

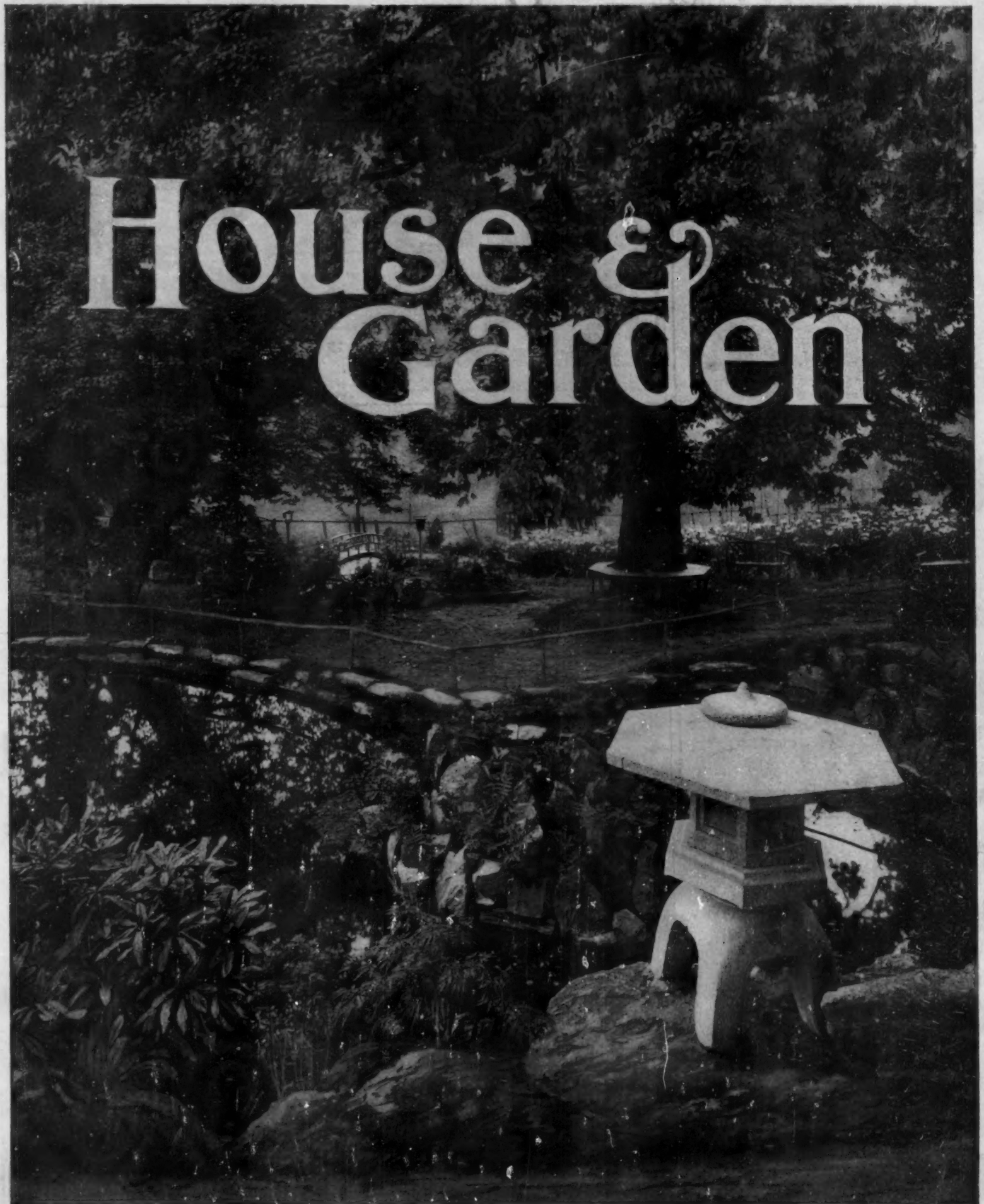
A Japanese Garden
Portraits of American Trees

Blenheim Palace
Tooled Leather

Vol. X

AUGUST, 1906

No. 2



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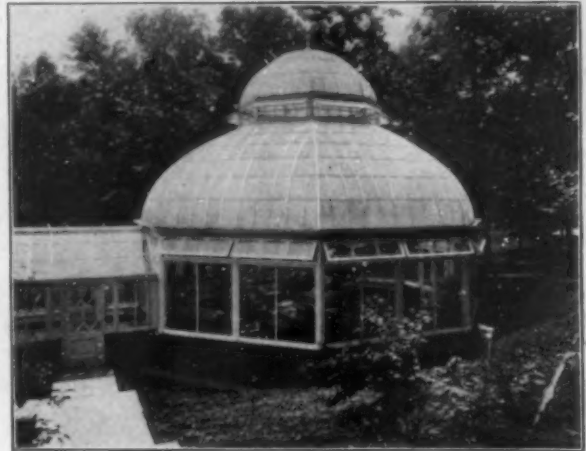
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CEILING OF THE GREAT HALL—BLENHEIM

House and Garden

Vol. X

August, 1906

No. 2

HOUSES WITH A HISTORY

BLENHEIM PALACE

By P. H. DITCHFIELD, M.A., F.S.A.

AMONGST the historic houses of England, Blenheim must rank highly. It was built by the English nation and bestowed as a reward for his military services on John Churchill, Duke of Marlborough, the hero of many fights, who did good service to his country in the days of "Good Queen Anne." In the grounds once stood another palace, that of Woodstock, a very famous house, the hunting-palace of the Kings of England.

Sarah, Duchess of Marlborough, doomed it to destruction because of her spite against the architect, Sir John Vanbrugh, who wished to restore it as a house for himself. Here Henry I. often came to stay in order to hunt in the neighbouring forest of Wychwood, and kept a menagerie in the grounds of his hunting-lodge. It saw the rising of the storm between Henry II. and Archbishop Becket, who here bearded the King, and here was forced to sign the Constitutions of Clarendon, so obnoxious to ecclesiastics. Here too, was the famous maze associated with the tragedy of Fair Rosamund, the mistress, or, as some chroniclers seem to imply, the wife of Henry II. The story tells how Queen Eleanor found her way into her rival's chamber, and

forced her to drink a poisoned cup of wine. Fair Rosamund's body was borne to Godstow and laid to rest in the graveyard of the good Sisters. The lovers of Tennyson's *Becket* will not need to be reminded of poor Rosamund; but in all probability she died peacefully at Godstow without the aid of a dagger or poisoned wine. At any rate, her well is still known at Woodstock, and she lives in legends which lack not romance. John, a king of whom we are not proud, was born at the old palace, and often hunted in the neighbouring forests when he was not being hunted by his barons. Chaucer, too, is said to have been born here, but like Homer, seven places claim the honour of his birthplace. Woodstock frequently saw Edward III., and here his sons were born. Richard II. kept Christmas here in 1391, when a tournament was held in the park, which ended in tragedy, the youthful Earl of Pembroke being slain by John St. John, whose lance slipped and fatally pierced the Earl's body. Here too, one William Morises tried to assassinate Henry VIII. Woodstock palace was the prison of the Princess Elizabeth under the close gaolership of Sir Henry Bedingfield. It had been disused for some time,



THE NORTH FRONT—BLENHEIM

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House and Garden

and was so ruinous that the gate-house was fitted up for her reception and hung with such stuffs as could be found. Her soldier-guard and attendants, who lived in the rambling, ruinous palace, grumbled sorely during the long cold and wet nights of a weary winter. The Princess liked not her captivity and envied a poor milkmaid who was "singing pleasantie, and wished herself to be a milkmaid." One day she wrote some sad verses on a shutter with a piece of burnt wood, and on another day she inscribed with a diamond on her window-pane the words:

" Much suspected of me
Nothing proved can be
Quoth Elizabeth Prisoner."

She whiled away the time by studying her books, working embroidery and coquetting with astrology under the guidance of the celebrated Dr. Dee, past master of the art. She came here again on several occasions under happier circumstances, and repaired the dilapidations of the old palace. An island in the lake, called after her name, still preserves her memory. Sir Robert Cecil speaks ill of the old house in the times of James I. "The place is unwholesome," he writes, "all the house standeth upon springs. It is unsavoury, for there is no savour but of cows and pigs. It is uneaseful, for only the King and Queen with the privy chamber ladies, and some three or four of the Scotch Council, are lodged in the house, and neither chamberlain nor one English councillor have a room." Those who know Sir Walter Scott's *Woodstock* need not be reminded of the strange adventures of the Parliamentary Commissioners who took possession of the rambling old building, and of the pranks played upon them by "an adroit and humorous Royalist, named Joe Collins," who "summoned spirits from the vasy deep" and raised ghosts numerous enough to tax the energies of the Psychical Society, and at last frightened the commissioners away. It was a merry time for old Woodstock. But the ghosts have gone with the old house, which has given place to the lordly Blenheim, with which we are now mainly concerned.

On June 18th, 1705, less than a year after the battle was fought, from which the palace takes its name, the grateful nation began to rear this pile and to bestow upon the hero of many fights a gift of an estate of over 2000 acres. Lands in England were formerly held by many curious tenures, e. g. providing men-at-arms for the king's service, presenting a rose to the king whenever he passed through the manor, holding the king's head when he crossed the sea, etc. This custom of grand or petit sergentry was revived when the nation gave this estate to the Duke, who, or his successors, was required on the anniversary of the day of the battle of Blenheim to render to the sovereign at Windsor "one standard or colours with three fleur-de-lis painted thereon, as an

acquittance for all manner of rents, suits and services due to the Crown."

The house has been called with truth "the extravagant culmination of Palladian grandeur." Its cost was enormous. The sum of £300,000 was expended, of which the nation gave £240,000, the rest being supplied by the Duke and Duchess. The great Duke did not live long enough to inhabit his palace, and the Duchess, the famous Sarah Jennings, or la belle Jennings, the favourite and then the bitter opponent of Queen Anne, quarreled hopelessly with Vanbrugh. She thwarted him in every way, and actually refused him admittance to see his own work. The poor architect, cheated of his salary, was obliged to stand without the gates of Blenheim, and pass two uneasy nights at "the Bear" without a glimpse of his wonderful erection. Duchess Sarah was indeed a remarkable lady, headstrong, passionate, revengeful, and yet withal a faithful loving wife at a time when conjugal faithfulness was not a common virtue in the courts of the last Stuart monarchs. A writer who has carefully read the records of her time, and has formed a very fair and just estimate of the character and conduct of the Duchess, says that "he who shall study in detail the story of the building of Blenheim will arise from his delectable task with no small knowledge of the England that passed from the rule of the Stuarts to the dynasty of Hanover."

We will examine this stupendous mansion, this monument of Palladian grandeur, possessing amidst all its magnificence the faults and failings of pseudo-classicism.

Leaving the old town of Woodstock, once famous for its gloves, we pass through the Triumphal Gate, which has a large central arch and two posterns with an entablature supported by double detached columns raised on pedestals. An inscription records that—"This gate was built in the year after the death of the most illustrious John, Duke of Marlborough, by order of Sarah, his most beloved wife, to whom he left the sole direction of many things that remained unfinished of this fabric. The services of this great man to his country, the pillar will tell you, which the Duchess has erected for a lasting monument of his glory and her affection towards him, 1723."

On entering the park by this gate a magnificent view of the noble house greets the eye. The architectural critic will not fail to perceive the remarkable vigour of design, however much he may scoff at the extravagance of Palladian grandeur. It possesses the usual regularity of plan. There is a great courtyard facing the principal building, and on each side two smaller courts, the kitchen and stable courts, surrounded by buildings. A grand vision of towers, colonnades, porticoes and exuberant variety of design greets us from whatever point of view we

Blenheim Palace

regard the palace. The principal front is 348 feet in length. It consists of a large central block with wings forming the smaller courts, and joined to the central block by arcades. We enter the palace through a noble gateway under a tower at the eastern end of the east courtyard. Above the archway appears the inscription: "Under the auspices of a munificent Sovereign this house was built for John, Duke of Marlborough, and his Duchess Sarah, by Sir J. Vanbrugh, between the years 1705-1722, and this royal manor of Woodstock, to-

gether with a grant of £240,000, towards the building of Blenheim, was given by Her Majesty Queen Anne, and confirmed by Act of Parliament (3 and 4 Anne C. 4) to the said John, Duke of Marlborough, and to his issue male and female, lineally descending." The ironwork of the gates records

the arms and crests of the Duke and interlaced M. M., which signify his titles, Marlborough and Mindelheim. The latter refers to his title of Prince of Mindelheim in Suabia of the Holy Roman

Empire. On each side of the gateway there are lodges, and surrounding the court are estate and domestic offices. Two sides are adorned with a piazza. Once there were here a theatre and the Titian gallery, the latter of which is replaced by a conservatory, and the former by an estate office. The Titian gallery contained a beautiful collection of paintings on leather

which was destroyed by fire in 1861. Over the second archway leading to the principal front, is a clock tower, and passing onwards the grand north front of the palace appears in sight. Its detractors pronounce it heavy, but they cannot deny that the effect is imposing, and that the



TRIUMPHAL ARCH, WOODSTOCK ENTRANCE—BLENHEIM



BLENHEIM PALACE FROM THE SOUTH



THE STATE DRAWING-ROOM

Blenheim Palace



THE ITALIAN GARDEN AND VINERY—BLENHEIM

appearance is lightened by an exuberant variety of design, and a skilful combination of towers, colonnades, porticoes, and pyramided attics. The buildings are grouped round three sides of a square. On the fourth side there is a grand view of the park, and across the bridge rises amidst the trees, the Duke's Column. At the entrance of the palace there is a grand Corinthian portico, over which stands a statue of Minerva. On the tympanum appear the arms of the Duke with military emblems. Two small cannons which came from the battlefield of Blenheim, guard the entrance.

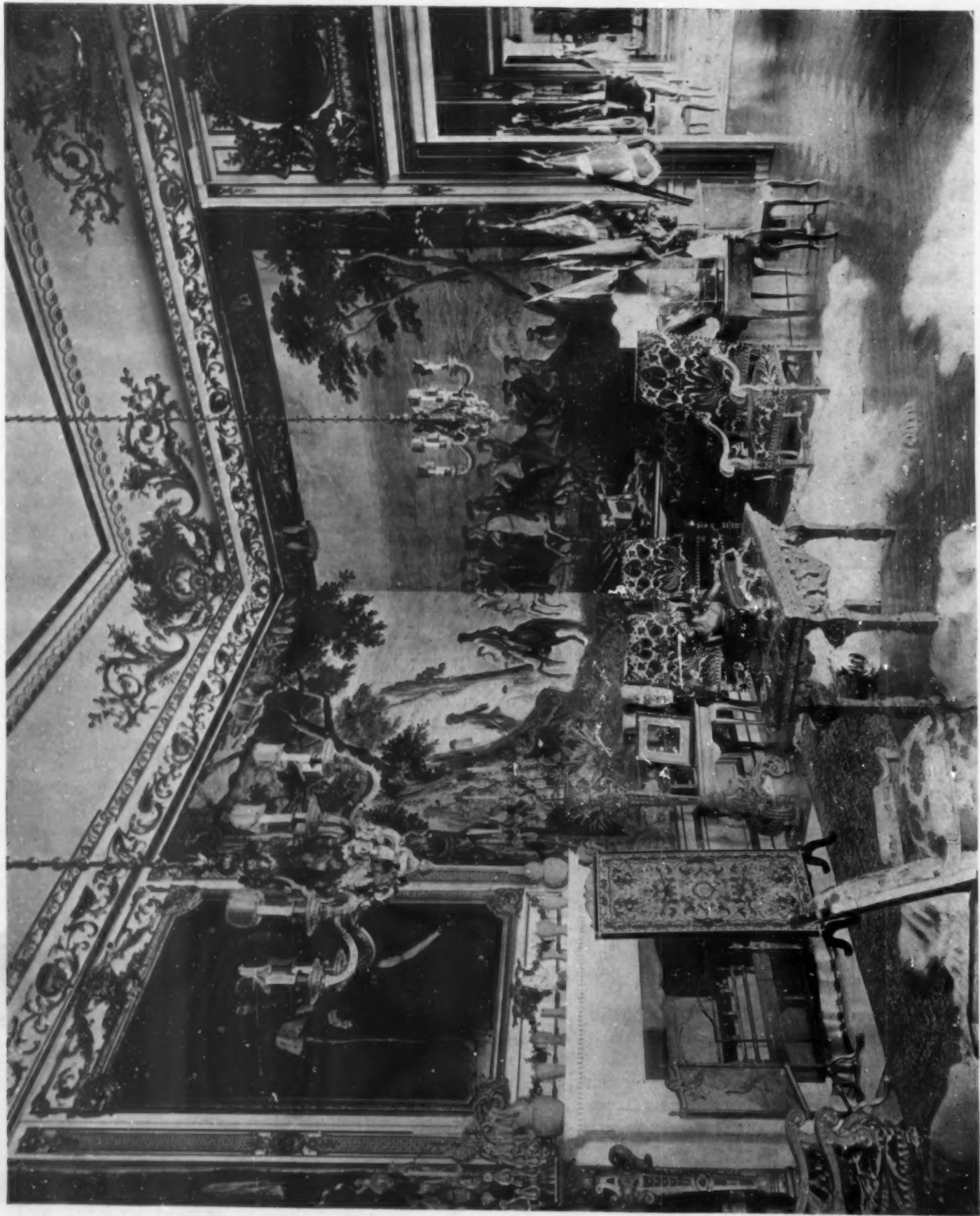
The south front is in five grand divisions; the centre, containing the saloon, is entered by a Corinthian portico, crowned by a pedestal, bearing the inscription *Europæ hæc vindex genio decora alta Britanno*. A colossal bust of Louis XIV., taken from the gates of Tournay, surrounded by military emblems, surmounts the pedestal. The palace is entered from the principal or north front, and we find ourselves in the great hall, a noble chamber with a lofty ceiling supported by fluted Corinthian columns, between which smaller columns of the same order support an arched corridor leading to the saloon opposite to the entrance. The key of the main door is a copy of that formerly used to lock the gates of Warsaw.

The ceiling of the hall was painted by Sir John

Thornhill, and is a fine allegorical representation of Britannia crowning the great Duke after the battle of Blenheim. His bust by Rysbrach appears over a doorway with an inscription in Latin by Lord Bolingbroke. Some fine bronze statues, copies of the famous Florentine marble statues, and several other statues and busts adorn the hall. A few pictures are seen in the gallery above, portraits of Queen Anne, Prince George of Denmark (Kneller) and the Countess of Essex (Marc Geerards).

At the entrance of the ante-room to the drawing-room are the busts of the present Duke and Duchess by Story. The Duchess is an American by birth, a daughter of Mr. William K. Vanderbilt of New York. The ante-room contains a good collection of old Dresden china.

The green drawing-room is perhaps one of the most interesting chambers in the palace on account of the superb paintings which line its walls. There is the great masterpiece of Sir Joshua Reynolds, a picture of George Spencer, third Duke of Marlborough and his family, which has been valued at £40,000. Kneller's picture of the first Duchess and Lady Fitzharding playing at cards, a portrait of the third Duke by Sir Joshua Reynolds, one of Sarah, Duchess of Marlborough by Kneller. There are also other remarkable family portraits by Cosway, Romney and Reynolds.

