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THE PATHWAY TO PERENNIALS LEADS  
STRAIGHT TO THE PALISADES  
NURSERIES, SPARKILL, N. Y.

R. W. CLUCAS, Manager



A Highway of Perennials leading to Hampton Court Palace, London. By planting this Fall, a similar effect can be produced by next Summer

## A HINT TO THE WISE—GARDENER



THE garden year is almost over; where yesterday there was a proud riot of Midsummer beauty, today there is the first faint whisper of coming Winter in the belated group of Autumn flowers. The garden speaks to us of the past rather than the present, and of the future rather than the past. For already we are planning the blooms of tomorrow instead of setting ourselves to mournful memories of faded blossoms. Now while the spirit of the garden is still holding us in its enchanted thrall is the time to make use of that enthusiasm; when our imaginations are working rapid fire with visionary beauties, when the faithful earth lies warm and ready to receive its green-leaved children, and when the plants themselves are settling down for the long Winter sleep. Now is the time to reach for the learned writings and mark well their sound advice on Fall planting. And now is the time to take to heart the words of the wise men, and busy ourselves with preparations for next year's garden.

Fall planting has been slow in its appeal to the general garden lover, because it seemed foolish to begin planting when all the earth was preparing for a period of rest. Spring seemed ever so much more the seasonable time, when there was a stir in the growing world, and a stir in the human heart that urged him forth among green things. Then when young men's thoughts were turning to love, his were turning to the garden. He sat down with bulky catalogues, and in a great rush sent off for some plants to set in the earth. Impatiently he awaited their coming; hastily he set them in their appointed places and watched them slowly recover.



Disappointedly he saw the days pass with never a bloom or scanty ones. Such is often the story with Spring planting. It is merely a question of education before Fall planting will be accepted as the reasonable, the most beneficial, and the most satisfactory in its results for the majority of plants.

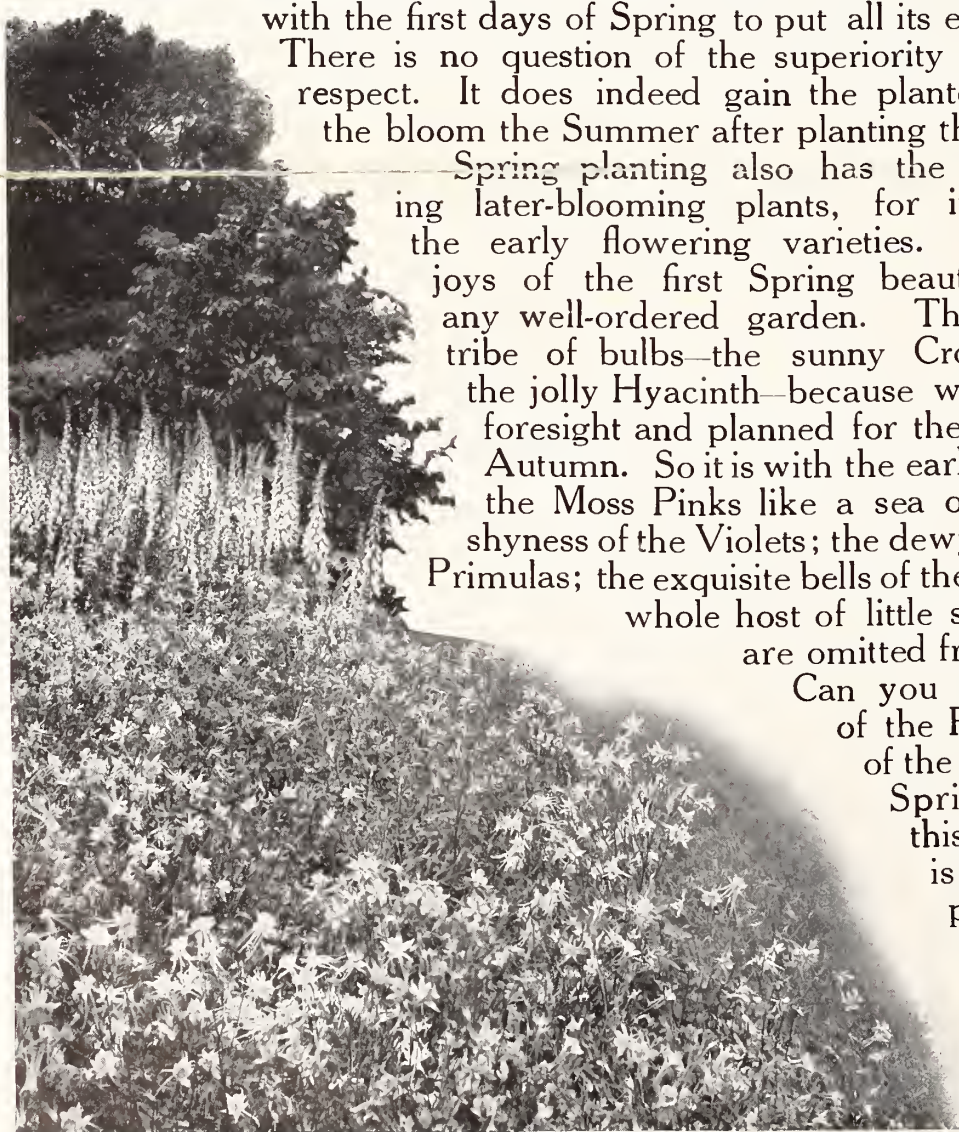
Anyone interested in the structure of plants must realize what a severe shock and set-back it is for the system of the plant to be dug up by the roots from the earth, shipped for a distance without necessary moisture, and then transplanted in a new situation. After recovery from this experience, the plant must immediately stretch forth its roots in search of food, and begin the tremendous task of re-adjustment. It seems like heaping insult on injury to ask the poor plant to perform still another office for us, yet do we not expect it to grow apace and blossom forth in full glory the very same season? That is what Spring planting demands of the plant; an immediate recovery and establishment, followed by rapid growth and profuse bloom. But if the planting is done in the Fall of the year, there is a much better chance for the plant. It is not retarded just at the time when its growth is quickening, but it is dug up when the work for the year is drawing to a close and the plant system is preparing to make itself comfortable for the Winter. If the plant is transferred at this season, it can make this adjustment in the new surroundings before cold weather sets in, and thus be prepared with the first days of Spring to put all its energy into new growth.

