Vol. II.

JUNE, 1902.

No. 6.

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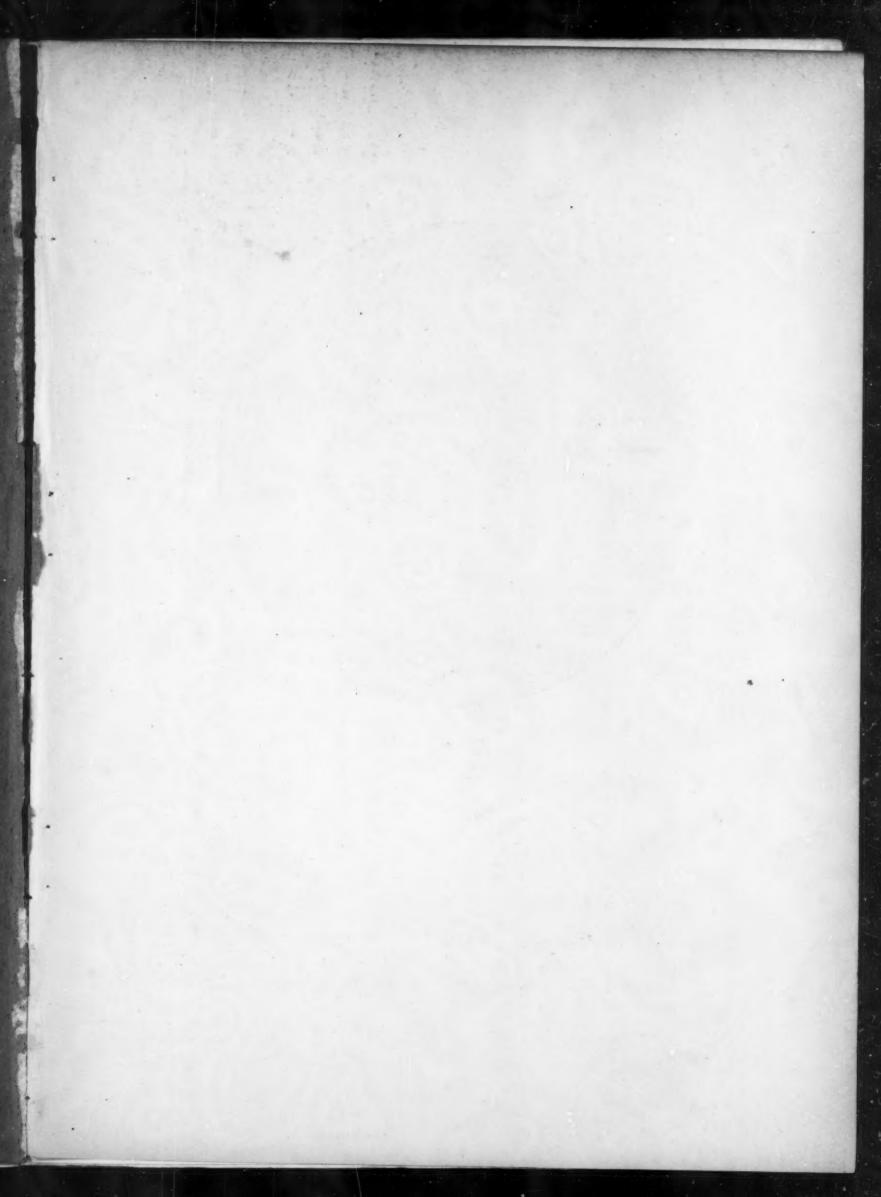
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Sgraffito Pie Plate, made by David Spinner, Bucks County, Penna., about 1800.
From the collection in the Pennsylvania Museum.

House & Garden

Vol. II

JUNE, 1902

No.6

THE EARLIEST DECORATIVE POTTERY OF THE WHITE SETTLERS IN AMERICA

BY EDWIN ATLEE BARBER

Curator of the Pennsylvania Museum, Fairmount Park, Philadelphia

THE art of the potter is founded on the earliest industrial efforts of the human race, and consequently the artistic instinct first sought expression through the fruit of the kiln. Man's primary care was to procure the necessary means of subsistence, and when this had been assured he turned his attention to the improvement of his surroundings. It has been said that the history of nations is recorded in the development of their fictile products, and this statement is applicable not only to indigenous peoples but to those which have migrated to other lands, as well.

Among the earlier settlers in Pennsylvania were the Palatines, who began to arrive from Germany and Switzerland toward the end of the seventeenth century. For nearly a hundred years, until the breaking-out of the Revolutionary war, they continued to come in increasing numbers. Many of them took up land in the Eastern counties of the State, particularly in Lancaster, Berks, Schuylkill, Lehigh, Montgomery and Bucks. They brought with them, among other things, a knowledge of the art of working in clay, and the artisans whose services were first in demand in this new country were the potters. It is a curious fact, however, and one not easily explained, that the German potteries seem to have been confined almost entirely to two of these counties,-Montgomery and Bucks. Here, for nearly a century and a half, one of the most remarkable phases of the potter's art continued to thrive on the patronage derived from the neighboring farms.

For some years the people were absorbed in establishing themselves in their new sur-They erected unpretentious roundings. dwellings of wood and occasionally of stone, sufficient for their immediate needs, and they devoted themselves to the cultivation of their little farms. Their household furniture was of the most primitive sort and the simplest luxuries were practically unknown. They had but little intercourse with the outside world, and the knowledge of the industrial arts which they had brought with them from the Fatherland, so long dormant, at length began to bear fruit. Teachers of fractur-or black letter-sprang up in various parts of the community and the walls of their dwellings began to be brightened with illuminated certificates of birth and marriage and transcripts of hymns and scriptural passages, quaintly embellished with paintings in brilliant colorings. A number of furnaces were erected, where iron stoves were manufactured, with ornamental designs representing incidents in sacred history, and at least one factory was established for the production of colored glassware of excellent quality.

In the first attempts at interior decoration by a hardy and struggling people, we may expect to find a bold and manly vigor of treatment rather than the refinement which is the direct result of long established prosperity. The evolution of the artistic instinct, after the first awakening, is slow and gradual, but none the less certain. The worker in clay who has long employed his time in the production of the coarsest and



BLACK DISH WITH COLORED SLIP PAINTING
1.—Dated 1826. Brought from Germany
From the Collection in the Pennsylvania Museum

simplest utensils will naturally devote some of his increasing leisure to the embellishment of his wares, for the delectation of a sweetheart, a wife or an employer's household. Articles which formerly were intended to serve only a useful purpose are transformed into objects of vertu, to be carefully treasured as heirlooms, and handed down from mother to daughter. The chimneyshelf, the high-boy and the mantel-piece, where previously stood the fat lamp, the apple-butter crock and the candle mould, become resplendent with rows of ornamental pie-plates and brightly colored jars. On each piece is engraved a curious decorative device, or an inscription in the Pennsylvania German dialect, sentimental, philosophical, religious or humorous. Frequently the names of the makers or the recipients are added, and occasionally a date, recording the exact time of manufacture. In the absence of printed literature of a popular nature, these inscribed dishes afforded unlimited amusement and became very popular with the people.

As early as the year 1733, as indicated by a dated example that has been preserved, ornamental earthenware was being made in the German settlements of Pennsylvania. The common red pottery was covered with a white engobe or coating of slip, through which the decorations were scratched, showing red designs in a white field, reheightened by additional tints obtained by the use of metallic oxides. The reverse method of tracing liquid "slip" of various colors through a quill on the red ground of the natural clay was also practiced, but to a lesser extent. From this time on, to about 1830, covering a period of a hundred years or more, the twin arts of sgraffito and slip decoration flourished to a most remarkable extent. Then the products from the neighboring settlers of other nationalities began to find their way into the German communities and the home-made pottery was gradually



GROUP OF SLIP DECORATED EARTHENWARE

11.—Large Meat Dish with Tulip Design and Two Circles of Inscriptions, Dated 1760,

111.—Far with Tulip Decoration V.—Sugar-Bowl with Crown-shaped Cover From the Collection in the Pennsylvania Museum

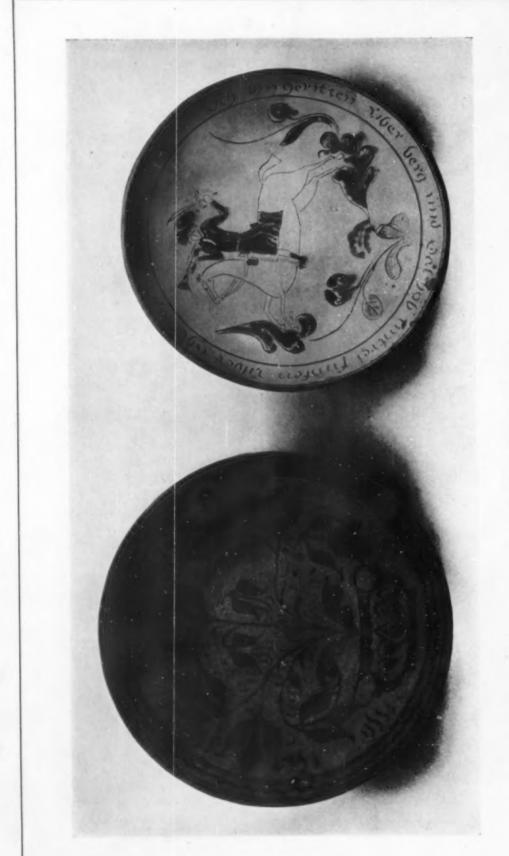
supplanted by articles of pewter, china and delft, imported from England and Holland, so that by 1850 the primitive styles of decoration had practically been abandoned in the United States.

