

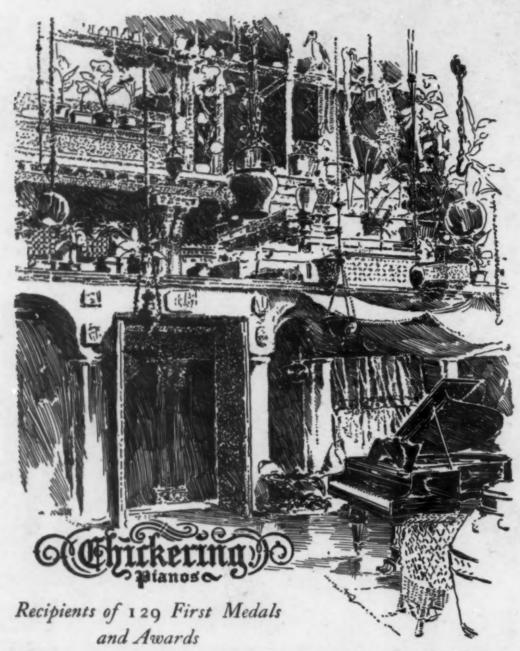
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35 Yearly

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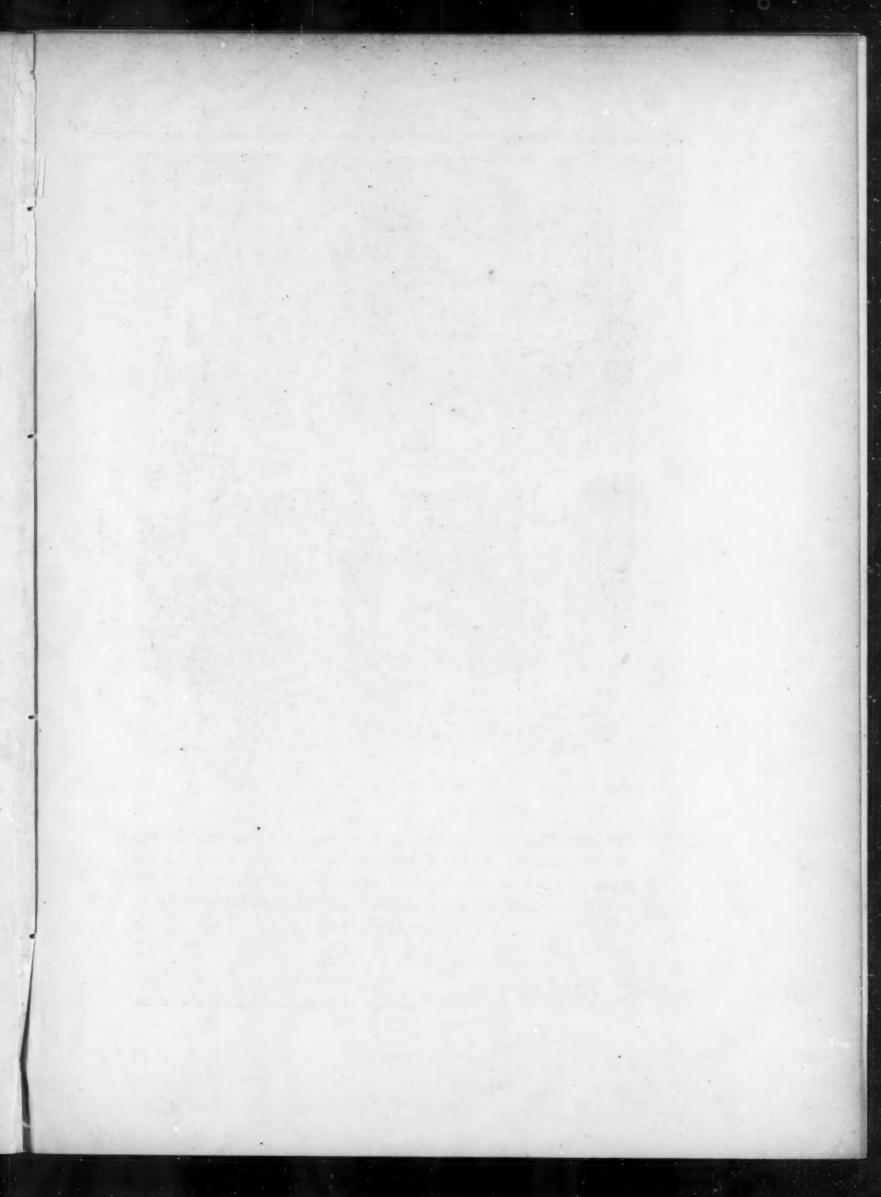
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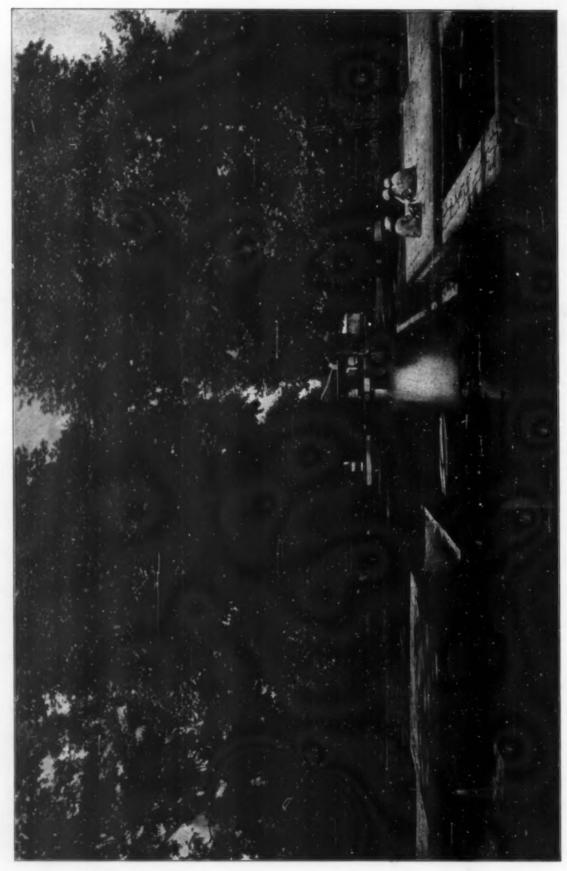
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THE SHAHLIMAR GARDENS AT SRINAGAR (KASHMIR)

A View from the Upper Pavilion

House and Garden

Vol. VI

November, 1904

No. 5

INDIAN GARDENS

By E. B. HAVELL

OF THE GOVERNMENT SCHOOL OF ART AT CALCUTTA

ARDENING, in an artistic sense, will I soon become one of the lost arts of India: perhaps it may be placed in that category already. Gardening, in a horticultural sense, still flourishes in India, and doubtless will continue to do so; but the art, so well understood by the Moguls, of planning and planting gardens in direct harmonious relation to the house, palace, or mausoleum to which they belong, is now rarely, if ever, practiced. Even the old gardens which the Moguls designed have either been allowed to fall into ruin or have been so transformed on modern European lines that the original idea has been entirely lost.

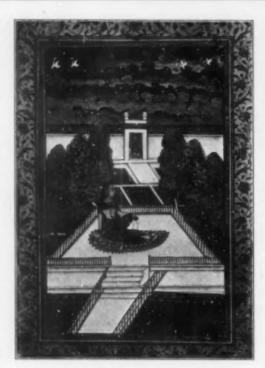
There are two causes which have led to the neglect of old Indian garden-craft: first, the degradation of taste, which, among so many Indians of the higher classes, has converted an active artistic faculty into a passive imitation of European fashions; secondly, the change of habits, which has deprived the garden of a great deal of the practical use it formerly served. Before the days of railways the garden in India took the place of hill-stations and summer resorts. With its fountains, cascades, water-courses and airy pavilions, it was a refuge in the hot weather from the stifling heat of the house. Every rich man, besides his ancestral palace or mansion (which always possessed inner courtyards, planted as gardens for the especial use of the ladies of the zanana), kept up one or more summer retreats, or garden-houses.

Previous to the Mogul epoch there is very little information to be obtained concerning Hindu notions of gardening, except what may be gathered from very vague descriptions in dramatic or poetical writings. The illustration given on the following page shows the ordinary type represented in Hindu paintings; but I know of no Hindu pictures of gardens older than the Mogul time, and probably this painting represents a style borrowed largely, if not entirely, from the Moguls. In the Mogul gardens there is always a raised platform, generally placed in the center. This was a very essential feature, for the raison d'être of an Indian garden was much more as a place for reclining at ease, for quiet enjoyment of music, of conversation and the hukkah, in the cool of the evening, rather than for exercise or amusements of an athletic descrip-In Indian gardens, therefore, the meandering paths, cunning mazes, labyrinths, and wide lawns, which Western people enjoy, are never found. Round the platform, which often had a fountain in the center, the garden was mapped out into square or oblong flower-beds, nearly always planted with poppies, if we may believe old native pictures Trees were planted of Hindu gardens. round the platform and along the four sides of the garden, and also scattered somewhat promiscuously among the flower-beds. The planting of the garden, as well as the disposal of trees and flowers, had to conform to various considerations besides esthetic rules. According to an old Indian treatise on gardening, the north and east sides of the house were auspicious for making a garden; the south, southwest and southeast were as-"These five trees pects to be avoided.

should be planted first: phulsah (Grewia asiatica), neal bhela, or marking nut tree, poonag(Rottleria tinctoria), Sirish (Mimosa sirissa), and nim (Melia azardirachta), as they are lucky: after this plantations of any kind may be made." The following trees should be planted on the four sides of the gardens, within the ditches (irrigation channels): on the east side, caronda (Carissa carondas); on the south, bamboo; on the north, conor, or jujube (Zizyphus jujuba) and caith (Feronia elephantum); on the west, amlah (Emblica officinalis) and bel (Ægle marmelos). No kind of thorny plant should be planted near or

in the entrance of a house—a very sensible limitation. Trees and flowers were also chosen as bearing some symbolic meaning, or from being sacred to the gods. The Asoka tree, with its splendid scarlet blossoms, is sacred to Shiva; the jasmine flower, to Shiva and Vishnu; the champak blossom, to Kama Deva, the Indian Cupid.

The famous gardens in the north of India, of which a more definite account will be given, are all of the Mogul epoch. Babar, the first of the Great Moguls (1494-1530) and prince of gardeners, has given in his memoirs the following description of one of the numerous gardens he laid out in his kingdom of Kabul, before the conquest of Hindustan: "In this district (the Istalif district, to the northwest of Kabul) is a garden, called 'Bagh-e-Kilân' (the Splendid Garden), which Ulugh Bey Mirza seized upon. I paid the price of the garden to the proprietors and received from them a grant of it. On the outside of the garden are large and beautiful spreading plane-trees, under the shade of which there are agreeable spots, finely sheltered. A perennial stream, large enough to turn a mill, runs through the garden and on its banks are planted plane



A GARDEN, FROM AN OLD INDIAN PAINTING

and other trees. Formerly this stream flowed in a winding and crooked course, but I ordered the course to be altered according to a regular plan which added greatly to the beauty of the place." In a valley close by he confined a rivulet within artificial banks "and caused a channel to be dug for it over one of the heights on the southwest of Sêyârân." On the top of this height he formed a circular platform on which to sit and take his ease.

In another district of Kabul he planted a garden, named by him 'Bagh-e-Vafa', or Garden of Fidelity, which he describes thus: "It over-

looks the river, which flows between the fort and the palace. In the year in which I defeated Behâr Khan, and conquered Lahore and Dibâlpûr, I brought plantains and started them here. The year before I had also planted the sugar-cane in it, which grew and thrived. It is on an elevated site, enjoys running water, and the climate in the winter season is temperate. In the garden there is a small hillock from which a stream of water, sufficient to drive a mill, incessantly flows into the garden below. The four-fold field-plot (i. e., a part of the garden divided into four compartments in the old Mogul fashion) of the garden is situated on this eminence. On the southwest part of this garden is a reservoir of water, ten gez square, which is wholly planted round with orange trees; there are likewise pomegranates. All around the piece of water the ground is quite covered with clover. This spot is the very eye of the beauty of the garden. At the time when the orange becomes yellow the prospect is delightful. Indeed the garden is charmingly laid out."

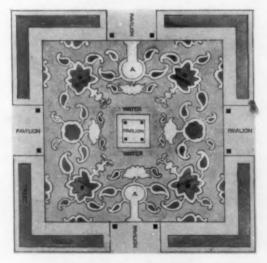
Some years afterwards, returning from one of his Indian campaigns, he hastened to visit his beloved Garden of Fidelity and found it

in all its glory. "Its grass-plots were all covered with clover; its pomegranate trees were entirely of a beautiful yellow color. It was the pomegranate season and the fruit was hanging red on the trees. The orange trees were green and beautiful, loaded with innumerable oranges; but the best of them were not yet ripe."

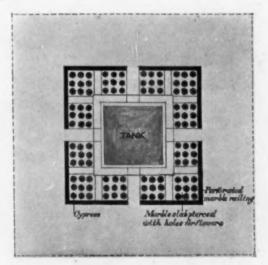
In these descriptions we have an exposition of some of the ancient principles of gardening as practised in Central Asia and Persia and Afghanistan in the beginning of the sixteenth century. First, the choice of a place beautiful from the hands of nature; next, the arrangement of the irrigation, artificial water-falls, fountains, reservoirs, flowerbeds and fruit trees, and a platform for sitting upon—all according to a definite artistic tradition. Symbolism and mysticism were the foundation of all Eastern art and gardencraft. Every tree and every flower had some symbolic or mystical meaning, traces of which can still be found in old European The garden itself, according to the Tartar traditions which Babar brought with him into India, was a symbol of life and death. Some of the Mogul gardens were used only as pleasure-grounds, but there was always one especial favorite which was set apart for the owner's last resting place when the pleasures of life were over. It must have been acquired by fair means, and not by force or fraud, otherwise the possession of it would only bring misfortune.

Hence Babar's allusion to the fact that he had paid the price of the Bagh-e-Kilân to the proprietors and received a grant of it.

