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Landscape Gardening.

BY ELIAS A. LONG.

POPULAR GARDENING PUB. CO.,
BUFFALO, N. Y.

Price, 30 CENTS.

Landscape Gardening.

A COLLECTION OF PLANS
ILLUSTRATING THE IMPROVEMENT OF
HOME GROUNDS,
TOWN LOTS, REAL ESTATE SUBDIVISIONS,
PUBLIC SQUARES, CEMETERIES,
WITH COPIOUS EXPLANATIONS.
BY ELIAS A. LONG.

20 Buffalo, popular
gardening, full

THIS collection of plans, from the author's port-folio, fairly represents the average demand for information on LANDSCAPE GARDENING at this day. Some of the engravings have appeared in the author's serial, "TASTE AND TACT IN ARRANGING GROUNDS," running in POPULAR GARDENING. Explanatory matter relating to the plans is also presented.

To make the collection educational as far as possible, a diagram of the grounds as they appeared before changes were made is in most instances given, as well as the author's plans for improving the same. It may be remarked that figures 1, 2, 6, 9, 11, 13, 24, 30, and 31, set forth with tolerable clearness the general type of unimproved grounds in America.

The corresponding plans, and some added ones, give an idea of the gain that could be wrought for our homes, suburban districts, parks and cemeteries, were trained landscape gardeners as generally employed in improving such property, as trained architects are now depended upon, for planning our dwellings and other structures.

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LANDSCAPE GARDENING PLANS EXPLAINED.

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DIAGRAMS 1 and 3. Eight-Acre Grounds in Nebraska.

Previous to the spring of 1888 the land had been prairie, without trees. At that time the owner set out one thousand young forest and fruit trees, shrubs, etc., as shown by diagram 1. In applying for a new plan, the owner stated his readiness to make any change necessary in the location of trees. At the southeast (lower left) corner, which faces the city, the street is to be cut down four feet; here the owner conceived would be a fine chance for terracing, if thought best.

Diagram 3 represents the new plan for improving these grounds. The principal feature is the long circuitous drive which has the effect of uniting the parts, making them more accessible and interesting.

Another improvement was the introducing of open spaces in the former arboretum and groves, with the effect of giving the retained groups and masses a more pleasing setting. Notice the beauty of the various open lawn areas and vistas about the grounds; notice especially the vista extending from the house over the arboretum lawn as shown by the new plan, comparing the same with this part of the grounds in the other. Observe the many masses and groups of shrubs and trees, arranged with the utmost freedom and irregularity. Few changes were made in the orchard.

Between the house and streets simple rounded slopes were recommended, instead of terraces and sharp slopes, for the fall of four feet from the house level to the pavement. The slopes rising from the sides of the path are to be embellished with shrubs and flowers in clumps, thus making a very pleasant approach from the street.

Diagram 2. Small Residence Grounds in Detroit, Mich. See Diagram 4.

Diagram 3. Improved Plan for the Eight Acre Grounds of Diagram 1.

Diagram 4. Small Residence Grounds in Detroit, Mich., Diagram 2 Improved.

But one side entrance was recommended, the appearance of the grounds being more pleasing, for having a wide stretch of lawn between the street and house at the side.

NOTE.—It is clear that with scarcely any greater outlay for additional construction and keeping, than would be needed for the system of drives, shown in Diagram 1, such a place may easily be treated as a simple, handsome forest park throughout. The character and the extent of the planting suits this idea very well, why should not the arrangement.

DIAGRAMS 2 and 4. Small Residence Grounds in Detroit, Mich.

The lot fronts on a wide boulevard. The main gardening is to the rear of the house. Some obvious faults in the arrangement of the former plan, diagram 2, are its extreme artificiality, straight lines and angles everywhere; sameness of the various features; the flower beds so scattered as to prevent any considerable area of open lawn for imparting a reposeful air to the scene.

In the plan, shown by diagram 4, the following desirable qualities are apparent: First, entire absence of straight lines, aside from the boundaries; second, the utmost variety in the forms of the flower beds; third, the delightful central grass area with graceful, irregular, almost intricate outline; fourth, a garden seat covered with climbers at A, and a vine-covered arch at B.

The wider parts of the beds are planted with bold shrubs like Lilacs, Mock Oranges, Weigelas, Loniceras, etc., which could not have been so well admitted into those of the old plan.

DIAGRAM 5. Home Grounds on a Farm in Delaware Co., Ind.

The diagram shows the characteristics of the place, both before and after the improved plan was applied. The dotted lines indicate the former yard, walk, and drive outlines.

The obvious faults of the former arrangement, are the very usual ones of straight walks and angles, where graceful curves would answer all practical ends equally well, besides imparting a quality of embellishment of their own.

The improvements advised, in general covered the following points: First, the substitution of easy curves in the roadway and walks, without losing directness of course from point to point; second, the arrangement of trees and shrubs largely in groups; third, the securing of an open lawn centrally between the dwelling and the highway. This last feature must be put down as a most important one for obtaining an air of breadth and repose to the front garden, and providing pleasant vistas in several directions, ends impossible with having the front grounds divided midway by the street walk,

as in the old plan. Fourth, the natural forest opened up by a driveway and wood-path, thus bringing some of the old trees into the yard proper, affording also a splendid place along the walk for locating beautiful wild flowers, ferns, shrubs, etc. An arbor-like arrangement of Beeches and Birches is provided at *i* along the wood path.