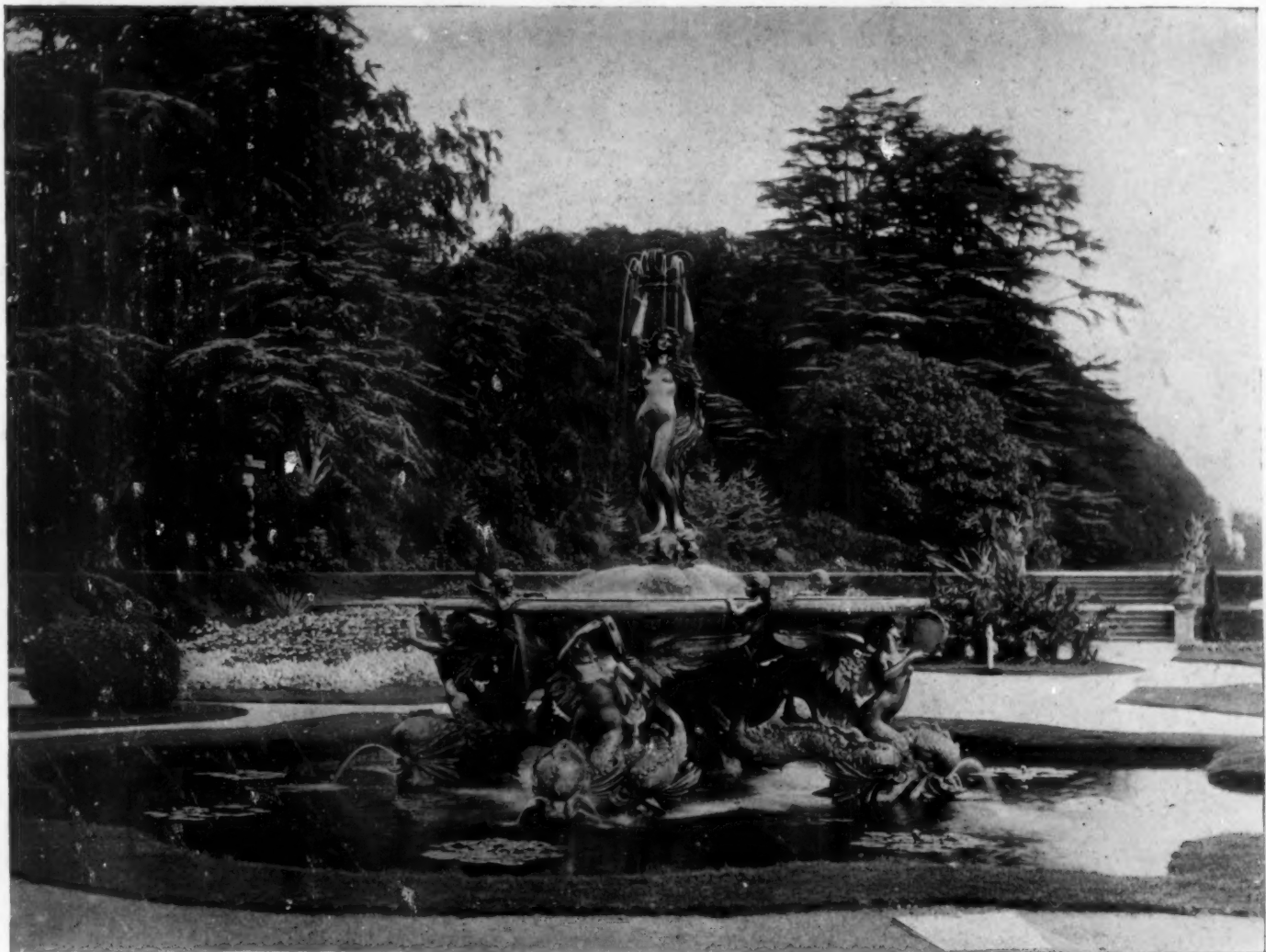


A ROOM IN THE STATE SUITE—BLENHEIM

Blenheim Palace

We pass into the next chamber, called the red drawing-room, or grand cabinet, the walls and furniture being adorned with red damask. Beautiful views of the park and of the Italian gardens are obtained from the windows of this room. The tapestries at Blenheim palace are remarkable. Many of them were copied from paintings of Le Brun, and represent battle scenes. In the suite of rooms through which we pass we notice some excellent paintings, Romney's portrait of Caroline,

marble, and the four door-cases are also of marble, consisting of pilasters, supporting an arch with shell keystones, within which is a smaller doorway, surmounted by the arms of the first Duke. The walls and ceiling are elaborately decorated, the painting being the work of La Guerre. The scheme of decoration includes a fine façade covering a raised gallery supported by fluted marble columns. The upper storey is ornamented with stone statuary. Trophies of arms with groups of soldiers appear



A FOUNTAIN IN THE ITALIAN GARDEN—BLENHEIM

Duchess of Marlborough, and Kneller's portrait of the first Duke. Copies of the old banners taken at the battle of Blenheim are preserved here. The centre of the chimney piece in the great drawing-room is a fine alto relievo in white marble, representing the marriage of Cupid and Psyche, copied from an antique of which Tryphon was the sculptor.

The saloon, always a prominent feature in a Palladian house, is a noble room, rising to the whole height of the building, in the same manner as, and communicating with, the great hall. Its base is

above, and below are groups of various nations, Scotch, Dutch, Swedish, Spanish, African and Chinese. On one side is the portrait of the artist, and near him that of Dean Jones, the chaplain of the Duchess Sarah. The ceiling is an allegorical painting of the career of the first Duke. We see him represented as a Roman conqueror driving his chariot over prostrate warriors. Mars and Minerva are fighting for him, and Time can scarcely keep pace with him. He is compared with Hercules fighting the dragon. But Peace stays his victorious career, while Truth, Plenty and Victory attend his



THE EAST FRONT FROM THE GARDEN—BLENHEIM

Blenheim Palace

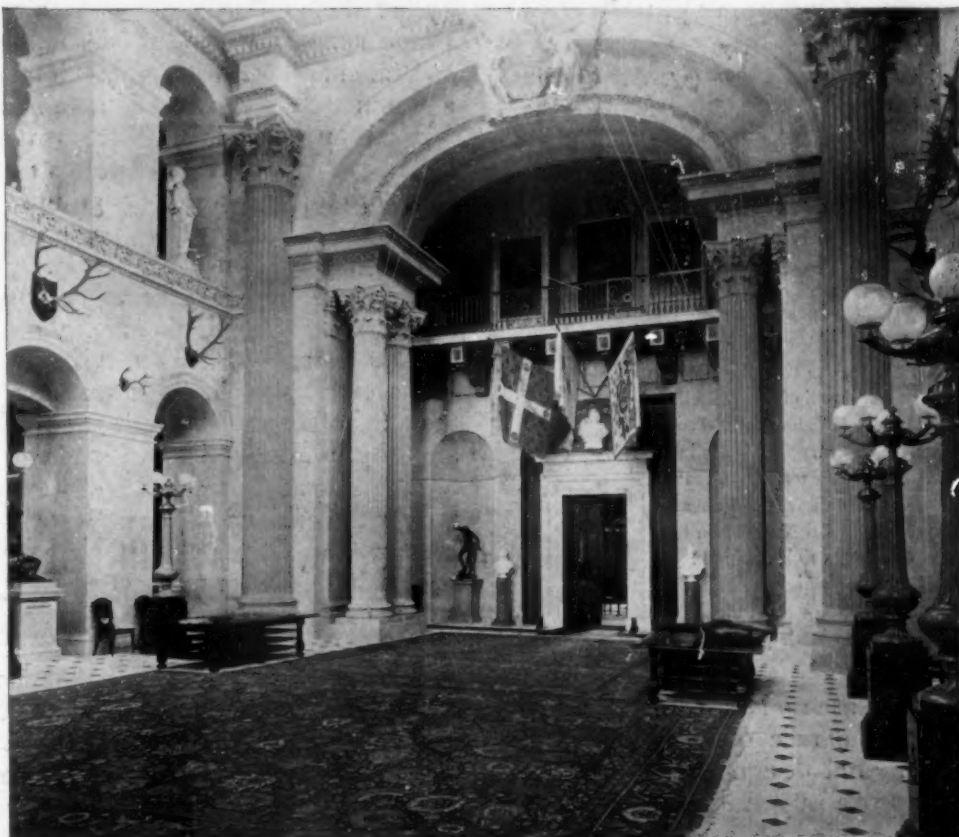
progress, and Queen Anne watches her favourite. It is impossible to give in detail all the remarkable features of this elaborate scheme of decoration.

We pass to the State apartments. The tapestries are very fine and represent scenes in the career of the famous Duke, who ordered them to be made for him at Brussels. First we see the siege of Donavert, then that of Lisle, then the Duke is before Mons in Hainault. The march to Bouchain and the siege of that place, the Earl of Cadogan and his favourite mastiff, the siege of Oudenarde, and groups after the school of Teniers representing the horrors of war, are some of the scenes portrayed in this remarkable series of excellent tapestries. Some of the pictures in the State rooms are worthy of notice, especially a beautiful portrait of the present Duchess by Carolus Duran, Louis XIV. by an unknown artist, and Kneller's painting of the great Duke and General Armstrong, who are represented in the conduct of the siege of Bouchain.

The library is one of the finest rooms in Europe; it is 183 feet long and occupies the entire southwest front. It formerly contained the famous Sunderland library of 80,000 books, which were sold at Christie's a few years ago. The carving of the bookcases is said to be the work of Grinling Gibbons. Rysbrach's white marble statue of Queen Anne, who is represented in her coronation robes, stands at the upper end, and on the pedestal is this inscription: "To the memory of Queen Anne, under whose auspices John, Duke of Marlborough conquered, and to whose munificence he and his posterity with gratitude owe the possession of Blenheim, A. D. 1726." Amongst the pictures are Van Dyck's Mary, Duchess of Richmond, George

Villiers, Duke of Buckingham by Mytens, Van Dyck's Lady Morton and Mrs. Killigrew, two famous beauties of the court of Charles II., the Earl of Strafford by the same artist. Sargent's portrait of

the present Duke and Duchess with their family is a fine and pleasing painting. Closterman's picture of the great Duke and Duchess has an historic interest. The poor artist was driven almost to distraction by the quarrelsome Duchess Sarah over this picture. The Duke wrote to Closterman: "It has given me more trouble to reconcile my wife and



A CORNER OF THE GREAT HALL—BLENHEIM

you than to win a battle." Vanloo's portrait of the second Duke and Duchess, that of the first Duke and Duchess by Kneller, Lely's Duchess of Portsmouth, Hudson's Earl of Sunderland, are some of the most striking paintings that arrest attention. A fine organ fills the lower end of this magnificent library. There are many other interesting paintings and busts, and some valuable documents, letters and dispatches of the great Duke which are preserved here. Although the present collection of pictures possesses many examples of great interest, it has only a tithe of the number of valuable paintings which formerly belonged to the family and formed a collection which both in extent and selectness was one of the finest in England. No private cabinet in Europe possessed such treasures of art. It was particularly rich in works by Rubens. A large number have been sold. Raffaele's celebrated Madonna d'Ansidei, the gem of the collection, realised £70,000, and is now in the National Gallery.

One more chamber in the palace must be visited, the chapel, which contains a somewhat heavy and pompous marble monument by Rysbrach of the first Duke and Duchess, a monument of the seventh

House and Garden

Duke (1822-1883) and a recent memorial of the brilliant but erratic statesman, Lord Randolph Churchill.

The architect was Sir John Vanbrugh, the conceiver of massively majestic effects, who escaped not the poet's satire conveyed in the epitaph:

" Under this stone, reader, survey
Dead Sir John Vanbrugh's house of clay.
Lie heavy on him, Earth, for he
Laid many a heavy load on thee."

Lord Lyttelton wrote enthusiastically of it in 1728:

" Parent of Arts, whose skilful hand first taught
This tow'ring Pile to rise, and form'd the Plan
With fair proportion; Architect divine
Minerva; Thee to my advent'rous Lyre
Assistant I invoke, that means to sing
Blenhemia, Monument of British Fame,
Thy glorious work! For thou the lofty Tow'rs
Didst to his virtue raise, whom oft thy Shield
In peril guarded, and thy Wisdom steer'd
Through all the storms of war. Majestic in its strength
Stands the proud Dome, and speaks its great Design.
Hail, happy Chief, whose valour could deserve
Reward so glorious! Grateful Nation, hail,
Who paid his service with so rich a Meed!
Which most shall I admire, which worthiest praise,
The Hero, or the People? Not the Vale
Of Tempe fam'd in song, or Ida's grove
Such beauty boasts."

The gardens and park are no less famous than the palace. Wise, one of the race of early landscape gardeners, was the original designer, but his plans have happily been improved upon by his successors. The Italian garden, bounded on the north by the conservatory, with its graceful fountain and beautiful formal arrangement is most attractive. The pleasure

grounds cover 300 acres, and have some splendid trees, deodars, Portugal laurel, cedar, copper beech and pine. There is the Temple of Health, erected to commemorate the recovery from illness of George III. in 1789, and the Ionic temple of Diana designed by Sir William Chambers, who also built the bridge which spans the lake. This noble bridge contains several chambers which were intended to be used as a summer residence. The lake is artificial, and was formed by "Capability" Brown by damming the little river Glyme. The groups of trees in the park were originally planted in groups, so as to form a plan of the battle of Blenheim, each group representing a battalion of troops. A prominent feature of the park is the column crowned by a colossal statue of the great Duke, and adorned with a record of his distinguished services to his country. "Rosamund's Well," the traditional rill in which the fair beauty bathed, and the high lodge, an old building once the residence of the ranger of the Royal Forest, are objects of interest that attract the curious.

As we leave the palace the rays of the setting sun shed a halo of glory on each tower and pinnacle of this wondrous house; the deer are browsing in the park beneath the shade of the ancestral trees; old oaks which have witnessed the hunting exploits of mediæval kings cast their shadows, and tell of the past glories of Woodstock, of the coming of the great Duke and of his winsome, wayward Duchess, and of the union of the last of his race with one of the fairest daughters of that great sister land across the seas, where the traditions of England's stately homes still find a hearty welcome.





Panoramic View of the South Side of the Garden

A JAPANESE GARDEN AT LANSDOWNE, PA.

DESIGNED AND EXECUTED FOR MR. CHARLES J. PILLING BY S. FURUKAWA

Photographs by the Owner

JAPAN, the land of five hundred autumns, as it has so aptly been termed, is teaching the American much that is beautiful and artistic in landscape gardening. First of all, let us not misunderstand the term "Japanese Garden." Often the merest apology for a garden is called Japanese,

just as every prim yellow house with white pillars is called Colonial.

Neither is the grotesque or curious a part of the true garden; in fact the born Japanese gardener simply endeavors to copy nature, in miniature but not cramped: the mountain, the rocks, the trees,



GENERAL VIEW OF THE GARDEN, LOOKING WEST

House and Garden



PARTIAL VIEW OF THE LILY POND AND IRIS BED

the ferns and most important the lakes and brooks.

Japanese methods of landscape gardening always combine the art of permanent and artistic beauty, equally attractive in winter (the ultra-aesthetic consider it more so) as in summer. It is claimed that the finest fundamental details are better seen in winter than when hidden by the summer foliage. Be this as it may, the garden shows up much rugged beauty when wrapped in a coating of snow, with its bold rocks, storm-swept evergreens and clear waters. In this instance



BEGINNING THE GARDEN

the gardener has combined this garden with the surrounding country, which is of a beautiful undulating character, thus blending his work with the principal surrounding features. There are several distinct and charming views and it matters not which way the eye turns no ugly or disfiguring background is found, but in every direction a perfect picture is seen.

Any Japanese garden is the direct opposite of the Italian or other formal gardens with their carefully trimmed trees

A Japanese Garden

and marble terraces, all requiring so much expensive care. The garden here illustrated is kept as near as possible like a piece of natural woodland, the leaves in the fall remain around the roots with the double benefit of a mulch and fertilizer and in summer the grass is occasionally cut but never with the exact

primness of the usual suburban lawn; it is essentially a rough natural garden, with hundreds of ferns growing out of the moss-covered rocks. It covers about one third or one half of an acre, yet seems to be of much larger area; work was begun four years ago and continued each spring and fall for three years. Construction cannot be profitably carried on in winter on account of the cold and in mid-summer owing to the heat, for the

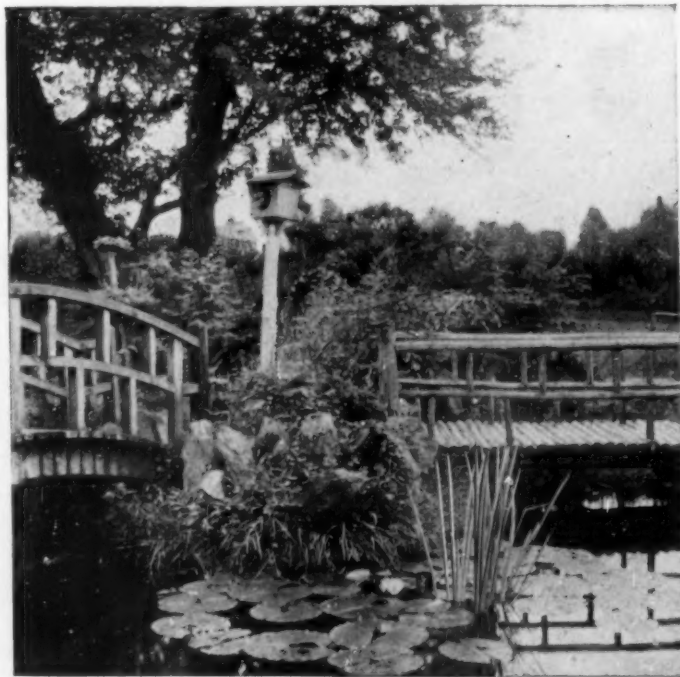


THE TROUT POND AND AZALEA HILL

rocks being so heavy make the work too exhaustive.

When designing a garden the Japanese considers three fundamental features, natural conditions, rocks and water. The original natural conditions here consisted of a hill overgrown with weeds overlooking a beautiful valley, three large trees

and a spring of clear water bubbling out of the ground near the large oak and immediately running back into the soil. These conditions promised unusual advantages but required the guiding hand of the landscape artist, not the usual kind who would design a square tank-like pond surrounded with geometric rows of trees and the usual flower beds; an artist was needed to originate a scheme to fit in with the surroundings. Fortunately the



THE TWO BRIDGES



LANTERN AND STEPS

House and Garden



THE UPPER FLIGHT OF STEPS

services of a skilled Japanese gardener were secured, one whose work was already well and favorably known. The first difficulty encountered was to find proper rocks; not quarry stone, but large, natural weather-beaten moss-grown surface rocks, and the larger the better. During a trip along Darby Creek, a mile or so away, we found exactly the required stone, but in very inaccessible places, difficult to approach by wagon. A stone contractor was consulted and the difficulties left to him. Very soon load after load of stone began to arrive until it seemed as though sufficient stone had been brought to build a house. These were brought in the winter because easier to remove while the ground was frozen and also to be ready in the early spring.

It was astonishing how many rocks were used and how quickly the supply became exhausted, with cries for more. The arrangement of the rocks is most ingenious for the benefit of planting and artistic as to appearance. Each rock is set up so there is always a cavity of soil without stone bottom thus allowing the roots of the plants to grow deep into the earth for moisture.

The ponds were excavated in the usual manner, the surplus dirt used for making the miniature mountains. The large pond has clay bottom with sides of brick set in cement, grouted between the bricks and dirt sides. This grouting not only strengthens the walls but also fills in any existing leaks. The most irritating and troublesome part

of any garden is a leaky pond, and unless the pond is properly made it will surely leak and prove a continuous annoyance while if constructed properly will be one of the most satisfactory and satisfying features. After the pond is once planted with water lilies, lotus, and the smaller aquatics, a charming succession of beautiful bloom is assured, provided the plants have very rich soil, for water plants require liberal nourishment as much as they need water. It is better to have the soil and cow manure well mixed two or three weeks before required, although if not convenient it may be done when needed without much fear of burning the roots, provided the boxes are at once put in the water. The four simple rules for a successful water garden are:

A tight pond,
Avoid overcrowding,
Warm water,
Very rich soil.

A continued apology during the entire work calls our attention to the new appearance of the work



WHERE THE TWO BRIDGES JOIN

A Japanese Garden

but with the promise that in five or ten years the aging process will gradually evolve the garden into its intended beauty; we are told the best gardens in Japan are hundreds of years old.

The only artificial ornaments allowed in a garden of this kind are the stone lanterns; three or four at the most, of the following designs:

Yukimi, Shizen, Kasuga, but avoiding the pagoda or other conspicuous shapes jarring to the eye.

The construction of the garden was the evolution of practical and artistic ideas.

First—Lake excavations.

Second—Formation of the mountains.

Third—Rock work construction.

Fourth—Laying out paths.

Fifth—Planting.

Sixth—Finishing touches.

It is hardly possible to find a more beautiful garden picture than the steep-sided glen reaching from the blue sky down to the water's edge and then reflected back by the mirror surface. The morning sun on the azalea bloom intensifying the delicate crimson colored maple leaves, just bursting into new life, makes an indescribable picture. The



ROUGHING OUT



VIEW LOOKING EAST

rolling ground surrounding this sheet of water reminds one of a mountain lake, the water giving expression to the whole garden. Two bridges are used, designed and built by a Japanese carpenter. The rustic one is of cedar, left its natural color, the curved bridge is painted a bright red. There are four small lakes, the largest about fifty feet long and twenty-five feet at the widest part with an island in the centre. This is fed by a large spring, consequently cold; it is stocked with brook trout, grown to a fair size; they are especially pretty and interesting darting through the clear, transparent water. The only successful water plant in this lake is watercress.

