

POSSIBILITIES OF HORTICULTURE.



MR. H. W. SARGENT'S GARDEN ON THE HUDSON.

THE results of human labor and research in science are cumulative. Each scientist starts with the hoarded experience of centuries, and knowledge grows by the food handed down to it from the granary of the past. The wonderful insight into the secret mysteries of the universe obtained within forty years by discoveries in electricity, by the photograph, the spectroscope, the telephone, the phonograph, and other notable inventions, gives evidence unquestioned of the marvellous power which is preparing for the human race in the centuries to come. Art has no aid from this cumulated power; it is the product of individual brain, aided only by observation of the products of the past. The culture which it requires may, however, be the accumulated work of generations, and what we call genius may be only the impassioned fervor called out by that culture.

The artist can not, like the scientist, take all the work of his predecessors, and with it establish a new starting-point for himself. He may study the works of Raphael and Da Vinci, and from them gain inspiration, but he can not begin where they ended. If this be true in relation to sculpture and painting, it is eminently true in regard to horticulture.

The results of horticulture in the past are, in a certain sense, cumulative, for by them we have the varieties of form and color, and the discovery of a new plant is a gain to the plant artist as great as that of a new gem to the jeweller. But in grouping and shaping forms, in contrasting and harmonizing of colors, and in all which the painter or sculptor means by art, horticulture is still, and will ever remain, dependent upon the genius of its votaries, aided only, as the painter is aided, by study of the works of the past.

Those who have thus studied are few, and still fewer are those who, with adequate study, have united a true love and an appreciation of the possibilities which nature has laid open before them in infinite variation.

Without adulation we can speak of the dead. Among the very few landscape artists in this country, the late A. J. Downing stood pre-eminent. Although denied the opportunity in the early part of his career to study the best examples of landscape art in Europe by personal inspection, he supplied its place by careful study of written descriptions. To natural taste he united knowledge of trees and plants—a knowledge very rare among landscape gardeners of the present day. He held, moreover, a graphic pen, and his magazine articles were spirited and lively, with a breezy freshness which always carried the reader with him. During his life—more than thirty years ago—very little was really known in this country of landscape art. A desire to know was, however, springing up, and thus a niche was formed, into which Mr. Downing stepped, and filled it as he grew. He continued to grow, because he did that which few landscape gardeners have done—he visited frequently the nurseries and private places in which fine or rare specimens were to be found, and studying them carefully, was prepared to judge correctly of their capabilities. He soon saw the necessity for some direct mode of literary communication with the people, and established the *Horticulturist*. His racy and enthusiastic editorials at once excited attention; his readers were kept *en rapport* with the progress of horticulture in Europe, and those whose minds had been turned in that direction received a new impulse and a new impression of the possibilities of horticulture.

We need such writers still. Although among wealthy men there is a decadence of horticultural taste, and trees or plants fade into insignificance beside yachts or horses, yet among the masses of men of moderate means there is an increasing desire for the possession of plants. Very few of these know of the existence of horticultural magazines, and earnest effort of enterprising publishers possessed of large resources is required to place the subject before them. With all the literature of Europe from which to draw, and with the pens of able men in

this country to aid the work, a magazine could be made which would be to these masses a guide and inspiration to the achievement of all charming possibilities.

The painter gains both knowledge and inspiration by the study of ancient and mediæval art; in like manner the maker of country homes, whether amateur or artist, can cultivate his taste by learning what was done in former days.