About walk *b* the prevailing trees are evergreens, in groups, for providing a proper balance of embellishments throughout the grounds. A hedge separates the lawn from the vegetable garden. It has an arched opening at *j*.

Aside from the trees named on the plan, shrubs are provided in the beds indicated from *d* to *h* inclusive.

Blooming in April:—Mezeron Pink (*Daphne mezereum*), Golden Bell (*Forsythia*).

Blooming in May:—Japan Quince, Flowering Plum (*Prunus triloba*), Flowering Almond (*Prunus*), Thunberg's Spiræa (*Spiræa Thunbergii*), Plum-leaved Spiræa (*Spiræa prunifolia*), Lilacs, many sorts, Rough-leaved Viburnum (*V. rugosum*), Lantana-leaved Viburnum (*V. lantanoides*), Bush Honeysuckle, Tree Pæony, Tamarisk (*Tamarix*).

Blooming in June:—Silver Bell Shrub (*Halesia*), Lance-leaved Spiræa (*S. lanceolata*), Josika's Lilac, Garland Mock Orange (*Philadelphus coronarius*), Double-flowering Mock Orange, Large-Flowered Mock Orange (*P. grandiflorus*), Dwarf Snowball (*Viburnum plicatum*), Graceful Deutzia (*D. gracilis*), Double Deutzia in several varieties, Weigela Rose and varieties, Red branched Dogwood, White Fringe (*Chionanthus*).

Blooming in July:—Alder-leaved Clethra (*C. alnifolia*), Billard's Spiræa (*S. Billardi*), Fortune's White Spiræa (*S. callosa alba*), Fortune's Spiræa (*S. callosa*), Japanese Spiræa (*S. species japonica*).

Blooming or otherwise attractive in August or later:—Purple Bramble (*Rubus odoratus*), Oak leaved Hydrangea (*H. quercifolia*), Althæas, Double and Single (*Hibiscus*), Large-panicked Hydrangea, Mist Tree (*Rhus cotinus*), Moneywort-leaved Cotoneaster, handsome fruit; Prunus Pissardi, beautiful dark red foliage all season; Purple-leaved Berberry, violet purple foliage; Variegated Cornelian Cherry, handsome white-blotched foliage; Waxberries, showy fruit; Berberries, showy fruit; Silver leaved Corchorus, white-edged foliage; Holly-leaved Mahonia, evergreen; Box in different varieties, evergreen.

DIAGRAMS 6 and 7. Home Grounds in Bristol Co., Mass.

The first diagram shows the former arrangement of the home, the owner of which in his application for a new plan, characterized it as "too prim and stiff." The trees to the front are Sugar Maples. Flower beds are indicated by F, Pæonies by P. Shrubs and Roses were scattered along the walks and drives.

In diagram 7, provided for improving the place, the aim was first, to substitute a large degree of grace and irregularity for stiffness and angles throughout. Second, to provide the fine lawn area (1) between the house and street, stocked with shrubs, trees, etc., in irregular order; and a pleasing open center. Notice the clumps of Pæonies (P) of the old arrangement, have been massed in the left portion of the plat under consideration, a much better arrangement. Third, to provide in plat 2 strong lawn effects, the sward supporting a large variety of growths, which, at the same time,

Diagram 6.

Diagram 7

Home Grounds of a Farm in Butler Co., Mass., Before and After Improving

fittingly seclude the barn. Fourth, the drive is made to bear gracefully towards the house, without any material loss of distance, in rounding the shrubbery mass to reach the barn. Fifth, the Roses from the badly arranged borders of the old plan, it was suggested be brought into the rear of plat 2. Sixth, flower beds together with shrubs are brought into plats 3 and 4. Seventh, an evergreen side of the lawn was provided in plat 5, thus securing a windbreak to the north of the home, as well as affecting something like a balance in the embellishing materials of the place.

NOTE.—Admitting that an orchard and vegetable plat may be better arranged artificially, with straight lines for facilitating cultivation, yet in the ornamental part, there is no good reason why a single straight line should be maintained beyond the fixed ones found in the outlines of buildings, boundaries, etc. Study these improvements as a whole, and what a beauty spot is afforded in the ample grass plats, the beautiful curving walks and drives, the profusion of trees, shrubs and flowers, contributing beauty and comfort every month in the year.

DIAGRAM 8. Quick Effects in Planting.

The figure relates to a subject of quite as much interest in landscape gardening as the matter of arranging grounds pleasingly. It is an object lesson on early results secured on the author's new home grounds at La Salle-on-the-Niagara, N. Y. It affords a striking contradiction of the notion that a planter must wait a lifetime for fine effects, or that it is of no use for people beyond middle age to plant.

The chart sets forth accurate sketches from life, of 31 different subjects, made June 22, 1891, less than 26 months from the day of planting. The dotted lines represent squares of four feet by four feet. In every instance the drawing was made by the aid of a gauge eight feet high and with a four foot arm, held alongside of the shrub, tree or group. Scores of other subjects of the same age from planting, in the author's collection of many hundreds of young specimens, could have been used, showing equal results.

