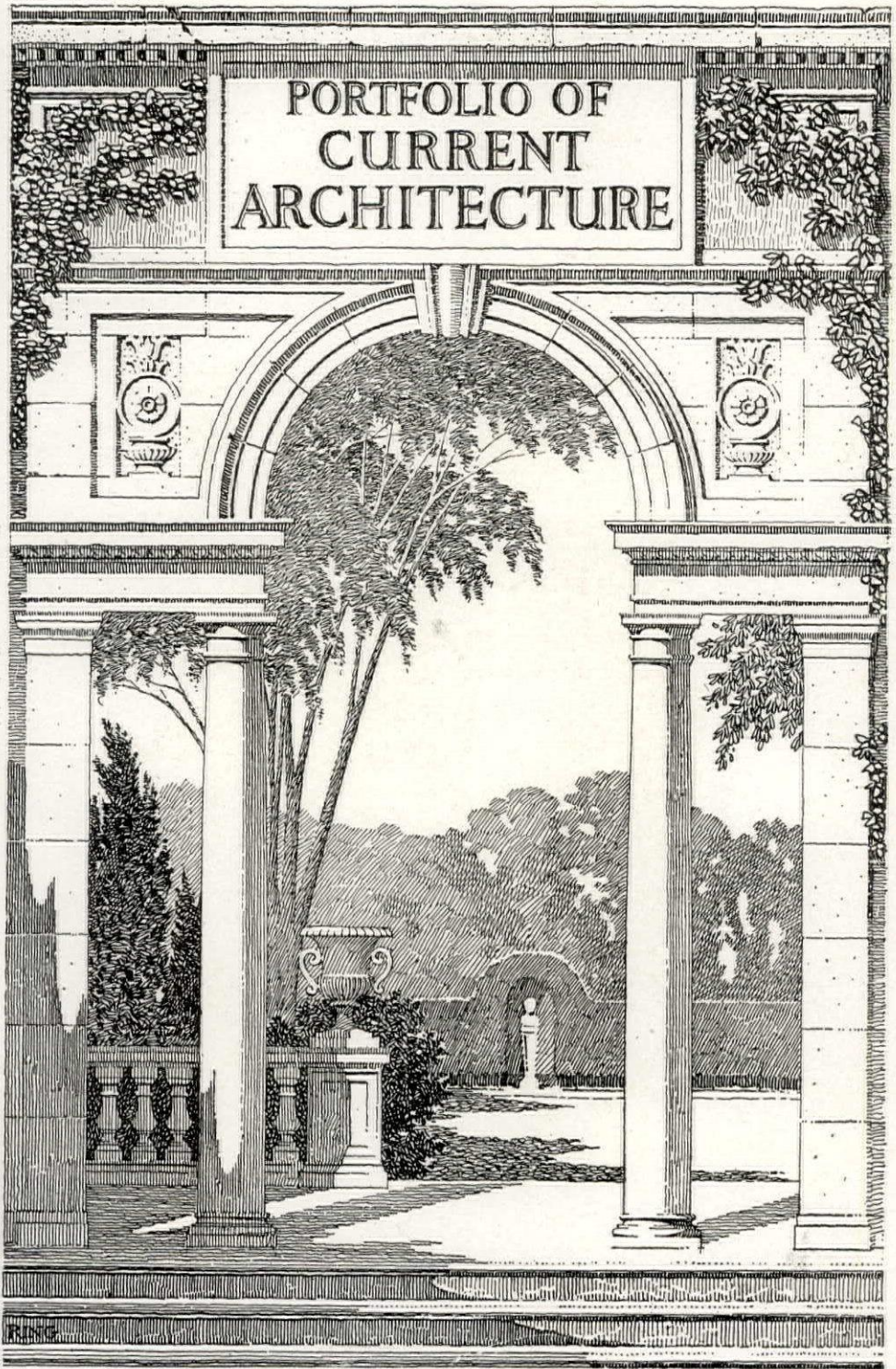
verge of the ravine. It is reached by one of a number of tempting paths that lead away mysteriously through the shrubbery.

The treatment of the garden, which is approached by a path of stepping stones, has been conceived in simple terms, with

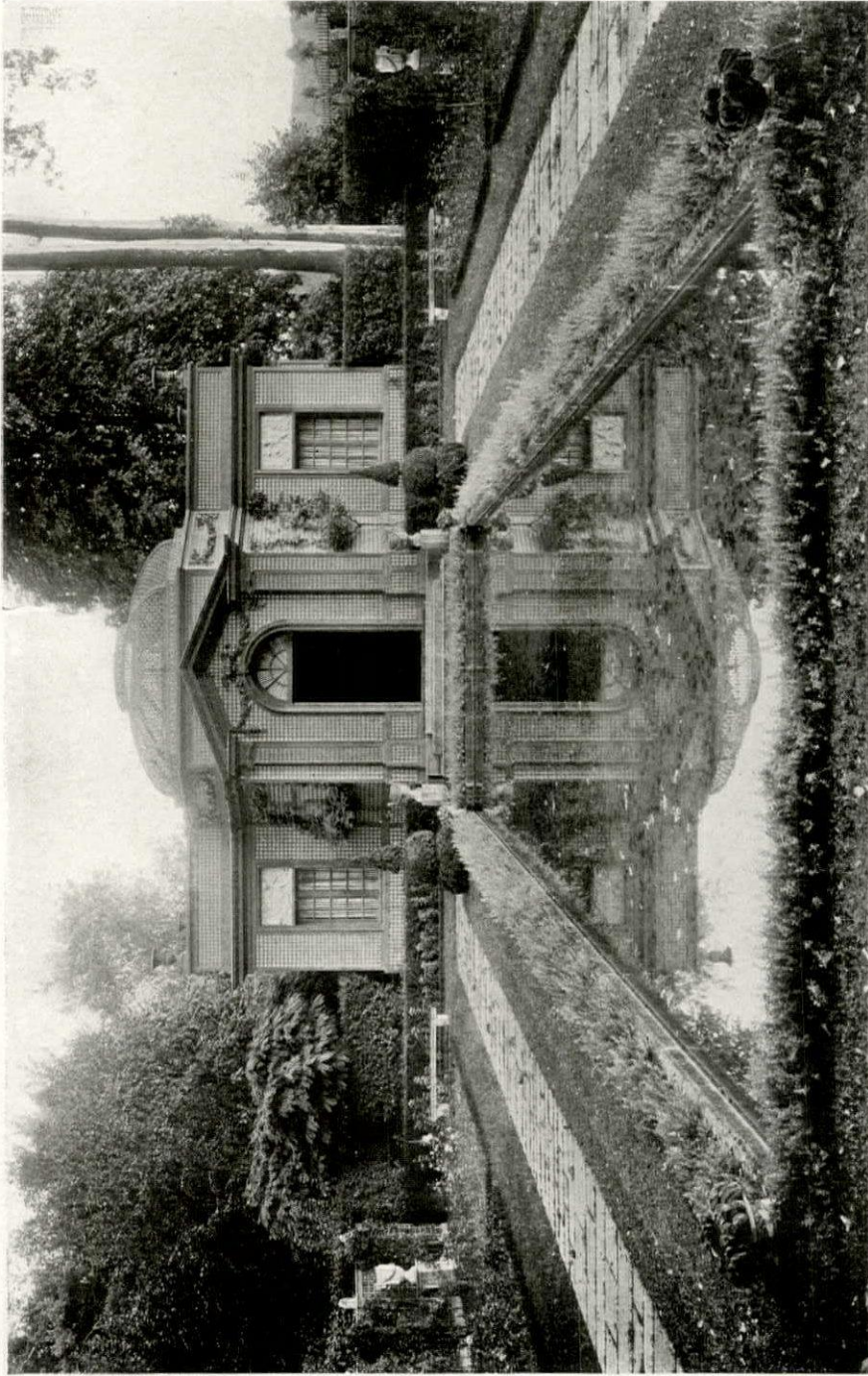
a view to obtaining large and impressive effects appropriate to the importance of the house and to making the most of the splendid opportunities afforded by the topography of the site at the crown of a commanding ridge.









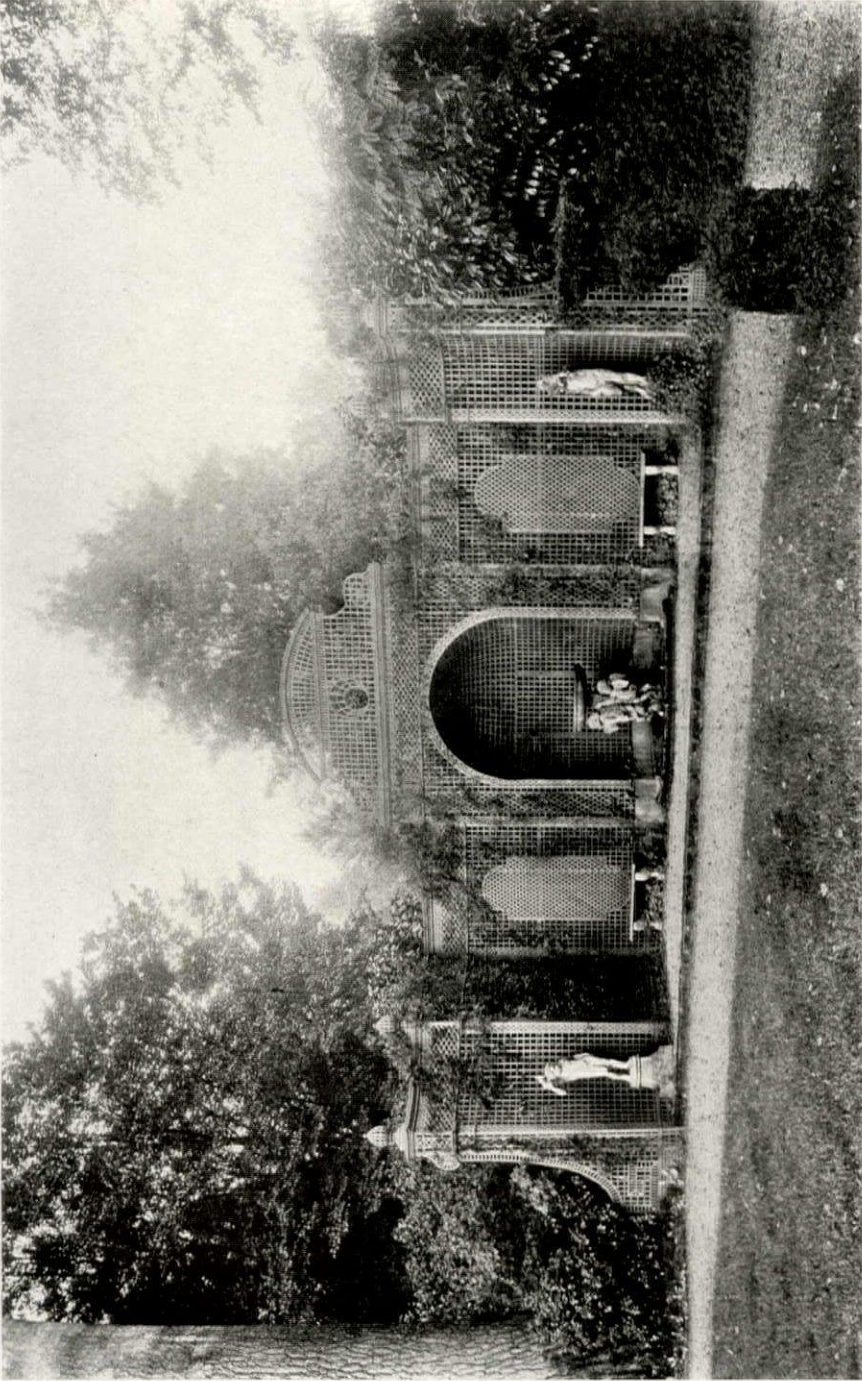


March, 1923

Pavillon de Musique,  
VILLA TRIANON, VERSAILLES.  
M. du Chêne, Architect.

*The Architectural Record.*



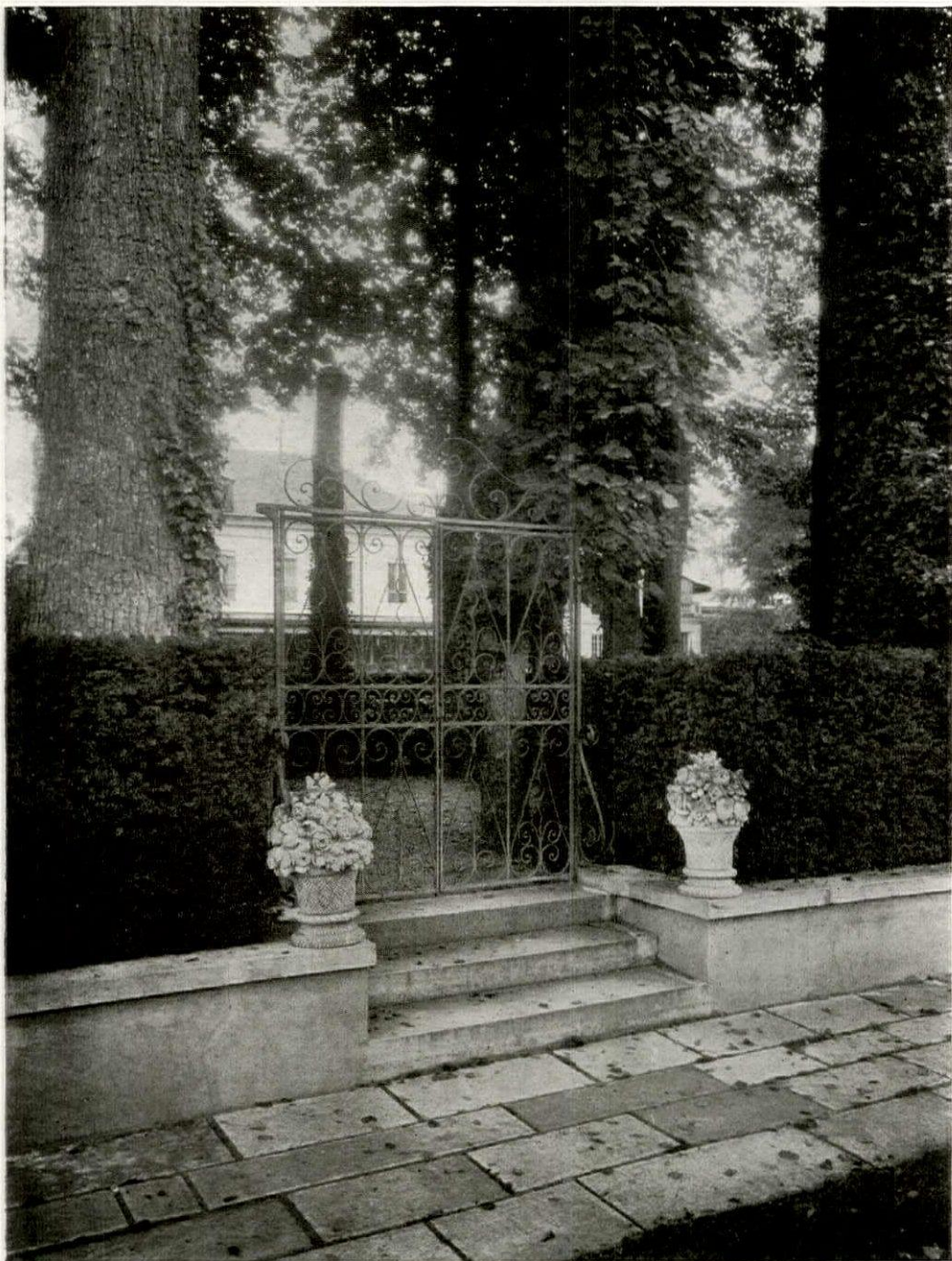


*The Architectural Record.*

Garden Trellage,  
VILLA TRIANON, VERSAILLES.  
Elsie de Wolfe, Designer.

March, 1923





*The Architectural Record.*

March, 1923

Gate in Garden,

VILLA TRIANON, VERSAILLES.  
M. du Chêne, Architect.





