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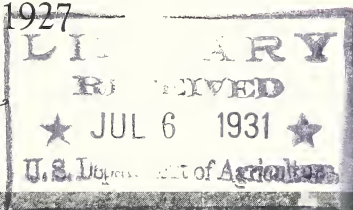
PUDOR'S

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PERENNIAL AND ANNUAL FLOWER CATALOG

SEASON 1927



John Muir says, "Everybody needs beauty as well as bread, places to play in and pray in where nature may heal and cheer and give strength to body and soul alike."

NOV 2 1927

O. M. PUDOR

PUYALLUP, STATE OF WASHINGTON, U. S. A.

(IN THE CHARMED LAND)



*"I never knew Thee, Lord, until
My garden brought us face to face,
Revealed Thy gracious miracle
Of sun and seed in little space.*

*Since I have seen Thine alchemy
Change earth-brown bulbs to living gold
Of daffodil, Eternity
Has seemed a simple truth to hold.*

*The incense-breath of mignonette
Has summoned me to vespers too,
And may I nevermore forget
To lift my heart, as pansies do.*

*No dim cathedral is as still
As twilight in this holy place;
I never knew Thee, Lord, until
My garden brought us face to face."*

Cultural Directions for 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 millionaire.

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 drought 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 Leguminosae, Malvaceae, Campanulas, and many others. Nothing suits them better than to get down to the cool reservoirs of moisture and air space 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 of 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 "leachy," 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 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 Delphiniums form an aesthetic combination. Place Golden Coreopsis against heavy foliage and deep shadows. Plant Foxglove among an undergrowth 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 Heliopsis and Calimeris incisa, Stokesia and Shasta Daisy. These can be used also with Golden Anthemis. Rudbeckia purpurea and Rudbeckia fulgida or subtomentosa 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 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 arrangement. If so, use plenty of green foliage as a foil and background. This method is the 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 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 fill 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, as 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 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 growth 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 carpatica*, *Dianthus* and others. All that is necessary to do is to cover the plants with 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 other of a semi-shrubby nature.

The majority of herbaceous perennials are easily increased in smaller quanti-

ties by simple divisions 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 Pyrethrum, 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 around them help 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.



“Create a Beautiful Garden that your friends may enjoy with you the loveliness of shaded walks and quiet nooks, of sunny hours and brilliant colors, the trickling sound of water and the sweet scent of flowers.”

PLEASE READ THIS BEFORE ORDERING---Terms-Rules

First—No Plant order is filled for less than \$1.50, unless you pay 25 cents extra for packing and postage. NO SEED order is filled for less than 25 cents.

Second—I pay the postage on all mail orders, but plants on which I pay the postage are of necessity smaller than those upon which you are willing to pay the postage, or have sent by express. You understand that I cannot pay out the biggest part of my small profit for postage. Therefore, if you are willing to pay the express charges, or will pay 20% on your order towards the postage, I gladly send you larger plants, except in cases of rare and expensive plants.

Third—I do not open account, I am too busy, and book-keeping is too expensive, neither do I send plants or seeds C. O. D., unless $\frac{1}{2}$ is paid with the order.

SEND MONEY ORDER; EXPRESS ORDER, or CERTIFIED CHECK OR DRAFT.

If you send currency, have your letter registered; I assume no responsibility if money is sent in an ordinary letter.

If you must send stamps, please do not send more than 50c worth.

Fourth—All stock is offered subject to being unsold on receipt of order; unless you name some substitutes, I will return your money—I do not substitute.

Fifth—I guarantee my plants and seeds to be true to name; if through some error on my part the plant turns out otherwise, I will replace it free of charge; this, however, does not apply to seedlings that have not bloomed yet and of which certain colors are ordered; I can give no warranty, expressed or implied, that the progeny will be true to the parent colour; this applies particularly to Delphiniums, Columbines, Lupins and Oriental Poppies.

Sixth—The choice flower seeds offered herein are absolutely good and fresh and with reasonable care and skill on your part a large germination should be obtained in every case, with some exceptions, however, of a few notable bad germinators. Some seeds lay in the ground for a long time, some all winter and then come up strong in the Spring. With good care, all flower seeds are as good in the Spring as they were in the Fall. Some people have the notion that Delphinium seeds lose all their strength by Spring. This is possibly the case with some badly inbred strains. The **Wrexham** strain is a poor germinator and in Spring I have found a 50% germination a good average. We sowed on the third of April outside, several ounces of my **Glory of Puget Sound Strain**; sixty days later we had a beautiful thick stand of tens of thousands of seedlings, the long rows looking like a wide green ribbon.

Seventh—I am not responsible for delays in the mails, and particularly not if the stock is held up through Quarantine regulations. If you are so unfortunate as to live in a State that has stringent plant laws coming from another State, and where plants are sent, after being received at your Post Office, to a central inspection point, often 100 or 200 miles away, then opened up, handled, perhaps fumigated, and after such treatment carelessly re-packed and returned to your Post Office, often causing days of delays. I prefer not to sell you plants, or possibly it is best to send such shipments by express.

A complete index of all plants and seeds will be found on last page.

LIST OF CHOICE HARDY PERENNIAL PLANTS AND SEEDS

(Arranged Alphabetically) An index will be found on last page.

"R" in front of variety indicates that the plant is suitable for the Rockery.
R. Acaena, New Zealand Burr (N. O. Rosaceae). Dwarf creeping evergreen rock plants, suitable for planting between stepping stones.

" **microphylla**, red flower-heads and greenish-purple leaves; 2 in., trailing
Each 25c.

R. Aethionema, Lebanon Candytuft (N. O. Cruciferae). Light soil with mortar and rubble. A charming genus of rock and border plants well adapted for sunny positions.

" **pulchellum**; prostrate habit $\frac{1}{2}$ ft. Free grower, rose-purple flowers with a long season of bloom; a lovely thing. Seeds 25c a pack; plants 40c each.

" **Persicum**. Light pink flowers, long blooming season, compact habit, 9 in. Plants 40c each.

R. Alyssum, Madwort (N. O. Cruciferae). Light soil in the sun for border and rockery.

" **Citrinum**; charming variety, masses of lemon-yellow flowers, dwarf compact habit, specially good for edging and rockery; $\frac{1}{2}$ ft; April to June. Seeds 25c per pkt.; seedlings 60c per doz.; advanced plants 15 and 25c each.

" **Saxatile Compactum**; yellow; April-May; $\frac{1}{2}$ ft.; best grown as a hardy biennial and sown annually in July to keep plants neat looking; they bloom the following Spring. Lovely in the border with blue Scillas. Seeds 10c per pack; 3 for 25c; seedling 40c per doz.; advanced ready-to-bloom plants 10 and 15c each, but not later than April.

" **Rostratum**; trailing species, yellow flowers in abundance during June and July; 1 ft. Seeds 15c per pkt.; plants Fall or Spring 15c and 25c each.

Anchusa, Bugloss (N. O. Boraginaceae). Ordinary soil; lovely blue flowered border plants.

" **Italica, "Dropmore Variety"**. 4 ft. June to September. Many panicles of lovely Gentian blue flowers; seeds should be sown July to September to bloom the following year; a gem for border effect. Seeds 15c per pack; $\frac{1}{4}$ -oz. 40c; plants in Fall or Spring 15 and 25c each.

" **Italica "Opal"**. A perfect gem for border effect. $3\frac{1}{2}$ ft. June to September; a pale, pleasing shade of blue. Seeds 20c per pkt.; plants in the Spring 15 and 25c each.

R. Androsace, Rock Jasmine (N. O. Primulaceae). A charming genus of Alpine plants which require a sunny position on rock and thrive best when undisturbed.

" **Carnea Alpina**, dense cushion with rose colored flowers; 3 inches. July and August. Plants 50c each.

" **Chumbyi**; very compact habit, lovely rosy-pink flowers, 4 inches; May to August. Plants 50c each.

" **Languinosa**; free growing trailing species, with silvery foliage and clusters of soft rose colored flowers; 3 in. June to October. Plants 50c each.

" **Sarmentosa**, downy foliage; flowers bright rose with white eye; a lovely thing; 6 in.; May to July. Plants 50c each.

Antirrhinum, Snapdragon, see under Annuals.

R. Aquilegia, Columbine (N. O. Ranunculaceae). Mixed soil. A most useful genus of hardy plants which are highly prized for their decorative effect in the open border.

" **Alpina**. A beautiful short-spurred form; clear blue, very rare, a treasure of the Alps; 15 in. Plants 15 and 25c each.

- Aquilegia Helenae*; pale blue flowers with pure white corolla, similar to *glandulosa* but taller; 1½ ft.; May to July. Seeds 15c per pkt.; plants 25 and 40c each.
- " Long Spurred Hybrids (Mrs. Scott Elliott's strain). One of the best strains including all shades of blue, pink, yellow, etc. Seeds 15c per pkt.; 2 for 25c; ⅛-oz. 75c. In mixture only, as they do not come true from seeds. Seedling plants per doz. 60c, 25 for \$1.00; individual clumps in two sizes, 25c each, \$2.50 per doz., and 40c each, \$4.00 per doz.; mixed colors only.
- " Rocky Mountain Columbine; I think this is the finest of all Columbines; very long spurs of an exquisite light blue color; not a very strong grower, and rather difficult from seeds, but when once established, a gem. Seeds 25c per pkt.; ⅛-oz. 75c; plants 15, 25 and 40c each; seedling 75c a doz.
- " Storries Gold Medal Hybrids "Scotland Yet". Brilliant scarlet sepals, petals yellow and other glorious colors; this strain was universally admired in my garden last season. Seeds 15c per pkt.; 2 for 25c; ⅛-oz. 75c; plants 25 and 40c each; seedlings in the Spring 60c per doz.
- ☞ Owing to the early awakening of the Columbine in the Spring in our mild climate, I can not ship individual clumps after April 1st, except seedlings.
- " Yellow; long spurred from clear yellow parent, will come only partially true from seed. Per pkt. 15c.
- " Emily Tenney; a lovely large lavender, with unusual long spurs, one of the finest in my collection. Per pkt. 25c.
- " Josephine Marsh; a late flowering, long-spurred hybrid, originated in my garden: it begins to bloom when others are commencing to go to seed; the color is a lovely shade of old rose (deep pink) with yellow sepals. Per pkt., 25c.
- R. " Pyrenaica; from the Pyrenees Mountains. Strongly deep blue flowers with yellow stamens, blooms very early before any of the other varieties. Suitable for the rock garden. Seeds 15c per pkt.; plants 25c each.
- ☞ Notice—*Aquilegia* seeds will come only partially true in color to the parent plant.
- Artemisia; Wormwood; Hawthorne Scented Mugwort. (N. O. Compositae).
Lactiflora; creamy white, very effective, beautiful ornamental foliage plant; 5 ft. August to October. No seeds. Plants 25 and 40c each.
- R. *Asperula*; Woodruff (N. O. Rubiaceae).
" Hexaphyllia; very pretty plants for borders or rockery; small white flowers in diffuse panicles; 2 ft. Seeds 25c; plants 25c each.
- Asters—Perennials; Michaelmas Daisies (N. O. Compositae). Ordinary soil, very beautiful late flowering single daisies; they are giving a wealth of bloom during September and October, a season when most other flowers are past, and for the best effects should be planted in masses; they are hardy and grow freely in any soil, multiplying very rapidly. Spring delivery only.
- " St. Egwin; a soft, rosy-pink, 3 to 4 feet; the whole plant is enveloped with these daisy-like pink flowers.
- " Novi Belgi Climax; plants of strong, vigorous habit, over 5 feet high, fully one-half of which consists of much-branched pyramidal-shaped flower stems filled with light lavender-blue flowers, each 1¼ inches or more in diameter; it blooms from the latter part of August until the middle of October.
- " Roycroft Purple; a large, deep purple with yellow center; very attractive color and exceedingly showy; blooms in October; a rare and distinct kind. Strong plants in early Spring, each 25c.
- Special—One each of the above 3 varieties, 70c! 3 each, \$1.75.

- R. Aubratia; Rockcress (N. O. Cruciferae).** Light soil. These are most valuable trailing plants for early Spring blooming, as they form masses of lovely blue, pink, violet and crimson shades of flowers. A charming effect is made by planting in conjunction with golden yellow Alyssum and white Arabis on the rockery or in old walls or as a carpet for Spring flowering bulbs. 3 to 4 inches.
- Bridesmaid;** pretty variety with soft blush flowers. 25c each.
- Lavender;** large lavender blue and white eye. Plants 15 and 25c each.
- J. S. Baker;** clear violet with white eye; large flower. 15 and 25c each.
- Moerheimi;** beautiful new hybrid with lilac pink flower. 25c each.
- Mrs. Lloyd Edwards;** large rich crimson purple flowers of great merit. Plants 15 and 25c each.
- Russel's Crimson;** rich reddish crimson, fine in partial shade. Plants 15 and 25c each.
- Souvenir De W. Ingram;** beautiful, large rosy pink flowers. Plants 15 and 25c each.
- Deltoidea Aurea Variegata;** mauve flowers, golden variegated leaves, besides being pretty in flower it gives a touch of color in winter. Plants 15 and 25c each.
- Dr. Mules;** imperial purple, long flowering season, compact growth; one of the best. Plants 25c each.
- Imperial Scotch Hybrids;** large flowered, extra fine hybrids of many colors. Plants 15 and 25c each.
- R. Bellis; Daisy (Compositae).** Loamy soil.
- " **Rotundifolia Caerulescens;** charming little single daisy for the rockery; bluish flowers in abundance. Plants 25c each.
- R. Bupthalmum; Ox-Eye (N. O. Compositae).**
- " **Salicifolium;** orange yellow marguerites from Tyrol; 18 in. Plants 25c each.
- Campanulas. The Bell Flowers.** A sunny position with a moderately rich soil, suits them best.
- R. " Carpatica;** the lovely Carpatian Harebell for the rock garden or border. Seeds 15c per pkt., 2 for 25c; plants 15 and 25c each.
- R. " C. Alba;** the white form of the above; prices the same.
- R. " Garganica;** a lovely trailing ivy-leaved Campanula with star shaped violet flowers with a white center from Monte Gargono. Seeds 15c per pkt.; plants 35c each.
- R. " Laurii;** a grand new Alpine from Greece, spreading in growth with many attractive flowers of a beautiful shade of lavender about one inch across, not drooping as in *C. rotundifolia*, but flowers turn upwards; when in bloom the plants represent a mass of color with scarcely a leaf visible; of easy culture in light soil and sunny positions. Only plants, 35c each.
- R. " Muralis (Portenschlagiana Bavarica).** Violet flowers 4 inches; one of the best Alpines. Seeds 25c; plants 35c each.
- " **Persicifolia Grandiflora;** blue, the lovely peach leaved Bellflower; 3 ft. May to July. Seeds 15c per pkt.; plants 15 and 25c each.
- " **do. Alba;** the white form of the above; prices same.
- " **Pyramidalis;** blue; the Chimney Bellflower; forces well in the conservatory; 4 to 5 ft. July to October.
- " **do. Alba;** the white Chimney Bellflower. Seeds of either 15c per pkt; plants 25 and 35c each.
- R. " Rotundifolia;** the lovely Harebell of Scotland; pale blue, slender graceful habit; 9 inches. Seeds 15c per pkt.; plants 15 and 25c each.
- " **do. Alba;** the white form of the above; prices same.
- R. " Thyrsoides;** very distinct; crowded spikes of sweet scented straw-yellow flowers; 9 inches. Plants 35c each.
- Canterbury Bells;** white, rose, lavender and blue; single and double; 3 feet; bi-annuals; seeds must be started in the early or late summer, fall sown will not do for blooming plants next season. Seeds single, 15c per pkt; double 25c; plants either Fall or Spring, 25 and 35c each.

R. Candytuft—see Iberis.

Carnation—see Dianthus.

R. Cheiranthus; Wallflower (N. O. Cruciferae).

Allionii; so called Siberian Wallflower; orange yellow, continuous flowering; a gem; sweet scented; 1 foot; April to July and again in the Fall if seeds are picked off; may be treated as an annual, sows itself. Seeds 25c per pkt.; plants 15 and 25c each; seedlings in season 50c per doz.

" Suttons Strain; of rich yellow, red and ruby shades; sweet scented Wallflowers. Seeds 15c per pkt.

