"Fairacres," a Residence at Jenkintown, Pa. Broughton Castle

Garden Work in November

German Model Houses for Workmen

A Residence of Joseph Bonaparte's

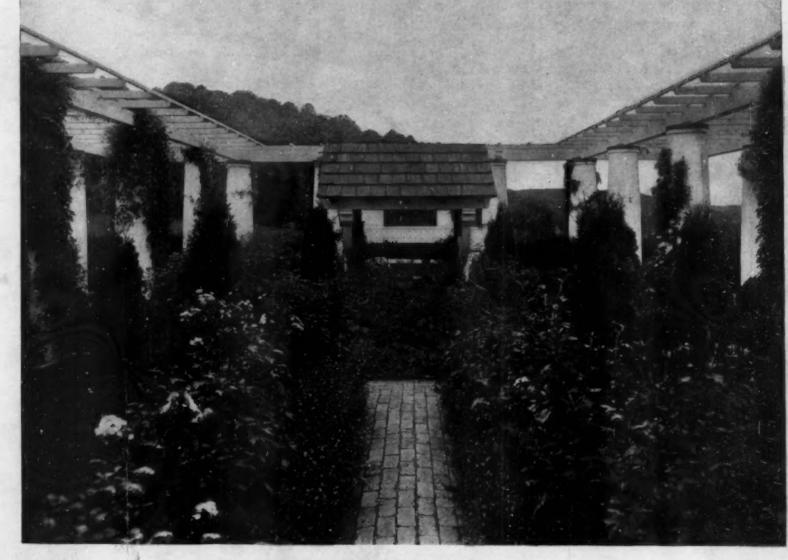
Vol. X

NOVEMBER, 1906



No. 5

House & Garden



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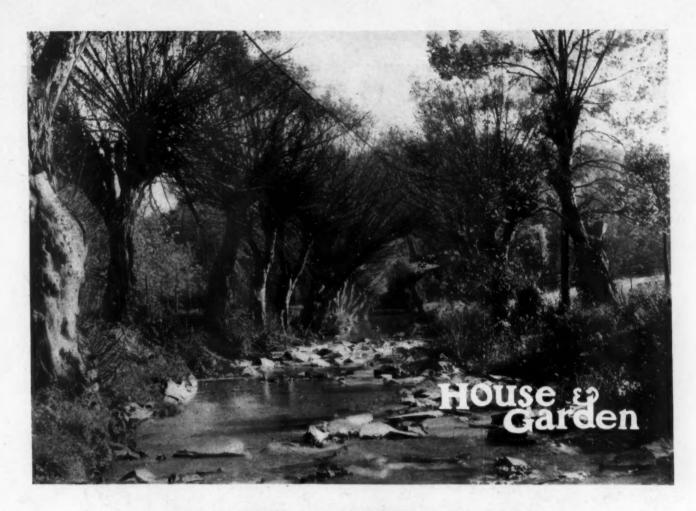
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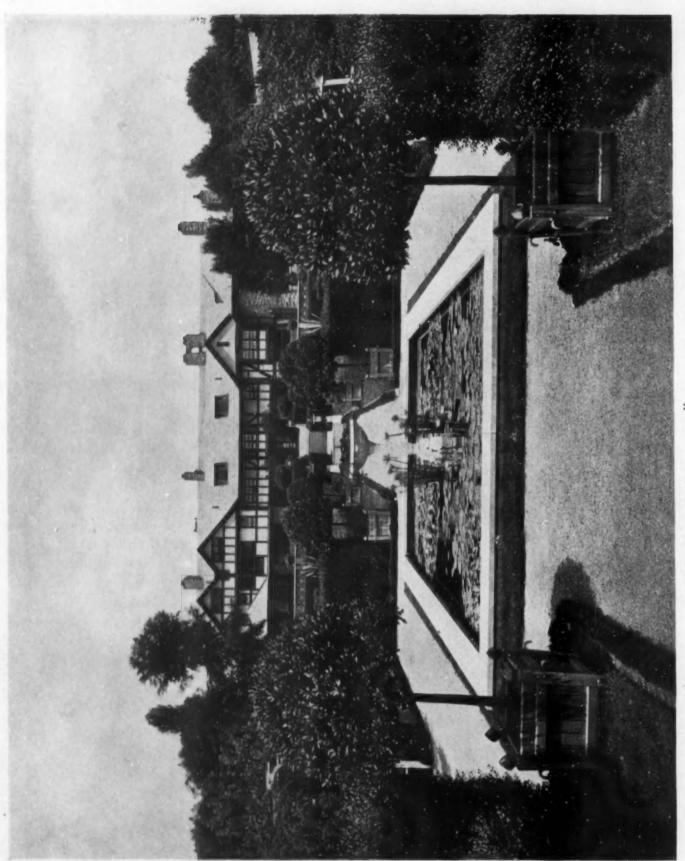
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THE HOUSE AT "FAIRACRES" FROM THE GARDEN

House and Garden

Vol. X

November, 1906

No. 5

"FAIRACRES"

THE RESIDENCE OF J. W. PEPPER, ESQ., JENKINTOWN, PA.

WILSON EYRE, ARCHITECT

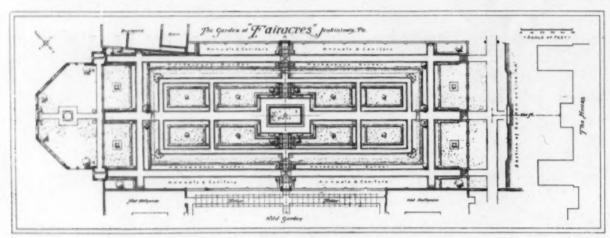
LIKE all of Mr. Wilson Eyre's designs, the house at "Fairacres" owes its peculiar charm to the fact that it embodies the solution of a very definite problem. In this case, the conditions of the problem which arise out of the peculiar circumstances of the time and place, are somewhat unusual.

The original house at "Fairacres" was built

about twenty-two years ago, and some eight years later Mr. Eyre was called upon to design the sunken garden. In 1904, following the continued development of the place, the old house was torn down and the new one begun. The existing garden fixed very definitely certain lines or axes to which it was necessary that the design of the new house



THE ENTRANCE FRONT



PLAN OF THE GARDEN

should conform, and the guiding motive in the arrangement of the plan was this recognition of the three axes formed by the central path and the two side paths of the garden, as at the further end of the latter the two principal garden houses or shelters were centred.

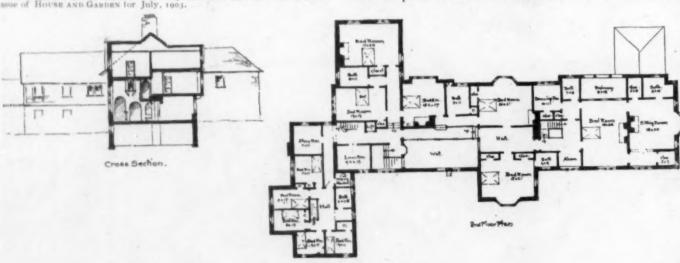
The garden itself, upon the narrower end of which the southeasterly side of the house faces, is about one hundred and fifty feet wide by about five hundred feet in depth. The central path of the garden is approached from the house terrace by a broad flight of steps, and is interrupted midway by a pool, shown in the view on page 208, while its most distant end is terminated by a semi-octagonal screen of lattice and vine, well in advance of which is the sun-dial, the whole forming a satisfactory and carefully studied termination of the principal view. The paths are bordered with low box and back of this are privet hedges, leaving a wide space filled with a profusion of blooming perennials and annuals.

But it is of the house that we are called upon more particularly to speak.*

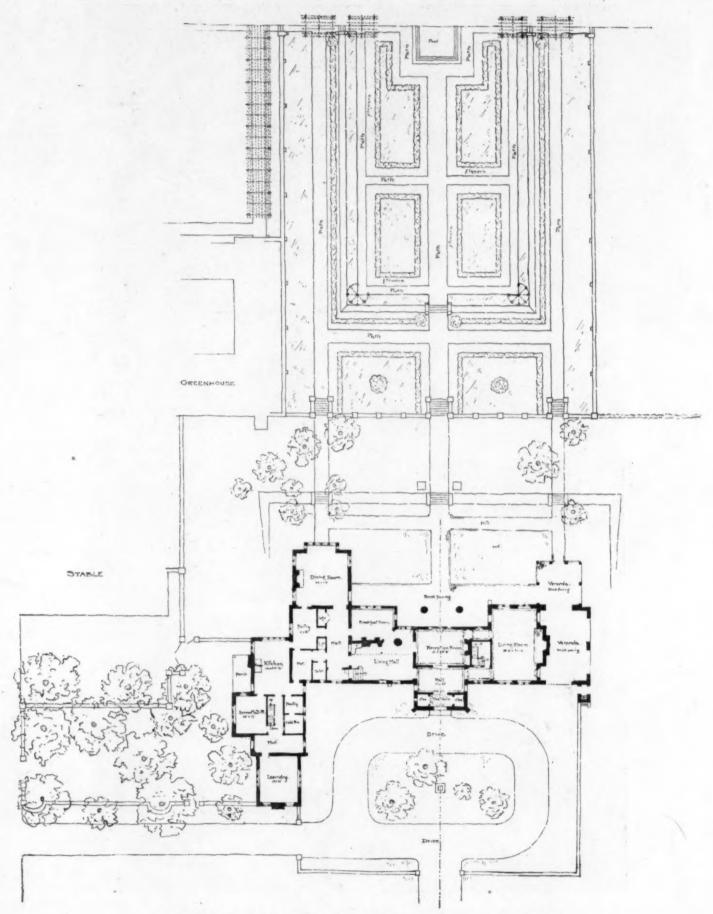
"Fairacres" is the country seat of Mr. J. W. Pepper, and lies at the entrance to the beautiful Huntingdon Valley, on the outskirts of Jenkintown, a suburb of Philadelphia, on the Reading Railway. The house stands on a hillside, and commands from its northwesterly side a comely view of the valley, with its swelling hills and dales, with the opposite side of the house overlooking the garden, as already noted. Designed in Mr. Eyre's best and most sympathetic manner, the house presents two somewhat dissimilar aspects, as it is seen from the approach, or from the garden. The valley side is faced with grey Chestnut Hill stone (local limestone of very beautiful texture and color), while the garden front is dominated by the half-timbered second story walls and gables. The roofs throughout are of grey shingle.

The plan of the house is very individual and effective showing quite as well as the exterior the high degree of professional skill which Mr. Eyre places at his clients' disposal, and deserves careful attention. It should be noticed first how the three axes of the garden fix the axes of interest in the plan itself, and how the service rooms, and

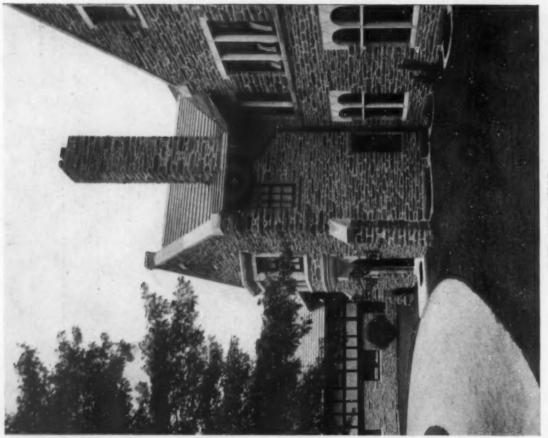
^{*} The garden at "Fairacres" was fully described and illustrated in the saue of House and Garden for July, 1903.



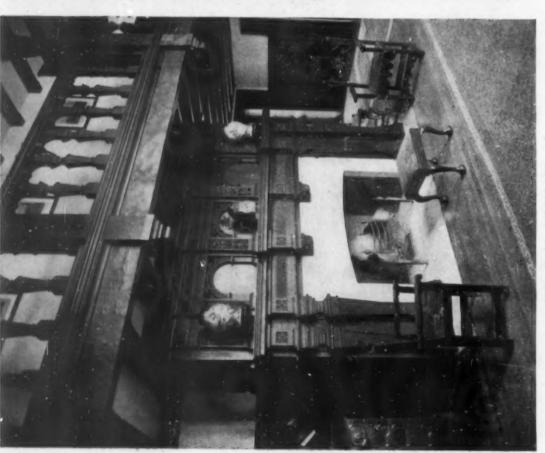
SECOND FLOOR PLAN



FIRST FLOOR PLAN OF THE HOUSE AND HALF OF THE GARDEN



THE ENTRANCE



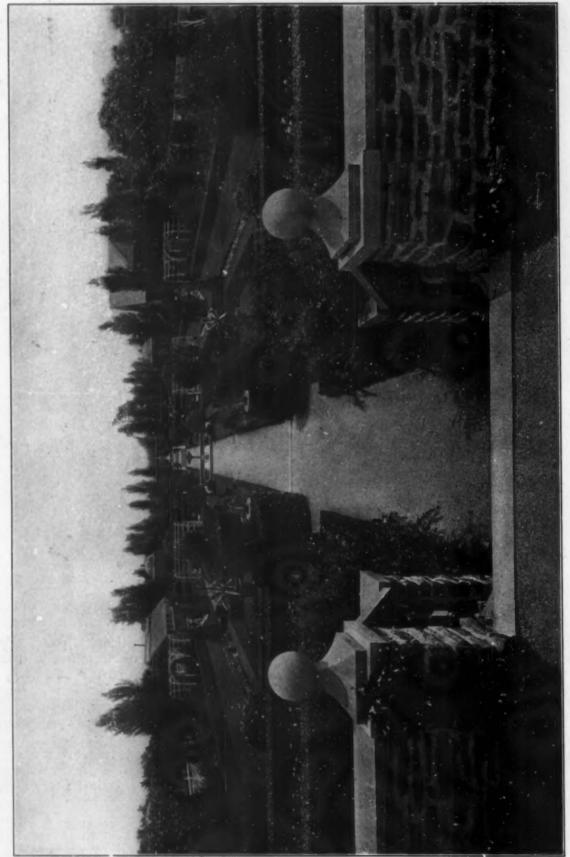
THE HALL FIREPLACE



THE DINING-ROOM

servants' quarters, isolated in a boldly projecting wing, shelter the principal entrance from the northerly winds and form an effective forecourt to the design. As one enters the front door into a large and heavily panelled vestibule, a surprisingly complete view is had of the whole length of the garden. Some idea may be gained of this effect from the illustration of the reception-room shown on page 219. At the same time that the glories of the garden in full bloom are shown to the casual visitor, it should not be unnoticed how carefully the more intimate parts of the house are screened from accidental intrusion. The library, with its veranda, whose lines centre with the right hand path of the garden; is completely isolated, having its private staircase from the owner's apartments overhead; and this staircase also affords access, if desired, to the other suites of the second floor, by way of the gallery, which is shown in the view of the Hall on page 216. From this main hall ascends the principal staircase, whose beautiful detail is shown in the view just referred to. The breakfast-room and dining-room are grouped about this hall, with its extension under the main staircase, and a view of the dining-room is shown on this page. The second floor plan is as carefully studied and completely worked out, as is the plan of the first story. The owner's suite entirely occupies the southeasterly end of the plan, and consists of a large bedroom, two bath-rooms, a dressing-room, abundant closet accommodation, and a large private balcony completely commanding the garden, but at the same time carefully screened from oversight from the other parts of the house.