*The Architectural Record.*

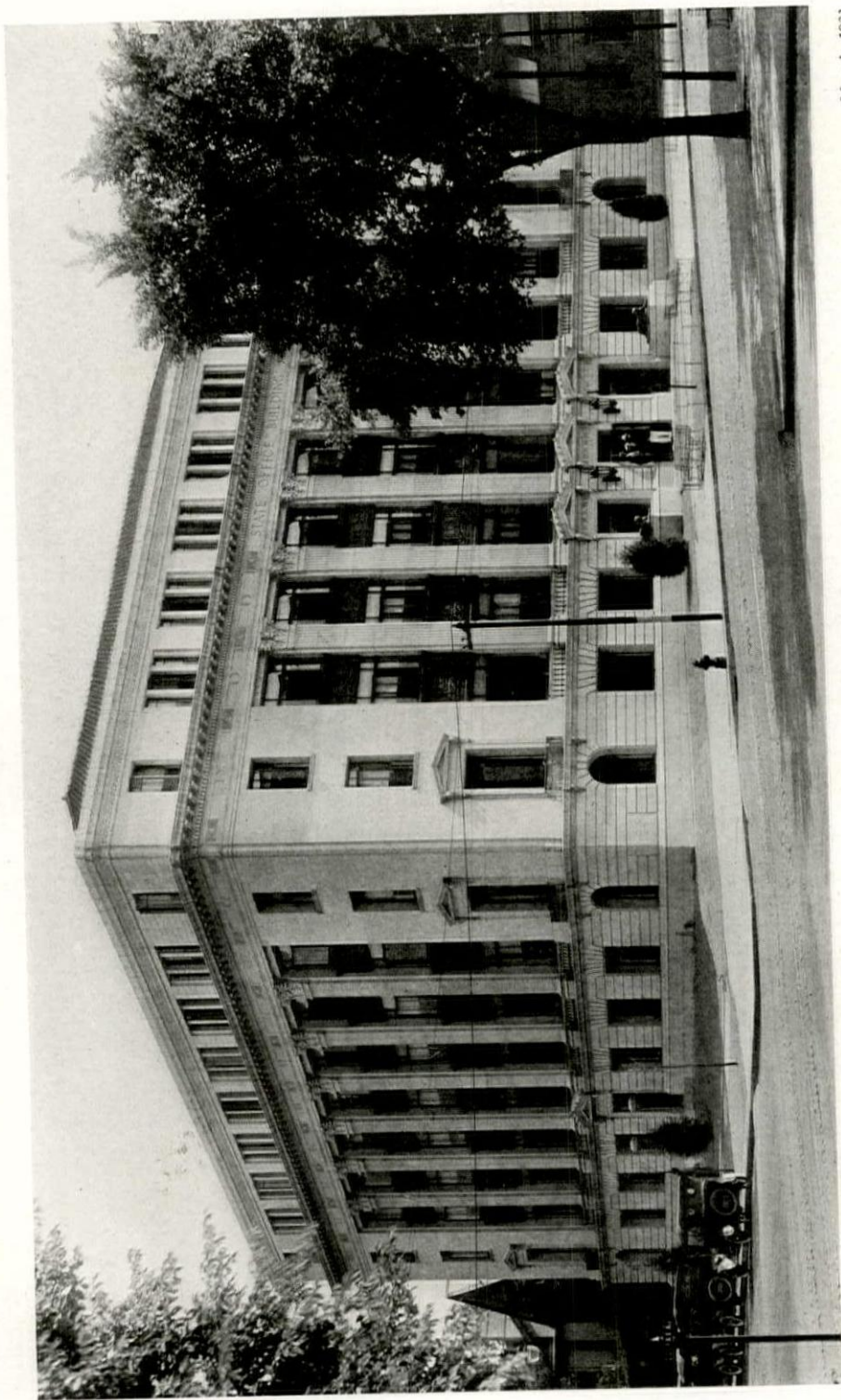
March, 1923

Garden Treillage,

VILLA TRIANON, VERSAILLES.

Elsie de Wolfe, Designer.





March, 1923

STATE OFFICE BUILDING, DENVER, COLORADO.  
William M. Bowman Company, Architects.

*The Architectural Record.*



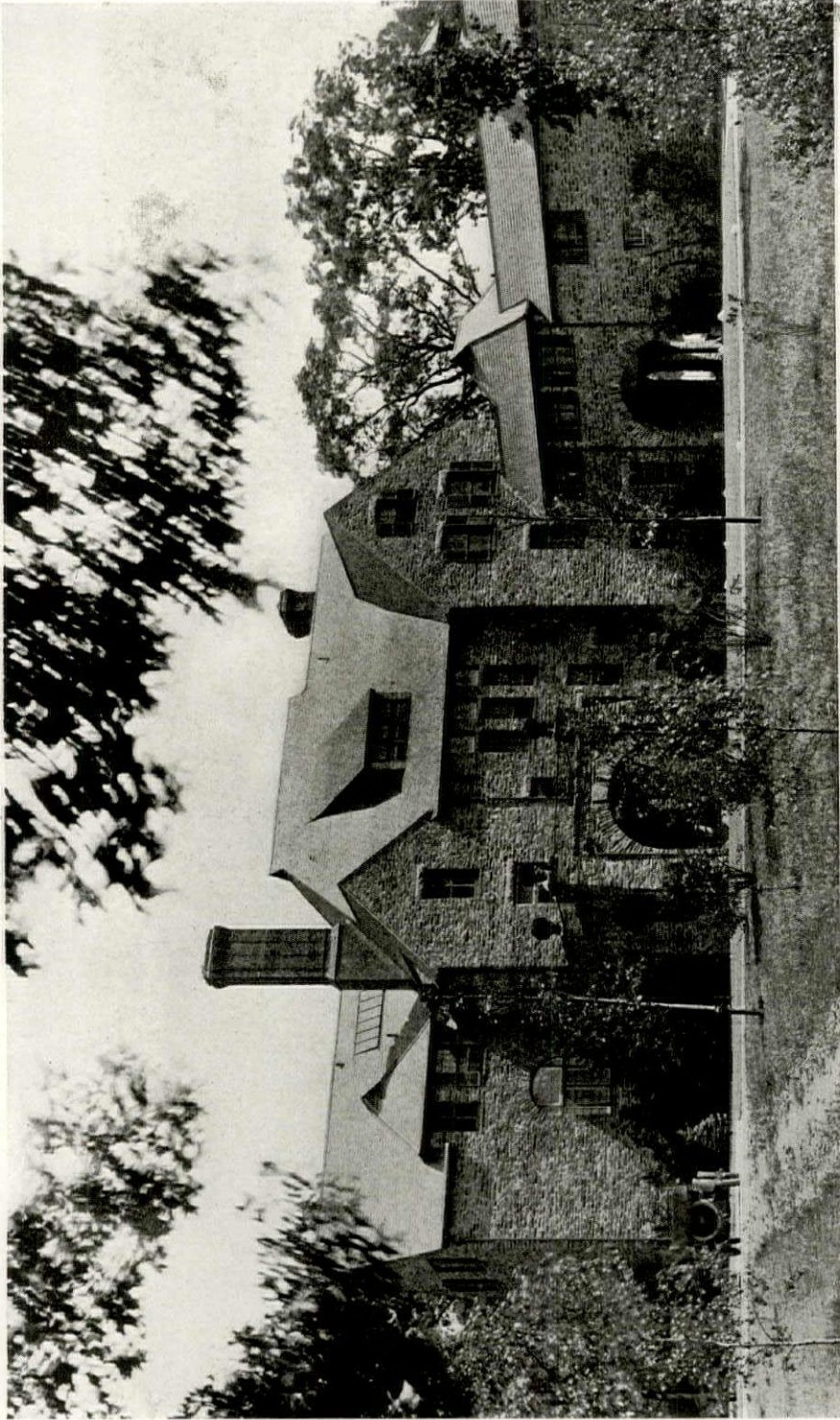


*The Architectural Record.*

STATE OFFICE BUILDING, DENVER, COLORADO.  
William M. Bowman Company, Architects.

March, 1923



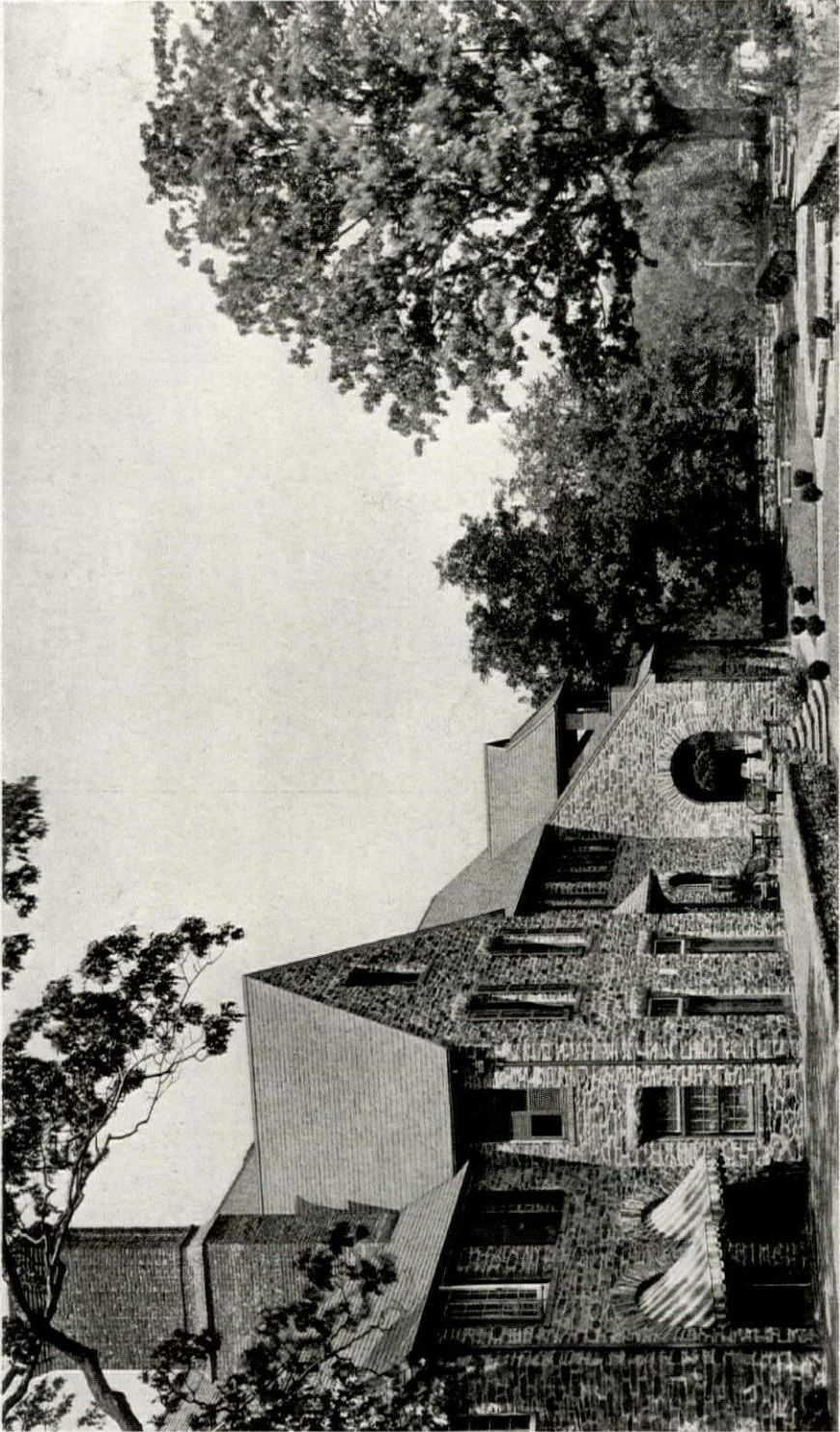


*The Architectural Record.*

RESIDENCE OF WALDRON WILLIAMS, ESQ., RYE, N. Y.  
Donn Barber, Architect.

March, 1923



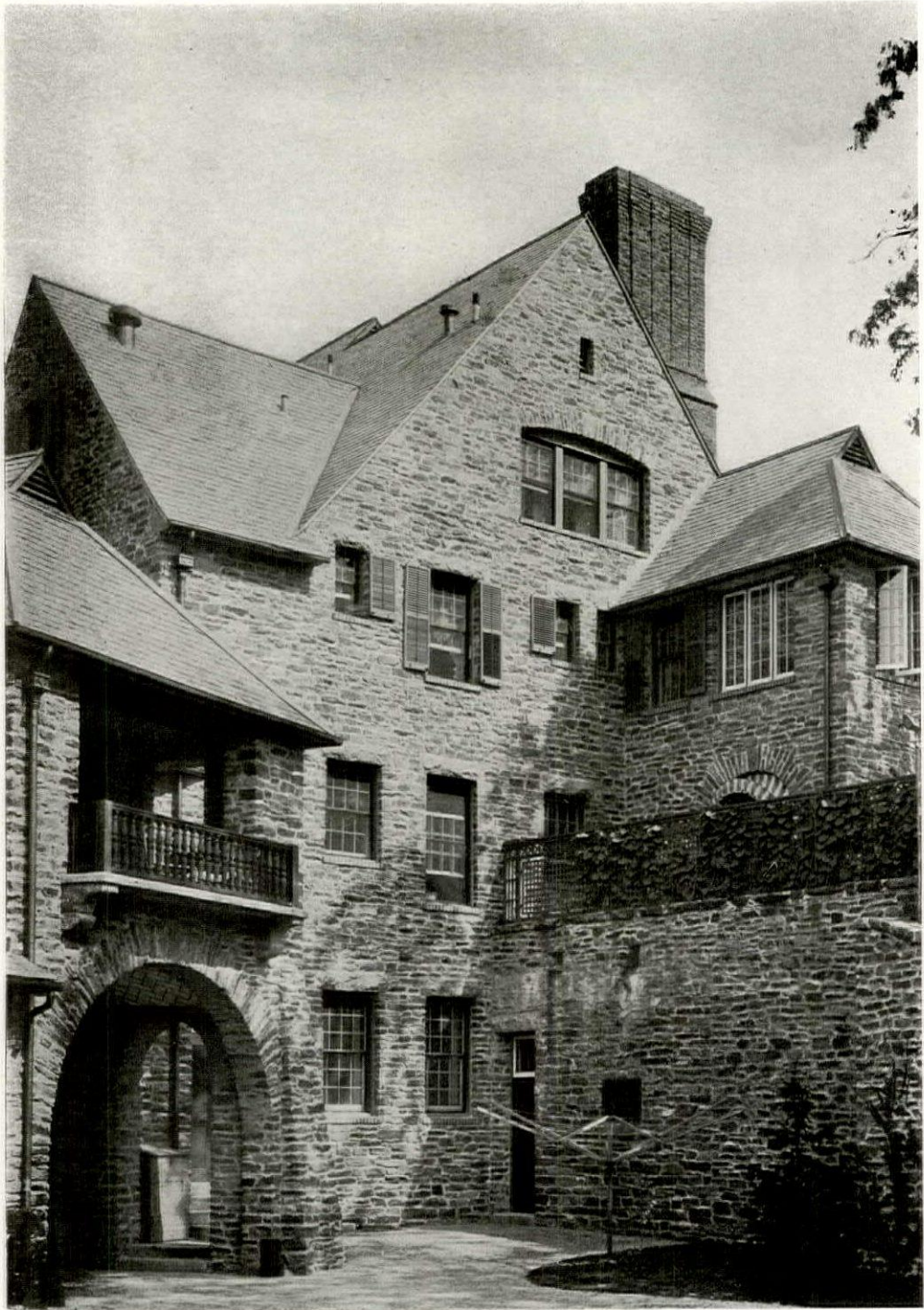


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RESIDENCE OF WALDRON WILLIAMS, ESQ., RYE, N. Y.  
Donn Barber, Architect.