While these lakes are of small area, easily walked around, yet all the more reason the gardener had in spanning them with small bridges, thus impressing us with increased size and artistic effect.

The next two ponds are of less area, spanned by the two small bridges and stocked with gold fish; the water in these middle ponds while warmer than the trout pond is not sufficiently warm for water plants. A lily and spiked grass in one of the large tubs are the only plants grown here and are to break the water surface rather than for bloom. The last pond, which is for lilies, is irregular in shape, with rocks so arranged as to relieve the severe lines. The water here is warmer than in the others. This is necessary because lilies will not bloom profusely if cold. Its warmth is maintained by not allowing the full volume to pass through. The water simply passes by, on a

House and Garden



THE WEST END OF THE GARDEN

level with the surface and only enters the pond when evaporation lowers the surface.

The following hardy aquatics are growing in the lily pond:

WATER LILIES.

<i>Gladstoniana</i>	<i>Marliacea chromatella</i>
<i>Laydekeri purpurata</i>	<i>Pygmæa</i> , white
<i>Laydekeri rosea</i>	<i>Pygmæa</i> , yellow

OTHER AQUATICS.

<i>Striped calamus</i>	<i>Pontederia cordata</i>
<i>Eichbornia crassipes major</i>	<i>Sagittaria Chinensis</i>
<i>Limnocharis Humboldtii</i>	<i>Vallisneria spiralis</i>

The plants in the garden are about equally divided between deciduous and evergreen and all hardy, as everything remains in the ground all winter, their permanence being a desirable and necessary feature. Nearly all the plants were imported from Japan and strange to say are less expensive than if bought in this country and far more satisfactory. At first it was difficult to know just which plants were needed and how to get them. Even after the source of supply was discovered several amusing incidents occurred by reason of the confusion of names but this was exceptional.

The principal plants are as follows:

HARDY AZALEAS.

<i>A. Hinodegiri</i>	<i>A. Indicum</i> , <i>Matsushima</i>
<i>A. Fuji-Manyo</i>	<i>A. Omurasaki</i>
<i>A. Mollis Kirenge</i>	<i>A. Kirishima</i>
<i>A. ledifolium</i> , var. <i>Leucanthum</i>	

SMALL EVERGREENS.

<i>Chabo-Hiba</i> (dwarfed <i>Thuja obtusa</i> .)	<i>Juniperus Chinensis procumbens</i>
<i>Sciadopitys verticillata variegata</i>	<i>Pinus Tanyosho</i>
	<i>Pinus Koraiensis</i>

JAPANESE MAPLES.

<i>A. atropurpureum</i> (Nomura)	<i>A. versicolor</i> (<i>Oridon-nishiki</i>)
<i>A. Osbiu-beni</i>	<i>A. Osaka-zuki</i>
<i>A. Japonicum</i> (<i>Itaya</i>)	<i>A. atrodisectum variegatum</i>
<i>A. sanguineum</i> , <i>Seigen</i>	<i>A. sanguineum Chishio</i>
<i>A. roseum</i> (<i>Kagiri</i>)	<i>A. dissectum</i>
	<i>A. atropurpureum dissectum</i>

MISCELLANEOUS.

<i>Iris Kämpferi</i>	<i>Cornus Kousa</i>
<i>Magnolia conspicua</i>	<i>Magnolia stellata</i>
<i>Wistaria brachybotrys</i>	<i>Wistaria Chinensis</i>

The word "Garden" seems always to suggest flowers; the true Japanese garden is not a flower garden and there is nothing in it suggestive of flower beds. There are a few flowers, but as minor details, and allowable only on account of being the plants making up the landscape.

The path leading to the garden is planted with Japanese flowering cherry trees; in the early spring, for a few days, producing a soft, pink cloud of blossom. The azaleas with their rich yellows, crimsons, whites and purples, give color to the May garden. The irises (*Kämpferi*) growing on the margins of the ponds are a revelation when properly grown, thriving in the low damp ground where they get an abundance of sun.

These beautiful flag-like blossoms, bursting into magnificent bloom the middle of June, are from ten to twelve inches in diameter, rivaling the orchid in beauty, ranging in color from pure white to deep royal purple, including maroons, deep blues, violet, beautifully veined, mottles and almost endless charming combinations of colorings, but outside of these few blooms the garden is not intended to be anything more than a piece of rough natural woodlands.

C. J. P.

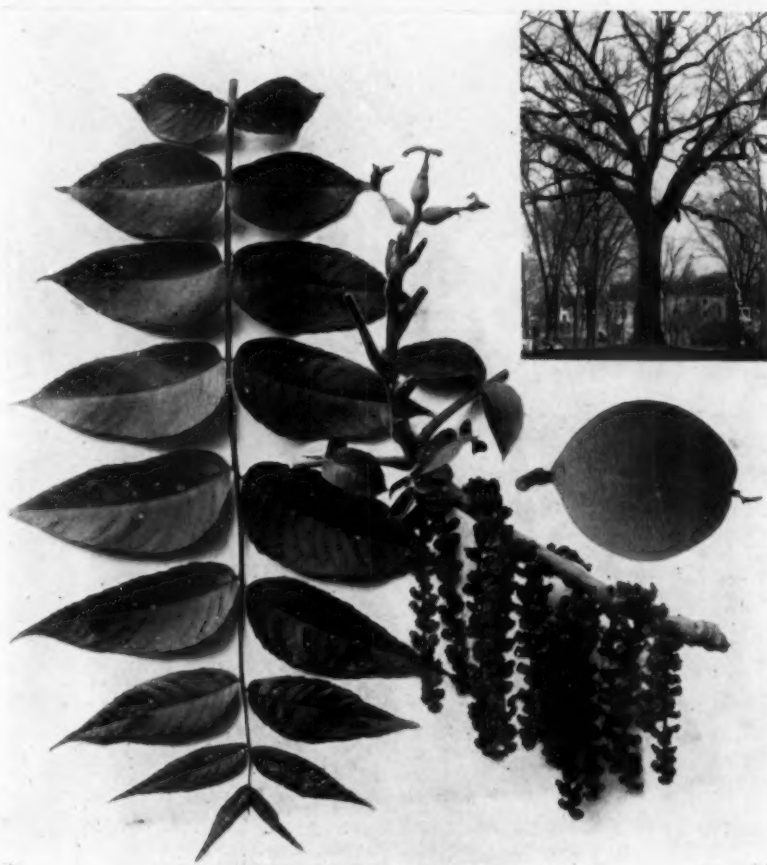
PORTRAITS OF AMERICAN TREES, NATIVE AND NATURALIZED

PHOTOGRAPHED FROM NATURE

BY ARTHUR I. EMERSON

WITH A GUIDE TO THEIR RECOGNITION AT ANY
SEASON OF THE YEAR AND NOTES ON THEIR
CHARACTERISTICS, DISTRIBUTION AND CULTURE

By Clarence M. Weed



The Black Walnut—*Juglans nigra*

Part III

- The Sycamore Maple—*Acer Pseudo-Platanus*
- The Persimmon—*Diospyros Virginiana*
- The Red Ash—*Fraxinus Pennsylvanica*
- The White Ash—*Fraxinus Americana*
- The Lombardy Poplar—*Populus nigra Italica*
- The White Spruce—*Picea Canadensis. Picea alba*



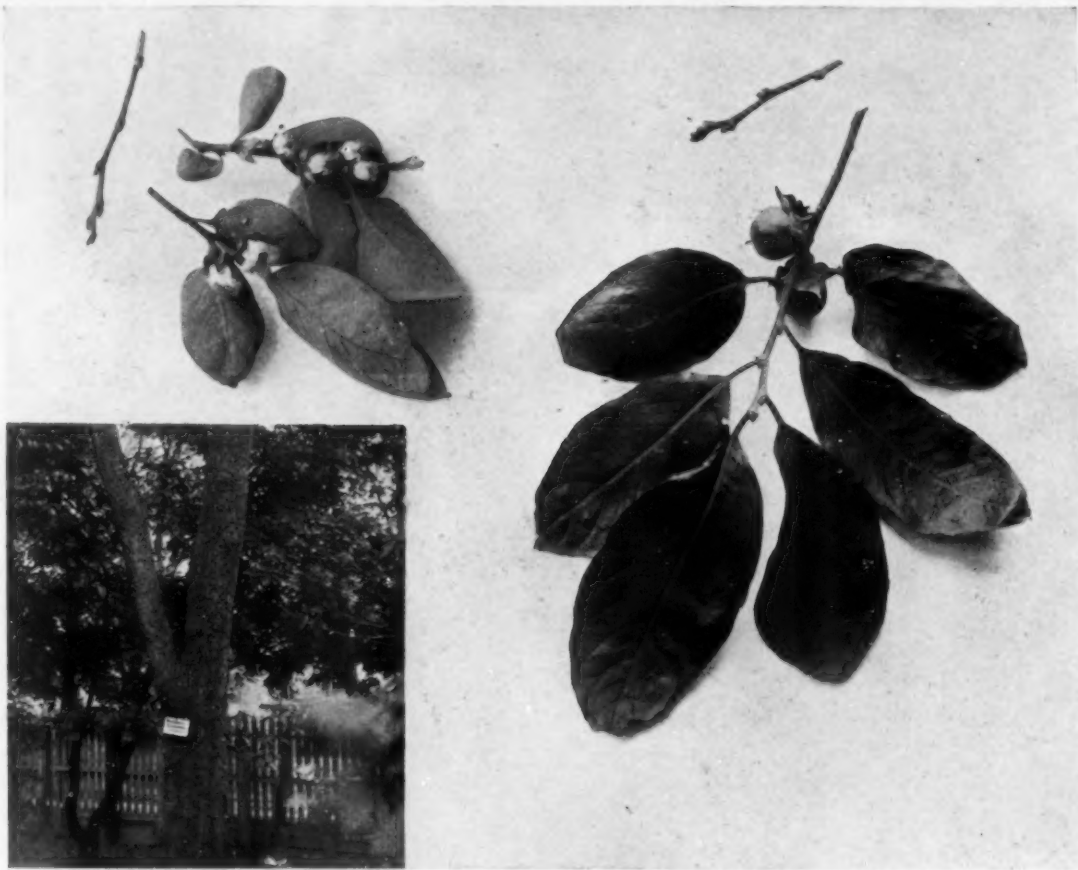
The Sycamore Maple—*Acer Pseudo-Platanus*

THE Sycamore Maple is vigorous and hardy, free from insect and fungus enemies, attractive throughout the year and furnishes a very dense shade. It grows rapidly and is easily started from seed. This tree is readily distinguished from the other Maples. The leaves bear a general resemblance to those of the Red Maple in their outline, but they are denser in texture and the lobes are broader toward the tip. They are palmately five-lobed but the two basal lobes are so small as to make it practically a three-lobed leaf. The veins are very distinct, especially on the under surface where they project and are more or less clothed with fine hairs along their sides. The upper surface of the leaf is dark green, the under surface being lighter and the whole blade changes in autumn to a distinct yellow color. The fruit matures in autumn, being borne in long clusters with rather small key-fruits. After the leaves have fallen the bare tree presents a sturdy appearance with the large green buds as its most distinctive character. In spring the long drooping racemes

of blossoms hanging from the ends of the young branches are very distinctive. The young leaves as they push out are covered on the under surface with a dense cottony down.

In Mrs. Dyson's "Stories of the Trees," may be found an account of the origin of the name given to this species which in Europe is called simply the Sycamore, although this term is more properly applied to the plane-tree.

"In the miracle plays, it seems, one of the favorite scenes for acting was the flight of Joseph and Mary into Egypt, and one legend said that on their way they rested under a sycamore tree. No sycamore, however, grew in the countries where these plays were acted and so our sycamore was chosen in its place because its shady leaves were a little like those of the true sycamore, and ever since then it has borne the name of the tree whose place it took. Before that time it was called the *mock-plane* because its leaves were the same shape as the plane-tree leaves, and by that name it is still known in some places."



The Persimmon—*Diospyros Virginiana*

FOR some reason, the Persimmon fruits are as famous among trees in the folklore tales of the South as is the opossum among animals. They are both extraordinary forms, being the sole representatives of their families in Eastern America and occupying a very similar geographical range. Even their scientific names are not unlike, the Persimmon being known technically as *Diospyros Virginiana* while the opossum is *Didelphys Virginiana*.

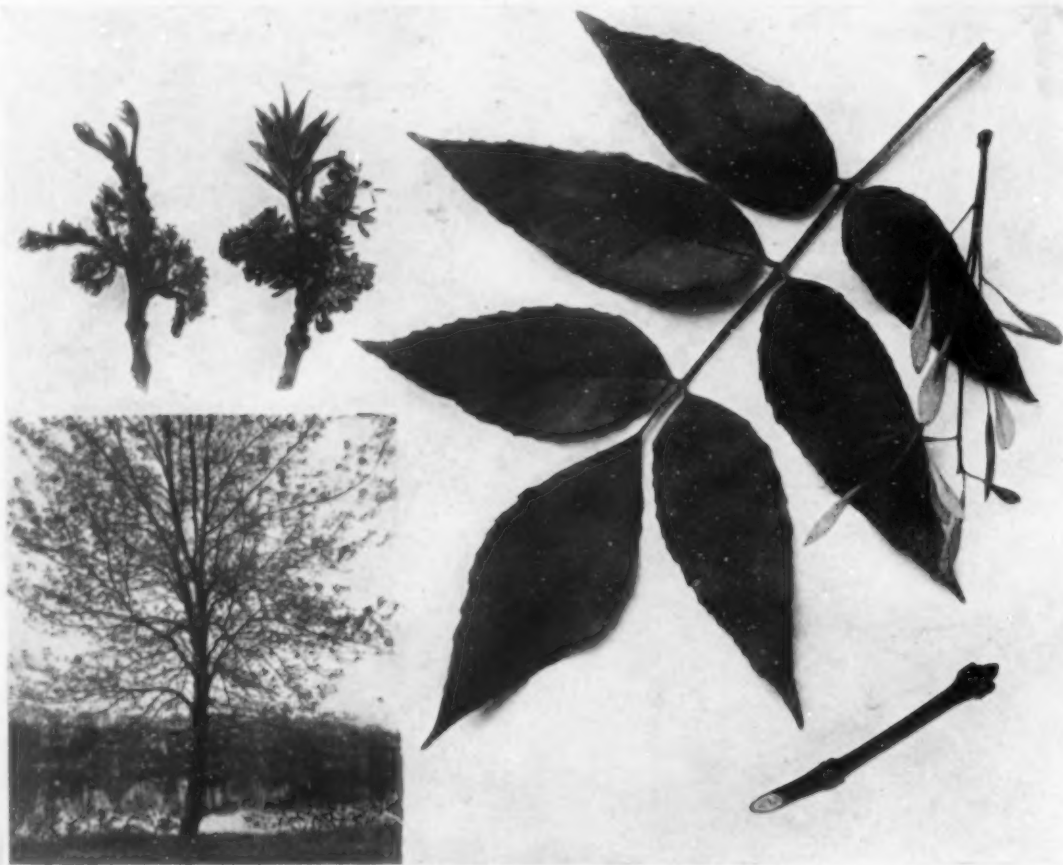
The Persimmon is essentially a Southern tree, being most abundant in the states along the South Atlantic and the Gulf coasts, extending as far north as Southern Ohio. It has been reported as being found in Southern New England, but there seems reason for believing that some of these trees were not indigenous. The fruit is the most interesting feature of the tree, being of good size and a favorite article of food after its astringency has been removed by the action of frost. The form and character of the fruits are shown upon the plate. These develop from flowers that blossom in June, there being pollen-bearing and seed-bearing

flowers upon different branches of the same tree or upon different trees. These blossoms are a pale yellow color and of the general forms illustrated on the plate, the smaller pollen-bearing being shown above the larger seed-bearing ones.

One of the earliest references to the Persimmon is found in "The Historie of Travaile into Virginia Brittaina," which reads as follows:

"They have a plumb which they call pessemmins, like to a medler, in England, but of a deeper tawnie cullour; they grow on a most high tree. When they are not fully ripe, they are harsh and choakie, and furre in a man's mouth like allam, howbeit, being taken fully ripe, yt is a reasonable pleasant fruit, somewhat lushious. I have seene our people put them into their baked and sodden puddings; there be whose tast allows them to be as pretious as the English apricock."

There is great variation in the size and quality of fruits from different trees and it would seem feasible greatly to improve the edible characters of the fruit from trees planted by men by a little attention to the selection of seed or by budding or grafting.



The Red Ash—*Fraxinus Pennsylvanica*

THE Red Ash or River Ash is easily recognized at any season of the year by the distinct pubescence upon the bark of the young twigs. In summer the leaflets are seen to be distinctly stalked like those of the White Ash but differing from that species in that the stalks, the petioles and more or less of the under surface of the leaves are covered with fine hairs. The under surface of the blades is lighter green than the upper surface. In autumn the leaflets become first yellowish, then brownish, falling to the ground rather early. The fruit is similar to that of the White Ash except that the wing instead of being terminal extends well down the sides of the basal seed-bearing parts.

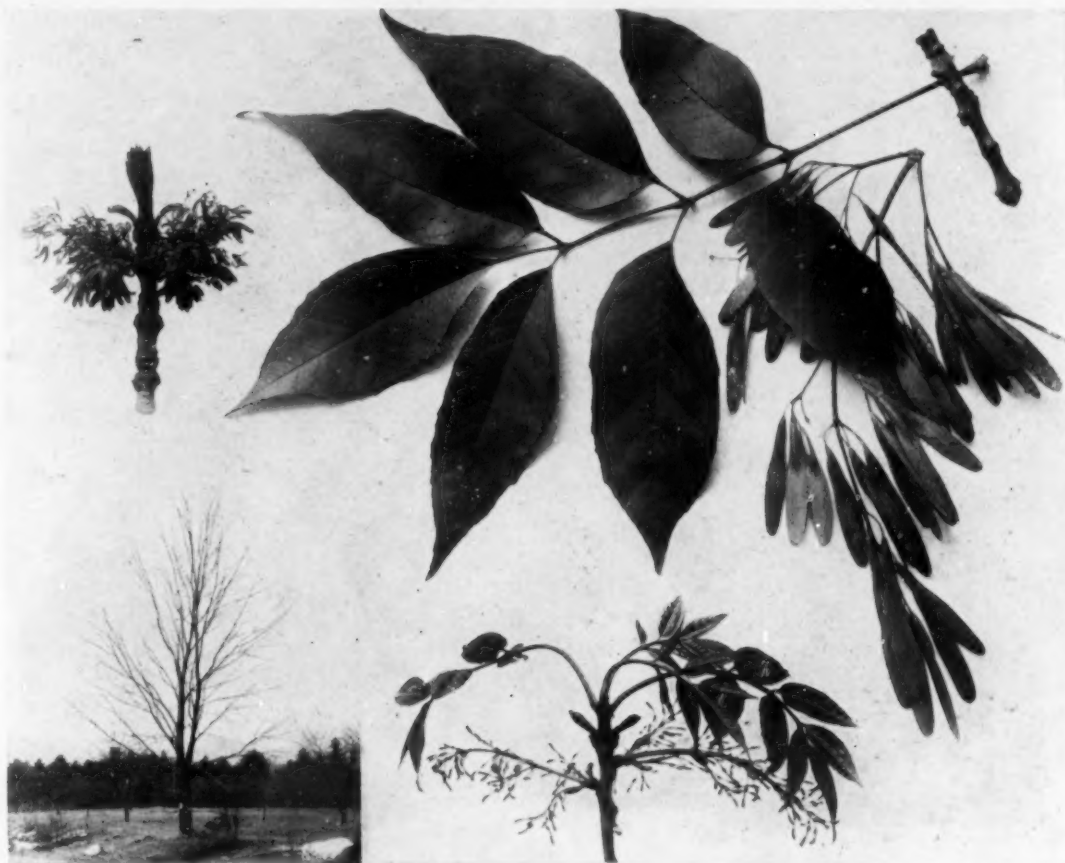
The Red Ash is a rare tree in comparison with the abundant White Ash. It occurs along river banks and is found over a wide territory, extending from New Brunswick to Manitoba on the north, to Dakota and Missouri on the west, and to Alabama and Florida on the south. Like the Black Ash it is sometimes called the Brown Ash. It is easily started from seed and has

almost as many claims for landscape planting as has the White Ash.

