THE ART AND CRAFT OF GARDEN MAKING

THOMAS H MAWSON


July. 1900

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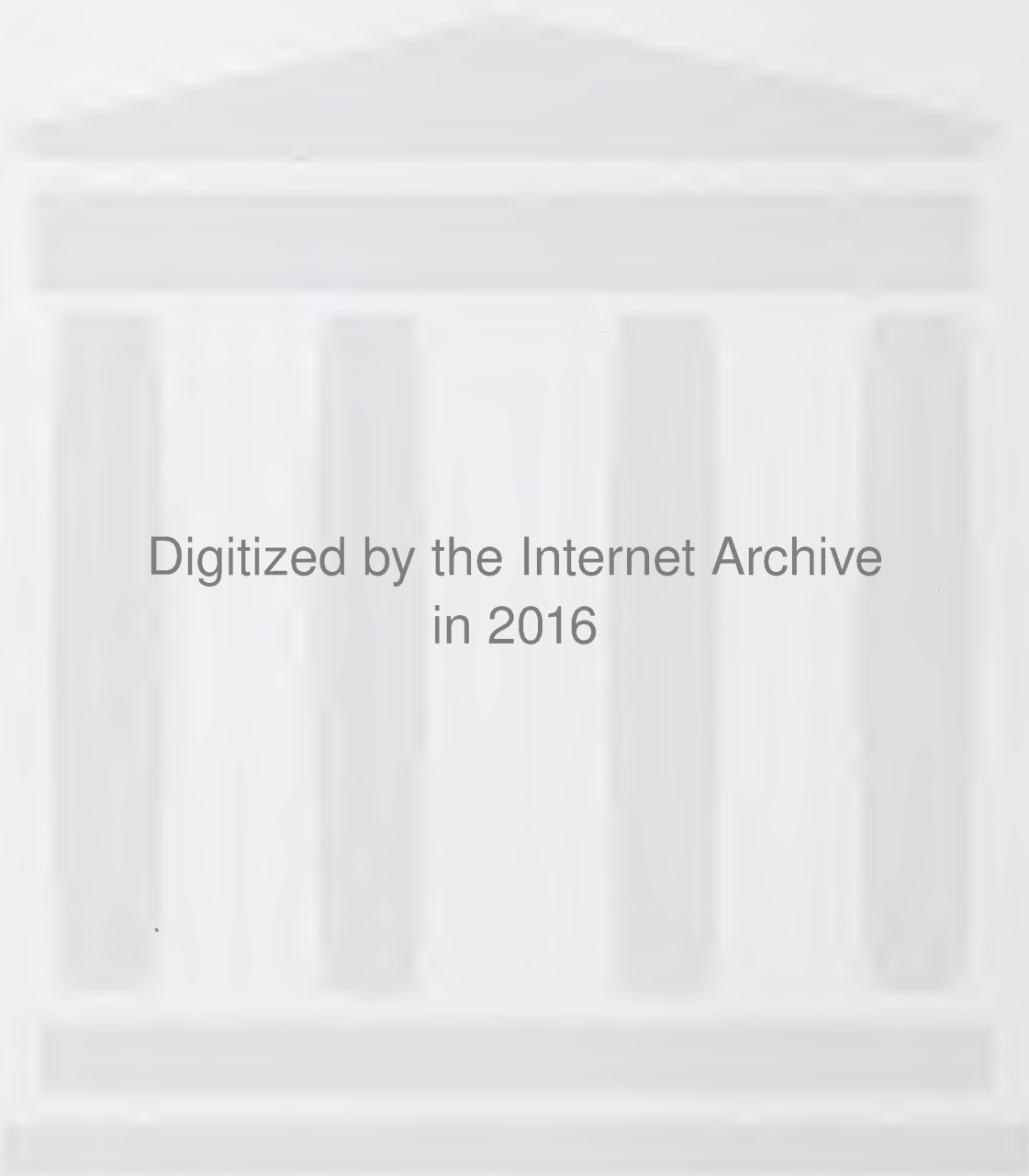


THE ART & CRAFT

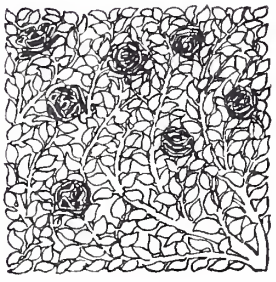
OF

GARDEN MAKING

BY

THOMAS H. MAWSON,

GARDEN ARCHITECT.



Illustrated with perspective views drawn by Mr. C. E. Mallows, and others, and also with numerous plans, sections and details of Gardens, and Garden Ornament, and further illustrated with chapter headings specially designed by Mr. D. Chamberlain.

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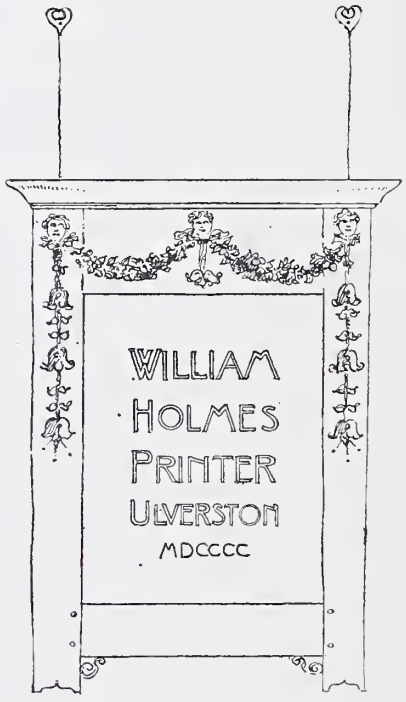
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TO COLONEL THOMAS MYLES SANDYS, M.P., OF GRAYTHWAITE HALL, NORTH LANCASHIRE, WHOSE EARLY ENCOURAGEMENT AND GENEROUS COMMANDS HAVE MADE ME HIS DEBTOR, THIS WORK IS RESPECTFULLY DEDICATED.

PREFACE.

GARDEN MAKING, it has been said, is the only art in which, owing to accidental development and unlooked-for groupings, the realisation surpasses in beauty the original conception. A caustic critic seizing upon this statement has referred to landscape gardening as an art which relies upon accident for its effects. Whilst not fully admitting the justice of this criticism, it must be allowed that the writings and practice of many men who have undertaken to lay out gardens, have given cause for it. The responsibility for this does not however, rest entirely with the landscape gardener, for no such desirable object as garden making has suffered so much from the inattention of those who have been most capable of guiding and advising. This is the more remarkable when we consider the immense interest which has been taken in horticulture during the last fifty years.

Perhaps the explanation is to be found in the fact, that garden making had gradually fallen from its former high standing as an art, and was not considered to be the business of anybody in particular, least of all of those whose work it really ought to have been. How much this has lost to garden art, and, therefore, to the country generally, it is impossible to say; but the garden designer desirous of doing something worthy of his aims, is made painfully aware how much his studies suffer for want of precedent. After he has done his best, his work lacks that harmoniousness which he naturally expects his subject to yield, and thus his education as a garden architect has to be very much a matter of experience, his best lessons being very often the outcome of his own failures.

Having, in the course of an extensive practice, had considerable opportunities for studying gardens, more especially garden design, in its relation to the house and its architectural character, I have realized the fact that one must be a compliment of the other. I can therefore, sympathise, on the one hand, with those architects who claim the right to design the setting or garden frame to the house they have designed, and, on the other hand, with those landscape gardeners who have felt, more especially in the later years of their practice, that to ensure a successful garden it is necessary that the designer has some say in the arrangement and disposal of the house on the site, and also in the selection of the site itself. In either case, however, the range of subjects which have to be mastered before this ideal can be reached, is so great, as to make many men shrink from undertaking it. By giving in a handy form some of the experience gained in the special department of garden design, I venture to hope that some of the difficulties, which now face architects who essay to design the gardens, will be considerably lessened. If I fail in this, I still hope to shew that garden designers are much more in sympathy with architectural ideals than recent writers would have it supposed.

The garden designer's work, however, appeals to a much larger section than is included in the foregoing. It is not only those who are building new houses or adding to old ones who have to consider their surroundings; owners of gardens are constantly requiring to re-model or re-adjust, especially where the original design has not been successful, whilst landed proprietors have always to be considering the changes which occur through the cutting or blowing down of timber on their estate, and to be making provision for the continuity of woodland effects. To such it is hoped the plans and sketches, with the accompanying descriptive matter, may be of use.

Throughout this work I have endeavoured to make it clear that whilst I consider a formal treatment the one most likely to give satisfactory results, I do not think the "Art and Craft of Garden-Making" is advanced by a slavish adherence to style or tradition. In my own practice, I am bound to confess, I have often executed work which could not be justified by those rules or canons of art which some would apply to garden designing, and yet to me the effect has been harmonious.

How best to arrange the little which I could say upon garden making was a difficult problem; but I hope that my efforts will not prove entirely unsatisfactory, and that the examples given may suggest some of the inherent possibilities of the subject. The purpose of this book, however, is not to supply details for general application—but rather to prove to those who wish to possess gardens that the subject is one which would repay individual care, and I would, further, point out, that whatever is stated, or shewn by illustration, can only be taken in a very general sense, because each site would necessitate special treatment. Repetition, where not impossible, would be almost unpardonable; and, moreover, if freshness is to be obtained, the details of each subject must be thought out, and so designed as to express the special object it is to fulfil.

Wherever illustrations are given relating to particular gardens, it must not be understood that these have been actually carried out. So many of my designs have been subject to "improvement," that very few have been realized in their entirety. In other instances designs which have been prepared with much care have been entirely rejected by the clients for whom they were prepared. In a work of this kind, however, it is only fair to my readers and myself that what is given should show what my own thoughts on the subject were. In this view my clients whose work is illustrated generously acquiesce.

In conclusion, I wish to acknowledge the hearty assistance which I have received from my late colleague, Mr. Dan Gibson, who has been associated with me in many of my garden schemes, and who is responsible for some of the architectural details illustrated herein. Also my obligations are due to Mr. C. E. Mallows for the perspective views, to Mr. D. Chamberlain who designed the cover and chapter headings, to Mr. A. R. Brown who has drawn many of the plans, to the whole of my office staff, who have prepared many of the detail drawings and otherwise given their best help, and to Joseph Brown, Esq., B.A., who has kindly read over my M.S. I hope these combined efforts may do something to shew that the study of garden design is one which will repay all the attention we can give it, and that we need not rely upon accidents for our effect, but may yet prove that there is both "Art and practical Craft in Garden Making."

THOMAS H. MAWSON.

The Corbels, Windermere,

March, 1900.

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CHAPTER II. THE CHOICE OF A SITE AND ITS TREATMENT. An actual site is selected, and all the natural features shewn by a detailed survey plan. The accommodation, requirements, and architectural character of a modern, middle-class English residence are discussed, and plans are given shewing character and extent of Gardens recommended.

CHAPTER III. FENCES AND GATES FOR GARDEN AND PARK. Suggestions are given for Fencing both large and small Gardens, and for boundaries to the Park. Garden Gates are also referred to and illustrated.

CHAPTER IV. ENTRANCE GATEWAYS, CARRIAGE COURTS AND DRIVES. These are all fully considered and illustrated by plans.

CHAPTER V. TERRACE AND FLOWER GARDENS. The design and construction of Terrace Walls is considered. Practical information is given on the aspect and positions for the successful growth of flowers. Gardens for the accommodation of special flowers, such as Rose Gardens, are also described and illustrated.

CHAPTER VI. LAWNS AND GARDEN WALKS. Practical hints are given for obtaining a perfect green sward. Walks for all purposes are referred to, and plans and illustrations shewn of paved and other Walks.

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CHAPTER VIII. CONSERVATORIES, GREENHOUSES, VINERIES, AND FRUIT HOUSES. Plans and suggestions are given for arranging Conservatories, ranges of Orchid, Plant, and Fruit Houses, as well as the most modest Greenhouses required by the amateur.

CHAPTER IX. THE TREATMENT OF WATER AS FOUNTAINS, LAKES, STREAMS, AND PONDS. This wide and interesting subject is illustrated by plans, perspective and photographic views of Fountains, formal Ponds, Lakes, Cascades and Streams.

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CHAPTER XI. THE FORMAL ARRANGEMENT OF TREES AND SHRUBS, AS AVENUES, HEDGES, &c. Illustrations are given of Avenues, the formal arrangement of Trees and Shrubs on Terraces, &c., and also the shaping of Hedges.

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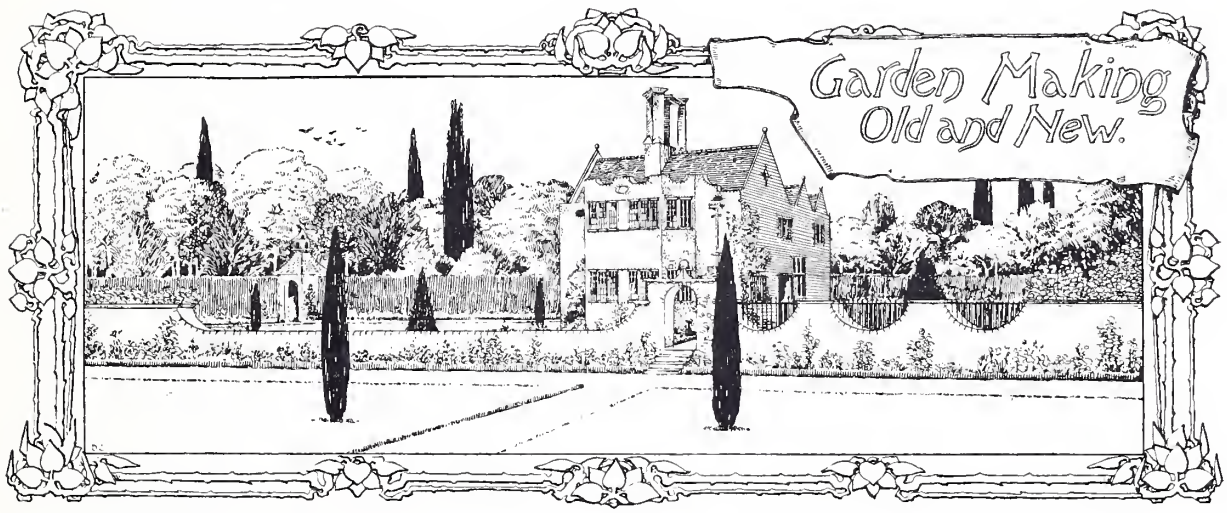
CHAPTER I.



In the preface some reference is made to the unsatisfactory state of the art of garden making as practised during the present century.

To get a clearer insight into the present position of the art, it is necessary to study the principles upon which the mediæval and renaissance gardeners designed, and contrast them with the practice of modern landscape gardeners. This is a subject which has already been most ably dealt with by two recent writers,† but it is one which, in a very condensed form, may with advantage be referred to again. The men of the old school were idealists and expressed their ideals in a straightforward common-sense manner, basing everything on a good well-balanced plan, and using ornament as far as possible to emphasize the plan; and thus a garden laid out in so many plots had a hedge or trellis round each, or a tree was planted at each corner to give point and expression to the shape. We have to thank these old garden designers for many stately avenues, grand parterres, quiet alleys, shady walks, sparkling fountains, quaint hedges, architectural ponds and broad unbroken lawns, which in many cases are wedded together in such a masterly way, as to impress the spectator with the grandeur and transparent honesty of the whole scheme. At the same time the varied though harmonious details and their adaption to the purposes they had to serve, marked these designers as men of the widest sympathies with garden craft.

Modern landscape gardeners may for want of a more correct expression be called realists, their theory being that the perfection of the art of garden making consisted in the imitation of Nature. The originator, or rather the most noted member of this school, was "Capability Brown," a man who was for a considerable time regarded as a genius. When we consider however, that he lived in a period in which almost every branch of

† "The Formal Garden in England," by Reginald Blomfield.
"Garden Craft," by the late J. D. Sedding.

art and literature was more or less debased, we need not wonder that men turned their backs on the good old examples of garden design, and ran after what they considered a new discovery, which was briefly, that every bit of pastoral scenery was of itself a garden fair, and therefore a model to be followed. Unfortunately the adoption of this idea resulted in the demolition of many a fine old garden. Brown and his admirers thought the place possessed greater capabilities than the original designer had realized; down therefore came the terrace walls, the mattock at the same time being laid to the root of the yew hedges. Ignorant indeed and blind must these innovators have been, not to have seen that the old garden designers were true worshippers of Nature, bringing to her shrine a cultured reverence which they themselves did not possess. Yet so it was; thus we find that for the future imitation took the place of exalted idealization, the crudest forms in Nature being placed on a higher pedestal than the finest forms purified by man's imagination. That some corrective to the vagaries into which the old school had fallen was required is indeed true, but such a radical change as that brought about by the landscape gardeners of the latter part of the last and the beginning of this century is to be deplored. The abilities of these men were measured by the amount of deception they were able to perpetrate, for their one claim to fame consisted in imitation and not in invention. With such ideas, it is not surprising that castellated ruins and other absurd excrescences came to be considered as necessary adjuncts to garden scenery.

Here and there it is refreshing to find that men, still clinging to the old ideas of art, dared to risk the adverse criticism of their neighbours by planting avenues which, as it happens, have never been discovered by the garden improvers. Had they found them they would in all probability have suggested their being broken up, the idea of a straight line being most repugnant to the profession; and yet, probably one of the finest things true estate improvers have been able to do, has been to rear a noble, stately avenue.

From the foregoing it will be seen how completely the two schools of garden makers were opposed to one another, the first relying upon design for power of expression, and the latter upon their skill in imitating nature. Had Brown and his followers been content to imitate nature, they would simply have perpetrated so many absurd and expensive frauds, but this imitation did not meet the whole scope of their misguided practise. Walks and drives, and many other things were required which could not be made to imitate nature. So far as the roads were concerned, Brown built up the theory that as nature abhorred a straight line, it was necessary to make roads curl about. Serpentine lines were said to be the lines of nature, and, therefore, beyond question the only proper lines. Lawns also which were flat or only gently undulating, had to be made to imitate Nature in "her best moods"; and so in the laying out of gardens undulation became a stock accomplishment. Unfortunately Brown has still many followers, and so long as the public are willing to pay for their services, there is certain to be a plentiful supply.

The modern garden, made up of serpentine walks and drives leading to nowhere, lakes in all sorts of apparently unnatural and impossible situations, cast iron fountains and even grandfather's clocks of the same material, unlovely girder bridges, little mountains and miniature alps, an assortment of rockery stones, arranged like so many gravestones,

weak and sickly conifers sadly proclaiming their alienship, is all the outcome of exactly the same set of ideas, the whole being a subject for ridicule and an exhibition of misdirected energy.

After Brown came Repton, who, whilst professing to be a follower of Brown, was unquestionally far ahead of his master in intelligence and power to grasp the importance of design. To his credit it must be said that he refused in some instances to destroy old gardens, and in others that he re-formed, in a more sensible way, many works which had been carried out by his predecessor. Repton also learnt that some sort of formality was consistent with, and even necessary to, any arrangement near architectural features; for, whereas the old garden designers favoured an entirely formal scheme, and the Brownites an entirely naturalistic garden, Repton recommended formality near the house, merging into the natural by degrees, so as to attach the house by imperceptible gradations to the general landscape. He also took a further step towards idealism by making, for each subject treated, a number of sketches, showing how his landscape would appear when the trees had attained a certain growth, so that whilst the results of his method was not demonstrable to the same extent as a perfectly geometrical garden, which could be shewn by the ordinary rules of perspective, there was nevertheless a certain degree of probability in his proposals. In his "fragments," Repton laid down a set of principles, the outcome of his own practice, which shew the reasonable position he took in respect to garden design and estate improvement.

No. 1.—"There is no error more prevalent in Modern Gardening, or more frequently carried to excess, than taking away hedges to unite many small fields into one extensive and naked lawn before plantations are made to give it the appearance of a park; and where ground is sub-divided by sunk fences, imaginary freedom is dearly purchased at the expense of Actual Confinement."

No. 2.—"The baldness and nakedness round the house is part of the same mistaken system of concealing fences to gain extent. A palace, or even an elegant villa, in a grass field appears to me incongruous; *yet, I have seldom had sufficient influence to correct this common error.*"

No. 3.—"An approach which does not evidently lead to the house, or which does not take the shortest course, cannot be right. (This rule must be taken with certain limitations.) The shortest road across a lawn to a house will seldom be found graceful, and often vulgar. A road bordered by trees in the form of an avenue may be straight without being vulgar; and grandeur, not grace or elegance, is the expression expected to be produced."

No. 4.—"A poor man's cottage, divided into what is called a pair of lodges, is a mistaken expedient to mark importance in the entrance to a park."

No. 5.—"The entrance gate should not be visible from the Mansion, unless it opens into a Court Yard."

No. 6.—"The plantation surrounding a place called a Belt I have never advised; nor have I ever willingly marked a drive, or walk, completely round the verge of a park, except in small villas, where a dry path round a person's own field is always more interesting than any other walk."

No. 7.—"Small plantations of trees, surrounded by a fence, are the best expedients to form groups, because trees planted singly seldom grow well. Neglect of thinning and removing the fence has produced that ugly deformity called a clump."

No. 8.—"Water on an eminence or on the side of a hill is among the most common errors of Mr. Brown's followers. In numerous instances I have been allowed to remove such pieces of water from the hills to the valleys, but in many my advice has not prevailed."

No. 9.—"Deception may be allowable in imitating the Works of Nature. Thus, artificial rivers, lakes, and rock scenery can only be great by deception, and the mind acquiesces in the fraud after it is detected, but in the Works of Art every trick ought to be avoided. Sham churches, sham ruins, sham bridges, and everything which appears what it is not, disgusts when the trick is discovered."

No. 10.—"In buildings of every kind the character should be strictly observed. No incongruous mixture can be justified. To add Grecian to Gothic, or Gothic to Grecian, is equally absurd; and a sharp-pointed arch to a garden gate or a dairy window, however frequently it occurs, is not less offensive than Grecian Architecture in which the standard rules of relative proportions are neglected or violated.

"The perfection of Landscape Gardening consists in the fullest attention to these principles—Utility, Proportion, and Unity; or harmony of parts to the whole."*

The particular style adopted by Repton is now very generally referred to as the gardenesque,† which is supposed to be a combination of formal and natural, or a compromise. In this he has had many followers, and what is perhaps somewhat remarkable, these have not been confined to landscape gardeners, but have included many eminent architects, amongst whom may be especially mentioned the late Sir Charles Barry, who in his practice did something to restore to popular favour the terrace garden. This school was well represented by the late Robert Marnock, Edward Milner, and Edward Kemp, the latter being the author of a most excellent book on garden design, entitled "How to Lay Out a Garden," probably the best and most thoughtful work ever written on the subject: through it can be grasped, more readily than by any other means, the principles and practice of the leading garden designers of 40 years ago.‡ We realise at once that in the arrangement of the more utilitarian part of their schemes, such as drives, kitchen gardens, &c., they were masterly planners; and that in other departments their designs were, to say the least of it, as meritorious as those of the houses which their work had to surround. Another point which it is pleasant to realise is, that their work was free from those vulgarities which make so utterly bad the work of the followers of Brown. Another characteristic of their work was the formal treatment of the ground immediately round the house, shewing a return to some of the methods adopted by the old garden designers. The probability is that during the time which had elapsed since the days of Brown, the more intelligent of the garden designers had recognised some of the mistaken principles upon which he worked, and had come to regard in a more favourable light the formality of the renaissance garden designers. Such were the positions taken up by the three schools of garden designers.

* Repton, "Landscape Gardening," p.p. 127-9.

† It will be noticed that two terms—viz., "gardenesque" and "naturalesque"—occur in the text, neither of which is correctly etymological; but having the precedent of more than one garden writer, and finding the words appropriate and expressive, they have been used in instances of which the following might be cited as an example. Suppose it necessary to describe the lake at Blenheim, which is, perhaps, the most successful work ever executed by Brown. It is certainly not correct to describe it as natural, in spite of the natural appearance, which is helped by the fringe of fine timber overhanging the water, or the bold undulating sweep of park lawn—for it is artificial. And as a scene is picturesque as it resembles or contains the elements of a picture, so also may it be permissible to describe scenes as "gardenesque" or "naturalesque," as they resemble gardens or natural scenes.

‡ "How to Lay Out a Garden," by Edward Kemp: 1856.

GARDEN MAKING—OLD AND NEW.

The revival of interest in, and study of architecture and the allied crafts which has taken place during the last twenty or thirty years,—a revival which although not always wisely directed, is increasing in volume and strength,—could not be without its effect on garden design, and one of the advantages, has been a deeper enquiry into the principles of the three schools of garden design, each of which has been championed with a force and a scholarliness which do credit to their respective exponents. It is only necessary to state that the outcome of these discussions has been a greater appreciation of the English garden. There is, however, no fear of a return to the dull monotony of the chess-board garden, or the extravagant topiary work which under Dutch influence made so many of our old English gardens ridiculous. What we are returning to is the truthful simplicity of the older work,—a garden which will be all the more charming and lovable, by having its borders filled, and shrubberies and plantations diversified with, the many beautiful flowers shrubs and trees, which have found their home amongst us.

The old garden idealists, if judged by results, worked on the most solid basis, and their methods are worthy of our earnest study and consideration; but on the other hand, it must also be allowed that naturalism has, under certain conditions, its legitimate use and place in the creation of garden and park effects; and that a compromise between these two opposites or a combination of the two is at times the only method by which we can obtain anything like an effective whole.

To avoid any misunderstanding of the term, some further explanation of what is meant by idealism in the garden and park may be advisable. Briefly, it is man's conception of beauty expressed by the aid of stone, wood, land, shrub, greensward and gravel walk—emphasized and enhanced by the flowers. It is the happy union of things which are allowable, because they are necessary, useful, or agreeable in themselves, arranged so as to form a pleasing whole. J. D. Sedding says, "A garden is man's report of earth at her best." But notwithstanding all that the foregoing implies, it does not include the whole truth nor the whole art, for to be successful a garden must respond to and satisfy man's longings for the beautiful. An idealist's garden must, therefore be the outcome, and embody the purpose of his own conception and forethought, and is just as much an invention as a house or other architectural structure; and the fact that in carrying out his invention he takes Nature as his handmaid, does not rob him of the credit of skill and discernment: neither can it be the proper function of art or craft to make it appear otherwise, nor to endeavour to hide the resources which have produced it. A park or garden is therefore, an invention in a different sense to that of a merely utilitarian erection, being in fact dependent to a large extent upon beauty for utility. In speaking of idealism, it must not be forgotten that our individual ideals may be grotesque and totally unfit for reproduction; also in approaching the subject of park and garden designing we should remember that the requirements of to-day are not necessarily the same as those which had to be incorporated in the old gardens, and that we have now a wealth of material entirely unknown to the old garden designers. The conditions under which we live are continually changing, and this change must necessarily influence garden design.

To obtain the excellence of the old work it becomes absolutely necessary that no details should be considered too small or insignificant for arrangement and design.

Everything within the scope of the garden scheme, whether building, arrangement of trees, shrubs, expanse of water, grass lawns, or whatever it be, should be designed or planned with due consideration to its use and fitness, proportion and balance. To attain this completeness and unity of the whole, implies, that to a knowledge of architecture,—the chief essential,—must be added the study of the technique of good gardening and of arboriculture, and that the designer must have a love for, and knowledge of, the many beautiful forms of plant life ready at hand for the making of his garden of delight.

The designer of the ideal garden, having no particular scruples about the lines of nature to interfere with his plans, would design in a straightforward, coherent way, considering a straight walk (if more convenient) to be the most capable of artistic treatment, and also assuming that natural objects within the garden must be drilled into position, and if necessary have their wildness toned. Throughout his designs he would for the most part depend upon combination of line; for instance, the various Flower Gardens or tennis lawns, would be planned with straight lines, and these would have their divisions (whether hedge or other arrangement) so treated as to express at once their use. To get shade, instead of creating it entirely by means of loose masses or clumps of trees, he would obtain it by means of alleys, covered bowers, pergolas or avenues, each of which would shew at once the designer's intention. Thus whilst enjoying the shade, the owner of the garden would cherish a kindly thought for the man who had considered his need, and, in disposing of every feature, had tried to show in an open and straightforward way so complete a grasp of his requirements.

Although preferring invention, the garden architect would, whilst endeavouring to give a purely individual rendering to his own work, have a care for the natural features having sufficient interest to warrant their preservation, or which only required a little assistance to bring them into harmony with the general composition. The stronger a man's love of art is, the more will he appreciate Nature. It is only when he tries to mimic her that artists quarrel with him. Nature may and should inspire us, but it was never meant that we should copy her weakness or lose the teaching of her strength.

This brings us to one of the most difficult problems with which the park and garden designer has to deal, viz.: how much of Nature it is right to admit within the park or garden, and how far, if at all, it is right to assist it. Many go so far as to say, that whilst both have their proper place, any connection between the two must be fatal to the scheme. Such is not the writer's view of the matter; rather would he say that wild Nature, especially near a town, should be jealously guarded, and that a copse of gorse, with its bright yellow blossoms, or a tumbling, musical stream, should be preserved and treated as a happy circumstance. An interesting case in point, and one of somewhat frequent occurrence, is to be found in the combination of the natural rock base to terrace walls, for nothing can be more effective than a combination of the two when well handled, that is, when natural rock crops out of the ground, to build upon it. As regards the assisting or touching up of Nature, it seems to be a question of the spirit in which it is done, rather than the principle which would lead to criticism.

SCOTCH FIRS ON BRATHAY CRAG. WINDERMERE. WINTER.

PHOTO BY WALMSLEY BROS AMBLESIDE

SCOTCH FIRS ON BRATHAY CRAG. WINDERMERE. SUMMER.

PHOTO BY GOULD, AMBLESIDE.

Illustration No. 1.

Illustration No. 1, which shows the Brathay Crags on Lake Windermere, is an instance, on a large scale, of assisted Nature, the fine Scotch Firs which give such a picturesque effect having been planted by the hand of man. Presumably these crags were at one time clothed with furze and ordinary rock herbage peculiar to the district. Of course, this is not in a garden, but a park designer's work consists very largely in arranging the picture "so far as they can be controlled by human agency" as seen from the more regular and formal terrace. Few people would be disposed to quarrel with this charming piece of Lakeland scenery, on account of its having been partly made. Perhaps this is to be explained on the hypothesis, as Repton puts it, that the mind acquiesces in certain frauds, after they have been found out. As instances in which the principle of touching up was deemed advisable, reference may be made to the stream running through the gardens at Ballimore (see p. 191), and also to a stream on the property of the Marquis of Bute, Mount Stuart, Isle of Bute, which the writer is now attempting to make a little more interesting, and fuller particulars of which will be found on page 81.

Whatever be the landscape gardener's purpose in view, or style of design to be adopted, there are so many considerations both of a local, and practical nature to influence him, that he finds his designs must be inspired on the spot, and must recognize, not only the special and peculiar requirements of the proprietor, but also the natural contour of the land, and the characteristics of the landscape, more especially of that portion which comes within the proposed garden boundary. For instance—there may be a beautiful stream or pond, perhaps a group of Silver Birches, or Scotch Firs, rocky projections, and scores of other details, which could not be destroyed, but must be made to form an integral part, in some way or other, of the garden design. The soil might be of a stiff cold clayey nature, or there might simply be the thinnest crust of soil lying on sand, or again where the soil was fairly rich it might lie upon limestone, which would exclude Rhododendrons or American plants. The site might also be exposed to strong sea breezes, or worst of all the atmosphere might be smoky and laden with chemicals rendering plant life very uncertain, and unsatisfactory. All such problems must be faced and disposed of before the garden design can be prepared.

Having recognised the proprietor's requirements and the necessities of the site, taste will dictate how best to wed the whole to the house and appurtenances and to secure a garden "not apart," but a part of the whole; and a little thought for the gardener will ensure such planning as will enable him to give satisfaction for the amount of work he puts into his garden.

CHAPTER II.

Individual tastes differ so widely that it is quite exceptional for two persons to have the same ideas about the value of a site, the conditions which would suit one being practically objectionable to the other. One person prefers to look on his neighbour's house and feels more sociable thereby ; whilst another likes to feel so entirely isolated that even his own workpeople's cottages must be placed out of sight and sound. Most people are, however, agreed upon the advantages of pure air and rural pleasures, which are now, partly owing to the extension of our railways, open to a much larger number of merchants and professional men than was formerly the case.

Although as has already been stated, two persons would seldom choose the same site, there are certain conditions which would generally influence both when selecting one. To give point to these considerations, we may take the case say of a wealthy merchant who wants a country residence, with sufficient land upon which to indulge his bent for gardening and arboriculture, model farming, or any other of those rural pursuits which can be followed within the limits of a few acres of land. Such a client would, in the first place, require that the district be supplied by good railway accommodation, in order that he may travel to and from his business with as little inconvenience as possible. In the second place, the site should be conveniently near to the railway station, and be reached by good main roads. Thirdly, in contrast to busy town life, he wishes for the quietness and peace of rural surroundings. Fourthly, working perhaps in a smoky and chemical-laden atmosphere, which is often made doubly bad by the fog which so frequently envelopes our large towns, especially during the winter months, he naturally wishes to get above the mists, and to obtain the purest atmosphere possible. In regard to the fog, however, mere altitude does not necessarily mean immunity. Mists will always hang in a valley, even though it be

a thousand feet above sea level. This observation may very easily be verified by visiting a hilly district in foggy weather, and climbing the highest hill, when it will be noticed that the mist lies like an inland sea, the hills appearing above like so many islands. The site most free from the visitation of fog is one on a Southern slope, which does not form a part of a natural basin. In fixing the exact position of a residence, reference might be made to the farmer who has tilled the ground, and who would generally be able to point out the portion of land on which the snow lies the shortest time, and also that which is most wind-swept. Generally speaking, it will be found that the sunniest slope is that which lies a few points East of South, and the coldest that which lies to the North-West. The first, if fairly well elevated, would at all seasons of the year be much warmer than land lying at the foot of the slope, and, incredible though it may seem, many varieties of plants, trees, and shrubs would grow in an elevated position which would not grow on lower ground.

Although our would-be purchaser preferred an elevated site, he would at the same time require shelter for both the house and grounds, but more particularly for the gardens, which, to be enjoyable, must be well sheltered from the East and North. Where the site is large, it is comparatively easy to create artificial shelter by the arrangement of plantations, but on smaller plots it often happens that the position for the residence has to be fixed on lower ground before an efficient wind screen can be obtained.

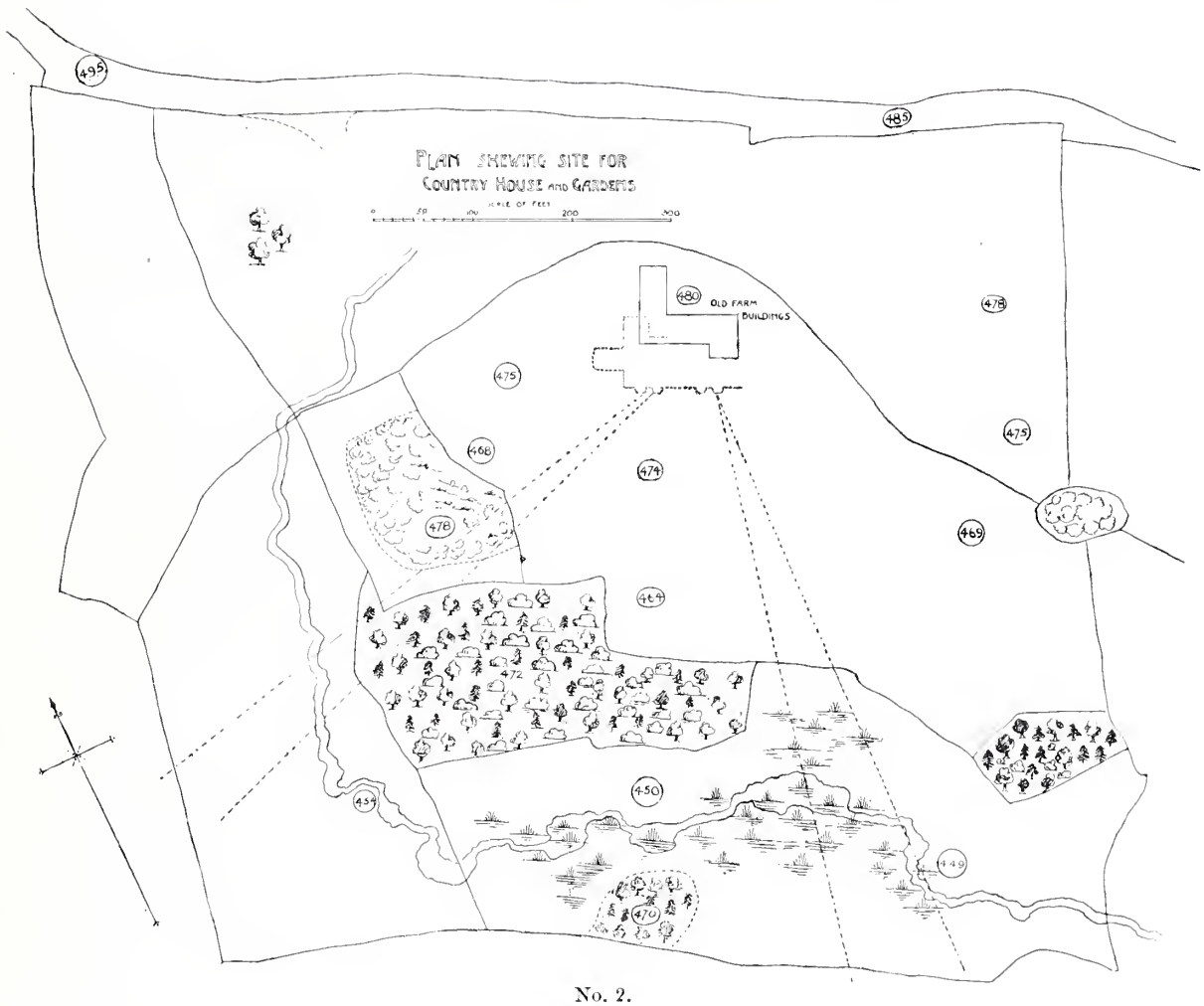
The next point to be considered is the nature of the sub-soil, and here it should be noted that stiff clay land should be avoided. A sub-soil of sand, gravel, loose marl, pinnell or dry samel, can always be drained if necessary, whereas a stiff clay can seldom be made quite satisfactory in this respect ; and here it may be stated that it is important to have a dry sub-soil for a garden as well as for the house. There is not much pleasure in walking along paths which are perennially greasy, or in working soil which is always either sticky or baked like a brick.

When the site extends to several acres, or even less, it is most desirable to have a few old trees and a hedgerow or two upon it. A house built in the centre of a treeless field, more especially on an elevated position, has a very unsociable and modern look about it ; whereas half-a-dozen fine old trees do in some way seem to link the present with the past, and give an air of antiquity and shelter to the site, if not to the house itself. Variety of contour and view is also an immense advantage, often admitting of and even suggesting picturesque treatment, which would give a decided character to the garden and home landscape, and on that account make it doubly enjoyable.

To give point to the foregoing observations, a plan is given on page 11 in extent and shape specially suitable for a moderate-sized country residence, and which would fulfil so many of the favourable conditions as can generally be obtained in a site of this size. The plan, as illustrated, is taken from the ordnance map, but to conceal its identity it was considered wise to alter it in one or two particulars, the alterations, however, do not affect its use for the purposes of this chapter. This site, which is nearly nine acres in extent, is such an one as might be found in almost any hilly district, but more especially in Westmoreland, the county in which it is situated. In addition to the interest the site

possesses for residential purposes, it is particularly interesting for the purposes of this chapter, since it is one which could not be properly treated in any stereotyped style, but requires for its fullest development a most careful study of the various natural features, more especially the contour of the land, the character and extent of existing plantations, as well as the extent and composition of views which are to be obtained from the higher ground.

By referring to the plan it will be seen that the nine acres are made up of six small fields, two plantations to the S.W., and two small spinnies or coppices to the S.E., all



No. 2.

being fenced in with very irregular stone built walls characteristic of the locality. These outlying plantations suggest they were small patches which form the remains of a general clearing—the whole of the nine acres, excepting a portion of the lower field, having at one time been covered with timber or coppice wood. The general fall of the land is to the South, and is reached by way of a good highway shewn at the top of the plan, the land adjoining the other boundaries being grazing land, except one or two small patches used for corn and potatoes, and coppice-covered hills. The ground rises considerably from the fence

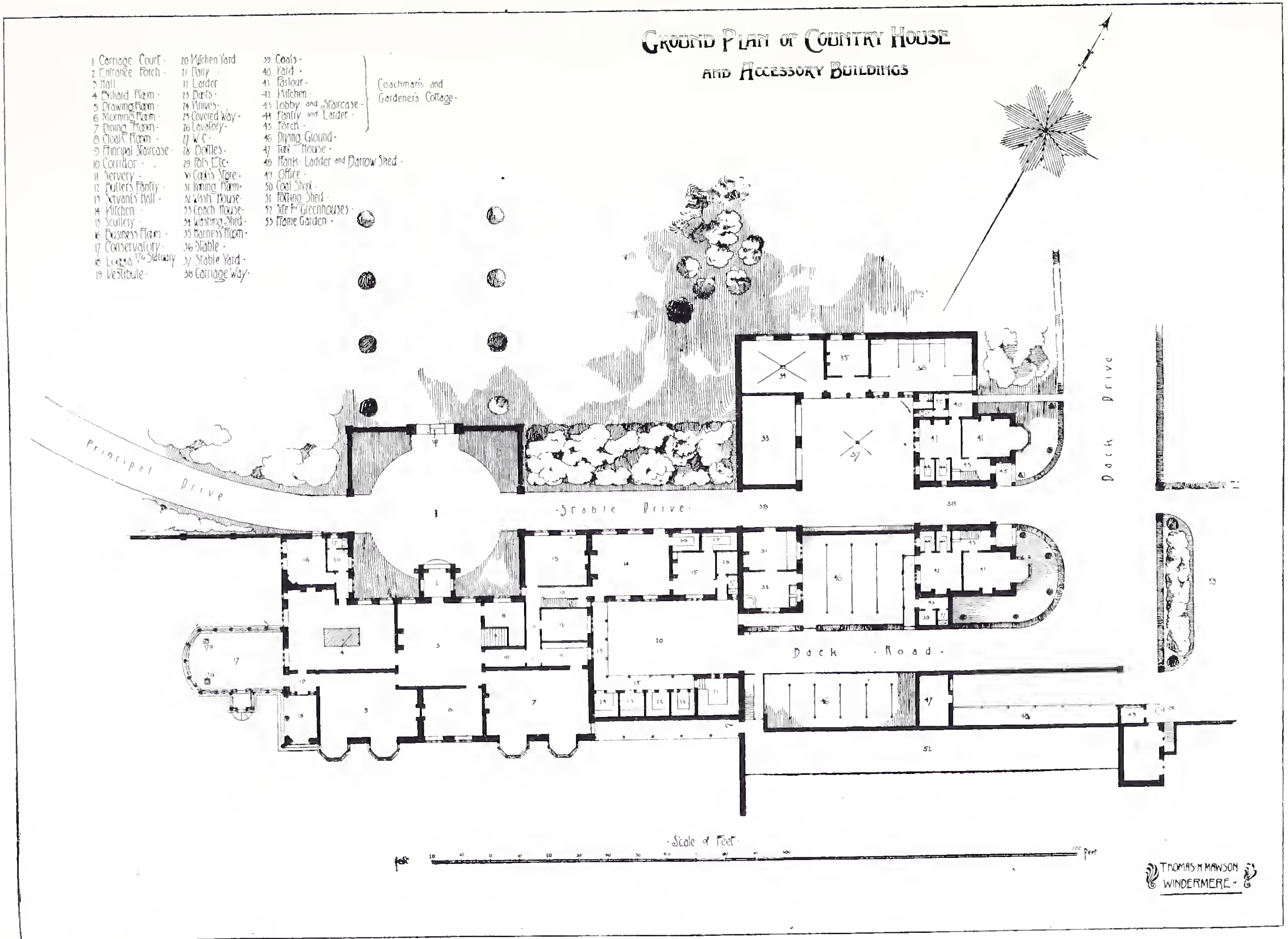
at the opposite side of the road, and is covered with fine timber, mostly Scotch Fir and Oak. A farm steading, with numerous outbuildings, had at one time occupied a level site indicated on the plan, and this was selected as the best position for the new residence.

A very pretty tumbling stream enters the ground near the N.W. corner, and passes to the South and through the lower field, and out at the S.E. corner. There are indications that at one time a portion of this lower field has been under water, which was drained off by lowering the bed of the stream. Some idea of the levels of the ground will be obtained by a careful study of the section through the centre of the site (illustration No. 4) shewing original and completed levels, and by the spot levels shewn thus on plan (495), which is the level on the road at the N.W. corner of the property, and means four hundred and ninety-five feet above ordnance datum (485), giving a fall of ten feet below this, and (480) a fall of fifteen feet.

There are two exceptionally fine views to be obtained from the site of the house, the directions of which are indicated by radiating lines. These views are delightfully framed by the existing timber on the ground. The soil over the greater part of the land is very thin, the sub-soil being shaley stone, which renders the ground and site very dry, though in the lower field there is a considerable deposit of peat and black loam. On the poorer and thinner parts of the site the timber is growing and in most flourishing condition.

Referring again to the sections and spot levels, it will be noticed that the land to the right of the plan is much more regular in contour than the remainder, the length from the road to the small scrub plantation having a fall of only one in forty, after which it dips somewhat suddenly towards the lower field. Such are the principal features of the site chosen for the explanation of the connection which should exist between the house and grounds.

Having decided upon a site, which, although a charming one, would be much easier to spoil than most, we have now to consider the plan of the house and accessory buildings, and herein lies a great difficulty with which the garden designer has to contend ; for directly he begins to inquire into the planning and arrangement of the house, the architect looks upon him with suspicion, or his client thinks he is endeavouring to enlarge the scope of his work beyond the area in respect to which he consulted him. This shows that both architect and client look upon the art of garden-making as something entirely apart from architecture. If however, the garden is to be a complement to the house, its arrangement must, in a great measure, be ruled by the plan of the house, and its details conceived in the same spirit. A careful study of what precedes will suggest to the reader the necessity of grasping the plan as a whole before beginning to erect a residence. It is to be hoped that he also realizes that to produce a successful scheme, art and the several crafts must be brought into line, and be made to assist each other in the realization of a design which shall shew unity of feeling, and good fellowship. A recent writer says "a client may think it the proper thing to let the architect out at the front whilst admitting the decorator at the side door, but if he is a wise man he will see that the two meet in the hall and come to some understanding." This is even more necessary in respect to the architect and designer of the gardens. There are so many points upon which there is an


Ground Plan of Country House
and Accessory Buildings
1 Carriage Court
2 Entrance Porch
3 Hall
4 Billiard Room
5 Drawing Room
6 Morning Room
7 Dining Room
8 Cloak Room
9 Principal Staircase
10 Corridor
11 Servery
12 Butler's Pantry
13 Servants' Hall
14 Kitchen
15 Scullery
16 Business Room
17 Conservatory
18 Loggia 17a Statuary
19 Vestibule
20 Kitchen Yard
21 Dairy
22 Larder
23 Boots
24 Knives
25 Covered Way
26 Lavatory
27 W.C.
28 Bottles
29 Pots Etc.
30 Cook's Store
31 Ironing Room
32 Wash House
33 Coach House
34 Washing Shed
35 Harness Room
36 Stable
37 Stable Yard
38 Carriage Way
39 Coals
40 Yard
41 Parlour
42 Kitchen
43 Lobby and Staircase
44 Pantry and Larder
45 Porch
Coachman's and Gardener's Cottage
46 Drying Ground
47 Tool House
48 Plank, Ladder and Barrow Shed
49 Office
50 Coal Shed
51 Potting Shed
52 Site for Greenhouses
53 Frame Garden
Principal Drive
Stable Drive
Back Drive
Back Road
Scale of Feet
Thomas H Mawson
Windermere

No. 3.

apparent overlapping of interests, and in respect to which the architect and garden designer must work together, if they are to be really successful. It is surprising how one can help the other if they be willing to act in concert.

Looking at the house from the garden designers point of view, there are several objects the attainment of which is very desirable. There is first the grouping of the several departments for convenience of working, and for the perfect use and enjoyment of the various parts of the several blocks, as—entertaining rooms, kitchen offices, laundry and outbuildings, stables and cow byres, all of which have relation to each other, and to the gardens and pleasure grounds.

In recent years there has been a great tendency to detach the stables and laundry and as many other buildings as possible from the main block, the stables being in one place, the laundry in another, the kitchen garden in another, and the workmen's cottages away from the place altogether, the result being that the several buildings, which, combined, have cost a large sum to erect, produce but little effect. They give no indication of their cost, whilst the ground is cut up by numerous connecting roads which are expensive to make. The work-people are continually tramping backwards and forwards, thus destroying the privacy of the place, and at the same time increasing the cost of maintenance. There is no doubt that sanitary considerations have had much to do with this detachment of buildings, but with the present-day advance in sanitary science, objections of this sort can only be of a sentimental nature. In keeping with the foregoing, and having special regard to the nature of the site, I now proceed to give on page 13 a plan of a moderate sized residence and necessary buildings adjoining. This is not given as a model of what a house should be, but simply for the purpose of illustrating the points already referred to.

In drawing up the foregoing plan I have supposed the architect and myself to have exchanged notes, with the result that my work is immensely simplified, and my client's interests advanced. It will now be easy to fit in the gardens; the extent and location of the principal features being decided by the position of the several departments of the house. Here we may with advantage read what two men who are eminently qualified to speak on the art of garden design have to say on the subject.

"The gardener's first duty in laying out the grounds is to study the site, and not only that part of it upon which the house immediately stands, but the whole site, its aspect, character, soil, contour, sectional lines, trees, &c. Common Sense, Economy, Nature, Art, all alike dictate this. There is an individual character to every plot of land as to every human face in a crowd, and that man is not wise who to suit preferences for any given style of garden or, with a view of copying a design from another place, will ignore the characteristics of the site at his disposal." "To leave a house exposed upon the landscape unscreened and unterraced is not to treat the site or house fairly.'—*J. D. Sedding.*

"Large or small, the garden should look orderly and rich. It should be well fenced from the outer world. It should by no means imitate the wilfulness or the wildness of nature, but should look like a thing never seen except near the house."—*William Morris.*

Having arranged to our satisfaction the plan of the house and the position of the accessory buildings, we can now devote ourselves to the gardens; but before going into details, there are a few general considerations which it may be well to take note of. In the first place a garden should always impress us as being a place for flowers rather than shrubs. Secondly, the flowers should have a cared-for appearance, for a slovenly ill-kept garden is as bad, if not worse, than none at all. The arrangement should suggest, as one writer very properly expresses it, a series of outdoor apartments rather than a panorama which can be grasped in one view. Thirdly, that, whilst a garden is to proclaim itself as a thing that has been made, it is made for the accommodation and enjoyment of nature's bountiful supplies. Further, that a garden has to serve the double purpose of foreground to the landscape when seen from the house, and as a base or setting to the house when viewed from the surrounding country; in short, that it is the link which connects the house and landscape.

Before the arrangement and extent of the garden are decided upon, it may be supposed that my client has informed me that he is not prepared to spend more than £300 per annum on its maintenance, garden expenses (excepting gardener's cottages) included. This sum may be apportioned as follows:—

	Per annum—£	s.	d.
Head gardener 30/- per week with cottage, light, and firing	72	16	0
Second ,, 22/- ,, ,, ,, ...	54	12	0
Garden labourer 20/- ,, ...	52	0	0
Strong youth 10/- ,, ...	26	0	0
Occasional Help with Mowing	12	0	0
Seedsman's account for seeds, bulbs, and sundries	20	0	0
Nurseryman's account for fruit trees, shrubs for making up	18	0	0
Coke and coal for heating, peat, loam, and silver sand etc.	29	0	0
Sundry expenses...	12	10	0
	£296	18	0

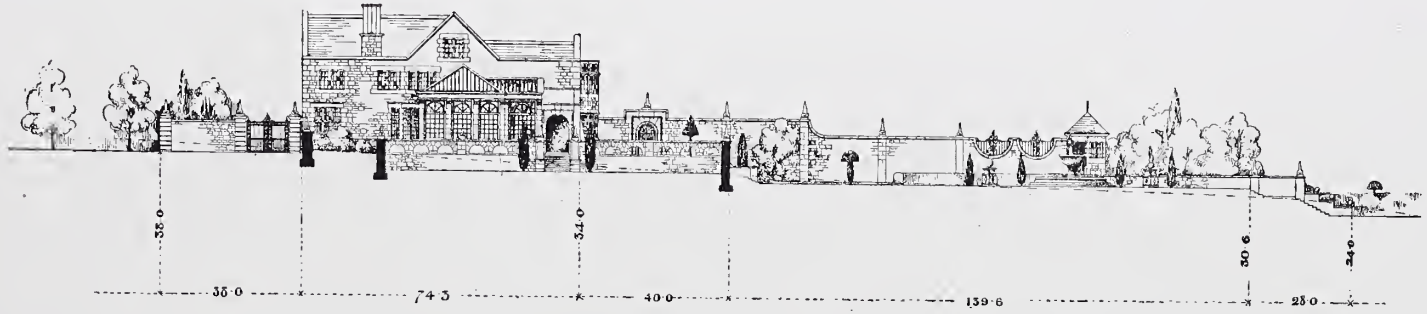
I have referred in detail to annual maintenance, because it cannot in any case be wise to lay out gardens which are too great a burden to keep up. Unfortunately, very few clients give this matter proper consideration until too late to restrict their schemes, hence so many undermanned and ill-kept gardens. The allowance for keeping up the gardens being limited, it is necessary to reduce the amount of work, so that the staff employed can do it without any additional help.

Keeping in mind what has been said above respecting the aim and object of the garden, and the limit of expenditure on up-keep, it will be seen that each department of the garden must be grouped in such a way as to give ready access from one to the other, and that each should be in connection with that portion of the house which it is intended to serve. Thus, the vegetable garden should be in direct communication with the kitchen block and stables, and the flower gardens with the entertaining rooms. Anyone who has had any experience in the maintenance of a garden will know that the treatment of an acre of ornamental ground decides the amount of work which will be required to keep it in order, but few seem

SECTIONS SHEWING THE FALL OF GROUND AND THE ARRANGEMENT OF TERRACES.

Scale 10 0 50. 100. 150 200 of feet

Lower Portion, Shewing Yew = Walk and Lake.



Upper Portion, Shewing House, Terraces &c

No. 4.

to realise that the garden which is the worst from a designers point of view entails more work than a garden artistically treated. All these points have been carefully considered in the plan of the gardens to a country house given in illustration No. 5. The broadly treated level pieces of lawn with a few quaintly arranged box edged flower beds, filled with old-fashioned perennials, give far less work to the gardener than the undulating slopes of grass, with tortuous curves around shrubberies, and flower beds cut out of the grass, which require filling three times a year with expensively reared bedding out plants and bulbs, etc. From the gardener's point of view as well as that of the designer, the ground devoted to gardens should be treated in the simplest and most direct manner. The different gardens should be arranged, if possible, in levels to suit the sections of the ground; and outside there should be, not closely shaven lawns, but wild gardens, where snowdrops and daffodils, primroses and violets, wood hyacinths and anemones may be encouraged, and a host of other hardy plants naturalized.

Having assimilated the natural and most striking features of the place, the best plan is to begin in the immediate proximity to the house, and work outwards: disposing the terraces as the land allows and the height of the house demands. After studying the sectional lines of the land, the course which most frequently attains the happiest results is to arrange the several terraces or gardens in such a manner as will give some indication of the original lie of the ground. To give point to this I now shew a section, through the centre of the site (illustration No. 4). This, with the help of the spot levels previously referred to, gives a fairly accurate idea of the lie of the ground, and shews the reasonableness or otherwise of the levels proposed for the several gardens. These levels, read in conjunction with the plans of site and gardens, explain the scheme fairly well. Attention should, however, be drawn to the fact that, in this instance, more regard has been paid to the natural features of the surroundings than would generally be given; and to preserve the spinney woods, the formal gardens are somewhat smaller than would have been the case had these not existed. Apparent extent is, however, given to the whole by the long walk ending in the architecturally treated steps leading to the lake and the small water pavilion on the opposite bank, which gives an idea of union between the opposite side of the lake and the gardens.

Although a special chapter is devoted to the formation of lakes and ornamental waters, it may be well to note here that the lake which has so large a place in this scheme is really a development of the natural features of the estate, and not a something which has been designed or laboriously excavated. This sheet of water carries its own excuse, if excuse were necessary, and at the same time forms one of the most welcome features, useful alike for punting in summer and for skating in winter, as well as for the accommodation of a most delightful collection of water lilies, and other families of hardy aquatic and bog plants; around it and in the small plantations generally outside the formal and kept portion of the ground, opportunities could be found for gratification of any personal preferences for any or all of the groups of hardy trees—conifers, shrubs, or such hardy plants as could be induced to grow.

Taking the block plan of the house and the garden arrangements (illustration No. 5) the different departments are indicated as follows:—1, Carriage Court. 2, Porch. 3, Enter-

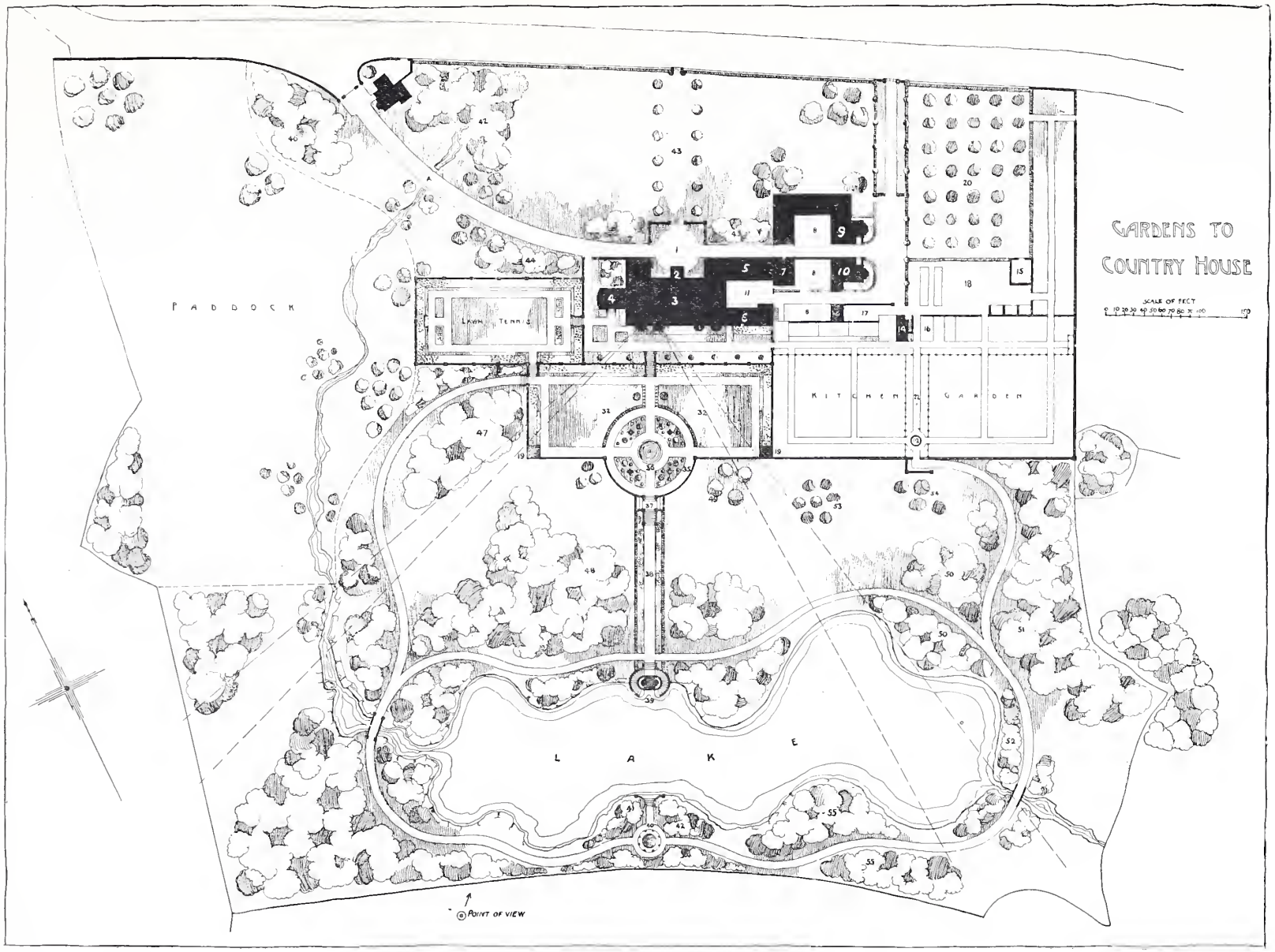
taining block. 4, Conservatory. 5, Kitchen wing, Larders, Boots, &c. 6, Laundry, with coal and cellar under. 7, Dairy. 8, Stable yard and drying ground. 9, Coachman's Cottage. 10, Gardener's Cottage. 11, Kitchen court. 12, Basin for water supply to Kitchen Garden. 13, Tool house with fruit room over. 14, Potting shed, with heating chamber underneath, connecting with a Range of Glass, consisting of early and late Vineries, Peach House, Stove and Greenhouse. 15, Manure Shed and Compost Bins, in which are stored the manure, loam, peat, &c. 16, two small houses for Cucumbers and Melons. 17, Garden Yard, enclosed by a wall, against which is a wooden awning for the protection of ladders, &c. 18, Frame Ground, ample space being left for cold frames, hot beds, and also standing room for the Chrysanthemums. Against the wall, fruit trees are planted, the border, 20 feet in width, being used as a reserve garden for hardy Spring flowers, &c. 19, Summerhouses; one at the junction of the terrace with the Kitchen Garden, and the other at S.W. corner of the terrace. 20, Orchard, which is divided from the Strawberry border by a Holly hedge. The wall to E. of this is like all other walls, planted with Fruit Trees.

The kitchen garden, which is a little over an acre in extent, is surrounded by a well built wall, with projecting coping, and arrangements for weather boards as described on page 98. The N.E. wall is 10 feet 6 inches in height and stone built, with strained wire fixed ten inches apart, for the proper training of the trees planted against it. The wall dividing the pleasure and kitchen gardens is broken up by pilasters placed about 20 feet apart, to divide it into bays and to give a little character and prominence, and for a short distance from the summer house the wall is divided into bays filled with wrought iron panels, so as to allow of an extended view in this direction. A garden or summer house erected at the corner is raised above the terrace level, and three feet above the lower garden level, the space under which, including the fall from the terraces, gives a head height of nearly six feet, being utilized for the accommodation of lawn mowers and garden roller.

To carry out a principle referred to in a subsequent chapter, and to make the kitchen garden a place for promenading, a long walk is formed in line with the upper main terrace, a light ornamental wrought iron gateway marking the division. This walk finishes in an arbour, placed against the wall which forms the Eastern boundary. A border of old-fashioned hardy perennials is provided on the South side of the walk. At the back of this border are arranged Espaliers six feet high for fruit trees.

Owing to the nature of the ground, and the necessity for preserving the existing timber, only one tennis lawn can be provided within the garden proper, on the S.W. front of the house; but there is ample space for two extra courts, at either side of the short avenue connected with the carriage court.

The principal terrace is supported by an arched wall, and handsome flights of stairs; it is reached by way of the Conservatory or Loggia at the S.W. end, or the covered way which connects with the glass houses in the Kitchen Garden, or through a wrought iron gate under an arched opening in the wall which divides the terrace from the drive. The width of this upper terrace is forty feet to the outside


GARDENS TO
COUNTRY HOUSE
SCALE OF FEET
PADDOCK
LAWN
TERRACE
KITCHEN
GARDEN
LAKE
POINT OF VIEW

No. 5.

of the wall, spaced as follows—border next to the house, seven feet wide; grass, seven feet six inches wide; walk, ten feet wide; grass, thirteen feet wide; terrace wall, one foot six inches wide. At stated intervals there are clipped golden Yews and Adpressa Yews, placed alternately. The lower terrace which is 250 feet long by 100 feet wide on the S.E. side, and 180 feet long by 90 feet wide on the S.W. side, is simply designed and arranged so as to obtain as much colour as possible. This is provided by ample spaces for growing free flowering hardy perennials and Roses. At the foot of the terrace wall, which is eight feet high, is arranged a wide border, for hardy plants such as Hollyhocks, Delphiniums, Sunflowers, and old-fashioned Roses—such as the Madame Plantier, York and Lancaster, &c., whilst on the wall itself might be planted the hardy varieties of Tea and Noisette Roses, which would flourish under such favourable conditions. Two large unbroken panels of grass are arranged at (32). At (35) there is a Fountain Garden surrounded with Yew—the Fountain (36) is arranged with a pond twenty feet wide, having a kerb which stands one foot five inches above the level of the path, and a bronze figure holding a Dolphin which sends up an upright spray. Around this fountain is arranged a series of beds filled with sweet scented flowers, the design of the beds being relieved by Irish Junipers or clipped trees, and in the centre of each panel a lead figure on a stone base. The lower terrace walls are much simpler in design than those of the upper terrace, the walls being in local ragstone in random courses, and the coping double rounded on the edges, but to take away the baldness of this arrangement, caps and finials are placed at intervals of about twenty feet, while the exterior view is helped by sloping buttresses, which give an appearance of strength to the walls, and break up the straight line.

Immediately in front of the Drawing room windows, and in the centre of the bastion wall to the fountain garden, is arranged a flight of sixteen steps (37) broken by a landing on which there is a recessed seat, and then another flight of stairs, making a total drop of eight feet. From this point to the lake, the walk (38) runs straight down between two holly hedges, in which are planted at regular intervals golden standard Hollies, clipped to a half round; these hedges partition off completely the wilder part of the garden; whilst the water steps at (39), and the Water Pavillion at (40), complete the formal arrangement to the S.W. and S.E. sides of the house.

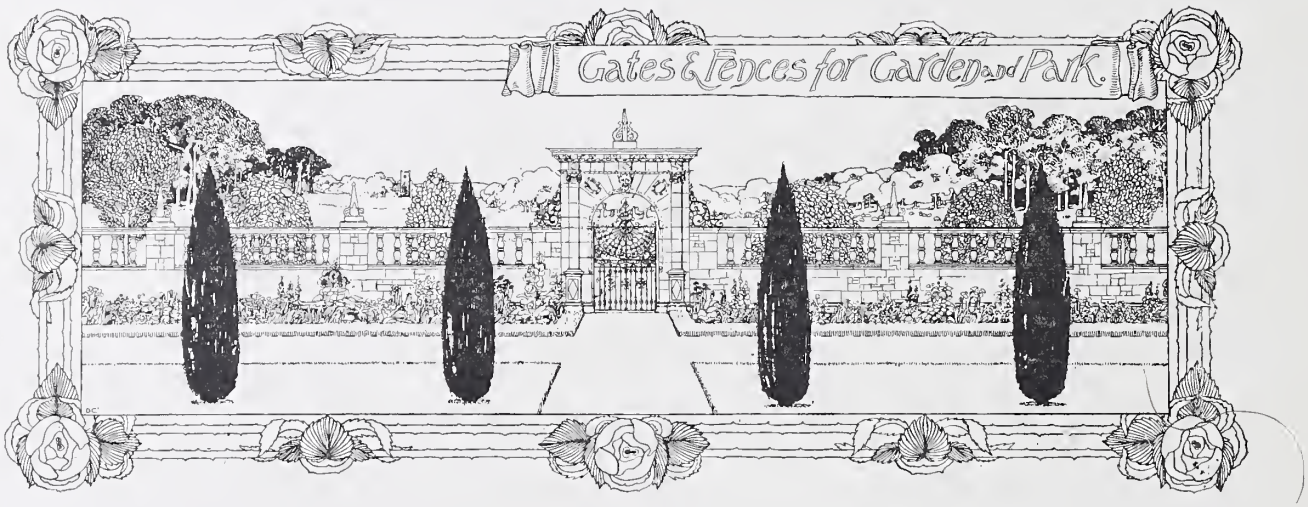
For the purpose of reducing the area of ground requiring attention, and also for giving variety to the whole, I have arranged for a paddock of about one and a half acres in extent. Owing to the character of the adjoining property, it is not necessary to do any planting in this field, beyond placing one or two single trees to break the hardness of the line.

As the subject of planting is very fully dealt with elsewhere, it is not necessary to do more than refer to the positions of one or two of the principal masses. (42) is a mass of Scotch Firs, to partially screen the lodge and provide a protection against the wind to the west. The avenue trees (43) are Spanish Chestnuts, (44) a mass of Rhododendrons and Azaleas, (45) Yews and Hollies, Laburnums and Lilacs, (46) a group of Pines interspersed with Silver Birch, (47) amongst the scrub-wood are planted collections of flowering Thorns (48) Crab Apples, Thorns, and Wild Cherries which have been planted

amongst the older timber and scrub wood, (49) Washington Yews, (50) choice Hybrid Rhododendron, Azaleas and American Plants, (51) Scarlet Oaks amongst the scrub, (52) Ledum Palustre and other bog shrubs, (53) Collection of Weigelas, (54) Cedrus Atlantica, (55) silver leaved purple, basket and other Willows, (56) Scotch Firs, (57) Tree Ivies and St. John's Wort under the shade of older trees. The stream, will be subjected to but small interference beyond the insertion of one or two cascades with proper fish ladders, and enlargement of the pools.

The frontispiece perspective view of the House and Gardens as seen from the rising ground, near the point indicated on the plan, gives a fairly good idea of the arrangement and effect of the whole.

CHAPTER III.



Undoubtedly a pressing question with purchasers of land after the carriage and other entrances are apportioned off, is the necessity of a good safe protective boundary, but how much real homely characteristic beauty might be preserved, and many miles of monotonous unclimbable railings and such other things be spared, if owners would give due consideration to the prevailing kind of fences in the district, and estimate at their true worth the beautiful hedges with well-kept stone or grass dykes, or moss-covered stone walls. Often unwisely, acting on the advice of "estate improvers," having removed the existing fences, owners either lay down the land for a park, or divide the fields by wire fences; the result is an expanse of wind-swept land, with no protection whatever for stock in stormy weather, or shade in hot sunshine; in this way the features which gave character to a district are often entirely destroyed. Too much can scarcely be said in favour of the old-fashioned hedgerow, in districts where their is a probability of its succeeding; and in well-wooded districts, where stone is plentiful; of stone walls; or, where the conditions are favourable, a combination of the two,—stone dykes, for example, with hedges on the top, or hedges planted in the open, and walls where there are overhanging trees or where from other causes a hedge would not succeed. Unfortunately few people appreciate these landmarks of a truly rural district, but why should exception be taken to a good thorn or holly hedge? There are no better fences. The explanation probably is, that they take so long to grow; a good hedge is however, worth waiting for.

There are, of course, many positions in which a solid fence, such as a hedge or a wall, would be decidedly wrong, as for instance, when a rounded mound, forming a middle distance to an extended view, is the limit of the property. In such a case it might be found that the fence would completely hide the distant view; and there are even instances where

the cutting up of a park into fields by fences might destroy that breadth which the architectural treatment of the house renders necessary. Take any of the large houses designed by Inigo Jones, Wren or Vanbrugh, such as Blenheim, and it will be seen what is meant by this.

The majority of estate owners are inclined to agree to a substantial wall, or good hedge for the portions of the fences which form the division between a public road, and the property ; but they do not, as a rule, agree to the same treatment for the internal fences, and from this cause it may be said that there are few problems in garden design, and estate improvement which are so difficult to settle. This difficulty, however, often arises through a mistaken objection to fences of any description. In fact, it was to overcome this antipathy to a definite boundary line to the park or lawn that sunken or ha-ha fences were invented. The object which this form of fence was supposed to serve was to give an impression of unlimited extent to the lawns. Granted that occasional legitimate use may be made of this form of fence, it is now generally accepted, that in most places its adoption not only shews questionable taste, but gives an uncared for appearance to the ground immediately inside it. This will easily be seen when it is remembered that no visable fence exists to keep off the cattle on the opposite side—no apparent barrier to prevent them walking up to the windows of the house. Then again, as viewed from the grounds, there does not appear to be any reason for the rough grass on one side, and the smooth shaven lawn on the other. Far better shew the reason by erecting a fence sufficiently prominent to express its purpose from whichever point it may be viewed, and which would shew that the smoothness on the inside was the result of lawn mowing, and the roughness on the other on account of the land being grazed by cattle.

In considering this question we must first recognise the purpose for which the fence is required, or whether it is to serve a number of purposes, as for instance, screening a road and giving protection from winds. It is also an important point whether it divides the garden from some portion of the same property, or whether it is the division between two estates, In either case, there would necessarily be conditions, which would not occur in any other place, requiring consideration, all needing special thought and selection, sufficient to prevent that sameness which one finds in the treatment of fences.

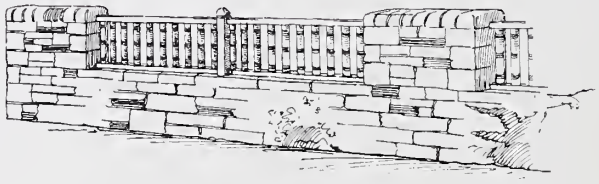
As will be seen on reference to the plans inserted, a garden may, to a great extent, be fenced in by the terraces and garden walls ; and when the house stands in its own park, this is the most economical treatment, as the balustrade which is necessary to the proper ornament of the gardens answers the double purpose of ornament and use. This form of fence is dealt with in the chapter on terraces, and an example is also shewn in the heading to this chapter.

Where, however, the lawns extend beyond the terraces, some fence becomes a necessity, and it is in respect to this that garden makers seem to prefer the invisible arrangement, but as stated above, it will be found that a good strong fence, which gives the impression of securing the gardens against cattle, will be the most pleasing. This need not, of course, be a solid wall, or a solid fence of any sort. An open arrangement, through which the grass

of the park could be seen, might be preferable. Where the fence is straight and the ground fairly level, it would not be difficult to construct some form which would not only serve its purpose, but would also add to the character and interest of the garden. In such a case, the fence might be of wrought iron or wood arranged in bays, with brick or stone pillars between them, or circular bays filled with wrought iron railings might be arranged.

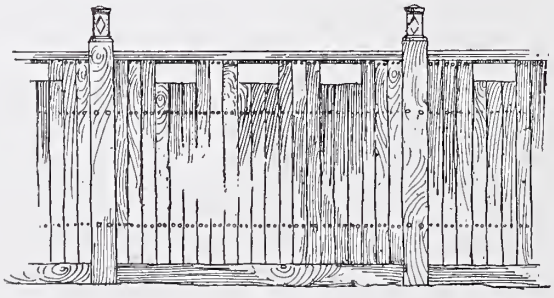
This offers a very wide range for the exercise of individual tastes, which, if shewn in the arrangement of local materials, would result in characteristic, and in many cases extremely interesting, fences—for instance, in a slate country much might be made of a combination of stone walls and the common sheep wires (illustration No. 6). In other places peeled Larch might be used in connection with stone. Both forms are, of course, quite rustic, and would only be suitable for the boundary to the park at the point where it divides the road from the park. When the ground is undulating, and the line of fence arranged to fit the contour, some strong but simple form of continuous bar railing would make a good and cheap fence. What is known as unclimbable fencing, but especially of the pattern adopted by the various railway companies, should not be used, unless a hedge or shrubbery is planted in front of it. Next to barbed wire or broken glass bottles on garden walls, nothing is more out of harmony with garden scenery than the spiked heads of an unclimbable rail. Excepting as a temporary fence, as, for instance, until a hedge is established, strained wire should not be used as a garden fence, unless it can be used in conjunction with Oak posts and top rail, as suggested by espalier (p. 101). This form of fence is, when arranged in a straight line, a very simple and inexpensive one, allowing of pretty effects in the shaping of the heads to the Oak standards. A fence such as this would probably cost as little and be as serviceable and much more effective than the ordinary manufacturer's machine-made fence.

No. 6.



No. 7.