As the Pennsylvania Germans were preeminently an agricultural race, they drew their first artistic inspiration from the familiar objects in nature by which they were surrounded. Their earliest attempts at decoration were imitative, rather than inventive. Instead of employing purely conventional designs and geometrical figures, as did the native Pueblo races of the West, they took as their models plants, birds, animals and, finally, the human form. Not the least



SGRAFFITO PIE-PLATES

VII.—Inscribed Example with Heraldic Lion, made by VIII.—Tulip Decorated Piece made by John Nase,
Frederick Hildebrand
From the Collection in the Pennsylvania Museum



EXAMPLES OF SGRAFFITO WARE

X.—Pie-Piate made by John Nase, 1805, bearing etched representation Washington on Horseback

From the Collection in the Pennsylvania Museum

IX.—Pie-Plate cvith Vase and Tulips in brocur. Made in Eastern Pennsylvania in 1789 interesting facts to be learned through the study of their pottery are those relating to the horticultural achievements of the early settlers. We know that the people were lovers of flowers and that they paid considerable attention to the cultivation of their gardens, but we do not find in their literature any mention of their ornamental plants. The simple flower and its foliage figured on their oldest ware. The tulip, which they cultivated extensively, was one of their favorite motives. Next to the tulip in popular estimation was the fuchsia or ear-drop (oehrdroppen). Later we find the lilyof-the-valley and occasionally the dahlia represented on their ware. While in time these delinea-

tions became modified by a more or less conventional treatment, they usually retained their distinguishing characteristics, by which they can be readily recognized.

The art of slip decoration had been practised in Germany for many years before the German immigration into Pennsylvania had commenced. Examples of this ware were brought to America from time to time, by arriving settlers, and served as models for the potters here. These old pieces are still



LARGE FLOWER VASE
XIII.—With "Pie-crust" Ledge and Bird and Flower designs above.

Made by Samuel Troxel, Bucks Co., Penna From the Collection in the Pennsylvania Museum



EARLY PENNSYLVANIA WORK

XI.—Pie-Plate made by David Spinner in Bucks Co., Penna., about 1800 XII.—Large Mug with Tulip Design.
Maker Unknown

From the Collection in the Pennsylvania Museum

occasionally found in some of the country houses within a distance of fifty miles from Philadelphia. They are distinguishable from the products of the Pennsylvania potters by the brighter color of the red clay and by the black glaze which covered them. A fine specimen of the imported ware (shown in Fig. 1) has for a central design a rudely traced house and tree, with the date "Anno 1826" beneath. On the roof of the building is perched a bird, while a woman stands at the threshold plucking flowers from an enormous garden vase. The coloring of the slips is varied and vivid.

The dishes bearing the oldest dates were flat on the bottom, with straight sloping sides (see Fig. II). These were used for vegetables or for meat pies and answered the double purpose of dish and platter. The curved pie-plate, which is a later form, is indigenous to this country, the home of the fruit pie, and is not found in Europe (see Figs. IX, X and XI). The sgraffito style of decoration offered greater possibilities to the ceramic artist than the more clumsy method of tracing liquid slips through a quill.

Soon after the death of our first president, some of the German potters sought to perpetuate his memory by depicting him in Continental uniform, mounted on a horse. The representation shown in Fig. X, was a

favorite one at the pottery of John Nase in Montgomery County. Many examples bearing this design have been found, with dates ranging from 1805 to 1847. These "Washington" plates are among those most eagerly sought for by collectors of early American wares. They frequently contain inscriptions which are usually irrelevant and trifling. On the plate here shown the following couplet is engraved:

"Ich bin geritten uber berg und Dal, Hab untrei funten Üwer ahl,"— I have ridden over mountain and valley, (And) have found disloyalty everywhere.

This sentiment has been altered on a similar piece, of later date, to read, "have found pretty girls everywhere."

embellished with a heraldic lion, was made by Frederick Hildebrand, whose pottery was in the same neighborhood. The inscription encircling it is also of a somewhat philosophical character:

"Ich leibe was fein ist,
Wann schon nicht mein ist,
Und nur nicht werden kan,
So hab ich doch die freud darn,"—
I like fine things,
Even when they are not mine,
And cannot become mine,
I still enjoy them.

David Spinner, who came from Switzerland, was one of the most progressive of the Bucks County potters. His sgraffito etchings were considered the best that came from



SGRAFFITO POTTERY

XIV.—Plate bearing Continental Soldier and Colonial Dame.

Made by David Spinner, Bucks Co.,

Penna., about 1800

XV.—Pie-Plate bearing a Parrot, Tulips and Conventionalized Fuchsias. Made by Andrew Headman, Montgomery Co., Penna., 1808

Perhaps the most common of the inscriptions used by the Pennsylvania Germans is that which occurs on the tulip-decorated pieplate, also the work of Nase, which is shown in Fig. VIII:

" Ich bin gemacht von heffner sin, Wan ich verbrech so bin ich hin,"— I am made of potter's earth, When I break then I am gone,

which has reference not only to the dish itself, but to the maker of it as well, and the human race in general.

The smaller plate in the same illustration,

the local potteries. Characteristic examples of his work may be seen among the illustrations here given. This work was executed about the year 1800, certainly not later than 1811, which latter was the year of his death. An entire series of elaborately decorated dishes, which for many years stood ranged along the old Spinner mantel shelf, may be seen in the Pennsylvania Museum, Philadelphia.

In addition to the pie-plates and panshaped dishes, which largely predominate, various forms of utensils and vessels are still



GROUP OF SGRAFFITO POTTERY

XVI.—Basin zvith Fuchsia Design XVIII.—Large Vegetable or Meat Dish zvith Bird and Tulips, 1796 XX.—Drinking Cup
XVII.—Covered Jar showing Tulip Motive XIX.—Inscribed Flower Vase, showing Floral Device

to be seen among the descendents of the old craftsmen. Toy whistles in the forms of birds and animals, mugs and drinking cups, tobacco jars, shaving basins, jardinieres and flower bowls, elaborately ornamented in the same characteristic manner, are found in considerable abundance. With the cultivation of the gardens in summer, came the desire to beautify the interiors of the houses through the winter season, and poor indeed was the German household which could not boast of at least a few flower-pots or vases of graceful form and decorative character, which were ranged with their brillant contents along the sunny window ledge. Here might be observed the rose, the forget-me-not and many old-time plants, both native and imported, among which were numerous rare varieties of the showy tulip, which had been the favorite flower in the Fatherland since the beginning of that most remarkable horticultural mania, the tulpenwuth (tulip madness), which swept through Europe in the sixteenth and seventeenth centuries. When the balmy days of spring arrived, the blooming plants were carefully transplanted to the well-kept beds outside. On the lawn the fertile appletrees were laden with pink and white blossoms, beneath which the peacock strutted proudly in his gorgeous livery.

The Pennsylvania potters infused into their work a large measure of sentiment and the quaint pot works with their low domeshaped kilns which usually occupied rooms in the dwellings of the proprietors, were the scenes of social gatherings and merrymaking. Previous to the opening of the apple-butter season, when every good housewife was expected to prepare a supply of this toothsome confection for winter consumption, a stock of earthenware crocks must be provided, in anticipation of the expected demand. This was the busiest period of the year with the local potters. The "burning of the kiln" was always a great event at the pottery, especially to the boys employed there. For thirty-six hours, while the firing continued, they were relieved from the exacting duties of their regular employment. While the men were attending to the fires, the youth of the neighborhood were accustomed to assemble in force to enjoy to the fullest extent the novelty of being permitted to remain up all night. All sorts of games were indulged in,—"Hide and Seek," "Silly Bunk" and "Tag," in the moonlight outside, and checkers and dominoes, in the light of the roaring kiln.

There are a few yet living whose memories go back to those good old times, when they "assisted" the old potters in their work; when slip decoration was considered the highest development of the ceramic art,—before the advent of tin utensils and the cheapened white china of more recent times had closed the picturesque old potteries of the Pennsylvania German communities forever.



VIEW FROM THE LILY-POOL AT NORTHCÔTE

Photographed in the Summer of 1898



THE ARCHITECT'S FIRST SKETCH OF THE HOUSE

NORTHCÔTE

A DAY AT NORTHCÔTE

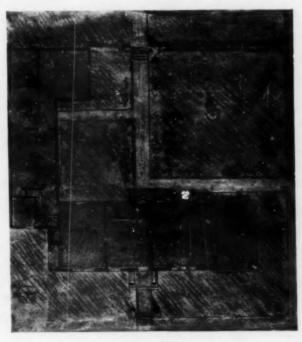
A HOUSE AND GARDEN IN NEW HAMPSHIRE

IN leaving the Connecticut River and penetrating the hills of Western New Hampshire, one is quickly in the midst of rural scenes and far from centers of feverish activity. Comfortable summer homes have come to lurk there in the copses of forest trees, but

the countryside itself bears no marks of disfigurement by restless citizens. From the highway which runs under the brow of Dingleton Hill and then crosses Blowme-Down Creek, a white cottage is seen rising above a hedge near the summit of a hillside. But little of the clapboard walls is visible, for their height is soon surmounted by a roof of dark red shingles. Several outbuildings of these same colors can be seen between clumps of verdure and above a wall of shrubbery which is grouped below the hedge extending around the hillside and enclosing the habitation. Beyond all, the summit of the hill rises to a bare outline against the sky, immediately behind the house, and, farther to the eastward, it meets the dark

background of a primeval woodland.

Arbor-vitæ, maples and slender poplars appear within an allenclosing bulwark of young thickly-set hemlocks. Occasional glimpses of a vine-clad arbor and orderly pairs of dark coniferous spires betray a design in the spaces between the buildings; and because, perhaps, these furtive views refuse at a distance to explain themselves to passers-by on the road below, one is eager to ascend the steep hillside and

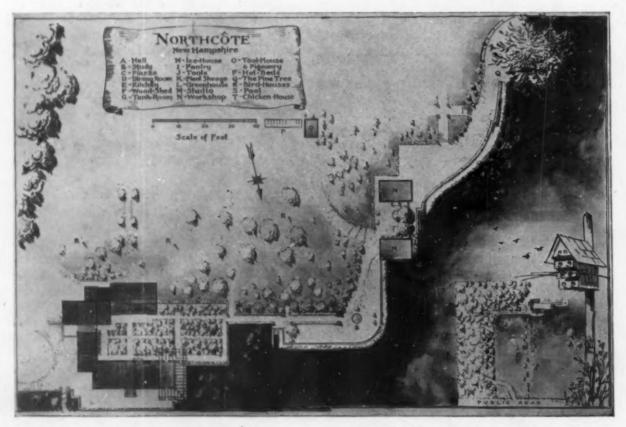


THE ARCHITECT'S FIRST PLAN



A SKETCH BY THE ARCHITECT

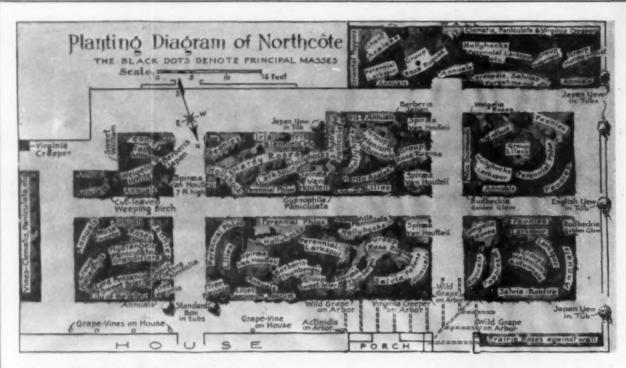
Before work at Northcote was begun



COMPLETE BLOCK-PLAN OF NORTHCÔTE

Measured and Drawn for House and Garden, September, 1901





THE MATERIALS OF THE FLOWER GARDEN

NORTHCÔTE

investigate the domestic stronghold. The gate by which one enters to mount the hill is in a post and rail fence, like those enclosing neighboring farms; and traversing the

drive, which curves in easy fashion through a wood, we are welcomed by lusty cackles from a hen-house a few yards above. The drive soon emerges upon a grassy level at the house. Here the kitchen door and the entrance to a woodshed confront us,-not the least appropriate point of approach to a place whose household customs are truly those of the country.

