



A Magazine devoted
to Architecture, Garden
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Vol. II.

FEBRUARY, 1902.

No. 2.

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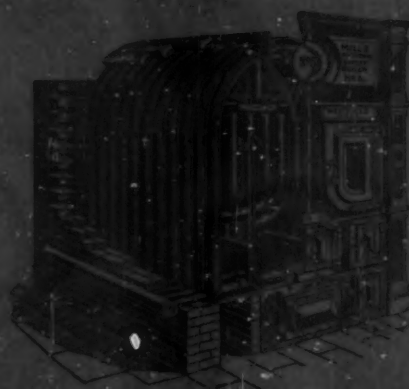
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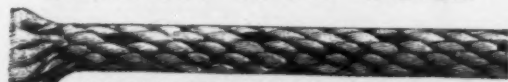
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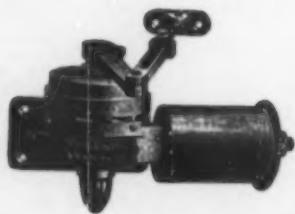
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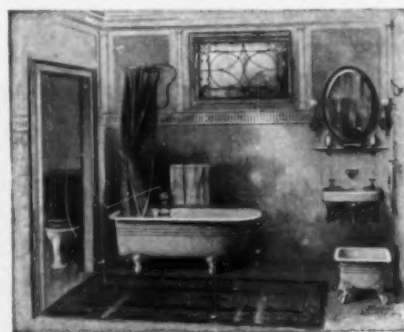
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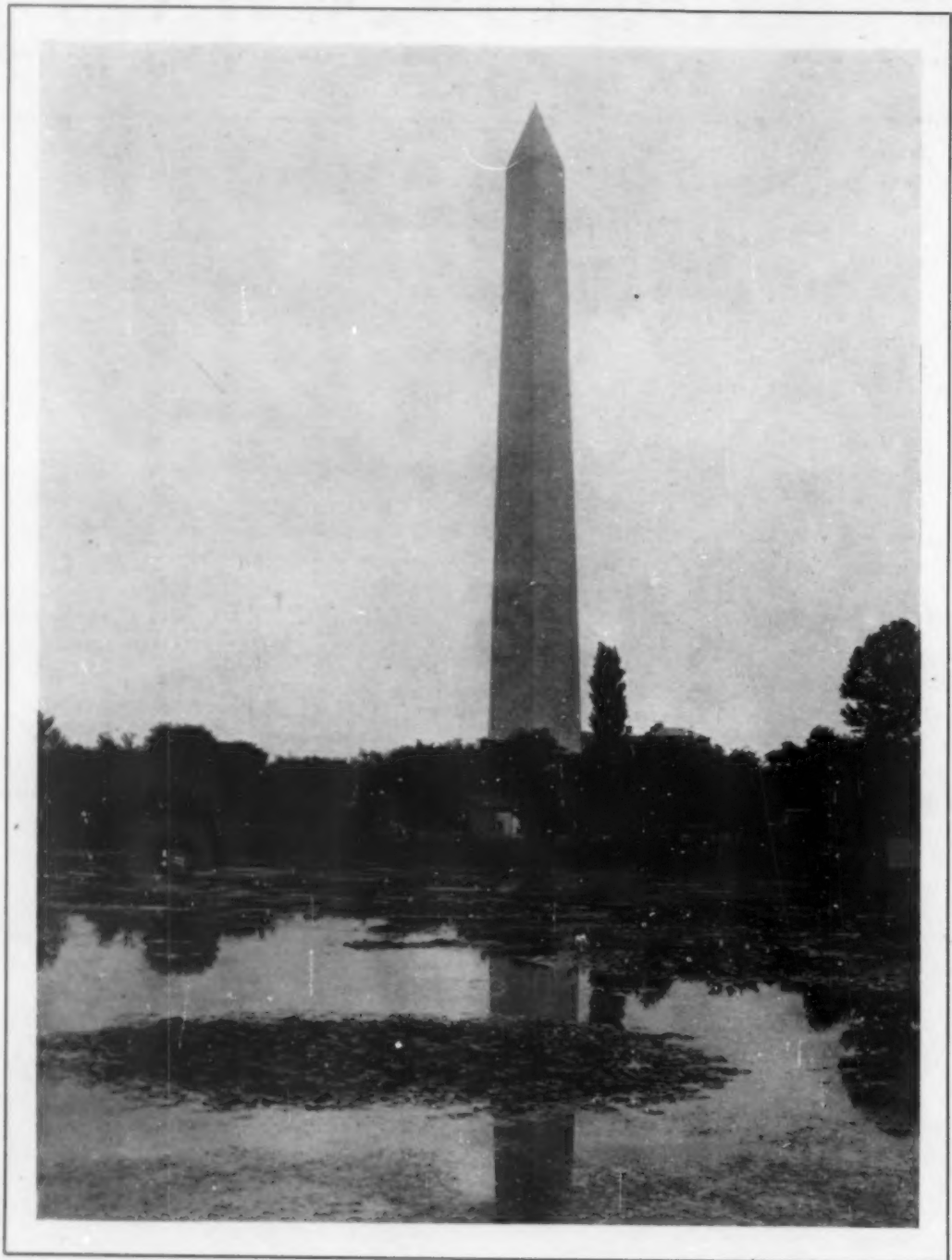
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THE WASHINGTON MONUMENT

Showing its present surroundings

House & Garden

Vol. II

FEBRUARY, 1902

No. 2

THE TWENTIETH CENTURY WASHINGTON

AS PROPOSED BY THE PARK COMMISSION OF

DANIEL H. BURNHAM
CHARLES F. McKIM

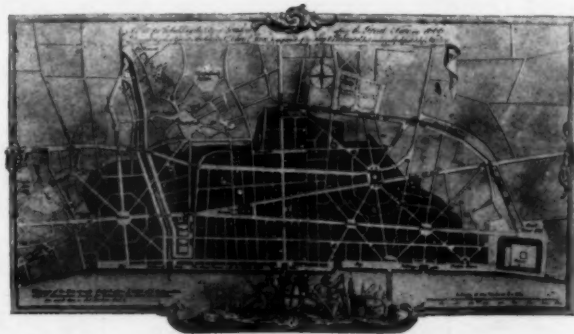
FREDERICK LAW OLMSTED, JR.
AUGUSTUS ST. GAUDENS

THAT the City of Washington may take equal rank with the monumental capitals of the world is made possible by the work of the Park Commission appointed about a year ago by the Senate Committee on the District of Columbia. An extensive plan for the city has been prepared, incorporating the chief existing landmarks into one harmonious scheme to which future buildings may add a beauty of completeness. The proposed ambitious improvements constitute a development of the original plan of the city and they aim to recover the salient features of that arrangement. When a site by the Potomac River was selected in 1790 for the capital city of the United States, it was the first instance of an entire city's being *designed*. The ground was free and without hampering conditions to control the direction or character of the future streets or the location of the buildings. To design a map of the new city, President Washington was fortunate in securing Peter Charles L'Enfant, a young French engineer officer who had done efficient service during the Revolution in designing fortifications, and had gained quite a reputation in Philadelphia and New York as an engineer and architect. The extreme novelty of the plan he produced makes the sources of his inspiration a matter

of great interest. He had requested the plans of many European cities of Thomas Jefferson, then Secretary of State, but a review of the arrangement of these cities shows few suggestions of which he actually made use. The Champs-Élysées, for the Mall, was the only probable one, for it must be remembered that the radiating streets in Paris were opened by the first and third Napoleons

years after the map of L'Enfant was drawn.

The only map of a city having focal points of interest and streets and avenues radiating from them to which L'Enfant could possibly have had access was that of Sir Christopher Wren for the rebuilding of London after the great fire of 1666. The same principle had



SIR CHRISTOPHER WREN'S PLAN OF LONDON
(Never Executed)

been used with dignified effect by Le Nôtre in his gardens. Whether Wren, who visited France in 1665, was inspired to adopt the radial system after a study of the gardens in that country; whether L'Enfant from a knowledge of their beautiful effects was tempted to utilize the system for a city; or whether he was influenced in his work by a recollection of the gardens and a sight of Wren's plan in the adoption of focal points of interest as centers for radial streets must remain more or less a matter of conjecture. It is a curious fact that while there was no city with radial streets in Europe at that period

one existed in America at Annapolis. That town was based upon Sir Christopher Wren's plan of London. Washington and L'Enfant made a careful study of the site for the new city and selected the locations for the principal buildings, monuments and statuary. The plan was submitted to Washington, modified by him, and finally approved. It is remarkable for the landscape it provided for the principal buildings, affording efficient approaches to them and pleasing garden

views before their main façades. The opportunities for vistas from one point of importance to another are numerous, and are well and carefully studied. When we remember that this country had then but a population of 4,600,000 and that the Capital City was laid out commensurate with a population of 800,000—the size of London in 1790—we may wonder at the breadth of mind and courage of our city makers, and we may thank them for withstanding

the ridicule of the timid and the sneers of the incredulous.

The streets were laid out as designed, radiating from centers, with circular parks at their intersections and the Capitol and White House were located on the sites selected for them. After Madison's administration, the idea of the founders was apparently forgotten or ignored. The noble approach to the Capitol and the imposing vista planned from the Mall were destroyed by careless plant-

ing; public buildings were built haphazard, here and there, with no idea of an ordered or harmonious grouping. This neglect of L'Enfant's plan has continued to the present day. The view from the Monument to the Capitol is over a tangle of trees and past a jumble of buildings unrelated to one another and each marring the other's effect. Looking from the Capitol are the unsightly Botanical Gardens in the foreground, then the tracks of a railway and again a confusion of trees without system



L'ENFANT'S PLAN OF WASHINGTON
(Made in 1791)



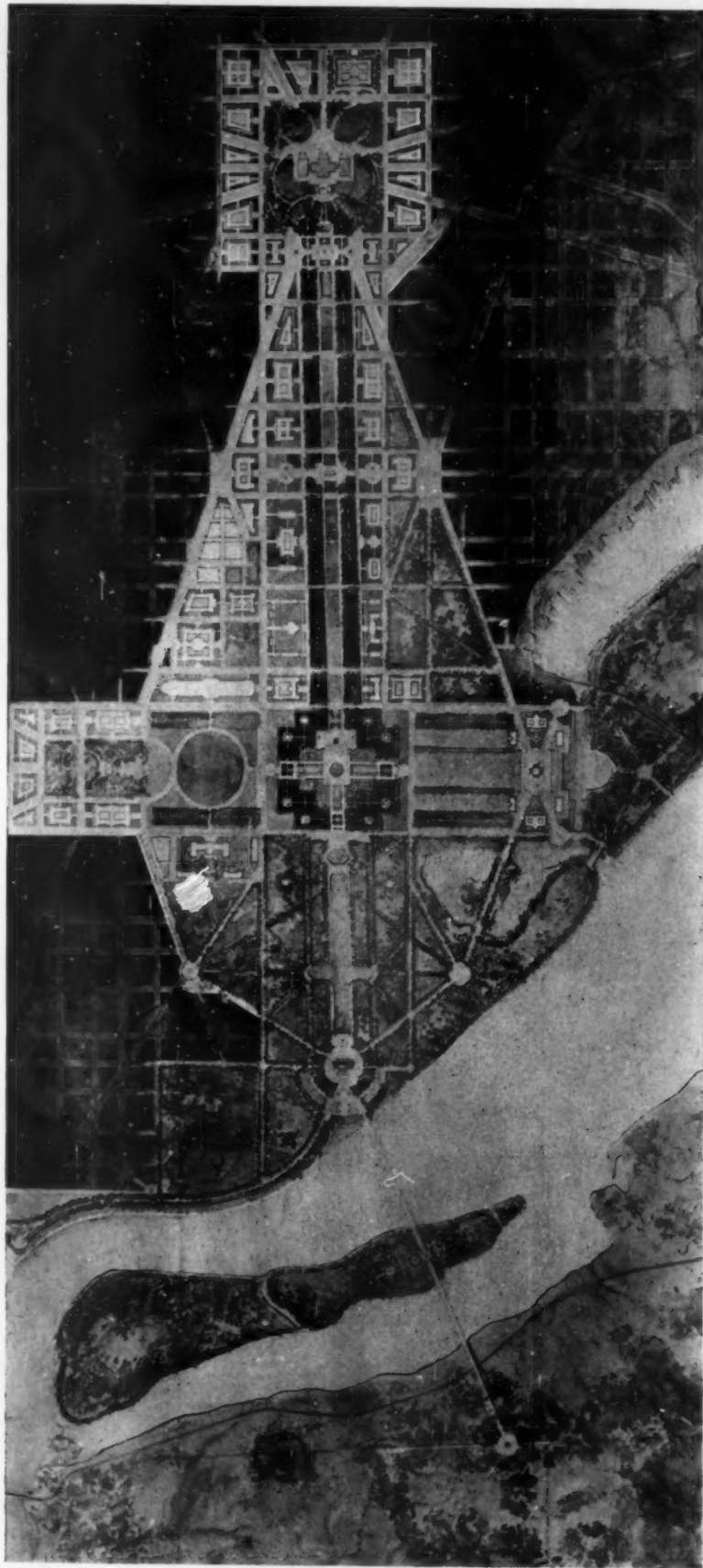
A VIEW OF THE CAPITOL

showing how a vista has been marred by the unfortunate placing of the new Congressional Library



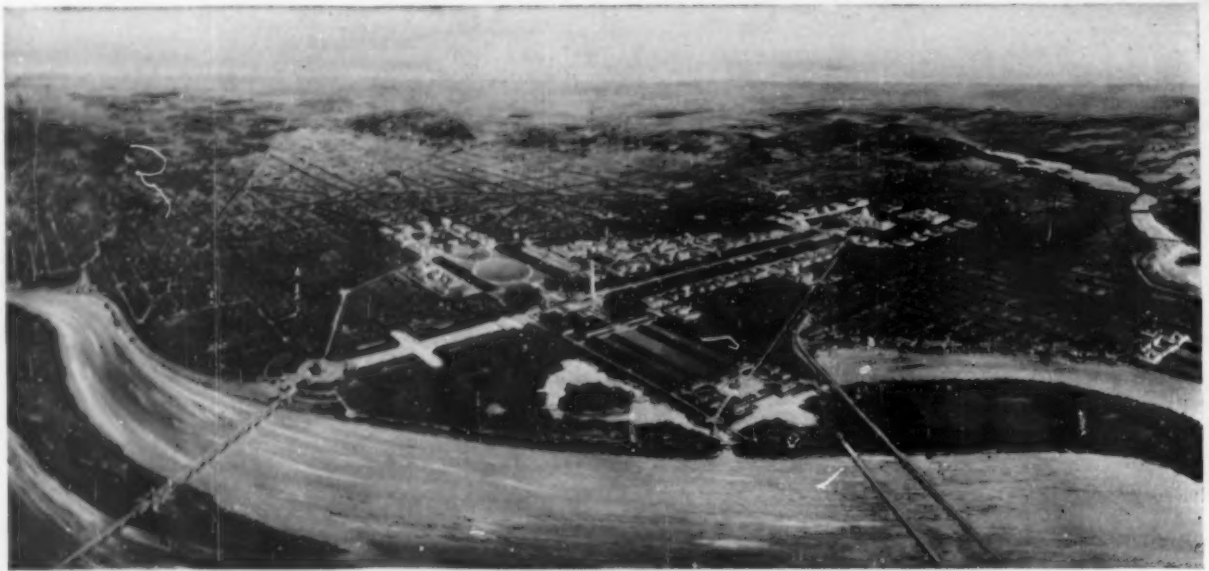
A VIEW OF THE PRESENT MALL

showing the unsightly rears of buildings which face upon it



ARLINGTON
THE MEMORIAL
BRIDGE
THE LINCOLN
MEMORIAL
THE CANAL
THE WHITE HOUSE
THE MONUMENT
AND GARDEN
WASHINGTON
COMMON
MEMORIAL
TO THE MAKERS
OF THE
CONSTITUTION
THE MALL
UNION THE CAPITOL
SQUARE

THE NEW GENERAL PLAN OF WASHINGTON PREPARED BY THE PARK COMMISSION



BIRD'S EYE VIEW OF THE NEW GENERAL PLAN
 Taken from a point 4,000 feet above Arlington

*From a drawing rendered
 by F. L. V. Hoppin*

or design. The creation of grand vistas was the fundamental, unique and distinctive feature of the first plan; and the ruthless destruction of them in latter times is the more amazing when we remember that the plan of L'Enfant has been continuously in the possession of the Government authorities.