Split oak fencing (illustrations Nos. 8 and 9) is very good and inexpensive, and for the division of suburban gardens, or as a protection from a footpath, or road, there are few fences



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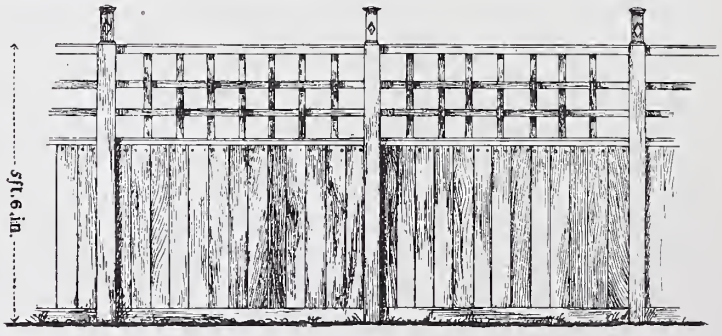
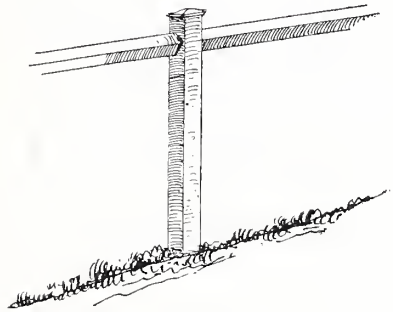


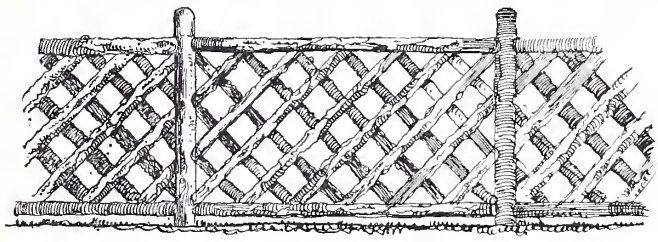
No. 9.

which answer so well. When weathered, and more particularly when covered with climbers, which can so easily be nailed against them, they look very picturesque. This form of paling allows of a number of arrangements, some of which are decidedly ornamental, but the ordinary pattern, which is simply a series of overlapping split battens cut off at a given height, as in the very simple pattern shown in No. 8 will be found to meet most requirements. A combination of this fence and split oak wattles is also very effective.



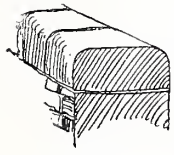
No. 10.

Sometimes a fence or paling of some kind is required in the wild garden or woodland; as, for instance, when the ground falls so rapidly from one side as to render it dangerous. The fence best adapted for this purpose is the ordinary oak leaning rail, the posts 4 or 5 inches square and the top rail set anglewise on the top, as shewn in No. 10. A good fence may also be made of peeled larch or oak, with strong posts, top and bottom rail, with lattice rails between, as shewn in No. 11. This form of fence should not, however, be used in connection with the garden proper.



No. 11.

Stone walls, which have already been referred to, may be built in so many ways, to correspond with so many kinds of surroundings, that no fear need be entertained as to their spoiling either garden or estate. The first cost, however, is higher than for the iron railings of the ready made patterns generally selected. It is, however, the dressed or tooled stone-work which is so costly; whereas, for ordinary estate work dry built (*i.e.* without mortar) walls are all that is necessary, especially when the cam or top stone can be set in cement. A well-built dry wall is always nice to look at. For walls nearer the residence, or that require to be more strongly built, mortar rubble might be used, with hog back or rounded coping, Nos. 12 and 13, set flush with the wall, or on to projecting weathered slate. Walls which are to divide small gardens might be treated in this way, and either be used for fruit trees or covered with climbers.



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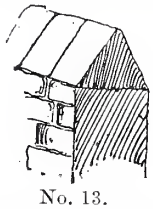
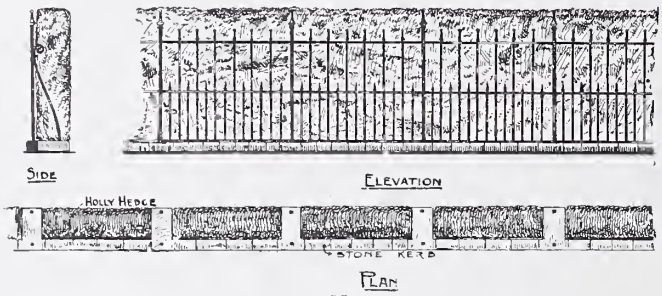


No. 13.

As a cheap fence round a cottage garden, there are few forms which look so well as the carpenter-made lattice, made in the same form as the rustic lattice shewn in illustration No. 63. The posts should be in English oak or larch, 3½ inches square, and spaced 5 to 6 feet apart, the bottom rail fixed a clear 3 inches from the ground, and the top rail rounded or weathered on the top, and fixed, say, 3 feet 6 inches from ground line. This top rail might be 3 × 2½, rebated 1½ inches to receive the laths, which may, however, be nailed on to the bottom rail. The cross laths might be 1½ × ¾, and spaced 8 or 9 inches centre to centre; on such a fence could be trained pillar and climbing Roses, Honeysuckles, &c.

It is sometimes inconvenient to make proper cops and dykes for hedges, in which event the quicks are planted on the flat, requiring an additional temporary fence to be erected until the hedge is strong enough to turn cattle. When such a fence surrounds a part of the gardens or pleasure grounds, or where it abuts on to some important public highway, a good, and on the whole, very harmless fence may be made by laying an ordinary stone kerb on edge, with off-sett pieces to receive the stays, and standards, and planting in the interspaces the quicks, which may be trimmed to the height of the railing. The plan and elevation here given will explain fully the arrangement of this fence.



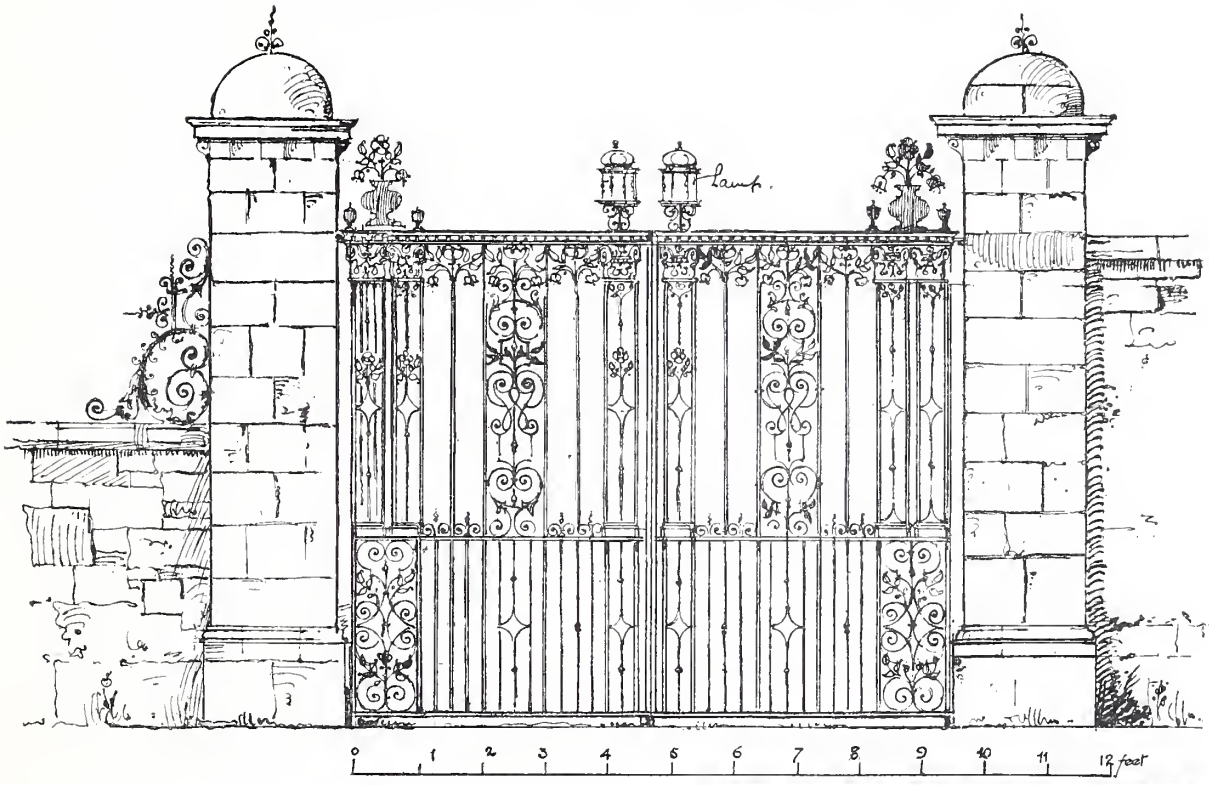
No. 14.

Another form of fence, the framework of which is constructed in much the same way, is the old upright paling, which may rise from within a few inches of the ground or from the top of a dwarf wall. The uprights or balusters may be 1½ inches square, set anglewise or square ; or they may be flat pieces say 2½ × ¾, shaped above the top rail. Indeed, the number of changes which could be made in this arrangement of fence is very great. In Holland, for instance, the tops are shaped and coloured to represent tulips and other flowers, the rest of the woodwork being painted white.

Travellers in Japan speak most enthusiastically about the artistic taste, ability and clever craftsmanship shewn by the Japanese in their fences, the most tiny gardens being fenced in by charming paling, the general character of which is simplicity itself, and yet, in the spacing of the several parts, and the sizes and thickness of the woodwork or wood and stone combined as the case may be, they exhibit the greatest care, which is carried into the minutest details, and all this without sacrificing the durability of the work, but rather the reverse, as clever contrivances are made to keep off the effects of the weather. In some cases this is done by means of a pantile roof over the top of the palings ; in others by metal caps fixed to the top of each post.

The reason why this subject is emphasized and thrashed out so fully is in the hope that fences may receive a greater amount of attention than is at present bestowed upon them—that instead of concluding that everything that can be done is shewn in the hurdle-maker's catalogue—owners of gardens and estates should again give their attention to the formation of wood, iron, stone, or hedge row which would be an improvement rather than a detriment, and it is hoped the examples given will aid in shewing how much variety may be gained by the simple, handy methods. Hedges of different kinds and form are described on p. 108, but speaking generally, for lasting pleasure, variety of hue, harmony with the surroundings, nothing so effective has ever been devised than these sturdy green barriers.

In dealing with wrought iron gates, a reference has been purposely avoided to those fine architectural schemes which are the necessary accompaniment of



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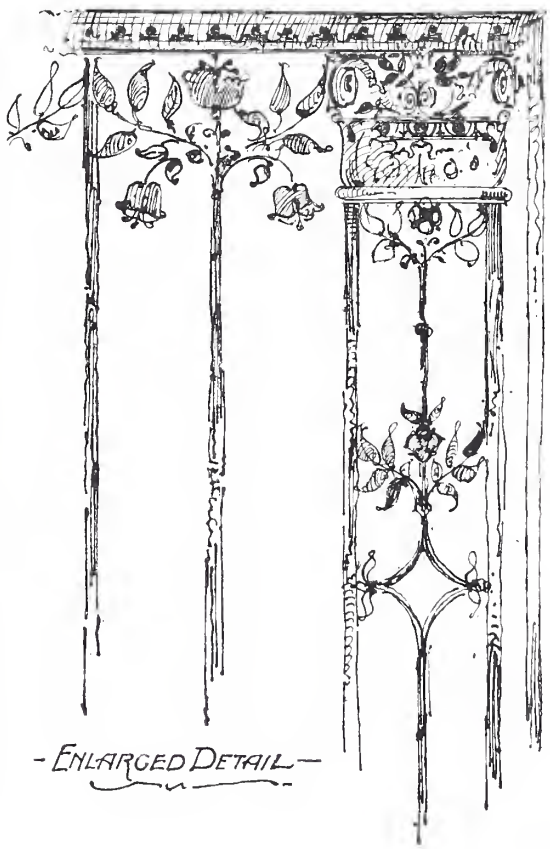
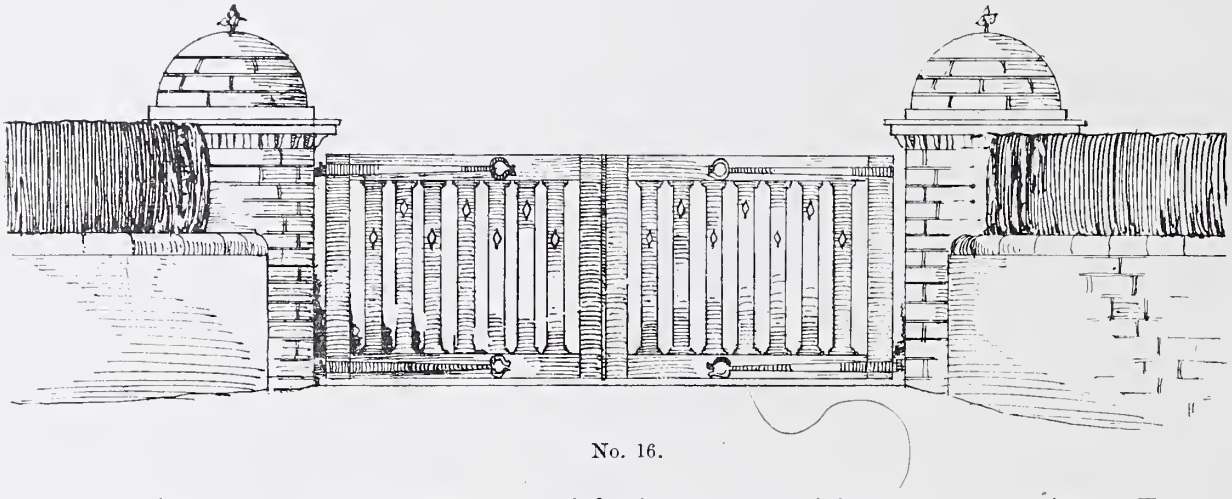


a well-designed country house, and which must be designed in character with it. Only two examples of gates wide enough for carriages are given, viz., a pair of wrought iron gates and a pair of simple oak gates; the latter form the entrance to the house illustrated on p. 125. The wrought iron gates No. 15 were simply the completion of the garden scheme shewn on p. 181, the architecture of the old house not demanding any special treatment of the surrounding details. The reason for its insertion here is to give emphasis to the value of wrought iron work for gardens, but more especially as applied to gates. As will be gathered from the many garden schemes which are illustrated herein, there are gates and doors required beyond those which protect the carriage drive—as, for instance, the many postern gates in connection with the several garden or foot roads leading to particular points in the property. There are also the little

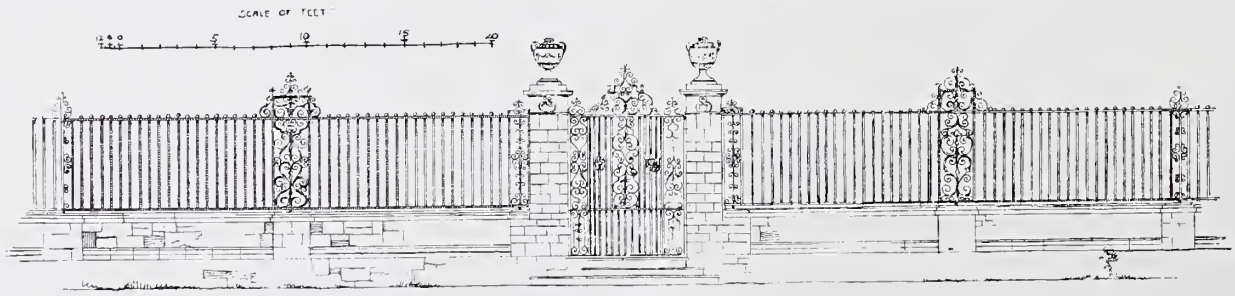


No. 16.

gates leading to the cottage gardens, and for houses to which there are no drives. Then, again, there are the field gates necessary to connect the several fields or paddocks which go to make the home park, so that wherever a fence is required a gate of some sort will also be needed.

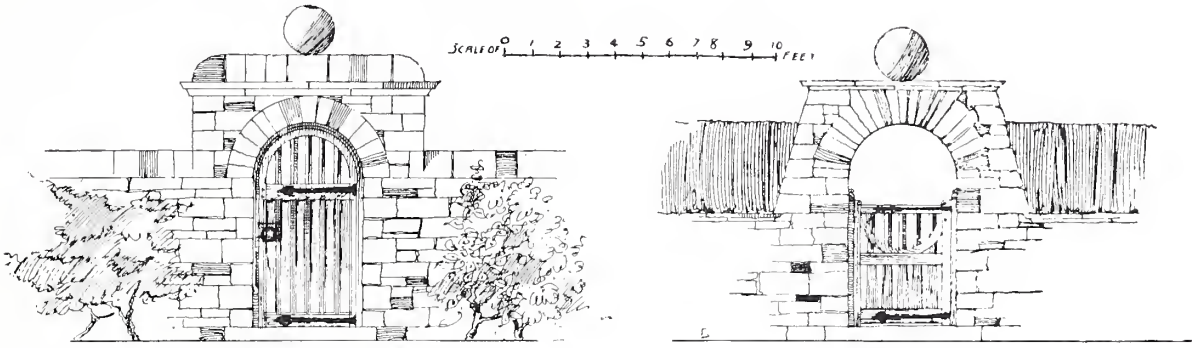
Referring especially to the use of gates, it may be pointed out that in the old examples they were made to serve as a part of the ornamentation of the garden they graced, the skill in design and the clever craftsmanship expended upon them being doubly pleasing from the fact of their being applied to legitimate and utilitarian objects.

In making a new garden, it is just as necessary to give character to details such as gates as in the case of the old examples, and the fact that the garden of which it forms a part is not designed in the same style as the old work referred to, does not materially lessen the necessity for effective detail. By effective detail it must not be understood that the prevailing modern idea of endless ornamentation is meant, for the work which gives the most lasting pleasure is that which is most expressive of its purpose and does not contain one superfluous line or detail. Everything depends upon the position and importance of the walks to which it gives access, the style and importance of the residence to which it leads. The gateway in the balustrated wall, for instance, shewn in the heading to this chapter, forms the boundary between a large carriage court and the park, the importance of the residence in this case demanding such an arrangement. The gateway



No. 17.

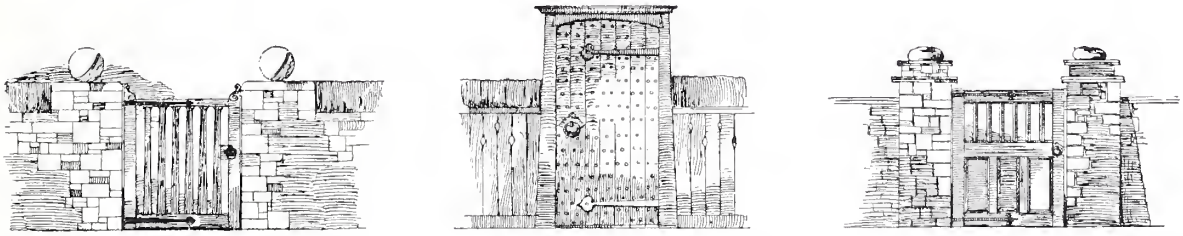
and open railing now given No. 17, the gateways shewn on page 201 with the overhead ornament, and the gateway and arch at Broad Oak, Accrington, shewn on page 184, are all arranged to mark the division between parts of the gardens.



No. 18. No. 19.

The two small gateways now given in Nos. 18 and 19 are both of a very rustic character, the stonework for both being built in the stone of the district in which they are erected. In the first no dressing of any kind, excepting punch and hammer dressing, is given to the stone, and in the second the stone is simply selected and built to shape, the ball on the top being rough-picked.

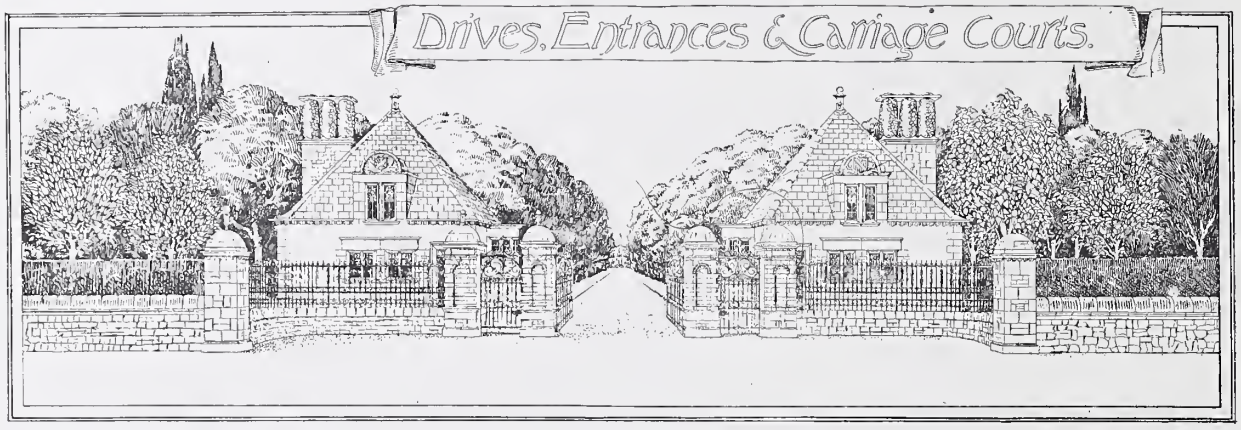
We now come to the small gates for cottage gardens or for positions in larger grounds where simplicity is desired—such, for instance, as the entrance to a wild garden, park, or paddock, from the shrubbery walks or other positions which cannot be said to be parts of the ornamental grounds. Here good taste would suggest that utility and construction should have first consideration.



No. 20. No. 21. No. 22.

The three small gateways shewn above, Nos. 20, 21 and 22, have all been designed in connection with villa gardens, where not only simplicity, but also economy had to be considered. Hedges of privet have been planted behind fences to Nos. 20 and 21, and this is to be trained to grow over, or neatly clipped or trimmed flush with the face of the fence.

CHAPTER IV.



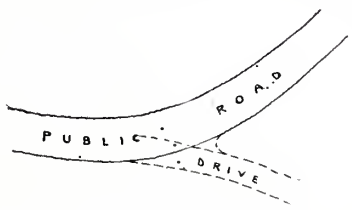
The approaches to a residence, whether through a park, pleasure grounds, or direct from the public road are of the greatest importance, and many things require careful consideration in respect to them. In the first place, they should give some clue to the style, size, and character of the residence to which they lead, and also the more particular use of the approach itself; a foot approach for instance, should not suggest a way for carriages, or *vice versa*.

One of the most common errors is that of giving an importance to the entrances out of proportion to the residence itself. This pretentiousness can even be carried so far as to make the public road appear as if made for the use of one residence only. In dealing with approaches to large mansions, this course is sometimes justified by the dignity which is added to the entrance; but in treating entrances to small modern residences, great care should be exercised not to be too assuming, otherwise the result may look absurdly inconsistent. These remarks are equally applicable to the lodges, wing walls, pillars, and gates, all of which should be designed with due regard to their use, the degree of importance and fitness to the situation chosen, and the establishment of which they form a part. Take, for instance, the position of gate piers; if set 50 feet back from the main road they would suggest having been so placed to accommodate a coach and four; whereas if set back for say half that distance, the impression conveyed would be they were arranged for the easy driving of a carriage and pair.

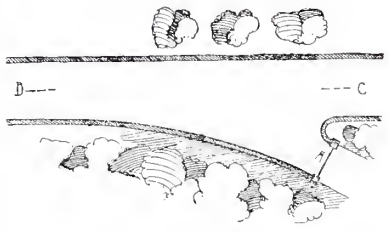
Another error is that of placing the entrance, merely for the sake of obtaining length of drive, as far as possible from the house, in some cases the drive even running parallel with the public road. Entrances placed in the most convenient position would often result in no drive at all, but merely a carriage court commencing directly at the public road; indeed this was the usual way of treating the approaches to the old Manor houses, and whatever objection may be taken to this form of entrance, there can be no doubt that the cost of forming and maintaining is much less than where half-a-mile of drive has to be kept in order.

DRIVES, ENTRANCES AND CARRIAGE COURTS.

In deciding upon the position of a main entrance, the question of levels should not be overlooked, and in this connection it would be well to remember, that wherever possible, the entrance gate should be at a lower level than the residence, to assist in giving elevation to the site of the house. It would also be advisable to choose a level place in the road at which to form a junction for the drive. Although most designers of entrances seem to favour an oblique junction, making the centre line run in the direction of a town, a railway station, or other important place, a junction at right angles is generally much more convenient and effective. Where there is a sufficient bend in the road to justify this oblique line it may prove successful, as in No. 23; but when, as is often the case, the drive breaks away from a straight road, the result is generally failure, or at any rate poor, unless indeed the curved wing wall can be carried for a very considerable length before the grounds are entered, as in No. 24. Seeing it cannot be right to ignore the reasonable limits imposed upon the designer, or the safety and convenience of vehicular traffic, a careful planner would in such cases invariably choose a right angle junction. Good levels are even more important than pleasing lines. Take as a case in point No. 24. Supposing the level of the road at A to be 432 feet above Ordnance datum, and point B 445 feet, and the gradient of road between C and B 1 in 20, the cross-fall of ground would be so considerable as to make the entrance positively unsafe for carriages. This may appear to be a very exaggerated example, but many approaches are quite as bad. Of course the ground at A could be levelled up, but as this would have to be carried from the point of curvature of the wall to a distance many yards inside the new gateway, the cost would be very considerable. Now, supposing half the amount of money expended upon this unsatisfactory arrangement had been spent upon making an entrance at right angles to the main road, the approach would probably have been quite as impressive in its lines and much safer. From what has been said it will be gathered that where the approach and entrance are to be arranged in an oblique direction from the main road, it is more important to have favourable levels than when they are arranged at right angles to it.



No. 23.

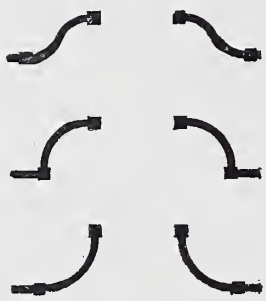


No. 24.

In planning the wing walls or fences every designer would naturally have his own ideas, and in some cases would probably resent any suggestion as to what is the proper thing to do. Considerable practice and frequent failures however, generally result in useful object lessons and settle points which, whilst placing few restrictions upon the designer, may help him to start aright.

In arranging the lines of wing walls all corners or nooks on the public road side should be strictly avoided. If, however, to gain some special architectural effect it becomes necessary to have them, some provision should be made for railings or other protection; and another point of importance is to arrange the gate pillars at right angles to the drive.

As previously noticed, the distance from the line of the roadway to the entrance gate is dependent on many things ; for instance, if the drive runs at right angles to the road, it is advisable to place the gates far back, so as to allow of a turn of large radius for carriages. If the public road be narrow in proportion to the amount of traffic upon it, it becomes all the more necessary to have some form of wing walls well recessed back.



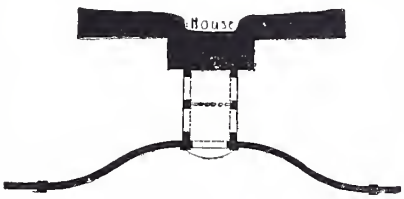
No 25.

Broadly speaking, there are three forms of wing walls, viz., the bell and cup shapes, formed by convex and concave lines, and a combination of the two by O.G. lines. For entrances placed at right angles to the road, the cup shaped plan is generally most effective. The next best is the O.G. line ; but for drives running at an obtuse angle from the road the bell shape is much the best, the convex lines allowing of long and short wing walls. Where the entrance is at the end of a street, and the residence of sufficient importance, the outer pillars are effective if in a line with the outside width of the street, the wing walls being concave describing a quarter segment of a circle ; or frequently a good effect may be obtained without placing back the line of the gate, by simply arranging the gate piers in a line with the boundary fences.

Nothing could be more deceptive to the uninitiated than the effect of curves. Somehow the curves, even when they have had much care bestowed upon them in planning, lose that flow of line which on paper looks so pleasing ; but there is all the difference between a sixteen feet scale drawing which can be comprehended at a glance and the lines as laid down and viewed in perspective. When dealing with a long curved wing wall to an entrance, as in No. 24, it would be found a good plan to have the ground roughly levelled and a rope line laid down. This is very simple, the *modus operandi* being as follows :— Obtain an old cart rope, or any new rope which is free from stiffening ; tie one end to a peg fixed at the point where the wing wall is to strike the pillar, and fix a ranging pole at the extremity of the bulge ; having thrown out the line between these two points, take up a position near peg No. 1, with the rope in hand, and, walking along the proposed line of the fence, allow the rope to pass lightly through the half-closed hand, repeating the operation until the line is pleasing to the eye. Having laid down the line, plant ranging poles at regular distances along it, and imagine the interspaces brick or stone wall, when the result will generally be to make the curve larger by carrying peg No. 2 further along the road. Of course, if it is proposed to treat the walls architecturally, it would become necessary to make a survey and to plot it on to a plan for the purpose of designing the necessary elevations.

Carriage entrances should, as a rule, be provided with either one or two side gates for pedestrians, and the parapet, or sidewalks, where these exist, with properly constructed kerb and channel running around to the pillars. The usual width for a carriage entrance gateway is 10 to 12 feet ; but if the gate pillars and general arrangement are on a large scale, 14 feet might not be too wide, but this width cannot as a rule be exceeded with very satisfactory results. Side gates for pedestrians may be any width from 3 to 5 feet.

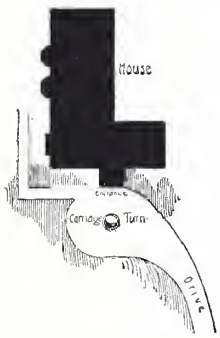
It will sometimes occur, when the house is close to the highway and even where a court is possible, that in order to make the most of a small area of ground, no carriage entrance or court can be adopted. In this case there would probably be a curve in the boundary wall from the main road, as shewn in No. 26. In this event the gateways should be treated in such a way as to shew at once that they are not intended for carriages. This may be done in many ways—by omitting wing walls, by making the gates narrow, by having gates with overhead ornaments as previously described; or the gateway may be arranged as arched openings in the fence; but so many admirable examples of old postern entrances are to be met with, that the seeker after ideas for entrances of this character has ample resource. Two really good examples are those at Tissington and Ragley Hall.



No. 26.

In considering the question of carriage courts or turns, it should be remembered that in the old examples, the shape and size of the court was decided by the plan of the house, which was generally arranged as a square with a court in the middle, or as an **H** or **L** shaped block of buildings, with the court in the recessed part, as shewn in the **E** plan No. 27, or in the angle of the **L** as in No. 28. These courts were really a part of the house planning. Sometimes, as at Blickling Hall, Norfolk, there would be an inner court, the space for carriages being between the stables on one side and the offices on the other. In modern houses this kind of arrangement has seldom been adopted, the chief entrance being on the main line of the building, or at the end of a projecting block, there being no building whatsoever to flank either side of the carriage stance; neither, as a rule, are any terraces erected on the entrance side of the house, the park, pastures, or more natural portions of the grounds being allowed to run up to the edge of the gravelled stance. This change of plan is probably responsible for the shape adopted for carriage turns, because the fact of there being no architectural limitations gave the landscapist an opportunity for working in his curves as in No. 28; this curved or circular form of carriage stance was probably the most sensible thing he ever devised, because the shape, if well considered, is made to the lines which a carriage would most naturally take when driving to or from the front entrance.

No. 27.



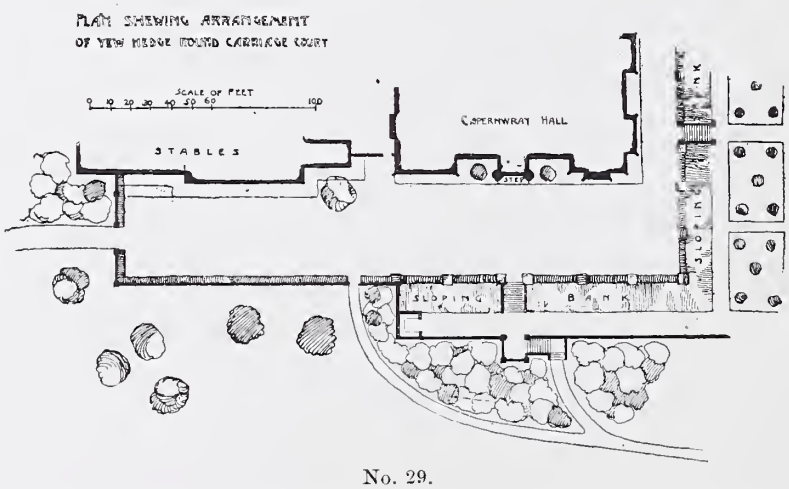
No. 28.

In some recent examples of house planning, there seems to be a wish on the part of the designer to return to some form of architecturally treated carriage court, generally by projecting the kitchen or billiard room wing on one side, and enclosing the remaining parts of the square by a good wall. In other places a very pleasing and storm-protected court is formed by the projection of the kitchen wing on one side and the billiard room wing on the other, thus enclosing nearly one half of the entire court.

Whatever the form adopted, there are one or two conditions which should be carefully observed, and first it should be noted that the width of gravel between walls should

be much greater than that between grass verges. Thus the width of a court between walls should not be less than 45 feet, if intended for the use of a carriage and pair; whilst 36 feet is sufficient if surrounded by curved sweeps of grass; but the former width should be extended to 60 feet at the least if to be used by a coach and four, to 48 feet for a grass edged turn. These are minimum widths, and do not take cognisance of the amount of gravel space which would look the best in the position in which the court or carriage turn is to be placed. In the second place, the courts or turns should be level, or only have sufficient slope to throw off water; and in the third place, the comfort of both horses and driver, as well as that of the owner or visitors, should be considered by arranging sufficient shelter. Where there are projecting buildings or high court walls, these would probably form a sufficient screen; but in exposed positions they should be carefully sheltered by masses of plantation, which, whilst not high enough to give the house a gloomy buried appearance would still prove an effective wind screen to a carriage and also to the entrance porch.

Residences are often built with entrances in such positions as to necessitate carriage turns which have steep banks falling away from them. Wherever this is the case "even where wind screens are not required" some kind of protection should be provided. At Capernwray Hall for instance, I have recently recommended the planting of a yew or holly hedge on the top of the slope which runs the length and across one end of the gravelled carriage turn. See No. 29. This hedge should be at least three feet through and four feet high, cut square on the top, with shaped yew pillars at intervals of twenty-five feet. This very simple addition is all that is required to make this ample but somewhat exposed and dangerous carriage square look perfectly safe.

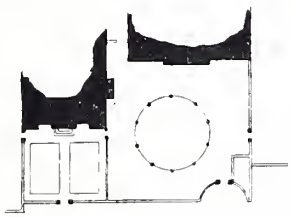


No. 29.

As most of the garden plans illustrated in this work, shew a carriage court or turn arrangement, I need only add that a study of these, together with the description accompanying them, will shew why each particular form was adopted.

As previously noted, there are many places in which any form of drive or carriage court is undesirable. In the case of small houses placed on small plots of land, this point cannot be too strongly insisted upon. Very often the privacy of a garden and even the possibility of a garden worthy of the name is completely destroyed by the ground being cut up by a drive and carriage circle. Take as an example the plan of my own tiny garden, page 176. Had I arranged for a carriage to drive up to the front door, there would

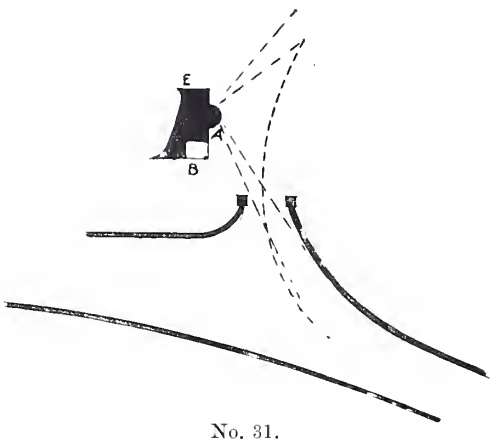
have been practically no garden left; whereas by placing the house near the road, I have a very short distance to walk and obtain a good piece of ground on the south and west sides.



No. 30.

Where a house is placed near a public road, and is sufficiently large to suggest the frequent use of a carriage, an arrangement on the lines of the carriage court at Chiswick House, as shewn by the adjoining plan No. 30, would work out satisfactorily.

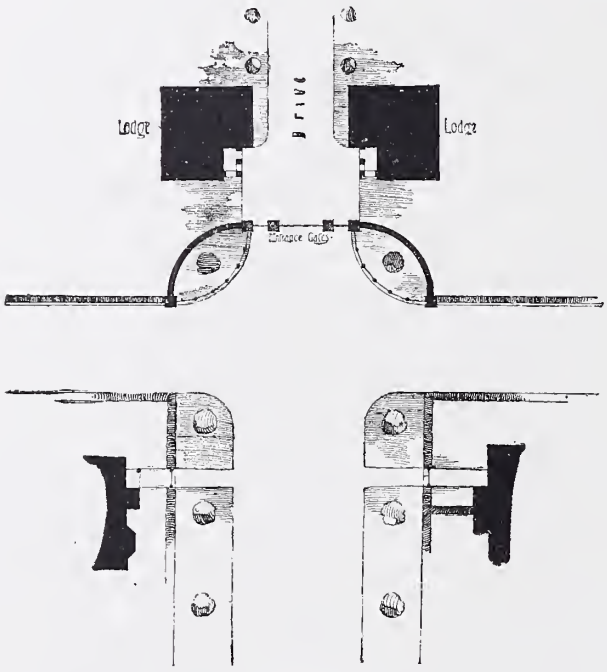
The position of the lodge, in relation to the direction from which carriages would most often drive, and to the ease with which the gates can be opened by the attendant, is a detail of considerable importance. The arrangement to be aimed at, is to obtain the longest possible view of the drive and also of the public road, so that the attendant may have due warning of the approach of a vehicle. To obtain this, the plan as well as the position of the lodge has to be considered. This will readily be seen by referring to the accompanying plan No. 31, the curved line representing the course the carriage would take on driving to or from the railway station. A. the living room, having a bay window commanding the drive in both directions as indicated by the radiating lines; B. the entrance porch which is within seven yards of the centre of gateway. Suppose, however, after passing through the gates, the drive curves in the opposite direction, an additional window would be required at E.



No. 31.

Lodges which are placed some little distance back from the wing walls are the most satisfactory, but there are so many things to influence their position that it is difficult to lay down any general rule; for instance, the ground may rise so rapidly from the entrance as to give the lodge a very tilted appearance if set back, and here it may be necessary to bring the lodge quite close to the road. Double lodges are not often required. One lodge is generally better than two, but, when the residence is an important one, double lodges are not only more imposing in appearance but form a convenient way of supplying the necessary accommodation for the responsible servants of the place. Two examples are shewn, No. 32 being two lodges arranged for a client in the Highlands of Scotland. The position chosen is at the end of the principal street in the village; the drive is for a considerable distance perfectly straight, and is to be planted as a broad avenue, which will, in years to come, form a dignified approach, and produce an effect fully justified by the importance of the mansion to which it leads. On page 203, No. 139 are shewn two lodges joined together, the entrance being through an archway, these lodges were so arranged for the purpose of forming a wind screen, and also for hiding adjacent properties. They form a part of the scheme at the Flagstaff, Colwyn Bay, the property of Walter Whitehead, Esq.

Those acquainted with the literature of landscape gardening must have been impressed with the fact, that garden and park designers were apt to view drives as unfortunate necessities, therefore they manipulate the drive by a series of curves, each one of which should, regardless of other important considerations, lead the eye to a vista, beautiful or otherwise, the intention being to keep visitors so occupied with the vistas as to forget the drive itself. A little of this is very entertaining, but after a while one comes to regard it as a trick and a very absurd one too. As both drives and walks are necessary, the question is not so much whether they should be straight or crooked, as what lines would be the most convenient; the whole matter resolves itself into one of common sense. There is an entrance at one end, and a mansion at the other. Which is the most easiest route? Having settled this point, it will naturally follow that the course chosen would, considered as a whole, be pleasing, because it would follow so far as possible, short cuts, and, where the levels of the ground allowed, easy gradients. Having proceeded so far, there would undoubtedly be many side issues which would come in to alter in some degree, the lines as originally struck out; as, for instance, the cutting up of fields, the passing over wet peaty ground, or the avoidance of rock which would require blasting. Drives so arranged, and properly supported by plantations or avenues, as the case might be, would fall in with the scenery through which they passed; the whole producing the effect of a happy combination of nature and man's artifice, and better still, there would be no need, or excuse for hiding the road.



No. 32.

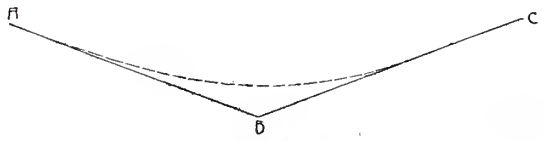
No. 33.

Where the nature and contour of the ground necessitates a series of curves, it is most important that they be made as easy as possible; for instance, if in setting out curves on the contour plan, the easiest gradient forms a series of small curves, it would be much better, if the cost is not very great, to unite them into longer curves as in No. 33. This is much more important in respect to drives than walks. When two curves are seen at once, it often suggests that one might have been avoided, because the amount of obstruction does not represent a depth of excavation more than the line of horizon, or a cutting of say 5 feet.

The question of gradients is for more reasons than one a matter of considerable importance. In the first place it is not in keeping with the proper treatment of a garden or park, to see horses over-exerting themselves in having to drag carriages up steep hills, for a park should not foster cruelty to horseflesh. Again, drives with very

steep gradients are very costly to form, and also to maintain; as it becomes necessary to channel them to prevent excessive washing, whilst the macadam itself is constantly needing repair. Unless under very exceptional circumstances the steepest gradients should not exceed 1 in 12. At Belle Vue Park, Newport, Monmouth, the writer formed a drive in which there is a gradient of 1 in 7; it was however, unavoidable, and the effect is not so good as one would wish.

All road-makers know the difficulty of joining varied gradients together in a satisfactory manner, ugly dips which look much deeper than the actual levels would warrant us in supposing them to be, being of frequent occurrence. These are generally caused by a too sudden junction of gradients as between A.—B. and C.—B. on the accompanying sketch, where by a sweeping junction as shown by dotted lines, much of this awkward effect might be avoided; this applies equally to the crown of the gradients.



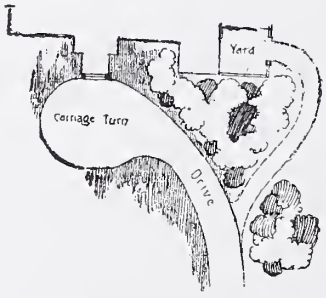
No. 34.

Repton, in referring to the formation of avenues, gives it as his opinion that the effect is heightened where the avenue takes a course over hill and dale; but in saying this he was probably thinking of the effect as viewed from the side or otherwise, of avenues with green drives, and not of avenues as roads. This point is here referred to, because straight roads or drives traversing a series of hills and hollows lose to a very great extent those lines of perspective, which give a straight drive or avenue its stately appearance. This point would be easily understood if the spectator were to stand on the first rise, and look forward to the last visible rise, when only the top of the rises would be seen, the length of road in the hollow being lost to view; it is therefore, as a general rule, important that, when making a straight road over undulating ground, the heights should be reduced and the hollows filled up so as to obtain length of line. When however, there is a swinging hollow which can be seen for its full length, the effect is quite as good as when the road is perfectly level. Repton also gives some valuable advice as to the proper junction of drives and walks which is also emphasized by Kemp. The importance and truth of Repton's advice on the junction of drives is referred to and illustrated on page 60.

Notwithstanding much writing to the contrary, it is just as important to observe the correct junction and direction of curves when laying out drives and garden walks, as in the designing of a wrought iron grille or a conventional wall-paper. But there is this difference, that the width of drives and walks must be decided by considerations of convenience rather than of effect, and that the effect of the curves when laid out can never be truly shewn by any system of drawing but to be accurately judged of must be laid out with pegs and string, or by some such similar means, on the ground itself and there adapted, not only to the contours but also to surrounding objects such as trees, the shadow of which it may be desired to take advantage of, or particular points of view it may be wished to pass. Every site has its own peculiarities which will influence the course of the drive.

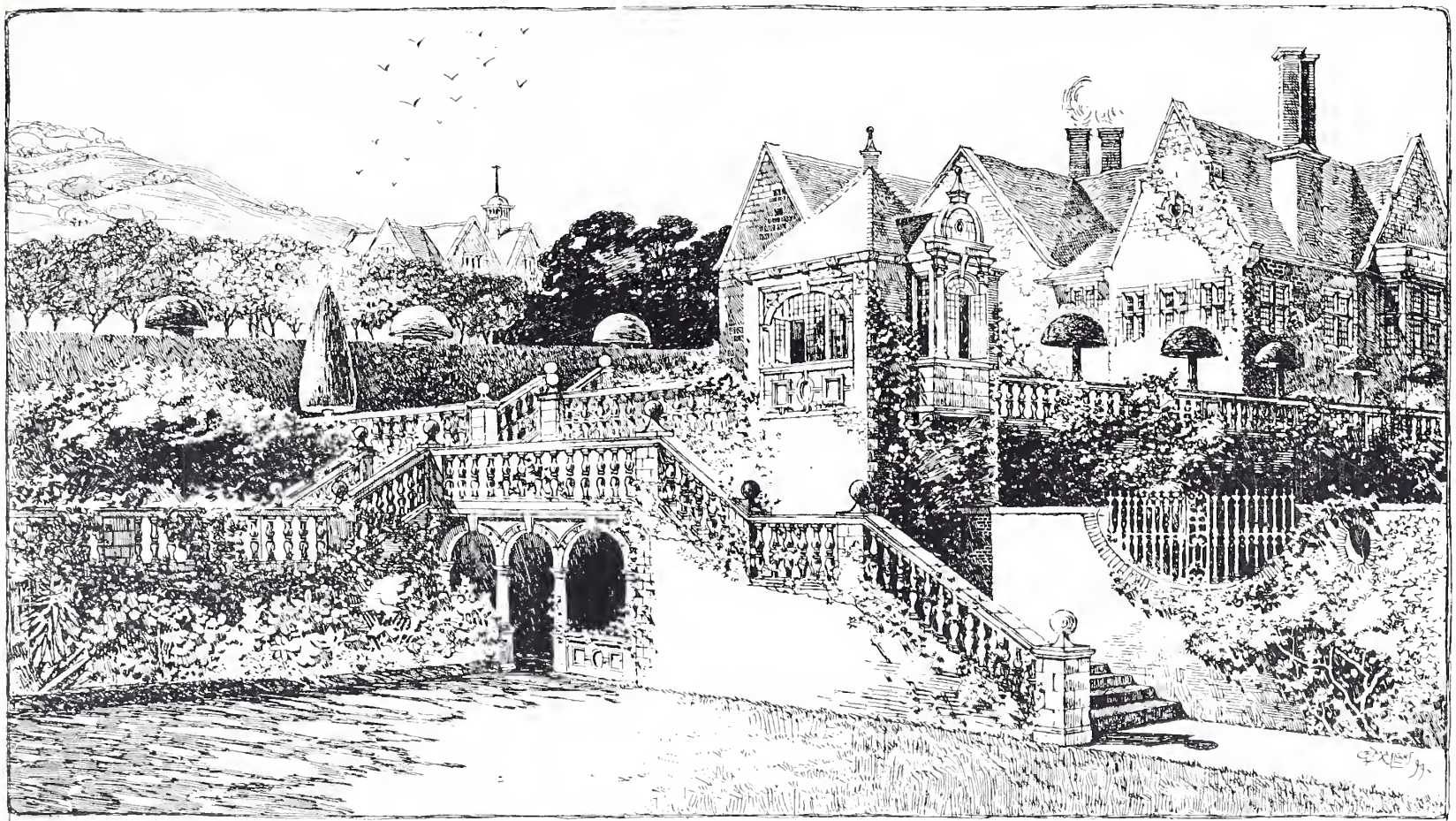
Side walks are seldom needed, but when necessary it would be found to be more consonant with the idea of a park if the ordinary arrangement of kerb and channel could be avoided. Park drives should not look like highways. A little study of this point might result in the invention of many satisfactory ways of dealing with the problem.

Where possible, separate roads should be constructed for the use of tradesmen and for the carting which is always necessary to a private residence. Where these cannot be conveniently made, and the main drive has to serve for a part of its length for all purposes, great care should be taken to ensure that visitors do not mistake the connecting road to the kitchen court for the main drive. This may be partly accomplished by keeping the junction as far from the residence as possible, by making the back road much narrower and by making the junction at a sharp angle, and planting the space on each side of the junction as shown in No. 35.



No. 35.

The length of a drive should prove an important factor in settling its width ; for instance, if a drive is only fifty yards in length it would not be in the least necessary to arrange for carriages passing each other, as it would be a very simple matter for one carriage to wait outside the entrance gates until the other had passed out again ; but where the drive is five hundred or more yards in length, it would be necessary to arrange the width so that carriages might pass each other on the drive. Supposing the main carriage drive to be moderately long, with a branch from it for the use of tradesmen's carts, the width should not be less than 16 feet and the branch road 9 feet wide. Where however, the drive is short, 12 feet would be a sufficient width.

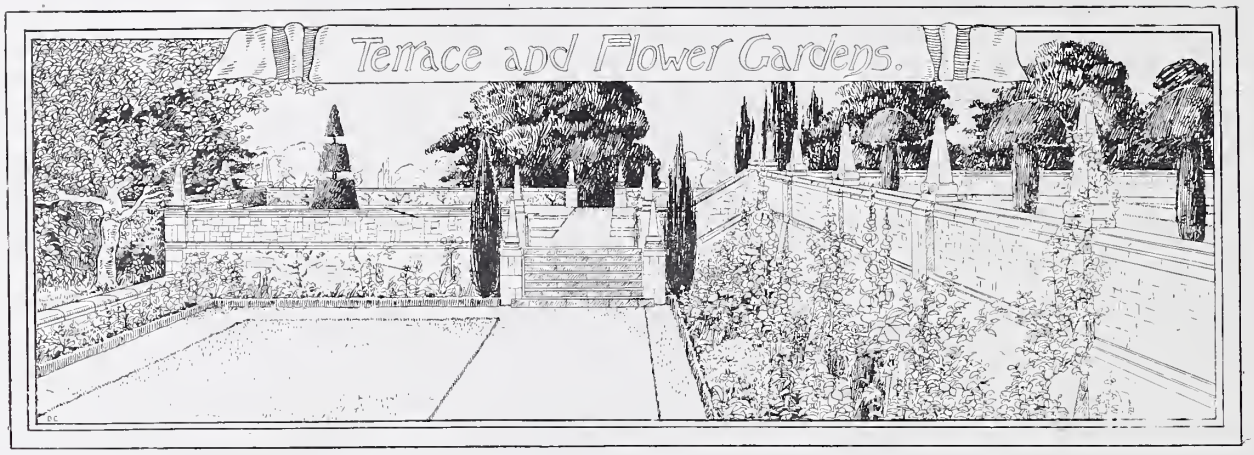


TERRACE AND PAVILION DESIGNED FOR A STAFFORDSHIRE GARDEN

T. H. MAWSON & DAN GIBSON

No. 36.

CHAPTER V.



"Design and form is the very soul of a dressed garden."—*Sir Gardner Wilkinson.*

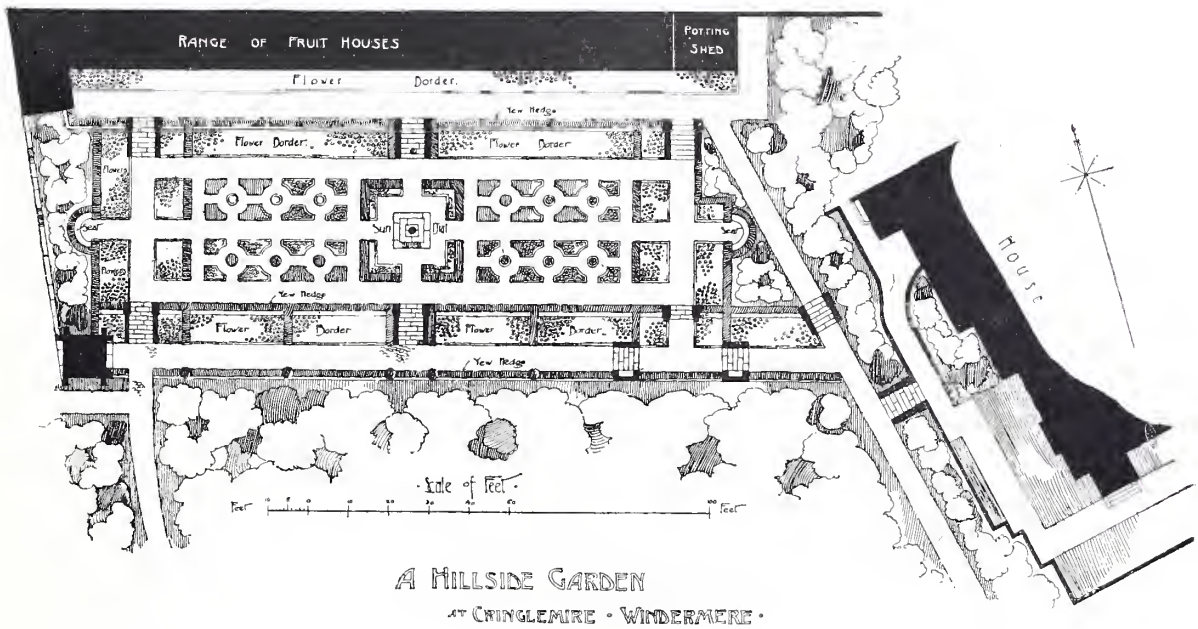
Though some form of terrace is shown in connection with the whole of the gardens illustrated in this work, this must not be understood as representing any singular ideas on the part of the writer, every landscape gardener whose work has received any recognition agrees that the only way to give a proper connection between the house and the garden is by some formal arrangement immediately round the house. There are notable exceptions certainly in the mansions of Blenheim and Goodwood and other houses of less note but equally accordant, but architects who have given any consideration to the subject of garden design have almost always made the terrace an important part of their scheme.

By most people a terrace is considered simply as a raised platform, often a mere strip of walk some 8 or 10 feet wide, occupying the ground between the house and gardens, the purpose of which is not very clear, as it can scarcely be considered a part of a garden scheme and hardly looks like a part of the residence. But even such a narrow terrace as this, if well designed, may be made to add considerably to the architectural character of the house. It is not in this restricted sense however, that I propose to consider this question, but rather as the treatment of the whole plateau upon which the house stands, and the level enclosures referred to elsewhere as outdoor apartments, and which ought to form a part of the architectural scheme.

Looked at in this way it will readily be seen that the terraces generally fall from the house in a series of levels. Or the terraces may rise from the house on one side and fall from it on the other, as at Blickling Hall and Tissington and partly at Haddon Hall, or as at Graythwaite Hall, see illustration No. 142; and again at Cuerdon Hall Gardens, see plan on page 196. Everything depends on the natural fall of the ground; and it may here be added that terraces will generally be most successful when they emphasise the

varying levels of the site. Indeed in some cases art might be well directed in creating an appearance of rise and fall of the site, this would apply more especially in a flat uninteresting locality; this might be accomplished by the formation of sunk gardens in one place and raised terraces in others. An example of this is shown in the illustration of the gardens at Little Onn Hall, Staffordshire. See page 199.

Although terraces are spoken of as being level (which they generally should be) they may sometimes with advantage be on the slope of a hill, an example of which is shown in illustration No. 37, which is a hillside garden designed for Henry Martin, Esq., of Cringlemire, Windermere. There are even instances in which a perfectly level terrace



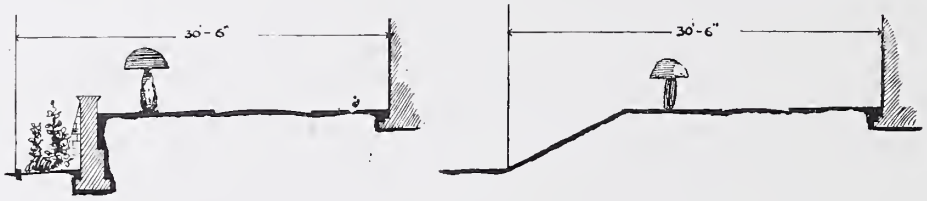
No. 37.

would appear to dip into the ground, to rectify which it might be necessary to give a slight fall of, say 1 in 60, in the direction of the general fall.

One of the principal points to be considered in connection with a terrace of varying levels, is the way of treating the line of division between one level and another. This may be effected in a number of ways, but one of two is generally adopted, viz.: either by a grass slope or by a retaining wall. The advantages of a wall over a grass slope are very great from almost every point of view. In the first place the great cost of mowing and making good of turf is avoided; in the second it is difficult to arrange a flower border at the foot of a grass slope, whilst in the case of a wall the space occupied by the grass slope can be utilised as a flower border. The principal lines of a terrace require to be carefully arranged parallel with or at right angles to the principal lines of the house.

Whilst most lovers of gardens prefer a wall covered with climbers, many are deterred from erecting one, fearing the cost of such a feature must necessarily be very great; and

they therefore adopt a slope laid down to grass or otherwise, planted either in a formal manner or with a variety of shrubs, in the same way as in the many well known views of the garden at Rydal Mount see illustration No. 118. This may result in a smaller first



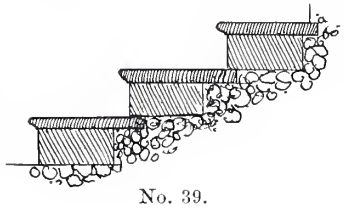
No. 38.

outlay, but as already stated, the cost of keeping up is unquestionably greater than in the case of a wall; though after all the cost of a wall depends entirely on its treatment. If for instance, the architecture of the house demands a pierced or balustrade finish, which independent of anything else, may cost 20/- per foot run, the cost for any considerable extent of wall so erected would be very heavy indeed, but except perhaps as regards the walls which stand next to the house, there are not many places which demand this elaborate treatment. Most terrace walls, shown in connection with the gardens illustrated herein, have been finished with a very simple coping, in some cases broken up by pilasters and sometimes by sloping buttresses, with ball or sugar loaf finials. The height of wall above the terrace may vary from 6 inches up to 3 feet 3 inches, although the best height for the solid terrace wall will generally be found to be 17 inches or sitting height, excepting when the fall to a lower level exceeds 6 feet, when it is generally safer to have it from 2 feet 9 inches to 3 feet 3 inches high. When the drop does not exceed 3 feet the wall often looks best when the depth of the coping only stands above the terrace—*i.e.*, on the high side the top of wall is, say 6 inches above the ground.

Although pierced or balustraded walls are not always necessary, they often, independent of the architectural effect, add considerably to the effect of a terrace by allowing more to be seen of lower lawns or flower gardens than would be the case where the wall was solid. This is especially true of terraces formed on the sides of a very steep hill, and therefore necessarily narrow and deep. Where the terraces are so arranged, the openings allow much more of the terrace to be seen, and, as viewed from the house, often obviate the appearance of a garden formed entirely of walls.

Steps form a pleasant feature in the terrace arrangements, lending themselves together with their flank walls to a variety of detail which makes monotony inexcusable, but the comfort of those who have to use them should be considered always before mere effect. This would in some degree be accomplished by making the treads broad and the risers easy, the size of step which I have found to be the best, is a tread 13 inches in width and a riser of 6 inches. Where however, the steps have to follow a grass slope made to a batter or slope of 1 in 2, the spacing of the steps could only be 12 x 6, but this might be increased to 13½ x 6 by having a projecting nosing of 1½ inches, either worked on the solid, or as a projecting flag on a built riser as in

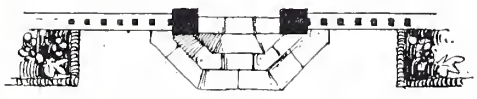
No. 39. Where the steps are in connection with very deep terraces it would be found advantageous to arrange them in two flights, using the space under landing as a summer house, or tool shed; but where the steps do not exceed 8 or 10 in number they may most often be arranged with effect when they run at right angles to the terrace, each side of the steps being supported by side walls against which the flower border finishes. Where the drop does not exceed 3 feet, a very usual and effective way of treating them is by forming them into spreading steps, arranged as a square, semi-circle or octagon, as shewn by Nos. 40, 41, and 42.



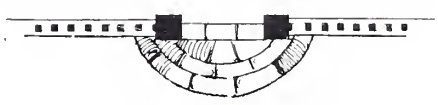
No. 39.

These spreading steps may be constructed in a variety of ways, *e.g.* with outer steps of stone and paving to the back, or where the walks are in brick, by a hard brick set on edge in cement or by an oak nosing to a brick tread.

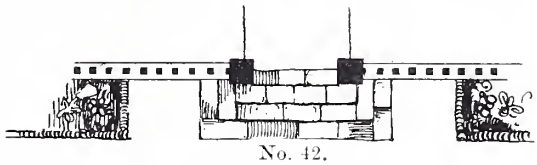
The foregoing are only a few of the forms of steps which would most often be found useful when laying out terraces; they are also such as would apply to most gardens. Although the forms of steps referred to are all exceedingly simple and perhaps more adapted to small gardens than large ones, there would be found ample opportunity for the display of individual taste in the designing of the pillars, side walls, and finials in connection with them.



No. 40.



No. 41.



No. 42.

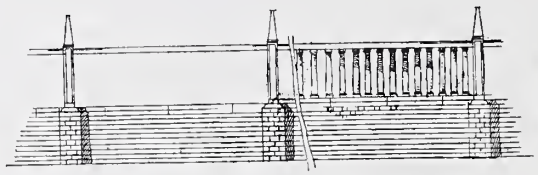
Terrace walls of the simplest possible design and local material may often answer all the purposes, and be quite as effective as those of more elaborate design, and, when covered with hardy climbers, look equally or more interesting than any other. It should however, be remembered that a terrace wall cannot be considered as a feature separate and apart from the architecture of the residence; for instance, a brick or stone residence in the traditional period of Inigo Jones, or a modern erection in which stone and brick are combined in the same way, would probably require to have its terraces treated in the same manner. Stone dressings are used for the house and must therefore be used for the terrace walls. The stone work might not extend beyond quoins or a coping, but in some form it might be necessary to the harmony of the whole. And so, whilst simplicity is a quality to be aimed at, there are many instances in which it is necessary to use ornament. The charming examples of balustraded walls at Montacute, Brympton, Wilton, Haddon, etc., are each indispensable to the success of, and shew a pleasing fitness to the gardens they adorn.

To give a clearer impression of what is meant by simple and by elaborate terrace walls, a series of elevations with scale are given on page 44 of terrace walls designed for gardens planned by the author. In addition to these there is an example which may be

TERRACE WALLS AND BALUSTRADES.

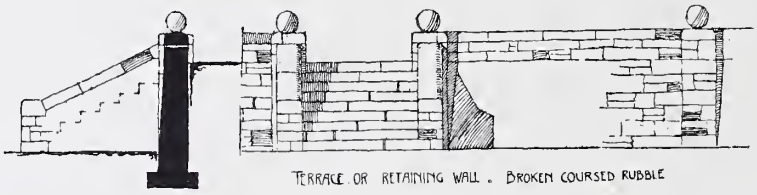
SCALE OF FEET

10 5 0 10



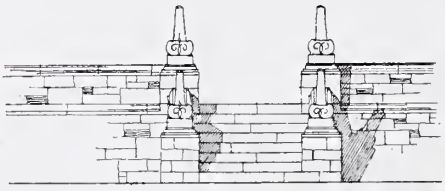
BRICK RETAINING WALLS WITH WOODEN BALUSTRADE

BRICK WALL WITH ROUNDED COPING BRICK STEPS WITH OAK MOSING

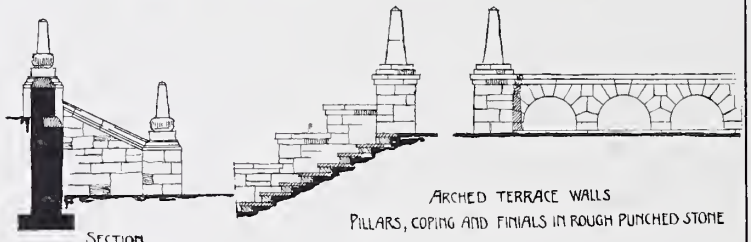


SECTION

TERRACE OR RETAINING WALL . BROKEN COURSED RUBBLE

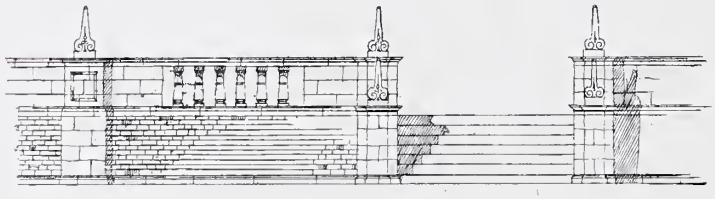


SQUARED RUBBLE WITH DRESSED STRING AND COPING

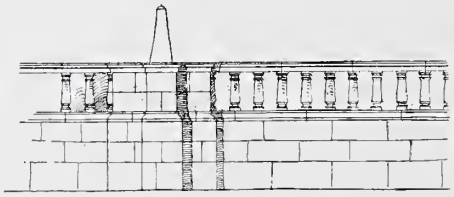


SECTION

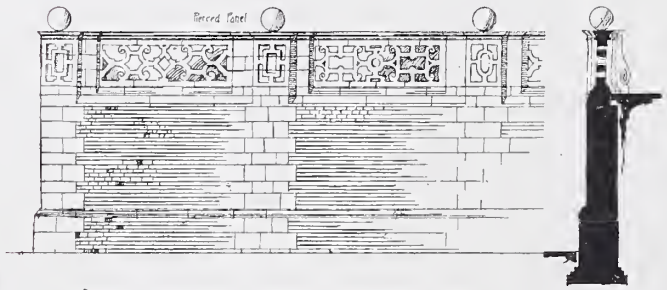
ARCHED TERRACE WALLS
PILLARS, COPING AND FINIALS IN ROUGH PUNCHED STONE



TERRACE WALL IN BRICK AND STONE WITH BAYS OF SQUARE BALUSTERS

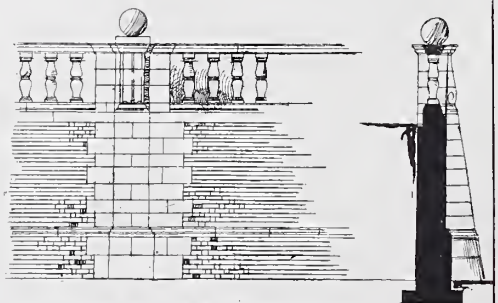


ASHLAR WALL WITH MOLDED STRING AND COPING



DRESSED ASHLAR AND SMALL BRICKS WITH PIERCED PANELS

SECTION



DRESSED ASHLAR AND SMALL BRICKS WITH BALUSTERS

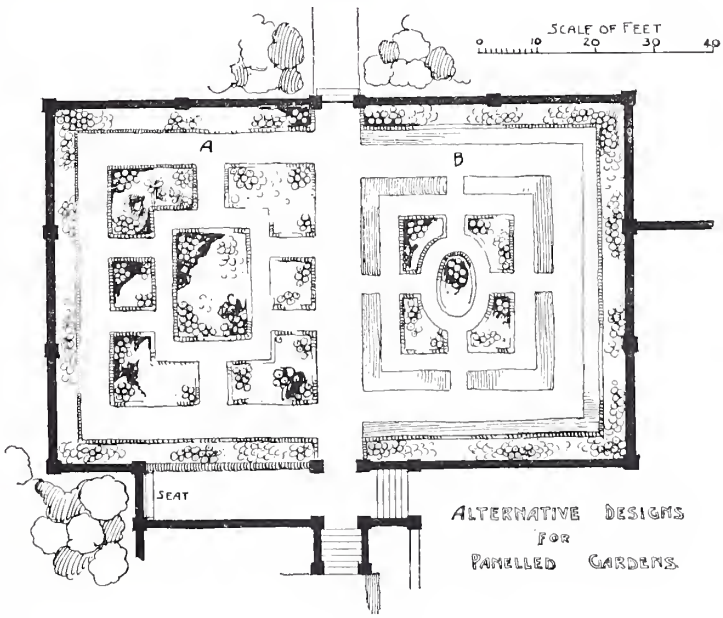
SECTION

interesting in its way; being a wooden balustrade set on a low brick wall. This was designed for the terrace in front of an old house in Staffordshire. Other examples showing stone terrace walls with bays of wrought iron filling in the circular sweep is shown in the perspective view of the garden for Walter Whitehead Esq., Colwyn Bay, on page 201 and also the cross terrace wall shewn in perspective No. 36.

Having gone into the question of terrace walls, it may be well to consider more particularly a few important points in connection with the terraces themselves. And first, it should be repeated that they should not be considered merely as one long promenade, but rather as a series of gardens, each division having its own particular charm; the whole being in connection with the best apartments of the house and forming a series of changes, all of which shall conduce to the full enjoyment of the owner and his guests. The entrance to each separate garden, having some special attraction, would in itself be an invitation to explore further.

The terrace being the centre around which the pleasure grounds or woodlands are arranged, attention would be directed to discovering or framing those features which have in them the elements of the picturesque, or which in any way give character or individuality to the place. "Nothing," says Sedding, "is prettier than a vista through the smooth shaven green alley or an archway framing a view of the country beyond."

Whilst it may be necessary that a portion of these terraces should come into the several garden scenes, there should somewhere towards the ends, be garden enclosures or perhaps a bowling green or a grass court with a sundial in the centre, and a yew hedge surrounding it, with apple trees throwing their heads above it. Such a court would add to that love of retirement which a garden ought to foster, and to which it should minister.



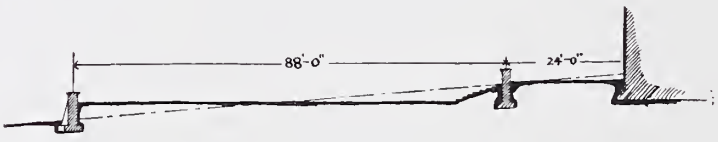
No. 44.

And now as to the purely landscape or garden making part of the terrace scheme; such, for instance, as the making of flower borders and beds, upon which depends, in a very great measure, the success of the gardens as a whole. The first consideration is that the border should be well made and thoroughly drained, and that, in arranging panel designs, fancy patterns be avoided. The more simple the

design of the beds the better they look. This will be easily understood when we consider the large number of flowers which can be grown in an oblong, of say, 12 feet x 5 feet, compared with what can be grown in the same superficial area divided up into a number of beds with curves and acute angles. There may be the same quantity of ground, but it is not available for plants in the same way. In the first, every inch can be planted, whilst in the other, there are long narrow points to each bed which cannot be planted. A series of beds with square angles give the most accommodation. Beds having right angles at the corners may, however, be of several shapes, a good form being the one shown in the sketch of the panel court at Wraysbury (page 47). This is one of those very simple panels which allow of repetition, as for instance, in four panels to fill a larger space; or the panels might, whilst retaining the general characteristics, be varied as in sketch No. 44, In the several garden schemes illustrated herein many forms of panels will be found.

As the question of edging to beds and borders is referred to on page 99, it is only necessary to add that beds of a definite panel design and divided by narrow walks of say 2 feet 6 inches wide, are much better than beds cut out of grass.

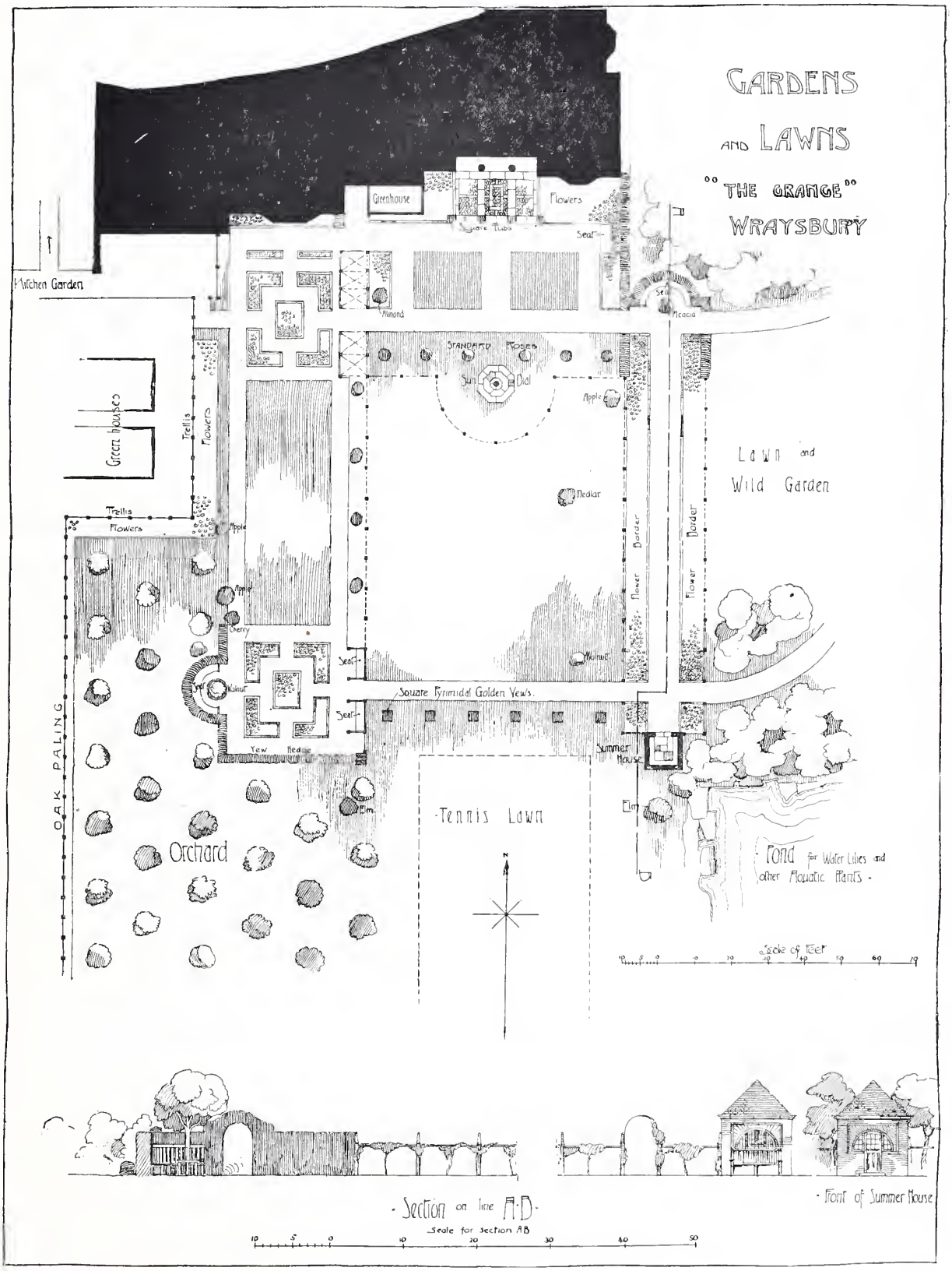
Much has been said by writers on garden design as to the width and length of terrace gardens; but my experience is that this is a question which, to a very considerable extent settles itself. At any rate this is the case in respect to terraces arranged on falling or rising ground; for instance, if the average fall from A. to B. is 1 in 15, and it is decided that the walls shall not exceed 4 feet 6 inches in height to ground level, the result would be as follows:



No. 45.

To obtain extra width would involve greater height of terrace wall. Where, however, the conditions are such as to allow choice of width, the terrace next to the house should not be less than 25 feet in width, whilst for the lower terraces 120 x 60 feet, or larger in the same proportion, would be found a very suitable size.

I have heard so many expressions of disappointment from people whose gardens were on the flat and who seemed to feel that on this account there was no use in attempting to do anything, that I am induced (though somewhat out of its proper place) to give a plan and perspective view of a garden I am now laying out for Geo. M. Freeman, Esquire, Q.C., The Grange, Wraysbury. Before describing these gardens, it might be well to point out that a flat, level piece of ground often possesses the quality of breadth sometimes unattainable in a garden placed on a hillside. In treating such a site the fullest advantage would be taken of the least rise or fall in the ground, and as stated elsewhere, have this rise and fall emphasized. The mistake which so many garden designers make is in endeavouring to reproduce unnatural undulations and mounds, instead of aiming at retaining the quiet peacefulness everything suggests, and making all agreeable thereto.