All the entrances are so equally important to the household that a search for the conventional front door is needless. We should likely seek our genial host through the woodshed, under whose dark archway the glory of the garden first greets our eyes. Bathed in sunshine it lies, flecked with trembling shadows of young trees rising in its midst and shading

the walls over windows of comfortable livingrooms. Enlivened by the sound of bees and the notes of birds, it is a resplendent setting for the dwelling walls which enclose the garden on two sides. On a third, the low wall of a greenhouse protects the almost sacred space. Treading the gravel walks we are soon lost amid the exuberant shrubbery which overflows the beds. A parrot ruminates in his cage under a weeping birch. Now we are in front of the hall door of the house, and see, across the vivid green and



THE NORTH ENTRANCE



THE GARDEN DOORWAY

NORTHCÔTE



IN THE MIDST OF THE GARDEN

DEN NORTHCÔTE
Photographed in the Late Summer, 1901



WALK AT THE END OF THE GARDEN



THE HOUSE FROM THE HILLSIDE

through the hall, the countryside spreading below in the blue distance. A few more steps and a glance toward the other side of the garden leads upward over the greensward of the rising hillside spotted with firs and young fruit-trees over which bird-houses

are poised at the top of gaunt poles.

The paths which lead through the garden are walled with green, and the high banks of the larger shrubs extend far above one's head. New delights come unexpectedly upon one at every turn, lying in wait, as it were, for those whose real love for thriving plantlife directs prying glances into shadowy depths or, tiptoe, peers over a sunny mass of phlox or larkspur. As one bows under an arch of

spirea or threads shady alleys, new vistas continually unfold. These are of short length within near-by green, but always they open into that hazy distance which is a universal background and a constant contrast to the bright strong colors near at hand. Quiet

nooks invite a rest in the shade of a thicket, and the broad cap of a wood parapet, enclosing the western end of the level space beyond the garden proper, is a brink where one may sit and view the silent panorama below. There an undulating valley stretches

out to the north and west, and roads, dotted with farmhouses, trail across its rich farmland and disappear in clefts between far-off hills.

Nearer at hand, in the midst of one of the garden views the owner of Northcôte is discovered in working garb building a bit of wall, trimming a hedge or shifting pots of plants. A cordial greeting, and host and guest repair at once to that favorite spot known as "the pine-tree."



VIEW FROM THE LILY-POOL

Photographed in the Late Summer, 1901

is at the end of one of the walks of the garden which passes from view of the house and curves around the face of the hill, keeping at all points its own level. Under the stiffly spreading branches of the pine-tree, all important matters of the elevated household



UNDER THE ARBOR

At Midday, in September

NORTHCÔTE



THE WALK TO THE GARDEN

NORTHCÔTE

Hedged with Siberian Arbor-Vita

are discussed. The point of view is high for both mind and body, and the whole world seems spread out below,—at least a New Hampshire world. On the wood bench, which curves its back into the hillside, all those that walk in the garden finally rest and watch the changing moods of the day, the march of summer clouds shadowing the landscape below. The cool shade is welcome on warm days; and even in winter, the pine-tree's gaunt branches shelter the spot from the heaviest of snow drifts that else-

where bury the hedges and garden and limit outdoor promenades to a single trail to the barn.

Just as all the parts of this charming place combine to make a delightful harmony, so are Northcôte and its owner a unity. A retired artist without the beautiful surroundings which a keen mind and refined senses require, would be as difficult to imagine as the creation of this place without that constant personal interest, the loving care and the actual handiwork of one who has been from

the beginning its leading spirit. The owner's nature is reflected everywhere in all the details of the house and grounds. Thus the individuality of the place is indissolubly established. Modest retirement is the note which pervades it. Simplicity and absence of pretence are everywhere apparent. The house itself is neither large nor elaborate; but the house when finished was only a bare form,

intime character in which all the beauties of the garden culminate, and to which a certain irregularity gives interrupted views adding the charm of the unexpected. It is a place to walk in, to live in, and be happy in, unconventional in its planting, easy in its growth and free from foreign objects which any native house gardener of these last hundred years would have scorned.



BEYOND THE STUDIO

NORTHCÔTE

around which all the natural charms of the place have since been carefully trained by a patient growth. Even the garden, which in our pride we often put in front of our houses to dazzle the approaching stranger with the utmost we can muster, is here concealed well within those exterior parts of the house which first meet public view. Nor at last does it spread out in meretricious show before a terrace or a drawing-room window. Great formality has been avoided to gain that

Moreover this home has suffered no second-handed tending by which an owner directs his servants to carry out his wishes. Beyond the house itself, built from designs of Mr. Wilson Eyre and finished about Christmas 1893, there is nothing at North-côte which has not been carried out under the enthusiastic eyes and supervision of its owner. He has set the plants with his own hand; furniture and bookshelves have been made by him; he has painted walls and doors in



UNDER THE PINE-TREE

NORTHCÔTE

beautiful harmonies. Building a wall he admits to be his particular weakness; and his contemplated additions to the present plan comprise untold dreams of stone steps and parapets laid by himself in cement which shall surpass all others for its speedy and relentless setting. Strolling about the garden and the open level toward the west, long councils he will hold with an interested friend upon the best manner of draining a troublesome corner of soil, a rigid means of framing for wooden parapets and the best timber for this or that



WALK TO THE GARDEN

November, 1899

purpose or exposure, for timber is, after all, the principal building material of this New Hampshire country, and Northcôte is but one of the places where its satisfactory application for use and beauty can be seen. Soon a call for dinner is heard and the meal is found awaiting on the porch. As we eat, ground squirrels slip in and out of the bushes near by; and some in their boldness come upon the porch and approach a chair, while a pause in the talk is filled with a catbird's strain.

After dinner comes an hour of pleasant lounging in the study. The sounds of birds and insects lull to sleep whoever throws himself on one of the divans under the windows. An arbor bearing actinidia, Virginia creeper and wild grape screens the window from the afternoon sun, and fresh breezes enter the room from the open north. A portfolio of views of the place, taken at different periods in its history, is a part of the library. There are

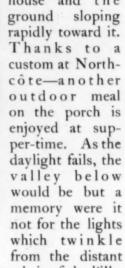
the large pictures looking toward the house from the lily-pool and another in the midst of the garden, both taken in 1898, three years after the first planting; then follow that of a girl resting on the parapet beyond the pool, taken a year later, and the snow scene taken in November, 1899. Future

guests may now find other views photographed for this article in September, 1901. These show the garden after a growth of six years. The process of change is still going on; for the one who is ever watchful of the garden's variations has new schemes for transplanting some of the flowers or casting out certain others. This transformation is already under way.

The new greenhouse is next inspected and

details of construction are discussed. A cedar tank is being installed for additional water supply and space for a small aviary has been marked out. A walk beyond the greenhouse toward the top of the hill affords a new impression of the entire arrangement of the place and reveals the reason in its name. We see the house below us, set upon the north side of the hill, and the garden in a level space

made between the house and the custom at North-



which twinkle from the distant farm-houses. Often the cool air of the hills, even in summer, requires an open fire in the study, whither the company repair for reading or music. The hours of the household are country hours and bedtime comes early. Guests for the night are guided to cheerful, simply furnished rooms by old-fashioned English candlesticks,—and the bracing air

inhaled all day brings complete rest.



THE HILLSIDE SNOW-BOUND November, 1899



THE PARAPET AT THE WEST

THE TREATMENT OF CITY SQUARES.—I.

I HAT is the function of the city square, triangle, open space? By common consent the municipality is better for these oases. Towns and cities are locating them as opportunity offers; but the task has never been developed into a science. Yet there must be some general principles underlying their arrangement. These ought to form one of the most interesting chapters in the "Science of Modern City Building;" for how complex are the uses to which we put them, how various are the sites which are granted to them! Indeed, the squares can hardly be discussed under a single head. There are the spaces in a crowded business district, most frequently before a public building; there are the spaces in the residence quarters, formed by the convergence of streets at irregular angles, or distinctly set apart for areas of beauty or for children's pleasure grounds; and there are the spaces frequently placed before railroad stations. Each group may well demand a consideration peculiar to itself.

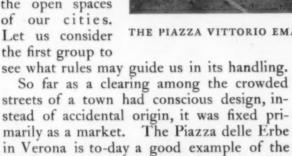
As yet, be it observed, the spaces have not even a generic name, unless it be that cumbrous and indefinite title, "open space"which might be street, or river, or back yard, quite as well as the thing that is meant. We take them, too, as we find them, usually, three-fourths of them not purposely created, but found existent through fortunate miscalculations or irregularities in the urban topog-And then we do with them what raphy. the whim of the moment dictates—perhaps to change our minds after a decade, in cases of some success, perhaps to wish we had decided on other treatment before the work is finished. For we fill in our open space as if it were a blank area on a wall that we were attempting to "decorate" or "treat" without a thought of the wall around it, without



THE PIAZZA DELLE ERBE

VERONA

regard for its possible harmony, for its purpose, for its connection with the building. Fancy our doing that! We would be clapping a poster where there ought to be a mural painting, we would be painting delicately where a passage was to be, or we would be leaving bare a space in the midst of a thickly-figured wall. We do the like of all these things in treating the open spaces of our cities. Let us consider



principle—the white umbrella-awnings of its



THE PIAZZA DI S. CROCE



THE PIAZZA VITTORIO EMANUELE (PIAZZA MAGGIORE)

FLORENCE

FORLI

countless booths quivering in the breeze until, as one looks down upon it, it is like a sun-flecked, shimmering sea. In other Old World cities one may often find the space around the cathedral thus in use. But once the community has felt the impetus of modern ideas in city building, the market is swept aside into its proper place where the traffic of the way flows before, rather than through, it. Then arises the first problem of the distinctly "city" square. The suddenly disused space is in a crowded portion of the city, is comparatively roomy, and is generally before an important public building-governmental or religious-whose strong and permanent attraction of the people accounted for the market's location there. The travel through the square is considerable.