There has been considerable discussion in regard to the specific relationships of the Red Ash and the tree which is commonly called the Green Ash, a sort which differs chiefly in having the bark of the twigs smooth. The gist of the matter seems to have been concisely stated by Professor C. S. Sargent, who writes:

"East of the Mississippi river the Red and Green Ashes grow side by side and retain their individual character; but in the West they are connected by intermediate forms which can be referred to one as well as to the other."

The Red Ash is one of the trees most easily recognized in winter on account of the grayish pubescence on the bark of the young branches. The surface of the bark is marked by slight longitudinal striations and numerous whitish oval dots which are often concealed by the pubescence. The buds are dark brown, and rather small with the surface of the scales downy. The terminal buds are wedge-shaped.



The White Ash—*Fraxinus Americana*

FEW trees have a more characteristic appearance at any season of the year than do our various species of the Ash tree family. The bark of the trunk is of a grayish color and is so vertically furrowed in a more or less zigzag fashion as to be easily recognized. The manner of growth of the branches and twigs is also characteristic, as are the large compound leaves and the very distinctive paddle-like key-fruits.

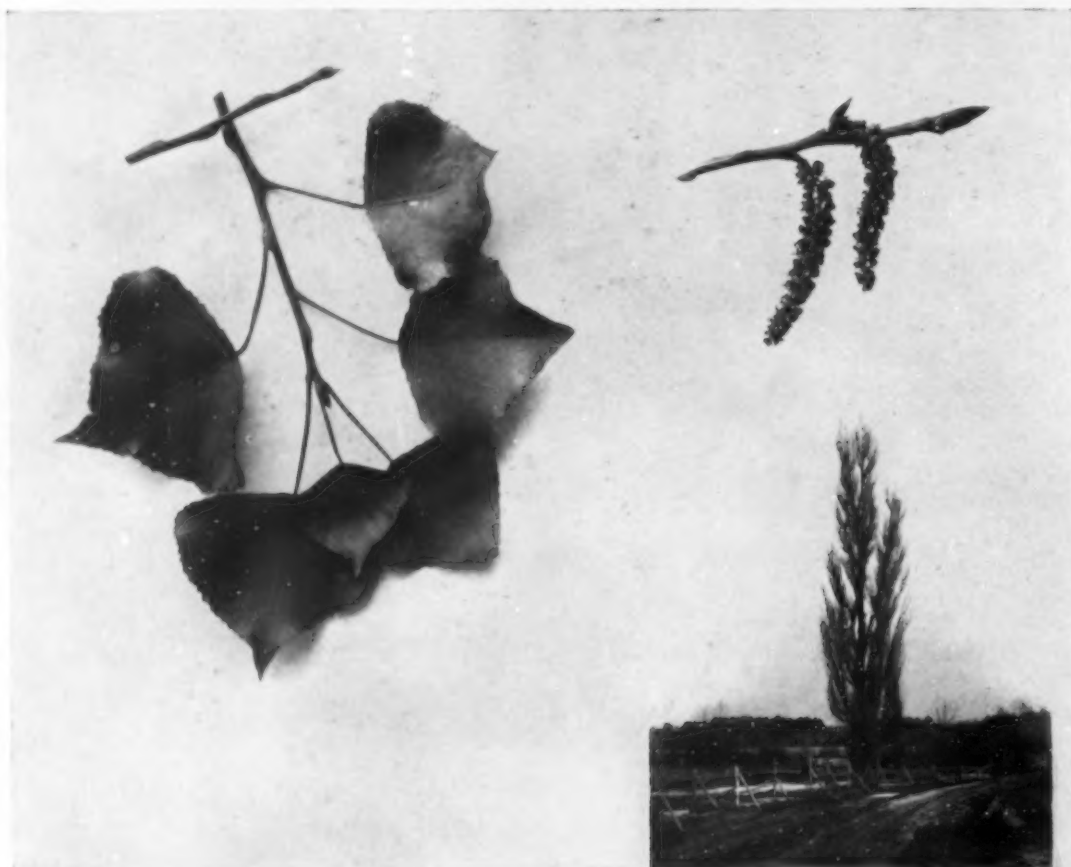
The European Ash has been the subject of many traditions and superstitions, which to a certain extent have been applied to the American species. One of the most curious of these is the one relating to the antipathy of snakes for the branches of the trees. So long ago as Pliny wrote the superstition apparently was in existence, for that author states that the serpent will go through fire rather than through the branches of the Ash tree.

The White Ash is distinguished in summer from the other species native to America by having stalked leaflets on glabrous

petioles, the leaflets being distinctly whiter on the under than on the upper surface. The margins of the leaflets are serrate and the tips are commonly acuminate. They turn yellow in autumn. In winter the White Ash is distinguished by having smooth glabrous twigs and slender key-fruits on which the wing is terminal.

The curious blossoms of this tree are sent out in spring in advance of the leaves. The pollen-bearing and the seed-bearing flowers are generally on different trees and the pollen is evidently carried by the wind. The seed-bearing flowers are in long panicles that become still larger as the fruit matures.

The White Ash grows commonly throughout a vast region bounded by Nova Scotia and Minnesota on the north and Florida and Texas on the south. It is greatly prized as a timber tree, the wood being used for many purposes, and it also has decided advantages as a shade and ornamental tree. It is often called the American Ash. It is easily grown from seed.



The Lombardy Poplar--*Populus nigra Italica*

THE Lombardy Poplar is one of the most interesting trees cultivated by man. It was formerly believed to have originated in Lombardy many hundreds of years ago in some specimen that assumed the peculiar manner of growth that characterizes the tree, but during recent years the species is said to have been found growing wild in Afghanistan high up in the mountains. It is an interesting fact that all of the Lombardy Poplar trees which have been grown by man have borne only pollen-bearing blossoms, so that the species has been reproduced by cuttings or suckers exclusively, no seed being possible under existing conditions. If the species does grow wild in its native home it ought to be possible to introduce seed-bearing trees.

The vertical habit of growth of the branches of the Lombardy Poplar at once distinguishes the tree from all others. The leaf also is characteristic, being very broad for its length. The base is usually truncate or wedge-shaped and the apex is acutely pointed, while the margin of the blade is finely crenulate or serrate. The buds are

small and vertically pointed, the flower buds developing very early in spring into pollen-bearing catkins and the leaf buds pushing out a little later their young leaves of a rich yellow-green color. The petioles are appressed but rather strong, holding the leaves firmly in their general position but allowing them to move freely from side to side in the wind. In consequence the blades are constantly shifting in unison, the observation of which fact led Leigh Hunt to write:

"The poplar shoot
Which like a feather waves from head to foot."

There has been much discussion concerning the place of the Lombardy Poplar in landscape gardening. In former times it was planted everywhere as an ornamental tree. Somewhat later it suffered from a reaction, which led to its general neglect. At present the fact seems to be recognized that a tree with so distinctive a character may be of inestimable value in some parts of a landscape picture while in other parts it may be worse than useless. It is easily propagated by cuttings of the branches and grows very rapidly.



The White Spruce—*Picea Canadensis*. *Picea alba*

THE White Spruce is one of the most magnificent evergreens native to North America. In the open it is a beautiful, symmetrical tree, thickly clothed with branches with a tufted appearance that distinguishes it from the Norway Spruce. Close at hand the branches are easily separated from those of the Red Spruce and the Black Spruce by the fact that, while the bark of the young twigs of the two latter species is both rather thickly covered with hairs, the bark of the young twigs of the White Spruce is glabrous. It may often be distinguished by the fact that the leaves have a rather unpleasant odor, as well as by their whitish color which gives the tree its common name.

This is a northern species, ranging from Newfoundland to Alaska and extending southward to the northern tier of states and British Columbia. Throughout this vast range it grows with the other Spruces and by many lumbermen is commonly not distinguished from them. It is especially abundant along the coast of Maine. In more northern regions the trees sometimes

reach a height of a hundred and fifty feet and a trunk diameter of four feet, but commonly in more southern localities it is but sixty feet high with a trunk diameter of two feet. The bark of the latest season's shoots is generally reddish brown, while that of older branches is much darker. The leaves are about four-fifths of an inch long with sharply pointed tips, and stripes of white dots on each of the four sides. The cones are borne on the tips of the smaller twigs and when fully developed are of an average length of one and a half inches. The margins of the scales are thin and rounded, the middle of the margin being commonly truncate and entire. The small seeds with the wing attached are about a quarter of an inch long. The cones drop off after the seeds are shed and may be found beneath the tree at any season of the year.

In Canada and the extreme Northern States this is one of the most desirable evergreens for ornamental planting, but further south it is not adapted to the climate and becomes unsightly as it grows older.



SCREEN—"RENAISSANCE" DESIGN

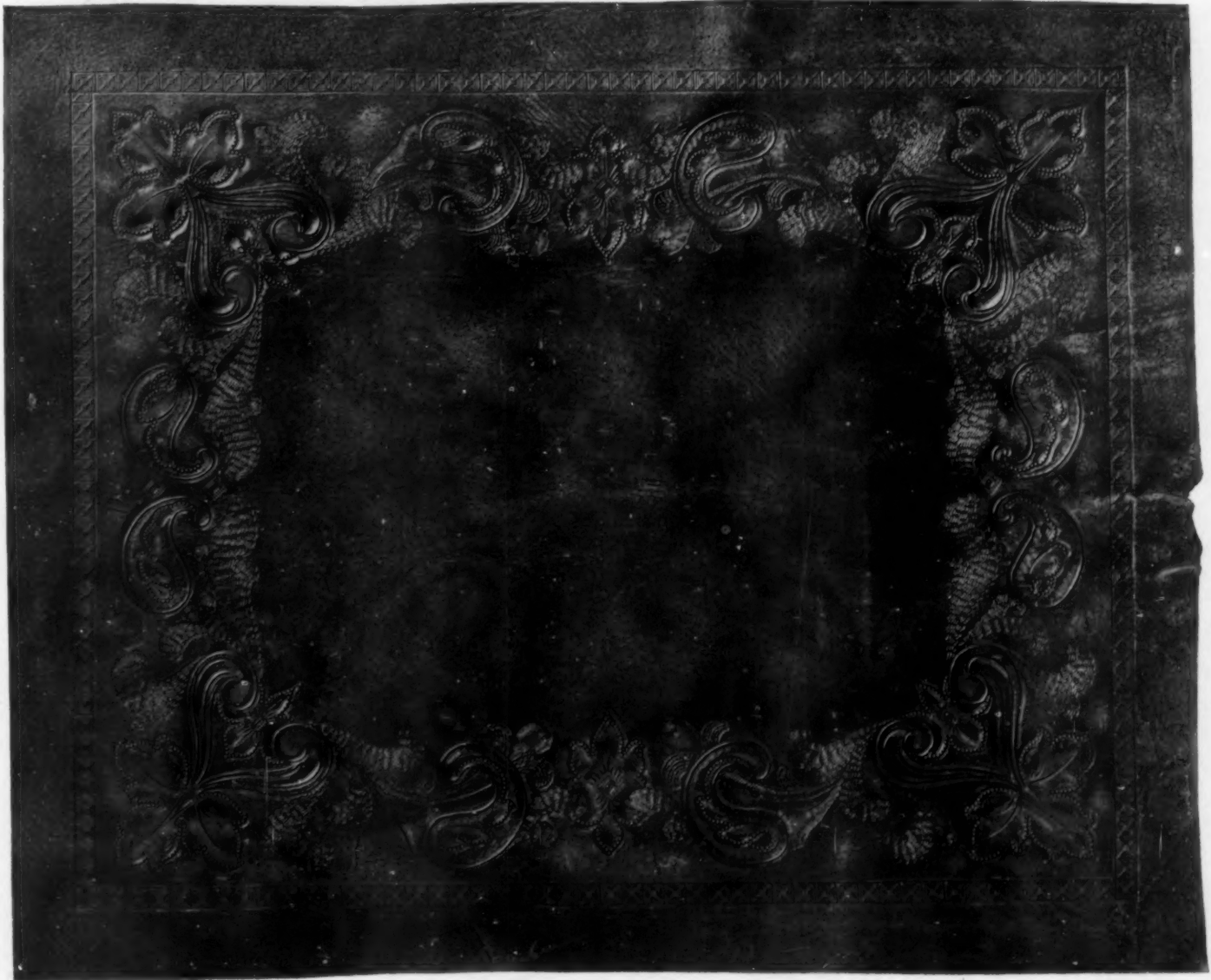
TOOLED LEATHER

THE Stone Age, the Iron Age, the Golden Age, have played their rôles in the development of the ingenuity and culture of mankind, each marking an epoch and an advanced step towards the evolution of practical needs into ideal conveniences, and so, out of the elements which made the environment of our ancestors, have developed, existed, passed away and been born again to cater to the ever changing tastes of humanity the various styles of buildings, furniture, decorations etc., that we term "Periods."

If, from the romantic standpoint of art, literature and chivalry, the Golden Age was happily named, it might seem an ill choice of the term to express, in a period so devoid of romance, chivalry and purely original art, what is really a Golden Age

from the financial standpoint, yet never in the world's history has the development of the world's resources of mines, agriculture, and mechanics made the term "Golden" more expressive.

With this wonderful outcome from industry has come the reversion of taste for the environment and the luxury of the other Golden Age, and the modern Aladdin (otherwise the great financier and Trust builder,) having energetically rubbed his lamp of intellectual mastery of industry, forthwith erects his modern palace along the lines of Old English, Spanish, Italian, German Baronial or French mansions and castles and ransacks all Europe for treasures of art, furniture, decoration and fantasy wherewith to give his residence of to-day the verisimilitude of the venerated past.



A TABLE MAT

House and Garden

To one not devoid of the imagination and ideality that go hand in hand with culture what wondrous mental pictures are evolved from the surroundings one finds in such a modern home! In the drawing-room the tapestries and furniture may have been once the property of nobility, if not even of

Murillo or Rembrandt might have given them had they turned from the easel for the nonce to lend their art to the decoration of some grand old palace of Spain, Italy or Flanders. But, alas, Time not only mellows but destroys with his touch, be it never so gentle, and not only has much of the genuine old



A ROUND TABLE MAT

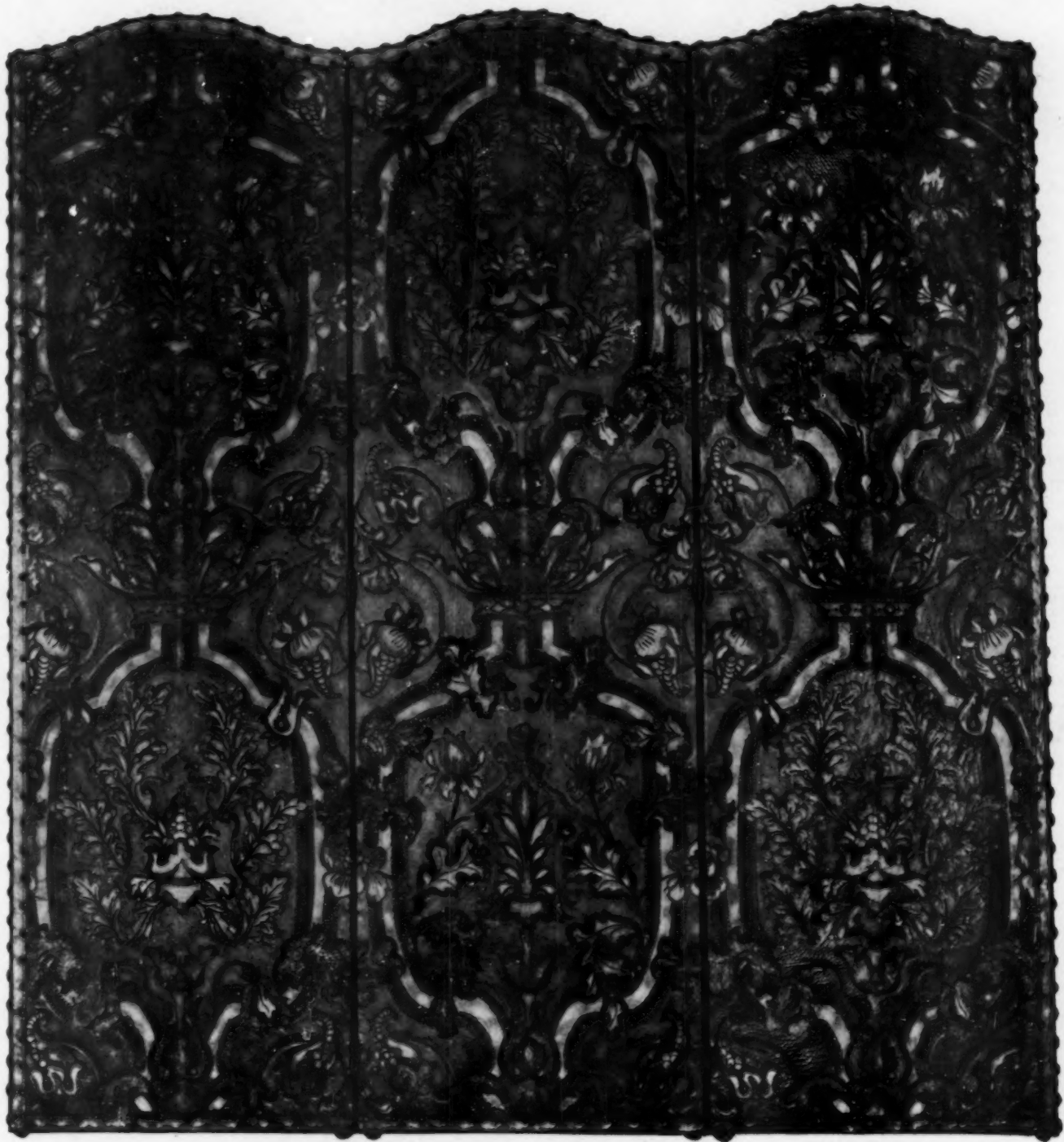
royalty, and one can almost imagine a courtly gathering once more passing through the salons seeking the object nearest for the time being to his or her heart. In the great hall or the dining-room or library may be wall hangings or furniture coverings of old leathers, rich and warm with tones that

leather been exhausted but the demand is so great for this most beautiful, enduring and artistic fabric for decorating and furnishing that it would be impossible to secure enough of it, but that is no drawback to its use for there are men to-day who have made a most thorough study, for the past quarter of a

Tooled Leather

century, of this great art-craft and whose hand tooled and carved and otherwise decorated leathers for walls, furniture, screens, table covers etc., are so wonderfully in touch with the *esprit* of the antique models from which they have studied and copied

even the trained connoisseur to detect any difference. While students in most of the arts and crafts have increased and multiplied, there have been very few who were capable and patient enough, as well as gifted with the special understanding of it, to make a



SCREEN—"OLD ENGLISH" DESIGN

that in rooms where they have been given perhaps two or three strips of antique leather, or one or two chair seats as a motif, (no more of the antique being obtainable,) they have filled out the necessary quantity for the entire room or the whole assemblage of furniture so cleverly that it is impossible for the eye of

lifework of this art-craft of tooling and decorating leather, but that the work is still done just as it was centuries ago, with the same designs, coloring and spirit, was demonstrated by the exhibits made at the exhibitions of the Architectural League of New York, and other cities by the association of artists and



SCREEN—"OLD FLEMISH" DESIGN

craftsmen, known as "Baisden-Bragdon-Webb Company," who also display at their beautiful and artistic show rooms, at No. 13 West 30th Street, New York, a collection of examples of their work that has commanded the admiration and endorsement of the highest and most capable critics among architects, decorators and the cultured public. All

the work executed by these artists is done to order by contract. They are intensely devoted to their work for the art's sake, and have never failed to produce or reproduce entirely satisfactory results. They invite inspection of their work and correspondence; will give estimates and make samples to ensure the satisfaction of their clients without charge, and will

Tooled Leather

send as many full sized examples of their beautiful leathers for inspection as may be necessary to convey a thorough conception of the work.