GARDENS
AND LAWNS
"THE GRANGE"
WRAYSBURY
Greenhouse
Flowers
Seat
Kitchen Garden
Almond
Acacia
Standard Roses
Sun Dial
Apple
Green houses
Trellis
Flowers
Lawn and
Wild Garden
Nectar
Flower Border
Cherry
Walnut
Square Pyramidal Golden Yews.
Summer House
Elm
Tennis Lawn
OAK PALING
Orchard
Yew Hedge
Pond for Water Lilies and other Aquatic Plants
Scale of Feet
Section on line A·D·
Scale for Section AB
Front of Summer House

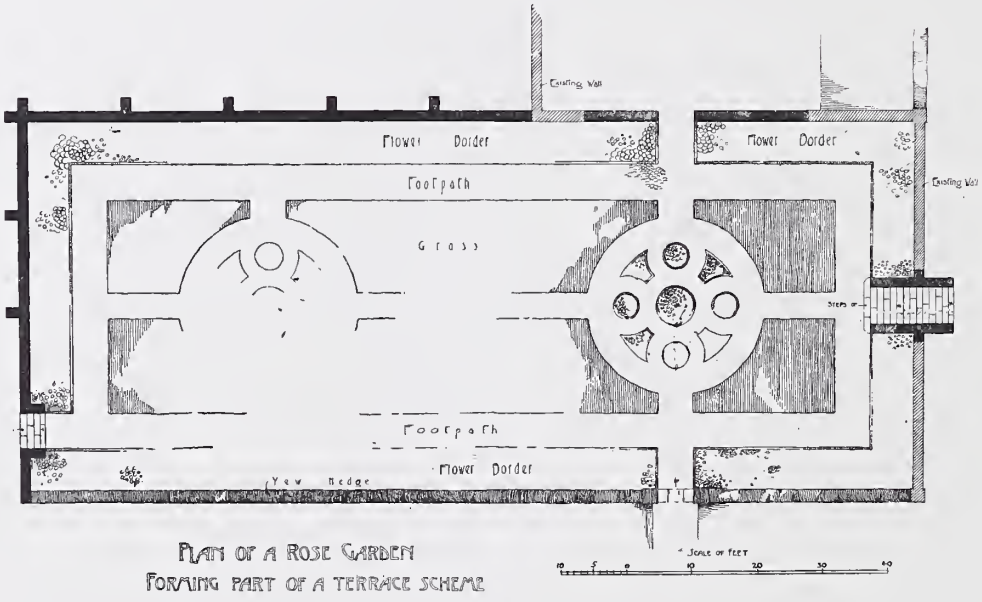
No. 46.

In this garden the site of which is so level that the river at normal flow is only about 7 feet 3 inches below the floor of the house—it will be noticed that considerable variety is obtained. The plan however, omits a formal lily pond, which stands at the end of the tennis lawn. Considerable use is made of pillars and rails which enclose the sundial immediately in front of the house, the bower walk to the right of the plan, and the formal flower gardens to the left. Up each pillar, and along each bar are to be trained climbers. No set form of bedding out will be attempted, each bed and border being planted with hardy perennials, and bulbous plants. On each side of the long bower walk will be planted a large number of Roses, including many of the old-fashioned sorts, the pillars being clothed with Paul's crimson and Dundee rambler. At one end of this walk is placed a circular seat surrounded by a yew hedge, at the other is the summer house shewn on the section. Outside this is a wild garden in which all sorts of plants are naturalized, and connecting up to this and the summer house, is a water garden for the accommodation of all sorts of hardy aquatic and bog plants, the stream being made wide enough and connected with the river so as to allow of punts being brought up to the steps to the side of the summer house. Another garden designed for a very level site and within two miles of the Grange is that shewn by illustration, No. 47.

These gardens were laid out in connection with a residence erected a few years ago for George Gregory, Esquire, from designs by T. E. Collcutt, Esquire, the architect of the Imperial Institute. The residence occupies the site of a previous house, to which grounds had been laid out in what is sometimes called the naturalesque or landscape style. Part of these were to be retained. As will be seen by the sketch, the house is raised some two and a half feet above the garden level. A terrace has, therefore, been built and laid out as shewn, this portion of the work being in the hands of the architect. The flower garden is divided into two portions, around each of which is laid a broad strip of grass, the centre beds being finished with box. The original intention was to have a fountain in the centre of each flower garden, but this was omitted, the space being devoted to a formally clipped yew, the smaller circles being of pyramidal junipers. A feature of this garden is the Irish yew avenue, which extends from the end of the terrace to the lawn tennis ground The tennis lawn is formed on the site of the kitchen garden, which has been replaced by one of larger size behind the stables. Inside the circle of clipped yew, in the corner of the flower garden, there is to be a seat. In the centre of the two small circles, at the end of the tennis ground, I hope to see some statuary or other architectural feature. The whole of the flower borders and beds are filled with old-fashioned hardy perennials and Roses, not forgetting the old sweet-scented varieties. To the front of the flower borders at the foot of the terrace walls is arranged a grass verge two feet wide, so as to balance the grass on the opposite side, but between this and the flowers there is a row of box edging. Another point of interest may lie in the fact that on the vacant piece of ground between the corner of the tennis-ground to the small triangular bed and the park fence, it is proposed to plant Apple and Pear trees, which, when in blossom, are very pleasing in contrast with clipped yew hedges, especially when blossoms shew above the hedges.

No. 47

In many gardens provision has often to be made for flower beds in parts of the grounds which do not in any way form a part of the terrace scheme. In this way one may have gardens set apart for certain families of plants, as for instance, a rose garden as shewn in the accompanying plan, No. 48, or an American garden, lily gardens, rock gardens, alpine gardens. There may also be gardens of remembrance, in which friends may plant any variety of hardy flowering plant to which they are more particularly attached ; such a garden is described in Lady Warwick's new book, "An Old English Garden." Then, again, there may be a portion planted entirely with the flora of Shakespeare or Tennyson, or other favourite poets. In this way variety and interest may be given to the garden as a whole. Such gardens, being arranged in more or less secluded parts of the grounds, need not follow so strictly the designs which would seem to be necessary near the house. For instance, a rose garden might be a geometrical set of figures cut out of the grass,



PLAN OF A ROSE GARDEN
FORMING PART OF A TERRACE SCHEME

No. 48.

standard and pillar roses being arranged so as to give a feeling of enclosure to the whole, and this set of figures might be quite distinct from, and indeed possess none of the characteristics of, the designs adopted near the house. If however, in making a rose garden, the beds are as would generally happen, cut out of the grass, great care should be exercised in the spacing of the several parts, so as to obtain sufficient width of beds to allow of a fairly good number of plants, the spaces of grass between the beds being sufficient to allow of a mowing machine passing between them.

Simplicity of design for the beds will be found to be quite as necessary when they are cut out of grass as when they form part of a panel scheme ; the best and most simple form being circles or beds radiating from a centre, or a series of squares grouped so as to give some kind of pattern when seen together. In both cases ample width of grass, never less than 3 feet, should be left between each bed.

It is not by any means advanced as a rule that whenever provision is required to be made for certain plants, a design more or less elaborate should be made for their accommodation. In the majority of gardens such an arrangement would be out of scale with the design as a whole, where, perhaps, only a single bed could be devoted to any one class of plants. In such cases any simple form,—a circle, square, oblong, or triangle—which would seem to fall in with its surroundings might be adopted; the forms to be avoided are stars, half-moons, tadpole and kidney shapes.

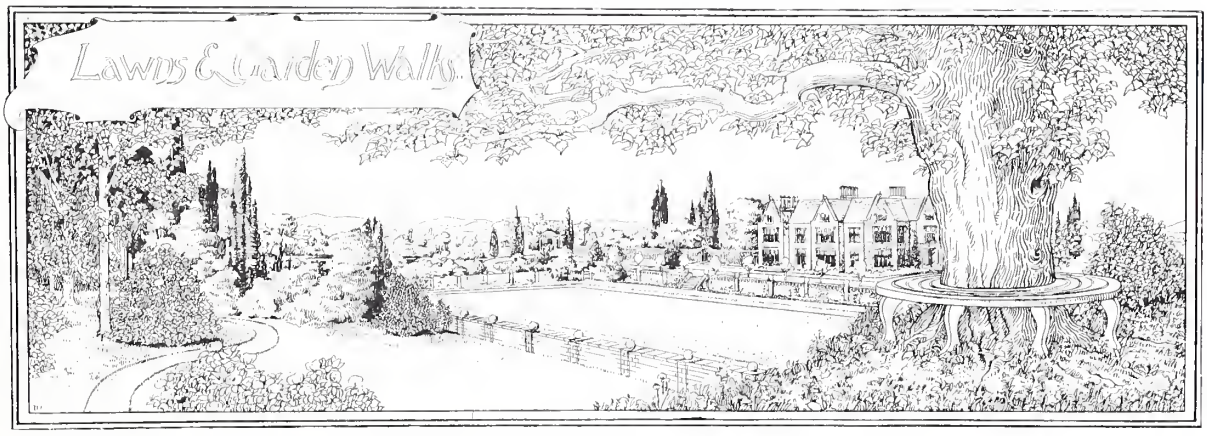
Alpine and rock gardens should not, as a rule, be very near the house. Any natural dingle or depression, which could be screened from the more important features of the grounds, would form a fitting place for them, or they might form a part of the wild garden or wilderness. They should not, as is so often the case, impress one with their costliness by suggesting a large amount of engineering work, but rather suggest that the original wilderness had been tamed as little as possible. This point cannot be too strongly insisted upon at the present time, when so many meaningless hillocks of stone are at great expense being thrown up and called Alpine gardens. Nothing to my mind brings garden making into such contempt as this dotting of stones, mostly end up, over half an acre of ground. Fortunately this system is not followed by the best informed of our rockwork builders.

Tennis and croquet lawns, which require level unbroken stretches of green sward, are peculiarly suited for parts of the terrace scheme; and indeed in these positions, are, from the fact of their being so convenient to the house, more used than in any other. Upon purely artistic grounds there are also strong reasons why these lawns should be located on the terrace, as the stretch of green sward gives the necessary breadth of effect; an effect which is the natural outcome of the requirements of the game. It is for this reason that so many of the garden schemes illustrated in this work include tennis lawns placed in close proximity to the house and in positions overlooked by its principal apartments. This favoured position is almost more necessary where the lawn is to be used exclusively for croquet, as the game is much patronized by elderly people, who would be induced to play much oftener if the lawn was close at hand; for this reason, care should be taken to protect the lawn from east winds, and in other ways to make it as comfortable as possible by the provision of sheltered seats, and arbours and where necessary by enclosing with good yew or holly hedges.

In forming lawns for single tennis courts I generally contrive a seven foot walk all round, thus adding fourteen feet extra length and width for play; the playing green being 100 by 50 feet is thus increased to 114 by 64 feet. For croquet a little more grass should be allowed, especially in width; a convenient size being 105 by 84 feet. In the formation of these lawns, two points should have very special attention; the first is drainage, which should be thoroughly well done, especially at that portion which is excavated out of rising ground and where grass slopes down to the lawn, as the water is drawn from the higher ground and the only way to secure a dry lawn is to make a good pipe drain at the foot of the slope and to fill it up with stones to within a foot of the surface; the other point is to have a good depth of soil, on which to lay the turf or sow the seed. Neglect of these two essentials is responsible for most of the unsatisfactory lawns one so often sees.

Nothing marks more clearly the change which has taken place in garden design than the present day custom of omitting the bowling green, which in the old gardens was almost considered an essential; bowling alleys and open grounds of advantage being common terms in old garden books. Bowls are still popular in this country, but they are principally confined to clubs or public parks; this is unfortunate, as bowling greens lend themselves to more artistic treatment than that allowed by any other form of playing green. In the first place, whilst the regulation size is about 40 yards square, almost any shape may be adopted, provided there is the requisite length, indeed the old bowling alleys were generally long and narrow, and protected on either side by a good hedge or wall. In other places the lawns were circular or oblong with circular ends, in which were placed seats, and sometimes lead figures. The most popular form to-day is a square, sunk some two and a half feet below the surrounding ground, the playing green being raised about six inches to the centre; the raised platform, which thus surrounds the lawn, forms a splendid point of vantage from which to watch the progress of the game. This platform should be carefully screened by a good hedge or plantation, and if in the hedge recesses were cut for seats the effect would be considerably heightened. Old walled-in gardens which are no longer required for vegetable or fruit growing make splendid positions for bowling greens.

CHAPTER VI.



One of the greatest charms of an English garden, is its beautifully kept, clean shaven, verdant lawn, often of a quality unattainable in any other country. We therefore do well to prize this special advantage, and to make the most of our opportunities. Recognising this fact, critics have very properly taken exception to the practice of dotting a lawn all over with specimen trees and shrubs, in such a way, as to lead one to suppose the green grass had been considered as so much background, on which the garden picture had been built, instead of its being dealt with as an "artistic quantity." Nothing gives so much breadth of feeling to a garden as a green lawn, and no other feature is so capable of giving repose. Fortunately both these qualities are attainable in all the styles in which gardens are generally designed, but in the landscape garden this is not so easy as in the formal, though a careful system of grouping, as against dotting of shrubs, and a due regard to the ease of line adopted for the walks, will do something towards the realization of this object.

In an architecturally-treated garden, the quantity of grass and the various levels of the lawns would all be settled with exactness; but in the more natural or landscape portions of the ground, there are a few conditions, the observance of which go to make lawns pleasing or otherwise. In the first place, it should be remembered that this style of gardening is supposed to recognise the contours of the land, the undulations already existing being made to form a part of the garden scheme. Now, although this is partly possible, it is not wholly so: for instance, to obtain a good walk it may be necessary to excavate several feet, or to raise it so many feet above the surrounding ground level, compelling a re-adjustment of the levels of the lawns. In all such cases it is well to remember that a garden in any style is simply a tamed landscape, and that it is the gentle undulating lines of nature which are to be followed, and not the rough broken ground of the uplands sheep pasture, nor, on the

other hand, the series of miniature railway embankments, so often crowded into a garden scheme. The foregoing short notes and the many garden plans which are herein illustrated, will probably suffice to give some idea of the principles which underlie, and are necessary to the formation of good lawns.

So many misconceptions relating to the making of a good sward are held, even by practical gardeners, that one or two of the more important ones may very well be dealt with here. In the first place, it is often considered wrong to have a good soil bed on which to lay the turf or sow the seed, the impression being that it encourages strong grass. I have even seen a large tennis lawn finished with less than three inches of soil, with the result that in two years it was covered with moss. A lawn, like a meadow, requires to be in good heart, and must, therefore, be prepared with a sufficient quantity of good soil. To prevent worms, however, a layer of sharp clean ashes or coke breeze may be laid under the turf, or, where the lawn is to be sown down, under the top spit of soil. Another error is that of neglecting proper drainage. This is the most important factor in the maintenance of good turf, because if the ground retains too much moisture, the grass soon goes yellow and is really apt to burn up sooner than well-drained ground. This is explained by the fact that on wet ground the roots are near the surface, whilst on dry warm soils they go down deep.

Whenever good turf can be obtained, this should be preferred to sowing seed, as the latter takes a long time before it can be considered a good lawn. If, however, care is taken in the selection of the seed, and the thorough preparation of the ground, a beautiful green sward can be obtained in this way. The prescription of grass seed, and the quantity which I use for an acre of ground, is as follows :—

Cynosurus cristatus	4 lbs.
Festuca duriuscula	3 lbs.
Festuca ovina tenuifolia	2 lbs.
Poa nemoralis	2 lbs.
Poa nemoralis sempervirens	3 lbs.
Poa trivalis	2 lbs.
Trisetum flavescens	1 lbs.
Trifolium repens	6 lbs.
Trifolium minus	2 lbs.
Dwarf perennial rye grass	20 lbs.
	45 lbs.

All gardens depend to a very great extent for their success, upon the arrangement and quality of their walks. Flowers are most delightful, shrubs or trees may be most interesting; but if, in order to get to them, it is necessary to wade through so much puddle or traverse a walk unnecessarily circuituous, or one of bad construction, or in which the gradient is very steep or uneven, the pleasure in the flowers or trees is largely discounted. In several gardens which the author has been called upon to re-model, the walks have apparently presented two ideas; that they were a substitute for the old

fashioned maze; and that those for whose benefit they were made might be able to tire themselves in the least possible time,—both ideas are quite foreign to the true intent and purpose of a garden.

In several of the preceding chapters, and in all the plans illustrated therein, walks are either shewn or described, the details being sufficiently clear to give the author's intention. It may, however, be well to emphasise a few principles which should guide when forming them; and first, it should be noted that a garden does not consist of a multiplicity of walks. A certain number of these or a certain amount of gravelled space may be necessary to the design; but, taken generally, the gardens consist of lawn, flowers, trees, shrubs, and the walks add to the pleasure of these things by affording dry clean paths upon which one may stroll at any time without the inconvenience that would otherwise be found to exist.

Garden paths are used for recreative purposes and social intercourse, and should, therefore, offer every inducement for frequent use by well conceived and harmonious lines, easy gradients and perfect metalling or paving. To make the walks still more useful, seats and shelters ought to be provided in convenient positions. They should also be arranged in such a way that the beauties of the place may be exhibited, not by a series of wriggles, each of which is supposed to bring the spectators into direct line with say—a sham ruin, but in a simple straightforward manner to show the extent of the garden, the picturesqueness of the climber-covered house, the wealth of flowers, or any other special feature of interest. In the last place, walks are absolutely necessary for the proper working of the gardens.

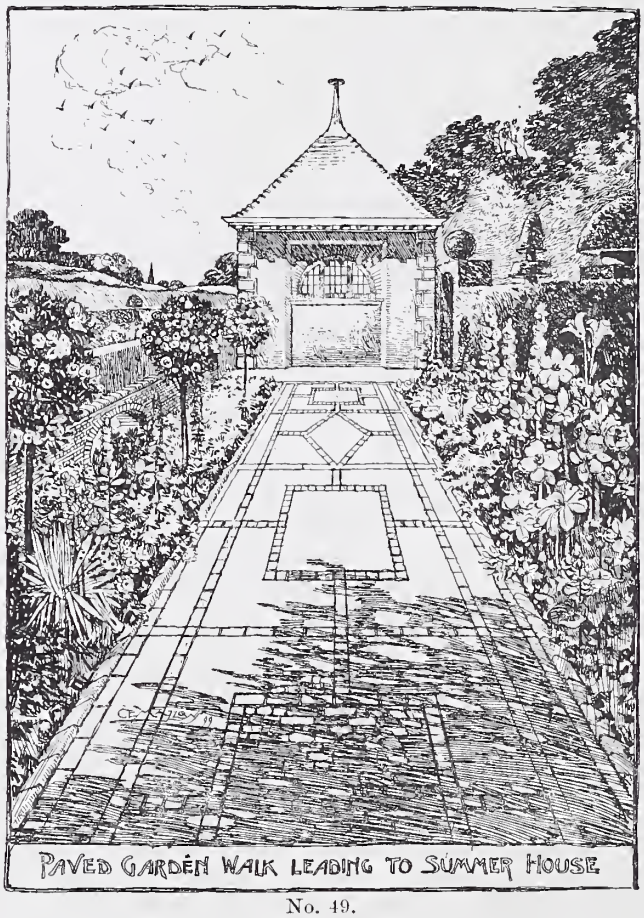
From the foregoing it will be seen that garden paths may, and in fact, ought to carry their own excuse; and it is only necessary now to emphasise the fact that they look best when they appear to be necessary to convenience or ornament, and that the practise of cutting up lawns indiscriminately merely for the sake of making paths cannot be too strongly condemned.

Referring first to those walks which form a part of a terrace scheme, it must be noted that they should be approximately level, if not cross-wise, certainly lengthwise. Wherever falls occur between the several levels they should be marked by steps; sloping paths on a terrace are seldom a success.

Respecting the width of terrace walks, it is somewhat difficult to say what widths would always be required. The size of the residence, and the breadth and extent of the terraces, have some influence on the widths which would look proper. It is, however, better to err on the side of wide rather than narrow paths. Where there is a long terrace running in front of a moderate sized residence, the width of walk should not be less than 9 feet; in front of a mansion the width might be as much as 12 or 15 feet, but on the second terrace 8 feet might be found quite sufficient; anything less than 6 feet in width would generally appear mean and out of scale. The paths in a flower garden arranged as a panel may be quite narrow, say 2 feet 9 inches or 3 feet wide, provided the walk surrounding the whole is fairly wide.

Terrace walks might with great advantage be made in a different manner to the other walks in the garden, and this without adding very much to the cost. Of the many methods of doing this paving presents the readiest and simplest means, the variety of designs which are possible allowing great opportunities for the exercise of individual taste.

The sort of paving most often met with is that formed with cobbles, with which cottage garden paths and the side walks of villages are so often made. With these small cobbles very effective walks may be made, the several colours of stone allowing patterns to be worked in the path. A still more effective arrangement can be made by laying the pattern in dressed stone or brick, as shewn in the sketch No. 49, filling in the space between the small cobble stones. Any hard brick of good colour might be used instead of stone for making the pattern.



PAVED GARDEN WALK LEADING TO SUMMER HOUSE.

No. 49.

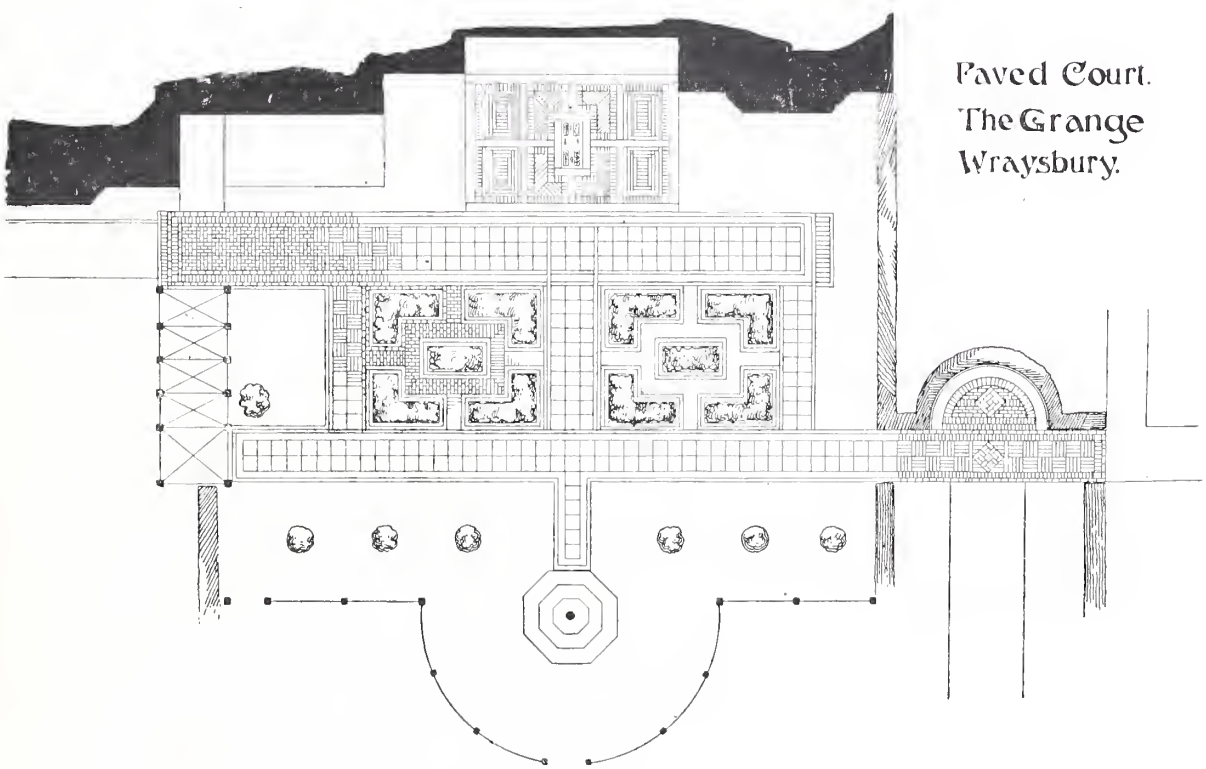
Almost any pattern can be formed in this way, but stone which has to be worked to curves is much more costly than when laid in simple squares or diamonds.

In forming paved walks, attention should be paid to the foundations which should first be prepared by removing the soil, then laying down a core of stone or brick or other hard material to a depth of six inches. On the top of this may be placed a layer of sand upon which the stone pattern may be laid, the cobbles being laid in sand, and the whole afterwards grouted in cement. A still more permanent way of paving would be to lay a cement screed on the top of the core, and pave into this screed. The stone which forms the pattern need not be more than 4 inches thick and of any width to suit the design. The cobble stones ought not to be much larger than a hen's egg.

When the residence and the other architectural erections are in brick a very excellent path might be formed by paving with the same material, as shewn in the accompanying plan. Such a path would not only be a very inexpensive one to form, but also a delight to walk upon. Those who have visited Holland, must have been impressed by the neatness and quaintness of many of the side walks paved with small klompje bricks. The paved court sketch No. 50 shews several patterns arranged with ordinary sand bricks.

Flagged paths are also good, and when neatly laid, and the flags are of good quality, very pleasing in appearance. Flags of two or three colours may be worked into a pattern, the most suitable treatment being some form of square set parallel with the walk, or angle-wise so as to form a series of diamonds.

Wood blocks, such as are used for roadmaking ought to form a most pleasing material for a walk, but, unfortunately, the large amount of tar and creosote which is at present considered necessary to good wood block paving, destroys, in a great measure, its effect. Where the tar can be dispensed with, a very desirable path would be the result.

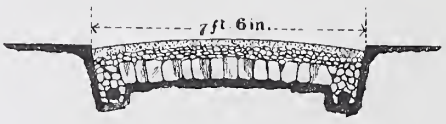


No. 50.

Walks laid in cement or asphalte are, as a rule to be avoided. There are, however, one or two kinds of concrete for walks, which, whilst making a very pleasant path, are not so objectionable as the ordinary forms. The best of these is the concrete coloured by oxides so largely used in Scotland for steps, yards, walks, etc., the other form which I have seen resembles the broken mosaic used for floors, and is a combination of concrete and broken gravel.

Gravel paths should be made as dry as possible by forming a good core of broken stone, brick, or slag, an operation which is not always conducted with that care which it ought to receive. When forming gravelled walks it should be remembered that their permanence and comfort depend largely on the way in which the core is laid. To begin with, the bottom of the walk should be levelled and formed so as to receive the proper amount of ballast

and gravel, to a total depth of say 6 inches, as shewn in No. 51. In this section the pitching is shewn at the bottom with rough broken stone and material about the size of a hen's egg on the top, the whole being covered with a layer of pinell or gravel, while at either side and below the level of the pitching, is shewn a four inch land tile covered with porous material, for the double purpose of draining the lower strata of the path, and receiving the water from the surface gullies. The ballast or foundation to these walks should be hand laid: for finishing the surface there are very few gravels to equal in colour that obtained from Farnham. The gravel obtained from near the Wrekin, and also the red granite gravel so much used in the Highlands of Scotland, make very fine walks. Very beautiful gravel may also be obtained from the lead and copper mines. Where these are not available, the walks may be laid with hard pinell or samel, and receive a coat of fine pit or river gravel, which should be rolled in.

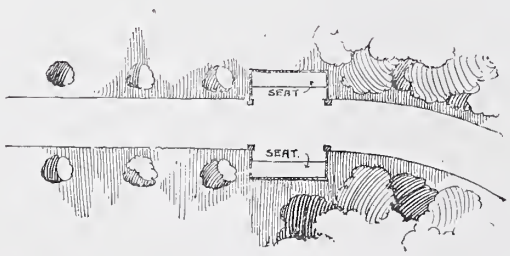


No. 51.

In most garden schemes, whether formal or otherwise, a difficulty often arises in respect to the finish of a walk. This is particularly so when the walk cannot conveniently be connected with some other. Where it is found desirable to make a walk which cannot be connected at its terminus with other walks or buildings, some fitting terminus should be made for it, such, for instance, as an arbour, or seat; this would serve a useful purpose, and in some degree atone for what might appear to be faulty planning. Such features allow almost unlimited scope to the designer, and, when successfully treated, never appear as details simply crammed in to fill up, but rather as features peculiarly appropriate to a garden scheme. This suggestion should not, however, be read as recommending the making of walks ending in a *cul de sac*; people do not like to be compelled to make a return by the same route, therefore a walk of this description should only be made when there are very strong reasons for doing so, as, for instance, when it leads to a particularly pleasing view.

There are often occasions for such treatment, even when the walk does not stop short, for instance, at the end of a straight walk from which another walk may lead at right angles, as shewn in sketch No. 101, p. 106.

Another difficulty often occurs where there is a wild garden or wilderness which adjoins and is connected with a formal scheme; the transition from the one to the other generally adopted being anything but happy. The best thing to do is to make a distinct break between them. If there is a fence dividing the two, this would in itself suffice; but, seeing that the division between a lawn and woodland is more often made by means of a shrubbery, a division should be made on the walk itself. A simple garden gate might supply the necessary break; but perhaps a more satisfactory way would be to have a summer house or arbour or pergola placed across the pathway, one side of which would then be garden and the other wilderness, as shewn in No. 52.



No. 52.

WOODLAND & WALKS SHEWING GROUPS OF LILIUMS, MOUNT STUART. ISLE OF BUTE. IRIS, AND HARDY FERNS.

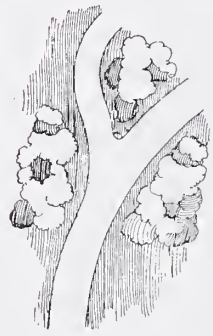
No. 53.

In the landscape garden it can scarcely be said walks are necessary to ornament at all, as continuous stretches of green sward would generally look much better. But seeing that dry walks are necessary for use, the art of the landscape gardener should be directed to making them as pleasing as possible. One of the first essentials is to arrange them so as to fall in with the contour of the land; as suggested for drives, they should lead to some important point of the garden, and be connected with other walks, and the terrace. The verges of walks should, for a width of at least 3 feet, be quite level to either side, and from this the banks should be connected as flowingly as possible with the contours of surrounding ground, thus (Nos. 54 and 55):

No. 54.

No. 55.

Battered banks or slopes, such as are made by railway engineers, are to be avoided.



No. 56.

Repton, who seems to have had a keen appreciation of beauty of line, laid down certain rules respecting walks passing through a garden laid out in the landscape style, rules that were adopted by those who were worthy of being considered his successors. The first and most important was that, when two walks diverged from each other, they should not appear as if they were intended to join again, as in No. 56, but rather as if each led to points far apart, as in sketch No. 57.

No. 57.

Another rule that he laid down was that curves should not be too small or repeated unnecessarily as on No. 33, p. 36. The curves shewn by continuous lines were considered to be more in accordance with good taste and general convenience. Another rule which, although not specially referred to in his writings, but which he followed out in his practice, was that a network of winding walks, where necessary, should not be seen all at once. These are three rules which, if observed, would do much to remove some of the objections that are raised against a natural treatment of pleasure grounds.

Sometimes it becomes necessary to connect the pleasure ground walk or walks communicating with particular portions of the house, as for instance, the conservatory or garden entrance, with the drive. Wherever possible, these would, of course, connect with the carriage sweep; but where the connection is with the drive itself, the same conditions should be observed as in making a back drive; or the junction should be at right angles, which would be still better.

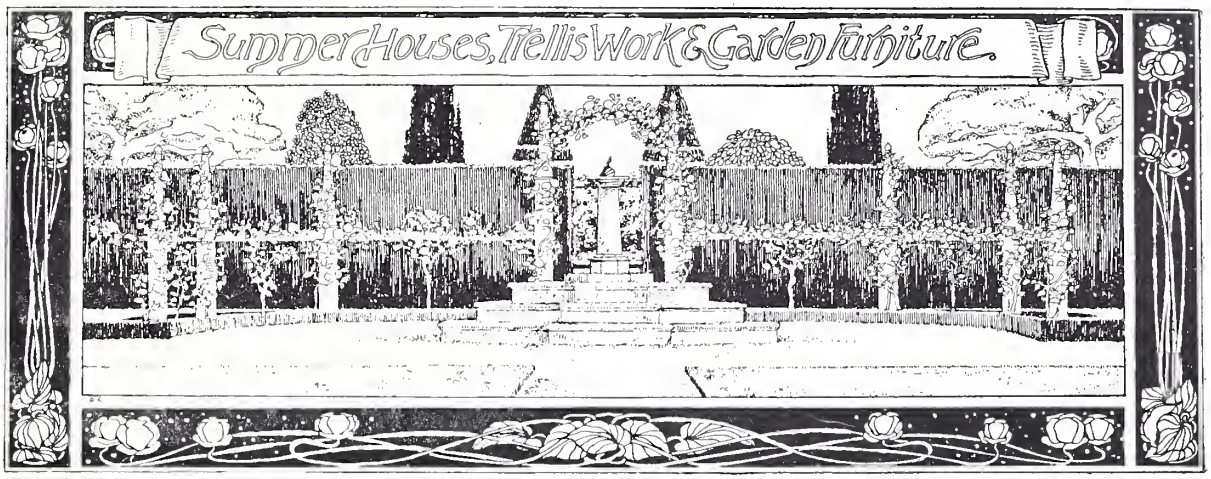
For verges to garden walks (other than those in connection with a terrace), grass would, by general consent, be allowed to be the most beautiful; but the fact that grass is so charming when in good keeping, makes badly grown turf all the more disappointing; for instance, what could be worse than a narrow strip of grass to the sides of a drive overshadowed by large trees. Here the grass would be ruined by the drip, and for this reason it

would be much better to use some other kind of verge, such as Ivy trimmed level and to a line, Cotoneaster microphylla similarly treated, edging of London Pride, Hypericum calycinum, or dwarf trained hedges of Sweet Briar or Box trimmed to a stubby hedge, say one and a half feet high and two feet wide. Rough cobbles might also be laid to a line, or a suitable edging might be made out of freestone or terracotta. The edgings which should not be adopted are blue bricks, white spar, fancy edging tiles, blue or otherwise, cement or granolithic.

Rocky or woodland walks may under favourable circumstances be attempted. Opportunity for a rocky walk often occurs, when, in excavating, the strata of rock is uncovered. These may be broken up if necessary, so as to allow a path running in and out amongst them. Amongst broken woodland ground a very effective and easy path may often be formed by building rough stone steps and planting Ferns, Sedums and Saxifrages in the chinks, and then having a stretch of roughly gravelled walk. See illustration of Woodland Walk, Mount Stuart, Isle of Bute.

Sketch No. 133.

CHAPTER VII.



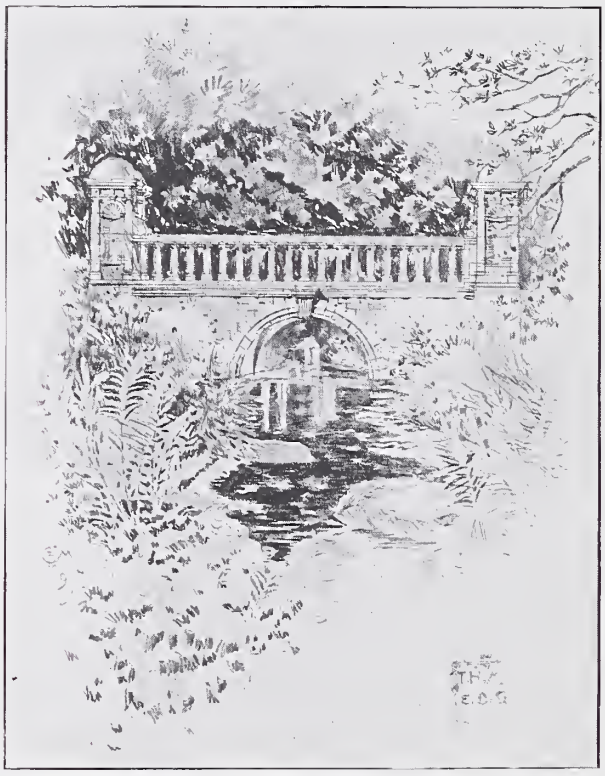
Apart from a choice collection of hardy flowering plants, nothing gives more interest and character to a garden, than well designed and carefully executed architectural details. To prove the truth of this statement, one only need note the reverse effect produced by a rustic summer house, standing in a garden near a good house; or the heavily varnished insecure looking rustic bridge which spans the often merely imaginary stream. Though this point has been previously referred to, it may here be noted that the popular rustic work has not even the advantage of cheapness; for not only is it costly to purchase in the first instance, but has the additional disadvantage of lasting but a short time.

Examples of summer houses which are intended to give an architectural finish to the end of a terrace are given on pages 56 and 102. Those now illustrated are isolated or connected with some outlying portion of the garden. Illustration No. 58 shows a garden house just erected on an elevated site in the garden of Cringlemere, Windermere, the property of Henry Martin, Esq. The room has a fireplace in it, is furnished as a garden house, and has a wide verandah on the east, south and west sides, from which points of vantage can be enjoyed some of the most magnificent lake and mountain views to be obtained in the Lake District; the rock-built slope detracts somewhat from the photograph, but later these will be grown over with all sorts of rock shrubs and plants, forming a charming bank of greenery.

The summer house at Ballimore, indicated on plan page 189, is also provided with a fireplace, and is arranged with cupboards, etc., the whole forming a very useful room, intended for use as a garden house for children. These examples, however, would not only be too expensive, but altogether too important for smaller gardens: yet however small the gardens might be, some form of summer house or arbour ought to form

part of the scheme. The following are given as examples of quite inexpensive but strongly built summer-houses ; sketch No. 62 is erected at the end of a small formal garden designed for Westmorland. No. 61 was designed for a garden in Staffordshire.

A summer house or arbour of the most primitive description is often required for a position in the wild garden, along some woodland walk, or in a specially interesting spot to which short excursions are made. Such an erection, being quite away from the dominating architectural features of the residence, may be made of any material which comes most readily to hand. In a stone district, rough rubble built dry or otherwise might be adopted, and the roof covered with thatch, straw, gorse or ling, wood shingle, or slates. Where stone or brick is difficult to obtain, wood might be used throughout, or the roof might be covered as in the case of the stone building, provided the woodwork were sufficiently strong. Such erections, whilst being built in the simplest and most direct manner, should be strong; and the result would generally be a summer house of a very rustic character, possessing all the charm which such a retreat is capable of lending to a woodland scene, whilst the rusticity would be real and not of the sham description previously referred to. The little wood structure designed for a cottage garden see illustration No. 174, shews a very simple inexpensive arrangement, and one which might be erected by almost any amateur gardener who could use carpenter's tools.

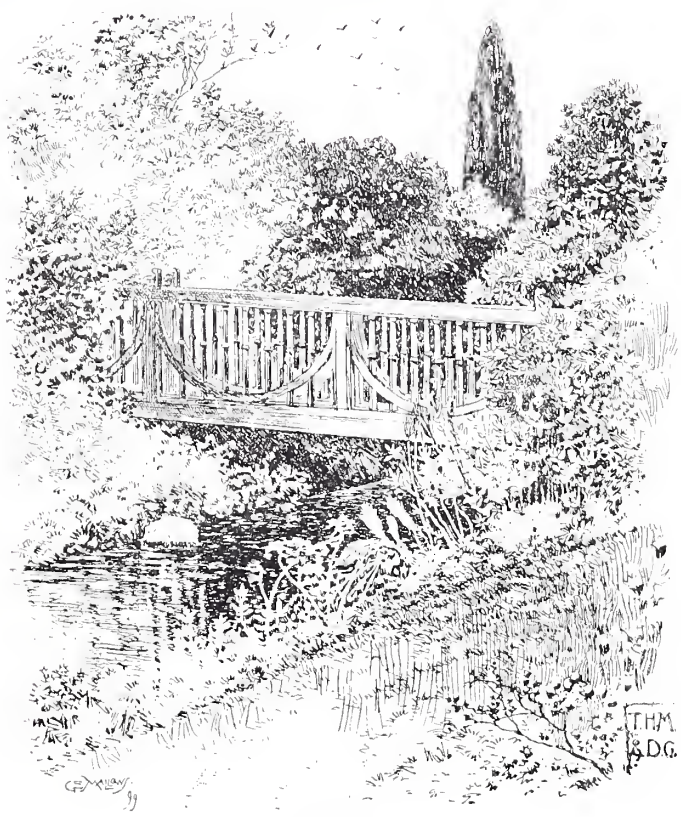


Bridge over Stream at Mount Stuart, Isle of Bute, for the Marquis of Bute, K.G.

No. 59.

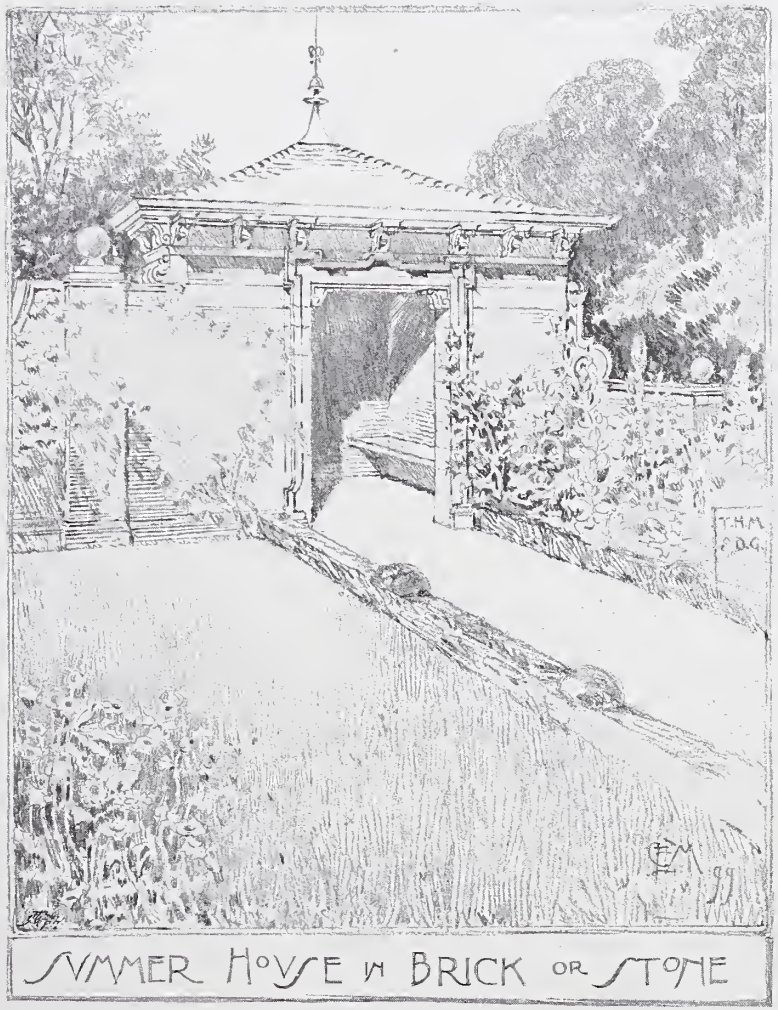
Whenever a stream passes through a garden, pleasure ground or park, a bridge of some sort is sure to be required, its character being decided by the size of the stream it has to span, the use and importance of the drive or walk passing over it, and the character of its surroundings. But whatever these may be, it will generally be found to be much the wisest and most economical in the long run to have the structures in stone or brick, or, where wood has to be used, in oak. Iron can seldom be treated satisfactorily or made to harmonise with garden scenery, and therefore does not, except in very isolated cases, commend itself to garden designers. Rustic wood work, such as peeled larch or oak, although in great favour with some persons, is very unsatisfactory, the fact that it is generally insecure and lasts only a short time, making it in the end a very expensive form of bridge.

A stone bridge need not in every case be a very elaborate affair; indeed there are few places which could stand a Palladian bridge such as the one at Wilton. In many cases a very simple rubble built bridge with a neat round coping would not only answer all purposes, but would also harmonise with its surroundings better than any rustic contrivance. When, however, it is near any architectural scheme of garden decoration, its details would require to be designed in the same spirit. The two bridges here illustrated, one in stone, the other in oak, represent bridges crossing small streams; the first was designed for The Most Honourable the Marquis of Bute, K.G., and was in connection with the woodland walk, illustrated on page 64, and the second is an oak bridge which spans the stream in the gardens at Graythwaite Hall, the seat of Colonel Sandys, M.P. A more important bridge than either of the foregoing is the one shewn in the section through the gardens at Ballimore, Argyleshire, the seat of Major MacRae Gilstrap, shewn on page 192. This is a stone bridge with two arches, the one crossing the stream and the other a walk, the walk on the bridge connecting the terrace with the rosery on the opposite side of the valley.

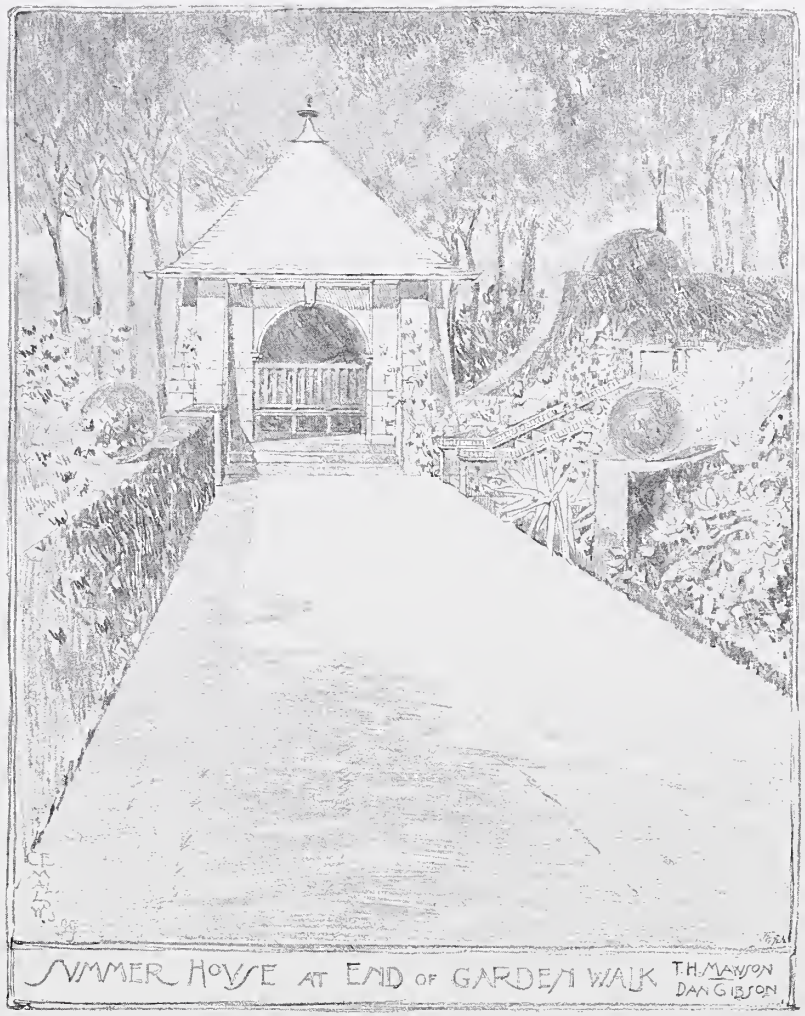


No. 60.

Arbours and pergolas are both features which lend a peculiar charm to a garden, affording delightful shade in hot weather, and when covered with suitable climbers such as Clematis montana, or Honeysuckles, forming a retreat which it will ever be a delight to visit and rest under. Both may be made at a very slight cost, and erected by any amateur who knows how to use a saw, hammer and nails. They are simply skeleton erections densely clothed with climbers; the arbour being arranged in a very similar manner to a summer house, and placed at the end of a walk or in some quiet corner of the garden, often in a wild garden. A pergola is really a corridor of greenery, differing very little from what we call a bower walk, the difference being that whilst the latter is usually formed by hoops of iron placed five or six feet apart, giving the appearance of a series of hoops covered with Roses or other climbers, the former is densely clothed on the sides and over the top with climbers, a strong continuous framework being made for their support, the sides being filled with laced wattles, or any other forms which would serve the purpose and please the fancy of the maker.


SUMMER HOUSE IN BRICK OR STONE

No. 61.


SUMMER HOUSE AT END OF GARDEN WALK
T.H. MAWSON
DAN GIBSON

No. 62.

SUMMER HOUSES, TRELLIS WORK AND GARDEN FURNITURE.

Trellis work is at once an inexpensive and effective means of giving interest to a garden; and in connection with this subject a few extracts from Mr. Belcher's most able paper read before the Royal Institute of British Architects may be of interest:

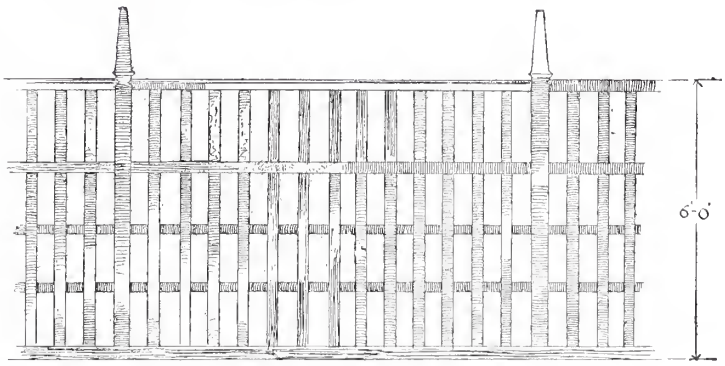
"Wherever wood construction has been in vogue, varied treatment of 'post-and-rail' "and 'lattice-work' has been in use all the world over."

"India and Burmah, China and Japan, each has its characteristic treatment worked "out with wonderful elaboration and finish. The familiar Cairo lattice-work is another "variety of the same thing in the East. While every European country upon which the "sun shines, has its own method of affording shade and shelter by trellis-work. It is the "ease and facility with which daring experiments can be made which render it valuable. "It can be altered and shifted at pleasure until the desired effect is obtained in a way which "more solid and valuable material prohibits. . . . ."

"In the art of laying out a garden, as in architectural designs, there is a certain "seductive mystery gained by partially concealing and judiciously screening some parts from "immediate view. By this means the imagination is tempted to conjecture the presence "of hidden delights beyond, and interest is quickened in expectation of some further "enchantment."

"Besides the fact that divisions of some kind are necessary for such surprises to the "casual visitor, they have always the additional and permanent advantage of affording "seclusion, quiet and comfort. The very flowers and shrubs enjoy the retreat, for in the "shelter they luxuriate, and their sweet fragrance is not dispersed by rude winds. Tall "hedges of yew, laurel, or holly form substantial divisions, but years must elapse before "such hedges can be effective. And here the common or garden trellis will prove the "temporary substitute. Against it the hedge can be planted and protected and trained. "On the wood trellis Roses, Clematis, Jessamine and Honeysuckle will climb readily, and "show their preference for it over cold and uncongenial iron rods and chains of wire."

"With the flexible laths, "deep archways can be formed in "the trellis division just long "enough to form a dark frame to "the picture beyond. Or if a "peep is required here or there, a "few laths can be cut and a bent "piece or hoop of wood, circular "or oval, inserted, forming an "unglazed window in the trellis "or hedge. There is an example "in the Penshurst garden."

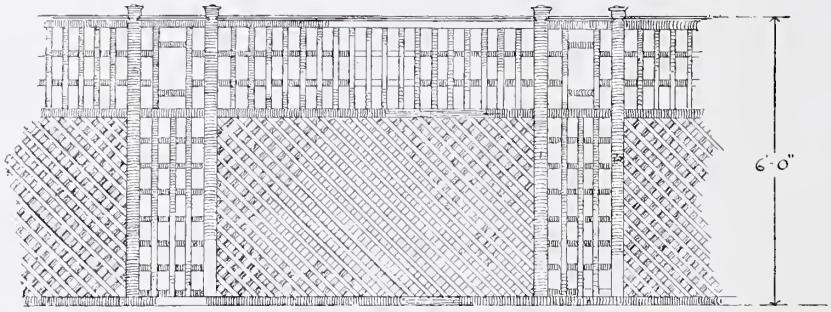


No. 63.

"Again, should it be desirable that the upper part of a high screen, or parts of it, be "more open or only partially hide what is behind it, then the trellis can be cut into patterns "more or less open as desired—sometimes in panels, sometimes in a running pattern."

"Trelliage suggests the shady walk or covered alley. The posts with top rail and cross "rails on which may be grown roses, honeysuckle and such like."

Several forms of trelliage are shown in some of the accompanying garden designs, including the writer's own garden. A circular trellis for climbing Roses is also shewn in the perspective view of the gardens at Cuerdon Hall see illustration No. 193.

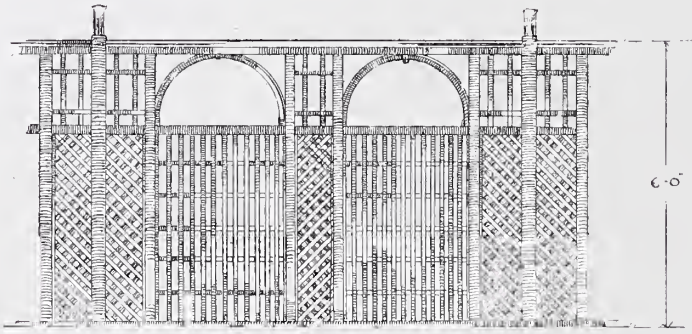


No. 64.

In designing trelliage it should be remembered that its use is to support climbers, and that the shape and detail of the spats, balusters, or laths should be arranged in such a way as to allow of the branches obtaining a firm hold. The best form is the crossed lattice, and the worst plain upright bars without cross bars for the support of the climbers. The three designs of trellis here given, Nos. 63, 64 and 65, shew some of the forms of trellis erected by the writer.

Trelliage may also be formed of rough peeled larch, Scotch fir, or oak, provided they are placed in positions away from the house or the more architectural part of the garden. These serve their purposes very well indeed. It is, however, very questionable whether they are any less expensive than the more substantial wrought trellis.

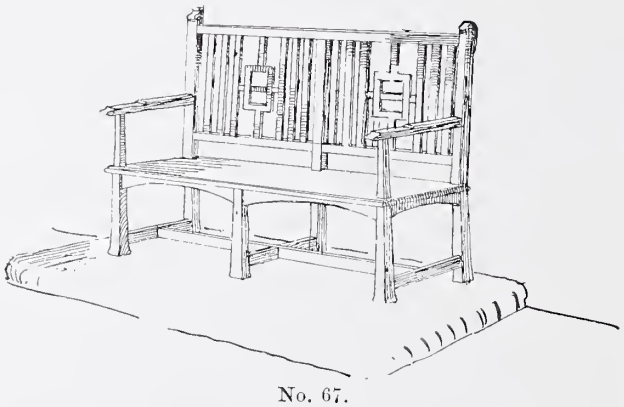
Good design in garden furniture is just as necessary to the success of a garden as the furniture to the house itself. By garden furniture is meant those architectural details necessary for use and ornament, amongst which seats are, perhaps, of more importance than any other. To the whole of these details careful, thoughtful design should be applied; in fact, in the perfection of these seemingly small things, often lies the difference between mediocrity and excellence. Taking garden seats first in order, it must strike anyone who has given the subject any consideration that there exists considerable room for improvement, both in respect to comfort and effect; in fact it may truly be said, that up to the present, those firms, who make it their business to supply garden seats, have entirely failed to produce anything which can be placed in a garden without detracting from its effect as a whole. Garden seats which are fit to look at, have generally been made by the village carpenter, from some old model; it is a pity that the carpenter is not oftener asked to repeat these models; for the result would be much better than selecting seats from the ironmonger's catalogue.



No. 65.

CIRCULAR GARDEN SEAT AND LEAD FIGURE.

No. 66.

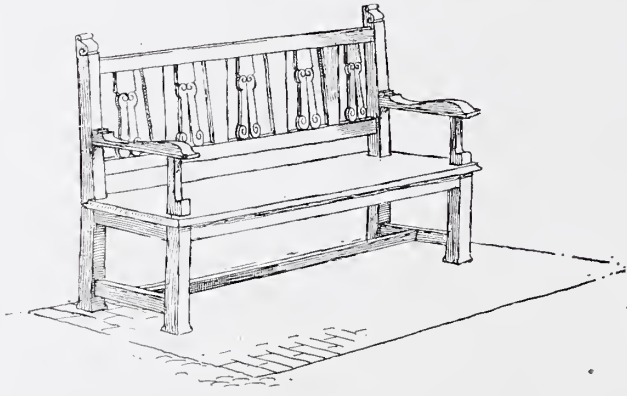


No. 67.

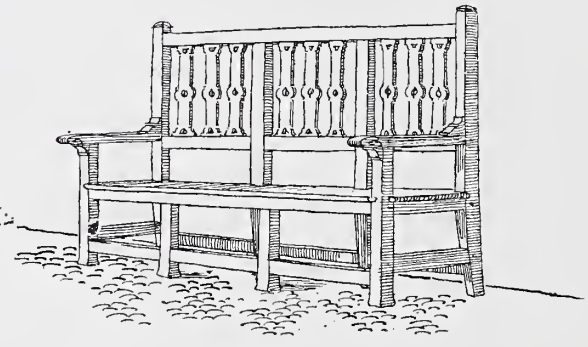
So many seats of excellent design have been illustrated by artists who have made a study of old gardens, that it is scarcely necessary to give further examples; but the seats here illustrated, may, it is hoped, still further assist towards an appreciation of design in garden seats.

As regards material, nothing looks so well as green painted pine; but where the little extra cost is not considered, oak would be found to stand much better, improving in appearance by age. A good length for a garden seat is about six feet.

Seats Nos. 67, 68, and 69 are all quite simple in design and construction, and are not too heavy to move about; illustration No. 66 shows a circular seat, such as is often required for the end of a walk. This form of seat looks best when backed by a hedge of Yew or Holly.



No. 68.



No. 69.

Mention should be made of the simple bench with a flap down back. This is a form of seat which is most useful for placing by the side of woodland walks that are some way from the garden, or in positions where they could not be cleaned and attended to by the gardeners. This seat opens and closes, the bench being a fixture and the back pivoted on hinges, so as to allow it to fall over and protect the seat when not in use.

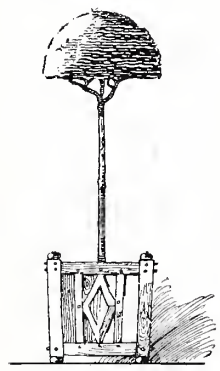
Good and fairly comfortable seats can be made of wrought iron, and when of simple design and painted green look very well; they have the advantage of lasting a long time.

Stone seats are shown in several of the designs illustrated; these can be made to look exceedingly well, but in practice are found to be very little used, excepting during the height of summer, as they are cold and uncomfortable to sit upon.

The advantages of growing certain things in tubs, vases are boxes, ar very great; the principal gain being portability, allowing of plants, which might not stand a severe winter, being placed in position for the decoration of the garden during the summer, and of being protected behind high walls, in sheds, or cool greenhouses during the winter. This form of decoration is most advantageous in many sea side gardens,—especially on the east coast,

where trees and shrubs are difficult to grow,—and where considerable compensating effect may be obtained by standing out in tubs sweet Bays, standard Laurels, Laurestinus, etc., to mark special features of the plan.

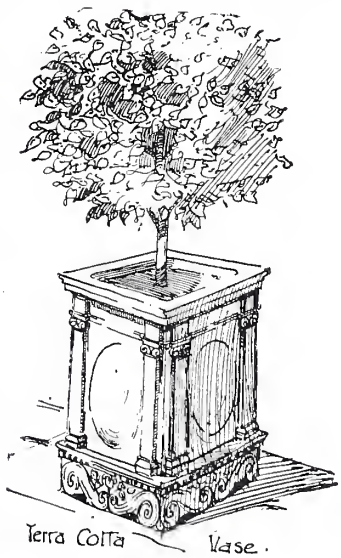
In the same way fine effects may often be obtained by tubs, vases, or boxes filled with hardy Fuchsias or other suitable plants, along a terrace. In ordering tubs or vases, it is well to remember their use, which is the proper accommodation and growth of shrubs and plants. This is a point which cannot be too strongly insisted upon, as in the majority of instances, and especially in the case of vases, there has been very little accommodation provided for soil or roots. On the whole the old fashioned green painted tub, or the wide-bottomed flower pots, are the best forms to adopt; and in fact, in most gardens there are few forms of tubs or vases which would look so well.



No. 70.

Square boxes might often be used with advantage on terraces. These might be in oak creosoted, or in deal painted. They allow of considerable variety of treatment, but would probably last better if framed into corner posts, and panelled or otherwise as fancy might direct; the bottom should in any case stand free from the ground, and be pierced to allow of drainage. If panelled, the inside should be flush, or else battened, so as to allow of the plants or shrubs slipping out easily when requiring transplanting.

Vases may be used with good effect along a terrace wall, or, when arranged with bases, they may be used to decorate a panelled design; for a flower garden they may be made in stone, but for most purposes terra cotta would be found to answer much better, since the thickness required for stone naturally reduces the size of the receptacle for soil, whilst terra cotta on the contrary can be made quite thin, and to almost any shape or colour. Vases being much more obtrusive than the green tubs, require to be placed with much greater care; in fact, nothing could be worse than an indiscriminate use of vases; but, having made sure that they are needed to furnish or give character to the garden or any part of it, there is no reason why they should not be of beautiful design, and well modelled. As in the case of tubs, the bowl should be wide enough to allow of a good supply of soil. The illustration here given represents one of the form which would be best suited for plant growing as it allows of plenty of soil. As a less expensive arrangement, the strongly made flower pots previously referred to, set on square bases, often look very well, especially when placed at regular intervals along a plain terrace wall; these pots should not be painted.

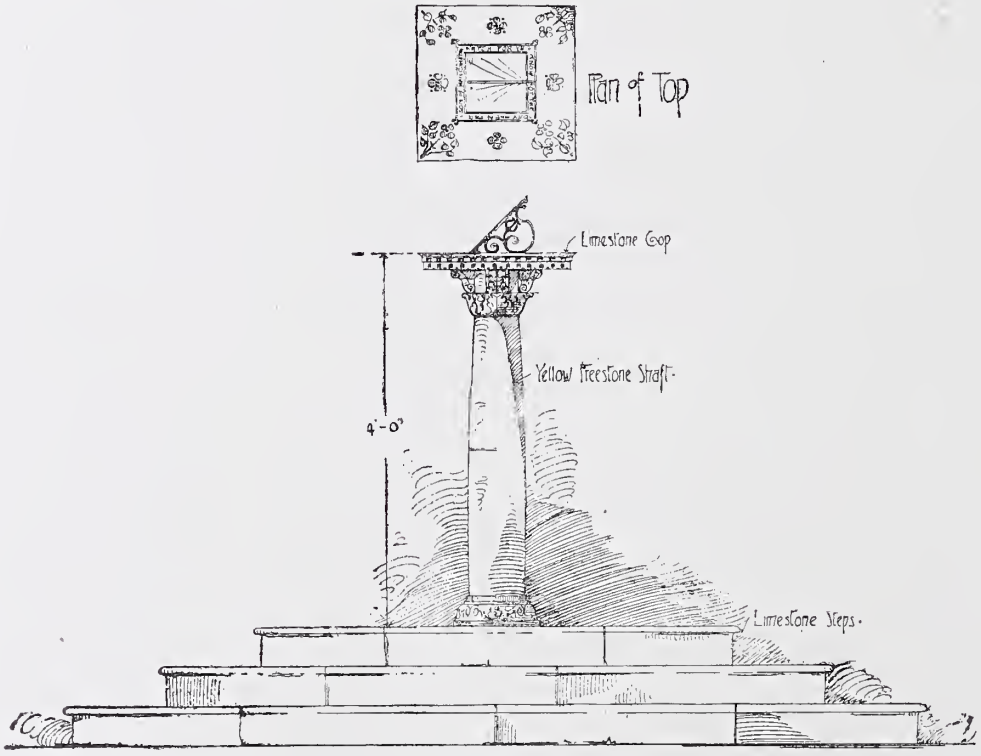


No. 71.

Urns, both in stone, terra cotta, and metal, have always been deemed fitting ornaments for a garden, the beautiful lead urns at Hampton Court being well known examples. In the old renaissance garden they were often placed on columns, or on a stone base; they were also used as finials to gate pillars and to mark the corners of

terraces. When well designed and modelled, they form a striking ornament. Some attempt to adapt such urns to a modern garden may be seen in the perspective view of Cuerdon Hall gardens, page 193.

Statuary may be of great use to the garden designer, assisting him to emphasise certain points in a way scarcely possible without it. This class of garden decoration has, however, been so much abused by the introduction of vulgar plaster or cement casts, and by figures manufactured in the tombstone maker's yard, that it may be well to state at once that it should be good of its kind, or else omitted altogether. The subjects and the materials in which they are executed should also be suitable for garden decoration, and in this connection it should be remembered that white marble and other cold and glaring materials are seldom in keeping with an English garden. Small lead figures or bronzes are much more harmonious. A little lead Cupid with his dart, in connection with a circular seat for instance, such as shewn in illustration No. 66, seems peculiarly appropriate for the decoration of a quiet garden retreat; old lead figures are now very scarce, but may at times be obtainable at moderate prices.

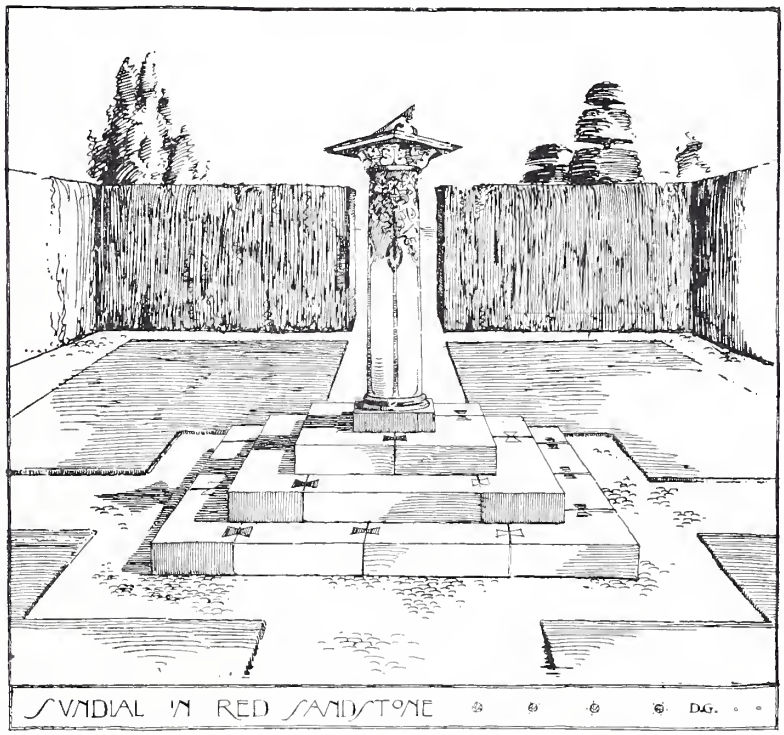


No. 72.

A sun-dial invariably formed a prominent feature in the quaint old garden of the past; and, fortunately, there are still many fine examples existing in the country, whilst occasionally a good specimen may sometimes be picked up in a second hand dealer's warehouse or in a country builder's yard. There is no great advantage to be gained, however, by purchasing an old sun-dial, more especially as the link with the garden of the past which the dial seems to suggest, is to some extent weakened when we remember that it formed

an integral part of the garden for which it was designed, but not of that to which it is transferred. New sun-dials are not so difficult to make as they were some years ago, as there are now several firms who are expert in the dividing of the dial plates, and the arrangement of the numbers; given a good, correctly arranged dial, there are numbers of good architects ready to design the base and pedestal.

Boathouses may seem foreign to a treatise on garden design, as few places are of sufficient extent to allow of an ornamental sheet of water, large enough for boating; but there are numbers of riverside houses and residences built on the banks of natural lakes, the chief attraction of which is boating, and in these cases the boat house seems to be in some way a part of the garden scheme.



No. 73.

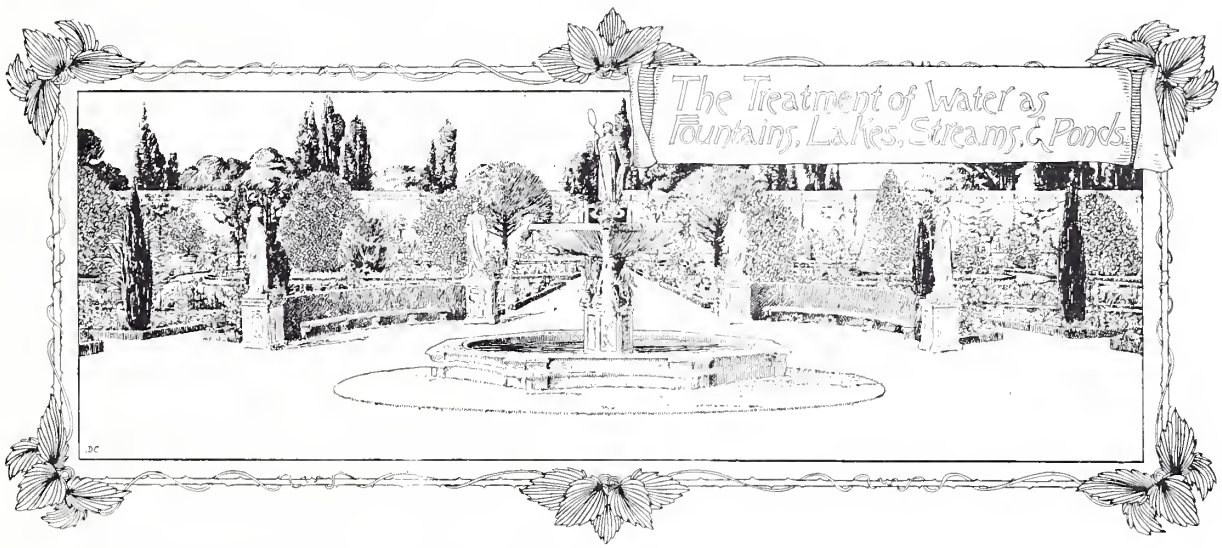
Whenever boating is possible a boat house of some sort is required; and may be merely a shelter large enough to protect a single rowing boat, or a more important structure with wet and dry docks, accommodation for small sailing yachts, and having also additional rooms for tea, dressing, etc. Boat houses present such delightful opportunities for the play of an architect's fancy, that it is a great pity he is not oftener consulted in respect to their design and arrangement. Such a course would result in a great improvement in their erection, and prevent the corrugated iron and matchboard arrangements which at present disfigure the banks of so many of our lakes and boating rivers.

It would of course be quite impossible, even were it advisable, to give plans and designs for boat houses to suit all places. One word of caution may however be given to those having but small sheets of ornamental water, and that is to treat their boat houses in the simplest possible manner, the size corresponding with the amount of boating which would be possible. It would also be well to select a position where the boat house could be partially sheltered by plantations.

Water pavilions are a fit accompaniment to a formal sheet of water; and may also be used with great effect to mark particular points in connection with a naturalesque lake or pond, giving the feeling that the formal arrangement is extended into the more natural

parts of the gardens; such an arrangement is attempted in plan No. 137, page 199, where the small pavilion on the opposite bank of the lake is made to finish a vista from the centre of the main terrace. The only water pavilion which I have had the opportunity of designing in connection with a formal arrangement of water is that shown on the plan of the gardens at Little Onn, Staffordshire. As will be noticed, this finishes the end of the old moat as viewed from the steps of the small flower garden, and is arranged much in the same way as an ordinary summer house, being designed to rise from the water on one side, and having steps running down to the water's edge from which position water fowls may be fed. This little erection it is hoped will convert into a very pleasing garden scene, what would otherwise have appeared incomplete and uninteresting.

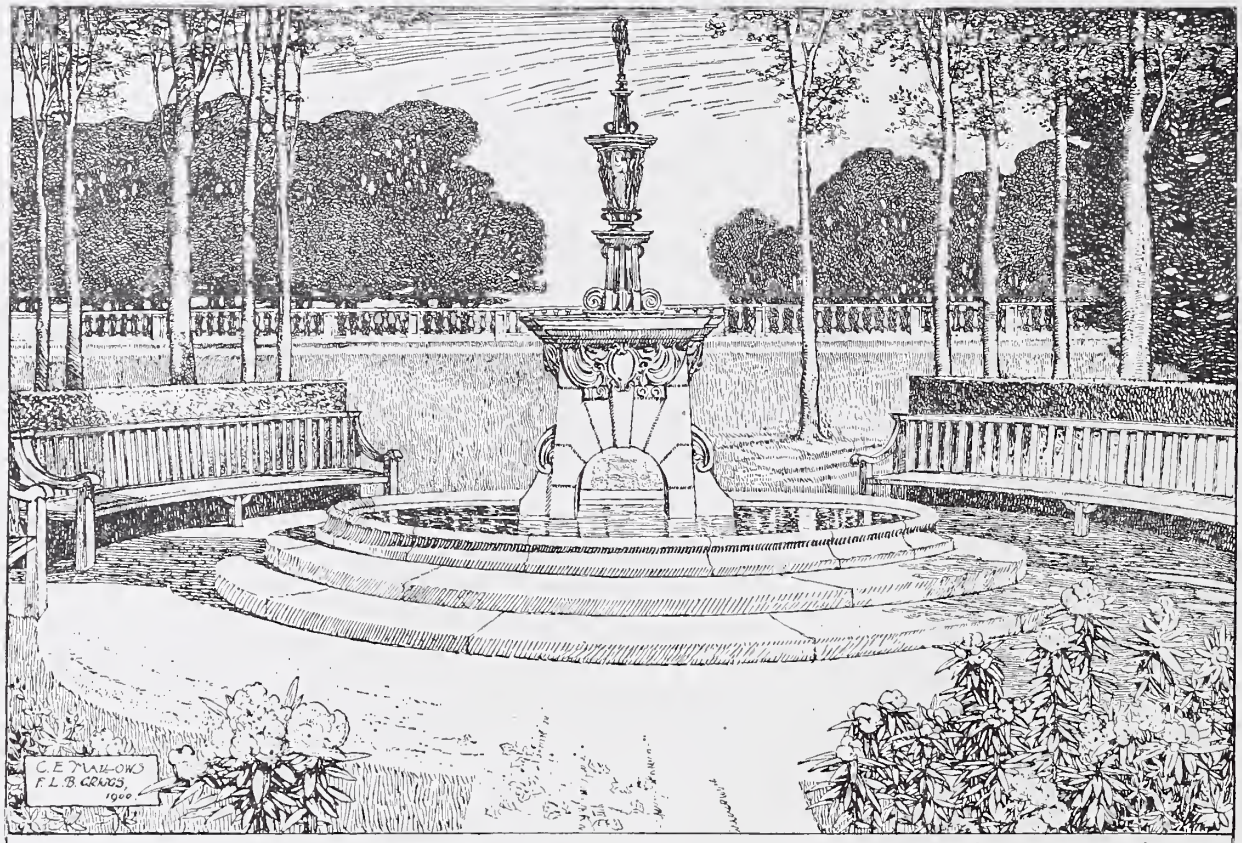
CHAPTER VIII.



Garden designers have always produced the most satisfactory results, when they have been enabled to bring water in some way into their composition. The many forms in which it occurs in the old English garden, such as fountains, fish ponds, cascades, and also the architecturally-treated ponds, fountains, and cascades so charming in the Italian gardens, such as the basin at The Villa Torlania, Frascati ; the cascades and swimming pool at the Villa D'Este Tivoli and the fountain and pools at Villa Lante Bagnaia ; and the large basins, canals, and ponds of Le Notre, of which the one at Versailles is a well-known example, all shew the value attached to the use of water by the old designers, and the number of forms in which it can be used in garden design. The naturalesque lakes of the latter landscape gardeners prove that, whilst the method of treatment was altered, the new school still looked to water to aid them in creating their landscape effects.

Of all the ways of using water in garden design, fountains have always been most popular. The music of playing water, the beautiful forms which it can be made to take, and the combination of architectural ornament will inspire garden designers for generations to come. Unfortunately, the success of a fountain depends upon obtaining the water at sufficient pressure, and a good plumber. In times of long drought the water supply may be insufficient to allow of use for this purpose, whilst in other places the cost of water obtained from a public company might be so great as to prevent its use excepting on special occasions. It is well to remember Evelyn's description of the fountain at Hampton Court—"In ye garden is a real and noble fountain with syrens, statues, etc., cast in copper by Fanelli, but no plenty of water." Where, however, there is an abundant supply which can be delivered at a pressure, a fountain should form some part of a garden scheme. In choosing a position for a fountain, and also in deciding upon the principle upon which the water shall be sprayed, it is well to remember the influence which

a very moderate wind has upon it; and for this reason a position well sheltered should be selected, or where this is impossible, artificial shelter should be arranged. When the fountain can be surrounded by a very large basin or pond, upright jets may be adopted; for smaller fountains, some simple form of bubble, or jets thrown out from the side of a central arrangement, would generally be found most satisfactory; where the pressure is not great, a single jet, which is allowed to fall into and over a tier of basins and finally into a small pond, is a good arrangement.



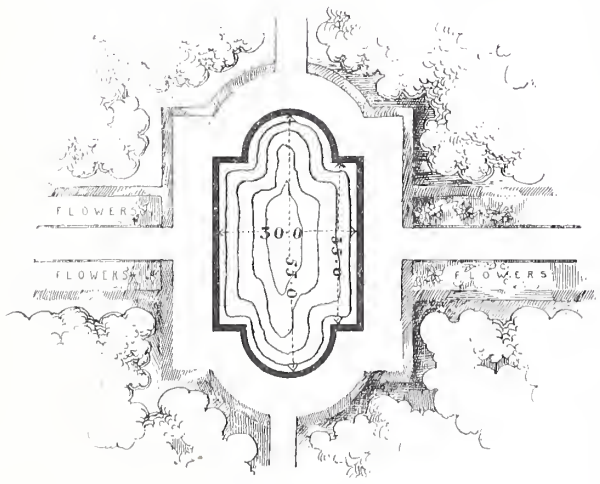
No. 74.