Cynoglossum; Hounds Tongue (N. O. Boraginaceae); common soil

" Amabile; a lovely Chinese plant suitable for the border; a mass of bright blue flowers; 2 ft. This is a hardy biannual, best and easiest raised from seeds; also seeds itself. Per pkt. 25c.

Coreopsis (N. O. Compositae); ordinary soil.

" Lanceolata Grandiflora; rich golden yellow flowers borne in great profusion the entire summer; a fine popular hardy plant. Seeds 15c per pkt.; plants 15 and 25c each.

Cowslip—see under Primoses.

CAMASSIAS

Whether on the Pacific Coast or in the East, there are few bulbous plants which meet climatic or soil conditions better, or give a more attractive bloom. They are hardy without protection, and thrive either under ordinary garden conditions or when naturalized in open moist woods, or on the sides of ponds or streams, or in not too dense a grassy growth. In the West they thrive where they are submerged all winter. All eastern customers praise them highly. It is better to plant them not over 4 inches apart in masses of from twelve to hundreds. Plant from October to January in any fair soil, and 3 to 4 inches deep. Water liberally when growing and in flower, but it does not matter whether they are dried off afterward or not. The foliage is excellent. Not necessary to lift when done flowering. They can be left alone for years.—(From Purdy's Catalog.)

Camassia esculenta is a purple form. Rich in color, and grows as high as 2 feet in the best soils. Showy in masses. 60c per doz.; \$3.50 per 100.

Camassia Leichtlinii comes in two colors. In deep blue, it is a fine plant that may grow to 4 feet in height, with as many as a hundred flowers, of the finest, even form, star-shaped, and as large as an inch and a half across. It flowers in long succession.

In cream-color, *Leichtlinii* is as large as in blue, but with the different colored flowers. It, too, is a very fine plant, and when well established reminds one of the *Eremuri*. Either color 80c per doz.; \$6.00 per 100.

Reports from delighted growers in all sections of the United States justify me in emphasizing both the hardiness and beauty of *Camassias*.

Camassias are ready from September to January 1. Best planted in late September and early October.

DELPHINIUMS

HARDY PERENNIAL LARKSPUR

The Delphinium is one of the most lovely of the hardy border plants; its handsome, stately habit, with the various rich colorings of the tall, stately spikes of blooms, make it at once, a charm and a delight in every garden. For their successful cultivation a rich, well-dug soil is necessary. They are easily grown from seeds, although some folks seem to have considerable difficulty in doing so, why, I do not know. If possible, seeds should be sown in the late summer, as soon as ripe, but germinate equally as well the following Spring, but when kept over until the following summer, then about 10 months old, the results are rather discouraging. It might be mentioned here, that the **Wrexham** strain



A 3-YEAR-OLD PLANT—"GLORY OF THE VALLEY"

Height 7 ft. 6 inches—flower stalks 32 inches

is rather disappointing to many folks as to its seed germinating power, but even tho a seed package containing some 200 seeds, might give you only 100 or even only 50 plants, this strain produces such marvelously beautiful flowers and stalks that one easily forgives and forgets this one fault in this strain. My stock is so large now, and we are raising so many thousands of seedlings that I can afford to sell small seedling plants quite cheaply, and ss they carry almost anywhere under favorable conditions, this is probably the best way to get a start with these "Hollyhock Delphiniums", or any other strain of Delphiniums, for so many people who imagine they know all the fine art of gardening have such wretchedly poor luck with such seeds as Delphiniums, Meadowrue, Scabiosa, perhaps Statice also, that they better let me do the worrying with the seeds, and buy small seedlings. It is perhaps human nature always to blame the other fellow, whether it is your husband, your wife, or your seedsman: "Surely I did everything right and proper, and put your seeds right next to some of my own under exactly the same conditions; mine came up finely, every seed, your seed gave me only a few plants, or none at all, as the case may be", and so on, but fortunately and happily, the majority of my customers write: "I believe every seed came up," or "I have more plants from your seed package than I can take care of", etc. As Sherman R. Duffy, in *Garden & Home Builder*, in the March, 1926 issue, puts it so aptly:

"A real test of gardening is raising plants from seed. One gardener will get 200 plants, another 10, and another none at all from exactly similar packets of the same seed. The best gardener gets the biggest crop of seedlings. The secret is protection until the plants are large enough and strong enough to shift for themselves."

I believe the causes of failure with seeds are mostly the following—seeds covered too deep; too much watered; too little watered so the soil bakes and the little germs perish; seeds bought and then not sown right way, but kept for weeks and months under unfavorable conditions; slugs, that will devour the little germs peeping thru the ground, before the owner is aware that the seed has germinated, and lastly, heavy rains or heavy artificial watering that will wash the seeds away. You may rest assured that you get the very same seed mixtures that I sow for our own use, and since we make three and four sowings during the year we know exactly what the seed will do. I, personally, superintend the gathering of flower seeds, and gather all valuable seed myself, storing it in the most approved fashion. My seeds never get old for the reason that by Spring I am usually sold out of all Delphinium seeds, so if you fail with my seed, don't think for a minute, that I mixed my last year's seeds with this year's new.

My own strain "The Glory of Puget Sound" has now been sufficiently tested in so many gardens in the East, the North, the South and the West to thoroughly prove, not only its wonderful beauty and loveliness, but its vigor and hardiness as well. As one party wrote me not long ago: "I have tested your Delphinium strain side by side with several well known English strains, and named sorts, and your strain is least susceptible to mildew."

And I let other gardeners speak in its praise, rather than myself:

Exeter, New Hampshire, March 22nd, 1926. "When Mrs. G. started West she asked me had I any special want in the flower line. My reply was 'Pudor's Glories.' The 'Glories' are here, both blue and white. My seedlings last year were wonderful, everyone of them blooming—and such blossoms! Never have I seen such blooms. I have one lovely clear blue of my own, but you have hundreds. I feel you would like to know that my plants gave endless pleasure to an invalid friend."

Isn't that great? Worth a million dollars in satisfaction.

Georgetown, Kentucky, June 20th, 1926. "This Spring I purchased from you some of your own seedling plants of Delphinium and I want to tell you how very beautiful my garden is; they were received in good condition, all of them lived except two, and I never saw such beauties. I have one with seven outer petals, a clear blue (what a gem that must be, and the price was about 75c a dozen! O. M. P.) the 5 inner petals a delicate mauve and a black bee, then another with 2 blue and 3 mauve petals and a white bee, all perfectly beautiful."

PRIZE WINNERS TOO

Lodi, California, June, 1926. "We had our Flower Show as I told you we contemplated, and I won first prize on Glory of Puget Sound Delphinium; it was certainly a beauty and easily beat all competitors; I also won second on a bouquet of mixed perennials which consisted of Glory of the Valley Delphiniums, mixed Columbines, and Mrs. Perry salmon pink poppies; it was a close second at that. All from seeds I bought from you. The salmon pink beauty created quite a lot of interest. I am more than satisfied with everything I have from you—seeds, plants, bulbs and Irises." That's fine, I thank you, Mrs. T.

Bluffton, Indiana, June 2nd, 1926. "The Delphinium seed which I bought from you last year germinated almost 100%; the plants came thru the winter beautifully, and I have dozens of vigorous ones just ready to bloom."

Council Bluffs, Iowa, June 5th, 1926. "Referring to my order No. . . ., I hardly know what to do about it. I ordered a package of Delphinium seeds, I divided the package into four sowings, made two sowings in hot bed in March, hoping to get at least a dozen good plants. I now have sturdy little Delphiniums covering three times the space I had allotted for them, and have "overflowed" into two neighbors gardens, and still have a lot of plants in my hot bed; looks as if there were 100 more." This is rather hard on the fellow who writes me that he succeeded in getting only 25 or 10 or 6 plants out of a package of seeds.

HERE ARE TWO GOOD ONES; BE SURE AND READ THEM BOTH, THEN DRAW YOUR OWN CONCLUSION!

Washago, Ont., Canada, May 10th, 1926. "Some time ago I got a package of your "Super Delphinium Mixture" and tho I planted these so carefully (probably too carefully. —O. M. P.) not one single plant has come. I used extreme care with these and planted in sifted earth and watched them and tried so hard to have them come up. I had this box in same room with some others which have done well, but I had this box marked and looked after it so very carefully." Now that was too bad; I sent the lady another package gratis, but at this writing have not heard from her. My comment is, that she was too careful, and worried too much over these seeds, and I never would have planted them in a box in a warm house. Delphiniums will not stand for heated room temperature; a temperature to start the seeds should never be higher than 50 in a greenhouse or in a room.

Now, here is the other letter, the same seeds exactly, and I might say that these seeds did not come from one plant, the seed of which might go to the bad, but it was a mixture of seeds from many different varieties.

LeClaire, Iowa, May 12th, 1926. It was a strange coincident, that both these letters arrived on the same day. "I want to tell you what a wonderful result I have had from the "Super Delphinium Mixture." This morning I counted 167 plants out of 200 seeds. They are certainly strong and healthy plants and I am more than pleased with them."—Mrs. C. C. J.

A REAL JOY

Writes Mrs. Ben J. Knudson, of Illinois: "I am having such perfect delight with my Delphiniums that I raised from your seed last Spring that I must have more of them. I am willing to pay the price; I have certainly had more than two dollars worth of pleasure from the one package of seeds that I got from you last Spring."

I have stacks of similar letters on file, from every state in the Union, and many foreign countries.

DELPHINIUMS FROM MAY UNTIL FROST

By CHARLES F. BARBER, in "Better Flowers", Portland, Ore.

Mother Nature often writes in the boldest characters and in some of her moods is a very effective advertiser. Go out in the pasture lands of the northern coast country and observe the great sweeps of native delphiniums (larkspur), in tones of blue, while to the south is added the cardinal note. We would be dull students indeed if we failed to act intelligently upon this cue, the native habitat of this wonder flower, and plant with a liberal hand in what we know to be ideal conditions of soil and climate.

What an amazing stretch of upbuilding has already been accomplished by the hybridizer, instrument of the creative forces, and more is yet to pass before our eyes. Consider the modest thing represented by the coast native and then look upon the three-foot spike of blossoms standing six and seven feet high in the most charming tones imaginable. What would a June garden be without delphiniums? But that is only a taste, for you can have them until heavy frost comes every summer and fall month in the coast country.

HOW IT IS DONE

How is this marvel accomplished? Your established plants will begin blooming in May. They run through the month of June. In July your seedlings planted in early August will start, if not earlier, and go on through, to be caught up with by the spring-sown plants, if these latter are planted before March. The process is simple and is also much abetted by the fact that your early blooming plants will give a second flowering from new growth.

It should not be supposed that because the delphinium finds its ideal environment on the Pacific slope it will not do well in much different conditions. Even in quite rigorous climatic locations and varying soils, light or heavy, limy or acid, it makes a splendid record, as also in the still milder regions.

And the delphinium is a modern flower, as compared with the other colors in Nature's paint-box. Science tells us that the first flower that ever existed came as a progressive development from the green leaf. Time and evolution work wonders and in the course of the ages this green flower took upon itself the tone of yellow. On and on through such mutations there then were born the pinks and reds, and last of all, as though the world had become prepared for the rarer things, came forth the blue, color of the heavens. And the delphinium is the apotheosis of blue flowers.

With this great initial advantage of environment and a flower to conjure with, why should not the ambitious gardener select the delphinium for a leading role on his garden stage? It affords untold enjoyment for its abundant bloom and still more may be had from it in the way of developing one's ideal type. And the amateur may succeed as well as the experienced grower, with a little heeding of the conditions needed. What rarer sight is there found in the garden than a well developed delphinium spike? And it does not hastily fade away, but deliberately finishes its blooming to the tip and in some varieties the main spike is followed by a supply of shorter laterals.

PLANTING PREPARATIONS

Even though acquainted with the delphinium, there are points that arise calling for fresh information, and new ideas are evolving in all plant work. Constantly, the writer finds need to emphasize the good that comes from thoroughly preparing the soil in a mechanical way.

With too many the idea of preparation is to push quantities of fertilizer down into a little cavity, dug out of whatever soil happens to be at the spot to be used. This may do more damage than benefit with any kind of plant. It may be as bad as crowding beef steak down an infant's throat. You do not forget to have the downy pillow ready for the baby's head and so do not overlook making the resting place of your choice plant just as soft and inviting as possible.

The harder and more permanent roots of the delphinium are pushed downward a foot and sometimes more, while in the growing season the upper soil is filled for some distance outward with innumerable fibrous feeding roots. Therefore the rule may be laid down that for a large growing type of larkspur a hole 18 inches deep and two feet wide is not too much. When filling this opening every bit of the soil should be mellowed fine.

Avoid stable manure, unless it is at least a year decayed, and then only employ it in the lowest part of the soil that fills the hole, well mixed together. When the plant is growing you may spread bone meal around it on the surface, to be hoed and watered in in the usual course of cultivation.

DIVIDING OLD PLANTS

One of the questions always bobbing up in connection with this perennial plant is when to divide for its health and increase. The moment you see weak shoots growing out of the center of the old plant you should, if it is yet spring-time, lift and carefully divide. Wash off all earth before you perform this surgical operation, or you may find when you have done the deed that one hand holds the crown and the other one the roots and neither will grow without the other. Cut away all the decrepit wood from the center and prune back the biggest of the old roots, dividing the outer rim as much as the plant will stand. Replant and keep well watered and you will have more plants with renewed youth, but it will take one season for them to build up.

FIGHTING FLOWER ENEMIES

It would be strange if such a challenging flower had no enemies. Fortunately, such as it has are controllable. The first thing to make one mad in the spring is to go out some fine morning and find that slugs have already breakfasted on the tender young shoots, shattering some fond garden dreams. But don't despair. Run for the sand pile and don't be afraid to heap plenty of it in around the plant. These slimy pests abhor sharp sand, for it sticks to their miserable bodies and hurts.

But do not stop with that application of sand. Write down this garden secret: As winter comes scoop out a saucer shaped hollow about two inches deep around the plant and fill this with sand, even heaping it up a bit. That will do two things—armor against slugs and also prevent any tendency to crown trouble on account of a soggy winter condition.

On the Pacific Coast the "blight" is only seen occasionally and then in its mildest form as a dark spot on the leaf. In some parts of the country it has become a serious matter, but fortunately the government has authorized the use of a formula which, a correspondent tells me, has proven 100 per cent effective. It consists of mercuric chloride, 1 gram; sodium nitrate, 1 gram; water, 5½ gallons. This is sprinkled on the crown and around the roots of the plants with a watering pot. It is also effective in localities where there is a tendency to root-rot.

Often our plant troubles are due to unhealthy soil. If a normally vigorous larkspur shows yellowing leaves, weak stalks and poor flowers, the soil may need treatment. Try the following; unslaked lime, 2 pounds; water, 5 gallons; tobacco dust, one-half pound. Dilute this when using in the proportion of 1 to 12 and thoroughly saturate the ground, repeating as needed, and watch the new health come to your plant. Where a plant is found to be a weakling, better exercise the law of 'survival of the fittest.'

One of the frequent questions asked of the grower of delphiniums is regarding the cutting down for a second blooming season. Earlier writers advised cutting the plant entirely down as soon as the flowers were spent. That was a thoughtless and crude plan. The leafage brings a plant into contact with the air and the ruthless destroying of this natural connection cannot help but be injurious. Just cut out the blossom part of the stalk and relieve the plant of the work of seed ripening; then when you find new growth coming from the base will be time enough to demolish the old stalk.

If you wish to do a little finer job in preservation of the plant's vigor, pick off the spent blossoms at the base of the spike before they have formed seed pods. And don't forget, when the flowering is done, to add that other handful of bone meal to each plant. It's as good as the bran mash for a pet Jersey.

STAKING A PLEASURE

Some of the plants of sturdier growth will stand up alone in almost any weather, but with the towering spikes of others it is not fair to leave them to the mercy of the rain and wind. A big delphinium spike holds quite a weight of water that helps to topple it over. After that the sun comes out to repair the waste and does a poor job of straightening.

Staking these plants may be a pleasure if you prepare for it in advance.

Stakes $\frac{5}{8}$ inches square and four feet long will be cut out of spruce by any box factory. They must not be any larger nor any smaller to be most serviceable. From this material and in this size they are light and strong. Two-ply "jute" twine from the wholesale paper house is the best to use, for it is just the right strength, inconspicuous and inexpensive.