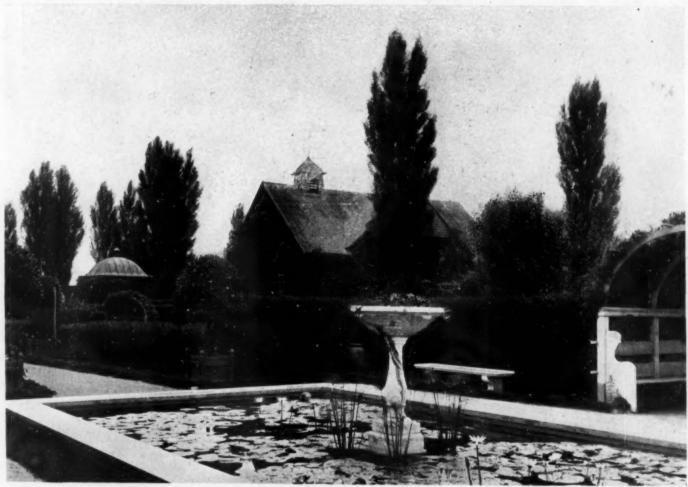
In addition to this principal suite, there are an isolated bedroom and bath-room over the entrance vestibule and hall, and four other family bedrooms arranged in pairs, each suite with its bathroom adjoining, and all overlooking the garden. The servants' bedrooms occupy on this floor the second story of the projecting wing already mentioned. Between the house and the garden, there is the wide terrace referred to, which is paved



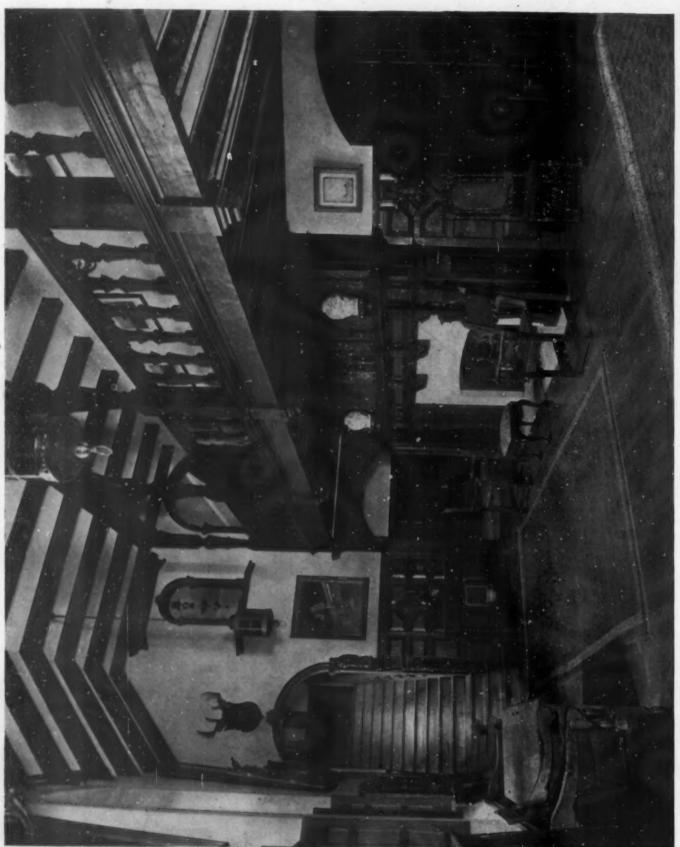
THE GARDEN FROM THE TERRACE BEFORE THE HOUSE



THE GARDEN TERRACE



THE POOL AND THE STABLE



THE LIVING-HALL

with brick, and from which the entire garden can be viewed. The interior finish of the house is of as interesting and varied interest as is the exterior.

Passing from the panelled vestibule, one enters the entrance hall, which is paved with Mercer tile laid in mosaic form, and panelled with a heavily molded dark oak wainscot, six feet high, with heavy dark oak overhead ceiling beams. Directly in front is the reception-room, seen through double doors glazed down to the flocr. This room is in the "Adams" style, with walls panelled to the ceiling, and painted throughout with a creamy tint, with Wedgwood jasper plaques inserted in the panels of the walls and ceiling. The latter is framed into a series of hexagonal and diamond-

shaped plaster panels, heavily molded, each panel being enriched with a Wedgwood plaque, having a sage green background. The whole room has a very distinctive note, and is true to style, with antique furniture in keeping with its setting.

The library is panelled to within three feet of the ceiling, and is filled with bookshelves. At the middle of the longer side is a deep ingle-nook with seats on either side of the fireplace—an ideal place for a long winter's evening, with a favorite book before the fire. The ceiling of this room is of double thickness, of solid oak beams chamfered, with heavy carved corbels projecting from the walls to support the beams at each end.

To the left of the entrance, is the Hall, with its large Jacobean fireplace—Jacobean being the style of all of the interior of the house except the reception-room. This hall has a clerestory, with

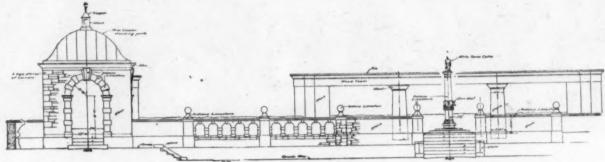


THE KITCHEN ENTRANCE

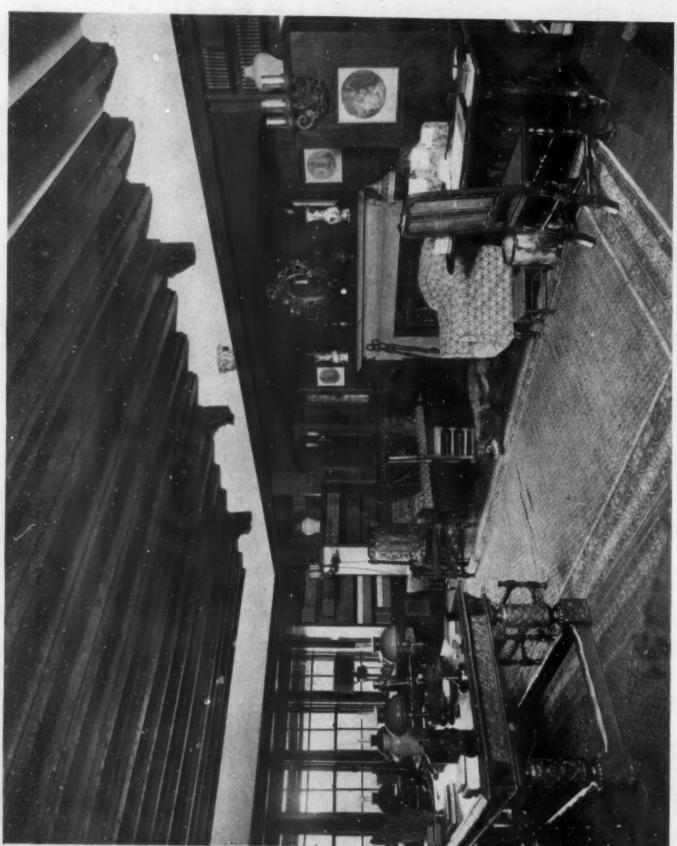
high Indiana limestone mullioned windows, with leaded glass enriched by medallions of painted glass, containing Swiss copies of antique subjects. A gallery, with oak posts and rails, runs across the clerestory at the second floor level.

Under the gallery is the entrance to the breakfastroom, with its mahogany wainscoting, mantel, and domed and ribbed ceiling. From this breakfast-room hall there is also access through double sliding doors into the reception-room.

At the opposite end of the hall an archway enters the stair hall, from which opens the dining-room, twenty-four feet square, with oak wainscoting to the ceiling, having antique paintings, representing the four seasons let into the walls. The ceiling itself is of plaster, heavily coffered, with a central wrought iron light fixture decorated with wrought iron leafage.



An Elevation of the Southeast End of the Garden. The Roman fountain having been substituted for the axial feature at the right



THE LIBRARY



THE "ADAMS" RECEPTION-ROOM

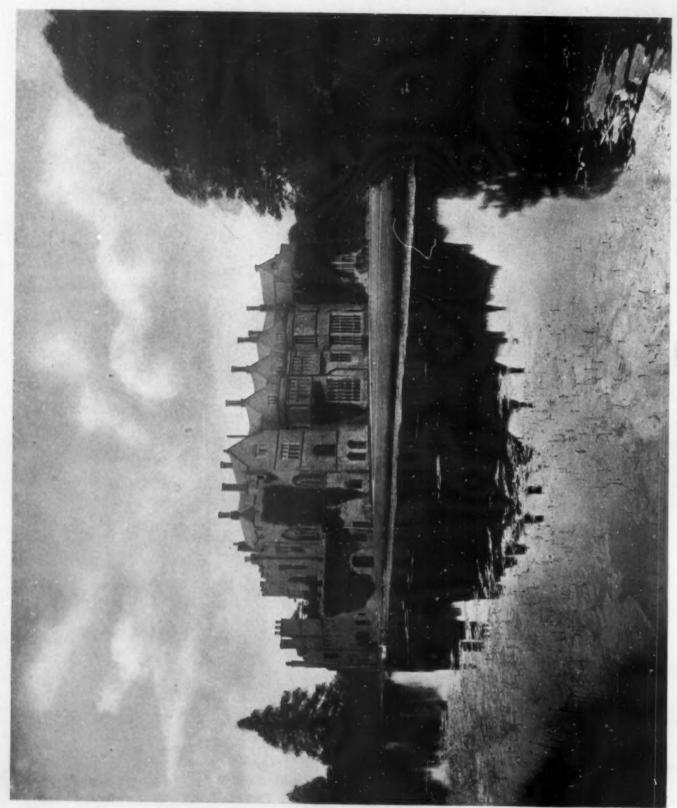
On the second floor, each bedroom is finished in white pine, painted a cream white, and each bedroom has an open fireplace.

This beautiful house illustrates as well as any other that could be selected, the charming effects produced by Mr. Eyre, when working with a sympathetic owner. House and garden are in absolute harmony, and both are impermeated with that captivating air of domesticity which this artist has the peculiar faculty of imparting to all of his designs, whether large or small. Mr. Eyre seems so well to succeed in placing the house in exactly the right position upon its site, and in creating a home amid beautiful surroundings.

As the issue of House and Garden, which contains the description of the garden at "Fairacres" is entirely out of print—having been destroyed in the fire which burnt down the establishment of the former publishers of this magazine in 1904—

the following from that description is reprinted for the benefit of our later subscribers.

The garden is the crowning ornament to the place and serves also to tie together into one group such minor buildings as the barn and greenhouses. Enclosed only by low stone walls, its splendor is that of an open plateau without an interruption to its unity or any barrier to a view which may comprehend all at a glance. In this expansiveness lies the appropriateness of the name of "Fairacres." It is the most formal garden in the vicinity of Philadelphia; and though less monumental, perhaps, than others in that region and elsewhere, it is equal to any in the richness of its design and the effectiveness of its ornamentation and planting. Indeed, this garden might easily rival some of the Old-World work in years to come, when age shall have given "Fairacres" less of a handicap in such a comparison.



BROUGHTON CASTLE FROM THE MOAT



Broughton Castle from the Southwest showing Gardens and Sun-dial

HOUSES WITH A HISTORY

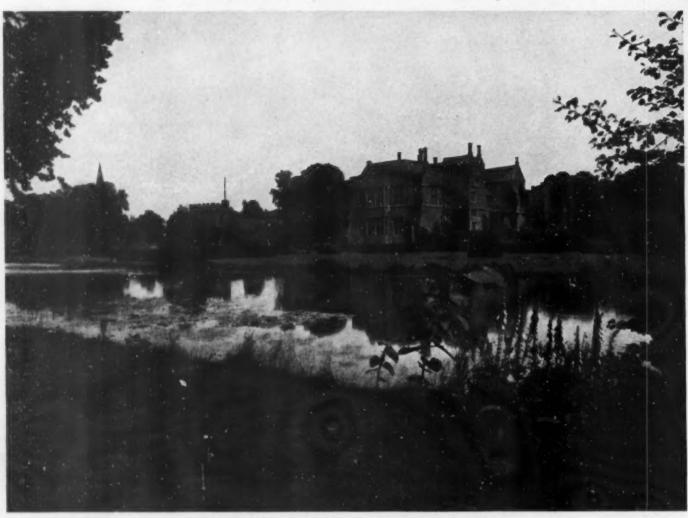
BROUGHTON CASTLE

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

A BOUT two miles distant from the old town of Banbury, famous for its cakes, for the mythical fine lady who "rode a white horse" accompanied with the tinkling of many bells, and for much else that need not now be chronicled, stands the noble Broughton Castle. It has passed through many a scene of storm and stress during its life of six centuries; but Time has dealt gently with its strong walls or been defied by them; and guarded by its faithful moat, it still keeps watch over the lands of its lord, and has many memories to recall of the exciting scenes which it has witnessed. Indeed, Broughton Castle has adapted itself to the needs of modern luxury and comfort, and though its walls and guarded gate seem to frown darkly on an intruder, within it is the perfection of a twentieth century nobleman's residence. Its fortunes are bound up with those of its noble owners, the Lords Saye and Sele, whose family name is Fiennes. They have owned the castle since the middle of the fifteenth century. The history of Saye and Sele is the history of England. Hardly a great event happens, but they have a hand in it. We meet them at every turn, and return to them at every crisis. They are descended from the union of two great houses, the de Sayes and the de Fiennes, representatives of whom came over with the Conqueror and fought in the battle of Hastings. The Fiennes came from a French village

of that name near Calais, and ancient records tell of the marriage in 1020 of Eustace, Baron of Fiennes, with Adila, lady of Ardres, daughter of Everard de Furnés, whose son founded Beaulieu Abbey. One of the most famous scions of the family was Ingelram de Fiennes who married Sybil de Tyngrie, a daughter of the illustrious house of the Counts of Boulogne, whose descent is traceable through the Dukes of Ponthieu to Bertha, the daughter of Charlemagne. Count Eustace's hand struck down the ill-fated Harold at the battle of Senlac. You may see his portrait in the Bayeux tapestry, taken in the act of slaying the English king. High honors were bestowed upon him by the Conqueror, besides some rich manors.