When Babar conquered Hindustan and established himself at Agra, the barrenness and flatness of the country put great difficulties in the way of his projects for laying out gardens. He expresses his disgust in the following words: "It always appears to me that one of the chief defects of Hindustan is the want of artificial water-courses. I had intended, wherever I might fix my residence, to construct water-wheels, to produce an artificial stream, and to lay out an elegant and regularly planned pleasure-ground. Shortly after coming to Agra I passed the Jumna with this object in view and examined the country to pitch upon a fit spot. The whole was so ugly and detestable that I repassed the river quite repulsed and disgusted. In consequence of the want of beauty and of the disagreeable aspect of the country I gave up my intention of making a charbagh (garden); but as no better presented itself near Agra I was finally compelled to make the best of this same spot. . . . In every corner I planted suitable gardens, in every garden I sowed roses and narcissus regularly, and in beds corresponding to each other." He also avowed his unmitigated contempt for all things Indian: "The country and towns of Hindustan are extremely ugly. All its towns and lands have a uniform look; its gardens have no walls; the greater part



PLAN OF A GARDEN
In one of the Island Palaces at Udaipur



PLAN OF A COURTYARD In the Maharajah's Palace at Udaipur



THE SHAHLIMAR GARDENS-THE LOWER PAVILION Photographed by Bourne & Shepherd, Calcutta

of it is a level plain. . . . They have no good horses, no good flesh; no grapes or musk-melons, no good fruit, no ice or cold water, no good food or bread in their bazars, no candles or torches—never a candlestick!"

Undoubtedly India owes a great deal to the Mogul love of gardening. Though, as I have observed above, the artistic traditions of their garden-craft are practically dead, the old gardens were frequently laid out so solidly ferred among the beautiful hills and streams of his dearly loved and never-forgotten home in Central Asia. Unfortunately none of Babar's Indian gardens now remain except that at Agra, which is now known as the Ram Bagh; this has been so Europeanized that it is unsuitable for illustration.

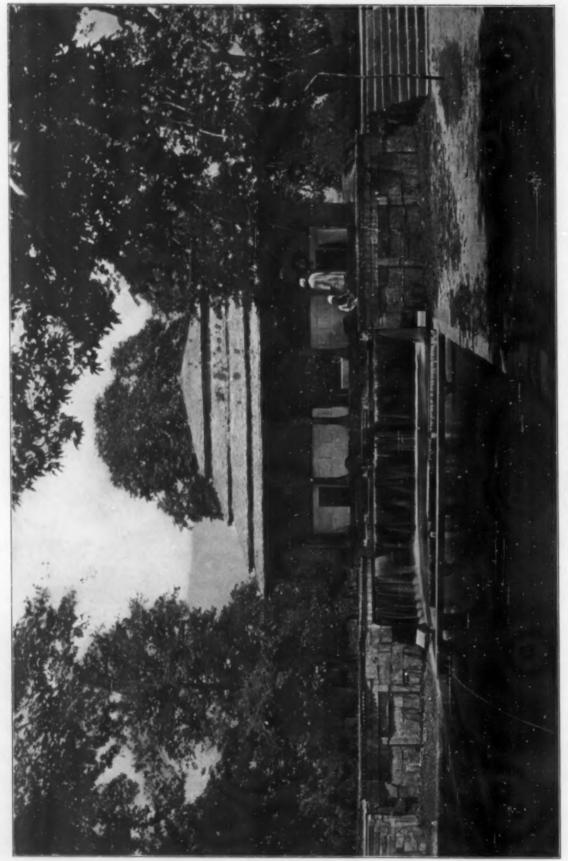
Jahangir, the great-grandson of Babar (1605-1627), gives in his memoirs a description of one of Babar's Agra gardens,



THE UPPER PAVILION OF THE SHAHLIMAR GARDENS

in marble and stone that it is possible to get a very accurate idea of the Mogul or "regularly planned pleasure-grounds" from the framework of them which still exists. At Agra the gardens were generally planted along the banks of the river Jumna, which not only formed a noble background but made it easy to provide the irrigation and "artificial watercourses." The flatness and monotony of the country around Agra which so disgusted Babar, and also the climatic conditions of India, probably forced him to adopt a more formal design than he would have pre-

with a four-storeyed marble pavilion decorated with gold and lapis-lazuli and approached by a magnificent avenue of areca-nut palms ninety feet high. It was planted with vines, apricots, apple and plum trees brought from Kabul, with pineapples and other foreign fruits introduced by the Portuguese, besides innumerable Indian fruits. Of flowers he mentions a great variety of roses, especially the musk and damask rose, the jasmine and gult-chemeily, which is either Jasminum grandiflora, or the gardenia. Babar's grandson, Akbar, laid out many gardens at Fateh-



ONE OF THE CASCADES AT SRINAGAR

pur Sikri and near Agra. He brought horticulturists from Persia to look after them. None of these gardens now exist. Jahangir mentions one of them as being remarkable for a great many ancient cypress trees of extraordinary size. These were probably planted by Babar, as he apparently was the first to introduce the cypress into India.

The earliest Mogul gardens which exist now in anything like their original condition are those which the Emperor Jahangir himself constructed. Some time before he came to the throne he was at Udaipur in Rajputana, and there, in one of the island palaces on the lake, is a very interesting garden, which, though probably not of his time, is of the Persian style which he introduced into Rajputana. It is not now cultivated in the old style, but the plan of it on page 215 gives a good idea of its very original construction. The flower-beds are worked out with brick, covered with a fine polished plaster, into conventional floral patterns, imitating, with the living flowers planted in them, the design of a Persian carpet. waters of the lake flow into the interstices to form the ground of the pattern. The plain spaces AA are platforms on which to sit. In the center of the garden is a small marble pavilion, probably for musicians; to reach it one must wade through the water, or pass over a plank. A marble platform with beds for trees surrounds the garden. The larger pavilions on each of its four sides look out over the lake.

At Udaipur also, within the Maharajah's palace, there is a small courtyard (see page 215) laid out in typical Mogul style. A marble tank in the center is surrounded by square plots, panelled by slabs of marble into geometric flower-beds. A rail of perforated marble encloses the flower-plots, four cypresses marking the outer corners. In the Mogul times every palace contained within its walls gardens such as this, large or small, for the use of the ladies of the zanana.

Jahangir's most famous gardens are those which he and his accomplished Queen, the beautiful Nur Mahal, "the Light of the Palace," laid out on a magnificent scale in Kashmir, after his accession to the throne. The principal one, called the Shahlimar Bagh, measures 500 yards by 207, and is ar-

ranged in four terraces; a masonry wall, 10 feet high, encloses the whole garden. A mountain stream, as in the Bagh-e-Kilân described by Babar, is trained to pass through the center of the garden, filling its artificial reservoirs and irrigation channels, and falling from terrace to terrace over cascades built of masonry. Bernier, the French physician, who passed many years at Aurangzîb's court, visited Kashmir about forty years after the Shahlimar Bagh was made and thus describes it: "The most beautiful of all these gardens is one belonging to the King called Chahlimar. The entrance from the lake is through a spacious canal bordered with green turf and running between two rows of poplars. Its length is about five hundred paces and it leads to a large summer house placed in the middle of the garden. A second canal, still finer than the first, then conducts you to another summer house at the end of the garden. The canal is paved with large blocks of freestone and its sloping sides are covered with the same material. In the middle is a long row of fountains fifteen paces asunder; besides which there are here and there large circular basins or reservoirs, formed into a variety of shapes and figures. The summer houses are placed in the midst of the canal, consequently surrounded by water, and between the two rows of poplars planted on either side."

He describes the Kashmir gardens generally as being covered with fruit-trees, and laid out with regular trellised walks. They were usually surrounded by the large-leafed aspen, planted at intervals of two feet. The largest of these trees were as high as the mast of a ship, with a tuft of branches at the top like palm-trees. The reservoirs were stocked with fish, so tame that they approached when called; some of the largest fish had gold rings with inscriptions "placed there, it is said, by the celebrated Nur Mahal."

Our frontispiece is a view from the upper pavilion of the Shahlimar Bagh, from a photograph taken some years ago, and it shows the splendid avenue of plane-trees which line the principal water-course. It will be observed that Bernier describes rows of poplars, not plane-trees, on either side of the channel. In his account of the gardens at Achibal, also laid out by Jahangir, he gives details regarding the arrangement of the fountains, cascades and trees which apply equally well to the Shahlimar Bagh:—

"What principally constitutes the beauty of the place is a fountain whose waters disperse themselves into a hundred canals round the house, which is by no means unseemly, and throughout the gardens. . . . The garden is very handsome, laid out in regular walks and full of fruit-trees, apple, pear, plum, apricot and cherry. Jets d'eau in various forms and fish ponds are in great number, and there is a lofty cascade which in

its fall takes the form and color of a large sheet, thirty or forty paces in length, producing the finest effects imaginable: especially at night, when innumerable lamps, fixed in parts of the wall adapted for that purpose, are lighted under this sheet of water."

One illustration here given (page 216), a view of the Shahlimar pavilion, when the water is not flowing, shows two stone terrace walls behind the pavilion with numbers of small niches for lamps by which the cascades were illuminated in the manner thus described by Bernier.

(To be continued)

HINTS ON LANDSCAPE GARDENING

From the Pen of Humphry Repton, Esq. (1752-1818)

PART III

TO my profession belongs chiefly the external part of architecture, or a knowledge of the effect of buildings on the surrounding

As every conspicuous building in a park should derive its character from that of the house, it is very essential to fix, with some precision, what that character ought to be; yet the various tastes of successive ages have so blended opposite styles of architecture, that it is often difficult, in an old house, to determine the date to which its true character belongs. I venture to deliver it as my opinion, that there are only two characters of buildings; the one may be called perpendicular, and the other borizontal.

The two characters might, perhaps, be distinguished by merely calling the one Gothic, and the other Grecian: but it is not the style or date that necessarily determines the character, as will appear from Figures 11 and 12; which represents a view of a house at such distance that none of its parts can be distinguished, yet the prevalence of horizontal or perpendicular lines at once fixes and determines the character. The first (Fig. 11) we should call a Grecian, house; the latter (Fig. 12) Gothic: and there can be little doubt, in

such a situation, which ought to be preferred.

The character of the house should, of course, prevail in all such buildings as are very conspicuous, or in any degree intended as ornaments to the general scenery; such as lodges, pavilions, temples, belvederes and the like. Yet, in adapting the Gothic style to buildings of small extent, there may be some reasonable objection: the fastidiousness even of good taste will, perhaps, observe, that we always see vast piles of buildings in ancient Gothic remains, and that it is a modern, or false Gothic only, which can be adapted to so small a building as a keeper's lodge, a reposoir, or a pavilion.

The characters of Grecian and Gothic architecture are better distinguished by an attention to their general effects, than to the minute parts peculiar to each. It is in architecture as in painting, beauty depends on light and shade, and these are caused by the openings or projections in the surface: if these tend to produce horizontal lines, the building must be deemed Grecian, however whimsically the doors or windows may be constructed. If, on the contrary, the shadows give a prevalence of perpendicular lines, the general character of the building will be

Gothic: and this is evident from the large houses built in Queen Elizabeth's reign, where Grecian columns are introduced; nevertheless, we always consider them as Gothic buildings.

In Grecian architecture, we expect large cornices, windows ranged perfectly on the same line, and that line often more strongly marked by an horizontal fascia; but there are few breaks of any great depth; and if there be a portico, the shadow made by the columns is very trifling, compared with that broad horizontal shadow proceeding from the

soffit; and the only ornament its roof will admit, is either a flat pediment, departing very little from the horizontal tendency, or a dome, still rising from a horizontal base. With such buildings it may often be observed that trees of a pointed or conical shape have a beautiful effect, I believe chiefly from the circumstances of contrast; though an association with the ideas of Italian paintings, where we often see Grecian edifices blended with firs and cypresses, may also have some influence on the mind.

Trees of a conic shape mixed with Gothic buildings displease, from their affinity with the prevalent lines of the architecture; since the play of light and shadow in Gothic structures must proceed from those bold projections, either of towers or buttresses, which cause strong shadows in a perpendicular direction: at the same time, the horizontal line of roof is broken into an irregular surface, by the pinnacles, turrets and battlements that form the principal enrichment of Gothic

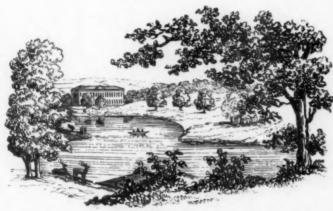


Fig. 11. View of the water at Welbeck; introduced to show the effect of a Grecian or Roman building, or one in which horizontal lines prevail.



Fig. 12. View of the water at Welbeck; introduced to show the effect of Gothic architecture, or buildings of old date, in which perpendicular lines prevail.

architecture; which becomes, therefore, peculiarly adapted to those situations, where the shape of the ground occasionally hides the lower part of the building, while its roof is relieved by trees, whose forms contrast with those of the Gothic outline.

As this observation is new, and may, perhaps, be thought too fanciful, I must appeal to the eye, by the help of Figures 13, 14, 15 and 16, which I hope will show that my observation is not wholly chimerical; and will, consequently, lay the foundation for this general principal; viz that the lines of Gothic buildings are contrasted with round-headed trees; or, as Milton observes:

"Towers and battlements he sees, Embosom'd high in tufted trees;"

and that those of the Grecian will accord either with round or conic trees; but, if the base be hid, the contrast of the latter will be most pleasing.

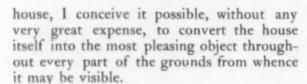
The Gothic style of architecture being the best calculated for additions or repairs to an old house, I might here venture to recommend it on the score of mere utility; but when we take into account that picturesque effect which is always produced by the mixture of Gothic buildings with round-beaded trees, I confess myself to be rather sanguine in my hopes of producing such beauty at Wembly, as will render that house, which has hitherto been a reproach to the place, the leading feature of the scenery.

Instead of clogging all the improvements with the dread of showing the

¹One of the estates mentioned in these papers which were improved by Repton.—ED.



Fig. 13. Grecian architecture, or architecture in which horizontal lines prevail, contrasted with round-headed trees.



Having stated some arguments for adopting the Gothic style, I shall now proceed to consider the objections that may be urged against it. The first objection will arise from the expense of altering the outside, without any addition to the internal comfort of the mansion. The same objection may, indeed, be made to every species of external ornament in dress, furniture, equipage, or any other object of taste or elegance: the outside case of an harpsichord does not improve the tone of the instrument, but it decorates the room in which it is placed: thus it is as an ornament to the beautiful grounds at Wembly, that I contend for the external improvement of the house. But in altering the house, we may add a room to any part



Fig. 15. Grecian architecture, or the architecture of horizontal lines, contrasted with spiry-topped trees.



Fig. 14. Gothic architecture, or architecture in which perpendicular lines prevail, contrasted with round-headed trees.

of the building without injuring the picturesque outside, because an exact symmetry, so far from being necessary, is rather to be avoided in a Gothic building.

Another objection may arise from the smallness of the house, as Gothic structures are, in general, of considerable magnitude; but the character of great or small is not governed by measurement: a great building may be made to appear small; and it is from the quantity of windows, and not their size, that we should pronounce a house to be a very considerable edifice.

PROPER SITUATIONS FOR A HOUSE

However various opinions may be on the choice of a situation for a house, yet there appear to be certain principles on which such choice ought to be founded; and these may be deduced from the following considerations:

First. The natural character of the surrounding country.

Secondly. The style, character and size of the house.