A BULFINCH GATEHOUSE

Removed from Capitol Grounds in 1870 and located at present on the Monument Lot

In the preparation of "A History of the United States Capitol," my attention was first called to the beauties of L'Enfant's plan, and I wrote an article strongly urging a return to the scheme in locating future Government buildings. In December of 1900 The American Institute of Architects had for



THE NEW WEST APPROACH TO THE CAPITOL

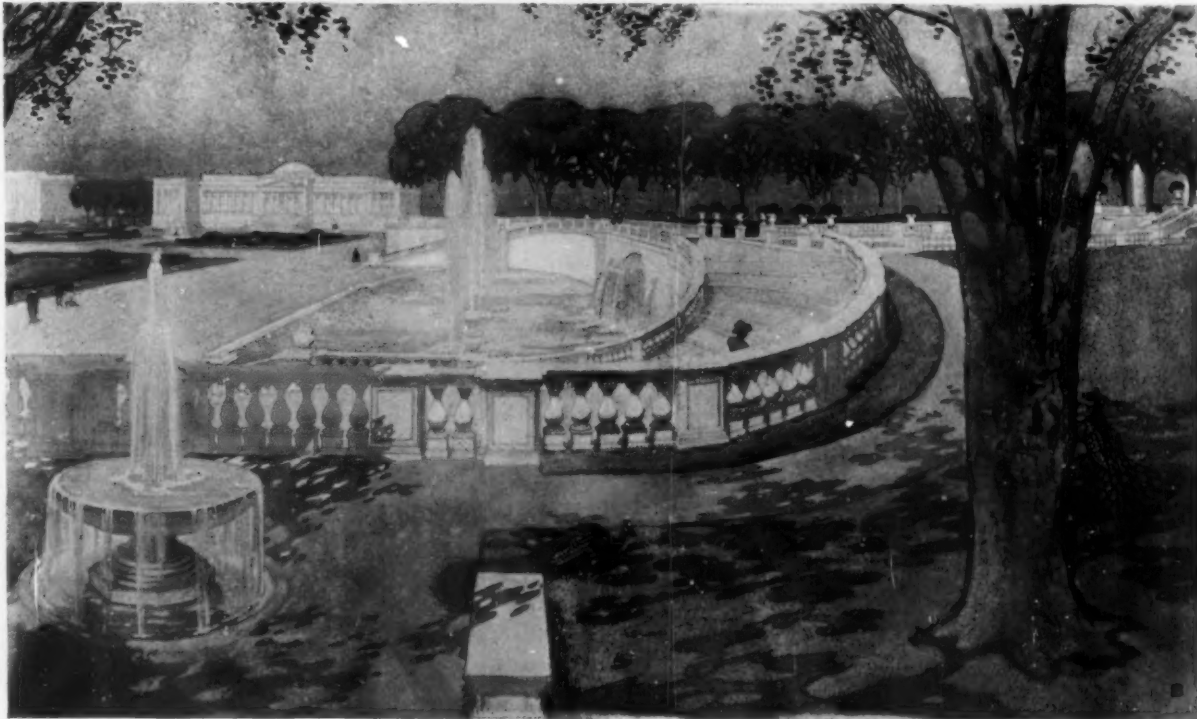
Showing proposed terrace, restoration of the Bulfinch gates and boundary fence, fountains and cascades



PERSPECTIVE VIEW OF CAPITOL FROM THE NEW UNION SQUARE

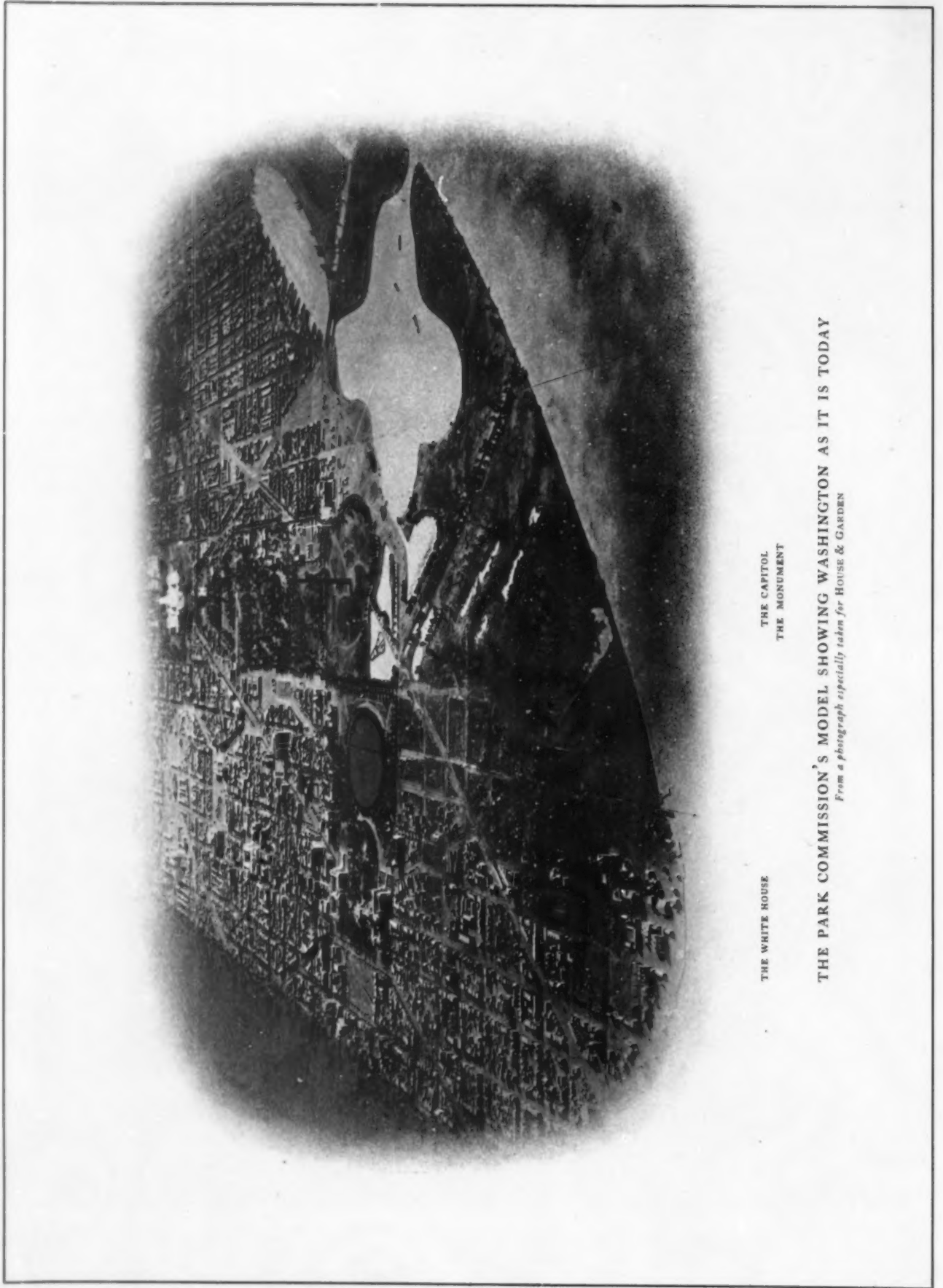
their principal topic of discussion the future grouping of structures and the park treatment of Washington City. Many bright men of the profession prepared papers on the subject, and all agreed that the fundamental lines established by L'Enfant should be adhered to. At this meeting a committee was appointed to urge upon Congress the pressing need of appointing a Commission to formulate a scheme for future grouping of buildings and a treatment of the parks in

harmony with the architecture. Senator McMillan, with a broad foresight of the necessity of such study, and a keen appreciation of the fact that only the best men should be selected for the duties of the Commission, acted upon the suggestion of the Institute and appointed Mr. Daniel H. Burnham, and Mr. F. L. Olmsted, Jr., giving them the power to select a third man, who it was well known would be Mr. Charles F. McKim. In a short time the Commission added Mr.



BASIN AND STAIRWAYS AT THE FOOT OF THE CAPITOL GROUNDS

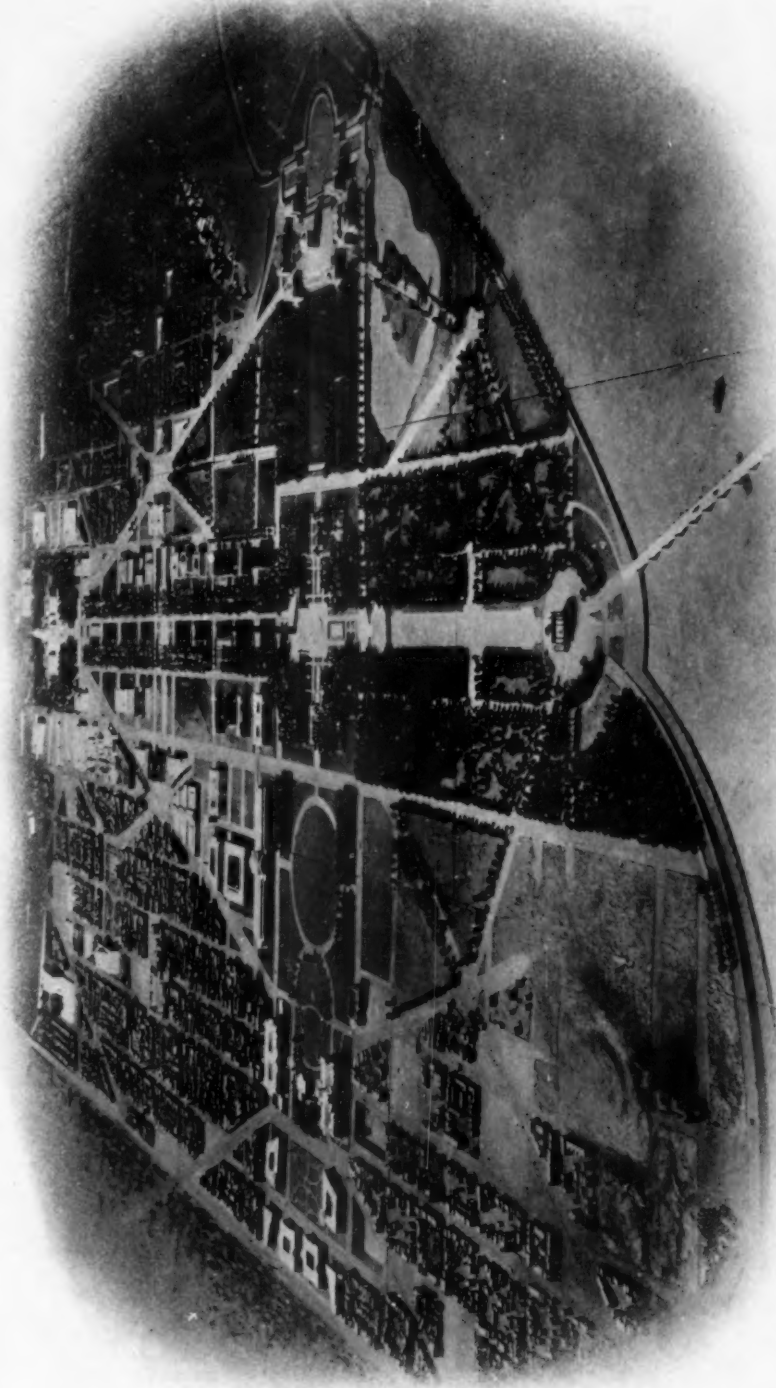
Forming also a termination of the Mall



THE CAPITOL
THE MONUMENT

THE WHITE HOUSE

THE PARK COMMISSION'S MODEL SHOWING WASHINGTON AS IT IS TODAY
From a photograph especially taken for HOUSE & GARDEN



THE WHITE HOUSE
AND
DEPARTMENT BUILDINGS

"THE WHITE LOT"

THE CAPITOL
THE MALL
THE MONUMENT AND GARDEN
THE CANAL
THE LINCOLN MEMORIAL

WASHINGTON
COMMON

MEMORIAL TO THE
MAKERS OF THE
CONSTITUTION

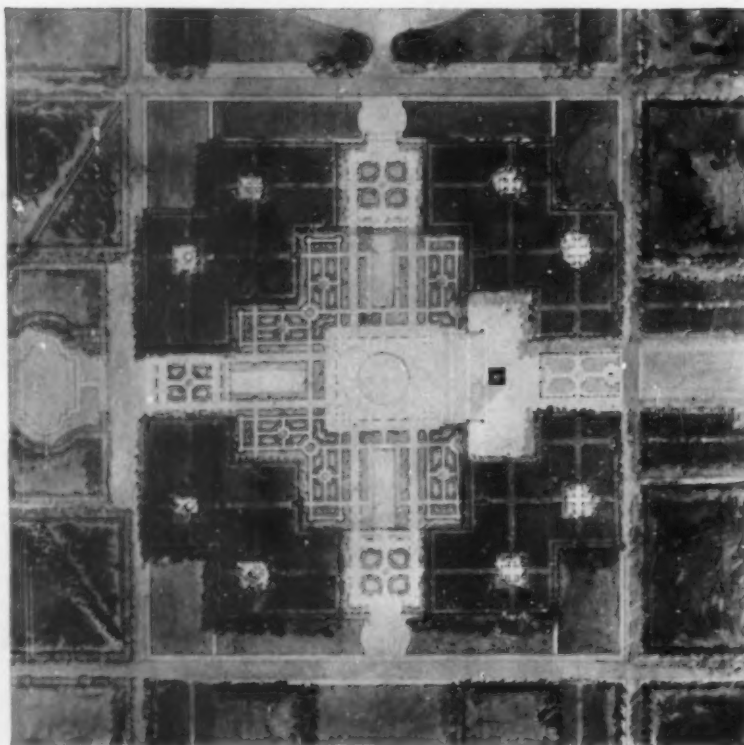
THE PARK COMMISSION'S MODEL SHOWING THE NEW WASHINGTON

From a photograph especially taken for HOUSE & GARDEN



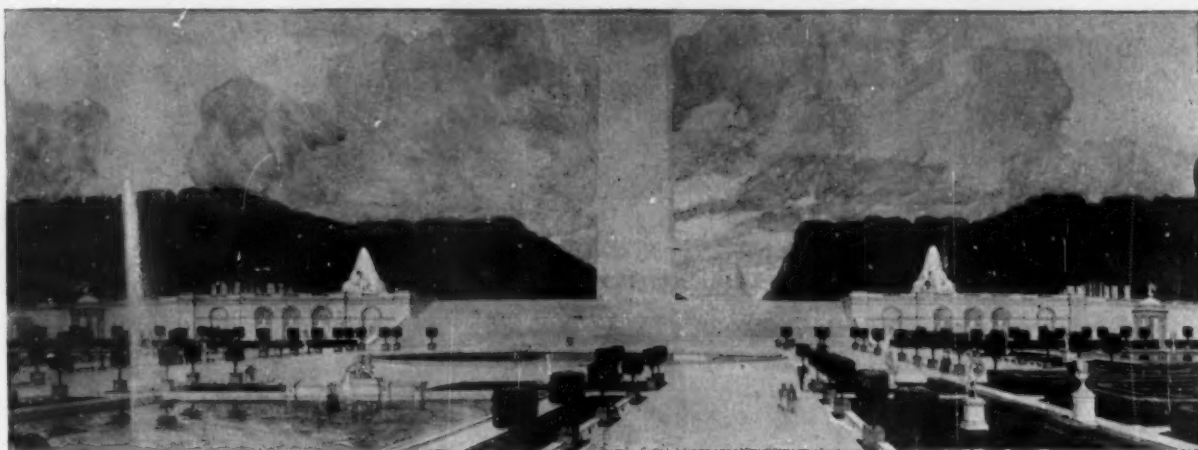
LOOKING WESTWARD FROM THE CAPITOL
Union Square in the foreground

Augustus St. Gaudens, so as to obtain his advice upon sculptural effects. The report was submitted to the Senate Committee on the District of Columbia, January 15th, and was unanimously approved. It was accompanied by drawings and models presenting a comprehensive scheme, together with numerous enlarged photographs of vistas, parkways, fountains, and other park embellishments already existing abroad.



PLAN OF THE MONUMENT GARDEN

In the entrance hall of the Corcoran Gallery of Art, where the drawings and models have been placed upon exhibition, is an enlarged view of L'Enfant's map, virtually the keynote of the proposed changes and extensions. The new plan, summing up the chief labors of the Commission, is the first drawing to attract attention. It shows the Capitol Building as the crowning feature of the city at the east end of the enlarged Mall. Around it are grouped buildings for legislative

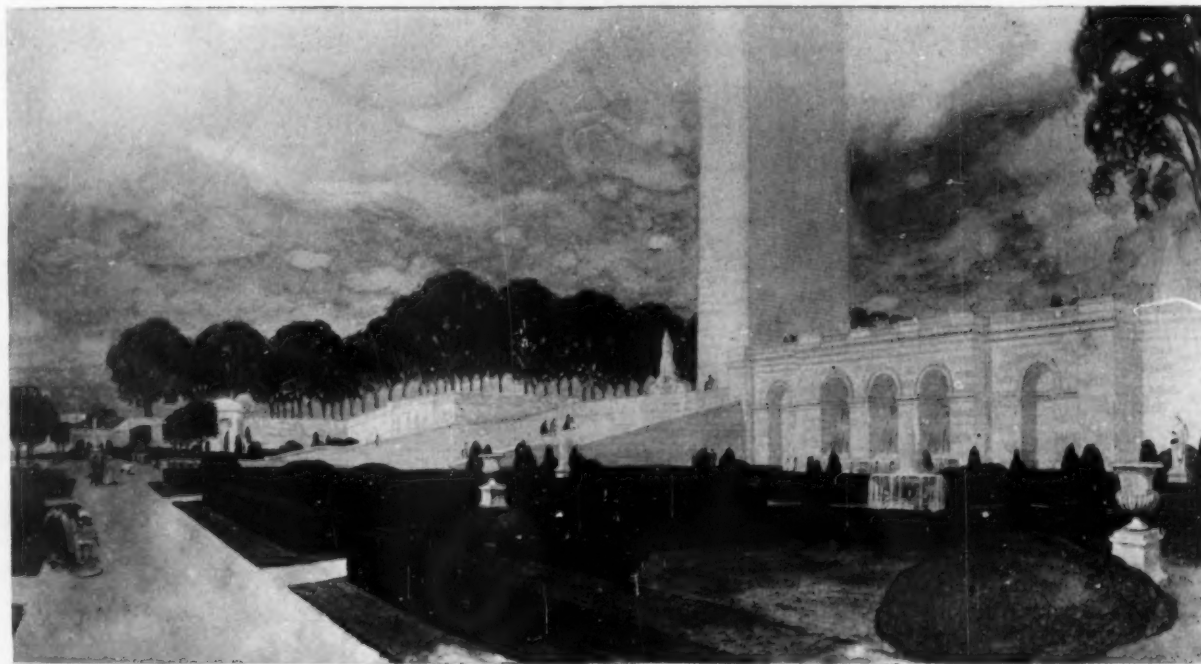


From a drawing rendered by Jules Guerin

IN THE MONUMENT GARDEN LOOKING EASTWARD

purposes so situated as not to destroy but to enhance the original vistas. At the foot of the Capitol grounds is Union Square, a formal space without trees, but well supplied with architectural adornment and with a Government building at the north and south ends. The west terrace of the Capitol is made the same width as the new Mall and, giving additional base to the Capitol, it materially improves the already imposing setting of the building. The splashing waters of cascades assemble in a pool upon each side of which ascend