A study of the chart will reveal the following: First, that as a rule the flowering shrubs develop into strong mature specimens very early. Second, that the key note for early effects in planting is to set out largely of handsome, vigorous shrubs, in masses. Notice the upper right-hand group, 16 feet across, consisting of Blood leaved Plum in the center, surrounded by light Variegated-leaved Cornelian Cherry. It is, at 26 months from planting, a solid mass of verdure a rod across and fully eight feet high, and matchless for fine effect. Another almost equally effective group is shown a little lower down, consisting of the Golden Bell (*Forsythia viridissima*) and the light Variegated-leaved Weigela. Given an abundance of flowering shrubs of the sorts here illustrated, or any of hundreds of other kinds and varieties, with the opportunity to arrange them in masses, and the most wonderful effects can be counted upon early in the second year after

planting. Third, that next to deciduous flowering shrubs, trees of the Evergreen or Conifer class, such as Pines, Spruces, Junipers, Arbor Vites, Larches, etc., must be ranked for producing strong, early-maturing effects. When grown in masses they present an appearance of surprising strength in two or three seasons from planting. Fourth, such deciduous trees as the Canadian Poplar, European Bird Cherry and Royal Willow, shown on the chart, to which may be added some other Willows and Poplars, besides Soft Maples, Ailantus, Pawlonias, etc., are of extremely rapid growth when grown in a very fertile soil. Such can be planted among the more moderate growing kinds, like Oaks, Lindens, Elms, etc., to be cut out as the latter require more space. Many climbing shrubs are also of great value for producing early effects.

But it will be surmised, and rightly, that the treatment of the stock had something to do with the quick results portrayed. We offer our readers the very simple secrets of these attainments. First, fairly good soil, neither highly enriched nor worn out. Second, preparation to a depth of sixteen inches by plowing and subsoiling—spading and trenching would have answered as well. Third, reasonable care in not allowing the roots to become dry between digging and planting. Fourth, good, firm planting, at which time from one to three shovelfuls of old compost (made of two parts rotted turf to one part good stable manure) was intermixed with the root soil of each subject. Fifth, liberal pruning at planting. Sixth, clean tillage of all beds occupied by trees and shrubs, never allowing a weed to develop in them. No water was applied to the beds in the 26 months, except once, and that during a protracted period of drouth.

DIAGRAMS 9 and 10. Home of a Physician in Allegan Co., Mich.

Diagram 9 shows the former arrangement of the place. The owner sought aid in rearranging the grounds, expressing a willingness to move his office if advisable. In the plan, the numbers 1, 2, 3, and 4 represent beds of bulbs and summer flowers, 5 a bed of Tea Roses.

By diagram 10, is illustrated the changes deemed desirable in the present instance. They include first, a system of curved walks, leading very directly from point to point, in place of the old and more formal arrangement; second, the office moved to a point which permits the opening of a vista in the direction of the street corner 8; third, beds of irregular outline scattered along the margin of the grass plats and near to the walks, to contain hardy shrubs and the occupants of the former flower beds; fourth, an arbor located at 4, to be covered with hardy and tender vines; fifth, some beautiful, irregular masses of shrubbery placed in the jog around the arbor, affording a delightful shrubbery walk in the midst thereof; sixth, a few fruit trees irregularly arranged on the rear lawn; seventh, other trees located here and there in such relation to the shrubbery and to the buildings, as to afford pleasing vistas in many directions.

Diagrams 9 and 10. Grounds of a Physician in Allegan Co., Mich.
Before and After Improving.

Diagrams 11 and 12. A Nurseryman's Grounds in New York State.
Before and After Improving.

DIAGRAMS 11 and 12. A Nurseryman's Grounds.

Diagram 11 represents the home grounds of a New York State nurseryman previous to the adoption of plans for improving the same. The place, as the owner readily admitted, presented a dearth of pleasing garden features, an exception being found in the curving Hemlock hedge.

Diagram 12 embodies our suggestions for converting these grounds into a complete and well balanced ornamental garden and specimen grounds, such as were deemed especially suitable for one who sells trees and other embellishing materials. Without varying the course or position of any principle feature, there is secured a strong preponderance of graceful curves and pleasing irregularity throughout, offsetting the fixed straight lines and angles of the boundary and building outlines. The drive-way and walks, with but slight curves, lead very directly from point to point. The front yard, instead of being very objectionably cut into two equal parts, each centrally occupied by a flower bed, is radically changed for the better. The plan of arranging the growths mainly in groups was adhered to, such masses contributing character and boldness not attainable if the same were scattered about more thinly. The various features not named by type in the plan, may be explained as follows, referring to the numbers:

1—Main entrance in the midst of exquisite clumps of ornamental shrubs. 2—Front and side of home lawn, profusely planted. 3—Central lawn plat. 4—Main lawn. 5—An attractive vine walk, with shrub and rockery screen towards the street. 6—Grove of ornamental trees. 7, 7—Mixed flower borders. 8—Fruit plat. 9—Shrubbery. 10—Walk piercing the hedge and leading to fruit plat. 11, 11—Rockery at ends of borders. 12—Summer flower beds. 13—Masses of evergreens. 14—Climbers at piazza.

NOTE—The present grounds unquestionably contain the elements of a most beautiful garden, one that could not fail to impart endless charms to its owner and to all beholders. It is desirable indeed that our nurserymen, and not they only, but florists and seedsmen as well, should possess such surroundings. They sell trees, vines, plants and seeds, they should show others by example how effectively to use such material in embellishing home and other grounds.