Fig. 16. Gothic architecture, or that in which perpendicular lines prevail, contrasted with spiry-topped trees.

Thirdly. The aspects of exposure, both with regard to the sun and the prevalent winds of the country.

Fourthly. The shape of the ground near the house.

Fifthly. The views from the several apartments; and,

Sixthly. The numerous objects of comfort, such as a dry soil, a supply of good

water, proper space for offices, with various other conveniences essential to a mansion in the country, and which in a town may sometimes be dispensed with, or at least very differently

disposed.

It is hardly possible to arrange these six considerations according to their respective weight or influence, which must depend on a comparison of one with the other, under a variety of circumstances, and even on the partiality of individuals in affixing different degrees of importance to each consideration. Hence it is obvious that there can be no danger of sameness in any two designs conducted on principles thus established, since in every different situation some one or more of these considerations must preponderate; and the most rational decision will result from a combined view of all the separate advantages or disadvantages to be foreseen from each.

It was the custom of former times, in the choice of domestic situations, to let comfort and convenience prevail over every other consideration. Thus the ancient baronial castles were built on the summit of hills, in times when defense and security suggested the necessity of placing them there, and difficulty of access was a recommendation which, in our happier days, exists no more. But when this necessity no longer operated (as mankind is always apt to fly from one extreme to the other), houses were universally erected in the lowest situations, with a probable design to avoid those inconveniences to which the lofty positions had been subject; hence the frequent sites of many large mansions, and particularly abbeys and monasteries, the residence of persons who were willing to sacrifice the beauty of prospect for the more solid and permanent advantages of habitable convenience, amongst which, shelter from the wind and a supply of water were predominant considerations. Nor shall I withhold the following conjecture, which I



Fig. 17. Oblique view of the avenue at Langley Park



Fig. 18. Effect of cutting down some of the trees in the avenue at Langley Park.

hope will not be considered as a mere suggestion of fancy: When such buildings were surrounded by trees, for the comfort of shade, might not the occasional want of circulation in the air have given the first idea of cutting long narrow glades through the woods, to admit a current of wind? and is it not possible that this was the origin of those avenues which we frequently see pointing from every direction towards the most respectable habitations of the last two centuries?

AVENUES

It seems to have been as much the fashion of the present century to condemn avenues



Fig. 19. Avenue at Hanslope Park.

as it was in the last to plant them; and yet the subject is so little understood that most people think they sufficiently justify their opinion in either case by merely saying, "I like an avenue," or, "I hate an avenue." It is my business to analyze this approba-

tion or disgust.

The several degrees of pleasure which the mind derives from the love of order, of unity, antiquity, greatness of parts, and continuity, are all in some measure gratified by the long perspective view of a stately avenue. For the truth of this assertion I appeal to the sensations that every one must have felt who has visited the lofty avenues of Windsor, Hatfield, Burleigh, etc., before experience had pointed out that tedious sameness, and the many inconveniences which have deservedly brought avenues into disrepute. This sameness is so obvious that, by the effect of avenues, all novelty or diversity of situation is done away; and the views from every house in the kingdom may be reduced to the same landscape, if, looking up or down a straight line, betwixt two green walls, deserves the name of landscape.

Among the inconveniences of long, straight avenues, may very properly be reckoned that of their acting as wind-spouts to direct cold blasts with more violence upon the dwelling, as if driven through a long tube. But I propose rather to consider the objections in point of beauty. If at the end of a long avenue be placed an obelisk, or temple, or any other eye-trap, ignorance or childhood alone will be caught or pleased by it. The eye of taste or experience hates compulsion, and turns away with disgust from every artificial means of attracting its notice. For this reason an avenue is most pleasing which, like that at Langley Park, climbs up a hill, and, passing



Fig. 20. Part of the Avenue at Hauslope Park cut down. The view shows that, in looking along an avenue, its effect will not be destroyed by cutting down a number of trees, unless the trunks of a portion of those that remain be disguised by bushes, such as thorns, hollies, etc.

over its summit, leaves the fancy to conceive its termination.

One great mischief of an avenue is that it divides a park and cuts it into separate parts, destroying that unity of lawn or wood which is necessary to please in every composition. This is so obvious that, where a long avenue runs through a park from east to west, it would be hardly possible to avoid distinguishing it into the north and south lawn, or north

and south division of the park.

But the greatest objection to an avenue is that (especially in uneven ground) it will often act as a curtain drawn across to exclude what is infinitely more interesting than any row of trees, however venerable or beautiful in themselves; and it is in undrawing this curtain at proper places that the utility of what is called breaking an avenue consists; for it is in vain we shall endeavour, by removing nine-tenths of the trees in rows, to prevent its having the effect of an avenue when seen from either end. Our figures 17 and 18 may serve to show the effects of cutting down some chestnut trees in the avenue at Langley, to let in the hill, richly covered with oaks, and that majestic tree, which steps out before its brethren like the leader of a host. Such openings may be made in several parts of this avenue with wonderful effect, and yet its venerable appearance from the windows of the drawingroom will not be injured, because the trees removed from the rows will hardly be missed in the general perspective view from the house. And though I should not advise the planting of such an avenue, yet there will always be so much of ancient grandeur in the front trees, and in looking up this long vista that I do not wish it should be further dis-

turbed, especially as the views on each side are sufficiently capable of yielding beauty; and when seen from the end rooms of the house the avenue will act as a foreground

to either landscape.

Most of the large trees at Hanslope stand in avenues; yet their pleasant shade forbids the cutting down of many of them, merely because the false taste of former times has planted them in rows, at least till those plantations which are now made shall better replace the shelter which the avenues in some measure afford. Our figures 19 and 20 give an idea of breaking the avenue to the north, which is not to be done by merely taking away certain trees, but also by planting a thicket before the trunks of those at a distance, as we may be thus induced to forget that they stand in rows. The addition of a few single trees, guarded by cradles, though often used as an expedient to break a row, never produces the desired effect. The original lines are forever visible.

Besides the character which the style and size of the house will confer on a place, there is a natural character of country which must influence the site and disposition of a house; and though, in the country, there is not the same occasion, as in towns, for placing offices underground, or for setting the principal apartments on a basement storey, as it is far more desirable to walk from the house on the same level with the ground, yet there are situations which require to be raised above the natural surface. This is the case at Welbeck, where the park not

only abounds with bold and conspicuous inequalities, but in many places there are almost imperceptible swellings in the ground which art would in vain attempt to remedy, on account of their vast breadth. They are evident defects whenever they appear to cut across the stems of trees and hide

only half their trunks; for, if the whole trunk were perfectly hid by such a swell, the injury would be less, because the imagination is always ready to sink the valley and raise the hill, if not checked in its efforts by some actual standard of measurement. In such cases the best expedient is to view the ground from a gentle eminence that the eye may look over and, of course, lose these

trifling inequalities.

The family apartments are to the south, the principal suite of rooms to the east, and the hall and some rooms of less importance to the west; when, therefore, the eating room and kitchen offices shall be removed to the north, it is impossible to make a better disposition of the whole, with regard to aspect. I shall therefore proceed to the fourth general head proposed for consideration, viz., the shape of the ground near the bouse; and as the improvement at Welbeck originally suggested by his grace the Duke of Portland has, I confess, far exceeded even my own expectations, I shall take the liberty of drawing some general conclusions on the subject from the success of this bold experiment. At the time I had the honor to deliver my former opinion my idea of raising the ground near the house was confined to the west front alone; and, till it had been exemplified and executed, few could comprehend the seeming paradox of burying the bottom of the house as the means of elevating the whole structure, or, as it was very wittily expressed, "moulding up the roots of the venerable pile, that it might shoot

up in fresh towers from its top."

All natural shapes of ground must necessarily fall under one of these descriptions, viz., convex, concave, plane, or inclined plane, as represented in the accompanying sections, figure 21. I will suppose it granted that, except in

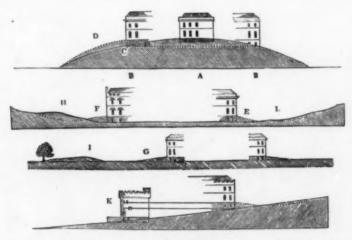


Fig. 21. Sections to show the manner of adapting houses to different natural shapes of ground

very romantic situations, all the rooms on the principal floor ought to range themselves on the same level, and that there must be a platform, or certain space of ground, with a gentle descent from the house in every direction. If the ground be naturally convex, or what is generally scalled a knoll, the size of the house must be adapted to the size of the knoll. This is shown by the small building A, supposed to be only one hundred feet in front, which may be placed upon such a hillock, with a sufficient platform round it; but if a building of three hundred feet long, as BB, should be required, it is evident that the crown of the hill must be taken off, and then the shape of the ground becomes very different from its original form. For although the small house would have a sufficient platform, the large one will be on the brink of a very steep bank at C; and this difficulty would be increased by raising the ground to the dotted line D, to set the large house on the same level with the smaller one. It therefore follows that, if the house must stand on a natural hillock, the building should not be larger than its situation will admit; and where such hillocks do not exist in places proper for a house in every other respect, it is sometimes possible for art to supply what nature seems to have denied, but it is not possible in all cases; a circumstance which proves the absurdity of those architects who design and plan a house, without any previous knowledge of the situation or shape of the ground on which it is to be built. Such errors I have had too frequent occasion to observe.

When the shape is naturally either concave or perfectly flat, the house would not be habitable unless the ground sloped sufficiently to throw the water from it; and this is often effected, in a slight degree, merely by the earth that is dug from the cellars and foundations. But if, instead of sinking the cellars, they were to be built upon the level of the ground, they may afterwards be so covered with earth as to give all the appearance of a natural knoll, the ground falling from the house to any distance where it may best unite with the natural shape, as shown

at E, F, and G; or, as it frequently happens that there may be small hillocks, H and I, near the house, one of them may be removed to effect this purpose. This expedient can also be used in an inclined plane, falling towards the house, where the inclination is not very great, as shown at L; but it may be observed of the inclined plane, that the size of the house must be governed in some measure by the fall of the ground, since it is evident that although a house of a hundred feet deep might stand at K, yet it would require an artificial terrace on that side, because neither of the dotted lines shown there would connect with the natural shape; and where the ground cannot be made to look natural, it is better at all times to avow the interference of art than to attempt an ineffectual concealment of it. Such situations are peculiarly applicable to the Gothic style, in which horizontal lines are unnecessary.

These sections can only describe the shape of the ground as it cuts across in any one direction; but another shape is also to be considered: thus it generally happens that a knoll is longer one way than the other, or it may even extend to a natural ridge of sufficient length for a long and narrow house; but such a house must be fitted to the ground, for it would be absurd in the architect to place it either diagonally or directly across such a ridge. The same holds good of the inclined plane, which is, in fact, always the side of a valley, whose general inclination must be consulted in the position of the building. A square house would appear awry unless its fronts were made to correspond with the shape of the adjacent ground.

I shall conclude by observing that, on a dead flat or plain, the principal apartments ought to be elevated, as the only means of showing the landscape to advantage. Where there is no inequality, it will be very difficult to unite any artificial ground with the natural shape. It will, in this case, be advisable either to raise it a very few feet or to set the house on a basement storey. But wherever a park abounds in natural inequalities, even though the ground near the house should be flat, we may boldly venture to create an artificial knoll, as it has been executed at Welbeck.

THE TOPOGRAPHICAL EVOLUTION OF THE CITY OF PARIS¹

By EDWARD R. SMITH, B.A.

Reference Librarian, Avery Architectural Library, Columbia University

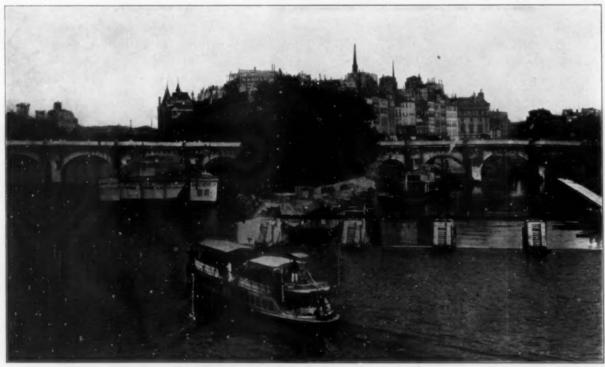
IV.—ROYAL PARIS

THE fortuitous arrangement of medieval I cities does not arise from an inherent lack of the sense of symmetry in the medieval architectonic scheme. The chief cathedrals of the thirteenth century in France are superbly symmetrical. They have as definite axes as the classical monuments of later times. If the civilization of the thirteenth century had continued, these axes would doubtless have been prolonged into the surrounding regions and the older maps would have been much firmer in their disposition. But the thirteenth century, like the fifth century B. C. in Greece, never attained its full fruition. The men who built Nôtre-Dame doubtless expected that succeeding generations would give their work a fair setting, but the fourteenth century was too busy fighting to remember the magnificent

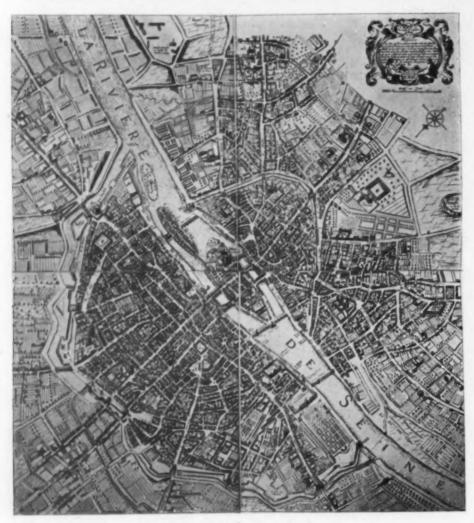
1 Continued from the October number of House and Garden.

expectations of its predecessor. Later Gothic architects huddled their decadent buildings together wherever there was space, with an entire lack of symmetrical arrangement. This, being the final result of the medieval period, has given to the work of that period its total effect; extremely picturesque and charming, but entirely accidental.

The Renaissance architects in France simply followed the previous period. So far as Paris is concerned, except for the futile projects of Francis I., there was no attempt to rectify the plan. But the Renaissance had in it the germ of a different state of affairs. The architectonic style which bears that name was based on the classic scheme, and in the classic scheme, symmetry, balance and order are fundamental. The period included in the seventeenth and eighteenth centuries, which followed the Renaissance,



THE PONT-NEUF AND ILE DE LA CITÉ



JEAN. BOISSEAU'S MAP-1654

accepted those qualities and endeavored to realize them to the fullest extent.

The Greek type is a rectangle, every detail of which has a definite relation to the central axis. Symmetry is essential to the design. So far as the architectonic unit, the temple, is concerned, the classic feeling is completely expressed. But the Greeks themselves never carried the principle of axial symmetry into the placing of their buildings. The location of the monuments on the Acropolis is entirely accidental. Their architects even went so far as to bunch three buildings together without any scheme of arrangement.