There is no question of the superiority of Fall planting in this respect. It does indeed gain the planter an entire season, as the bloom the Summer after planting thus will be abundant.

Spring planting also has the disadvantage of favoring later-blooming plants, for it is then too late for the early flowering varieties. To renounce all the joys of the first Spring beauties is a great blow to any well-ordered garden. Think of missing all the tribe of bulbs—the sunny Crocus, the stately Tulip, the jolly Hyacinth—because we have not used a little foresight and planned for their coming the previous Autumn. So it is with the early-blooming perennials—the Moss Pinks like a sea of color; the deep blue shyness of the Violets; the dewy freshness of the yellow Primulas; the exquisite bells of the Lily of the Valley—that whole host of little strangers that too often are omitted from the garden borders.

Can you forego the golden bells of the Forsythias, the blossoms of the Dogwood, and the other Spring-flowering shrubs this coming season? Now is the time to get busy and plan for their reception. Before the nippy days of Jack Frost come around in earnest your future garden should be well on its way toward being planted out.

(From the Garden Magazine)



An effective planting of Aquilegia and Foxglove



# FALL SPECIAL OFFER OF PALISADES POPULAR PERENNIALS

## *The Kind Our Grandmothers Grew*



AS it ever brought to your notice how inexpensive it is to acquire a permanent flower garden that will last for generations?

After dreary Winter is past how fondly we look forward to seeing old associates of Spring and Summer time, who call annually without the ceremony of digging or planting!

There are few things that call to mind more vividly pleasant recollections of our early life than the sight or odor of a simple flower, loved perhaps by some relative or friend; and what would be a more suitable remembrance than to plant such a one so that it may be called his or hers for time to come?

We give on the fourth and fifth pages of this circular a list of one hundred kinds with botanical and familiar names, with some of which you may have a fellow feeling, and if planted even in the least conspicuous corner or border this Fall they will make it the most interesting part of the garden next Spring and Summer.

WILHELM MILLER says in the Garden Magazine: "But now that the treasures of the Far East are lavished upon us, we have hardy plants suitable for practically every purpose the most exacting gardener can conceive. And wherever we have any special object to accomplish, we ought to try nine times to find a hardy plant that will do the work before falling back on a tender one. And this for two reasons: First, hardy plants harmonize better with our climate and environment than tropical plants; second, as a rule, they are cheaper to maintain. And, in the long run, those effects which grow naturally out of the soil, and out of true economy, will be recognized as the most artistic."