We cannot now follow the fortunes of this noble family, which produced many warrior-knights, who wrought many a deed of high emprise and fame on the battlefields of England and in the wars of the Crusades. Moreover they increased the family estates by marrying heiresses; one John de Fiennes wedded Maud, the daughter of Sir John de Monceaux, of Hurstmonceaux, where the ruins of a mighty castle testify to its ancient greatness and magnificence. Another, William, married Joane, the sister of William de Saye, whose son James served bravely uuder Henry V. in the French wars, and fought at Agincourt. He it was who



BROUGHTON CASTLE FROM THE SOUTHWEST

The Council Chamber where the Civil War was Planned is at the top of the Tower beneath the Double Gable

came to such a cruel death at the hands of Jack Cade's rebels in 1450. A picture at the castle tells the sad story of his savage murder, a story which Shakespeare has told before in his drama of Henry VI., Act IV, Scene 7.

But Broughton Castle in its early days knew other owners. Parts of the present building were erected by the Broughton family, which derived its name from this place. They occupied a position of rank and consequence, and divers members of the family were engaged in the king's service in the thirteenth century. Early in the fourteenth century they began to build their castle, and near it, some fifty yards away from the lily-bespread moat, they reared the beautiful church. A fine canopied tomb and monument of the time of Edward II., a rich and beautiful specimen of Decorated work, is traditionally said to represent the De Broughton who founded the church and castle. Then the castle and lands passed into the hands of the Wykeham family, of which the famous architect-bishop, William of Wykeham, was the most celebrated. He purchased the castle and estates from Sir Thomas de Broughton in 1377, and then settled the property on Sir Thomas Perrot, who assumed the name of Wykeham, and Margaret his wife, daughter of Agnes, the Bishop's sister. In 1450 Margaret, the heiress of the Wykeham family, was married to William, Lord Saye and Sele, the son of the victim of Jack Cade's rebellion, and thus this famous house passed into the possession of the distinguished family who have held it so long.

The Lords of Saye and Sele have had varied fortunes. This William who acquired Broughton by marriage did not long enjoy its possession. He was an ardent supporter of Edward IV., had twice been captured by the Lancastrians, and had to sacrifice his estate of Knowle in order to obtain a ransom. He had fled with Edward to Flanders and sold thirty manors in order to raise troops for his sovereign, and then—irony of fate—fell in the hour of victory at Barnet when the cause was won on which he had staked his all. He has a fine tomb in the church at Broughton; his helmet and gauntlets hang there and still tell of the fame of the fallen warrior.

Royal gratitude did little to restore the fortunes of the family. Two peers in succession refused to take up the title from want of sufficient means. But with the advent of the Stuarts their position improved. James I. paid them a visit at Broughton, and liked his reception so well that in 1618 he brought his queen with him. In 1624 William Fiennes, eighth Baron, was created Lord Viscount Save and Sele.

Then came the troublous period of the Civil War, in which Broughton and its owners played a conspicuous part. The castle was the cradle of the conspiracy, and William, first Viscount, one of the chief actors in that fatal drama. "Old Subtlety" he was styled by his opponents. He was one of the first to oppose the arbitrary acts of Charles I., and was the friend and ally of John Hampden. Retired country houses of the English malcontents were considered to be the safest places for the grave and dangerous consultations which were carried on at that time; and two places were selected as meeting places of the leaders. These were Fawsley in Northamptonshire, and Broughton Castle. In these secluded houses did Hampden,

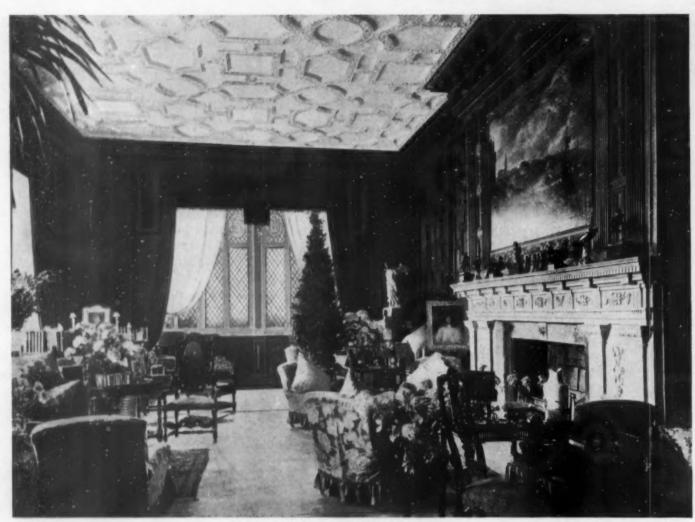
Pym, St. John, Lord Saye and Sele and Lord Brooke, and later on the Earls of Bedford, Warwick and Essex, Lord Holland and Nathaniel Fiennes, hold their sittings, which were sometimes attended by other persons of rank and property, who were as deeply involved in the general plan of resistance. Anthony à Wood thus describes the secret meetings at Broughton: "For so it was that several years before the Civil War began, he (Lord Saye and Sele) being looked upon as the godfather of the party, had meetings of them in his house at Broughton, where was a room, and passage thereunto, which his servants were prohibited to come near; and when they were of a compleant number, there would be great noises and talkings heard among them, to the admiration of those that lived in the house, yet could they never discern their lord's companions.'

We may presently visit the little consultation chamber, redolent of the memories of these conferences, a small isolated room, with three outer walls and a tower staircase leading up to it.

Soon the royal standard was unfurled. After Edgehill, the king marches on Banbury, where



BROUGHTON CASTLE FROM THE NORTHEAST



DRAWING-ROOM-BROUGHTON CASTLE

was a castle also held by the Lord of Broughton. The garrison was disaffected and the fortress surrendered. Then the royal troops march on Broughton, and lay siege to it. You can still see in the park the remains of the earthworks thrown up by the Royal forces, and where the defenders hung bales of wool over the walls to deaden the impact of the cannon-balls. But all is of no avail. The place is too completely surrounded by hills. It surrenders, and is ruthlessly pillaged. The inhabitants of Banbury learn the stern lessons of war and suffer at the hands of Prince Rupert's troopers.

They complain bitterly, and conclude "But that which touched us most is a warrant, under His Majesty's hand, for the plundering of Lord Saye and Sele his house, demolishing of it, and invites the people to do it, with a grant unto them of all the material of the house." "Old Subtlety" had, however, found his way so far into the hearts of the men of Oxfordshire that no man would touch a stone of the old castle, which remains until the present day to tell the story of those troublous times. Saye and Sele's "Blue Coats" distinguished

themselves in the long struggle, and their leader was not loved by the Cavaliers, who used to sing:

"Farewell Saye and Sele and hey,
Farewell Saye and Sele and ho,
And those sons of Ayman
Shall hang as high as Haman,
With the old Anabaptists they came on,
With a hey trolly lolly ho!"

We need not follow the fortunes of war further, save to note that the Lord of Broughton never agreed to the king's murder, and when the Commonwealth had run its course, was one of the first to bring back Charles II. The castle bears some traces of the change in the political opinions of its owner when "the king enjoyed his own again." The long barrack-room where Cromwell's troopers and the "Blue Coats" of Lord Saye and Sele used to sleep, was christened "Mount Rascal," and on the beautiful angle lobby of the great dining-room the penitential words were placed:

"Quod olim fuit meminisse minime juvat."

Lord Saye and Sele became Lord Privy Seal. You can see his bag of office, with its C. R. upon it,



THE HALL—BROUGHTON CASTLE

hanging at Broughton to this day. It is interesting to note that it was this Lord and his friend Lord Brooke, when the fortunes of the "root and branch" men were low, meditated a settlement in New England, and built a little town called Saybrook, in 1635, which is now, I believe, a flourishing place in Connecticut.

Since that troublous time peace has settled on the noble house and its noble owners. When we approach the castle we see that it stands in a small park, and lies in a hollow, surrounded by low wooded hills. Entrance to the castle is gained through a large gatehouse and over a bridge spanning the moat. These were constructed at the beginning of the fifteenth century, when, in 1407, a royal license was granted to the owner to crenulate the castle. To the same period belong the embattled walls to the moat, the embattled rooms of the house containing the kitchen, guard room in the roof and other chambers and the stables.

Recent restoration work conducted with loving and reverent care by the tenants, Lord and Lady Algernon Gordon Lennox, has thrown much light upon the construction of the castle. Lady Algernon Lennox has kindly sent me some notes of the discoveries which have been made, and my friend, the present Lord Saye and Sele, has furnished me with some family papers relating to the history of the castle. A considerable portion of the De Broughton's fourteenth century work (1301-1307) remains. The chapel belongs to this period, situated at the northeast angle. The east window is Decorated, with the geometrical tracery which was in use in the beginning of the fourteenth century. Immediately under this window is the original stone altar, supported on three plain corbels, and retaining the five small crosses. This chapel has several windows or peep places looking into it. A witty Bishop of Oxford, when he saw two windows looking down into it from side bedrooms, remarked, "Now I understand why the Psalmist says, 'Let the saints rejoice in their beds!' " Adjoining is a groined priest's room, and leading away to the west is a beautiful groined corridor branching off to a circular staircase. This leads to the "barracks," a long attic where Saye and Sele's "Blue Coats" used to sleep when they were not fighting, and also to the mysterious "Council



THE GARDENS—BROUGHTON CASTLE



BEDROOM-BROUGHTON CASTLE

Chamber" where the chiefs of the Rebellion hatched their plans. A great part of the walls in the north and east sides and the groined chambers belong to the same period, early fourteenth century; and the recent restorations show that the main walls of the great hall are of the same date. When the plaster was removed from the walls, a series of doorways of undoubted fourteenth century work was discovered, which seem to have led to the minstrel's gallery. Also the remains of three magnificent windows of the Decorated style, which reach the whole height of the hall, were laid bare. A portion of the beautiful tracery which filled them has been discovered on the south side of the castle. The hall appears to have been "Elizabethanized" in 1554, when the bay windows were thrown out and Tudor windows inserted in place of the earlier ones. This noble hall measures 54 feet by 26 feet. Along the north side of the castle on the first floor runs a fine gallery 90 feet long by 12 feet 3 inches wide, with rooms opening out of it. The latest portion of the house is the dining-room, which has a fine ceiling and splendid chimney-piece. The room is panelled throughout,

and in the corner is an angle lobby or screen, forming the entrance. The original of this quaint and singular adornment is the interior doorway of the ante-chamber of the Hall of the Council of Ten in Venice. It is an elaborate work of beautiful detail, thoroughly Elizabethan in style. A few other houses in England have similar screens, notably at Bradfield and in a few Devonshire seats. The white paint has recently been removed from the oak panelling, and the large window at the north end re-opened, after being blocked for many years. This white paint had a signification, and was used in the houses of enthusiastic loyalists to testify to their zeal for the House of Stuart. The drawing-room has a fine ceiling dated 1559, which has rich pendants. King James's bedroom, the entrance to which is from the gallery, has a large and very handsomely carved Jacobean chimneypiece of stone of unusual design, owing to the peculiar treatment of the figure sculpture. The two grand staircases were also erected in the restoration of 1554. The groined passage leading from the hall to the present dining-room is a fine specimen of English architecture, as the removal of the plaster which defaced it now shows. The corbels, all different in design, are remarkable for their originality and spirit, notably the carvings representing a man blowing a horn, and a rabbit chewing a pea-pod.

The house is full of memorials of the Civil Wars, old armour, swords, cannon-balls, and dented cuirasses. The walls are adorned with family and historical portraits. The heroes of the Civil War gaze at us from the canvas, Royalists and Parliamentarians alike, now in godly union and concord, Charles I., Prince Rupert, Prince Maurice, William, Viscount Saye and Sele or "Old Subtlety," Oliver Cromwell, John Hampden, Nathaniel Fiennes, Lord Falkland, Pym, John Fiennes, are all there, and perhaps leave their frames on some ghostly evenings, and discuss their fights over again.

In the little church hard by the lords of the castle lie at rest. It is a very beautiful resting place, principally of the Decorated period. Sir Gilbert Scott used to say that the west window of the aisle was the best fourteenth century window he had ever seen anywhere for beauty and fair proportions. The nave is Early English, and the chancel screen is of stone of Decorated style. The roof and clerestory are of fifteenth century date. The tower and spire are very good examples of

Decorated work, beautifully, but simply proportioned. Within there is almost a wilderness of monuments. A splendid canopied monument records the memory of Sir T. Wykeham and Margaret his wife. The De Broughtons all lie there, and many of the Saye and Seles, the lord who fell at Barnet, and "Old Subtlety" and many of his successors.

The gardens of Broughton are an attractive and charming feature of the old castle. They were created by Lady Algernon Lennox, who now resides in the ancestral home of the Lords Saye and Sele, and are a witness to her taste and sense of beauty. Situated between the castle and the moat, the carefully trimmed hedge of box with the quaintly-cut figures of birds, the wealth of old-fashioned flowers, and the sweet formal character of the garden harmonize well with the old grey walls of the castle. An attractive feature of the garden is the large sun-dial with the hours marked in a circle in the midst of the wide spread lawn. May the dial only mark happy hours for the Lord and Lady of Broughton.

Broughton Castle, with its little church, presents many features of special historical interest, and remains to this day a well-nigh perfect specimen of English domestic architecture of the fourteenth century.