It was left to the Romans to take the next step. When they built a fine temple or bath it was their custom to clear a space about it, and to build a court with the main building as a central attraction. The primitive irregular market places were transformed into the great rectangular imperial fora.

The classical architectonic scheme pointed toward, but never grasped, the conception of a street or boulevard as we now know it. The best Roman streets were long and straight. As a matter of course, the triumphal arches were placed upon them and they were frequently lined with colonnades which were in themselves fine; but the streets were narrow and the façades of the houses were entirely without interest. When symmetrical arrangement was attempted, it was of the rectangular or gridiron type, which is familiar in

the plan of Pompeii. The Renaissance in Italy went but little farther. Italian cities have been so thoroughly remodeled that it is often difficult to find the original arrangement. We can point very definitely to one street, however, which in its day was considered a splendid example. The Strada Nuova, in Genoa, is superbly built, so far as the palaces which line it are concerned, but as a street it is puerile. It is too narrow to show its buildings, too narrow even for use. Compared with a fine Paris street or even one of the modern streets of Genoa, it is not a street at all. It is simply a passage.

Bernini's Piazza di San Pietro is fine, but that is a baroque development of the Roman forum and not a street.

The street or avenue and its fully developed type, the boulevard, which gives am-

ple space between buildings of suitable height, which provides a vista for fine monuments at its terminations or along its course, is a French invention, and, we may say, an invention of that portion of French architectural history covered by the reigns of the four Bourbons from Louis XIII. to the Revolution. At the same time it is the culmination of the classic idea of symmetry and balance in arrangement and construction. We feel, now that it has been invented, that classic architecture requires precisely this sort of setting.

AXES IN THE PLAN OF PARIS

With the development of appreciation of classic symmetry in the seventeenth century it was quite natural that architects should be dissatisfied with the medieval lack of arrangement. They felt the necessity for more firmness in the city map, more definite lines of symmetrical development. The introduction of these lines was the special accom-

plishment of the Bourbon period, and it is this which gives to the city of Paris its finest characteristics today. Paris, as we know it, notwithstanding the enormous labor of Napoleon III. and Haussmann, is the city which was conceived by the great designers of Louis XIV. (1643-1715).

THE RIVER

One of the chief axes of Paris is provided by nature. That portion of the Seine which lies between the Place de la Concorde and the Pont-Neuf is nearly straight and permits symmetrical architectonic arrangement.

The importance of the river axis

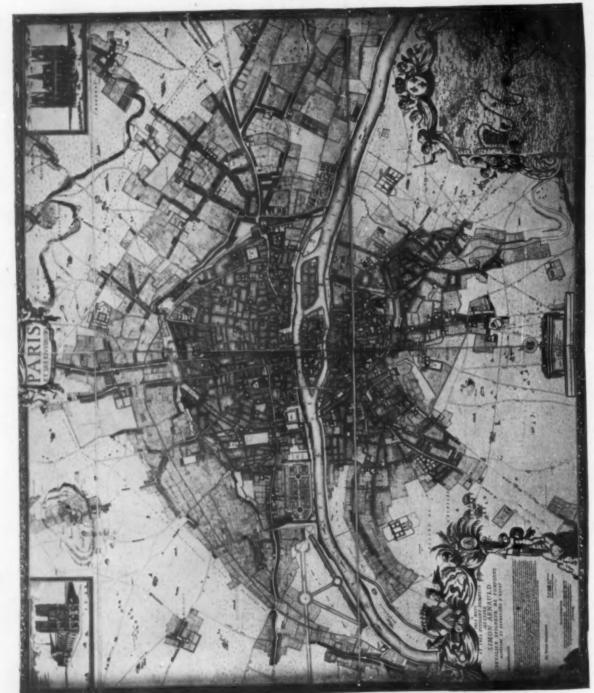
was clearly seen in the Renaissance period, and the northern side was charmingly treated by the architects of Catharine de Medici and Henry IV. in the construction of the Petite and Grande Galeries du Louvre. The completion of the old Louvre quadrangle, in the reigns of Louis XIII. and Louis XIV., was an important addition. The Pont-Neuf made a modest, but monumental, termination toward the east. Westward, toward Chaillot and Saint-Cloud, was open country, quiet but varied, occupied by villages which have since given their names to populous quarters of the great city.

At the commencement of the reign of Louis XIII. the southern side, the rive gauche, was undeveloped. The chief features were the group of buildings about the Tour de Nesle and the great meadow of the Pré aux Clercs, a large portion of which was taken up by the hôtel and gardens of "la royne Margueritte." With these were vari-



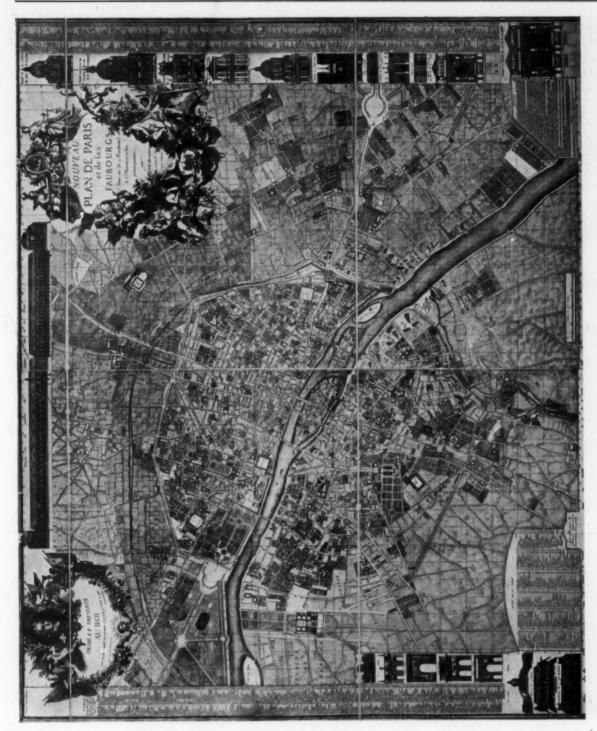
THE MAP OF PIERRE BULLET AND FRANÇOIS BLONDEL-1676





ous medieval and Renaissance hôtels and monasteries which were not especially monumental. Louis XIV. and his group of architects engaged upon the development of the Louvre, felt the need of some important monument to balance that building on the other side of the river. The splendid legacy which Mazarin left at his death in 1661 for a "Collège des Quatre Nations"

gave them precisely the opportunity which they required. Louis Lévan, chief of works at the Louvre, proposed, with the earnest support of Louis XIV., that the property about the old Tour de Nesle be secured and the new collège be built on the axis of the Louvre quadrangle. The scheme was accepted and the Collège des Quatre Nations, now the Institut, was built by him according



THE MAP OF THE ABBÉ DE LA GRIVE-1728

to this scheme. The Pont des Arts, a light foot-bridge connecting the Louvre and Institut, was built by Percier and Fontaine in 1802. Until the nineteenth century the rest of the southern side was devoted to various private residences, such as the Hôtel d'Orsay, Hôtel Salm Salm (now Légion d' Honneur), Hôtel de Bourbon, and Hôtel de Lassay, with

their gardens. The École des Beaux Arts, the Chambre des Deputés, on the site of the Hôtel de Bourbon, and the great railroad station were contributed by the nineteenth century.

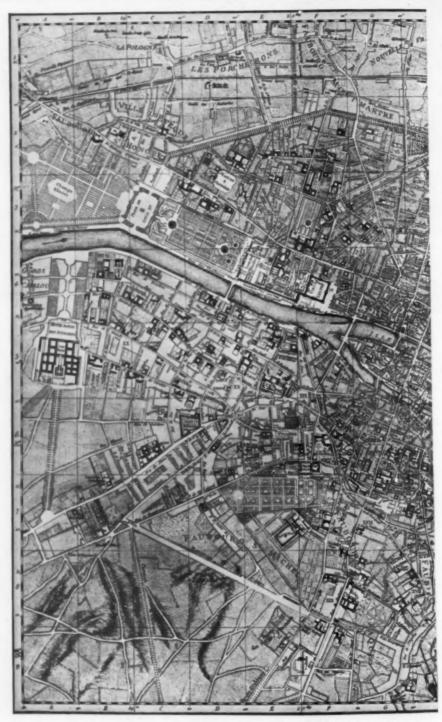
The quays on this side of the river were built at various times—Malaquais, 1669; Voltaire, 1791; d'Orsay, in the Empire; des Tuileries, under Louis XIV.

In medieval Paris the only bridge below the Ile de la Cité was that at Saint-Cloud. There was a structure here as early as 841, which was rebuilt in the fourteenth century. In the year 1564, to connect the Tuileries, then in process of construction, with its quarries at Vaugirard and Nôtre-Dame des Champs, and for the convenience of workmen who lived on the southern side, a ferry or bac was established. This was afterwards replaced by a wooden bridge on piles, which appears in the old maps as the Pont Rouge or Pont des Tuileries. Between 1685 and 1689 the Pont Rouge was replaced by the Pont Royal, a stone bridge, designed and executed by a Dominican monk, François Romain, with the assistance of Jules Hardouin-Mansard and Jacques Gabriel. The Pont du Carrousel is quite modern-1834.

This part of the city is a great central Cour d'Honneur with an immense basin; quite the finest arrangement of this kind ever attempted. The monuments of the Roman Forum were, of course, much more magnifi-

cent, but their arrangement was not.
THE TUILERIES-NEUILLY AXIS

The Seine is an axis provided by nature. The architects and designers of the seventeenth and eighteenth centuries, filled with devotion to classic symmetry, felt the need of a purely architectonic line of symmetrical



THE MAP OF ROBERT

development. This was found in the production of the axis of the garden of the Tuileries as it appears in the plate of Du Cerceau illustrated in the last article. In the seventeenth century the garden was completely remodeled by Le Nôtre. This famous garden designer was born at the Tuileries,



DE VAUGONDY-1760

where his father was gardener before him. He succeeded his father in 1637 and had charge of the work during the rest of his life. His design for the garden is probably represented by a plate in the "Grand Blondel," which corresponds with the present arrangement, except that many of the par-

terres have been planted with trees.

The garden of the Tuileries ended with the enceinte of Charles IX., which came to the river at the Place de la Concorde. Beyond this point to the west was a large area of waste land the control of which seems to have been secured by Henry IV. in anticipation of the proper growth of the royal domain in this direction. It remained crown property until November 27, 1792, when the revolutionary government took possession. It was ceded to the City of Paris August 20, 1828.

In 1600 the entire district of the Champs-Elysées was absolutely unarranged. It was waste land such as abounds in the outlying regions of every great city. The name "Champs-Élizés" occurs first in the plan of Nicolas de Fer, published in 1697. The improvement of the Champs-Elysées did not begin on the axial line, but along the northern bank of the river which turns a little to the left at the Place de la Concorde. A fine promenade

with four rows of trees was begun here early in the reign of Louis XIII. for the use of Marie de Medici, queen of Henry IV., which is, to this day, called Cours la Reine. It appears first in the map of Boisseau (1654).

After Le Nôtre had elaborated his scheme for the garden of the Tuileries, the main



THE ARC DE TRIOMPHE DU TRÔNE

From the " Grand Blondel"

avenue of the Champs-Élysées was begun, which first appears in the plan of Jouvin de Rochefort (1672) under the name "Avenue des Tuileries." This plan also shows the This plan also shows the rond point of the Champs-Elysées, the Avenue Montaigne and Avenue d'Antin radiating from it, although, of course, they do not take these names until much later. must remember that in all these old maps, work projected and work accomplished are not clearly separated. The form of the avenues is precisely that of the Cours la Reine, ronds points with straight connecting roads. one who is familiar with the French forests, like Fontainebleau and Saint-Germain, knows how common the type is. The time of its origin is not known, but as a rule common types are old types. The map of the Abbé de la Grive (1728) gives the name "Avenue de Neuilly" to the portion east of the rond point, thus indicating a definite intention to carry the street through to that village. It is possible that it followed the line of an old road already in use.

The beautiful plan de Roussel (1730) carries the Avenue de Neuilly through to the village and develops the Place de l'Étoile.

The plan of Verniquet (1798), the finest map made before the nineteenth century, gives a beautiful representation of the entire Champs-Élysées region at the end of the eighteenth century. Napoleon and his successors added the Arc de Triomphe. The Champs-Élysées were entirely remodeled by Haussmann in 1859.

A great square at the bend of the river where the enceinte of Charles IX. ended, was undoubtedly included in the original scheme, which it is easy to ascribe to Le Nôtre and Louis XIV. In all the early maps the Cours la Reine does not begin at the Tuileries garden, but at a carefully determined distance from it, which agrees with the present limitations of the Place de la Concorde. In the plan of Bullet and Blondel (François Blondel, architect of the Porte Saint-

Denis), which bears the date 1676, the actual space reserved for the great square is carefully shown. At this moment only one axis was contemplated. An avenue balancing the Cours la Reine on the northern side is shown.

The beautiful plan cavalier of Turgot (1739) represents the Rue Royale completed on the northern side. The plan of Vaugondy (1760) gives the square its first name, Place de Louis XV., and defines the outline as it has remained to this day. It shows also the location of the equestrian statue of Louis XV. In the plan of Jaillot (1775) the beautiful scheme of Gabriel is elaborated. The plan of Verniquet (1798) gives the Pont Louis XVI., now de la Concorde.

Jacques-Ange Gabriel, the architect who created the Place de la Concorde, was the son of Jacques-Jules Gabriel and the grandson of Jacques Gabriel, one of the architects of the Pont Royal. In 1752 Jacques-Ange entered the famous concours for the construction of the Place Louis XV. His plans were accepted and the square finished in 1763. The colonnades on the north side were finished in 1772.

Gabriel, delicate architect that he was, felt that the space left for the Place Louis XV. by the designers of the previous reign was too large and broke it up charmingly by an arrangement of depressed parterres. Moreover he allowed nothing to appear in either axis except the equestrian statue of Louis XV., which was easily dominated by the architectural masses. The square assumed the name Place de la Concorde in the Revolution and retained the form which Gabriel gave it until 1836, when, under Louis-Philippe, the vast mass of the obelisk of Luxor and its attendant fountains was planted in the center and the parterres of Gabriel's design destroyed. In considering the eighteenth century scheme for the Place de la Concorde it should be remembered that the design of Coutant d'Ivry for the Madeleine called for a dome which would have made a much more interesting center for the two colonnades on the northern side than the present design.