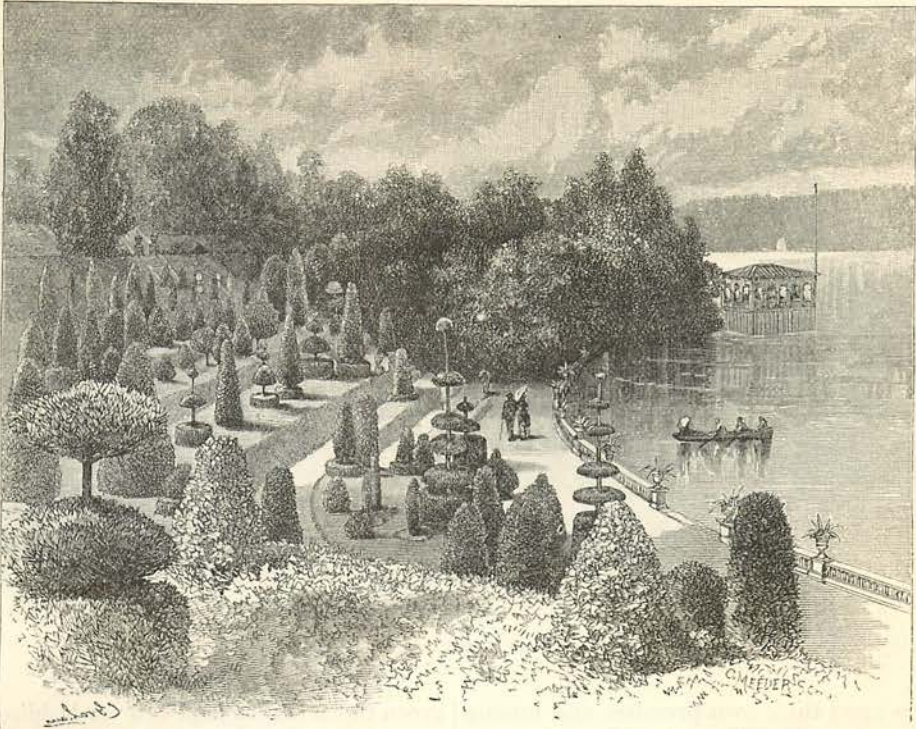
There are handed down to us glimpses of the Babylonish and Persian gardens, the glories of which we can imagine, and of which Coleridge had visions when he wrote:

“There were gardens bright with sinuous rills,
Where blossomed many an incense-bearing tree,
And there were forests ancient as the hills,
Enfolding sunny spots of greenery.”

The Greeks copied something of these in their intercourse with Persia, but their taste seems to have favored architecture rather than horticulture. Like many American citizens, they had more use for bouquets and garlands than for parks and gardens.

The order-loving Romans gathered up much from the luxurious habits of the countries which they conquered, and the remains of old gardens in Rome show even now that geometric lines and topiary work met most fully their sense of beauty. Virgil complained that he could never escape from the hand of man, and that temples, statues, and fountains were always intruding upon nature; the average Roman delighted in nothing so much as in straight lines, trimmed hedges, arched avenues, and shrubs pruned into all sorts of shapes. The Villa Pamphili Doria in Rome is a good existing specimen of this style.

This topiary gardening, which was the outgrowth of the Roman civilization, impressed itself continually upon all European horticulture. In Spain it was for a long time a favorite, and it became so ineradicably established in Holland that it is known even now as the Dutch style. The best example of it, on a large scale, is at Versailles, but the finest existing topiary work is at Elvaston Castle, in England, where the golden and other yews, pruned into various forms, present a scene of surprising beauty, of which the sketch (page 522) gives but a faint idea. That which, in sinuous folds, seems like an immense boa-constrictor, is a hollow hedge of English yew, with a walk in the interior light-



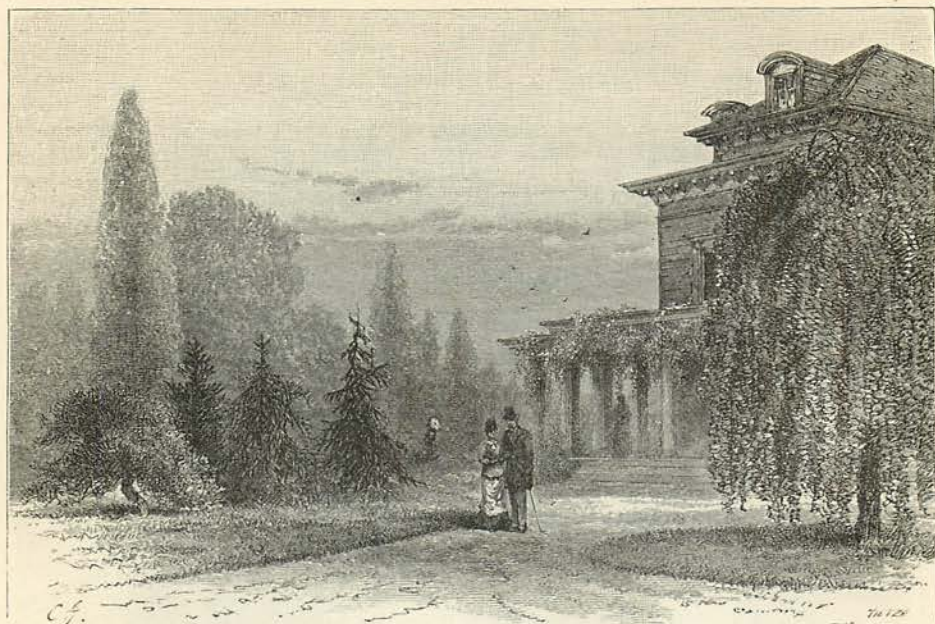
ITALIAN GARDEN AT MR. H. H. HUNNEWELL'S, WELLESLEY, MASSACHUSETTS, ILLUSTRATING TOPIARY WORK.