DIAGRAMS 13 and 14. A long, narrow Three-fourth Acre Lot, in a Town of Northern New York.

In the left hand engraving, A indicates walk entrance; B, drive entrance; C, flower bed; D, old vines; old fruit trees are scattered about. The length of the lot, as compared with its width of 90 feet, was thought to be a fault.

Diagram 14 represents the plan furnished for improving these grounds. So far from considering the narrowness and length of the lot a fault, it was sought to treat it for obtaining certain advantages, the chief one of which is an extended garden vista, really nothing short of magnificent, down through the lot as seen from the verandas, walks, &c., at the house.

While making the most of the opportunity of creating an extended vista back, an additional end obtained was an appearance of great breadth, crosswise, in the front part of the grounds. This was accomplished by taking up the

former straight central walk and locating a new one by graceful, easy curve, considerably to one side of the middle of the front plat, thus securing an ample lawn area here, unbroken in its center, and conveying a delightful impression of breadth and repose. This quality is further strengthened by the arrangement of trees, shrubs, &c., irregularly about the walk, drive, and towards the margins. Another gain is the improved appearance of the handsome dwelling, as seen from the highway, over an unbroken stretch of lawn. The various details of the new plan are explained as follows:

1—Front walk. 2—Front drive. 3—Front steps to house. 4 4 4—Groups of ornamental deciduous trees. 5 5—Groups of evergreen trees. 6 6 6—Large masses of hardy shrubs. 7—Mass of hardy perennials and shrubs. 8 8—Clumps of Roses. 9 9 9 9—Beds of summer flowers. 10—Garden seat. 11—Vegetable garden surrounded by hedge. 12—Fruit garden to rear of lawn. 13—Turning plat.

NOTE.—This plan affords a good example of the art of making a certain area appear much larger than its actual size, a quality applying in some measure to all good landscape gardening. It is a case in which less than an acre was treated to look several times its real size, with the actual number of feet to be covered by the lawn mower, spade and rake, not at all increased. And this is the height of good garden arrangement. For a visitor to catch a view of a garden like this, would be to lead him irresistibly to desire to explore its parts throughout.

DIAGRAM 15. A long, narrow, Seven-Acre Garden.

This plan was prepared for a resident of the State of Connecticut. The desire of the owner was to have fine park-like grounds, with almost no space devoted to fruit and vegetable culture. The place, in the main, was flat and wholly unembellished by natural growths. Fortunately, there is a spring of clear water, which enabled the obtaining of some fine water effects. A chief object sought in preparing the plan, was the creating of certain features of boldness to overcome the natural tameness, and yet doing so by a plan simple in character. The buildings were well located for accomplishing this end. The entrance drive was carried to the right of the dwelling, and, by easy curves, was elaborated to extend gracefully through the grounds, one branch leading to the extreme end, opening into a street beyond.

Plat 1 affords an unbroken stretch of lawn, 600 feet back from the highway. An irregular fringe of trees and shrubs to bloom through every month of the growing season, was located along its border throughout.

Plat 2 derives its beauty from its general grace and the open center of sward which is slightly crowning at the middle. The tree and shrub masses are arranged to show relationship with the heavier ones beyond, as if broken from them. The drive at this point is delightfully hemmed in by shrubs and trees. Towards the barn, evergreen trees are used as a means both of protection and to shut the stable yard from view, at a season when deciduous trees are leafless.

Back of plat 2, the general effect is decidedly picturesque. The lakelets are artificially formed. A bold mound is created in the embrace of the rear lakelet, and this supports an arbor. A bog, with the surface only slightly above the

Diagram 13. Long Narrow Town Lot. See opposite page.

Diagram 15. A Long Narrow Seven Acre Plat Laid Out

Diagram 14 Long Narrow Town Lot, Diagram 13 Improved.

as a Private Park Embodying Many Attractive Features.

water's level, affords accommodations for moisture-loving plants. The general planting in this part is in the nature of a forest or grove, and opportunity is afforded for growing a large assortment of native and other trees, including moisture-lovers at the water's edge, especially in the vicinity of that portion of the upper end of the water in which several small isles appear. A bridge, made of flag stones and boulders, crosses the lakelet near its upper end.

DIAGRAM 16. Details of a Large Shrub Border.

Size 120 feet in length by 25 feet across at its widest part. This diagram represents a bed containing a total of over 200 flowering shrubs, including some evergreens, in 39 separate kinds and varieties. The object sought in the arrangement was to secure a pleasing mingling of the various groups, these being irregular in their outlines. The names of the respective kinds are given in the engraving. Having set the plants somewhat closely, say about four feet apart, they quickly filled the space, making a strong effect, almost the first season of planting.

DIAGRAM 17. A Home Plat of Two Acres in Erie County, N. Y.

Location overlooks Lake Erie; home occupied by a gentleman doing business in town 14 miles away.

A chief object sought in these improvements, besides the securing of a handsome and complete garden, was to open up numerous views of the distant water scenery in sight from all parts of the grounds. In the plan, the vistas thus provided are shown by dotted lines. Some of the other ends secured by the plan are, first, ample lawn areas with extended vistas in various directions; second, graceful walk and front drive leading to the right-hand corner of the plat (as seen from the street), and thus in the direction of the railway station, this being the course taken mostly when leaving or approaching the home; third, a large assortment of deciduous and evergreen trees, shrubs and flowers, besides an extended vegetable and fruit plat; fourth, a vine arbor located on the highest point of the place, and from which, commanding views of the lake and surrounding country, and of the garden features are had; fifth, a vine walk at 59, the trellise to be constructed of gas pipe connected at the sides with galvanized wire, all to be covered with the vines suggested. This walk extends to the farther part of the grounds, indicated by 66, passing between two rows of Grape vines.