## TO ENCOURAGE FALL PLANTING WE ARE MAKING THIS SPECIAL OFFER

You may select from one single plant to one thousand in any assortment (or we will make a selection for you) at the prices named below, and we deliver without further expense to your express or post-office (our option) strong flowering plants of varieties named on pages 4 and 5 of this circular. When a preference for specific varieties of the Perennials named is given we will try to comply.

PRICES at which we will deliver, express and postage paid, strong flowering plants of the varieties named on pages 4 and 5 of this circular, purchaser's selection, in any assortment.

|   |   |        |                    |   |        |                     |         |
|---|---|--------|--------------------|---|--------|---------------------|---------|
| A single plant of any variety named for | - | 15c.   | Any 25 plants for  | - | \$2.25 | Any 250 plants for  | \$15.00 |
| Any 5 plants for                        | - | 60c.   | Any 50 plants for  | - | 4.00   | Any 500 plants for  | 27.50   |
| Any 10 plants for                       | - | \$1.00 | Any 100 plants for | - | 7.50   | Any 1000 plants for | 50.00   |

*When ordering refer to this Special Offer as XXX, which is void after November 30th*





A delightful Perennial garden bordered with Boxwood

**Achillea** (Milfoil)  
**Aconitum** (Monkshood)  
**Ægopodium** (Bishop's Weed)  
**Agrostemma** (Rose Campion)  
**Alyssum** (Madwort)  
**Anchusa** (Sea Bugloss)  
**Anemone** (Jap. Wind Flower)  
**Anthemis** (Chamomile)  
**Aquilegia** (Columbine)  
**Arabis** (Rock Cress)  
**Armeria** (Sea Pink)  
**Artemisia** (Southernwood or Old Man)  
**Asclepias** (Butterfly Flower)  
**Asters** (Michaelmas Daisy)  
**Aster** (Alpine Daisy)  
**Baptisia** (False Indigo)  
**Bocconia** (Plume Poppy)  
**Boltonia** (False Chamomile)



A charming approach to 'My Ladies' Garden"



This picture shows a bright array of Perennials to be enjoyed from the veranda

## PALISADES POPULAR OR OLD-FASHIONED FLOWERS

FOR PRICE

The illustrations on this page are intended to show what of Palisades Hardy

**Callirrhoe** (Poppy Mallow)  
**Campanula** (Canterbury Bells)  
**Centaurea** (Hardy Corn Flower)  
**Chelone** (Shell Flower)  
**Chrysanthemum** (Giant Shasta Daisies)  
**Chrysanthemum** (Hardy Japan)  
**Cimicifuga** (Snakeroot)  
**Coreopsis** (Tick Seed)  
**Costmary** (Bible Leaf Plant)  
**Delphinium** (Larkspur)  
**Dianthus** (Hardy Carnation)  
**Digitalis** (Fox Glove)  
**Eupatorium** (Hardy Stevia)  
**Euphorbia** (Flowering Spurge)  
**Funkia** (Day-Lily)  
**Gaillardia** (Aurora Flower)  
**Geranium** (Hardy Geranium)  
**Geum** (Red Buttercup)  
**Gypsophila** (Baby's Breath)  
**Grasses** (Ribbon Grass)  
**Helianthus** (Hardy Sun Flowers)  
**Helenium** (Sneezewort)  
**Heliopsis** (Orange Sunflower)  
**Hemerocallis** (Yellow Day-Lily)  
**Heuchera** (Alum Root)  
**Hibiscus** (Mallow)  
**Hollyhock**, Double and Single  
**Iberis** (Candytuft)  
**Iris** (Fleur-de-lis)  
**Iris** (Japanese)  
**Lathyrus** (Everlasting Sweet Peas)  
**Liatris** (Gay Feather)