ed by windows at the sides. The same effect can here be produced with hemlock. In this country there is no topiary work equal to the Italian garden of Mr. H. H. Hunnewell. It only wants the color of the golden yew to rival Elvaston. In looking at them both, one is forcibly convinced of the limitless possibilities of horticulture.

There came at last a reaction against this artificial system, and the English or natural style gradually came in. This soon became popular on the Continent, was generally known as the *jardin anglais*, and for many years was the prevailing mode throughout Europe. Upon this the French taste for color has, within twenty-five years, been ingrafted. The Champs Elysées and other places of public resort in Paris have been made brilliant with the highest-colored bedding plants. Overflowing soon into England, a taste for ribbon gardening and parterres glowing with the richest colors became the fashion, and one of the best we saw twenty years ago was the terrace garden of the Earl of Harewood. Within a few years this taste for bright colors in plants has reached America, and the Centennial

grounds showed our people what could be done with masses of coleus, geraniums, arundos, cannas, and other high-colored plants.

Yet even these, beautiful as they are in their prime, cause for half the summer a colorless disagreeable blot on the lawn. Planted in June, they rarely cover the ground until August, and for the intervening time the bed in which they are planted is a mass of almost naked earth. Before the middle of October they succumb to the frost, and then for eight months more they do nothing to hide the bare earth in which they are planted. Eight months of ugliness is too high a price to pay for two months of beauty. Yet these bedding plants have become the fashion, and fashion is uncompromising in its demands. The gardeners naturally encourage people to buy them, because they bring a good price and are easily propagated. Thus the continued use of exotic plants for bedding is likely to increase rather than diminish, unless the taste is subjected to rigorous criticism. The only remedy is for men and women of true taste to insist on a better exam-



THE APPROACH TO MR. S. B. PARSONS'S HOUSE, FLUSHING.

ple upon their own premises and among their friends. They should not inveigh against color, but should persistently demand from their gardeners permanent plants of color, which would be beautiful for a large part or for the whole of the year.