In determining the treatment to be here adopted, three things should be considered: first, the traffic's accommodation and its convenience; second, the character of the neighborhood as a whole and how its monotony may be relieved by this opportunity; third, what is required for the harmonious setting of such of the abutting architecture as may be deemed fairly permanent. Such architecture is likely to include the public building.



THE PIAZZA OF ST. MARK, From the West

VENICE



THE PIAZZA OF ST. MARK, From the East

VENICE



TRAFALGAR SQUARE, From the South

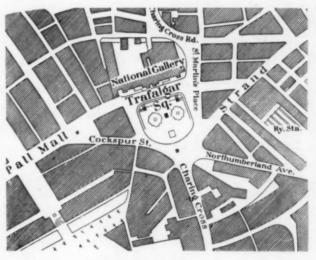
LONDON

In the consideration of this latter point even something more than a "harmonious" setting may be sought. The square will occasionally give an opportunity for terracing, or for balustrades, that will make a fine approach without trespassing too severely on precious space. In one of the papers of the recently issued report on "The Improvement of the City of Washington," there is this suggestive comment: "In many cases

the approaches to a simple inexpensive structure exalt it above a pretentious, but undeveloped, neighbor, and in any scheme for the embellishment of a city too much stress cannot be laid on these important accessories to the higher architectural achievements." clearly, again, if there be planting in such a square, the paths must not be circular, but diagonal, so affording the short cuts that will accommodate the traffic and not lengthening courses in order that a few more flowers may be planted. Flowers growing under conditions that compel the hurried traveler to make a detour around them exasperate rather than delight. Similarly, if a monument or fountain is to adorn the square, it must be in scale and must not occupy too much ground. A hundred examples illustrating the wise and

unwise treatment of the squares that are thus essentially urban come to mind.

In front of Santa Croce in Florence there is a broad space, made familiar by the statue of Dante. The space is too large for the traffic. The result is a feeling of bareness, and a sense of loneliness for the statue. The sun beats pitilessly on the great empty area, where a few trees, so

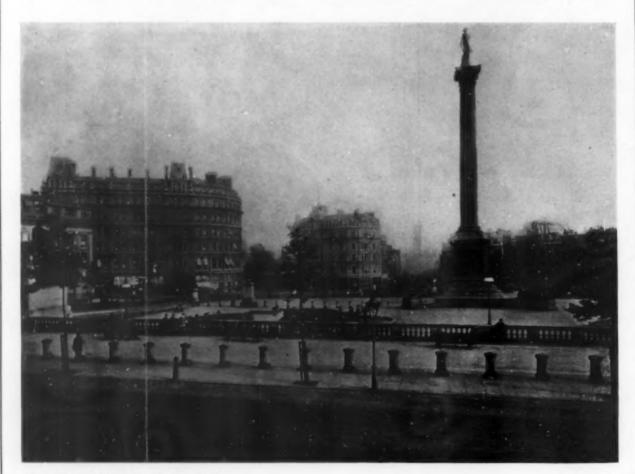


PLAN OF TRAFALGAR SQUARE

planted as not to close the vista of the church, would vastly enhance the beauty of the spot, would relieve the monotony of the neighboring streets, and would not impede travel. This is speaking, of course, from the esthetic point of view, for historically the square's emptiness is justified by the games of which it was once the site.

Without so good an excuse, one must find the like emptiness in, for instance, Forli's not with too much sentiment, as having a relation to public life quite akin to that of the open hearth to private life. It loosens fancy, in the very center of business, and ever bids the spirits rise.

In front of St. Mark's in Venice there is one of the most famous squares in the world. This is bare, only the Campanile and the ornate flagstaffs before the cathedral trespassing upon it. But could there be any-



TRAFALGAR SQUARE, From the North

LONDON

Piazza Vittorio Emanuele after the market has been swept aside. In fact, municipal neglect of vegetation is a typical original sin in the cities of garden-like Italy. But the new civic gospel has attacked it; and the original sin, it ought to be added, is partly atoned for by the constant virtue of running water, in fountains. These, to be sure, originally served a useful purpose, were not provided merely for embellishment; but the city fountain has been described prettily, and

thing else here? In a city where there was plenty of room for walking, turf might have been planted to advantage so that the palaces would have looked on a garden-court. But in Venice the space is too precious. As "the focus" of the city, "Keep off the grass" signs would have robbed the people; water here would have mocked them; while merely a decorative pavement, well setting off the architecture, is substituted appropriately for turf and flowers, and in its

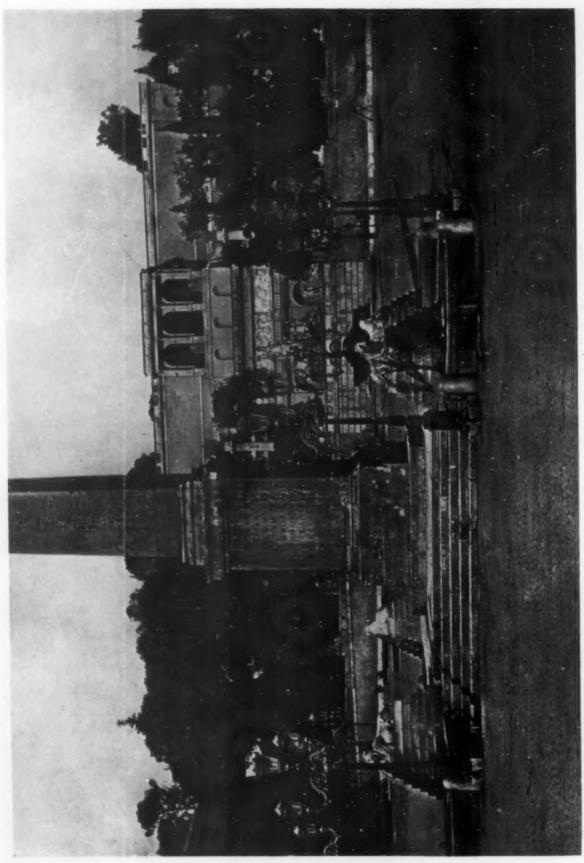


THE FOUNTAINS

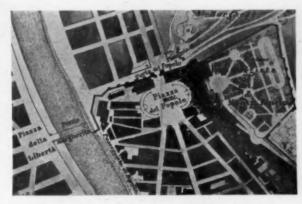
TRAFALGAR SQUARE

breadth is even more strange to Venice than a garden would have been.

Trafalgar Square, London, is one of the most traveled squares in the world. There are two huge fountains and something like half a dozen statues besides the great Nelson column. But the fountains stand back from the maelstrom of converging traffic, and against the terrace, so that they take no space that is needed for travel; the Nelson shaft, which occupies the center of the square, is tall enough to dominate the whole busy scene and be visible as a landmark from afar; and yet its base is not so large as to trespass—the natural convergence of traffic being before, not around, it. Finally, the smaller statues are placed so as to be decorative adjuncts -- in purpose, at least--which are constructively incidental as far as the topography goes. Here, then, is a great space singularly well utilized. It may be considered as having three divisions: the first, a vestibule crowded with criss-cross traffic and therefore left clear; the second, a richly ornamented setting for the enthroned architecture; the third, the terrace upon the top of which the public building stands. There is here illustration of how important an accessory to its architecture a square may be made without loss of its own independence. And note, also, this about the decoration of Trafalgar Square: in the heart of a vast city, walled by great buildings that are pierced only by busy streets, the roar of traffic pulsing over its every inch, there is no attempt at incongruous "naturalness." The whole treatment is richly urban, frankly artificial, and yet unique in its superb decorativeness. The very fountains are sculptured, their basins enclosed in geometric copings. And,



THE PIAZZA DEL POPOLO, Looking toward the Pincian Hiu



PLAN OF THE PIAZZA DEL POPOLO

by the by, what pleasure those basins give! What countless thousands of little Britons have sailed, or are to sail, toy boats under the shadow of the Nelson statue, on these calm waters of Trafalgar Square!

In the fine and well-known Piazza del Popolo in Rome there is one of the most interesting examples of the square deliberately planned for city embellishment. The whole view from the top of the Pincian Hill which overlooks the Piazza, seeing the bridge beyond and the background of modern buildings, is a lesson in the science of modern civic construction. The Piazza is old, and the obelisk that stands in its center has been there for more than three hundred years, but the treatment of the space is essentially modern. It forms the fitting vestibule to New Rome. Into the square comes the broadened Corso; from it diverge great radial thoroughfares. With the ancient "Hill of Gardens" rising on one side, and tall trees leaving on the other only the vista of the bridge, there is verdure enough in the surroundings to justify a distinctly formal and architectural arrangement. This includes a geometric placing of single lampposts and candelabra, and curved bounding



THE PIAZZA DEL POPOLO, Looking dozun the Corso

ROME



THE PIAZZA AND PORTA DEL POPOLO

ROME

walls adorned with sculpture. The whole space is something larger, perhaps, than is needed to-day; but the fast growth of. that section of the city across the Tiber, of whose traffic this Piazza is the natural distributing point, makes its size appear a wise provision for the future. The lesson of the square is not so much in its hint for other communities-the situation being peculiar-as in



THE PIAZZA DEL POPOLO FROM THE PINCIAN HILL

its illustration of how perfectly—with what results in nobility of aspect, in harmony to surroundings, and in convenience to the neighborhood—an open space may be treated, if only the problem be given sufficient thought. Potentially, its spaces are the city's jewels.