*March, 1923*



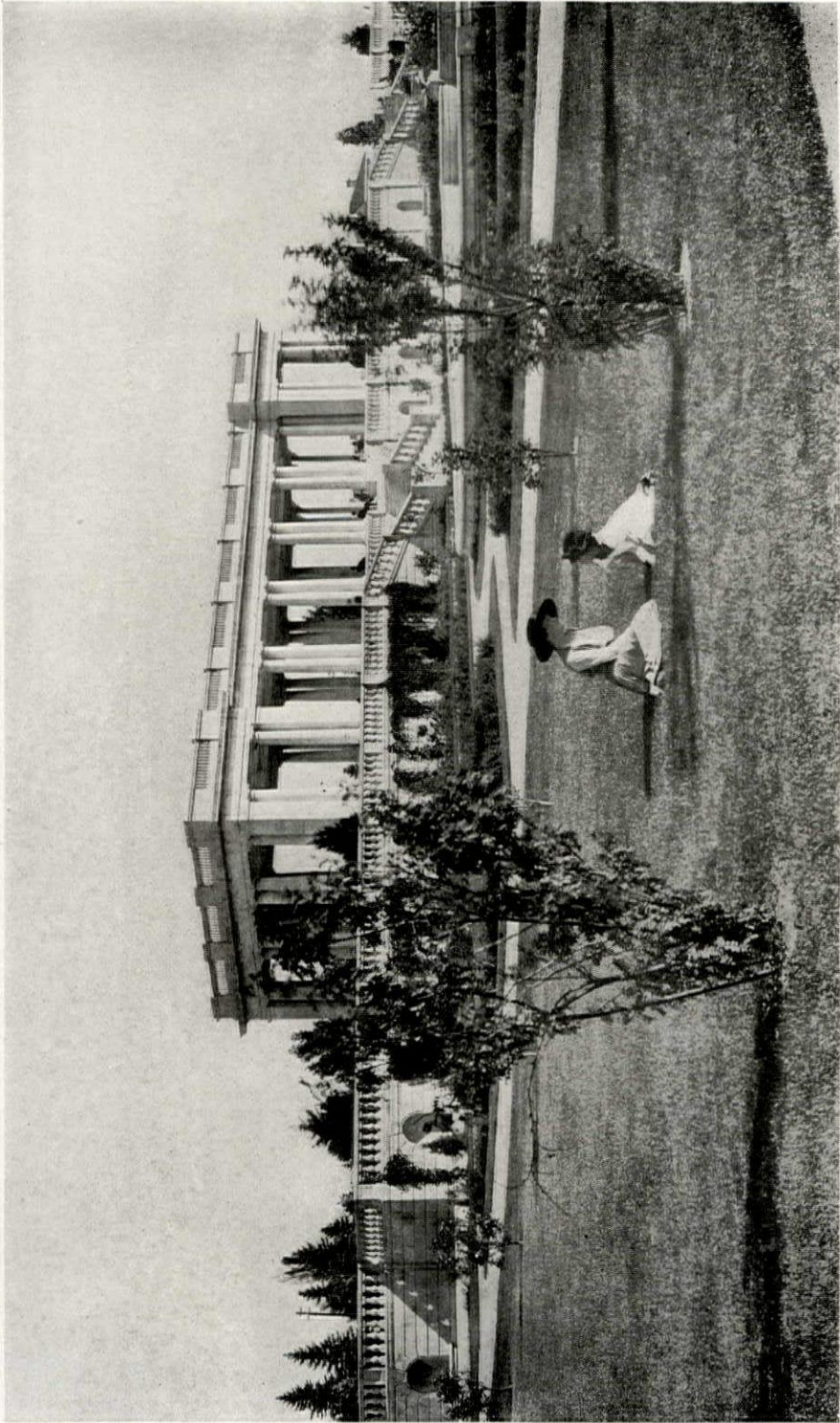


*The Architectural Record.*

March, 1923

RESIDENCE OF WALDRON WILLIAMS, ESQ., RYE, N. Y.  
Donn Barber, Architect.





*The Architectural Record.*

CHEESMAN MEMORIAL, DENVER, COLORADO,  
Marean and Norton, Architects.

March, 1923





*The Architectural Record.*

RESIDENCE OF ROBERT F. WELSH, NEW HOPE, PA.  
Morgan Colt, Architect.

March, 1923



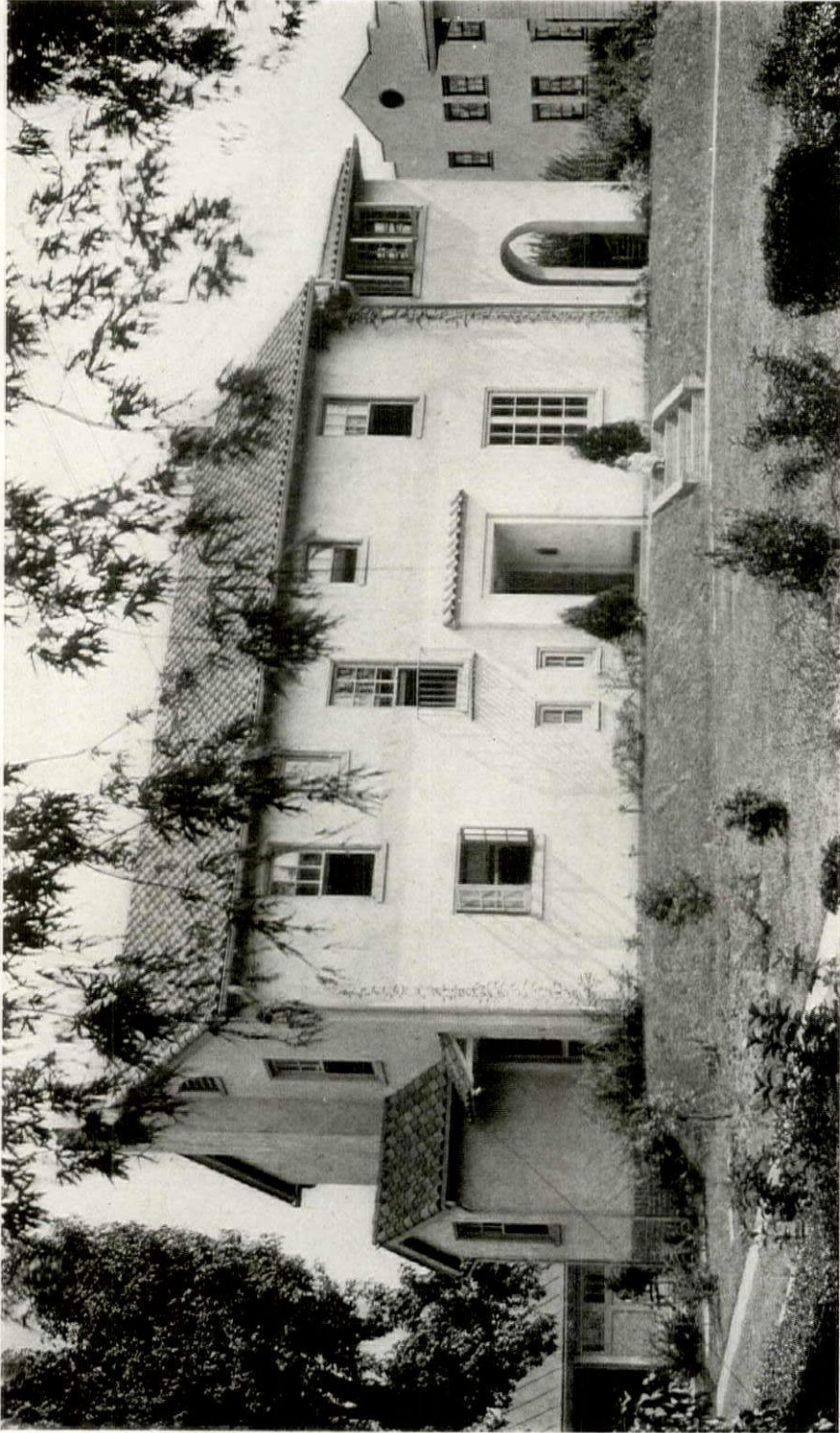


*The Architectural Record.*

RESIDENCE OF MRS. G. E. WOOD, NEW HOPE, PA.  
Morgan Colt, Architect.

March, 1923





*The Architectural Record.*

RESIDENCE OF A. H. STRAUS, RICHMOND, VA.  
W. Duncan Lee, Architect.

March, 1923



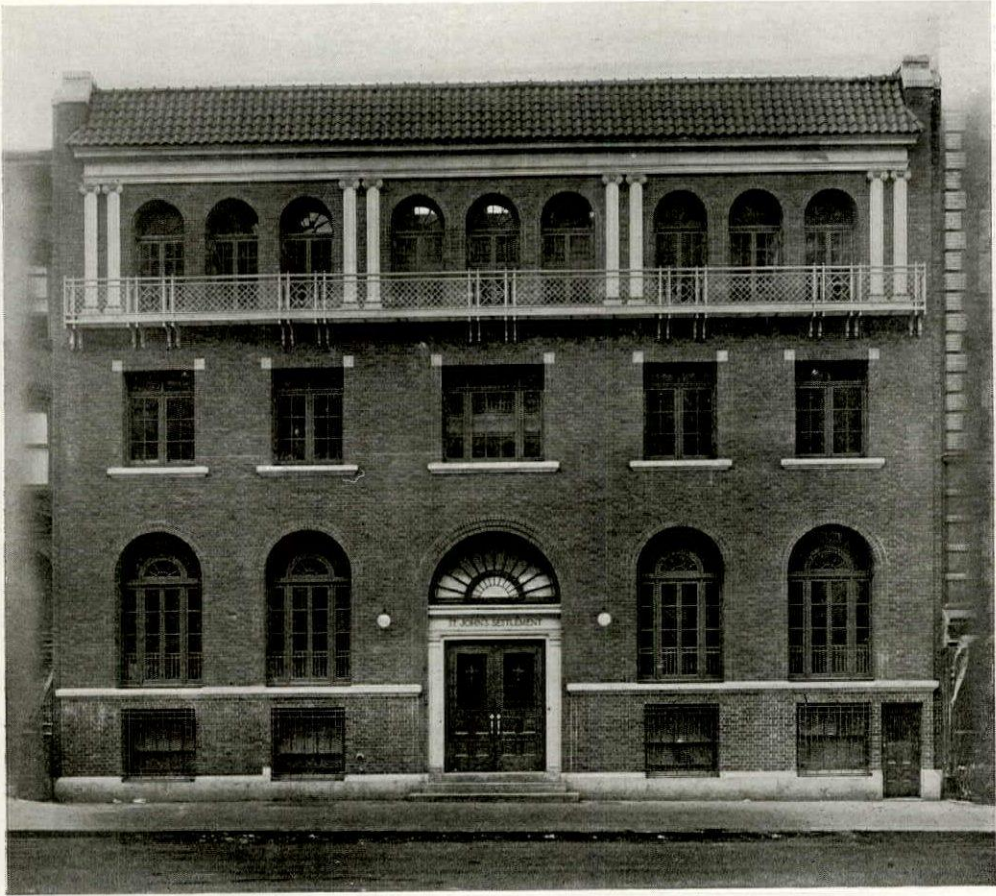


*The Architectural Record.*

*March, 1923*

THE NEW FIFTH AVENUE TOWER, NEW YORK.  
J. H. Freedlander, Architect.





*The Architectural Record.*

March, 1923

ST. JOHN'S SETTLEMENT HOUSE, NEW YORK.  
De Rose and Cavalieri, Architects.



# ARCHITECTURAL SPECIFICATIONS OF A CENTURY AGO



By

SAMUEL LAPHAM, JR

*Being a copy, with commentary, of the  
Documents and Drawings for a Church  
on John's Island, S.C., by Robert Mills,  
Architect. (1781-1855)*

AMONG the records of the Parish of St. John's Colleton, S. C., there was recently brought to the attention of the writer a small portfolio of drawings and written matter bound together. Through the courtesy of Mr. J. I. Waring, in whose keeping the records are, and of Mr. Albert Simons, the portfolio was examined and proved to contain plans and specifications for a church on John's Island, S. C., by Robert Mills, the architect. These documents were evidently made between 1820 and 1830, when Mills resided in South Carolina. In describing the contents of this portfolio, it would be more explicit to say that it contained drawings, specifications and a report, as in the last part of the document the specification type of writing is abandoned and the tone of the work becomes that of a report to be presented to a committee rather than instructions to a contractor. This belief is strengthened by the fact that the drawings and written matter are sewn in the covers with heavy thread, and their condition is such as to make certain that they were never used on the job.

Of the actual building for the Church of St. John's Colleton, it may be said in passing that all has vanished, save one brick pier, half hid among the creepers.

The writing in this portfolio covers eleven pages, eight and a half by eleven inches in size, and the general appearance is as illustrated. The drawings consist of plan and front elevation on the

central sheet of the portfolio, and then on the following single pages are the side elevation, lateral section and two cross sections. No scale appears on any of the drawings, but checking up by means of the dimensions mentioned in the report proves that they are drawn to the odd scale of one-sixth of an inch equals one foot. All are carefully done in ink and rendered in monotone washes, except on the sectional drawings, where the cross sections of wood and brick are tinted, the former being yellow and the latter red. At the end of the report is the signature, "Robert Mills, Architect," in the same handwriting as that of the body of the manuscript. This signature also occurs, faintly penciled, on the fly leaf, but in this case it is written as "Rob't. Mills, Architect." The plan also has the name formally lettered beneath the title.

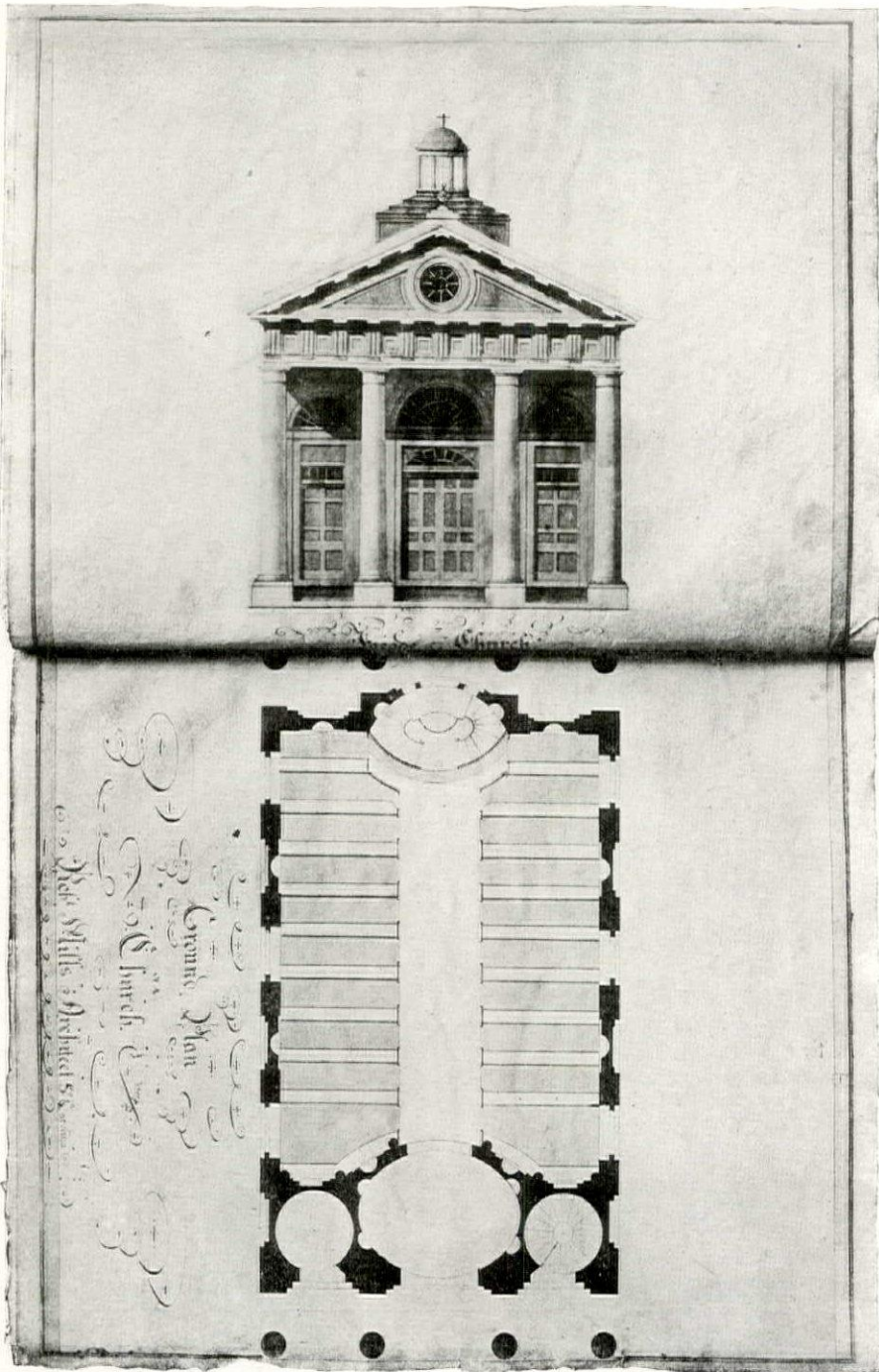
This architect, one of whose minor works is herewith printed as a curiosity, seems but little known in the present day, yet he was one of the foremost architects of the early nineteenth century. Few realize that he was the architect of both the Washington Monument and the Bunker Hill Monument, yet they are known to every American; and it would seem that a brief record of his life is at least due him before we reprint and smile over his specifications.

In tabloid form his life runs thus:

1781. Born, Charleston, S. C.

Educated at Charleston  
College.





*The Architectural Record*

March, 1923

Front Elevation and Floor Plan  
 ST. JOHN'S CHURCH, JOHN'S ISLAND, SOUTH CAROLINA  
 Robert Mills, Architect



- 1800-1810. In employ of Hoban and Latrobe in Washington, D. C.
- 1810-1812. In practice in Philadelphia.
- 1812-1820. In practice in Baltimore. (Chief work of period: the Baltimore Washington Monument.)
- 1820-1830. In practice in South Carolina, holding the State Office of "State Engineer and Architect." (Numerous buildings throughout country, including the Bunker Hill Monument. To this period also evidently belong the documents under discussion.)
- 1830-1836. In practice in Washington.
- 1836-1851. Architect of Public Buildings. Appointed to this office by President Jackson.
1851. Retired from office and from practice.
1855. Died, Washington, D. C.