In hybrid delphiniums there is a great diversity in the form of both the individual florets and the spike as a whole, as well as in habit of growth and coloring. No one has the right to declare "This is the true type and form." Let who will choose a certain limited style and discard all others he may work out something very fine within that constricted range, but others will prefer to revel in the abundance of beautiful variations. Some will be greatly impressed by the massive close-flowered spike and others will favor the light and airy forms.

Yet even these two divergent preferences may be harmonized when it is seen that the one makes a special appeal in the garden, while the other lends itself much better to cutting for interior decoration. There is in process of development a type that combines both the erect garden spike and also such an abundance of laterals, three feet or more in length, as to provide ample cutting material.

SEED SOWING "DON'TS"

Do not try raising delphiniums from seed after mid-August. You will meet with many difficulties, if not entire failure. And don't sow them out in the open ground. Provide a frame with earth raised at least six inches and escape many accidents and enemy raids. In very early spring some bottom heat is required and can be had with the hot-bed if a greenhouse is not at hand. And don't cover the seeds more than one-eighth inch. Finally, count that day lost whose low descending sun finds that you have allowed the seeds to dry out while trying to germinate. (Chas. F. Barber.)



DELPHINIUM "WHITE GLORY"

DELPHINIUM SEEDS

"Glory of Puget Sound"—A thing of beauty of tall, vigorous growth; I have never noticed any mildew on any of the plants. This is the original plant of all my "Glories". The double florets seem to be overlaid with a glistening silvery sheen; the outer row of 5 petals is of a beautiful clear blue; the inner row of 7 petals a clear mauve, beautifully frilled; the small bee is of light brown; the florets are over 2 inches in diameter, larger than a silver dollar.

Seeds, per package of fully 200 seeds, 50c. A few original plant divisions in September or February and March, \$1.50 each.

"Glory of the Valley"—A beautiful color combination of light blue and silvery mauve, the sky-blue of the 5 outer petals often suffusing into the mauve of the 7 inner petals, making an exquisite color combination; the bee is small but prominent on account of its snowy whiteness. The variety is exceedingly strong and vigorous, a three-year-old plant producing often 20 or more 7-foot tall, strong but graceful flower stalks with an unusual large number of lateral spikes or side shoots. When well grown the individual florets are larger than in the "Glory of Puget Sound."

Seeds, per package of 200 seeds, 50c. No plants for sale this year.

"The Blue Glory"—A glorious flower, indeed it is; a double clear, all deep blue, and no better name could be given it. This variety is giving me some unusual and extra fine seedlings, and two years ago started to producing single and double **White Sports**. It was from this variety that I produced my fine, new **White Glory** three years ago. I have no plants for sale of the **Blue Glory**, but offer **SEEDS** at 50c per package of 200 seeds.

"The Blue Bird Glory"—A new hybrid seedling. Can you imagine in your mind's eye a perfectly shaped large double flower, of an all "blue-bird" blue—if you have seen that heavenly flash of blue along a country road, you will know the glorious effect of that blue in your garden—without a trace of any other blue or any other color; a small white bee; such as is my new "Blue Bird Glory."
Seeds per pack of 100 seeds, \$1.00.

Pudor's Glory of the Sky—Like a clear turquoise summer sky; very large and double without any other trace of color; very inconspicuous bee. A very limited amount of seeds this year at 3c each; not less than 25 seeds sold.

A SUPER DELPHINIUM SEED MIXTURE

I am growing some 100 new, very superior unnamed seedlings in a plot by themselves, the careful selection from 2 years' choicest, selected hybrids; it is from these that I raise my next year's thousands of seedlings. I will sell a limited amount of seeds from these, which means that I am giving you the same chance as I have for raising something very superior in the way of new Hybrids; as you should sow at least 200 seeds to have a good chance for something extra fine, I will sell a few packages containing fully that many seeds at \$1.00 per package. (No. ½ pack.)

WHITE DELPHINIUMS

As my old customers know, some 3 years ago I succeeded in growing a very fine double white Delphinium; most of the seedlings from it, came in blue. I am still offering seeds from these original plants at \$1.00 per pkg. of 50 seeds (not less).

White blooming selected daughters from this variety in the second generation are now giving mostly white seedlings, and these second generation white seedlings will undoubtedly give all whites in another and third generation. I can offer seeds this season from the **second generation white blooming seedlings** at \$1.00 per package of 100 seeds, (last season I sold them 25 seeds for \$1.00). However, the supply is not large, as I sow a quantity of it myself.

I will have no seeds of the third white blooming generation for sale until next year, and then I fully expect to have something fine and permanent.

NO NEW NAMED VARIETIES

I am producing so many new seedlings which are far superior to the parent plants that I can not name them all. Every season something better shows up; all I can do is set them apart, use them for breeders, grow seeds and plants from them, with the expectation, and often the assurance that I get something still better in another season.

A NEW SUPERB "PRIVATE" MIXTURE

Last year I selected some two dozen superior seedlings from a large field planting; this Spring I transplanted them in a new lot by themselves; they bloomed this past summer and were very beautiful, indeed; all double large flowers of exquisite colors, both in the dark and light shades, mostly light, bees very small or none at all.

This seed will give me new fine seedlings next year; I will have a little more seed than I can use, and invite those who care to pay two dollars a package of 200 seeds, to share the fun, and the joy and pleasure in growing new seedlings from this finest mixture. Per package of 200 seeds—no less bagged—at \$2.00.

A LOW PRICED BUT EXCELLENT DELPHINIUM SEED MIXTURE

From unnamed, mixed hybrids that have the blood of the "Glory of Puget Sound" in them; you will raise some very beautiful and many double Delphiniums from these seeds. Per pkt. of about 200 seeds, 25c; 1/16 oz., 50c; 1/8 oz., 75c; 1/4 oz., \$1.25; 1/2 oz., \$2.25; 1 oz., \$4.00. (1/4 oz. contains about 3,300 seeds; 1 oz., 13,000 to 14,000 seeds.)

ENGLISH DELPHINIUM STRAINS

Kelway's Choice Hybrids from their celebrated named varieties at Langport, England, a grand mixture of light and dark blues; per pkt. of about 200 seeds, 35c.

Blackmore and Langdon's Prize Strain, per pkt. of 200 seeds, 35c.

NEW ENGLISH "NAMED" BELLADONNAS

Belladonna, Cliveden Beauty, larger and taller than Belladonna, per pkt. of 100 seeds, 25c; 1/8 oz., \$1.25.

Belladonna, Fancy Stormonth, light azure blue, very large; per pkt. of 100 seeds, 25c; 1/8 oz. \$1.25.

Belladonna, turquoise blue; per pkt. 25c.

Belladonna, Formosum (dark blue), per pkt. 25c.

Plants of any of the Belladonna: Clumps 25 and 40c each; seedlings at 60c per doz. Notice: The Belladonnas do not make as large clumps, and as heavy a growth as the Hybrids.

R. Delphinium Chinense; "Azure Fairy". A real gem for the rock garden; 18 inches high of an intense azure-blue color; blooms continually if seeds are not formed; universally admired. Plants 25c each; \$2.50 per doz. Seeds 25c per pkt.

WATKINS SAMUEL'S ENGLISH WREXHAM STRAIN

(Also called "THE HOLLY HOCK" DELPH. STRAIN)

MY NAMED WREXHAMS

Mr. Watkins Samuel—A glistening, semi-double, all clear light blue with a black bee; the florets set thickly on a perfectly shaped flower stalk.

Lavender Queen (Wrexham)—A lovely double all pure lavender; some of its outer flower petals are tipped, and some suffused with a delicate turquoise blue; a lovely creation.

Lady of Wrexham (New)—A magnificent, very large clear single blue with a conspicuous black bee and a wonderful "church-steeple" stalk.

Wrexham Lad—A large single deep blue with a faint touch of lavender on two of its five petals; prominent black bee. A strong "phlox" like grower. Makes a stunning effect.

Wrexham Purple—A single, rich all deep purple arranged loosely on a perfect flower stalk; prominent brown bee.

TWO REPRESENTATIVES OF WATKINS SAMUEL'S ENGLISH
WREXHAM STRAIN

Grown by O. M. Pudor, at Puyallup, Washington



UPPER: "WREXHAM LASS"
LOWER: "MR. WATKINS SAMUEL"

Wrexham Lass—The superb double florets loosely arranged around a perfect spiral stalk; the 5 outside petals a lovely clear blue, the 6 or 7 inside petals soft mauve suffused with blue at their base; bee black, lying flat against the flower petals. I consider this the finest and handsomest variety I have of the Wrexham strain.

Wrexham King—Kingly, indeed; its 4-foot flower stalk is studded with huge 3-inch petals, single dark blue florets; a not too prominent bee. The variety is a gem.

Wrexham Giant—I have added another named variety to my collection of Mr. Watkins Samuel's Wrexham seedlings. An immense 5-petal single, deep clear-blue with a conspicuous black bee; a heavy solid flower stalk.

Seeds from any of the above named hybrids, per package containing 100 seeds, \$1.00. All 8 varieties, \$6.00. No plants of these.

Having been requested by many customers to make a mixture of all my best varieties, I have concluded to mix a few ounces of all the above; this should give you something extraordinary.

Best Named Mixture Wrexham, per pkt. of 200 seeds, \$1.00.

A Fine Mixture of Splendid Wrexham Hybrids, the seeds coming from many hundred different varieties, all good. Per pkt. of 200 seeds, 50c.
1/16 oz., \$1.00; 1/8 oz., \$1.50; 1 oz., \$10.00.

FAIR WARNING!

DO NOT SOW DELPHINIUM SEEDS OUTSIDE AFTER AUGUST 15TH, OR SEPTEMBER 1ST, THE LATEST; YOU WILL MEET WITH DISASTER. SOW AGAIN IN THE EARLY SPRING, FROM FEBRUARY ON TO APRIL, PREFERABLY IN COLD FRAME. THEY WILL BLOOM THE SAME YEAR.

NOTE—**Tiny Seedlings or Advanced Plants**—which shall you have? The difference is this:—(1) If you are **keen** and **careful**, and have some previous experience of pricking out, watering, and tending the early stages of Plant growth,—then the **TINY SEEDLINGS** will be both a **JOY** and a **PROFIT**. There is no doubt about them. They reach you fresh and healthy, and, if you have reasonable facilities, **SUCCESS** is **CERTAIN**. (2) If, on the other hand, you are **easy**, or if the circumstances are such that you cannot give critical attention, or have not the elementary knowledge, accommodation, or facilities,—then **ADVANCED PLANTS** or clumps will be your best investment. These are past the critical stage, and only ordinary care is necessary to insure success, provided they are planted at the proper time.

DELPHINIUM PLANTS

Clumps, Advanced Seedlings or Seedlings

Kelways or Blackmore & Langdon Strain—Clumps 35 and 50c each; \$3.50 and \$5.00 per doz.; \$25 per 100 by express collect. In mixture only; not sold to color.

From Finest Named English Varieties in Mixture Only, advanced seedling in September. 25c each; \$2.50 per doz.; \$18 per 100 by express; these, of course will bloom next year; for Spring delivery of these, add 20% to the above prices, provided you want larger plants than advanced seedlings.

Wrexham Delphiniums from the best mixture (no named variety-seedlings sold). Not sold to color, mostly dark blue, but wonderful, at 50c, \$1.00 and \$2.50 each, NOT according to SIZE of clump, but depending upon QUALITY. You might get a very small division according to your idea, and pay \$2.50 for it; people have selected plants in the garden and paid as high as \$5.00 per plant. But you in the distance, I rather have you buy the seeds, or the cheap unbloomed seedlings and raise your own plants.

SEEDLING PLANTS

Glory of Puget Sound Seedlings in Mixture, 60c per doz.; advanced plants 15 and 25c each.

From Best Unnamed Seedlings; 75c per doz.; advanced plants 15 and 25c each.

From Named English Best Delphiniums in Mixture Only; 75c per doz.; advanced plants 15 and 25c each.

From Wrexham Strain in Best Mixture; 75c per doz.; advanced plants 15 and 25c each.

NOTICE—You must order the above seedlings by the dozen of each variety; do not order 3 or 6 of this or that strain, I won't sell them that way, except advanced plants, which are however not sold less than 2 of one strain or variety at 15c and 25c each.

SPECIAL NOTICE!

All Tiny Seedlings are sent by Post, carefully packed between layers of fine moss, and at the prices quoted they are package and postage free. Some people prefer to have them sent by express, thinking the package will get more air, but the package, of course, is very small.

Owners' Risk. All plants are forwarded at Owners' Risk, the Post Office Department accepts no responsibility for damage or delay, and I certainly can not, and immediately the plants are placed in the mails or in the express office, they are at the sole risk of the consignee or purchaser.

THE TIME TO PLANT DELPHINIUMS

September is the best; October is too late, and they are apt to perish over the winter, and, of course, I will get the blame. Many growers prefer early Spring planting, just when they start into growth, and that undoubtedly is an excellent time; this means, with us along the Coast often February, and always March. I am not going to send any more "CLUMPS" to the East in April; plants are entirely too large, the stalks will rot or wilt in transit and the dickens is to pay, that is, I get it. If you live in a climate that does not allow planting before April and May (I have received orders that read "do not send my Delphinium plants before June!" Imagine! This year they bloomed here in June.) I advise you to either plant the clumps in September, or buy small seedling plants, which I can send as late as May, and even June—but remember, with no guarantee; these little seedlings will bloom the same season in September and October. Yes, Delphiniums will bloom from 4 to 6 months from seed, depending upon the strain.

ABOUT SEEDLINGS

Thousands of people are now buying seedlings, and find them highly satisfactory. As one lady from New York State wrote me this summer: "Why worry with seeds, when you can buy seedlings so cheaply and satisfactorily." Sometimes a shipment goes bad, often people don't know how to handle them, after they receive them, some get panicky and disgusted when the leaves are rotted off, or have turned yellow or are withered; they are not interested enough in plant life to realize that the root is there and intact, and if given half a chance the plants will survive and live. You will have to be your own judge, don't ask my opinion, be a sport and play the game; it never occurs to a person that I lose the plants too, and the postage and a lot of trouble and bother to boot. Read these following comemnds, they might help you in your decision; if you are afraid, don't buy seedlings, but buy clumps, or seeds; if you don't succeed with seeds the first time, try again, if you get disgusted, try it all over again, and come out a winner in the end.

Reno, Nevada, April 1st, 1926. "Last Spring I purchased a dozen seedlings of Columbine from you and this Spring I have fifteen reday to blossom—so why worry with seeds?"

Centerville, Indiana. "My shipment of seedlings and seeds arrived O. K. Seedlings were very dry but have come out fine. I put the Wrexham seedlings in halves of oatmeal boxes; wood ashes on soil in some boxes, lime on top of soil in other, and left some without either; so anxious to be successful; new baby leaves have already begun to show and I am delighted."

READ THIS ONE; YOU MAY LEARN SOMETHING NEW

Suffolk St., Guelph, Ont., Canada. "This is to let you know I got the plants on Friday, the 4th; the customs card to notify me was posted on the 2nd; the third a bank and public office holiday and no mail till the 4th, when I got the card at noon, I lost no time in going after them; it was annoying to think they had been there two days.

"I found a mass of decayed leaves, that had parted from the roots which were however in very good condition, I separated each carefully and cut off the dried stems; there were tiny white leaves showing. We planted them in good light soil in garden and a good watering with a shading in day time. I do believe every one will grow; the bigger plants are already showing growth in the center, so I am not at all discouraged at their condition. The two days delay was unfortunate, but I shall not hesitate to send for more, when I want some. It is interesting to know how far they can be sent and how long tied up and still survive."

THIS LETTER IS FROM ST. LOUIS; THE NEXT FOLLOWING FROM NEW YORK

St. Louis, Mo., May 3rd, 1926. "Recently I ordered 1 dozen each seedling plants of Delphiniums and Lupins; they arrived in very bad shape; worse than any plants I have ever received, and I have had many plants sent to me by mail. I don't think it advisable to ship such small plants from your place to St. Louis; the distance is too great; the customer is the loser. If I order any more it will be clumps or large plants."