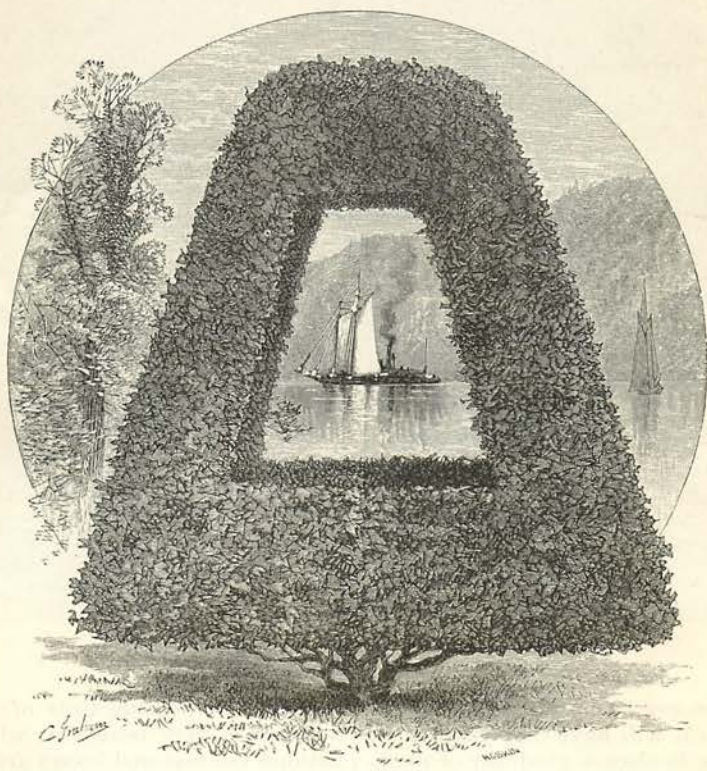
Few things are finer than a bed or border of ivy contrasted with a border of the dwarf *Euonymus radicans*. Then there is a sort of ivy with white and green variegation, and the periwinkle, with its pale blue flowers crowning dark evergreen leaves. The golden yew and the procumbent yew, both evergreens, one with a rich dark foliage, and the other with a lustre of burnished gold, can be planted in masses, and kept down to six or twelve inches. They can also be pruned into globes, ovals, pyramids, columns, or any desired form. The *Biota elegantissima*, bronze in winter and golden in summer, and the *Retinospora aurea*, with a golden foliage all the year, can be treated in the same way. Then there is a variegated retinospora—*filifera aurea*—like an evergreen fountain tipped with gold, which can serve as a centre for a flat bed. The *Retinospora obtusa nana* makes a low mass of tufted green of great beauty. *Thuja verrucata aurea* is another mass of gold and green. The ever-

green thorn can be kept low for bedding, as can also the glossy rich broad-leaved *Mahonia aquifolia*. *Picea hudsonica* makes a blue-tinted mass, and the common hemlock, with its white-tipped variety, can be kept low in a bed with as smooth a surface as on a hedge. The *Azalea amœna*, with its dark foliage and brilliant pink flowers, and the *Daphne cneorum*, unsurpassed in the fragrance of its flowers, and both hardy, make most exquisite beds. The *Cotoneaster microphylla* would also be very effective. Those I have named are evergreens, but there are many deciduous plants which can be used in the same way. The purple-leaved hazel and the purple berberry are almost as dark as a purple beech. The Japan quince can be kept low, and a bed of its crimson flowers would surpass any coleus. The new varieties of clematis—*jackmanii* and others—with their tints of blue, crimson, and white, would be simply superb. And then come the grand flowers, fawn and orange, of the *Bignonia grandiflora*, blooming freely for many weeks. In truth, all the vines can be treated as bedding plants, if the knife be judiciously used. I think that one of the most striking things I have seen was a common honeysuckle grown in a flat bed, the edges neatly trimmed,

and the whole surface covered with flowers. I saw another honeysuckle trained to a stake four feet high, and then allowed to fall over, making a mound four feet high and five feet in diameter. Few know the capabilities of climbing plants for great variety of form—for flat beds, for mounds, for columns, for arches, for cornices, for sides of buildings, or for any other form that taste can devise.

of form, but in so disposing those forms as to meet the requirements of the most fastidious taste. Here is shown the superiority of the natural or English conception of landscape gardening, not only over the old topiary or Italian mode, but also over the more modern one of numerous flower beds and ribbon gardening.

The English style is based upon a clearly conceived aim to imitate natural land-



VISTA SEEN THROUGH TRIMMED BEECH, AT MR. H. W. SARGENT'S, FISHKILL-ON-HUDSON.

I have applied my remarks to flat beds, in order to show that permanent hardy plants with leaves and flowers of high color could very properly take the place of the present fashionable masses of coleus, geraniums, etc. I would by no means limit the use of these plants to flat beds. True taste requires variety, and these masses could be made to assume various shapes and heights. Even in the foliage of large trees there is sufficient variety of tint to make a lawn seem like a large picture.