HOUSE OF BARTRAM, THE BOTANIST, PHILADELPHIA

Drawn by Jonathan Ring

GERMAN MODEL HOUSES FOR WORKMEN

BY WILLIAM MAYNER

American Consulate-General, Berlin

III.—SPINDLERSFELD

THE dyeworks of W. Spindler were founded in October, 1832, and have since become a leading establishment in Berlin. They are located in Coepenick (Spindlersfeld). There have also been erected for the workmen four double houses with twelve to fourteen lodgings each, the rent for a room, bedchamber and kitchen, amounting from \$45

to \$52.50 per annum. Besides this there are many other beneficialinstitutions for the working men, for instance the bathinghouse where a shower-bath can be had for two cents, hot bath for four cents as well as all other medicinal baths, etc. During the summer there are bathing places for men and women free of charge. In the kindergarten children are taken care of by two trained nurses at a charge of fifty pfennigs (twelve cents) per month. The savings of working men and employees are invested at interest of 6 per cent for about \$800, higher amounts 4 to 5 per cent. There are evening schools for the workmen, a

library with about 5000 books, besides a technical library containing 1000 volumes. Near the factory there are about twenty-five acres of park land for the workmen and their families.

There is a sick fund and an old age and accident fund. In the home single workmen can receive a dinner at from six to nine cents. It is significant

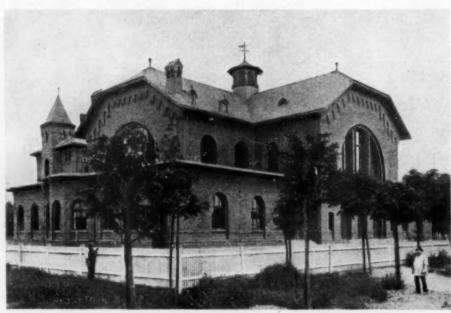
that up to the end of 1904, two hundred and seventyfive male employees and workmen and thirty-eight females celebrated their twentyfive years jubilee in the employ of the firm, receiving, with an expression of thanks, a donation in money from the head of the firm.

During the winter, entertainments are given at the expense of the firm in the Erholungshaus on Sundays (twelve theatre performances and six scientific lectures) to which the employees of the firm and their relatives have free admission.

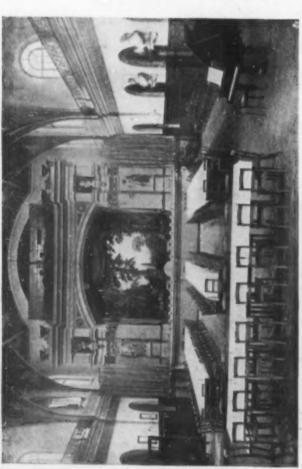
So much has been written in favor of the so-called model workmen's dwellings in Germany, that



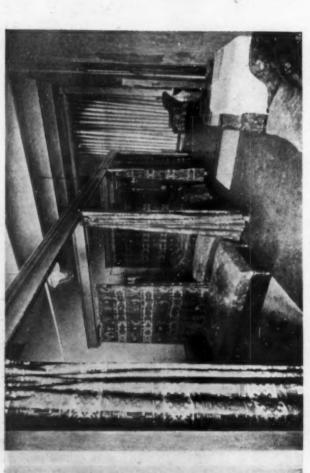
MODEL DWELLINGS FOR WORKMEN—SPINDLERSFELD



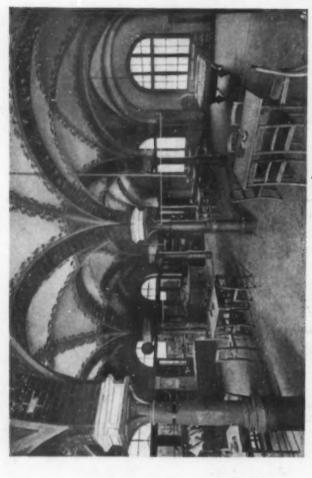
RECREATION HOUSE FOR WORKMEN—SPINDLERSFELD



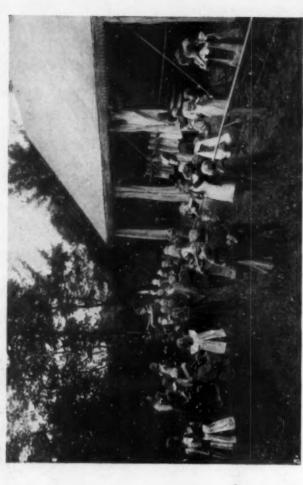
ENTERTAINMENT ROOM IN WORKMEN'S RECREATION HOUSE SPINDLERSFELD



COOLING-OFF ROOM OF THE BATHS IN THE MODEL DWELLINGS SPINDLERSFELD



REFRESHMENT ROOM IN THE WORKMEN'S RECREATION HOUSE SPINDLERSFELD



KINDERGARTEN FOR WORKMEN'S CHILDREN SPINDLERSFELD

it is only fair to listen to what a competent critic of architecture says on the subject.† Mr. Paul

Schultze-Naumburg, after deploring the anarchy in art, says: "Why is it that our work men's houses should look like palaces, our palaces like Swiss cottages, our peasants' (farm) houses like prisons, our prisons like churches, and the churches like railway depots?"

And he continues: "When one hears the words Arbeiter-Häuser one involuntarily thinks of sad places, with long streets of monotonous, coarse brickbuildings, with barracklike windows. Such a workmen's 'colony' is no abode of enjoyment. Nobody would think of taking a walk through it for the purpose of recreation. A good man feels no contempt for these places and their inhabitants, but only pity for all those individuals whose lot is so sad. And he will yield to the belief that it

will only then be possible to present a more agreeable picture to the working people, when the means of the whole human race have so increased that they will suffice even for the lowest. For the present, however, it is their duty to submit to their

fate * * * * * * * Must this really be?"

Mr. Schultze-Naumburg does not claim to be able to solve the social question, but he says: "This I know, however, that the prison-like appearance of some of our Arbeiter-Kolonien is just as little the

BOATHOUSE OF THE SPINDLERSFELD ROWING-CLUB

consequence of the small means at disposal as the false display of our cities is a necessary result of

the wealth which is there being concentrated."

This writer thinks that so long as the workman lives in the city, it is hardly possible to help him. He then goes on to say: "So long as we continue to create this homicidal-type of great city-so long as we make greater and greater efforts to crowd human beings into cells like those of a bee-hive, between tower-high walls, the lot of the workman must be most wretched in these gigantic stone dens. The lot of the wealthy who choose their dwellings amid these heaps of stones and bricks, does not essentially differ, but only varies in degree.

Mr. Schultze-Naumburg is of opinion that the only method is to build cottages out in the open, either singly or in "colonies." Much has been done by the employers and

also by the employed to realize this ideal. The "model" workman's dwelling should not be something radically new in form, but should rather be constructed after the type of the small country house, similar to, but not an exact copy of, the farmhouse.

The task is to construct wholesome and useful rooms; with small gardens to the The houses. German farmhouse is regarded as a satisfactory type naturally with some necessary additions and alterations. The air of cheerfulness and comfort of thistypeof house will naturally have an



PARK AND LAKE AT SPINDLERSFELD

† Paul Schultze-Naumburg, "Kulturarbeiter: Band 3: Dorfer und Kolonien: George D. W. Callwey, Kunstwart-Verlag, Munich Germany.

effect on the inhabitants. We dare not speak condescendingly of the degradation of the lower classes of the people so long as we permit them to live in houses which seem to bear the stamp of

The author realizes the host of protests which such a statement will call forth, even from people otherwise of a benevolent disposition. then of the opinion that the workman must be reared in elegant houses, even surrounded with works of art? All that would only be a question of money. Schultze-Naumburg says he knows the whole phraseology by heart and it makes him weary. What he wants to bring about is only a change in the form, and urges that it has nothing to do with art in the sense of luxury. With the same material, be it ever so cheap, he contends that brighter, more cheerful and pleasant dwellings can be constructed. It is an error to suppose that the farmhouse is uncomfortable, unpractical or even unhealthy. On the contrary, the type of the peasant farmhouses all over Germany exhibits the most comfortable interior, spacious, roomy arrangements, the large rooms being lighted by small but numerous windows placed in the right places. In some of the modern red-brick buildings, it is possible to vegetate but not to live. It is the style of architecture that is found fault with. Drainage and water-supply can be installed in both types of dwelling equally well. As far as the appearance of the whole goes, it is quite an art, for instance, to place the right tree in the right spot. Arbeiter-Kolonien have to be erected away out of the city, half in the country where the land is still cheap. The farther from the hot city—which seems to singe everything for miles around—the better.

The admirable dwellings constructed by Borsig and by Schwarzkopp for their workmen, have been built in the vicinity of meadows, fields and the stately pine-forests of North Germany. Spindler's workmen's cottages are located on the lovely river Spree. Krupp's latest colonies on picturesque slopes, but this is all only like a drop in the ocean when we consider the lot of the laboring millions.

MEDIAEVAL COOKERY

(Continued from October House and Garden)

UP to the end of the fifteenth century, English people lived much more after the French fashion than they did in the following ages, when the influence of the Normans ceased to be felt, as a comparison of English with French cookery books of the period shows.

French people then, when they lived more in the open air and partook of only two full meals a day, had more substantial fare than now. Both English and French people liked their food very highly spiced and seasoned with strong and piquant herbs, such as would be very distasteful to our modern palates. Besides the spices and herbs still used, both nations then mixed cardamoms, of which they were very fond, saffron, garlic, galingale, sedwale, marjoram, and several species of clary or sage with their food. Galingale was a very popular spice; and has a strong and bitter flavour, something between pepper and ginger. Sedwale or setewale is an East Indian root; it has an aromatic flavour, and was supposed to help digestion, and was excellent preserved in sugar.

Peacocks, cranes, herons, swans, curlews, bitterns, and cormorants were eaten in both countries; the French also ate bustards, and then, as now, many small birds that we despise. Sturgeon, conger, and porpoises were eaten in France as well as in England; but we do not appear to have ventured on dog-fish,

several species of which were popular among the poorer classes in France. Whale is mentioned in several English cookery books; in France it was eaten salted in Lent by the poor of Paris, and with herring and cuttle-fish was called the Lard de Car-ême. It was sold outside the Paris markets by a thousand poor fishmongers who were forbidden to stand under cover of the market, and it formed the Lenten food of forty thousand poor people. A French recipe says this whale was cut in slices and boiled in water and served with peas, which were probably the best part of the dish.

Cuttle-fish seems to have been a dish peculiar to France. It was pickled in some sour sauce to render it more easy to eat and digest, then put in a pan with some salt over the fire, and stirred frequently, then dried on a cloth, sprinkled well with flour, and fried in oil, with or without onions, according to taste.

The similarity of the style of living in the two countries will be seen at a glance by comparing two menus, one taken from a very celebrated and valuable old French cookery book called *Le Ménager d'Paris* written at the end of the fourteenth century, and the other taken from "Two Fifteenth-Century Cookery Books," before referred to. The English menu is the more elaborate, but it is one used at a royal feast given by the Bishop of Winchester,

whereas the French dinner was served at a French nobleman's table.

> FRENCH MENU.

THE BISHOP OF WIN-CHESTER'S MENU.

FIRST COURSE.

FIRST COURSE.

Norwegian Patties. Camelin Broth. Beef-marrow Patties. Purée of Eels. Boiled Loach with cold

Brewes. Boiled Chickens. Pig in Sage. Shoulder of Mutton. Roast Capon.

sage. Meat and Sea-fish.

Pastelade (pastry).

SECOND COURSE.

SECOND COURSE.

Roast Meat and Fresh

Venison in broth.

A Kid larded and boiled. Roast Kid. Steak or Baked Meat. Patties of Bream. Chicken Patties and Pancakes. Eels.

Herons. Peacocks. Roast Venison. Rabbits. Little Loaves.

THIRD COURSE.

THIRD COURSE.

Furmenty and Venison. Lampreys with hot sauce. Quails. Dariols and Fritters. Roast Bream. Boiled Meat. Sturgeon and Felly.

Felly. Samaca (Fritters). Peasecod. Blanc-de-ris. Strawberries.

The above menus have been put into modern English as far as possible, but some of the items require elucidation, and the recipes for some of the dishes are curious if not useful. As a rule English dinners began with the Furmenty and Venison at the beginning of the third course in this French menu. It was evidently a very popular dish in both countries, though it does not figure in the bishop's menu. Furmenty was also eaten with porpoise; in England it was made, as it still is in some countries, of wheat, but in France barley sometimes took the place of wheat. The recipe for Furmenty with Venison, given in "Two Fifteenth-Century Cookery Books," modernised in spelling and slightly altered to make it intelligible, is as follows:

"Take fair wheat and pound it in a mortar, fan away clean the dust, and wash it in fair water, and let it boil till it break; then strain away the water, and cast thereto sweet milk, and set it over the fire, and let it boil till it be thick enough. And cast thereto a good quantity of raw yolks of eggs, and cast thereto saffron, sugar, and salt, and let it boil no more then, but set it on to a few coals, lest it wax cold. And then take fresh venison and water it, seethe (stew) it, and cut it in thin slices and put it in a vessel with fair water, and boil it, and as it boileth blow away the grease, and serve it forth with the furmenty and a little of the broth, all hot in the dish with the meat.'

The first item in the French menu which we have translated, Norwegian Patties, was made with cod and other fish minced, and put into little patties of the size of an old copper coin worth threepence, and fried on a fish day in oil, on a flesh eating day in beef-marrow.

Camelin Broth was a broth made of meat and coloured yellow with Camelin, a plant with small yellow flowers, which were sold in a powder for

The Beef-marrow Patties are called in the original bignets de moelle, bignets being an obsolete word meaning a sort of puff made of flour and eggs, on which little balls of beef-marrow were placed. Beefmarrow was a very popular dish both in England and in France; as many as three hundred marrow-bones being ordered for some large banquets.

The Purée of Eels is called in the original a Soringue. It was a kind of soup. The eels were skinned, cut up, and fried in oil with onions and parsley, to which were then added pounded ginger, cinnamon, cloves, saffron, and bread beaten up into a purée with water and passed through a strainer. This was all boiled together and flavoured with claret.

The last item in this course is very vague, and evidently depended on circumstances over which neither housekeeper nor cook had control. The best fish and meat that could be got was to be used, so that the French first course would be as substantial as the English one.

The Dariols in the French third course were a kind of cream custard often mentioned in old English cookery books, where, however, they also meant patties filled with meat, herbs, and spices, mixed together, according to some writers; but the author of the "Forme of Cury," the oldest English cookery book, says they were custards baked in a crust. In France Dariols were certainly made of cream or custard, and as they were a sweet and not a savoury dish; they were considered indispensable at a wedding in that country.