In the above fountain there is a central shaft rising above the second basin, on the top of which are arranged three Cupids supporting the uppermost basin, over which water falls into the middle basin, which in turn empties into the pond below; the whole surmounted with a bronze figure poised on the higher shaft several feet above the basin. Another interesting feature is the bubble fountain in the circular pond under the cross arches; this bubble is often playing when the other portion of the fountain is at rest. The object in designing these fountains was to produce architectural features, which would be fitting ornaments to the flower gardens in which they stand. Very small fountains placed at the end of a long terrace walk, or forming a centre to a flower garden, may be

made very effective, as they require a very small supply of water, and, when backed by yews or other dark-foliaged evergreens, are very valuable in giving a high light which intensifies the shadows, thus yielding the beautiful contrasts which are so valuable in garden scenery. The well-known fountain at Revelstoke is a very good example of what may be done with a series of falling sprays, whilst for an upright spray, a simple jet rising out of a basin or held by a small figure would answer very well.

In forming basins or ponds for fountains, the inside should be so constructed that a sheet of ice may lift without bursting the rim or carrying away the coping. All that is necessary is to make the sides slope from top to bottom, and to finish them with a smooth surface. Another point which requires the greatest care is to fix the connections in such a way as to allow of their being easily repaired in case of accident. Many finely-designed fountains have been rendered useless by inattention to the plumbing arrangements.

The architectural ponds and canals, which played such an important part in the designs of Le Notre, did not meet with much appreciation in this country; but there are a few examples, which go to show how beautiful they were, the one at Wrest, Bedfordshire, probably being the best known. If architecturally treated ponds could be substituted for the miniature lakes so often attempted in small gardens, the result would be a general improvement. The objections urged against this formal treatment of water are more imaginary than real. The water in a formal pond is just as much a mirror as a naturalesque arrangement. The same art which regulates the outline of the basin or pond would take into account the margin which would be reflected in the water, whilst the reflection of floating clouds and the animation produced by water fowls would apply to each alike. There is however, a practical consideration which, in the case of a short supply of water, is very much in favour of the formal pond, viz., that its construction would allow of being much more easily cleaned out than is possible in the case of the naturally-treated pond; and thus in hot weather there would not be the same sanitary objections. Formal ponds may either be built of stone or bricks, or have pitched sides with sloping grass banks running down to the water's edge; whilst their size and shape may be decided by the position and surroundings, and the available supply of water. Where the pond is fed by a stream, a very pretty effect can often be obtained by treating the inlet and outlet as cascades; or the supply may be by means of a spouting wall fountain. The moat at Little Onn, Staffordshire, is a formal arrangement of water on a somewhat large scale see page 199. A very charming water-lily pond, set in a formal garden, is shewn in Mr. Sigismund Goetzes' picture in last year's Royal Academy. In this case, the water is



No. 75.

depicted as coming through an arched culvert, the wall above the arch being crenulated. A small formal lily pond, which forms a part of the garden scheme at The Grange, Wraysbury, is shewn on page 77.

Architecturally treated cascades make grand effects, and might be adopted in many gardens through which a stream passes. It is not always necessary to incur a great expense in their construction. Of course, a fall of level is necessary ; but even when the fall is very little, it might be divided into a series of pools of different levels, the water being arranged to fall over any kind of barrier ; or, if the stream is large enough, a series of step falls might be arranged, the form being either concave or convex, or a combination of both.

If there is one thing more than another in which the landscape gardener is unjustly condemned and censured it is his natural treatment of water. He is usually branded and identified with some of the absurd engineering feats of Capability Brown, or the still more ridiculous miniature lakes which are squeezed into suburban gardens. It is in his treatment of water, if anywhere, that the landscape gardener has done good service. It is all very well to point to the formal ponds at Wrest and other places, and to the magnificent canals of Le Notre, and say "Go and do thou likewise."—But, charming as some of these are, they are only fit accompaniments of a garden on a grand scale ; whereas the lakes and streams now referred to are a part of the wilderness, the pleasure garden, woodland walks or home park, and in this position may be much more in accordance with their surroundings than more artificial or geometric forms. When—as is most frequently the case—ponds or lakes are already in existence ready to the hand of the improver, the result may be made, and often really is, one of the most delightful parts of the domain. Here grow to perfection plants which succeed nowhere else, ferns and lichen cover the rocks and crannies, the sporting of the fish in the pools, and the swish of the waterfowl, all harmoniously adding to the charm of eye and ear.

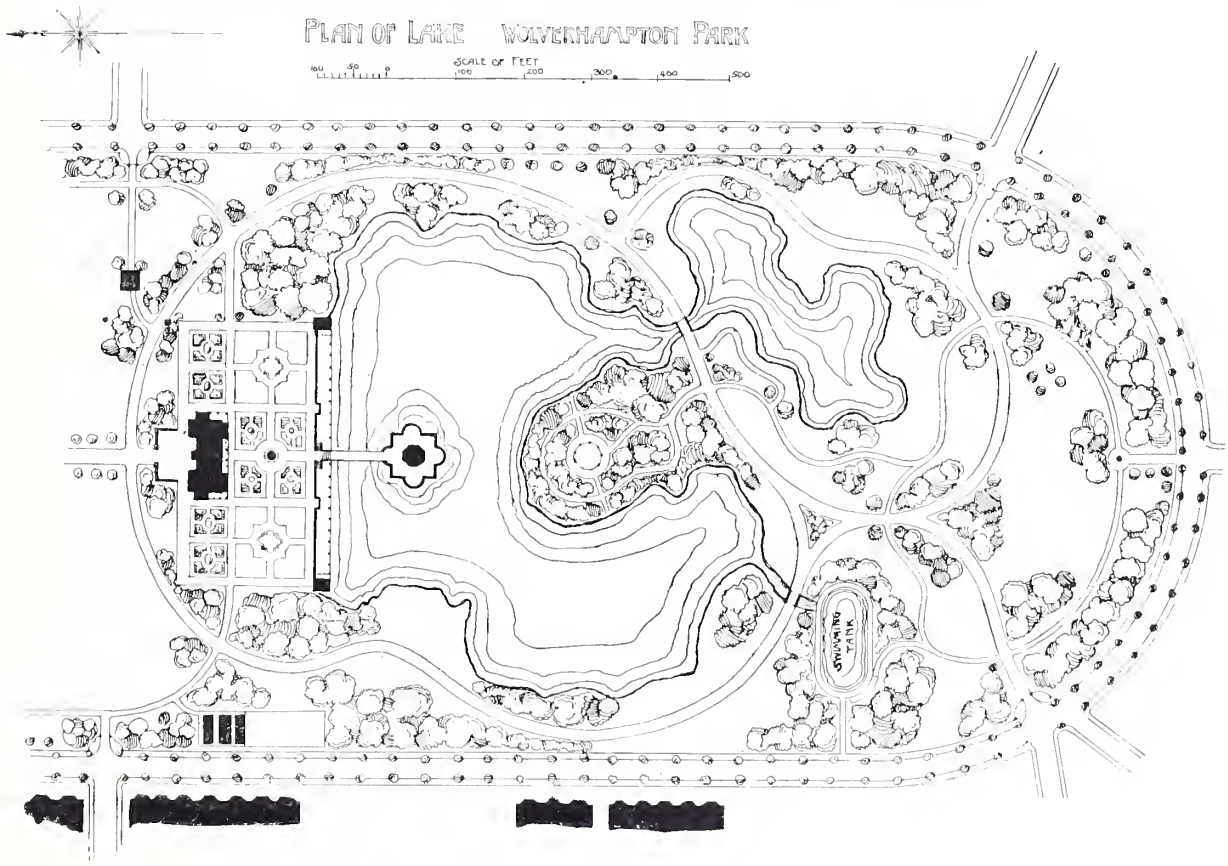
A good-sized sheet of water is not only a welcome feature in the landscape, but is, under favourable conditions, most useful for boating in summer, for skating in winter, and fishing in almost all seasons. The pleasure to be obtained from a boat on even a small sheet of water is not so small as some would have us to imagine ; at the worst, a boat and a book in a sheltered bay is equal to a hammock under a tree. Great care, however, needs to be exercised when introducing a natural feature such as a lake or a large pond, otherwise considerable sums of money may be spent, and the proprietor find, after all, that he has been led into useless expenditure. Quite recently the writer was consulted respecting the improvement of a lake upon which three thousand pounds had been expended with the most wretched results. The water was rapidly becoming an offensive cesspool, besides which, the lake had been arranged in such a manner, as to make it difficult to drain some fifty acres of park land surrounding it, which had become only fit for osier growing.

The old axiom, " Plant the hills and flood the hollows," is generally a safe one to follow. When a lake is formed on the side of a hill, and needs the support of massive embankments of earth, the conditions for formation are evidently not favourable, and would offend anyone possessed with a sense of the fitness of things. Then there should be a

running stream of water with which to supply the lake, to compensate for evaporation, and to prevent stagnation and the objectionable accretions consequent thereon. If this stream is inadequate to ensure purity, it may be supplemented by surface water and land drains.

Lakes which require great expense in their construction are seldom satisfactory; the best effects being almost invariably obtained where little more than a short dam across a valley or dell is necessary. This done, it will depend somewhat on the nature of the land which has been flooded as to whether the outline is pleasing or not. If the ground is of a gentle undulating character, the lines will not be jagged and irregular; but if the outline is bold, rough, irregular and broken, the lake would probably be more in keeping with the wildness of the woodland or wilderness, while the former outline would harmonise better with the gentle undulations of the lawns of a quiet garden.

To make a lake effective and enjoyable, almost everything depends upon the reflections, and from the character of the objects upon the banks; but, before setting out the plantations on the banks of a lake, it is well to consider that there may be too much foliage, especially if the water supply is not very abundant, as the foliage falls into the water and naturally fouls it. The best way is to plant the larger promontories so as to give indefiniteness to the outline and to allow the grass to sweep down to the water's edge in the



No. 76

bays. The rising portions at each side of this sweep of grass should be planted with masses of Rhododendron Wilsonii, R. hirsutum, Dogwood, Brooms, Mahonias, Tree Ivies, Laburnums, or Holly. In planting, due regard should be paid to colour in mass: much the best results would be obtained by planting each variety in masses by themselves. For the islands, nothing looks better than a mass of scarlet Dogwood, Willows, or cut-leaved Alders.

Although smoothness or softness of effect has been recommended as the best treatment of the surroundings of a lake, opportunities for variety may be afforded by the introduction of rock; as, for instance, at the outlet, which would be much better treated as a cascade than as a water chute. The inlet also generally offers the same opportunity, and when there seems to be a reason for such treatment, it will add to the effect of the whole if carried out in a right and proper spirit.

A plan of the lake in the East Park, Wolverhampton, is here given on page 76. This is a lake of some thirteen acres in extent, formed against a series of spoil banks or pit mounds, the contour lines being almost the same as those of the finished water line; it was only necessary to unite the various hollows by cutting through the banks dividing them. A good stream of clear water was obtained from pumping operations at the adjoining mines; and, even if this failed, recourse could be had to a stream which ran within one hundred yards of the boundary.

In the formation of this lake the bottom required careful puddling, owing to the number of mining shafts and drills which had been sunk on the ground. All that was needed, however, was to put the material excavated through a brickmaker's pugging machine attached to a portable engine, and to pitch the bottom of the lake with blocks of clay delivered from the machine. Portions of the banks to the south side of the lake were of considerable height, but with the support of rockwork at the base, and a plentiful supply of maiden loam from an adjoining railway cutting, they were converted into fine hills for plantations. The larger plantations mark, in each case, the positions of these mounds, whilst the stretches of greensward, mark the lawns, which run in gentle sweeps to the level of the water. Owing to the considerable sweep of water for the wind to play upon, the banks at places were pitched with broken stones laid in cement, the grass growing over this to the water's edge.

The lake is bounded on the north side by the terrace, with a boat-house at each end, the principal boat landing being arranged in front of the terrace, and 4 feet 6 inches below it. As originally planned, it was intended to attach the island to the terrace by means of a bridge, and to place the bandstand on the island, but this portion of the plan has been omitted. The bridge over the narrowest part of the lake was intended to be of oak on a rough rock foundation. The plantations will give some idea of the effect aimed at.

Tarn Hawes, Coniston, is an instance of lake making on a large scale. I am told that before this work was undertaken there was a series of ponds, and a large area of swampy, boggy ground. By the formation of a dam the late proprietor of the estate succeeded in making the present sheet of water, the effect of which is further heightened by many fine

plantations which he formed on the most suitable banks around it. The making of Tarn Hawes is a very forcible example of what the writer has in several places tried to point out, viz.:—that if the designer is to meet with any success in his treatment of natural objects he must take nature as his handmaid, humour her, follow her, lead and watch with respectful deference for her suggestions. Had the maker of this beautiful sheet of water not been content to make the dam, and leave the water to flow to the natural contours of the surrounding rising ground, but tried to improve on the lines of his foreshore by throwing out a promentary here and excavating a bay there, he would have been sure to have found sooner or later that however sincere he had been he would have caused nature or at least the geology of the surrounding rocky hills to appear untruthful by creating apparently impossible incongruities of strata.

No. 77.

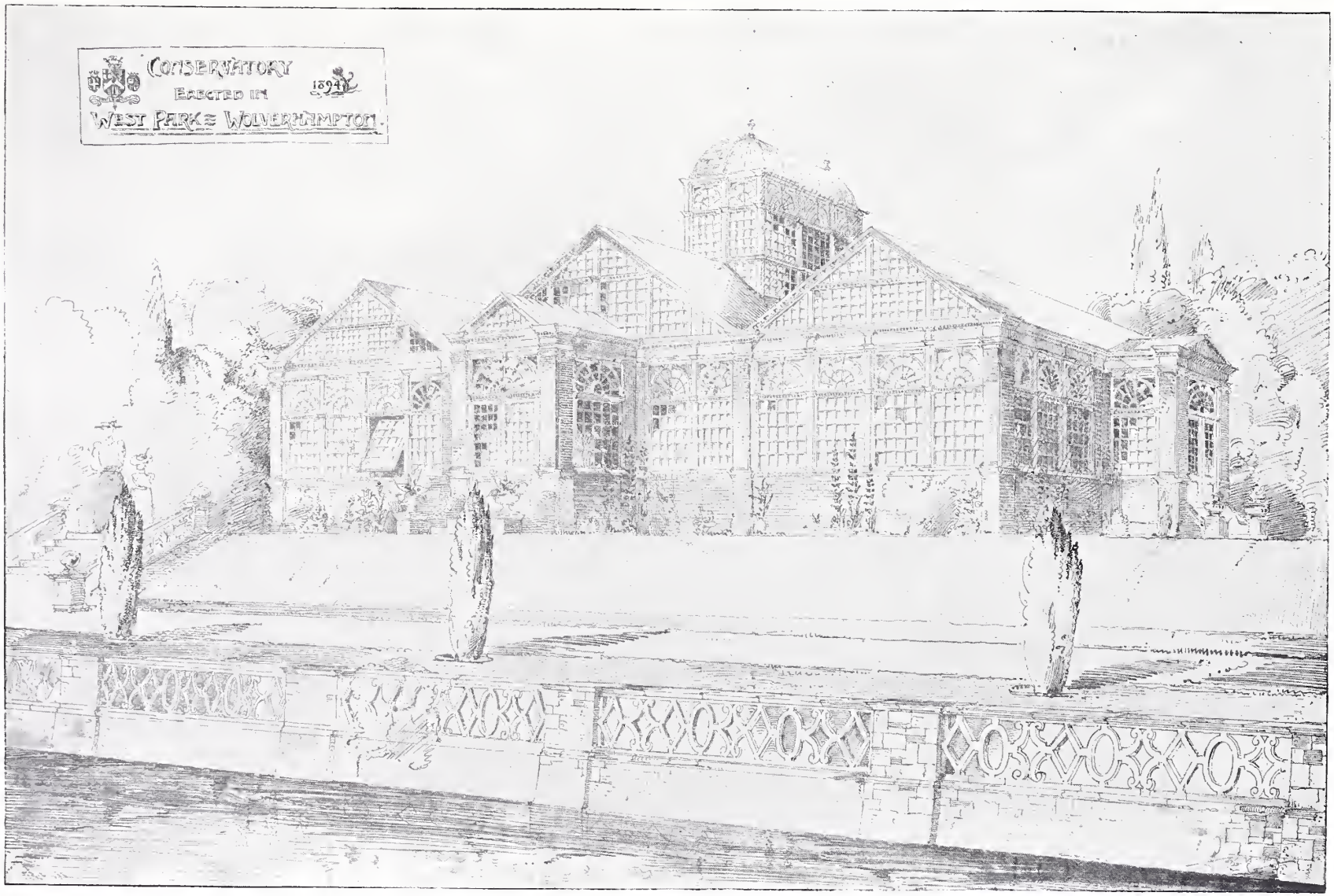
It may be well to here state that all the ornamental water in the plans and drawings shewn in this book is more or less artificial, though that shewn in the plan of Little Onn Hall, on page 199, is of great antiquity having originally been the moat to some monastic buildings traces of which still remain. In this case the undoubted beauty of the water and its surroundings is entirely due to the softening and mellowing hand of time.

Artificial lakes are seldom satisfactory when a fine river or lake can be seen from the grounds, as the effect of the one will stultify the other.

The stream shewn as illustration No. 77, arranged in connection with the woodland walks adjoining the gardens at Mount Stuart. In this case the stream is here and there intercepted by a natural stratum of rock, over which the water tumbled into the enlarged pools. In both instances, owing to more effective drainage of the higher land, the volume of water was greatly increased, making it necessary to have some kind of protection for the banks. Now here was a circumstance, which it must be admitted, could have been treated in an effective more open manner, by clearing away the trees, &c.; but it would have been sacrilege to have destroyed a single one, or to have stubbed the undergrowth of Brambles, Honeysuckle, Gorse, and Broom, and every

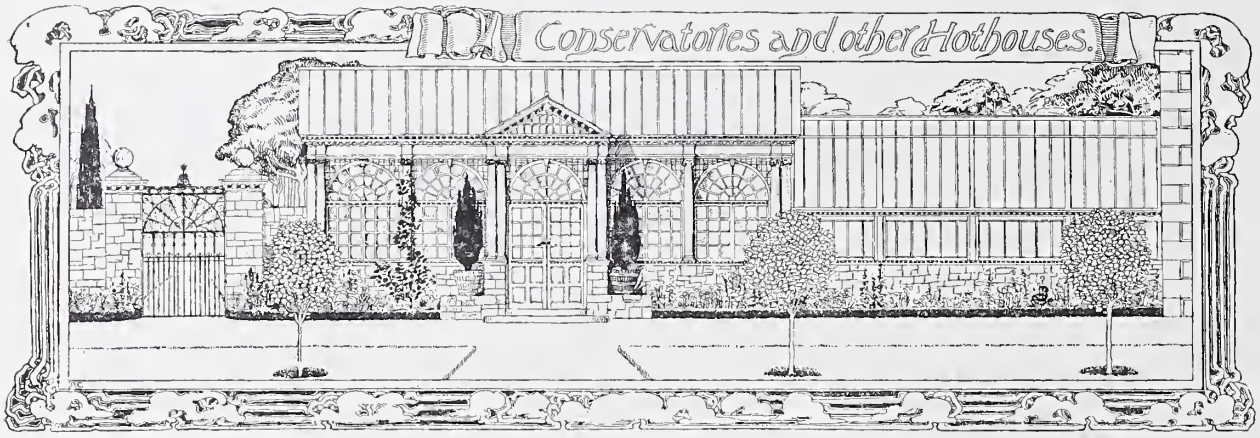
charming wild bits of nature. Advantage was taken of the natural strata of rock which was in some cases further bared, whilst in others additional rocks were added to deepen the cascade and to raise the water level so as to form pools. These inserted strata were carried along the sides of the stream, to protect the banks where the wash was greatest; and, where the water was sufficiently still, flag Iris and Sedges were planted in the clay bottom of the stream. Amongst the brushwood and trees on the banks were planted breaks of Narcissus, wood Hyacinths, Anemones, and all sorts of bulbous and other plants which could be naturalized with a reasonable degree of success. Cream and white Brooms, Spanish and double Gorse, tree and ground Ivies, Heath and Menzesias, Gaultherias, Hypericum and Vincas are also being planted, all of which when established, would bear the imprint of nature. Groups of undergrowths such as common Hollies, Yew, or Blackthorn, also Crabs and white Thorns planted amongst the surrounding timber, give the amount of connection required between a series of loose copses.

In each of the cases referred to, it will be noticed that it was simply a question of assisting effects which already existed, that the materials used were indigenous to, or such as it was reasonable to expect in such situations, and under similar circumstances, and also that no foreign trees or shrubs were introduced, a fact which will add very much to the interest of the stream. Much the same course was adopted at Ballimore (see p. 191). The rockwork inserted, and the planting surrounding, being in character with the natural aspect of the position ; it is in such places that rockwork, when well done, proves so pleasing.



No. 78.

CHAPTER IX.



Somehow or other, few people seem to imagine that Art can have anything to do with the arrangement of glass houses; that, seeing there are so many firms who publish catalogues full of illustrations, all they have to do is simply to choose one, two, or three greenhouses, as the case may be, according to the requirements of their ground. So long as this is confined to houses in which are grown plants for display in a conservatory, this method, whilst a very short-sighted one, may not result in much harm, provided always that good material and workmanship is obtained. But when the glass houses are intended as an adjunct to the pleasure grounds, and more especially when they are in close proximity to, and seen in conjunction with the house or other important buildings, it is most necessary that attention be paid to the planning, grouping, and details.

When a glass erection takes the form of a conservatory attached to a residence, it should be distinctly architectural in treatment, for nothing can be more annoying and disappointing to an architect than to see a stock pattern conservatory, highly ornamented with cast iron cresting and finials, set up against a house which he has designed with great care and perhaps some success. Even when carefully designed I am by no means inclined to think that a conservatory is always an improvement to a residence.

Granted that a house is better for having a conservatory attached to it, there are a few important considerations which should decide its character and design. In the first place, the style of the house to which it is to be attached; secondly, the position in relation to the entertaining rooms; thirdly, the external effect when viewed from a distance; and fourthly, whether it is to be furnished with palms and other ornamental plants planted out, or supplied with plants grown in other houses.

It will be quite plain to everyone that a conservatory attached to a palatial residence must be a very different structure to one attached to a plain brick suburban villa. In the former case stone pilasters and entablature might be necessary; whilst in the latter an erection very similar to a tenant's greenhouse, provided the cornice and mouldings were

nicely treated, might not be out of character. In either case, the style and importance of the residence should suggest the design of conservatory that would best harmonise with it.

The plan of the conservatory must, of course, be ruled by the position of the entertaining rooms, and particularly their windows. It is seldom desirable to erect a conservatory against a house owing to the great obstruction to light and air occasioned to the entertaining rooms ; the better course being to place it some distance away, and connect it with the house by a glazed corridor, an arrangement which commends itself for sanitary and other reasons. This arrangement might even be advisable when it is possible to build the conservatory directly against the house, without obstructing the light.

The effect of a conservatory erected on the South-East or West front of a house which is placed conspicuously on a hillside, is often anything but agreeable, reminding the spectator of a huge mirror, this especially when the front is glazed with large sheets of plate glass, and when there are no trees or shrubs near to cast a partial shade, or to give an indefiniteness to the angles or ridges. For this reason it will generally be found much better to glaze with ordinary sheet glass of reliable strength, arranged in small squares, rather than with large unbroken sheets.

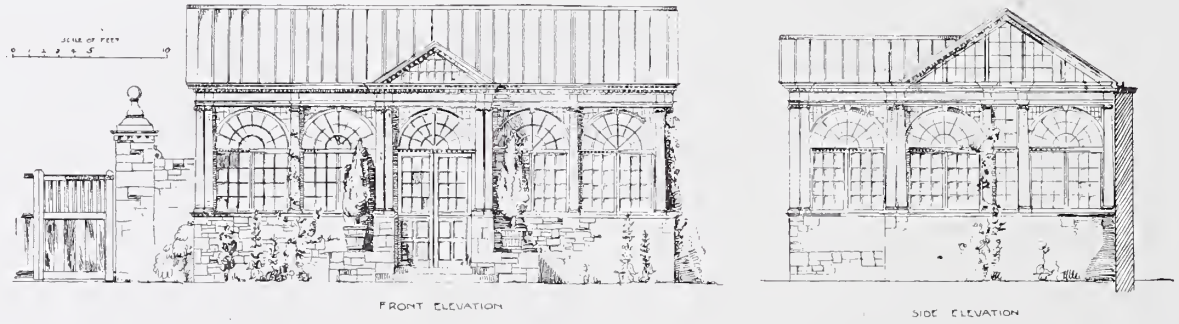
It should further be remembered that a conservatory is more for the display of flowers than for growing them, and that to expect a gardener to keep the place gay without supplementary plant houses, is to court disappointment. Even where there are proper ranges of glass houses, the demand for cut flowers and table plants for the house, may nearly exhaust the resources of the gardener, and leave him with no chance of keeping the stages bright with pot plants. In this case it is better to arrange the centre of the conservatory with soil beds, and plant it with tree ferns and palms ; a pleasing effect can, in this way, be obtained without much assistance from the greenhouses, excepting for a few flowering plants to give the necessary colouring. In any case, the walks in a conservatory, which is used not only for the display of plants, but also as a place in which to sit and promenade, should be much wider than those in an ordinary greenhouse, thus reducing the area to be furnished with plants.

A recent writer on conservatory design goes into particulars as to heights of cornice and transoms, asserting that no transom should be more than 5 feet 6 inches from the floor level, as otherwise the view would be obstructed. But if conservatories are to fulfil the chief end for which they are designed, they must rely upon the wealth and display of palms, foliage, and flowers within, rather than upon the view without. This arrangement of transom also suggests plate glass, which, as stated above, is largely destructive of artistic effect ; the small squares of the old orangeries are far more effective, and not half so pretentious.

The sketch of a winter garden in the West Park, Wolverhampton, will show what is meant by pilasters and heavy cornices. In this instance the conservatory was designed principally for the show of chrysanthemums, which, in this as in many other public parks, are a great feature. Here the necessary ventilation is obtained, by means of box ventilators built into the brickwork under the stages; by the lantern over the central gable; and by ridge ventilators along each end gable.

A small conservatory, designed to hide unsightly back buildings, and which occupies a convenient position on one side of the carriage circle, is shewn by sketch No. 79. As it was only intended to have one other small plant house, it was arranged as a fernery, the ferns being planted in crevices of naturally arranged limestone rock placed against the back wall and round the sides, the effect being very pleasing. The same elevation is shewn in the chapter heading, but with the addition of a greenhouse corridor, which, as shewn, is arranged to connect with the drawing-room of the house, the whole forming a very convenient and desirable promenade under glass.

In most gardens a range of glass, large or small in proportion to the size and requirements of the establishment, is considered a necessity; more particularly when the house is situated at some distance from a market town; but, even when it is situated in close proximity to a market, the pleasure and instruction, in selecting and growing one's own plants has a charm for which the showy productions of the florist can make but scanty compensation. As regards fruit, there can be no question that home grown peaches and grapes retain a beautiful bloom, which cannot be claimed for fruit which has travelled a long distance.



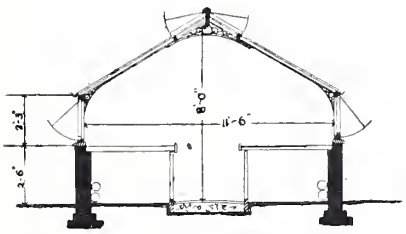
No. 79.

One of the most important details to be provided for, in connection with a range of plant and fruit houses, is the heating chamber, and potting sheds; both of which should give ample space for ease, and efficiency of working. The plan of gardens, and perspective view of glass at the Flagstaff, Colwyn Bay, shew a suitable arrangement.

In planning plant and fruit houses, it should be borne in mind, that the principal expense in keeping them up is in the heating; an expense which often reaches unreasonable and unnecessary proportions. It is obvious that to avoid this, compactness of planning is most desirable; and that the hot water mains should be carried entirely, or nearly so, under the houses, and made to act as part of the heating supply. This cannot be too strongly emphasized, as there is a great tendency to run the mains independent of the houses, in culverts which are not only expensive to build but which also assist in cooling the pipes. One instance might be cited where nearly one hundred yards of five inch mains placed in culverts were carried under the gravel walk; consequently, the boiler power required to heat the houses, was enormously in excess of what it ought to have been.

Another point which is frequently overlooked, is to limit as far as possible the cubical area of the several houses to be heated. It is admitted by very many capable gardeners that most glass houses are much loftier than required: in some instances so much so as to

make successful plant growing an impossibility. Probably the best plant growers in this country are those who supply Covent Garden market, whose plant and fruit houses are much lower than those erected in private establishments; so that, whilst discarding their rough and ready method of construction, much may be learned from their principles of economy and efficiency. A low roof certainly ensures strong and sturdy plants, as they are close to the glass, and consequently not drawn, as when placed six or eight feet from it. The inclination of the roof is also a matter of no small importance; but here the difficulty is, that whereas the flat roof is best adapted for catching the rays of the sun, it is the worst for drip, which is so injurious to plant life. Another important provision is that of uniting, so far as possible, the plant and fruit houses with the potting shed. Plants from isolated



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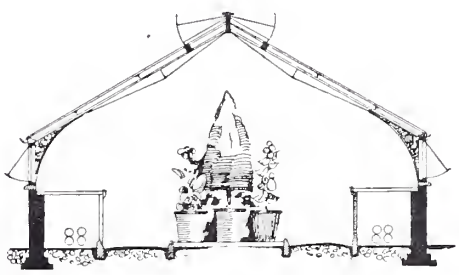

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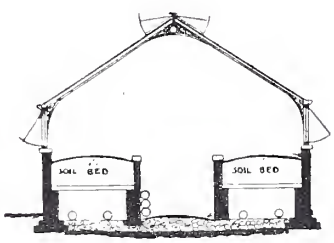

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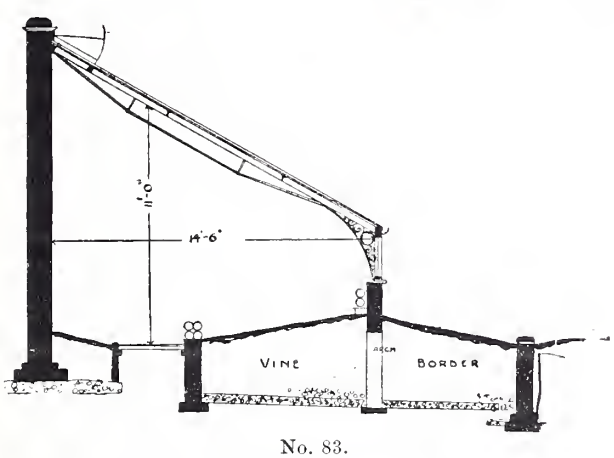
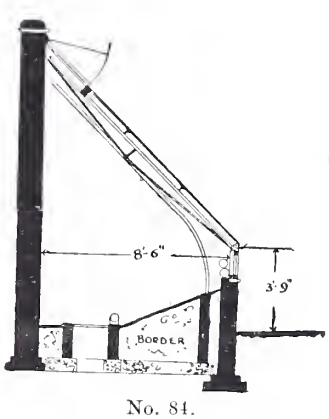


No. 83.



No. 84.

greenhouses require to be carried backwards and forwards to the potting shed, often in severe weather, and just when the young buds are beginning to push. Some device is, therefore, needed to protect tender plants from the inrush of detrimental cold draughts, by detaching part of the glass.

The best roof for Plant houses is one with a rise of about eight inches to the foot; for Vinery a square pitch of forty-five degrees; for a Peach house sixty degrees. The above sketches Nos. 83 to 84, give the best heights and sizes, for the various kinds of glass houses generally required in a moderate sized garden. Vineries are often required of greater width than those shewn on the section. This would be most effectively and economically obtained by a return of the roof at the back, forming what is known as a three-quarter span.

In arranging the quantity of piping required, some slight difference should be made between houses which are situated in a warm sheltered garden and those which are placed in an exposed position; but for general use the following table, extracted from "Fowkes on Heating," will be found reliable :—

For every 1,000 feet, atmospheric contents,				Greenhouses and Conservatories,	35 to 40 feet 4 in. pipe.
,,	,,	,,	,,	Vineries	45 to 50
,,	,,	,,	,,	Plant Stores	55 to 65
,,	,,	,,	,,	Forcing Houses	60 to 70

For Peach Houses, 30 feet of 4 in. pipe per 1,000 feet atmospheric contents, would be sufficient.

For heating lengths of piping up to 2,500 feet, I have found no boiler so efficacious as the old Chatsworth. For greater lengths, an upright tubular, or Richardson's patent would be preferable. To avert disaster, it is always advisable to put in twin boilers, both coupled up to the mains, which would allow of either being used in case of accident. There must always be a slight rise from the connection with the boiler to the end of the main. Each house also should have a shut-off valve, for the purpose of regulating the heat from the main.

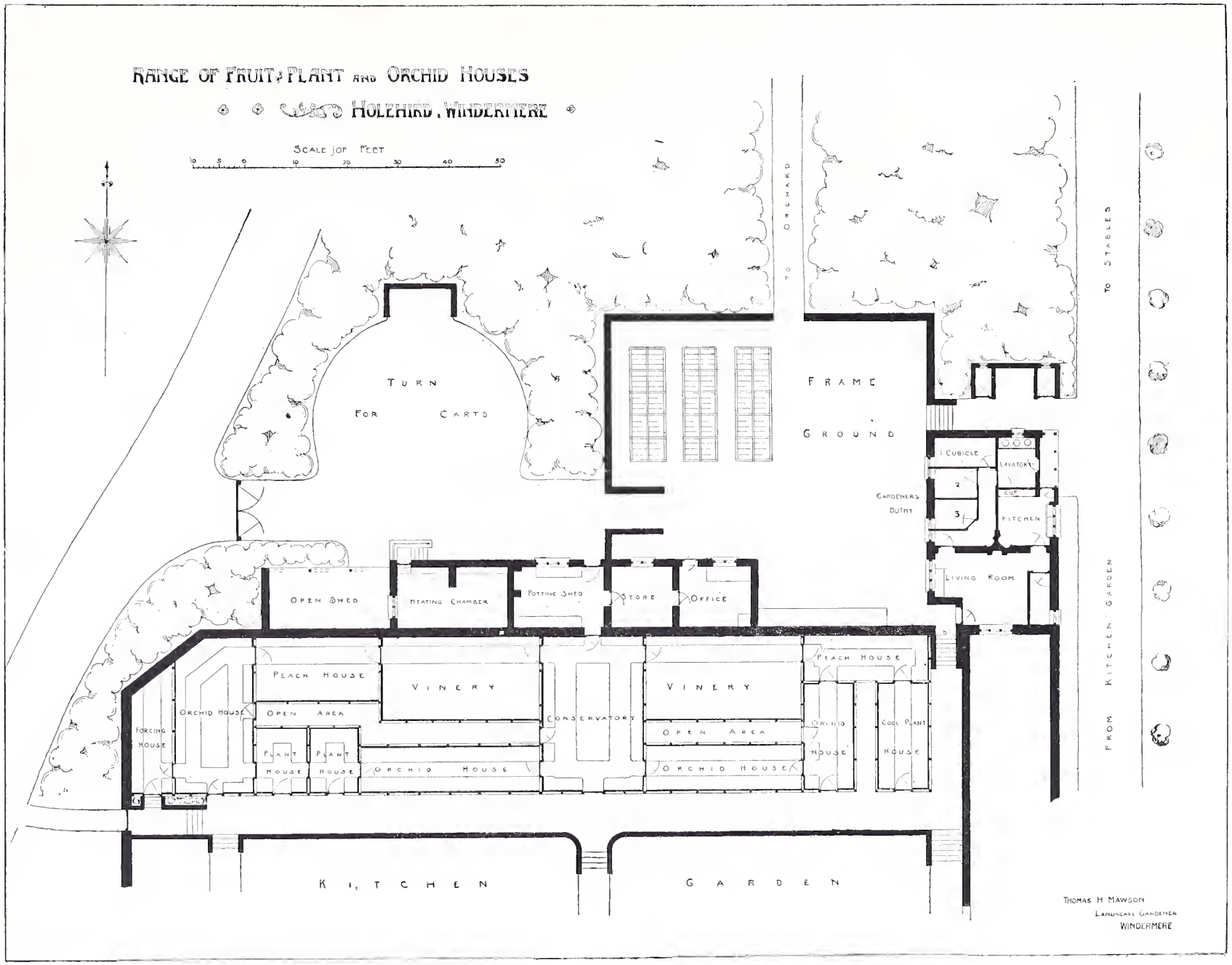
To supplement the glass houses, whether large or small, it is always well to have a few good span-roof frames with sufficient piping to keep out the frost; a 3 in. pipe round a six feet frame, being adequate for the propagation and rearing of spring bedding plants.

On pages 89, 90, and 92 are plans of three ranges of glass; No. 85 being an extension or addition to some fruit houses at Holehird, Windermere. This property was recently purchased by W. G. Groves, Esq.; a gentleman who has long been known as a keen and successful orchid grower, the large extensions being required for the accommodation of his very fine collection.

For the purpose of distinguishing between the old work and the new; it may be noted that the old portion consisted of early and late vineries, with a plant house in the centre and a peach house at each end. The centre house, was, however pulled down, and also one of the peach houses. The potting shed and the heating chamber, although considerably enlarged, occupy the same position as before the alterations. The remainder of the work is all new; but, although the width of the fruit houses would have been reduced, had the whole been planned together; the scheme, as a whole, is given as a conveniently planned range of glass and accessories.

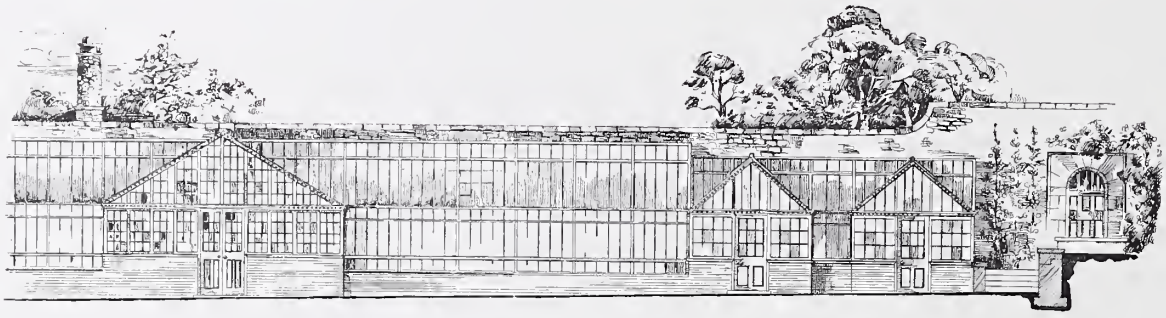
In planning the new orchid and plant houses, the limits were fixed by the walks shewn on the plan, and the position of the retaining wall alongside it. The object of the proprietor was to be able to go the round of the entire range without leaving the shelter of the glass; an object which the allotted space somewhat favoured; the only obstacle being, that one of the outside vine borders had to be partially cut away. This was, however, in a measure compensated for, by the improvement made to the inside borders.

Entering by way of the potting shed built on the North side, an ample gravelled space is provided for carts, &c.: to the left, which is slightly higher ground, is arranged the


RANGE OF FRUIT, PLANT AND ORCHID HOUSES
HOLEHIRD, WINDERMERE
SCALE 10 FEET
10 5 0 10 20 30 40 50
TO ORCHARD
TO STABLES
FROM KITCHEN GARDEN
TURN FOR CARTS
FRAME GROUND
1 CUBICLE
LAVATORY
2
3
GARDENERS BOTHY
KITCHEN
LIVING ROOM
OPEN SHED
HEATING CHAMBER
POTTING SHED
STORE
OFFICE
PEACH HOUSE
VINERY
CONSERVATORY
VINERY
PEACH HOUSE
ORCHID HOUSE
OPEN AREA
FORCING HOUSE
PLANT HOUSE
PLANT HOUSE
ORCHID HOUSE
OPEN AREA
ORCHID HOUSE
ORCHID HOUSE
COOL PLANT HOUSE
KITCHEN GARDEN
THOMAS H MAWSON
LANDSCAPE GARDENER
WINDERMERE

No. 85.

frame and standing ground, with the gardener's bothy placed against the North wall of kitchen garden. To the right and left of the potting shed are stores, office, heating chamber, shed for tools, ladders, and compost heaps.

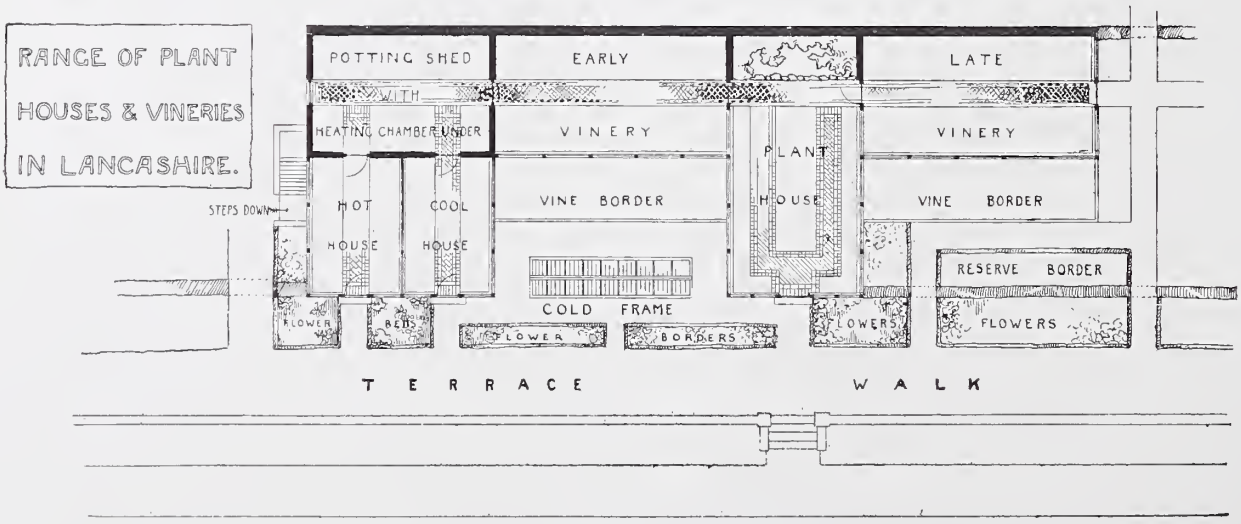


No. 86.

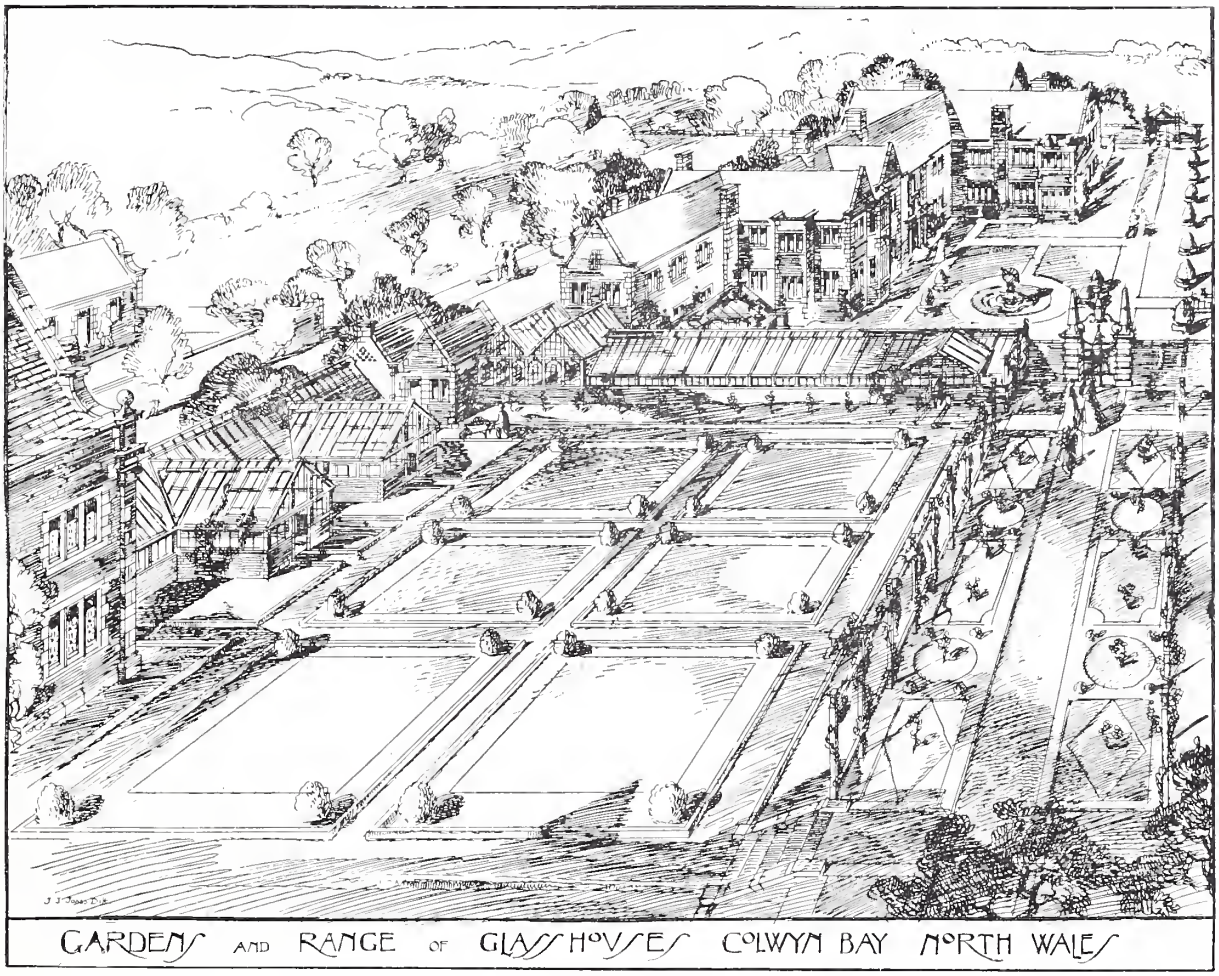
The heating mains are carried through the potting shed and the stores and office to right and left of the boilers, thus making these rooms comfortable to work in. The heating of all the houses is so adjusted that each separate house can be regulated to the niceties required for orchids or other purposes.

In designing the elevations strict attention had to be paid to the habits and requirements of the plants to be grown in the different houses, but by care in grouping and in detailing the cornices, it was found possible to obtain a compact, simple, and substantial appearance. As will be seen by the half elevation, No. 86, cast iron ornamentation is entirely dispensed with.

The perspective view No. 88, shews a range of glass now being erected at The Flagstaff, Colwyn Bay, North Wales. This consists of potting shed with heating chamber under, a corridor and room in which to pack flowers and fruit; palm house, 18 by 17; early muscat house, 27 by 16; late vinery, 27 by 16; plant house, 24 by 16. All these face due South. Against the wall connecting the lodge and the potting shed, are



No. 87.



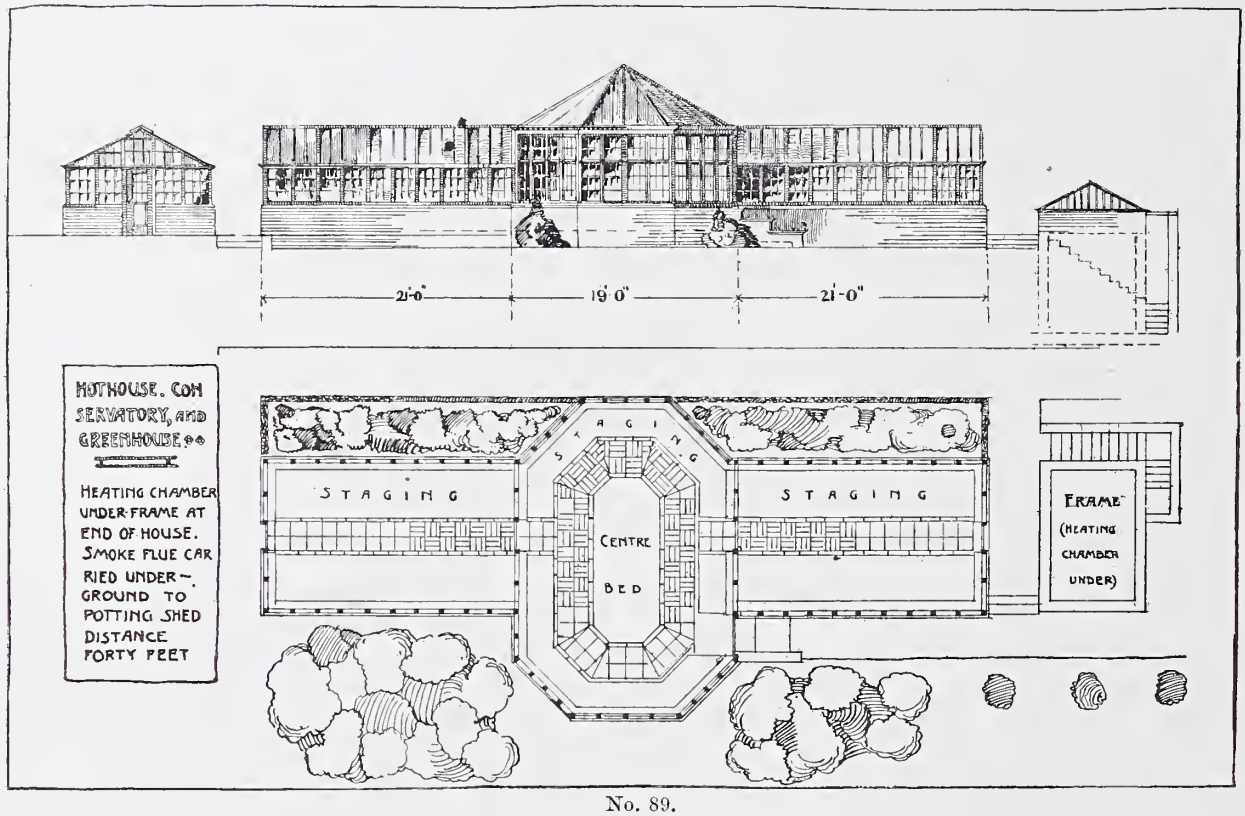
No. 88.

erected early and late peach houses; each 21 by 12, one to be used as a propogating house, and the other for melons and cucumbers. The position of each of these houses, and their position in relation to garden schemes will be seen by reference to page 201.

The second plan shews a small but useful range of glass, designed in connection with the formal garden, illustrated on page 87, for a client in Lancashire. This range consists of a plant house which can be used as a conservatory for the display of Chrysanthemums or other flowers in bloom. A vinery, which is divided into two compartments, one for black Hamburgs and the other for black Alicantes and Lady Downs Seedlings, and at the end of the vinery are a plant house and stove, each 12 feet wide. Like the first-named range of glass, the whole of these houses are in direct connection with the potting shed.

The third plan and illustration No. 89, represents glass houses on a small scale, erected at Cleeve Howe, Windermere. Here there is a conservatory in the centre, and a small stove at one end, and greenhouse at the other. The chimney in this case, was not permitted to be near the house. In preference, therefore, to carrying the pipes in flues, it

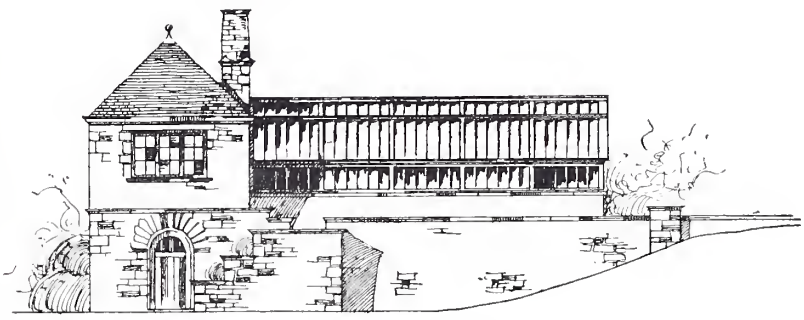
was considered more economical to place the boiler near its work at the end of the stove; conducting the smoke through an underground flue, to a chimney over the potting shed some twenty yards distant. The stoke-hole is completely hidden, by placing over it a span-roof frame, which, being visible from almost every portion of the grounds, was made rather more ornamental than is usual.



No. 89.

The last illustration is that of a very simple little greenhouse: well calculated to give delight and pleasure to amateurs and ladies interested in gardening; essentially a "growing house," it is suitable for almost any kind of plant, provided the requisite amount of piping is inserted. Where there is no other glass erection, the wisest plan is to use it as a cool house. As shewn in the illustration, it is attached to a potting shed and tool house, on one side of which is placed a potting bench, and a wall on which to hang tools. Under this is placed the heating chamber, on one side of which is fixed an independent boiler with external hopper feeder, so as to ensure the fire burning for a great length of time without attention. This little boiler heats a 4 in. flow and return pipe, which passes round the greenhouse and is sufficient to keep the temperature at 45 deg. during the winter months. The staging, which is 4 feet wide, is of fixed lattice on one side, and on the other of slate, which can be removed to allow Chrysanthemums being placed on the ground, during the period of blooming.

The best staging for most purposes, is that formed of Westmorland or other strong slate, laid on ⌐ iron bearers, placed 1 foot 9 inches apart, the flags being covered with fine gravel to make an even bed. The superiority of this kind of staging, is that it is not subject to quick changes of temperature, as with lattice and iron stagings.



No. 90.

Paths for greenhouses should be either concreted, tiled, flagged or paved with brick; and gullies should be fixed, to draw off all surplus water expeditiously. The outer walls may be of 9 inch brickwork or 15 inch stone, the constructional woodwork red pine or teak; the latter being much more durable than the former. Continuous lights on each side of the ridge are the best ventilators, because in stormy weather, the exposed side can be closed, and the sheltered side only opened. Box ventilators built into the walls under the staging, are much better than continuous ventilators immediately above the staging, inasmuch as the cold air is warmed by the pipes, before it reaches the plants.

The floors, stages, and beds of conservatories have a great deal to do with their success. These are however, details which are very apt to get overlooked, or left entirely to the horticultural builder, who has so overdone everything, as to very materially destroy the effect of the plants.

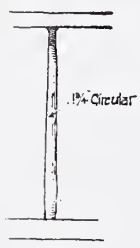
In designing and erecting a conservatory, it should, as before stated, be remembered that it is the foliage and wealth of flowers, which are to give the effect. If this fact were kept in view, much useless expenditure and discordant detail would be avoided. The two things which would first be omitted, would probably be the crude glazing with highly-coloured lead lights; and the fancy villa vestibule kind of floor tiling.

One of the best colours for a conservatory floor is a plain buff; which may, however, be laid in a number of ways, so as to produce some suggestion of pattern; or some sort of inlaid tiles of simple design and quiet colour might be used; or a more distinct pattern might be made by bordering with a dark brown tile, and dividing the floor into a chequered pattern. So long as strong showy colours, especially blues are avoided, tiles make a most effective, inexpensive, and durable flooring.

When a conservatory is designed to form an adjunct to a house of a classical style of architecture (in which case a large amount of floor space would probably be required), the floor might be laid with marble, either in squares, diagonals, or lozenges and diamonds as sketch No. 91. Such a floor is not so costly as might be supposed; whilst the effect, supposing the surroundings to be in keeping, is very good indeed. A simple effect may be obtained by using sawn limestone in conjunction with grey slate, but in this method the pattern would require to be larger. The green Westmorland slate makes a delightful floor, when laid in random squares; or worked into even squares, or squares laid diagonally.

No. 91.

As surrounds or edgings to beds or borders, nothing looks better than dressed stone; but moulded terra cotta or brick might also be used with good results. Whatever the material adopted, the moulding should be simple and unobtrusive, and of sufficient height to retain the soil; *i.e.*, from 4 to 6 inches above floor level. This kerb should be well fixed by cement or dowels, and set on either a concrete, or a brick foundation. When the section is a suitable one, the kerb might be used as a base, into which to fix the standards for the staging placed against the exterior walls.



The best kind of staging for running round a conservatory, is that previously recommended for greenhouses; viz., a slate staging covered with fine clean gravel. A little more attention should, however, be paid to the detailing of the standards, and also to the edging. The least objectionable standard which I have been able to obtain, has been a very plain baluster-like casting, some 1¾ inches thick, and tapering somewhat to the top, as shewn in sketch adjoining. Wood lattice staging, although not so good from a gardener's point of view, is much more effective than the iron staging.

The height of a staging placed against an exterior wall should not exceed 2 feet 3 inches; and if it stands 8 or 9 inches below the glass line, the plants would look much better when seen from the outside, as the flower-pots would not be so much in evidence.

When staging is required for the centre of a conservatory, it is generally for the accommodation of tree Ferns, Palms, Camellias, or other large plants growing in heavy pots or tubs; such staging therefore, requires to be constructed with a view to strength. A good staging for this class of plants, is formed of sawn flag tabling, resting on stone or brick-built piers.

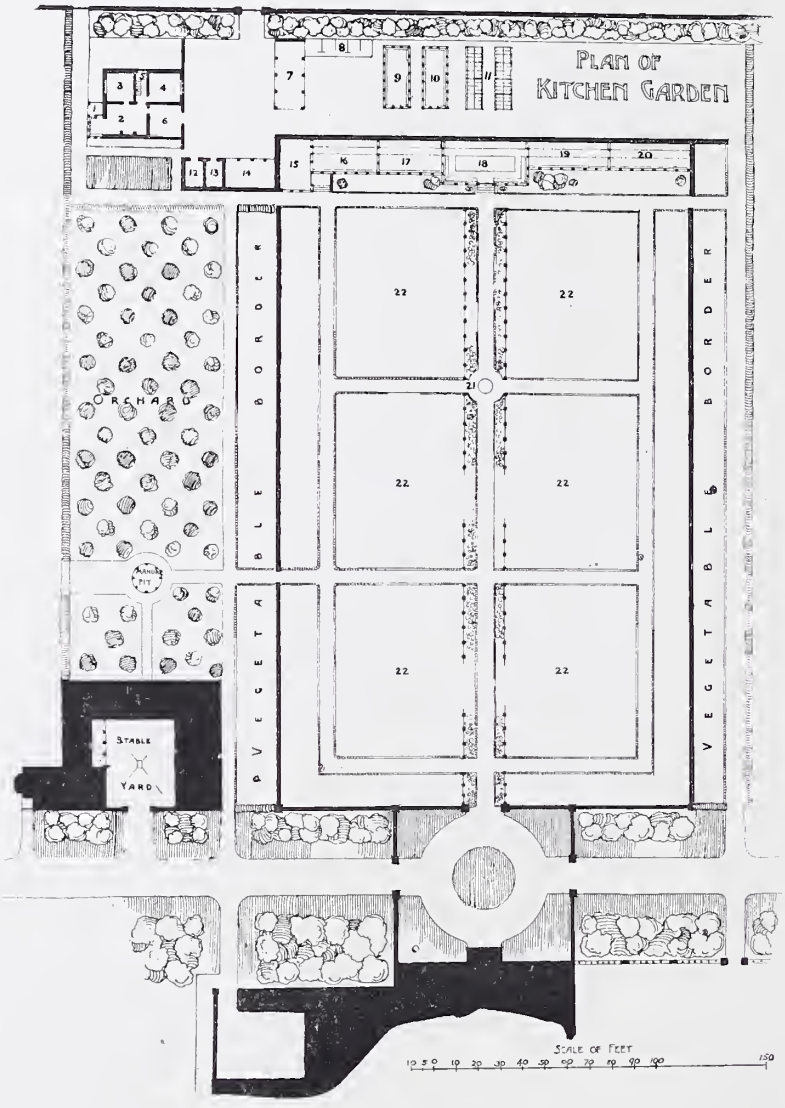
CHAPTER X.

In a previous chapter dealing with the site, and the disposal and position of the various essential portions, importance is attached to the kitchen garden ; which is not only regarded as a utilitarian necessity, but also as possessing favourable possibilities as an adjunct to the ornamental grounds. The latter consideration I have, however, found to have but little weight with clients; most of whom seem to prefer that the kitchen garden should be placed far from the house, and if possible, entirely out of sight, as though there were something vulgar or insanitary about vegetables, but if properly planned and neatly kept, these objections are merely sentimental. There are many old kitchen gardens throughout the country, and more especially in Scotland, which are in every way the most delightful portions of the gardens, giving sheltered walks at all seasons, including trees and plants "good for food and pleasant to the eye," imparting variety and interest throughout the year. Perhaps one reason why these old gardens are so very charming is because the old-fashioned hardy perennials, banished from the lawns and gardens near the house, have been planted along the sides of the walks, so as to give cut flowers for table decorations, &c.

To my mind, no garden pleasure exceeds that of being able to wander round a good walled-in garden, enjoying the fragrance of the fruit blossoms in the Spring, watching the setting of the fruit, and its various developments through the successive seasons until the ingathering. To cut off such a source of delight, or to arrange it so far from the house as to preclude the residents or guests from regularly visiting it, is to rob them of a source of pleasure and instruction.

As showing how near to a residence I would allow a kitchen garden to be placed, a plan is given on next page of a garden joining up to the North side of a house, having its main walk immediately opposite the front door; the entrance being by means of a wrought iron gate placed in the carriage court wall. In this instance the principal walk is nine feet wide, and terminates in a conservatory (18) placed against the North wall, the plant and fruit houses (15, 16, 17, 19, 20) being arranged to the right and left of it. Near the centre of the garden is placed a circular tank (21) with a flat freestone coping raised some eighteen

inches from the ground. This would not only be useful for the gardener, but, especially if fitted with a simple upright spray fountain, would make, by the combined influence of the beauty of flowers and the music of water, one of those peaceful spots beloved of all true admirers of the true and beautiful.



No. 92.

The portions marked (22) are the beds for cropping, while the more architectural portions of the ground are arranged as follows:—(1 to 6) show the gardener's lodge —(1) being the porch, (2) the living room, (3) the parlour, (4) the scullery, (5) the stairs, and (6) the yard; (7) and (8) are the coke store and compost bins, while the glass and its accessories are apportioned as follows: (9) and (10) are the stove and greenhouse, (11) garden frames, (12) root and seed store, (13) fruit store, (14) open shed, (15) potting shed with heating chamber under, (16) and (17) are the early and late vineries, (18), as will be seen from its position, is the conservatory, and (19) and (20) are the early and late peach houses.

At each side of the walk is arranged a border four feet six inches wide for hardy perennials, and behind these again there are espaliers for fruit trees. Arches are placed at regular intervals along the wall, and these, whilst obstructing a minimum of light from the borders, give the appearance of a continuous bower. In a garden such as this, with its level sheltered walks, and borders of fragrant flowers, most people who are fond of a garden, would more often prefer to stroll than in any other part of the grounds. Such walks would, in any case, give a welcome variety to the circumscribed paths possible in a small place.

I have purposely prefaced this chapter by the foregoing, because I hold that there is no necessity for regarding a kitchen garden as an unfortunate requirement, and also because,

I believe, the real reason for detaching it from the rest of the garden, has very often simply been, to get rid of the last remnant of formality near the house.

Supposing it has been decided to have a kitchen garden near the house ; there are many things which require careful consideration if it is to prove successful. First and most important is the aspect. Here, it may be noted, that if the position indicated on page 96 for the house has been adopted, the ground will fall away to the South, and thus ensure the garden being a sunny one. The next point is to have the garden well enclosed by walls and good high hedges. The latter make, of course, the least expensive boundary, but they yield no return like good walls. Everything considered, it is much better, and more economical in the long run, to erect good walls on which fruit trees can be trained, than to plant hedges which require constant trimming. There are times, however, when a good Yew hedge forms the most fitting division between the vegetable garden and the lawns. The third point is to secure good soil. This is not always an easy matter ; but, still, much can be done to improve it, even under the most disappointing conditions, by draining where it is wet ; by the use of lime, road scrapings, or sand where it is heavy or clayey ; or by the use of clay where the soil is sandy. A fourth matter for care is the deep but careful trenching of the soil, and the adding of soil from the walks or wherever it is obtainable.

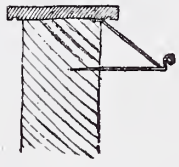
Many gardeners recommend the sub-soil being brought to the top. This is often a capital way of treating an old garden, but it is the greatest mistake in the case of a new one, where the best soil should be kept near the surface. The best way of treating new ground is to overhand trench it, *i.e.*, to make two trenches instead of one, throwing the top spit on to the second trench and the sub-soil on to the near one. To enrich the sub-soil add a liberal supply of manure—cow manure being best for light land, and horse manure for heavy land ; old lime and screened rubbish from old buildings might also be added for heavy clay or peaty land. In selecting the position for a kitchen garden, great care should be taken to choose one which admits of thorough drainage. This is generally much more important where the site chosen is in a valley or on low-lying land, than on a hillside or rising ground. Here we may remark that a serious mistake is often made in preferring a snug sheltered position, because it is in such positions that spring frosts are most troublesome ; not that there are more degrees of frost in the one position than in the other—there may indeed, be less—but because there is more moisture on which the frost can act. It is, therefore, necessary to do much more draining on the ground which lies in a hollow than on that which is on the hillside.

The size of a kitchen garden is also a matter requiring consideration. For a moderate sized establishment an acre and a half would be quite sufficient, this area, of course, being independent of the space allotted to the frame ground and range of glass. For a small establishment, three-quarters to an acre of cropping ground will probably be found to meet all requirements. It should be understood, however, that this extent of garden would not allow of late potatoes being grown, nor for any space being taken up by orchard trees. Where convenient, an orchard should be planted to one side of the kitchen garden, and if the ground is rising to the N. or W., fruit trees along the boundary would add very much to the general effect, and make a good wind screen to the garden.

In addition to the space allotted to the kitchen garden, but connected with it, there should be provided a frame ground, and also a reserve garden, a plot of ground on which cold frames can be arranged, and accommodation provided for manure and compost heaps. There should also be space enough to allow the gardener to set out his Chrysanthemums without taking up space along the garden walks. Some such arrangement as is shewn in illustration No. 5 would generally be found necessary.

It has already been said that walls make the best boundaries to kitchen gardens. For these brick is undoubtedly the best, but in a stone country brick walls often look very much out of place. If stone is the building material of the district, the garden walls would look much better if in stone. It should be remembered, however, that it is much more necessary to wire a stone than a brick wall, as brick allow of much better nailing. When the foundation rests on clay, it is well to put in a damp course, and, if the wall is in brick, to take the extra precaution of building a cavity. This would add considerably to the dryness and, consequently, to the warmth of the wall, and make it much better adapted for the successful growing of the choicer kind of fruits. Whether built in stone or brick, the walls should be well pointed, so as to give as little accommodation as possible to garden pests.

Walls that are built without pilasters or buttresses are undoubtedly much better for training fruit trees against, but when the walls divide the pleasure and the kitchen garden, the appearance would be much improved by having these features on the side next to the pleasure grounds. The height of a wall would vary, the North, West, and East walls being higher than the South. Thus, the North wall might be 12 to 14 feet high, the West and East 9 to 10 feet, and the South 7 to 9 feet high. The coping to a wall is an important detail; for this purpose a good flagstone, 2½ to 3 inches in thickness, projecting 2½ inches on each side of the wall, and having a water drip groove on the under side, would answer as well as any of the more expensive forms of coping. It would, however, be advisable to build in board irons into the wall, upon which projecting boards could be placed in the early Spring, making a convenient framework from which to hang netting for protecting the fruit against birds. In the same way it is well to build in the eyelets and fasteners for end straining bars, a much more satisfactory plan than having to break into the walls for the purpose of inserting them. The ordinary and most economical method of wiring a wall is that which is arranged on a similar principle to that shewn for Espalier No. 95.



No. 93.

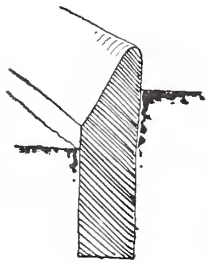
When not provided for in a separate department, the Vineries and Peach houses are generally built against the South side of the North wall, as shewn on plan No. 92, p. 96. This ensures the greatest amount of light and sun, and is at the same time the most economical way of treating fruit houses. The portions of this wall not occupied by glass should be reserved for choice hardy fruits, such as Peaches, Apricots, Coe's golden drop Plum, and the best kinds of Pears and Apples.

The wall, having a western aspect, would grow excellent crops of Apples, Pears, and Plums; whilst the Eastern aspect would grow good Pears and Plums. The North side of the North or South walls would grow good Morella Cherries and Red Currants.

Fruit borders should be 15 to 18 feet wide, and for the sake of symmetry the same width from each wall. These borders require careful making, especially on heavy soils, where the whole of the surface soil should be carefully thrown back, and a layer of broken stones or bricks, rubbish, or burnt clay spread over the ground, to a depth of at least 10 inches, the ground having first been thoroughly drained by field pipes. On the top of this rubbish should be spread a layer of good turf from an old pasture, if obtainable, and if not, a layer of half rotted stable manure; the soil may then be thrown back and fresh soil added until there is a depth of at least two feet with a rise of six inches to the back. The borders can be used for the earliest crops of vegetables and salads, or for strawberries.

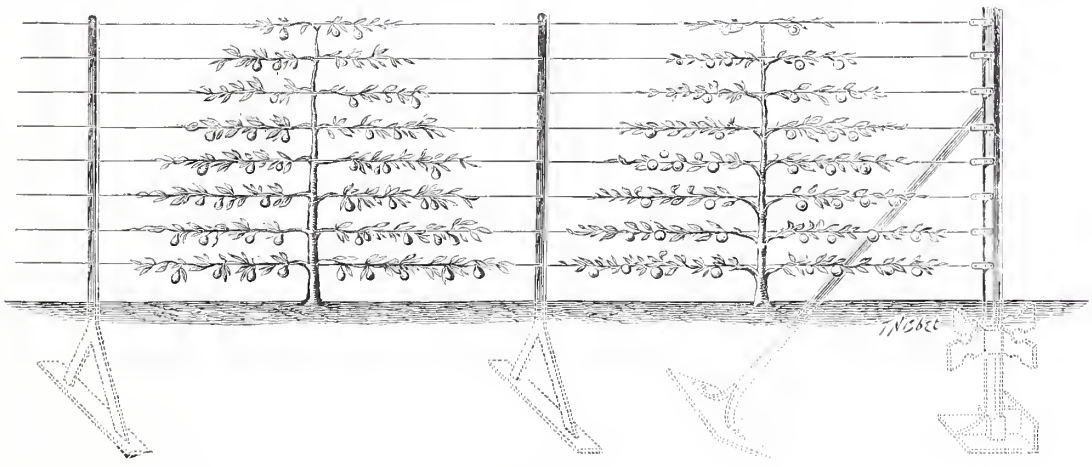
For convenience of working, the garden should be divided into quarters, 90 feet in length and 60 feet in width. The length should be, if possible, east to west, so that the cropping may be the short way of the quarters, which would allow greater ease in working, and at the same time insure the crops getting the greatest amount of sun.

For an edging to a kitchen garden, nothing looks better than neatly trimmed Box edging, which needs a little keeping in order, however. Stone flags two to three inches thick and twelve inches deep make an excellent edging, as do also Welsh or Westmorland slates, about one inch thick, and in lengths of two feet and over. Terra Cotta and earthenware edging is much used, and when perfectly plain makes a very good and cheap edging. Crenulated, foliated, and fancy patterns should, however, be avoided, as they not only look paltry, but are most unsatisfactory in every way. The best section I have used is that shewn in sketch No. 94, and I feel quite sure the little extra money which it costs is well spent. The one edging which should not be allowed in a kitchen garden is grass, unless it can be laid in strips of not less than two feet wide.



No. 94.

A convenient water supply to a kitchen garden is an important item. When water cannot be laid on, large cisterns should be provided for the reception of rain water. From whatever source the water is obtained, it is much better if exposed to the sun and



No. 95.

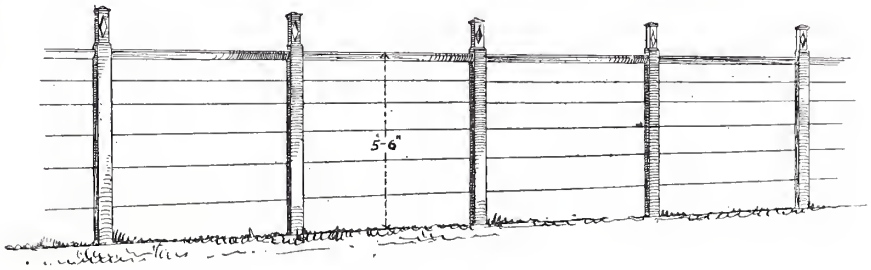
atmosphere for a few days before use. A very pretty effect may often be obtained by having a circular basin placed at the junction of the main walks, with a jet in the centre which can be turned on and off as required. Such an arrangement is shewn on plans page 96.

Espaliers for fruit trees have already been briefly referred to. They take up very little space, and when the trees are properly trained, healthy, and successful, add much to the beauty and effect of the garden. They may be constructed of various materials; a combination of wood and wire, although not so durable, lends itself to better treatment than wire and iron only. The most usual form, however, is the one shewn in sketch No. 95. This may be made into a form of bower by joining the two sides together with arches, the strained wire running through these the same as at the sides. Another form of espalier is shewn in sketch No. 96; there is such an arrangement in the

No. 96.

gardens at Trentham, the long bower being formed with pear trees; the general effect being exceedingly good. Where the espaliers are used for climbers or roses as well as fruit trees, a compromise between the two might with advantage be adopted. In this case only the arched bars would be carried over. When this is done a very pretty effect may be gained by planting honeysuckle, Clematis montana, or C. Jackmanni at each principal standard, and training it over the arched bars, fruit trees being planted and trained to the upright strained wire espalier. Where the walk is sufficiently long, it will have all the effect of a covered bower walk. Opportunities may often be found for a walk of this description on the ground lying between the pleasure grounds and kitchen garden,

and it might be used as the treatment for the walk from the kitchen garden to the kitchen offices or garden entrance to the house. Although espaliers formed entirely of iron standards and strained wire are general, a much prettier effect can be obtained by having wooden posts and top rail, and strained wires below, as in the sketch.

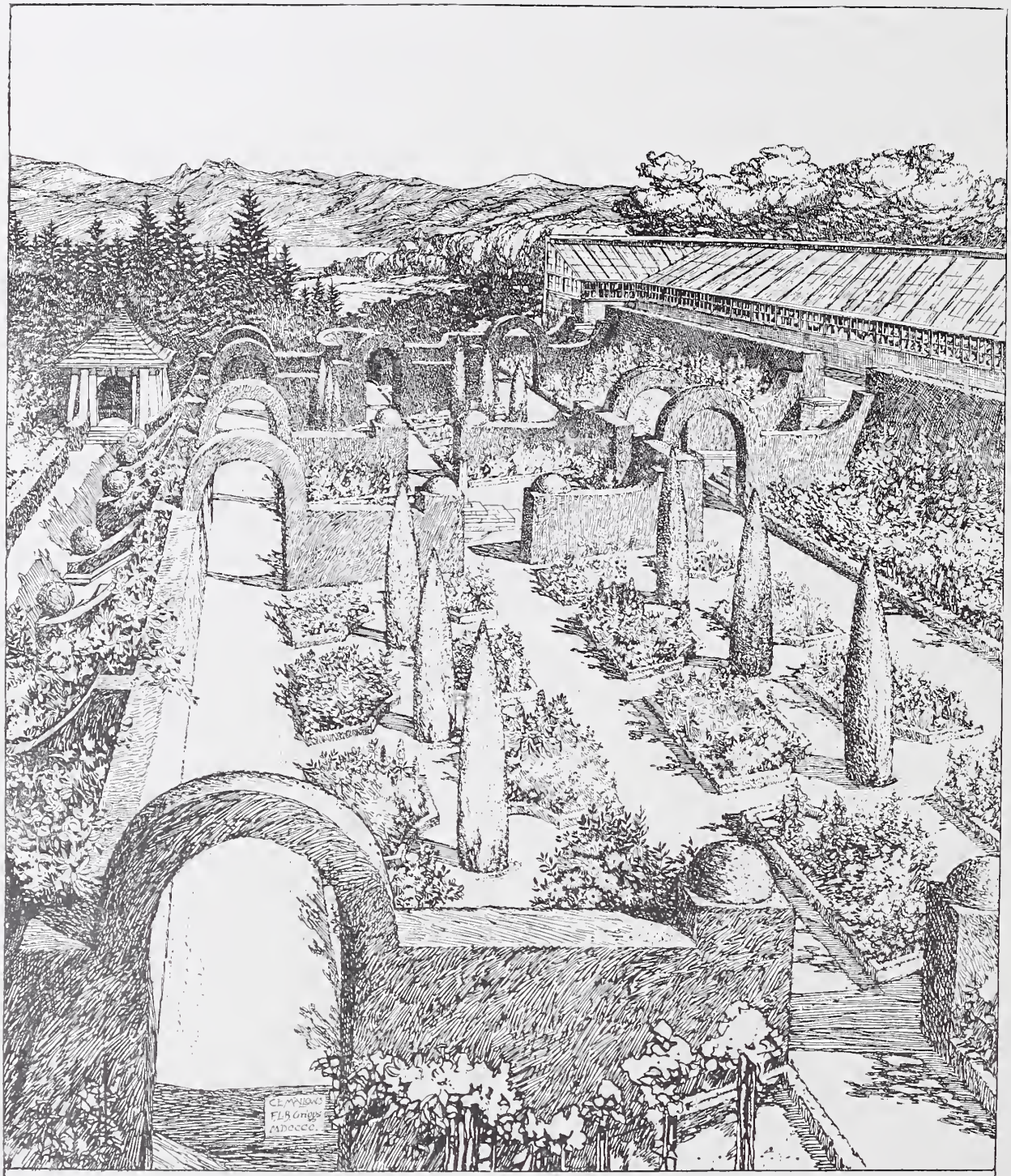


No. 97.