A complete selection of trees and shrubs was prepared. To aid in their proper distribution over the grounds, the respective places for these on the plan are indicated by figures, and to these the figures in the following list refer:

1—One Scarlet Oak (*Quercus coccinea*); one American or Trembling Aspen (*Populus tremuloides*). 2—Common Hickory (*Carya alba*). 3, 4—White Pine (*Pinus strobus*). 5—One Double White-flowered Horse-chestnut (*Æsculus Hippocastinum var alba flore pleno*). 6—Three Mountain Ash-leaved Spiræa (*S. sorbifolia*). 7—One Snowy Mespilus (*Amelanchier Botryapium*); two Judas Tree (*Cercis Canadensis*); hardy flowers. 8—Three Variegated-leaved Weigela (*Diervilla foliis variegata*). 9—Three Holly-leaved Mahonia (*Berberis aquifolium*). 10—Two Siberian Arbor Vitæ (*Thuja var. Siberica*); three Globe-headed Arbor Vitæ (*T. var. globosa*); three Red Cedar (*Juniperus Virginiana*); one Gray-leaved Juniper (*J. var. glauca*). 11—Nine Plumed Hydrangea (*H. paniculata grandiflora*). 12—One Cut-leaved Weeping Birch (*Betula*); one European Larch (*Larix*); three Austrian Pine (*Pinus Austriaca*); two Hemlock Spruce (*Abies Canadensis*). 13—Two Alcock's Spruce (*Abies Alcockiana*). 14—Three African Tamarisk (*Tamarix Africana*). 15—Six Norway Spruce (*Abies excelsa*). 16—Three Yew (*Taxus var. erecta*). 17—Six White Spruce (*Abies Alba*). 18—One Norway Maple (*Acer plantanoides*); two English or Corked-barked Maple (*A. campestre*). 19—Wier's Cut-leaved Maple. 20—Three Calycanthus (*C. Floridus*). 21—One Tulip tree (*Liriodendron tulipifera*); one Oak-leaved Mountain Ash (*Pyrus quercifolia*); one European Linden (*Tilia Europea*); one Paulownia Imperialis; two Japan Aralia (*Aralia Japonica*); one Garden or European Oleaster (*Eleagnus Hortensis*). 22—Three Lilacs in variety (*Syringa*). 23—Five Thunberg's Spiræa (*S. Thunbergii*); five Double Plum-leaved Spiræa (*S. prunifolia*); three Althæas (*Hibiscus*). 24—Cut-leaved Weeping Birch (*Betula*). 25—Three Red-Branched Dogwood (*Cornus sanguinea*); three Japan Snowball (*Viburnum plicatum*). 26—Six Weigela in variety (*Diervilla*); three Golden Bell (*Forsythia Fortunei*). 27—Four Variegated Cornelian Cherry (*Cornus mascula variegata*); six Purple-leaved Berberry (*Berberis Europæus atropurpureum*). 29—One Spring Adonis (*A. vernalis*); one Wind flower (*Anemone Japonica*); one White and Cærulean Blue Columbine (*Aquilegia carulea*); one Peach-leaved Campanula (*C. persicifolia*), one Narrow-leaved Lungwort (*Pulmonaria angustifolia*); one Goat's Beard (*Spiraea aruncus*); one Meadow Sweet, (*S. venusta*);

one Purity (*S. ulmaria*); one Sweet Violet (*Viola odorata*); six Perennial Phlox. 30—Three Ailantus glandulosa. 31 and 32—River's Purple-leaved Beech (*Fagus var. purpurea Riversii*). 33—Soulange's Magnolia (*M. Soulangeana*). 34—Six Mock Orange in variety (*Philadelphus*). 35—Two Rough-leaved Viburnum (*V. rugosa*); one Mountain Ash-leaved Spiræa (*S. sorbifolia*). 36—Two Plumed Hydrangea (*H. paniculata grandiflora*); one Double-flowering Deutzia (*D. var. flore pleno*). 37—Flower bed. 38—Two Pyramidal Birch (*Betula alba fastigata*); two European Larch (*Larix*); two Red Buckeye (*Æsculus pavia rubra*); one Double-flowering Purple Deutzia (*D. var. purpurra pleno*); three Lance-leaved Spiræa (*S. Reevesiana*); three Douglas' Spiræa (*S. Douglasii*); three Alder-leaved Clethra (*C. alnifolia*). 39—Six Purple-leaved Plum (*Prunus Pissardi*). 40—Two Lombardy Poplar (*Populus fastigata*). 42—Red Buckeye (*Æsculus pavia rubra*). 43—Weeping Tooth-leaved Poplar (*Populus grandidentata pendula*). 44—Sycamore Maple. 45—Bird Cherry. 46—Red Oak (*Quercus rubra*). 47—Laurel or Shingle Oak (*Quercus imbricaria*). 48—Four Norway Spruce (*Abies excelsa*). 49—One Black Walnut (*Juglans nigra*); one American White Elm (*Ulmus Americana*); one Red Buckeye (*Æsculus pavia rubra*). 50—Austrian Pine. 51—Three Bush Honeysuckle in variety (*Lonicera*); one Double-flowering Plum (*Prunus triloba*); two Scarlet Japan Quince (*Pyrus*). 52—Six Weigela in variety (*Diervilla*). 53—Twelve Roses and hardy flowers. 55—Greenhouse flowers. 56—Smoke Tree (*Rhus cotinus*). 57—Three Billard's Spiræa (*S. Billardi*). 58—Apple tree. 59—Pepper Vine (*Ampelopsis bipinnata*); one Chinese Wistaria (*W. sinensis*); one Scarlet Trumpet Honeysuckle (*Lonicera sempervirens*); one Canadian Honeysuckle (*L. var. Canadensis*); one Hall's Japan Honeysuckle (*L. Halleana*); one Monthly Dutch Honeysuckle (*L. var. Belgica*); two American Trumpet Vines (*Tecoma radicans*); three Jackman's Clematis (*C. Jackmanii*); one Dutchman's Pipe (*Aristolochia Siphon*). 61—Two Pear trees. 62 to 65—Small fruits. 67—Native trees, shrubs and flowers. Virginian and Veitch's Ampelopsis against buildings. Akebia quinata, Chinese Wistaria, Hall's Japan Honeysuckle and Dutchman's Pipe at veranda pillars.