I wrote the man that he was mistaken, and that I shipped thousands of seedlings to New England States with perfect success. I sent him another batch, free of charge, and prepaying the postage. He graciously wrote me, that the second lot did not arrive in any better shape, and that I could not change his mind. I wonder! NOW READ THE FOLLOWING.

Larchmont, N. Y., June 11th, 1926. "I acknowledge receipt of the two recent shipments of Delphinium Seedlings; the first was received by parcel post on May 19th, and came thru very well; the fact that the package was registered probably helped a lot.

The second lot was received by express this week and was in splendid condition; plenty of moisture still remaining around the roots. Thanks so much for taking care of these small orders. The six dozen seedlings ordered from you last fall are beginning to show themselves above ground now; this means they have wintered well." O. A. M.

Centerville, Indiana. "The named English strain of Delphinium seedlings arrived in good shape and believe I will be able to grow about 15 out "of the dozen" ordered. I shall prize every plant. The Wrexham plants are doing nicely." Mrs. G. G. E.

SEEDS TWO YEARS OLD

Golden, Colorado, June 10th, 1926. "You might be interested to know that I purchased several packets of Delphinium seeds from you, and shortly afterwards went away. It was the second year before I was able to plant them. Despite this fact, I, today, have 14 beautiful plants from that seed; they are simply glorious. I wish that you could see them." Mrs. J. B. F.

AND SO AD INFINITUM.

CAUTION!

Do not order 1 dozen seedling plants to be sent by themselves—they are so small and the package so small, that it is most difficult to pack 1 dozen tiny seedlings in such a manner, that they will keep moist enough for long distance shipment. No PLANT orders are solicited for less than \$1.50, unless you add 25c extra.



120 Days From Seeds.

These magnificent Delphinium spikes, photographed in the early part of September, were grown from my choice Delphinium seeds, sown out-of-doors on April 20th. They bloomed all Fall until killed by frosts in the latter part of October, producing magnificent spikes four to six feet tall. The plants themselves, of course, will survive the coldest winters, anywhere, with a little protection, or none at all.

See what a glorious Delphinium display you can have in the late Fall, when your large clumps have long passed their glory, by simply sowing the seeds during March and April, and even the first part of May.

Only Spring sown seed of such perennials as Delphiniums, Lupins, Geums, Per. Flax, Scabiosa Causcasia and Siberian Wallflower, will produce their lovely flowers out of season; Fall planted seeds will bloom at the regular time in June or July.

CULTIVATION OF DELPHINIUMS

(From Horticulture, Boston)

Various fungus diseases and insect pests are already at work on Delphiniums, making it increasingly difficult to grow these favorite perennials. In some instances where plants have collapsed, the cause probably has been the larvae of the June beetle, which operates at this season and is very difficult to deal with, as it remains under the ground until it emerges as a mature beetle at the end of a three-year-cycle. This pest sometimes gets so bad that an entire renovation of the garden or lawn is necessary. In that case, the best plan is to take out the plants, spade over the ground, and turn in a flock of chickens.

The June beetle is most likely to be abundant in a new garden which has been in turf, but sometimes strays into old gardens from fields or lawns.

It is the blight, though, which is the greatest bane of Delphinium growers. Dry bordeaux mixture dusted over the crowns from the beginning of the season is helpful, but is not a panacea. Several remedies are now on the market. One called Del-Bli has seemed to be reasonably successful. Another, which comes from the West, where it is being warmly praised, is called Qua-sul.

Mrs. Francis King has recommended the following formula: Four pounds of lump lime, one pound of powdered tobacco dust and one gallon of water to slack the lime. When the lime has been slacked as long as it will, add more water, and when boiling has ceased, still more, until there is a total of five gallons. Then add the tobacco dust. Use one quart of this solution to seven quarts of water, and pour a cupful around the roots of each plant. Repeat every ten days if necessary.

It is not advisable to use fresh manure at any time, but Delphiniums grow well on land which has been manured for other crops. The best fertilizer is bone meal, which should be applied liberally in the spring or early summer. Wood ashes are also valuable fertilizer for Delphiniums.

It is especially important to keep the soil around the plants moist. If water cannot be given freely throughout the summer, it is well to mulch the beds with peat moss or some other litter which will keep the ground cool and prevent the evaporation of moisture.

Some garden makers like to work a little nitrate of soda into the soil in late June if they have cut the plants back for a second crop. Whether this cutting back should be done or not is a matter about which growers differ. Some believe that the vitality of the plant is weakened to such an extent that it is not likely to winter well if it is made to produce more than one crop. Others run the risk, because they want a long succession of flowers, and start new plants every year to take the place of any which may succumb.

Larkspur is readily grow from seed, but this seed must be fresh. It will not germinate well at all when it is over a year old. Seed sown before the first of August will give plants that will flower next year. Delphiniums develop rapidly, and many garden makers who have greenhouses find that by starting the seed indoors early in the season, the plants will flower the same year.

Delphiniums have been improved to a surprising degree, and many of the newer varieties put out by expert breeders are startling in the size and rich coloring of their blooms.

LUPINS AND LIME

Editor, F. E. & H. T. W.:

Woolgatherer's reference to Lupins and lime in the issue of Feb. 13 interested me. I once restored a bed of sick *Lupinus polyphyllus* varieties to good health by the use of lime, at least, I have always assumed lime did it, as nothing else was used, and the anaemic looking plants were restored to vigor. Not long afterward I was told lime did not agree with Lupins, but I stood pat on my experience.

I have a recollection of reading somewhere that there was a certain species which objected to lime—I can't recall which one—and perhaps that is how the idea got abroad that Lupins do not like lime.

In view of my very definite experience in this instance, I should say *polyphyllus* Lupins do not object to lime.

H. E. Downer, Poughkeepsie, N. Y.



FOR BEAUTY OF ITS EXQUISITE TURQUOISE-BLUE FLOWERS, AND ITS
GRACE OF FLOWER STALK, THE "BELLA DONNA"
DELPHINIUM STANDS WITHOUT A RIVAL

GERMINATION OF DELPHINIUM SEEDS

The first plantings of Delphinium seed invariably bring report of failures and, usually, seed or soil are blamed. The illustration shows one of half a dozen seed boxes and seems to offer a worth while method. The secret, if there be one is merely first care. Delphinium seed must have low, steady temperatures from ten to fifteen days, with constant surface moisture, darkness and apparently company, for best results. The fifteen varieties of seed shown could not have come so evenly save through planting methods. The soil use was leafmold and sand with a little loam to stiffen it. Spraying with a mildew remedy was used to prevent damping off.

Not a single plant perished prior to transplanting. The box was filled within 1 inch of top, wetted thoroughly (lots of drainage was provided) then filled to brim and pressed evenly. The seed was sown in rows and merely pressed in to insure equal depth and covered with sifted leafmold and powered sphagnum. An empty flat served as a cover when stood on the north side of a wall. The seedlings were up on the eleventh day, the cover being removed on the thirteenth day. The box was brought to a lath frame on the eighteenth day and fully exposed on the twenty-fifth day.

This method enables one to note first evidence of damping off, permits soil stirring between rows and prompt detection note of slugs or sowbugs, besides permitting equal development of every plant. When sown broadcast in a large bed, none of these advantages exist. A few flats are enough for largest plantings. Pricked out when true leaves first appear, the roots are just beginning to branch and plantlets fall apart easily and never halt in growth. Sown broadcast, one cut worm, or one damping off spot may, before noticed, ruin many plants. Never delay pricking out after true leaves appear. —N. F. V.

THERE ARE SEEDS THAT NEED SNOW

Many perennial seeds, particularly seeds of rock plants, won't germinate without the assistance of ice and snow. Perennial larkspur seeds are often a great disappointment as to spring germination. Primroses, with the exception of the polyanthus, often will not germinate if they are sown later than March.

Sow seeds of this class of plants in boxes and set them outdoors to freeze and thaw. Heap snow upon the boxes at every opportunity. Snow seems to awaken the tiny germs in the seeds. If sown in the cold frame do not hesitate to give a covering of snow to melt upon the seed bed. These seeds must have their winter nap in the cold to jump into life.

Delphinium seeds will show the good effect of this outdoor treatment.

Seeds of the irises which are now offered by many firms need this weathering and wintering to make them germinate promptly and freely.—From New York Telegram.

MUTATIONS IN DELPHINIUMS AND OTHERS

When any kind of animal or plant produces offspring these young resemble their parents—but never exactly. There are always differences; lesser or greater. These differences are called variations. Most of these variations are mere fluctuations around a mean and are not necessarily repeated in the next generation. Some of them, which may be more marked, are undoubtedly due to varying environmental influences and also are not repeated in later generations unless these generations are reared under the same kind of environment. But some times these variations appear in the next and all the succeeding generations even though the environment surrounding the development of these succeeding generations is not the same as that which surrounded the first generation in which the variation appeared. Such variations are inherited. They breed true. Such heritable or fixed variations are called mutations, meaning that from one kind of plant or animal a new kind has been produced by a persisting change or little jump. This is the production of a new kind of plant. This is species-forming by mutation. It is the easiest kind of origin of species to observe. It has been observed by many naturalists. These naturalists have seen evolution actually happening. The most famous cases of this kind are mutations of the evening primrose first carefully observed and described by the



PUDOR'S "WHITE GLORY" DELPHINIUM

great Dutch botanist, De Vries, of the University of Amsterdam, and later observed and studied by German, English, and American botanists. These new kinds of evening primroses, arising by fixed jumps or mutations from a species called Lamarck's evening primrose, are visible evidences of the present-day evolution of plant kinds.—Dr. Vernon Kellogg in Scientific Monthly.

Dianthus; Pinks, (N. O. Caryophyllaceae) Common soil.

- R. " **Single Alpine Pinks**, seeds secured by Mrs. Perkins at Winlock Abbey, England. Plants 15c and 25c each.
- R. " **Deltoides (Maiden Pink)**. Sheets of glorious green leaves with charming fringed flowers in white and bright rose (mixed plants) 6 inches; May to August. Plants 15c and 25c each.
- R. " **Sylvestris**. From the Alpine Meadows; dark green wiry leaves with showers of pink flowers; 9 inches. Plants 25c.
- R. " **Deltoides Superbus**. Deep crimson flowers and almost purple foliage. Plants 25c each.
- " **Neglectus**. A charming old rose variety; 3 inches; one of the best Alpine pinks. Plants 25c each.
- R. " **Caesius (Cheddar Pink)**. Pretty indigenous species, bright pink flowers, a lovely plant for dry banks, rocks and old walls. 6 inches. Plants 25c each.
- " **Barbatus (Sweet William)**. Finest mixed varieties. Seeds per pkt., 15c, 2 for 25c.
- " **Barbatus (Sweet William) Pink Beauty**. A charming new strain, many shades from salmon pink to richest shades of salmon red. Seeds per pkt. 15c; 2 for 25c.
- " **Barbatus (Sweet William) Scarlet Beauty**. Vivid orange or salmon scarlet; very beautiful. Seeds per pkt. 15c; 2 for 25c.
- " **Allwoodii**. A new race of English hardy border Carnations, producing 75% double flowers of the most beautiful colors as large as the finest Greenhouse carnations. The strain is quite hardy. Seeds are very scarce. These double carnations are not as spicy as the following single strain. Seeds per pkt., 50c.
- " **Allwoodii Perpetual Border Carnations**. Blooming through the entire summer outdoors; flowers are very large, and beautiful, mostly single, but deliciously fragrant. Seeds per pkt., 25c.
- " **Latifolius Atro-Coccineus Pl.** A beautiful, hardy pink of crimson color, semi to full double flowers borne on stout stems 15 to 18 inches high. Seeds per pkt. 15c, 2 for 25c.
Plants 15c and 25c each in the Spring. Seedlings, Spring or Fall, 60c per doz. of the latter variety only.

Dicentra. (Dielytra) Bleeding Heart or Lyre Flower (N. O. Papaveraceae).

- " **Spectabilis**. Fern-like foliage and drooping heart-shaped flowers of pure rose; 2 to 3 ft. Thrives in the shade. Plants 25c and 40c each.

Digitalis. Foxglove (N. O. Scrophulariaceae). A fine border plant, suited for partially shaded positions 4 to 5 ft.

- " **The Shirley (New)**. Magnificent strain, enormous flowers from pure white to deepest rose. Seeds per pkt. 15c
- " **Monstruosa (Mammoth Foxglove)**. Long spikes, enormous flower in mixed colors. Seeds per pkt. 15c; plants 25c and 35c each; seedlings 75c per dozen. These are rather difficult to pack and send, after they start into growth in the Spring.

R. **Draba Whitlow Grass (N. O. Cruciferae)**. Light soil; an early flowering genus of Alpines for a sunny position in the Rockery.

- " **Aizoides**. Yellow flowers, also good for edging; 6 inches. Plants 25c each.

R. **Erinus Alpinus (N. O. Scrophulariaceae)**. Sandy soil; suitable for crevices of rocks or walls. 3 inches; April to June. Bright purple and rose pink flowers. 15c and 25c a plant.

Eryngium; Sea Holly (N. O. Umbelliferae). Highly ornamental perennials, with bluish or bronze flowers or globular form; 2 ft. Plants 25c each.

Flax (See Linum).

Foxglove (See Digitalis).

- Gaillardia. Blanket Flower (N. O. Compositae).** Ordinary soil; highly decorative, gorgeous flowers, fine for cutting. Plants 25c each; seeds 15c per pkt.
- Galega. Goats Rue. (N. O. Leguminosae).** Tall growing hardy perennials; showy for the border, good cut flower. June to Sept.
- " **Officinalis.** Clusters of pink and lilac flowers.
- " **Officinalis Alba.** A good white variety for cutting. Seeds 25c per pkt.; plants mixed, 25c each.
- R. Geranium, Crane's Bill (N. O. Geraniaceae).** A charming family of border and rock plants, most floriferous in well drained ordinary soil.
- R. " Endressi.** A lovely rose shade; 1 ft. Blooms continually May to September. Plants 35c each.
- R. " Lancastrienne.** Flesh colored flowers with strong pink veining and a strawberry center; 2 to 3 inches; May to September. Plants 40c each.
- Geum, Avens (N. O. Rosaceae).** Ordinary soil.
- R. " Borisii.** New and rare. Single flower of a rich orange scarlet—a rare color; in bloom continuously; a good rock plant. 1 foot. Seeds, small pkt., 25c; small seedling plants in the Spring, 25c each.
- " **Lady Stratheden.** Rich golden yellow, double, a great favorite. Seeds 15c per pkt.; plants 15c, 25c and 40c each; seedling 75c per doz.
- " **Mrs. Bradshaw.** 2 feet; large brilliant semi-double scarlet; splendid for cutting. Seeds 15c per pkt.; plants 15c, 25c and 40c each; seedling plants 75c per doz.
- " **Orange Queen (New).** A lovely shade, intermediate between that of Mrs. Bradshaw & Lady Stratheden; no seeds this season. Small plants 35c each.
- Gypsophila. Chalk Plant (N. O. Caryophyllaceae).** Common soil. Valuable border and rockery plants; the tall varieties extra fine for cutting.
- " **Paniculata.** Pure white, 3 feet, fine for cutting; July to August. Plants 15c and 25c each.
- " **Paniculata Fl. Pl.** A double form; pure white; July and August, can be dried for winter use. Some plants come in single form from seeds. Plants 15c and 25c each. Seeds 25c per pkt.
- R. " Repens.** Of trailing habit; 6 inches; white flowers, good for border or rock plants. Plants 15c and 25c each; seeds 15c per pkt.
- R. " Repens Rosea.** A charming pink variety of this pretty plant. Plants 25c each.
- Hesperis; Sweet Rocket (N. O. Cruciferae).** Common soil. Old fashioned border plants, very useful for cutting; sweetly scented. Easily raised from seeds, bloom the first season; sow outside in Fall or Spring; white, purple and pink; mixed. Seeds per pkt. 15c, 2 for 25c.
- Hollyhocks. Althaea (N. O. Malvaceae).** Rich loam.
- " **Chater's Double Mixed. Newport Pink.** Exquisite. Scarlet, Violet, rose and mixed. Double pure white and yellow. Seeds 15c per pkt.; plants 25c and 40c each. Small plants when in season 75c per doz.
- Hypericum. St. John's Wort (N. O. Hypericaceae).** Ordinary soil in sun.
- R. " Olympicum.** Deep yellow flowers in great abundance; beautiful dwarf species; a fine rock plant; 12 inches. Seeds 25c per pkt.; plants 40c each.
- R. Iberis. Perennial Candytuft (N. O. Cruciferae).** Most valuable plants for rockery and the border, giving dense masses of flowers in the early Spring.
- R. " Gibraltarica.** Large white flowers, tingled rose, very lovely; 12 inches; May to August. Seeds 15c per pkt.; seedling plants 60c per doz.; advanced plants 10c & 15c each. Best time for planting this very early flowering plant is in the Fall, or very early in the Spring, March, if possible.
- R. " Sempervirens, Snowflake.** Pure white flowers, borne in great profusion, a perfect gem; 2 inches; April to July. Seeds per pkt., 15c.
- Incarvillea, Trumpet Flower (N. O. Binoniaceae).** Beautiful, hardy perennials for the border, mixed soil.
- " **Delavayi.** Large Gloxinia-like flowers, rosy-purple, very handsome; 2½ ft.; June to August. Seeds 15c per pkt.; 2 for 25c; plants 25c.
- R. " Grandiflora.** A very fine, dwarf novelty; 12 inches; brilliant rose, fine for rockery. Seeds 25c per pkt.; plants in the Spring 25c each.