The illustrations of this article are made from the work of the Baisden-Bragdon-Webb Company and while the description of the coloring of these specific objects, conveys comparatively, inadequately an idea of the richness and beauty of their softly modulated and intermingled tones, it serves to indicate but one of the many treatments and handlings of which each design is capable. The work was all executed for orders and therefore to harmonize with the atmosphere of the rooms where they were to be used.

Screen—"Renaissance" Design.—On a ground of rich, golden brown, illuminated, the tooled design is worked out in rich but subdued, lustrous golds and delicate suggestion of colors, while the fruits and flowers are done in the effects of Roman enamels, glazed to a wonderful depth and softness of effect.

A Table Mat: Hand Carved and Tooled Design.—The design being carved and tooled on the natural color of the hide is merely glazed with tones to enrich its tan and brown effects, while the surrounding ground of leather is oil dyed in a dull, bluish green.

A Round Table Mat: Hand Tooled and Burnished Effects.—On a heavily grained leather, the ground is a deep, rich brown and the design, worked up in rich, dull golds, overlays a ground of deep, illuminated green. These mats are made to order for all size and shape tables or desks and, of course, in color schemes to suit the requirements.

Screen—"Old English" Design.—On a ground

of mottled green, illuminated by being laid over pure silver leaf, the main design is worked out in great variety of tooling in antique bronzed gold while the foliage and flowers are done in olives, dull reds and blues and oxidized silver, having in many places the effect of Byzantine enamels, on copper, and infinitely rich without garishness.

Screen—"Old Flemish" Design.—On a ground of mottled, quiet, old gold the main design is worked up in rich golds and browns and the fruits in the cornucopias etc., are done in shades of greens and dull reds.

All these decorative leathers vary in color scheme and effects produced as well as in design, from the richest designs all over the leather, down to simple lines of bordering etc., and from the dullest, most antique effects of the old Spanish and Flemish leathers up to the rich and sometimes almost opulent colorings demanded by present day decorative schemes, but always there is the softening influence of the glazings, the tonings and the art that makes them perfect. Besides the hand tooled and carved leathers the Baisden-Bragdon-Webb Company execute many orders for the hand painted leathers of the Spanish, Vernis Martin and Watteau type which are greatly admired by art lovers and have the stamp of approval of the best known critics. They are generally done on gold grounds, more or less dull, and sometimes the ground is plain and again it is covered entirely over with a tooling that gives a diaper effect in the open spaces where the design is not painted.



Cliff on the Nile

AN INTERESTING EXAMPLE OF SEWAGE DISPOSAL AT ESSEX FELLS, N. J.

BY ALBERT PRIESTMAN

IN a previous issue we spoke of the dependence which of necessity must be placed upon the life processes of bacteria, for the complete disposal of polluting matters in sewage, and the care which should be exercised in the design, construction, and operation of sewage works, for complying with the conditions governing microbic action.

A small plant for the purification of sewage at Essex Fells, N. J., affords an interesting and useful example of a satisfactory and economical method of treatment, and of the application of the knowledge which has been gained during the past ten years in relation to this important subject.

Essex Fells is one of the most picturesque of the many charming residential districts in New Jersey populated chiefly by the families of those whose businesses are in New York City.

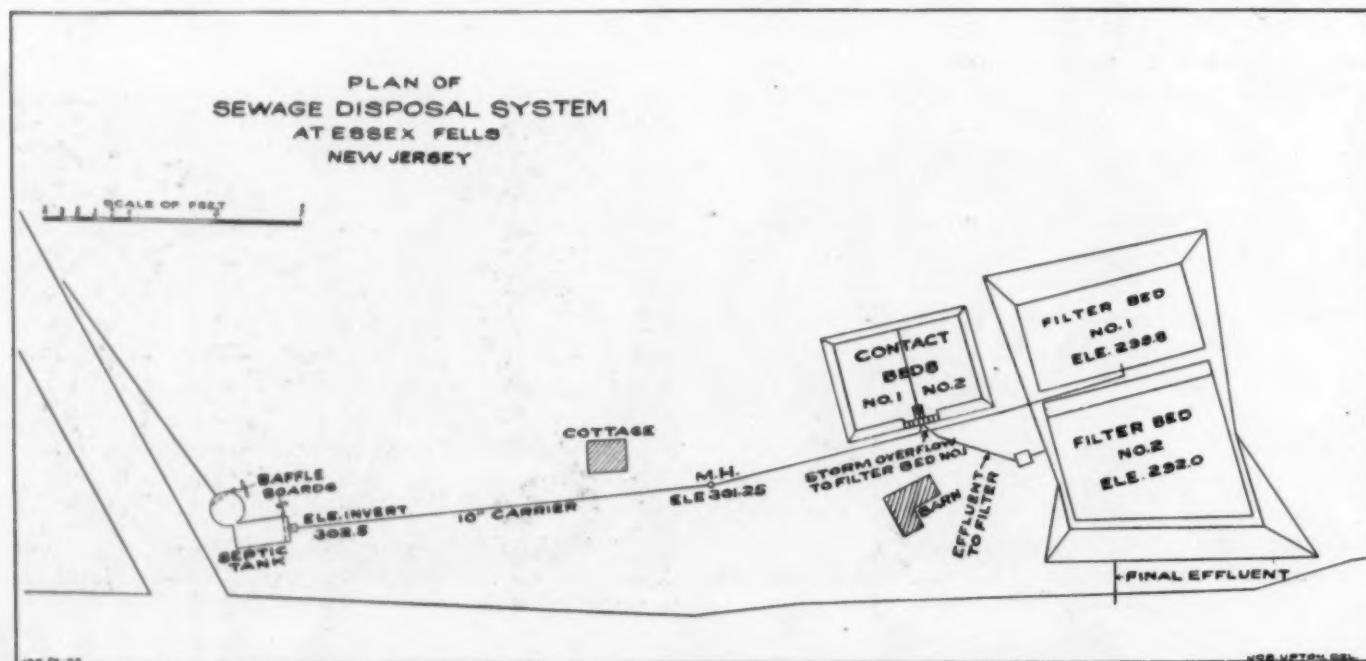
About 1895 far seeing capitalists purchased upwards of fourteen hundred acres of beautifully wooded country within a mile of the village of Caldwell in Essex County, and 350 feet above tide water.

To-day, thanks to the excellent judgment of landscape gardeners, civil engineers and architects, the "well-to-do" make their homes in one of the most delightful spots which can well be imagined for those who appreciate country life and its many outdoor pursuits.

An abundant supply of excellent drinking water

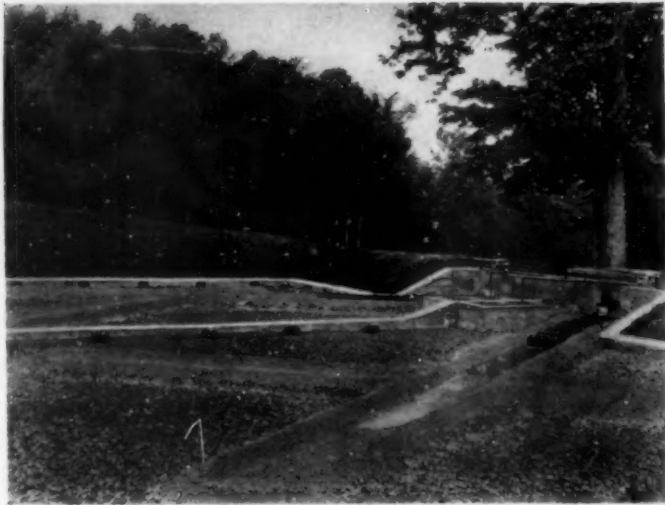
from artesian wells, accounts in no small measure for the health which apparently is universally enjoyed by the inhabitants of Essex Fells, but much is to be credited to the complete system of sewerage which insures that house wastes do not pass to cesspools to poison the ground and atmosphere, but readily gravitate to, and are satisfactorily disposed of, at purification works.

The original sewage disposal plant was designed in accordance with the best practice in vogue at the date of installation. It consisted of a circular grit chamber 18 feet in diameter and 11 feet in depth, into which the sewage gravitated and in which the heavier matters were deposited. From this chamber the sewage passed into a rectangular chamber 30 feet in length by 15 feet in width, in which it collected to a depth of 8 feet. At the further end of this chamber was a "Field" siphon. This make of siphon was invented by Rodgers Field of England, nearly thirty years ago. The principle under which it operates is that of the exhaustion of air from the long leg of the siphon, by liquid falling through it and which thus entrains the air so that a partial vacuum is formed which sets up siphonic action. The liquid is then driven up the short leg and down the long leg by atmospheric pressure until the contents of the tank or reservoir have been withdrawn to the level of the mouth of the siphon, when the air enters and the



Plan of Sewage Disposal Plant, Showing Preliminary Treatment Tanks, Contact Mineralizing Beds, and Sand Filters

An Interesting Example of Sewage Disposal



"Contact" Mineralizing Beds Automatically Operated by the Merritt Air-lock System

vacuum is broken. There are to-day siphons which are more positive in their action, but the "Field" has in the past, and is still demonstrating in many places the utility of devices for controlling the flow of sewage, which are free from moving parts, require no oiling, and are not subject to wear. In its use for the operation of the plant we are describing this siphon has for eight years without intermission, automatically discharged the contents of the dosing tank, passing intermittent doses through a 10-inch carrier to one or other of two filters composed of coarse sand found on the property and placed in position five feet in depth, well underdrained and enclosed, and held in place by earth banks. These filter beds were constructed at two levels. The upper bed had an area of somewhat less than one-eighth, and the lower one slightly less than one-sixth of one acre. These beds were probably assumed to be capable of handling upward of 20,000 gallons of crude sewage per day, judging by the dimensions of the dosing tank.

Sluice gates were provided so that the flow might be changed over from one filter to the other, or so that the liquid contents of the upper bed could be passed, if desired, to the surface of the lower one. The underdrains discharge into a small stream traversing private gardens and which it is important should be as free from contamination as possible.

The purpose of this first arrangement was to secure purification of crude sewage by simple subsidence through sand. The large volume collected for each dose in comparison with the small filter bed area, indicates that the designing engineer who was originally employed relied too much upon straining the sewage and too little upon its bacterial oxidation in sand sufficiently supplied with air.

At first when the volume of sewage was small, good results were obtainable. The sewage freed from its heaviest solids by deposit in the grit chamber,

was flushed over the surface of the sand filters, where the matters in suspension were collected and periodically raked off and buried. Those matters in solution, which it should be mentioned form much the greater part of the organic matters in sewage, passed into the sand where they adhered to the particles by "mass action," allowing the water with which sewage is mixed, to pass into the underdrains well purified. Later when the population of the district had increased, necessitating a larger volume of sewage to be treated, the favorable conditions governing the successful use of sand filters as the only means of purifying sewage water, no longer existed, and despite constant manual attention, it was found impossible to prevent an accumulation of impurities in the sand which choked many of the small passageways, causing the filter beds to become water logged, that is to say, water was held up in the sand by capillarity, long after it should have drained away and air should have taken its place. Hence, the masses of sand became what is known as "sewage sick" and little or no oxidation was possible.

Like experience has been frequent in connection with similar plants, and much money has been spent in providing additional filter beds, when as originally constructed they would to-day have been effective, if those who designed works ten years ago had enjoyed the knowledge which is now held in regard to this subject.

In the case to which this paper has reference, sanitary engineers who were called into consultation decided not to increase the number and area of sand filters, thus merely postponing the time when a further extension would be necessary, and which would further increase the labor account for attention to the surfaces of the sand beds, but instead to adopt preliminary methods in common use in Europe, which



Bed of Sand Five Feet in Depth, formerly Relied upon for Purifying Crude Sewage. Now Employed for Filtering Oxidized Sewage Water

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by a natural process (without recourse to chemicals) effect the mineralization of the organic impurities in the sewage water previous to its passage into the sand. It was also determined to reduce the cost of maintenance to a minimum as well as insure certainty of action by taking advantage of the latest developments in automatic appliances. The type of oxidizing or mineralizing beds selected was that operated under what is generally known as the "contact" system. These are water tight reservoirs holding broken stone or other suitable material, ranging in size from $\frac{1}{8}$ inch to 1 inch in diameter and in which the sewage collects and then stands at rest, allowing time for each particle of impurity in the sewage water to gravitate and adhere to the piece of stone nearest to it, just as a chip of wood will gravitate and adhere to the side of a boat at rest in calm water. Thus when later the outlet at the bottom of this reservoir is opened and the outflow of the liquid contents is regulated so that it does not drain away too rapidly, the organic matters to be mineralized will become separated from the water by adherence to the pieces of stone, the surfaces of which are inhabited by millions of health preserving bacteria. These micro-organisms in the presence of the air which occupies the space vacated by the water, consume and thus change poisonous matters into harmless mineral salts. It is important that the organic matters entering into the interstices of the broken stone shall be many thousands of times smaller than the pieces of stone of which the contact bed is composed.

As much as 25 per cent of polluting matters in sewage being solids in suspension, it follows that some means must be adopted for dissolving as large a proportion of these as is possible and for breaking down into minute particles such as are allowed to pass to coarse grain filters. Consequently, the construction of two contact beds at Essex Fells, each measuring 35' x 50' x 3' in depth, was carried out in conjunction with what was comparatively but a slight change in the structure of the dosing tank, but which change brought about a very radical difference in the use of this tank. A deep baffle-board placed across the inlet to the grit chamber above described, and another across the outlet end of the rectangular tank with a weir over which sewage gravitates, instead of being withdrawn by the Field siphon, quickly converted a dosing tank into what is now known as a "septic" or



"Contact" Mineralizing Beds in their Completed Form

"resolution tank," that is to say, a liquid holding reservoir, in which the whole or a part of one day's flow is held, so that anaerobic bacteria, which liquefy and gasify organic solids, may be utilized, and for this purpose are supplied with food as the sewage slowly passes from inlet to outlet. It is more than ten years since Cameron of England, demonstrated by means of his famous Exeter tanks, the practical usefulness of septic as compared with chemical anti-septic methods of sewage treatment. Extravagant claims were at first made, so that many erroneously believed that the use of such tanks meant "sewage disposal made easy," while others disbelieved in their usefulness, and instead held faith in the full efficacy of the sand filter. Time has however shown that while both methods are good they are insufficient alone for present day requirements, and indeed that as in the particular plant which is the subject of this paper, (if constant manual attention is to be avoided,) coarse grain mineralizing beds are relatively of equal, if not of more importance in combination with the other two methods, than is the third leg of a three-legged stool. In other words, there are three stages in sewage treatment:

1. The preliminary treatment of matters in suspension.
2. The intermediary method of oxidizing or mineralizing organic matters.
3. The final process of clarification of the sewage water from the mineral "ash," as well as of further bacterial purification.

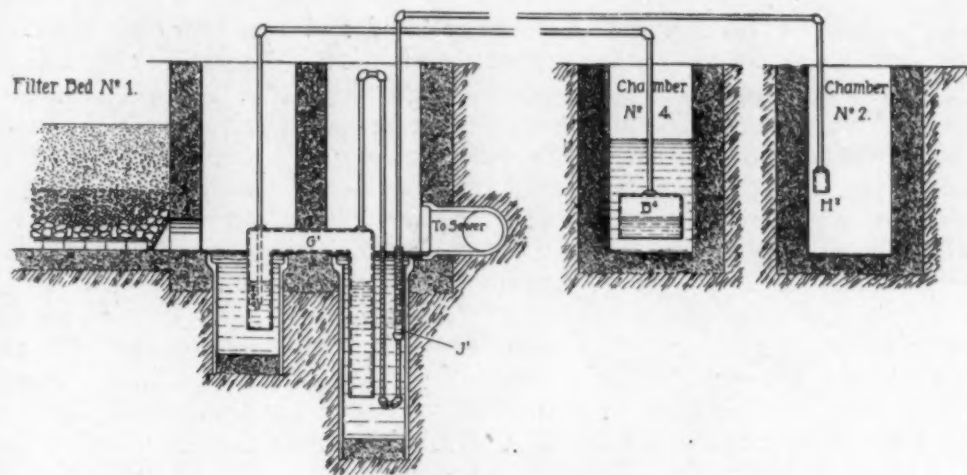
The last process, however, may generally be left to those who are responsible for seeing that water filtration precedes the delivery to the consumer of any drinking water taken from districts which are not thoroughly policed and guarded from every sort of pollution besides that of sewage.

An Interesting Example of Sewage Disposal

As the Essex Fells plant now employs each of these three stages, it may be of interest to the reader that we should describe in some detail the precise operation, as well as explain the action by which satisfactory results are obtained automatically. For although different local conditions may vary the particular manner in which the forces of nature should be harnessed, the laws governing these forces are the same all the world over.

Entering the septic tank, the sewage is deflected downwards by means of a baffle-board. This is because more active fermentation by anaerobic bacteria will take place if air is excluded as far as possible from mixing with the sewage in this tank, and a larger percentage of solids will in consequence be liquefied or pass off in the form of marsh gas, carbon dioxide, hydrogen and nitrogen. The conversion of these solids into gases is also of distinct importance in connection with the liquefaction of other solids. Solids unless intermingled with gases are as a rule heavier than the sewage water, and naturally therefore gravitate to the bottom of the tank. Here they are attacked by bacteria and gases are formed which cause the solids in which they are generated to become buoyant and to rise and float on the surface until these gases have been liberated to atmosphere, when they again sink to the bottom, where further gases are formed and the process is repeated. In their vertical travel they are further subjected to the action of liquefying bacteria, and the result is that not only is a large percentage of the suspended solids dissolved, but those which are not are nevertheless broken down into fine particles so that they are more readily treated subsequently in the mineralizing beds. The writer is acquainted with an engineer who counted a large mass of solids 18 inches square rise and sink seventeen times in two hours, by which time the mass was completely broken down and a piece of lemon peel, by which it had been identified, sank out of sight.

The travel of the solids in suspension is therefore principally a vertical one, but the weir formation at the outlet end of the tank creates a slow even movement of the entire contents of the tank towards the outlet, the rate of flow being in accordance with the cross sectional measurements of the tank, and the varying rates at which the sewage enters. A baffle-board at the outlet end reaching above and below the water level holds the floating solids from passing over the weir, so that the effluent from the tank contains only the finer solids in suspension in addition to



Section through Filter Bed

the solids in solution. A ten inch carrier conveys the septic sewage to a distributing chamber constructed at the entrance to two contact beds. It is here that a very ingenious device is employed, which like the Field siphon is automatic, and employs no moving parts. In other respects, however, it is dissimilar, inasmuch as it controls the flow without absorbing fall and is operated by the injection of air into specially shaped passageways in a positive manner, by the flow of the sewage. By this device each bed is filled to a depth of three feet. Then the inlet to one bed closes and that to the other opens. After a definite time the outlet from the bed which has been filled opens to permit of the drainage of the filtrate and remains open until a few moments previous to the time when the bed again commences to refill. This is known as the air-lock method.

The apparatus is made up of a combination of air bells and inverted U-shaped iron passageways, ingeniously arranged so that the flow of sewage may be controlled in a great many different ways according to the particular requirements of each sewage plant. The action at Essex Fells is as follows:

Sewage passes through an open inlet into channel ways formed of fine cinders placed on the top of the broken stone, and through which the sewage percolates into the broken stone beneath. This formation of distributing channels is specially useful in intercepting particles in suspension which pass from the tanks. The outlet to the filter bed has been previously closed so that the sewage steadily rises in level throughout the filtering material, until it has reached a level which permits it to flow into a small chamber in which are three air bells. As the liquid rises in level these bells become submerged and the air contents of the first bell is forced through an air pipe into the outlet passageway of the adjoining filter bed, which is thus air-locked. The second air bell acted upon in a similar manner, forces out water from a U-shaped pipe which being connected with the inlet of the adjoining bed, allows the confined air,

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which has held this inlet closed, to be released and the adjoining bed then commences to fill. The third air bell forces air into the inlet through which the bed has been filled and closes it. The sewage then remains at rest amongst the broken stone to which the organic matters gravitate and adhere. Meanwhile a second chamber has been slowly filling with the filtered sewage water. When a definite time has elapsed, and the water has risen to a certain level, pressure acts upon the contents of a fourth air bell which displaces from a U-shaped pipe water which has held the outlet closed during the periods of filling and resting full of the first filter bed. The confined air is thus released and the water flows out from the bed, freed from organic matters, spreads over the surface of the sand filter and gradually subsides through the sand passing into the underdrains and out to the stream clear, sparkling and odorless. While this last process is being carried out the second contact bed is filling, and later, precisely similar movements to those we have just described take place in the chambers of that bed.