Sturgeon in France was boiled in wine and water, and, as the fish absorbed the liquor, more wine without any water was to be added. It was to be eaten hot with the liquor and spices in which it was boiled. In England it was boiled in water, and eaten cold with parsley and vinegar.

The first item in the English menu, called "Brewes," is still known in Sussex; it consists of thin slices of bread soaked in broth, or sometimes in wine, so as to make a sort of purée.

The Pig in Sage was a whole pig, cut up first into quarters, then boiled, allowed to cool, cut up into pieces and laid on some dishes, and a sauce made of pounded sage, the yolks of hard-boiled eggs ground to a powder, seasoned with pepper, salt, and ginger and mixed with vinegar, poured over it. The sauce was not to be too thin.

It is uncertain what is meant by "Pastelade"; we suggest it was pastry of some kind. The editor of "Two Fifteenth-Century Cookery Books" thinks it

was a pastry or a pounded dish.

The dish called "Samaca" was a kind of fritter made of flour, curds, eggs, cream, and grease. Butter, as we have said, was not much used in those days in cooking; oil on fast days and lard or marrow

on flesh days supplying its place.

Peasecod is simply the shells of young peas, "cod" being the old English word for hod or husk or pod; these were probably boiled, and beaten through a colander, as is still done with them in France, where they are served with fried sippets, making a most delicious sort of spinach mixed with cream or butter. Blanc-de-ris must, we think, have been some kind of blanc-mange, probably a mould of ground rice.

Having now compared two menus of dinners on a meat day, we will take two fish dinners, one for a French nobleman, the other for a banquet given by one Lord de Grey, who, Holinshed says, was naperer, that is, he provided the linen, at the coronation of

Henry IV.

The French menu was composed about 1393, and Henry IV. came to the throne in 1399.

> DINER DE Poisson.

DINNER AT HENRY IV.'s CORONATION.

FIRST COURSE.

FIRST COURSE.

Baked Apples. Figs. Gamache (a kind of wine). Baked Herring. Cress. Pea Soup. Salt Eels. Herring and Whale. Perch in White Broth.

Brewes. Salt Fish. Salt Salmon. Salt Eels. Fried Whiting. Baked Eels.

Rice Molle.

SECOND COURSE.

Best Fresh-water Fish. Sea Fish. Eels. Bourrées with hot sauce. Chervets. Tench in Broth. Crabs. Bream Patties.

THIRD COURSE.

Furmenty and Porpoise. Norwegian Patties. Roast Mackerel.

Boiled Plaice.

SECOND COURSE.

Cinnamon Soup. Codling. Rock Fish. Roach. Flampaynes. Halibut. Fried Plaice. Roast Train. A Sweet.

THIRD COURSE.

Jelly. Almond Cream. Trout. Sturgeon. Porpoise. Whelks. Eels and Lampreys, roasted. Pimpernels. Pancakes. Oysters. Fried Cuttle-fish.

Tench. Perch. Bream. Mulberry Tartlets. Leche Lumbard. Chesemayne.

In the second course the Bourrées of the French menu were sometimes made with lampreys. The Pimpernels mentioned were a species of that little plant much used as a savoury herb; probably the mackerel or some other fish were stuffed with it.

The Rice Molle with which the English menu opens is merely a mould of rice, first ground to a powder, then boiled with almond-milk and sugar, and put into a mould and turned out when cold.

Brewes on a fish day was slices of bread soaked in wine, then the recipe says, "put a good quantity of honey to sweeten it, add pepper, cloves, mace, sanders (that is, sandalwood ground to powder), and salt; scald them till the bread is tender, and serve forth.'

Chervets were a kind of patty filled with minced meat, or in this case fish would be used. The recipe says, "Take and make a fair paste of flour, water, saffron, and salt, and make round coffins thereof." They used the word "coffin" in the sense of a basket or box, and always called the pastry of patties or tartlets "coffins," which apparently were not intended to be eaten when baked; but in chervets the 'coffins" were fried in oil after being filled with minced fish.

Flampaynes were generally made of pork, so it is not easy to see how they got into this menu where no meat was allowed. We think in this case they were a sweet dish, "flame" or "flam" being a kind of custard, and "payn," meaning bread, from the

French pain.

Roast Train is a very curious dish, but with some slight alterations we can imagine it might be very nice. The recipe given for it in "Two Fifteenth-Century Cookery Books" says, with delightful vagueness as to quantity, "Take dates and figs and cut them the breadth of a penny, take raisins and almonds, and prick them through with a needle into a thread of a man's length, one of one fruit and another of another fruit." This is a very large order six feet of almonds and six feet of raisins, six feet of figs and six feet of dates." "And then bind the thread with the fruit round a spit, and round the length of the spit, in the form of a hastelet" (that is, a small roast joint), "then take a quart of wine, and ale, and fine flour, and make a batter thereof, and cast thereto ground ginger, sugar, saffron, ground cloves, and salt, and make the batter fully running and not standing, but in the mean that it may cleave."

What a graphic description this is of the right consistency of the batter. "Then roast the train about the fire, on the spit, and cast the batter on the train as it turneth about the fire, so long till the fruit be

hid in the batter. As thou casteth the batter thereon, hold a vessel underneath for spilling of the batter, and when it is well roasted it will seem a hastelet; and then take it up from the spit all whole, and cut it in fair pieces of a span length, and serve of it a piece or two in a dish all hot." We have given this recipe almost verbatim, only modernising the spelling, because it is so quaintly worded, and at the same time so well expressed, that one longs to experimentalise in Roast Train.

The dish we have ventured to call Mulberry Tartlets is set down in the menu as "Pynenade in paste," and from the "Forme of Cury" we learn that "pynenade," spelt in various ways according to the fancy of the speller, was so called from the pines of which it was made, and pines meant mulberries. Pynenade was therefore preserved mulberries of some kind, and pynenade in paste probably equivalent to mulberry tart or tartlets.

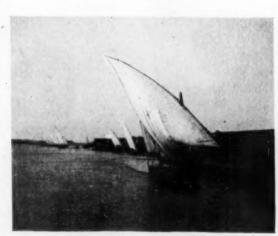
Leche Lumbard was a favourite dish. A "leche" was a slice or piece of bread or of anything, and Leche Lumbard seems to have allowed the cook plenty of choice, for there are several recipes all quite different; the result, however, appears to have been a sort of sweet cake with a syrup poured over it.

One recipe says, "Take honey and clarify it on the fire till it is hot, then take the hard yolks of eggs and crumble a good quantity of them thereto till it be stiff enough, and then take it up and lay it on a board and powder-pepper it." We think to "powderpepper" means to dredge with flour. "Then mould it together with your hands till it be so stiff it can be sliced, then slice it; then take wine, ground ginger, cinnamon, and a little clarified honey, strain this through a strainer, and cast this syrup on the slices when you serve it."

The last dish, Chesemayne, seems to have puzzled the editor, who suggests it meant jasmine, but we think we have solved it, and that it was nothing so poetical as jasmine, but neither more nor less than a sort of Welsh rarebit. "Chese" is clearly cheese, and "mayned bread" or "mayned flour," which we constantly meet with, appears to mean sops or slices or rounds of bread, so we may safely conclude Chesemayne was cheese served on slices of bread, either toasted or melted first.

The courses at most grand dinners in England, in the Middle Ages, concluded with that triumph of the confectioner's art then known as a Subtlety made of jelly, sugar and pastry. The Subtlety at the coronation feast of Henry IV. was very elaborate. It represented Our Lady and the Holy Child in the centre, and on one side of her knelt St. George and on the other St. Denis, the respective patron saints of England and France. They are in the act of presenting a figure of Henry IV. to the Queen. The King holds in his hand a hymn to the Blessed Virgin and the two saints.

The preponderance of patties in these menus is probably due to the fact that fingers then supplied, to a great extent, the place of knives and forks. Spoons were used, but knives were not general till about 1563, and forks were not commonly used in England till 1611. China dishes and plates were only beginning to be known in the reign of Elizabeth; till then wooden plates and wooden spoons were commonly used. In her reign silver or tin was used instead of wood for the spoons, and pewter plates slowly began to replace wooden ones.—Gentleman's Magazine.



Grain Boats on the Nile



The Val d'Aran



Church at Vila

THE VAL D'ARAN

By Albert Touchard

ALL foreigners who have traveled in Southern France know the celebrated health resort of Luchon and its vicinity, Lys Valley and Port de Vénasque, that are reckoned amongst the most picturesque scenery of the Pyrenees.

But people hardly know, if they know at all, the neighboring valley of the Garonne, the valley which under the name of "Val d'Aran" stretches through St. Béat, Lès, the frontier of Spain and extends as far as Viella, a curious, little, old city, crouched at the foot of the high mountains of Port de Viella, where carriage roads come to an end and are replaced by narrow mule paths.

This rich valley, with its ever changing scenery, is

but little frequented by tourists, although the road, as far as Viella, is very good and suitable for motoring.

As soon as October begins, the mountains that encircle it offer an unexplored paradise to hunters; after the first fall of snow you can hunt bears, which, after all, are not rare in this part of the Pyrenees. The amateur of old architecture will find here, in almost every village and especially in Viella, ancient churches, bridges and curious oldish houses, which of course, are worth visiting.

Whilst going up the picturesque Val d'Aran, the traveler will feel strongly impressed by the transition from mild, rich and cultivated France, to the wild, forlorn, mediæval solitude of Spanish Aragon.



The Garonne at Lès



Bridge at Viella

GARDEN WORK IN NOVEMBER

BY ERNEST HEMMING

If the weather permits, no better time can be selected than the present for making permanent improvements in the garden and grounds. Alterations in roadways, fences, grading, draining, pruning and doctoring old trees, cleaning up woodland and such like work should have careful attention. If attended to at this time, when there is apparently little to do, it will make a vast difference in the busy season of next summer.

In connection with the clearing of woodland it should be noticed that many country homes are being built among the trees with the native growth coming almost up to the door. However desirous the owner may be of retaining the natural growth, there is always a certain amount of clear-

ing up to be done and this usually creates places where it is necessary to plant something in keeping with the surroundings. The native rhododendron and mountain laurel are used largely for this purpose, and there is nothing better. They get the conditions they require in such positions; that is, partial shade, moisture with good drainage, and woodland soil or leaf mould.

The accompanying illustration shows a location that a year ago was absolutely without undergrowth-nothing but the naked trunks of trees and a scant herbage. The additional plantings have been so arranged as to give a natural effect, and the reader will agree that the planter has succeeded admirably.

The principal thing to be done in routine work is the mulching or covering over of plants to protect them during the winter. This work is often carried to extremes, entailing much unnecessary labor which is barren of good results. The principal mistake is usually made in the covering of the turf on lawns. It is hard to understand how this practice became so general when it has so many objectionable features with doubtful corresponding beneficial results. It is not at all uncommon to see a lawn that has been a delight all the summer, looking like a farm yard, because it has been covered with half-rotted stable manure. Should the weather be dry and frosty without. snow, this covering dries and fills the atmosphere with small particles of straw and offensive dust, which is blown into the dwelling. It is also one of the main sources of introducing objectionable weeds and strangest of all, it does but little good. Grass does not need protection from the cold and any plant food the manure might contain has either evaporated into the atmosphere or been washed away by the rain before the grass can begin to use it.

An application of wood ashes or bone-meal

applied in April when the grass is beginning to grow will be found an excellent fertilizer or, what would be better still, mix the ashes or meal with screened soil and spread them evenly overthelawn. Then rake and roll.

When the snow lies deep on the

ground the rabbits and field-mice get hungry and very often girdle young or newly planted trees by chewing the bark at the

surface of the ground or snow. When there is danger from this source the trees should receive a coat of paint from the ground eighteen inches up the stem, a mixture of white lead and boiled linseed oil being used.

Winter is an excellent time to thoroughly clean the specimen evergreen trees on the lawn. If a good sized spruce, an abor-vitæ or Retinospora be examined, it will be found that all the green portion of the tree is on the end of the branches, while the inner portion of the tree towards the trunk is filled with dead twigs and rubbish which harbors all kinds of insects. This should be thoroughly cleaned out. It will be found rather a long job but it pays to do it well. After the interior of the trees has been cleaned out, give them a heavy dressing of cow manure, extending out from the



RHODODENDRONS USED AS UNDERGROWTH

trunk as far as the branches. Large evergreens are usually overlooked as regards feeding. This is a mistake because when the ground becomes impoverished they lose their lower branches and

quickly deteriorate.

Nothing adds so much beauty to the grounds as a few choice well-grown evergreens, especially in winter. Unfortunately, very few of the broad leaved kinds will stand the American sun. The rhododendrons are not always to be relied upon except when well situated. Philadelphia is the extreme northern limit of the Magnolia grandiflora. The English and Portuguese laurels are failures here so that we have to be contented with the spruce, pine, cedar and abor-vitæ types.

The possibilities for winter effects that may be produced with the bark of trees and shrubs is often overlooked. The silvery white bark of the paper birch is well known, then there is the red twigged dogwood, yellow twigged willows, golden barked

ash, flame colored willows, golden weeping willow, Euonymus alatus with its curiously winged corky bark and a number of others that would show up finely against a background of hemlock or other evergreens and make a very pretty effect that would be much appreciated from the window during the winter, when the outlook is often so very dreary.

This month the chrysanthemum is queen. It is hard to conceive what we should do without them. They come at a time when very few other flowers are to be had, and as they are so easily grown they are within reach of everyone with a garden and the will to try and grow them. It is hardly credible to the average visitor to the chrysanthemum shows that the huge specimen plants with one hundred or more flowers on them are grown from a single cutting in the one season, yet such is the case. While such results can hardly be expected unless special facilities and expert care are given, there is no class of plants that give such uniformly

good results, so that plans should be laid for a good supply next year. After the plants have done blooming, cut off the stems and set the pots in a frame or cool greenhouse, safe from the frost. The young shoots that come from the roots and around the stem will be wanted for cuttings in the spring, after that they may be

thrown away.