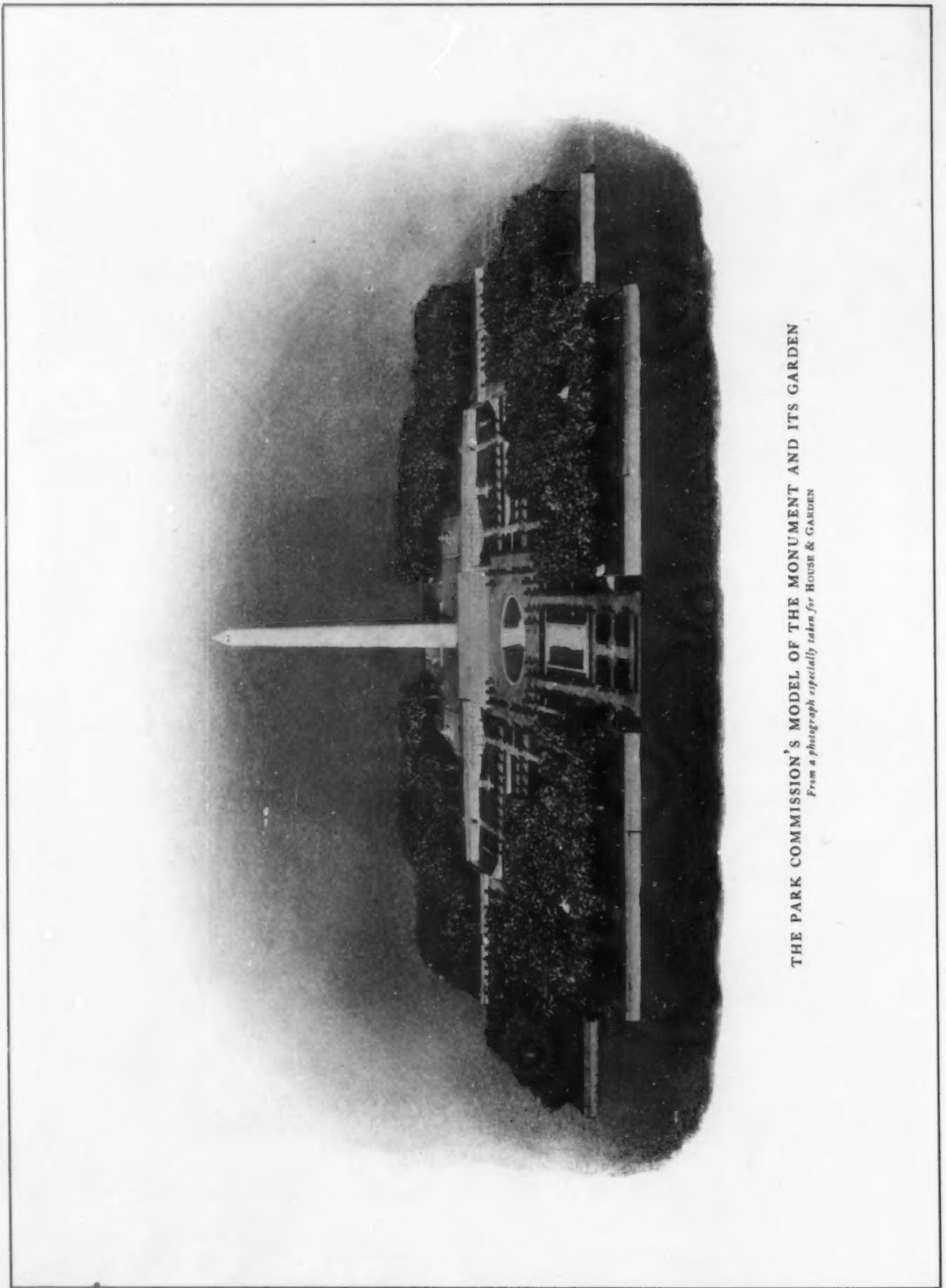
winding stairways. Above are formal lines of trees leading in a graceful curve up to the main building of the Capitol. Statues to Generals Grant, Sherman and Sheridan occupy prominent axial positions, and the terrace wall is flanked by marble reproductions of the Bulfinch gatehouses and gateposts. These were removed to make way for the improvement of the grounds in 1876; and though discarded, are far more in harmony with the architecture of the Capitol than the ornaments which took their place.



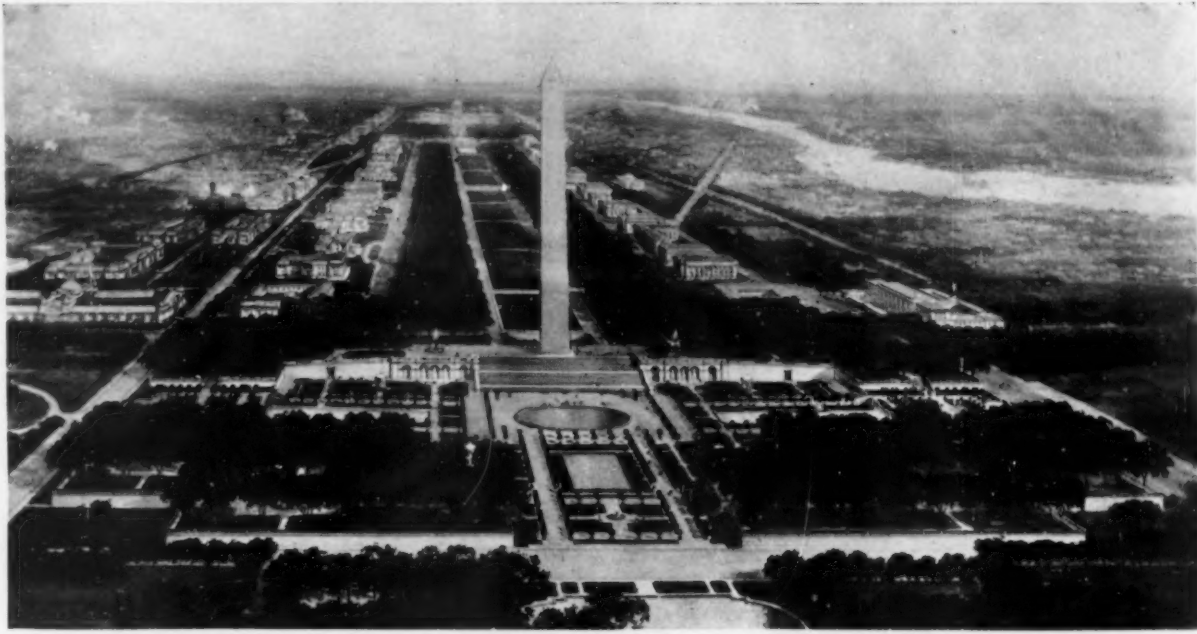
From a drawing rendered by Jules Guerin

THE NEW SETTING FOR THE MONUMENT

From the garden on the West. On the left is a vista to the White House



THE PARK COMMISSION'S MODEL OF THE MONUMENT AND ITS GARDEN
From a photograph especially taken for HOUSE & GARDEN



From a drawing rendered by Charles Graham

GENERAL VIEW OF THE MONUMENT GARDEN LOOKING TOWARD THE CAPITOL

From Union Square to the Monument—a distance of a mile and a half—extends a broad majestic avenue of green sward, flanked on each side by four rows of American elms. The formally planted trees broaden into a great square at the Monument, and give to it a setting and a scale which it appears to me could not be attained in any other way. At the end of this *tapis vert* the white shaft rises about five hundred and sixty feet from a plaza but slightly raised above the turf. The shaft, at present standing on a small hillock, seems to sprout from the ground, and a need is felt of a horizontal plane on which it should rest. This base is given in the new design by the esplanade which, beyond on the west, is treated as a broad marble terrace. A flight of steps descends forty feet to a formal garden below. In the form of a Greek cross



A PAVILION IN THE MONUMENT GARDEN

dense planting of elms surrounds it and its center is enriched by parterres and minor walks. The model which has been prepared of this section gives a clear idea of shaded groves in the midst of which, with charming effect, are placed resting pavilions, fountains in large basins of water and still pools surrounded by quiet borders of grass. From this garden an opening continues of the same width as the *tapis vert* between the Capitol and the Monument. Instead of lawn, however, the principal surface here is of water within a canal about two hundred feet wide and three thousand six hundred feet long. Crossing it is another canal more than a thousand feet long. The vista from the Monument westward is ended by the Memorial to Abraham Lincoln, which is placed on the river bank. Here the Memorial Bridge across the Potomac begins. Standing within

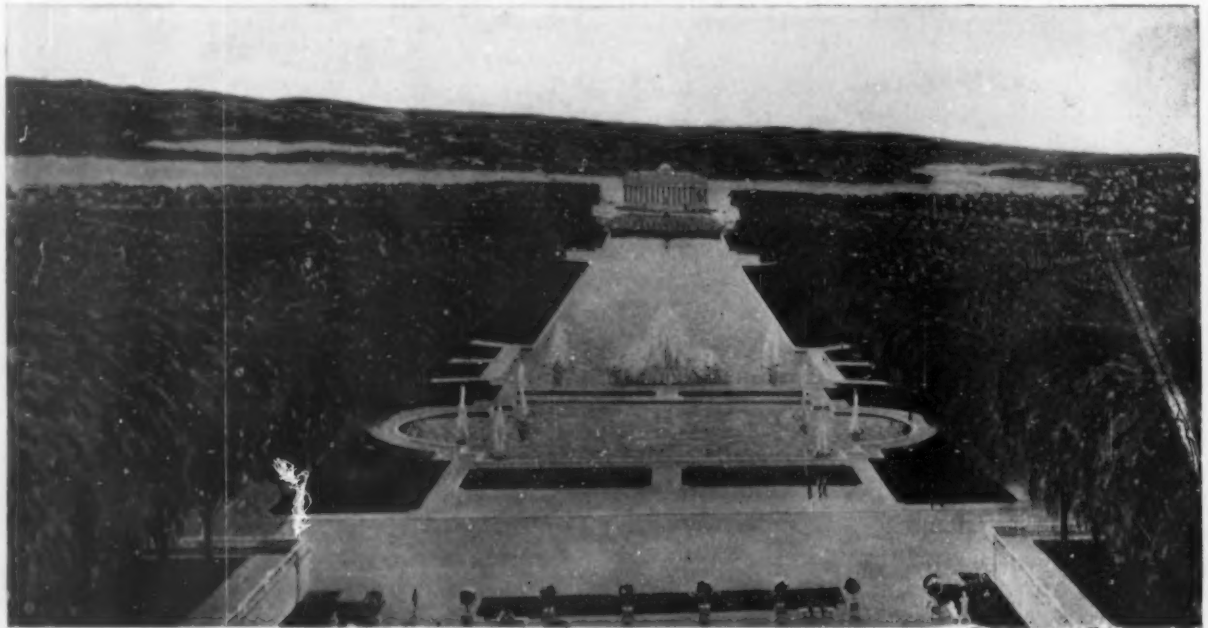


THE LINCOLN MEMORIAL AND THE CANAL

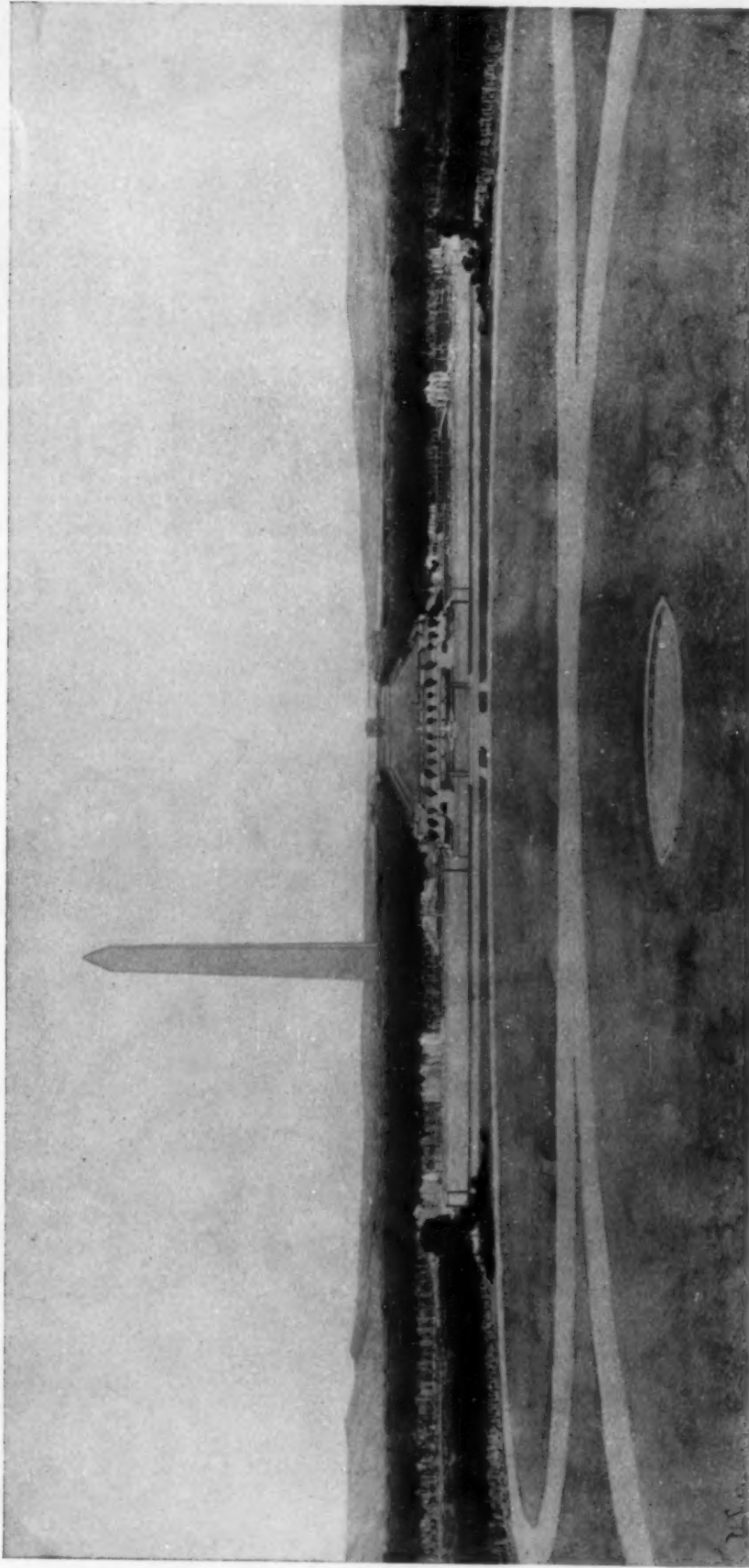
the peristyle of this memorial, charming in its refinement and simplicity, one may look eastward over the canal and the formal garden past the Monument to the dome of the Capitol two and a half miles distant. In the other direction the eye follows the Memorial Bridge (whose axis starts from the point where one stands) to the pediment of the old Arlington mansion on the hills of Virginia.

The plan of L'Enfant located a monument

at the intersection of the north and south axis of the White House and the east and west axis of the Capitol, but the present shaft was reared, for unknown reasons, about seventy-five feet south of the Capitol axis and about five hundred feet east of the center of the White House. The Commission has boldly fixed the center line of the contemplated improvement on this axis, as they found it, of the Monument and Capitol. The inaccurate posi-



LOOKING WESTWARD FROM THE MONUMENT



From a drawing rendered by Jules Guerin

VIEW FROM THE WHITE HOUSE

*Across "The White Lot" and the Monument Garden
The Memorial to the Makers of the Constitution in the distance*

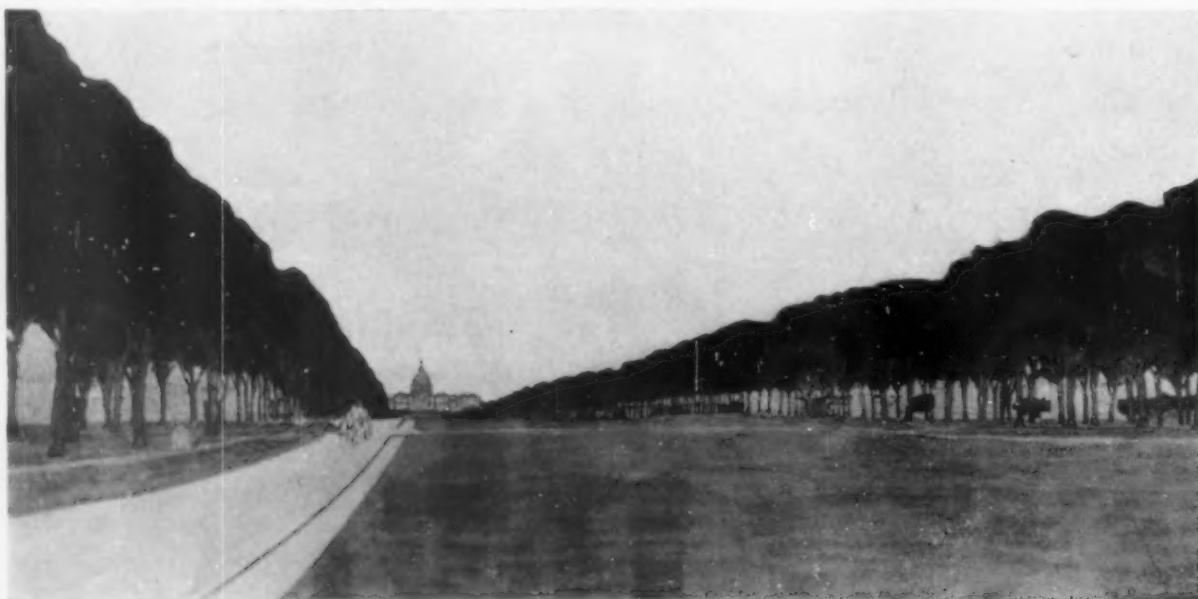


THE MONUMENT FROM THE EAST

tion of the former was too great to admit of deflecting the center lines of the treatment making a false axis with the White House. That building has been left unchanged and the adherence to it appears to be a happy circumstance, for the principal treatment at right angles with the Mall proposes a group of buildings for Executive Departments to be arranged around Lafayette Square in prox-

imity to the President's house. The grounds south of this house, known as "The White Lot," are so planted with four rows of trees that an uninterrupted view is had between them across its broad circle of grass, through the low garden by the Monument, to the Washington Common and the river beyond.