Iris. Over 250 of the best garden varieties; old and new. Ask for special Iris catalog.

Iris Seeds. Large assortment, but seeds very scarce; only in this way are new varieties made; ask for special Iris seed list in the Fall, as seeds must be put into the ground in the Fall.

" " Japanese. Can be planted either Fall or Spring, and are as easy to grow as peas; wonderfully beautiful varieties may be expected. Bloom the second year from seed. Seeds per pkt. 25c; from finest mixed varieties.

Japanese Iris Seedlings. Spring or Fall. 60c per doz., or advanced seedlings, 10c 15c and 25c each, the larger ones may be expected to bloom the first season; not sold to colors.

R. Jasion, Sheep's Scabious (N. O. Campanulaceae). Light soil. Miniature blue scabious-like heads, very pretty and free flowering; a lovely plant for the border or rockery. 12 inches. June to September. Seeds 15c per pkt.; plants 25c each.

Kniphofia (Syn. Tritoma; Red Hot Poker, Torch Lily) (N. O. Liliaceae). These brilliant-colored flowers in torch-like form, thrive best in a sunny, well-drained position, as specimen plants or in the hardy border.

" Californian Hybrids. The flowers range in color from yellow and coral to orange and scarlet; 4 to 6 ft. in height, and the flower heads from 8 to 16 inches. In localities where the ground freezes, plants should be well covered with leaves, or taken up and heaped in a frost-proof cellar. Divided, strong plants, 25c & 40c each.



LILIUM AURATUM



LILIUM CANDIDUM

Lilium Candidum—The Madonna or St. Joseph's Lily; a perfectly hardy, lovely Lily that succeeds well in every garden; to appreciate its full beauty the bulbs should stay in the ground for several years. Strong flowering bulbs, 35c each, \$3.50 per doz. Plant this Lily in August, very shallow.

L. Regale—The wonderful new Regal Lily from Western China; one of the finest Lilies in cultivation; white flowers with a faint tinge of primrose yellow in the throat; the outside of petal a deep rose; deliciously fragrant; height 4 to 5 feet; the finest hardy garden lily in existence; July. Flowering bulbs that will produce one to three blooms the first season, 50c each; \$5 per doz. Plant this lily in the late Fall, at least 18 in. deep.

Auratum (The Golden Rayed Lily of Japan)—One of the finest lilies; six petals of ivory whiteness, studded with crimson spots, the center striped a golden-yellow; exquisitely fragrant; 3 to 5 feet. Large flowering bulbs, 50c each; \$5 per doz. Plant this lily at least 18 in. deep.

All Lilies should be planted in the Fall, but the **Regal** and **Auratum** can be planted with excellent results in the early Spring months.

Lathyrus. Everlasting Pea (N. O. Leguminosae). These hardy tall free-flowering peas, are very showy as climbers or for arches, or for a screen; the cut flowers last a long while.

" **Latifolius White Pearl**, a great improvement; 6 ft. June to September. Only plants this season, 25c each.

" **Everlasting Pea, Rose Queen.** Rosy pink; 6 ft. Seeds 15c per pkt.; plants 25c each.

R. Lewisias. Purslane family (N. O. Portulacaeae). These are among the most beautiful rockery plants the world possesses but they also thrive in a very well-drained gritty soil in light shade or not too much exposed to the sun. The soil recommended for calochorti would suit them. All have deep roots, fleshy leaves, and short racemes of most dainty flowers with a satiny texture.

" **Lewisia Oppositifolia** and **L. Rediviva** are assuredly hardy in the East; the others I would expect to be hardy if given a covering of grass or leaves.

" **L. Columbianum** has a rosette of short leaves and rosy flowers with dark lines down the midrib. 25c each, \$2.50 per doz.

" **L. Howellii**, with beautifully crested leaves and similar flowers. Same price.

" **L. oppositifolia** is smaller and deciduous. The flowers starry, pure white. 15c each, \$1.50 per doz.

" **L. Rediviva**, also deciduous, is a small plant, with large, satiny pink flowers of great beauty. 15c each; \$1.50 per doz.

LILY OF THE VALLEY

These lovely flowers are too well known to require a description. Strong field-grown clumps for immediate effect, 50c each; \$5 per doz.

Single Pips, \$4 per 100.

Either Fall or very early Spring planting; will succeed best in the shade or Northern exposure.

Linaria. Toadflax (N. O. Scrophulariaceae). A most lovely race of miniature Snapdragon-like flowers, in the most charming colors; grow the annual toadflaxes next season by all means; they make admirable subjects for dry positions in beds or borders or in the rockery. The following are hardy perennial varieties:

R. " **Alpina.** Violet and orange, elegant dwarf rock or border plant, trailing. Plants 25c each.

" **Purpurea.** Gray foliage and tall narrow spikes of purple flowers which are graceful and attractive; 3 ft. Plants 25c each.

LINUM—PERENNIAL FLAX (N. O. Linaceae)

Sibiricum (Perennial Blue Flax). Dainty feathery foliage, slender growing hardy perennial, with light blue flowers; 2½ feet; lovely for the rockery or among other plants. Seeds per pkt. 15c, 2 for 25c; strong seedling plants, 50c per doz.; strong field grown plants, 15c each; \$1.50 per doz.

LUPINUS POLYPHYLLUS

Hardy Perennial Lupines—A valuable race of new hardy perennials that will vie with the Delphinium in popularity; lovely shades of blues, purples, pinks, white, yellows, apricots and many intermediate shades; in very cold climates it is best to treat them as annuals, sowing the seeds either in the Fall in cold frames, or outside early in the Spring, when they will make a fine showing during the autumn; but their real blooming season is in May and June from seeds sown the previous year. With some protection in very cold climates they will live year after year, the clumps getting larger and finer from year to year. My large field of 3-year-old-plants of the new English Hybrids: **Downer's**, **Elliott's** and **Harkness Regal Strain**, was such a glorious sight during the latter part of May and up to the fifteenth of June that thousands of visitors from near and far pronounced it the most wonderful and gorgeous sight they ever beheld. All the varieties and colors were planted together, and it was a color symphony of

the rarest beauty, indeed. In growing these hardy lupins, you must bear two things in mind: Do not give them any fertilizer of any kind, as their roots make their own out of the air; and when dry weather comes and during their growing season, they must not suffer for water. My field is planted in a moist stiff clay soil, and here they grow to perfection. I have one planting in very sandy soil, and here they do as well, but do not grow as tall, not producing as fine flower stalks as on heavier, moist land. I never irrigate or sprinkle them.

These Lupins bloom with the Iris, and in a home garden wonderful color combinations can be made with these two flowers. They fade just when the Delphiniums come into bloom, but by removing the faded blossom-stalks about a foot or two from the ground, they will burst again into bloom in August, blooming until cut down by frost. Plants ship very well, both baby seedlings and large plants. I have sent very large clumps last Spring to Garden City, N. Y., and the Botanical Gardens at Brooklyn, N. Y. Some Springs aphid collects on the bud stalks. As soon as noticed, spray with strong soap suds and tobacco juice, and no more trouble will be experienced.

Downer's New Hybrid Lupins. A wonderful new strain of many beautiful colors.
Elliott's Sweet Scented Lupins. Another remarkable new English strain of many colored Lupins, noted for their sweet fragrance.

Baby Seedling Plants, in mixed colors only, of either strain, 60c per doz.; 25 for \$1.

Harkness Regal Strain. A new English strain of very wonderful colors, producing many apricot shades of wonderful beauty, as well as yellows.

Baby Seedling Plants, in mixed colors, 75c per doz.; 25 for \$1.25. Seeds per pkt., any of the above, 15c each, 2 for 25c.

PLANTS IN SEPARATE COLORS

Lupine—"Pink Beauty". This particular variety has been greatly admired by all who have seen it grow in my gardens. A 3-year-old clump will produce from 20 to 40 of the most wonderful pink flowering spikes, 36 to 40 inches tall, lasting for several weeks. It makes a grand border plant, or a wonderfully beautiful individual specimen.

Individual Clumps, in 2 sizes, 25c and 40c.

Seedling Plants (Spring or Fall), 75c per doz. (These will not all come true.)

Seeds (fully 50), 25c per pkt.

"Blue Beauty"—Similar in habit and growth to the "Pink Beauty," but the flowers are a deep blue.

Individual Clumps, in 2 sizes, 25c and 40c.

Seeds (fully 50 seeds), 25c per pkt.

"Purple King"—A rich royal purple, same color as Iris "Purple King."

Clumps 25c and 40c.

Seeds, per pkt., 25c.

L. White Beauty. A pure white form, sometimes a faint flush of delicate pink. **Plants** 25c and 40c each. **Seeds** 25c per pkt.

L. Rosy Morn (Pudor). Large, handsome spikes with deep pink flowers, a wonderful acquisition. **Strong division,** each \$1.25; **seeds,** which will only partially come true, 50c per pkt.

" **Wistaria.** A beautiful wistaria blue. **Strong divisions** 75c each; **seeds,** which will only partially come true, 50c per pkt.

" **Apricot.** Very beautiful and rare shades, sometimes almost bronze effects. **Plants** \$1 each; **seeds** 35c per pkt., which will not all come true to the parent.

" **Yellow Queen.** A lovely bright yellow variety of good habit and strong growth. **Strong divisions, per plant,** \$1; **seeds per pkt.,** which will only partially come true to the parent, 50c.

R. Lychnis, Campion (N. O. Caryophyllaceae). Common soil. Useful plants for the border or rockery.

" **Viscaria Splendens.** Deep red, early flowering; 10 inches. June to July. **Plants** 25c each.



LUPINE "PINK BEAUTY"

(A 3-year-old clump) 20 to 40 spikes, 3 to 4 feet tall

- R. Nepata Mussini (Catnip).** An excellent plant for any position, but especially useful in the rock garden. Of dwarf, compact habit, producing masses of bloom. The soft, lavender shade of the flower and pleasing gray of the foliage, make this an attractive plant. It thrives in dry, sandy soils, and remains in beauty over a very long period. The plant may be easily increased by division in the autumn or spring. **Strong plants 25c and 40c each.**
- R. Meconopsis. Poppy-Worts (N. O. Papaveraceae).** Moist, rich soil in half shady places. A lovely race of poppies from Asia.
- " **Cambrica (Welsh Poppy).** Pretty orange flowers, indigenous; 12 in. **Seeds 15c per pkt.; plants 15c and 25c.**
- To this family also belong **Integrifolia**, the wonderful primrose-colored poppy from China; **Paniculata**, the glorious golden **Himalayan** poppy; **Wallichi**, the blue Himalayan poppy and several other glorious Meconopsis. Having had bad luck with the imported seeds last season, I have to wait another season for results.
- R. Oenothera, Evening Primrose (N. O. Onagraceae).** Beautiful race of plants for beds, borders and rockery, preferring a warm, sunny position in good garden soil.
- " **"America" (Burbank).** A gigantic snow white, nearly 18 inches in circumference, a thing of exquisite beauty in the evening twilight, enchanting in the moonlight and lovely in morning's early dawn; closes about 10 A. M., but lasts all day on a cloudy day. Comes easy from seeds. **Seeds per pkt., 25c.**

PAPAVER—ORIENTAL POPPY

Gorgeous, stately, beautiful perennials of rich, satiny texture, borne upon three-foot stems. Should be planted and divided in August, as they make a very early Fall growth.

- Oriente Mrs. Perry.** Immense flowers of beautiful soft salmon-pink shades. **Division roots from the original plants 50c each**, in August or September only. Seeds which will give a beautiful range of pink shades, with some crimson rogues, **per pkt. 25c.**
- R. Papaver Nudicaule.** The lovely Iceland Poppies with its most exquisitely bright colored flowers in yellow, salmon, orange and white shades. Entirely hardy. 1 ft.; May to September.
- " **Nudicaule Sunbeam.** A much improved new strain. **Plants 15c and 25c; seedlings, when in stock, 60c per doz.; seeds, 25c per pkt.; 1/8 oz. \$1.00.**
- R. "Rupifragum.** Pretty coral-tinted flowers, 18 in. **Plants 15c and 25c.**

PENSTEMON

These plants represent the highest perfection of the many new grand varieties of recent years. The seedlings produce an abundance of pink and scarlet shades with white markings, highly attractive in beds and borders. They should be grown in groups or in beds of, at least, 12 plants, when they will give a brilliant color effect. Height 2 ft.

Hurst's Monarch Strain. Magnificent large-flowered strain, embracing all shades of color. **Strong seedling plants, per doz. 75c; 25 for \$1.25. Larger plants, 15c and 25c each. Seeds 25c per pkt.**

PEONIES

These should be planted in good, rich soil in September or early October, covering the eyes not more than 2 in. under the soil (or they won't bloom). They are perfectly hardy and practically free from disease. The range of color is most magnificent. They should always be divided into small divisions, from 3 to 5 eyes, not more, and then be left undisturbed for 8 to 10 years, applying each Fall a coating of well-rotted cow manure, and you will be rewarded with the most magnificent blossoms.

Notice: I do not send out Peonies in the Spring, as they will not do well for you. Peonies after being divided and re-planted will produce only medium flowers the first year, and often not at all representative of the variety. The **Officinalis** family blooms very early, before and on Decoration Day, and have no sweet perfume; the beautiful gorgeous French hybrids bloom usually throughout June, and are exquisitely fragrant.

Officinalis Rubra, the old-fashioned bright red "Piney," each 75c.

" **Rosea Superba**. Pale lilac rose; fragrant, medium habit; a very lovely color; early with *Rubra*. Each \$1.00.

Umbellata Rosea (Sarah Bernhardt). Guard petals violet rose, shading to amber-white center; very early and a great bloomer. Each 75c.

Mons. Charles Leveque. Rose-white, center deeper shading; a lovely, very large and full flower and very fragrant. Each \$1.00.

Marie Lemoine. Pure white, center cream; very large and fine; late. Each 75c.

President Roosevelt. Rose type; color deep, rich, brilliant red. Each 75c.

Special Offer—One each of the 3 early type, \$2.00 by express; by mail, 25c extra. One each of the 3 French Hybrids, \$2.00 by express, 25c extra by mail.

Perezia Multiflora. This remarkable new perennial is a plant about three feet high and somewhat Teazel-like in appearance. It branches freely from the base, and bears from the middle of May onwards star-shaped, composite flowers of a clear porcelain-blue which are freely produced in branching umbels. The leaves are long, toothed, and of graceful shape, rendering the plant both imposing and ornamental, particularly for the decoration of the perennial border and shrubberies. Per pkt. 25c.

Phlox Paniculate—Decussata (N. O. Polemoniaceae). Large flowering, handsome, hardy perennials, thriving best in a rich moist soil. July and August. Divide every 2 or 3 years to obtain the finest blossom stalks.

" **America**. A stately tall plant, bright salmon-pink with carmin-red eye; 4 feet.

" **Wildwood**. A tall, stately, very floriferous Phlox; 4 to 5 feet. Petals white suffused soft carmine with a bright carmin eye.

" **W. C. Egan**. Large trusses with large individual blossoms of a pleasing pale pink with a rosy eye; 25 to 30 inches.

" **Miss Lingard**. One of the best white. 2 ft. The first to bloom.