Good walks in the kitchen garden, as elsewhere, are a necessity. Where it is possible to adopt a style of walk, which would not perhaps be in keeping with the flower garden or on the terraces, a strip of strong flag, granolithic or other similar patent stone paving, down the centre of the walk, would probably make the working of the garden easier, and allow of the walks being regularly swept. Tar paving, which would make a pretty flower garden almost impossible, may be used in the kitchen garden with success; but whatever form of walk is adopted, it should be remembered that a large amount of barrow work is constantly being required, and that a half-made walk would soon be cut up.

It cannot be too strongly insisted upon that a kitchen garden, the first object of which is utility, should be planned with a view to obtaining the largest area of cropping ground within the least fencing; which means, that the lines of the walls should so far as possible be straight and at right angles to each other. For the purpose of obtaining ample wall space for choice fruit trees, a parallelogram would be better than a square. The proportions of the parallelogram being say 100 to 150 feet, this would give an additional length of wall having a south aspect. It sometimes occurs, however, that owing to some peculiarity in the contour of the land, the lines of existing boundaries, or the divisions of the land by drives, that a regular shape is quite impossible.

As so many of the garden plans herein illustrated shew kitchen gardens as part of the scheme, it is not necessary to do more than give emphasis to the importance of good arrangement in the principal departments, viz., the arrangement of potting sheds, tool houses, fruit rooms, places for ladders, wheelbarrows, garden rollers and lawn mowers, bins for composts and manures, standing ground for Chrysanthemums and plants which require plunging, and here it may be noted that as the whole staff generally require to work under cover on wet days, that the sheds should be ample. To give a clearer idea of what is required in this way, reference may be made to the plan on page 96, which gives the accommodation which would be necessary for a garden to a moderate sized country house.



DESIGN FOR A HILLSIDE GARDEN . WINDERMERE .

No. 98.

CHAPTER XI.

It is very remarkable that, whilst everyone speaks of avenues in terms of the greatest admiration, comparatively few planters attempt to rear them. Directly such a thing is proposed, attention is called to the grand panoramic view which it is alleged would be cut off. Just as most people prefer square sheets of plate glass two yards high and one yard broad, to a window with leaded lights, so people seem to prefer extent of view without regard to its quality or to the dictates of comfort, which would suggest the seclusion and quietude which an avenue seems to impart. Avenues may therefore be said to be appreciated as a mark of antiquity and as relics of a bygone time. When this is not the case and the proprietor is able to appreciate avenues on other grounds than these, there is great reluctance to attempt to rear one, because of the idea that it would be an object to be enjoyed by posterity and not by its planter. This is not only a somewhat short sighted, but also a very mistaken policy, because avenues, if fairly successful, begin to express their intention in a very few years, and there is always something pleasant in imagining what they will be like in future years *serit arbores quae alteri secuto prosient.*

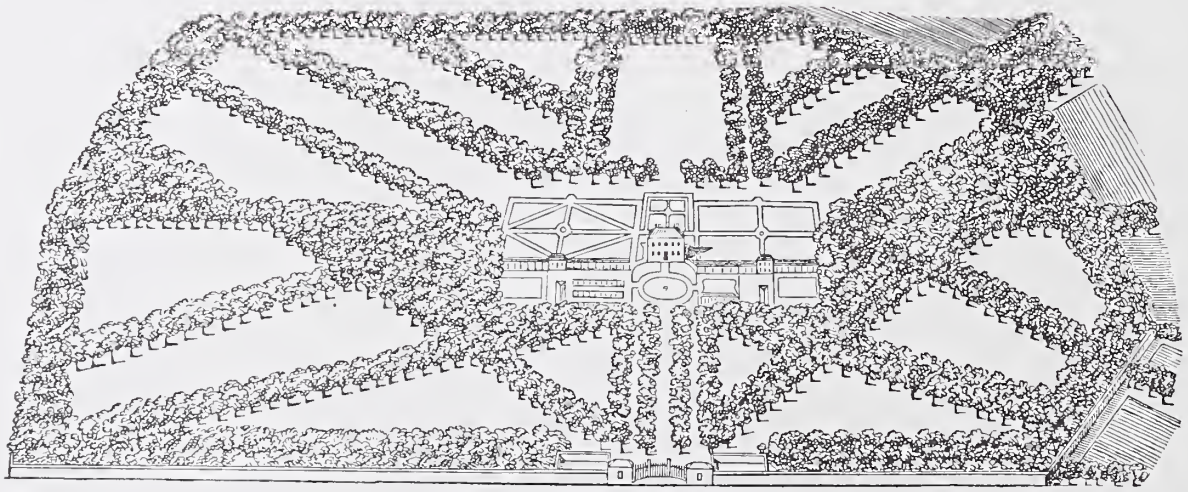
The opportunity rarely occurs for the formation of avenues on the grand scale adopted by some of the garden designers of the Renaissance, some of whose avenues must have been truly magnificent. Take, for instance, the description and illustrations of Badminton by Kip, in which is described a triple avenue two and a half miles in length, the centre avenue two hundred feet wide and the side avenues each eighty feet wide; or many other fine avenues which were then planted. With due caution avenues might be planted much oftener than they are,—with due caution let it be noted,—because an avenue has its place, and there are many strong reasons why it should not appear to be out of it. In the first place, the avenue is an expression of stateliness, and should therefore lead up to some building worthy of it. An avenue terminating in a cheap villa residence would defeat

its own object by making the villa look so much cheaper, but on the other hand it would probably add immensely to the dignity and interest of a palatial residence.

In the same way, unless the views are very uninteresting, an avenue should not be allowed to monopolize the entire landscape, which it might very easily do if placed in a wrong position; for instance, when the house stands very little above the surrounding land and the avenue runs either across the south front, or at right angles to it, and so near to it as to prevent a view being obtained to either side of it. The best use for an avenue is when it can be made to connect the gate house and the north carriage court. This would form a most perfect screen between the carriage drive and the south and west fronts of the castle, where, as at Ballimore, the ground is so much lower than the level of the ground floor to the house, an avenue of spreading low growing fernleaved Beech, would, after twenty years' growth, have a very pleasing effect when viewed from above. In this case, there would only be a grass walk between the trees.

The form of avenue which is most questionable is that which is in such favour with suburban builders, viz., a line of mixed trees planted at each side of a twelve foot drive, which has as many curves in it as can be contrived. Planters of such avenues have failed entirely to recognize the conditions which go to make an avenue so enchanting.

Another form of avenue which is very rarely justified by results is the radiating avenue, which is really avenue-forming overdone. It generally consists of a number of avenues starting from one point and intersected by others arranged in a similar manner.



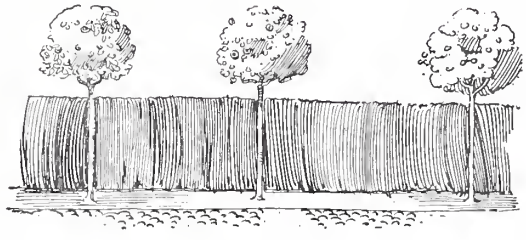
No. 99.

The illustration here given sketch No. 99 from "Loudon's Suburban Gardener," will give a fairly good idea of the arrangement of avenues here referred to, but it may be noted that the large square bosque and the two principal radiating avenues would be very

fine indeed. A multitude of avenues, as shewn in above sketch, not only take up a large area of ground, but, as generally planted, are only pleasant for use in summer weather.

The best kind of avenue is that formed of two straight rows of trees, the variety of trees and their distance apart being regulated by its length of line. For instance, an avenue 100 yards in length might be formed of fern-leaved Beech, the distance between the rows 12 paces, the trees in the rows being 8 paces apart. For an avenue of 500 yards the trees might be of stronger growth, such as Elm, Lime, Sycamore, or Chestnut; here the rows should be from 15 to 20 paces apart, and 10 paces in the rows. To obtain an early effect, double the quantity of trees may be planted, alternate trees being removed as soon as they begin to touch each other.

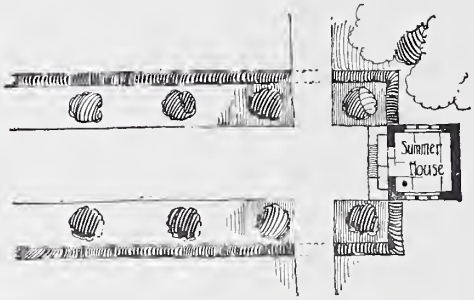
The question will be asked "Are avenues to be the accompaniment of palatial architecture only?" The author can only add that he has never proposed one, excepting when it led up to an important building, excepting in a public park, when he has finished the end with architectural feature, such as a statue or fountain, as he has considered them to be entirely out of scale with small houses. Groves of smaller trees give the same delightful shade and solitude; the length of grove being such as to come within small kept grounds, where the trees can grow into perfect shape owing to their being unmolested by cattle. Some of our most delightful flowering trees are eminently adapted for groves. Amongst these the best are Mountain Ash, Snowy Mespilus, Thorns, the Siberian and John Downie Crab, Almonds, the double flowering and common Cherry, and Prunus Pissardii. Amongst the foliage trees, the fern-leaved beech, cutleaved Alder and several of the Maples are very effective: Either of these, and also the Lime and Turkey Oak, can be trimmed and kept to any size. These groves were very much used by the old gardeners, and might with advantage be added to scores of existing gardens. When the trees are standards, having good heads, and the groves have good hedges running alongside, they form sheltered walks which are pleasant in almost all weathers, and during the hot summer season they would be more resorted to than any other portion of the grounds.



No. 100.

A form of colonnade, and one which has a very prim appearance is that formed by the mop-headed Acacia, which is perfectly hardy in a great many parts of England, but which seldom does well in the North of Scotland. Another form of arrangement is that of planting tall pyramidal headed standard Portugal Laurels, Sweet Bays, Bayleaved and Golden Queen Hollies on long clean stems. Any of these may be used with great effect in forming colonnades or alleys which are likely to be used in winter. They should be arranged to the side of the house and run if possible north to south, as the sun will then shine along them and they would be sheltered from east winds. It adds considerably to the effect of a colonnade if it can be made to terminate in a sheltered seat or summer house; or, when the walk is to continue beyond the end of the colonnade, by an arrangement of seats with an arbour covered with climbers. It is, however, much better if a summer

house can be arranged and the connecting walks be made to join the other at right angles, as in No. 101.



No. 101.

The spaces between the trees might be arranged as grass or gravelled walks. The former is probably the most effective, but the latter is much the simplest to keep in order. A still better method, but one which is more costly, is to have a paved walk, such as is illustrated on page 56. In spacing out the trees, grass, hedges and walks, due regard should be paid to the character of the trees to be planted. If thorn or crab were used, the distance between the hedges should be not less than twenty-five feet, the width of walk being not less than six feet. Grass looks extremely well at the sides, provided it is kept in good order; and for this purpose the verges should be cut at least nine inches from each hedge, and a circle formed round each tree. If, after the trees have attained some size, the grass cannot be kept in good order, a kerb might be put on each side of the walk, the border under the trees being planted entirely with St. John's Wort, Rhus racemosa, Gaultheria shallon, or G. procumbus, Vincas or common Irish Ivy. St. John's Wort is the most effective of these shade-loving plants.

Every garden of moderate size, formal or otherwise, should have its alley or bower walks. Those who have a garden with no such arrangement, have not yet realized its possibilities, and have thereby lost much of the pleasure which a garden well conceived can give. Such a walk gives sufficient seclusion from without, and yet is open enough to allow a sight of the garden from within, enough shade to make the walk pleasant when the sun is burning, and sufficient shelter to give an impression of comfort when the winds are blowing. Altogether, it is as desirable as the colonnade previously referred to, and can often be arranged when, from various causes, the colonnade would not prove a success.

In the days when a filbert walk was looked upon as an essential to any garden scheme, great care was taken when planting the trees and more particularly in their after treatment, with the result that not only was a pleasant walk contrived, but also a good crop of nuts obtained. During the present century, filberts have been very much neglected, but results equal to those read of in the old garden books, might still be secured. Growers of cob and filbert nuts are agreed that much better results can be obtained by trimming or pruning the branches, than by shearing or pleaching; whilst the effect is equally good if care be exercised in the knifing.[1] Both cob and filbert nuts may be planted 1½ to 2 feet apart in the rows.

In the modern garden, hedges are seldom recognized as an artistic quantity. Occasionally one sees a good hedge dividing the kitchen garden from the pleasure grounds, or screening some back premises, where it conveys the idea that it has been a choice of necessary evils, which perhaps lay between a brick wall and a hedge. The owner, being unable to bear the idea of the former, adopts a hedge. Nothing could be more disastrous

1 By knifing is meant the trimming of branches separately by secateurs or a garden knife, as opposed to shearing or clipping.

to good garden design than this antipathy to hedges. Instead of considering them as unfortunate requirements, opportunities should rather be sought for planting them.

Those who have followed the architectural drawings exhibited during recent years at the Royal Academy must have been struck with the number of designs in which Yew or other hedges formed part of the scheme. In respect to some of these designs it is not too much to say that the hedges assisted, to a very considerable extent, in making the designs interesting. The definite lines of the hedges and accompanying walks assist the grouping, and furnish an extended base to the architectural scheme. Hedges give one an idea of shelter in almost all kinds of weather, and suggest protection for flowers of half-hardy habit. How much more enjoyable is the garden thus protected than the bald, wind-swept pleasure grounds so often met with.

Before describing the possible treatment of the various kinds of hedges which may be reared, a word may be said respecting the opposition which is so often urged by the gardener against them. Many gardeners who are, in regard to most things connected with their craft, most excellent men, seem to have an unwarrantable dislike to hedges and box edging, which, it is alleged, harbour every known garden pest, making, as they contend, successful flower growing quite impossible, or at the best disappointing.

It is not denied that hedges do harbour these things, for wherever trees, shrubs, or other protection can be found, shelter is provided for them ; but that they make flower gardening impossible is altogether erroneous. A bed of lettuces in the middle of a fifty-acre field, half a mile away from any hedges, would attract greater attention from these pests than a whole flower garden with hedges and box edging covering half the ground. Granted, however, that there is some truth in the gardener's contention, and add to it the further objection that the roots of the hedges absorb the nutriment from the soil, the shelter which is given to the flowers is a most excellent set-off against these drawbacks ; and to this may be added the extra effect which is given to the flowers, when seen against the fine dark background afforded by a holly or yew hedge.

The number of trees and shrubs which will allow of clipping for hedges is very large. Even Scotch and Spruce Firs, when grown under favourable conditions, form most excellent hedges. In some parts of Scotland, but more particularly in Aberdeenshire, the Scotch Fir is largely used as a hedging plant for the division of fields lying in exposed positions ; and in the deer forests along the Dee side, thousands of Scotch Firs may be seen which have been trimmed into dwarf symmetrical bushes by the deer. Then there are the very numerous varieties of Arborvita Cupressus, Retinosporas, and Junipers, nearly all of which stand trimming. Laurus rotundifolia, caucasica, common, and Portugal, are all good hedging plants, but the best and most permanent evergreen hedges are formed by Yew, Holly, Tree Box, Cotoneaster microphylla, Cotoneaster Simondsii, Cotoneaster buxæfolia, Ligustrum (privet), ovalifolia, or Sweet Briar. The privet is practically evergreen, and in fact is so in mild winters, when the old leaves remain on until the young ones are pushing forth. The Sweet Briar is really deciduous, but, owing to the stems being of a bright green colour, it may almost be considered as an evergreen. The best deciduous hedges are Beech, Hornbeam, Thorn, and Myrobella plum.

Most of the foregoing can be obtained from most respectable nurserymen, in almost any

size ; and in some cases a nurseryman will sell some of the half-matured hedges dividing his nursing quarters. When this is possible, an almost perfect hedge is obtained to begin with ; but care should be taken that the hedge is prepared for lifting at least six months before it is required ; the best plan being to purchase in the early spring, preparing the hedge by close root pruning, and then removing the hedge in the autumn. Where, however, there is no hurry, it is much more satisfactory to start with smaller plants, as they make much more perfect hedges than larger ones, which often lose their lower branches.

It may be of interest to call attention to the difference between the section adopted by nurserymen and foresters, and that of the architect. The former keeps his hedge wide at the bottom and narrow at the top, see sketch No. 102. The reason for this is that hedges trimmed thus make strong lower branches, with the result that a good close bottom is maintained. Architects generally favour, on artistic grounds, hedges trimmed square on the top ; and the gardener generally improves upon this by allowing the top to spread as shewn in sketch No. 103, with the result that the hedge gets bad and open at the bottom.

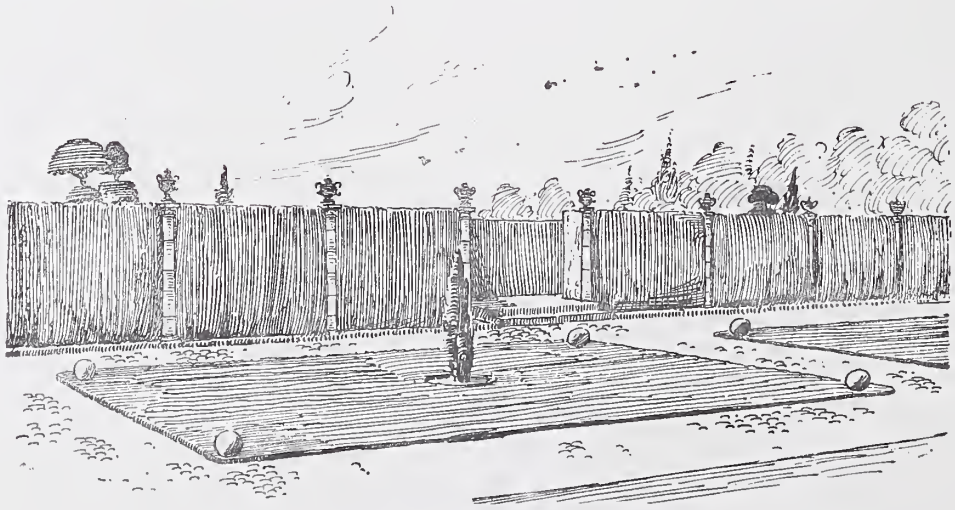
No. 102.

No. 103.

The forester's hedge does not look so prim as when cut square, but for practical purposes it is unquestionably the best. By a little care however, the advantages of the one might be combined with the primness of the other, the only requirement being that while young, the plants forming the hedge should be encouraged to form a good bottom by training to a point. The top can then be gradually brought out to the square, as the bottom thickened up. Another way would be to trim the hedge with battered sides, as shewn in sketch No. 104. Holly especially looks exceedingly well when trimmed in this manner.

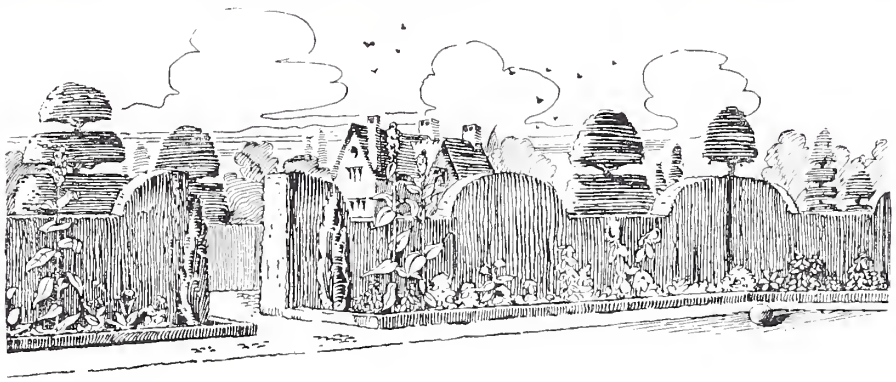
No. 104.

Respecting the shapes into which hedges may be clipped, it may be stated that simple forms are generally the most satisfactory. First, because they seem to serve their purpose without any show or pretence, and in the second place because they are much more likely to be kept in good form, than those requiring



No. 105.

great skill in clipping but, as even simplicity may be expressed in many ways, there is no reason why there should be lack of variety: take, for instance, the hedge that has nothing but straight lines in it, yet may be treated in many ways, by crenulating, for example; or it may have pediment-like crenulations or pilaster projections to mark the opening for a pathway, or arranged at stated intervals of say twenty feet apart. There is also the usual form of straight jump, as from the end of a building, or to meet the fall in the ground.



No. 106.

These are a few of the easiest forms which would suggest themselves. Amongst those which are not quite so simple are the rounds, as in sketch No. 106, and hollows on level hedges the latter being much more difficult to trim than the round. It will readily be seen that all these forms allow of further elaboration by the addition of standard trees with clipped heads, arranged at stated intervals. These would, in the case of the crenulated or rounded hedge, spring from the highest part. The heads might be trimmed into any shape desired with lower whorls, into obelisks, umbrella shape, or indeed any shape which would correspond with the character of the hedge.

Excepting where there is some symbolical meaning attached to their use, it is well to avoid heads clipped to the forms of wild beasts, peacocks, etc. This is carrying formality to excess, and it is also a very un-English way of treating shrubs. There are, however, instances where they may be made to serve a purpose or to express a very pretty idea; as for instance, when a pair of clipped doves mark the entrance to a path leading to a cottage porch. Here there is a symbol of domestic felicity, and at the same time a pleasing green canopy over the postern gate.

This brings us to the treatment of openings through hedges. These may by a little contrivance, be made very effective, as for instance, when several arches cross the same walk. Those who have once seen this effect in some of the older gardens will not easily forget the charm of such a vista.

It is open to a planter to carry a hedge up over a walk even when the rest of the hedge is comparatively low, but to succeed in this means time and care, and probably the help of an archway formed of wood or iron will be needed to which the branches may be tied. By the use of Irish Yews in conjunction with common yews an arch may be obtained the first year; it is not quite so good, however, as that formed by the common yew alone. In

some quarters there has been an attempt made to multiply these arched openings, the hedges as a whole appearing like a many arched bridge of greenery. The shadow effects as thrown on to the surrounding ground or walks are very fine, but the shelter, which is the chief use of a hedge, is partially gone, whilst the draughts which sweep under these arches make it difficult to grow flowers successfully; and for this reason openings should be confined to the actual requirements of the case.

When trees are mentioned in connection with the formal garden it is generally clipped trees that are meant, but clipped trees are not always absolutely necessary to a formal scheme. There are, many conifers and shrubs which have naturally a stiff and formal outline; the best of these is unquestionably the Irish Yew, which, with its golden variety, Taxus Hibernica aurea, might be planted much oftener than it is at present. The line of Irish Yews in Sketch No. 107, along the terrace at Oaklands, arranged by the late Mr. Palmer, will give some idea of what can be done with them. As supports to steps, or as breaks to any line of wall, or as flanks to a porch, they are amongst the most useful shrubs grown; they have also the additional advantage of growing in most soils, positions and atmospheres. As an upright conical-shaped conifer, the Cupressus Frazerii, with its neat habit and beautiful blue shade of green, is very useful; and on light sandy soils or in districts where conifers succeed, it is probably the better of the two. Cupressus Erecta viridis is very good in a young state, but soon loses its lower branches. Juniperus Hibernica and Chinensis are both very effective conifers of upright habit and good colour. With a little knifing the following may also be kept in good shape, viz.: Cupressus Lawsoniana, C. lutea and argentea, Retinospora Squarosa, R. plumosa and R. plumosa aurea. All these are more or less of upright growth. Amongst the dwarf varieties may be mentioned Cupressus Lawsoniana nana and Cupressus mesembryanthioides. Biotea elegans is a very charming dwarf-growing conifer with a very pleasing bronze shade of colour.

No. 107.

For clipping there is nothing to equal tree Box, the branches of which are so numerous and the leaves so small, that it keeps its shape long after clipping. It can also be trained into almost any shape, as proved by the specimens at Levens; it also succeeds on almost any soil and in any atmosphere; it is also one of the longest lived of shrubs. In addition to the common variety, there are the Handsworth Box, a very effective blue-grey coloured variety, and also the golden Box, which looks very pretty when trained as a dwarf cone. The Box is the best where dwarf clipped shrubs are required; the taller pyramids would be better in Yew or Holly.

The best variety of Yew is unquestionably the common one, Taxus baccata, but there are several which are also most useful in the formal garden. The variety which, "after the common one" is most popular is Taxus elegantissima aurea, which can be obtained ready trimmed into the most useful shapes, viz.: obelisks, mound shaped, squares and pyramids. They can also be obtained as standards with mushroom shaped heads grafted on to the Irish Yew, the effect of which is very good, the heads being of a bright golden colour, and contrasting admirably with the dark green of the Irish Yew below. See sketch No. 108.

No. 108.

Another variety which deserves more attention than it receives is the Taxus adpressa stricta. This is rather darker in colour than the common variety, and much more compact in habit. It makes a beautiful pyramid, and requires very little keeping in order.

Amongst Hollies, the common variety is the best for clipping, and indeed for some shapes it is the only variety which will succeed. For pyramids, the golden queen, alba marginata, minorca, and several other varieties make capital specimens. Waterer's golden Holly makes a splendid standard or round headed dwarf bush; it is of very slow growth and compact habit, and, on the whole is one of the most useful varieties.

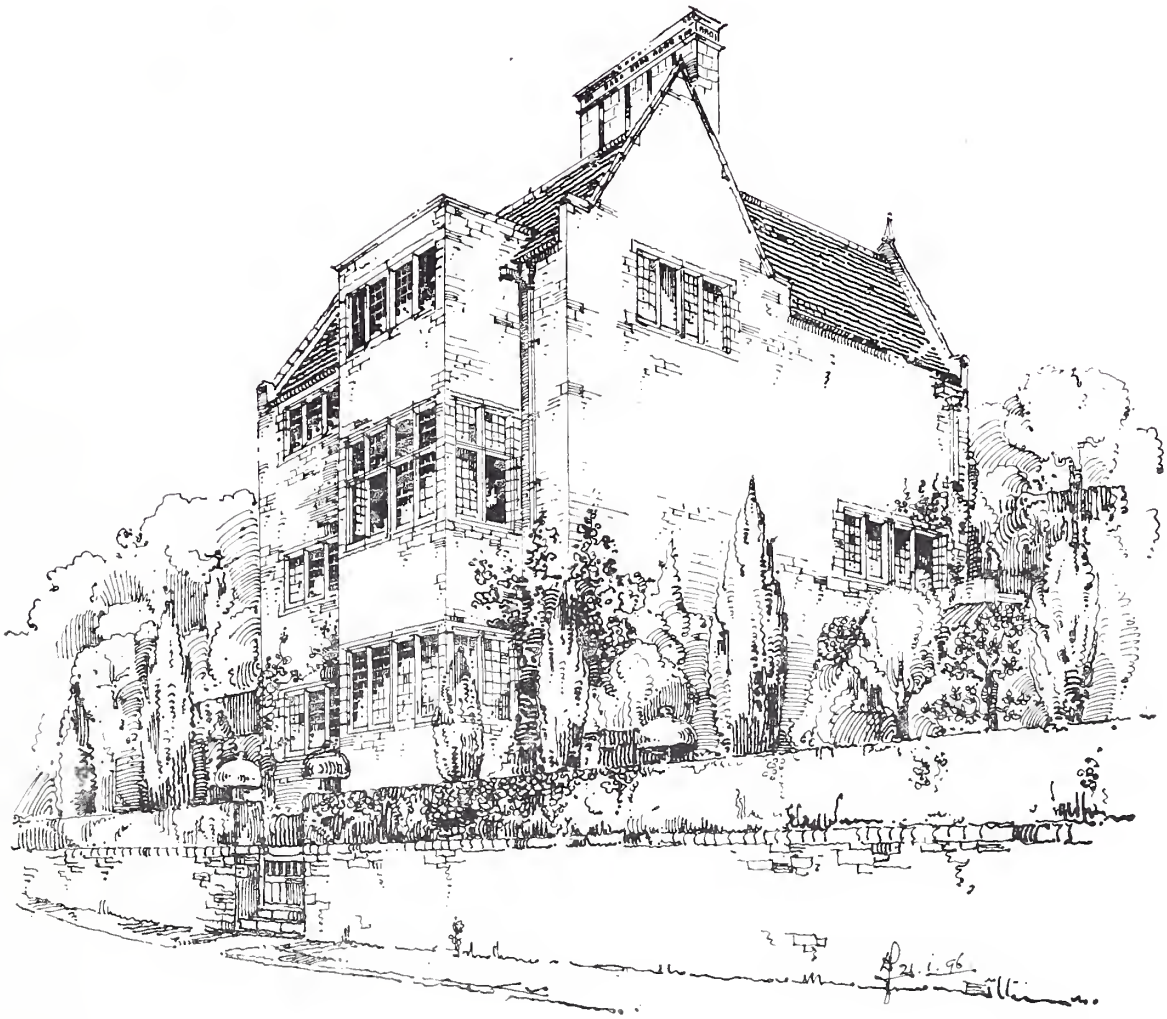
The Portugal Laurel makes a fine standard, and, being a good grower, succeeds in most places. Those who have seen the terrace garden at Trentham will remember how very effective are the standards that are planted in tubs and arranged at intervals along the main walks. This is the form in which this shrub always appears to advantage. Few people realize how fine a pyramid can be made out of the Laurus rotundifolia; if it is carefully pruned with a garden knife, there are few shrubs which are more effective. It has this disadvantage, however, that it does not last more than ten or twelve years, as with close trimming it becomes bare and sticky. But a shrub which is so accommodating and inexpensive, and which can be so easily replaced, should be included in the list of shrubs which it is advisable to use. Other evergreens that are good subjects for a formal treatment are the Sweet Bays, which the Belgian nurserymen grow to such perfection. There are, of course, many other evergreens which could be used, but for most purposes those enumerated will be found to be the best.

Amongst the deciduous trees which might be used with great effect, none are so beautiful as the comparatively little known fern-leafed Beech. This is a tree which will

stand any amount of cutting and trimming. The light pea green of the young leaves in the spring-time makes a delightful picture; whilst even in the summer, when the leaves have taken on the more sober hues, there is much to admire in the beautiful finger-like leaves and the peculiarly neat habit of the plant. The white or pink thorns, although inferior to the fern-leafed Beech, are very useful for occasional use. Mopheaded Acacias treated as standards, are very effective for planting along a straight walk or terrace border, or for standing above the line of the oak paling of a suburban villa garden.

Amongst the deciduous shrubs having variegated foliage, few can equal the Cornus elegantissima, the colouring of which is much superior to the Acer Japonica variegata, whilst as regards habit and hardiness there is no comparison. This shrub is not grown so largely as it deserves to be; treated as a bush amongst conifers, as a standard along a walk, or as a pyramid for arranging in the formal garden, it is unsurpassed. Some of the Japanese Acers make charming standards, but unfortunately they only succeed in very mild and sheltered localities; where however, a garden is favourably situated, and the soil of a light, sandy nature, nothing could be more charming. They do not, however, stand clipping, but they may be kept in fair shape by simply cutting off any straggling branches. Among the hardiest varieties of the flowering shrubs which are of sufficiently neat habit to warrant their inclusion within the formal garden, none are more beautiful than the Brooms, some of which, when grafted on the common Laburnum, make excellent standards. The best varieties are Genista pallida, G. p. præcox, and G. alba. The golden or white balls of colour which these plants give in early spring, and the fragrance of their blossoms, are sufficient in themselves to make any garden for the time being most attractive. The Clematis, especially C. Jackmanii, may be used with great effect when trained over wire supports and worked into umbrella or other simple shapes, they are, however, very bare and ragged in the winter season, but although clipping has already been referred to, it has been in connection with hedges; but the same caution should be exercised in respect to single trees as recommended in the case of hedges. Over elaboration is fatal, more especially when the shape attempted is one to which the tree does not readily lend itself; or which, when successfuly cut, does not appeal to one as a reasonable shape. For instance, a tree Box cut into the shape of a chair or seat may shew deft manipulation of the shears, but the result is tantalizing, seeing that we cannot sit upon it; and when, as generally happens, these cut seats are placed at points at which a real seat would be a welcome feature, the disappointment and disgust is all the greater. The shapes adopted should shew some appreciation of the existing lines, and be a complement to them. Where, for instance, as at Blickling, there is a predominance of upright lines and an abundance of erect growing conifers, the perfectly flat beds of yew are in good keeping; but, on the contrary, where there are a number of horizontal lines and flat surfaces, as at Montacute, the long lines of obelisk-shaped yews are equally effective. It is not to be understood that the requirements of every garden can be so readily gauged, neither is it desirable that they should be, as this would be conducive to monotony. A little forethought is, however, better than relying upon accident to make things look right. It is not to be supposed that the writer would limit the shapes to the repetition of old forms; there is

ample scope without resorting to this. There are as many ways of doing a thing as can be drawn radii from a centre; the garden craftsman need not therefore despair of obtaining effective treatment, even though clipped seats and peacocks are forbidden. If his garden scheme does not suggest new and simple forms, he only needs to take a day's holiday amongst old cottage gardens to get the necessary amount of inspiration.



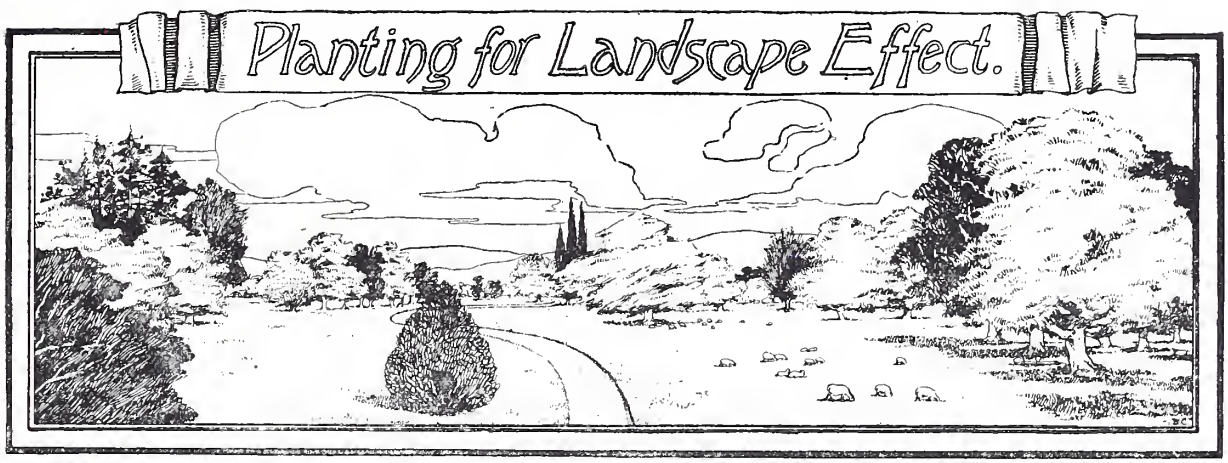

VIEW FROM PROPOSED SITE BEFORE PLANTING.

No. 109.


SAME VIEW WITH NEW PLANTATIONS & TERRACES.

No. 110.

CHAPTER XII.



Many who have read the preceding chapter, will naturally think of some rolling mass of woodland scenery, forest glades and wooded glens, the delightsomeness of which they cannot for one moment question. In such scenes the sensation of pleasure seems to be derived from an appreciation of Nature's freedom and prodigality. Here the tangled mass of thorn and briar, there the woodbine growing up and almost hiding the hazel; at another place a struggle for the mastery between young forest aspirants; or the royal Oak and aristocratic Beech in all their pride and stateliness, occupying large areas of land wrested from the conquered; trees of strength and beauty with added picturesqueness as age creeps on; no control or order anywhere, excepting that of the survival of the fittest. In addition to all this, there is the grander effect created by the woods and forests dispersed upon the panoramic landscape. No order here, yet there is magnificence and beauty. Recognizing the mere fact of all this, and seemingly without any inquiry into the reason why these scenes are pleasing, many 'improvers' have often set themselves to work to reproduce like effects; under totally different circumstances.

In a work like this it would be impossible to investigate the conditions which give rise to our pleasure in the natural landscape; but it will readily be seen that notwithstanding the fact that everything is merely accidental, there does exist in a fine landscape, some balance of parts, which is the counterpart of order. When this is not the case any artist when painting a landscape, fills in, leaves out, or alters details, until he obtains his idealy balanced picture shewing nature as he conceives it ought to be. The landscape gardener asks for the same liberty as the artist, with this difference, that whereas the artist recomposes his landscape on canvas, the gardener wishes to recompose the landscape itself, and this mainly by the help of trees. The proper disposal of plantations, whether in the form of clumps, masses, groups or single trees, is therefore a matter of the greatest importance, for although "Groves may ever please, they please most when placed aright."

There can be no doubt that much that is done in the name of landscape improvement is the very essence of monotony, especially in the case of plantations. The avenues and formal arrangement of trees referred to in the previous chapter may give an effect the reverse of monotonous; but masses of foliage arranged in clumps, may from want of arrangement, make a landscape almost as dreary as one entirely devoid of timber. No doubt these same clumps were planted with just the opposite intention, but owing to one cause or another they did not come up to the planter's expectation. This failure may have been due to many causes, but undoubtedly one of the most common is a want of recognition of the difference between garden and landscape scenery. There is also a lack of scale, or, what is a more common and even greater fault, a crowding in of foreign shrubs and conifers, where only trees which are indigenous or allied to our native trees should have been used. Now whilst one may tolerate a monkey puzzle on the lawn for the sake of having a specimen. The same tree surrounded by a ring fence in the park is so incongruous in its general character as to be the most irritating to a man who appreciates English Oaks or old Scotch Firs. It may therefore be taken as a safe rule never to plant, outside the pleasure grounds, trees, shrubs or conifers which have a foreign look about them.

A Silver Birch, for instance, looks in keeping anywhere. Greater attention might therefore be paid to those trees which seem to be a part of our island, and which have ever been the pride and joy of lovers of English landscapes. The Oak, Elm, Sycamore, Beech, Ash, and Birch are still the trees we should choose to plant for the giants of our parks, whilst for attendants we should not ignore the claims of the Thorn, Crab, Cherry, Willows, and Spindle trees. Amongst those trees which may be trusted to give shelter and pleasing variety of form and colour to the preponderance of bare boughs of our winter landscapes are Scotch Fir, Cedar of Lebanon, Yew, and Holly. A little more respect for these "old stagers," and a little less regard for Spruce Firs, Austrian Pines, Auricarias, Indian Cedars, and Lawson's Cypresses would be of advantage all round.

Another and most frequent cause of disappointment is to be found in the effect created by continuous boundary plantations, which every planter somehow or other seems to make it his first care to set out. This is a feature invented in the early days of Brown's career, at the time when the art was almost solely directed by him. Continuous plantations of considerable width were made to run round the boundaries of properties he was engaged to improve, and through which were formed the shrubbery drives that he was so fond of. This generally resulted in an effect just the opposite to that which he and his imitators professed it was their art to produce. The meadows and pastures which they spoke of as nature's gardens were completely shut out, and the limits of the property was defined in such a way as to reduce its apparent extent. It does not require very much insight into the matter to see that composition in the artistic sense was totally ignored by this arrangement.

Gentlemen laying out estates should remember that the first object of a plantation is to meet some real need, the chief essential being to obtain shelter; and in this connection and running the risk of appearing too particular it may be stated that it is not merely a question of having belts or masses of plantations to the windward side of the residence. In architecture, construction, which is mathematically correct, does not always appear to be

sufficient in strength to satisfy the mind. So in planting, it is often necessary to carry operations much further than the bare requirements of shelter would dictate, before the place assumes that sheltered and comfortable appearance which would allow of the endorsement of Alfred Austin's lines:

"What! not care to live, whilst English homes nestle midst English trees."

Shade for man and beast, seclusion and privacy, may also be considered as coming within the scope of the necessary requirements. All these objects may be attained without in any way marring the general composition when looked at from an art point of view. When considered in this latter connection, however, the question of planting assumes a very different aspect. The work of the landscape gardener must certainly shew some acquaintance with common requirements, by first providing for necessities; but he finds other uses for his trees, since planting is required to break up the landscape into a variety of scenes, which should show a diversity of expression, interchange of glade and wood, broad grassy lawns, clump and groups or single trees, exhibiting at one time deep shade and dense colour of mass, and at another the lighter and airier graces of individual form. Plantations are also required to give character and connection to outside scenes, but their principal use should be the developement of variety within the park and garden enclosures.

In carrying out a scheme of plantations, whether in the park or garden, the larger masses should be considered first, the smaller plantations being arranged in such a way as to suggest a dependence on each other, so that when viewed together, there may be good grouping effects. Even the boundary plantations should be made to play a part in the general effect.

To give a clearer idea of what is intended to be conveyed by this, sketch No. 109, as shewn of the view from the position most suitable for a residence. As will be seen, there are parts of the view which are very objectionable, and others which are really good. The problem is how to hide the one and yet retain the other. This can often be done by properly arranged plantations. Some attempt to shew this will be found in sketch No. 110. These two illustrations represent exactly the same piece of land, and the trees shewn are such as might be expected from twenty-five years' growth.

In setting out an arrangement of park plantation on the landscape principle, it is always well to carefully study the character and height of tree required. The best help to this is to set out ranging poles, say 10 feet high, fixing their position from the most important points. After having decided upon position, length, and breadth of the mass, it is easy to ascertain the height to which it is desirable the trees should grow. If, for instance, the top of the pole, which is ten feet high, only reaches half-way up the object to be hidden, or the height to which the the tree may be required to grow, it would take a tree 20 feet high to accomplish its purpose; but by bringing the ranging poles nearer the eye, it might be found that a tree only 10 or 15 feet high would accomplish the same object. In the same way groups of ranging poles might be set out to represent the various masses and single trees, moving them about until they were in the right position. Of course it must be borne in mind that each pole represents a tree, and full allowance should be made for growth, so as to avoid the necessity of cutting down at a later stage to open up the vistas

again.[1] The immediate screen is provided by other and more quickly growing trees, arranged in such a way as to allow of their being cut down directly the permanent trees have grown sufficiently large.

It will be realized that the arrangement of plantations which accomplish their object from one point of view may not do so from another; this may necessitate some remodelling of the principal plantations, and perhaps other smaller ones may be required to fill up the openings. The best plan is to first select the principal point of view, and then to stake out lines shewing the width of plantation required to cover the unsightly objects. These may then be considered from the next important point, when it will probably be seen that other plantations are required to shut out objectionable features which do not come in view from the first named position, a good deal of readjustment of the plantations is often necessary before this portion of the work can be considered successful.

No. 111.

The internal masses, especially those which form the most prominent features in any composition, should, by a careful arrangement of outline, variety of colour, and diversity of form, be made objects of interest in themselves. To further explain this, a sketch is given of a plantation relieved by outlying single trees.

1 The above mode of determining the width and height of plantations is one which was very generally resorted to by Mr. Repton, whose work has been previously referred to.

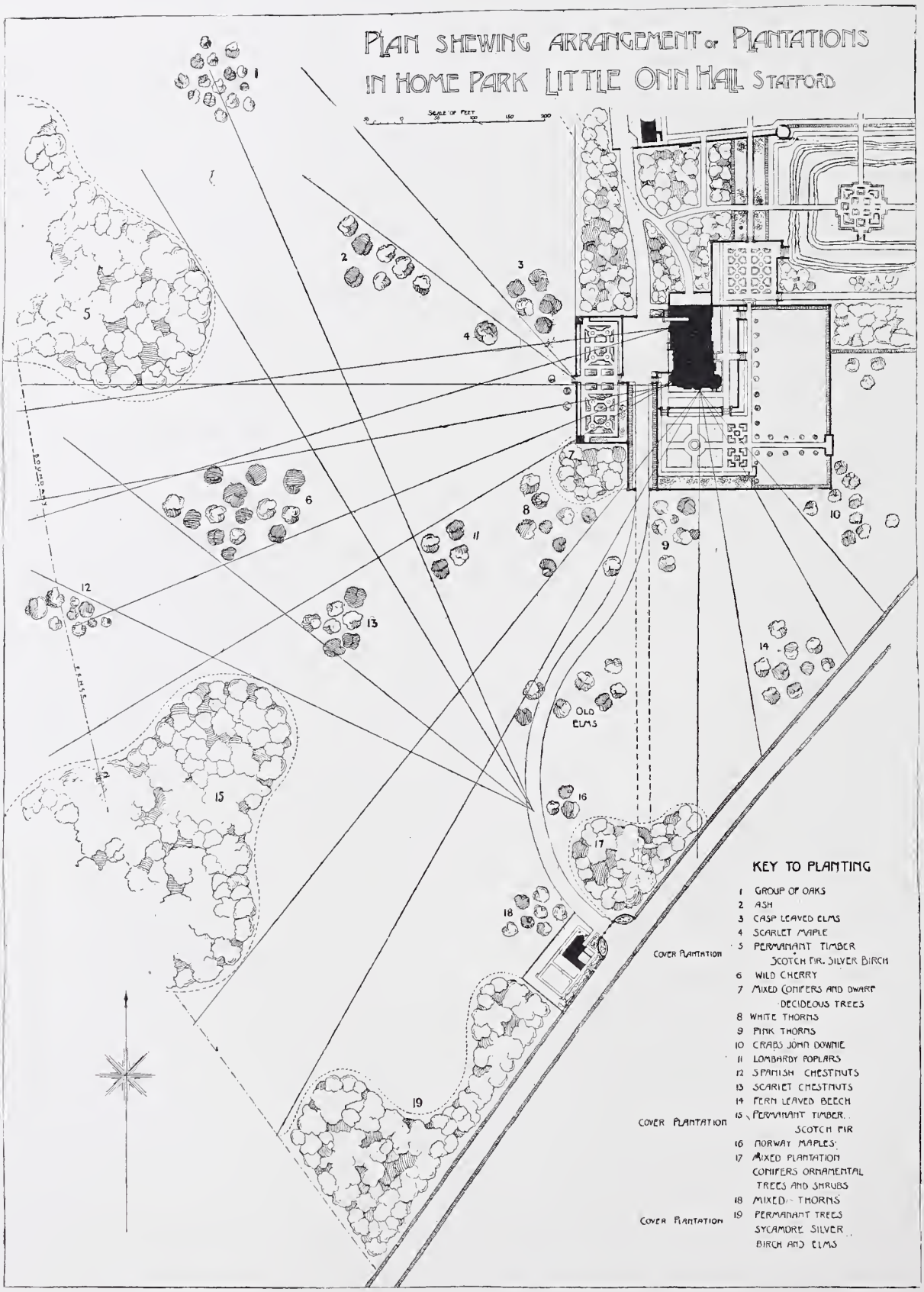
In addition to the plantations already mentioned, there are many arrangements of trees which may be termed supports to other plantations, as they are generally used either to ease off the hard outline of larger plantations, or as connections between the more important arrangements. Take, for instance, many of the plantations seen in noblemen's parks, which were primarily intended for effect, but are also treated as cover for game, the whole being surrounded by quickthorn hedges. Now, thorn hedges, neatly kept, and in long straight lines, have a very prim and pleasing appearance, but when arranged in irregular lines with bad curves, are, in too many cases, very objectionable. If to the outside of these hedges and towards the salient points groups of thorns, crabs, or similar trees can be planted, it is really wonderful what a very great improvement can be effected within a very few years. Something of the same effect will have been noticed by visitors to Deeside, Aberdeenshire, especially around Glen Tana and Ballatar, where batches of self-sown silver birch are often seen on the outskirts of a hillside planted with Scotch Firs.

Although the boundary plantations of the "Capability Brown" school have been adversely criticised, there are times when, through a variety of causes (as for instance the short distance between a residence and the public road), it is most desirable to make these plantations play an important part in the economy and decoration of the garden. At the risk of repetition, it must be urged they should not be arranged merely for the purpose of accommodating shady walks or of describing the limits of the ground, but for the purpose of creating a feeling of retirement by cutting off, as it were, the outer world; and also for hiding, where necessary, roads, railway embankments or other undesirable features. Having accomplished these objects, it will be a happy circumstance if the shady walk can also be managed.

In fixing the outline of the boundary plantations, the line may be arranged with broad sweeps and equally strongly marked bays, the swells ranging rather to one side of the larger masses as seen from the terraces, sweeping inwards towards the road where the view is to be kept open. The trees of largest growth being planted in the swells, whilst the bays may be planted with dwarf trees and shrubs. Occasionally, however, a proportion of low-growing trees or shrubs are required in the swells, and sometimes a tall tree in the bays.

In gardens or parks on the outskirts of large towns it would, owing to the smoky and vitiated atmosphere, be useless to plant many trees which are favourites with landscape gardeners; but there are a sufficient number of varieties which would succeed fairly well and so allow of a near approximation to the effects produced in more favoured districts. For this purpose the principal plantations should be of considerable size. The need of this will be understood when it is remembered that half a dozen Beech trees of fine growth, such as are often seen in favoured rural districts, may completely cover half an acre or more land; whereas an approximation to their effect could only be produced in a smoky atmosphere by forming a single plantation of equal area, and planting it thickly with such trees as will grow.

Up to this point, only the general arrangement has been considered. Now for a few important points of detail. First, the masses that are some distance from the most important points of sight might with advantage be composed of one to three varieties of trees only.


PLAN SHEWING ARRANGEMENT OF PLANTATIONS
IN HOME PARK LITTLE ONN HALL STAFFORD
SCALE OF FEET
OLD ELMS
KEY TO PLANTING
1 GROUP OF OAKS
2 ASH
3 CASP LEAVED ELMS
4 SCARLET MAPLE
5 PERMANANT TIMBER SCOTCH FIR. SILVER BIRCH
6 WILD CHERRY
7 MIXED CONIFERS AND DWARF DECIDEOUS TREES
8 WHITE THORNS
9 PINK THORNS
10 CRABS JOHN DOWNIE
11 LOMBARDY POPLARS
12 SPANISH CHESTNUTS
13 SCARLET CHESTNUTS
14 FERN LEAVED BEECH
15 PERMANANT TIMBER. SCOTCH FIR
16 NORWAY MAPLES
17 MIXED PLANTATION CONIFERS ORNAMENTAL TREES AND SHRUBS
18 MIXED THORNS
19 PERMANANT TREES SYCAMORE SILVER BIRCH AND ELMS
COVER PLANTATION
COVER PLANTATION
COVER PLANTATION

No. 112.

Beeches by themselves form a splendid group; and the same remark applies to Oaks, Elms, Sycamores, Horse Chestnuts, Norway Maples, Cherry, Thorn, &c.; amongst the Pines, Scotch Fir is the most characteristic. When a great many varieties are associated together the colour effects are lost, but clumps arranged near the eye may include any number of varieties, as in this case much interest lies in detail.

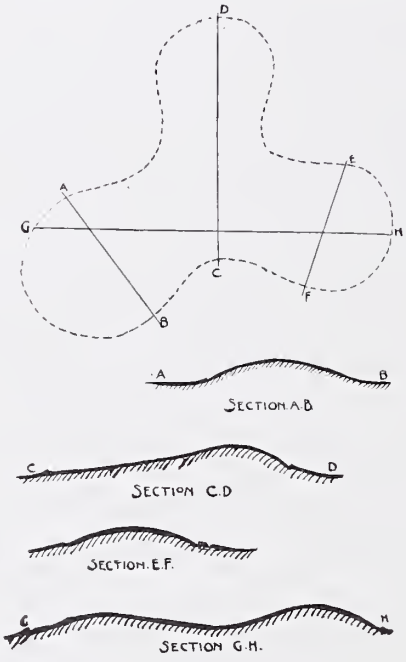
When groups of trees are first formed, it is generally advisable to plant somewhat thickly amongst them common and quickgrowing trees and undergrowths, to act as nursers, but they must be cut out directly the permanent trees can make some effect by themselves. If this portion of the park is to be grazed by cattle, it will be necessary to surround the trees with a fence, which should be arranged with well connected sweeping curved lines, and outside this fence should be planted single specimens to break up hard lines, as recommended on page 119. The best tree for this purpose is undoubtedly the Thorn, which not only seems to group well with almost any tree, but is also very little molested by cattle. The trees within the fence should not be planted in any regular form so as to suggest rows. Covert plants, such as Box, Yew, Holly, Laurel, Scarlet Dogwood, Privet and Mahonia, might be scattered at irregular intervals towards the margin, but at times receding far into the clumps. Where a group is arranged with a variety of trees, the brighter foliaged ones may be brought to the crown of the swells, and the recesses planted with those of more sombre hue.

As explanatory of what has previously been said respecting the planting of parks for landscape effect, I give a plan of a portion of the home park at Little Onn Hall, in Staffordshire. The land being level, there was a good opportunity for fine avenues, but for several reasons the chief of which was a desire to take advantage of some planting done a few years ago, it was decided to abandon a formal treatment in favour of the arrangement shewn on plan No. 112. The radiating lines shew the lines of open vistas.

In planting ground forming part of the landscape outside the boundaries of the home park, whether common or pasture or moorland, an imitation of nature's ways would often give the best results. Most writers on planting have made suggestions for hiding man's work under such conditions. Repton, for instance, recommends making a wide hole and planting half-a-dozen or more sycamores or oaks at say, one foot apart, allowing them to grow and fight out for themselves as to which should take the lead and push the other to one side. Gilpin, who wrote much on forest scenery, and who had a true appreciation of the picturesque, makes many suggestions and recommendations with the same object; whilst Sir Uvedale Price, whose book on the picturesque is so well known, has also many suggestions to make for the attainment of this happy-go-lucky effect. It is told of Robert Marnock that he once horrified an up-to-date forester by taking a bundle of Scotch firs by their roots and throwing them with all his force on to the open ground, and requesting him to plant each tree on the identical spot where it had alighted. It may be easy to take exception to this latter method, but, at any rate, it will be admitted that the result would not be in any way stiff, formal, or constrained.

In all cases where new plantations are to be made, whether in the garden, park, or on moorland, the ground should be trenched and properly prepared. This, I know, may seem to many to be a needless expense, but, from practical experience of planting with and without trenching, I am satisfied that the extra outlay is far more than compensated for by

the greater rapidity with which the trees and shrubs take root and grow. It will, of course, be at once apparent to anyone interested in planting, that much greater care is required in the preparation of beds for plantations of choice shrubs, than for the more vigorous forest trees, such, for instance, as Scotch Firs. This case does not refer to the depth of soil only, but also to material added, "as peat and manure," to the outline of the beds, and to the way in which they are shaped and rounded. This brings us to a consideration of the best means of shewing newly-planted shrubs and trees to advantage,—a result which is obtained by grouping on beds which are raised above the level of the surrounding lawn. Take, as an example, a group of American plants, to be planted in a bed, which is shaped to meet the contour of the ground, with several swells and corresponding depressions. The section of the soil line, when the bed was completed, might, with advantage, be as in No. 113.



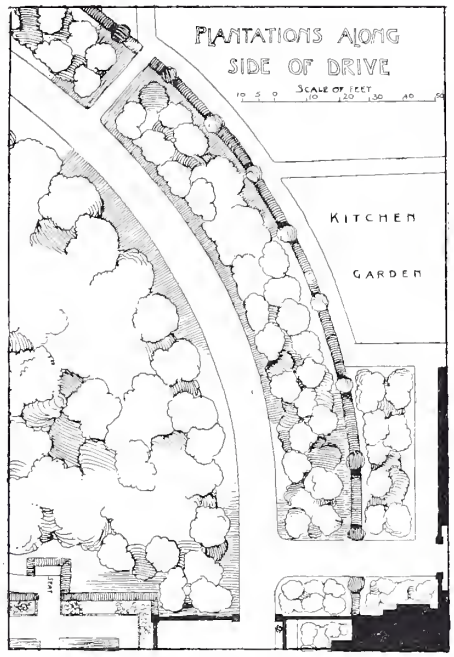
No. 113.

This would at once give some variety to the head line of the group, the shaping of the ground assisting in emphasizing the outlines of the trenched portion. This work requires, however, to be carried out with the greatest care, and with due regard to the requirements of the case; otherwise it may degenerate into a series of meaningless hillocks, that might destroy the breadth of effect which the lawns were capable of giving.

Reference should be made to the practice of running lines of Lobelia and other bedding plants round the plantations arranged for landscape effect. This produces quite the opposite effect to that desired by the planter, whose intention was to give a natural outline of shrubs, such as Rhododendrons, sweeping on to the grass, the curved outline of the soil bed being simply to mark the general outline of the mass as a whole. This is a point it is well to remember. When planting these beds, it is usual to plant some of the shrubs close to the outline, and to let others stand well back, so as to give a broken effect from the outset. When the plantations are near the house, the vacant places may be planted with hardy perennials in groups until all the ground is required for the spread of the shrubs. In any case, it would be possible to so dispose the several groups of shrubs and plantations on the rising ground so as to avoid entirely this "made" kind of shrubbery effect. Here it may be noted that the plantations, arranged for park and landscape effect, in an undulating country, would invariably look better when planted on the hillsides. To fill the hollow with trees of tall growth, and to leave the hills unplanted, assists in reducing the landscape to one level; besides which the finest views are generally seem through these depressions.

It is not always necessary to give a curved outline to the plantation,—as a matter of fact, a plantation with a curved outline, as seen at a distance, may look perfectly straight; and a plantation which has straight fences may give all the variety which could be obtained

for many other form. The hardness of outline may be just as great in one as in the other. The real effect is much more influenced by the varieties of trees planted, and the way in which the thinning out is done.



No. 114.

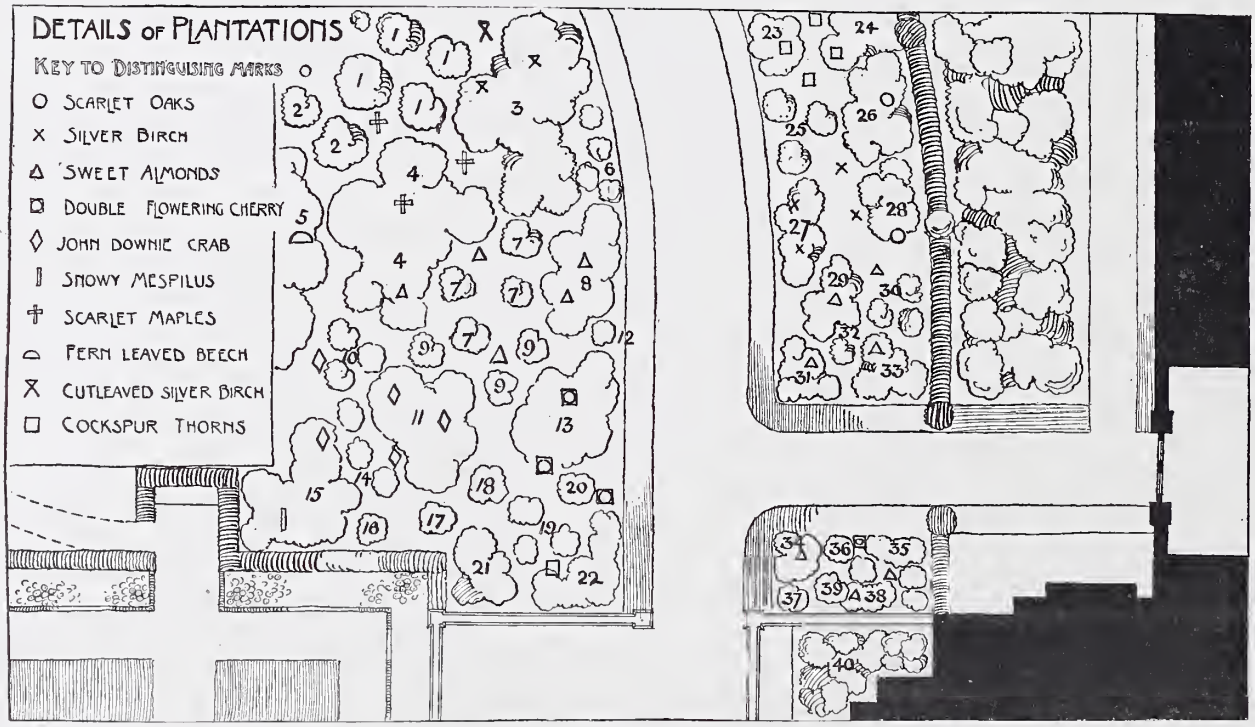
When planting single trees, either in the park or on the garden lawns, care should be taken to prepare a good bed of soil, in which the trees can grow and take root. To squeeze the roots into a small pit dug out of hard ground, and not to loosen as much soil as would be required to allow of the young roots making a start, is treating neither the tree nor the garden fairly. In planting Limes for instance, the pit should be six feet wide, and have the soil loosened to its full depth. Deep planting is inadvisable, and the crown of the roots might stand up a little, while the turf should not be relaid within one foot six inches of the stem. This would allow light and air to penetrate to the young roots. When once the tree is thoroughly established, the turf might be carried up to the stem. The staking and protecting of trees in parks grazed by cattle is a very important consideration, indeed upon the success of this depends the possibility or otherwise of rearing fine specimen trees. To begin with pyramidal trees with branches reaching down to the ground is to court failure, the sweeping branches, which are considered the perfection of a tree standing on a garden lawn, cannot be maintained in a park, where the cattle will soon form for themselves a brousing line. It would be better to start with stout trees, having strong clean stems 8 or 12 feet in height, the branches or heads rising above this height. It is then possible to protect the stem, either by forming a cradle round its base, or by the ordinary tree protection made of Larch or other suitable timber, with cross-laggings.

To give a clear idea of the method of planting shrubbery borders, plan No. 114 and also a detail No. 115 are now given, these shew a part of the plantation arranged to either side of a drive forming part of a garden scheme now being laid out for W. M. Severs Esq., of Nant-y-Coed, Conway, North Wales. The drive it may be noted is to the north of the residence, the gradient from entrance being rather steep. The width between the drive and kitchen garden was very limited, a condition which generally results in a thin scanty plantation, but by planting a good Holly hedge to the back, this appearance is entirely obviated. On this side there is no attempt at the usual serpentine lines of grass, the verges two feet six inches wide running its entire length. The same arrangement applies to the opposite verge for the length shewn on detail. The plantation to the left of plan had to serve two purposes, first to give protection to the carriage court and also to screen part of the garden from the drive. How this is secured will in part be gathered from the plan and the following explanation of the numbers.

1. Pyramidal green hollies (four varieties).
2. Cupressus frazerii.
3. Lilacs and weigelas.
4. Portugal laurels and golden privet.
5. Laburnum.
6. Daphne fioniana.
7. Golden Irish and Adpressa yews.
8. Laurestinus.
9. Cornus elegantissima.
10. Standard acacias.
11. Arbuties unedo.
12. Skimmea japonica.
13. Berberris, of sorts.
14. Lilacs.
15. Azaleas and laurestinus
16. Acer negunda variegata
17. Irish yew.
18. Portugal laurels.
19. Eleagnus, of sorts.
20. Spanish gorse.
21. Berberris Darwinii.
22. Veronica Andersonii.
23. White broom.
24. Phillyrea augustifolia.
25. Osmanthus illicifolia.
26. Grislina littonalis.
27. Spiræa A. Waterer.

NOTE.—Mahonia is planted as an undergrowth to silver birch, marked X

28. Garrya elliptica.
29. Choice pernettyas.
30. Three cupressus Frazerii.
31. Olearia haastii.
32. Standard golden holly.
33. Broad-leaved hollies.
34. Spanish gorse.
35. Euonymus japonica.
36. Female aucuba.
37. Laurestinus.
38. Escallionia macrantha.
39. Standard golden holly.
40. Dwarf flowering shrubs and perennials.

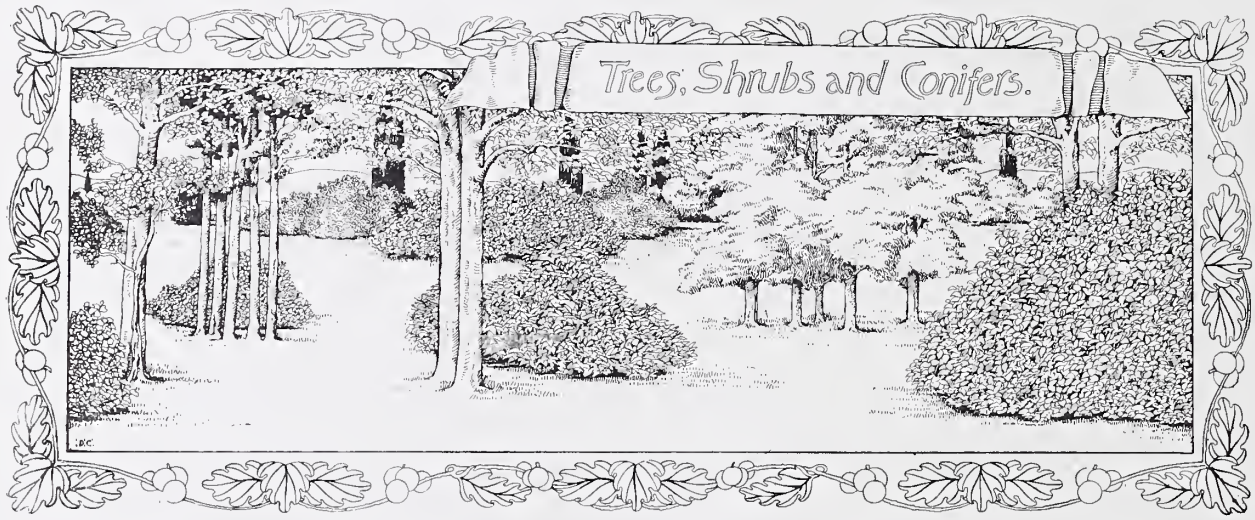


No. 115.

In the list of trees and shrubs, I have endeavoured to indicate the purposes for which each variety may be used. One other suggestion may be added, viz., that it is much safer to trust to an inspection of the trees and shrubs growing in the neighbourhood of proposed new gardens and parks for indications of what to plant, than to information supplied in catalogues.

No. 116.

CHAPTER XIII.



The subject of plantations and planting has already been dealt with at length, and their employment in the creation of garden and landscape fully considered. It is therefore, unnecessary here to do much more than to give a list of the most useful varieties of trees for the various plantations, with a few descriptive notes, and some indication of the conditions under which they succeed the best. There are, however, a few very important considerations which, although already referred to, may with advantage be emphasized, because on a proper appreciation of them depends, to a large extent, the pleasure which it is possible to derive from foliage and woodland scenery. These conditions may be summarised as follows :—

1. That trees and shrubs which are indigenous, or those which are introduced into this country, and are allied to, and succeed as well as indigenous varieties, should be preferred to those which remind us of foreign countries, or are simply freaks of nature. This is more especially so if the latter are of stunted growth, or sickly in appearance.

2. That the proportion of deciduous trees and flowering plants should, in most cases, exceed that of evergreen shrubs and trees. This however is, to a certain extent, a question of locality. A seaside garden, for instance, requires a larger proportion of evergreens than an inland garden.

3. That whilst conifers may, under certain conditions, be fitting objects for the garden, especially when used as formal trees on the terrace, they are seldom satisfactory when mixed with English trees in the park or home-landscape ; though an exception to this rule may be made in favour of Scotch Firs, which have a fine effect when planted by themselves, or in conjunction with the Silver Birch.

4. That collections of trees, shrubs, or conifers might be arranged in such a way as to show that the proprietor's intention was to possess a choice variety of one particular class of plants. A pinetum, for instance, might be formed for the accommodation of conifers, and so on.

5. That certain trees are to be avoided as inimical to the effect which plantations or groups of shrubs should give. In this way, the free use of Cupressus Lawsoniana, Araucaria imbricata, or monkey-puzzler, is to be avoided. Again, when a garden is favourably situated in a district where most things will grow and succeed, it is well to avoid planting shrubs such as Aucuba japonica and Golden Elders, which remind one of a garden in a smoky atmosphere.

6. That flowering shrubs deserve to be much more largely planted than they are at present, this refers more particularly to those old-fashioned varieties that are sometimes spoken of as being common. Amongst these may be mentioned Laburnum, Lilacs, Syringas, Mock-Orange, Snow-ball, Ribes, Weigelias, Deutzias, and shrubby Spiræas, most of which bear not only beautiful but also fragrant flowers.

7. That dotting a lawn all over with specimen trees is a doubtful expedient, and one which more often detracts from, than adds to, the effect of the garden, since breadth of effect is generally destroyed when trees are planted in this way.

8. That it is possible to overplant a garden, and so destroy its breadth. Perspective view No. 116 shows how little planting is required in many gardens.

9. That it is well to remember that, in purchasing trees and shrubs, those which are the most thriving and healthy in the nurseries are probably those which have stood the longest time un-transplanted, and that recently transplanted shrubs do not look nearly so robust and vigorous, but are much safer to move.

As has already been stated, the following lists do not pretend to any degree of completeness, nor do they include all trees that are worthy of a position in the garden or park; much less is it suggested that each garden should be planted with the same varieties of trees and shrubs, for the result would be to reduce their decoration to such a degree of sameness as to create monotony. Each garden should have individual care bestowed upon its every detail, and in no department is this so necessary as in the choice and arrangement of its trees and shrubs. These lists must, therefore, be considered as first aids to those about to plant or lay out their gardens.

To make the selection of trees and shrubs for various situations more simple, I have classified them so far as possible under several headings, as deciduous trees, hardy conifers, &c., and have prefixed the following abbreviations to those which, in addition to their general use, are suited for growing under special conditions, as stated:—S, trees and shrubs for sea-side planting; T, for town and suburban gardens; P, those which thrive best on peat, or on soil from which lime is absent; U, varieties which are suitable for undergrowths and planting in shady places.

In these several lists no claim is made to botanical correctness or otherwise, of the nomenclature. I have throughout used the more familiar names by which they are known amongst nurserymen. I have, however, consulted "Nicholson," and where variations occur have also given the different names under which the tree or shrub is known.

Acacias. Trees of modern growth, with beautiful and graceful foliage, the character of the tree being light and airy. The best varieties are: A. inermis. A pseudo Acacia (Robinia), both of which bear a profusion of beautiful, Wistaria-like flowers; this tree may be kept pruned to a beautiful formal head. The Mop-headed Acacia, is much planted in suburban gardens. T.

Acers. *See* Maples.

Ailanthus glandulosa *(Tree of Heaven).* Generally grown as a standard on long clean stems six to eight feet high, pruned to a mop head, in which form it makes a good tree for planting at stated intervals along a straight walk; it bears lovely flowers. Should not be planted in the park or woodland.

Almond (Sweet). One of the earliest trees to flower, makes a charming garden avenue, or may be planted amongst other shrubs. T. S.

Ash. The common variety is the best; the Weeping Ash is very funereal in appearance, and can seldom be used with advantage. The Golden Ash makes an effective tree for arranging towards the margin of a plantation, and is also a good tree for planting on soils lying on limestones. T. S.

Alder. For seaside planting, or for planting on land which it is difficult to drain, the Alder has few equals. A fine group of Alder with its profusion of catkins hanging over the margin of the river or lake is a very pretty sight. Alder is also a capital town tree. The Cut-leaved variety *(Alnus incana laciniata)* is a very graceful tree, slender and stately, with large-deep-cut leaves. May be planted on the lawn or in the park. T. S.

Beech. For an avenue there are few, if any, trees equal to the Beech. Unfortunately it does not grow quite so rapidly as some trees, and it is often difficult to obtain very large plants from the nurseries. Beech succeeds best on land lying on gravel or chalk. There are three distinct varieties in addition to the common form—the Purple, Fern-leaf, and Weeping Beech. The Copper Beech as sold by nurserymen, is generally a seedling from the purple-leaved variety; the true purple being obtained from grafts. The fern-leaved Beech is one of the most beautiful and useful trees in cultivation. T.

Birch. When in doubt as to what to plant, try Silver Birch; it is one of the few trees which never seem to be out of place. Nearly all the Silver Birch have a beautiful pendulous habit when fully matured. In ordering, ask for the "True Silver." A charming variety is being imported from America; it is called Betula papyracea, the paper or canoe Birch. The stems are perfectly white even in a young state. There is a pretty purple-leaved Birch, B. atropurpurea; a Cut-leaved Birch, B. Laciniata; and a weeping variety, B. Pendula Youngii (Young's Weeping Birch), the latter may sometimes be used near a stream or on the margin of a lake. Groups of Silver Birch planted on a hillside, especially when in conjunction with Scotch Firs, make a very charming effect. T.

Chestnuts, Æsculus. There are several very beautiful varieties of Horse Chestnuts all of which should be seen on every estate. The double white, the scarlet, and yellow, are as easily grown as the common variety. Chestnuts make a fine avenue, and form beautiful clumps in the park; both in Spring, when in flower, and in Autumn, when the foliage has taken on its Autumn tint, they form a prominent feature in the landscape. The yellow-flowered Chestnut makes a pretty tree for the lawn. T.

Chestnut, Spanish, Castanea: Sweet Chestnut. Although there are several varieties offered by Nurserymen, the common variety is the most useful. It makes a fine avenue. It has large lance-shaped leaves of a fine dark colour, which turn a beautiful golden yellow in the Autumn. The timber is valuable. T.

Aria, Sorbus. Excellent trees for seaside planting, and succeed equally well inland. They soon grow into effective specimens. The foliage is large, silver on the under side, with bunches of white flowers in the Spring. The best varieties are:—A. chrysophylla, A. quercifolia, A. theophrasta, A. vestita, and A. venusta. T. S.

Cherry. The common wild Cherry is one of the most beautiful of English trees, and one which deserves to be much more frequently planted than it is at present. It is most effective when planted on a hill-side in a group by itself. It is a free grower, and succeeds in most places. The double-flowered Cherry is very fine when in bloom, but is more suitable for the garden than the park. Closely-pruned standards make a very effective garden avenue or colonnade. The Weeping Cherries are disappointing.

Cytisus, Laburnum. This is amongst the most popular and certainly the most useful of flowering trees. Grown as standards with branches well pruned they make very sturdy trees, and when thus treated may often be used in positions where a low screen of trees is required. They are useful for growing amongst other trees or shrubs, they stand shade, and grow well by the sea or in a smoky town. The two most useful varieties are the common and the Scotch. There is also a golden-leaved variety of the common Laburnum. T. S.

Crabs. One of the hardiest and most beautiful classes of flowering trees, having the additional advantage of bearing very beautiful and useful fruit. The best varieties are Siberian, John Downie; Malus or Fairy Apple; Malus floribunda the coral-flowered Apple; Malus pendula Elize Rathke weeping Apple; Malus spectabilis, Chinese Apple; and Malus Hyclop, or Dartmouth Crab.

Elm. One of the most characteristic of English trees. Elms are indifferent alike to soil and situation, and make magnificent avenues, park clumps, or single specimens. The most useful sorts are:—The English Elm (U. campestris), a lofty tree with small leaves; the Camperdown Weeping Elm; Dampierre's golden Elm, a very beautiful and quick-growing variety with golden-coloured foliage; the Huntingdon Elm, an erect vigorous variety, with large leaves and smooth bark; the Scotch or Wych Elm, a rapid grower of spreading habit, with large leaves; the Blandford Elm, a tree of large growth and fine massive foliage; and the Cornish Elm (Wheatleyi), a variety of upright habit with dark green foliage, which remains on the tree until late in the Autumn. This latter is one of the very best trees for town planting. T. S.

Limes. The fragrant Linden is one of the most beautiful and useful of trees, and one which grows rapidly in most places; it can be trained to form an ornamental screen, as often seen in Holland, or pruned for a mop-headed colonnade tree, it is also one of the finest trees for avenues or park clumps. There is the additional advantage of its transplanting safely up to almost any size. By far the most useful and beautiful variety is the true "Red Twigged," but the White-leaved Linden, and Missippiensis, an American Lime a variety with enormous leaves, are also beautiful trees. T.