Diagram 18.
A One-Fourth Acre Garden.

Diagram 19. A Bed of Shrubs.

Diagram 20.

Diagram 21.

Diagram 22.

Diagram 23.

Examples of Curves, Bad and Good.

Diagram 24.

Diagram 25.

Diagram 26.
Plans of Rose Bed.

DIAGRAM 18. A One-fourth Acre Garden.

This plan was designed for a town resident who desired to cultivate the greatest possible variety of garden objects, ornamental and useful, within a small limit. Some scores of flowering and evergreen shrubs, hardy flowers, etc., are accommodated in the borders next to the boundaries, in the front half of the place; more than a score of shade trees are located here and there over the lawn. A dozen fruit trees are also accommodated in the rear part of the place. There are three lines of Grape vines on each side of the back walk, and beyond these some beds of Strawberries, Raspberries, Currants, etc., besides quite a plat devoted to vegetables. An arbor covered with an assortment of flowering and other vines, forms a terminal object at the end of a long straight walk.

DIAGRAM 19. A Bed of Shrubs.

This bed shows twenty-nine hardy shrubs, in six varieties, irregularly arranged. F indicates Forsythia viridissima, W, Weigela variegata, H. Plumed Hydrangea, D, Spirea eximea, E, Burning Bush (Euonymus).

The design was to secure in a small bed a succession of attractiveness from April when the Forsythias bloom, until the end of the Hydrangea season in October, to be followed for some months later, by the fruit of the Burning Bush. The shrubs selected are also attractive in foliage outside of the blooming season.

DIAGRAMS 20 and 23. Examples, Bad and Good, of Curved Approaches.

The fault of figure 20 is that the curves are not sufficiently decided; the dotted line would be followed.

Diagram 22, shows the same case treated for making an easy graceful curve in every way suited for use and beauty in embellishing this part of the grounds.

A curve of the form of 21 would be out of place on any grounds except such as might have a steep descent from the house to the street, in which case the sweep would render the walk easier. The illustration represents an actual case of a walk as found on nearly level ground. A chief objection to it here was, that, as in all cases of too decided a bend on ground that is even or nearly so, there is a tendency to form a path across the lawn, as shown by the dotted lines, leaving the distant course unused. Where the house lies close to the street, a curve such as is shown in diagram 23 is more suitable, being both easy to pursue and graceful in appearance.

DIAGRAMS 24 and 26. Relating to a Rose Bed.

Design 24 is that of the former arrangement of a Rose bed, of a size accommodating 350 plants, in a garden in Ontario, Canada. Application for a new design was made on the grounds of this one being "so stiff and angular." As a substitute two plans, 25 and 26, were submitted. The upper one of these is regular, the lower one irregular in arrangement. In both, the design is simply to have the beds cut in the sward, the walks between and around being of grass. Of the two plans submitted, our choice would be for the irregular one at the bottom, for the reason that the eye tires sooner of regularly balanced features than of the reverse. The chief charm of all natural scenery is its irregularity. When the same quality can be carried to the garden, it should by all means be done.

DIAGRAM 27. Park-like Platting of a 46 Acre Suburban Tract, in Western New York.

The object which the projectors of this real estate enterprise had in view, was to lay out the subdivision somewhat different from the usual plan of straight drives and angular blocks. A motive in this was, to compete more favorably with neighboring plats, in the sale of lands. The frontage on the inlet is very fine and the water scenery picturesque. To counterbalance these marked attractions a wide, park-like avenue was laid out, centrally through, the area. This handsome road comprises several grass plats, each forty feet wide by about 250 feet long, and two circles about sixty feet across, all tastefully embellished with ornamental trees, evergreen shrubs and flowering plants. These are mainly arranged in irregular clumps. Two twenty-six feet drives extend, as shown by the diagram, through the garden-way. To the outside of the drives, there is provided a width of fourteen feet on each side of the highway proper, through which the sidewalks extend, but the lawn is designed to run from the curb back to the residences, unbroken only by walks, trees and other garden features. The plats in the street proper, as well as somewhat back into the home lawn, were adorned before the sale of lots began, with Elm and other shade trees, irregularly arranged. Beyond the central circle the garden-way is 100 feet wide. Here the style of arrangement is varied to have a forty-foot drive in the center, with unusually broad areas for lawn, sidewalk, trees and shrubs, between the curb and the lot lines.