The few works named in the above list plus those done while Architect of Public Buildings in Washington, including the Treasury Building (1836), the U. S. Patent Office (1836), the Old Post Office (1839), the Washington Monument (1848), and others, will show by what right he was rated the leading architect of his time. Further and more elaborate facts concerning the man can be found in the Bulletin of the Univ. of South Carolina, No. 77; in an article by Mrs. Austin Gallagher in THE ARCHITECTURAL RECORD, December, 1916, and in an article by Mr. Schuyler in the *American Architect* in 1910.

Returning to the documents on St. John's Church, one cannot but feel that the architects of 1823 had just as hard roads to travel in their professional way as the architects of today have. Cannot the reader see Mills struggling with his building committee or vestry (or whatever body was responsible for the building of the church in those days) as he reads his report to them? Note how he lets them know that he has thought of the health of the congregation by his re-

marks on dampness. When in doubt or met by opposition, note how, like many a modern architect, he overwhelms them with rhetoric. His praise of the dome of the church is a masterpiece in itself. One does not have to imagine the silence of the opposition when he thundered forth, "This is almost necessary where a Dome is, as Congruity is its concomitant." Not even a present-day committee would say anything for a while after that remark. And as to price—which one notes that he waits to discuss until the very end—he is as wary as any twentieth century architect who presents his figures as "an approximate tentative estimate." Mills waits until the end, when the vestry were probably tired and eager to go home and then bases his figures on "enquiries and queries to master workmen," and if his measurements are "not mistaken" the sum he mentions will be sufficient for the building. Whether the church members saw this point, history does not relate. However, on the inside of the cover of the portfolio can be discerned, faintly scribbled in pencil in Mills' writing, the words, "Glory to God in the Highest," with an exultant loop from the end of the last word encircling the whole phrase. Maybe it is Mills' note of what the vestry wished to be put in the blank portion of one of the tablets that flanked the pulpit, as the cross section shows the other portions filled with the Ten Commandments and the Lord's Prayer—but the loop has the flourish of the architect who has successfully passed by the question of estimated cost.

Items of further interest can be found by study of the reprint below. The spelling, capitalization and the figures have been copied carefully, with no changes except for the alteration of the "long s" into the modern "s" wherever it occurs.

The first sheet is a fly leaf, the next is a title page, inscribed in flourishing script lettering with the caption:

Designs for an Episcopal Church to be erected on John's Island near Charleston, S. C., by Robert Mills, Architect. :: ::

And then follows on the third sheet the subject matter as quoted below.

Regulating Bill of Particulars for the Workmen.



Labourer.

Dig out for footing of external walls Eighteen Inches below the surface level and cart away the earth,

Also for interior walls one foot.

Brick layer.

Footing of out Wall Eighteen Inches below the surface level.

Footing of interior walls One Foot below  
.....Ditto.....

Bring up all the Foundation Walls Eighteen Inches above the ground level proportion'd in thickness to what is shown in Section. The Bricks laid with good Mortar made of Stone or Shell lime and sharp river sand. All the Bricks used in this building to be sound and well burnt laid in flemish bond, no two Courses to be stretchers.

Carry up Walls externally to imposts of Arches, Fifteen feet, to Top of Cornice Five feet.

Carry up internal walls to Footing of Gallery.

Carry up Columns Sixteen Feet High, Entablature to the Top of Corona 3 Ft. 8 In. springing Arches to support the Brick work above from Column to Column, having first a beam of Oak laid fore and aft, and return'd upon the Walls, properly fast'ned down upon the Columns, not only for strength to prevent the Columns from being overturn'd but in order to form the Architrave of the Entablature.

Carry up Tympanum of Pediment to under-side of Rafters.

Carry up Brickwork over Columns Two feet high from thence spring Arches to meet with the general wall as shown in Section. The external walls to be two Bricks thick. The requisite apertures to be made in carrying up these, Recesses &c. I refer to the plans, Elevation & Section.

The Diameter of Columns Two feet of Doric proportions.

The corner Pilasters carried up without diminishing as do the Columns and other Pilasters.

All the doors and Windows to have Nine Inch arches.

Two projecting courses of Bricks at the feet of all the Arches to form Imposts.

Roughcast the whole of the external walls, Columns, Pilasters &c in the best composition of the kind and mark out the same in a proper and natural manner to imitate Stone.

Carpenter.

Common Joists .....	10 by 2 In.
Rafters .....	6 " 3 "
Collar Beams.....	5 " 3 "
Wall Plates.....	7 " 4 "
Lintels .....	4 in. thick
Ribs of Dome.....	9 by 2 in.
Circular Collar of Ditto.....	4 in. thick
Architrave Beams to Columns.....	10 by 12

All the Timber of good sound Pine.

Frame a Roof with Collar Beams in one

Span, Rafters not more than Sixteen Inches apart, leaving an Aperture for Dome which is to be fram'd of pieces of Inch plank nail'd together in two thicknesses at convenient distances apart, mortise the Ribbs into Collar & strengthen them with proper Braces, leave a circular opening in Crown for Sky Light.

Sheet the Roof with ¾-Inch plank, Sheet the Dome also with plank of the same thickness; Lay wall plates all around the building properly scarf'd and lapp'd for the footing of Rafters and flooring Joists, returning them on Cross Walls. The Joists to be caulk'd and notch'd down, not more than Sixteen inches apart, those in Gallery and Staircases put to a breadth to receive the lathing and to have at least Nine Inches bearing on each wall. Lay lintels over all the required apertures of Doors, Windows on proper Topsils. Prepare for Bricklayer all the Centers for Arches. Lay Architrave Beams over external Columns and return them on the Walls.

Frame with common Inch plank a Cove, springing from the Imposts of the Circular Windows, meeting and nailed to the Rafters.

Slater.

Slate the Roof with the best blue Slate.

Copper Smith.

Copper the Dome, Neck, Steps and Pedestal of Dome with the best Sheet Copper, each Sheet properly lapping each other and nail'd with Copper nails.

Joiner.

Lay the floors of Pews and Platform of Pulpit with 1¼ Inch plank, clear of Sap or Shakes, straight Joint, groov'd and tongued, the boards of the latter not wider than Six Inches and secret nail'd.

Lay the floor of the Gallery with 1¼ Inch plank clear of Sap or Shakes straight Joint, groov'd and tongued.

Wainscotting to Pews to be Inch thick, rais'd pannels one side, flush and beaded the other. Stiles stuck with a quarter round, Torus moulding capping to all the Pews, plain seating with front Edges rounded off and Ogee Supports. Box'd Sash frames to all the lower Windows, with bead. Parting pieces. Oak sunk Sills, and 1½ Inch Ovolo Sashes hung with Cast Iron Weights. The Top circular Sashes to be hung on Pivots, solid frames; All the Door Frames to be Four Inch by Five Inch with proper Rabbits for reception of doors. The great door to be 2 Inches thick, the inferior doors 1¾ Inches thick, Rais'd Pannels one side, flat the other. Stiles stuck with a quarter round. Run up a common winding staircase upon a circular base, 1½ Inch Oak Steps, 1¼ Inch risers, with a center Newel. Run a Balustrade of square Balusters round the Platform of Pulpit and Gallery, butting the latter against an Inch Plank, thickness'd and smooth'd both sides; Hand Rails work'd.

Plasterer.

Lath and plaster the whole of the requisite



Regulating Bill of particulars for the Workmen

Labourer.

Dig out for footing of external Walls Eighteen Inches below the surface level, and cast away the Earth, 11bs for interior walls one foot.

Brick Layer.

Footing of out Wall Eighteen Inches below the surface level.

Footing of interior walls one Foot below. Ditto

Bring up all the Foundation Walls Eighteen Inches above the ground level proportion'd in thickness to what is shown in section. The Bricks laid with good Mortar made of Stone or Shell lime, and sharp river sand. All the Bricks used in this building to be sound and well burnt laid in Flemish bond, no two Courses to be stretchers.

Carry up Walls externally to impost of Arches. Fifteen feet to Soffit of Cornices. Nine feet

Carry up internal walls to Soffit of Gallery.

Carry up Columns sixteen feet high Entablature to the Soffit of Corona & <sup>to</sup> supporting Arches to support the Brick work above from



Walls, Cielings, Recesses &c in three Coats, the same to be laid smooth and even, properly whitened.

Stucco Plasterer.

Run single Architraves round all the Arches, over Windows, Doors & Niches, finishing them at the Imposts, which in the side arches are to form Cornices or Cappings to Consoles on Trusses. Cast Ionic trusses for all the side arches and fix up the same in their proper places under Imposts.

The Columns under Gallery to be of the Ionic Order with their congruent Entablature, Cornice to have modillions instead of dentils. Run an astragal, cut into beads at the foot of the dome, also at bottom of the skylight. Run a plain Cornice round the top of the walls in Vestibule and place an oval ornament with a pateria in the center of the ceiling.

Glazier & Painter.

Glaze all the Windows with good clear white Glass, well bedded in putty and back puttied.

Give the Glass and sash Frames three coats of white Lead.

Paver.

The floor of the Vestibule and staircases together with Porticoes to be levell'd with clay, well ramm'd, laid with the best 9 Inch pan Tiles diamond form and bedded in sand, falling 6 Inches below the floor of Pews.

Stone Cutter.

Prepare and set all the Sells to the Windows, Bases to the Columns and Steps to Porticos, of the best free Stone of Virginia or New York, free from Shakes or Stains, particularly for the Sells of the Windows and bases of Columns.

As the preceding Observations shew, I have proposed to have the whole of the external walls and Porticos rough cast. This not only has the handsomest effect for a building of the kind, but is attended with an advantage that ought to be particularly attended to, in the situation in which it is contemplated to be placed; This advantage lies in the Walls to prevent the penetration of that dampness which proves not only injurious to the plastering within but prejudicial to the health of humanity. Still more to obviate this Inconvenience, I would propose after a twelve months Plastering to saturate the Plastering with Linseed Oil and then give it one or two Coats of Paint. Owing to a peculiar Quality attached to Bricks made in and about Charleston it would be prudent to let the Walls remain about a Year before they are rough cast.

In my Estimate I calculate upon having the Columns of Brick, except the Abacus and Fillet:

The Entablature will be of Brick also with its mutules, except the four corners which owing to the great projection of the Order will be necessary to have of Stone; The Brickmaker must be notified of this, that he may form the requisite moulds. The Door and Window Sells are to be of Stone. The Steps of the Portico as they are inserted between the Zocles of Columns, I would have of New York Stone, which are to be found work'd up into Slabs, having Brick risers. The paving of Portico of the same kind of Stone, or scots grey Stone in Squares. The floors of Iles & Vestibule to be laid with black marble Squares; those of the staircase and other circular Rooms either of Boards or the same sort of Stone as that under Portico—I have elevated a small dome on the Roof both for the distinguishing of the building and for Beauty both externally and internally. I have proposed a Skylight from this dome, this is almost absolutely necessary where a Dome is, as Congruity is its concomitant.

This will be coppered externally, Internally I have design'd it to be ornamented with Stucco pannel work, as also the Cove under it which extends from End to End of the Church, this however will be an extra Expense if it should be adopted. What Stucco Work is introduced will be found mentioned in the Bill of Particulars under the head "Stucco Plasterer." The Gallery in this Church is purpos'd entirely for Servants, it is small and lying over the Vestibule. A front finish of it is shewn Page. . . . The Extent of this Edifice is 42 feet exclusive of Porticos, the width 26½ ft. Twenty Pews are obtain'd in this Plan and except Two, are not less than 9 Feet by 3- The Ile between is 5 feet wide, at the east Extremity the Pulpit is placed in a Niche for the Purpose. The Commandments &c are placed on each Side See Page. . . .

The Drawings are so explicit that I conceive further description unnecessary.

Ere I began my Estimate for this Building I made Enquiries and proposed Queries to the different Master Workmen relative to the Prices such and such work could be executed at, and having been satisfied in these particulars attach'd them to the Quantity of Work I found by measurement &c in the church; The Amount of the agregate of the whole I found not to exceed Dollars 6400 to which if you add 25 Per Cent for Risk in Carriage, Time expended &c. brings up the Sum of Dollars 8000: This if I am not mistaken in any measurements will suffice to finish the said Church in the manner mentioned in the aforesaid Bill of Particulars.

(Signed) Robert Mills Architect.



## Numero 93, Rue Royale, Versailles

by

Harold Donaldson Eberlein  
and Leigh Hill French, Jr

THE HOUSE AT NUMBER 93, Rue Royale, in Versailles, is one of those perfect specimens of a type that one is rarely fortunate enough to meet with. It is so perfect in every particular, both inside and out, that its existence seems well-nigh incredible. There are no irrelevancies to mar the completeness, no incongruities to spoil the ensemble, no deficiencies to leave room for any additional desiderata.

The existence of this bit of perfection in type may be thus explained. The house itself was there, an unspoiled survival from the Directoire period. It came into the possession of a distinguished *antiquaire* of Paris who keenly appreciated its inherent qualities and has made it as his home, sparing no pains to have even the least external feature and the smallest item of interior appointment scrupulously correct according to the standards of the period. In creating any composition of such archaeological exactitude there is always present the danger that the result will prove utterly cold and lifeless, a mere mummified expression of a past vitality. In this case, fortunately, the owner and occupant has not only taken the dry bones and impeccably restored a former architectural and decorative type to the last scintilla of correctness, but he has made his work, so to speak, a living organism. That is one reason why it is reproduced here, for the Directoire mode is commanding more and more attention and any material that may contribute a clearer understanding of its niceties is of present value. The other special reason for presenting it is its suggestive quality in the treatment of a small property—the entire width of the premises is only thirty-eight feet.

The house is of stucco painted a clean,

cool grey and the woodwork is white. The little entrance courtyard is graveled, and adorned with borders of geraniums. Back of the house is a long garden with graveled paths leading to a little tea-house or breakfast pavilion at the angle of the rear wall, beyond which are the stable, rabbitry, poultry yard and vegetable garden. The sheet iron hood over the garden door is merrily painted with red, white and blue stripes.

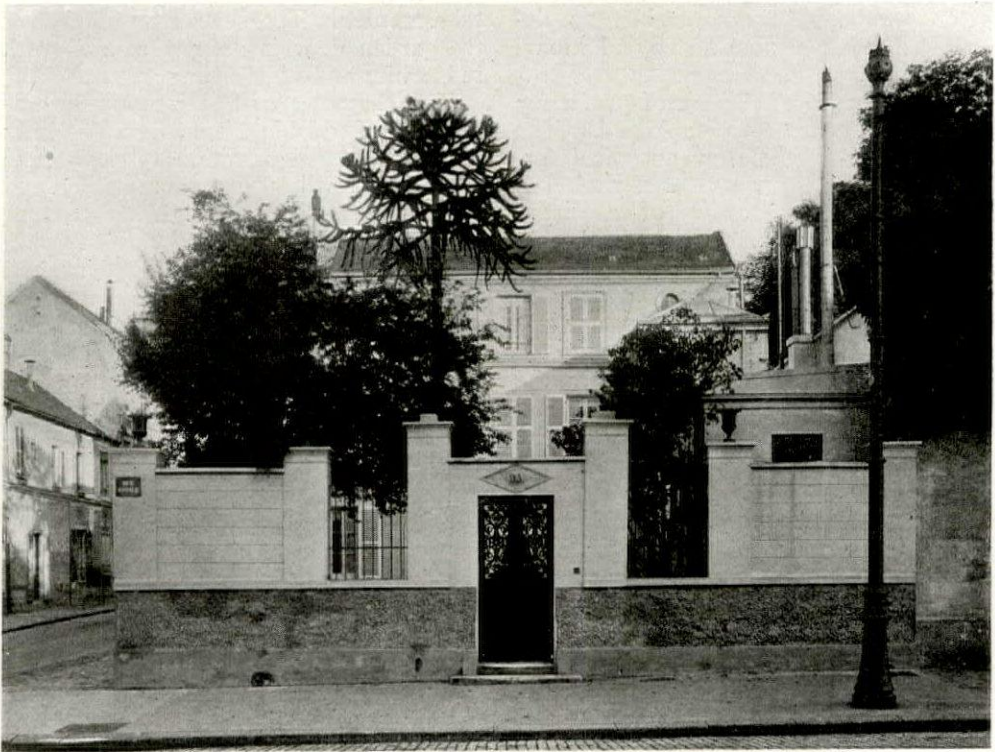
The character of the interior decoration and furnishing is made sufficiently plain by the illustrations, but a few color notes will prove illuminating and helpful to a thorough understanding of the ensemble. In the hall the walls are painted light grey, while the door and window frames and the trim surrounding the niches are marbled white and grey. The base is marbled black and yellow and the floor consists of black and white marble chequers, the quarries being eight and a half inches square. In the passage between the drawing-room and the dining-room the walls are wholly marbled—a dark grey dado, light grey upper walls and black border bands. In the drawing-room the woodwork is pale green picked out with rose lines; the cornice is also pale green picked out with rose lines; the ceiling is white; the plain wall-paper is a greyish buff and the patterned paper border running beneath the cornice, above the baseboard, and down the angles of the walls is dark brown. The woodwork in the dining-room is cream color picked out with light green lines and the cornice is painted in the same manner; the dado is painted the same color as the woodwork and the light green lines are repeated in the chair rail: the base is marbled deep red and white; the plain wall-paper is light sea



green, and the patterned paper border beneath cornice, above chair rail, and carried down the angles of the walls, is in deep red and gold. The library walls are covered with plain chrome yellow paper, the narrow patterned paper border beneath the cornice and carried down the angles of the walls being deep purple and deep green; the ceiling is white; cornice, woodwork and baseboard are grey, picked