Having thus the color, the perfection of art consists not only in giving variety

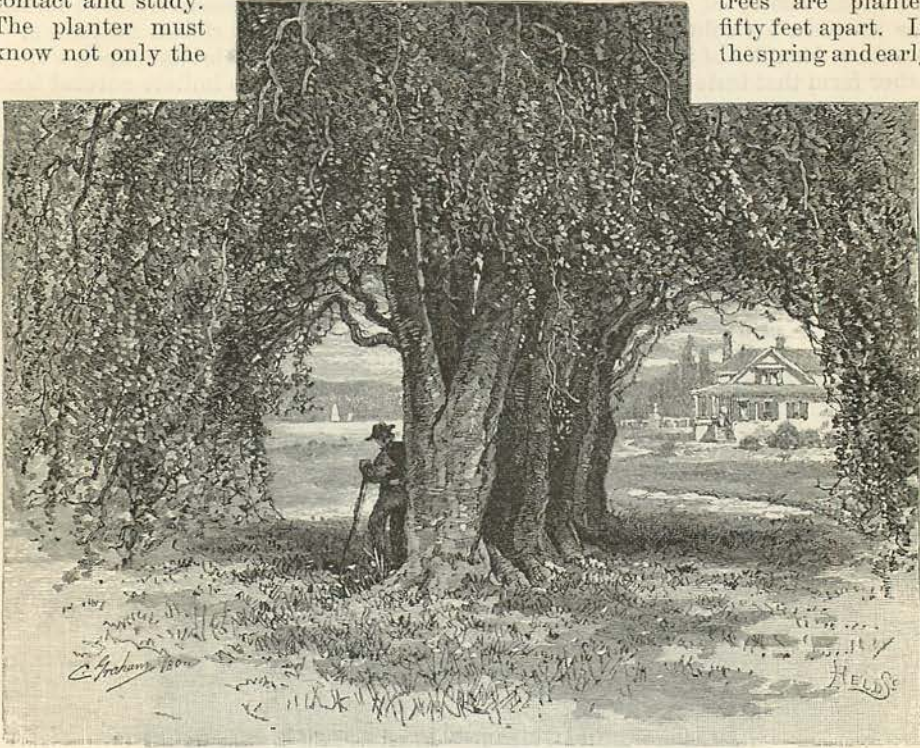
scapes, and Repton defines landscape to be "a view capable of being represented in painting. It consists of two, three, or more well-marked distances, each separated from the other by an unseen space, which the imagination delights to fill up with fancied beauties that may not perhaps exist in reality."

Knight expresses the same idea when he says:

"More cautiously will taste its stores reveal:
Its greatest art is aptly to conceal;
To lead with secret guile the prying sight
To where component parts may best unite,
And form one beauteous well-connected whole
To charm the eye and captivate the soul."

To do this well requires not only engineering qualities, not only the ability to sit down and place upon paper groups that please the eye, but it requires a familiarity with trees and plants which is obtained only by years of contact and study. The planter must know not only the

If variegation is wanted in a beech screen, every third tree can be of the purple variety. The wide-spreading beech-tree—the *fagus* under which Tityrus reclined—is a tree of rare capabilities. For avenues it is unsurpassed if the trees are planted fifty feet apart. In the spring and early



AVENUES FORMED BY A ROW OF ENGLISH BEECHES.

form of the tree as he plants it, but the form which it will have fifty years afterward. The landscape gardener or planter who attempts to produce the desired effects without this knowledge will have an ephemeral reputation, or, if his work is accepted for want of experience in his employers, he will retard a true connoissance of art and beauty in the circle in which he is known.

Our subject—the possibilities of horticulture—covers a wide field, and there is abundant opportunity in this country to display the resources of American ingenuity and taste. Only a few can here be named.