Border of Perennials with



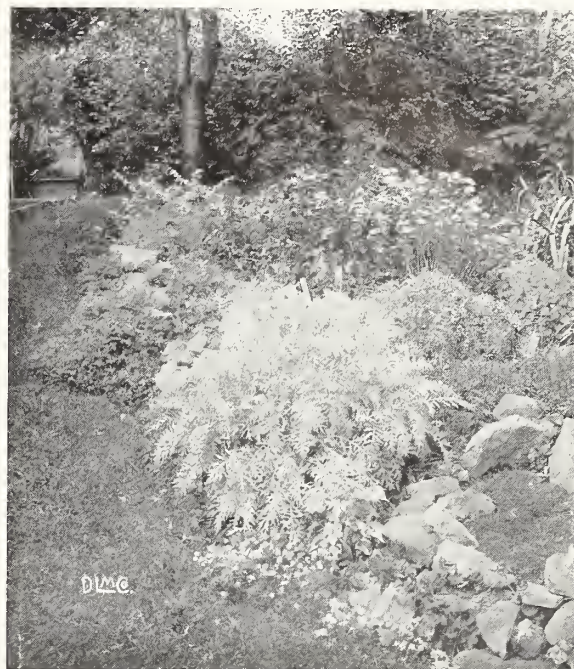
# ULAR PERENNIALS

## IN ONE HUNDRED VARIETIES

SEE PAGE 3

Permanent effects can be produced by Fall planting  
Perennials and Shrubs.

**Lilium** (Hardy Lilies)  
**Linum** (Blue Flax)  
**Lobelia** (Cardinal Flower)  
**Lupinus** (Lupins)  
**Lychnis** (Ragged Robin)  
**Lychnis Chalc.** (Maltese Cross)  
**Lysimachia** (Creeping Jenny)  
**Lythrum** (Loosestrife)  
**Mertensia** (Blue Bells)  
**Monarda** (Horse Mint or Bee Balm)  
**Myosotis** (Forget-Me-Not)  
**Nepeta** (Variegated Ground Ivy)  
**Oenothera** (Evening Primrose)  
**Pæonies**, Early Flowering  
**Papaver** (Poppy, Oriental and Alpine)  
**Pardanthus** (Blackberry Lily)  
**Pentstemon** (Beard Tongue)  
**Physostegia** (Dragon Head)  
**Physalis** (Chinese Lantern Plant)  
**Phlox Decussata** (Hardy Garden)  
**Phlox Subulata** (Moss Pink)  
**Platycodon** (Jap. Bell Flower)  
**Plumbago** (Leadwort)  
**Polemonium** (Jacob's Ladder)  
**Polygonatum** (Solomon's Seal)  
**Primula** (English Primrose)  
**Primula** (English Cowslip)  
**Pyrethrum** (Persian Daisy)  
**Rudbeckia** (Cone Flower)  
**Salvia azurea** (Rocky Mt. Sage)  
**Santolina** (Lavender Cotton)  
**Scabiosa** (Blue Bonnet)



A fine Rockery in a cool and shady spot

**Sedum** (Stone Crop)  
**Sempervivum** (House Leek)  
**Solidago** (Goldenrod)  
**Spiræa** (Meadow Sweet)  
**Stokesia** (Stokes Aster)  
**Sweet William** (Dianthus)  
**Thalictrum** (Meadow Rue)  
**Thymus** (Creeping Thyme)  
**Tradescantia** (Spiderwort)  
**Tricyrtis** (Toad Lily)  
**Trillium** (Wood Lily or Wake Robin)  
**Tritoma** (Red Hot Poker)  
**Valeriana** (Garden Heliotrope)  
**Veronica** (Speedwell)  
**Vinca** (Creeping Myrtle)  
**Viola cornuta** (Johnny Jumpups)  
**Viola** (Sweet Scented Violets)  
**Yucca filamentosa** (Adam's Needle)



Many varieties of Perennials are suitable for planting on  
pool margins, making a very attractive showing