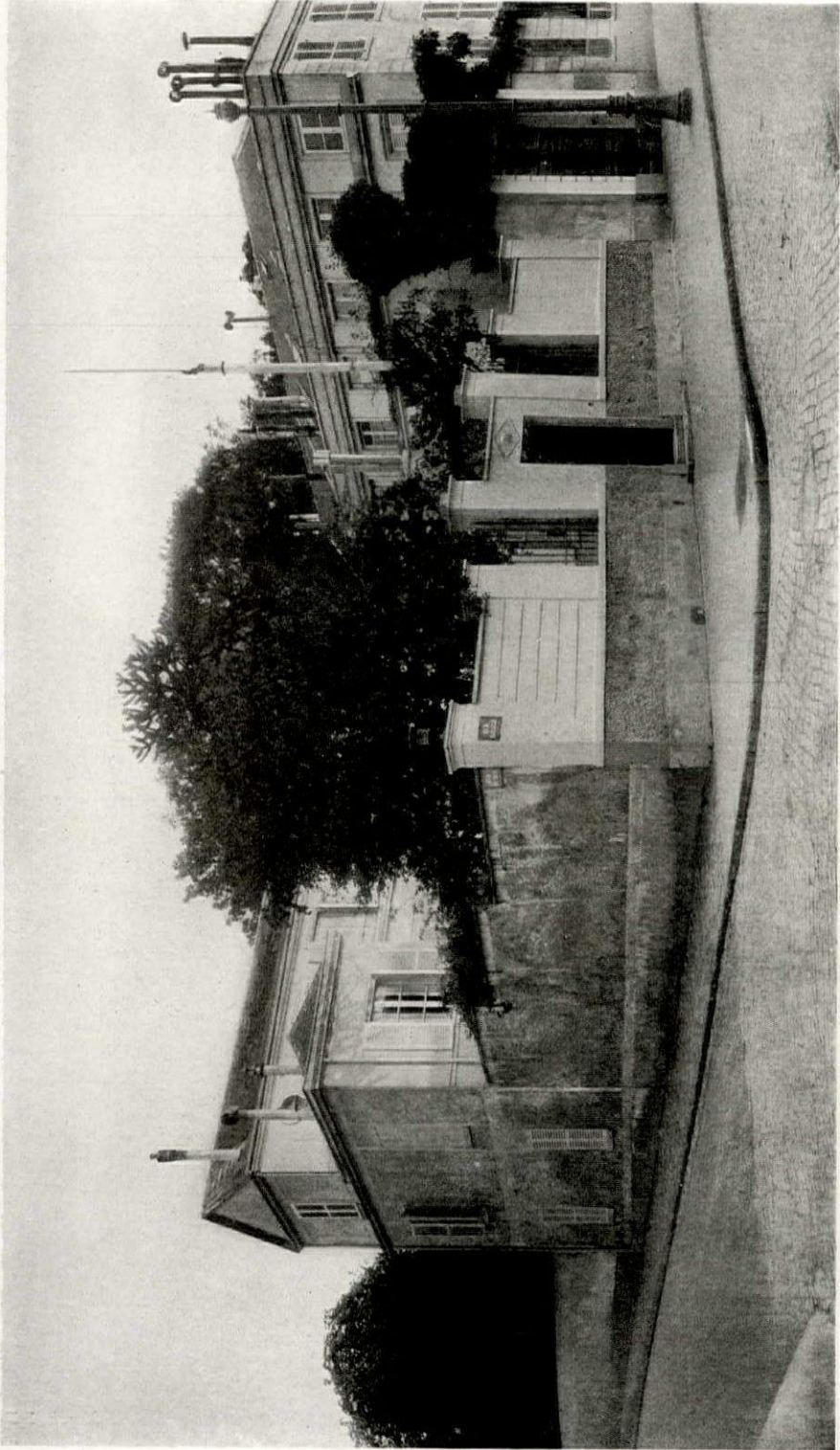
out with white lines. Although the description may sound somewhat startling, the effect is not at all garish but extremely subtle in its combination and balance.

The poise and dignity of this small establishment, with its thirty-eight foot frontage, command attention and deserve close study for the lesson conveyed of doing much with a very small space.



Gate and Forecourt  
NO. 53 RUE ROYALE, VERSAILLES



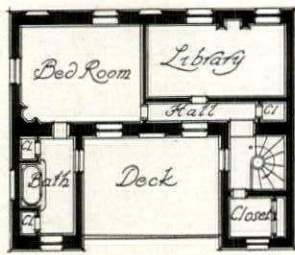
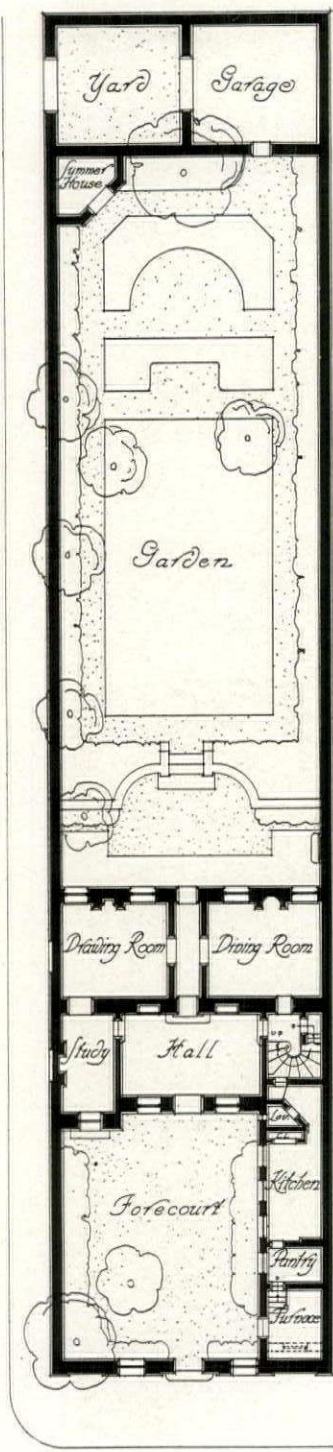


*The Architectural Record*

General View  
NO. 93 RUE ROYALE, VERSAILLES

March, 1923





*Plan of  
First Floor*

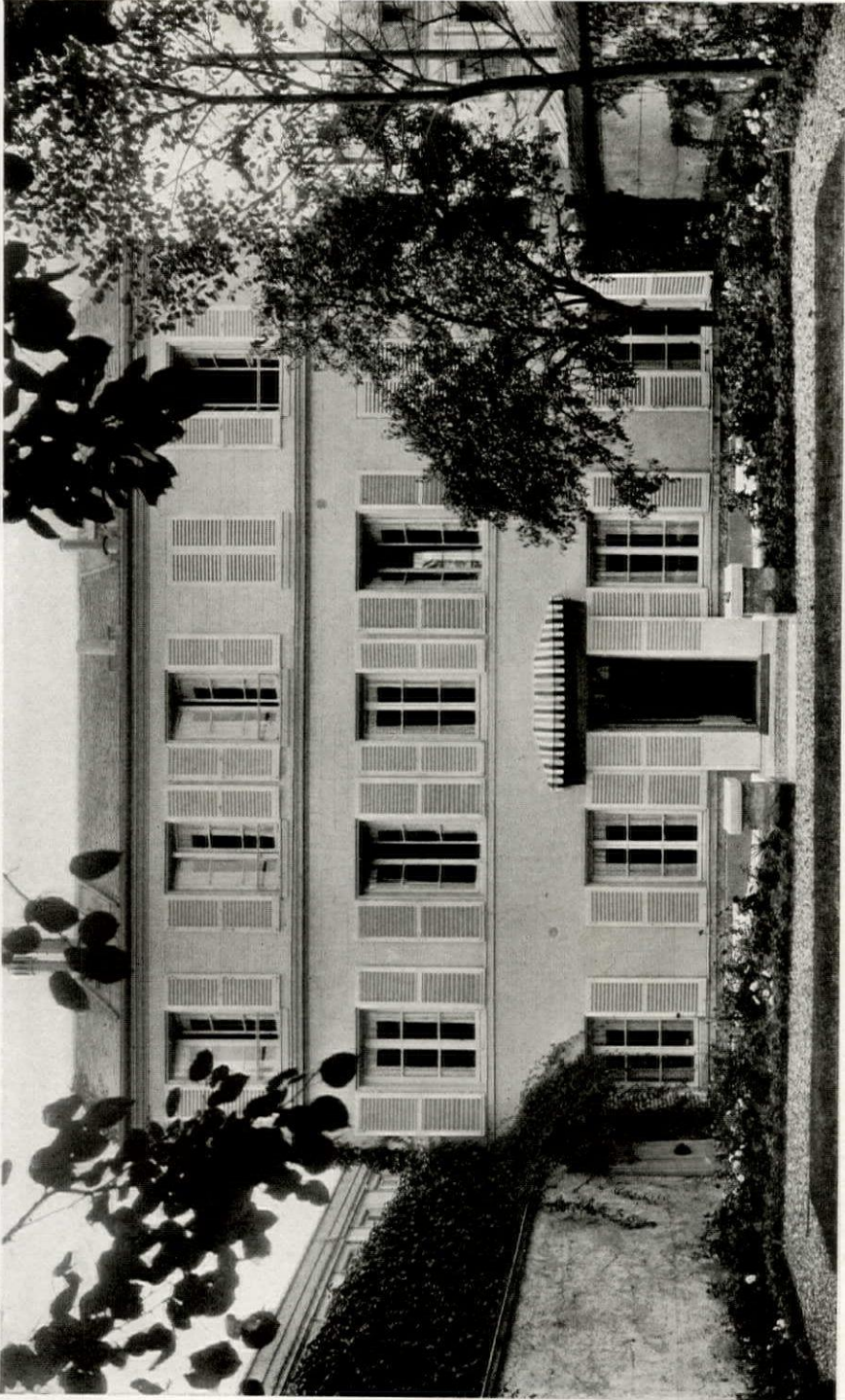
*93*

*Rue Royale*

*Versailles*







*The Architectural Record*

Garden Front

NO. 93 RUE ROYALE, VERSAILLES

March, 1923





*The Architectural Record.*

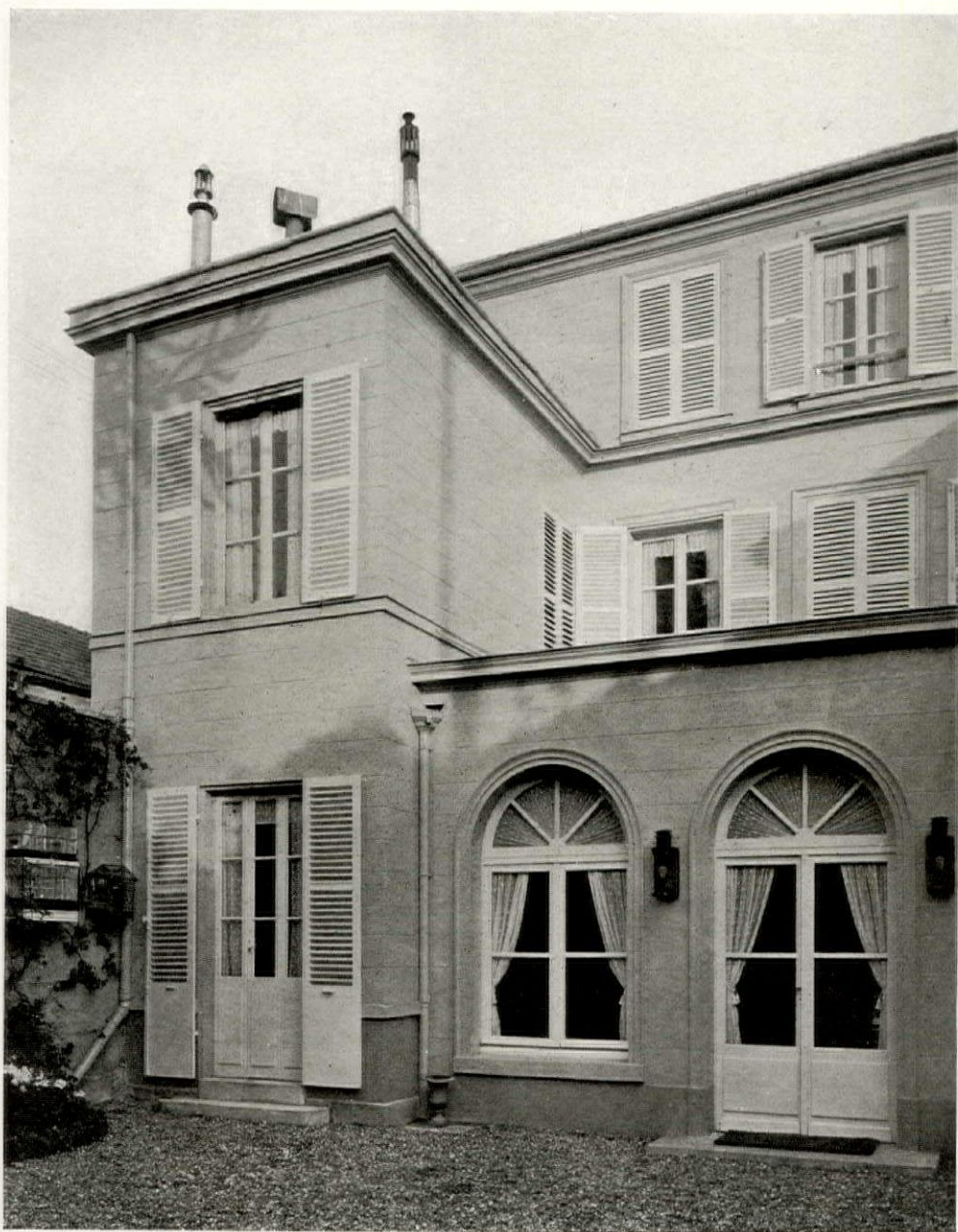
*March, 1923*

Gate Detail

NO. 93 RUE ROYALE, VERSAILLES

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*The Architectural Record*

March, 1923

Detail of West Front

NO. 93 RUE ROYALE, VERSAILLES

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Entrance Hall  
NO. 93 RUE ROYALE, VERSAILLES





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House Door  
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Drawing Room

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Drawing Room Doorway

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Dining Room

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South Wall of Dining Room

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West Wall of Dining Room  
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West Wall of Dining Room

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Library

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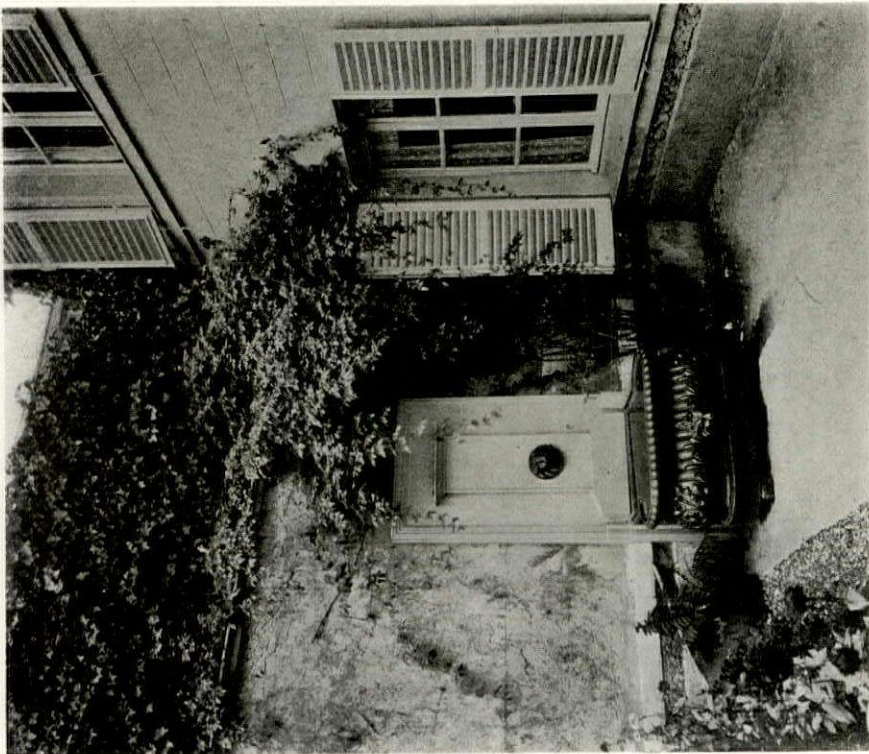
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Bedroom