PLACE DU TRÔNE (DE LA NATION) AND COURS
DE VINCENNES

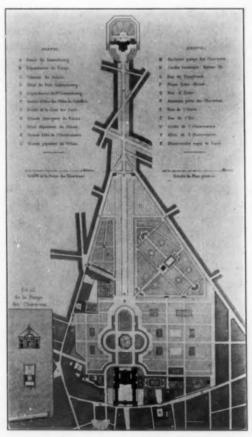
Having established the great axis leading

from the Tuileries to Neuilly, it was natural that the classic designers of the period should wish to carry it through the city. All that they accomplished, however, was the determination of its direction at the eastern end, leaving future generations to build the connecting links. An irregular site for a large place to balance the Place de l'Étoile was chosen in the Rue du Faubourg Saint-Antoine, beyond the abbey of that name, for which a fine arch was designed by Claude Perrault, the architect of the Louvre façade. The first stone of this work was laid by Louis XIV. in 1670, but it was soon, abandoned and its place taken by a plaster model which in time disappeared. The plan of Jouvin de Rochefort (1672) which gives our first picture of the Place du Trône, at the same time sketches plainly the scheme for the Avenue de Vincennes, or, as we call it now, Cours de Vincennes, having the same form as the Avenue de Neuilly. The construction of the Rue de Rivoli and the improvement of the Rue Saint-Antoine and the Rue du Faubourg Saint-Antoine in the reign of Napoleon III. connected the Place du Trône with the Place de l'Étoile in a way which is convenient enough, but probably far less dignified than the original designers would have desired. The Place du Trône (now de la Nation) appears in the later maps in the form which it has at present.

THE LUXEMBOURG-OBSERVATOIRE AXIS
In addition to the great lines which we have described, various lesser axes appear in other parts of the city in connection with important monuments.

In the later Roman occupation the portion of Lutèce lying in the southwestern

angle formed by the road to Montrouge and that to Vaugirard was occupied by a pretorial camp. In 1257 a large part of it was taken up by the monastery of the Chartreux, which remained until it was destroyed by the Revolution in 1790. About the middle of the sixteenth century Robert de Harley bought property in this area on the north side of the Rue de Vaugirard, which passed in 1583 to the Duc de Piney-Luxembourg, whose name is still attached to it. Marie de Medici, the widow of Henry IV., bought the land in 1613, and her architect, Salomon de Brosse, built upon it between 1615 and 1620 the splendid palace which we now call the Luxembourg, the most complete and perfect, if not the largest, monument of



PLAN OF THE LUXEMBOURG GARDEN IN THE REIGN OF LOUIS-PHILIPPE



THE HÔTEL DES INVALIDES

From Granet

its kind in Paris. De Brosse was a relative of Androuet du Cerceau and quite properly took as the model for his building the old château of Verneuil sur l'Oise (now destroyed) which is supposed to have been built by the founder of the family and is represented in his "Plus excellents Bâstiments." The Luxembourg also resembles somewhat the posterior portions of the Pitti Palace, the home of Marie de Medici, in Florence. De Brosse designed the original garden of the Luxembourg in 1613, and in the same year began the aqueduct of Arcueil, which follows closely the line of the old Roman work described in our first article.

The Petit Luxembourg, to the west of the main palace, was built by Richelieu in 1629. Further to the west was the convent of the Filles du Calvaire, of which only a fragment now remains.

The meridian of Paris passes a little to the west of the Luxembourg and over the hill to the south, where both the aqueducts terminated. This hill was a convenient site for the much needed observatory which was built in 1667 by Claude Perrault, under the direction of Colbert, the minister of Louis XIV. The Luxembourg and the Observatoire are not precisely in the same axis, but the divergence is not great, and the possibility of bringing them into the same scheme was doubtless clearly in the minds of the old designers. Under the Consulate and the Empire the property of the Chartreux was added, the western portion of the garden cut off, and a connecting avenue built between the monuments. The beautiful central parterre, laid out by De Brosse, was much injured in the reconstruction. In the reign of Louis-Philippe (1830–1848) the ensemble was elaborated in a charming way. Haussmann added several splendid decorations but lost some fine features.

The Luxembourg-Observatoire axis shows well the steadying effect which a fine axial thoroughfare with symmetrical arrangement of monuments and gardens has upon the map of a city. The Tuileries-Neuilly axis is finer, of course, but its extreme length makes it much less intelligible, less easily grasped. The HÔTEL DES INVALIDES AND ÉCOLE MILI-

TAIRE The kings of France always had a care for their disabled and dependent soldiers. In early days the droit d'Oblat permitted them to billet their men upon the monas-The monks and the soldiers, however, did not agree, and in the time of Henry IV. the complaints of both became so bitter that in 1600 this king established the Maison royale de la Charité Chrétienne as a military asylum in the Faubourg Saint-Marceau. The experiment was a failure, and after 1605 the invalid soldiers went back to the monasteries. After the peace of the Pyrenees in 1659 Louis XIV. found leisure to take up this important matter. A location was discovered in the Plaine de Grenelle, a part of the old fief of Saint-Germain des Prés, and the Hôtel des Invalides was built by the architects Libéral Bruant and Robert de Cotte. The splendid church in which the tomb of Napoleon has been placed was designed by

Iules Hardouin-Mansard.

If we look at the map of Jouvin de Rochefort (1672) in which the Invalides first appears we will see that it occupies a perfectly free position in open country and that a slight change would have brought its axis into line with that of the Avenue d'Antin and the rond point of the Champs-Élysées. It is surprising that this fact was not recognized at the time. Instead it was left to the present generation to create a new axis, that of the Pont Alexandre III. and the two Palais des Beaux Arts.

In placing the Hôtel Royale, the École Militaire, and the Champs de Mars, which were designed by Jacques-Ange Gabriel and executed by A. Brogniart between 1752 and 1787, more foresight was shown. The axis of the monument in this case was arranged to pass over the hill at Passy, where in the nineteenth century the rond point of the Place du Trocadero and the great exhibition palace of that name were built.

The interesting plexus of ronds points and avenues to the south of the Invalides and École Militaire was developed in the eighteenth century nearly in its present form.

THE BOULEVARDS

Improvements in artillery during the early

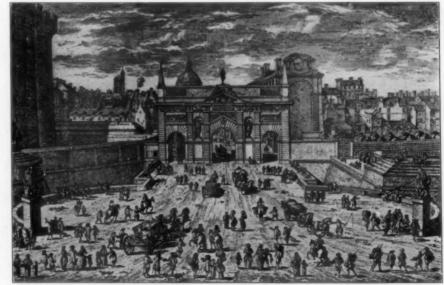
seventeenth century rendered the old masonry wall of Charles V. less and less valuable. It was gradually replaced by earthworks in the form of bastions which were called "boulevarts." The derivation of the word has never been made out.

The powerful governments of Richelieu and the great ministers of Louis XIV. were responsible for many wars, but they managed to do their fighting at a distance from Paris, so that

for two centuries the city enjoyed profound peace, a vast relief from the perpetual civil wars of the sixteenth century. The great bastions or "boulevarts," abandoned by the military authorities, were found to make excellent parks for the people. Occasionally trees were planted upon them and parterres laid out. The bastion to the north of the Bastille and the Porte Saint-Antoine was especially popular. In the plan of Gomboust (1652) it is called the "boulevert de la Porte Saint-Antoine," and in that of Boisseau (1654) the "grand boulevert."

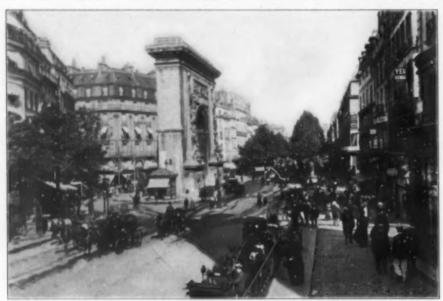
In the beautiful map of Bullet and Blondel (1676) the old fortifications are entirely removed and in their place a system of ronds points and straight connecting avenues is drawn, which is speculative, of course, but shows clearly what the intention was. The actual execution of the scheme was gradual. Even in the days of Haussmann the boulevards were extremely rough. The name boulevarts is not actually transferred from the bastions to the avenues until the map of Jaillot (1775). Before this they were called cours or rues de remparts.

In the reign of Louis XIV. the medieval gates were replaced by a superb series of triumphal arches designed by François Blondel. Two of these, the Porte Saint-Denis (1671) with sculpture by Girardon and Michel Anguier, and the Porte Saint-Martin, are still in existence. The beautiful Porte



THE PORTE SAINT-ANTOINE

From Maquet



THE PORTE SAINT-DENIS

Saint-Antoine and the Porte Saint-Bernard were destroyed in the Revolution.

The system of boulevards which the age of Louis XIV. bequeathed to Paris has been repeated in nearly every European city where the destruction of *enceintes* has given opportunity. The finest example is the Ringstrasse in Vienna, where the boulevards have been made connecting links in a system of parks and architectural centers.

THE MUR D'OCTROI AND THE OUTER SYSTEM OF BOULEVARDS

In 1786 the farmers of taxes secured the construction of a light wall about the entire perimeter of the city. The map of Verniquet shows that with this wall, on its outer side, there was constructed, or perhaps only planned, a series of avenues quite similar to the inner ring of boulevards already partly The avenues of the Mur carried out. d'Octroi, greatly improved in the time of Haussmann, are represented by the boulevards passing through the Place de l'Étoile, Place des Ternes, Place de Clichy, the regions of la Chapelle, la Vilette, Menilmontant, Charonne, the Place du Trône (de la Nation) Place de Daumesnil to the river at the Pont de Bercy. On the south side the Mur d'Octroi with its avenues followed approximately the line of the Boulevards de Grenelle, Garibaldi, Pasteur, de Vaugirard, Edgar Quinet, Raspail, Saint-Jacques, d'Italie,

de la Gare to the Pont de Bercy. The Mur d'Octroi was abolished in 1860, but some of the pavilions which were erected by the architect Ledoux for the convenience of the tax gatherers still remain at the Barrières d'Enfer, de la Vilette, de Charenton, du Trône and de Bercy.

THE LOUVRE AND THE TUILLERIES

It is difficult to pass over the history of Bourbon Paris without stopping to describe

the prodigious constructions which were always in progress at the two great palaces which are so near the heart of the city. But vast as these operations were, they were all contained in the scheme which was definitely determined upon in the reign of Henry IV. The colonnade of Claude Perrault was a splendid accident. The quadrupling of the design of Pierre Lescot did not add to its beauty. The Salle d'Apollon is larger but not finer than the Petite Galerie. But our task is, chiefly, with topographical conditions, and these, so far as they cover the Louvre and the Tuileries, may be easily explained.

The enceinte of Charles V. divided the space between the palaces unequally into two portions; the larger, toward the Louvre, was filled with ordinary city streets and houses until Haussmann cleared it up. Between the enceinte and the Tuileries was the private garden of that palace, called in the older maps Parterre de Mademoiselle, from Mademoiselle de Montpensier, who was housed at the Tuileries in 1638. In 1662 Louis XIV. used a part of the garden for the magnificent fête which he called the Carrousel. Revolutionary Paris has held the name ever since.

The consideration of the various schemes for connecting the two palaces on the northern side may be taken up to better advantage with the final execution of that work under Napoleon III. THE PLACE VENDÔME AND PLACE DES VIC-TOIRES

The creation of a great public square, similar to the Place Royale of Henry IV., between the Rue Saint-Honoré and the Rue des Petits-Champs, was suggested by Louvois, a minister of Louis XIV., in 1683. The site was occupied by the Hôtel de Vendôme, built in the reign of Henry IV. The original scheme for the new place was a grand affair. It was to be called Place des Conquêtes and to be built on three sides, that on the Rue Saint Honoré being left open. It was intended to serve as a monumental civic center providing accommodations for the Bibliothèque, all the Academies, the Monnaies and several foreign embassies. The scheme of Louvois was too extravagant for

execution. After 1698 it was recast in its present residential form and constructed by Jules Hardouin - Mansard, under the name Place Louis-le-Grand.

The Place des Victoires was a private enterprise undertaken by François d'Aubusson, Vicomte de la Feuillade, who erected here a monument to Louis XIV. in 1686.

THE PALAIS-ROYAL

Like the Louvre and Tuileries, and a vast number of monuments public and private which we have not space for here, the Palais-Royal is extremely significant architecturally, but its topographic importance is not great. In fact, it was not placed with any regard for the rest of the Paris map and is, at this moment, an obstruction to the natural traffic and intercourse of the city.

(To be continued)

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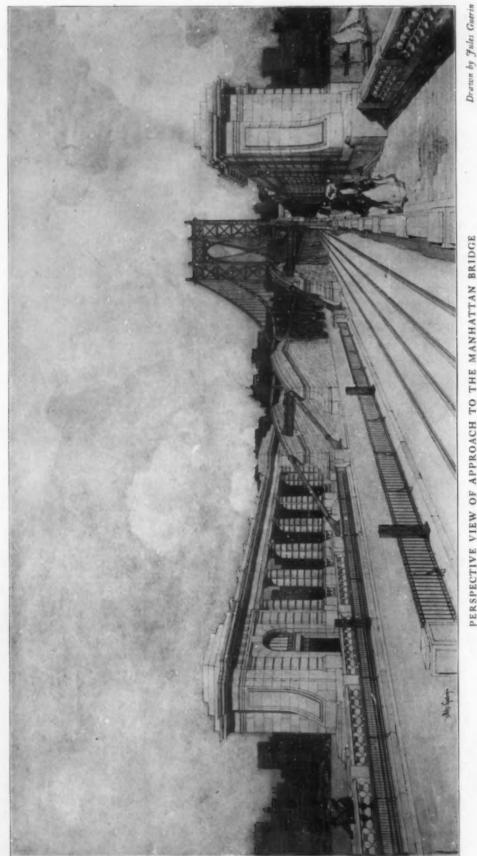
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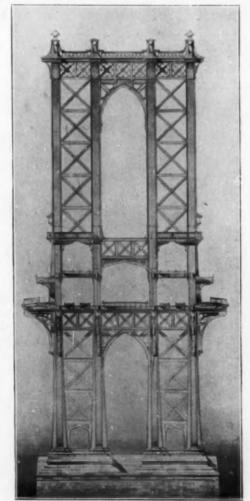
PERSPECTIVE VIEW OF APPROACH TO THE MANHATTAN BRIDGE
The Architectural Treatment designed by Carrère & Hastings

NEW ARCHITECTURAL DESIGNS FOR THE MANHATTAN BRIDGE

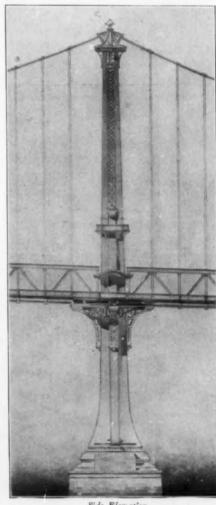
N abandoning the project to use eyebar I chains and returning to wire cables in the construction of the new Manhattan Bridge over the East River the municipal authorities of Greater New York determined also upon a revision of the architectural part of the design. This work was assigned to the firm of Carrère & Hastings, whose sketch plans of the decorative features of the bridge are in the hands of the Municipal Art Commission. As the foundation of one of the main towers is already completed and that of the other is well under way, the Commission's decision should not be long delayed.