The garden path always looks well bordered with  
Perennial plants







A delightful Perennial garden bordered with Boxwood

Achillea (Milfoil)  
 Aconitum (Monkshood)  
 Agropodium (Bishop's Weed)  
 Agrostemma (Rose Campion)  
 Alyssum (Madwort)  
 Anchusa (Sea Bugloss)  
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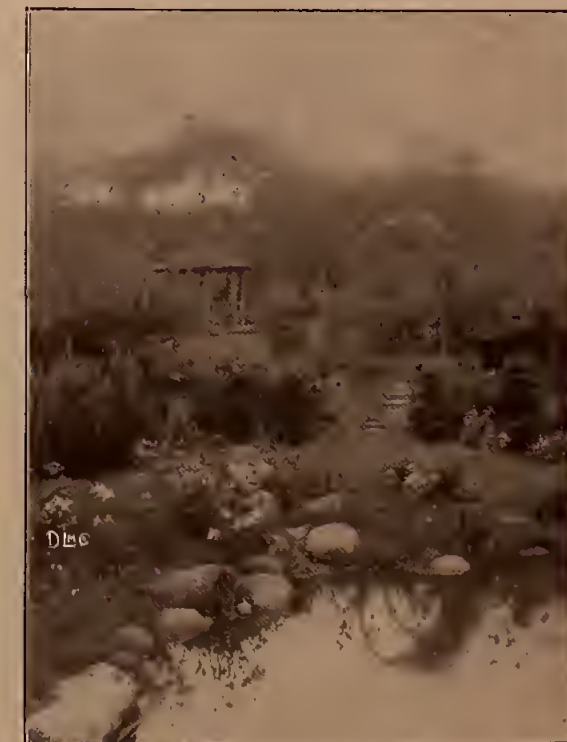
A charming approach to "My Ladies' Garden"



This picture shows a bright array of Perennials to be enjoyed from the veranda



Border of Perennials with background of Trees



Many varieties of Perennials are suitable for planting on pool margins, making a very attractive showing



The garden path always looks well bordered with Perennial plants

## PALISADES POPULAR PERENNIALS OR OLD-FASHIONED FLOWERS IN ONE HUNDRED VARIETIES

FOR PRICES SEE PAGE 3

The illustrations on this page are intended to show what charming permanent effects can be produced by Fall planting of Palisades Hardy Perennials and Shrubs.

Callirrhoe (Poppy Mallow)  
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 Chelone (Shell Flower)  
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 Stokesia (Stokes Aster)  
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 Yucca filamentosa (Adam's Needle)

A fine Rockery in a cool and shady spot

THE PALISADES NURSERIES, INC., SPARKILL, N. Y.





Weigela rosea variegata or Diervilla



Althaea, Hibiscus or Rose of Sharon



Viburnum opulus, Snowball Bush

## SPECIAL OFFER OF SHRUBS FOR THE LAWN

Following is a list of twelve shrubs which are especially well adapted to planting on the home grounds around the house and which will prove a delight from early Spring until late Fall.

**FORSYTHIA** (Golden Bell). Showing masses of yellow flowers very early.

**CYDONIA** (Japanese Quince or Fire Bush). Blooming in May and best planted in Summer.

**SYRINGA** (Lilac). An old favorite in which several new forms are now offered.

**DIERVILLA** (Weigela). Three colors, flowering in June in almost any soil and pretty the season through.

**SPIRÆA Van Houttei** (Bridal Wreath). A wonderful shrub which looks in June almost as though weighted down with snow.

**BUDDLEIA** (Butterfly Bush, or Summer Lilac). A new shrub from China, which deserves a place in every garden, for its heliotrope-colored flowers are produced from July until the coming of frost. Very fragrant.

**HYDRANGEA paniculata**. Flowering in August and best grown as a lawn specimen, although it can be trimmed to suit any position.

**ALTHÆA, or Hibiscus** (Rose of Sharon). A September-flowering shrub which has flowers resembling Hollyhocks. Double and Single.

**VIBURNUM** (Snowball or High Bush Cranberry). Flowering in June, but with ornamental scarlet berries, which last well into the Winter.

**SYMPHORICARPOS** (Snowberry). Most valued for its large, white berries, which hang on the branches until long after snow flies.

**PHILADELPHUS** (Mock Orange, or Syringa). A well-known, hardy shrub. White, fragrant flowers. Blooms in June. Makes a large shrub.

**DEUTZIA crenata**. Double white flowers tinged with rose. Blooms the middle of June.

Prices at which we will furnish large-sized, well-branched shrubs for immediate effect of any of the above varieties: Each variety plainly labeled.

Plants, 2 to 3 ft. high, 15c. each, \$1.25 per doz., \$12.00 per 100, or a collection, one plant of each of the 12 varieties for \$1.60, or half a collection (6 plants) for \$1.00.

Extra strong plants, 3 to 4 ft. high, 25c. each, \$2.50 per doz., \$20.00 per 100, or a collection consisting of 12 plants, one of each of this size, for \$2.75, or half a collection (6 plants) for \$1.50.