Of the other highways, three are to have the trees arranged at regular distances apart and equally distant from the curb, while in others, the irregular park-like style of arranging is being adopted.

NOTE.—It must be obvious to all who are interested in the development of suburban residence districts, that the adoption of park-like improvements, instead of having stiffness and angularity prevail, is a change greatly for the better. It has been shown repeatedly both in Europe and America, that where the tastes of buyers are recognized, through adopting handsome lay-outs for such tracts, the results in earlier sales and at advanced prices, have very greatly overbalanced the slightly increased cost of the improved course.

Diagram 27. Tasteful Platting of the Residence Subdivision of a Suburban Village.

Diagram 28. Park-like Plan of a 157 Acre Suburban Tract, near St. Louis, Mo.

DIAGRAM 28. Park-like Platting of a 157 Acre Suburban Tract, near St. Louis, Mo.

This diagram represents the improvements adopted by an enterprising real estate company, for rendering their lands attractive to buyers, through applying landscape gardening principles in laying out the same. The land is rolling and presents other natural attractions, with which the park-like arrangement adopted, harmonizes admirably.

The 157 acres were laid out into nineteen residence sections, containing upwards of 250 lots. The lots generally have a frontage of 100 feet. The depth varies from 120 feet to upwards of 300 feet. On the plan, the drives are represented by full lines, the boundaries of land embraced by the highways proper and lot divisions by dotted lines. It is designed that the erection of street fences shall be discouraged.

At various points the areas devoted to public use and highways are made to possess considerable width. Here and there along the railway, for instance, are plats heavily planted with trees and shrubs, to in part cut off the view of the railroad from the nearer lands fronting in that direction. Between sections E and F, G, I, there is a beautiful dell somewhat wooded, and through which runs a brook, fed by a spring on the grounds. Here the land, of fair width, was treated by planting, walks, etc., to be a bit of park. Between sections L and S another rill is found meandering through a picturesque dell, and again a good width of the park-like quality was introduced, the same, extending westerly towards the railroad around the curve formed by L. Throughout, an irregular style of arranging all street trees has been adopted, the idea being that the improvement of the individual lots shall conform to the general lay-out of the entire tract.

The object in this is to convert the entire 157 acres into nothing less than a magnificent residence park. It will be noticed that a sprinkling of shade trees is provided somewhat back from the heavier line of trees along the streets, the design being that these trees—deemed essential to the carrying out of the main park-like features—are to be planted by the company, before buyers take possession.

At the northwest part of section K, a concourse has been designed. This is the highest point in the locality and affords a magnificent outlook, over an extensive valley lying in a southwesterly direction. In general the greatest possible variety in form, size and location of lots is afforded in the present plan, thus providing for all tastes.

Taken as a whole, this project affords a good example of the attractions which it is possible to embody in suburban residence tracts of this character. It is essentially a large and handsome park devoted to residence purposes, with no disadvantages as compared with the usual angular arrangement of suburban streets and blocks. There are obtained: first, a system of tree-lined drives equal in beauty and grace to any found in our best public parks; second, with having the main driveways 36 feet wide and the street part proper 66 feet wide, and residences no nearer than sixty-five feet from the curb line, there is secured a broad stretch of lawn 166 feet wide from building to building, excepting as the width of the drive and walks are taken out; third, with the lots being of ample width the considerable area

between the houses, devoted to lawn, gives the impression of each home being seated on a large park, merely at a convenient distance back from the drives; fourth, the various plats at the junction of the drives, together with the ample areas in the highways about the rills and skirting the railroad, all contribute very materially to landscape effects agreeable to the eye; fifth, as the residents of this tract will in the main be business men in the city, the railroad station has been made the point from which the highways generally diverge. It would be impossible to have them more direct and convenient were they laid out to be straight and crossing at right angles.

NOTE.—A proper question for those interested in developing suburban tracts for residence purposes, is this: how is it possible to arrange such lands most attractively, with a view the easier to secure first-class buyers at remunerative prices. Take a case like the present one, where it is designed that 250 or more homes are to occupy a certain tract, shall the arrangement be that usually adopted in the business parts, or, going to the suburb to live, shall steps be taken to render the same locality as beautiful by nature's contributions aided by the landscape gardener's art, as is possible under the circumstances? It is proper to state that, in the present instance, adjoining areas of about the same extent were laid out in square blocks without any plan beyond that devised by the owners or in a surveyor's office. The streets extend in straight courses, by abrupt rise and fall over hills and through valleys, rendering them as inconvenient, not to say incongruous to the eye of taste, as possibly could be imagined. The houses also are in many cases located with extreme awkwardness.

It is gratifying to know that a reform movement is now at work, both in Europe and America, to improve such districts with some regard to landscape effects. In the future, we may expect the landscape gardener to be much consulted, in all such projects. When that time has arrived, the projectors of subdivision schemes who have not had the foresight, taste and judgment to apply this class of improvement to their lands, will find themselves laboring under grave disadvantages in competition with wiser projectors in such lines. In that day of landscape suburban improvements, the advantages accruing, in conjunction with the park systems, now being so generally provided about our towns, will be obvious. The landscape gardening idea, is certainly destined to be a prevailing idea for this class of work in the not distant future.