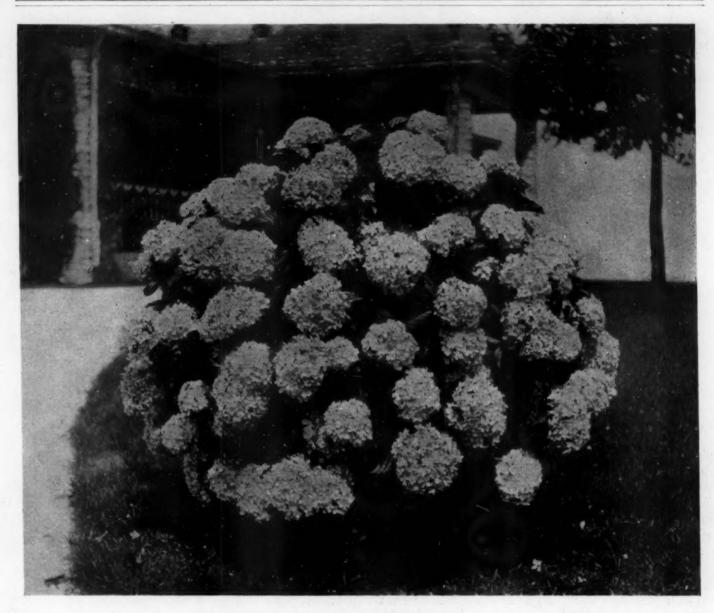


CRAPE MYRTLE IN TUB

WELL grown plants in tubs or vases have great decorative qualities. There are certain positions around the house, on the terrace or veranda, in fact anywhere where the artificial lines of the roads or masonry are in evidence, such plants can hardly be dispensed with. The list of plants suitable for growing in this manner is not a very extended one. The bay tree Laurus nobilis heads the list. These are imported Plants in in large numbers every year from Holland to supply the demand, and may be had in almost any size or shape, standards and pyramids being the most popular forms. Box bushes are also very good but do not reach such large proportions, the pyramid form being the most suitable for this plant. Various

other kinds of evergreens are occasionally met with but none are quite so adaptable for the purpose as the two above mentioned. The California

privet Ligustrum ovalifolium can be



HYDRANGEA IN TUB

trained and clipped to almost any shape, and if given the same care and attention usually bestowed on the bay tree makes a desirable subject for tub culture.

Among flowering plants none are quite the equal of the subjects of our illustrations, the crape myrtle, Lagerstræmia Indica, and Hydrangea hortensis.

In addition to these, oleanders, orange trees, rubber plants, palms, and cycas about complete the list.

None of the above mentioned plants can be considered hardy enough to stand out doors when growing in tubs north of the latitude of Washington, D. C. Even the box and privet, although quite hardy when planted in the ground, would be liable to injury in the winter when growing in tubs in an exposed position. The bay tree will stand a few degrees of frost but should not be subjected to a temperature much below 32 degrees Fahrenheit.

Under these conditions the winter accommodation and care of tubbed plants limit their use and no doubt accounts for their not being more generally used. In some large establishments a specially constructed house is built for their accommodation where an ideal temperature of from 45° to 50° can be maintained.

When such quarters are lacking an enclosed porch, a light well-ventilated cellar, or even an outhouse will often be found suitable. In such places the winter care is not very exacting, the essentials being to look at them once or twice a week to see that they do not become too dry. Very little water will be needed, however, as the function of the plants are practically suspended. Rubber plants and palms would be benefited by a little more heat and moisture than is advisable for the others. The crape myrtle and hydrangea being deciduous would stand the poorest winter quarters, they may be wintered in

some sheltered corner if well covered with straw, leaves or some such material.

The summer care of tubbed plants is more exacting, their roots being confined in such a small

space, they depend entirely upon the gardener for water and food. The latter should be given to them at regular intervals in the shape of liquid manure, but this constant attention is usually amply repaid.

THE FIRST COUNTY PARK SYSTEM IN AMERICA-V

By FREDERICK W. KELSEY*

(Continued from the September Number of House and Garden)

A FULL record of all that has occurred in connection with the parkways for the Essex County parks would fill volumes. The correspondence, the official communications, the public conferences, the private confabs, the petitions and the litigation for the parkways, the protests against destroying them, the resolutions of various civic associations, the public hearings, the mass-meetings, the action of special committees—would each, if given complete, require a chapter or a volume. A chapter, too, might well be devoted to the different phases of the situation during the various changes in this interesting question.

How, on the announcement of the parkway plans by the Park Commission in November, 1896, the traction company began at once to scheme after the manner of public utility corporations for the defeat of those plans, and to be the first to obtain possession of one or both of the principal avenues that were designated for parkways. How, as this contest went on, with the people and, at the outset, the Park Commission on the one side, and the allied powerful corporate and political forces working through the "organization" machine as dictated by the party boss, on the other side, the proceedings in the county and local governing boards, in dealing with the question, were for years a continuous performance of the play of battledore and shuttlecock.

How shrewd attorneys and the interested politicians, working for the corporations, continued the policy of creating realistic phantoms and legal hobgoblins for the purpose of befogging the public mind and confusing honest officials, in order that the result of preventing the parkways and securing the franchises might obtain. How the effort was made to use both the press, and even forged postal card ballots to accomplish these ends. How such representative organizations as the New England Society, the Woman's Club, the Road Horse Association, and other civic and good government associations joined the parkway forces and entered into the fray, where they remained to the finish.

A volume might also be written on the action of certain officials and the majority members in

the Board of Freeholders, and of the municipal authorities in East Orange and Orange, who for years were seemingly so anxious to serve "The organization" (alias, in this instance, the corporations), that their official acts resembled those of toy officials and toy boards, where each in time of emergency, sprang to rescue the situation for their superiors, and against the parkways and their constituents, as moves a jumping-jack when the strings are pulled by the man in power behind the scenes.

A chapter might also be of interest accurately describing the shifting of position of some of these officials; first upon the one side, and then upon the other of the same identical question, when their opinions and services were needed to comply with the needs and exigencies of the corporations as from time to time these requirements developed.

Topics of General Interest. Much might also be written of the changed attitude of the Park Commission, clothed as it was, and is, by its charter, with all authority and full power, from its original position of active interest toward securing the two principal parkways for a time after their announcement in November, 1896, to a somnambulistic condition of non-activity and seeming impotence, and an apparent indifference as to what became of its own plans, and as to whether the board should secure the parkways as it had planned, and had repeatedly promised the public, or should give them over, through the assistance later of the commission's own counsel, to the corporations for private uses.

Then, too, an extended account of the evolution of the parkway question into the agitation for limited franchises, which has since become such a live State issue, would fill much space: How the persistent determination of the traction companies' managers to defeat the parkway plans, and, regardless of consequences, secure the long-sought franchises, led to an investigation as to the reasons why the men responsible, who were accredited with having some public spirit in other matters, were on this subject deaf and blind to all appeals; how, when the indisputable facts were ascertained and recognized by the public as to "the millions"

literally "in" such franchises, there was at once a response and popular uprising that has already found expression in the platforms of both the leading political parties—an uprising followed, as since, by the widespread popular demand for improved utility franchise conditions by the people: And how the majority of the Legislature of 1905, under the direction of the "corporation leader" of the House, juggled with this franchise legislation.

These might all be topics worthy of full description, and perhaps of interest, to the readers of this history of the parks. Space, however, does not permit. Nor is it intended that this history of the Essex County parks will do more than give a consistent, continuous, and truthful account of the more important facts, which record shall mirror the events of the past as they have occurred, and

east and the mountain parkway and parks on the crest of the first mountain, constitute a compact, and, to that extent, complete "park system" in the heart of the county, readily and directly reached from any of the four sides of the elongated square of parks and parkways that would be thus formed.

For a Park and Parkway System. What the commission of 1894 did, however, intend should materialize, and be put into practical form at the earliest possible date, was the plan for the parks and the parkways, as outlined—"a system of parks in its entirety," as promised in the commission's formal report in 1895, already referred to. It was for this purpose that the liberal charter for the second commission was prepared; and had all the members of the first commission in 1895 been reappointed on that board, and the personnel



CRYSTAL LAKE-EAGLE ROCK PARK

possibly throw some light on the situation of park affairs that may be helpful in the solution of this great problem for the present or for the future.

The general plan for the parkways, as agreed upon by the first Park Commission in 1894-5, was outlined with three distinct and objective points in view:

First—Convenience and accessibility to the great majority of the people of the county.

Second—Economy in the use of Park and Central Avenues, inasmuch as these were the two parallel and broad avenues, between the proposed larger parks, well adapted for parkway purposes, and already laid out and constructed at county expense; and

Third—Availability. As these parkways, with Park Avenue on the north and Central Avenue on the south of the populous portions of the county between the Passaic River and the Orange Mountain would, with the Branch Brook Park on the and policy of the commission remained unchanged, I have now no more doubt that these plans would have been carried out and promises fulfilled, than I have of any future event which is considered a certainty, yet not having transpired.

On October 19 Commissioner Meeker introduced the resolution which the parkway-avenue controversy has since made historic. All the commissioners not being present, the resolution was entered upon the minutes for future action. On November 12 following, at a meeting held at Commissioner Murphy's residence, the resolution was seconded by Mr. Shepard, and was then, by unanimous vote, passed. It was as follows:

"Whereas, It appears to the Park Commission to be desirable that the avenues hereinafter named should be under the control of the commission as part of the system of parks and parkways.

"Resolved, That the counsel be directed to



BRANCH BROOK PARK

obtain, if possible, from the Board of Chosen Freeholders of the county of Essex a transfer of the care, custody and control of the avenues as hereinafter designated, to the Essex County Park Commission; as also from the other municipal corporations in the county a transfer of the same, so far as may be necessary, under the statute.

Corporation Control. At this time the parkway question, as applied to Park and Central Avenues, had been well considered. The necessity of using both avenues for parkways, if any creditable park system should be established, was recognized and so stated by each of the commissioners. The action was taken after mature deliberation; and, as already indicated, was in entire accord with the recommendations of all the park experts and the recorded action of the first commission on that subject. Nor was there any reason to then doubt what the attitude of the traction company's managers would be. The matter had been under public discussion for some time. Petitions from Orange and East Orange to the Park Board, as already quoted, had favored early action to secure these parkways.

The trolley management had laid lines to counteract any such result. James B. Dill had been employed. The influences were actively at work. Within thirty days after the introduction in the Park Board of the parkway resolution as above, viz., November 9, 1896, application was made to the East Orange Township Committee by the Consolidated Traction Company for a railway franchise on Central Avenue. This was the picket gun of a battle that was raged with unceasing vigor and aggressiveness for eight years. The

firing became general and soon extended all along the line. Both sides were in a measure prepared. The Park Commission had the law and public opinion in its favor. The traction company, grown greedy and arrogant from former franchise spoil, had the power of concentrated wealth, and the party machine, with the resource and influence of a domineering party boss to do its bidding. For years the corporate interest, then demanding the sacrifice of the parkway for the coveted franchise, had had full sway. The old Essex County

Road Board, before it was abolished years previous by a reform Republican Legislature, was their willing tool. The succeeding Board of Freeholders, in control of the county roads, although riding into power on the popular wave which in 1893 and 1894 engulfed the race-track, coal-combine, corporationridden State-and-County-Democracy was equally subservient. From those unsavory legislative days of 1890, '92, '93, the street railway companies had readily passed their own bills, both at Trenton and in Essex County, as they desired, and in their own way. The law permitting a traction company to practically pre-empt a street or avenue by merely filing a map and certificate of intention with the Secretary of State, and the payment of a small fee, had, prior to 1896, been availed of, and both Park and Central Avenues were "on the map" of the traction company's routes as prescribed.

The Storrs bill of 1894 was intended to curb this hydra-headed giant of financial and political power by requiring the filing of consents of the owners of a majority of the street frontage before any road could be constructed under this "pre-emption law."

As introduced, the bill exempted all non-taxable property from consideration in the matter of these consents. But, under this clause, the Cemetery of the Holy Sepulchre property, with its 966 feet of frontage in East Orange, would have prevented the company from procuring the necessary "consents" for appropriating Central Avenue there, so the "reform" Legislature followed the example of its predecessors by amending the bill and striking out the objectionable clause as the corporations desired.



The House from the Lane

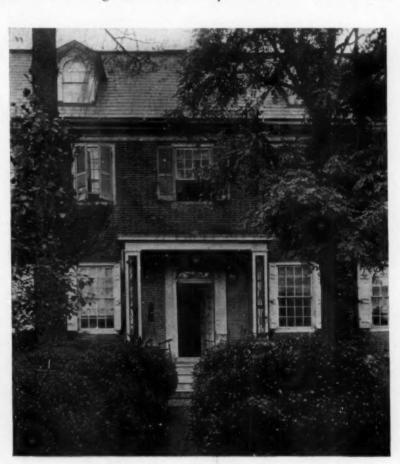
A RESIDENCE OF JOSEPH BONAPARTE'S

By Edwin Bateman Morris

AT the very southern end of Trenton, New Jersey, where the higher ground of the city suddenly falls away to the meadows beyond, there is a most curious promontory, locally known as Bow Hill, which juts out into the marsh-lands like a huge horseshoe.

Right in the middle of this plump peninsula is a veteran house which is a specimen of very diverting Colonial architecture, whose chief claim to public attention has been not so much on that account as by reason of having been for some time the residence of that ubiquitous Frenchman, Joseph Bonaparte, King of Spain, King of Naples, member of the Legion of Honor, Count de Survilliers, and numerous other things rather too ornamental and florid for New Jersey. The house was built in 1785 out of bricks brought, as was the necessary custom in those days, from England and with sand

(and this is an illustration of the fact that coals are sometimes carried to Newcastle) from Pennsylvania. Bonaparte, who did not occupy the house until more than thirty years after it was built, kept it up then for the comfort and convenience of a certain



THE BOX HEDGE AND THE FRONT DOOR

Annette Savage, a pretty shop-girl, with whom he fell in love while in Philadelphia. He and Annette lived there for a long while and left many marks of their occupancy. One cannot help feeling the romance of the house on going up the winding stair and seeing scratched on one of the little square window-panes, "Oh good night." Bonaparte was not an exemplary person, and the romance was by no means glorious; but it is interesting to see the writing on the windowpanes that Annette wrote with her ringfor there is morein one place, "God is love," in another, "Trust in the Lord," scrawled up-hill



THE KITCHEN WING

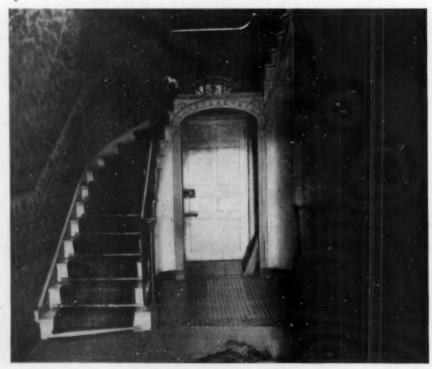
across the glass. It is interesting to speculate on the occasion of these things—which was perhaps something very commonplace after all. Doubtless, they were phrases she had learned to write in the autograph albums of her nieces and second cousins, whose minds must have been filled with good and upright thoughts. In the southwest corner of the house is the room which Bonaparte occupied, and

in the northwest is Annette Savage's (an instance of selfishness, perhaps, when one realizes the difference of two such exposures, at a time when a complete hot air system with a thermostat was a thing unknown). Between the two rooms a little door, never intended in the original plan, was cut by the King of Spain for his convenience. The door is still there.