These prices include boxing and packing, but not transportation charges. No less number than six of one variety sold at dozen rates or twenty-five at hundred rates. No restrictions as to number of collections ordered.



Planting of Hydrangea paniculata



## AMERICA'S HARDY GARDEN

**F**ASHIONS in gardening have waxed and waned since the days of Colonial glory, but through the shifting changes of continental formality, there has ever emerged pure and quaintly charming, that typical embodiment of America, the old-fashioned hardy garden. Like cosmopolitan America, it has assimilated all the adaptable qualities of the best European styles into a conglomerate type, rather than created a distinctly new form for itself. It has gathered in its bosom that host of hardy pioneers who can withstand the struggles and hardships of our cold north winds and bleak mountain peaks, and who, undaunted, can brave the rugged virgin soils of a new country. Sturdy native blooms and foreign titled queens alike find place side by side in the shelter of its enfolding borders. Imperishable, they rise more vigorous and strong with each succeeding season, instead of weakly living out their little Summer and leaving an empty garden in their wake next Spring. Each year sees the garden assume a fuller bloom, maturity that reveals the memories of its youthful past and hopes

for its unknown future. From earliest Spring to latest Fall there is a constant procession of flowering color and beauty that makes of the garden enclosure a wonder spot on the earth. Once planted in their appointed

places they firmly establish themselves and need no further attention from human hands, fully repaying our thoughtfulness in placing them there by a riot of beautiful colors and forms. Such is the hardy perennial garden of old-fashioned favorites.

As we stroll through its informal by-paths, the reminiscent past comes floating before us, inseparably bound up with the sentiment of the flowers. One by one they troop through the imagination linked with the romance of former days. The tall spires of the jaunty Hollyhocks; the tinted cup and saucers of the Campanulas; the glorious full-blown petals of the Pæonies; and the delicious fragrance of the lowly Lavender. Even the names themselves are rich in that flower lore beloved of all true gardeners. The climbing Roses bend their profuse bouquets over the Bachelor Sweet William; the Phlox group of multitudinous wonderfully garbed sisters nod in friendly fashion to the elegant spikes of Larkspur, their neighbor; and when the frost is in the air the golden yellow Poinpons of the Chrysanthemums are still smiling gayly at the sun amid the rayed and starry beauty of the Michaelmas Daisies.

The names and stories of the hardy garden members are laid before you in the preceding pages, and all the joys of foregathering a goodly company of congenial, companion blooms that will blend harmonious colors together and that will afford the fullest succession of bloom throughout the garden year are revealed in the list of "PALISADES POPULAR PERENNIALS," now at your service.

Feb. 5th, 1915,  
Salem, Mass.

Palisades Nurseries, Inc.,  
Sparkill, N. Y.

Gentlemen: I have bought quite a little stuff of you in the past, and have always found it satisfactory and the prices remarkably reasonable.  
Yours very truly, H. L. C.



Buddleia, Summer Lilac or Butterfly Bush



Philadelphus Syringa or Mock-Orange

### A PALISADE HARDY BORDER

Our "Colonial," "Old-Fashioned," or "Grandmothers' Garden," with its single and double Hollyhocks, Larkspur, Foxglove, Phlox, Iris, Pinks, Columbine, Pæonias, Sunflowers, and a hundred other varieties arranged according to color, flowering season, size, etc.

A perfect picture in your garden to last for years will be the result if you allow us now to plan a scheme, whether of contrasts or of harmonies, to be carried out this Fall. Our "Artistic" Border 100 feet long by 4 feet wide, about 350 plants, costs \$22.50 only. Consider what is "saved" by this system and what is gained in true beauty.

### COST OF PLANS FOR MAKING A HARDY GARDEN OR BORDER AND HOW THEY MAY BE HAD FREE

Beautiful landscape effects result only from a preconceived scheme of arrangement; hence the importance of a plan.

Plan for showing proper arrangements of single beds, or perennial borders 100 x 4 ft. \$5.00, FREE with orders for \$22.50 and upwards worth of plants.

Plan for property containing 7500 sq. ft. or less ..... \$10.00, FREE with orders for \$100.00 and upwards worth of plants.