" **Thor**. Salmon pink with crimson eye.

" **Elizabeth Campbell**. Bright salmon pink, with lighter shadings and dark red eye. One of the best. Plant in front of Hollyhock "Newport Pink."

" **Miss Jenkins**. A good late flowering pure white.

" **La-Vague**. Pure mauve, with aniline red eye. 4 ft.

" **Siebold's Scarlet**. A wonderful color, a bright carmine orange scarlet which does not burn in the sun.

" **Beautiful Pink Shades**, the names of which have been lost.

PLANTS—Any of the above 25c each; \$2.50 per doz.; \$15 per 100.

My selection of 6 varieties \$1.25.

PYRETHRUM—PERSIAN DAISY (N. O. Compositae)

A very handsome hardy perennial, double and single flowers in lovely bright colors of deep red, carmin, shades of pink and pure white; an excellent cut flower; pretty fern-like foliage.

Mixed seeds 25c per pkt.; mixed seedling plants, mostly double, 75c per doz., 25 for \$1.25; strong divisions, mixed colors, 25c each, \$2.50 per doz.

Notice—Transplant and divide every second year in the Spring.

Rudbeckia (Cone Flower). Fine plants for the border, grow and thrive anywhere, giving a wealth of bloom in the late autumn, excellent for cutting. Hardy.

" **Maxima**. A rare and attractive variety, growing here in my garden 6 to 8 feet tall, with large glaucous green leaves and bright golden yellow flowers, 4 to 6 inches across, with a green cone an inch or more high; in profuse flower during August and September. Plants 25c each; \$2.50 per doz.

SCABIOSA—PINCUSHION FLOWER (N. O. Dipsaceae)

S. Caucasica. Hardy perennial; lilac-blue shade, prized for cutting; 12 to 18 inches. Strong plants 35c each; seeds 15c per pkt.



SCABIOSA CAUCASICA

STATICE—SEA LAVENDER (N. O. Plumbaginaceae)

- S. *Latifolia*. A handsome and valuable plant with tufts of evergreen leathery foliage; large heads of light blue, small flowers; they keep long after being dried; July-August, 1½ ft. Strong plants 25c and 40c each; seeds 15c per pkt.
- R. *Saxifraga* Rockfoil. Common soil in full sun in a well drained position in the rock garden. most charming, valuable plant. Best mixed varieties. Plants 15c and 25c each.
- R. *Silene*. Catchfly. Beautiful Alpine plants.
" *Alpestris*. Pure glistening white flowers. Plants 25c each.
- Snapdragon (see *Antirrhinum*)
- R. *Stachys*. Wound-Wort (N. O. Labiatae).
" *Corsica*. A rare little carpeting plant for the rock garden, with black-white mimulus-like flowers. 2 inches. Plants 35c.
" *Coccinea*. Scarlet flowers in long spikes, also makes a fine border plant. 12 inches. Plants 25c.
" *Lanata*. With silvery foliage, also used for edging and carpeting. July-August. Plants 25c.
- Sweet William (see *Dianthus*).



150 Days From Seeds.

My lovely ENGLISH HYBRID PENTSTEMONS—a half-hardy perennial—with their large, many-hued Gloxinia-like flowers. You can have them in flower four months from seeds. In extremely cold climates simply treat them as an annual like Snapdragons, starting the seeds early in boxes in the cold frame or under glass. In half way decent climates where the temperature does not go below zero, treat them like any other hardy perennial, simply mulching them thru the winter.

If you don't grow Pentstemons you are missing a very fine and showy perennial; it comes easy from seeds.

STOKESIA—CORNFLOWER ASTER (N. O. Compositae)

S. *Cyanea*. Beautiful lavender-blue Corn-flower-like blossoms from early June to October; 18 to 24 inches. Seedlings that will bloom next season, 75c per doz.; plants 15c and 25c each; seeds 15c per pkt.

THALICTRUM—MEADOW RUE

Th. *Dipterocarpum*. Tall growing perennial plants of great beauty, with loose sprays of clear mauve and primrose flowers; most graceful habit; thrives best in rather poor soil in the shade. Strong baby seedlings, per doz., 75c; 25 for \$1.25; plants 25c; seeds 25c per pkt.

THERMOPSIS. Pea Family (N. O. Leguminosae).

" *Caroliniana*. 3 to 4 ft. June-July. Long spikes of bright yellow flowers. Just the thing for planting among your Delphiniums to bring out the blue. Seeds 25c per pkt.; plants 35c each.

Tritoma (see *Kniphofia*).

Veronica-Speedwell (N. O. Scrophulariaceae). A beautiful class of spikey flowered plants, well adapted for the border or rockery.

R. " *Fraticans* (*Saxatilis*). A lovely plant which makes dense carpets of blue; spreading habit. Plants 40c each.

R. " *Prenja*. Another charming rock *Veronica* of a decided trailing or creeping habit; 4 inches; July to September. Plants 40c each.

R. " *Prostrata*. Finer than *Rupestris*, dwarf creeping plant, smothered with genitian blue flowers; 6 inches; June to August. Plants 35c each.

R. " *Rupestris*. Fine carpet plant, sheets of brilliant blue. Plants 35c each.

R. " *Repens*. Dwarf trailing species, with deep blue flowers. Plants 40c each.

" *Subsessilis*. Blue; 2 ft.; July to October. Plants 25c and 40c each.

R. VIOLAS—Violet Family—(N. O. Violaceae)

The *Viola* is a very popular flower for bedding purposes; being practically hardy in character, they are easily cultivated, and when planted in bold groups or masses of distinct colors give a splendid effect, in many cases lasting throughout the entire summer. They are also suitable to harmonize with any other select bedding plants and make an excellent ground work for standard roses. To insure the best results, the dead flowers should be removed regularly.

R. *Viola Cornuta G. Wermig, or Purpurea*. A deep purple and a lovely *Viola*; 6 inches; a fine rock plant. Seeds 15s per pkt.; plants 25c each.

" *Cornuta "Mauve Queen"*. Very fine rich mauve, fine for massing or rockery, always in bloom. Seeds and plants same as above.

" *Cornuta "Rose Queen"*. Deep rosy lilac, continuous and effective bloomer. All the above varieties of *Viola Cornuta* or "*Horned Violet*" may be treated as annuals, and are extremely useful for edgings or small beds, and their dwarf spreading habit renders them valuable for the rockery. Seeds per pkt. 15c; plants 25c each.

Viola Gracilis Ipswich Variety. Charming rock or border specie, tufted habit, rich blue flowers in greatest profusion in April and May. Valuable for carpeter for bulbs. Plants 25c each; seeds, per pkt., 25c.

" *Lord Nelson* (new). A glowing rich deep violet purple; net habit and continuous free bloomer. Seeds 25c per pkt.; plants 25c each.

" *Sutton's Apricot*. A charming and unusual apricot color. Comes almost 90% true from seeds. Seeds 25c per pkt., plants 35c each.

" *Hybrida. Jersey Gem*. A lovely, most remarkable chance seedling, originated in the garden of Mr. A. T. Weston, New Jersey. The blooms, which are as large as a violet, are slightly scented, and of a pure purple color, born on stiff stems 6 inches long. *Jersey Gem* is said to be a more vigorous than the true *Viola Cornuta*, with better foliage and larger and better flowers. It is easy to grow in a rich soil, in an open situation. A large bed containing some 120 plants in the originator's garden was never without flowers throughout July nad August, and over 1000 blooms were picked each week. This plant is a gem indeed. Strong plants 25c and 35c each. (It does not seed.)

Viola Cornuta Bugalair. A lovely, long-stemmed violet-like flower, of very robust growth, with violet-like foliage. A lovely plant, flowers fine for cutting but without scent. Blooms in the Spring. Flowers are not hidden by the pretty foliage, but stand above it on very long stems. **Strong plants, 20c each; \$2.00 per doz.**

" **Haslemere (New).** Very pretty hybrid; flowers a charming shade of lilac-pink, in the greatest abundance. It received the Award of Merit from the Royal Horticulture Society. **Plants next Spring, 35c each.**

SPANISH, DUTCH AND ENGLISH IRIS BULBS

Must be planted by October 15th, to remain in the ground for 2 or 3 years, when the colonies then formed must be divided in August, and replanted in September; it will be found that the bulbs have tripled and quadrupled.

Plant these Iris Bulbs in well-drained, light sandy loam, if possible; fertilize with bone meal at planting time.

DUTCH IRIS (First to Bloom in May)

Albert Cuyp. Standard pure white, falls lemon-yellow with large orange-yellow central blotch. **\$1.00 per doz.**

Hobbema. Large white flowers, inside tinged blue. Falls large palest yellow with orange blotch. **\$1.00 per doz.**

Hart Nibbrig. The finest of all; brilliant clear blue; bulbs scarce. **12 bulbs for \$1.00; \$7.50 per 100.**

Rembrandt. Another very fine one; deep blue; falls richer blue. **12 bulbs for \$1.00; \$7.50 per 100.**

Anton Mauve. Very large flower; a most pleasing tone of uniform soft blue; very choice. **\$1.00 per doz.**

Van Der Neer. Soft blue, falls pale yellow with large depe yellow blotch. **\$.100 per doz.**

A good mixture, **75c per doz.; \$5.00 per 100.**

SPANISH IRIS—June Flowering

Flora. White and light lilac.

Prince Henry. Beautiful brown.

L'Honneur d'Overeen. Blue.

Beauty. Porcelain blue.

Empress of the Blues. A lovely blue.

La Citronelle. Lemon yellow.

Queen Wilhelmina. Pure white with yellow blotch on lower petals.

Any of the Above Named varieties, **75c per doz.; \$5.00 per 100.**

A Good Mixture, **60c per doz.; \$4.00 per 100.**

ENGLISH IRIS—June and July Flowering

Royal Blue. Per doz. **\$1.00; \$7.00 per 100.**

ROSA SPINOSSISSIMA

A Lovely, Pure White, Single Wreath Rose

This is another gem in my gardens, and everyone wants one. A very large, single, pure white rose with golden stamens with an exquisite perfume. Plant is of strong, healthy growth, and develops into a bush about 4 or 5 feet tall, with long pendular branches covered in the early part of June with these exquisite large single white roses. It blooms for several weeks. A hedge of these roses would be a never-to-be-forgotten sight. Entirely hardy, and increases very fast from root shoots. Price, **35c each; 3.50 per doz., postpaid; \$20 per 100 by express.**

SPARE THE DOGWOOD AND RHODODENDRONS

None of our native woody plants are subject to such ruthless destruction as the **Flowering Dogwood** and the **Rhododendron**, mostly by well-meaning people who do not realize that our country roads are rapidly losing their chief attraction.

The flowers wilt rapidly and are soon thrown away.

Motorist and others, please help to keep our country roads beautiful.

KEEPING UP THE ROCKERY

By Adolph Meyer

In "Better Flowers," Portland, Oregon.

Many owners of rock gardens wonder why they do not have such attractive continued results as their neighbors, and upon investigations I find that their rockery has gone entirely without cultivation or weeding since Fall, though it is now well into the middle of Spring.

Amateur gardeners and garden lovers cannot always realize how much humidity and warmth their rock plants are missing when they do not cultivate the soil properly. I have frequently heard the remark, "I thought Alpine and Rock Plants did not need cultivation. Nobody cultivates these plants in the mountains and there they grow excellently!"

Here my friends are mistaken. In the high mountains we have a wonderful gardener named Jack Frost. Late in Spring, very often the melting snows thoroughly soak the soil, which during the night following will then freeze, giving a natural cultivation. Through the frost the water-soaked dirt will expand one third of its volume and will then remain loose after the frost leaves the ground. No space is left untouched by this natural cultivation, which will often be repeated for several days or even several weeks at a time, and in the day time the rays of the sun penetrate the loose soil, giving life to plants that have been dormant during the winter.

Perhaps you wonder why Alpine Plants are never pulled from the soil through the freezing and thawing seasons. This is because the drainage in the mountains is most excellent, and most of the fertile soil is distributed very deep into the crevices of the rocks, giving most rock plants very long roots, which enable them to resist the strength of the frost and to tenaciously retain their hold into the earth. The same condition exists in your own rock gardens; that is why they require deep, clean cultivation.

The fall is the time to give necessary food to your rock plants. Be very careful, as some plants do not want food at this time; for example, *Iberis*, *Helianthemum* and *Alyissums*, which bloom far better in poor soil, which protects them from damping off over the winter season. Bell flowers, *Aubretias*, *Arabis*, *Primula*, *Auricula*, etc., will be very thankful for additional food.

If you want good spring flowering you must start work in the late fall. In October and November, before the winter checks your work, give your rockery a deep cultivation with a garden trowel. Don't be afraid to touch a few of the side roots, as in a loose soil the plants will develop twice the root system that a hard soil would permit. Be careful to remove every single weed, or some of them will keep on growing. They will bloom every frost-free day and produce thousands of seeds, which in turn would produce more weeds that will require every bit of your time to remove the following season.

After you have cultivated and weeded your rock garden cover it with a mulch that has been prepared ahead of time. Leaf mould, or turf, with some sphagnum added, bone meal or old rotten manure for plants demanding additional food. For those plants that require poor soil add some small chipped rocks or coarse sand to the mulch. Now your plants will be protected from freezing, if cold, dry weather, without snow should appear, and at the same time the cultivated soil is prevented from hardening. If you will observe these directions your rock garden will be ready for the winter slumber and well prepared for a sound, healthy awakening in the spring.

In the spring, as soon as the weather permits, give your rockery the same cultivation and weeding, mixing the mulch into the soil. There is no definite rule regarding the time when spring cultivation should begin, as all depends on weather conditions and locality. However one general rule may be suggested and that, **THE SOONER THE BETTER**. As soon as the soil is loosened in spring the warmth of the sunny hours will penetrate to the roots of the plants and develop strong, sound root systems, even though the air may be too cold to permit the development of leaves and flowers.

After the Spring cultivation has been accomplished there is but little work in the rock garden. Keep it free of weeds and cultivate every six to eight weeks. When the weather becomes extremely dry give it water once or twice a week. In the mountains there is a heavy dew every night, providing the rock plants with a regular bath; this dew may be replaced with a light sprinkling late in the evening. Bear in mind, however, that good cultivation is much better for your rock plants than too much watering.

If you will carefully follow the instructions I have given you will be surprised and delighted with the results. It requires very little work to keep a rockery in good condition, but a great deal of hard work to **recondition** a neglected rockery.

THE USE OF COLD FRAMES

Cold frames are easier to construct than hot beds, and much simpler to handle. The management of hot beds requires no little skill. They will be used on large estates where there are professional gardeners, as a matter of course, but the average amateur will obtain much better results from cold frames. The difference between hot beds and cold frames is that the former are heated, usually by means of a thick layer of fresh manure under the surface soil, while no heat is used in cold frames except that which is received from the sun. Cold frames are available for use three or four weeks before the last freezing date.

Frames are commonly 6x3 feet and are placed in a corner of the garden containing good soil. They should be made preferably of planks, although ordinary boards will suffice, and should be at least a foot high at the back and eight inches at the front, the slope being towards the sun. It is well to have the frames banked up around the sides with earth or manure.

A cold frame may be covered with an ordinary hot bed sash, but there are several substitutes on the market which are cheaper and about as satisfactory. One is a prepared cloth which lets in the sunlight, while keeping out the cold. Another and rather more durable substitute is made of fine wire, the openings of which are filled with a material resembling celluloid. These substitutes are much lighter than glass, and for that reason easier to handle. They are coming into somewhat general use, even among commercial growers, and are admirably adapted for the needs of amateurs. For that matter, though, an unused double window or any discarded sash may be made to serve the desired purpose. It is not necessary, of course, to make the cold frame the size mentioned above, except as a matter of convenience when using commercial sash.

Many vegetables, like cabbages, cauliflowers, Brussels sprouts, lettuce, cucumbers, corn and melons, and most of the annual flowers may be started in a cold frame a few weeks before the time for setting them in the open ground. Plants like tomatoes, peppers and egg plants which have been started in boxes in the house earlier in the season may be hardened off in a cold frame.