In this bridge the engineers have profited by the lessons learned in the construction of the Brooklyn and Williamsburg bridges. The reduction in the size of the openings for traffic through the massive stone towers of the Brooklyn Bridge was necessarily so great that freedom of circulation is materially restricted at these points. In the case of the Williamsburg Bridge there is none of the impressive solidity of the older bridge, and at the same time the lighter steel towers above the roadbed are conspicuously angular and commonplace in all their parts. By contrast, the lines of the steel structures bearing the Manhattan Bridge, from pier to cable-saddle, are so simply and delicately drawn as to give the appearance of great beauty to the slim shafts of the towers. In fact, the architects were so impressed at the first view by the beauty of the lines furnished by the engineers that they declared the towers needed but little decoration.

Acting in this spirit of restraint, they have abstained from any mere decorative treatment on top of the towers and above the cables, and have contented themselves with

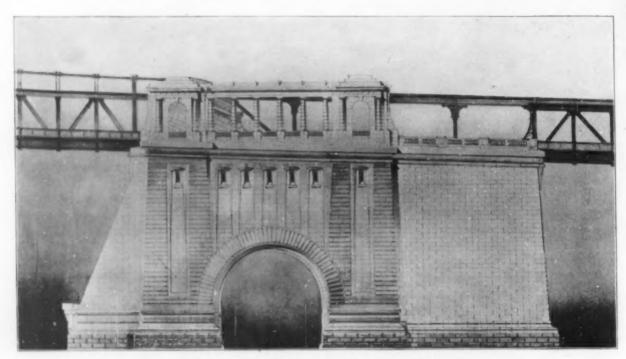


Front Elevation

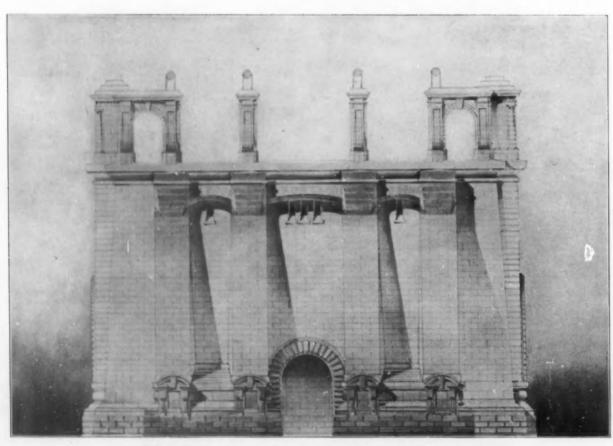


Side Elevation

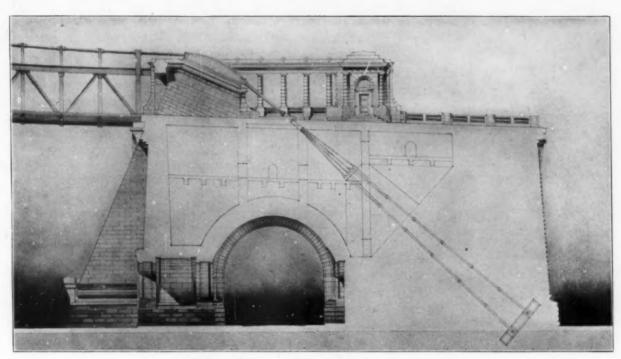
ONE OF THE TOWERS



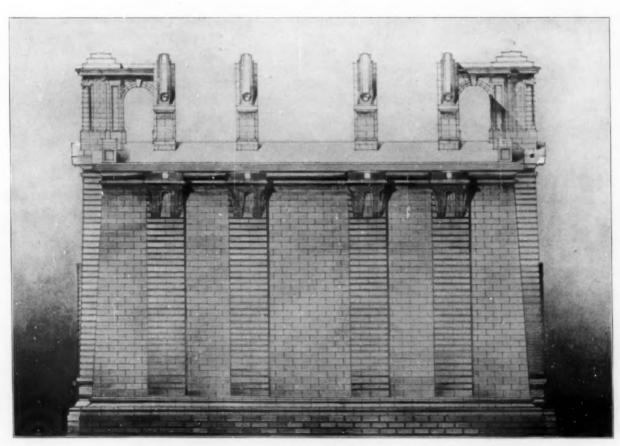
SIDE ELEVATION OF ONE OF THE ANCHORAGES



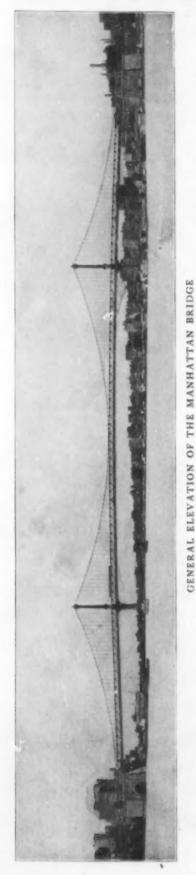
ELEVATION OF AN ANCHORAGE LOOKING TOWARD APPROACH



SECTION OF ONE OF THE ANCHORAGES



ELEVATION OF AN ANCHORAGE LOOKING TOWARDS TOWER



crowning the towers with a cornice effect, under the lines of the cables, like the cap of a column under an architrave. This cornice has a wide projection, and about it are concentrated all the decorative features in a gallery effect extending the full width of the tower.

An interesting development of the architectural design is the way in which sheltered resting places or observation galleries are added outside the towers on a level with the roadbed. Each of these is covered with an iron and copper hood, which affords an opportunity for a minor variation in the general color effect of the steel work. These galleries are about thirty-six feet long and five feet wide. A short distance above them are smaller uncovered galleries. The galleries have been popularly described as "roof gardens," although, in point of fact, they are merely narrow balconies which lead out of the main footway and extend around the outer tower posts.

In the treatment of the towers the architects were necessarily restricted to mere matters of detail work in iron, which, viewed in conjunction with the great masses and interlacings of the structural steel work, are almost wholly overshadowed. The really important feature of their design is the stone work over the anchorages. Their purpose, as they have explained it in a letter accompanying the plans, has been to give "some expression in stone above the roadbed of the immense amount of masonry necessary under the roadbed for the construction of the anchorage. On the one hand, this affords us an opportunity to bring stone construction in contact with the great amount of necessary iron construction, and on the other hand makes it evident to all crossing the bridge that they are on the anchorage by some other method than by the mere change in the pavement material."

The anchorage, which has an area of about two hundred and twenty-five feet in length by one hundred and seventy-five feet in width, as seen from the street, is devoid of unnecessary ornament, entire dependence being placed upon the strictly structural decoration and the effects obtained by the large masses of material and stone jointing. Massive buttresses on the water side carry the saddles to receive the cables and

also serve to take up the thrust given by the cables.

Coming to the spaces over the anchorage, the design of the stone work is an impressive court treatment, which gives extra width at this part of the thoroughfare and makes room for spaces off from the general circulation where pedestrians can rest on their way over the bridge and obtain a magnificent view of the city and the river. The pavilions of the colonnade on either side are long and low and detract in no way from the sense of great height derived from the main towers in a general view of the bridge. Within, the pavilions are about one hundred and sixteen feet long by twelve feet wide, in the clear. On each side stairways connect with the interior of the anchorages and thence lead to the street below. By examination of the perspective (see page 240) it will be

seen how the masonry supports for the anchorage saddles are made a part of the architectural scheme connecting the colonnades.

In conclusion, it is well to repeat this high tribute paid by Messrs. Carrère & Hastings to the work of the engineers, O. F. Nichols, Chief Engineer of the Department of Bridges, and R. S. Buck, Consulting Engineer: "The main lines of the cables and suspended trusses, as given to us by the engineers, are, in our opinion, the most beautiful we have ever seen in any bridge, expressing as they do the rational and simple solution of the problem from the engineering point of view."

NATURE'S CHIAROSCURO IN ITALY

NOT without reason is the artists' term for effects of light and shade made up of the Italian *chiaro*, "light," and *oscuro*, "darkness." For in Italy preëminently one may enjoy such effects and in Italian gardens Nature's care for just this matter is the cause for no little of their vaunted charm.

Though but rarely considered, it is to the wonderful contrasts of light and dark masses that this charm is due even more than to the artfulness with which the landscape gardener introduced his famous architectural and sculptural features.

The old claim of formal versus natural gardening is just now to the fore; but in

discussing the classic method we are prone to forget that the classicists, instead of despising Nature (and especially Nature's sunlight) rather called her to their aid and worked together with her.

If you will compare some of the Italian formal gardens with some northern examples I think you must agree with me that there is a glamour, a mysterious radiance about the south-

ern gardens that is somehow lacking in the north. It is not the glamour of romance and antiquity that I mean. England and Scotland are brimful of romance and age. But it is sunshine,—alive, shimmering, exuberant, exultant; 'tis a glamour of another ilk and none the less real because it is intangible, indescribable.

And for this you must come to Italy.

Come into the garden at Tivoli, this garden that has been so photographed and painted and described. Yet in spite of all, the Villa d'Este holds its own and still hides many a dear secluded spot unprofaned by the hurried tourist wearily following his voluble

guide. Come into this nook where we may sit and look out over the artificial lakes. The trees and shrubs which surround us are dense and dark as if illimitable forests hemmed us in. The mysterious gloom of the black cypress trees is scarce lightened by the witchlike glitter of silver birches. Yet the pools themselves are liquid sunshine, for they were so placed as to catch every



THE GARDEN AT ASOLO
Formerly Queen Caterina's

drop of light, and Nature has given them the power to give it out to us, if you will, in thousands of radiant smiles.

"These old villas with their deserted gardens make me so insufferably sad!" Thus spoke a lady to me at dinner the other night. She put me in a passion, and yet when I go into the d'Este palace (which by the bye is but the worse half of the villa proper) I can sympathize with her. I grant these old Italian palaces, no matter how magnificent,

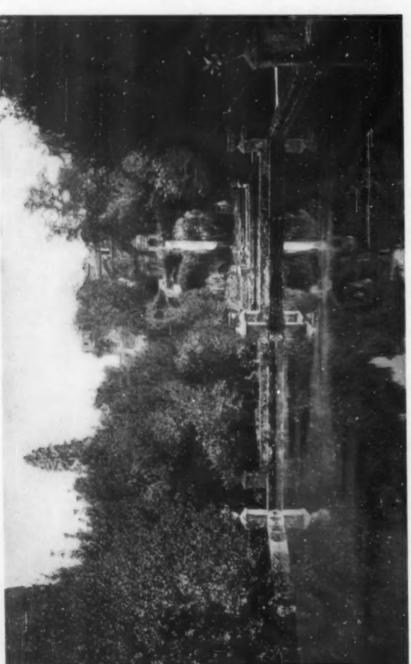
how architecturally sublime, give me what children call the shivers. The huge barrack-like apartments, the dim-lit spaces, the dark recesses, the damp oozing from old masonry, these give the most forlorn of feelings. Dilapidation, the vanity of wealth and pomp and power, the gruesomeness of past comedy, the dull weight of bygone tragedy, the sense of dust to dust, hang over the spirits like a pall.

But in the gardens all is different. Over

each garden, however desolate, Nature has thrown her veil of beauty. In those outdoor realms stray sunbeams play at hide and seek among the ruined balustrades. The sunit-self peeps at me through yonder green vista. Lizards laze in the very loneliest places and a chance bird chirps somewhere in the branches.

I step upon the moss-grown terrace. From the distance I catch sounds like the buzzing of a swarm of bees. It is only a little jumble of brownskinned urchins who are calling out to each other while they tumble about at play in the street a dozen rods below.

Over on the hill beyond the cypresses that lift impressive fingers skyward, one insignificant dot, that means a man, a donkey and a cart, moves slowly along the shining road. Truly, life is not strenuous here, but none the less is there life and love and joy, and doubtless also sorrow. But we have dreamed



OLS OF THE VILLA D'ESTE GARDI

long enough in Tivoli. Let us leave lower Italy and come up into the Highlands, as Dr. Robertson calls them, of this sunny land.

We have grown used by now to the flat bareness of the Italian architecture, to the sparsity of windows and to the vast surfaces of plain wall that made us think at first (yes, confess it) of barracks and prisons and factories. By now we are able to realize that whereas in

England or Scotland a castle wall does literally "frown," here in the land of the sun the walls and towers beam upon us. There is a placid look of indulgence about them akin to that, shall we say, of the superior priesthood contemplating the frailties of the laity. It is all the same, whatsoever gloomy or tragic interior history may lurk behind these smiling villas—what skeletons in the closet, so to speak, the walls may hide—what matters it to the walls!

Come with me up into the little mountain town of Asolo, which the poet Browning "discovered" in one of his gypsy wanderings and which he has made famous forever by the story of how Pippa passed that way.

Long ago someone else, we do not know whom, discovered the tiny hill town for Queen Caterina Cornaro. Here the exiled queen held a miniature court in imitation of the court in Cyprus that should have been hers, and here she solaced herself for the loss of sham glories by the gain of some true pleasures, and here, like all Italian grand dames, she patronized arts and letters.

Today what is left of Caterina's royal palace has been turned into an artist's studio



THE GREAT FOUNTAIN AT THE VILLA D'ESTE

by Barrett Browning. The veritable old tower up which the courtiers used to pass has lent itself admirably to modernity, and in marked contrast to the rich gloom of typical Italian villas the lightsomeness of the color scheme is startling. Yet when all is said, though few people would have dared leave the walls of a room so white and bare, the result of just this whiteness that gleams in the sunlight and reflects here and there the rich gold of draperies and window hangings could hardly be bettered.

But here in this pleasant villa garden man and money, and best of all, Nature have worked together. And the result fascination—hypnotism, if you like.

If you will spare another five minutes to walk in the shade of the pergola with me and watch the play of light on the marble columns and the gleaming statues, if you will note how even the steps are a study in light and shade, how the whole picture is set in a dark frame of ivy-draped wall,—perhaps if you linger long enough you will need no converting to my belief that chief among the various elements that go to make up our pleasure in the wonderful Italian gardens is Nature's chiaroscuro.

ESTHER MATSON



THE NEW YORK STOCK EXCHANGE PEDIMENT

at Washington suggests a comparison, at certain points, with the of the New York Stock Exchange conspire against architect A S the most widely known pedimental work in this country Crawford's decoration of the Senate wing of the Capitol sculptured tympanum of the New York Stock Exchange, which from the broad paved plaza east of the Capitol are greatly in its favor. On the other hand, all the conditions of the location and sculptor. The building is wedged tight between overtowering skyscrapers and faces a busy city street of little more than average width, so that nowhere can its chief ornament be seen to entire satisfaction. Measured merely as groups of sculpture, Ward compels admiration by the logical exposition of a simple has only recently been uncovered to public view. The architectural setting of the Washington pediment and the approach however, Crawford's pretentious work appears weak and incotheme, by the skilful composition of the whole, and especially by herent in conception and crude in execution, while that of J. Q. A. the strong and convincing modeling of the several figures.