Plan for property containing 7500 to 12,000 sq. ft. .... \$15.00, FREE with orders for \$150.00 and upwards worth of plants.

Plan for property containing 12,000 to 20,000 sq. ft. .... \$20.00, FREE with orders for \$200.00 and upwards worth of plants.

Plan for property containing over 20,000 sq. ft., special price.



Forsythia, Golden Bell



# THE PERENNIAL GARDEN

Extract from a paper read at the recent annual convention of The Canadian Horticultural Association by W. J. Potter, Parks Department, Toronto, Ont.

The most beautifully wrought bedding plant scheme cannot compare with a well-designed perennial garden, with its daily surprises and new faces to welcome us. One week it is a riot of color and the next something different. It presents an ever-changing succession, commencing before the winter snows have melted, until Jack Frost calls a halt in the Fall. This is one reason why we should grow more of this class of plants. Another reason is that they fill the bill in every size of a garden, from the capacity of a few dozen, for the cottage, to the broad acres of the millionaires.

The preparation of the soil for a planting of perennials should be most thorough in every detail, if we expect results that shall excel. The work should be of a permanent character.

The plan that I have generally adopted I find works well. Prepare the beds in the Fall by trenching or digging two spades deep. This breaks up the sub-soil. It should be dug and left in a rough condition, at the same time incorporating plenty of good rotten manure, or half-rotted leaves, or both, if the soil is very heavy. This makes the best medium for growing perennials. Give a good application of charcoal, peat moss, fibre or better still, plenty of good, tough sod. These materials will act as mechanical agents to the soil, as well as give fertility, and at the same time will tend to increase its effectiveness as a drouth resister, and a storehouse for plant food for many years.

Deep cultivation is very essential as many of our best perennials are deep-rooting; for example, the Leguminose, Malvace, Campanulas, and many others. Nothing suits them better than to get down to the cool reservoirs of moisture and air spaces during the parching months of July and August. The extra trouble of deep cultivation will be amply repaid in the extra quantity and quality of the flowers. In addition they will require less attention as to watering, etc., especially if we have to depend on the rainfall. Trenching not only opens up the soil and allows freedom of root action, but also drains the soil in Winter, and renders it moist in Summer. The action on the pores of the soil is similar to the action of warm air in contact with a cooler surface or body.

If the ground is of a very sandy nature it is better to neutralize it by the action of cow manure (if procurable). Heavy clay loam with the sod left on is preferable. Wood ashes or lime applied at the time of preparation is also good, as it has a binding effect on the soil, and being very "leaky," heavy mulching at all times is necessary for the best success. In Summer it prevents too rapid evaporation and provides a constant stimulus. It acts also as a protection in Winter.

I am rather in favor of nitrogenous manures for perennials, especially in the growing of the heavier varieties, although it is necessary to give a liberal dressing of bone meal or granulated bone annually, as leguminous and woody plants depend on the lime salts and phosphoric acid contained therein. On the other hand, there are some plants that do not like lime, e. g., the Foxglove, but they are few in number.

There are two general methods in the planting of a perennial garden. The first is by arrangement of colors for certain sections or divisions. Of course in each case the aim is to have continuity of bloom for the entire season, so arrange the height, natural position, etc. This method might suit those who are partial to certain colors and shades and is easily accomplished.

Color planting is more suitable for large gardens, where the eye rests on the whole, or greater part of the scheme. It also includes the choice and use of two colors or combinations, such as pink and blue (light), cream and purple, golden yellow and deep blue, or orange and medium blue; or a gradual blending down from an intense color, using several intermediate shades. The yellow and orange shades always look well and if separated in good generous blocks, cannot help but be effective. Blocks of white flowers or green ornamental foliage will act as a foil where it is necessary to use strong colors in heavy masses, reds and scarlets for example, that is if both meet the eye at the same time. The blue Delphiniums, white and pink Hollyhocks afford an example of good tones, but keep the reds and maroons away. Gypsophila and purple Delphinium form an aesthetic combination. Place Golden Coreopsis against heavy foliage and deep shadows. Plant Foxgloves among an underground of dwarfier material or among evergreens in groups. The composite flowers offer many delightful combinations. One cannot err in their use as the colors, for the most part, can be called relative or harmonious. Examples include Helianthus and Callimeris incisa, Stokesia and Shasta Daisy. These can be used also with Golden Anthemis. Rudbeckia purpurea and Rudbeckia fulgida or submentosa harmonize, and so on "ad infinitum."