If the house was attractive eighty years ago (and it must have been, or Joseph Bonaparte would not have lived there) it is doubly so now. When one crosses the Delaware and Raritan Canal about two miles south of the heart of Trenton and walks out by St. John's cemetery, he sees off to the right among a clump of magnificent pine trees the two chimneys of an old brick house. It is half a mile away when it first peeps through the trees, for the country is very level and there are but few houses round about. And presently one comes to a long grass-grown

road that leads straight to the house. It is a fascinating walk, with all the pine trees in front -one of which is especially distinguished, with little furry patches of leaves here and there on its gaunt limbs. The proportions of the house are splendid, and the evenly spaced windows and solid, sturdy chimnevs, placed comfortably at either end of the ridge, make the building very restful and charming to look at. The drive is fully half a mile long, yet it hardly seems long enough for one to appreciate the quiet simplicity of the house and the almost

pompous stateliness of the pines. And when one enters the gateway and walks along the brick path between two rows of boxwood hedge to the entrance doorway, he is struck with the perfect simplicity of the house. Could anything be more attractive than the windows with their little panes? They all have what is known as "plank front" frames—that is, the window-boxes are not set back from the face



THE STAIRWAY

of the wall and concealed by the brickwork, but are flush with it-a trick common in the buildings of the Colonial period, having for its object to push the frame out as far as possible in order to give room for a broad sill on the in-The cornice is very Colonial in spirit with a pattern executed on it by means of little auger holes bored into

The lawn is covered with flowers and shrubs in the most attractive and luxurious profusion — some of them plants that are very rarely seen in modern gardens. The flowers

and bushes are for the most part of a much more modern origin than the house (for some photographs taken of the house in somewhat recent times show the house quite bare as compared with the present profusion), except the daffodils, which are said to be descendants of the original daffodils planted by Miss Savage. The box hedge by the front path is very valuable and charming, and the weeping willow tree



THE ENTRANCE TO THE HOUSE

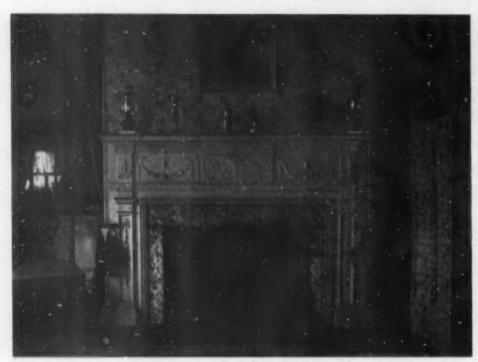
by the corner of the house is a treasure. Bow Hill itself (I am speaking now of the hill and not the house, which is also called Bow Hill) is very attractive. About thirty or forty feet back of the house (they used to call it front long ago, although that is a distinction rather than a difference, as the aspect of the house is practically the same from either side, having the same arrangement of win-

dows, the same portico and the same front door) the land drops away at an angle of almost sixty degrees down to the meadows. The slope of the hill is covered with fine tall trees under which the grass is almost as smooth as a lawn.

The house is planned after a very common Colonial scheme, which is simply that of running a wide hall through the house from front to back, and putting two rooms on either side of it. The plan is simple and convenient and admits of using the same scheme of decoration for the front as the rear—not altogether a bad



THE HALL



THE PARLOR FIREPLACE AND MANTEL

thing, especially as the main road is almost sure in a hundred years to creep around to the rear of the house, suddenly transforming it into the front. The kitchen of Bow Hill is in a little wing tacked to the building on the east and is quite picturesque.

The doorway with its naive semicircular transom of stained glass is very attractive indeed, and upon entering the hallway one instantly sees another semicircular stained glass transom at the other end of the hall, peeping in a most playful way over the landing of the stairs. Under the landing is a door exactly similar to the entrance door, and by going out through it one finds himself on a porch precisely like the porch which lies without the other door. From this another path—almost as charming as the one between the box hedge—leads down through a little gateway to the slope at the extremity of Bow Hill.

Within the house are many interesting things. The stair is an exquisite piece of architecture. It is dainty and attractive and managed with remarkable restraint and good taste, while the steps go around at just a short enough radius to give an æsthetic sense of excitement regarding the possibility of reaching the bottom in safety. The sides of the stair, below the string course, instead of being panelled in the usual way, are decorated most charmingly with little reed mouldings running perpendicularly, which make it very rich indeed. The bottom step of the stair, which in the illustration seems to be disregarding the rules of perspective, was capriciously set at an angle by the builder and architect, probably for the purpose of showing that that was positively the bottom. The influence of the semicircular transoms of the front and rear doors will be noticed on the interior doors of the hall, where they have put little plaster lunettes —a thing which is quite distinctive and original.

In one or two of the illustrations there are glimpses of old Chippendale dining-room chairs, of which there are several lurking in obscure corners of the house. They are really quite beautiful pieces of furniture, and if a person could get a number of such chairs he would have a dining-room set that he might well be proud of. In my excitement over the chairs I strayed into the former parlor (now seldom used) and discovered a mantel done in the real Colonial manner, with little baby pilasters and applied carving of ropes of

flowers and baskets of fruit-

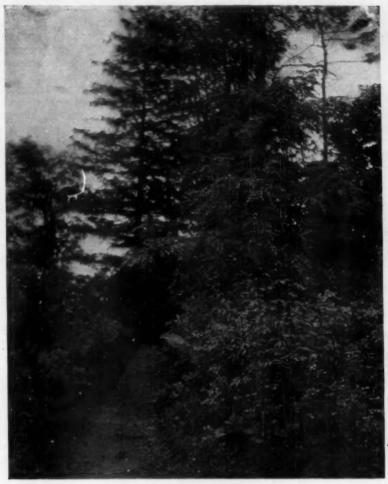
not a model of good form as considered from a strictly architectural standpoint, by reason of its unstudied proportions; but very charming indeed on account of its perfect execution and that feeling of quaintness that seems to be in all the work of the period. The candelabra on the shelf are very old, too, and have a good deal of individuality. The candelabra and the Chippendale chairs make the chance visitor want to steal them away when his hostess is out of the room.

Bonaparte could not have found a more attractive place to live in than Bow Hill, or "Beau Hill," as after his occupancy of it with Miss Savage it was once cleverly called, and, if he was not happy there (and he does not seem to have been) it was certainly not on account of the house, but on account of the avalanche of public disapproval he brought down about his ears by his indiscretion in regard to Annette Savage. He undoubtedly would not have gone to Trenton at all but for his ostracism in Philadelphia, where he soon discovered his infatuation for the pretty little shop-girl was social suicide. Before that ostracism he had tried to purchase land from Stephen Girard on Chestnut Street between Eleventh and Twelfth, for which he offered a very handsome sum. There is an interesting anecdote in regard to the attempted purchase. Bonaparte was dining with Girard and, as the subject of the land came up, the former offered to pay any fair price at all for it. Girard said, "Well, now, what will you give? What do you call a fair price?" "I'll tell you," said Bonaparte, "I'll cover the block from Eleventh to Twelfth and from Market to Chestnut with silver half dol-lars." Girard thought a bit. "Yes, M. le Count," he said at last (Count de Survilliers was Bonaparte's

title in this country),
"if you will stand
them up edgeways."
That was as far as
the negotiations
went.

One of the most charming things about the house at Bow Hill is the satisfactory workmanship. One is apt to listen tolerantly and remain unconvinced when he hears the assertion, so often confidently made, that the durability of modern houses is almost a minus quantity as compared with that of a house built-say even fifty years ago. But the splendid physical condition of some old houses now starting in, hale and hearty, on a second century makes one wonder whether more care was not taken with

ancient architecture, after all. At present there are numerous tricks and customs (once firmly adhered to by the builder and demanded by the owner—who was willing to pay for them) which are now regarded as Quixotic. In fact, consideration for future generations is not a part of the modern philosophy. There was a time when every bit of wood that went into a building was thoroughly sound and known to have been seasoned. Every piece of wood of the old Colonial box-cornices was painted on both sides before it went into place. But, although this simple expedient will make the wood last three or four

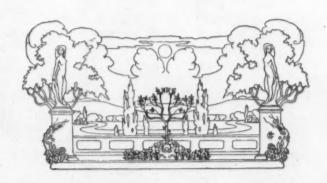


A PATH AT BCW HILL

times as long, people have neither the time nor the money to waste on such precaution. As a result, you can go around in almost any part of the country and watch ten-year-old houses coming to pieces. For that reason, the well-groomed, healthy appearance of Bow Hill attracts one's attention immediately. It looks young and strong, as if it had plenty of reserve force. The walls are beautiful pieces of Flemish-bonded brickwork; and the woodwork, both on the interior and the exterior, is almost perfect. The stairway, which is unusually good, is so more on account of its splendid execution than for any remark-

ably clever or well-studied design. But the result of mere painstaking craftsmanship on a simple, straightforward — though perhaps unoriginal — scheme is always satisfactory. One cannot have a better illustration of this than the pretty little stair at Bow Hill.

Altogether the house is charming. As one catches a last glimpse of its stocky chimneys disappearing among the pine trees, no matter what his opinion in a general way of Bonaparte's taste may be, he cannot but be convinced that the Count was right about Bow Hill.



HOUSE AND GARDEN CORRESPONDENCE

FITTING UP A JAPANESE TEA-ROOM

Mrs. M. writes:

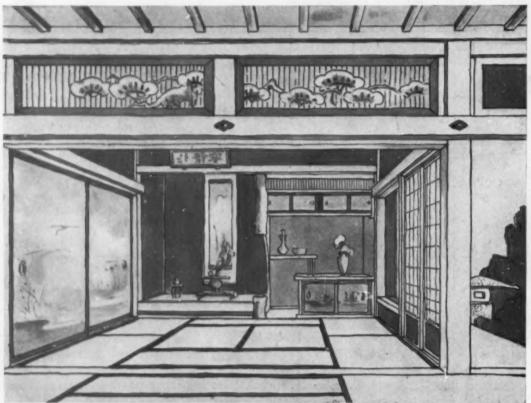
I wish very much to fit up a Japanese tea-room at the rear of my house; I could extend a porch which is there and have it enclosed in the proper style. Would you kindly give me some suggestions for the arrangement of this. I wish it to be absolutely correct as far as possible. Of course I know that very little furniture is used in a real Japanese tea-room; this we could not follow, but the setting could be eminently correct. Do they not use an effect of the grille panels? What coloring for the walls? What for the woodwork? I can have long sliding windows set in if you advise.

gaseous products, which accumulate in the house from the lungs of the inmates, the lighting apparatus, etc.

If one can go to the expense of indirect steam heating with an exhaust fan or two in the attic, run by a small electric motor, the desired result is attained if the apparatus as a whole is properly designed. The expense of such an apparatus is often prohibitive, however, for moderate cost houses, and the hot air furnace is the usual substitute. The weak points in the furnace installation are, first leaky joints in the combustion chamber, which allow products of combustion to escape into the hot air supply, loss of heat through imperfect insulation of the pipes, and inability to supply heat to rooms located at a distance from the heater.

The faults can be overcome, but not in a cheap appara-

Briefly, then, you must start with a good furnace. If the house is large and especially if it is long or irregular in plan it is more economical to have two smaller, than one large furnace of equal heating capacity. Avoid long horizontal runs of pipe in the cellar and pay for good insulation on the pipes and in the stud partitions. And not least, but of extreme importance, have a watertight, amply large cold air inlet to a window; this of course controlled by a valve. See that the air comes from an uncontaminated source, open to air and sun, and protected from direct exposure to violent winds. The fundamental defect of the hot air furnace is the feeble motive power for sending the air to the points desired, but this defect can be minimized by attention to the points noted. C. E.



SKETCH BY A JAPANESE ARTIST

I have obtained from a Japanese friend a correct drawing

of a Japanese tea-room. This is, as you will see, almost totally bare of furniture; it will, however, convey to you a good idea of the arrangement. The panels set above the door which could lead from your living-room into this tea-room are of an especially attractive effect; the wood should be stained black. The walls covered in a Japanese grass cloth, pewter grey in tone. Much blue and white ware can be used for holding flowers. Your tables for this room should be low and of teak wood. Chairs of bamboo or Hong Kong would accord best with the simple treatment of the room.—Margaret Greenleaf.

HEATING THE HOUSE

I am about to install a heating apparatus in my newly remodelled house—a hot air apparatus from necessity, and should be greatly obliged if you would advise me how it may be made safe from a hygienic point of view, economical, and generally efficient.

The only perfectly hygienic method of heating a house is by some system which introduces an ample volume of pure, warm, fresh air with suitable provision for the extraction of the waste

PERGOLAS

I received "Picturesque English Cottages, Etc." by express last week in perfect condition. Thank you. I am intending to build this fall, and am very much interested in pergolas. The article in the July House and Garden entitled "Garden Portraits" by Margaret Greenleaf, was very interesting. She speaks of Miss Carlisle's ideas and sketches of the correct dimensions. I only wish she had told what these correct dimensions were. Can you give me any literature on this subject, and do you publish anything that will furnish correct ideas? H. R. C.

The term "correct" applied to the dimensions of a pergola or any other object can only mean correct for the particular time and place under consideration. What Miss Carlisle meant, I fancy, was that the pergolas she illustrated were correct from the point of view of giving ample sunshine and air circulation, as contrasted with more contracted pergolas, which sometimes are mere leafy passageways. There are no rules with regard to pergola construction. House and Garden has from time to time published many illustrations of them and our forthcoming book, entitled, "American Country Homes and Their Gardens" shows a number of pergolas which might, perhaps, be of some service to you.