Not to press the comparison further, Mr. Ward, without doing violence to any of the conventions implied in the ornamentation of the flat triangle, has given a free, modern and individual rendering of the much-treated subject of Commerce and Industry. At the center of the group stands a heroic figure

of "Integrity," with outstretched hands, as if in benediction of the toilers on either hand. On the dais at her feet are two figures of cherubs. To the right bends toward her, bowed under the weight of his heavy sack of grain, a sturdy tiller of the fields; beside him is a shepherdess and her charge. To the left the figure of a mechanic stoops at his work, while behind him stands his youthful helper.

To meet the difficult problem presented by the sharp angles of the lower corners the groups include two figures each, in similar attitudes; in each case one figure rests on one knee, and the other is extended at full length. They represent, in the right hand angle, prospectors examining a piece of ore; in the left hand angle, designers working over their plans. The pediment balances to a nicety, though the secondary figures beside the mechanic and the husbandman give the impression of being out of scale.

These defects—if they be such—are more than atoned for by the effective posing and masterly modeling, especially of the nude male figures. Mr. Ward was indeed fortunate in his choice of an associate in the execution of this imposing piece of sculpture, for much of the credit for the success of the work must be accorded to Paul Wayland Bartlett, who did the actual modeling after Mr. Ward's design.

PICTURESQUE ENGLISH COTTAGES AND THEIR DOORWAY GARDENS

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

IV.

ENGLISH villagers are very proud of their gardens, which form such a charming feature of their rural life. Charles Dickens, in one of his finest passages, wrote: "In the culture of flowers there cannot, by their nature, be anything solitary or exclusive. The wind that blows over the cottage porch sweeps over the grounds of the nobleman, and as the rain descends on the just and on the unjust, so it communicates to all gardens, both rich and poor, an interchange of pleasure and enjoyment."

When strangers visit our shores, or when we first return from foreign travel, one of the first sights which gives pleasure and gratifies the eye, is the sight of the wayside cottages and their bright little gardens, the home of many old-fashioned flowers, the source of the cottager's supply of fruit and vegetables. These gardens combine utility

with beauty. Flowers encircle the cabbage plants and the potato crop; and although the cottager, who has a wife like unto a fruitful vine and many olive branches round about his table, is sorely tempted to increase the area of his kitchen garden and plant his "taters" and carrots in the soil once sacred to his flowers, he can scarcely harden his heart to uproot the plants in which he takes so great a pride.

The flowers, too, find a zealous friend in the busy housewife who tends them and waters them, sometimes with the contents of her teapot (hydrangeas seem to love cold tea), and watches over them as flowers love to be watched. She finds time, in spite of the olive branches, to care for these other plants which make her garden gay and bright, and values far more the gift of some roots and cuttings than a present of money.

The walls of the cottages are usually covered with creepers. A vine is trained about the porch. A Virginia creeper soars as high as the topmost gable and chimney-stack, and in the autumn clothes the cottage with its mantle of beautiful mellow brownish-red leaves. Climbing roses are not forgotten, and many a cottage can boast of its fine



THE LITTLE GARDEN OF THE SHALFLEET POST OFFICE



AT NEWPORT, ISLE OF WIGHT

Gloire de Dijon or Marechal Niel, or stronggrowing crimson rambler, which fill the air with fragrance. Clematis plants of various hues are seen on many a cottage wall, and ivy, too, "that creepeth o'er ruins old," loves

to cling to rustic dwellingplaces, and sometimes clothes walls and thatch and chimney with its dark green leaves. The honeysuckle is a favorite plant for climbing purposes. It covers the porch and round about sheds its rich perfume.

The garden path is made of gravel. In Sussex it is paved with large flat Horsham slabs of stone. Box edgings are not uncommon, than which nothing can be more handsome or suitable. In the beautiful little garden of the Shalfleet Post Office there is a charming well-trimmed

edging of box, which surrounds the little path and the central bed, wherein stocks flourish and a carefully tended standard rose raises its beautiful head. Cottagers especially like edgings made of large loose flints or stones arranged in formal shapes with little paths between the beds, as in the views of the cottage gardens at Newport, Isle of Wight, where every advantage is taken of a little space. You will notice also the "gray-heads" in the wall of the cottage, a favorite and old-fashioned method of relieving a wall surface, much used in Berkshire. The gray-headed bricks are frequently arranged in various patterns and designs. In this little garden no attempt is made to grow vegetables. The whole space is devoted to flowers. This shows the devotion of the cottager to his flowers in spite of the needs of the olive branches. Miss Hayden records the saying of an old Berkshire dame, who said that she could gaze at them all day long, if she had no work to do. "They be sa wunnerful, an' there is sa much in 'um, when you comes to study 'um. As for hurtin' or breakin' a flower, well there, I couldn't do it; 'twud sim downright cruel."

The window garden, too, is a sight to behold. You will scarcely find a cottage that has not in the window some plants which are tended with the greatest care, and are



A ROSE GARDEN AT TOLLBURY



THE GARDEN OF THE TOLLBURY STUD FARM

watered and washed so religiously that they flourish famously. Plants are like animals, and respond gratefully to the affectionate regard and care of their masters. The favorite flowers for window gardens are geraniums, hydrangeas, fuchsias, an occasional cactus or begonia, musk and balsam and many others which obscure the light of day and make the cottage dark, but the peasant cares not for that if he can see his flowers.

Some cottages can boast of their rose gardens, the owners of which obtain many prizes at the local flower shows. The views of the garden of the Tollbury Stud Farm show a fine and flourishing rose garden with an edging of tiles partly covered with pinks wherein the roses, chief glory of the English gardens, find a congenial home. The other view of the same garden is very picturesque, with its diminutive lawn, its pinks and larkspurs and other old-fashioned English flowers. These constitute the chief charm of

the cottage garden, and are prized by the true garden lover far higher than bedding-out plants or the ordinary annuals. Nowhere do they flourish better than in the peasant's rustic pleasure-ground. The best of these old flowers which you will see in many a cottage garden are the lilacs and laburnums, sweet williams and tall white Madonna lilies, gillyflowers and love-lies-bleeding, the lark-spur and the lupin, pinks and carnations, the ever constant wallflowers, and the Canterbury Bells. The everlasting-pea is always welcome in its cottage home, and dahlias are greatly prized, not the single ones so much as the old-fashioned, tight-growing, formal kinds.

In some parts of England there is a tendency among cottagers to neglect these oldfashioned flowers and cultivate the hardy annuals. Nasturtiums and China asters and stocks flourish where once the sweet william and other herbaceous plants were regarded with delight. In our own gardens we have



A COTTAGE ON THE OUTSKIRTS OF DORKING

begun to appreciate our herbaceous borders and to value the plants which some of our village neighbors are now discarding. We hope that they will return to their first love, and cherish again the old flowers which are the true glory of a rustic garden.

In the outskirts

In the outskirts of Dorking there is a beautiful cottage garden. A small stream separates it from the road, along which Romans marched, and the pilgrims wended their way to the Shrine of St. Thomas at Can-



A GARDEN WALK, SHALFLEET

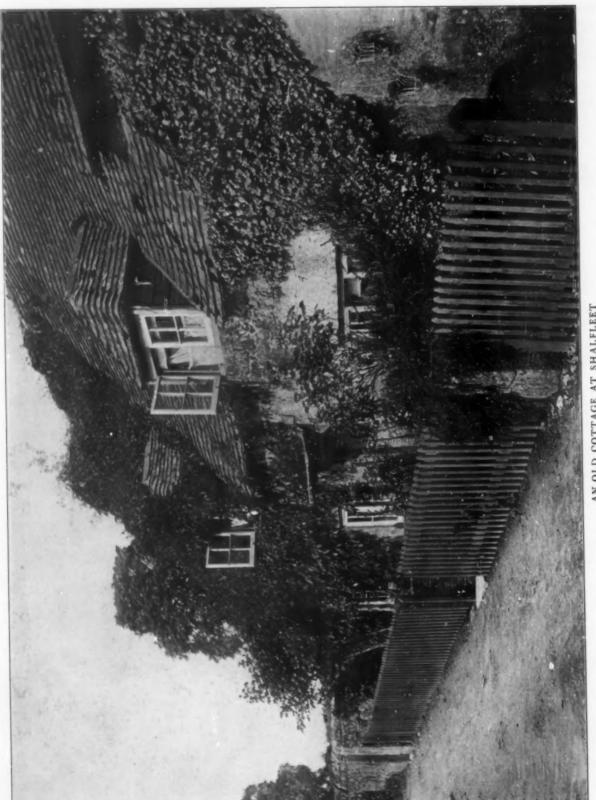
terbury. In the front of the house, which is a halftimbered structure, with a beautiful tiled roof and tile-covered porch and a graceful clustered chimney-stack, is the flower garden, while behind it the useful vegetables grow. We give two views of this fine Dorking garden, enclosed by a simple paling fence, its boxedged garden path, and its wealth of luxuriant shrubs and flowers and creeping plants. The old lattice windows remain, and happily have not been supplanted by modern sash or square panes of glass, which are not nearly so picturesque. You will notice also the tiles used for the covering of the porch and their fish-scale shape.

The gardens in the Isle of Wight are especially rich in luxuriant growth and the wealth of sweet flowers. Part of the garden of the Post Office at Shalfleet has already been described. The whole village is most picturesque, lying in a hollow in the western part of the island. The merciless hand of the "restorer" has as yet spared its beauties. We give a view of the pretty garden path with its trees and flowers, an ideal border. Adjoining this picturesque post office is another cottage equally beautiful, with its mantle of ivy and Virginia creeper, its dormer windows and tiled roof whereon the lichen clings and produces a rich coloring.

Our villagers are very expert gardeners. They know not the Latin names of plants; they have their own names for shrubs and flowers, which you will not find in the botanical books, but are formed on some whimsical idea, some errant fancy born of rustic imagination or quaint conceit, and are often very appropriate and true. Lecturers sometimes come to teach us how to dig our gardens, what potatoes to plant, what fertilizers to use, the kind and nature of the soil which it is our privilege to cultivate. But our rustics like not lecturers. We think we know from experience quite as much as the lecturer can tell us; so we refuse to "sit under" his eloquent discourses, and prefer to pursue our own ignorant and perhaps mistaken ways. Here is a description of a Berkshire village garden told by one who knows her county well and the quaint ways of her rural neighbors. She tells of the glories of "the Red House which gained its title in its youth. A century of wear and weather has toned the bricks until they look almost colorless by contrast with the rich, crimson flowers of the Pyrus Japonica that is trained beneath the lower windows. The upper portion of the walls is covered by a



A FRONT GARDEN NEAR DORKING



AN OLD COTTAGE AT SHALFLEET

vine, among the yellowing leaves of which hang, during autumn, tight bunches of small purple grapes that supply the wherewithal for grape wine. At one side of the narrow railed-in space separating the front door from the street, stands an old pear tree, loaded every season with fruit which, owing to its 'iron' quality, escapes the hands of boy-marauders. The little spot reflects all the tints of the rainbow, save in the depth of winter. The first buds to pierce the brown earth and brighten its dull surface, are such tender blossoms as the snowdrop, hepatica and winter aconite. To them succeed crocuses, hyacinths, tulips, the scale of color mounting ever higher as the season advances, until it culminates in a blaze of scarlet, blue, and vellow, that to be fully appreciated should flame against gray, venerable walls or light up the dark sweep of some cedar-studded lawn. The square garden behind the house slopes to the brook near the bridge, and is shut in on two sides by high mud walls half hidden beneath manes of ivy. Along the stream—bordered just there by willows-is a broad band of turf flanked by nut bushes that shelter each a rustic seat, and sparkling in spring with clumps of daffodils tossing their heads in sprightly dance. When the sun is shining through their golden petals and burnishing the surface of the water, when it is brightening the pink willow-buds and revealing unsuspected tints in the mossy trunks of the apple-trees beyond the brook, that little strip of grass is a joy, the remembrance of which abides throughout the year, until the changing months make it once again something more than a memory."

Not only for ornament are some plants and herbs cultivated. Our villagers are learned in the lore of the herbalist. An old pensioner in my parish who was wounded in the Indian Mutiny and bore bravely the effects of the wounds until his dying day, used to collect sundry herbs and simples and wondrously relieve the pain. It was in winter that he suffered most, when the herbs refused to grow. "Floures of Lavender do cure the beating of the harte," an old receipt book tells us. "They are very pleasing and delightful to the brain, which is much refreshed by their sweetness. Good housewives always have lavender not only for

¹ This garden is in the village of West Hendred, Berks, and is described by Miss Hayden in her book "Travels through our Village."

nosegays and posies, but for linen and ap-

which the herb-garden supplies, relics of

gypsy lore, and not without their efficacy if

received and served with faith.

Many are the quaint remedies



Old Cottage at Bledlow, Bucks

A TALK ON PEWTER

With illustrations from Mr. Walter Churcher's Collection

By ERNEST RADFORD

THERE is probably in America at least as much of the ware which our English ancestors used as can be found to-

day in the old country; and the revival of interest in it should be as lasting here as there. The use of pewter in England from almost the earliest days of that country's history until its partial supersession by earthenware, china, silver and silver-plate was so general that nothing but the neglect which is the usual fate of things discarded by fashion can account for its having become at all rare. If the change when it came was welcomed, it was chiefly because pewter, unless it is properly cared for, is undoubtedly quite the shabbiest stuff that has ever been largely used. Its habit of communicating so much of the blackness

of its own nature to other things does not recommend it to us, and though vessels of china and earthenware are by comparison frail, there is not that to be said against them. Fragility, moreover, since it involves replenishing, is accounted a virtue by the

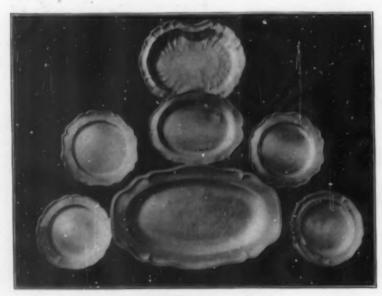


SCOTCH CHURCH FLAGONS AND ALMS DISH

vendor, and the durability of pewter would be its weakness from his point of view. In competition with metal-ware, although

cheaper than silver, or plate of respectable quality, it has faults of its own which they lack. It has a way of blackening things, as I have said, and is more easily knocked out of shape than harder ware.