The principle upon which this method of automatic operation is based was first worked out in England, but necessity, which is frequently the mother of invention, has resulted in its application in this country upon a more workable scale, and to the decided advantage of those who are responsible for the important feature of regularity of operation in the treatment of sewage.

It will be seen that the first method applied at Essex Fells which proved inadequate, was that of automatically spreading crude sewage over an area of sand so that it might be purified by simple subsidence through the sand, and that the present method is to mineralize the sewage, with the aid of an automatic device, after preparation for this process has taken place by preliminary fermentation in a suitably constructed tank, and to make use of the sand filter,

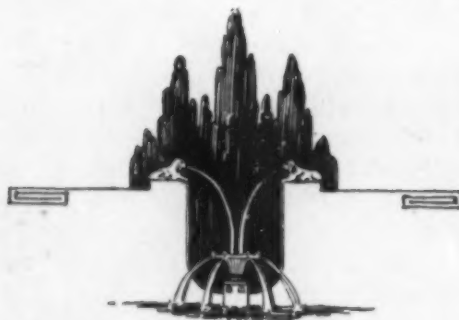
not for dealing with organic matters in sewage, but instead for the clarification of oxidized sewage water.

The previous method necessitated that the grit chamber be frequently cleaned out, which operation was odorous and distinctly objectionable. As the volume of sewage increased the surfaces of the sand filters continually needed raking, and the beds were not sufficiently aerated to effect satisfactory sewage purification.

By the present method the suspended matters remain out of sight, and a large part of them is liquefied and gasified. Should it become necessary in the future to dispose of an accumulation of matters which are not removed by anaerobic action, these can be carried by gravity to the upper sandbed where the water which forms 90 per cent of such accumulation, will drain away, and when the residue can then readily be handled.

The use of the present combination of processes requires less area than the former method (if the disused upper sandbed is disregarded), while it is capable of taking care of the continually increasing volume of sewage for many years to come. It is also more automatic in its operation, seeing that it is not necessary to manipulate any valves by hand, except at infrequent intervals.

In claiming the reader's attention to the facts stated above, we would emphasize the importance of bearing in mind that in the treatment of sewage while the difference in the character of sewage and of local conditions and requirements renders it impossible to point to any one method or combination of methods as a "cure-all" it is nevertheless true that whether it be in respect of the treatment of sewage from a single residence or of that of a large city, the same general laws apply, governing the most successful utilization of the life processes of micro-organisms, "the important, almost the only agents of universal hygiene."

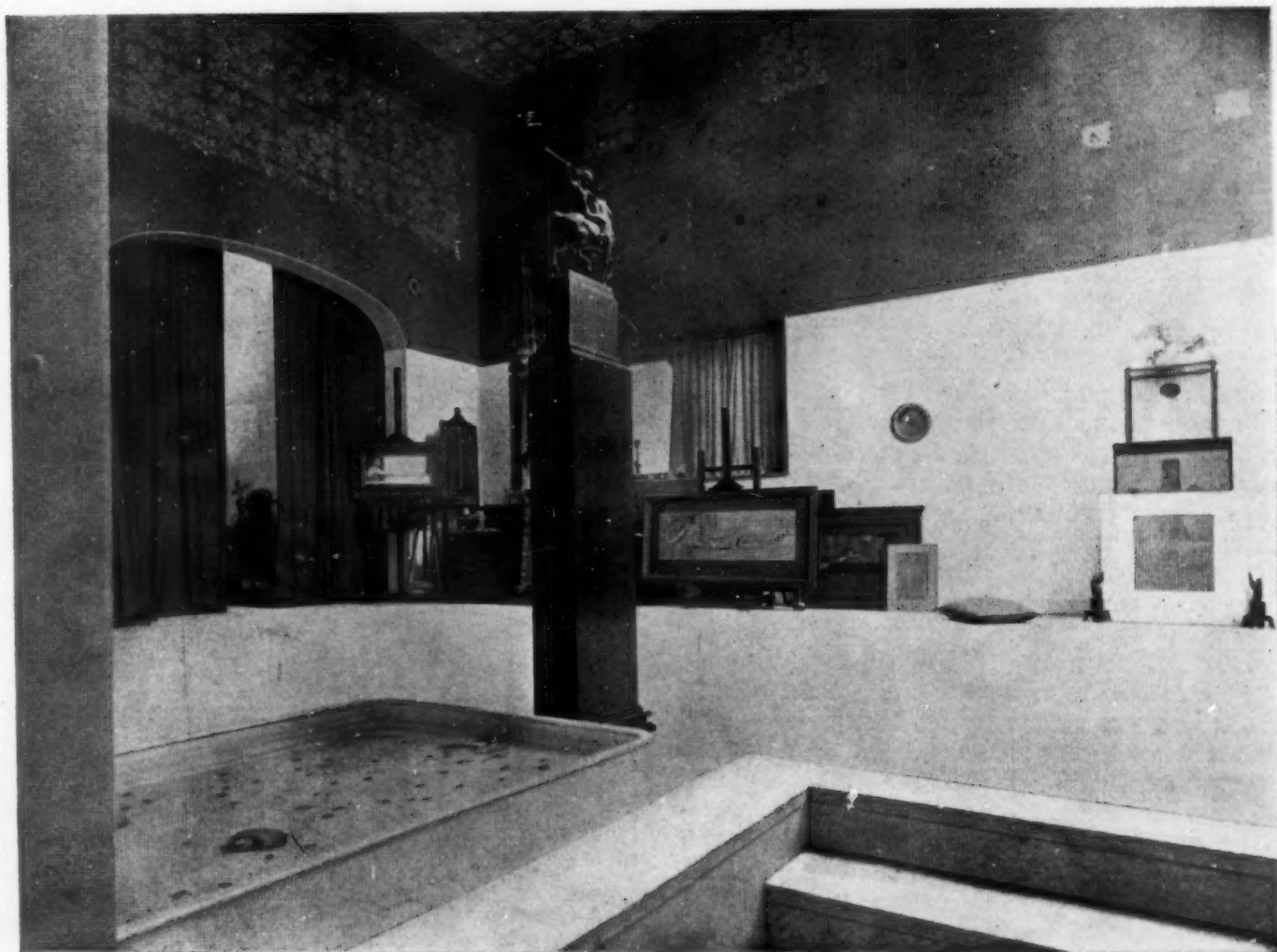


THE HOUSE OF A SYMBOLIST

BY WOLFRAM WALDSCHMIDT

A MAN with cultivated tastes is scarcely to be envied. Every little defect in style—whether it has to do with works of art in the narrower sense of the word or in the more commonplace surroundings of his daily life—gives him almost physical pain. In a room for example where the Philistine will idle comfortably the aesthete feels himself ill at ease: the stock pattern decoration of the sofa, the rose design of the tapestry, the purse-proud gilded clock, all oppress him keenly, the bright colors of the chromo on the wall hurt him, the gaudily gilded carving of the table makes him nervous, and the outlandish design of the chandelier drives him into sheer desperation. The artist at times feels himself wholly oppressed by his gross surroundings. It is not possible for him to work if he is continually forced to cast his eyes on a bronzed plaster jar or a big paper fan. Gladly, therefore, does he furnish for himself an artistic paradise

into which no discord of the barbarous outer world can force itself, and places about him treasures of art which accord with his own rare taste. Such surroundings naturally respond to the style of his own paintings or sculptures. The pre-Raphaelite Rossetti fitted out his gloomy, ivy-grown dwelling with old chests, bronze lustres, crucifixes, Oriental vases and exotic flowers, and the picturesque bric-a-brac of his chambers blends with the background of his mystical female portraits; Whistler, the creator of the *princesse du pays de la porcelaine*, turned his house into a museum of works of Japanese art; Lenbach's portraits, with their flavor of the old masters, look as if they were painted solely to decorate the artist's rooms, those rooms shrouded in half light and shade, and adorned with old carpets and heavy Renaissance ceilings. Stuck also has carried over into the furnishing of his home the strong antique style of his



THE STUDIO

House and Garden



THE HOUSE

pictures. The same hand which chooses and discards the lines and colors of a picture has directed also the furnishing of the studio.

But no one has set his dwelling so perfectly in harmony with his paintings as the most refined symbolist of our time, the Belgian, Fernand Khnopff.

A visit to his house in Brussels gave me the first really complete understanding of his art.

Everyone knows Khnopff's work: those rare harmonies in pale colors, slender women with melancholy features, fascinating heads, often maliciously cropped by the picture frame, whose eyes sometimes gaze coldly like those of Medusa, sometimes unfathomably Sphinx like, whose terrible lips now seem of stone and again distorted to hysterical laughter; round about such visages, all kinds of ancient and precious articles are grouped by a highly refined taste. One could believe that the artist amused himself in a purposeless toying with pretty things. As a matter of fact he paints over and over only the inventory of his house, which he himself has conjured up: busts with mask-like aspect, fragile candelabra, curtains hanging from thin golden rods between which vistas open away into marble white halls. His pictures not infrequently make the impression of a whimsical section out of the artistic whole which surrounds him and reflect his ideas and his dream like a magic mirror. The background of the "Ar-

onslilie" gives as exact an impression of a Khnopff interior as if a camera had been set up in some corner of his studio or passageway.

The artist lives in the last house of a lonely street close by the beautiful trees of the Bois de la Cambre. Over the black door, which seems to shut before an unfathomable mystery, stands an inscription whose obscure meaning I was at first unable to explain, *Passé-Futur*. I thought I had gone astray, for the house had no number, or perhaps the owner was travelling. All the windows are tightly closed by curtains and no sound comes from inside; but an old servant appears and lets me in without a word, and at the same instant I think I hear a few musical chords which die away as if into the distance. My surprise is immediate. Instead of being in a "best room" I find myself in a little apartment with dazzling white bare walls and only a bayberry tree in the corner. I think of a Burne-Jones picture and my expectation is stretched to the utmost.

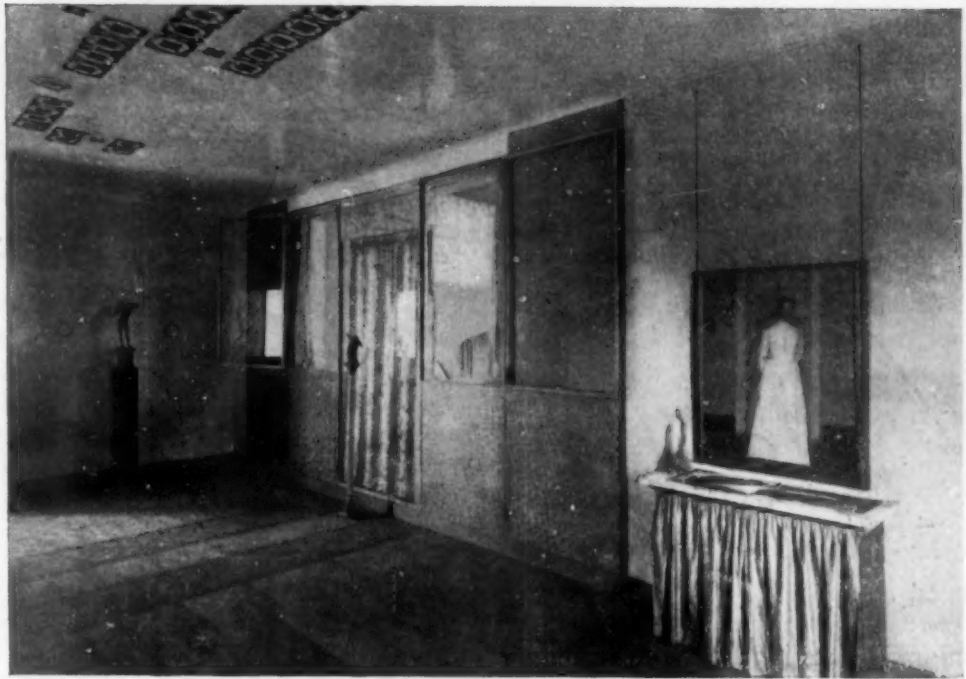
Fernand Khnopff does not make the impression of a man of four dimensions. His appearance has nothing striking. He is a man of the world, of conventional manner and perfect French politeness. He offers to act as our guide, and now comes wonder upon wonder. Has Maeterlinck's fiction come to



THE ENTRANCE HALL

The House of a Symbolist

reality? Have I gotten into that marble castle where the seven princesses sleep enchanted? There is an endless passageway with deep perspective into a distant room. There are stairs leading upwards and backwards, and windows out of which one looks into a farther outlying drawing-room. Everything is tuned to pale epicurean tones. The walls, the ceilings and the floor, glare in spotless white, the curtains which divide the chambers here and there are of a silky bleached blue, dull gold ornaments are distributed with a sparing hand, and flowers stand on shelves in Venetian or crystal glasses,—but not fresh blossoms, rather dull colored roses of faded appearance. Even the light is not that of sober day, but artificial, mystical and subdued, for the windows are screened with semi-transparent veils through which one sees the moving of the tree tops outside only like an indefinite magical swaying to and fro. "It is before such a back-



THE DRAWING-ROOM

ground," the artist remarks, "that I prefer to place my models." Real, plastic forms against an indistinct, even unreal, background.

Sketches, etchings, and paintings form the wall decorations, which are held in ivory colored frames and hung by golden chains. It is the master's own work—for everything here is by his hand—which attains its full effect only in the setting of such an interior. In the studio, and so placed that one can see it almost everywhere, is that remarkable head with one wing known through so many pictures, which has come almost to be the signature of the artist. In England Khnopff found the model which realized his type of womanly beauty. He draws his style from the English pre-Raphaelites, and it was also in England that he saw that head of Hypnos which most visitors in the British Museum certainly pass by unconsciously but which, for him, had a mysterious attraction. He has copied the bronze work in marble admirably to go with the white clean character of his rooms. One seems to take it for granted that Khnopff is a perfect artist, that he is fond of such works of art for their delicate forms and coloring, perhaps also because they awaken dim feelings and memories of long dead cultures. But his own attitude is not that. "I wish," he said, "that each thing should have a certain inner meaning." A wing was accidentally broken off the head of his Hypnos; to Khnopff that stands for a symbol of maimed striving, the feeling of dependence, and it is no soft dreams that this god of sleep brings: his lineaments are cruel, the empty eye sockets glow at night with an artificial fire and a dry bundle of brush wood is stuck behind the picture,—bizarre, but symbolically significant.



THE BLUE NICHE

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As the sensitive eye of the modern has grown weary of the gaudy restless color scheme, so also does his soul shun the strong excitements and gives itself over rather to a gentle resignation. Mournful contemplation of the fading of all beauty gives the ground tone which is repeated by the cabalistic and astrological circles and designs on wall and ceiling, by the sickly flowers at the window and the monotonous purling of the fountain. Thin streams ripple out between two rose colored mussels at one side of the atelier and in the marble basin drive the fallen flower petals around, picturing in the whirling motion of the water rare patterns whose continual dissolving and reuniting one could gaze at as in a dream and therewith forget the hours. The gurgle of the fountain makes the silence in the cool halls audible. One catches the echo of his own words as if they were repeated by invisible lips and starts back with a shock when he suddenly espies his own face in the mirror between two masks of marble. Here is nothing but enigma, questions without answers, until the imagination is bewildered and one thinks that everything is only a dream. My host finally takes me—and with every step I catch some picturesque vista—up into the Holy of Holies, a room of twilight and pale blue and dull gold, which is exclusively set apart for reverie. Here, like an altar, might have stood the triptych on which the artist is already working and whose central portion symbolically shadows forth the frankincense.

Two golden rings are fastened on one of the walls. "They contain," explained Khnopff, "the names of the two artists whom I revere the most, Edward Burne-Jones and Gustave Moreau." One of the former's sketches hangs here, a present from the great pre-Raphaelite, and in connection with Moreau I called to mind a painting of Khnopff's in the

studio which was almost an obeisance to the Parisian hermit and looked as if it had been put together entirely with precious stones. It represents St. Anthony, after Flaubert, as temptation comes to him in the form of a woman with child-like innocent expression and tries to entice the inhabitant of the desert by offering him fabulous riches.

"Will you have the shield of Dgian-ben-Dgian, the builder of the Pyramids? I have treasures shut up in galleries where you could lose yourself as in a forest. I have summer palaces of bamboo reeds and winter palaces of black marble. . . . Ah! if you only would."

Finally we visit the garden. Round about the house grow flowers with exotic blooms, as they appear in the backgrounds of the old fourteenth century masters, the portraits of a Domenico Veneziano or a Pisanello; and behind the house a broad expanse of lawn is shut in by a breast high parapet. No other house is visible from here and the view falls on the Bois de la Cambre as upon an immeasurable primeval forest.

I take my leave. The black door shuts behind me, and an unbroken silence reigns as before. Had I only dreamed? My eyes fall on the inscription: *Passé-Futur*. Its meaning is clear to me now for the mystery of Khnopff's art has revealed itself. Our life lies in the past, our longings in the future, there is no present, but that which we call existence is made up only of memories and hopes. The instant is fleeting, it is and is no more, our business, our words are matters of indifference, only the dreams are true and everlasting and reality is a passing shadow.

I had no more eyes for Brussels. The turnouts of the Bois, the cafés of the boulevards, the banalities of the Wiertz museum, everything paled at the thought of that artificial paradise in which I had been permitted to pass a single hour.—*Dekorative Kunst*.

THE FIRST COUNTY PARK SYSTEM IN AMERICA—III

BY FREDERICK W. KELSEY*

(Continued from the July Number of *House and Garden*)

THE matter as to financing the park project was a troublesome proposition to determine. The precedents and experiences of very many park undertakings, both in this country and in Europe, were carefully looked into. Almost every scheme of providing for the cost of park lands and the improvements was considered. They included direct assessments on contiguous property in full or in part; partial assessment on adjacent lands; and for the entire cost being provided in the general tax

levy upon the whole district or municipality. Each appeared to have advantages against other more or less potent disadvantages. Direct assessments were found to have been cumbersome, costly and unsatisfactory, and in many places difficult, and not infrequently impossible, to collect. This was due to the fact that every public park, as to location, size, property environment, and other conditions determining assessable benefits on adjacent property, is a law unto itself. No two, in these respects,

*Courtesy of the J. S. Ogilvie Publishing Co., 57 Rose St., New York.

The First County Park System in America—III

are alike; hence no uniform system of awarding damages and assessing benefits as obtains, for instance, in the case of municipal street openings, is possible.

This, of necessity, makes confusion and uncertainty in the legal proceedings, and gives an almost unlimited opportunity and exceedingly broad field for never-ending litigation to "those who won't pay." Then, too, as every park is different in size, topography, and the other conditions noted, the task of fixing with comparative exactness and equity the district lines within which an assessment for park benefits should be levied, becomes the more difficult the more study is given to the solution of the problem.

Shall the park belt benefits extend 100 feet, 1,000 feet; or over the whole municipality or county wherein the park or parks are located? This becomes the troublesome question.

Against Direct Assessment. An attempted partial direct assessment for park lands on the lines as above indicated, tends to make confusion worse confounded. If the plan involves providing a portion of the cost by tax on the available ratables, on the principle that in a large park or system of parks the benefits inure to the whole community, why should not all the cost be thus provided? That is the almost invariable contention of objectors to a direct tax for special benefits.

As a matter of fact, these phases of objection to any plan of assessing benefits for the Essex County parks became so serious to the first commission that the conclusion was finally and reluctantly reached that the expense of acquiring, developing, and maintaining the parks of the system should be borne by the whole county by issuing county bonds, and through the tax levy. It was also decided that it was injudicious to attempt to provide any of the requisite funds for the parks by direct assessment on adjoining property. The park charter was accordingly drawn on these lines, and in these respects it at present remains.

As to Parkway. The precedents and conditions for providing for the cost of the parkways were entirely different. For this purpose existing boulevards, avenues, streets, or other public places where rights of way had already been secured, might be desirable in connecting the various parks



THE LAKE IN WEEQUAHIC PARK

into a system or chain of parks; or new rights of way might be indispensable for the same object. A parkway being of a definable width similar in many respects to any other avenue or street acquirement, the application of the principle of assessing benefits becomes a comparatively simple matter. This provision was, therefore, included in the second and sixth sections of the park law (of 1895), and the East Orange parkway has been laid out under the assessment-for-benefits plan therein provided. In the method prescribed for making parkways of existing avenues or streets, there were apparently no very intricate questions to be solved.