The Washington Common lies south of the Monument Garden, directly in line with

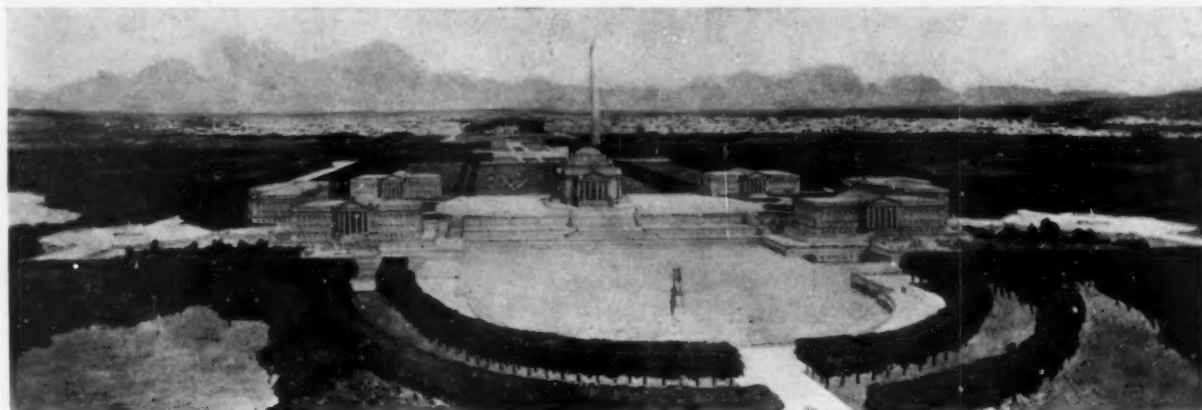


THE NEW MALL

the White House, and it provides large greens for outdoor games and athletic sports. At the far end, upon land to be reclaimed from the malarial marshes of the river, has been designed the Memorial to the Makers of the Constitution. A domed classic structure stands isolated upon a vast platform, at each end of which are three minor buildings symmetrically disposed. All of these overlook

silvery waters of the Potomac and the hills upon the distant shore.

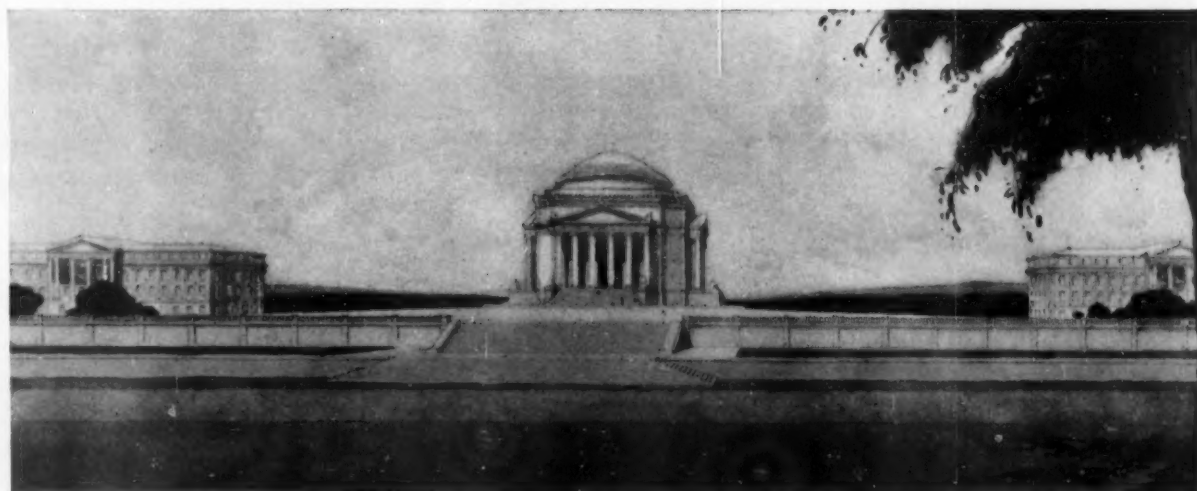
Fronting the Mall upon the north it is proposed to erect such scientific buildings in which the general public is interested, as the National Museum and Smithsonian Institute. Farther to the north, on purchased property between Pennsylvania Avenue and B Street, is contemplated the location of



Theatre and Public Baths

The Pool for Aquatic Sports

Gymnasium and Athletic Buildings

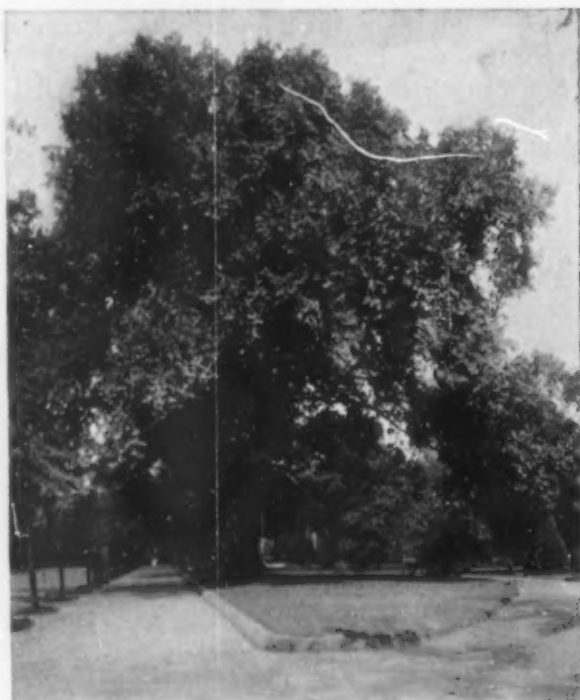


From drawings rendered by Jules Guerin

THE MEMORIAL TO THE MAKERS OF THE CONSTITUTION

a great semicircular basin separated from the open waters of the Potomac by a mole surmounted by a shaded avenue. The water within is intended for aquatic sports and public baths in the summer, and for skating in the winter. This dignified group, finally terminating the vista from the White House across "The White Lot," the sunken garden and the playing fields, is outlined before the

various municipal structures such as the buildings for District officials, the Armory and Drill Hall, a public market, etc. Upon the south, it is suggested, the space between Maryland Avenue and B Street should be acquired to give a symmetry to the fan-shaped park system diverging from the Capitol. The purchase of the district between New York Avenue and B Street is



AMERICAN ELMS ON LAFAYETTE SQUARE



WASHINGTON

also proposed to give a further symmetry west of the White House and to accommodate future buildings of a semipublic character. The detailed views, which the Commission's superb collection of drawings affords, naturally divide themselves into five groups or divisions by which reference to the

exhibition is made:—the Capitol, the Mall, the Monument, the Lincoln Memorial, the Washington Common (including the Memorial to the Makers of the Constitution). As an adjunct to the drawings and models, is a series of diagrams showing the comparative extent and the method of connecting in a



THE "Tapis Vert"

AT VERSAILLES



THE *Char Embourbe* AND AVENUE

AT VERSAILLES

continuous circuit the park areas of London, Paris, Boston and of Washington as it now is and as it is proposed to make it. Suggestions are shown for connecting the Mall with the outlying parks of the city and for boulevards along the Potomac west of Georgetown.

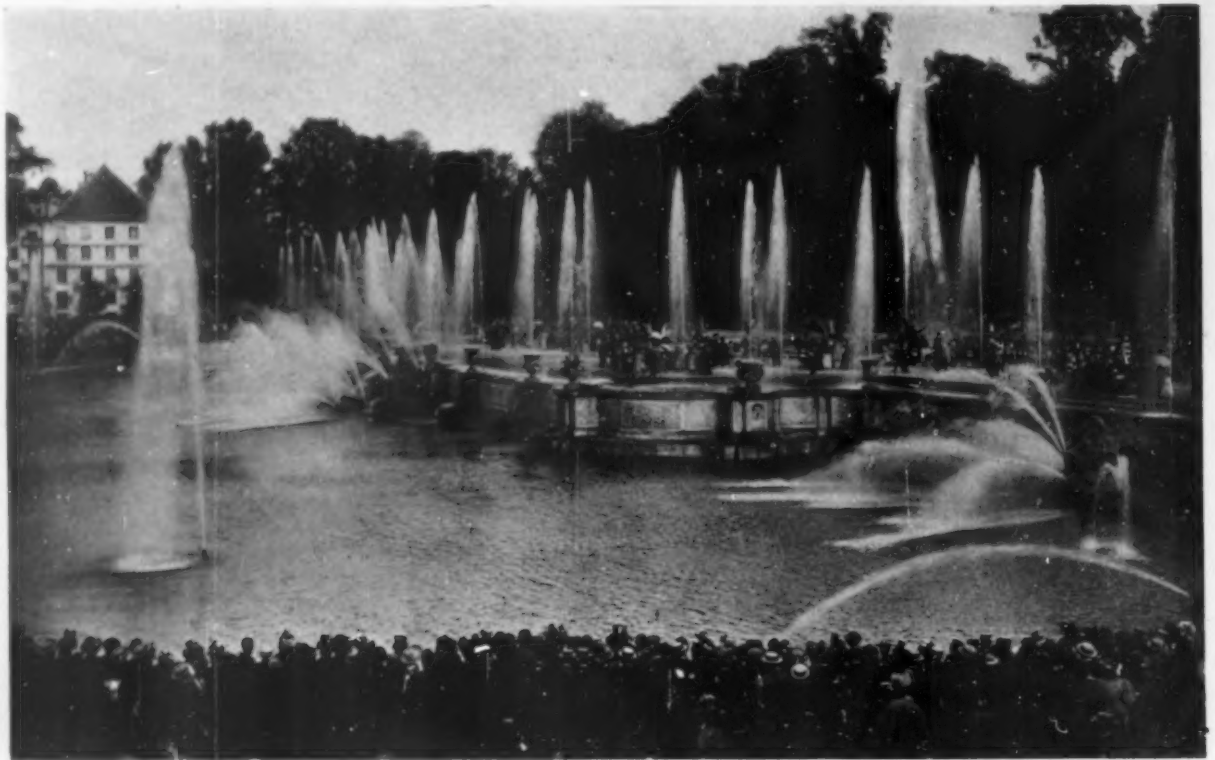
In a graphic and convincing way numerous photographic enlargements of foreign park scenes illustrate the results to be attained by the new arrangement. The Long Water at Hampton demonstrates the beautiful effect to be obtained by the vista down the canal west of the Monument, and the

tapis vert of the Mall is represented by many views from Versailles and elsewhere. Numerous fountains are shown to prefigure those which may be expected in the various basins and squares of the new city. As the elm has been selected for general use in the formal planting, not the least interesting feature of this photographic exhibition is a collection of views showing the American tree as it

appears in Washington and as far north as Boston. The scheme presented for all these improvements is in no sense a visionary one. The property the Commission suggests to be acquired is real estate which at present is



THE LONG WATER AT HAMPTON COURT



THE BASIN OF NEPTUNE

AT VERSAILLES

inexpensive. The beautifying of the Mall is merely a question of planting; the suggested treatments around the Monument and the Capitol are only appropriate settings for these noble structures; and certainly Abraham Lincoln and the Makers of the Constitution deserve as superb memorials as the hearts and purses of the American people can erect to

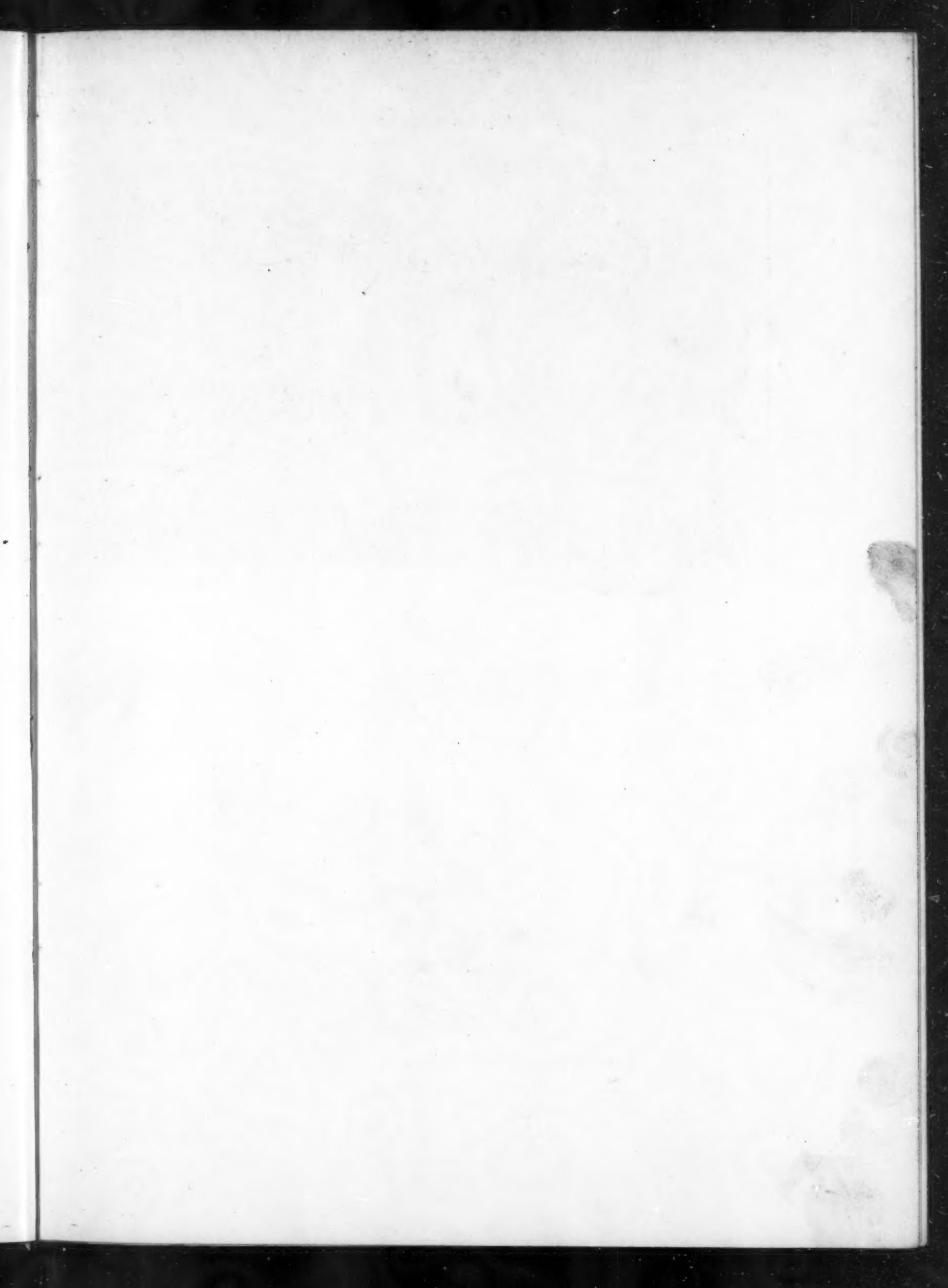
them. The improvement of Washington, the Capital city of the country, should not be a question of local pride alone; the enthusiasm of the whole United States should be called forth to make its reconstruction the principal artistic achievement of the century,—the pride of all Americans and the pleasure and wonder of foreigners.

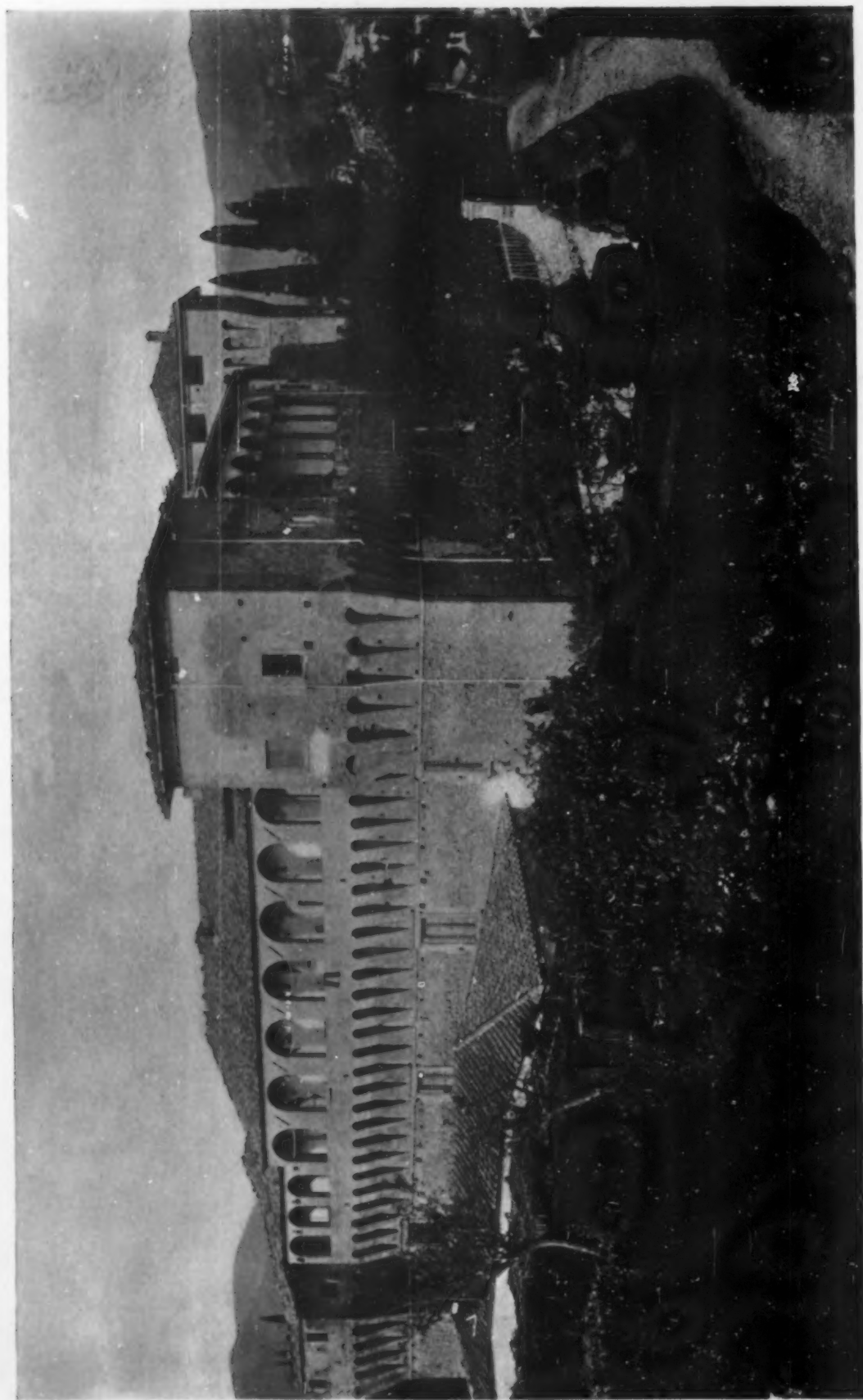
Glenn Brown



“THE CHARLES SUMNER ELM”

In front of the Capitol





TOPIARY WORK AT THE VILLA BUFALINI, S. GIUSTINO, ITALY

"FROZEN MUSIC."¹

PHILOSOPHERS tell us that there are two forms, or modes of consciousness; one of time, and the other of space. They are the two gates through which ideas enter phenomenal life,—the two boxes, as it were, that contain all the toys with which we play. Everything bears the stamp of one or the other of them (though we are not always keen enough to perceive it), and can be classified accordingly. If such a classification be attempted with regard to the arts, music is seen to be allied to time and architecture to space because music is successive in its mode of manifestation, and in time alone everything would occur successively, one thing following another; a work of architecture, on the other hand, impresses itself upon the beholder all at once, and in space alone, all things would exist simultaneously. Music, which is in time alone without any relation to space, and architecture, which is in space alone without any relation to time, are thus, in a manner,

convertible each into the other, by reason of the correspondence subsisting between intervals of time and intervals of space. A perception of this may have inspired the famous saying that architecture is "frozen music,"—a poetical statement of a philosophical truth.