So obtain we a picture of table services blackened and battered, which if not chucked by the kitchen maids into the moat (that much overpraised receptacle of the filth of our "stately homes"), would pass for a few pence of that date into the hands of the traveling tinker. The fact that pewter itself makes good solder accounts for whole sets of it having passed out of sight for that purpose. It would be



SWISS DISHES OF PEWTER



MR. WALTER CHURCHER'S COLLECTION OF PEWTER

as well at this point to say something more definite about the composition of pewter, which, with tin as the base of it, is a compound of two or more metals. Thus lead makes for softness, giving us solder when the proportions of tin and lead are equal, whereas ten per cent. of it in pewter was usual, while in pewter of finer quality, omitting the lead altogether, there would be a little brass, copper, bismuth or antimony. There is no fixed rule about this. The modern makers are after what would be

sold as "art pewter," a substance retaining the workable qualities of the genuine article without the unamiable characteristics of which I have spoken.

Since pewter is soft, the vessels made of it are heavy in all their parts, and unable to bear very much pressure or forcing. So tea-pots were commonly made without hinges, or feet, and the knifemarks we see on old plates show clearly what the substance is.

That the nature of the material concerns the decorative artist no less than the pewterer proper must be sufficiently obvious. The best, which was the hardest, could be engraved with the burin, or chased, or stamped, or etched-not always quite properly, though, for when art-workers follow the fashion rather than their own inclination there is often much to regret in the evidence they leave of their mastery, and excessive elaboration is the chief fault of the most presumptuous pieces. With that excess the names of the past-masters Briot and Enderlein are usually associated, and to point the moral of a written discourse upon pewter enough of their work has been saved.

There is opportunity here of drawing a distinction between two classes of decorators who, though they go by one name, are seldom in touch with each other. The feeling for art which goes in to the metal would be

rightly described as the craftsman's art, while the other is anyone's art; but happily the distinction of English pewter has been its



SNUFF BOXES OF PEWTER

Early XIX Century Work

comparative freedom from the decoration which is external only, and when the attention of the worker is confined to the object itself, the whole of his feeling for art is expressed in the thing he makes, and the gain to that thing is immense.

"Over things either great or small the sense which an architect has should prevail." So Pugin said to himself while preparing the working drawings for the architect of the House of Lords, and at the same time designing its inkstands.

This is neither a collector's, nor a very serious talk about pewter. The recent revival has brought with it a call for as much as can be written about, and enough has been put into other papers of what may seem to be missing here. At present the craze for any old pewter is being assiduously nursed by the trade, and with the recognition of nonsense in it, comes the disinclination to treat it all seriously.

There was much sound workmanship, and as much mere common sense in the utensils formerly used, but of art there was none as a rule, and the value, if any there be, in the hundreds of pots and pans which have been resurrected lately, is for the collector, not the true lover of art. So much for the foolishness of it. On the other side it remains true, that for a very long while, and when the guilds were our foster mothers, nearly everything that

would be called plate nowadays, and a thousand utensils besides, were fashioned of pewter entirely. An idea of its genuine worth

as a material, failing a better, will be obtained by the reader of Mr. Starkie Gardiner's paper in the "Journal of the Society of Arts," and another by Mr. Lazenby Liberty, to whose interest in it the quality as well as the quantity of much modern pewter is owing.

In England there is The Pewterers' Company, whose records have lately been pub-

lished, and a glance at Mr. Masse's volume entitled "Pewter Plate" will show how exhaustively it can be treated.

Now to speak of the illustrations. Of the decoration which is external, and could suitably be applied to such trifles as snuffboxes, there are

several examples here. The character of the design would be affected of course by what the

modeler knew of the metal. When pewter approaches silver in the matter of hardness, the original model may suit one metal almost as well as the other, and the probability is that these designs have done double duty.



BARREL-SHAPED BEER JUGS

sphere, and handled with the understanding of the material which those who see art in it

PLATES FROM STAPLE INN

lack of mere beauty, and they display what



SALT AND PEPPER CASTERS, MUSTARD POTS, ETC.

The illustration, which shows nearly the whole of Mr. Churcher's collection at once, will give a general idea of the uses to which pewter was put before it was deserted by fashion. The change on the whole is for the better, no doubt, but in a more limited

who see art in it must be supposed to have, it has already been reintroduced, and seems likely to keep its place.

Excepting the snuff-boxes, the illustrations are mostly of unornamented pieces, which would be classed with common utilities; but some have his-

the collector values. Amongst the plates that are shown there are some of a set from Staple Inn, London, with the mark of the Woolstaplers on them, and pieces of a similar set, which we know from the arms upon them to have

belonged to the city of Yarmouth, are to be "picked up" as we say. Similarly the pewter of the nobility usually bore the arms of the family on it. There were degrees of nobility in it depending on the purposes it was intended to serve, and the social rank of its owners. Where money had not to

be stinted, we find the most richly ornamented pieces, of course, in presentation plate, loving cups and the like, in the property of churches, corporations and companies; while for the commonalty of old England the pewterers anticipated nearly every need of the present day.

THE New York Subway is no sooner opened to the public than its beautiful walls are threatened with advertisements. Certain clauses in the agreement between the city and the operating company are adduced to show that this should not be. But thus far the objections have been in vain. Indeed their argument hangs upon a thread. The demands of modern advertising were not foreseen by at least one party when that agreement was made; nor do they appear to have been taken into account when the stations were designed and thousands of dollars spent upon the wall decorations. If public opinion shall have power to remove the signs, well and good. If it has not, then there should be some control exercised over the advertisements themselves. If these be artistic in design, limited in size, and confined to certain definite spaces or panels apart from the names of the stations, no one can deny that sensitive eyes will be satisfied and waiting at the stations made entertaining. But this control should not rest in the judgment of an advertising agency or the operating company. Why should it not be exercised by a body similar to or a part of the Art Commission? The time has come when all sign advertising in public places should be held in check, and arrangements should be made to do this before the next subway is built and before the new East River bridges are hung with innumerable transparencies.

"English and Scottish Wrought Ironwork" is the title of a large folio volume devoted to the illustration of smithwork existing, for the most part, upon the old estates or in the churches of Great Britain. The examples chosen are chiefly gateways produced during the period between the years 1700 and 1740; but, curiously, a few much earlier subjects have been taken in; as, for example, the screen at Winchester, a specimen isolated from its fellows by virtue of its Gothic design and early date (1093). Inn-signs, lamp brackets, tomb and hat rails and other minor objects also appear, and serve to give a rather fragmentary character to the contents of the volume. Nearly all the work shows the influence of the Renaissance in a certain disdain of structural principles and the creation in iron of such forms, entirely unsuited to it, as mouldings, mortises and tenons, and cornices with attached leaves. But the designers of the time did not hesitate at these points when grace and richness of effect were to be gained by ignoring them; and if a question arises as to theory of design the exquisite ironwork which the author presents from Belton House, Oxford and Cambridge is likely to settle it. Of each specimen emphasis is properly laid upon the architectural environment; and not only are photographs reproduced to fully show the ironwork in question but measured drawings which include the surrounding stone or wood work, exhibit the means of connection between these materials and the iron. These drawings possess the advantage of having been reproduced at a uniform scale, enabling one to compare each subject with another and to realize the value of every detail. Thus taken as a whole the book contains an excellent series of grilled entrances which cannot fail to be of practical use to any architect.

^{1 &}quot;English and Scottish Wrought Ironwork," by Bailey S. Murphy. 68 plates of drawings and 72 collotype reproductions of photographs, together with descriptive text, in folio. Imported by Charles Scribner's Sons, 1904. Price, \$25 net.

Announcement to Our Readers and Subscribers

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Y this transfer HOUSE AND GARDEN comes under a management which is both conservative and progressive. The new publishers intend to maintain the high standard of present and past numbers, and to add many improvements to the contents and appearance of the publication. This policy will be greatly aided by the admirable facilities of The John C. Winston Company, whose new eight story Winston Building is equipped with one of the largest and most modern

printing and binding plants in the country. Here the magazine will be cared for in the highest style of the printer's art.

HOUSE AND GARDEN, under the former management, has attained a distinctive place and success of its own. It is felt, however, that a broader scope and more definite editorial policy is desirable.

In 1905 HOUSE AND GARDEN will interest by practical suggestions, not only practicing architects but the owners of country estates; it will be useful alike to the garden designer and to the lover of gardens, to the man of the city and to him of the large or small suburban house. Municipal improvement, landscape gardening and artistic decoration of the home, are among the subjects which will continue to find expression in HOUSE AND GARDEN.

Timely articles will be published at appropriate seasons of the year. The February, March, April and May issues will be largely given over to the garden, and will contain valuable practical information on the designing, planting and care of that important part of an estate. Recent architectural work and suggestive views of dwelling houses will be given enlarged space in the June, July and August numbers, fully illustrated and explained by handsome half-tone and colored plates. During the winter months attention will be turned towards the interior of the home, and these numbers will contain helpful ideas for interior decoration and furnishing.

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House and Garden in 1905

As an earnest of our promise we have secured a new and attractive cover for the January issue, designed by N. C. Calder, and have increased the reading matter in each number by eight pages. After the first of the new volume, each number will be mailed promptly on the twentieth of the month preceding that for which it is issued.

These efforts to make HOUSE AND GARDEN of greater value and interest to its readers, should command the hearty support of past subscribers and the co-operation of future friends. You, in fact, can help us more than any of our own efforts will accomplish. Send us a renewal of your subscription for the coming year, and write on the attached blank the names and addresses of a dozen or more persons to whom HOUSE AND GARDEN would be interesting. Immediately on receipt of your renewal and this list, we will mail you postpaid a handsome copy of "Bab Ballads" by W. S. Gilbert, illustrated by the author and beautifully bound in cloth, which retails at \$1.00. This is the classic nonsense book of the English language, and will be a perennial source of entertainment. Your name will not appear at all in our correspondence with the persons whom you suggest below.

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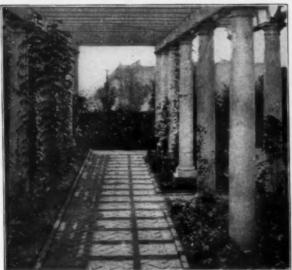
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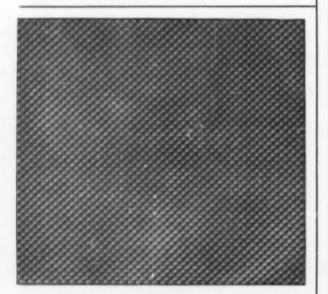


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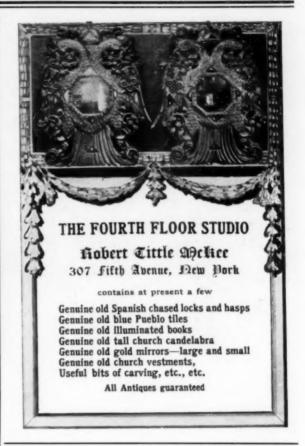
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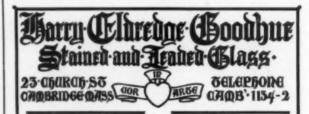
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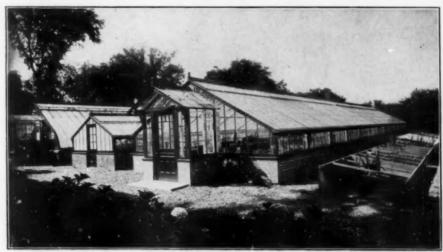
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No. 6

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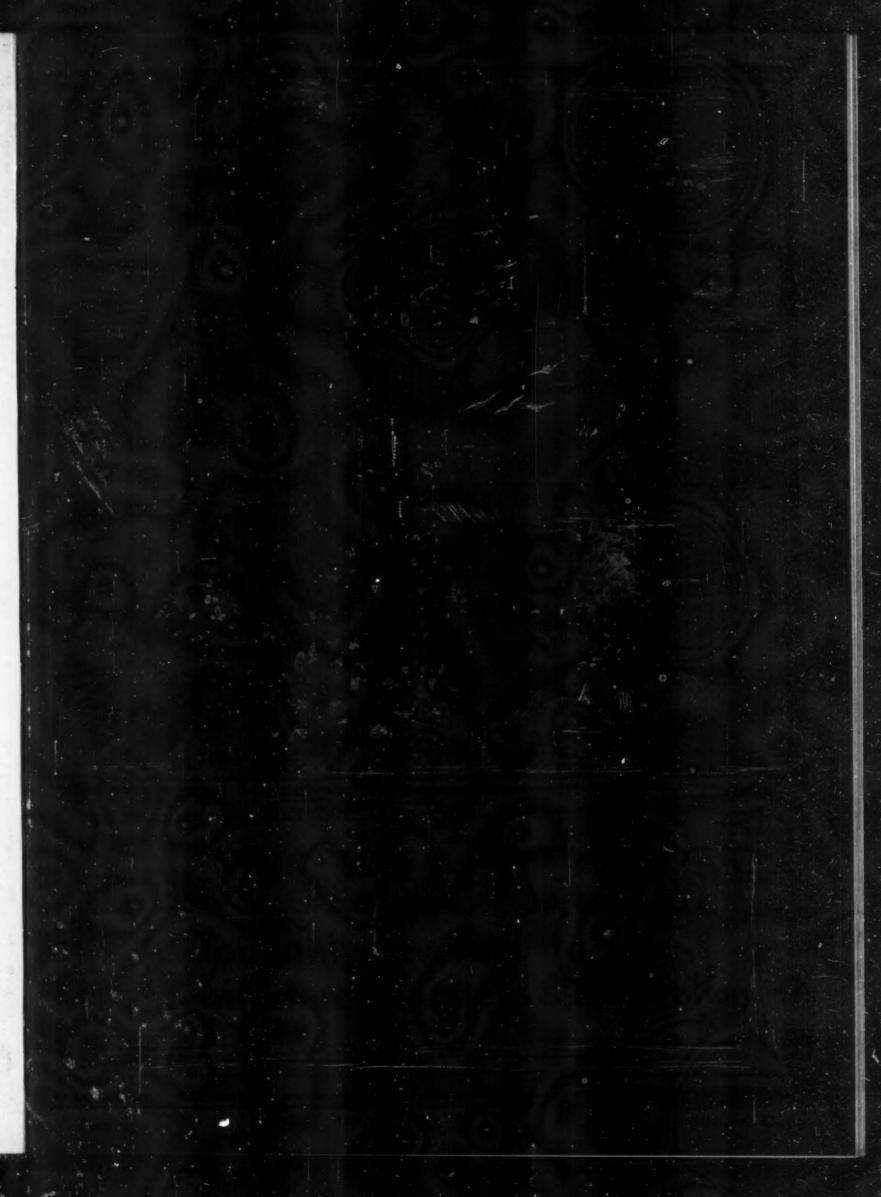
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