Maples. The Spring and Autumn tints of the Maple are strikingly bright and most lovely, the Norway Maple, with its delicate green tints in Spring, and yellow in Autumn particularly, making a fine effect. Other varieties worth growing are Schwedleri, a very distinct variety with the habit and growth of the Norway Maple, but with leaves and stalks of a maroon red, and reddish purple colour, turning to orange-scarlet in the Autumn; Reitenbachia, an effective variety of free growth, the leaves turning a beautiful scarlet in the Autumn; Campestre or English Maple, of somewhat slow growth, with round habit and handsome foliage; Silver Maple, a very charming free growing golden leaved variety; and the red Colchicum Maple, the young wood and leaves of which are a bright crimson colour—this variety does not succeed on cold clay land. There are also the snake-barked and eagle's claw Maples, both of which are quite hardy and beautiful varieties, but more suitable for the gardens than the park.

Oak. Few planters seem to realize that there are quite a number of very distinct and beautiful varieties of Oaks, and yet there are at least six distinct kinds, all of which are worth growing, viz. :—The Common Oak; the Golden variety of the Common Oak; the Turkey Oak a variety which is very hardy and a compact grower, with long, deeply-lobed dark-green leaves; the Scarlet Oak, an American variety with smooth bark, a clean and rapid grower, and very large leaves, which turn a brilliant scarlet in the Autumn; the Purple-leaved Oak, a very fine variety with large leaves, retaining its colour throughout the season; the Pin Oak, a beautiful tree of symmetrical habit, slightly drooping branches, and colour a beautiful deep glossy green. T. S.

In addition to the above may be mentioned the Evergreen Oaks, which are so valuable for seaside planting. The best of these are Quercus Austriaca Sempervirens, an exceedingly handsome tree which makes a fine avenue, and an equally fine mass when planted by itself; Q. Fordii, a small-leaved variety; the Lucombe Oak; and the Holly or Holm Oak. T. S.

Planes. There are two varieties, both of which are most useful for street planting, forming avenues, or groups. The one is the Western or Sycamore Plane, and the other is the Oriental Plane. The latter is planted along the Thames Embankment. I may add that I have not succeeded with the latter variety of Plane in the northern counties or in Scotland, although I believe they grow well in the Western Highlands. T.

Poplars. These are favourite trees for smoky towns, and should be considered as essentially town trees. An exception may be made however to this rule, in favour of

the Lombardy Poplar, which is most useful for breaking the sky line in masses of foliage, or plantations in flat districts. It may also sometimes be used for avenues. The Golden Poplar, is most effective for garden and home park plantations; and one which may be pruned or pollarded where necessary. The varieties which are useful for town planting are P. Canadenses, P. Black Italian, P. Balsamea. T.

Mountain Ash, or Rowan Tree. These are well-known and appreciated, especially by the birds. A bank of Mountain Ash, either in flower or in fruit, is a splendid sight. They will grow on almost any soil or in any locality. For masses in the home park or woodland they are most useful and effective. T. S.

Sycamore. This is one of the hardiest, and also one of the handsomest and most characteristic of English trees. It is valuable for planting as a wind screen in exposed situations, for forming large masses of foliage in the landscape, or for avenues. It grows quickly, and trees of considerable size can be obtained from most good nurseries. There are two varieties of the common Sycamore, specimens of which might be planted in the garden. These are the variegated or Corstophine Plane and the purple-leaved Sycamore Maple. T. S.

Thorns (Cratægus). In speaking of Thorns most planters refer simply to the white, pink, or scarlet varieties of the common white-Thorn. All these are most useful to the planter. The family of Cratægus is, however, a very large one, including many very excellent and hardy trees which are good growers and bear fine flowers and fruit. Amongst these may be specially mentioned the Cockspur Thorns, which can be obtained in great variety, T. S.

Willows. For sea-side or town planting, or for planting upland which cannot be thoroughly drained, Willows are invaluable, and some of the varieties are also very beautiful. The best are Babylonica, a most delightful tree for planting near a stream, pond, or lake; another fine variety is the silver-leaved Willow, which will grow in almost any soil or situation. Rosemary-leaved Willow is almost as fine a sea-side plant as the Sea Buckthorn. There are also the purple, scarlet, and yellow-barked Willow, all of which are very effective in Winter as well as in Summer. The Palm Willow is also worth growing. T. S.

GROUPS OF CONIFERS IN A WESTMORELAND GARDEN

No. 117.

HARDY CONIFERS FOR THE FORMAL GARDEN, PINETUM, & LAWN.

No class of trees or shrubs require more care in selection and arrangement than conifers. So much so, that it is safe to add that more places are spoiled than improved by their use; and yet there are many varieties which are of the greatest use to the garden designer. The fault generally lies with the planter, who perhaps does not recognise their effect, or the use of scale in garden design, and who, in the absence of this knowledge, relies upon the perfectly well-meaning advice of his nurseryman. To guard against the serious errors which are perpetrated by planters, the list here given is confined to the most reliable varieties, and in one or two instances where, owing to the popularity of species which the writer considers bad, a word of caution is added. The list as a whole should be read in connection with the foregoing statement.

Judging from observation, it may be said that nowhere do conifers look so much at home as in mountainous districts, especially when the buildings of the district are in cold grey stone, or in which there is a large amount of water, either in the form of a river, loch, or lake. The explanation is probably to be found in two things:—First, that in such districts conifers attain a large size and most characteristic colouring, and in the second place, that they supply just the requisite amount of warmth of tone to the district in the winter season.

Abies, or Spruce Fir, of which there are a great number of varieties, contains some of the worst, but also some of the most beautiful conifers. Amongst the most beautiful and useful varieties may be mentioned the following :—A. alba, or white American Spruce, one of the most useful conifers grown, being very compact in habit, of perfect pyramidal shape, and of splendid glaucous colour. A. Canadensis, or Hemlock Spruce, and A. Albertina or Prince Albert Spruce, are two varieties which, though very similar in foliage, are not so in general character, the first being of a round-headed pendulous growth, whilst the latter is upright, graceful, and airy in character; A. Canadensis will grow in partial shade, but A. Albertina, requires an open situation, where it makes a very fine specimen. A. Douglassi, or Douglas Spruce, is a handsome tree of very rapid growth, frequently attaining upwards of two hundred feet in height, valuable as timber. Nurserymen seem to obtain their seed from two sources,—that obtained from the Colorado district producing the sturdiest plants. The writer's experience of this conifer is, that whilst in valleys or in positions where it is protected from strong winds it is a rapid and luxurious grower, it is very impatient of exposure to east winds. A. Englemanni, or pungens, also sometimes called commutata, is a very beautiful variety of medium height and compact growth. A. glauca, of which Kosters variety is the best, is of an exceptionally fine colour, and one of the most beautiful pines in cultivation. Hookeriana, a native of California, is a very ornamental bluish-leaved variety; the individual leaves are quite small, giving the plant a very neat and graceful appearance; it is a good grower, and a conifer which should be in every collection. A. orientalis, or oriental Spruce, is, especially in a young state, a very pretty pine, being very symmetrical in growth with branches which sweep down to the ground, the colour being as rich as in the Picea Nordmanniana. This pine is not a quick grower, and should be regarded rather as a variety to mark special points or to make a specimen in a pinetum, than as a variety for general planting. A. pygmæa, pumila, Gregoryi, and Remontii are interesting dwarf species which are often useful for planting on rock-work or for forming a small group to ease off the bend in a walk, as shewn by illustrations Nos. 56 and 57. They grow as flat-headed carpets, and not in a vertical direction as other Spruces. A. Smithi is a new golden variety of the common spruce, very effective when in robust health, it is not, however, a variety for general planting. A. Smithiana, or morinda, is a distinct and valuable variety with light greyish-green foliage of a feathery and somewhat drooping character.

Araucaria Imbricata, or monkey puzzle, is a variety most unsuitable for garden planting; its proper place is in an arboricultural museum, or piece of ground devoted to freaks of nature.

Arborvitæ, or Thuja, contains many varieties which are most useful for hedges or formal trees, as they stand clipping. Among the best are the American and Chinese or oriental arborvitæ. There is also a golden variety of the latter called aurea variegata, which is an upright pyramidical growing conifer of a lovely golden tint, very ornamental. Other varieties are Ellwangeriana, remarkable for its symmetrical shape; eligantissima, a most beautiful golden variegated variety of more upright growth than

the preceding ; and semper aurescens (golden arborvitæ), which has a constant beautiful hue which, unlike some variegated Conifers, does not look brown in Winter or burnt in Summer—it has the same habit as the thuja aurea, and should not be wanting in any collection.

Cephalotaxas drupacea and fortunii (Cluster-flowered Yew).

Cedrus Libani (the Cedar of Lebanon) has always been held in great repute by garden makers and improvers, and very properly too, as it is one of the most stately trees both in form and colour. A single specimen at maturity is a noble tree, whilst an avenue formed of Cedars is one of the most stately it is possible to rear. Other varieties are the Cedrus Deodora, or Indian Cedar, a free-growing variety with plumy branches. In some districts this grows to a large size, but it is not so fine a tree for the garden landscape as Libani or Atlantica, which latter, is in general character, between the two. There is a blue foliaged variety, Atlantica glauca, which makes a fine and interesting specimen. Cedrus Atlantica is, on the whole, the most useful, as it is not so particular as to soil and situation as either Deodora or Libani.

Cryptomeria elegans is a fine dense-growing hardy tree, the foliage of which changes from green to purple bronze in Winter. One plant would be sufficient for most places. C. Japonica forms a fine pyramidal specimen tree, very suitable for a lawn or mixed plantation of conifers. Wherever pines are planted this should be included. C. spiralis is a very choice conifer for shrubbery borders ; it is dwarf in habit, each branch somewhat resembling a bunch of staghorn moss. It is also a good variety for planting as a specimen on a lawn.

Cupressus (Cypress). This family includes many very handsome hardy evergreen trees, some of which can be strongly recommended for planting on terraces, for hedges, as specimens on the lawn, and for boundary plantations in the gardens. C. Lawsoniana lutea, is a beautiful variety of a bright golden colour, much more compact in habit than the common Cupressus, it will stand trimming to shape, provided that it is knifed and not cut with shears. C. Lawsoniana, the common Cupressus, may be used as a hedge plant, but is too funereal in appearance for other purposes. C. erecta viridis and erecta stricta are naturally compact in form, growing into shapely upright conicals, both are useful for planting on the terrace, or as specimens to mark special points in a Dutch garden or panel design. C. argentea is also a very compact pyramidal variety, and one of the most useful grown. C. Frazerii is a distinct and beautiful variety of a rich and glaucous hue and a stately and upright habit of growth. For breaking up a mass of thick foliage or for use anywhere in the garden where an upright shrub is required, it is excellent. Other effective varieties are C. mesembryanthioides, which makes a low-growing shrub of a very unusual pendulous habit. C. nana is a dwarf variety of the common C. Lawsoniana, forming thick and massive bushes, it is an interesting conifer, and one which can often be used with effect in connection with rockwork. C. macrocarpa is, although very uninteresting and somewhat delicate in a young state, when once established a charming conifer, and one which is quite distinct from all other varieties of Cupressus. It is sap green in

colour, and as a tree for planting in a seaside garden has few equals, while as a specimen on a lawn, or in an avenue, it is most useful and effective.

Juniperus, Juniper. There are few families of evergreen trees or shrubs which include so many diverse forms as does the Juniper. In support of this it is only necessary to refer to the form of the well-known Irish Juniper with its thin, upright, spiral form, and the common English Juniper, which forms a low growing carpet. Between these two extremes there are the American, or red Cedar J. Virginiana, a very useful and effective loose growing upright form, and the Chinese, J. Chinensis, with its golden variety, J. Chinensis aurea, which are both so useful for planting in the formal garden as well as in groups of conifers. The Irish Juniper is a very useful shrub for planting on terraces, this is the variety shewn in illustration No. 98.

Picea, Silver Fir. This genus includes some of the most beautiful and hardy pines known, most of which are well adapted for planting in the British Isles. P. Nordmanniana, for instance, will stand any amount of cold, and is not at all particular as to soil and situation so long as the atmosphere is fairly free from smoke and chemicals. The following varieties are all worthy of a position in the pinetum :—P. amabilis, the true variety of which is one of the most beautiful conifers grown, and one that should be in every collection ; the foliage assuming a beautiful glaucous blue, the tree being very symmetrical and pyramidical in shape. P. balsamea (Balm of Gilead), the well-known Silver Fir. P. grandis from Vancouver Island, makes a noble specimen for the lawn or pinetum. It is a species which should not be planted except in these positions. P. lasiocarpa is a very handsome free growing variety with pale green elongated leaves, the branches of which are perfectly horizontal and in regular whorls, and as these grow older they droop somewhat owing to their weight. P. violaca concolor is another variety of the same type, but with a beautifully blue shade of colour, P. nobilis, one of the best known pines, is a truly noble tree with regular horizontal spreading branches, the leaves of which are dull green above and silvery beneath, incurved towards the stem. Like one or two others, this variety is the most beautiful when about fifteen to twenty feet high; later, it loses its lower branches and presents a somewhat ragged appearance. P. nobilis glauca is, as its name denotes, a blue variety of the above, but as it is obtained from grafts, it is very difficult to purchase a plant which is symmetrical in a young state, but once it sends up a true leader, a beautiful tree soon follows. P. pinsapo is a very fine handsome pine of moderate height, rather spreading in habit with short leaves which seem to stand round the stem like a bottle brush. There is also a blue grey variety which as seen at Ashridge and other places, is very beautiful, this is P. pinsapo glauca.

Pinus, of which the varieties are legion, includes some of the best known and most useful varieties of conifers, but it also includes a large number of species which are only interesting to lovers of the curious.

The best variety is undoubtedly the common Scotch Fir, P. sylvestris, which is one of the few pines which seem to associate with English landscape scenery; it is not however a tree for the garden or lawn. Two other pines which are useful in their place are P. Austriaca, which will stand a great deal of smoke and is therefore a useful tree for suburban gardens, it is a dark coloured pine of rather upright habit and fine foliage, one of the best for planting as shelter. The stone pine, P. cembra, is also very hardy and of neat upright growth.

Retinospora. These are known to all lovers of conifers as beautiful dwarf evergreens much in repute for the mixed border, as specimens on the lawns and also for planting on the terraces. The following are all good. R. ericoides, one of the best small growing conifers in cultivation, it is very pyramidal in shape, a close grower, distinct in colour and of dwarf habit. R. leptoclada a very compact and neat growing pyramidal conifer, which is useful for planting in small formal beds. R. obtusa aurea is also a neat growing variety for the border, and R. pisifera is useful as a group by itself. R. plumosa aurea is the well-known golden retinospora so often used for planting in vases and boxes, this variety stands a great deal of trimming and may therefore be used on the terrace. R. squarrosa, though somewhat ragged in appearance when allowed to grow naturally, is a very beautiful shrub when carefully trimmed, by which means it may be made to take many simple shapes, the colour is a pleasing grey, like grass when covered with early morning dew.

Sciadopitys verticillata, the umbrella pine of Japan is a somewhat rare but beautiful evergreen tree of slow growth, quite distinct from any other pine and one which should be included in every collection.

Sequoia (taxodium) **sempervirens** is of rapid growth and pyramidal habit, a very desirable conifer for planting in sheltered situations.

Taxodium distichum (deciduous cypress), is an elegant quick growing pine which is not half so well known as it deserves to be. A group of deciduous cypress in early summer is a sight to remember, the light pea green foliage being as striking as that of the common larch when budding into leaf, it is of easy growth, succeeding equally well on damp or dry soils.

Taxus. The yew is of all evergreens at once the most English and the most beautiful in character; useful alike for almost every purpose for which trees are required. The common yew especially may be planted as an avenue as at Melbourne and other places, as a single tree on the lawn as seen at hundreds of places, as a screen tree, as a clipped tree in the formal garden, or as a hedge, for which purpose it is better than any other plant. Other varieties, all useful in their way, are T. adpressa (syn. brevifolia), a handsome variety of slow growth with small dark glossy foliage, and T. aurea, one of the most effective varieties for decorative purposes; its brilliancy of colour being very much admired. This variety is often grafted on the common Irish yew the result being a mushroom or pyramidal head as illustrated in sketch No. 108, page 111. T. fastigiata (Irish yew). Although often caricatured by writers on

gardens, there is no tree of natural shape which is so useful to the garden designer as the Irish yew and its golden variety T. fastigiata aurea, as a line of yews as shewn in illustration No. 107, page 110, or for marking the sides of steps or a doorway, they are invaluable. They require, however, to be used with great discretion as they sometimes, when improperly placed, give a funereal appearance to a garden. T. elegantissima the silver striped yew, is a variety of good habit. Very effective specimens, grown in many shapes such as conicals and spreading bushes, and fine pyramids clipped round, sometimes square, may be obtained from many nurseries. They are of course expensive, but they give an immediate effect. T. fructo luteo, the yellow berried yew, deserves to be better known, a bank of these when in fruit is a very pretty sight, groups of 5 to 9 plants on the side of a mound are most effective. T. Dovastoni, the Dovaston weeping yew, standards of this variety sold by nurserymen make poor specimens, but single plants grown in bush shape may sometimes be used with great effect near rockwork or water.

Thujopsis borealis (syn. cupressus Nutkænsis) is one of the finest evergreen trees, and one which should be planted instead of Cupressus Lawsoniana. It is of upright habit and growth, perfectly hardy, and useful for clumps, masses, shrubbery borders, or as a single specimen. T. dolobrata is one of the most distinct and interesting of the conifers which have, during the present century, been introduced into our gardens. In general appearance it is like a pyramidal mass of Lycopodium selaginella, the colour is a rich light green, and the plants may with care be trained as pyramids growing up to twenty feet high, or kept as dwarf rounded bushes.

Thuja Lobii is a most useful timber tree and also one of great value for planting as a screen or shelter. In a young state it is often damaged by late frosts, but when once established it is very hardy. Like Cupressus macrocarpa it is very disappointing in a young state, but like that variety it eventually grows into one of the most beautiful of conifers. T. gigantea, also known as Cupressus gigantea, is much thought of by foresters and gardeners, but it is a conifer which the writer has never been able to use with good results, there are a few specimens in the country which are fine, but generally, there is a very poor head on a somewhat uninteresting stem. From a landscape gardener's point of view, it would look best when standing out of a bed of low growing shrubs. Other varieties are T. vervaeneana, a variety with golden variegated foliage, T. Wareana the Siberian arborvitæ; T. ericoides, a dwarf growing heath-like species; T. Occidentalis and T. Orientalis, the Chinese and American arborvitæ, both of which are food for hedges.

Wellingtonia gigantea, the well known Sequoia or giant tree of California, it is also known by some people as the "Noah's Ark Tree." There are occasionally places in which this conifer may be planted with effect, but excepting where a specimen is required for the sake of variety or for planting in the pinetum, great care should be exercised when choosing a position for it.

RYDAL MOUNT VIEW SHEWING TREES AND SHRUBS ON BANK

No. 118.

FLOWERING SHRUBS, DECIDUOUS AND EVERGREEN.

Alaternus. Rhamnus alaternus, see Buckthorn.

Amelanchier, Snowy Mespilus. These hardy deciduous shrubs are closely allied to the Medlar, are perfectly hardy, and in Spring bear masses of dainty white flowers; some varieties grow to a height of twenty feet and will thrive well in any moderately rich soil. A. Canadensis Syn. A. Botryapium, is the best of this genus, being a very ornamental shrub. There are several varieties of this species. T. S.

Amygdalus, Sweet Almond, well known flowering trees or shrubs. They are exceedingly ornamental and may be used in many positions, the stronger growing varieties being excellent for large shrubberies or as specimen trees, or for planting as a colonnade. The almond though well known is not grown nearly so much as it might be; blooming in early Spring when other deciduous shrubs are dull and bare, it makes a very desirable plant. There are many varieties, the best are:—A. flora rubra plena, double red; A. communis, common almond; A. nana, a dwarf variety bearing rose coloured flowers, and A. incana, a handsome dwarf shrub with red flowers. T. S.

Andromeda. A genus of dwarf hardy evergreen shrubs, which succeeds in almost any position and any soil though preferring that of a peaty nature. A. acuminata, a

compact shrub, flowers white, borne in great profusion, leaves thick, upper surface smooth and shining. A. augustifolia is useful for the rockery or planted on the edge of shrubberies as it seldom attains more than two feet in height. A. Catesbæi blooms in May, flowers white, height three to four feet. A. floribunda is the best known variety, a very compact evergreen shrub, the flowers white, open in April and May, this shrub is also very handsome in the winter when it is generally very full of greenish white buds. A. polifolia, wild Rosemary, the flowers of the preceding varieties are white, this bears blush white flowers, the edge of the corolla being occasionally red: this variety also makes a very pleasing effect when planted by the edge of a stream. A. arborea, or tree Andromeda is a deciduous variety with long lanceolate leaves which turn to a most gorgeous colour in the Autumn. This is probably one of the finest shrubs for producing Autumn garden effects and like other Andromedas is of simple culture. It should be noted that although Andromedas will grow almost anywhere, they are impatient of limestone. T. P.

Arbutus unedo, The Strawberry Tree. This somewhat singular tree, bears fruit and flowers at the same time, is very ornamental and an excellent subject for planting near the sea, where so many of our beautiful flowering shrubs do not succeed well; it blooms in the Autumn when the fruit of the preceding year, which is edible, is ripe. Grows to a height of ten or fifteen feet. S.

Azaleas. These hardy flowering shrubs may be found in many gardens, still they are not nearly so much grown as they deserve to be. Every garden, however small, should contain a few plants. It is a mistake to think, as many persons do, that they will not thrive without peat, as they grow well and bloom profusely in ordinary garden soils. Their numerous shades of colouring, varying from pure white to yellow, pink and deep scarlet, and again all shades of nankeen yellow, make them suitable for planting in conjunction with almost any kind of shrubs, or they may be planted in beds by themselves, where they make a brilliant display in the Spring and early Summer months, and an equally glorious show in the Autumn. It is unnecessary to mention here the names of the many varieties of Ghent Azaleas, or A. mollis, lists of which may be found in most nurserymen's catalogues. It is interesting to note that A. Indica generally looked upon as a greenhouse species, has been found to do well out-of-doors in this country, when planted in sheltered positions, but it is not advisable to plant it in positions exposed to strong winds; being a sub-evergreen it does not appear so bare in the Winter as the Azalea mollis. A. viscosa, or swamp pink, is a white sweet scented species growing to a height of two to three feet; there are many varieties of this azalea with flowers of various hues. For beauty of flower the Ghent varieties surpass all others, their heads of honeysuckle-like flowers being more graceful than the varieties of A. mollis, though the latter have the best of it in the Autumn when the foliage is very brilliant. A. ponticum, the common yellow variety, is the sweetest scented, and has the additional advantage of growing and flowering perfectly in partial shade. T. P.

Berberis. (Barberry). This genus of hardy flowering shrubs is well known and the uses to which they may be put are many and varied, some species being of upright growth,

others of trailing habit, while others again have gracefully arched branches bearing racemes of yellow or orange coloured flowers in the greatest profusion. Most of the kinds, both evergreen and deciduous, will thrive well in any ordinary soil and may be grown by those possessing little knowledge of gardening. A. aquifolium is an evergreen species better known under the name of Mahonia aquifolium, many people being unaware of the fact that it belongs to the same family as the common Barberry. It may be planted in the shrubbery where its bronze coloured leaves show to advantage among the green foliage of other shrubs, the masses of sweet scented yellow flowers in Spring, and the violet berries in the Autumn and Winter, make it a most valuable variety, and one which at the same time is very inexpensive. It is also an excellent plant for game cover. B. Darwinii, another evergreen, is the finest of this genus and one of the most beautiful flowering shrubs grown. Its small shining green leaves, and the orange coloured flowers with which it is so profusely hung in the Spring, make it conspicuous among other shrubs and an excellent variety for the shrubbery border. B. ilicifolia (holly leaved barberry) is a deciduous variety with large dark green leaves which remain on the plant till late in the Winter. B. nepalensis (Syn. Mahonia nepalensis), the habit of this plant very much resembles that of B. aquifolia, but its compound leaves are much larger, sometimes attaining a length of two feet. A specimen of four or five feet high forms a handsome shrub but does not succeed in exposed positions. B. stenophylla is a variety with small narrow leaves, its long, gracefully arched branches bearing a profusion of small yellow flowers, is a pleasing sight. B. Thunbergii, a choice Japanese species of dwarf compact habit, bears bright red berries in the Summer, the foliage turning to bright crimson in the Autumn. B. vulgaris, the common Barberry, is a free flowering shrub growing to a height of twelve to fifteen feet, its branches of coral red berries in the Autumn making it almost, if not quite, as beautiful as when in flower. B. vulgaris purpurea is a purple leaved variety of the above. T. S.

Buddlea Globosa is a handsome shrub bearing large round heads of orange coloured flowers. Inland it requires a sheltered position but is an excellent shrub for seaside gardens. S.

Calycanthus. A genus of hardy deciduous shrubs, natives of North America, very handsome and sweet scented, and well worth growing. The best species are :—C. floridus the Carolina allspice known as the sweet shrub from the agreeable odour of its wood ; the branches are spreading, flowers chocolate-coloured, and leaves large and glossy. C. glaucus is a variety with purple flowers not so strongly scented as the foregoing C. lævigatus has erect branches with smooth green leaves and purple flowers. C. Occidentalis is a large leaved Californian species with red flowers ; height ten to twelve feet, the preceding kinds only reach a height of from four to six feet. P.

Ceanothus. See the list of climbers ; Page 165.

Cephalanthus occidentalis, a native of North America, is an ornamental deciduous shrub of compact growth, bearing pale yellow flowers, succeeds best in a moist shady position. Height six to eight feet. U. P.

Choisya ternata, a handsome shrub requiring a sheltered position except in the most favoured parts of the country, an excellent seaside plant, with white, sweet scented flowers, and smooth, rich green, ternate leaves, sometimes likened to the orange blossom. Height four to six feet. S.

Clethra alnifolia is a dwarf deciduous shrub with rich green, alder like foliage, and spikes of pure white flowers. Other hardy kinds are C. acuminata, height twelve to fourteen feet; and C. paniculata a dwarf variety with fragrant white flowers borne in long racemes, very useful for shrubbery borders.

Colutea, Bladder Senna. A genus of rapid growing deciduous shrubs which thrive well in any ordinary soil and in almost any ordinary position. C. arborescens, with its delicate acacia-like flowers, is said to grow on the almost barren crater of Vesuvius; it attains a height of eight feet. C. a. crispa is a dwarf growing kind with crisped leaves, bearing yellow flowers in July and August.

Cornus. Dogwood. This class of shrubs is excellent for the shrubbery or for planting as undergrowths. The best varieties are:—C. florida, the flowering dogwood; C. mascula, the Cornelian cherry; C. mascula variegata with yellow flowers, useful for the front of a plantation. C. mascula elegantissima, is another variegated form of the Cornelian cherry, the foliage of this, in addition to the white markings, being tinged with red. C. sanguinea is the common dogwood and C. stolonifera the red dogwood, so called from its branches being a bright red colour. T. S.

Coronilla emerus, Scorpion senna. A dwarf ornamental shrub of compact habit, bearing light reddish yellow flowers, it does well in light sandy soils and in gardens near the sea coast. S.

Corylus atropurpurea, purple leaved filbert, a very conspicuous shrub with large leaves coloured like the purple beach, the nuts and husks being of the same colour, the male flowers, which are borne in long catkins, add much to their beauty; it is a very ornamental plant for the shrubbery. C. lacinata is a somewhat interesting plant with deeply cut foliage.

Cotoneaster. These are hardy shrubs requiring little or no care after planting, excellent for the shrubbery or for training against walls. The flowers are generally white and very small, but are borne in great profusion. In the Autumn and Winter the numberless bright red berries are very showy and effective. C. buxifolia is the box leaved variety, having a trailing habit. C. microphylla, perhaps the best known species, is excellent for covering low walls. C. Simmondsii, a strong growing species of upright growth, is useful for the shrubbery or for training against walls. All these are evergreen or subevergreen. T. S.

Cratægus. See list of trees and climbers.

Cydonia Japonica. Quince. A hardy, deciduous, and most desirable plant which may be grown as a bush or trained against a wall, where the rich scarlet flowers with which it is covered in the Spring, give it a very striking appearance. C. atrosanguinea flora

plena is a double flowered variety having dark crimson flowers. C. Maulei is a dwarfer kind than the foregoing, and a most beautiful shrub. It bears red flowers and golden yellow fruit, which, though delightfully perfumed are not pleasant to the taste. T. S.

Cytisus. Brooms. C. albus is a pretty little shrub of slender growth, bearing white flowers in long racemes. C. Andreana, a very ornamental free flowering shrub similar in habit to the common broom, the flowers are a velvety crimson and yellow. C. scoparius, the common broom, is too well known to need description here. C. præcox is not such a strong grower as the common variety but flowers profusely, the flowers being pale sulphur or cream coloured. Cytisus will generally be found in nurserymen's catalogues under the name of Genista.

In the creation of garden effects there are few shrubs so useful as the above varieties of common broom. Like the silver birch amongst trees, they seem to harmonize with any style, rough or polished, gardenesque or formal treatment. In connection with the latter style, standard brooms are often very useful, they are grafted on the common laburnum. T. S.

Daphne. There are many species but all are not hardy. D. mezereum album is a white flowered variety of the above. D. fioniana is a very charming dwarf evergreen shrub growing to from two to two and a half feet high, much stronger in growth than D. cneorum, the flowers are also much larger and richer in colour, whilst the perfume is equally strong and pleasant. P.

Deutzia crenata is a handsome deciduous shrub of medium height and a profuse bloomer. D. crenata flora plena is a double flowered variety of the above, the flowers being white and the back of the petals tinged with pink, and borne in long racemes. Both D. crenata and its double variety are amongst the most useful of flowering shrubs and may often be planted in batches by themselves, even in Winter, after the foliage has dropped off, they have an effective appearance. D. gracilis is a slender branched species with pure white flowers; this is the kind so much used for forcing. D. parviflora, a very desirable Chinese variety, is of upright growth but very compact. It bears creamy white flowers in great profusion in May and June. T.

Diplopappus chrysophyllus is a pretty evergreen shrub with slender stems, height three to five feet; the leaves are very small, the upper side being green and the under side golden, giving it a very ornamental appearance; the flowers are small and white almost covering the plant. Left to itself it is of a rather ragged growth and therefore needs pruning. S.

Diervilla. See Weigelia.

Erica. Heather or hardy Heaths. Pretty little shrubby plants, splendid for growing in masses, on the rockery, or as an edging to the shrubbery. On the outskirts of pleasure grounds there are often odd corners and scraps of ground where the soil is too poor to allow of good shrubs succeeding; in such positions as these, Ericas are often most valuable.

There are many species and varieties the best being E. carnea; E. cilians alba major; E. cineria; E. Hammondii; E. mediterranea glauca; E. stricta; E. tetralix; E. tetralix alba and mollie; E. vagans grandiflora; E. vulgaris alba, etc. P.

Escallonia. See climbers, page 167.

Exochorda grandiflora, a very beautiful shrub of compact growth, bearing large white flowers in May, somewhat resembling the Syringa but borne in longer spikes. It grows to about six feet high but will bear cutting if required dwarf, and will thrive in any good soil.

Forsythia are ornamental dwarf deciduous shrubs. F. suspensa thrives well trained as a climber or grown as a bush, the flowers being yellow and borne on gracefully drooping branches. F. viridissima is an elegant flowering shrub, producing in Spring bright yellow flowers, which extend along the whole length of the stem. This shrub grows to a height of from six to eight feet. T. S.

Gaultheria procumbens, Canadian Pea, or Creeping Winter Green, a pretty little creeping shrub, bearing small white flowers in July and later bright red berries; very useful for the rockery. G. Shallon is also useful for the same purpose but is a taller growing species and may be used with advantage in the shrubbery, and is also excellent for the shrubbery as it thrives well under trees. U. P.

Genista. (See Cytisus).

Halesia, Silver Bell or Snowdrop Tree, a genus of hardy deciduous trees, adapted for planting on lawns or in shrubberies and will succeed well in almost any position. H. hispida has white flowers borne in racemes. H. tetraptera is a large handsome shrub, bearing white bell shaped flowers in May or June, and growing to about the same height as the lilac.

Hibiscus. A desirable class of deciduous flowering shrubs with malva like flowers. Although perfectly hardy in the Midland, Southern and Western counties, and in gardens situated near the coast, they are not always reliable in gardens situated in Scotland or the North of England. There are many varieties but H. Africanus and hybrids from it are the best.

Hippophae ramnoides, Sea Buckthorn, a hardy deciduous shrub of irregular shape, bearing yellow flowers and berries of a bright orange colour; for very exposed positions along the coast there is no other shrub which is so useful for forming low wind screens or for protecting other less hardy trees and shrubs. S.

Hydrangea paniculata grandiflora, a deciduous shrub of long growth, hardy in any position and a most valuable plant for the shrubbery and for grouping on the lawn, the end of every branch bearing a large panicle of pure white flowers in the Spring and early Autumn.

Hypericum calycinum, St. John's Wort or Rose of Sharon, a beautiful plant of spreading habit, not more than twelve to eighteen inches in height with thick almost evergreen foliage completely covering the ground. It is a profuse bloomer, bearing flowers of a bright golden yellow with fluffy yellow centres. H. Moserianum is a beautiful variety of more erect and shrubby growth, with flowers somewhat smaller than H. calycinum. Both these varieties make splendid undergrowths and are also useful for carpeting shady borders or for growing where grass would not succeed. U.

Kalmia latifolia. The Calico Bush. This is an excellent dwarf evergreen shrub of slow growth. The flowers are rose coloured clustered similar to rhododendron but when fully developed resembling the flowers of the horse chestnut. There are several other varieties of Kalmia but this is undoubtedly the best. The Kalmia loves peat and should have some about its roots when planting in ordinary loam. It is a most attractive shrub. P.

Kerria Japonica is a pretty cottage garden shrub with slender branches bearing yellow flowers in great profusion for almost half the year. K. japonica flora plena is now most generally grown and is excellent for the shrubbery or for training against a wall or trellis as a climber. K. japonica argentia variegata is a dwarf variety of slender growth, having small leaves edged with white. This is a most useful shrub for almost any purpose.

Laurustinus floribunda (Viburnum tinus). A lovely evergreen flowering shrub of compact growth, blooming at a time when outdoor flowers are scarce, and may often be seen in bloom from October to March. The flowers are small and grow in flat clusters, which when fully expanded are pure white. There is a variety known to nurserymen as L. nigra or the black Laurustinus, which is very hardy but does not bloom so freely as L. floribunda. S.

Ledum. A dwarf ornamental evergreen shrub, bearing umbels of white flowers in April and May. The best varieties are L. latifolium globosum and L. palustre, both very useful for massing near the margins of streams, lakes, or ornamental water.

Leycesteria formosa. A handsome, summer flowering, deciduous shrub with a spreading habit. The flowers are white, slightly tinged with red, and borne in racemes at the end of the branches. It succeeds well in almost any soil and should be cultivated much more extensively than is now the case, as it is comparatively rare.

Lonicera Ledebourii A dwarf shrubby honeysuckle, bearing red flowers in June and July, quite distinct from the ordinary varieties. L. Standishii is a large leaved, deciduous variety, the flowers, which are creamy white and very fragrant, appearing in May before the leaves. T.

Magnolia is one of the most ornamental and attractive flowering trees or shrubs known. M. conspicua see illustration No. 120 is a handsome deciduous species of erect growth, its numerous large white flowers being very conspicuous and delightfully perfumed. M. Conspicua soulangeana is perhaps even better than its parent; it is of similar habit but the flowers are shaded with purple. The illustration gives a slight idea of the striking effect of the flowers, relieved against the bare deciduous branches and the wall of the house.

Mahonia. See Berberis. U.

Menziesia polifolia alba Irish Heath. A pretty dwarf shrub bearing white bell-like flowers which are useful for the shrubbery or rockery; there is a red variety which is also worthy of a position in the borders. These Menziesias are very useful where very dwarf shrubs are required for the front of a border. They may also be massed either in borders or in special beds on the lawns.

Olearia Gunniana, Syn. Eurybia Gunniana. A handsome shrub bearing large heads of white composite flowers and very small leaves, it is useful for training against dwarf walls. O. Haastii is a most useful evergreen flowering shrub, having small box-like leaves of a rich dark green which are white on the underside; literally covered with heads of white flowers in the Summer and Autumn, and quite distinct from the preceding variety, being of sturdier, stronger growth. This species is invaluable for planting in seaside gardens. S.

Osmanthus ilicifolia. An evergreen shrub effective in the border, somewhat resembling a holly, for which it is sometimes mistaken, having thick, prickly foliage and very fragrant, small, white flowers. There is a variegated form of this species which, however, is not quite so hardy. O. fragrans has creamy white flowers and the foliage is slightly serrated but not prickly like the foregoing varieties. T.S.

Pæonia moutan, Upright or Tree Pæony. With their large showy flowers often from six to eight inches across, deserve to be cultivated much more extensively than is now the case. The many varieties, from pure white to rich purple, will succeed in any good garden soil.

Pavia, Buckeye, Bush Horse Chestnut. A genus of hardy deciduous shrubs sometimes included under Æsculus, which they very much resemble. The foliage is very handsome, the leaves being composed of from five to seven leaflets. The best varieties are, P. alba or P. macrostachya, a most effective shrub, bearing white flowers in May or June; height six to eight feet. P. Californica, a very handsome shrub with very fragrant white or rose coloured flowers, grows to a height of from twelve to fourteen feet. P. flava (Sweet Buckeye) with pale yellow flowers; and P. rubra (Red Buckeye) height eight feet.

Philadelphus, Mock Orange. Very ornamental deciduous shrubs better known under the name of mock orange or syringa, planted as groups, or in the mixed shrubbery, they are always welcomed by lovers of old fashioned flowers. They are not only perfectly hardy, but succeed in any kind of soil or atmosphere. The following are a few of the best varieties:—P. coronarius is the popular common syringa or mock orange, bearing white flowers with a strong Gardenia-like perfume, and of which there are several varieties, such as P. coronarius aureus primulæ florus, a double white variety, and P. coronarius aureus, golden leaved, keeping its leaves all through the season, also a dwarf variety, P. coronarius nanus, which is not however very well known and which, although beautiful when at its best, is not at all a free flowerer. P. Gordonianus is a handsome shrub with white flowers borne in great profusion, but lacking the scent of P. coronarius. P. grandiflorus has very large, white, sweet scented flowers. T.S.

Prunus pissardi is a very ornamental deciduous shrub of erect growth, the leaves being oval and of a deep reddish purple colour, making it very effective when grown as a specimen or in conjunction with other shrubs. It will bear hard pruning and may be grown with advantage as a standard. P. triloba, so named from its leaves being three lobed, is not so hardy as P. pissardi, a sheltered situation suiting it best. The flowers of both these species are white and appear early in Spring before the leaves.

Pyrus. *See* list of Climbers, page 156.

Rhododendrons. The hybrids of some of the hardy species are generally admitted to be the finest of all our hardy shrubs, being exceedingly ornamental and showing to great advantage when planted in groups and masses; embracing, as they do, every shade of colour from the purest white to the richest crimson and purple, the rich colours of some varieties being simply magnificent. When not in bloom, Rhododendrons are really fine shrubs, having the advantage of being evergreen and possessing splendid foliage. The effectiveness of masses of Rhododendrons is often lost by the indiscriminate mixing up of varieties. Much better results can be obtained by planting groups of six or eight together and confining the mass to say as many varieties, and by carefully arranging the colours. Rhododendrons, although peat loving plants, succeed admirably on any good loam provided that it does not rest on limestone or chalk. The hybrid varieties are numberless and it is a difficult matter to select a few of the best without feeling that there are many other good varieties which should be included. The following will be found excellent varieties:—

Rhododendron alarm, centre white deeply tinged with scarlet.
,, **album grandiflorum**, blush, large truss, fine foliage.
,, **atrosanguineum**, blood red.
,, **barclayanum**, bright rose, large truss.
,, **blandianum**, rosy crimson.
,, **boule de neige**, white, early.
,, **caractacus**, rich purple crimson, good truss.
,, **Causicum album**, white, fine foliage.
,, **Charles Bagley** cherry red.
,, **Cunningham's White**, most useful for general planting
,, **Charles Dickens**, dark scarlet
,, **Duchess of Sutherland**, rosy lilac.
,, **fastuosum fl. pl.**, double lilac
,, **Francis Dickson**, deep brilliant scarlet, first class variety.
,, **Frederick Waterer**, fiery crimson, very fine.
,, **Helen Waterer**, pure white with crimson margin.

Rhododendron, Iago, rosy carmine, early.
,, **John Waterer**, dark crimson.
,, **Lady Elinor Cathcart**, light rose with chocolate spots.
,, **Madame Carvalho**, pure white, fine truss.
,, **Mrs. John Clutton**, the best hardy white rhododendron
,, **Mrs. John Waterer**, rosy crimson.
,, **Mrs. Holford**, rich salmon, large truss.
,, **Nero**, dark rosy purple, finely spotted.
,, **Purity**, white with yellow eye
,, **Russellianum**, deep scarlet, large truss.
,, **Sir Isaac Newton**, plum colour.
,, **Stella**, pale rose with chocolate blotch.
,, **The Queen**, blush changing to white.
,, **The Warrior**, rosy scarlet.
,, **Verschaffeltii**, blush with chocolate spots.
,, **William Downing**, dark puce coloured.

Alpine Rhododendrons have a dwarf compact habit and are free flowering, and are suitable alike for massing, for the shrubbery border or for the rockery. The best sorts are :—

ferrugineum (The Alpine Rose), a beautiful variety with scarlet flowers and box like leaves.

hirsutum is most useful for massing by itself or with other dwarf varieties, and also makes a pretty group when planted near the margin of a stream or lake. It bears red flowers, and hirsute or hairy leaves.

myrtifolium, myrtle leaved, flowers purple.

præcox superbum, bearing lilac flowers.

Wilsoni is one of the best dwarf evergreen shrubs we have, deserving extended cultivation. It may be massed by itself, or with other dwarf varieties, or may be planted to the front of shrubbery borders.

The above varieties flower from May to July or later in cold situations.

Rhus cotinus Purple Fringe or Smoke Plant is a hardy deciduous shrub of a curious rambling habit, bearing a profusion of large panicles of purple coloured flowers in the summer. It is a useful plant for the shrubbery, for planting in masses on the lawns, or in groups by the streams. R. glabra is a handsome species with large compound leaves divided into numerous leaflets. R. glabra lacinata or fern-leaved sumach is a very ornamental variety of similar habit to the preceding but having the leaves deeply cut; both are good town plants, and when planted on the margin of water are very effective.

Ribes. Flowering Currant. These old fashioned cottage garden shrubs are general favourites, with their profuse bright flowers so welcome in very early spring. The following are deciduous and grow to a height of from five to seven feet. R. aureum, a golden yellow flowered species; R. Gordonianum, crimson and yellow flowers with a spicy and agreeable perfume; R. sanguineum, crimson flowers in long racemes, there are several varieties of this species, such as R. sanguineum atrorubens, which has deeper coloured, but smaller sub-flowers than the type, R. sanguineum glutinosum the flowers of which are rose coloured and in longer racemes, and R. sanguineum flora plena, the double crimson flowered currant. Flowering currants are at home under almost any conditions; are most reliable shrubs for town gardens, or near the sea, require no particular soil and will stand hard pruning. T.S.

Sambucus nigra aurea, Golden Elder, is an ornamental deciduous shrub suitable for large shrubberies. It is one of the very best plants for a town garden but for this reason, and also on account of its somewhat stunted growth, should not be planted in more favoured localities. Other varieties are S. nigra laciniata the parsley or fern-leaved elder, the leaflets of which are deeply cut, giving it a very distinct appearance; S. nigra laciniata aurea, a golden leaved variety, perhaps not so strong growing as S. nigra aurea but of a more elegant form; and S. nigra foliis argenteis, the silver leaved elder, which has leaves variegated with white, this latter I consider the most useful of elders. T.S.

Skimmia. These are very pretty dwarf evergreen shrubs, having thick, fleshy foliage, and bearing heads of white flowers in the Spring and clusters of bright red berries in the Autumn. S. Japonica is ornamental when in fruit. S. oblata has a dwarf compact habit and is one of the most beautiful species known. Among dwarf shrubs few surpass the Skimmia. T.S.

Spiræa. This is a large genus. The following are a few of the best shrubby species. S. bumaldi is a dwarf decidious shrub of compact growth, a beautiful plant when in bloom, being quite covered with rosy pink flowers in late Summer and Autumn. S. Anthony Waterer is a variety of similar habit, but the flowers are much deeper in colour, being bright crimson, lovely in bloom. S. Lindleyana a species of more straggling habit, the flowers are white and borne in long panicles. S. salicifolia grandiflora is very ornamental, having larger flowers than S. salicifolia. Other useful varieties are S. callosa alba, areafolia and Nobleana. T.S.

Staphylea, Bladder Nut. S. colchica is a handsome branching shrub, producing white flowers in large terminal clusters and growing from five to six feet high. It is very fragrant and hardy, and will succeed in any good garden soil, and loves partial shade. U.

Symphoricarpus. These are handsome deciduous undergrowth shrubs. The berries are eaten by game in the winter. S. racemosus, the common snowberry, is a useful plant with small pink or rose coloured flowers in Summer, and clusters of large white berries in the Winter. S. vulgaris foliis variegatis is one of the most useful of dwarf deciduous variegated shrubs in cultivation. It is of a very bright golden colour and is excellent for planting in the open or in shade, will grow in any soil, and is impartial alike to coast or inland. U.T.S.

Syringa, Lilac, deserves a place in every garden, not as is usual merely for the sake of variety, but arranged in masses, as pleached alleys, or in a border devoted entirely to them; they may also be planted as a screen, either in the shape of a thick hedge or border. The following are the cream of the family. S. chinensis has flowers of a rich violet colour, but in some soils of a paler shade; S. Japonica, cream coloured flowers borne in dense clusters; S. Japonica alba has immense clusters of pure white flowers; S. Josikæa, purple flowers with dark shining leaves; S. Persica, the Persian lilac, bright purple flowers and small shining leaves. There are numerous garden hybrid varieties of the common lilac S. vulgaris from which the following have been selected.—S. alba grandiflora, with large white flowers; Albert the Good, very large dark purple flowers; Charles X., flowers a reddish purple colour in large trusses, much used for forcing; Dr. Lindley, very large clusters of purplish lilac flowers; S. Lemoineii, double, rose coloured flowers changing to pale lilac; S. Michael Buchner, has fine clusters of double lilac flowers, and is a very distinct dwarf variety; S. President Grevy, double flowers of a beautiful blue in immense trusses; S. Princess Alexandria, pure white, one of the best white flowering varieties; S. rubella plena, a double red variety. T.S.U.

Tamarix gallica, The Common Tamarisk, is an excellent shrub for the seaside or any shrubbery; it bears small white or pink flowers in spikes, and very small leaves. T. parviflora has small pink flowers in dense spikes eight to ten inches in length. T.S.

Ulex Europeus, the common furze, gorse or whin, as it is variously styled in different districts, There is a double variety which is very effective and well worth cultivating, also U. nanus, a pretty dwarf species. Extremely useful in the treatment of the sides of drives, woodland walks, the wild garden, and other places where the dressed garden feeling needs to be subservient.

Veronica Andersoni an ornamental evergreen shrub, bearing pale bluish violet flowers which, excepting near the coast where it is hardy, requires a warm sheltered position as severe frosts are apt to cut the young wood. It is included among hardy shrubs as it thrives well in some parts of this country. V. buxifolia is stout, compact, from two to three feet high, with shining box-like leaves and white flowers. V. carnosula is a prostrate variety, bearing white flowers and very thick fleshy leaves which have a pretty bluish tint. V. Traversi is hardy, dwarf, and compact with stout stems, producing spikes of pretty white flowers with which it is almost covered in the Summer; the leaves are small and narrow. Height two to four feet. S.

Viburnum opulus sterilis, Guelder Rose or Snowball Tree. A very interesting and beautiful deciduous shrub which bears large globular trusses of glistening white flowers, very effective for the shrubbery. It is quite hardy and succeeds almost anywhere, growing to a height of from six to eight feet. For Viburnum tinus see Laurustinus. T.S.

Weigelia. Syn. Diervilla. Handsome flowering shrubs well deserving more extended cultivation, they thrive well in any ordinary garden soil, and are well adapted for the shrubbery, they are very profuse bloomers and have a graceful spreading habit, with their long racemes of beautiful bell shaped flowers in Spring, and gorgeous foliage in Autumn. W. amabilis has pink flowers and fine large foliage, and blooms freely in the Autumn. W. candida is of vigorous habit and bears an abundance of white flowers in Summer. W. Eva Rathke is a variety with purplish red flowers. W. hortensis nivea is a dwarf, white flowered variety of spreading habit with large leaves. W. rosea is the best known and most largely grown of the Weigelias, bearing rose coloured flowers. W. rosea nana is a dwarf form of W. rosea. T.S.

Xanthoceros sorbifolia. A somewhat rare shrub or small tree of erect growth forming a round bush. The stems are covered with smooth reddish bark, and the foliage somewhat resembles that of the mountain ash. The flowers are white and are borne in terminal racemes in the Spring.

EVERGREEN SHRUBS.

In addition to the foregoing there are a number of evergreen shrubs which are grown entirely for their foliage. True there is no great list of these, but all the same they are amongst the most valuable shrubs which the garden maker has at his disposal.

Tree Box is valuable as a town plant, as undergrowth, or for shady borders; also for the formation of hedges or as single specimens for clipping or otherwise. The best varieties are, the Handsworth box, of a bright shiny greyish green tint, which has somewhat larger leaves than the common variety, and a new broad leaved variety called Buxus latifolia nova, which is darker in colour than the preceding. Another very

useful variety is Myrtifolia, the leaves of which are smaller and which is very effective as a dwarf shrub; there is also a large leaved golden variety, B. Japonica aurea, which grows naturally into a compact pyramidal cone. The common box is Buxus sempervirens. T.U.S.

Evergreen Oaks (Quercus) are, in some localities invaluable. This is especially so near the coast or in suburban gardens which are near smoky towns. Along the South and West coasts of England they grow and succeed quite close to the sea, but in many places along the East coast, especially if in exposed situations, they are not so successful. The effect of a short avenue of evergreen oaks, more particularly when the branches meet over the path, is very fine indeed, while for wind screen they are also most valuable, the density of foliage forming a veritable wall of greenery. Evergreen oaks are very unsatisfactory to establish unless they are purchased in pots, in which way many nurserymen grow them. The best varieties are; Q. Austriaca sempervirens, an exceedingly handsome evergreen; the Luscombe oak; Bordis oak, a variety with small foliage and one which may be trimmed as a bush; the Holly or Holm oak, a variety with handsome foliage, and laurel shaped leaves, of free growth. T.S.

Euonymus, is another class of evergreen shrubs very useful for planting seaside or town gardens. In London, there are few if any varieties of shrubs which succeed so well, whilst the number of diverse varieties almost makes it possible to make an effective plantation by their use only. There is the common Japonica with its rich dark green foliage, and E. argentia variegata which is a silver leaved variety; there is also a golden variety called E. ovatus nanus. In addition to these here are two very beautiful variegated varieties viz., E. latifolius albo-marginatus and E. macrophyllus ovatus aureus, the golden and silver varieties of E. latifolius; there is also a capital variety for use as an edging, E. radicans albo-marginatus which is also useful for covering dwarf walls. S.

Hollies are, of all evergreen shrubs the most reliable. Their extreme hardiness in all sorts of positions, their power to withstand smoke and chemicals, and the fact that, whilst preferring a moderate heavy loam, they succeed on almost any kind of soil and will grow in shade or sun, coupled with their power to withstand strong draughts and biting winds, gives them a unique position among evergreen shrubs. In addition to this, hollies are interesting from the fact that they are truly British shrubs, most of the varieties having sprung from the common Ilex aquifolium. Amongst the large number of sorts now grown, only a few are selected, but this list will be found quite long enough for practical purposes. Taking the green varieties first, the following are all good. T.U.

Ilex aquifolium. The Common Holly, most valuable for hedges.

,, **balearica.**

,, **contorta** (Corkscrew Holly). This variety is of moderate growth and compact habit, with smooth twisted leaves.

Ilex Dahoon or I. Scotica. A very hardy, smooth leaved variety.

,, **Donningtonensis.** An excellent variety for standing the smoke of towns.

Ilex ferox, Hedgehog, a dwarf variety with very prickly leaves. The plant is of very compact habit, more inclined to make a spreading than an upright bush.

,, **fructo luteo**, Yellow Berried. This variety has the attraction of bearing its beautiful yellow berries on very young plants, but apart from this it is an excellent green holly.

Grecian Holly.

Ilex Hodginsii. Probably the best of the broad leaved varieties and one which is a great favourite with town gardeners. It is a sturdy grower, makes a very handsome shrub.

Ilex laurifolia. Of all green hollies this is the handsomest, its fine dark glossy leaves giving it a massiveness which renders it a very desirable variety for the back of a shrubbery border.

,, **madeirensis** It bears its handsome red berries on young plants.

,, **minorca**, balearica. A small leaved variety, and a very excellent sort for borders.

,, **myrtifolia**, Myrtle leaved. Also a small leaved variety, the stems of this holly add much to its effectiveness.

,, **platyphylla.**

The following are gold and silver variegated varieties :—

Ilex Aquifolium albo-picta, Silver Milkmaid, as yet rather a scarce variety, when more plentiful will become a favourite.

,, **Argentea variegata.** The small leaved silver variety.

,, **aurea Regina**, Golden Queen. This may be regarded as the finest of all varieties of variegated Hollies; the leaves which are large, are of a beautiful golden colour; it makes a good standard and shaped pyramid.

,, **contorta aurea maculata.**

,, **Dahoon variegata.**

Ilex Ferox Argentea, Silver Hedgehog.

Gold-striped Holly.

Ilex latifolia aruea marginata.

Silver Queen Holly. The best of the silver hollies, foliage large and finely silvered, it is much better grown as a dwarf bush than as a standard or pyramid.

Waterer's Holly. For formal standards, pyramids, cones, or other shape, this variety has no equal, being of slow but compact growth, it is more easily kept in form than any other, it is very hardy and stands smoke well.

Laurels are so well known as to require little notice here. It may however, be well to give a word of caution, as so many gardens give one the impression that they have been planted entirely with them, owing to their vigorous growth having gradually ousted the more beautiful but slower growing shrubs. Laurels should generally be considered as nursers, planted to furnish the beds and give protection to other shrubs until they are sufficiently established to take care of themselves, then lifted and used elsewhere as undergrowths for which purpose they are invaluable. They may be also planted permanently in places where a quick growing screen is required, or for furnishing a steep bank with foliage instead of grass. Laurel hedges are not, as a rule, a great success as they become, in a very few years, ragged and woody at the bottom. The best variety for this purpose is Laurus Caucasica, which, if kept low and trimmed with a knife,

instead of shears, makes a fairly good fence. As an undergrowth, Laurus rotundifolia is probably the best variety. Laurus latifolia makes a fine shrub if kept carefully pruned. For planting a bank the common laurel is as useful as any. T.S.

Portugal Laurels are in every way most valuable shrubs and adapted to any position, windy, exposed situations, or in most town gardens. For hedging they are superior to the common laurel the smaller dark leaves giving it a much neater appearance. T.S.

Phillyreas. These comparatively little known shrubs are very similar in appearance and growth to small leaved evergreen oaks. They make very fine bushes, growing up to eight or ten feet in height; they succeed in most soils and are valuable for town or surburban gardens, or for cold, windy situations. There are not many varieties but the best are P. augustifolia and P. oleæfolia. T.S.

CHAPTER XIV.

FOR WALLS, PERGOLAS, BOWERS, TRELLIS, PILLARS, &c.

Few classes of plants have such a hold on the lovers of the beautiful as climbers. Even architects, who some years ago advised the banishment of all vegetable life from the walls which their ingenuity had contrived, are now strongly in favour of their use; thus recognising they are indispensable, not only for the decoration of plain wall surfaces, but also for beautifying portions of buildings, which, owing to utilitarian requirements, would otherwise be unsightly. In the garden they are useful for training over verandahs, making bowers, forming sheets of pleasing foliage, and delighting the eye with their brilliantly-coloured flowers. Wherever there are terrace walls with flower beds in front, it will considerably assist the general effect if the wall is diversified with choice Ivies, Ceanothus, or Cratægus, all of which have foliage which make a much more effective background for flowers than brick or stone.

A number of plants such as Garrya elliptica and Berberis Darwinii, which are of shrubby growth, are included in the list of climbers. These are intended for covering low walls, or for planting in positions against the house or other buildings of no great height. In such cases these plants might be trained as half climbers and half bush, the principal branches being secured to the walls, but the lateral shoots allowed to grow outwards. In this way considerable variety would be gained.

Ampelopsis Veitchii (Small-leaved Virginian Creeper), one of the most beautiful of climbers, charming alike in Spring time when bursting into leaf and in the Autumn when the leaves die off in the most gorgeous glowing tints. This climber does not like new

cement work ; it is however very easy to rear, and once established grows at a remarkable speed, requiring no nailing and growing in almost any atmosphere ; other varieties are Purpurea, a seedling variety of great merit, which has purple-leaves. Hederacea, common Virginian creeper, a rapid grower, foliage turns very charming colours in Autumn. For covering balconies, trellis, or where immediate effect is desired, this climber is most valuable. Nurserymen can often supply plants with strong growths eight or nine feet long.

Aristolochia Sipho, the large-leaved climber which is growing over Professor Ruskin's house at Brantwood It is a deciduous variety, but the shoots are, like the jasmine, green in winter. In late Autumn the plants present a very gorgeous appearance. This plant will grow in almost any aspect.

Buddlea globosa, described in the list of shrubs. Orange-coloured flowers. It is an excellent shrubby climber for covering walls, and one which does well by the sea.

Calystegia Pubescens, fl. pl., (The moon flower). A convolvulus-like flower is useful for covering pergolas, arbours, and trellis, will grow quickly in any warm dry soil. There is a fine plant of the single variety on a boatman's cottage at Waterhead, Ambleside, which is much admired by visitors.

Ceanothus. In warm sheltered positions, or near the coast, there are few climbers which surpass the Ceanothus. The habit of the plant which is half shrubby and evergreen, suggests its use in many positions for which it is difficult to find a suitable climber, as for instance round a verandah pillar, clothing a piece of blank wall, or against a high terrace wall. It is not perfectly hardy in Scotland or the North of England, and does not succeed on a cold clay soil. The best are, Gloire de Versailles, with large panicles of sky-blue flowers ; a fine Climber. C. Azurea, pale blue, and C. Divaricatus, a very pale blue variety.

Chimonanthus fragrans grandiflora (Winter Sweet). A delightful Winter flowering climber. The flowers which are borne upon the naked stems like jasminum nudiflorum, are of a delicate yellow colour and very fragrant. This climber may be regularly pruned, much in the same way as a red currant, the flowers being produced on the young wood.

Cotoneaster Simmondsii although usually considered a shrub or hedging plant, or as a shrub for game cover, makes a fine wall plant. It is almost evergreen and is covered with red berries during the Winter. C. Microphylla is a neat-growing shrub with small box-like leaves, and an abundance of red berries in the Winter : for covering dwarf walls this is one of the most useful plants in cultivation. I have seen this used with great effect in conjunction with C. Simmondsii, the latter being trained up the jambs and mullions of a window, and C. microphylla under the window, the whole forming a pleasing mass of greenery.

Cratægus Lelandii, a charming climber, with clusters of berries in the Winter and heads of thorn like blossoms in the Spring. Pyracantha, small white flowers in Spring, and large clusters of bright red berries during Autumn.

Clematis. Although these are among the most popular climbers grown, they are not planted nearly as extensively as they deserve to be. The ease with which they can be reared ought, in itself, to be sufficient inducement to extended cultivation. For giving a picturesque character to a cottage in the least possible time C. montana is difficult to beat; for the porch C. Jackmanii with its beautiful purple flowers, will, within a very short time, make a show; for a pergola C. flammula, C. montana or C. vitalba, are excellent. The choicer varieties such as C. beauty of Worcester, Anderson Henryi, etc., make a grand effect when grown over wooden pillars, in fact there are few positions in which Clematis of some sort may not be planted. No fear need be entertained as to their becoming monotonous, the number of varieties which can be purchased is quite sufficient security against this. The following are all good varieties.

	Time of Flowering.
Anderson Henryi, one of the best; creamy white large flowers, a good variety for training over trellis ...	July to Oct.
Alba Magna, white flowers and purple-brown anthers	July to Oct.
Beauty of Worcester, produce both single and double flowers on same plant, bluish violet, white stamens. It is a vigorous grower and a remarkably free and continuous bloomer, producing flowers at almost every joint... ...	June to Oct.
Countess of Lovelace, bluish violet, double	June to July
Louis Van Houtte, violet purple, a free grower and hardy variety	June to Oct.
Duchess of Edinburgh, double white, an excellent and sweet scented variety ...	June to July
Flammula, sweet scented, white, recommended for pergolas	June to July
Jackmanii, intense violet purple	July to Oct.
,, **alba**, fine white	July to Oct.
Jackmanii superba, colour more intense and somewhat later than Jackmanii ...	July to Oct.
Lady Carolina Neville, French white, with mauve bars ...	July to Oct.
Lord Neville, dark plum colour, the stamens are much lighter but the anthers are dark, the flowers are crimpled, which added to the colour gives the plant a very distinct appearance ...	July to Oct.
Madame Edouard Andre is of the Jackmannii type but eclipsing that variety in colour, which is of the most brilliant crimson, a colour hitherto unknown amongst Clematis. It is very hardy and a rapid grower ...	July to Oct.
Montana. Although a small flowered variety, this is one of the most useful of climbers, growing almost anywhere. It is however inclined to get ragged in appearance if allowed to grow without training or pruning	

	Time of Flowering.
Mrs. George Jackman, satin white, very beautiful ...	June to Oct.
Madame Grange, crimson, violet tinted red in centre, very distinct	July to Oct.
Miss Bateman, white, red anthers...	May to July
Purpurea elegans. deep violet purple, one of the best of its class; it is very effective when planted in conjunction with C. Anderson Henryi	July to Oct.
Princess Beatrice. A new variety of merit. The flowers which are 6 to 8 inches across, are of great substance, the petals being broad and overlapping each other. The colour of the flower is a silvery lilac ...	
Sir Garnet Wolseley, slaty-blue	May to June
Venus Victrix, a fine double-flowered variety, lavender blue, beautiful form ...	July to Oct.
William Kennett, deep lavender	June to Oct.

Coccinea. An American variety which is quite unlike our Clematis in growth or flower. It succeeds against a south wall if the soil is warm and moderately dry, otherwise it is disappointing. The flower buds are about the size of a filbert nut, the top portion opening back and giving a fleshy, bell shaped, scarlet flower.

Corchorus (Kerria), an old-fashioned climber with double yellow flowers, an excellent seaside plant; a climber which deserves to be planted more frequently.

Cydonia (Pyrus) Japonica, a showy wall shrub, bearing clusters of large scarlet apple-like blossoms early in Spring and large fruit in Autumn. Alba, white flowers. Maulei, is a grand decorative variety, fruit very large.

Escallonia. A popular climber for sea-side gardens, excellent for clothing low buildings or walls. The two best sorts are macrantha, pink flowers, and rubra, fine dark variety.

Garrya elliptica. In foliage this reminds one of an evergreen oak. Although usually considered a shrub, it makes a most excellent wall plant. The great beauty of the plant is owing to the large number of golden yellow hazel like catkins which hang from the plant throughout the Winter months, thus adding interest to the walls at a time when most climbers are dormant.

Honeysuckle (Lonicera), the best varieties are early and late Dutch and the scarlet trumpet. Although amongst the best known of climbers, they are not half so much planted as they deserve to be. For walls having a North-West and North-East aspect, and for planting in shade, they are indispensable; whilst for bowers, covering trelliage and training up pillars they have few equals, combining beauty of flower with the most delicious scent.

Ivies (Hedera), are so well known that little needs to be added except that the three most useful varieties for the garden maker are the common Irish, rægneriana, and digitata, all green varieties which are however quite distinct in character from each other. The most approved varieties are :—

MAGNOLIA CONSPICUA AT WYNLASS BECK WINDERMERE. PHOTO BY BRUNSKILL

No. 120.

IVIES.

atropurpurea, a very attractive variety of the common Ivy, the foliage turning a beautiful deep bronze during late Summer and Autumn.

common Irish Canariensis, the quickest grower.

digitata, leaves deeply divided; commonly called "The finger Ivy."

new bronze, beautiful rich bronze, one of the most effective varieties grown.

rægneriana, Goliath Ivy, large dark green leathery heart-shaped leaves, close grower and free.

madeirensis variegata, finest of all the silver-leaved Ivies.

marginata grandis, free growing variety with bright silver margin.

marmorata minor, pretty neat foliage, elegantly marbled white.

Magnolia grandiflora and Exmouth Variety are the well-known evergreen trumpet flowers. The best deciduous varieties are **M. conspicua, M. Soulangeana, M. Llenie**, all are splendid plants for training against walls, where sufficient space can be allotted to them. *See* accompanying illustration.

Jasmine. Few climbers are more commendable than Jasmines, they are perfectly hardy and succeed almost anywhere; although most of the varieties are deciduous they are to all appearance evergreen, as the stems are always green. All the varieties are sweet scented

and free flowering; all are very neat in habit requiring very little attention in the way of pruning. For planting against trellis work or walls they are most effective; the best varieties are: The common white and yellow; nudiflora, the latter, a strong growing variety which flowers all through the winter months. Revolutum, is an evergreen variety which bears a profusion of golden yellow flowers. This variety is often planted as a cool greenhouse climber, but along the coast and also in many inland districts it is perfectly hardy.

Tropæolum speciosum, (Flame Flower). The scarlet-flowered climber which makes such a splendid sheet of colour in front of many Westmorland cottages. Succeeds best in an East or West aspect.

Wisteria sinensis, a most beautiful deciduous climber, with large bunches of lilac flowers. When once established it grows very rapidly and soon covers a large space.

HARDY ROSES. For walls, pillars, and bowers. Whilst fully acknowledging the great beauty of many of the new hybrid perpetuals, and the desirability of finding a place for them, I do not like to think they should occupy the entire garden to the exclusion of many varieties which helped to make, and which still make, some of the older gardens so delightful. The fine old Scotch climbing Roses, so wayward in their growth, but covered with clusters of fragrant flowers, the Banksian and Boursaults, the old Provence Roses, and amongst the dwarfer sorts, Madam Plantier, Crimson Bedder, York and Lancaster, the old moss and cabbage Roses, are, notwithstanding all the recent improvements, Roses which might still be planted with great advantage in our gardens. Roses have, to the garden designer, other qualities than mere size, and for this reason he is much more interested in the good work done by rose-growers in the raising of the many magnificent varieties of hardy tea roses than in some of the later additions to hybrid perpetuals. The single varieties of roses and briars, are now very numerous. It is only necessary to mention Paul's carmine pillar and Lord Penzance's sweet Briars, to realize how much our gardens have been enriched by the indefatigable industry of rose enthusiasts.

Climbing Roses. Aimèe Vibert, clusters of beautiful white roses, a continuous bloomer, excellent in flower and foliage; as a white pillar rose it has few equals.

Alice Gray, creamy blush, elegant.

Ayrshire Ruga, pale flesh, very fragrant.

Queen of the Belgians, white.

Banksian Fortuniana, white, large and sweet, very fine. There are also the common white and yellow varieties, both of which are beautifully scented.

Boursault. There are a number of varieties of boursault roses, but the best for general planting are, amadis, a large crimson flowered variety; elegans, crimson, purple and white stripes, and inermis, a bright red.

Cheshunt Hybrid, cherry carmine, large, full open flowers, a very free Autumnal bloomer.

Devoniensis, creamy white, very large and full, superb.

Félicité Perpétué, creamy white, very double, in clusters.

Gloire de Dijon, yellow tinted with salmon, a very fine rose,—the "rose of roses," without question the finest and most useful climbing rose in cultivation.

Harrisonii, golden yellow, very free blooming.

Macartney, an extremely pretty single white rose which may be trained over walls, fences, pergolas, trellis, or almost anywhere where freedom of growth is a desideratum.

Multiflora, pale flesh.

Musk, as the name implies these are fragrant; the following are good, viz.:— Fringed, a pink colour with cup shaped serrated petals, Princess de Nassau, with yellow cup shaped flowers, and Rivers which has cream coloured flowers.

Noisette Roses. The roses in this class mostly flower in clusters, they are the finest of roses for South and West walls. For planting against terrace walls there are very few climbers to equal them. Most of them have large and handsome flowers, are highly fragrant, and of vigorous climbing habit.

Bouquet d'Or, deep yellow, shaded copper.

Celine Forestier, lemon, good free bloomer.

Cloth of Gold, yellow, large, and very splendid.

Coquette des Blanches, pure white, very fine.

Jaune Deprès, deep reddish yellow, fine.

Lamarque, pale lemon, large and splendid.

Reve d'Or, deep yellow, sometimes coppery.

Soflaterre, sulphur, large and very double.

Triomphe de Rennes, deep lemon, large, full, and fine.

William Allan Richardson is one of the best known popular roses in cultivation. This variety is, owing to its beautiful foliage and profusion of rich orange coloured flowers, worthy of a position on every rose wall.

Crimson Rambler (Polyantha Rose). This variety is, to the garden designer, a valuable introduction. If he wishes to clothe a low trellis or pergola quickly it is invaluable, as a climbing plant it is fine for breaking up plantations of evergreens with pillars of brilliant colour. Other varieties of Polyantha Roses are Bennett's seedling, sometimes called Thoresbyana, a white flowered variety which owing to its pendulous habit, is most useful for covering bowers and pergolas; there is also the well known and deservedly popular variety Dundee Rambler, which has white flowers slightly suffused with pink. This rose is one of the most useful varieties in cultivation.

Princess Marie, a beautiful crimson variety.

Single Climbing and Pillar Roses and Briars. This is a most interesting and useful class of roses which strangely enough has been very much overlooked: some of the varieties are simply charming for training up pillars. The following are the most distinct:—

Rosa Alpina, the parent of the Boursaults, is a very strong grower, flowering very early in the Spring; colour rosy red.

Rosa Brunonis, or white Indian Rose. This variety does not appear to be grown by many nurserymen, probably because so seldom asked for; given plenty of room however, it makes a fine climber; as a single plant will cover a large wall space. The flowers, which are borne in clusters, are pure white, the centre being filled with yellow, fluffy stamens.

Rosa Gigantea (Indian Rose). This is an almost continuous bloomer; several varieties are to be obtained but the pink and crimson forms are the best.

Austrian Briars (Copper and Yellow). For planting along a low trellis or short pillars, these give, when in flower, an effect unlike any other rose. The colour alone is sufficient to attract attention, to this is added a flower of perfect shape, borne in such profusion as to make one mass of colour: these roses are not only useful for pillars but also for planting as masses on banks or on rough ground.

Paul's carmine and single white, both these are useful for planting against walls or trellis, or for forming rose banks, both are of vigorous growth and very floriferous, the flowers being borne in long succession. Paul's Carmine especially may be considered as one of the most beautiful single roses in cultivation.

Lord Penzance's Sweet Briars may be classed amongst the finest introductions to our gardens in recent years. This will be realized when it is stated that to the fragrance of the old sweet briar has been added beauty of form and size, and colour of flower; the latter being as large as those of Austrian briars, while the colour ranges from white to dark crimson. Briar roses will be found most useful for forming masses of colour on the lawn or for planting rough land or banks; they may also be used for pillars, low fences, or walls, or for training as loose hedges. The best varieties are:—Amy Robsart, Anne of Geirstein, Brenda, Catherine Seyton, Edith Bellenden, Flora McIvor, Jeannie Deans, Julie Mannering, Lady Penzance, Lord Penzance, Lucy Ashton, Lucy Bertram, Meg Merrilees, Minna, and Rose Bradwardine.

Tea Roses. This class is easily distinguished from others by the peculiar and delightful fragrance of the flowers. They are invaluable as supplying the various shades of yellow wanting amongst the hybrid perpetuals, and also because they are so charming for covering dwarf terrace walls having a south aspect. A warm aspect with well drained soil suits this class best. The following are some of the best varieties :—

Aline Sisley, deep purple rose, which changes to violet-red.

Anna Olivier, flesh coloured rose.

Belle Lyonnaise, deep yellow changing to salmon.

Catherine Mermet, flesh-coloured rose and of exquisite form.

Comtesse de Nadaillac, bright rose with apricot centre.

Duchess of Edinburgh, deep rosy crimson, fine form.

Homer, white tinged salmon.

Isabella Sprunt, sulphury-yellow.

Jaune d'Or, fine golden yellow, free bloomer.

Madame Caroline Kuster, beautiful orange-yellow, free flowering.

Madame de Watteville, light salmon with darker margin to petals.

Madame Ducher, clear yellow, medium size, vigorous.

Madame Falcot, dark apricot, changing to yellow.

Mdlle. Henriette de Beauveau, bright yellow, large, perfect habit.

Mdlle. Marie Arnaud, fine canary yellow, passing to white.

Marie Van Houtte, yellowish white, striped and edged with bright rose.

Meteor, rich, dark, velvety crimson, exceedingly free.

Niphetos, deliciously sweet and highly prized for its lovely pure white buds.

Niphetos, Climbing, new, white flowers, fully equal to the old Niphetos, of good climbing habit and free blooming, a valuable variety. Succeeds perfectly on a terrace wall in a Westmorland garden.

Perle de Lyon, deep yellow, large, very full, and of fine form.

Perle des Jardins, pale yellow, occasionally deep canary.

Rubens, white, tinted rose and fawn.

Safrano, bright apricot, changing to fawn.

Sunset, a sport from Perle des Jardins, flowers similar to that variety in form and substance, but a deep apricot in colour.

The Bride, a white sport from Catherine Mermet.

W. F. Bennett, crimson, large and double, very fragrant.

Hybrid Tea Scented Roses, these Roses are seedlings from teas crossed with hybrid perpetuals and are consequently more hardy than ordinary tea roses. Below are some of the best varieties.

Duke of Connaught, buds long and of fine form, colour deep velvety crimson.

Duchess of Connaught, delicate silvery rose with bright salmon centre.

Duchess of Westminster, flowers exceedingly large without the least coarseness, colour brightest cerise.

Jean Sisley, very large and full, colour outside petal rosy lilac, the centre bright pink.

Madame Etienne Levet, cherry red, edged copper yellow.

Mdlle. Blanche Durrschmitt, light flesh colour, tinted with salmon rose, turning to white.

Michael Saunders, good form, and very full of petals, colour bronzy-pink.

Pierre Guillot, growth vigorous, flowers large and full, bright red petals, veined with white.

Viscountess Falmouth, a very delicate pinkish rose, the reverse of the petals being bright pink and highly scented.

LIST OF HYBRID PERPETUAL AND OTHER ROSES

SUITABLE FOR MASSING IN BEDS AND ALSO FOR TOWN AND SUBURBAN GARDENS.

Deep Crimson, Bright Red, &c.

Alfred Colomb
Comtesse de Choisent
Duc de Rohan
Duke of Edinburgh
Duke of Teck
Dupuy Jamain
Earl of Pembroke
Eclair
Exposition de Brie
John Stuart Mill
Lord Bacon
Mdlle. Annie Wood
Marechal Vaillant
Marie Baumann
Maurice Bernardin
Marechal P. Wilder
Mrs. W. Turner
Mrs. Jowitt
President Thiers
Senateur Vaisse
Sir Garnet Wolseley
Wilhelm Kœlle
Chas. Lefebvre
Duc de Montpensier
Duke of Wellington
Fisher Holmes
Glory of Cheshunt
Glory of Waltham
Paul Jamain
Crimson Bedder
Queen of Queens
Souvenir de la Reine de Angleterre
Victor Verdier
Comtesse d'Oxford
Caroline d'Arden
Madame Gabriel Luizet
Armosa, Bourbon
Louise Margottin, Bourbon
Coupe de Hebe, Bourbon
Charles Lawson, Bourbon
Baron Gonello, Bourbon

White, and White Tinged with Pink.

Baronne de Maynard
Boule de Neige
Coquette des Blanches
Madame A. de Rougemont
Madame Freeman
Elise Bœlle
Olga Marise
Margaret Dickson
Merveille de Lyon
Mrs. Rivers
Mdlle. Bonnaire
Madame Plantier

Various Shades of Pink.

Anna Alexieff
Baroness Rothschild
Duchess de Morny
Francois Roicheton
Hippolyte Jamain
John Hopper
La France
Lyonnaise
Madame Knorr
Mdlle. Eugene Verdier
Jules Margottin
Magna Charta
Marquis de Castellane
Marguerite de St. Amand
Mrs. John Laing
Paul Neron
Pride of Waltham

Moss Roses. The original moss Rose is supposed to have been a sport from Provence, and now we have a numerous progeny retaining the mossy characteristic. No roses can be more interesting, and certainly none are sweeter or more beautiful in the bud. They are not well adapted for standards, neither are they suited for pot culture or forcing, but the common moss pegged down in beds of rich soil and annually manured is one of the most beautiful of all roses for bedding. Like the Provence they require high cultivation, and their increased beauty amply repays whatever additional attention they receive.