It was deemed advisable that the future commission should have the right, and it was provided, as it now has the right, to appropriate for a parkway any existing highway; but as the local municipal or county authorities already held possession under the right of eminent domain, the proviso (section 2 of the charter) makes it necessary to first have "the concurrence of the Common Council or other body having authority over highways" in all cases where a larger width of area for a parkway than the existing highway is required. The "care, custody and control" clause (the eighteenth section), which was for so many years the bone of contention over the efforts to make parkways of Park and Central Avenues, was intended to simplify, not to complicate the transfer and utilization of those avenues as fundamental parts of the park system.

Another question which the first commission found difficult to determine was as to the amount of the appropriation that should go into the report

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and be provided for in the new law. Next to the matter of method in providing for the selection of the next commission, and of determining how the necessary funds for the undertaking should be obtained, this was considered of paramount importance. At first the amount suggested in our deliberations was \$1,000,000. This was soon increased by half a million. Later \$2,000,000 it was deemed should be the limit.

It may be a matter of interest for the reader to know that, so far as could be learned from the investigations made in 1894-5, the Essex County Park enterprise was, and, so far as I have since been able to learn still is, the initial county public park undertaking of this country. In the legal preparation of the charter there were, for this reason, so many novel and intricate questions involved that on January 28, on request of the counsel, John R. Emery, it was decided to employ Joseph Coult as associate counsel, "in the construction and provision of the bill to be presented to the Legislature."

Left to the People. The commissioners promptly decided that they would "trust the people on the issue." An amendment was at once prepared providing for a vote throughout the county at the next election, which was to occur April 9, (1895), with the ballots "For the park act" and "Against the park act." This draft of the amendment was immediately sent to Senator Ketcham, at Trenton. It was, without objection, added to the bill, and on February 26, the measure was passed in the Senate by a vote of 14 to 0. On the following day it was passed in the Assembly by a vote of 50 to 0—not a single vote having been recorded in either house against it.

The bill carried with it a direct appropriation, should it be approved by the people of the county, of \$2,500,000 of public funds. This large sum was to be expended as a board of five men to be appointed by the court should determine. The conditions for raising the money were arbitrary, indeed peremptory. The disposition of the funds was unrestricted and wholly discretionary with the board when appointed. The matter of appointment, too, was left entirely within the discretion of the Supreme Court official in naming the commission.

In view of all these conditions, that such a bill should pass without objection or a negative vote, called forth much comment. It has been stated by those conversant with such matters that the passage of that bill in view of the then existing circumstances—the amount of appropriation of public moneys, etc.—was one of the most remarkable and unique pieces of State legislation which up to that time had occurred.

In Governor Werts's message of January 8, 1895, appeared a complimentary reference to the park movement in Essex County, and to the work of the

commission thus far. He had also transmitted to the Legislature the commission's report after it had been sent to Judge Depue.

On the afternoon of April 19, 1895—the first commission met for the last time. The financial statement was then submitted and approved. The total expenditures, including architects' fees, \$2,372.13; counsel fees, \$450; printing and stationery, \$172.55; rent, secretary's salary, telephone, etc., and all incidentals were \$4,474.25, which amount had been received from the freeholders and the account closed. The board, by resolution, then authorized "all maps, plans, reports and other property turned over to the commissioners appointed April 18," and then adjourned *sine die*.

The record was made. The die was cast. The book was closed. Yet, as the people had voted for the parks and the way was at last open to secure them, the scene had shifted, and a larger book, with vastly greater possibilities, was opened.

A Change in the Current. As the rivulet becomes a stream, and the stream broadens into the river, the current moves on until the course is changed, or completely reversed. So the movement for the Essex County parks, from a small beginning, rapidly widened and deepened on its course, and although not directly obstructed, the current became entirely changed by the appointment of the second commission on April 18, 1895.

This commission then had everything a public board could possibly have in its favor: an extremely liberal charter, conferring ample authority, approved by almost unanimous action of the Legislature and by a large majority vote of the people of the county as well; a generous appropriation; and more, the good will and confidence of its constituency and the cordial support of public opinion throughout the State.

While the plans of the first commission were, during the early part of the year, maturing, the favorable comments and commendatory articles in the local papers were reflected in the press of other cities. The New York Tribune, Times, World, and Evening Post all had a good word for the Essex parks, during the month of January of that year, and before the new commission was appointed, had given a resume of the movement and of the friendly support extended it.

Scene of Action Shifted. The correspondence* gives a clear and correct reflex of the situation at that time. Immediately after the county vote was found to have given a large majority for the park bill, almost the entire field of activity for the parks and the pressure from political and special interests was at once transferred, and the scene of local action shifted to, the inner room of the court, or wherever the judge having the appointments to make could be found.

* See Mr. Kelsey's book, pp. 59-62.

The First County Park System in America—III

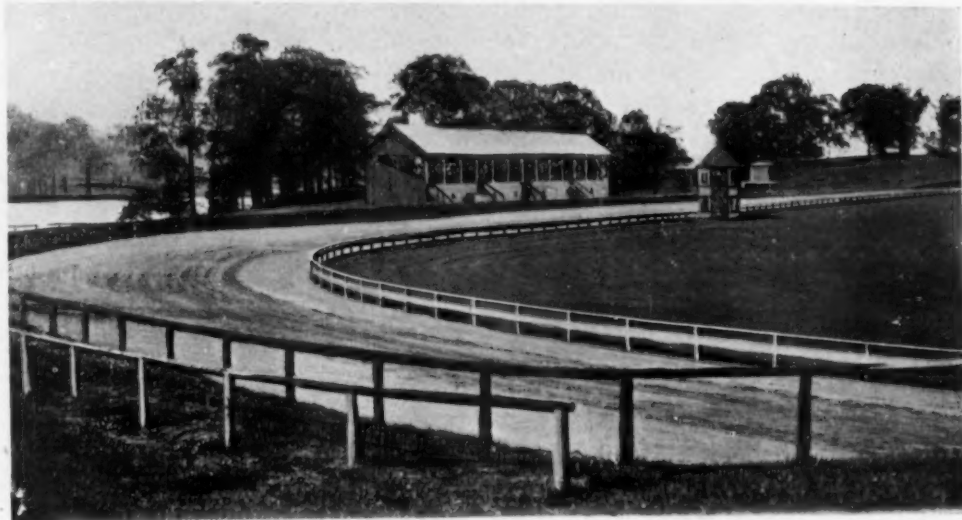
In most instances, where large and diversified interests are at stake and conflicting claims become a factor for adjudication, whether before a court, a legislative body or an executive official, things are not always what they seem, and the kaleidoscopic conditions of conclusion may be frequently shifted almost from day to day as the see-saw of contending influences and varying elements enter into the final disposition of the subject in hand.

The question then before the court was no exception to this rule. True, the judge, in announcing the new commission the morning of April 18, 1895, gave as quoted below some of the reasons that appealed to him for making the change against what was evidently the trend of public desire, and the conclusion left upon Mr. Ure's mind prior to the appointment that no change would be made. That presentment of the judge, however, gave no intimation of, nor made the slightest reference to, some of the most important and potential influences brought to bear upon him to make the changes as he did.

I have never doubted Judge Depue's sincerity in dealing as he did with the taxation-representation phase of the question, or that it was made to appear to him as desirable that the sectional or local representation principle should then be injected into the enterprise—although this very principle of sectionalism, as I have already indicated, occasioned the wreckage of the park enterprise for Newark in 1867-72; was largely responsible for the failure to materialize of the commendable efforts of the committee of the Newark Board of Trade in the same direction in 1892; has occasioned the failure of many public park enterprises all over the country; and was the very thing that the first commission had made every effort to prevent, and which, having been presented, was in reality one of the essential elements in the immediate indorsement of its plan by the public and the Legislature.

Reasons for Court's Action. Nor do I doubt that it had been forcibly represented to the judge that the better plan would be to reverse the divisional lines of representation from three from the county at large, as he had endeavored to establish in selecting the first commission, and give the majority in the board to Newark, as the portion of the county paying the larger proportion of the county tax.

Then again, from the view-point of the court at



TROTTING TRACK AT WEEQUAHIC PARK

the time and under the swirl of varying influences brought to bear upon the judge in selecting that board, may he not have been sincere in thinking that merely the qualifications of a successful manufacturer or man of business, and those of an energetic chairman of a State partisan committee of his own political predilections, might constitute the very elements of fitness for the responsible position of park making? As one having a mind with judicial tendencies and attainments, and who had evidently never given the subject of creating an extensive park system theretofore special attention, a generous thought may, I believe, be accorded this action as to its intention, whatever may have been its practical results.

But some of the "interviews on the part of the people of the county" were not directed to the question of geographical representation of the new commission, nor of taxation, nor of the conservative, or extravagant tendencies of any of the candidates who were then under consideration; but to other and decidedly different phases of the subject. There were \$2,500,000 of county funds to expend. "Who was to have charge of the handling of this great sum of money?" "Who was to control the patronage in this new and important Department of Parks?"

Subsequent events indicated, clearly enough, what these and other arguments and influences were which became potent factors in the final selection of a majority of the commission.

The unexpected had happened. The plan of laying out "the best park system that could be devised" for the whole county irrespective of local and sectional lines, which had been the keynote and the foundation structure of the work of the first commission, and the reason for its popular approval, had been by this act of the court—where the appointing power had been placed for the

House and Garden

express purpose of minimizing the chances of failure in the execution of the plan—completely reversed. And, in that enterprise, a new principle and prerogative was then and there established, with two-fifths of the board of new material, one new member an active and ambitious politician, both representing large corporation interests—men who had had nothing whatever to do with the formulative plans or the work of the first commission, and who were not conversant with the causes that had led to the popular success of the undertaking up to that time.

Former Policy Reversed. Whatever may have been the intentions of the court, this reversal of policy was the practical effect, as was conclusively shown at almost the first meeting of the new commission and has been more fully demonstrated since.

Two of these three commissioners, now placed in control of the board, who had just received their appointment and who then, for the first time, came into the park enterprise, all made and created, with the \$2,500,000 to expend, were lifelong "always to be depended upon" Republicans, and were directly installed as officers at the request of the court.

In this record of the park undertaking—the truth of which will stand long after all of us engaged in its work and development thus far shall have passed to the beyond—not wishing to do the memory of Judge Depue or any living person any injustice, I will here state, that, while the judge might not have intended by this action to usurp powers that did not rightfully or legally belong to him, or to the office he was then administering, I am just as firmly convinced that such was the fact.

The very first section of the law under which he was acting, "Chapter XCI., Laws of 1895," distinctly provides that "every such board shall annually choose from among its members a president, vice-president and treasurer, and appoint a clerk or secretary, and such other officers and employes as it may deem necessary to carry out the purposes of this act."

If that clause does not clearly enough leave the selection of officers solely as a prerogative of the board to determine; and with equal clearness leave only the selection of the commissioners with the court, what language could be employed to express such meaning? If the judge, under this law, could assume to determine and direct by an expressed "wish" or otherwise, who the officers should be, why could he not with equal right or authority decide who the secretary, counsel, or any other officer or employe should be?

I do not think that at the moment when the expression as to the judge's wishes was made, or during the brief discussion that followed, any of the commissioners thought of the clause in the

charter above quoted. And I have also the generous disposition toward Judge Depue's memory to believe that, in the extraordinary pressure brought to bear upon him regarding the appointments he had overlooked it or possibly may have never read it. There was, however, at least one of the commissioners present at that meeting who knew, without a shadow of doubt, that it certainly never had been the intention in framing that law or the preceding park act, to lodge with the presiding justice of the Essex Circuit of the Supreme Court any power whatever beyond naming the commissioners who were to be entrusted with the park undertaking. With that appointive power securely placed in the court by legislative edict, an officially expressed "wish" in such a matter as the selection also of officers, may, in the absence of counteracting influences or advices, be construed, as it was intended to be and was in this instance construed, to have almost the force of a mandate. The effect of that action has had a great influence in shaping the affairs of the Park Commission down to the present time, and was one of the causes that a little later brought a sharp turn in the rapid-flowing current of Essex County park affairs.

The question as to who should be secretary of the new board was soon determined by the appointment of the former secretary, Alonzo Church. Then came the settlement of two questions, the solution of which practically constructed a dam across the heretofore straight and smooth course of the park movement, and effectually turned to one side, and almost back upon itself, the current, in an entirely reverse direction from that taken all through the work and life of the first commission.

Policy in Selecting Parks. In public matters, as in other affairs of life, there are certain general principles which with reasonable certainty foreshadow ultimate results, much as, under the application of the axiomatic rules of science, like causes produce like results. Anticipating that park making on a large scale might involve these principles, the first Park Commission had, as indicated in the preceding chapters, continuously dealt with the park system as an entity, hoping thereby to avoid the pitfalls of sectional differences, and by treating the proposition as a whole, thus to be in a position to better determine the probable limits of cost for "a system of parks in its entirety."

Question of Policy. After the second commission had completed its organization, the question then before the board, briefly stated, was whether the pledge made by the first park commission in respect to the policy of establishing the park system should be carried out, or a new policy on other lines be inaugurated. The consideration and discussion of the subject went on for months. At almost every meeting it received attention.

The First County Park System in America—III



TENNIS COURTS—NORTH BRANCH BROOK PARK

Although free from personalities or acrimonious reflections, the arguments for and against the proposition stated were earnest and persistent.

Mr. D. Willis James. Among my acquaintances there was one for whose judgment I entertained the highest regard—Mr. D. Willis James. I had known of his philanthropic deeds, his kindly nature, his public spirit and withal exceptional judgment on large financial operations, and on matters pertaining to the carrying out of large undertakings. I met Mr. James at his summer place at Madison. Without mentioning the names of the commission or giving any intimation as to which side of the question any of them stood on, or the slightest inkling of my own views on the subject, I presented the matter to him precisely as it was then before the park board; stated the claims at issue, which had been put forward by each of the commissioners; explained to him the amount of the appropriation and that it was intended and was appropriated for a park system for the whole county, and set forth the plan that had up to that time been followed by those having the enterprise in charge. His reply was earnest, emphatic and directly to the point. It made a lasting impression upon my mind.

A Piecemeal Policy. "Do not make the mistake," he said, "of attempting to carry out any piecemeal policy in such an undertaking as that. It will cost you more than twice what you anticipate before you get through, and if you start that way you will never be through.

"In my judgment," he added, "there is but one way to proceed in an undertaking of that magnitude, and that is to have the whole scheme

laid out in advance before any commitments are made. In this way you can see the end from the beginning and at least approximately know at the start where you are coming out."

Early in July, I brought before the board the matter of encouraging gifts of park land, etc., from private owners, and the following statement was approved and appeared in most of the Essex County papers about that time:

"THE ESSEX COUNTY PARK COMMISSION,
Newark, N. J., July 25, 1895.

"In order that Essex County may possess as elaborate a park system as possible, the Park Commission has thought it wise to invite the people to assist in increasing the area and attractions. This is the only commission in the United States where the park movement embraces an entire county, and the splendid possibilities which follow from such an almost unlimited choice of magnificent natural features make most desirable the hearty co-operation of the press and people in every portion of the county.

"The experience of other localities shows that park development has been materially assisted by liberal gifts of land and money, and in almost every community that park systems are a monument not only to the wise public policy but to private benefaction as well."

But further argument was useless. The work of the commission in establishing the lines and acquiring the land for the different parks was going on apace. The relative bearings that one park should have to another, or that any of those determined upon should have to the park system as a

House and Garden

whole, was lost sight of, or considered as "wholly secondary." Each park was treated as an entity, as though the plan for a unified system had never been under consideration. The location for one park as a distinct proposition as exemplified in the East Side Park in Newark, had accentuated the pressure brought to bear upon the commission to locate others.

The suggestion of the court as to local "representation," and the two new commissioners appointed to carry out that principle, had borne fruit, and, before the close of 1895, the sectional policy for the Essex County parks was well established and became the controlling principle, as it has, subject to minor modifications, since remained.

The First \$1,000,000. With the great mass of people, to whom the matter of income vs. expense is a present and ever-recurring problem, there are, perhaps, few characters in fiction more interesting or that have attracted wider attention than Wilkins Micawber. His object lesson in correct finance, showing the happiness that may follow from an income of "twenty pounds a year" and expenses of "nineteen pounds, nineteen shillings and sixpence," when compared with the misery resulting from a like income and the expenditure of "twenty pounds,

one," illustrates in a few words a principle of very general application.

Thus, in the park enterprise, each of the commissioners, favoring the policy of being pecuniarily forehanded in public matters as in private affairs, was of one mind as to the desirability of providing ample funds before incurring liability for land purchases or other financial obligations.

The meeting when the bids were opened was, as usual, in executive session. There was, in this unofficial and unbusiness-like procedure, no discourtesy to any of the bidders; none was thought of or intended. Nor, so far as I can now recall, would any of the commissioners at that time have been likely to have objected to the presence of the public. The bids were called for in the regular course of business and no occasion for secrecy could or did exist.

The fact was that, owing to the topography and peculiar situation of that property, it was a most difficult matter to draw any specifications for contract work, as a whole, that would give the commission, through the architects and engineers, the necessary reservation for directing the work—a matter so vitally important in park improvements of that character.

GARDEN WORK IN AUGUST

BY ERNEST HEMMING

HOW to counteract the effects of the heat and the usual accompanying drouth on plants, is perhaps the question that is uppermost in the mind of the gardener during this month.

The trying conditions, that are usually met with during this season of the year, will be the real test as to whether work was thoroughly done or not earlier in the year.

Where the ground was deeply worked and properly prepared the crops will come through the trying times much better than where the work was not so well done. This is equally true of planting a garden or making a lawn. Usually in making a lawn the chief object is to get the ground graded and a sod formed as quickly as possible with the result that the sod is often growing right on the top of hard pan or ground that has never been broken up. Where such is the case these places are always the first to suffer in dry weather.

It is equally important to look at the lawn as a growing crop; any labor expended to bring the soil into good tilth before seeding or sodding will pay for itself in the long run.

The various kinds of grasses composing a lawn grow better under some conditions than they do under others, and if these conditions can be produced

and a good sod formed the less likelihood there will be for the objectionable fall grass getting a foothold. This pest is now putting in its appearance, and is very difficult to eradicate. The grass itself is an annual but such a rank grower that it often kills out the lawn grass and leaves a crop of seed to perpetuate itself the following year.

If it was of an upright habit there would be little trouble in keeping it in check with the mowing machine, but the stems or stolons lie flat on the ground throwing out roots at every joint so that the machine passes over them. Where there is only a little, hand weeding should be resorted to to hold it in check but this is impossible where the lawns are very extensive or the grass very bad; such being the case, after mowing, the patches of fall grass should be gone over with an iron-tooth rake pulling up the prostrate stems so that the machine will catch them and mow them off; this will do much to keep it in check.

There is little to do among the shrubs at this time of year, and if it were not for the *Hydrangea paniculata*, var. *grandiflora* with its pendulous blooms and the different varieties of althæa or *Hibiscus Syriacus*, the shrubbery borders would look very uninteresting. The hydrangea owing to its heavy

"Plans"—An Explanation

flowers is not suitable for every position and for this reason there are many who do not admire it. The type *Hydrangea paniculata* is of a much more graceful habit and better adapted for the mixed border as the flowers are upright and looser in their make-up.

Many of the altheas are not very attractive as the colors have a tendency to a dull shade of purple or magenta. There are however, some very attractive varieties, *A. totus albus* a single white, *A. caelestis* single blue, Jeanne d'Arc, double white, bicolor, cream, crimson centre and Lady Stanley, double blush white, would meet with the approval of the most fastidious.

Weeding, hoeing, staking and watering constitute the principal work in the flower garden, but like the plants themselves we should begin to think about and make provision for another season.

Biennials should now be sown so as to get good strong plants in condition to stand the winter. Pansies, sweet williams, canterbury-bells, foxgloves, hollyhocks and forget-me-nots, may be classed in this group. Those who have always purchased their pansies already grown have no idea of the delight and surprises experienced in raising their own from seed. Each one is a mystery until it blooms and when a good strain of seed is procured the many beautiful varieties well repay for the trouble.

Germinating seed at this time of year requires rather more attention than during the spring, owing to the heat, so that provision must be made to give them the required shade and moisture.