Not many of our readers know of the admirable screens which can be made with the hornbeam and the European beech trimmed flat and close as a wall.

summer the delicate tints of the young foliage are very beautiful, while in the autumn the matured leaves are fresh and green long after other trees are stripped by the frost. Its dense foliage lies in flakes upon sturdy horizontal branches, so that, looking through it from one side to the other, you can see the sky, while looking up from below or down from above, you can see nothing but foliage. An admiring writer, dwelling upon its magnificence and its beauty, calls it the Hercules and Adonis of the English forests. The head of the celebrated Studley beech in England was 350 feet in diameter, and there are other trees which were existing at the time of the Norman conquest. The American desire for quick results has induced the planting of maples, elms, and other fast-growing trees; but the man who has faith enough to

plant for the distant future, and form a beech walk one thousand feet long, with a stone monument recording the time of planting and the name of the planter, will at the end of a hundred years be found famous, and men will rise up and call him blessed. Another possibility is in the weeping-beech. Those who know it growing alone, with its cathedral form, its picturesque contortions, and its graceful beauty, scarcely realize how remarkable it may be when planted in double rows for a walk. The outside branches can be allowed to grow unchecked, forming a picturesque mass, while the inside limbs can be trimmed close to the trunk until a sufficient height is reached, when they can be allowed to interlace and make a dense canopy. A single row would also form a very unique walk. As the tree grows, the lower limbs can be cut off close to the trunk, when the upper branches will arch over in picturesque curves, sweeping the ground, and leaving a broad walk each side of the trunk. A tree which I planted forty years ago, and which is now a leaf-inclosed house, covering two thousand square feet, will give the visitor the best illustration of its possibilities.

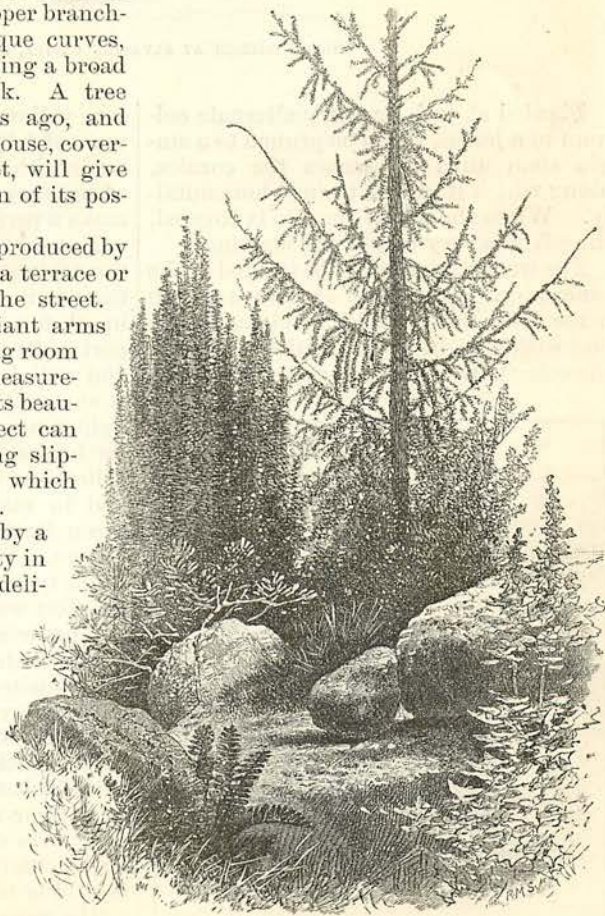
Another good effect can be produced by planting it upon the edge of a terrace or bank which is higher than the street. It will then throw out its giant arms and grasp the sidewalk, leaving room beneath its canopy for the pleasure-seeker to walk and wonder at its beauty. Somewhat the same effect can be produced with the weeping slippery-elm, the branches of which sweep in long graceful curves.

For a simple arbor formed by a single tree, there is great beauty in the weeping-sophora. The delicate softness of its foliage is surpassed only by the parasol curves of its branches.

Many men have seen and dreamed of a rustic vine-clad house. Every one who has a house or piazza desires to cover it with vines. If the house is of wood, it is frequently injured by them, and a piazza is often so covered from column to column that no air can reach the house. The true medium is to cover only the cornices

and columns, leaving free the spaces between. The most fastidious taste will leave also the columns free, and will allow vines upon the eaves or cornices only, on which the branchlets will be kept well pruned in. These compact lines of green thus form a pleasant contrast with the house, like lambrequins upon the windows of a room.