Let us take one more familiar example of a square in the city's heart. Union Square, New York, has a likeness to



UNION SQUARE

Trafalgar Square in that it is a point of confluence for lines of heavy travel. A portion of it has been paved as a plaza; but it is the wrong portion. It is not where the heaviest travel meets; but, at the north end, it is bare, as an island where streams have parted. The balance of the square is planted. There are some good trees, a couple of excellent statues that are so badly placed as to receive little but anathemas, and there are flowers, turf, and an incongruous "cottage." Now, on Manhattan Island—with its dreary stone and iron turf, flowers and trees are to be loved wherever they are seen. Nor at this spot is there any such predominating architecture as to justify the stately formalism of Trafalgar Square. The decision to plant the area—a decision from which, pathetically, New York deviates only twice when given the power of choice, and then only at Park entrances—was sufficiently inevitable not to indicate any departure from haphazard selection. The paths wind circuitously, destroying the square's value for short cuts; and the trees and grass are perfectly neutral, to say the least, as a setting for the hotchpotch architecture that looks down upon

NEW YORK

them. In this case, then, only one of the three considerations that should determine the treatment of a square in the business district of a city was respected. The planting offers an urban variety, and that is welcome enough to make the square loved; but as far as city building is concerned as a science, Union Square has the appearance of "constructed ornament," instead of that inevitableness which is its right.

In crowded neighborhoods the accom-

modation of traffic should be ever the first consideration if ornament be desired, for what is the ornament that does not please? And then in determining the style of embellishment, a large view should be taken. City beauty requires not isolated jewels, no gem that shall not be better for its setting as plainly as the setting shall be better for the jewel, and none that shall not have a clear relation to the city as a whole. These are simple rules in the telling. It would seem that they scarcely required recital; but who has formulated them and where have they had a conscious adherence? The Science of city building must be put into plain writing if we would advance. We must look here and must look there, and according as things have been done, well or ill, must choose our course and lay down such general principles as we may. The square in the city's heart is a more complex problem than at first appeared. It will be necessary in other papers to consider other kinds of squares. With other purposes and other surroundings there will develop other rules.

Charles Mulford Robinson.

THE ARITHMETIC OF BEAUTY.1

ALTHOUGH architecture is based primarily upon geometry, it is possible to express all spatial relations numerically, for arithmetic and not geometry is the universal science of quantity. The relation of masses one to another, of voids to solids, and of heights and lengths to widths form ratios; and when such ratios are simple and harmonious, architecture may be said to "aspire towards the condition of music." The

THE NUMERICAL BASIS OF THE ARCHITECTURAL ORDERS 3

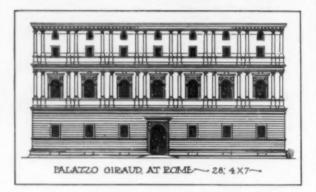
THE TURAN DOBG AND KINE ORDERS ACCREDING TO VIGINE PROPERTY A 4

THEIR CONTUNCTIVE PROPERTY A 4 AND THEIR CONTUNCTIVE AND THE CONTUNC

trained eye, and not an arithmetical formula determines what is, and what is not beautiful proportion. Nevertheless the fact that the eve instinctively rejects certain proportions as unpleasing, and accepts others as satisfactory is an indication of the existence of laws of number, not unlike those which

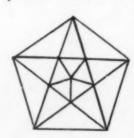
govern musical harmony. The secret of the deep reasonableness of such selection by the senses lies hidden in the very nature of number itself, for number is the invisible thread on which the worlds are strung,—the universe abstractly symbolized.

Number is the within of all things,-the "first form of Brahman." It is the measure of time and space; it lurks in the heart beat and is blazoned upon the starred canopy of night. Substance, in a state of vibration, that is, conditioned by number, ceaselessly undergoes the myriad transmutations which produce phenomenal life, becoming in turn sound, heat, light, and electricity. Elements separate and combine chemically according to numerical ratios. "Moon, plant, gas, crystal are concrete geometry and number." To the Pythagoreans, and the ancient Egyptians, from whom the former perhaps derived their philosophy, numbers were possessed of sex, odd numbers being conceived of as masculine, or generating, and even numbers as feminine on account of their infinite divisibility. Harmonious combinations were those involving the marriage of a masculine and a feminine number,—an odd number and an even. Number proceeds from unity towards infinity and returns again to unity as the soul, defined by Pythagoras as a self-moving number, goes forth from, and returns to God. These two acts, one of projection, and the other of recall,—these two forces, centrifugal and centripetal,—are symbolized in the opera-



tions of addition and subtraction. Within them is embraced the whole of computation; but because every number, every aggregation of units, is also a new unit capable of being added or subtracted, there are also the operations of multiplication and division, which consist in the one case of the addition of several equal numbers together, and in the other of the subtraction of several equal numbers from a greater until that be exhausted.

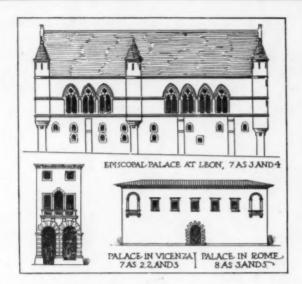
The progression and retrogression of numbers in groups expressed by the multiplication table gives rise to what may be termed "numerical conjunctions," to coin a phrase. These are analogous to astronom-

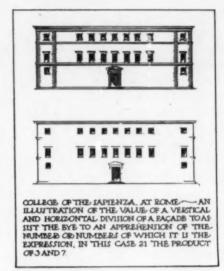


ical conjunctions. The planets, revolving around the sun at different rates of speed, and in widely separated orbits at certain times come into line with each other and with the sun. They are then said to

be in conjunction. Similarly, numbers, advancing towards infinity singly and in groups (expressed by the multiplication table), at certain stages of their progression come into

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





relation with one another. For example, an important conjunction occurs in 12, for of a series of twos it is the sixth, of threes the fourth, of fours the third, and of sixes the second. It stands to 8 in the ratio of 3:2, and to 9 of 4:3. It is related to 7 through being the product of 3 and 4, of which numbers 7 is the sum. II and I3 are not conjunctive numbers. 14 is so in the series of twos, fours, and sevens; 15 is so in the series of fives and threes. The next conjunction of 3 and 4 and their first multiples after 12 is in 24, and the next following in 36, which numbers are respectively the two and three of a series of twelves, each end being but a new beginning.

It will be seen that this discovering of numerical conjunctions consists merely of resolving numbers into their prime factors, and that a conjunctive number is a common multiple; but by naming it so, to dismiss the entire subject as known and exhausted is to miss a sense of the wonder, beauty, and rhythm of it all, a mental impression analogous to that made upon the eye by the swift glancing balls of a juggler, the evolutions of drilling troops, or the intricate figures of a dance, for these things are number, concrete and animate in time and space.

The truths of number are of all truths the most interior, abstract, and difficult of apprehension, and knowledge becoming clear, definite and certain, to the extent that it can be made to enter the mind through the channels of physical sense, it is well to

accustom oneself to conceiving of number graphically, by means of geometrical symbols rather than in terms of the familiar Arabic notation. This, though admirable for purposes of computation, is of too condensed and arbitrary a character to reveal the properties of individual numbers. To state, for example, that 4 is the first square, and 8 the first cube conveys but a vague idea to most persons, but if 4 be represented as a square enclosing four smaller squares, and 8 as a cube containing eight smaller cubes, the idea is apprehended immediately and without effort. 3 is, of course, the triangle; the irregular and vital beauty of the number 5 appears clearly in the heplalpha, or five-pointed star, the faultless symmetry of 6, its relation to 3 and to 2, and its equal division of the circle are portrayed in the familiar hexagram known as the Shield of David. 7 when represented as a compact group of circles reveals itself as a number of singular beauty and perfection, worthy of the important place accorded to it in all mystical philosophies. It is a curious fact that when asked to think of any number less than 10, most persons will choose 7.

Every form of art, though primarily a vehicle for the expression and transmission of particular ideas and emotions, has subsidiary offices, just as a musical tone has harmonies which render it more sweet. Painting reveals the nature of color; music of sound in wood, in brass, and in stretched strings; architecture shows forth the qualities of light, and the strength and beauty

of materials-brick, iron and stone, All of the wood. arts, and particularly music and architecture, portray in different manners and degrees the truths of number. Architecture this in two ways, esoterically, as it were, in the form of

harmonic proportions, and exoterically in the form of symbols which represent numbers and groups of numbers. The fact that a series of threes and a series of fours mutually conjoin in 12, finds an architectural expression in the Tuscan, the Doric, and the Ionic orders according to Vignole, for in them all the stylobate is four parts, the entablature 3, and the intermediate column 12. The affinity between 4 and 7 revealed in the fact that they express the ratio between the base and the altitude of a right-angled triangle of

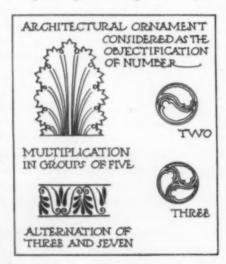
60 degrees, and the musical interval of the diminished seventh, is architecturally suggested in the Gothic chapels of Windsor and Oxford whose widths and lengths are in the proportion of 4 to 7, and it finds complete objective expression in the Palazzo Giraud which is four stories in height with seven openings in each story.

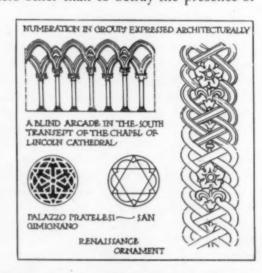
Every building is a symbol of some number or group of numbers; and other things being equal, the more perfect the numbers involved, the more beautiful will be the building. 3, 5, and 7 are the numbers of most frequent occurrence, and they are the most satisfactory, because being of small quantity they are easily grasped by the eye, and being odd they have a center or axis, so necessary in every architectural composition. Next in value are

PENTALPHA S 6, WITH MULTIPLES & 4. MULTIPLE OF 3 ROSE WINDOW IN WEST TRANSEPT OF THE CHURCH OF ST OUEN, ROUEN: BASED ON THE GRAPHIC SYMBOL FOR THE NUMBER SEVEN A NUMERICAL ANALYSIS OF GOTHIC TRACERY lowest multiples of these numbers and the least common multiples of any two of them, namely: 6, 9, 12; 10, 15, 20; 14, 21, 28; etc., because the eye, with a little assistance, is able to resolve them into their constituent factors. It is part of the art of

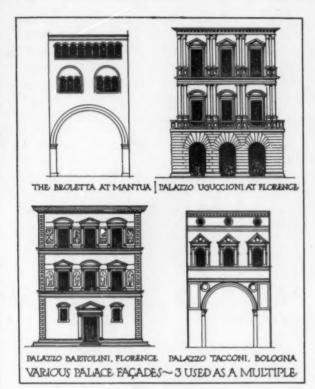
architecture to render such assistance, for the eye counts always, consciously or unconsciously, and when it is confronted with a number of units greater than it can readily resolve, it is refreshed and rested if these are so grouped and arranged that these units reveal themselves as factors of the higher quantity.