Seeds may be sown in the soil in which event it is wise to spade it over as deeply as possible and to incorporate a little well rotted manure. Many skilled gardeners prefer to used flats or paper pots which are set on the ground under the sash. There is a distinct advantage in this plan because the plants can be shifted to the open ground without much disturbance of the roots. If paper pots are used, it is not necessary to remove them. Dirt bands are also often used. They are similar to paper pots, except that they have no bottoms and are set in flats or on boards.

China Asters, Pot Marigolds, Candytuft, Snapdragon, Gypsophyla, Stocks, Nicotiana, Salpiglossis, Godetias, and many other annuals may be started readily in cold frames.

After the cold frame has served its purpose in the spring, it can be used for growing cucumbers or lettuce, the sash being removed. Lettuce seems to thrive especially well in such a frame in midsummer, growing much better than in the open ground, probably because the boards shut off the drying winds and because water can be given readily. (Horticulture, Boston.)

MILDEW

Mildew and other fungous diseases can only be controlled by taking prompt measures to check them immediately they appear. A timely application of powdered sulphur when the leaves are damp in the morning, or spraying with sulphide of potassium at the rate of half-an-ounce to one gallon of water, will check the progress of the disease, whereas, if the spores are allowed to ripen they become distributed by various agencies, and a very large area may be involved.—W. Auton, in "Gardener's Chronicle" (England).

CUT WORM REMEDIES

Many reports have been received this year about the damage done by cut worms in the flower garden as well as in the vegetable garden. This pest is exterminated readily by the use of poisoned bait such as is formed by mixing bran and arsenic with the addition of a little molasses and lemon juice. Probably most amateurs will prefer to use a commercial poison bait such as can be obtained at any seed store. One well known garden superintendent reports that he has been able to win immunity from the cut worms by the liberal use of lime and powdered sulphur. He makes a mixture of these materials and dusts it all over his plants when they are young, with the result that the cut worms do not touch them. He finds this mixture equally successful for controlling the squash borer. Other gardeners may find this remedy worth experimenting with.—(Horticulture, Boston.)

CONTROL OF SLUGS

With reference to the note on this subject, a poison bait of bran and Paris green is no doubt an effective method of destroying slugs, but I fear it would destroy a good deal more than the slugs. What about the birds? How many of these would be killed? And probably some of the most useful kind, too. Paris green is a deadly poison, and its possibilities in the destruction of life are great. As I pointed out in "The Gardeners' Chronicles" of January 3 (Vol. LXXVII, p. 14) and May 30, 1925 (Vol. LXXVII, p. 376), there is nothing more effective and safer to use for the destruction of slugs and snails than ordinary alum, and it may be applied in any scale, great or small. It may be used in saturated solution, either to water the ground or spray the plants with, without risk of damage, and a hot, saturated solution applied to rubbish heaps and other haunts of the pests, where there are no plants to injure, will exterminate every adult and egg it comes into contact with. Its preparation (in solution) is of the simplest description, and there is nothing in it to clog the nozzles of syringes or do them any harm whatever. It may also be used in the powdered state for the protection of isolated plants in slug-infested ground. I am surprised at people worrying over such materials as sulphate of aluminum, poisons, trapping, etc., when they have such a simple, otherwise harmless, and cheap and effective substance as this ready to hand.—A. D. Richardson, Edinburgh, in "The Gardeners' Chronicle," (England).

An alum solution is extremely simple to use, all that is necessary being to dissolve the material in a suitable vessel by means of hot water, and make certain that a little of it always remains undissolved at ordinary temperatures, thus insuring that the solution is saturated. For solutions, lump alum, which is cheaper, may be used instead of the powdered material. Also it contains no grit or other matter which would choke the nozzles of sprayers and is thus less troublesome than sulphate of aluminum and lime solution, which must be strained before use. Alum solution is ideal so far as easy application goes, and sprayers may be easily cleaned if necessary after use by having water forced through them. A saturated solution is approximately one pound to one gallon of water.

ALUM AS A SLUG AND SNAIL DESTROYER

It does not seem to be generally known that ordinary alum is one of the most effective destroyers of slugs and snails, as well as one of the easiest materials to use for the purpose. Such materials as salt and soot, which are so often employed, are not reliable, as the animals can slough them off twice, or even thrice, before their destruction is brought about. Not so, however, with alum, for a few crystals of the powdered material sprinkled over the back of one of the

largest snails will bring its death about in a very short time. They cannot slough it off, and once they come into contact with it they are doomed. It is only effective, of course, in the fresh state, and the sprinklings require to be renewed occasionally.

Out-of-doors powdered alum is very effective for the protection of young lettuce or other tender subjects which form such tempting morsels to these vermin, and so far as I have been able to ascertain there is nothing among either flowers or vegetables which it seems to harm. I have repeatedly sprinkled the dry powder over tender foliage both when it was wet and when dry, and not the slightest harm resulted from it.

For stages, frames, and in fact all closed structures in which plants are grown it is invaluable for the purpose, as it can be very easily used. For the destruction of the pests in rubbish heaps and other of their hibernating quarters the best plan is to dissolve a good-sized lump of the unpowdered material in boiling water, and pour it over the rubbish or other material as hot as possible. This is much more effective than a cold solution, as the steam enters all the interstices of the material and every egg which it comes in contact with is destroyed.—A. D. Richardson, Edinburgh, in "Gardeners' Chronicle.

NO GARDEN IS COMPLETE WITHOUT A LIBERAL PLANTING OF IRISES

**Plant Them in February, March and April and Again From
July on to October First**

I grow many acres of Iris, a careful selection of over 250 of the world's best Garden Iris, constantly adding to my collection. Large estates desiring to make large plantings of either the best old or the new creations, I am in a position to supply them by the hundred or even thousand at attractive prices.

The prices of nearly all the new, meritorious varieties, such as Ambassadeur, Ballerine, Dream, Gaudichau, Lord of June, Lady Foster, Lent A. Williams, Ann Page, Morning Splendor, and others in that class, have been reduced one half.

A new price list, describing each variety, as well as giving the rating as authorized by the American Iris Society, is free for the asking. A very comprehensive Iris catalog, really a manual, comprising some 40 pages, and including valuable treatises, an elaborate color classification, and many illustrations; it lists in detail all of the best old garden varieties, and most of the best new ones, as well as scores of Siberian, Oriental, Japanese, Dutch, Spanish and many other Iris species. The Manual is not free, but is sent only on receipt of 15 cents. (No refund.) Ask me for this manual.

OTHER PUBLICATIONS

AN EXCELLENT IRIS BULLETIN

The U. S. Department of Agriculture at Washington, D. C., has issued an exceedingly interesting and well illustrated manual on Garden Irises, including chapters on Iris diseases and insect pests and remedies. You will find it of great value. Ask for Farmers' Bulletin No. 1406 and address your letter to the Superintendent of Documents, Government Printing Office, Washington, D. C., enclosing ten cents in coin, not stamps. Be sure and do it right.

DELPHINIUMS AND HOW TO EXCEL WITH THEM

An interesting and practical 20-page illustrated booklet on the propagation, cultivation and exhibition of these popular and beautiful flowers. It was written by Mr. A. J. Macself, the Hon. Secretary of the National Hardy Plant Society of London, England, an authority on Delphiniums. The price is 25 cts., and no refund. I have this for sale.

A MOST EXCELLENT 90-PAGE PLANT BULLETIN

Handsomely illustrated. Write to Washington, D. C., U. S. Department of Agriculture, for Bulletin No. 1381 (free) entitled "Herbaceous Perennials." All your troubles and questions are answered and solved in this most excellent publication. Don't ask me for this bulletin.

A WORTH-WHILE LIST OF THE MOST SATISFACTORY GARDEN ANNUALS

OLD FRIENDS AND CHOICE NOVELTIES

All Cheaply and Easily Raised From Seeds

Although a number of flowering plants may be sown during February in favoured localities and under good weather conditions, March is the chief month for the sowing of both annuals and perennials. Need for economy in gardens has resulted in the extended use of annuals, and, while the precision of style and coloring which results from plants raised from cuttings is admitted, equally good general effects may be secured much more simply and cheaply by raising plants from seed. There is much to be said on behalf of annuals, for their variety of habit, elegance of form and delicate blending of color are not surpassed by any other section of plants. It must not be thought, however, that because of the comparatively small amount of skill needed to grow them that little care need be bestowed on them. Good cultivation is the keynote of success with these plants as with all others and it is a matter of considerable importance to note that where this is practised a large proportion of them remain in beauty until the extreme end of the season.

AGERATUM (FLOSS FLOWER)

Blooms throughout the summer, being the most effective annual for bedding and borders.

Imperial Dwarf Blue—Very dwarf and compact, especially good for ribbon borders. 9 inches Per pkt. 10c; $\frac{1}{8}$ oz. 20c; $\frac{1}{4}$ oz. 35c.

Little Blue Star—A lovely miniature variety for small beds and edgings. Plants are compact attaining a height of only 3 inches and are covered with small bright mauve flowers. Per pkt. 15c; $\frac{1}{8}$ oz. 30c; $\frac{1}{4}$ oz. 50c.

Blue Perfection—The darkest of all large flowering Ageratums. Color deep amethyst blue; compact growth, fine for bedding. Per pkt. 10c; $\frac{1}{8}$ oz. 20c $\frac{1}{4}$ oz. 40c.

ALYSSUM

Little Dorrit—A beautiful variety growing close to the ground with small white flowers; flower heads in an erect mass 3 or 4 inches high. Per pkt. 15c; $\frac{1}{8}$ oz. 20c.

Little Gem or Carpet of Snow—One of the best white flowering edging plants of dwarf compact habit, 4 inches high. A solid mass of bloom from early till late. Per pkt. 10c; $\frac{1}{4}$ oz. 25c.

Lilac Queen—A pretty, deep lavender-lilac of dwarf habit. Per pkt. 10c $\frac{1}{4}$ oz. 25c.

ANTIRRHINUM—SNAP DRAGON

Within the last few years Snap Dragons have become very popular; they are most lovely for cutting and are very showy and beautiful in the garden, readily grown from seeds. Seeds sown outside the latter part of April or first of May will bloom early in July, remaining in bloom until frost. It is probably best to start them early indoors or in a frame in February and March, transplanting them in the open when the weather is suitable. The seeds being very fine they must only be pressed in the soil.

There is a long list of Snapdragons but where garden space is limited it pays to grow only a few of the very best varieties and colors. The strain I grow is Sutton's English strain.

TALL VARIETIES—Height 3 Feet

Flowers are very large and produced on long spikes, and are especially adapted for forming bold groups in the border; invaluable for cutting.

Golden Chamois—One of the finest varieties; an exquisite combination of the softest pink and bright golden shades.

Crimson and Gold—Largest flowers on long spikes of deep crimson and rich gold.

Buff Pink—A lovely shade.

Cloth of Gold—Long spikes of yellow flowers, remaining in bloom the entire summer.

Giant Crimson—An extremely rich color with dark bronze-green foliage.

Mixed Tall Varieties containing all of the above and several other colors. Per pkt. of any of the above, 15c; the 5 named varieties one pkt., each 60c.

HALF-DWARF OR INTERMEDIATE VARIETIES

Height from 12 to 18 inches; the best varieties for Bedding purposes.

Bright Pink—A beautiful shade of pure rose-pink.

Buff Pink—A new shade and highly attractive. Can be effectively used with other pink and apricot shades.

Buff Beauty—A charming variety with soft pinkish buff self-colored flowers; the best of all the buff shades.

Orange King—A glowing orange scarlet; a wonderful color; everyone who saw it in my garden exclaimed over the beautiful color.

Golden Queen—A rich yellow.

Crimson Empress—A rich velvety crimson.

Superb Mixture of delicate shades.

Per pkt. of any of the above 15c. The 6 named varieties one pkt. each, 75c. 3 named varieties, 40c.

ASTER-SUNSHINE

A new Aster of remarkable beauty and striking gracefulness of the flowers, which measure from four to six inches in diameter. The quilled centers are golden in color, and are immediately surrounded by small florets which merge into white at the outer edges. The outer petals form loosely curled circles making the flower extremely pleasing to the eye. The habit is branching. This novelty which has come to us from England was by far one of the prettiest sights in my garden during the last part of August and September. The colors are Pink, Lilac, White and Blue, or in mixed colors. All are very beautiful, particularly the pink and the blues. Seeds per pkt. of 100 seeds, 25c.

CALENDULA—POT MARIGOLD

No garden should be without these bright showy, lovely flowers; excellent and most artistic as cut flowers, lasting a long time in the house. They withstand many light frosts. Of all varieties of Calendulas, **Balls' Calendula** are the best and most beautiful ones, both in color and in form.

Ball's Gold Calendula—A rich golden yellow; about 95% come true. Much superior to the old **Lemon Queen**; per pkt. 15c; 2 for 25c; $\frac{1}{8}$ oz. 75c

Ball Calendula, Orange—This is the original **Ball Calendula** that has given an entirely new meaning to Calendulas with long stems and uniformly double flowers of great size. Per pkt. 15c; 2 for 25c; $\frac{1}{8}$ oz. 75c.

CANDYTUFT

Giant Hyacinth-flowered or Improved Empress—A wonderfully improved strain of the popular **Empress Candytuft**, forming much branched plants about 18 inches high, each branch terminated by an immense spike of very large individual pure white flowers. Makes a very effective white bed or border, and is invaluable for cutting. Per $\frac{1}{2}$ oz. 40c; pkt. 15c.

Rose Cardinal—Brilliant deep rose-red; very effective for bedding. $\frac{1}{2}$ oz. 40c; per pkt. 15c.

CLARKIA

FLOWERS IN LONG LOOSE SPRAYS

This pretty and easily grown annual has been much improved in recent years, and the varieties offered below are excellent for cut flowers; they do well either in sun or shade, growing 2 to 2 $\frac{1}{2}$ feet high, with leafy racemes of double flowers, which all open in water when cut.

Ruby King—Brilliant rich ruby red, double and produced in long sprays. An indispensable variety for the garden. Per pkt. 15c; $\frac{1}{4}$ oz. 50c.

Salmon Queen—A beautiful Salmon pink. Per pkt. 15c; $\frac{1}{4}$ oz. 30c.

Elegans Flore Pleno—Very double, pure white. Per pkt. 15c.; $\frac{1}{4}$ oz. 30c.

Elegans, English Brilliant Mixture. A selection of the finest double varieties; all inferior colors being excluded. Per pkt. 15c; $\frac{1}{4}$ oz. 30c.

DIMORPHOTHECA—STAR OF THE VELDT

One of the quickest blooming annuals, often flowering within six weeks from seed. Produces a wide range of lovely colors, which harmonizes most beautifully. It requires an open sunny situation and in such will bloom all summer. It also makes a charming pot plant, by planting a few seeds in a large plot, and then thinning out to 3 or 4 plants. Flowers will be greatly improved in size and billiance by watering the plants frequently with weak liquid manure.

Various colored hybrids of this flower which are quite as strong growing as the type, and include a wide range of shades of primrose, apricot, buff and salmon, as well as delicately tinted white flowers. $\frac{1}{4}$ oz. 50c; per pkt. 15c.

ESCHSCHOLTZIA—HARDY CALIFORNIA POPPIES

From the original golden yellow California poppy there have now been evolved the most lovely colors imaginable, from pure white to the deepest crimson—all exceedingly beautiful varieties. They make indeed a most gorgeous effect in the garden, blooming all through the summer months, from seeds sown in the open ground early in the spring, and thereafter take care of themselves for years to come, by self seeding, and from the plants, which are really true perennials. Some of the new colors are still quite rare.

Enchantress—One of the most charming of all Eschscholtzias. The color on the outside of the petals is soft rosy carmine; on the inside a lighter ton of rosy carmine heavily overlaid cream. The flowers are double, and of exquisite form. This variety will be admired by everyone. It is of very robust habit, and more floriferous than any of the varieties at present in cultivation. Per pkt. 20c.

The Geisha—Outside orange crimson, inside a deep golden yellow. This beautiful variety received an award of merit from R. H. S. of England. Per pkt. 15c; $\frac{1}{4}$ oz. 40c.

Rosy Queen—Soft flesh pink. Per pkt. 10c; per $\frac{1}{4}$ oz. 25c.

Golden West—A clear golden yellow. Prices same as above.

Alba Fl. Pl.—Extra selected double white. Per pkt. 15c; $\frac{1}{4}$ oz. 40c.

Gaiety—Deep crimson, inside of petals white. Per pkt. 15c; $\frac{1}{4}$ oz. 40c.