DIAGRAMS 29 and 30. A Village Square of Four Acres.

The right hand diagram shows the square in its present form; the other, a new design prepared for the same at the request of interested citizens. The change to the latter plan can now easily be made, as the trees have but recently been planted and the highways are not yet constructed.

The fault in the present plan is one very common to town squares, namely, that the arrangement is on the geometric order. It is the fault of crowding into a town's beauty-spot, more of the same straight lines and angles that already exist in the street courses and blocks outside, when here is the spot of all others, for expressing some marked contrasting features. What possible excuse can there be for crowding 150 or more free and graceful trees, into a stiff, unnatural orchard-like arrangement, in a town square, when a more natural course for locating the material could be taken, converting it into a most charming restful place?

Diagram 29.

Diagram 30.

A Village Square of Four Acres, Before and After Improving.

Diagram 31.

Plans of a Small Cemetery, Before and After Improving.

Diagram 32.

The substitute, in diagram 29, is designed to show such an improvement, namely, the landscape garden plan of arrangement. There are presented, first, the means of securing quiet, restful lawn effects in place of areas of angular outline; second, easy, graceful curves, in marked contrast with the geometric lines of the town outside, are employed in defining the drives and walks; third, the trees arranged after an irregular order, nature's own suggestion, with the effect of imparting a charm peculiar to the natural grove and landscape, in the very heart of the town.

NOTE.—Is the fact sufficiently appreciated, that the purpose of every garden should be to secure a delightful haven of rest for the tired brain and bodies, at intervals from their contact with the cares and labors of a busy world? Nature's materials, in soil, grass, trees, sunshine and breezes, are perfectly suited to contribute their part to the recreating garden. It is our privilege to rightly use or to misuse these gifts. Imagine for a moment, the restful effect on the mind of the weary business man or employee, as he meets an oasis like diagram 29 in the midst of brick and mortar, or the same in coming in contact with the unnatural garden presented by the other figure.

DIAGRAMS 31 and 32. On Improving a Small Rural Burial Ground.

Figure 31, below the marks A A, represents a small, three-acre cemetery, lying adjacent to a growing village in New York State. This cemetery has already been enlarged once or twice to meet the demands of the community. It is designed to again increase its area, to more than double its present size.

The questions confronting the trustees are these: Shall the old plan of arrangement, comprising straight walks and drives, be extended through the new part, or is the garden cemetery idea, peculiar to the burial grounds of most of our large cities, suited to an area of this extent?

To this our answer was emphatically for the improved cemetery idea, as suited not only to the present case, but to every one of the more than 30,000 burial places in America. Figure 32 shows our plan for treating the total area, comprising about eight acres, for obtaining simple, graceful, landscape effects, together with the utmost ease of management and keeping. Attention is invited, first to the graceful continuous roadways through the grounds, in marked contrast with the straight, angular ones of the old arrangement; next, we would allude to the distinctive landscape quality characterizing the style throughout. Each section (F for example) is designed to present a continuous sweep of lawn, with no variation of surface between walks and lots or elsewhere, except as caused by the graves, and these to be raised not more than four inches above the established grade. Only grass or lawn walks are to prevail. Such a thing as a raised lot or terrace or the presence of railings, walls, hedges or enclosures of any description to private lots, is to be strictly prohibited. The centers of the sectional plats are to be graded somewhat crowning. Each section is to be converted into lawn and planted with trees, to some extent, before the sale of lots is begun.

The walks, six feet wide, and the lots, indicated by dotted lines, are to be marked at their corners by small stone monuments or durable stakes, placed with their heads even with the earth to permit the lawn mower passing over them.

It is seen that curved drives are planned to be carried through the old part, below A A. It is believed that in time the owners of these sections will be so impressed by the handsomer appearance of the new parts, that they will regrade the older plats to secure uniformity of effect everywhere.

NOTE.—It is nothing short of surprising that so little attention is paid to the appearance of the majority of country cemeteries. Here are these small places, made sacred by their association with our dead; owned jointly by hundreds of persons, and backed, we may say, by the wealth of hundreds of thousands, in some instances millions of dollars. in each case, and yet how far from being beautiful reposing places for the dead! We have but to refer to the common characteristics of such burial places, for all to know them: the rows of square, uneven, untidy lots, with an excessive number of walks, that for reasons no one can explain, are usually sunken a foot or more and utterly devoid of nice keeping; the fences, walls, hedges, not to say an appalling medley of tall grass, weeds, bushes and other distasteful features abounding. What can be more striking than the contrast of such an area with the improved cemetery, beautiful, quiet, well-kept, because laid out to be easily kept, which is peculiar to the landscape garden idea. The very ease of maintaining is one of the strongest arguments for the adoption of the improved plan. The system involves, simply, the fixing of lot prices at a figure that will cover the expense of keeping all parts of the grounds in thorough order, by mowing and otherwise, perpetually. As the cost of this work, when the surface of all lots and walks of a section are on the same general grade, and dozens of them (the entire section in fact) are cared for together, is very light for any individual lot, it is not required that the prices be greatly increased to meet this most important end.

Plan of Dumferline School Botanical Garden.

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