Music depends primarily upon the equal and regular division of time into beats, and of these beats into measures. Over this soundless and invisible warp is woven an infinitely various melodic pattern, made up of tones of different pitch and duration

arithmetically related and combined according to the laws of harmony. Architecture implies the rhythmical division of space, and obedience to laws numerical and geometrical. A certain identity, therefore, exists between simple harmony in music, and simple proportion in architecture. By translating the consonant tone intervals into number, "the universal solvent," it is possible to give them a spatial, that is, an architectural expression. Such expression, considered as proportion only and divorced from ornament, will prove pleasing to the eye in the same way that its correlative is pleasing to the ear, because in either case it is not the special organ of sense which is gratified, but the soul itself, in which all senses are one. Containing within itself the mystery of number, it thrills responsive to every audible or visible presentment of that mystery.

If a vibrating string yielding any given musical note be stopped in its centre, that is, divided by half, it will then give the octave of the original note. The numerical ratio which expresses the interval of the octave is, therefore, 1:2. If one-third instead of

one-half of the string be stopped, and the remaining two-thirds struck, it will yield the musical fifth of the original note, which thus corresponds to the ratio 2:3. The length represented by 3:4 yields the fourth, 4:5 the major third, and 5:6 the minor third. These comprise the principal consonant intervals within the scope of one octave. The ratios of inverted intervals, so-called, are found by doubling the smaller number of the

THE NORMAN PORCH CANTERBURY—AN ARCHITECTURAL EXPRESSION OF A NOTE & HARMONICS

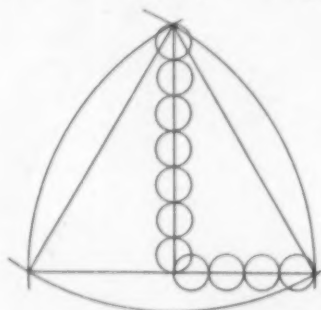


FIGURE ONE

one-half of the string be stopped, and the remaining two-thirds struck, it will yield the musical fifth of the original note, which thus corresponds to the ratio 2:3. The length represented by 3:4 yields the fourth, 4:5 the major third, and 5:6 the minor third. These comprise the principal consonant intervals within the scope of one octave. The ratios of inverted intervals, so-called, are found by doubling the smaller number of the

¹ The second of Mr. Bragdon's series of articles entitled:—"The Beautiful Necessity: being Essays upon Architectural Esthetics," begun in the January number of HOUSE AND GARDEN.

original interval as given above. 2:3, the fifth, gives 3:4, the fourth; 4:5 the major third, gives 5:8, the minor sixth; 5:6, the minor third gives 6:10, or 3:5, the major sixth.



THE RELATION BETWEEN THE SUBMINOR SEVENTH (4:7) AND THE EQUILATERAL TRIANGLE

FIGURE TWO

Of these various consonant intervals the octave, fifth, and major third are the most important because the most perfect. It will be noted that all of the intervals above given are expressed by means of the numbers 1, 2, 3, 4, 5, and 6, except the minor sixth; and this, of all consonant intervals, is the most imperfect. The subminor seventh, whose ratio is 4:7, though included among the dissonances forms, according to Helmholtz, a more perfect consonance with the tonic than the minor sixth.

A natural deduction from these facts is that relations of architectural length and breadth, height and width, to be "musical" should be capable of being expressed by ratios of quantitatively small numbers. Although, generally speaking, the simpler the ratio the more perfect the consonance, yet the intervals of the fifth and major third (2:3, and 4:5)

are more pleasing than the octave (1:2), which is too obviously a repetition of the original note. From this it is reasonable to assume (and the assumption is borne out by experience) that proportions, the numerical ratios of which the eye resolves too readily, become at last wearisome. The relation should be felt rather than fathomed. There should be a perception of identity, and also of difference. As in music, where dissonances are introduced to give value to consonances which follow them, so in architecture simple ratios should be employed in connection with those more complex.

Harmonics are those tones which sound with and reenforce any musical note when struck. The distinguishable harmonics of the tonic are given in figure one. They yield the ratios, 1:2, 2:3, 4:5, and 4:7. The note and its harmonics form a natural chord. They may be compared to the widening circles which appear in still water when a stone is dropped into it; for when a musical sound disturbs that pool of silence which we call the air, it ripples into overtones which, becoming fainter and fainter, die away into the original silence. It would seem that the combinations of numbers which express these overtones, if translated into terms of space, should yield proportions agreeable to the eye. Figure three illustrates a simple application of these ratios to architecture. The subminor seventh (4:7), used in this way, in connection with the simpler intervals of the octave (1:2), and the fifth (2:3), is particularly pleasing, because it is neither too obvious nor too subtle. This interval is important from the fact that it expresses the angle of sixty

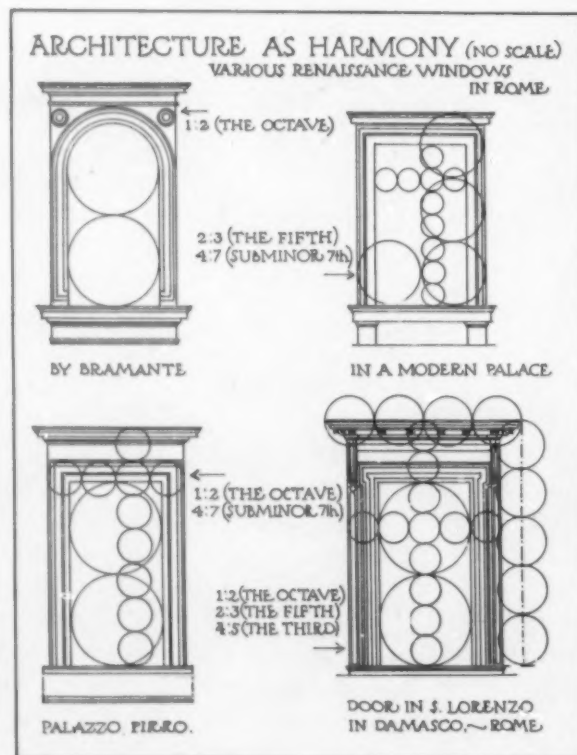


FIGURE THREE

degrees, because the numbers 4 and 7 represent (very nearly) the ratio between one-half the base and the altitude of an equilateral triangle. According to Gwilt, the Gothic chapels at Windsor and Oxford are divided longitudinally by four, and transversely by seven equal parts.

A distinguishing characteristic of the series of ratios which represents the consonant intervals within the compass of an octave is that it advances by the addition of 1 to both terms, 1 : 2, 2 : 3, 3 : 4, 4 : 5, and 5 : 6. Such a series always approaches unity, just as, represented graphically by means of parallelograms, it tends toward a square. According to W. Watkiss Lloyd,—in an article published in *The American Architect* of March 31st, 1888—the scale of ratios which determined all the important proportions of the Parthenon is of this order, advancing by consecutive differences of 5, as shown in figure four. Mr. Lloyd goes on to say : “The oblong plan of the temple has exactly the proportion of breadth to length of 4 : 9,—131.341 front, 228.141 on flank, (error, .012). The same proportion is repeated in the well marked definition of breadth of top step—the hundred Attic feet—and the height from this step to the top of the horizontal cornice.” (It will be noted that this, the most important ratio, is not the simplest.)

It would be a profitless task to attempt to formulate exact rules of architectural proportion, based upon the laws of musical harmony. The two arts are too different

from each other for that; and moreover the last appeal must always be to the eye, and not to a mathematical formula, just as in music the last appeal is to the ear. Nothing is truer than that “the concept is unfruitful in

art.” Laws there are, but they discover themselves to the artist as he proceeds, and are for the most part incommunicable. No masterpiece was ever fashioned by means of predetermined formulas of beauty, though from every masterpiece such formulas may be deduced. And these are useful and valuable, not as a substitute for inspiration, but as a guide : not as wings, but as a tail.

In the present instance, perhaps all that it is necessary for the architectural designer to consider is that important ratios of height and width should be composed of quantitatively small numbers ; and that if possible, they should obey some simple law of numerical progression. From this basic simplicity complexity will follow, but it will be an ordered and harmonious complexity, like that of a tree, or of a symphony.

In the same way that a musical composition implies the division of time into equal and regular beats, so a work of architecture should have for its basis some unit of

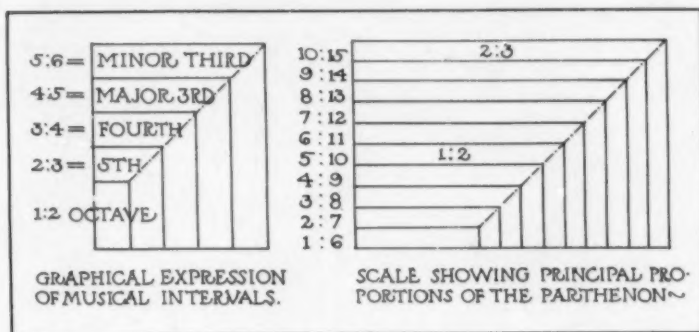


FIGURE FOUR

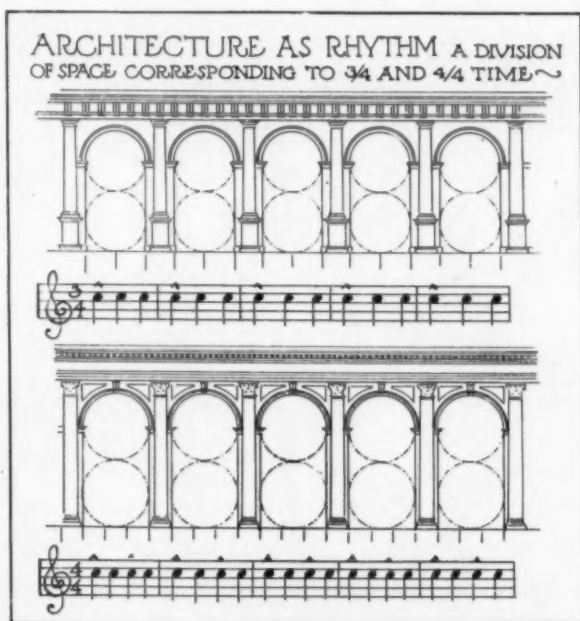
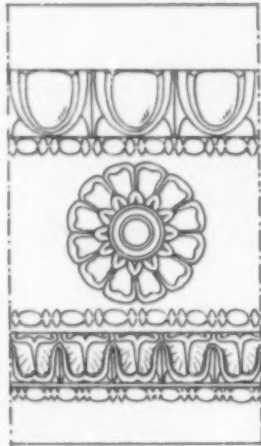
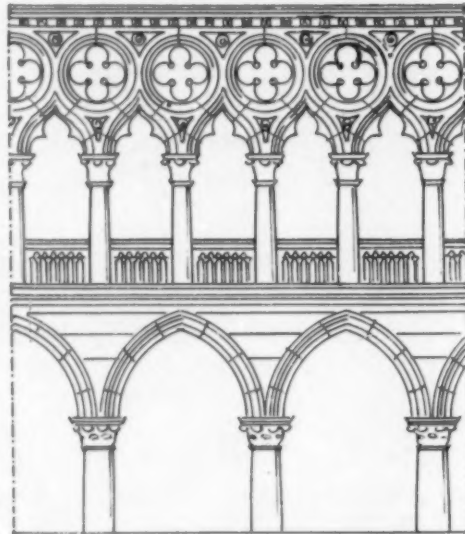


FIGURE FIVE

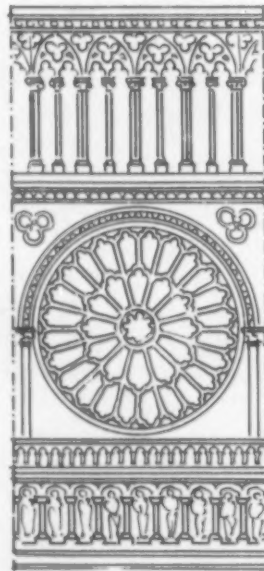
ARCHITECTURE AS PATTERN. (NO SCALE)



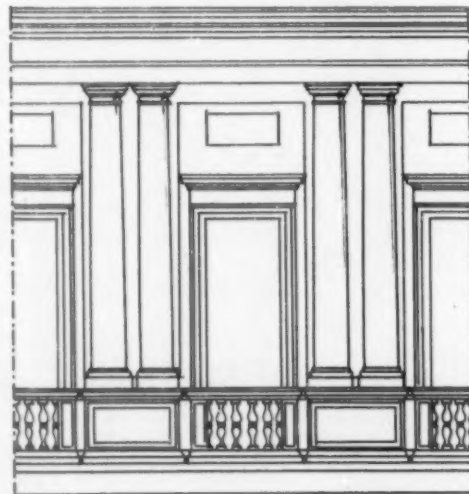
GREEK ~ FROM THE
ERECHTHEION AT
ATHENS



ITALIAN GOTHIC ~ FROM THE
DUCAL PALACE AT VENICE



GOTHIC ~ FACADE
OF NOTRE DAME



ITALIAN RENAISSANCE ~ THE
PALAZZO STOPPIANI AT ROME

FIGURE SIX

space. This unit should be nowhere too obvious, and may be varied within certain limits, just as musical time is retarded or accelerated. The underlying rhythm and symmetry will thus give value and distinction to such variation. Figure five, which shows a Doric and a Corinthian arcade laid out according to Vignola, illustrates how close a parallel exists between music and architecture in this matter of rhythm.

It is a demonstrable fact that musical sounds weave invisible patterns in the air. Architecture, in one of its aspects, is geometric pattern made tangible and enduring, *i. e.*, "frozen music." In illustration of this, note the identity between the fragment of sculptured detail from the Erectheum (shown in figure six), and the central portion of the front of Notre-Dame. The traceried arcades of the Venetian Ducal Palace remind one irresistibly of music. Every well composed façade makes harmony in three dimensions: every good roof line makes melody against the sky.

In a larger sense than any of the foregoing music and architecture are pure and related arts; for in them is presented not a likeness of some known idea, but a thing-in-itself,

brought to a distinct and complete expression of its nature. Neither a musical composition nor a work of architecture depends for its effect upon resemblances to natural sounds in one

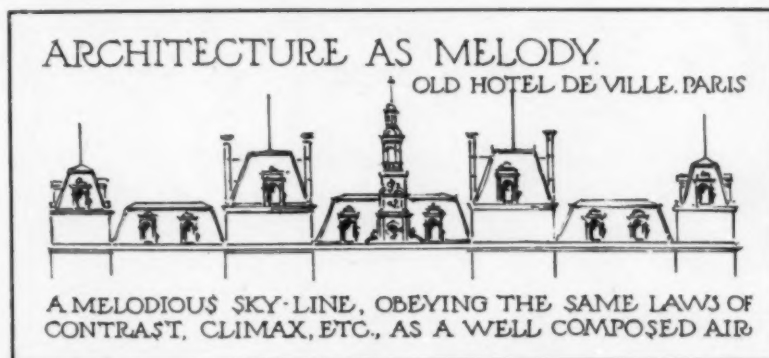
case, nor to natural forms in the other. Poetry, painting, sculpture are not so much creative as re-creative, for in them the artist merely presents the likeness of some known idea in a new and beautiful way.