NO. 93 RUE ROYALE, VERSAILLES

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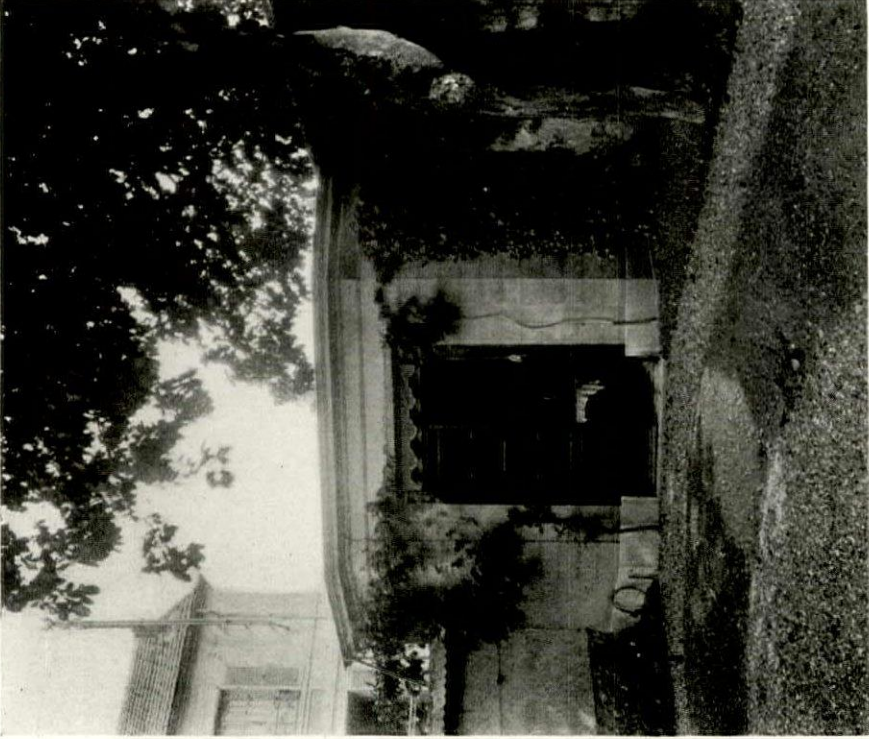




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Wall Fountain

NO. 93 RUE ROYALE, VERSAILLES



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Tea House in Garden





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Garden Door

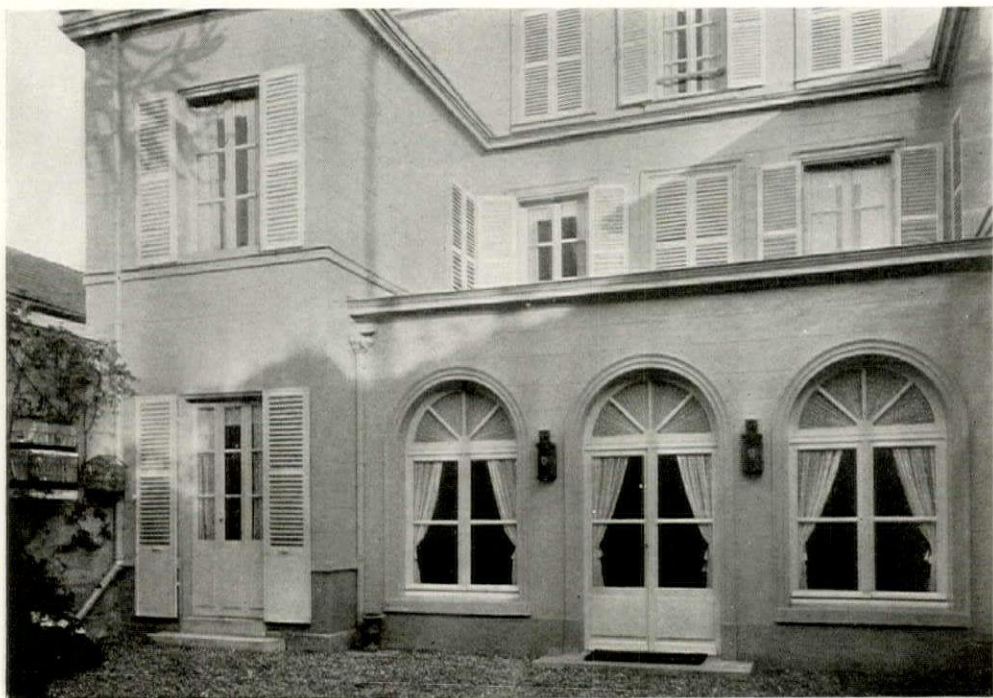
NO. 93 RUE ROYALE, VERSAILLES



Detail of Garden Front

March, 1923





West Front

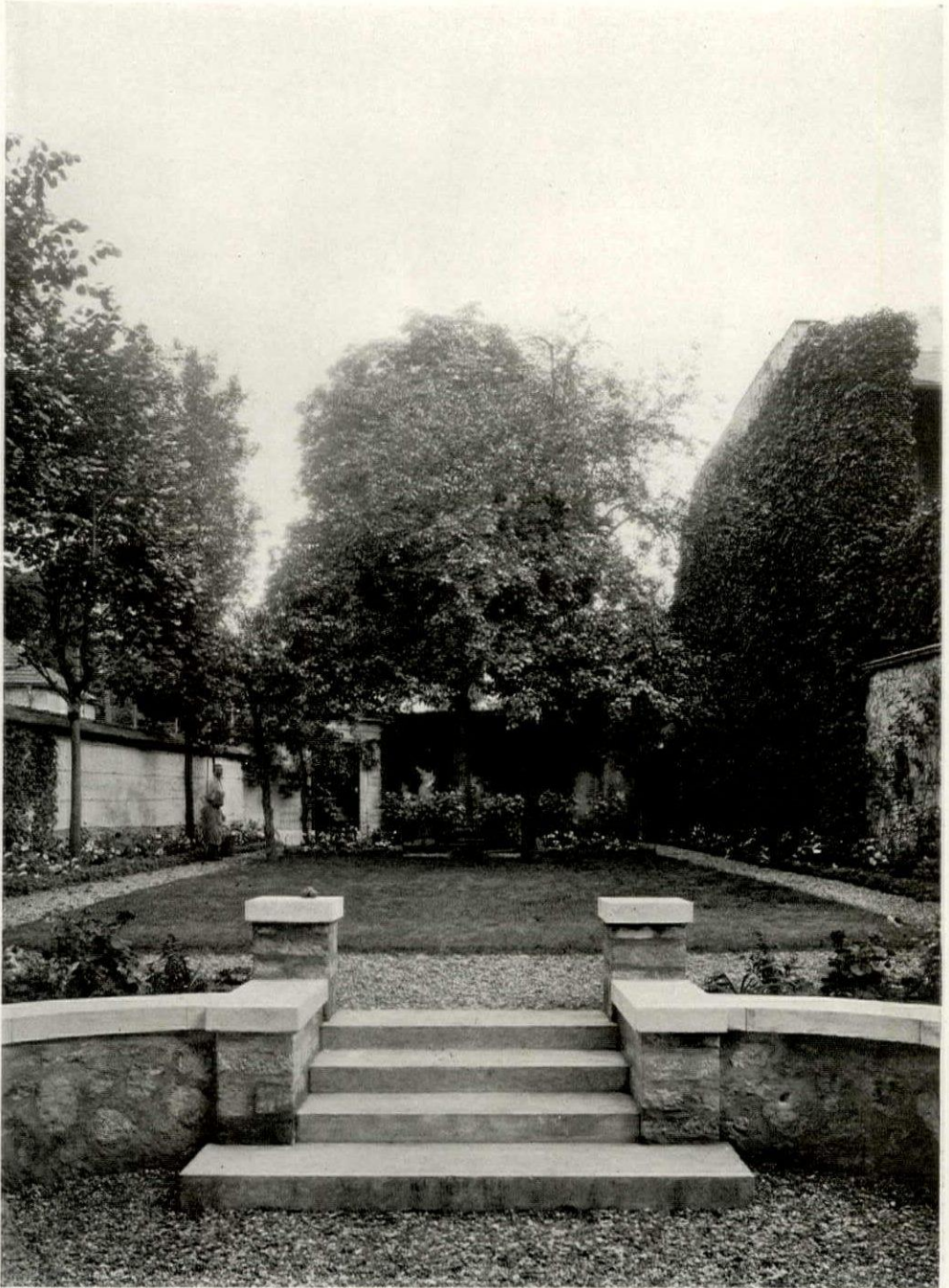


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House Door and Kitchen Wing  
NO. 93 RUE ROYALE, VERSAILLES

March, 1923





*The Architectural Record*

*March, 1923*

Garden

NO. 93 RUE ROYALE, VERSAILLES

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# The VIENNESE METHOD for ARTISTIC DISPLAY

NEW YORK GALLERIES of the WIENER-WERKSTÄTTE  
OF AMERICA

By Leon V. Solon

When walking down Fifth Avenue recently I happened to remark a life-size gilt figure in a second floor window which had all the appearances of a remarkable work of art in the archaic manner. This, combined with the title of the concern housed therein, which was in a language rarely seen in public places of recent years, excited sufficient curiosity to make inspection an urgent matter. A visit made next day proved so interesting that it has been repeated several times, each time with stimulated interest and with a clearer enlightenment upon certain decorative convictions that are rapidly gaining converts here.

It proved to be the exhibition galleries of a group of Austrian artists and craftsmen. The work exhibited is of that variety which was formerly described as "Art Nouveau," a designation used here for information, not condemnation. All the exhibits are of artistic value, and are extremely interesting from the point of view of design, technique, and treatment of material for its decorative capacity.

It was very instructive to find that a style which has been relegated to the discard in favor of historic influence anticipates in certain forms of expression a new decorative feeling in architectural treatment. As a matter of fact, its relation to our architecture was not distinguishable a decade ago for the reason that architectural feeling in this country at that period had not evinced those tendencies which make the connection now visible. In addition, this form of decoration long ago reached an impasse, and produced tedium owing to the frequent repetition of the same note by inferior exponents or feeble imitators. The

movement now begins to assume a new significance in an architectural sense; it is a sharp breaking away in interior ornamentation from the rigid control of conventional architectural treatment inherited from the sixteenth century. We are made to feel that a new order of values has been inaugurated in interior decoration; and though many will not agree with the manner in which treatment is developed, the educational value of the effort and the independence of thought remain for deduction and instruction.

Where the architect is confronted with the problem of creating a setting for displaying objects of manufacture, the treatment of this interior is full of suggestion as to the mental attitude that he might adopt. The mental processes which are apparent there seem to have succeeded each other in the order of their relation to the ultimate objective—the enhancement of the objects displayed. They appear to have followed in this sequence:

1. The relation of general effect to display requirements.
2. The contrivance of detail and color masses to the main idea of display.
3. Architecture to figure merely as a minor accessory to decoration.

The specific problem was to make a homogeneous effect with a heterogeneous assortment of objects extremely varied in material, quality of effect, and artistic interest. These included painting, sculpture, furniture, faïence, glass, lace, jewelry, textiles, etc. The interest of the visitor had to be focussed on each object regardless of an actively competing interest in its near neighbors. General scenic value can easily be obtained at the





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Decorations for a sitting-room. Faience panels in window decoration.

THE WIENER-WERKSTAETTE OF AMERICA, NEW YORK





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Interest focussed upon the exhibition cases by the treatment of walls and ceiling.

THE WIENER-WERKSTAEETTE OF AMERICA, NEW YORK





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March, 1923

The entrance rotunda.

THE WIENER-WERKSTAETTE OF AMERICA, NEW YORK





White lace displayed in a black room.  
THE WIENER-WERKSTAETTE OF AMERICA, NEW YORK

expense of its component items, but to combine that interest with a well preserved individual interest in each exhibit is no small achievement. It is brought about with skill and success in this gallery.

Regulation features, such as cap and base, are not used; in fact, moldings are a negligible factor, serving merely as frames to spaces or as boundaries to colors or patterns. An interesting feature is developed in the treatment of angles; a "bead and reel," carved in the round, makes contact with projecting angles with excellent effect. The niches in the window recess are contrived in an unusual fashion, so that no sharp shadow disturbs the background of the objects they contain. The semi-circular section of the surfaces separating the niches impart a sense of structural strength to the wall by the suggestion of imbedded columns.

Forcible contrasts are skillfully manipulated to enhance the delicacy of the exhibits by a quality of effect which is the

reverse of that usually developed under parallel circumstances; black is the prevailing tone used, either in solid masses or relieved with repeating sprigs at comparatively rare intervals. In the gallery to the right of the rotunda an excellent method is devised with the purpose of concentrating interest upon the recessed spaces in the walls, which are filled with very varied and small exhibits; bands of black decoration start over each recess, traveling across the ceiling to the opposite recess. Interest is focussed by this means in the same manner that sight is caused to travel instinctively to a lighted window in a dark façade. The display and decorative value of this is considerable.

The little rotunda which faces one on entering is charming, creating an atmosphere that is most fitting to the exhibits. Each display space is separated by a small semi-circular recess, in front of which a curiously designed shaft supports a piece of sculpture or decorative art; it is a rational way of spacing the panel pictures and of separating interests that



compete. Each room is a distinct study in effective display, wherein the objects shown are the first concern of the decorator. A very interesting point of view presents itself in analyzing the principle of these treatments, which may be worthy of consideration. In exterior architecture, color effect is directly related to architectural conditions and subordinated to them. In this scheme we find this method reversed, and all suggestion of architectural construction practically eliminated or entirely subordinated to color or decoration. This is a very

novel angle of thought, as the architect today leaves certain features, such as cornices, base, trim to openings, and the like, which are fixed points to which the decorator must conform. Should decoration be restricted to such a degree in every case? Or should the decorator fix the boundaries of decorative spaces, using only such architectural features, if any, as are needed to accentuate his decorative spacing? This exhibition of the Wiener-Werkstaette of America stimulates many thoughts of such character.



A novel treatment for niches. The figure is gilt terra-cotta, life-size.

THE WIENER-WERKSTAETTE OF AMERICA, NEW YORK



# ARCHITECTURAL POLYCHROMY

By

C. HOWARD WALKER

An address delivered at a joint meeting of the Illinois Chapter of the American Institute of Architects, the Illinois Society of Architects and the Chicago Architectural Club, October 11, 1922, on the occasion of the opening of an exhibition of tiles and tilework, by The Associated Tile Manufacturers.

There are definite objections to the use of many colors upon the exterior of buildings for several reasons.

A building is an entity, a complete and adequate organism, and its expression should be one of unity. Factors which would tend to minimize this expression by introducing a confusion of statements are inadvisable.

Such confusion would occur from the introduction of colors, unless there were a marked domination of one color. Therefore a general tone and a dominant color serve best to give harmony to the general effect. The introduction of polychromy should be minor and accessory and devoted to intimate details which should accent but not disturb the general effect.

There were at first but two reasons for the use of color. Men had little or no intention to beautify objects by its use. It was protective, as with birds and insects, merging into the background and inconspicuous, or it was later a picture book, a record of events, simply representative, with an attempt at natural coloration. As it was to be read as a record, it was in zones read from left to right upon the walls and upon the columns in Egypt, and led eventually to the hieroglyph, the alphabet and finally to written language, by which time the superposed zones, having lost their purpose, had disappeared. In all respects the forms and their color were literal and representative, as far as was possible without a knowledge of either light and shade, shadow and perspective. The colors were of local coloration, even and

flat. The ceilings of the Egyptian temple are the deep blue of the heavens, studded with stars. The plants of the river, the lotus and papyrus, and the palm appear in the flutes of the columns and in the bud and bell capitals, because these columns were first made of the reeds, and the record is painted in their natural colors upon the stucco-covered stone. The colors are intense, partly because they are oxides of copper, burnt earths and cinnabar, and also because shadows are deep and dense and the detail would have been lost had it not been in intense color, which clarified it and gleamed from the shadows.

Around the columns and upon the pylons the figures, which are colored the brown of the bronzed actual figures which they represent, record the occupations of the Egyptians, the ceremonies of the temple and the wars of the king and his armies going out to the far-flung boundaries of the realm. They are the great picture books of the time.