There is a raison d'être for string courses other than to mark the position of a floor on the interior of a building, and for quoins and pilasters other than to betray the presence of





a transverse wall. These sometimes serve the useful purpose of so subdividing a façade that the eye estimates the number of its openings without conscious effort and consequent fatigue. The tracery of Gothic rose-windows forms perhaps the highest and finest architectural expression of number. Just as thirst makes water more sweet they confuse the eye with their complexity only to more greatly gratify it by revealing the inherent simplicity in which this complexity had its origin.

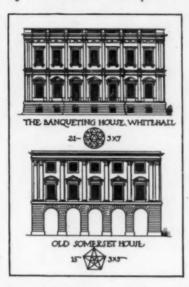


Sometimes, as in the case of the Venetian Ducal Palace the numbers involved are too great for counting, but other and different truths of number are celebrated; for example, the multiplication of the first arcade by 2 in the second, and this by 3 in the cusped arches, and by 4 in the quatrefoils above them.

Seven is proverbially the perfect number. It is of a quantity sufficiently complex to stimulate the eye to resolve it, and yet so simple that it can be so resolved at a glance. As a center with two equal sides it is possessed of symmetry, and as the sum of an odd and even number (3 and 4), it has vitality and variety. All these properties a work of architecture can variously reveal. Fifteen, also, is a number of great perfection. It is possible to arrange the first 9 numbers in the form of a square so that the sum of each line, read across or up and down, will be 15. Thus:

Its beauty is portrayed geometrically in the accompanying figure which expresses it, being

15 triangles in groups of 5. Few arrangements of openings in a façade better satisfy the eye than three superimposed groups of five. May not the secret of this satisfaction dwell in the intrinsic beauty of the number 15? This is a question which would



be decided differently by different persons, for the perception of numerical beauty is largely intuitive.

In writing short, detached essays of this sort an author can represent his subject from one side only. If the present writer

has seemed to insist on forcing some significance from everything he has brought to the reader's attention, it is partly because he has been obliged, by the necessity of the case to write in that spirit. he could not vivify he has been forced to omit. In conclusion, therefore, it is perhaps well that the reader be reminded that these are the byways, and not the highways of architecture into which he has been led,—that the highest beauty comes always, not from beautiful numbers, nor from likenesses to Nature's eternal patterns of the world, but from utility, fitness, economy, and the perfect adaptation of means to ends. This truth is usually exploited in the literature of architecture, to the exclusion, it has seemed to the writer, of every other. essays have been attempted in the hope of being able to show that along with this truth there goes another: that in every good work of architecture, in addition to its obvious and individual beauty, there dwells an esoteric and universal beauty, and that by taking more thought of this beauty, we may learn to build more worthily.

Claude Bragdon.

REMODELING AN OLD ITALIAN GARDEN IN THE EIGHTEENTH CENTURY.

TRANSLATED FROM THE ITALIAN.

In his book entitled Vecchie Storie, Signor Pompeo Molmenti has given a few short extracts from a letter to His Excellency the Cavaliere Daniele Andrea Dolphin, Venetian Ambassador to the Court of France from 1780 to 1786. Luigi Ballerini, a general agent and superintendent, informs his employer of the various details of the work in the garden of the Villa Mincana, in the Padovano, near Venice.

The Cavaliere must have been very enthusiastic over the new ideas as to gardens, to have ordered such extensive changes in his own at a time when he had been absent for three years and was to remain away for yet three more. Perhaps he wished to astonish and outshine his neighbors, and be the first to start the new fashion at home while he was still at the fountain-head of innovation and could send complete plans and descriptions in order to have it all ready to enjoy on his return.

Taste in the arrangement of gardens was as much influenced by the new ideas of the latter part of the eighteenth century as were the habits and manner of living. The frivolous, pleasure-loving Queen of France, was eager in the pursuit of novelty of every kind, and cared little for what was destroyed could she only succeed in escaping even the appearance of restraint, etiquette and formality. The old theory that an architectural setting with a geometrical plan, long straight lines of clipped trees and regular flower beds was necessary to give a house a natural appearance and make a suitable transition between it and the surrounding landscape, was one of the first to be attacked under the new order of things. Formality of any kind was a thing of the past. What was then known as the English garden with its grove-like appearance, winding paths and irregular stretches of lawn lent itself beautifully to the new ideas. In the very first year of her reign, Marie Antoinette asked for and obtained the gift of the Little Trianon and ordered plans for substituting a more modern garden in the new fashion, in place of the formal and botanical ones then surrounding the small palace.

The Comte de Caraman had planted an English garden at Roissy which was greatly talked about in the fashionable world and also a charming one behind his hotel in the Rue St. Dominique, Paris. The Queen actually visited the latter before finally deciding to destroy the old Trianon gardens. Drawings made by the Comte were accepted, but were altered a few years later by the architect Mique. Work began at once but did not progress rapidly owing to the lack of funds. The more serious alterations were only begun in 1779, while the Belvedere was not finished until 1781 and the Swiss Hamlet and Marlborough's Tower not until the summer of 1783. The Ambassador Dolphin was in Paris during the three years of active work and could hardly avoid becoming enthusiastic and wishing to try some innovation and imitation in Italy when the young and attractive Queen was eagerly enjoying the novelty and freedom of the recently discovered pleasures of outdoor life and companionship with nature in her many forms. It is curious however, to see that in spite of ordering his garden to be reconstructed, the Ambassador could not entirely divest himself of the older and more formal Italian ideas. He commanded an English park that "succeeded wonderfully," irregular groves, running streams, artificial rocks and mounts; but the old-fashioned quadrangular groundplan was left untouched and clipped hedges with niches for statues were replanted, while there was at least one avenue which provided a vista, even though it had an artificial rock But the letter describes it all at the end. very distinctly:

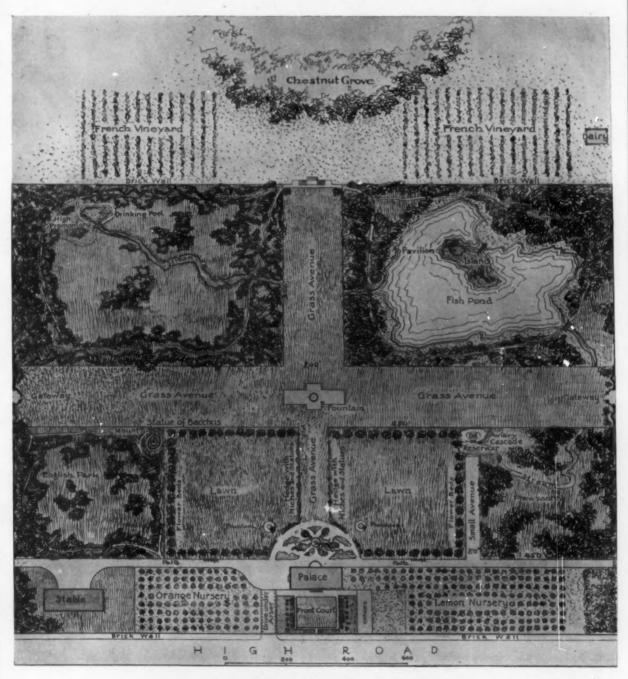
MINCANA, April 28, 1783.

"The garden is all upside down with the work on the fountains and is levelled off in accordance with the designs, so the jets of water towering above everything can now be seen with much greater pleasure. Some irregularities that were defects in the paths have been removed; the hedges are growing much stronger and this year the arches of

Whether Mincana exists at the present day is unknown to the translator. The illustrations for this article were taken from Venetian villas built about the same period as Mincana and are merely used to show the architectural style of the seventeenth century.

many niches for statues will be made in them. The lemon nursery has borne the winter season well...... Your Excellency knows that instead of arriving at any goal on descending from the lemon nursery, an uncultivated corner of the garden proper was formerly reached which was unattractive from not having any object of interest. This space

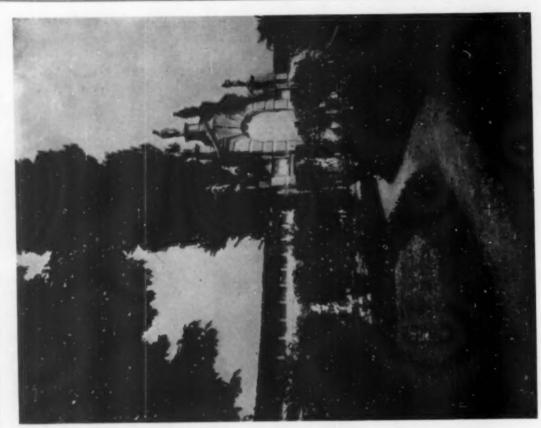
was easily enlarged by setting the wall back, and it has been possible to arrange a grove there which will be a suitable preserve for the rare pheasants that cannot be exposed in such an open space as the garden. At present, on leaving the lemon nursery one enters a small avenue that will be finished at the farther end by a landscape feature formed of



PLAN OF THE VILLA MINCANA GARDEN

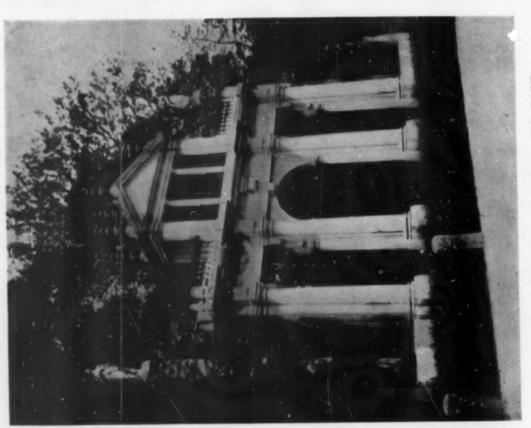
Reconstructed by Eleanor G. Hewitt from the Description in the Text