A cold frame with the sash raised up so as to allow free circulation of air and cheese cloth tacked over the glass for shade, is an excellent arrangement for the purpose and insures against loss from heavy rains. Sow the seed thin so that they can remain until planted in their permanent quarters. Even without the protection of the frame, if suitable spots are selected, good success may be had by sowing in the open ground.

The vegetable garden is now paying for all the trouble and expense put upon it. The last sowing of corn, peas, beans, etc., has been made. Where early crops have been cleared off, the ground should

be dug and pulverized, and a sowing made of turnips, spinach, white Strassburgh radishes and lettuce; they will come in very nicely during the fall. Plant celery and strawberries as advised in the last issue, giving the latter every attention so as to get good strong plants by the winter as this means an increased quantity of fruit next spring. When setting the plants in the ground, put them well down, as deep as possible without burying the crowns.

Now is a good time to make a mushroom bed if the requisites are procurable, the most essential being a good supply of fresh horse manure. This should be shaken out of the straw and piled under an open shed until sufficient has accumulated for the purpose.

The manure should be turned over about every other day to get rid of the rank gases and to prevent overheating. When sufficient has been collected do not add any more to the heap but keep on turning it over for a week or so to get it all in the same condition. Select some convenient place in out-house or cellar and make up the bed. For convenience in handling the bed should not be more than three feet wide but can be made as long as desired.

It is very essential that the manure be pounded down very firmly and evenly and it should be at least nine inches deep when the bed is completed.

Do not introduce the mushroom spawn immediately but bury a thermometer in the bed and watch it closely for a few days. If the manure was in the right condition, the temperature will rise very rapidly, possibly to a hundred degrees or more. As soon as the temperature falls below ninety the spawn may be planted. Break it up into pieces about the size of a walnut and bury them about four inches apart, then leave for about a week or ten days when the bed should be covered with about two inches of loam spread evenly over it and firmed down. The soil and manure should be in a moist condition when used but not wet or sticky. It is usually not advisable to water the bed but the ground and walls surrounding it may be sprinkled to keep the atmosphere moist. It usually takes from four to five weeks before the mushrooms begin to appear.

"PLANS"—AN EXPLANATION

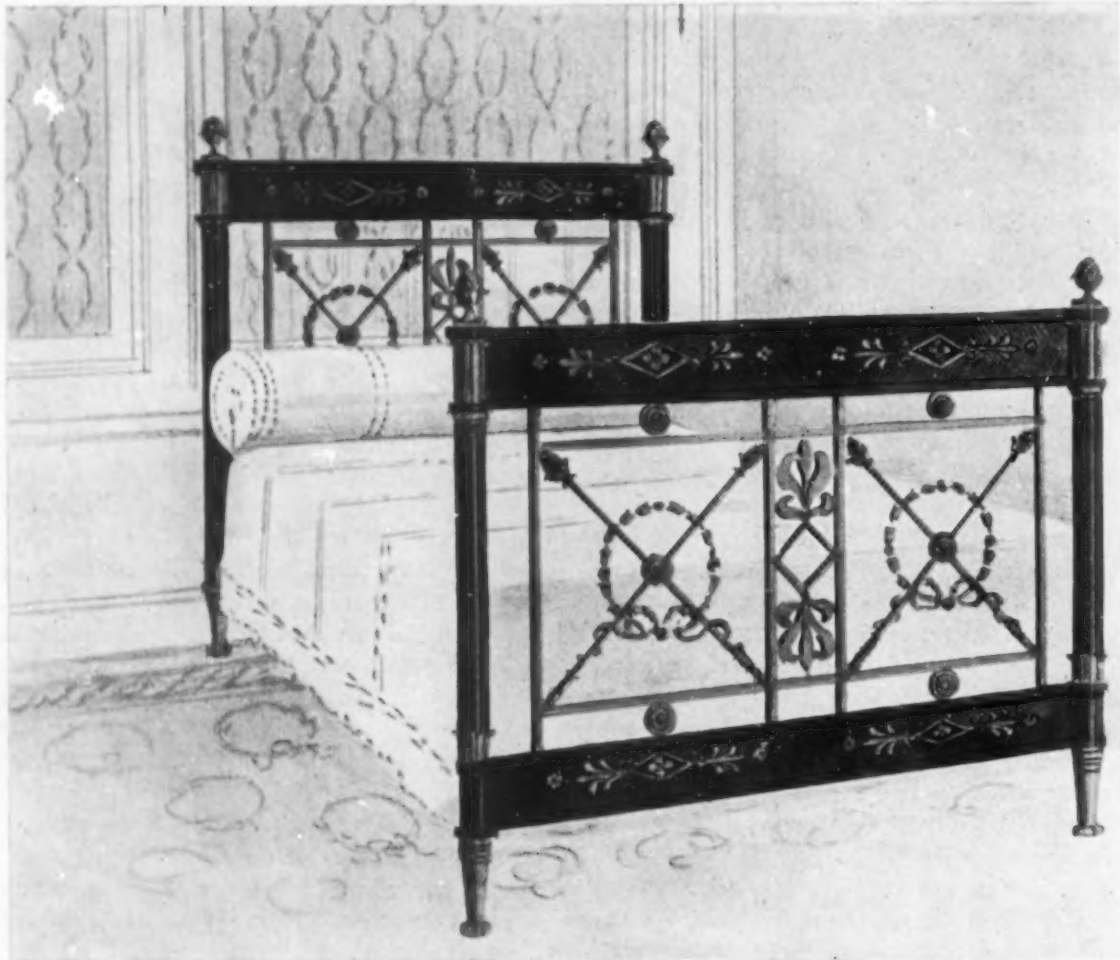
IN order to correct a misapprehension which appears to have arisen in the minds of some of our subscribers with regard to Mr. Lawrence Visscher Boyd's charming cottage shown at the bottom of page 40 of our July issue, we desire to say that the plans referred to are small black and white reproductions similar to those accompanying the house illustrated on the top of the same page. No architect, of course, would have put any other

interpretation on our announcement, but by the layman it seems the word "plans" is sometimes erroneously interpreted "working drawings." It was found at the last moment that room could not be made for the cuts of the plans of this particular house, and in order that our subscribers might not be disappointed, we offered to forward them by mail at our own expense, and that offer still holds.

HOUSE AND GARDEN.

BEDSTEAD COMPETITION

FOR THE METAL ART COMPANY



Designed by F. Hopkinson Evans, Philadelphia

BEDSTEAD WITH METAL FRAME AND WOODEN PANELS WITH METAL INLAY

THE illustration shows a good example of a class of what are essentially metal beds, but in which wood is used to a greater or less degree for ornamentation. The frame of these beds is of metal, as are also the posts, sides and rails, and the bed has the strength and rigidity of all-metal construction. In the design shown above the wooden posts are cored with metal, making a column strong and secure from top to bottom, to serve for attaching the sides. The head and foot are backed with metal and the ornamentation of inlaid metal affords the means of clamping the wood securely to the metal back.

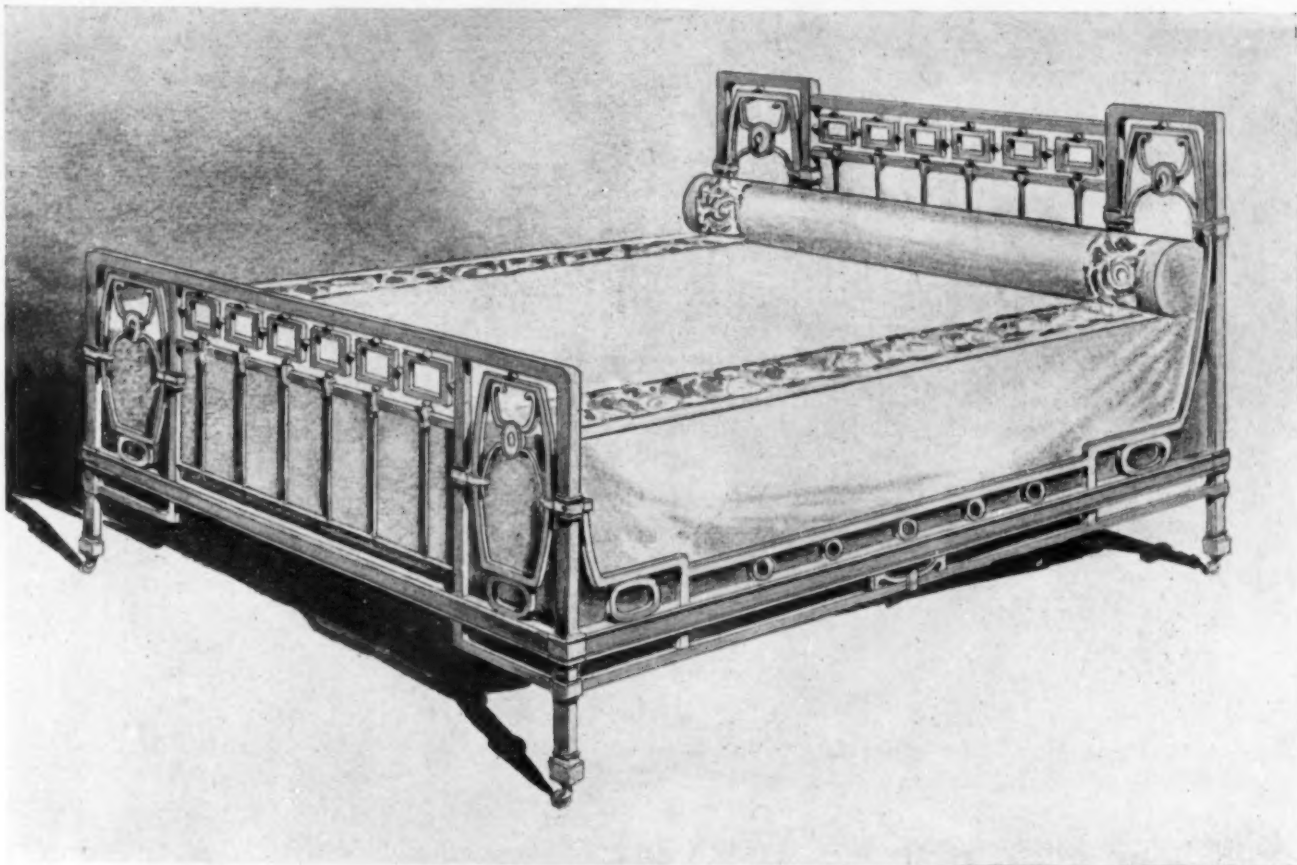
This bed can be made of brass or other metal

in combination with mahogany or other rich wood. The metal can be finished in old brass, Roman, Etruscan or other surface that may be desirable to harmonize with the wood that is used.

Beds of this type present opportunities for beautiful coloring which could logically be used as the foundation tone in planning the decoration of a bedroom. Instead of the incongruous break made by the average bedstead in an otherwise harmonious interior, the architect could undoubtedly start with the bed and plan all of its surroundings, using the bed as the centre not only of utility but of beauty in a chamber.

BEDSTEAD COMPETITION

FOR THE METAL ART COMPANY



Designed by Pierre Lahalle, Paris

ALL-METAL BEDSTEAD

METAL beds having square tubing instead of round have been made by many manufacturers in recent years, and have gained considerable popularity, despite the fact that many of the designs that have been offered for sale are monotonous in the extreme.

The illustration above shows a pleasing use of the square tubing in a Renaissance design, in which the architect has combined connections that are excellently strong with an appearance of extreme lightness, delicacy and beauty.

This bed is notable for the low head and foot, which would be of advantage in a room of moderate size in lending an appearance of

greater height to the ceiling and giving an effect of more space in the room.

The composite character of this design would make the bed appropriate in a wide variety of interior decorations, including the Art Nouveau, but it suggests the delicacy of the French style and would harmonize very well with airy and graceful interior furnishings patterned after those of the eighteenth century Bourbons.

This bed could be produced in every essential as the drawing shows although some modification would be advisable to facilitate assembling without materially altering the design. The finish of this bed would be as desired, in bright, dull, old brass or Etruscan finish.

BEDSTEAD COMPETITION

FOR THE METAL ART COMPANY



Designed by C. M. Bill, Boston

BEDSTEAD WITH METAL FRAME AND WOOD PANELS

THE design illustrated above, which conveys imperfectly the beauty of the original because of the absence of color, suggests the use of brown walnut or zebra wood finished yellow. Any cabinet wood can be used for the panels, giving a wide range for the exercise of individual taste. The frame work is all of highly ornamental cast metal with bronze or other finish.

It is a sign of the times that people are planning, selecting, discriminating with a better display of individual judgment than ever before in all that concerns the home, within and with-

out. Manufacturers of metal beds whose catalogues of designs are in the hands of the public, report that they receive through the mails many rough drafts of beds embodying the artistic ideas of the individual purchasers—and in many instances beds constructed with these crude suggestions as the basis have proved entirely pleasing from whatever view-point they may be judged.

Such a design as the one reproduced on this page is suggestive of many modified forms, to give expression to individual conceptions.

TUBEROUS-ROOTED BEGONIAS

BY H. HOWARD PEPPER

WE wonder that more people do not plant the beautiful tuberous-rooted begonias, especially the single varieties, the blossoms of which sometimes measure six inches in diameter. They make beautiful bedding plants, are cheaper than geraniums, much prettier and almost as easy to grow as potatoes. They give almost constant, showy bloom through the summer and fall in the following colors: scarlet, white, pink, crimson, orange and yellow. The foliage is also very attractive.

We start ours in boxes and pots in the cellar, March first. They could be started earlier to advantage if they could have plenty of light so that they would not get leggy. We plant them out as soon as all danger from frost is passed. They will grow in sun or shade but prefer a shady situation with plenty of light. Another good feature about them is that they can be transplanted in full bloom. While the double varieties are beautiful they are more expensive than the single and not so showy. The double blossoms are like rosettes. We plant ours among ferns, on the front of peony and rose beds, in tubs and veranda boxes.

By covering them with cheese cloth on cold nights we have kept them in bloom as late as the 26th of October.

When the frost kills the foliage, the tops are removed, the tubers are dried and kept in baskets in a warm dry cellar until spring. They seem to prefer leaf-mold to manure and require a great deal of water. If planted in a sunny situation it is well to mulch them. They may be successfully raised from seeds, cuttings or by division of the tubers.



ENLARGED VIEW OF PLANTS IN BOX



GENERAL EFFECT OF THE BEGONIAS



A CORNER OF THE PORCH

HOUSE AND GARDEN CORRESPONDENCE

INEXPENSIVE FURNISHING OF A SUMMER COTTAGE

Mrs. G. F., writes:

Kindly give me a scheme for inexpensive papering and furnishing of a summer cottage in the country. The house has but one story, has a living room 18 x 20 feet, two 12 x 14 bedrooms, a kitchen and service department, and one bath room. I can spend about \$350. I have on hand brass beds for both rooms, including bedding, etc., a dining-room set of quaint design in mahogany, and a large davenport of Craftsman design in brown oak; this is not upholstered; these are absolutely all, everything else must be purchased.

The interior trim of the house is hard pine; this has all been stained and given a dull finish.

All rooms except the dining-room are treated alike, with a rich, nut-brown stain called English oak. The dining-room has been stained a dark, soft green. The house faces south. The dining-room is on the northwest corner.

You have stated to me so clearly your needs, that this, together with the floor plan, furnishes me with all the information necessary in making your color scheme.

For your living-room I would suggest that you use a soft yellow tan paper, in what is known as the water grass pattern: on a lighter ground small wavy lines are shown irregularly. This paper has a frieze very shadowy in effect, showing delicate green tree tops against a light sky line. It is difficult to describe this paper in a way to show you how very attractive it is; it makes an excellent setting for any furniture and harmonizes well with the English oak. The paper itself sells for fifteen cents a roll of eight yards; the frieze being twenty-five cents a roll of eight yards; this is one of this season's offerings, and among the best in color and design.

For your dining-room I suggest that you use the golden brown bookcloth for the lower wall to the height of your plate rail. Have strips of pine stained and finished like the woodwork, set at intervals of eighteen inches about the room; these to run from plate shelf to floor line. This will give you an excellent effect of wainscot and add much to the dignity of the room. From the plate rail to the ceiling line an English paper showing a conventional design in shades of yellow deepening to a rich orange outlined in brown against a sage green ground. The ceiling color should be taken from the lightest tone in this paper. The windows should be hung with curtains of the thin crinkled silk in the shade of orange of the paper. This silk is thirty-two inches wide and sells for seventy cents a yard. The curtains should be hung on small brass rods set close against the glass and extend to the sill, and should be finished with a three inch hem. The door curtain could repeat either the brown or green tone in the room; it should exactly match your decorative cloth on the lower wall if you use the brown. If you decide upon the green these should be of a shade to harmonize with both the green in your paper and the green of your woodwork.

For the bedrooms—one of which I note is of southern exposure, the other of northeastern, I advise the following selections. In the south chamber the wall to be covered with a soft blue two-toned striped paper; this can be purchased for twenty-five cents a roll. The ceiling to be covered to the picture rail with a paper showing single clusters of blue flowers which harmonize perfectly with the blue of the side walls though slightly deeper in tone.

The windows in this room should be hung with a sheer white muslin, showing small disks of blue. Since you will use your brass beds in these rooms it will only be necessary to consider a dressing table, chairs, desk, etc. Cottage furniture finished with white enamel would look well; an attractive dresser with a good mirror can be bought for \$14,—this is a well-made piece

of furniture with deep drawers which are really useful. A small bedside table of same finish should find a place here, and other furniture of willow can be used. This should be left in the natural color but given a coat of dull varnish which preserves the willow and softens the tone of it. Chintz, showing the same blue and white design as that of the wall paper, could be used to cover square tufted cushions for the backs and seats of these chairs; this upholstering you could do yourself which will materially reduce the cost of furnishing this room. A blue and white rag-style rug should be used on the floor,—you do not mention the wood which has been used for your floors, I presume, however, that this is also of the hard pine.

For the northeast bedroom the La France rose paper is suggested; this paper shows single roses with stem and leaves at intervals against an ecru ground. Sheer white muslin curtains should be used in this room with over draperies of old rose linen taffeta. The dresser here can be of brown oak or walnut, if you desire a change from the white cottage furniture. Again the willow chairs are suggested as being eminently comfortable, inexpensive and artistic. The rug in this room can be an art square in two tones of old rose, size 9 x 12 could be purchased for about \$18.

For your living-room I would suggest that you choose shades of green and tan for your rug; this should be of body brussels. You can have it made to order, purchasing the brussels carpet by the yard for \$1.25 to \$1.50; this will give you an excellent quality; it can be set in a border. Your davenport should be covered with upholsterer's velveteen in a shade of green, which is slightly lighter than the body of the carpet. Place your davenport lengthwise by the side of the open fireplace I note on your plan; I see you have marked that the tiles are of ecru; I had this in mind in advising the paper that I have chosen. A central table which you could have your carpenter make should be heavy and almost square; this can be built of pine, ash, or oak and stained like the woodwork. A lamp made to fit a large copper loving cup could hold the centre of this table; the shade should be spreading and show yellow and bronze in its coloring; this could either be of art glass, or you could make it yourself on a wire frame of soft silk fluted on and finished with crystal fringe. Under this lamp and almost covering the table a square of brocade in Japanese design should be placed. The golds and blues and dull red of this brocade will make a pleasing break in the coloring of the room. Several pillows should be placed on your davenport; these to be covered with raw silks in shades of dull blue, Indian red and a tawny yellow. Book shelves which show in your plan on the west side of the chimney will also aid in the color effect when well filled with books, as these must be carefully arranged to have complete harmony of coloring in their bindings. For the other furniture of this room I would suggest that it be after the lines of Arts and Crafts. This furniture can be bought in an unfinished state and stained to match the woodwork; it is comparatively inexpensive and strong and substantially made. Two Hong Kong chairs of willow with cushions covered in soft silks will add to the comfort and artistic qualities of the room. The window draperies should be of raw silk, soft green in tone, matching the lightest shade in the carpet. With growing plants in brass and copper jardinières placed attractively about you will have an effect which I am sure will please you, and which will cost you very little money.

For the kitchen I suggest that you paint your walls in oil in a light shade of Delft blue. Use blue and white crash towelling for curtains, carry out the blue and white idea in cooking utensils.

The plaster wall of your bath room above the tiling should be painted also in oil a pale sea green shade.

I will be glad to supply you with the addresses of the firms from whom you can obtain these materials should you desire it, and will write me to that effect.—MARGARET GREENLEAF.