All Egypt was a picture book and each moulding was decorated with symbols which told a story. A background had been provided upon which the record gleamed, a page upon which was displayed definitely each object and symbol, and no background could be better for this purpose than one that was white. Therefore the Egyptian covered his brownstone temples of the south and the limestone mastabas of the north with the Egyptian white earth, the stucco, and created a tradition which was followed by the Greeks.



The mouldings were painted with repeated symbols. To Osiris all the plant forms coming from the earth, that mysterious realm of the dead and of the God, were dedicated and appeared upon his temples.

Polychromy therefore either literally or symbolically told the story of the land upon a white background, which became almost a necessity, for it was always related to religious buildings and expressive of the highest ideals of the people, and the tradition was maintained and extended to Phoenicia and to Crete, where it met the work of Mesopotamia and was carried to Greece.

The most beautiful buildings were white and their colors were purer and clearer and perceptible at a greater distance than were other combinations of color. The clarity was very marked, but the pigments were permanent only in lands where rain was rare.

Herodotus and Theodoros both give accounts of the glazes of Central Asia. Even in their time it was considered probable that the knowledge of these glazes had come from further east, and it was generally assumed that they were from China.

In any event it was necessary to protect the sunburned brick of which the terraces and buildings of Babylon and Nineveh were carefully laid, for with the occasional great rains and the inundations they were washed into masses of clay.

Xenophon in his march of the 10,000 camped upon the site of Nineveh without knowing it, and the Romans had a military camp extending within its walls and were ignorant of its existence, though much has been discovered by modern excavation. Therefore all Mesopotamia began to protect its mud brick by glazes of many colors.

The towers known as Ziggurats, upon which were elevated the sacrificial altars, were built terrace upon terrace, each of the symbolic color of one of the planets, white, blue, yellow, green and black. These zones of color so resemble the stratifications of the Grand Canyon that its mountains have been named after the temples of Mesopotamia and of India.

The bricks were thin, so that they were readily burned throughout and were large, often two feet square, and were protected by colored glazes.

In the ancient world the painter was considered inferior to the sculptor. He was in fact an artisan and remained with some few exceptions in that position well into medieval times. There are accounts of mural paintings at Delphi and elsewhere in Greece which were the work of great painters, but usually the painter's work was confined to coloring masterpieces of sculpture or of architecture. Even as late as the fourteenth century in Spain there were different grades of workmen—the assemblers, who made the design and superintended the work; the sculptors or carvers, and, then, the painters of the flesh, faces and hands and feet; the painters of the robes and the gilders, who put on the gold patterns—each an artisan doing his part. The sculptor, upon the other hand, was always considered a skillful artist, and the arts of sculpture—the productions having the third dimension—were early developed to a high degree. Because the sculptor was pre-eminently the artist of the time he constantly did the drawing. In Mesopotamian work, in Egypt, upon the Greek vases, the work of the man who puts on the color follows that of the man who has drawn with an incised line. This is characteristic of the work.

Skill in line drawing was considered a high art. There was no affection for the so-called lost line and the results are a lesson to those who appreciate a beautiful line confining the color within it which was laid in by the painter. This decision of line and clear definition of areas of color are to be found in the work of the Building Material Exhibit. It is the occasion for the little raised dikes to be found in the tiles to hold and retain glazes, which when fired upon plain surfaces would run into each other. All Mohammedan work shows extreme care in regard to the isolation of colored glazes, for if glazes fused together the work was considered ill done. The same care occurs in the Assyrian tile and in the Greek vases, and in the one great



exception, the famous archers frieze in the Louvre, of which there is a colored copy in the Metropolitan Museum in New York, and which is in bas-relief and therefore has no raised dikes, and in which consequently the colors have fused; at a distance of fifty feet the forms begin to disappear and the effect is confused and ineffective.

Color was confined in definite areas, each defined by an incised line drawn by a master draughtsman. There was consequently clarity of statement and carrying power, which are essential in the use of polychromy.

There is evidence of the same intention in the stained glass of the thirteenth century. The stained glass masters knew well, as did the mosaic makers of the sixth century, that each area of color must be defined at its perimeter. Colors of similar tones could not be placed immediately adjacent to each other without a white or black line separating them, preferably a white line to prevent confusion.

But to return to the pigments. If exposed they were injured by the effects of weather. The earlier pigments were powdered and were mixed with a medium of some kind of glutinous substance, white of egg, fish glue or gum. At times the gum was put on first and the color laid upon it. This was the case with the applications of gold leaf. There is an interesting book by Laurie upon "The Pigments of the Ancients." When metal was applied and at other times when it was desired that the gum should not dry too quickly, honey was mixed with it. The background, until the buildings were built of white marble, was of white stucco.

Porous stone, limestone, sandstone and brick were all covered with stucco, upon which in contrast the pigments were fresh, clear and beautiful. The early painting was of dark-toned figures upon light ground, as in the Etruscan vases and the later Greek lekythae. Flesh colors were of dull maroon, hair and beards purple black, women were colored a warm pinkish tone. In the sixth century before Christ the sculpture was of

marble and light figures upon dark ground appeared, and the tendency to consider white as the noble color increased as time went on.

But the color of the cities was probably not entirely white, as that was confined to the temples and the important buildings. Apart from glazes there was another coating put upon walls which would protect them from the weather, i. e., asphaltum or bitumen. In the Old Testament, King James translation, it is stated that the Tower of Babel was built up and put together with slime, and there have been sermons by well intentioned but poorly informed divines drawing a lesson from the imbecility of the Babylonians who built with slime; but the French Testament in its translation says the tower was put together with asphaltum, an excellent material to be found throughout Central Asia. Asphaltum or bitumen was very generally used as a protective paint. Its gamut of color was from that of the crude product, purple, black and brown to the amber of the refined material. The mummy cases took the color of the medium. An ancient city had the gamut of color of the bitumen and was probably purple and brown at the water's edge and above golden amber culminating in the white temples of the Acropolis, gleaming in color and gold. It is possible that the tradition of golden color of the Italian masters came down from Egypt to Greece and to Byzantium and was brought to Italy by the Greek priests, who taught in Florence and worked by the side of Fra Angelico, using the golden color of the amber bitumen.

A method more resistant to weather than that of painting with the gum medium was early adopted, and was known as encaustic painting, in which hot wax was either used as a medium or applied to the face of the color, usually the former, and while the color was hot it was pressed down to create a hard resistant surface. The color was thus made permanent and was as fresh as if glazed. That which is so well preserved upon the walls of Pompeii is of this character.



The early Greeks were not far removed from barbarians and before the archaic civilization they probably painted their wooden temples in as many colors as the Alaskan Indians paint their totem poles, and even after the wooden temples in the eighth and seventh centuries before Christ began to be translated into stone the traditional coloring was probably retained, as the Etruscan Temple of Jupiter Capitolinus in Rome was retained until the time of Germanicus, but that is no reason for assuming that the temples of the Greeks in the great period of the fifth century should have been as crudely colored as they are shown to be in Hittorff's restorations, which have been considered authoritative. There is one man who has shown an appreciation and a knowledge of the polychromy of the Greeks; he is Mr. Leon V. Solon.

Without doubt remains of color indicate that the ends of the triglyphs were blue, and that there was red on the edge of the epistyle in some cases, but that these in the resultant badly proportioned areas were anything more than backgrounds for gold patterns, there is ground for considerable doubt. It seems reasonable to argue from analogy rather than from some evidences of color which have defied the action of time.

The Greeks in the eighth century before Christ used color crudely and lavishly; with the advent of the Ionians the finer art of Asia Minor began to influence that of the Greeks, and by the time of Pisistratus it had become refined, as all the minor arts testify. The figures of the maidens in the Acropolis museum have delicate decorations, the Greek vases are exquisitely drawn and there is no indication of undetailed masses of color. In the classics there is constant reference to the lavish use of gold. The palaces of Ulysses and of Antinous are mentioned in the *Odyssey* as gleaming with gold, and there are but few works of antiquity in which gold as a decoration is not mentioned. It was the common metal of the time, silver being rare. Monies were of silver. It is known that in Mesopotamia and in Asia Minor gold

ornament occurred constantly. Bronze was overlaid with it, as in the rosettes of the mausoleum of Agamemnon. Gold masks covered the faces of the dead. The Athene Parthenos of Phidias was of ivory and gold, and his chryselephantine Zeus at Olympia had a base of ebony and ivory and gold encrusted with precious stones.

The helmets and strings to the sandals of the knights in the Panathenaic Frieze were of gold. It was everywhere present, yet Hittorff's accepted restorations comparatively ignore it. Is it reasonable to assume, when the treatment of the objects which retain their color is so subtle, that the polychromy of the temples alone should have remained barbaric and crude?

The west pediment of the Parthenon represents the contest of Athene and Poseidon for the soil of Athens. The centre of the pediment between the two gods is void. Poseidon has the trident, but the olive of Athene is absent and yet it is the great symbol of her triumph. Could it have been painted in gold as the central motive of the pediment? Is it reasonable to conclude that only occasional unrelated spots of gold were upon the Parthenon? Pausanias states that the Pentelic marble of the Parthenon offended Greek taste from its excessive whiteness, and it was "rubbed with saffron and milk," the latter turning it to an ivory tint and the particles of saffron sparkling like gold.

Could the Greeks, who were so subtle in their taste in this respect, have left crude undetailed squares of blue upon the triglyphs? In various accounts of the precinct of the temples upon the Acropolis of Athens the writers mention the constant recurrence of the olive and the laurel, yet but few examples exist. Is it too imaginative an idea to consider the blue of the triglyphs as a background for designs in gold or laurel and olive in the channels? The Greeks accented the outside edges of their mouldings by incised lines and the edges of the articulated parts of their structure by lines of dark color. Might not the color which Hittorff spreads over surfaces have been



merely what remains of these colored lines?

There is no reason to assume that because the Greek was barbaric in his taste in the eighth century he was the same in the fifth. He undoubtedly appreciated the superb quality of gold, of a surface which reflected light with splendor, which had warmth, not the cold glitter of the more precious metal, silver, and which harmonized with all colors. Gradually polychromy upon the exterior of buildings became less, but gold remained, and the Ionic and Corinthian orders were of white and gold. The use of colored marbles instead of perishable pigments appealed to the Romans and painted polychromy was relegated to interiors.

The house, which in ancient times had been deemed unimportant, even ephemeral, became more permanent and its rooms were decorated in color. The remains of Pompeii show the plans of Roman houses and the systems of color decoration upon their walls. As light came only through the centre of the ceiling, the ceiling itself and the upper portion of the wall, i. e., the frieze, received only light reflected from the floor and therefore left white or light, with delicate dark designs upon it. The bottom of the wall, to a height of three or more feet was a dark, at times a black zone, as a protective color against injury by portable objects, and as a contrasting background for marble and bronze furniture. The large expanse of the middle wall, between the base zone and frieze, was of middle tone and clear color, divided vertically into panels by delicate lines of pilasters or border patterns and in the centres of the principal panels little figures or pictures were painted. If the occupant moved he cut out the figure, put a rectangular frame about it and inserted it in the panels of his new residence, thus inventing the first framed picture. The painting was encaustic, with wax as a medium, upon stucco. The colors were pure and clear and of high intensities.

The eccentric conceptions upon some of the walls of Pompeii did not occur in the finer rooms of the palaces of the Emperors, such as the house of Livia on the

Palatine. The polychromy of the Romans was obtained in their monumental buildings by colored marbles, and by colored glass in the pierced stone grills of the window openings in the baths, which shone like jewels. Then there came a new art from the East—the mosaics of Byzantium, with gold, and blue and sea green grounds. There had long been mosaics of colored pebbles such as those of the temple floor at Assos, and of the marble tesserae of Roman buildings, but they had been comparatively devoid of color and had not ascended upon the walls. The wall mosaics, at first the mere salvage of precious broken Persian tiles, were found capable of covering curved surfaces, vaults and domes, which tiles were not, and the mosaics were put together of small pieces of the most beautifully colored fragments of stone and of glass which otherwise would have served no purpose.

The tradition of blue and green and of lavish use of gold in the East is carried on by the mosaics. From what could this tradition have come in the sixth century A. D. if not from the buildings of Asia Minor and of the Greek colonies, which had blazed in gold? The clarity and definition of shapes and designs were maintained in the mosaics by black or white outlines, a definition which was retained in stained glass later.

When Leo the Isaurian in the eighth century condemned to destruction all effigies, the Greek artists fled to Italy, taking their arts with them, and where mosaics could not be obtained, walls and columns and arches were painted in the Romanesque times with imitations of its patterns, and polychromy spread over Europe upon both the exteriors and interiors of buildings.

In medieval times there was a riot of color only tempered by the dim light of the interiors of the buildings and the dark stones of the uncarved surfaces of the outside walls. Everything was painted, statues, carved mouldings, ornament and architectural forms.

The tendency of medieval and Gothic detail was towards naturalism and colors had the local color of the objects carved,



often therefore adjacent colors had similar tones, which were separated from each other by gold in lines or in patterns, and by white. Clarity of effect, always essential, was thus obtained.

It was at this time that colored terra-cotta was adopted in Italy as much more permanent and more brilliant than pigment, and it has been used with admirable effect ever since. In this the common-sense tradition of separating similar tones of color from each other by white or light tone still occurred. Sharp contrasts of tone gave definition of delicate detail which otherwise would have been lost. There are some excellent examples in the exhibits here of the value of black contrasts with white tile and terra-cotta.

Coincident with the naturalistic work in Europe, is the geometric work of the Mahomedans which makes its appearance in the eighth century A. D. The tenets of the religion very strongly prohibited naturalistic representation as being impious and as competing with the creations of Allah. The penalty for violation of this law was very severe. As a result, all efforts in design were compelled to resort to geometric patterns, and to this fact we owe the largest quantity of patterns in existence. At the time when our ancestors were but little removed from barbarians the Mahomedans in Central Asia, in Cairo and on the southern shores of the Mediterranean were the most cultivated people of their time, establishing schools and hospitals, and providing Europe with physicians. They were expert geometers, and the ingenuity and intricacy of their designs is unequalled. Faïence and glazed tiles they had derived directly from Persia, and mosaics from Damascus. The gamut of their color combinations was direct and simple, but the effects were subtle and delicate. They covered surfaces with small patterns which were colored elaborately, as were their textiles. These patterns were modeled in planes, each slightly in advance of that behind it, the pattern of the highest plane being of the largest and most open design, through the interstices of which the design of the next lower plane appeared.

If there were a third plane, its design, which was necessarily the smallest in scale, showed between the interstices of the pattern of the second plane.

There were seldom more than three planes of ornament, each of which was at least one-half an inch in advance of that behind it. The final background was a dark color, the highest plane often in gold. Delicate painted patterns also occurred upon the faces of the flat modeled patterns. For years in Spain at the Alhambra and the Alcazar, the colored walls of the Moors suffered abuse and at each epidemic of cholera they were white-washed until the successive coats obliterated the designs.

When in recent years these coatings were removed much of the color was destroyed, and in the attempts to restore it the same thing happened that occurred with the restoration of Greek polychromy, i. e., if an indication of a color appeared it was spread over the entire surface of the unit upon which it existed. Each plane was restored with its local color not only on its surface but carried down on its edges or reveals until it met the color of the next plane. There was, therefore, no definition of each color area by white at its edges. The restorations, whether in the small mosque of the Alhambra, or in Owen Jones' restorations in the Crystal Palace in London, were most confused and unsatisfactory, the tones fusing together without definition. But in examining this work of the Moors I failed to find any color on the reveals, and the result was most extraordinary in its subtlety and the white reveals were like an exquisite pattern of lace drawn over the colored patterns, isolating and clarifying them, changing in its delicate tones of white with every change of angle of the light, and was almost opalescent in its effect. This must have made the patterns of the Moors in the Alhambra one of the most exquisite and vibrating color decorations imaginable.

The Mahomedans seem to have thoroughly comprehended that tile was not a constructive form of material, but that it was a wall covering, and their tiles



were cut to the shapes of their patterns, as if they were a large-scaled mosaic. Each unit had its own color and colors of similar tones were separated by ribbons of white.

There was in the past, therefore, no apparent theory of color combinations. The principal desire seems to have been to have the colors clear and intense, unconfused with adjacent colors and therefore separated from them. Few neutralized colors occur, and naturalistic color often affects the choice of color.

It is reserved for modern research to evolve theories of color. Into any manifestation of nature and of man's accomplishments, can be read a systematic order, for order underlies all successful work, and the desire for it induces theories in regard to it.

But certain physical facts, which are undoubted, are worth consideration. The theory is simple, in fact it is not a theory, but a fact. By a prism white light can be resolved into the rainbow, that is, the prismatic spectrum. Of the consecutive colors in the spectrum, three, the so-called primaries red, blue and yellow, are integral. The intermediate colors are from combinations of the primaries, those resulting from the mixture of two of the primaries being the secondaries, violet, green and orange. The prismatic colors are of full intensity, unneutralized. As white light subdivides into the primaries and their combinations, a mixture of all three of the primaries created no color, neutrality, and the combination of a primary and its complementary secondary, i. e., the color made from the two remaining primaries, creates no color.