Renderea for House and Garden by F. L. V. Hoppin, Architect



A LEMON NURSERY

Showing the Architectural Arrangement of a Wall for a Background



A GATEWAY IN A WALL SURROUNDING A PARK Spiral Iron Stairs around the Columns at each side lead to the Covered Balcony over the Gate

a rugged artificial rock, whence a rushing cascade of water will fall and be collected in a reservoir. An aviary with a cupola for song birds will be placed on top of the rock; an open brook will issue from the reservoir, run through the pheasantry, and flow into the fish pond. Your Excellency will recognize from all this how much more delightful it will be to find so many animate things rather that a statue or a picture;

with the murmuring of the water, the singing of the birds, the leafing out of the trees that were so large when planted, and the glimpses of the beautiful pheasants, this sylvan retreat will become a more charming situation for repose than any of those that the poets take so much delight in describing. The grove is already completed, but the cascade is still to be made, unless you should send other commands; the rest of the work is stopped for the time being..... A small drawing will show Your Excellency the English park, in the quadrangle in front of the stable, that is so wonderfully successful through the care taken in transplanting such large trees all alive, and owing to their strength, it will be possible to walk there quite freely in a heavy shade in two years' time. The latter is entirely finished, containing even mountainous and exotic plants, and Your Excellency can still further embellish it with a few from America, even though here they are extremely rare and very seldom found. The only things necessary besides all this, will be a pavilion in the Chinese style on the little island, adorned

with those elegant trifles and luxuries which Your Excellency knows so well how to order in person, and a few other ornaments scattered with taste among the hedges and little vales. Flowers and sweet smelling herbs are always cultivated below the winding path and are succeeding so delightfully that I should not blush to have Your Excellency see them even at the present time. In carrying out the project of the pavilion Your Excellency will probably also arrange for recesses for various

rustic seats and benches and then a more charming retreat in Summer cannot be desired. On one side the walk commences that formerly led to the labyrinth, but where now is found, as the result of another design, a highly agreeable feature of the garden, formed by one of those mounts with a winding path having one of the old statues restored, a Bacchus, in the centre. The winding path, so easily ascended, is bordered with



AN ORANGE NURSERY

With Wall Architecturally Elaborated

vines, a very suitable decoration to this particular place when they are full of fruit An irregular grove winds around the other quadrangle leaving a large space in the centre where there can be an enclosure for deer and other animals, and a walk encircling it all can be made entirely in the shade, The little brook runs through the centre of this square and makes a drinking pool at the extreme limit for the convenience of the animals; there is a promontory planted with

trees above the pool. When the hedges are grown, the only necessary things to complete everything will be the stockade, the animals,

and their wooden house for the winter, and then this will also be a magnificent and charming part of the garden. Issuing from this walk, the chestnut grove that forms the view from the centre of the palace is reached and after that again, the French vineyard. The aviary, which will be ready for use in three years, is placed on the opposite side, and consequently Your Excellency will surely have a manysided pavilion with several out-looks built, where either

while writing, reading, or drinking the milk from the adjacent dairy, (alone or in gracious company), the singing of the birds can be enjoyed and from time to time the pursuit of the game which will certainly be plentiful on account of the fitness of the situation....."

Walking for pleasure was evidently unknown in Italy in the eighteenth century, and that the sight of some object of art

or interest was the only reason for exertion, is brought out very strongly in this letter, also that true luxury is having every sense pleased, and even the queer kind of sport enjoyed at that time all arranged for in advance.

The nineteenth century fad, the wild garden, is foreshadowed in "the sweet smelling herbs and flowers will always be cultivated near the path." It seems a pity that Signor Molmenti did not

see fit to give the entire letter. It would be interesting to know the fate of the other old statues from among which the Bacchus was selected to be restored, and any other details Ballerini thought of writing to the Ambassador.





A PENTAGONAL PAVILION IN A VENETIAN GARDEN



TWIN OAKS.

IN the country north and west of the city of Washington but in the immediate vicinity of the National Capital are a number of exceptionally handsome estates, none of them of more than the most moderate size. From the landscape standpoint perhaps the most attractive of these is Twin Oaks, the home of Mrs. Gardiner G. Hubbard. The estate

Bisset, and the results attained are the more remarkable from the fact that at the time of the establishment of this country-seat the sites for the residence, stables and all out-buildings were chosen without thought or regard for the attainment of harmony in the provision of a landscape setting. The entire policy of landscape architecture followed has dictated a close adherence to the natural system.



APPROACH TO THE HOUSE

TWIN OAKS

which has an altitude or about two hundred and fifty feet above the city of Washington comprises fifty-five acres forming a triangular-shaped tract of rolling ground. About twenty acres is occupied by a woodland of oaks, beeches, hickory and other natural hardwoods, and practically all of the remainder of the holding is in lawn.

Of late years great attention has been devoted to landscape gardening at Twin Oaks under the direction of Mr. Peter

Indeed there is an entire absence of all formal gardening.

The aim has been to introduce on the estate every known variety of hardy shrub and tree; and to that end, frequent extensive importations have been made from all parts of the globe, but there has ever been kept in view as an especial object the desirability of embodying specimens of every variety of ornamental vegetation native to America and embracing everything from trees to wild



WALK FROM THE ROSE GARDEN TO THE GREENHOUSES
TWIN OAKS



A SUMMER-HOUSE, Covered with Crimson Rambler

TWIN OAKS

flowers. As Twin Oaks is designed for practically continuous occupancy from April to December and the intensity of the sun's rays in the southern clime renders the sight of extensive gravel roadways painful to the eyes, this material has been utilized only on the two main drives. All the other avenues of communication on the estate are turf drives. These manifest a tendency to appear slightly worn at some seasons of the year; but all things considered, preserve their appearance surprisingly well. Likewise grass paths take the place of all other forms of walks on the estate.

A charming feature of the estate is the rose arbor which affords a connecting avenue between the rose garden (containing two hundred varieties of the flowers) and the conservatories. The arbor is made up of twelve double arches of rustic construction

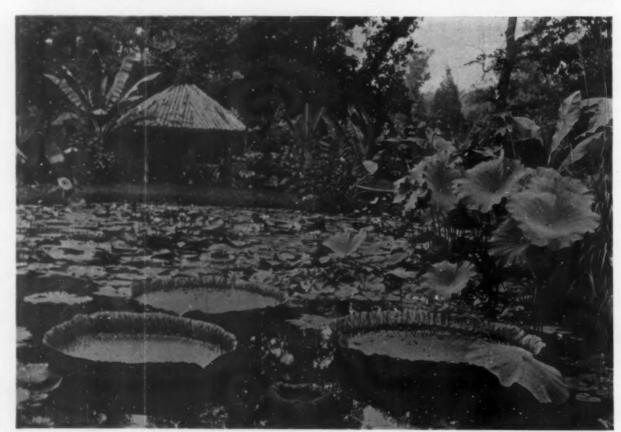
covered with such varieties as the Crimson Rambler, Memorial, Baltimore Belle and Queen of the Prairies. The conservatories to which access is gained through this avenue and which are located several hundred feet from the residence comprise about fifteen thousand square feet of glass. The group of buildings includes rose, carnation and palm houses, a grapery and violet pits, but no definite scheme of arrangement has been adhered to.

At the opposite side of the estate is a simple pergola, consisting of a series of arches designed to afford a shaded path to the subtropical garden and lily-pond. Constituting the central part of the pergola is a Japanese rustic house, covered with Japanese wisteria. Near at hand is a summer-house of rustic cedar covered with crimson ramblers. The water garden is ninety-five feet in length and



" EMPRESS OF CHINA" ROSES

TWIN OAKS



THE WATER GARDEN, Victoria Regia in the Foreground

TWIN OAKS

seventy-five feet in width and the depth of four feet six inches affords accommodation for a profusion of water lilies and other

aquatic plants. Most of the lilies are grown in boxes, but the pond at the edges is only from eighteen to twenty-four inches in depth, and here are grown the hardy lilies. The pond holds some magnificent specimens of the Victoria regia. The largest leaf grown on the estate measured five feet nine

inches in diameter and easily supported a boy eight years of age, with only a thin board to distribute his weight evenly over the leaf. Surrounding the water garden is a sub-tropical garden or border in which more than forty varieties of plants appear.

Simplicity of design characterizes both entrances to Twin Oaks. On the south where the private roadway leads from Woodley Lane at a point just opposite Beauvoir, the country-seat of Admiral Dewey, the entrance is marked by two stone pillars, while the drive is flanked on either side by a line of evergreens and Norway maples. At the north entrance, which is situated in a

ravine, there are massive walls of rough stone, covered with the many-flowered Japanese rose. The trees constitute one of the chief

glories of the estate. The collection of Japanese evergreens is one of the finest and most complete extant, and there is also an especially creditable representation of Holland evergreens.

The residence at Twin Oaks is a large structure the architecture of which is a modification of the Colonial style. On the

southern front is a commodious sun parlor and directly before the house stand the two immense oak trees from which the estate takes its name. The greater part of the interior of the house, including the great hall is furnished in oak, but the library and dining room are in cherry. The house is situated on a considerable elevation with a broad expanse of lawn in front and a wooded ravine in the rear. The sun parlor and in fact every window in the southern exposure commands a splendid view of the entire city of Washington, the Potomac River and the blue hills of Virginia, beyond.

Waldon Fawcett.



ARCH COVERED WITH "THE MEMORIAL ROSE"

Rosa Wichuraiana



A HOUSE AT GERMANTOWN.

Designed by Alfred Cookman Cass, Architect.

The site of this new house was a plot of ground fifty-six feet in width taken from the western end of an old homestead property located about five miles from the center of Philadelphia. Some three hundred feet of lawn lies between the old house and the new. The two properties have been permitted to appear like one, inasmuch as the new house has been built by a member of the family

toward the shade of a splendid ash-tree. The hall and living-room open upon a terrace surrounded by a low hedge and paved with brick. During the summer this terrace is in shade early in the afternoon and is a delightful outdoor living-place. The lawn, a few feet below, offers an exceptional opportunity for a garden, but at present it is felt that the simplicity of the green expanse is an agreeable and sufficient change from the monotony of surrounding pavements, and it will be left for the present as it is.