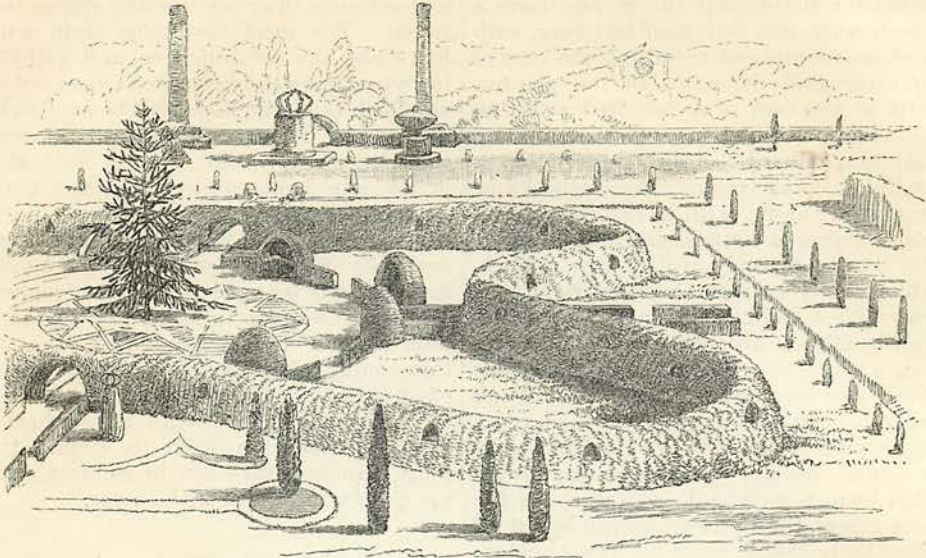
For these effects vines only have been generally used, and few know how much finer are the branches of the *Salisburia*—a Japanese tree introduced into England a hundred years ago, and known in this country for many years. It has a clean and light-colored leaf like that of the maiden-hair fern, with a peculiarly beautiful radiation from its stem. Its long branches have few branchlets, and are closely furnished with leaves.



Irish Yew.

Abies Elata.

ARTIFICIAL FOREGROUND, AT MR. S. B. PARSONS'S, FLUSHING.



HEDGE GARDEN AT ELVASTON CASTLE, ENGLAND.

Planted at each or every alternate column of a house, it can be pruned to a single stem until it reaches the cornice, along which it can be trained horizontally. When the whole cornice is covered, the effect is very bright and striking.

The weeping-larch can be trained in the same way. Admirable archways can be made with the tamarisk or clematis, the one with a light green feathery foliage, the other with large flowers, purple, crim-

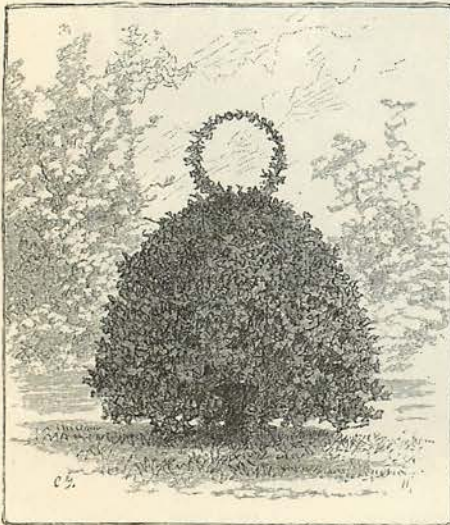
son, yellow, and white. A compact column of foliage, dark green and glossy, is made with the weeping silver-fir. Planted near together, a row of this last would make a perfect hedge or screen.

Few trees in form and color can equal the Chinese cypress. Of all pyramidal trees it is the most completely cone-like in its form—straight as an arrow, compact in its habit, regular in its gradation, and well defined in its outline. Its color is unequalled by that of any other tree—a light pea-green of a most refreshing tint. Its leaves are like small twisted cords, delicate as the edging of a lady's collar, and in mass giving the appearance of green feathers. Its only fault is its late foliage. We have looked at it only as a single tree: for an avenue or close screen, its effect would be striking. For the latter, no trimming would be required to make it, when planted close, a green wall of exquisite color.

For an avenue, a fine effect will one day be produced by alternate planting of the red-twigged and white linden, when, like a line of battle, they will flash in the sunlight their white and green banners.

A mass of the euonymus, or burning-bush, with its scarlet autumn seed-vessels, is a thing to be remembered.