Blanche Moreau, pure white, large, full, and of perfect form; the buds and flowers produced in clusters.

Common or Old, pale rose, very large and full, well mossed, form globular.

Laneii (hybrid), rosy crimson occasionally tinged with purple, large and full and well mossed; foliage very large.

Little Gem, a miniature moss rose, forming compact bushes densely covered with small double crimson flowers beautifully mossed

White Bath, paper white, well mossed, exquisite in bud, the best White Moss.

China or Monthly Roses. For beds for the flower garden and for growing over trellis or cottage walls these roses deserve to be grown, as they are so constantly in flower during the Summer and Autumn and give so little trouble. In fact, when growing against a wall, the less labour is expended upon them and the better they seem to grow, although when grown as bushes the knife should be used pretty freely. There are many varieties of China roses, all of which, for simple unaffected beauty, are most valuable; for filling formal beds, edged with box, or stone, they seem peculiarly appropriate. The following six varieties are all good :—

Alfred Aubert, bright red, distinct colour, good form.

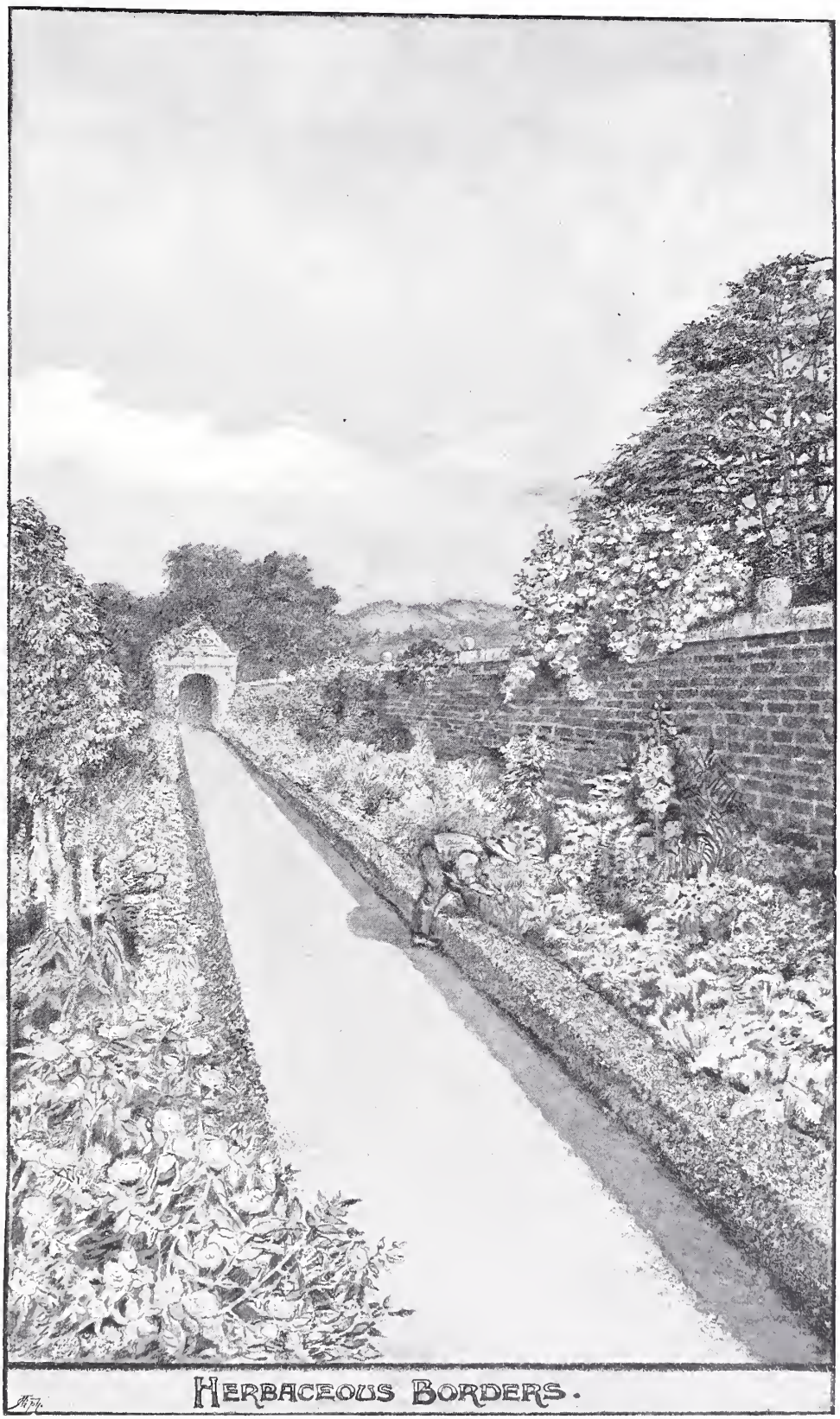
Common, bright pink, free flowering.

Cramoise Supérieure, velvety crimson, of medium size, very double, form cupped, exquisite in bud.

Ducher, white, large and free.

Fabvier, crimson-scarlet, of medium size, semi-double, form expanded; one of the most brilliant roses, excellent for planting in masses.

Purple, the most abundant bloomer.



HERBACEOUS BORDERS.

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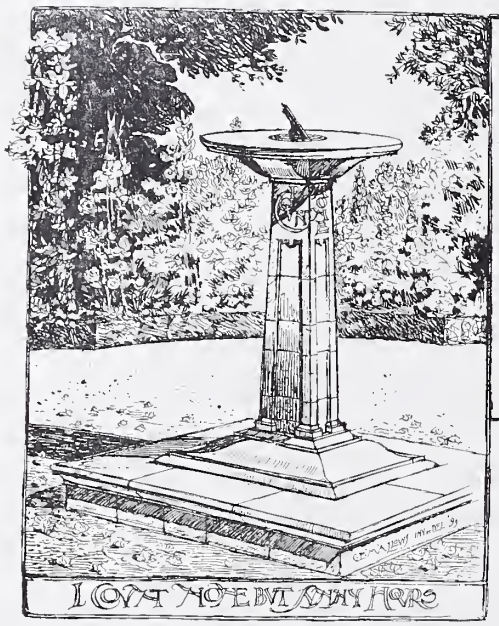
CHAPTER XIV.



HARDY FLOWERING PERENNIALS FOR BEDS AND BORDERS AND ALSO FOR NATURALIZING IN THE WILD GARDEN

Lists of hardy flowering plants do not, as a rule, find a place in works devoted to garden-designing. This is probably owing to the fact of there having been so much fashion in flowers, at one time scarlet Geraniums, Calceolarias, and Lobelias; at another time, carpet bedding; at another, sub-tropical plants, all reared at great expense and placed in a position for a very short-lived display during the Summer. Many nurserymen's catalogues contain excellent lists of hardy plants, but the large number of varieties offered are really confusing to the uninitiated. It is partly for the purpose of guarding against this mistake that the following lists are given; the varieties chosen being showy, of strong constitution, and such as require, on the part of the gardener, no special knowledge of the ways of hardy plants. The list given does not however, by any means exhaust the number of beautiful or desirable hardy perennials. Those who wish to have a really fine collection of hardy plants, and to know something about each, cannot do better than study Mr. Robinson's book, "The English Flower Garden," wherein are described most of the hardy flowering plants found in English gardens.

All the hardy perennials given in the following list might be planted at any time from March to September, provided they were obtained from the nurseries in pots; or they may be planted direct from the open ground from March to the middle of May, and at any time during September.

To the list of hardy perennials I have added a list of hardy bulbous plants, such as Daffodils, Wood Hyacinths, Anemones. This is a group of plants deserving the attention of anyone who has a garden.

Acanthus Mollis. A plant with fine, much serrated foliage, and flower spikes which often attain a height of 3 to 4 feet. An excellent plant for the wild garden.

Aconitum, or Monks Hood, an old fashioned, strong growing perennial. The finest are A. Napellus Albus; A. Versicolor, which is blue and white; and A. Autumnale, a fine purple, flowers late into September; 3 to 4 feet.

Alpine Phloxes, are a beautiful class of dwarf easily grown plants, suitable for growing over rocks. To ensure success plant in a good open soil. Amongst the best are P. vivid, a fine bright pink; P. Nelsoni, a fine clear white; P. atropurpurea of a rich crimson, flowering in the early Spring; and P. The Bride, white.

Aquilegias, a useful class of plants, better known as Columbines. They vary in colour and include whites, yellows, blues and purples. Amongst the best and most useful are A. Chrysantha, yellow; A. vulgaris alba, white; A. glandulosa a fine blue and white. These varieties are perfectly hardy, and do well in almost any position; height 2 feet.

Alyssums. The most useful for rock work are A. alpestre, montanum, saxatile compactum, all dwarf-growing varieties of a bright yellow, all do well in a dry sunny position.

Anemones, Wind Flowers, a large and charming class of plants of easy culture. The following should all have a place in the garden. Anemone apennina is a deep blue, and of dwarf and very free habit. A. nemerosa ranunculoides, a beautiful bright yellow; makes a fine contrast when seen growing amongst the blues, and has finely-cut foliage. A. nemerosa alba plena, the double white wood Anemone, and one of the finest, is a free bloomer. A. fulgens, the scarlet wind flower, bears pretty scarlet flowers about an inch and a half across, it is of easy growth and most effective, and grows to about fifteen inches in height.

Anthericum liliago, or St. Bernard's Lily, a good border plant of easy culture, bearing fine spikes of pure white flowers, about 2 feet high; flowering during the months of May and June.

Anthyllis atrorubens. A fine and most useful plant for a dry bank, heads of dark crimson, flowers rather resembling a large clover.

Armeria plantaginea rosea, Sea Pink, is a very effective plant of dwarf habit, with fine heads of rose coloured flowers about 12 inches high, flowering from May to the end of July.

Asphodelus ramosus, bears a fine bold spike of white flowers, does well in almost any kind of soil, and should be in every border; height 2½ feet.

Asters, or Michaelmas daisies, are indispensable as they make a show until the frost comes and blackens them. There are a large number of varieties, amongst which A. Harper Crewe, a fine large white, and A. amellus majus, a fine large blue; also R. Parker, a pale blue, will be found as useful as any. A. alpinus is of dwarf habit, not exceeding 6 inches, of a beautiful mauve colour, and very free, flowering from May to June, grows in any kind of soil.

Aubretias, of these there are several varieties, amongst which may be selected A. Leichtlinii, a fine clear rose; and A purpurea, both do well on a dry bank in ordinary soil. For rockwork or planting on rough dwarf walls in conjunction with Alyssums and white rock, they are lovely.

Campanulas, of which there are a great many varieties, are most serviceable as border plants, the best sorts being C. persicæfolia alba grandiflora, C. glomerata dahurica, and C. Burghali; the former grows to about 2 feet high with a large pure white bell, the two latter are purple, and grow to 18 inches high. Both varieties flower about July, lasting

to the latter part of August. C. macrantha has a good effect when planted in woods, etc., throwing up its tall spikes of deep blue flowers often reaching a height of five feet, it is of very easy growth, and succeeds almost anywhere.

Amongst the dwarf Campanulas the following are all good free growers: C. G. F. Wilson, a fine shade of purple and a very free flowerer; C. carpatica alba, white; C. turbinata, light blue; C. bavarica, blue, an exceptionally free grower; and C. pusilla and pusilla alba.

Centaurea, or Knapweed. Amongst the finest of these perennials will be found C. montana rubra, with very numerous large feathery rose-coloured flowers, 2 feet high; C. macrocephala, a fine plant growing to a height of 5 feet, with large handsome bright yellow flowers—it is of rather coarse growth, but looks well at the back of a border, where it can have plenty of room. These two varieties will be found useful for cut purposes.

Cheiranthus alpinus, or Alpine Wallflower, is an exceedingly pretty plant, bearing a profusion of bright yellow flowers from May into July; height 6 inches.

Cistus, Rock Roses, for planting on dry banks or rockeries nothing could be more effective. There are several free flowering varieties of various shades of colour, a few of the best are C. florentinus, a large white flowering variety, very free; C. algarvensis, a small leaved variety with bright yellow flowers and a dark ring round the centre of the flower, and C. formosus, a fine bright rose.

Coreopsis grandiflora. A splendid border plant with numerous large yellow flowers very useful for cut purposes. It is certainly the best variety in cultivation. It is of very free habit and blooms all the Summer; height 2½ feet.

Delphiniums, or perennial larkspurs, of which there are many varieties of all shades of white, blue and purple, make a splendid display and need very little attention, remaining in flower for about two months; height, 3 to 6 feet. No border of hardy perennials can be complete without them.

Dictamnus fraxinella. A well-known plant that should be in every border, bears spikes of flowers of a pale rosy pink with rather a curious scent. It is of free habit and likes good rich soil. 3 feet.

Doronicum excelsum, or Leopard's Bane, is a plant too well-known to need much description, colour bright yellow, and flowers in early Spring and far into the Summer. This is a plant that should be in every garden; height 2½ to 3 feet.

Epimedium niveum is a very excellent dwarf white flowering plant, the foliage of which is also very pretty and useful for cutting; will grow in shade, flowering about May.

Erigeron speciosus superbus, bears clusters of large mauve flowers from June to September; height, from 2 to 3 feet. An excellent border plant.

Eryngium alpinum, or Sea Holly, is a well-known plant, and one which shonld be included in every collection; it is a strong grower, succeeding in any good garden soil, flowering from June to September; height 3 feet.

Funkias, of which there are many varieties, make fine foliage plants; two of the best are F. Fortunei cœrulea and F. undulata marginata, the former being of a fine glaucous colour, and the latter beautifully margined with white; these will succeed in partial shade.

Galega officinalis alba, or goat's rue, a fine plant for the border, beautiful white pea-shaped flowers, which last well when cut. It is about 4 to 5 feet in height, and does well in any soil.

Helianthemums, or rock roses, no rock garden is complete without a selection of these pretty plants, as they are perfectly hardy and make a fine show. They vary in colour from white to deep red. The following are good, H. venustum, fine red; H. tomentosum, yellow; The pearl, white. They thrive well in a dry position in ordinary soil.

Heleniums, masses of beautiful bright yellow flowers which last well when cut. Amongst the most useful are H. pumilum, about 2 feet high; H. grandiflorum, 3 to 4 feet; and H. autumnale, which flowers more in clusters and lasts late into autumn; about 6 to 7 feet in height.

Helianthus, of which there are several varieties, make a fine show towards autumn, when flowers are getting scarce. Amongst these, H. doronicoides, a very free-flowering single variety, and H. soliel d'or, a double variety with fine quilled flowers, will be found as useful as any.

Helleborus, or Christmas Roses. There are a great many varieties of these, but H. niger major is one of the freest flowering sorts, bearing fine pure white blossoms. It is very useful for cutting purposes, and does well in a rather shady position.

Hepaticas. All varieties of these are useful for shrubberies and the wild garden. If the reader has not seen a woody glade, copse, or hedgerow garlanded with these golden harbingers of Spring, in lieu of description I would advise Take the first opportunity of doing so.

Heuchera sanguinea. This plant is one of the prettiest known, bearing numerous slender spikes of pretty scarlet flowers, which when cut are very useful for decorative purposes, looking exceptionally well by artificial light, it is of easy growth, height 2½ feet.

Hollyhocks, these are well-known and make fine border plants, growing to a height of 8 or 10 feet, and lasting for many weeks. They show to great advantage, and should be in every border, especially those on the terrace. Single varieties are almost as effective as the choicer and more expensive double sorts.

Iberis, or Perennial Candytuft. Corrœfolia is one of the finest. It has fine large pure white flowers, and comes into flower when the common varieties are done. This is an excellent plant for growing in the rock garden or on the top of walls.

Inula glandulosa, a useful plant 2 to 2½ feet in height, with fine yellow flowers in June and July.

Iris Kæmpferii. The Sacred Flower of Japan. Almost everyone who has seen a swamp knows the broad, succulent, green blades of the Flag, or yellow-flowered Iris, and the tall stem or sheath from which they spring. The Iris Kæmpferii are similarly recognized, but the flowers are of various shades of white, azure and dark blue, and dark blue and blue purple, attaining in some instances a diameter of from 6 to 12 inches under good cultivation. If allowed a fair quantity of peat to retain moisture, they succeed well in the border; they are also amongst the most valuable plants for the margin of ornamental waters. I. siberica is another effective plant for moist places, grass-like foliage

and numerous pale blue flowers streaked with white. The well known flag iris, I. germanica is another section, which may be planted in almost any soil or situation, all the colours found amongst other Iris are to be found in this class. In the autumn batches of Spanish and English iris, both of which are equally beautiful, may be found a place in the borders.

Leucojum vernum (Spring Snowflake), has pretty white flowers dotted with green, very much like a snowdrop. L. æstivum is similar to L. vernum but taller in habit. Both in foliage and flowers these are very effective throughout the Summer months; height 18 inches.

Liliums. There are many varieties of lilies which are well worth growing, and which make a fine show in the border. The following are all good: L. candidum, the old garden or Madonna Lily, which has pure white flowers, should find it a place in every border where the soil is moderately light. L. croceum, or orange lily, is a fine old lily, bearing six to eight orange coloured flowers in clusters, on stems varying from four to five feet in height. L. chalcedonicum Turk's cap has rich scarlet flowers in clusters of four to six on one stem. It is of easy culture, and is one of the finest varieties; there are very few hardy flowers which are so effective. L. Humboldtii is a tall growing variety, bearing numerous flowers of a pretty golden yellow with dark spots, and is of easy culture. L. tigrinum splendens, the Tiger Lily, is one of the most useful for borders, a free flowerer, the colour being orange scarlet with numerous dark spots. L. martagon has dark purple flowers, borne on stems four to five feet in height, and is of good habit. L. martagon album, a very fine white variety of the preceding, of handsome appearance, should be in every border. L. testaceum is a tall growing variety with clusters of salmon coloured flowers, very pretty and easy to cultivate.

Lithospernum Prostratum, for rockwork is as fine a plant as could be wished for. In colour it rivals the beautiful Gentiana verna, but is easier to grow, and thrives best in a sunny position; grown in a mixture of good sand loam mixed with a little sandstone if procurable.

Lupines. The white and blue make a fine show, growing to a height of about 3 feet, very free flowering.

Lychnis. Amongst this class of plants I should recommend L. chalcedonica, which has fine scarlet flowers from July to the beginning of September; height 3 feet; and L. viscaria splendens plena, a dwarf variety, very profuse flowering, of a rosy pink, flowering in the months of June and July.

Lythrum roseum, a fine showy plant, very free in habit, the flower spikes are of a deep rose and often attain to a height of four to five feet. It is also a very useful plant for marshy ground, or by the margins of lakes or streams.

Malva moschata alba. An effective border plant with clusters of pretty white flowers. It will grow in almost any soil; height 2½ to 3 feet.

Monardia didyma or Burgemot, a showy plant, bright red flowers, growing about 2½ feet high; flowers in the latter part of July, and lasts almost to the end of September.

Montbretia. A most useful class of plants with ornamental grass like foliage, the flower spikes in many various shades of colour, resemble Gladioli but on a much smaller scale.

M. crocosmœflora, with orange scarlet flowers, is one of the best for the border, and M. elegans, a pretty shaded yellow, and M. fairy star, a rich orange with yellow centre, are also very effective. The Montbretias grow and succeed almost anywhere, but prefer a fairly light soil. There are now quite a number of hybrid varieties reared in France, some of which are very charming.

Narcissus. Amongst the large flowered or trumpet varieties, some of the best are N. Empress, a beautiful variety with rich golden yellow trumpet and large white perianth; N. Emperor, a fine effective rich yellow; N. golden spur, a very showy variety, of a rich golden yellow, the trumpet being broad and reflexed; N. Johnstoni (Queen of Spain), a very pretty flowered variety with fine sulphur coloured flowers. N. maximus, one of the finest, having rich golden yellow flowers, the perianth being finely twisted; N. telamonius plenus is the old fashioned double daffodil, and still one of the most useful. A few good medium flowered varieties are N. Barrii conspicuus, which is one of the finest of this class, has a broad yellow perianth edged with deep orange, very showy. N. Incomparabilis giganteus, Sir Watkin, a very fine variety with fine sulphur perianth, sulphury white with a scarlet crown; N. incomparabilis cynosure has a large perianth, sulphury white; N. Leedsii variety; Mrs. Langtry, a pretty variety with broad white perianth, and a large white cup; N. C. J. Backhouse, a distinct variety with broad white perianth and yellow cup; N. triandrus albus, a very small flower, resembling the Cyclamen in shape, and creamy white in colour, very pretty; N. double orange phœnix, a showy variety with large white flowers, streaked with orange; commonly known as eggs and bacon. Amongst the short cup varieties may be named N. biflorus, a free flowering variety, bearing two flowers on one stalk, of a creamy white colour. N. poeticus ornatus, a fine free flowering variety, bearing flowers with a broad perianth and rich orange cup. N. poeticus plenus is a double white variety, very sweet scented and useful for cut purposes, but rather a shy bloomer. These do not by any means exhaust the many varieties of Narcissus, but will be found to contain a nice selection which might form the nucleus for a larger collection.

Ornithogalum nutans is well adapted for the wild garden; it flourishes and increases rapidly. The flowers are of a whitish green, and look very pretty in a cluster. O. umbellatum, Star of Bethlehem, comparatively unknown under its formidable botanical name, clusters of five or six pure white flowers on short stem; the bulbs should be planted in the autumn, when once established they should not be disturbed.

Orobus Vernus. One of the vetches, makes a pretty border plant, purple flowers, flowering in early Spring. There are several other varieties, but this is one of the best; 2½ feet.

Papaver Orientalis, or Oriental Poppies, make a fine show, and may be planted in almost any position where bright masses of colour are required. Colour flaming scarlet; height, 2½ feet.

Pæonies. No garden would be complete without some of these, they are easy of culture and make a brilliant show. As there are a great number of varieties it is a difficult matter to decide which are the best, but the following will be found to be good and reliable; merits which cannot be claimed for a number of the hybrids that are advertised:

Artheusa, which is a fine double of a peach colour; Madame Lemoine, a pure double white; and Emile Lemoine, a rich purple.

Phloxes. An indispensable class of plants of varied colours and easy culture, no border being complete without them. Amongst the early flowering varieties I should recommend Purple Emperor, Lady Napier, and A. M'Kinnon. For a selection of late flowering varieties none could be better than avalanche, which is pure white and a fine flower; ball of fire, a brilliant scarlet; and pantheon, a beautiful shade of salmon. Phloxes produce the finest blooms when the roots are regularly divided.

Physalis Francheti, a variety of Winter Cherry, makes a fine show in Autumn, having a bright crimson globe-shaped pod in which the fruit is enclosed; is very useful for cut purposes, lasting for many weeks, 2 feet.

Polemonium, or Jacob's ladder, is a well-known old-fashioned plant, which should be in every border. Richardsonii is a very pretty pale blue, and flowers for fully three months. The white form, P. Richardsonii album, is as free as the blue.

Polygonatum multiflorum, more familiar under the name of Solomon's seal, the white bell-shaped flowers, suspended from underneath the long, shapely, symmetrically-divided frond-leaves, or fronds, are effective in the border or in the wild garden.

Polygonum cuspidatum. A fine looking plant for places where it can have plenty of room for development, often growing to a height of 8 feet, with pretty white flowers. It grows well under trees, but should not be planted where it will be likely to smother small plants, as it propagates rapidly, and soon covers a large area.

Potentillas. There is a large family of these; the three varieties which are the most distinct are Californica, bright double yellow; variabilis, double orange and yellow, and purpurea plena. These will flower well from July to the latter part of August; height 1½ to 2 feet.

Primroses. Our beloved hedgerow companion, and the probable progenitor of the different varieties herein commended, has but to be mentioned to ensure it a hearty welcome to our wild gardens. The double yellow, double white, double mauve, and single varieties all do well in a nice cool, shady place, and will make quite a blaze of colour.

Pyrethrums. These will do well in almost any garden. There are now a great many varieties, both double and single, both of which are very useful for cut purposes as well as border decoration. They are very varied in colour and succeed in almost any soil or situation.

Telekia speciosa, a tall growing glaucus-leaved plant, with large spikes of yellow flowers; very suitable for rough places.

Thalictrum aquilegifolium, a useful border plant with foliage resembling the aquilegia; about 4 feet high, with fine feathery heads of white flowers. T. squarosa is also a very fine showy perennial with pretty foliage and white fluffy heads of flowers.

Tulips. Having regard to the extreme beauty and comparative hardiness of florist's Tulips, it is difficult to understand the way they have been neglected. These are not to be confounded with the varieties which are imported so largely from Holland, it is the old garden tulip which is here referred to. All these varieties may be used to great advantage in the borders, they are many and much varied in colour, and can now be

obtained from any nurseryman at moderate prices. They may be allowed to remain undisturbed in the borders from year to year.

Trillium grandiflorum, or American wood lily, when once established makes a charming addition to the border; having pure white lily-like flowers, dwarf habit, and liking rather a moist shady position, the habit of growth and general character of the plant is very similar to the Christmas rose.

Verbascum olympicum, conspicuous for its large white rosettes, clear, pretty yellow spike, varying from 6 to 12 feet high.

Veronica saxatile and saxatile alba, two very useful plants of a prostrate habit and very showy, perfectly hardy, and do well in good sand loam. V. rupestris is another prostrate variety with fine bright blue flowers.

Ranunculus aconitifolius plenus, or fair maids of France, does well either for border or bog garden, bears clusters of double white flowers, which are also useful for cut purposes.

Rheums. The ornamental character of the foliage of these plants should be sufficient commendation to secure them a place in any garden. One of the best is R. sanguineum, the foliage of which, when young, is a beautiful red, the flower spike being of the same colour, and often attains a height of 10 feet.

Rubus odoratus, a good plant for the wild garden, about 4 to 5 feet high, and covered with deep rose-coloured flowers.

Rudbeckia Newmanii, Newman's dwarf sunflower, colour bright yellow with a dark centre, flowering late into Autumn; height, 18 inches. R. laciniata plena, or golden glow, should also have a place in every garden, resembles a double Sunflower, but of a much finer substance, grows 5 or 6 feet high.

Saxifragas, an extensive class of alpines of acknowledged beauty, carpeting large spaces effectively. Amongst the best are, S. Burseriana, which flowers very early and forms nice silvery tufts with pretty pure white flowers borne singly on stalks about 2 inches long, and has a very pleasing effect; S. luteo purpurea, or Frederick Auguste, forms beautiful green tufts with pale yellow flowers; S. Cochlearis, a crested variety forming nice tufts, the flowers of which are a beautiful white. S. cotyledon, a very free variety of easy culture, forming silvery rosettes, the flower spikes often attaining 18 inches in height; of a spreading nature, and a beautiful white, and will do in almost any soil. Some of the mossy saxifragas are very useful for rather shaded positions, making fine green carpets. S. Wallacei, a beautiful form, having large pure white flowers; S. atropurpurea, with pretty rose coloured flowers; and S. pypnoides, will be found very useful varieties.

Sedums, These well-known and most desirable rock plants, will grow almost in any soil or position. A few of the best are, Sedum elegans, forming spiral tufts of foliage with bright yellow flowers; S. sexangulare, a creeping variety (resembling the common stonecrop), forming a carpet composed of a dense mass of verdant green stars, the foliage of which is of a crimson tint; and S. album, which is well known.

Sempervivums, lovers of quaint old cottages will not fail to recognize these plants, more

familiarly known as houseleek; and the scanty sustenance they obtain in the crevices of the rough-cast, or on the rugged projections of stone tabling, shows the ease with which they can be cultivated. S. arachnoideum, forms pretty rosettes covered at the top with a white down resembling a spider-web, giving it a fine appearance. S. triste, forms large rosettes of deep purple, and is one of the finest varieties. It is also a useful plant for edging purposes. S. californicum, about the largest variety of all, forming rosettes of a glaucous colour, the tips of the leaves being a dull brown.

Solidago, or golden rod, of a coarse habit, is thoroughly well suited to the wild garden; their tall spikes of bright yellow here show to advantage.

Spiræas, amongst these, S. aruncus plumosus takes the lead for border work, attaining a height of 4 feet to 5 feet, and having a flower spike of a fine creamy white. S. astilboides is also very useful, being much dwarfer in habit, flowers last well when cut. S. palmata, pink, and S. venusta, rose, are also very showy.

Symphytum caucasicum, or borage plant, makes a showy plant for the wild garden. A free flowerer, with fine bright blue flowers, early in the year.

Scilla. S. campanulata and S. campanulata alba are both effective in the border, throwing up large masses of flowers year by year, as for cultivation they simply require planting and leaving alone. They are very useful for planting in partial shade.

AQUATICS AND SUB-AQUATIC PLANTS.

For Planting in Ponds, and by the Margins of Streams.

Much more attention is now paid to this class of plants than was formerly the case; water and bog gardens forming a part of many garden schemes. This is not to be wondered at since Marliac has reared such superb Water Lilies, and Japan has supplied us with such very charming varieties of their sacred lilies (Iris Kæmpferii). Apart from these however, there are still a sufficient number of beautiful aquatics and bog plants to make a water garden desirable, whilst in many situations their use allows of pieces of ground, which are uninteresting and even objectionable, being converted into spots full of interest.

Acorus calamus or sweet scented rush, the foliage of which resembles an Iris and is evergreen, and when broken emit a sweet scent, they all do well in shallow water or in very wet ground on the margins of ponds, and are perfectly hardy.

Aponogeton distachyon or Cape Pond Weed. Often called Water Hawthorn from its beautiful fragrance, is one of the easiest water plants to cultivate. It bears numberless curious shaped white flowers dotted on the inside with small black dots; is fairly hardy and very free in habit.

Asphodelus lutea, a graceful plant for a moist position, has grass-like foliage and fine large spikes of bright yellow flowers, attaining a height of 3 feet.

Caltha palustris monstrosa plena, a double variety of the marsh marigold, with full, large, rich yellow flowers; makes a very beautiful margin to still water.

Cypripedium spectabilis. (The Mocassin flower). The finest hardy variety known, succeeds in a well drained moist position and likes peat. The flower stems vary in length from

6 to 12 inches with fine large white and shaded pink flowers, no bog garden is complete without this plant. C. calceolus, the British form though now very scarce in the country; has a flower of a fine shade of yellow with long dark brown petals. It does well in a good heavy soil with limestone and likes a rather shaded place.

Elymus glaucus. Is a very ornamental grass and when planted in tufts, makes a happy break to the margin of a stream, especially when the tendency of the surroundings are too tangled or disordered. Another beautiful grass is Carex pendula, a fine variety for growing in marshy places or under trees. It is very ornamental.

Ferns, no bog garden is complete without a few ferns. The well known Osmunda regalis or Royal fern is by general consent the finest, but other good varieties are Onoclea sensibilis, an American fern of easy growth which likes a shaded peaty position, and Struthiopteris Germanica, or ostrich feather fern, a fine large-growing variety, which is well worthy of a place; it is of very free habit, and soon makes a fine brake.

Houttonia palustris or water violet, has foliage resembling a fern and throws up a fine spike of flower about 6 to 12 inches in height, colour white shaded with pink, in about 2 feet of water.

Menyanthus trifoliata or Buckbean, a very free growing plant with fine sweet white flowers; useful for shallow water.

Nymphea. Water Lilies. A few of the hardiest are N. Marliacea chromatella, a beautiful yellow with finely marbled foliage; N. Robinsoni, a large flowering variety with rich vermilion coloured flowers of very free habit; N. alba rosea, a fine variety, the flowers rose colour, equal in size to the ordinary white water lily. N. alba, no sheet of water should be without this variety, the freest flowerer of all, the abundant quantity of bloom making quite a picture. N. nuphar lutea, the common yellow, is one that could not easily be done without, the foliage in itself being a recommendation.

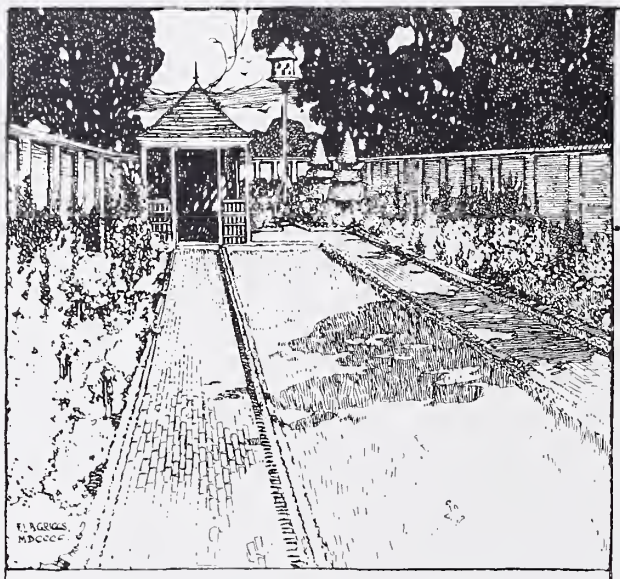
Parnassia palustris, or Grass of Parnassus. A pretty little plant for bog gardens, with dark green foliage and well-formed white flowers; very easy to grow.

Primula rosea, a plant easy of growth, with beautiful rosy pink flowers which are numerous and last for weeks together; planted between the crevices of rock near the waters edge it soon makes a fine carpet of colour. P. Sikkimensis, is another beautiful variety for a moist position, throwing up an abundance of fine primrose yellow flowers on stems about 6 to 12 inches long, is of easy culture and prefers a rather shaded position.

Ranunculus aquatilis, has fine feathery foliage which floats on the top of the water, interspersed with numerous pure white flowers, it is often found growing in ponds and requires no planting, if thrown on the water it will establish itself. R. lingua, is a fine plant for the edges of ponds in shallow water, it grows about 2 feet high and bears showy bright yellow flowers.

Sagittaria monstrosa fl. pl., few plants are more effective for margins of lakes or shallow water; dark green leaves and fine double white flowers, varying in height from 12 to 18 inches.

Typha latifolia, the Common Bullrush, needs no description but nevertheless is a graceful ornament in shallow water or boggy ground. T. minima, is a miniature variety of the bullrush, not more than 18 inches high.



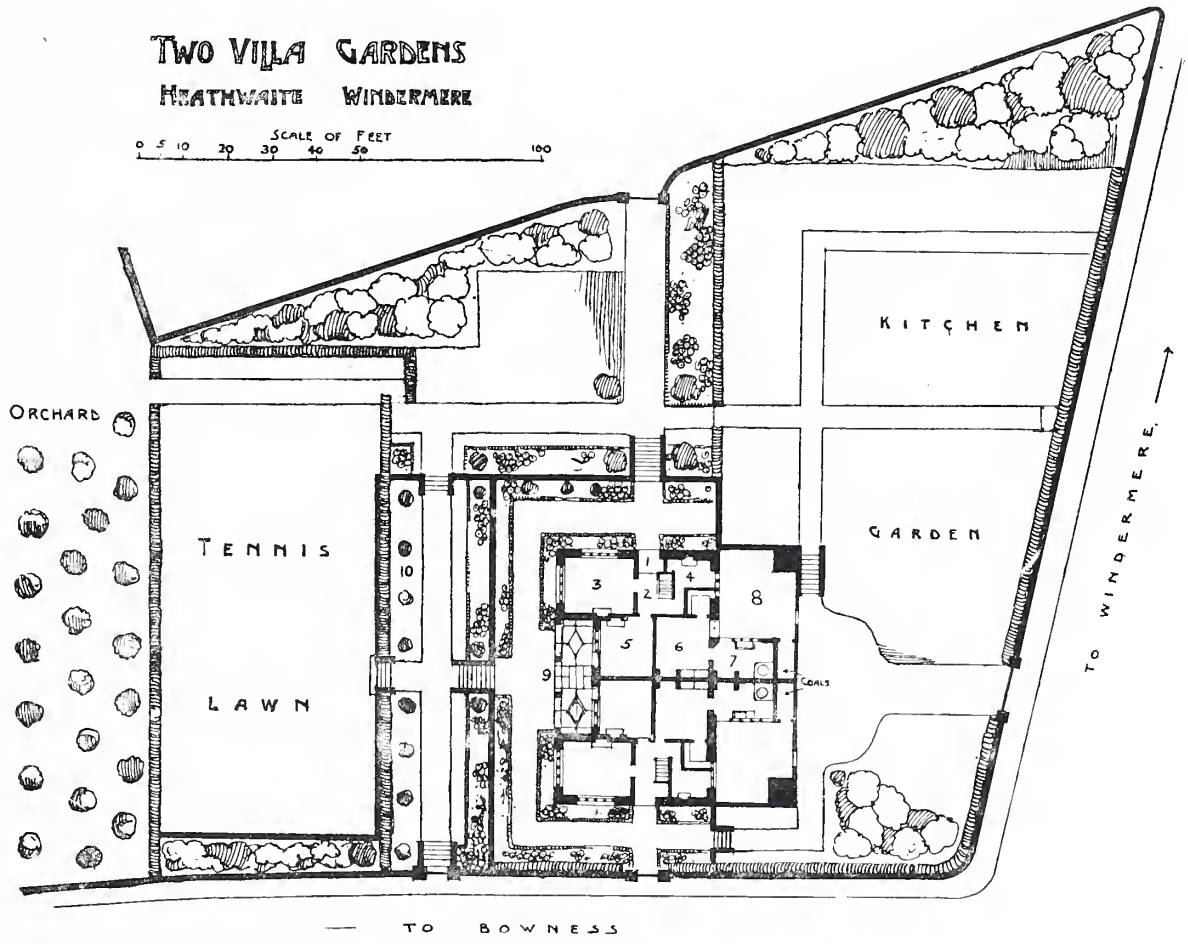
A SIMPLE COTTAGE GARDEN

EXAMPLES OF GARDEN DESIGNS

To make the most useful selection of garden designs from the large number which the landscape gardener or garden architect, prepares during the course of his practice, is a very difficult matter. This arises principally from the fact that many plans which would be full of interest to those acquainted with the site and surroundings, are more or less meaningless to those who do not possess this knowledge. This is particularly true in regard to designs which have been prepared for undulating sites, the various bend and turns, rendered necessary by the different contours of the land, could only be adequately explained by such a number of sketches, as would result in this work being much larger and more costly than is desirable. There are other instances in which, from a variety of causes, the designs suffer considerably from illustration. The gardens at Graythwaite Hall are a case in point. Those who know the difficulties encountered in laying out these gardens would measure their success by the amount of improvement actually accomplished; whereas only the plan of the garden as it is can be illustrated. The principal consideration to be kept in mind is that the plans selected are intended to shew the practical applications of the principles already dealt with. In this way many designs which, pictorially considered, might add to the effect of the book have had to be omitted, because their inclusion would not serve any practical purpose, or assist readers in grasping the conditions which are conducive to successful garden design. My endeavour has been to select designs which deal with conditions most likely to be encountered in laying out other gardens; and for this reason the examples chosen range from a small villa garden to gardens of twelve or fourteen acres in extent, and the descriptive matter accompanying the illustrations, explains, so far as possible, the conditions under which the designs had to be carried out, and the effect which it was desirable to accomplish.

The designing of a small garden is almost as delightful work as that of designing small houses; and yet, so far as the gardens are concerned, it would be quite safe to say, that although there are a dozen averaging from one eighth to one half an acre for every garden of two acres or more, garden designers, for some reason or other, seldom get the opportunity

of arranging a cottage or villa garden. It is for this reason that I give, as the smallest gardens illustrated, my own and those belonging to two members of my family. The three houses and gardens adjoin each other, each being arranged so as to enhance the effect of the others.

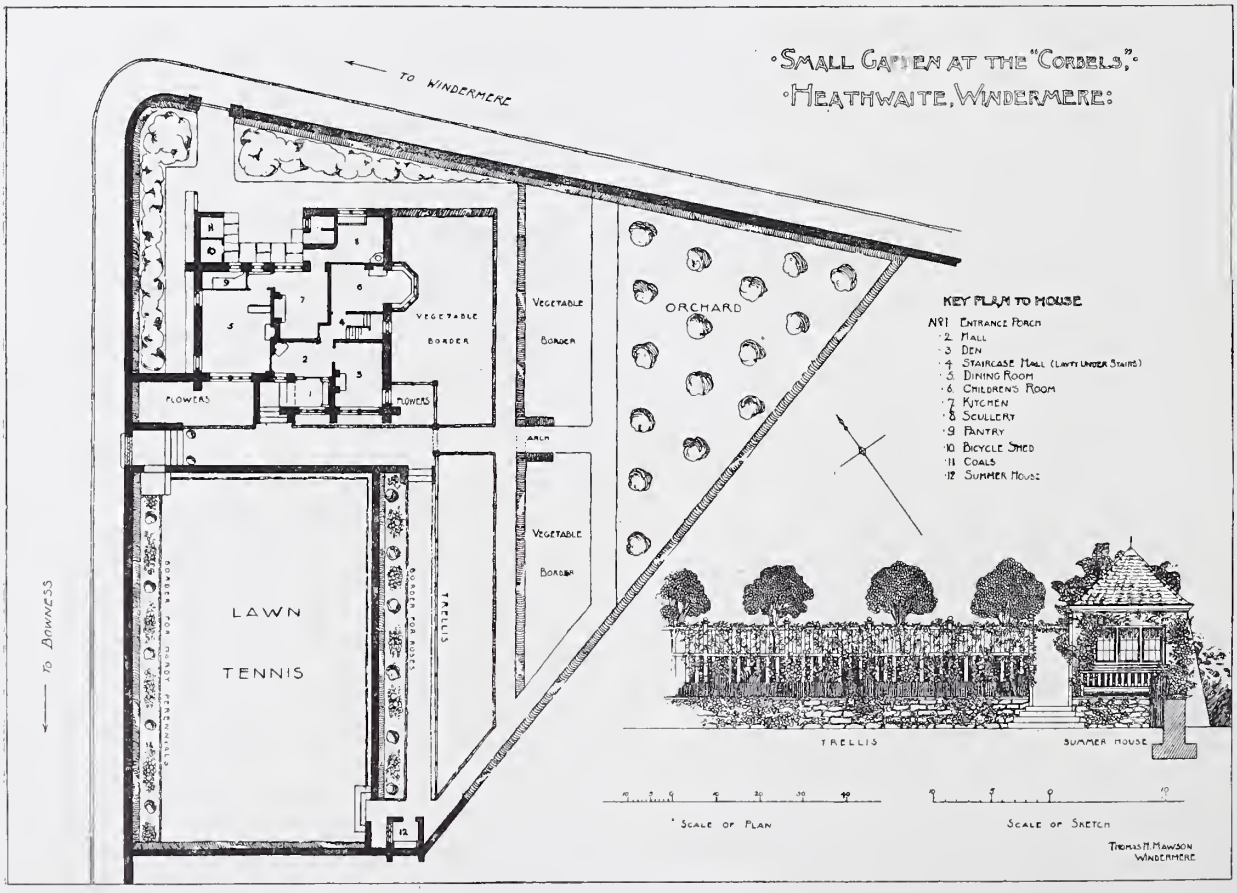


No. 121.

The above site, which is nearly three hundred feet above the level of the lake, commands some of the finest views in the district; in the only direction in which future building was likely to take place, a few characteristic cottages have been erected, these in no way spoil the view, and are in any case very much better to look upon than the speculative buildings which might otherwise have marred the outlook. To give meaning to the garden designs and their connections with the houses, the ground floor apartments are worked out on the plans. Taking the garden first, it will be noticed that the site is bounded by public roads on the S.E. and N. sides, the ground to the S.W. of the garden being planted as an orchard. The houses, it will be noticed, are placed much nearer the south than the north boundaries; this was owing to this portion of the ground being much more elevated than the remainder. In designing the gardens it was decided to have one tennis lawn, which is on the S.W. side, common to both houses, but to divide the remainder of the ground as

nearly as possible. It was also decided that both houses should have the use of the walks connecting with the several public roads. There is a deep terrace, 15 feet wide in front, and on the N.W. end of the houses. This is connected with the houses by the verandah : between this and the lawn tennis ground is a second terrace, 25 feet wide ; both terraces being supported by rough broken coursed walls, coped with thick Westmorland slates. The treads of the steps are 2½ inches thick, with roughly-built risers ; the idea being to encourage spleenwork and other ferns to grow between the crevices. A quantity of rock was left partly uncovered, so as to give accommodation and a home for rock plants ; and from this the higher terrace wall rises quite naturally. The numbers shewn on the plan are as follows :— (1) Porch, (2) Entrance Lobby, (3) Drawing Room, (4) Study, (5) Dining Room, (6) Kitchen, (7) Scullery, (8) Yard, (9) Verandah, (10) Lower Terrace.

Beech hedges divide the tennis ground from the orchard on the S.W. side, and again, the flower border and main walk from the kitchen garden on the N.W. side. The North corner, which runs to a point, is planted with evergreen shrubs, which are to be allowed to grow to a considerable height so as to screen the garden from some cottages on the opposite side of the road. All the flower borders are filled with choice hardy perennials, sweet-scented and free-flowering roses, and all the walls are covered with a selection of clematis, climbing roses, and other hardy climbers.

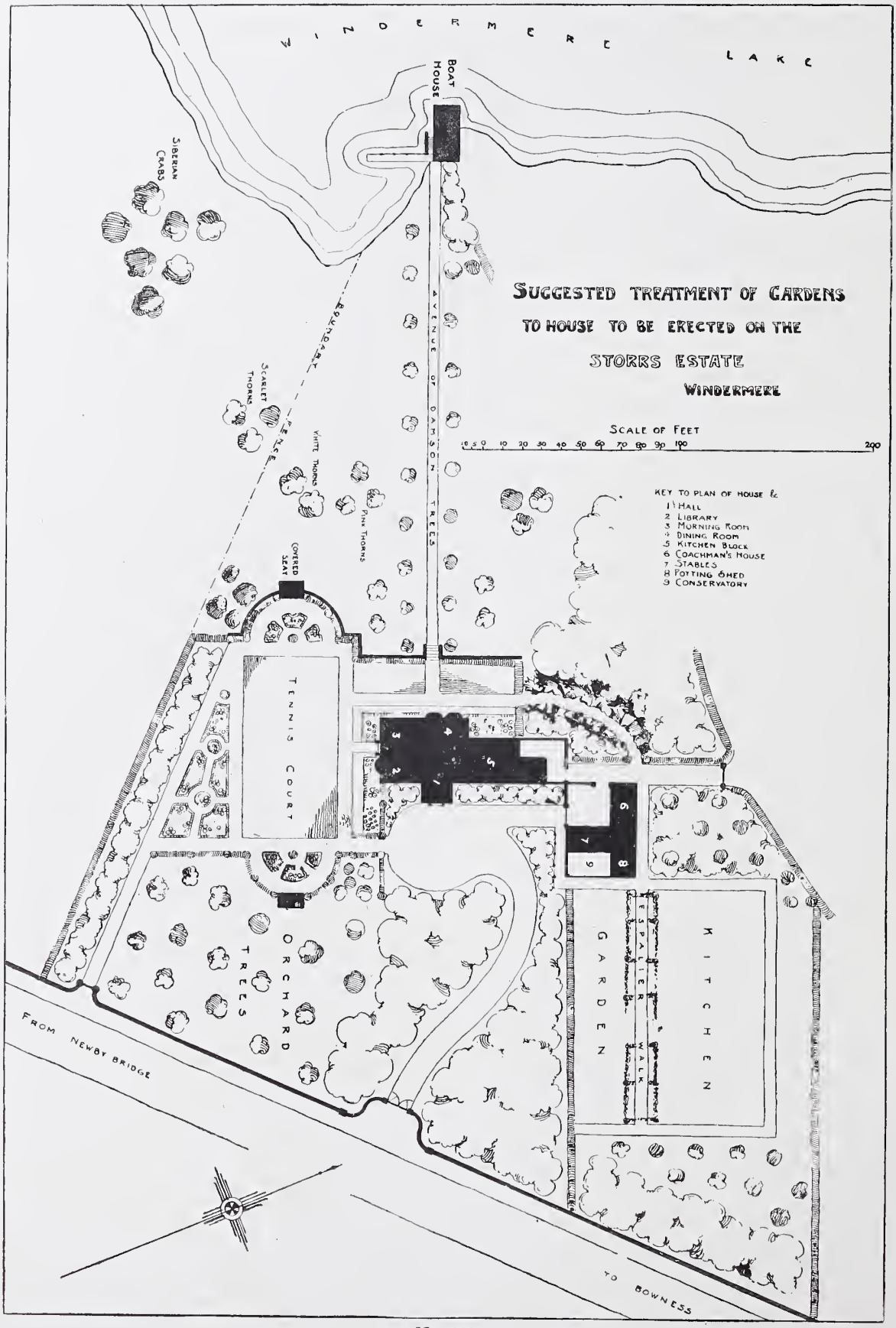


No. 122.

The small garden at the Corbels will probably be interesting because being the property of the writer, and consequently expressing, without any interference from outsiders, exactly what he thinks a small garden should be; this is exactly the reverse of what most people, having the same piece of ground to arrange, would have considered the proper treatment. To begin with, there is no drive or carriage turn, and instead of the sloping paths there are fourteen steps to the front door. The omission of a drive allows of the tennis lawn, the smooth shaven grass being restful to the eye; whilst the arrangement of the steps is much easier, especially for old people, than would be the steep path which would otherwise have been necessary. By referring to the plan, it will be noticed that whereas the steps are required to reach the front door, the back path comes in on the level; therefore it will be realized that the fall in the ground between the Windermere road and the field below the summer house is very considerable. It was to meet these levels that a terrace, 3 feet 6 inches below the ground floor level of the house was arranged; the tennis lawn being about half the difference between the terrace and the field. Thus:—level of terrace below floor level, 3 feet 6 inches; level of tennis lawn below floor level, 7 feet; level of field below floor level, 10 feet. The terrace and boundary walls are built of rough rubble and local stone, with slate coping; a little character being added to the whole by the arched gateway, shewn by No. 19, and the summer house. A feature is also made of the trellis work, which gives a dividing line between the summer house walk and the fruit border. This trellis also gives the necessary connection between the house and the summer house, and, when covered with climbers, will be one of the prettiest features in the garden. The border is planted with free-flowering Roses, including some of the single varieties; whilst standard Gloire de Dijon Roses are placed at regular intervals. There is a box hedge planted inside the wall by the side of the tennis lawn, which is to be allowed to grow over it, and so give the appearance of a retaining wall with hedge on the top. The whole of the walls have climbers planted against them. Inside the wall adjoining the road to Bowness is planted a hedge, which is to be trimmed to shapes. The long border is planted with hardy perennials, but at stated intervals are planted standard golden Hollies and Cupressus Frazerii. On the terrace at the head of the steps are planted two golden Irish Yews, which grow out of the gravel walk; these may later be formed into an arch.

The small kitchen garden is entered through an archway in the trellis, and is divided in the centre by a walk, on one side of which is planted a thorn hedge. This is to be clipped to shape, and will, when grown, answer all the purposes of a more pretentious drying ground, and do away with the necessity of providing the usual posts and lines, which disfigure so many small gardens.

It may be well to add that as all the flower borders are filled with hardy perennials, bedding out plans are not required. These would add very little to their interest, but, on the contrary, add considerably to the expense of maintenance. Economy has been considered all round, and this fact may have added something to their quiet reposeful feeling.


WINDERMERE LAKE
BOAT HOUSE
SIBERIAN CRABS
AVENUE OF DAMSON TREES
SCARLET THORNS
WHITE THORNS
PINK THORNS
COVERED SEAT
TENNIS COURT
ORCHARD
TREES
GARDEN
ESPALIER WALK
KITCHEN
FROM NEWBY BRIDGE
TO BOWNESS
SUGGESTED TREATMENT OF GARDENS
TO HOUSE TO BE ERECTED ON THE
STORRS ESTATE
WINDERMERE
SCALE OF FEET
10 5 0 10 20 30 40 50 60 70 80 90 100 200
KEY TO PLAN OF HOUSE &c
1 HALL
2 LIBRARY
3 MORNING ROOM
4 DINING ROOM
5 KITCHEN BLOCK
6 COACHMAN'S HOUSE
7 STABLES
8 POTTING SHED
9 CONSERVATORY

No. 123.

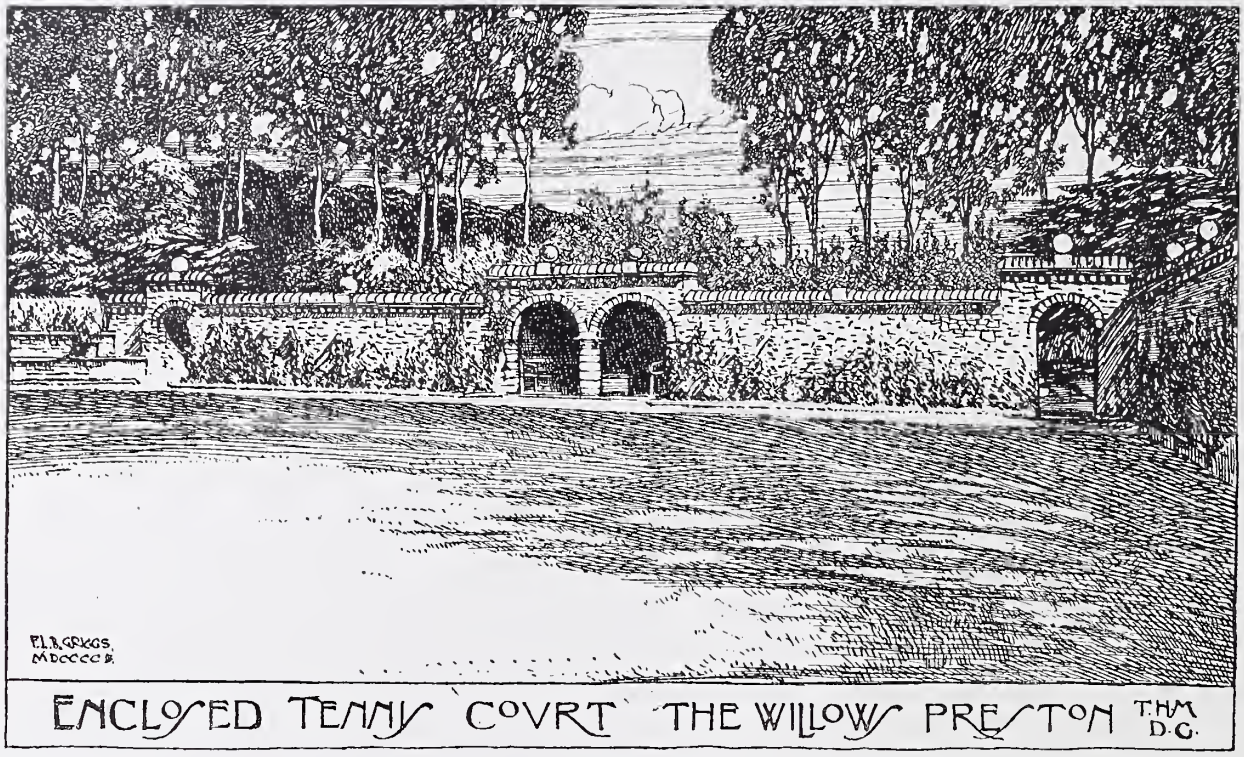
Gardens to proposed House on Storrs Estate, Windermere.

This is an example of grounds and house greatly in favour with retired, business, or professional men who can secure, on an average, three days a week at home. The site is about 2½ acres in extent, and forms part of the famous and historic estate of Storrs, which in its glory comprised a classic mansion and park, about 700 acres in extent, and noble timber trees, and beech and other avenues to match, with a frontage of about three miles to Windermere. The peculiar wedge or triangle shape of the ground is common on an estate of this kind, the vendor naturally apportioning the sites, both distant and near, with a piece of the lake foreshore for apparent reasons.

The principal rooms are arranged to comprise fine lake and mountain views rather than aspect, and everything in the garden is made subservient to them, but on the South front the lack of attraction is compensated for in the foreground by the geometrical flower beds fitted to the peculiar shape of the ground, and the other beds at either end of the tennis courts, and as the views in this direction, though lacking the variety and extent of the principal front are not altogether uninteresting, being bounded by limited vistas of fine timber trees, so the tennis lawn was inserted to give a feeling of repose, and is secluded from the drive and public road by a yew hedge, and by plantations along the South boundary. The kitchen garden arranged in close proximity to the stables, the directness of the drive with spacious carriage turn, the directness of the walks which are as few and as simple as convenience demands, and the simple terrace wall, steps and covered seats in local material, all bespeak a broad, unassuming style of treatment, well in harmony with a neighbourhood where nature is so lavish. The rather dense plantations bordering the drive were necessary to secure an aspect of privacy. The walk to the lake is bordered with damson trees, alike beautiful in flower or profitable in fruit, and terminates in a boathouse designed to not only harmonize with the most exceptional natural beauties of its surroundings but also to help to blend the more severely conventional parts of the grounds with nature as represented by lake and mountain, towards the attainment of which end, water loving trees are planted along the margin of the lake, and reeds, indigenous to the district, are encouraged to grow in the shallower parts of the shelving beach.

The boathouse itself will consist of a small wet dock for the accommodation of a steam launch and rowing boat and a tea room over, the windows of which are arranged so as to comprise the best views. A small storage room and convenience being made at the back of the upper room, while on the South side of the boathouse is built an additional pier for the use of small sailing boats.

In the little piece of park-like greensward sloping down from the terraces to the lake, there already exist several exceptionally fine forest trees such as oak, elm and beech, some of which, planted as they are on bold, rocky knolls, with their roots grasping and entwining the dark lichen covered rock, lend the grounds an aspect peculiar to the district, to these, other forest trees and undergrowths have been added in groups and masses on various parts of the site, so as to form vistas and bind the stretches of hill and water into well composed views.



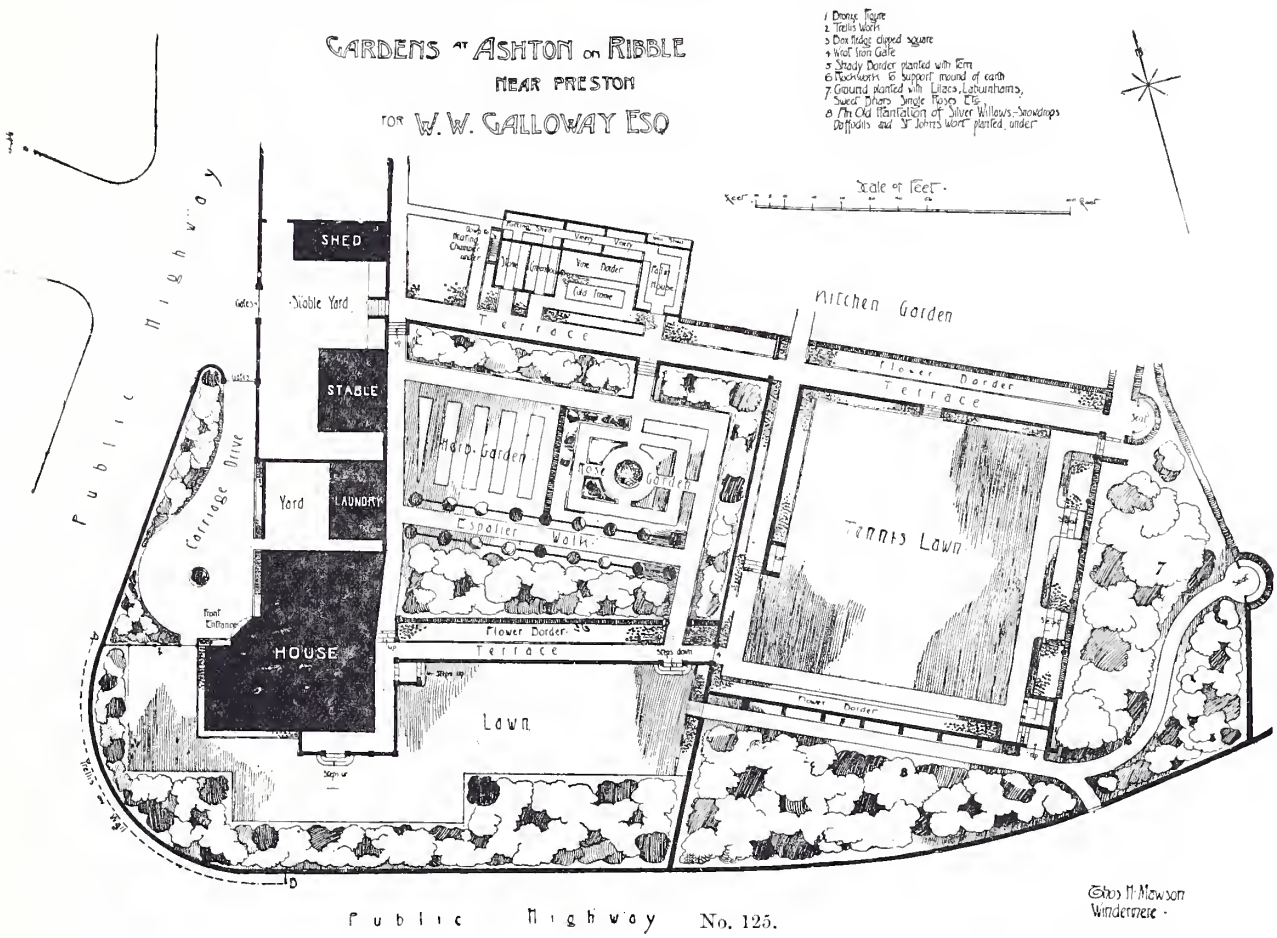
No. 124.

Gardens at Ashton-on-Ribble, Preston, for W. W. Galloway, Esq.

This is in many ways one of the most interesting schemes for improving an old garden which the writer has had to design. Prior to my being consulted, the character of the house as a private residence, had undergone a complete change, owing to the formation of the Preston docks; which at present run along the entire South front, a distance of some four or five hundred yards; and the views in this direction, before the construction of the docks, were into the interesting pastoral country beyond. A part of this view still remains, but its repose was marred by steamers, cranes, and the general paraphernalia of a modern dockyard. This made it all the more necessary that as much interest as possible should be created within the gardens, and that the plantations should be arranged so as to screen certain parts of the docks, openings being made in other directions to bring in such peeps into the country as would lend interest to the place and compensate somewhat for the views lost.

In its original state the ground sloped from North to South, and the portion now laid out as a tennis lawn, was an orchard, but most of the trees were worn out. A part of this orchard was added to the kitchen garden and another portion to the terraces and flower garden.

Outside the new garden, in the portions numbered 7 and 8, there are, in addition to the flowering shrubs which have been planted, a number of Elms, Beeches, and Willows, which

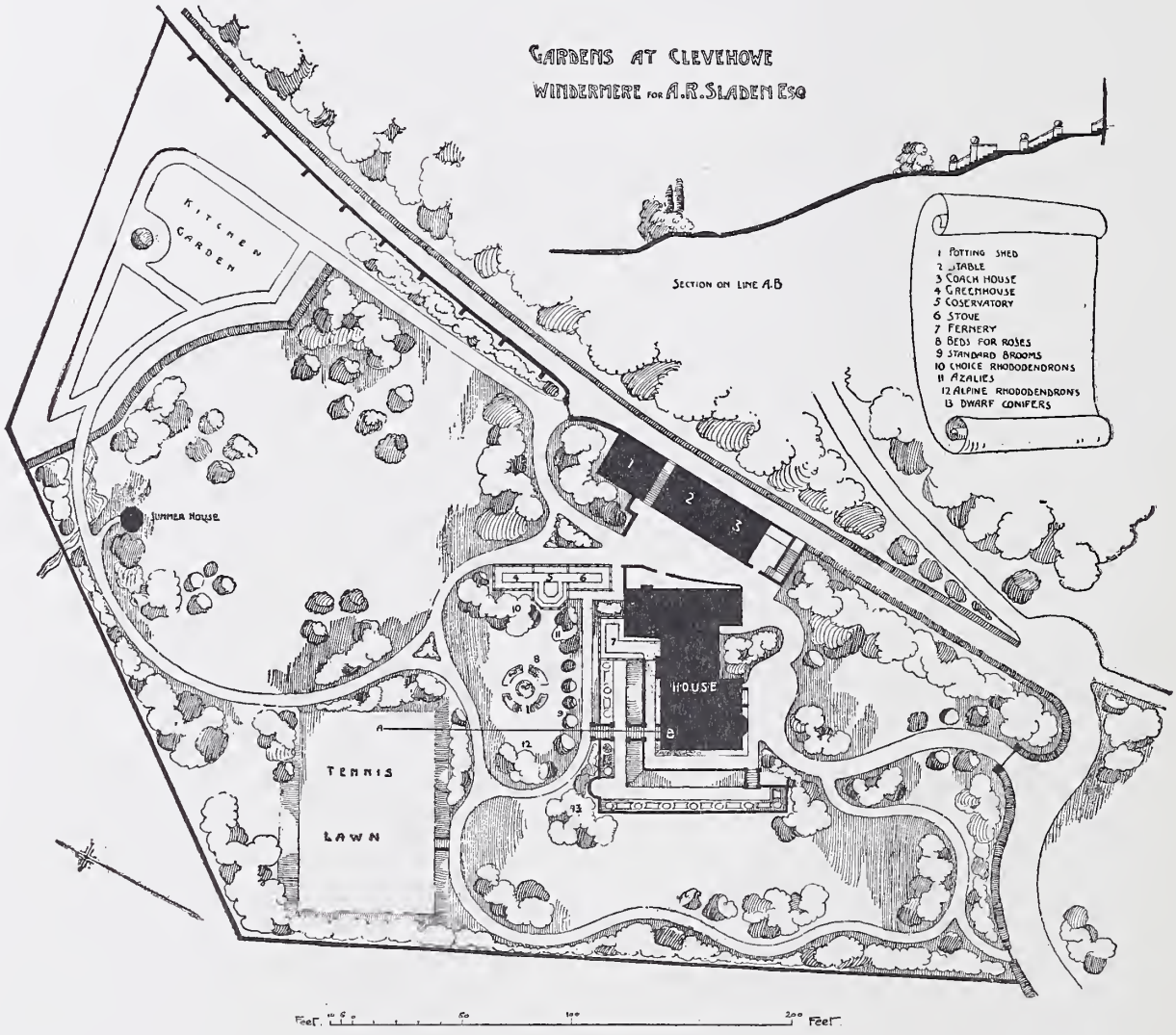


Public Highway No. 125.

give a very effective background to the formal terraces and gardens. As will be seen from the illustration, much of the interest of the new work lies in the character of the architectural details, which, within a very short time, have mellowed and assimilated with the scheme as a whole. The wrought iron work which is shewn in the illustration, was designed for the front entrance. Another wrought iron gate and grille being fixed in the wall which divides the tennis courts from the old portion of the garden. It has been stated elsewhere, that in a garden which is situated near a town, more colour is required than in a country district where every leaf is bright and healthy. For this reason ample and spacious borders are apportioned for the display of flowering hardy perennials, and various bulbous plants, while in addition to these green tubs filled with Fuchsia Ricartonii, are arranged at intervals along the terrace wall, and make in themselves a very fine show through the season. Yew hedges are planted as a background to the flowers, and although planted little more than two years ago, are now perfect hedges six feet high. One of the most successful features of this garden is the green sward of the tennis lawn, which, enclosed by the walls, is a refreshing and quiet retreat, proving the value of a square lawn when unbroken by trees, shrubs, or winding walks.

Since this plan was prepared, a billiard room has been added to the house, this occupies the ground to the East end of the house, so that it does not materially alter the garden scheme.

The first thing which will be noticed in this plan is the number of lines at obtuse angles to one another. The reason for this was, that the old portion of the garden was already walled in, the wall running through the centre of the plan and dividing the rose garden from the tennis lawn; so was the wall opposite the greenhouses; and although they were remodelled and finished with proper coping and balls; the owner wisely decided to incorporate them in the new scheme.



No. 126.

Gardens at Clevehowe, Windermere.

These gardens were re-modelled and enlarged in 1881. The gardens then existing were much too small, and possessed but few suggestions of design. It should be explained, however, that although very little of the existing features could be included in the

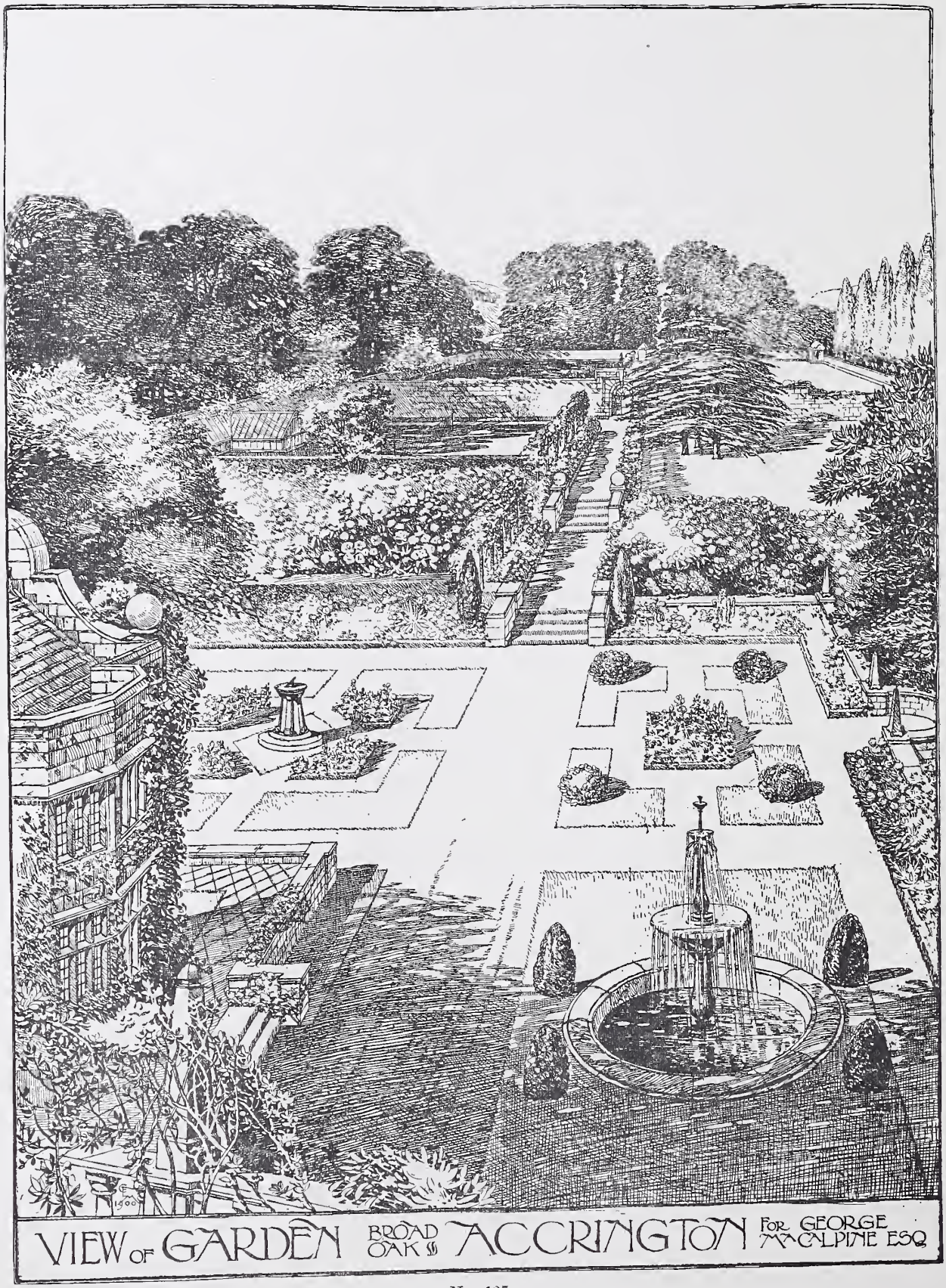
remodelled design, that little had its influence on the scheme, as here shewn. The portions of the old garden which remain are the drive and the winding walk along the S.W. boundary, which approximately followed the line shewn on the plan.

To understand this design, it is necessary to grasp the peculiarities of the site, which are exceptional in many ways. As in many other places in the Lake District, the site stands very high above the level of the lake, and consequently possesses remarkably fine views, which are, however, to the West and North-West, the principal rooms being planned so as to take advantage of these views. The approach to the house is by way of a joint drive connecting with the Ambleside road. The footpath, starting from near Windermere station to the Troutbeck Road, passes along the entire length of the Eastern boundary. This foot-walk is much higher than the grounds below, and was consequently somewhat difficult to hide. Beyond the South-Western boundary lies another garden, this contains remarkably fine Conifers and old Oaks, which constitute a most important factor in the view in this direction.

In re-modelling this garden, one of the first things decided upon was the removal of the kitchen garden, which occupied the ground lying between the section line A.B. and the greenhouses shewn on the plan. This, like the rest of the garden, had been formed without the least attention to design or convenience of working, and being on a much lower level than the house, was overlooked by, and spoiled the view from, the drawing-room. The new position chosen was at the N.E. corner of the grounds, the shape being suggested by contour of the ground.

The section line A.B. shews the levels to the North, the fall on the S.W. side being quite as steep. Anyone who has had the working of a garden made on a hillside as this is, will know how soon the grass slopes are burnt up in the Summer. I therefore advised the terrace wall, which allows of a level walk, of flower beds, and also allows of the slopes below being made much flatter.

The treatment of this garden is, on account of the extreme steepness with which it slopes away from the house on the N.W. and S.W. sides, necessarily, to a large extent, of a naturalesque character; nothing in the way of formal or enclosed garden "apartments" being possible, while the winding walks and naturally grouped timber trees could hardly have been made use of in such great profusion, at least with the same amount of success, had the ground not possessed the bold swells and hollows which form the *raison d'etre* for the equally bold swells and curves in the walks and plantations. The short carriage drive is a peculiarly happy instance of this adaption of the curves to the contours of the ground, the route chosen being, practically, the only means of approach and at the same time a most excellent one, as will be seen by reference to the plan. Since the scheme has been prepared the character of the carriage turn opposite the main entrance door has been somewhat altered by the building of a large billiard room on its Eastern side which however helps to screen the public footpath running along the Eastern boundary and also the buildings marked 1, 2, and 3 on the plan.


VIEW OF GARDEN BROAD OAK ACCRINGTON FOR GEORGE McALPINE ESQ

No. 127.

Gardens at Broad Oak Accrington, for George W. Macalpine, Esq.

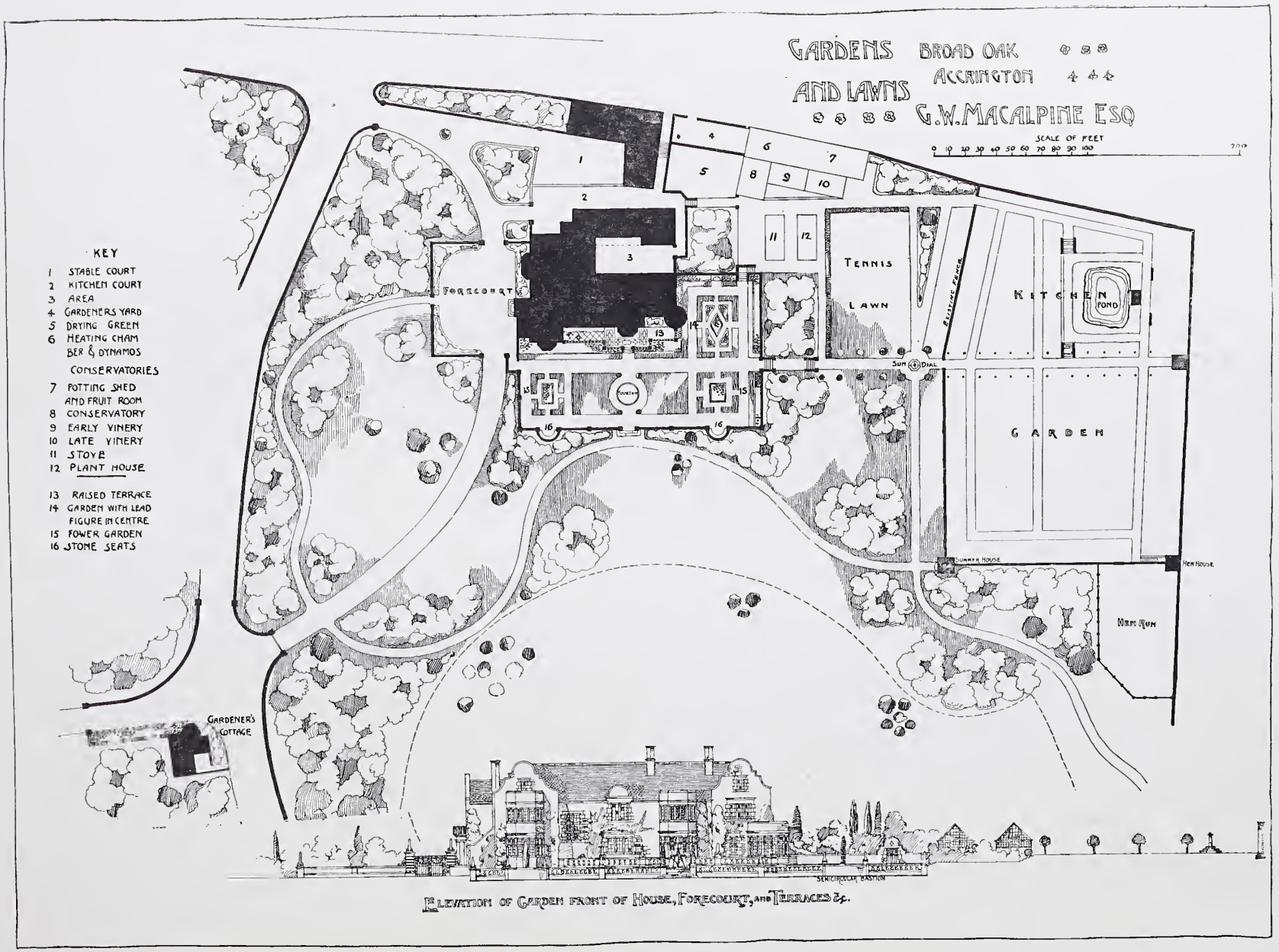
Accrington, like many other Lancashire towns, would not be associated by many people with fine gardening, and yet it is wonderful what is accomplished by men who have a love of nature, trees and flowers. As many professional men, manufacturers, and merchants are, by the exigencies of their professions or business, compelled to live near their offices or works; so have many ardent horticulturalists, who by patience and enthusiasm have added considerably to our knowledge of what is best suited to these positions, thus reducing the difficulty of making and maintaining good gardens in such localities.