The porch which adjoins the living-room

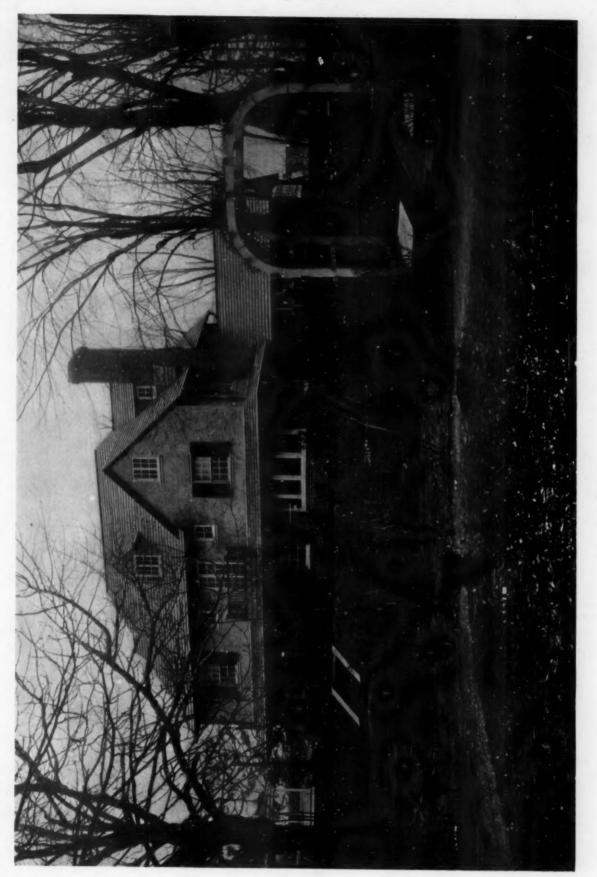


FROM THE SOUTHEAST

which has occupied the old place for many years.

As the remainder of the former lawn lay nearly three feet below the street level, the first floor of the new dwelling was set but a trifle above the pavement, so as to give the house the best appearance from the front and also from the lower grade. All the living-rooms face the east and look out across the lawn. The dining-room has an outlook in that direction through generous casements,

is really a sheltered portion of the terrace, and it will be enclosed with glass during the winter months for use as a conservatory or a sun-parlor. For either of these purposes the brick paving will be found quite suitable for it has been laid upon a deep foundation of broken stone and cinders, and dampness has already been proved impossible. The stairway, pantry and kitchen are properly confined to the north and west of the house, and on the second floor this side is occupied by



THE HOUSE FROM THE OLD LAWN



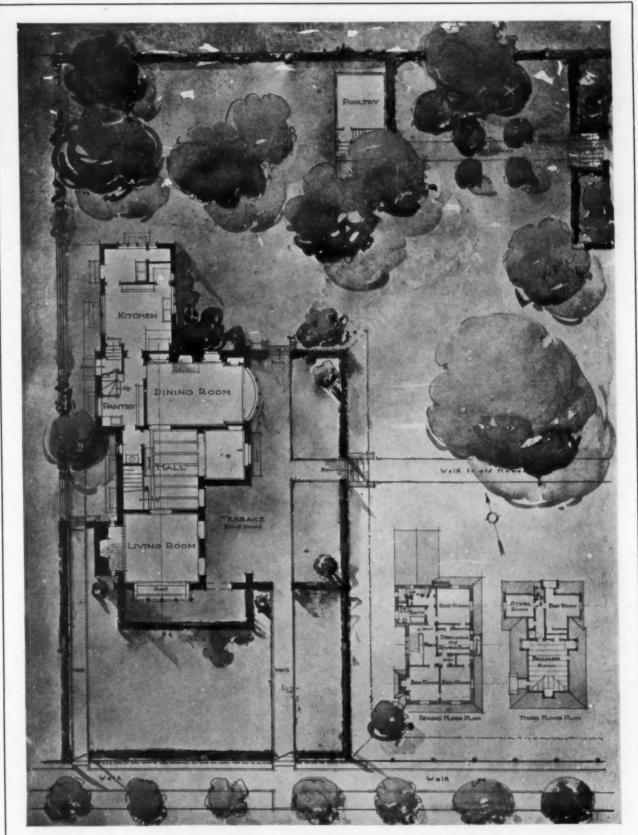
THE FRONT

passageways and the bath-room. A special care was taken to make the servants' quarters convenient in every way, as upon this depends more than is usually admitted the happiness of the household. A stairway of liberal width leads from the pantry to the third floor and in no way disturbs the privacy of the second.

On the west side is the tradesmen's path leading to the kitchen and communicating directly with the cellar by a full vertical door, —an improvement on the customary lean-to hatchway and accomplished by lowering the grade on this side. The adjoining property here having been filled in to the level of the street, a retaining-wall, surmounted by a low iron fence, extends from the large chimney northward to the rear of the lot. This fence will soon be covered with honeysuckle, while a privet hedge and several Lombardy poplars

will complete a distinct boundary-line toward the street. Across the front a simple white picket fence is to be placed in front of the hedge.

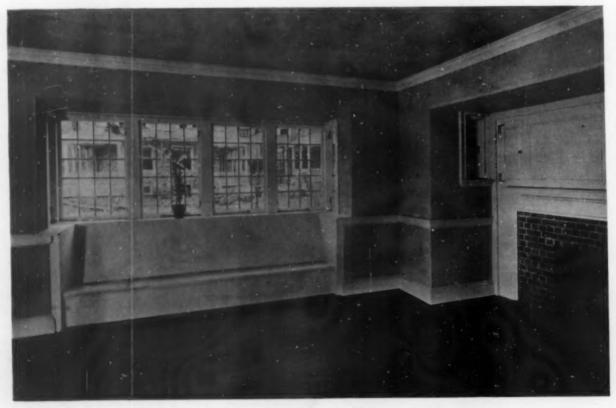
The most pleasing feature of the exterior of the house is its color, The bricks are hand-made and of a rough surface. Their color is a dark red, of varying shades, and they are laid in the English coursing with a mortar of cement and of yellow and gray gravel. The joints are wide, and match in color the light brownish gray and very rough plaster which covers the walls above the first floor. The shutters, belt mouldings and eave rafters are of cypress, and have been stained a very dark brown, while the sash and window trimmings are white, slightly tinted to a warm tone. The largest, roughest and heaviest split cypress shingles from the swamps of Florida have been used for the roof, and



PLANS OF A HOUSE AT GERMANTOWN, PHILADELPHIA DESIGNED BY ALFRED COOKMAN CASS, ARCHITECT



FROM A NEIGHBOR'S ROOF



THE LIVING-ROOM



THE DINING-ROOM

have been left in their natural color. Inside the house the same simple detail and quiet color are noticeable. Each room, instead of being sharply contrasted with its neighbor, has its walls of a uniform pale yellow sandfinished plaster. The wood trimming is nearly white, while the dark brown Georgia pine floors are echoed in the ceiling by the

still darker oak joists. Simplicity in the aspect of the whole house has been coupled with integrity of construction. Much of the joinery has been mortised and pinned together in the old-fashioned way, and the meaningless multiplication of mouldings, often but a habit of the draughting-table, has been frankly eschewed.



THE HALL



THE BILLIARD-ROOM

In "American Gardens" the art of formal gardening as practiced in America obtains, for the first time, an adequate pictorial expression. The collection of photographs which the book presents is representative of all that is best, especially among the more recent works. Although a number of gardens of the eighteenth century have been included, one feels that there must be many others fully as interesting that have escaped the attention of the editors, but of new gardens treated in a more less architectural way the book offers an endless variety.

Granting then that we have before us a representative collection of American gardens, it may be worth our while to enquire how it stands with the art of garden design among us nowadays. Certain it is that the renaissance of the formal garden is in full swing, "no home happy and no back yard complete without its pergola." But have we not something too much of pergole and hermae and exedrae? Have we not in place of developing the modest formal garden of our ancestors, a garden that spoke less of its European origin than of its American environment, have we not rather created the garden of the architect's sketch-book and the amateur's photograph, a garden at its best pleasantly reminiscent of its foreign sources and at its worst boisterously assertive of them? Have we assimilated what we have so hastily swallowed? Is there as yet any distinctly American style in gardens? The answer is not far to seek. We have no more a style of our own in gardens than we have in architecture. And this is all the more remarkable since nature has a way of forcing individuality upon the gardens of each of the nations. When Charles VIII carried back to France the inspiration of Italian art, that of the garden was not wanting, but from the time of Charles VIII to that of Louis XVI the art of gardening became more and more truly an expression of French life and French environment and less and less a reminiscence of its Italian origin. English garden is under heavy obligations to its Continental neighbors, yet through the course of years it has so blended foreign influences with what is native to it that it is, as Sedding says, "the precise thing which experience has proved to be most in accord with the character and climate of the country, and the genius of the race." Now it is just because one earnestly wishes to see in our own gardens such an accord with the character and climate of the country, and with the genius of the race that an examination of "American Gardens" leaves with us a note of dissatisfaction. Our art is not yet fine enough to enable us to speak quite in our own words, we must be dragging in here a scrap of French, there a whole sentence of Italian.

But to the book itself. It consists of many good photographs, well reproduced. They are followed by an index of singular value containing sketch-plans of nearly all of the more interesting gardens illustrated in the book. These plans make no pretence at accuracy of detail, yet they faithfully convey all the more important features. Preceding the illustrations there is an essay on gardening partly historical, chiefly critical, by Guy Lowell. It contains much sound wisdom, particularly in its insistence upon the necessity of so skilfully adapting such details as we may borrow from other countries as to make them seem at home in our own. With but few of Mr. Lowell's dicta are we prepared to take issue, yet it is hard to remain silent on hearing him say, "There can be no doubt that, despite the summer charms of the formal garden, the natural style appears better in our climate in winter, and that therefore a formal garden will give its greatest satisfaction only when it is built in connection with a house that is to be principally used in summer." Our own experience has been sharply at variance with this. There comes to mind at once a little formal garden that in summer is scarcely gayer, scarcely more overflowing with flowers than some of its informal neighbors. But in winter, when their empty beds seem so formless and uninteresting, its trim parterre firmly outlined in box, its well-kept walks shut in between walls of somber bronze green foliage, contrasting with the snowy covering of the ground, are a perfect assurance that the natural style does not, as Mr. Lowell would have us believe, appear the better in our climate in winter.

¹ American Gardens, edited by Guy Lowell. 21 pp., 112 plates, 12 pp. index. Boston, Bates and Guild Company. 1902. Price,



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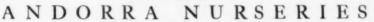


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