The variegated althea, one of the most constant of plants with variegated leaves, is proof against winter's cold or summer's



TRIMMED HOLLY.

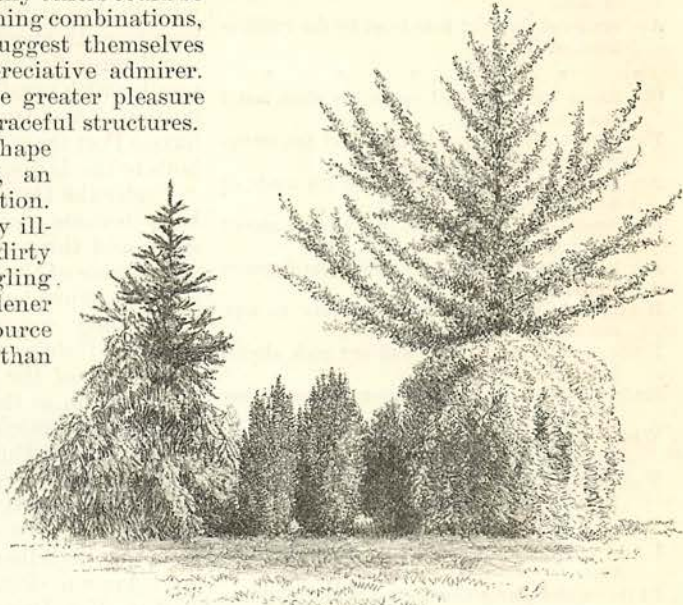
heat, and will make a hedge of great beauty.

The oak-leaved hydrangea, when trimmed hard, makes a low mass of color of great richness. The kalmia and rhododendron should be planted together, either in groups upon the points of curves, or in double and treble lines on each side of a curving walk. A fine effect is created by four lines, the outermost rhododendrons, the next kalmias, the third hardy azaleas, and the last, next the walk, *Daphne cneorum*. Many others could be named capable of charming combinations, all of which would suggest themselves to an earnest and appreciative admirer. Many of these can give greater pleasure when combined with graceful structures.

To glass in any shape there is, with many, an insurmountable objection. The word suggests only ill-kept greenhouses, dirty flower-pots, and straggling plants, requiring a gardener difficult to find, and a source of annoyance rather than pleasure. There is a structure, however, which requires no other care than that which can be given by a common laborer. A servant of the house can keep it in order as easily as a room. It need not be a costly structure. It can have a span roof, not of glass, but of boards.

The sides can be of glass; the length can be a hundred feet, and the width twenty feet. It should be kept as a cool-house. To guard, however, against extreme cold, which occasionally comes, a sunken flue could be run under a path from the extreme end to the chimney of the dwelling of which it would form a part. This flue would be used so rarely that one of the house servants could easily give it attention. In this house could be placed camellias, laurels, laurustinus, Cape jasmine, sago-palm, oranges, the more tender rhododendrons of exquisite color, and many other plants which flourish in a cool-house, or are not injured by a little frost. They should be planted in the ground on curving walks, and no pots should be allowed. The plants would

thus require very little care, and would afford a charming promenade for the family—a garden of greenness in the midst of the severity of winter. If desired, orange-trees only could be used, and a veritable orange grove could be formed at the North amid frost and snow. A skillful mechanic could so construct this house that with little labor it could be taken away every spring, leaving as a part of the lawn this unique collection, which would be looked upon as an Italian



Nordmann Fir.
Weeping-Hemlock.

Irish Yews.

Ginkgo.
Weeping-Sophora.

ARTISTIC GROUP.

garden of rare beauty. This plan is simple and thoroughly practicable at moderate expense. It will afford so great increase of enjoyment that, when appreciated, it can not fail to be adopted as a very desirable accessory to a country dwelling.

We have mentioned a few only of the possibilities of horticulture. They are limited only as nature is limited. Those whose eyes are fully open to all artistic capabilities will find their resources grow, and will be able to invent new combinations of plants as certain in their results as those of mental or moral culture; and in connection with this work, they will become imbued with a sense of the beauty and meaning which nature reveals only to the reverent artist.