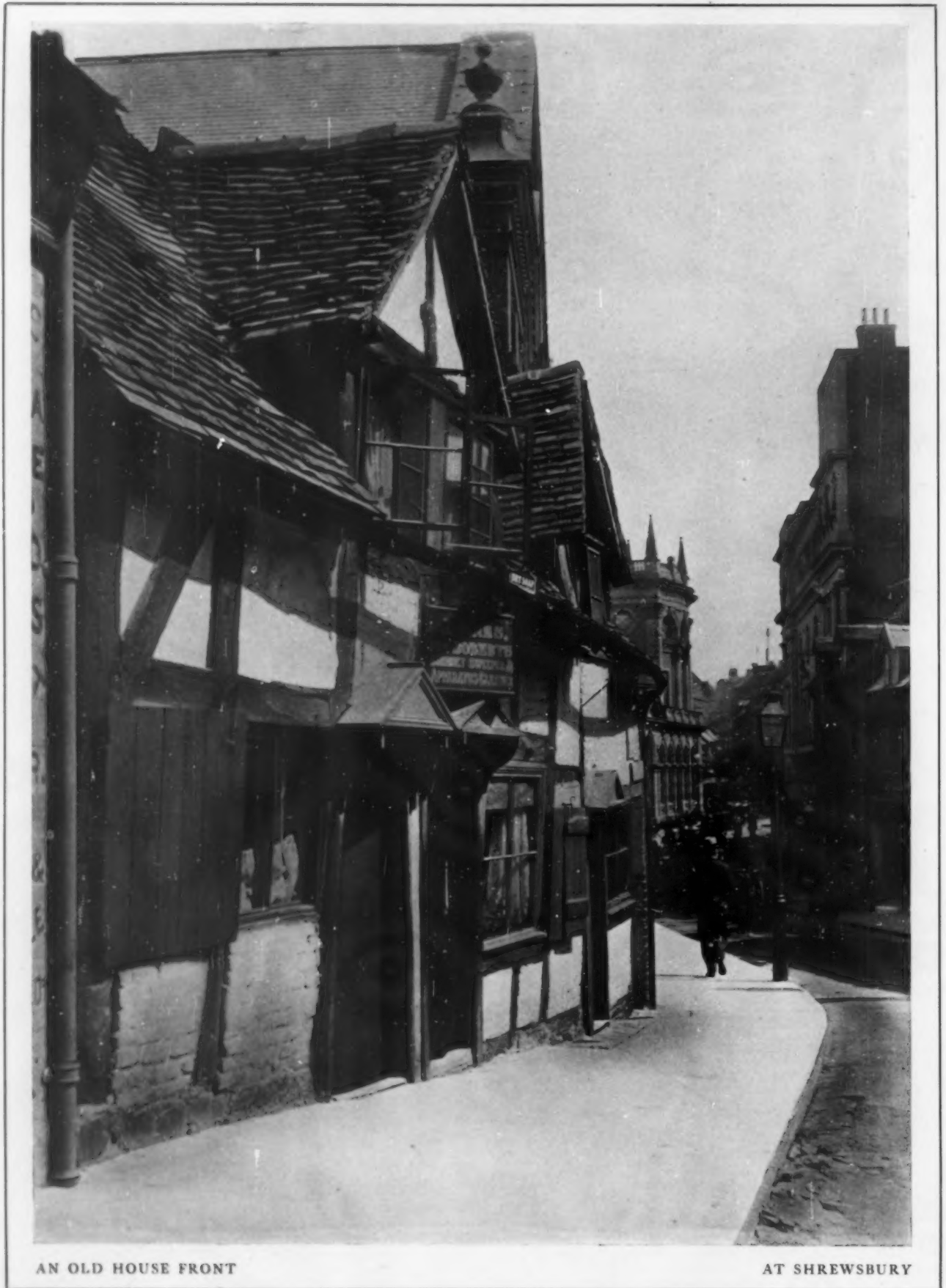
Music expresses best those universal emotions which are the exclusive possession of no race or caste, but the common heritage of humanity. It speaks directly to the soul in a simple and universal language the meaning of which is made personal and particular in the breast of each listener. "Music alone of all the arts," says Balzac, "has power to make us live within ourselves." Architecture expresses that other outside life which is not one, but infinitely various, being conditioned by race, climate, and environment. Architecture in presenting and preserving, as it does, a record of the complicated every-day life of a people, shows forth also the secret thought which animated them. Just as music, through the universal, arrives at the particular, so architecture, through countless particulars, attains the universal.

Claude Bragdon.



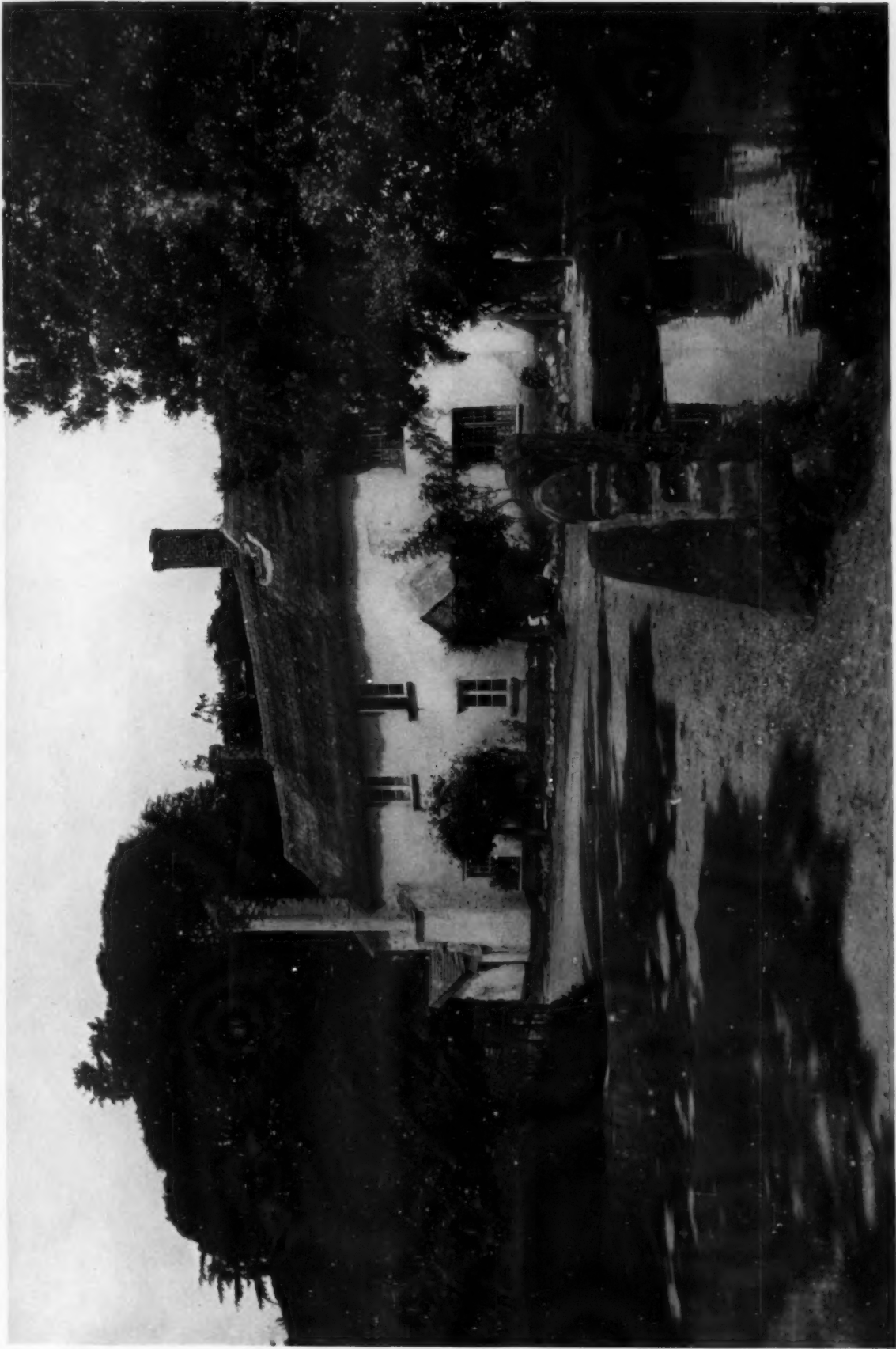
FIGURE SEVEN





AN OLD HOUSE FRONT

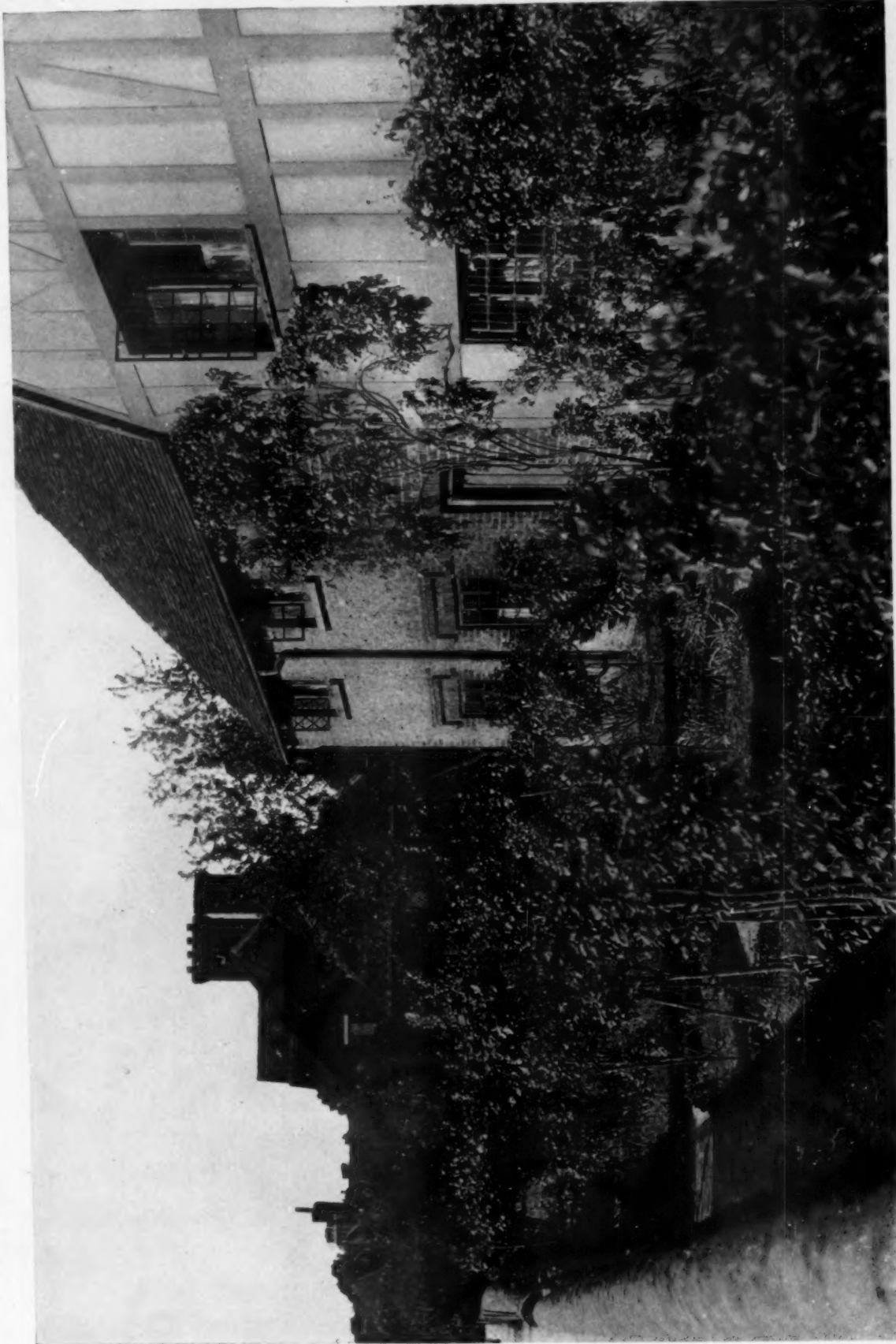
AT SHREWSBURY



ON THE DAWLISH ROAD, NEAR EXETER



BYWAYS OF ENGLAND
ON THE OUTSKIRTS OF DORKING, SURREY



WHITE PARRISH, WILTSHIRE

A ROADSIDE GARDEN

Bellefontaine, at Lenox, Massachusetts

BELLEFONTAINE

AT LENOX, MASSACHUSETTS.

Designed by Carrère & Hastings, Architects.

II.

THAT part of Bellefontaine dealt with in the January number of **HOUSE AND GARDEN** was the southern side of the building and the avenues and terraces there facing the open country. We entered the grounds by one of the poplar avenues that extend laterally from each end of the house. The southern outlook of the place is not, however, usually seen by the visitor, for the entrance most frequently used is a drive which leaves the road from the village, before one comes to the house itself, and leads into the woods. At the road is no mark or suggestion of the monu-

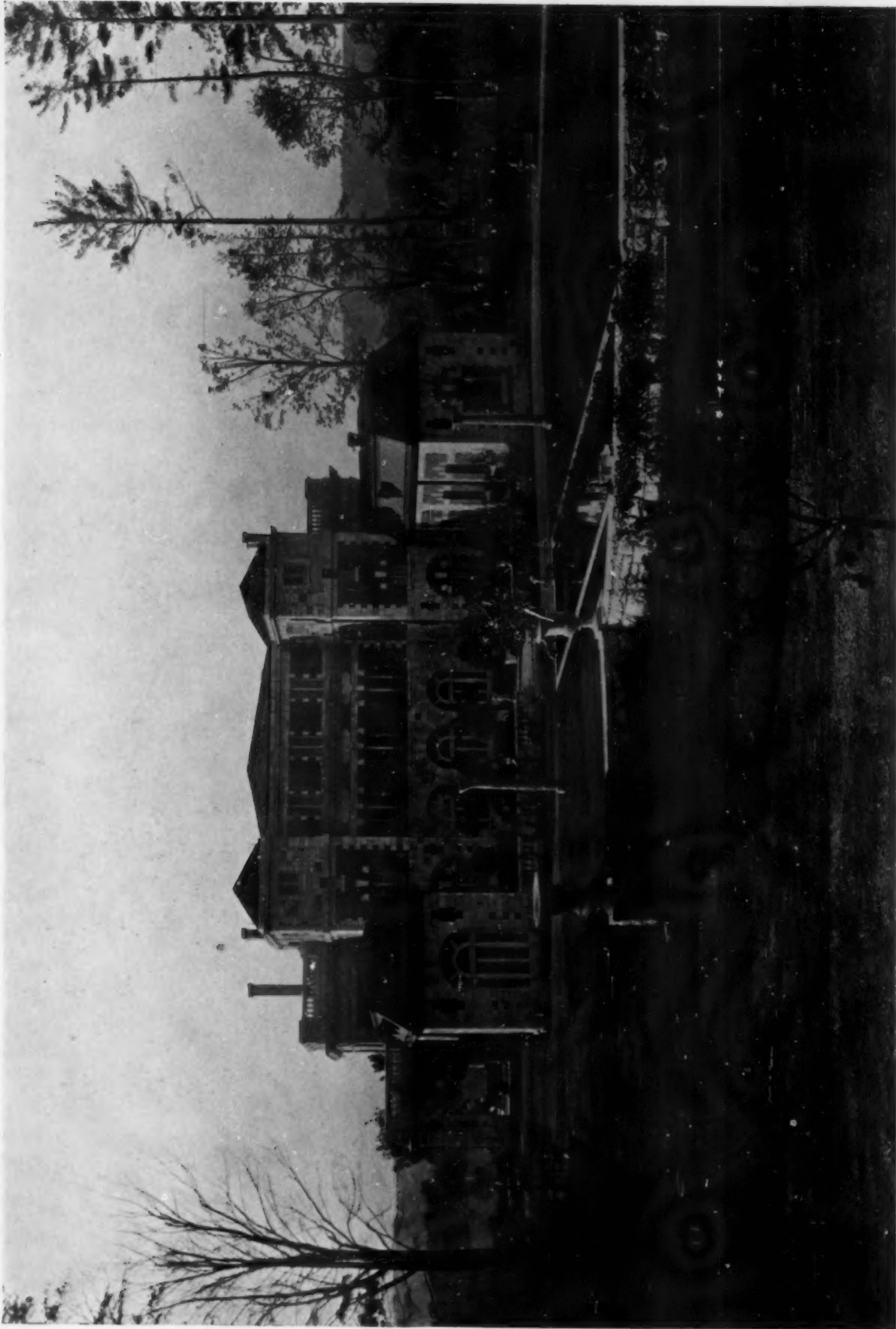
mental place beyond, and the drive enters the shady gloom of a seeming wilderness. A grotesque figure of marble grinning here and there from behind a dark hemlock, a statue or pergola before a hemicycle of pines are the only traces of a designed effect which, in a moment, comes completely into view. A turn of the drive suddenly discloses the house. Two rough stone posts, half-covered with vines, are passed, and then before one is spread a large forecourt—the house across its distant end.