Collections of Phlox show off to much advantage if separated as to color, the scarlets from the magentas and the pinks from the purples. Use the white forms between.

The second method of planting may appeal to those who want to form collections without regard to color arrangements. If so, use plenty of green foliage as a foil and background. This method is the



*Spiraea Van Houttei, Bridal Wreath*

planting of each genera or family in separate masses or irregular bays in conformity with the size and shape of that portion of the bed to be planted. When following this method, make a sketch or drawing to scale and have the framework laid out first with the space allotted to each group. Then plant evergreen shrubs at vantage points. These not only act as foils to certain colors and forms, but also afford shelter in Winter from cutting winds and in Summer from hot sun for shade loving plants.

There are many genera which will thus make a continuous show of bloom by judicious placing and the use of the proportionate number. Take Veronica, for example. The first one blooms in the Spring, and so on till Fall, without a blank. Phlox are the same, starting with *P. ovata*, and followed by *Arendsii*, *suffruticosa*, and *decussata*, giving an unending succession till October. *Rudbeckia*, *Helianthus*, *Spiraea*, *Aconitum*, *Campanula*, *Helenium*, *Inula*, *Pentstemon*, *Lychnis*, *Lilium*, *Aquilegia*, *Gypsophila* and many other families not including continuous bloomers, can be used in this way. If by chance there happens to be any blank spaces, any of the continuous bloomers in the list fills the bill.

Propagation may be done in a number of ways. The most generally adopted method is by seeds. These should be sown early enough to form good, strong plants by October so as to enable them to stand the Winter. About June will usually suffice for many. I prefer sowing most everything in the Spring, as it takes a long time for many to form good crowns, and it is better to err on the side of size than lose your stock through the Winter. Phlox are better sown in the Fall as soon as ripe. This is true also of a few other hard seeds, as many will not keep, such as *Aquilegia*, *Myosotis* and *Primula*. These must be sown as soon as possible. This method applies only to stocks which come true from seed or with which there is no regard for mixture. Any choice varieties, such as Phlox, Delphinium, Gaillardia, etc., are better raised from cuttings or divisions.

Cuttings are made early in the Spring. A frame or greenhouse is a necessary adjunct for the purpose. By Wintering such stocks inside a cold house, they can be raised wholesale, and indeed many will bloom the first season. These cuttings should be taken as short as possible on the side growths or when first starting to grow. Others can be multiplied from the roots, as having running fleshy roots they can be cut up in small pieces, for example, Gaillardia, Dicentra, Lythrum, Peony, Poppies, etc.

Many perennials can be increased by a system of layers without much trouble, including the dwarfier cushion plants, such as *Arabis*, *Campanula Carpathica*, *Dianthus* and others. All that it is necessary to do is to cover the plants with clean sand or sandy soil so as to form a mound, but not so thick as to bury the plant. Merely fill up the intervals between the leaves and stems. Some plants are better propagated by earthing up the stems in a similar way; for example, tree Peonies, and some others of a semi-shrubby nature.

The majority of herbaceous perennials are easily increased in smaller quantities by simple division of the roots. Those which have a heavy mass of fibrous roots can be increased in the Fall. Indeed, this method of dividing the roots should be carried out every few years, as the quality is better. If this is neglected, the clumps get hollow and woody in many cases, and are liable to run out. These include *Pyrethrums*, *Delphiniums*, *Phlox*, *Pentstemon*, *Platycodon*, *Aquilegia*, *Aster* and a host of others. A constant keeping up of the utmost vigor of your plants is essential both for quality and because they are then less liable to suffer from insect attacks.

It is not the intensity of our cold Winters that ruins many plants, but the dry, strong winds in early Spring, as well as the fact that water remains on the crowns and forms ice, thus suffocating them. To avoid much of this trouble, see that your border is well drained and encourage as much of nature's covering—snow—as possible. To this end do not clean the border off too clean and bare in the Fall; in fact, no more than is necessary. The more material that is left on in the way of a rough coating of leaves, etc., the more snow is liable to find a lodgment. In the case of evergreen plants, I find that pieces of hemlock or spruce branches placed around them helps wonderfully. Do not cover these evergreen plants with a heavy mulch, as it will do more harm than good. They need air at all times.