C. E.



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Vol. X NOVEMBER, 1906 No. 5





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NOTES AND REVIEWS

THE MODERN HOME

WE have received from Mr. M. A. Vinson, dealer in books relating to architecture and the allied arts, a copy of "The Modern Home"* with text and illustrations relating to the British middle-class houses of the twentieth century.

The book is a complete exposition of its subject which is adequately described and fully set forth in illustration in the 176 pages of the volume. The English house has a certain charm which is easily transplanted to America by sympathetic hands, and no architect who builds houses ought to deprive himself of the assistance this volume would afford him in his office or the personal pleasure which its plans, sections, elevations, and perspectives in color, have to offer.

CONCRETE COUNTRY RESIDENCES

HOUSE AND GARDEN has already pointed out at considerable length the singularly appropriate manner in which concrete as a building material lends itself to domestic work, especially for suburban and rural residences. The rapidly increasing use of this practicably indestructible method of building is a sufficient evidence that this fact is receiving more and more recognition every year. If there were any lingering doubts in the mind of prospective house builders, they would be speedily removed by an examination of the handsomely printed book just issued by the Atlas Portland Cement Company,† which shows in its ninety-four pages nearly as many different types of domestic and semi-domestic buildings, including stables and outbuildings. Photographic illustrations of each building are shown, together with floor plans, and the extreme range of "expression," in the artists' sense, is surprising. There is practically no problem in house building, large or small, expensive or inexpensive, that cannot be fully met by the use of this plastic material. Even to those who are not intending to



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^{*}The Modern Home, A Book of British Domestic Architecture for Modern Incomes. A companion volume to "The British Home of To-Day." The text by W. H. Bidlake. M.A., Halsey Ricardo and John Cash; exited by Walter Shaw Sparrow: Hodder & Stoughton 27 Paternoster Row, London.

[†]Concrete Country Residences. Published by the Atlas Portland Commany, 30 Broad Street, New York. 10 in. x 12 in., 94 pages of illustrations. Price \$1.00.

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adopt new methods of construction, this volume has a distinct value of its own, for it is just the sort of book to put in the hands of the prospective house owner who says "where can I find some good designs for houses? I want to make up my mind what sort of house will best meet my needs." Every type of house is shown here, from the simplest to the most elaborate, and the owner who cannot find here what he thinks he wants, really doesn't know his own mind.

THE TRANSPLANTING OF LARGE TREES

OLD and large trees have been successfully transplanted for many years past in Germany, and not least in the immediate vicinity of the ever-growing and flourishing manufacturing center of Essen, on the Krupp estate "Hügel" (Hill), situated on a southerly slope of the valley of the river Ruhr. In this article we shall attempt to describe the transplanting methods used on the "Hügel" estate.

methods used on the "Hügel" estate.

Even at the time when the park was first laid out, hundreds of large trees were planted, a work which was accomplished in an exceedingly successful manner by the former chief gardener, Mr. Bete, since deceased. The operation of transplanting was especially difficult at that time, because each tree halve be transported from distant places (Kettwig, Mülheim on the Ruhr, Rellinghausen, Ueberruhr and Velbert). The transplanting trucks and other devices were constructed on the "Hügel" estate especially for this purpose, being gradually improved in accordance with the results of past experience. Some of these are still in use at the present time. The four-wheeled trucks principally used for transplanting trees, on which the latter are transported in an upright position, are all of different

The extensive changes made during the past ten years under the superintendence of the present chief gardener, Mr. Fr. Veerhoff, which have vastly improved the work on the "Hügel" estate, necessitate the transplanting of numerous large trees, all of which have taken root in a most satisfactory manner, without suffering in the least in respect to their appearance and development. Especially careful attention was paid to the transplanting of the more valuable and splendidly grown coniferous trees, among which there are a number of cedars, and most excellent results were obtained. The transplanting of large cedars had been attempted in the past on the estate, but all efforts proved to be vain, notwithstanding the loamy and cohesive character of the soil. The root clogs would crumble while the trees were being lifted or hoisted on the truck, the result being that further experiments had to be abandoned at that time.

While opening up a vista during the winter of 1904-1905, it became necessary to transplant several splendid trees of the *Cedrus Libani* variety, and the following method was adopted. After the large root clog had been cut out in circular shape and separated from the surrounding soil,



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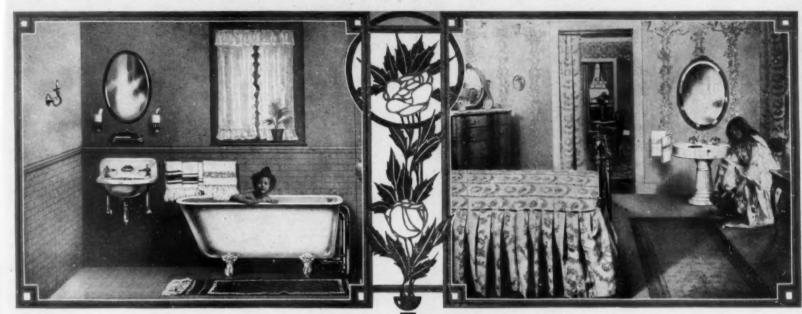
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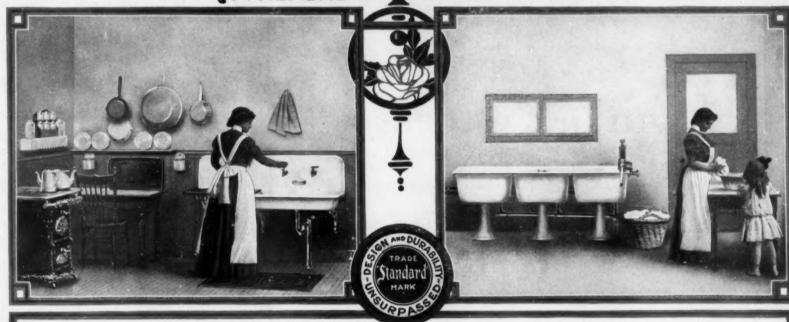
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strong oak boards or staves were placed in an upright position around the clog, and joined together by means of adjustable steel hoops and screws, so as to form a barrel-shaped receptacle. Once the root clog was enclosed in this manner, there was no further danger of its crumbling, and the remainder of the work could be proceeded with without fear of any disturbing difficulties. The results obtained were completely satisfactory. During the past summer the cedars continued to grow vigorously and produced strong, healthy shoots. There was, in fact, absolutely nothing in their appearance to indicate any harmful results due to the transplanting process to which they had been subjected. The success obtained in this case encouraged Mr. Veerhoff to undertake further transplanting operations on a larger scale in the course of last winter, when three cedars of still larger size, as well as several other large coniferæ, were transplanted.

The cedars measured from 421 to 46 feet in height, while their spread was about 261 feet. The diameter of the root clog was 81 feet in all

One of the trees successfully transplanted was a copper beech tree, Fagus silvatica purpurea, the trunk of which measured 31 feet above the ground, is 15 feet in diameter, while the root clog measured of feet in diameter. In this case, as well as in that of the other transplanted foliage trees, such as horse-chestnut trees, oaks, elms, etc., it was not necessary to enclose the root clog, the roots being sufficiently entangled to hold the soil.

A further method of transplanting, which, however, can only be used for short distances, deserves to be briefly mentioned. In extremely difficult cases, when, for instance, the trees or even the root clogs are too bulky or too heavy, transportation by means of rollers is resorted to. In using this method it is nearly always necessary to surround the root clog with strong boards and hoops, in the manner already described in this article. The hole around the tree must be widened in the direction in which the tree is to be rolled, and all obstructions on the ground must be removed, so as to leave a clear path to the spot where the tree is to be replanted. This path must first be beaten down, levelled and generally prepared for this mode of transportation, and boards for guiding the rollers must then be put in place. After the root clog has been carefully undermined and the supporting rails adjusted, a number of wooden rollers, varying according to the size of the clog, are inserted between the boards and the rails. The tree is then moved by a crew of laborers, or, in the case of an exceptionally heavy and bulky tree, by means of a tackle. During transportation the tree must be balanced with guy ropes. As the tree is being rolled forward, the rollers over which it passes are taken up in the rear and placed in position in front, and it will be found advisable to hold a number of rollers in reserve for this purpose. This mode of transportation was used with the most satisfactory results for transplanting two high Picea excelsa pyramidalis on the "Hügel" estate.

The work of transplanting a silver linden, Tilia tomentosa, in midsummer, was done several years ago and was entirely successful; a fact which certainly furnishes sufficient proof that large foliage trees may, if necessary, be transplanted even during the growing season. It is worthy of note that several experiments with the transplanting of trees during the summer season had already been made on that estate. Nine years ago, for instance, a linden tree was transplanted on the occasion of a visit of the German Empress and in her presence. The tree had first to be transported over a distance which it takes from one-half to three-quarter hours to cover, viz: from the "Hügel" estate to the Altenhof Colony, where it was to be replanted. This "Kaiserlinden" on the Altenhof is at present a splendidly developed tree.

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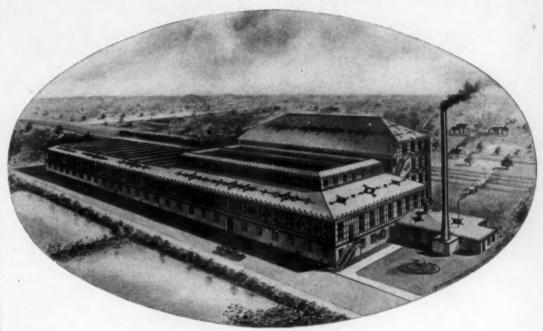
Park and Cemetery.

EARLY ILLUMINATING OILS

AS I listened to these various remarks, said Professor C. F. Chandler at a recent meeting of the Illuminating Engineering Society, my mind went back to a time when no one knew anything about electric lighting and gas was a new thing. Sperm oil sold for \$1.75 a gallon by the cargo, and \$2.25 at retail fifty or sixty years ago, and at that time the cost of artificial illuminants was one of the most serious items in domestic expenses. I remember in my early boyhood when they began to build the gas works at the foot of the street in New Bedford on which I lived. There were gas works in existence at that time, but they were confined to a few of the large cities. I spent much time in watching the operations as they dug the hole for the gas tank, built the benches, set the retorts and started the works; and when my father actually put pipes into the house and had burners put on, the light seemed most marvelous. In my boyhood we had nothing but oil lamps. I have in my museum in Columbia an old brass lamp with a little crooked handle on it, which my grandmother used. She would hold the little lamp between her eyes and the book she was reading to me, and that was artificial illumination in those days. Then there was an improvement. Some one conceived the idea of substituting camphene, refined spirits of turpentine, and that was introduced as a substitute for sperm oil. It was very inflammable and evolved a combustible vapor, and we had numbers of explosions from it but it gave such a brilliant light and was so cheap, that people burned it and took the chance of the explosion and the terrible accidents which occurred, for the sake of getting something that was within their means. I do not remember the price, but it did not cost more than one-third as much as sperm oil. The difficulty was that it could only be used with a chimney. The turpentine is so rich in carbon that it gives a smoky flame, and it vas necessary therefore to burn the camphene in a lamp with a chimney. But an ingenious chemist produced a satisfactory oil for portable lamps without chimneys by combining camphene, too high in carbon, with alcohol, poor in carbon, producing the co-called "burning fluid" which was used in high glass lamps, without chimneys, having two plain, unusually long wick tubes. These old "fluid" lamps are now being sought in all the old attics in New England and sold to the ladies, who have kerosene burners put on them and pretty shades and use them to decorate their tea tables. But I am afraid there must be a factory where they The New Fireproof Material for Use in the Building Trades

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make them, as there are so many of them being discovered and sold.

I went to Germany to study chemistry. When I entered a German family, as a boy, in Berlin, there was a glass lamp placed on the table that held a queer looking oil. It had a smell different from sperm oil, and I inquired of my host what it was and he said it was a "Photogen" lamp. I inquired of my professor what this new oil was, and he said it was made from boghead mineral, which came from Scotland, and that parties in Scotland had begun to manufacture it on a large scale. I was so much interested that I immediately sought for information, and secured one or two pamphlets which had been published on the subject of this coal oil, giving an account of how the oil was manufactured from the boghead mineral, which came from Torbano Hill, Scotland. When I came home, in 1856, and told my New Bedford friends, who had their whale- and sperm-oil refineries and candle works, about an oil made out of a mineral dug out of the ground, they shook their heads and said nothing could ever interfere with the prosperity of the sperm-oil industry. I was interested in the oil and wrote to the Scientific American and offered to write an article on the new oil which was burned in Germany, if they would promise to publish it; they wrote back that they did not think any such oil as that would ever interest the American public. In less than three years after that, there was a series of coal oil factories from Portland, Me., down to Wilmington, Del., manufacturing the so-called coal oil or kerosene. It was made out of the boghead mineral which came from Torbano Hill, Scotland; Albertite, which came from Nova Scotia; Grahamite, which came from Ritchie County, W. Va., and Breckinridge coal, which came from Breckinridge County, Ky. As soon as this coal oil made its appearance lamps were invented to burn it, and the price of the oil dropped down to 50 cents per gallon. The coal oil industry was firmly established and light became much cheaper.

Then a couple of Yankees from New Haven went to Northwestern Pennsylvania, where they saw oil on the surface of the ponds, and some of this oil was skimmed off the ponds and taken to New Haven to Prof. Silliman, who examined it and said it was nothing but crude kerosene oil. They asked him if it was useful, and he said that it certainly was if they could get enough of it. They went back to Oil Creek, in Pennsylvania, but did not dare to make any very definite bargains with the farmers. They prowled about and found places where there was scum on the water and made contracts with the farmers to gather the oil on a royalty. They gathered a few barrels of it and then selected a man, Col. Drake, and put him in charge and organized the first petroleum company in the world, the Pennsylvania Rock Oil Company. Col. G. L. Drake was made the superintendent, and went to Oil Creek to take charge of the collecting of the oil. He learned that in 1819 oil was accidentally obtained in boring two salt wells on the Muskingum River in Ohio, and that in 1829 a flowing well was accidentally obtained at Burkesville, Ky. He became possessed of the idea that he might obtain oil by boring for it, so he erected a derrick and started to bore an oil well. The old farmers came from miles around to watch the boring operation, with a feeling that Drake might with equal reason bore for whiskey. But



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