This great opening of sunken lawn, bounded first by drives and then by dense forest trees, is the most impressive feature of Bellefontaine. Without it, with what poor effect the mansion would have been huddled against the wood, where now the brick and marble walls cast their shadows over a smooth turf and are reflected in the waters of a pool. A

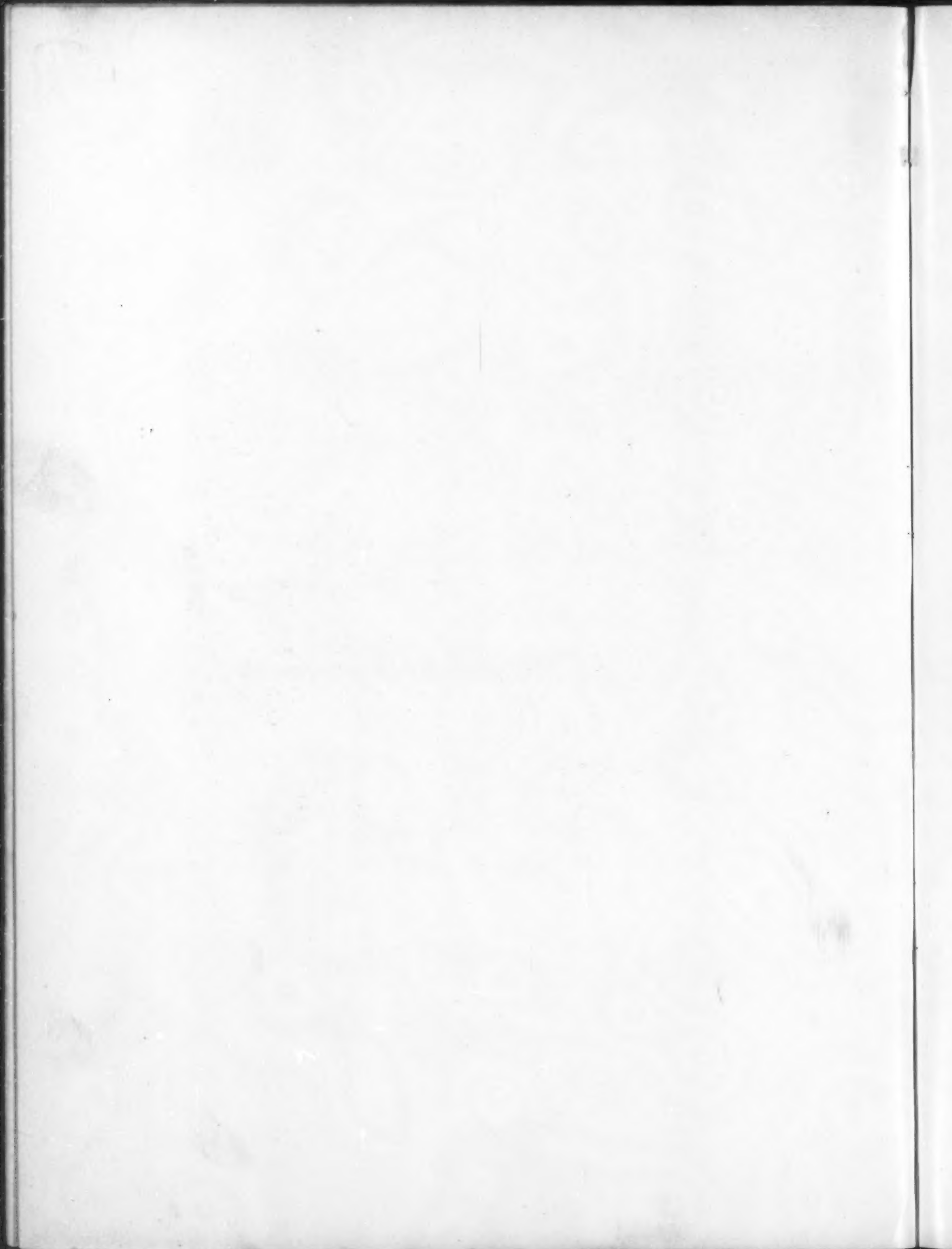


A DRIVE

BELLEFONTAINE



BELLEFONTAINE FROM THE NORTH



straight edge of wood reaching across the hillside was found on the original site. The house was placed at the centre of this line and a wide outlook toward the south obtained. On the north the trees were cut away for the forecourt. As the ground to be used was a hillside the question of grades was first to be solved. The slope from the entrance of the court to the entrance of the

above the water at the upper end than at the south or house end. This height between the water and the grass and the strong border of white curbing separating the two is perhaps the one crudity in the whole effect. It is somewhat veiled, however, by the grass and vines which spring from the joints of the stonework. At the northern end, where there is the greatest difference between the



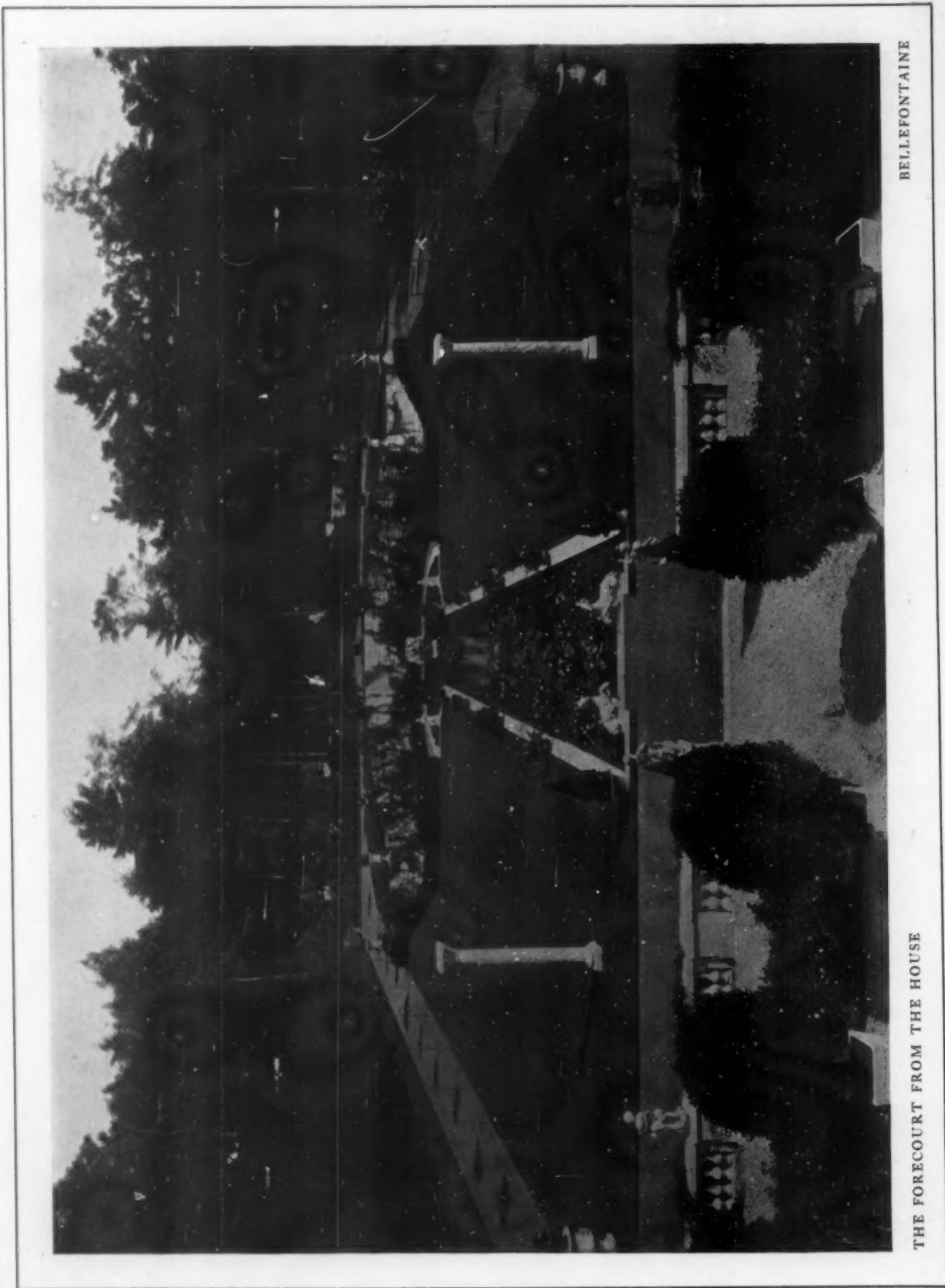
THE POOL

BELLEFONTAINE

house was a natural one for the drive and was kept unchanged for that purpose. The lawn occupying the central space and containing the pool is not level, as at first seems, but it declines slightly as the drive does, and is thus a medium between the slope at the extreme sides of the forecourt and the surface of the water in the centre. The retaining walls of the pool extend much higher

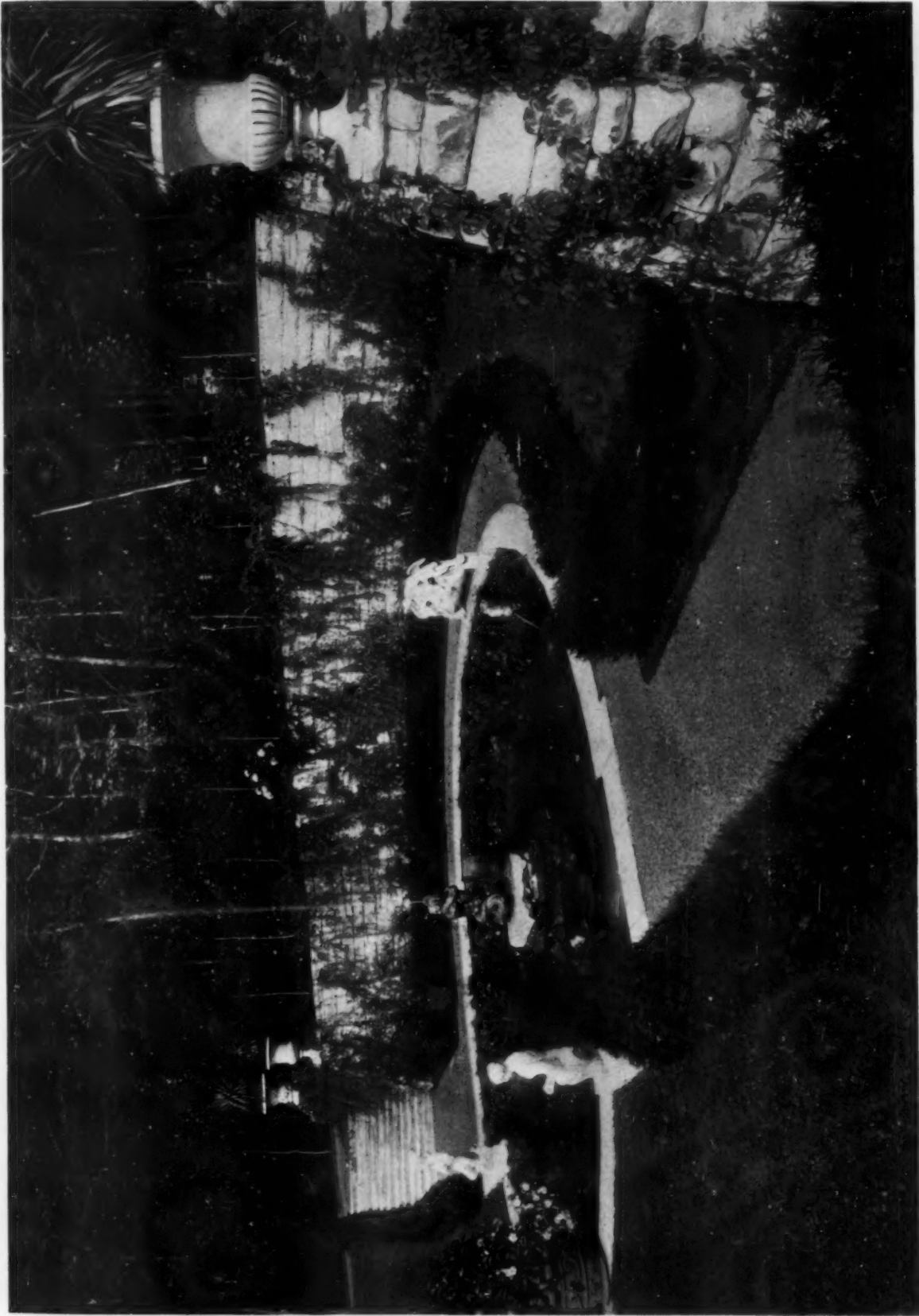
level of the lawn and the drive, a heavily battered retaining wall provides a strong ending feature of the design. Two low hedges cross the lawn in front of the wall and, dividing, one skirts the semicircular margin of the pool. Creeping vines trail over the whole height of this high wall and save from complete interruption the green background of Nature upon which the design has been placed.

Bellefontaine, at Lenox, Massachusetts



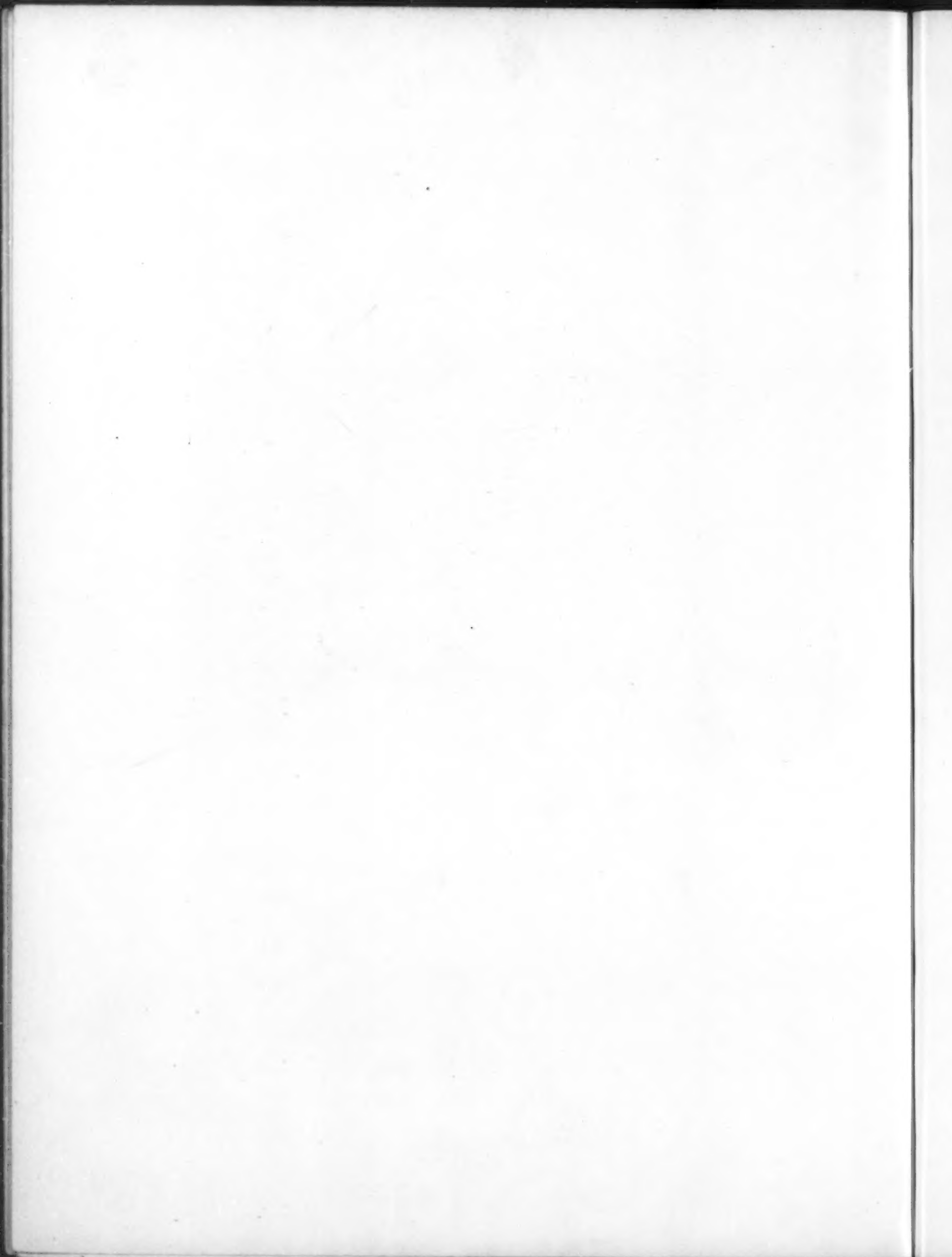
BELLEFONTAINE

THE FORECOURT FROM THE HOUSE



BELLEFONTAINE

THE HEAD OF THE POOL





STEPS TO A FLOWER GARDEN

BELLEFONTAINE

In sobriety and dignity lies the beauty of this quiet atrium giving impressiveness to the house. The forest trees enclose and shelter it in a way that no planted hedges or built walls could attain; and so well related to the house was the open space that, once the trees were cleared, little was needed to heighten the effect. A wise restraint governed the work and a quiet reserve now pervades the result. No tumult of flowers disturbs the peaceful contemplation of the Egyptian lotus in the pool. Architectural ornaments are few, and effects have not been gained determinedly, but have been left to arrive by yearly growth. To more fully appreciate what has and has not been done,

we have only to imagine how calamitous would have been the careless use of hedges, beds of flowers and labyrinthine walks, and to feel the serenity of the quiet lawn and the easy modulation to the forest made by the rows of young trees. The future growth of these planted avenues means a steady improvement of the present ensemble. The wall at the extreme end containing the gateway is half obscured by creeping vines; and sculpture has been used wisely to emphasize salient points. The two marble shafts, recently placed in the centre of the lawn, are the only restless objects in the scene; and this by virtue of their inappropriate placing. They mar the wide basin of grass and should

Bellefontaine, at Lenox, Massachusetts



THE EAST FLOWER GARDEN FROM THE PORTICO

BELLEFONTAINE



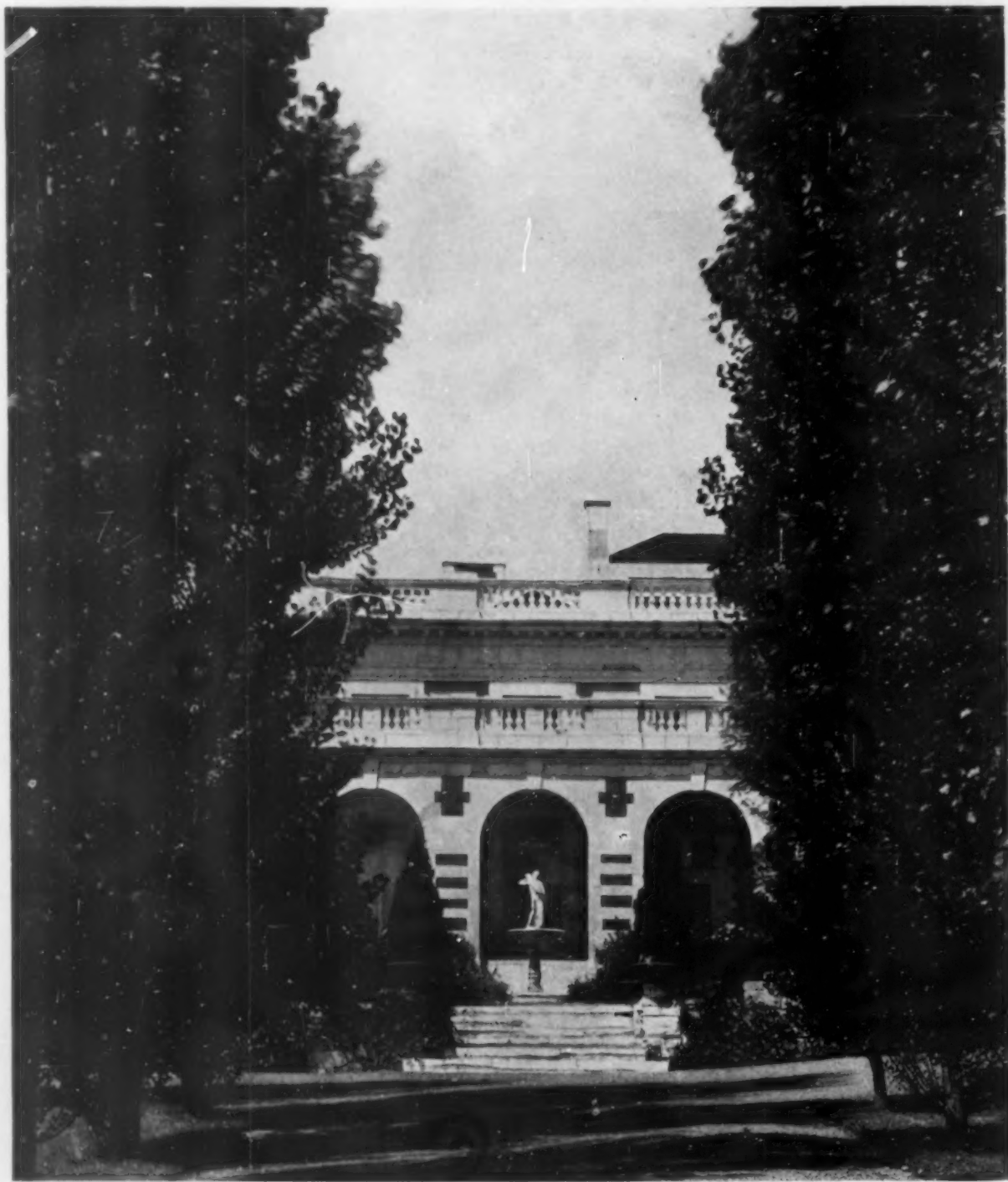
THE EAST AVENUE

have been set, if used at all, at the extreme corners of the lawn.