People passing through this and similar towns often do not realize what fine stretches of country exist on their outskirts, and in the case under consideration the writer was agreeably surprised to find the country to the S. and S.E. (the direction of which will be seen from the plan which is placed N. and S.) of a gently undulating picturesque character, the middle distance being broken up with fine groups of trees, mostly sycamores and elms, whilst the view to the S.W. is over a part of the town ending in the hills beyond. The only portion of the ground which, from a landscape point of view, could be considered difficult to treat, was the one looking from the porch steps over the main entrance, and also from the library window, the position of which is marked by the projecting bay, this view being marred by some mills in the middle distance; a feature however which is not so bad as a row of modern speculative cottages would be.

Before explaining the plan as adopted, a few more particulars of the site and the house may assist in an appreciation of the scheme. The residence, which is from the design of J. W. Watson, Esq., of Glasgow, occupies the site of an older house which has been entirely pulled down to the ground, the only portions of the old buildings which remain being the stables, which are good, and the potting sheds numbered (6) and (7) on the plan. A portion of the old kitchen garden walls also remain, and the pond, which at one time was the water supply to the estate, but is now used for supplying the fountain and greenhouses only. As will be seen by the elevation the kitchen garden is considerably higher in level than the terraces, whilst in a section from N. to S., *i.e.*, from the higher road through the stable, house and centre of the terraces, the average fall in the ground would be about one in fifteen. This fall extends to the bottom of the beautiful grass park, which runs for a considerable distance below the fence shewn on the plan by a dotted line. The curved line of this fence gives some idea of the contour of the land. The numbers given on the plan, with key to same, will fully explain the detail of the design.

Within the grounds exist a number of fine old trees and Rhododendrons, the masses of foliage at the end of the terrace representing the latter, while along the Eastern boundry of the park there is a long plantation through which a winding path meanders. This is the only old path left untouched. Suggestions and incentives were therefore abundant, to which must be added a client deeply interested in the work and also a considerate architect.

The objects and improvements aimed at in laying out this garden were such as are often encountered, and may be shortly summarized as follows:—To retain the pleasing views, to



ELEVATION OF GARDEN FRONT OF HOUSE, FORECOURT, AND TERRACES &c.

No. 128.

TERRACE GARDEN BALLIMORE ARGYLE. THE RESIDENCE OF MAJOR MAC RAE GILSTRAP

No. 129.

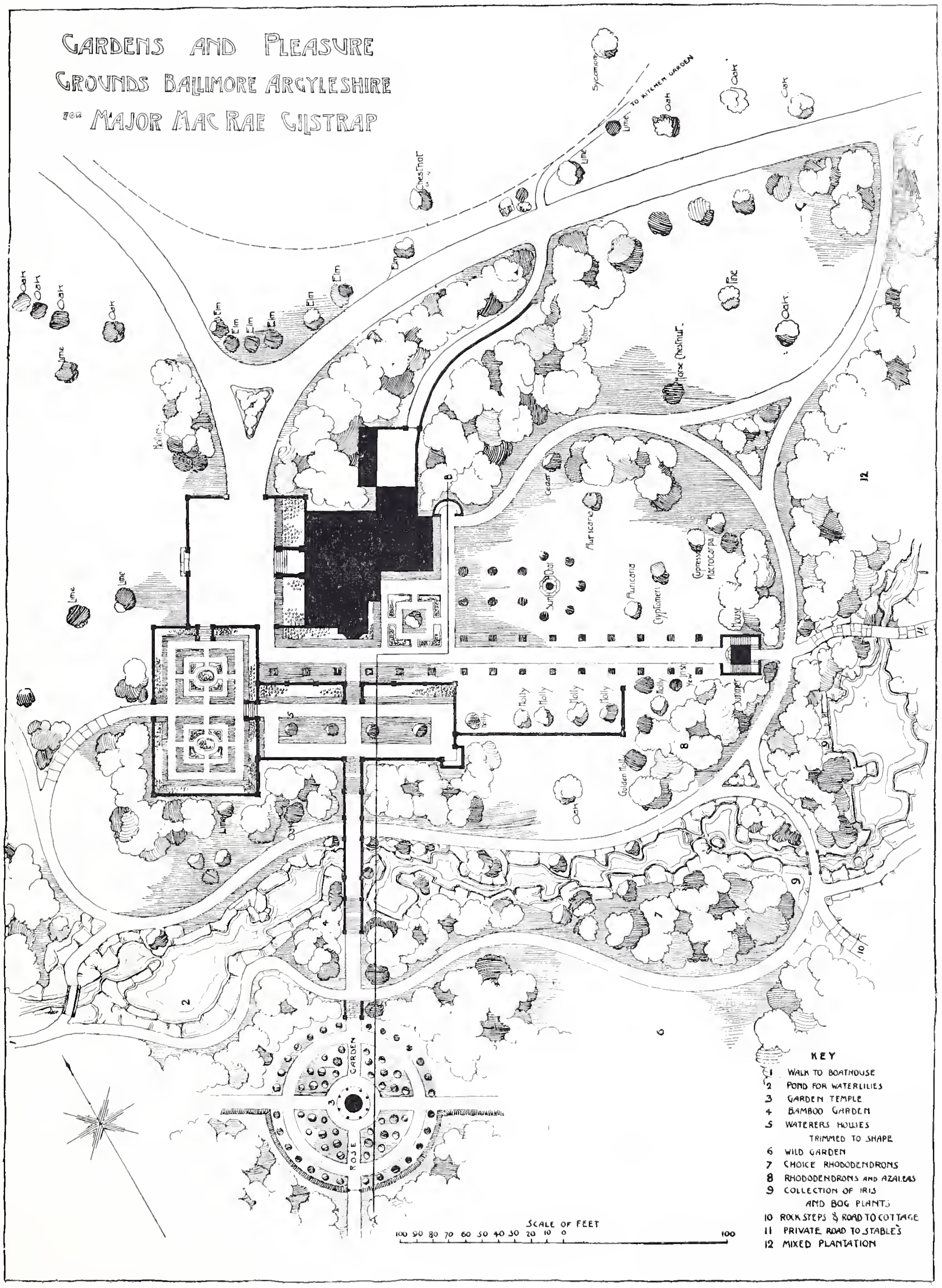
screen objectionable ones, and to break up, with foliage or otherwise, others which, from their character or use, would destroy the quietness of the garden.—To give, by means of terraces and carriage court, a proper base to the house.—To give a setting of foliage to the house as viewed from important points in the grounds and estates.—To give ample walks protected from all winds.—To give that amount of colouring, by means of flowers and rich foliaged and flowering shrubs, necessary in a garden near a town.—To provide a good kitchen garden and the necessary amount of glass to keep the house supplied with fruit, flowers and vegetables.—To arrange the whole in such a way as to ensure ease of management and working.

Although the plan is fully explained by reference to the numbers, the following details need to be particularized. First there is the raised balustraded terrace near the house, which is to be paved with coloured slate and marble as indicated on the plan. Then there is the lower terrace with its fountains, flower beds, and formal golden hollies, the panel garden at the end of which will be kept gay with colour for at least half the year; and also the long straight walk which passes through an arched gateway in the garden wall, the gate being in wrought iron, the walk continuing across the kitchen garden between espaliers and borders of old fashioned perennials to a bower at the end. There is also a summer house at one corner of the kitchen garden walls, and a poultry house at the other. On the undulating lawns are to be arranged masses of choice flowering shrubs, including Azaleas Weigelias, Lilacs, and Deutzias. There are evergreen trees to give the necessary warmth of colouring in winter, and withal ample green turfed lawns which have been laid down with the greatest care. Mr. Mallows' perspective view shews the terrace and long walk as seen from the bay of the room over the diningroom.

Ballimore, Argyleshire.

The seat of Major Macrae Gilstrap, is a charming domain on Loch Fyne, a good view of the mansion being obtained from the steamers to and from Inverary, at a point near the Beacon or Otter, the new pier at Otter being on the estate. This pier is now the principal point of debarkation for the estate, but during certain months of the year the pier at Tighnabruaich has to be used, and as this is some twelve miles distant, it was considered advisable (on account of this isolation), to make the mansion and grounds in themselves as complete and interesting as possible. At the time I was called in to advise, it had been decided to add considerably to the mansion and to bring the old portions, which possessed little architectural merit, into character with the new work. These additions and improvements have been most successfully carried out by W. Leiper, Esq., R.S.A., of Glasgow.

Beyond a fine walled in kitchen garden, which is situated at some little distance from the mansion; the drives, which as shewn on the plan, have only been slightly altered, and a little stretch of lawn on the eastern side of the house, it could not be said that any "grounds," in the usual acceptance of the term, existed. The idea presented by the site was that it had formerly been a bluff or hill which had been levelled down to form a base on which to place the residence, the material excavated being thrown over the edge of the already steep embankment leading down to the stream, which latter, as it then existed,



GARDENS AND PLEASURE
GROUNDS BALLIMORE ARGYLESHIRE
FOR MAJOR MAC RAE GILSTRAP
KEY
1 WALK TO BOATHOUSE
2 POND FOR WATERLILIES
3 GARDEN TEMPLE
4 BAMBOO GARDEN
5 WATERERS HOLLIES TRIMMED TO SHAPE
6 WILD GARDEN
7 CHOICE RHODODENDRONS
8 RHODODENDRONS AND AZALEAS
9 COLLECTION OF IRIS AND BOG PLANTS
10 ROCK STEPS & ROAD TO COTTAGE
11 PRIVATE ROAD TO STABLES
12 MIXED PLANTATION
SCALE OF FEET
100 90 80 70 60 50 40 30 20 10 0 100
ROSE GARDEN
Sun Dial

No. 130.

could not be said to be a natural feature, as it was mostly kept within bounds by an ugly irregular mortar built wall.

The estate as a whole is splendidly wooded, especially near the house, where certain ornamental trees, including conifers apparently of fifty or sixty years growth, are dotted about the lawn, the positions of these and also of some very old hollies being indicated on the plan. Almost every hill on the estate is planted, and as seen from the mansion, fall into and form numerous pleasing glades and vistas. The ground below the carriage court falls in pleasing undulations to the shore, the drive to the right of the plan is used as approach from Tighnabruaich, and also leads by a branch drive to the stables, while the drive to the left passes for about a mile and a half along the shore to Otter Ferry. It may be added that the home park, which of course is divided into a series of fields and plantations, on which considerable improvements have been effected, extends to about one thousand acres.

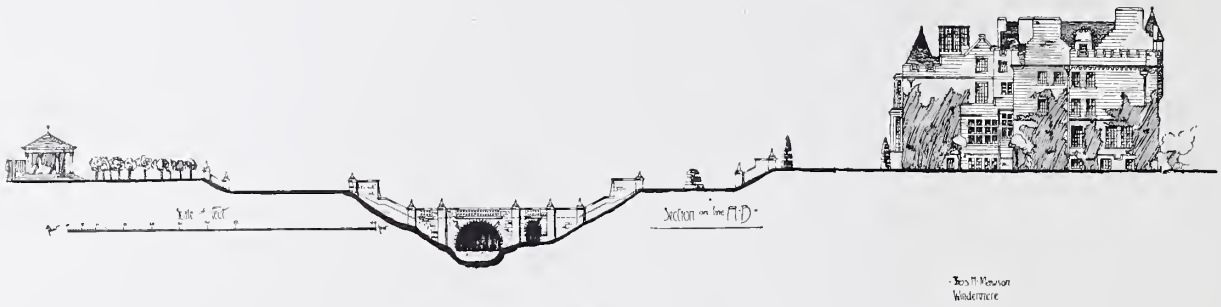
Referring to the block plan of the house, both dining and drawing rooms have, for the purpose of gaining a view of the Loch, a window overlooking the carriage court, but the principal window of the drawing room also overlooks the terraces. The large hall is lighted by the mullioned bay window shewn on the section, No. 132, the billiard and smoke rooms being in the tower, both hall and billiard room overlooking the garden with the sun dial and the summer house walk.

The plan does not include the whole of the pleasure grounds, to have done so would have reduced the details too minutely. It may however be noted that amongst other things, a very fine cricket crease has been planned, and that adjoining the grounds there is the cottage which in Scotland is generally known as the Dower house. This has its own gardens and grounds, and also a separate drive leading to it, all being laid out from the writer's designs.

In execution, the plan has been modified in one or two unimportant details, such as the omission of the bridge, and a slight alteration to the terraces. It will be noticed that the scheme as a whole includes almost every type of garden planning from the formal terraces to the most naturalesque treatment of the stream. Perhaps the most noticeable features are the long straight lines of walk, especially the one leading to the summer house, and in the opposite direction, the one which is carried over the bridge and on to the opposite side of the valley. There are also the long lines of terrace walls, the intention being to lay out certain prominent lines which would grip the landscape and give a feeling of connection between the mansion, garden, and landscape, the summer house and small temple being arranged to mark the end of this formal treatment. This severe style, whilst adding to the effect of the mansion, in no way detracts from the purely natural treatment of the stream, each being helped by the sharp contrast. As will be seen by Mr. Mallow's perspective view and also the sketch forming heading to chapter XV. the terrace walls are solid *i.e.*, no balustrade has been adopted, the walls are built of the local ragstone, the dressed work being confined to pillars, string, coping and finials, thus allowing of a large number of climbers, which always add so much to the charm of terrace walls.

ROCKY STREAM and BRIDGE BALLIMORE. ARGYLESHIRE.

No. 131.

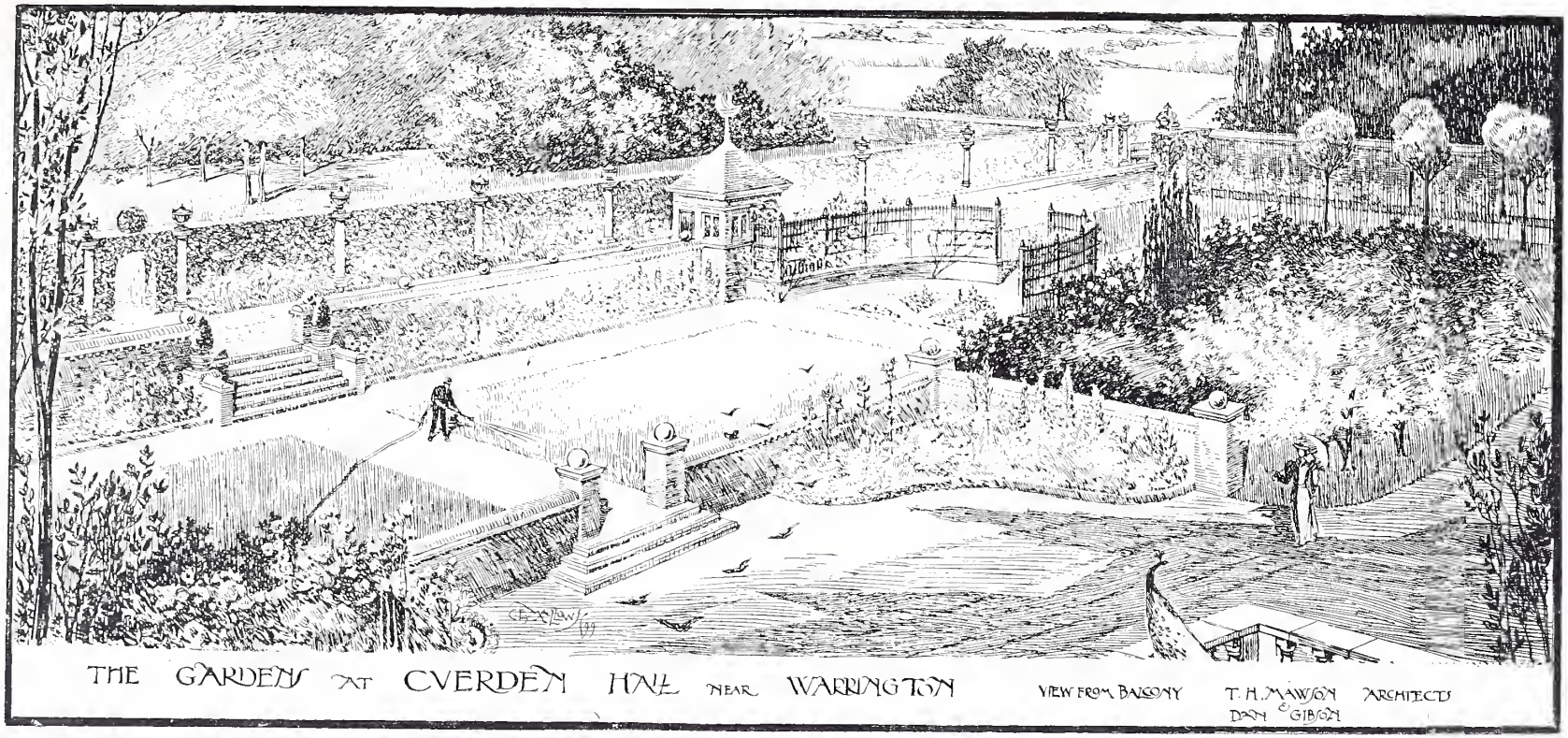


No. 132.

The freer or winding walks are very little seen from the formal part of the garden, and pleasantly mark the rise, fall, and general contour of the ground. There was a very important stipulation in their arrangement, viz., to have a series of pleasant walks over which a bath chair could, when required, be wheeled without steps or obstacles, a point which should always be considered when laying out an extensive garden.

The stream has been a somewhat extensive piece of work, in connection with which the skill of Mr. Pulham has been called into requisition. A part of this work with the little bridge at 9, is shewn in the illustration No 131. In forming this work there were two considerations of a practical nature which had to be kept in view, the first being to make the banks quite safe against spates or floods, and the second to construct a series of pools for fish to sport in. As already stated, the sides of the stream were previously supported by rough irregularly built walls, the bottom of the stream being rough shaley rock; the improvements were effected by removing the walls and excavating a part of the rock, and by adding stratas of rock as shewn in the illustration, the result being much more in harmony with the surroundings than the former restricted conduit.

Ballimore is an ideal place for anyone with a love for an arboricultural or botanical collection, and this fact has been recognized and taken fullest advantage of by Major Macrae Gilstrap, whose collection of ornamental trees and flowering plants bids fair to equal that of any other place on which the writer has been engaged. The beds and borders on the terrace are planted with a choice collection of hardy perennials, florists' flowers and Roses. The walls are clothed with Honeysuckles, Clematis, Climbing Roses, Wistarias, Vita Cognitæ, Magnolias, and other hardy climbers. In the quiet pools there are choice nymphias and other aquatics, along the margin of the stream are Iris, Caltha, Spiræas, and other bog plants, and also large quantities of the choicer Daffodils and other bulbous plants, all of which give promise of naturalizing and increasing. The terrace borders are planted entirely with hardy perennials, and Roses. Other portions of the scheme are explained by the numbers and key on the plan.


THE GARDENS AT CVERDEN HALL NEAR WARRINGTON
VIEW FROM BALCONY
T. H. MAWSON ARCHITECTS
DAN & GIBSON

No. 133.

Gardens near Warrington.

Cuerdon Hall, the residence of R. A. Naylor, Esq., is situated near the village of Thelwall, about five miles South of Warrington. Prior to my being consulted, the house had been enlarged and the garden laid out in the landscape style, this had proved so unsuccessful that it was decided to remodel them. Made up as it was of tortuous walks, hillocky lawns, scrappy rockwork formed by placing stones on end, and planting like that seen in a modern cemetery, the garden needed an effect of dignity, unity and repose, no attempt was therefore made to incorporate any of the old work in the new scheme.

To grasp thoroughly the intention of the design, it is necessary to understand the position and nature of the site, and, approximately, the plan of the house. As will be seen by the cross section, the ground falls from the tennis lawn to the public road, or from S.E. to N.W., being nearly the opposite fall to that generally chosen for the site of a residence. A longitudinal section from the main entrance to the stables would shew the ground to be nearly level in this direction. The house therefore appears rather sunk, and one great object in the new scheme was the apparent raising of the elevations.

The original residence was built round the sides of a court, and one of the improvements has been the roofing in of this court, the space so obtained being made into a large hall with a picture gallery running round it. This gallery is now filled with a collection of old masters. The drawing and morning-rooms are on the S.W. side overlooking the sun-dial garden, and the dining-room looks to the N.W., the kitchen block being on the N.E. side. A portion of the house which is often used, especially during the summer months, and at other times also, is the end of the picture gallery, which opens on to a wide balcony placed above the portecochère. From this balcony two conservatories are entered, placed on the same level and running to right and left. This balcony or roof of the portecochère is connected with the carriage court by a flight of stairs shewn on page 196. The kitchen garden is to the South, the stables to S.W., and the kitchen yard to the N.E. This is an unfortunate arrangement, and might have been avoided had one or the other been considered earlier; but they also were already made when I was called in.

From this it will be seen that to be successful the garden must accomplish the following objects:—Firstly to give elevation to the house. This is partly realised by the arrangement of a terrace round the S.W. and N.E. sides of the house, the terrace being formed not by raising the ground next the house, but by lowering the ground outside the terrace wall. Secondly to give good garden effect as viewed from the balcony, as shewn on the preceding page. Thirdly to provide sheltered and screened walks to compensate for the privacy which is taken away from the garden owing to the position of the carriage court and to the drive which runs through the centre of the grounds. The principal sheltered walk is arranged as a grass walk, bordered on one side by a yew hedge and on the other by a terrace wall. In connection with this are two summer-houses and semi-circular seats; this walk is connected at one end with the drive by a covered lilac walk, and at the other end by a covered laburnum walk. Fourthly, the stable yard must be partly hidden, and the buildings broken up by other and better architectural features. This is provided for by the pilastered brick wall 9 feet high, into which is worked an alcove, and also by the ornamental iron gates

and stone pillars to the stable yard entrance. Fifthly, owing to a lack of distant views, and to the somewhat tame character of the immediate surroundings, much more foreground interest and colour is required than in the majority of gardens; this is provided by the arrangement of panelled gardens, to be filled with free-flowering hardy perennials; by two Rose gardens formed at the end of the lawns between the carriage court and the grass walk; and by long flower borders in various positions. In addition to this, the shrubs are mostly free-flowering varieties.

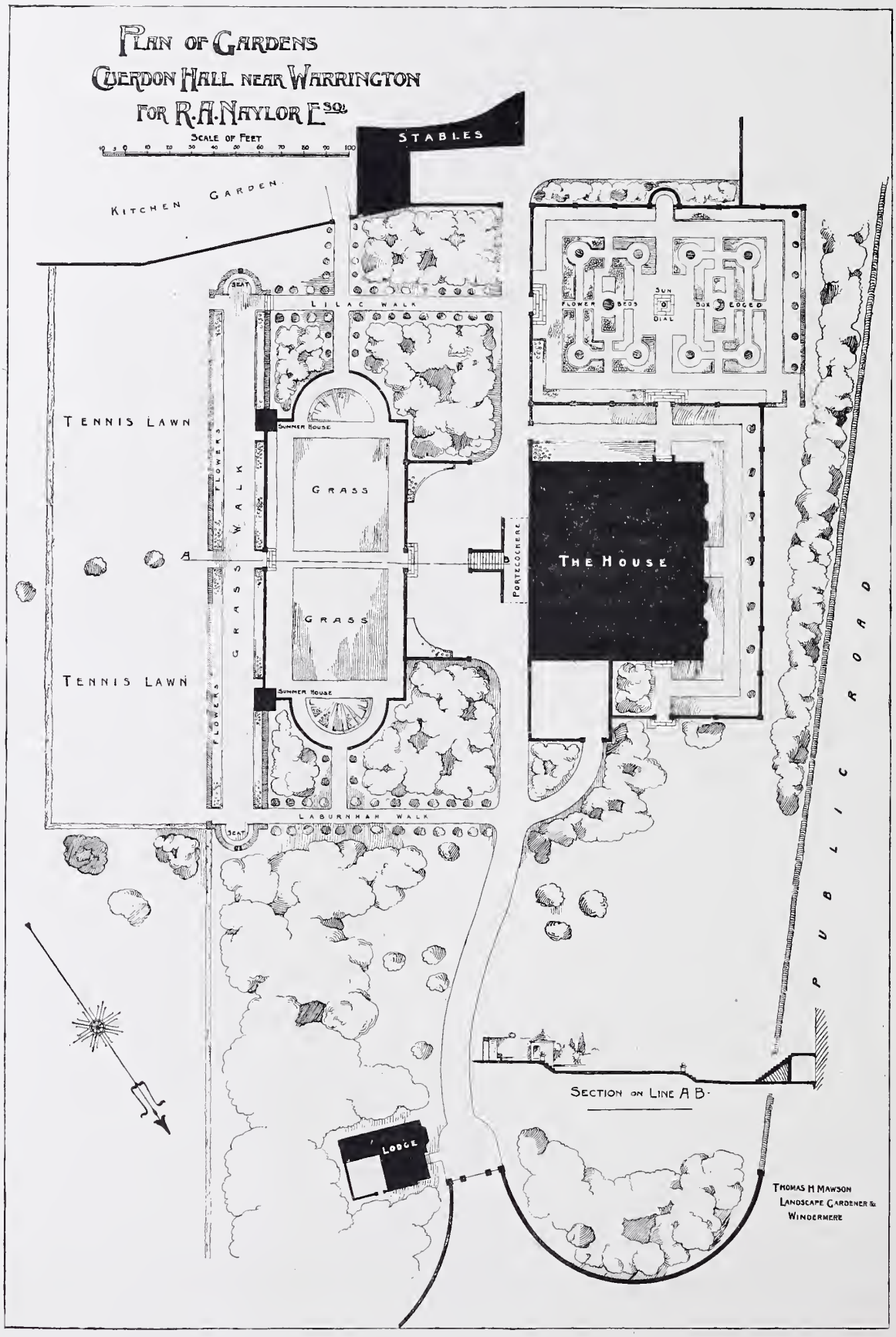
It will be noticed that in this scheme, architectural detail forms an important part. This is partly owing to the fact that the scheme is in what is known as the formal style. This was, however, one of those places in which any attempt at the naturalistic style would have ended (as indeed it had already done) in failure. In such places the happiest results are obtained when everything proclaims itself as having been made for its purpose.

The necessity for making the main drive pass entirely across the centre of the site was in this scheme perhaps the feature most difficult to deal with, and the one most calculated to destroy that privacy and seclusion, the evident expression of which should predominate in every well designed garden. To obtain this idea in a site so hampered, especially when one considers the complicating nature of the contours, might well seem, at first glance, almost impossible.

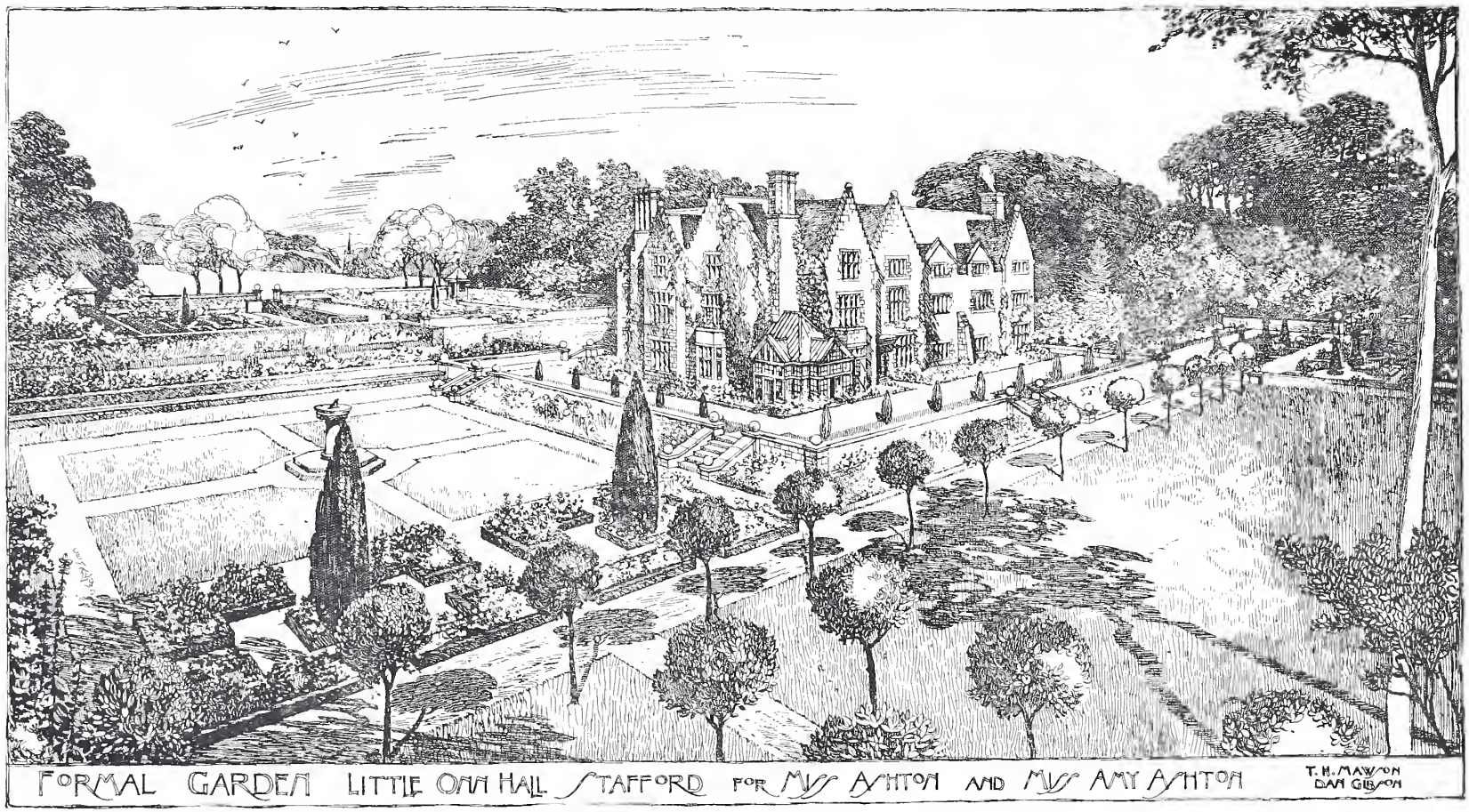
In dealing with this difficulty the point which first presents itself to the designer is that of course nothing in the way of actual pleasure grounds can be attempted between the main entrance gates and the carriage court, this portion of the ground being of necessity treated with a bold, park like freedom, the only walk necessary to the remainder of the scheme being screened by an avenue of laburnums. The treatment of the carriage space in front of the main entrance coming next under consideration, it becomes at once apparant that an enclosed court is the only form that it can take consistantly with the privacy of almost any part of the grounds. This court is very clearly shewn in the perspective view on page 193, though in judging of the effect it must be remembered that this sketch is taken from a very elevated point of view and therefore the walls do not screen so much of the grounds as they would when viewed from the carriage court.

Having thus disposed of the more public portion of the drive, all that now remains to embarrass the garden designer is the apparant bisection of the pleasure grounds by the drive leading to the stables. This can only be remedied by making the approach from one part of the grounds to the other of such an interesting nature that the eye is attracted by the view at the other side of the drive rather than by the drive itself. Thus, in the present case, in approaching the drive from the formal flower garden, the shady avenue of lilacs, being such an entire contrast to the many hued flower garden, at once draws and captivates the attention.

The long piece of blank wall dividing the house yard from the drive would seem to be a well nigh irredeemable feature, but even this if covered with large masses of free growing ivy and, say, snow white Dundee rambler roses thrusting their flowers from among the dark leaves, may be made to form a feature of the greatest interest.


PLAN OF GARDENS
CLIEFDON HALL NEAR WARRINGTON
FOR R.A. NAYLOR ESQ.
SCALE OF FEET
STABLES
KITCHEN GARDEN
SEAT
LILAC WALK
SUN DIAL
FLOWER BEDS
BOX EDGED
TENNIS LAWN
SUMMER HOUSE
FLOWERS
GRASS WALK
GRASS
PORTE-COCHERE
THE HOUSE
A
B
TENNIS LAWN
SUMMER HOUSE
LABURNHAM WALK
SEAT
PUBLIC ROAD
SECTION ON LINE A B
LODGE
THOMAS H MAWSON
LANDSCAPE GARDENER &
WINDERMERE

No. 134.

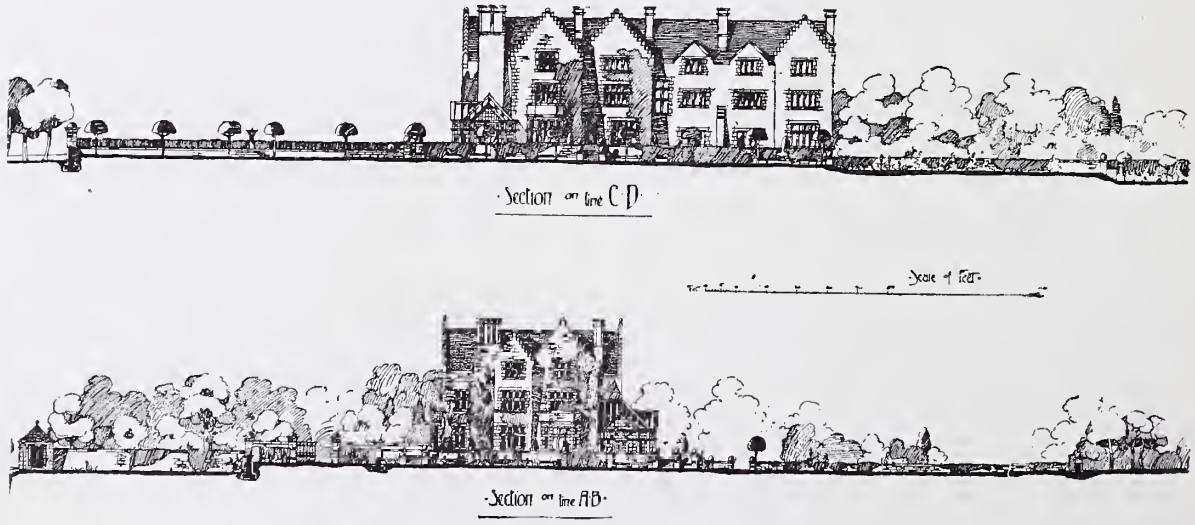

FORMAL GARDEN LITTLE ORM HALL STAFFORD FOR MISS ASHTON AND MISS AMY ASHTON
T. H. MAWSON
DAN GIBSON

No. 135.

Gardens at Little Onn Hall, Staffordshire.

Little Onn Hall is situate about eight miles from Stafford, and three miles from the village of Gnosal, at the latter place is the nearest railway station. The present hall has recently undergone considerable alterations and additions, a new entrance hall and billiard room having been added, and other portions of the house re-modelled. The older portions of the hall, built about 25 years ago, did not possess any great architectural features; but the present completed building which is in stone, has some character about it, the numerous gables, each furnished with crowfeet or corbie step, the stone mullioned windows, and the large climber covered wallspace making a very pleasing centre round which to form a garden.

The house covers a somewhat large area, the billiard room, hall, and one end of drawing-room facing West; the drawing-room and dining-room having one side to the South; the latter room and also the library being lighted principally from the East. From this it will be seen that the entertaining rooms and hall occupy three sides of the house. The ground upon which the hall has been erected, and for a considerable distance round it, is practically level; but the floor height had been very wisely raised some four feet above the general level, thus allowing of a terrace which is carried round the South and East fronts. In addition to the four feet gained by raising the floor level, the ground falls about five feet to the West and the same distance to the East; the level of the kitchen gardens and of the lower step into the rose garden being almost the same. On account of this rise in floor level, and of the fall to the park and kitchen garden, the hall looks much more elevated than it did before the commencement of these improvements. To give a clear idea of the ground by this change of level, two sections are here given, section A.B. shewing terraces and flower garden to the East side of house, and section C.D. shewing the terrace to the South the section of drive and rose garden.



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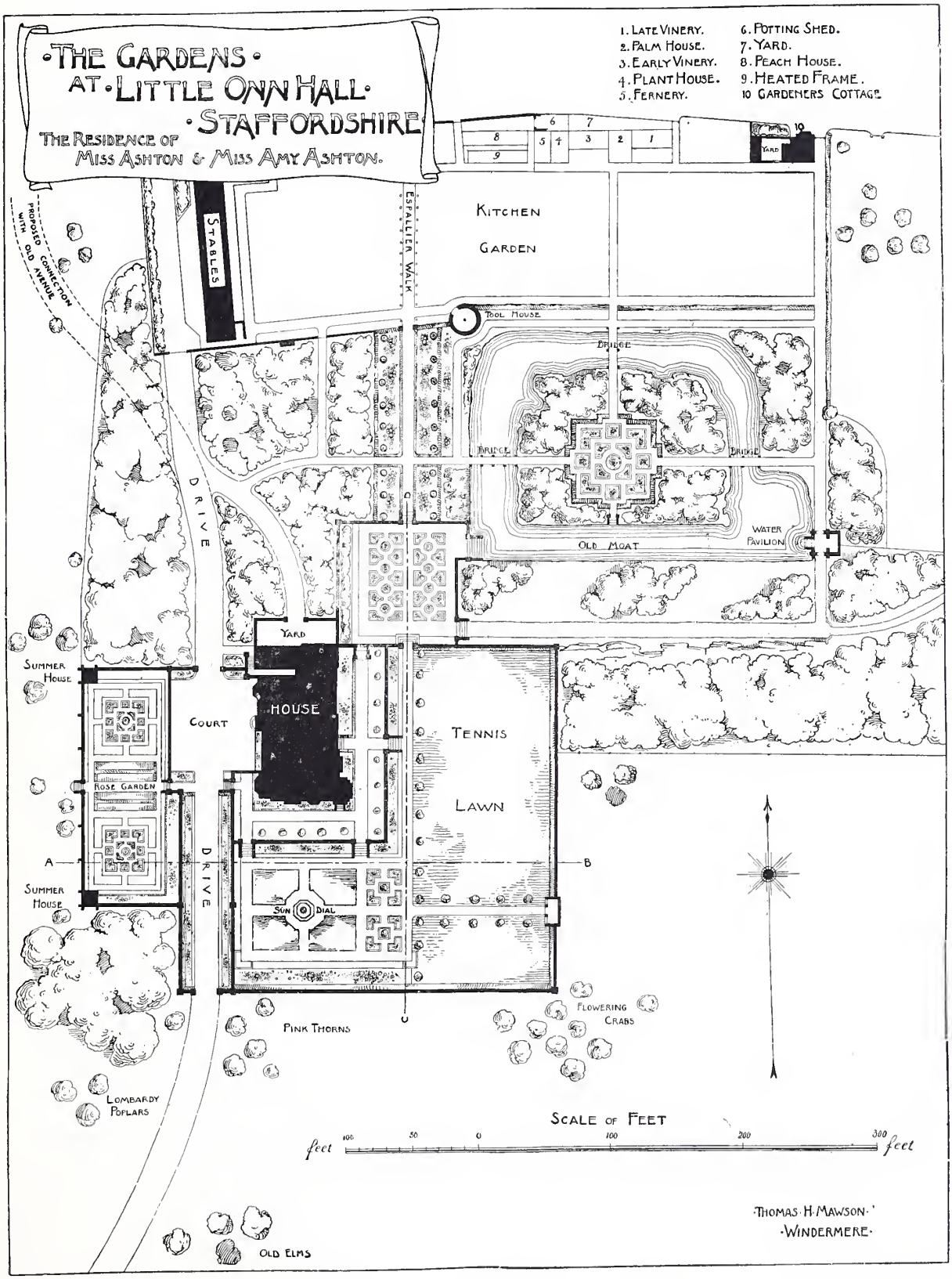

THE GARDENS AT LITTLE ONN HALL STAFFORDSHIRE
THE RESIDENCE OF MISS ASHTON & MISS AMY ASHTON.
1. LATE VINERY.
2. PALM HOUSE.
3. EARLY VINERY.
4. PLANT HOUSE.
5. FERNERY.
6. POTTING SHED.
7. YARD.
8. PEACH HOUSE.
9. HEATED FRAME.
10 GARDENERS COTTAGE
STABLES
PROPOSED CONNECTION WITH OLD AVENUE
ESPALLIER WALK
KITCHEN GARDEN
TOOL HOUSE
BRIDGE
BRIDGE
BRIDGE
DRIVE
OLD MOAT
WATER PAVILION
YARD
SUMMER HOUSE
COURT
HOUSE
TENNIS LAWN
ROSE GARDEN
A
B
DRIVE
SUMMER HOUSE
SUN DIAL
PINK THORNS
FLOWERING CRABS
LOMBARDY POPLARS
OLD ELMS
SCALE OF FEET
feet 100 50 0 100 200 300 feet
THOMAS H. MAWSON
WINDERMERE

No. 137.

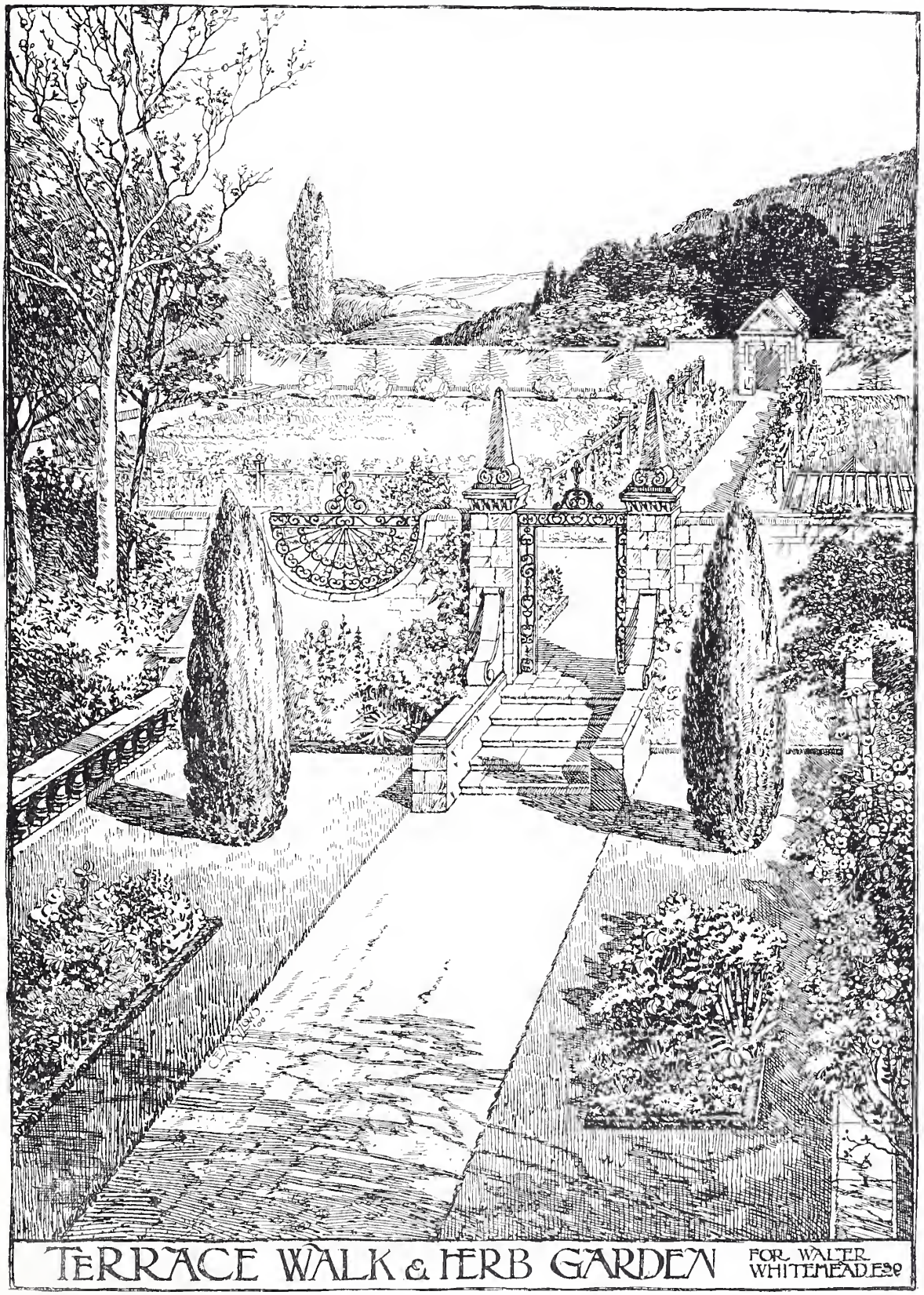
Only two portions of the scheme shown on the plan existed prior to my being consulted, viz., the kitchen garden and the moat or pond, both of which as shewn on plan are slightly altered. The moat seems to have surrounded, at one time by monastic or other important buildings, and to have been stocked with fish. In fact, the old fish stews, divided into five compartments, still remain, and are being carefully preserved.

Before this work was carried out the house had the appearance of growing out of the ground, without any architectural supports or base. This, in a hilly and rocky country, may at times be a proper way for a house to be arranged, especially when it sits on a cliff of rocks; but in a level country it is apt to give the building a depressed appearance, and suggest dampness.

It will thus be seen that in designing these gardens, the improvements to be aimed at were—first, and most important, to give elevation and base to the house. This, as has already been suggested, has been provided by an arrangement of terraces, to impart plenty of colour, which is provided by rose gardens, flower gardens, and borders arranged for herbaceous flowers; and, also to unite the old kitchen garden and moat with the rest of the pleasure grounds. Comprising an area 8½ acres in extent, including the kitchen garden, it will be seen that considerable variety is obtained; whilst the compactness of the gardens will allow of their being kept in good order with the minimum of labour.

There are a number of fine old trees in the park, mostly Oak, Elm, and Sycamore. These are incorporated in the plan of park plantations given on page 116. Also good young timber plantations between the North end of the house and the stables, and also a fine belt of Beech of about 40 years' growth in the plantation alongside the moat, between the tennis lawn and the public highway, extending in width from the fence shewn on the plan to the edge of the moat. Before this work was taken in hand, this young timber had been much injured by a number of Spruce, which are being cleared out. Amongst these trees, young undergrowths are being planted, consisting of Rhododendrons,—especially caucasicum album, which is a capital grower in shade—Azaleas, Lilacs, common Yews and Hollies, Brambles, with large patches of St. John's wort, Periwinkles, Ground Ivy, Vaccineums, and Gaultherias. Amongst these, again, it is proposed to naturalise Snowdrops, Daffodils, wood Anemones, wood Hyacinths, American wood Lilies, etc.; whilst on the margin of the pond are being planted Iris Kæmpferii, Iris Florentinus, and all sorts of sub-aquatic plants. In the pond will be planted a fine collection of water Lilies, water Hawthorn, Nelumbium, &c.

In addition to the Yew and sweet Briar hedges, there will be arranged on the terrace Irish Yews, and also golden and common Yews clipped into shape, mostly as squares or pyramids. The Rose garden which occupies such an important position between the carriage court and the park, is planted with all sorts of old fashioned varieties, such as the York and Lancaster Rose, the old China and damask Musk and Macantney, all planted in masses, whilst on the walls are planted choice tea and noisette varieties, which are growing very freely.



No. 138.

As will be seen from Mr. Mallows perspective view, the architectural details have a great influence on the scheme as a whole. Some of these details are indicated on the sections, these in addition to those shewn in perspective view, will give a good idea of the effect obtained in the several parts of this garden, and also serve to show the importance I attach to the architectural features in a level district; this being one of those places which could not have been converted into a satisfactory garden without recourse to the many forms of Garden Architecture that are here introduced.

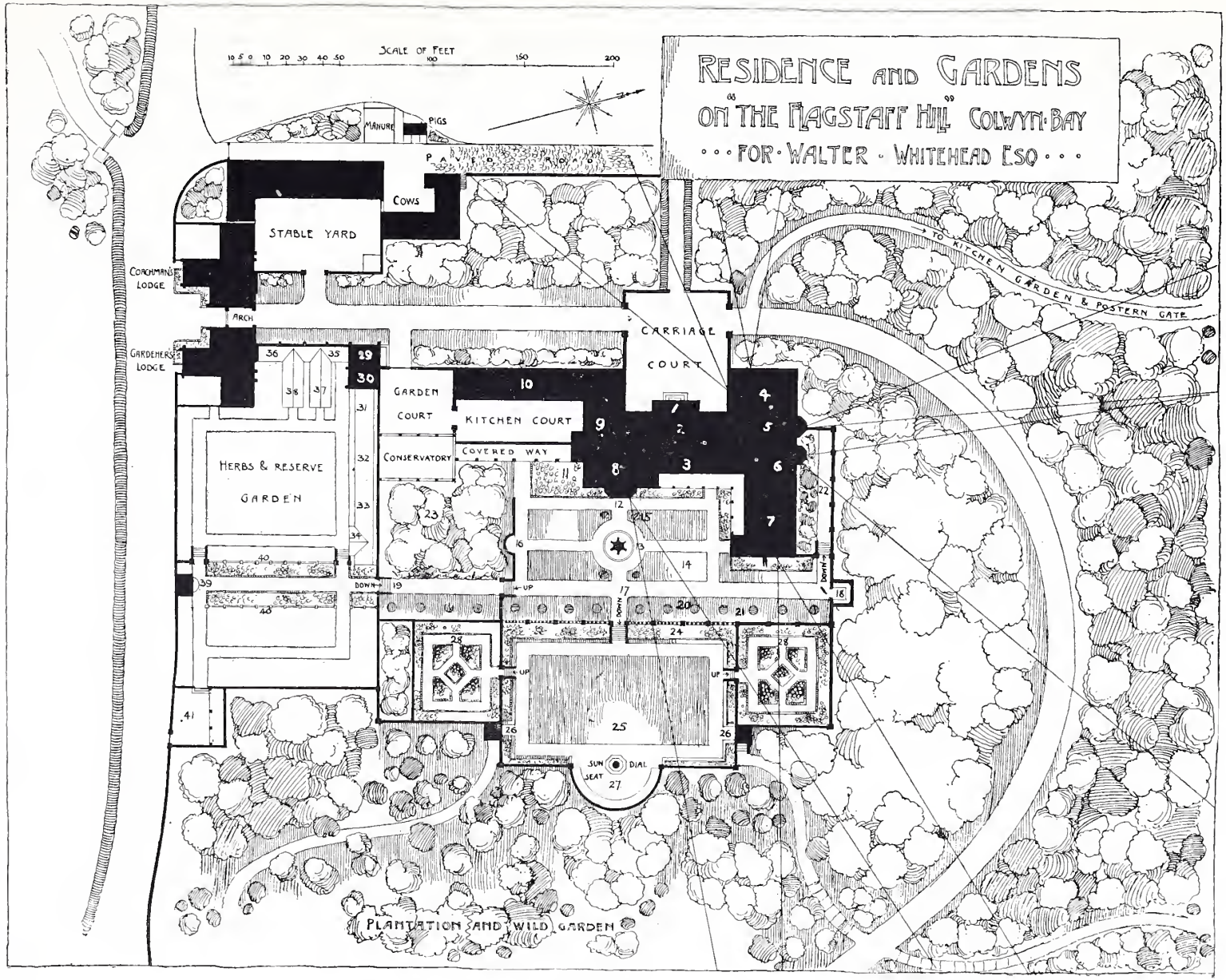
Gardens for Walter Whitehead, Esq., The Flagstaff, Colwyn Bay, North Wales.

The subject of this illustration being situated at one of the most popular seaside resorts, is chosen because the site presented an unusual number of difficulties, and also because it is well known to many of my readers. To those who do not know it the following particulars will give some idea of the site and its difficulties.

Flagstaff hill lies to the South West of Colwyn station, 420 feet above sea level, a mile and a quarter distant from both station and bay, and about three hundred yards above the Pwllycrochan Hotel. The Flagstaff is reached by two main roads, one by Pwllycrochan Avenue, which passes the two upper lodges on the way to Conway, and the other and easier approach, by way of the new road called Oak Drive, at the end of which are erected a drinking fountain, cattle trough, and postern entrance. The road then proceeds by way of an old lane at each side of which are a number of beautiful old oaks which form a canopy of greenery. At the head of this lane is placed the principal entrance and entrance lodge.

Very few sites in the British Isles command such an extensive panorama of sea and landscape scenery. Under favourable atmospheric conditions the Isle of Man, sixty miles distant, can be distinctly outlined: the Westmorland hills, still more remote, are occasionally visible, and frequently the tower at New Brighton can be clearly recognized. Puffin Island and the Menai straits are within easy view, and the Snowdon range of mountains form a magnificent background in the West, and in winter, when clothed with snow, form a strong contrast to the verdure of the milder climate of the surrounding neighbourhood, which produces almost any kind of vegetation, which can be successfully grown in the open in any part of the United Kingdom. The direction of these views is indicated by the radiating lines shewn on the plan. The principal view from position (4) on the plan, across the carriage court, takes in the Conway valley and Castle; from (5) is seen Little Ormes Head; (6) Colwyn Bay; and (7) and (8) the East end of the bay with Rhyl in the distance. All the fine views range from south west to east, that looking due south being somewhat restricted and including one or two houses in the distance; this lack of interest was the principal factor in deciding the plan of the garden in this direction. All the advantages of a site cannot be obtained without some corresponding disadvantages, and this case was no exception to the rule, as it is naturally exposed to every wind that blows.

The principal drive from the entrance to the carriage court, part of which is shewn on the plan here given, is four hundred yards long and fifteen feet wide, with a gradient of


RESIDENCE AND GARDENS
ON THE FLAGSTAFF HILL COLWYN BAY
FOR WALTER WHITEHEAD ESQ
SCALE OF FEET
MANURE
PIGS
COWS
STABLE YARD
COACHMAN'S LODGE
ARCH
GARDENER'S LODGE
CARRIAGE COURT
GARDEN COURT
KITCHEN COURT
COVERED WAY
CONSERVATORY
HERBS & RESERVE GARDEN
TO KITCHEN GARDEN & POSTERN GATE
SUN DIAL SEAT
PLANTATION AND WILD GARDEN

No. 139.

about one in thirteen, a gradient which, spread over such a long length of drive will give the reader some idea of the altitude of the house. From the carriage court, the drive continues in a straight line to the double lodges and entrance shewn on the left hand side of the plan, the total rise between these two points being only three or four feet. It should however be explained that the long drive is splendidly protected for a considerable part of its length by existing pine trees, and that there is also a vigorous young plantation of mixed hardwoods to the east of the terrace, and it was principally to avoid cutting down any of these trees that decided the outline of the terrace walls. From this point to the West boundary there were no trees whatever.

The proprietor wished the house so placed and planned that he should not only obtain the best views from each room, but also that he should have the best aspect, ensuring the rooms being as sunny as possible, and secure protection from the wind and be able to find a sheltered walk on which to promenade, from whichever direction it might proceed. The radiating lines and the plan denote how the first conditions were met, all the entertaining rooms excepting the morning room which only obtains the morning sun for a very short time, and the billiard room on which the sun falls a little after mid-day complying. The last condition was the most difficult to meet. Broadly speaking the two prevailing winds are from the direction of the upper corners of the plan, diagonally to the lower cross corners, or from slightly South of West and East of North. The stables, lodges, cow sheds, and kitchen wing make an ample protection against the first, but the second could not be entirely guarded against, though much is done in this direction by the **T** shaped plan, the projection at (4) with the addition of the carriage court wall screening the front entrance, and the projection at (7) with the high terrace wall and summer house at the end of the terrace (18), which screens a good part of the terraces. The curved drive is well protected, the ground between the drive and the walk to the kitchen garden having been raised fourteen or fifteen feet and planted with maritime Pines, Scotch Firs and evergreen Oaks; the latter will, in years to come, give the best possible protection without growing so high as to obstruct the view from the house. The same class of evergreen trees are to be planted between the stables and the carriage court.

It has already been stated that the view to the South was restricted and that it was desirable to screen several houses from the house and gardens on this side of the property, and also that the principal entertaining rooms were to have a South aspect. It will also be seen by the arrangement of the steps on the plan, that the ground rises in this direction. For these reasons it was decided to place the house as far as possible away from the South boundary. This South aspect is of course, greatly to the advantage of the flower garden as it is naturally the most sunny side, and, owing to the building and plantations already referred to, the most sheltered. The first intention was to make the herb and reserve gardens large enough for vegetable growing, but it was found that further extension to the East than that shewn on the plan would necessitate the removal of several old trees, and also leave the garden front too open to the road: this garden is walled in as originally intended, thus giving a series of additional sheltered walks which can be reached from the residence by the covered way and through the conservatory, vinery and

palm house. The perspective view of the herb garden and glass houses, No. 138, gives a fairly accurate idea of the extent and importance of this portion of the scheme.

We may now refer in detail to the several features as indicated by the numbers on the plan. In the subjoined list, these numbers are, for ease of reference, given under the heading of the department to which they belong.

The plan only shews that portion of the grounds which forms the immediate surroundings of the residence. It may, however, be added that a herb garden of about an acre and a half in extent and an orchard of similar area are already made on the sloping ground on the N.E. side of the drive.

It should be noted that while the garden scheme, including the terraces, glass houses, plantations, drives and walks, is being carried out, the style and character of the residence, for which plans have been prepared by Mr. Dan. Gibson, has not yet been finally fixed. The plan here illustrated, whilst shewing the disposition of the various buildings in the manner considered necessary to the success of the whole, does not shew a scheme as actually carried into execution, though the lodges have been successfully carried out. I refer to this fact because I am prevented thereby from giving a perspective view, which would have shewn both house and grounds, and their relation one to the other and to the site. The plan, however, shows the advantage of a scheme in which both architect and garden designer are mutually interested.

The Proposed Residence.

NOTE.—The Carriage Court is nearly six feet below the floor line of large Hall.

1. Entrance Porch.
2. Picture Gallery.
3. Large Hall.
4. Billiard and Smoke Room.
5. Staircase.
6. Morning Room.
7. Drawing Room.
8. Dining Room.
9. Butler's Pantry.
10. Kitchen Wing.

The Hall and Drawing Room open on to the Loggia.

There is a covered way which screens the Kitchen Court from the Terrace and connects the Hall and Drawing Room with the Conservatory.

Upper Terrace.

11. Flower Borders with dressed stone edging.
12. Walks 7 feet in width.
13. A Fountain with central shaft supported by bronze figures.
14. Four Grass Panels.
15. Clipped Box Tree in each point of Grass Panels.
16. Circular Seat to finish end of central walks.
17. Main Terrace Walk 9 feet in width which is finished at N.E. end by a shelter on Summer House and high Terrace Wall (18), and at the other end by a Wrought Iron Gate with overhead ornament (19), through which is seen the shelter in the reserve garden.
20. Grass border 14 feet wide.
21. Standard Bay Trees in tubs placed on stone cases.
22. Lower terrace running round the North end of the house, reached by way of an arched doorway in cross wall.

23. Hill of rock which forms the remains of the Flagstaff mound. This is to be planted with rock plant and shrubs.

Lower Terrace. The wall which divides the Upper from the Lower Terrace is arranged with bays of balusters, similar to the last illustration on page 43: sugar loaf finials being substituted for balls, stone being used throughout instead of a combination of brick and stone. The lower terrace is 5 feet 6 inches below the upper terrace.

24. Border for Hardy Perennials 6 feet wide, edged with Box. To the front of this again there is a grass verge 2 feet 6 inches wide.

25. Croquet or Tennis Lawn, the size of which is 100 x 50 feet, surrounded by a walk 7 feet in width.

26. Two Shelters through which the walk passes, giving connection with the wild garden and drive.

27. Circular Bastion with a seat on the garden side and a Sundial in the centre.

28. **Side Flower Gardens.** These are intended to be planted as Rose Gardens, the beds forming centre panels being planted with dwarf free flowering varieties, such as Crimson Bedder, York and Lancaster, Fairy Roses, Monthly and China Roses. The border inside the walls being reserved for Choice Hybrid Perpetuals, Tea and Noisette Roses. Over the walls are to be trained Lord Penzance's Sweet Briars, Tea Roses, Dundee Ramblers.

It will be noticed that these gardens are not on the same level as either the upper or lower terraces; they required to be arranged to meet the fall in the ground.

Herb and Reserve Garden. To which reference has already been made, is enclosed by walls, against a part of which are arranged the whole of the plant and fruit houses. The walls not so used are treated ornamentally, especially that part which divides the reserve from the terrace garden. A part of this is divided into semi-circular bays which are filled with wrought iron fans. The centre walk is a continuation of the long terrace walk, the trellis arranged for climbing Roses, the borders at either side being reserved for old fashioned hardy Perennials. In this garden there are also borders for all kinds of herbs, salads, and annuals for cutting.

29. Potting Shed with heating chamber under.

30. Annexe to potting shed, to be used for packing flowers, &c.

31. Palm House.

32. Early Vinery.

33. Late Vinery.

34. Greenhouse.

35. Early Peach House.

36. Late Peach House.

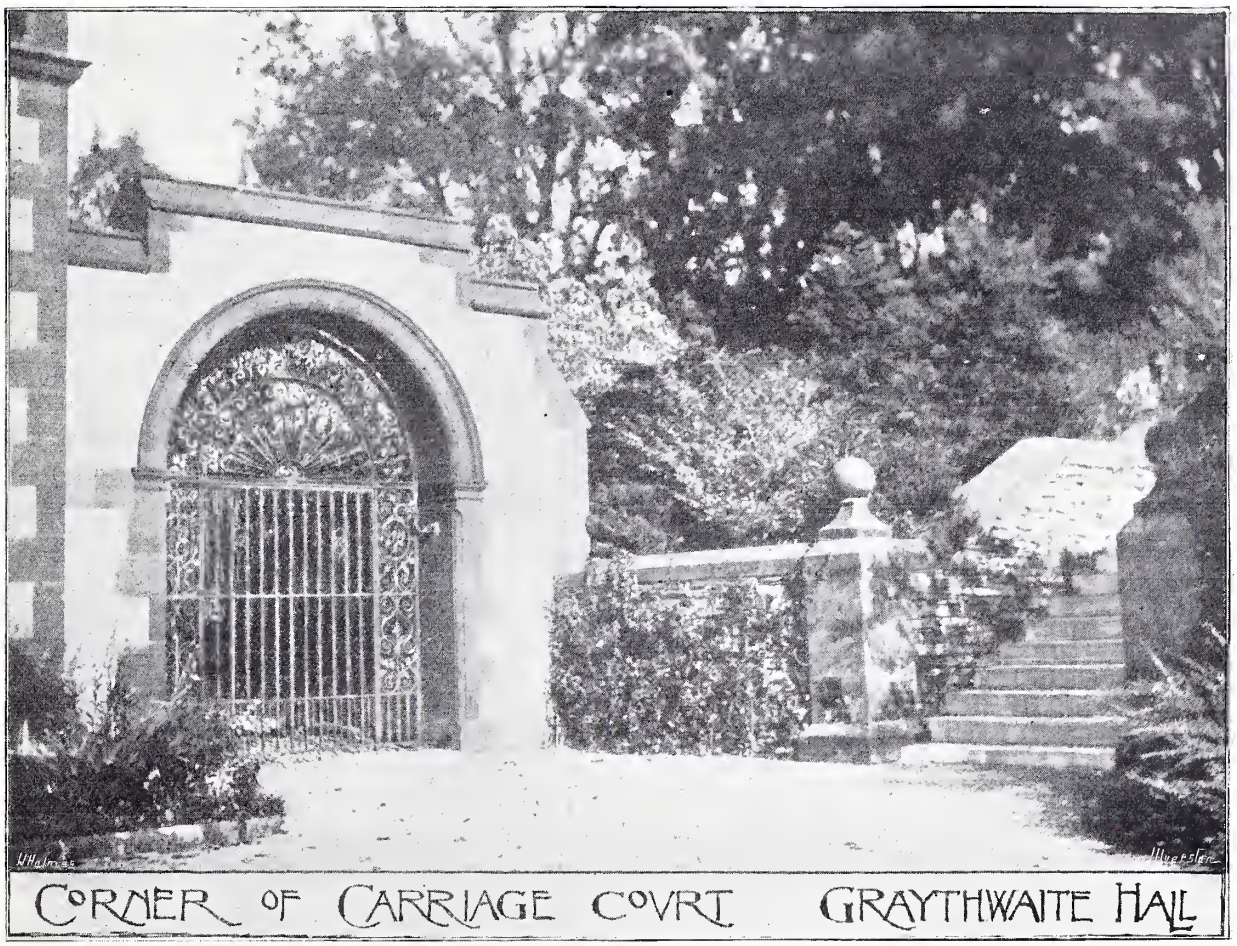
37. Stove Greenhouse.

38. Melons and Cucumbers.

39. Summer House.

40. Low trellis with rose arches across the walk.

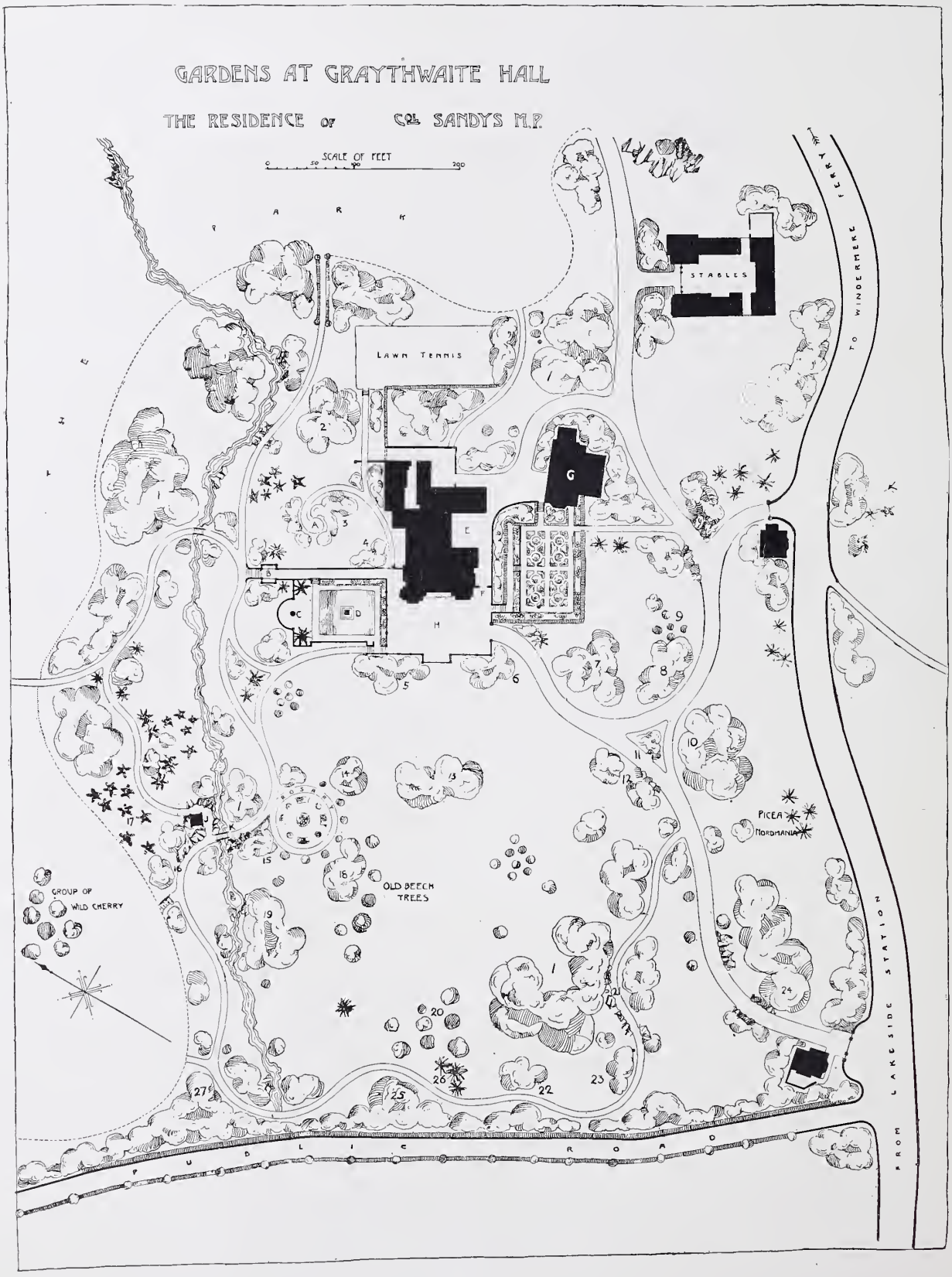
41. Yard.



No. 140.

Graythwaite Hall has been the seat of the Sandys since the middle of the fifteenth century, whilst for some hundreds of years previously the family held estates in West Cumberland which adjoins this part of North Lancashire. In fact the history of the family has practically been bound up with the district from the time of King John up to the present day. This is in itself quite sufficient to explain the keen interest which the present proprietor has taken in the work of improvement on every part of the estate, but more particularly in connection with the mansion house and necessary buildings and also the gardens and home park.

To realise what has been done it is necessary to understand the general arrangements of the house stables and gardens prior to the scheme of improvement being taken in hand. In the first place there was only one entrance which was used for all purposes, the position being near the group of shrubs No. 10, a small postern gate not shewn on plan in the position of old entrance, now serves as a private way to the kitchen garden. Between this entrance and the position where the two drives join, there was a rise, and from this to the


GARDENS AT GRAYTHWAITE HALL
THE RESIDENCE OF COL. SANDYS M.P.
SCALE OF FEET
0 50 100 200
STABLES
LAWN TENNIS
TO WINDERMERE FERRY
PICEA NORDMANIA
OLD BEECH TREES
GROUP OF WILD CHERRY
FROM LAKESIDE STATION
PUBLIC ROAD

No. 141.

main entrance portico a very steep decline. There was no terrace of any kind but masses of overgrown trees and shrubs surrounding the house on every side. The ground now converted into a formal garden, and which is about 16 feet higher than the carriage court was the site of the old stables; this high ground came right up to the house. To the north and opposite the recreation room are a row of large Limes, whilst to the North West corner of the house the ground rises in a mound ascending a winding walk.

The ground to the South West or from the front of the house falls in the direction of the little bridge, but owing to the large number of trees and shrubs very little of this was seen; in fact there was not a single open view in any direction, the Hall being completely shut in.

The following description which appeared in the "Gardeners Chronicle" of Nov. 29th, 1896, gives a fair idea of the gardens as altered at that date.

"The design for these grounds, which are entirely new, is arranged so as to obtain "as much picturesque effect as possible, at the same time to involve as little extra labour "in maintenance as possible. The ground which is of a very undulating character, lies on "bluestone rock, which makes excavation very expensive. Generally speaking, the ground "falls to the West, and rises to the North-east and South-east the mansion being placed "towards the North-east end of the pleasure ground. As the ground falls towards it from "the East and South and North, and falls from the house towards the West, its position "as regards the main roads would be thought by some persons to be rather unfortunate, as "the drive traverses a descent in approaching the Hall, which gave it a sunk appearance. "This low-lying appearance has now been removed by sinking the drive in one part of its "course, by removing a large portion of the hill between plantations numbered 10 and 12 "by making the main entrance court to run level from the colonade to a width of 60 feet "supporting same by balustraded terrace wall. By forming a terrace on the North and "West fronts, and sinking these somewhat so as to give greater elevation to the house. "A part of this work has already been done, and gives the desired effect. Although "situated in a beautiful district, and forming part of a charming estate, there were, "owing to the whole of the park and grounds being surrounded by a belt of oaks about "a hundred years old, practically no views into the park or of the distant landscape. "By felling a number of these oaks, they have been broken up into groups, and by this "means many very fine views of the surrounding country are obtained. The crest of "the hill which rises the West side of the stream has also been cut through, and a view "opened up across the park. By the removal of some cowsheds, barns, and a smithy, a "very fine view, terminating in a rocky hill planted with Scotch Firs, has been brought "in from the walk which leads along the side of the stream to the park; by the margin "of this stream it is intended to naturalise Daffodils, Spiræas of sorts, Iris, Japanese "Anemone, and other hardy free-flowering plants."

"The stables which at present occupy a position near the house, are to be removed

No. 142.

"and spacious new stables built on ground convenient to the dwelling, *i.e.* in position "shewn on plan. A walled-in kitchen garden of about one and a half acres, with an "excellent gardeners' cottage, and a range of glass, has already been erected on the South-"east from the mansion. A number of old trees were found on the ground, most of which "have been taken advantage of, and others have been transplanted to their present stations "in the park and elsewhere. Conifers have been largely planted for shelter, and large "quantities of the choicer Rhododendrons and Azaleas, and Acers are planted to ensure "variety and brilliancy of colour during the season.

Since the foregoing appeared much has been done in many directions to further improve the gardens. In the first place, the old stables have been removed and the site converted into a formal garden, the old bark barn at the end being remodelled and made into a recreation room. The ground has also at great expense been excavated from the end of the house which has resulted in a great improvement. A drive connects the front carriage turn with the side entrance court, this is spanned by an arch designed by Mr. R. Knill Freeman, F.R.I.B.A., in which is the very beautiful piece of wrought iron-work shewn in the photograph designed by Mr. Dan Gibson, the steps in same view lead to the formal garden on site of old stables.

The proprietor's love of choice hardy flowering plants and shrubs has resulted in a very fine collection of hardy perennials and flowering shrubs which is increasing annually. The rustic bridge which spanned the little stream has been removed, the oak bridge illustrated on page 65 being erected in its stead. A sundial has also been designed to stand on the terrace, this is shewn on page 72. Great care has also been bestowed on the design of the garden furniture such as seats and chairs.

As rock was everywhere within a very few feet from the surface, formation as generally understood was almost impossible. From this it will be gathered that the plan illustrated represents the design as fitted to the existing contours, even the terraces having to be controlled by existing conditions. Whatever exceptions may be taken to certain portions of the plan it may be said that the luxuriant way in which everything grows renders the garden at all times interesting. Reference to the explanatory key to the letters and numbers on the plan give a clearer conception of the arrangement of these grounds but more especially of the plantations.

A. Seat on mound.

B. Flight of steps with seats at head.

C. Lead figure on stone base, *i.e.* the two stars represent old yews.

D. Sundial.

E. Luggage entrance and court.

F. Gateway in arched opening.

G. Recreation room.

H. Carriage court.

I. Rhododendrons by side of waterfall.

J. Garden house.

K. Bridge illustrated on page 65.

1. Three plantations composed principally of choice hybrid Rhododendrons.
2. Azaleas and Rhododendrons on sloping bank.
3. Groups of deciduous flowering shrubs.
4. Rhododendron Wilsonii and Mezerions
5. Mixed Shrubbery principally small growing Conifers, Lilacs and Wiegeleas.
6. Cedar tree with undergrowths of Pernettyas and Vacciniums.
7. Large group of choice Pernettyas round base of rock.
8. Spanish Gorse.
9. Cream Broom.
10. Hybrid Rhododendrons.
11. A cutting between two rock banks planted with rock plants and ferns.
12. Double Gorse.
13. Collection of American plants.
14. A large old Azalea.
15. Pernettyas, Spiræas, Mezerions and other shrubs.
16. Hardy Heaths planted on rock bank.
17. Collection of choice Pines.
18. Rhododendron Caucasicum alba.
19. Large group of old Ponticum Rhododendrons.
20. Group of Prunus Pissardii.
21. Mahonia and other shade loving plants.
22. Irish Heaths.
23. Group of rock shrubs.
24. Mahonia, Gaultheria, Skimmia and other deciduous flowering shrubs.
25. Rhododendron and Ghent Azaleas.
26. Three pigmy Pines.
27. Collection of Hollies and standard flowering shrubs.

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