Mikado (Hurst-England)—Intense crimson scarlet. Per pkt. 20c.

Special Mixture, including all the new shades, which create a most brilliant display. Per pkt. 15c; $\frac{1}{4}$ oz. 30c.

DO NOT FAIL TO HAVE SOME OF THESE BEAUTIFUL NEW CALIFORNIA POPPIES IN YOUR GARDEN NEXT SUMMER.

GODETIA

Of all annuals for garden decoration Godetias are unsurpassed for the brilliant effect they produce in beds and borders. They are extremely easy to grow and the plants remain in full beauty for a long period. When cut, the long graceful sprays of the tall varieties make a handsome decoration for vases, and this section is also largely employed as a background to borders of the dwarfer-growing kinds. They do best in a rather poor, sandy location.

TALL VARIETIES WITH FLOWERS IN LONG LOOSE SPRAYS

Double Crimson Glow.

Double Mauve—Clear pinkish-mauve flowers.

Double Rose—Very fine double flowers of a delicate rose-pink shade. 2 to 3 feet.

Mixed in all the finest varieties or any of the above, per pkt. 10c; $\frac{1}{8}$ oz. 25c.

GYPSOPHELIA—ANNUAL BABY'S BREATH

Quite as useful as the perennial sorts and fine for sweet peas and carnations. Height 18 inches. By making 2 or 3 sowings during the season you are assured of a continued supply of these lovely delicate flowers. Quick to grow and easy to raise.

Elegans White.

Elegans Delicate Pink—A charming pink variety, which you should grow.

Either of the above, per pkt. 10c; $\frac{1}{4}$ oz. 25c.

HELICHRYSUM (Straw Flower)

Monstrosum Fl. Pl.—One of the best "Everlastings." Exceedingly effective double flowers in rich glittering colors, making a fine display in beds or borders, but especially grown to dry and use in baskets and vases through the winter; when wanted for this purpose they should be cut with as long stems as possible, and when the blooms are about one-third open, take off all foliage, tie in bunches and hang head downwards in some dark, dry place until cured; they succeed in any good garden soil; give them plenty of room to develop, planting not closer than 12 inches apart; hardy annuals; $2\frac{1}{2}$ feet. (Description from Dreer.) I offer the following choice colors:

HELICHRYSUM

Golden Globe—Golden yellow.

Fireball—Bright red.

Rose Carmin Shades—Rich and glossy.

Salmon—Beautiful rosy-salmon.

Silver Globe—Glistening white.

Scarlet Beauty—A beautiful color.

Per pkt. each 15c; the six colors 75c.

Mixed—All colors, per pkt. 15c; $\frac{1}{4}$ oz. 25c; 1oz. \$1.00.

LARKSPUR—ANNUAL DELPHINIUMS

Not to be confused with the perennial Delphinium which is quite a different thing. For a description of the latter see pages 8 to 19. These annual Larkspurs produce fine spikes, most graceful and attractive. They grow from 2 to 3 feet high. The tall stock-flowered are the finest varieties for beds and for cutting.

"*Rosy Scarlet*" (New)—A wonderful color in Larkspurs. Per pkt. 25c.

"*Exquisite*" (New)—A beautiful soft pink. Per pkt. 25c.

Blue—A deep rich color. Per pkt. 15c; 2 for 25c.

White—A very popular variety. Per pkt. 15c; 2 for 25c.

Flesh—A very delicate shade of pink. Per pkt. 15c; 2 for 25c.

Mixed—All the best colors. Per pkt. 15c; 2 for 25c; $\frac{1}{4}$ oz. 30c.

LINARIA

Linaria (Toad-Flax) (N. O. *Scrophulariaceae*). Little known, charming rock and edging plants, like a miniature Snapdragon, with wiry stems and lovely, graceful flowers of many hues. There are both perennial and annual varieties—the latter are charming, embracing the most beautiful violet, blue, pink, crimson and yellow shades.

" *Maroccana Excelsior Hybrids*. Lovely delicate tints, gems, richly marked. 1 foot. Hardy annuals. Per pkt. 25c

" *Reticulata Aurea Purpurea*. Gold and purple, remarkably pretty. Per pkt. 25c.

NEMESIAS

These attractive, charming flowers are grown in England and Scotland as freely as Nasturtiums, coming some 30 years ago from South Africa. They are easily raised from seeds, which germinate quickly when sown in boxes or right in the beds; the plants should be planted about 6 inches apart each way.

Sutton's Large-Flowered in mixed colors of white, pale yellow, pink, crimson, and many beautiful intermediate shades. These *Nemesias* will make a perfect blaze of gorgeous colors in your garden. Per pkt. 15c; 2 for 25c.

Hybrid "Blue Gem"—This popular dwarf, compact *Nemesia* is a gem, indeed; very beautiful for edgings or pot culture; a lovely forget-me-not blue. You must try these *Nemesias*, both the dwarf and *Nemesia Suttoni*. Per pkt. 15c; 2 for 25c.

NIGELLA (LOVE-IN-A-MIST)

Miss Jekyll—This lovely variety will give you an abundance of long stemmed, clear corn-blue flowers, prettily set in dainty foliage. It is a treasure, indeed, and one of the finest annuals for the garden. The plants are very hardy, and if possible, seeds should be sown in the fall, producing the best flowers the following summer, but an early spring sowing is equally good. Per pkt. 15c; $\frac{1}{4}$ oz. 25c; 1 oz. 50c.

Miss Jekyll Pure White—Prices same as above.

NEMOPHILA (BABY BLUE-EYE)

A lovely low growing hardy annual with pretty foliage extensively used for ribbon borders and general garden decoration.

Insignis Blue—Beautiful color; height 6 inches. Per pkt. 10c; $\frac{1}{4}$ oz. 25c.

PANSY SEEDS

Heinr. Mette's (Germany) Triumph of the Giants, awarded prizes wherever shown.

The plants distinguished themselves by their robust growth, and form compact bushes of round shape, with strikingly large, healthy-looking foliage.

The imposing five-spotted flowers which on long, vigorous stalks surmount the foliage in the most graceful manner, are of enormous size, perfectly round form, original structure, and unusual substance. The individual petals are exceedingly broad and cover each other in such a manner as to make the flowers appear almost double. With most of the flowers the border of every petal being conspicuously undulated and curled, which grants the flower a striking and very peculiar appearance, entirely new to this class of plants.

The beauty, brilliancy and richness of color being the most striking; also very rare and new tones of red and brown are met with in these flowers.

Anyone growing these Pansies will declare them to be the most perfect and wonderful Pansies they have ever seen. $\frac{1}{8}$ oz. \$2.00; per pkt, 50c. (about 200 seeds.)

Phacelia. Campanularia. A beautiful, lovely annual; the finest of all blue annuals; a rich, deep, gentian-blue. It is not known as it should be; it grows anywhere, is hardy and strong, and makes a lovely border, or a charming bed. Sow it liberally—you will love it. Light soil, sunny position; height 9 inches. Seeds per pkt. 15c; $\frac{1}{8}$ oz. 35c; $\frac{1}{4}$ oz. 55c; $\frac{1}{2}$ oz. 85c

SALPIGLOSSIS (TRUMPET FLOWER)

Beautiful ornamental hardy annuals of great charm with large veined funnel-shaped velvety flowers, fine for cutting. A bed of these beautiful plants is one of the most striking features of the garden during July and August. Height 3 feet.

Mixed—All the finest colors, including blue and gold, golden yellow, crimson, gold veined, rich purple, velvety red; all mixed. Per pkt. 15c; $\frac{1}{8}$ oz. 30c $\frac{1}{4}$ oz. 50c.

ANNUAL STATICE

Few annuals are more valuable for cut flower purposes than the *Statice*, particularly **S. Suworowi**, which produces delightful rose-colored flowers. This *Statice* grows about one and a half feet high. The flowers can be dried for winter, keeping their color for many months. Seed should be started in the house or in a cold frame early in the Spring. It is different from most seed, however, as the dried flower itself is planted, although pulling it apart somewhat helps to hasten germination. Cover it only lightly, better just press in, and keep seed bed moist. Beware of slugs!

Statice Suworowi—(Perennial where winters are mild)—Bright rose; height 18 inches. Per pkt. 15c; $\frac{1}{4}$ oz. 50c; $\frac{1}{2}$ oz. 75c.

S. Sinuata True Blue—A rich-colored new variety; tones well with the mauve and makes a fine contrast with the yellow. Price same as above.

S. Sinuata Hybrida—Hybrids with mauve, rose, white and yellow flowers. Price same as above.

STOCK, NEW HYBRID BROMPTON

The Monarch Strain is quite distinct in habit, growing about 2 feet in height, and can be supplied in several shades; Canary-Yellow, Bright Violet, Old Rose, Silvery Lilac or mixed. **Per pkt. 25c.**

"Avalanche"—This superb new biennial Stock, though freely branching, is of a compact habit and produces a great number of large well-formed spikes of flowers of a pure glistening white, which form excellent material for cutting. This novelty is also a grand bedding variety. **Per pkt. 25c.**

VISCARIA

If you have never grown this lovely dwarf annual you will certainly be glad to have your attention called to it. Many people saw it the first time last summer in my garden, and everyone exclaimed over its charming flowers and ordered seeds. The plants bloom all summer long 'till late in the fall and are most attractive when planted in masses or along paths. The dwarf varieties make excellent pot plants. Height 6 to 8 inches.

V. Tom Thumb Rosy Gem—The attractive brilliant carmine-rose flowers appear in great profusion. **Per pkt. 25c; 2 pkts. for 45c.**

V. Tom Thumb Blue Gem—Bright blue flowers, a charming plant. Prices same.

ZINNIAS

California Giant Dahlia—Flowered

These are positively the finest Zinnias grown. Not too much can be said about these new creations in Zinnias which are showing the widespread popularity of this type of Zinnias and its remarkable versatility in adapting itself to varying conditions and climates. Excellent cut-flowers and wonderfully decorative in the garden.

Exquisite—Truly Dahlia-flowered as regards form and size. A light rose with center a deep rose.

Golden State—A very rich orange yellow; yellow in the bud, turning to an attractive orange when in full bloom.

Crimson Monarch—The largest and best of the red shades. Flowers often eight inches in diameter; very vigorous; a marvelous production of greatest merit.

Oriole—An immense orange and gold bi-color, worthy of the beautiful bird after which it was named. **Per pkt., any of the above, 25c. The 4 beautiful varieties for 80c, any 2 for 45c.**

Special Mixtures. A well blended mixture containing all the above and several other equally beautiful novelties. **Per pkt. 15c; 2 for 25c; 1/8 oz. 75c; 1/4 oz. \$1.25.**

PLEASE DO NOTE

AS ONLY SUCH SEEDS AS GERMINATE WELL IN MY OWN ESTABLISHMENT ARE SUPPLIED TO CUSTOMERS, I WILL NOT AND CANNOT ACCEPT RESPONSIBILITY FOR FAILURE IN THE HANDS OF OTHERS WHOSE MANAGEMENT, LACK OF EQUIPMENT OR LACK OF KNOWLEDGE, MAY UNCONSCIOUSLY BE THE CAUSE OF NON-SUCCESS.

SPECIAL NOTE

Seeds and all Unbloomed Seedlings, though offered in Separate Colors, must be accepted as from Mother plants only of the Colors indicated, with no warranty, expressed or implied, that the progeny will be constant to the parent Colors.

PLEASE DO NOTE

The proportion of true Color Shades may vary from 85 to 95 per cent., the balance being recessive types of earlier parentage. If you must have exact color lines, Named Sorts (from Cuttings or Division) alone are absolutely reliable.

HINTS ON SOWING FLOWER SEEDS

When sowing seeds bear in mind the fact that every fertile seed contains a living plant in embryo. The germ of life is there in a state of suspended animation and only awaits favorable conditions to quicken and develop. Water, heat and air are the all-important factors, and a happy combination of these must be the object of all preparations.

WATER. As a general rule, a seed requires to take up a quantity of water equal to its own bulk to enable the germinating processes to commence. After these have once started, germination must go on, and growth continue, or the embryo will perish.

TEMPERATURE. Experiments have proved that seeds of hardy plants give the best percentage of germination if sown in a temperature of 45 deg. to 50 deg. Half-hardy subjects should be given 10 deg. more; while Cucumbers, Melons, Bananas, and the like, which revel under tropical conditions, should be afforded a seed bed temperature of 70 deg. to 75 deg.

AIR. Seeds breathe, giving off during the germinating processes carbon dioxide, and unless this can readily escape, germination is materially hindered, hence the advisability of using an open sandy compost that air can readily penetrate.

SEED SOWING UNDER GLASS. Seeds of any type sown under glass in pots or boxes should be sown very thinly, and be just lightly pressed into the soil with the aid of a piece of board. The soil should have been previously moistened and allowed to drain, and after sowing cover the seed with three times its own diameter of fine sandy soil. By this method the seed is enclosed in a moist bed, from which loss of water by evaporation must be checked by covering the pots, etc., with sheets of glass, and shading from direct sunshine with paper until the seedlings appear, as the soil must on no account be allowed to become dry after sowing. If possible avoid any further watering until the seed has germinated, but should it appear necessary water is best applied by standing the pot or pan in water up to the rim.

SEED SOWING OUT OF DOORS.

Outdoor sowings are less under control, but the careful cultivator will usually be able to get a satisfactory seed bed. This is of the utmost importance, as much good seed is ruined by being sown when the soil is in an unsuitable condition. Good results can never be obtained by sowing in a pasty soil, the land should work freely without "balling," a condition that can often be obtained early in the season by lightly forking over and leaving to dry for a few hours in the sun and wind before attempting to rake down.

SOWING HARDY ANNUALS. Seeds of Hardy Annuals can be sown direct into the position in which the plants are to bloom; making both Spring and Autumn sowings, the best months being March and April—September and October respectively for most types. Prepare the positions thoroughly, sow the seed very thinly and cover with fine sandy soil. Many species, including such favorites as Mignonette, Clarkia, Godetia, Nigella, Schizanthus and many others transplant readily, and an earlier supply of bloom may be obtained by sowing these subjects in boxes in gentle heat during early March, hardening the plants prior to transplanting to their flowering positions during April. The first mentioned is popularly supposed to be a difficult subject to transplant, but this will not be found to be the case if transplanting is firmly done when the soil is in a fairly moist condition; the plants should not be watered in, but may be freshened by spraying with a syringe, or fine rosed can, should the weather prove dry and sunny.

SOWING HALF-HARDY ANNUALS.

Such as Asters, Phlox Drummondii, Salpiglossis, etc., should be sown in boxes or pots on a mild-hot-bed during first or second weeks in April, and grown on steadily during the six or eight weeks that must elapse before it is safe to put them into their flowering quarters. The more tender types usually grown for greenhouse decoration, as for instance, the Thunbergias, Celosias, Torenias, etc., should be sown in good time, say April at the latest, or the season will be far spent before they are in bloom.

HARDY BIENNIALS. Should be sown at an earlier date than is usually the case; much better plants can then be obtained and the wealth of bloom these will give in the Spring will amply repay. A good general rule to adopt, and one that will provide a useful timely reminder, is to make a point of sowing seeds of Hardy Biennial plants for the following year's supply at the time the current year's plants are in full bloom.

HARDY PERENNIALS. Seeds of these should be sown during Spring and early Summer, and where the convenience exists it is a good plan to sow in pots or boxes in a cold frame, transplanting when large enough to handle into nursery beds until the Autumn. Otherwise, the seed may be sown in the open ground, observing the precautions already advised as to conditions of soil, etc. Shading is important and the seed beds should be protected from full sun until the seedlings are well established.

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* * * such gardens are not made
By singing: "Oh, how beautiful!" and sitting in the shade,
While better men than we go out and start their working-lives
At grubbing weeds from gravel-paths with broken dinner-knives.

There's not a pair of legs so thin, there's not a head so thick,
There's not a hand so weak; and white, nor yet a heart so sick,
But it can find some needful job that's crying to be done,
For the Glory of the Garden glorifieth every one.

RUDYARD KIPLING.



THE best things are nearest—breath in your nostrils, light in your eyes, flowers at your feet, duties at your hand, the path of God just before you. Then do not grasp at the stars, but do life's plain common work as it comes, certain that daily duties and daily bread are the sweetest things of life.

Lord Houghton