The perfect symmetry of the forecourt garden is an echo of the balanced arrangement of the house itself. Two principal wings of the building project on this side and enclose a small court included within the

precincts of the house by a stone balustrade. The surface of this space is of small stone chips, upon which are two beds of flowers following on each side the walls of the wings, then turning and paralleling the balustrade (see the plan illustrated in the January number of *HOUSE AND GARDEN*). Prim bay

Bellefontaine, at Lenox, Massachusetts



THE EAST END OF THE HOUSE

BELLEFONTAINE

trees, are placed at equal intervals before three wide windows at the centre of the façade. The fact that these windows open from the main corridor of the house and not from a living-room defines the true importance of the forecourt garden compared with other

surroundings at Bellefontaine. The flower gardens at each end of the house, the terrace upon the south and the outlook in that direction are the most cherished views, and the garden on the north is considered a mere formal approach to the house, and is enjoyed

from the windows of not a single important room.

A *salon*, library and dining-room are ranged in a suite along the south front of the house, and the wings extending northward accommodate the entrance and smoking-room on the east and the kitchens upon the west. The inconspicuous entrance, without *porte cochère* and protected only by a *marquise*, its removed position upon the outside of the east wing, preserves the seclusion of the living-rooms. According with the French Renaissance of the exterior all the details within have been carefully studied. Corridors, floored with marble tiles, are walled with stone below a frieze decorated by painted rural scenes, and stairways are of wrought bronze. The sides of the principal rooms bear elaborate wainscots and pilasters reaching to high and richly ornamented ceilings. All the furniture consists of beautiful pieces collected by an owner who yearly spends several months abroad. Though a great and interesting variety, it is entirely congruous to its surroundings.

The artistic success of Bellefontaine is largely due to the intelligent use of materials. The exterior walls are laid with a local brick,

made at Pittsfield, of a warm color, slightly more pinkish than the familiar Haverstraw product. The stone which appears in great quantity in each façade is a marble from the quarries at Lee. In order to save expense the second quality pieces were used,—the “short ends” and “rough backs,”—and their irregular tones of color have happily saved the house from the formal stiffness usual whenever marble is employed. The views of steps and walls illustrated in this and our preceding article show how well the unstraightened pieces have lent themselves to the desired end. Upon the house a rough texture has been obtained by coarse tooling; and balusters have been put in place, showing all the marks of the lathe. In the outlying walls little mortar has been used, and the lower surfaces of copings have been left entirely rough so that the rectilinear features of the architecture have been softened to harmonize with the freedom of the planting. From these details about the house to the Florentine well in the centre of the vegetable garden near the road, close examination finds a perfect sympathy between these inanimate objects and their surroundings.



THE PERGOLA, BELLEFONTAINE

A House at Bernardsville, New Jersey



A HOUSE AT BERNARDSVILLE, NEW JERSEY

A HOUSE AT BERNARDSVILLE,
NEW JERSEY

Designed by Lord, Hewlett & Hull, Architects.

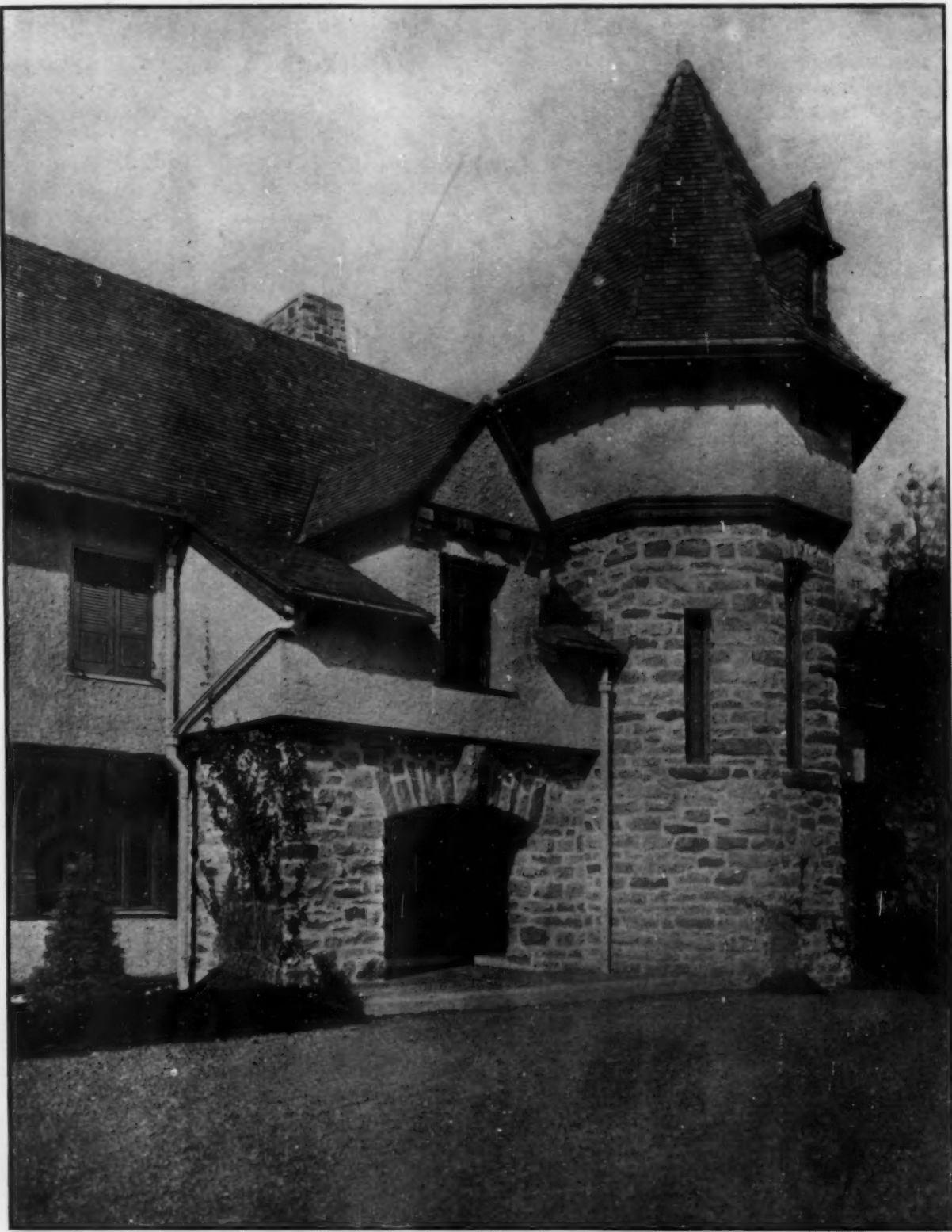
IN the valley which extends southward from the village of Mendham in northern New Jersey this unpretentious house stands upon a hillock of considerable size. Beautiful views of the valley lie upon the north and the south, but a barrier of hillsides rises

above the house upon the east and west and gives an agreeable variety to the surrounding horizons. The two sections of the house are set at an angle with each other, and the exterior or northwestern side has been the rather unusual choice for the living portion of the place. The principal rooms open there upon a porch and a terrace. Within the angle of the wings on the southeastern side is



A HOUSE AT BERNARDSVILLE

FROM THE SOUTHEAST

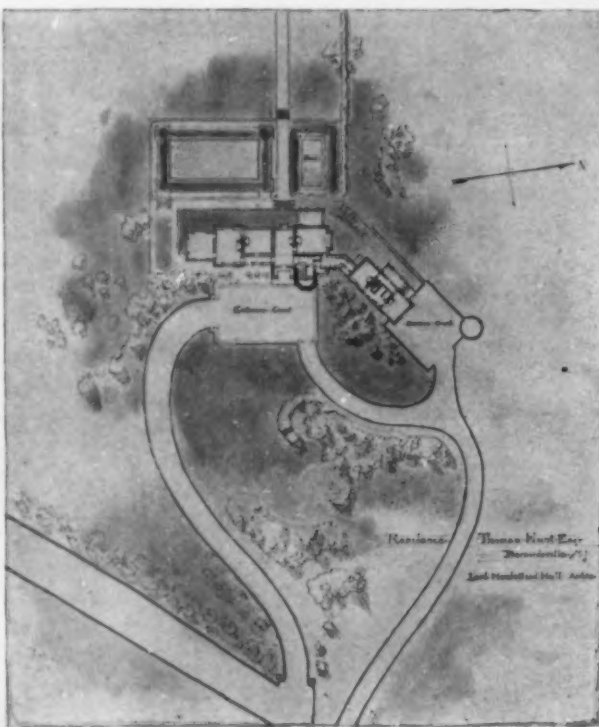


THE ENTRANCE

A HOUSE AT BERNARDSVILLE

A House at Bernardsville, New Jersey

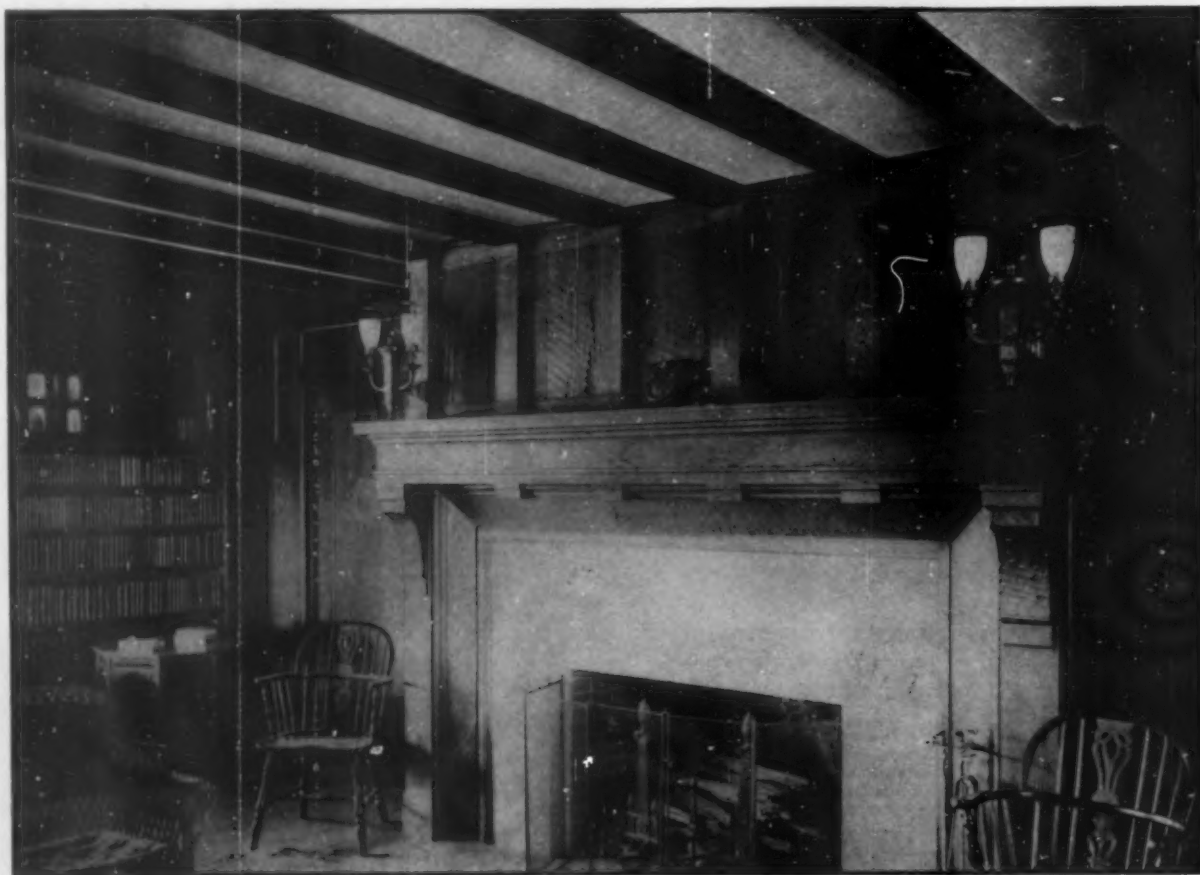
the main entrance, protected by a low archway in a section of the house attached to a tower. An irregular and picturesque treatment was suited to the summit of the knoll and has caused the avoidance of any marked formality in the disposition of the gardens and terraces. The planting and the arrangement of the drives have been entirely free and unconventional. A pool on the west side of the house is overlooked from the terrace of the dining-



THE PLAN

room. In adding an interest to the environs it also serves as a reservoir for the water supply of the gardens and stables. These are situated on the slope of the hill northeast of the house and at a level about thirty-five feet below the platform on which the main building rests.

Rubble stone, laid with very wide full joints, is the material of the tower and outlying masonry; stucco covers the upper walls of the house; and the roof



THE LIBRARY

A HOUSE AT BERNARDSVILLE

is of red flat tiles. All the wood portions are bold in shape, and are dressed only by the adze. Inside the details have been broadly designed, and they are quiet and unobtrusive.

architects have followed the type of the farm-houses of Normandy. If from these the present building may be removed on account of its rigid aspect, it is due to an inevitable



THE HALL

A HOUSE AT BERNARDSVILLE

There is an absence of trifling mouldings and of restless paneling. Rudely vigorous mantels and a wainscot of rough-hewn and unvarnished chestnut running from floor to ceiling give an ingenuous simplicity to the interior. In the general character of the design the

defect of newness and one that is surely to pass with age. Outlines becoming pliant with time, and tones of color softening by the weather, will make the house more and more akin to those picturesque old French farmsteads which have influenced its shape and form.



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THE hopeful part of the proposed plans for the improvement of Washington is that they are already far on the way to realization. The opinion of the Park Commission has been sought and followed in connection with undertakings already provided for. The new buildings for the Departments of Agriculture, of State and of Justice, the Union Station for the railroads and the abolition of grade crossings throughout the City, the Municipal Hospital, the railroad and highway bridges across the Potomac, the Grant, Sherman and Sheridan memorials:— all these take their place in the new scheme. Other projects are about to be authorized, such as office buildings for the House and for the Senate, a hall of records, the improvement of the Anacostia flats and the War College. These also will carry into effect parts of the comprehensive plan which was put before the public on January 15th. While the design has been prepared under the direction of the Senate Committee on the District of Columbia, the cooperation of other Congressional committees and of members of the Cabinet has brought about a harmony of action and a constant endeavor to provide for existing and well-recognized needs.

The chief benefit of the designers' work recently completed for the Capital City is the

opportunity given to initiate public undertakings so that they may each finally come into a complete and harmonious unity. Such a foresight has always characterized well-managed private institutions and the public corporation should possess it no less. That the wisdom of these preconceived designs for our cities has become appreciated is shown by the suggestion just made to Mayor Low by the Fine Arts Federation of New York City. That society has urged that a commission of distinguished experts be appointed to mature a plan for the future development of New York in much the same manner that has made it possible for Washington to become one of the most monumental cities of the world.

There seems to be a popular notion that these schemes are devised by architects solely to dazzle the public with the huge figure of cost their immediate execution would involve. It would not only be impossible to execute at once such a vast project in its entirety, but there is little to be gained by such despatch. It would mean useless extravagance. From the point of view of wise economy the design should be carried into execution piece by piece, as needs for the different sections arise and as funds are forthcoming to carry them out. In the case of Washington all the circumstances are most fortunate. Particular sections of the work have been left to the care of certain influential persons who have willingly set their hearts upon the ultimate completion of the several features. Senator Cullom is fathering the Lincoln section and we can trust Mr. Root to see that the scheme for the War College may not lapse. The railroads have aided the cause by agreeing to deflect a portion of their tracks and to put underground the remainder. The opinion of the Commission has been heeded in fixing the location of the new Union Station at an appropriate point. The preparation and exhibition of the admirable scheme, its position in our mind's eye, is a large part of the task done. The fulfilment should now be a comparatively easy matter making an interesting growth during the next fifteen or twenty years.



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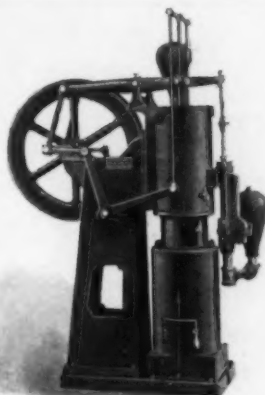
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