That is, a primary and its complementary cancel each other.

Each pair, red and green—blue and orange—yellow and violet—cancel each other, annihilate each other. The best graphical statement of this fact is made by the circular prismatic spectrum, in which each color has, directly opposite to it in the circumference of the circle, its cancelling color. It is obvious that cancellation is accompanied by conflict, and conflict in color combinations is undesirable, except when violent sensation is desired. It is equally obvious that there will be no conflict if the use of complementaries is avoided; and it tends strongly to cause an effect of harmony if one color and its immediate changes into the adjacent colors in the spectrum is made the dominant of the color scheme. The use of any third of the circular spectrum is therefore perfectly safe, and contrasts are obtained by the introduction of small areas of the colors in the other two-thirds of the spectrum.

The problem of neutralization towards white in tints, towards black in deep tones, and towards neutral grays in middle tones is a further development of these elemental facts. In architectural polychromy, as it is to be seen at an appreciable distance, the colors require clarity, definition, and the dominance of some one color in the whole or in each of widely separated parts. Definition is gained by the separation of similar tones by white, black or gold, and by the accent of high lights in carving or modelling by light color or gold, and of shadows in hollows, etc., by dark tones. Apart from this and transcending it is the genius of the artist.



NOTES AND COMMENTS

**Pittsburgh  
Architectural  
Club  
Exhibition**

The thirteenth annual exhibition of the Pittsburgh Architectural Club, held at the Carnegie Institute Galleries, December 9-24, was perhaps the most interesting, if not the most ambitious of the many that

have marked the architectural progress of the club from year to year. It presented a contrast with that of last year, where the hundred odd delightful European travel sketches of one member alone drew largely upon the attention and excited the ambition of the draftsmen visitors, but gave little pabulum for architectural growth and progress.

Of the three hundred and thirty-eight catalogued exhibits, all but thirty-one represented in one form or another the work of Pittsburgh architects. With a set intention of making this year's program one of exact representation of the "days' work" of members and the architects of the city, the subjects decorating the walls of the three galleries given to the display presented almost every description of constructed form and, without any notable exceptions, a uniform standard of high achievement in design.

Yet so varied in subject and distinctive in rendering were the exhibits that the collection was full of variety, and each sketch or scale drawing excited study because of its practical application to the work on the boards.

Again, without in the slightest degree breaking in upon the architectural design idea, there were diversions enough to embellish and lighten the more serious architectural theme. Henry Hunt of Pittsburgh, for instance, showed some unusually delightful effects in stained glass design, the sculptor G. Moretti struck a new note in memorial monuments with his "Battle of Nashville" memorial shaft and his "Spirit of Aviation," and Frank Vittor presented an Italian Renaissance fountain of skilled workmanship. To many draftsmen the drawings

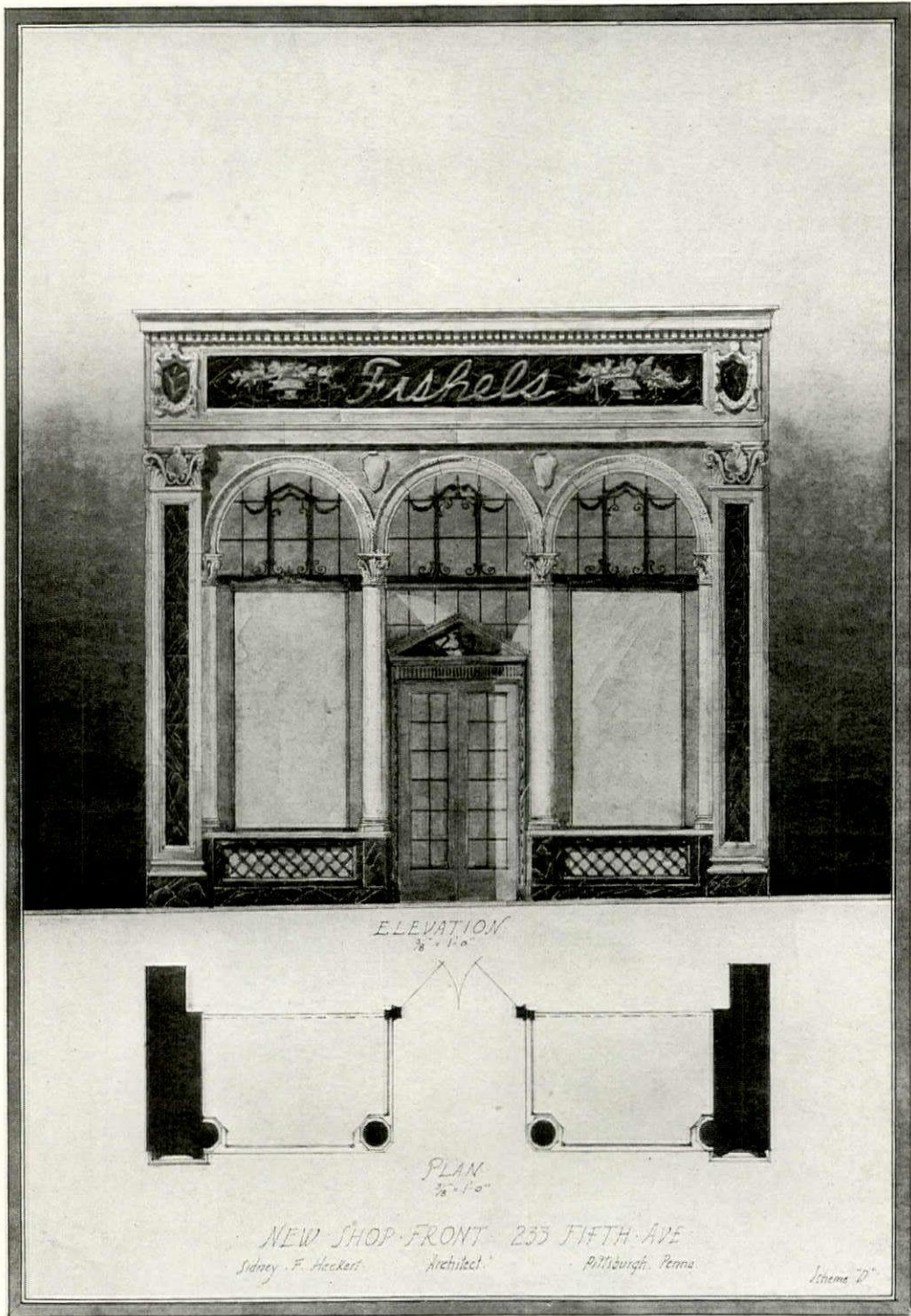
executed by Burch Burdette Long were worth the "whole show."

Through a request from the club, drawings of buildings of national note were sent by the firms of Helmle and Corbett, McKim, Mead and White and Bertram G. Goodhue of New York. The first named firm also sent models that were of special interest. The "Stanford White Memorial Doors" were specially studied in the McKim, Mead and White collection

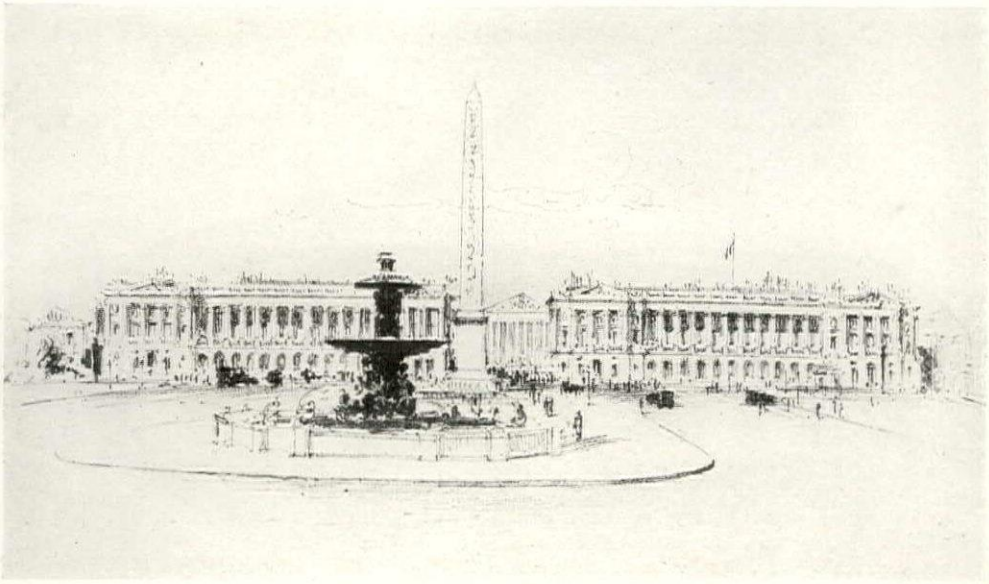


SKETCH OF PROPOSED PEOPLES INSTITUTE  
OF PITTSBURGH, PA.  
Thomas Pringle, Architect

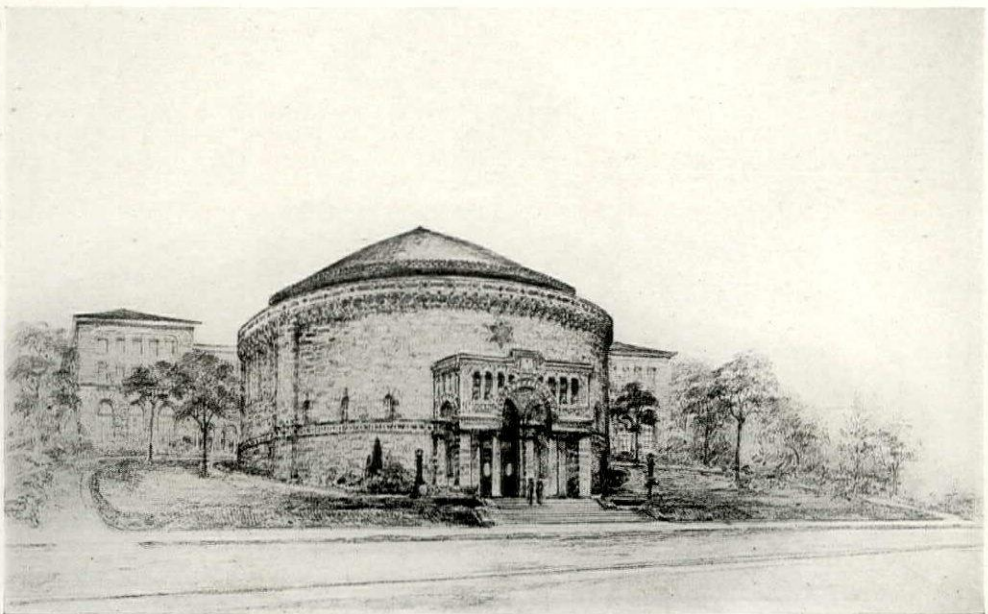








PLACE DE LA CONCORDE, PARIS, FRANCE  
Sketch by J. Vernon Wilson, Architect



*The Architectural Record*

March, 1923

B'NAI ISRAEL SYNAGOGUE AND COMMUNITY CENTER





Y. M. H. A. BUILDING, PITTSBURGH, PENNA.  
Benno Jassen, Architect



*The Architectural Record*

March, 1923

RESIDENCE OF JOHN B. SEMPLE, ESQ., COCOANUT GROVE, FLA.  
Kiehnel & Elliott, Architects



and the drawings sent by Mr. Goodhue of the Kansas City Memorial gave place even to his splendid conception for a State Capitol for Nebraska. The entire collection from these New York architects, thirty-one in all, was given a special hanging in a room by itself, and there were usually a number of draftsmen there studying both the rendition and the form, particularly of those that in competition with the most talented had been accepted as the best. The club members strongly appreciated the courtesy of the architects who sent the drawings and so aided in making the exhibition an artistic success.

Although the Pittsburgh Architectural Club is not unique by reason of the large number of practicing architects among its membership, its well sustained personality and the endeavor to make it what such a club ought to be through a long term of years, has caused many of those who graduated into practice from its ranks to retain both membership and an active interest in its work.

Perhaps the answer to the uniformly high grade of draftsmanship noted in the exhibition may in part be found in the sketch problems that form a feature of regular meetings and in the Sketch Class that, under the direction of Oliver J. Robling, aids in the development of the sketch instinct that always seems to be part of the true designer.

The problems, which occupy an hour in their rendition at regular meetings, are always interesting, sometimes serious and touching upon the practical, and as often call upon the ingenuity of each participant as well as his skill in drawing. One of the latter, submitted upon request by a warm friend of the club, Henry Hornbostel, was unique in its conception and when studied lost its apparently frivolous appearance in the many practical points it brought to the designers' attention. It is worth reproducing here in this attempt to give some impression of the club and its work as illustrated by the exhibition.

The problem, in which the usual money prize of ten dollars was offered, was competed for by about twenty of the members, and was as follows:

SUBJECT: A GONDOLA SUSPENDED FROM A BALLOON FOR TEN FLAPPERS.

*"The gondola will be built by a colony of ten flappers who have left home on account of the restraints imposed on them by prudish parents and relatives. They have lots of money in their own right and propose to enjoy life to the full. The gondola will be used for gay parties and for sightseeing, and a chaperon will accompany the ten. It will have all kinds of electrical conveniences, heating apparatus, toaster, curling irons, etc., and will be equipped to remain in*

*the air twenty-four hours. All home comforts but no home restraints, is the flapper's motto. Toilet facilities are desired, but baths are not required. A wireless outfit for entertainment will be installed in the gondola and the balloon cabin will have its own wireless for navigation purposes. PRESENTATION.—The gondola will be shown on elevation or perspective as the competitor prefers, but a section drawn to scale must be made. The balloon with its navigation cabin will not be shown, but the suspenders should be indicated."*

The fine spirit and enthusiasm that signalize the club membership and the humor that enters into and lightens the serious problems of the day will also be evidenced by the designing of costumes for the coming Beaux Arts costume ball, in which the Associated Artists of Pittsburgh, the Pittsburgh Chapter A. I. A. and the Pittsburgh Architectural Club will participate.

R. C. M.



ST. FRANCIS DE SALES CATHEDRAL,  
TOLEDO, OHIO

Comes, Perry & McMullen, Architects



THE ARCHITECTURAL RECORD.

Mr. Frank M. Andrews, architect, has re-established his offices at 221-223 West 57th Street, New York, and has associated with himself, Mr. Harry M. Prince and Major D. Gutman, the latter being in charge of the structural and mechanical engineering departments.

Mr. Lewis Davis Brumm has opened offices for the practice of architecture, at 412 Calumet Building, Miami, Fla., and desires manufacturers' samples and catalogues.

Messrs. Pendleton S. Clark and Walter R. Crowe announce the formation of a partnership for the practice of architecture, under the firm name of Clark & Crowe, with offices in the Krise Building, Lynchburg, Va. Manufacturers' catalogues and samples requested.

Notice has been received of the removal of Mr. I. L. Crausman, architect, to 370 East 149th Street, New York.

Mr. John J. Donovan announces the removal of his offices from 512 Pacific Building to Tapscott Building, 1916 Broadway, Oakland, Cal.

Mr. M. Louis Kroman announces that he will be engaged in the practice of architecture and engineering, with offices at 921-922 Woodward Building, Birmingham, Ala.

Messrs. Weston and Ellington, architects and engineers, announce the opening of their offices at Suite 1507, Stroh Building, Detroit, Mich.

Messrs. Walter F. Price and Wm. McKee Walton, architects, have associated under the name of Price & Walton, and will carry on business at 119 South 4th Street, Philadelphia, Pa.

Mr. William F. Stone, Jr., formerly associated with the late Otto G. Simonson, architect, desires to announce that he will continue his practice at 1122 Munsey Building, Baltimore, Md.

Messrs. Walter E. Ware, A. I. A., and Slack W. Winburn announce their association as architects and landscape architects, under the firm name of Ware & Winburn, 610 Utah Savings & Trust Building, Salt Lake City, Utah.

Messrs. Webber, Staunton & Spaulding, architects and engineers, announce the formation of a partnership, under the firm name as above, with offices at 1017 Hibernian Building, Los Angeles, Cal.

Mr. H. H. Whiteley, architect, announces the removal of his studios from 520 South Western Avenue to temporary quarters at 5912 Hollywood Boulevard, near Bronson Avenue, Hollywood, Cal.

Mr. Herbert Wood, 1-2 Stock Exchange, Collins, Melbourne, Australia, is desirous of receiving manufacturers' samples and catalogues.

Mr. Harry B. Mulliken, architect, announces the removal of his office to 4944 Grand Central Terminal, New York.