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The delicale tints of Eruthroniums make them one of the most charming plants in a garden. The varieties here illustrated are (See pages 8 and 9.)

## CALIFORNIAN and Other West American BULBS AND PLANTS (Pages 3-12)

SINCE
1879
$30^{\circ}$

Hardy Perennials and Rock Garden Plants and Seeds
(See Pages 13 to 30)

## WILD FLOWER SEEDS

(See Page 34)

Seeds of Annuals for Fall Sowing
(See Pages 31 to 34)

## CARL PURDY, Ukiah, Calif.

## Greetings to Garden-Lovers <br> Everywhere

It is my intention tr make firm friends of Gery person who entrusts me with an wrler. I have thousants of such friends now and I fully expect to ndd rou, the first-time reader of this catalog, to that ist.
To do this I must first of all be truthful, and grow good plants and deliver them to my customers in good condition. But, in addition to this primary service, it is my practice to give close study to my customers' needs and problems, to give planting directions which will be very helpful, and still more to go as firr as a catalog an go in teaching the best use of plathts.

If $f$ add that every complaint is met in a spirit of reason, and that $I$ alwars go farther than I promise in rectifying any errors 11. orersights, have I not said enotigh ?

The cultural directions in this catalog seem to be much appreciated. To save space they are abbreviated as follows

Michaelmas Daisies. Sit. (situation), sun. Soil. any loam. Pl. (plant), October to April. Prop. (mopagate), divisions.

## TERMS AND DELIVERY

Delivery Dates: California Bulhs, except Lilies, must be ptanted in fall and I will not send ans of these later than January 1, except Lilies and Orehids mas be sent into Aarch: Lewisias any month in the rear. All Perennials can be shipped from Sept. I to Mas 1. If ordered early we can retard many things to be delivered later than May 1 . Sempervivums and Sedums can be sent throughout the year.

At the Terraces the season is fully six weeks later than about San Prancisco Bay ur Southern California. Plants like Phlox or Delphiniums, which are a foot or more high there in early April, are, as a rute, about as dormant on April 1 here as in winter. Our stock is in excellent shipping ondition until early April. In fact. I have had shipments dug in Vermont after spring "pened which were further advanced that the same things in the open ground here This is because we have many cold nights until early April, and the cold winds harden and retard growth

Carriage. 'The mice of every item includes postage prepaid. Express rates are much higher for small shipments and if exmessly ordered sont via express the carriage charges will be sour expense but extra plants are added to cove? What the postage charges would hare been. Safe delivery to any point is guaranteed. In case of loss, we reserve the right oreplace goods

Quality of Stocks. I do not grow potted plants, and the tock that I cond cut is all field-grown, hardened, and stocky I fo not belipe that better plants are sent out by anyone in America. This mas not be trua of efery item, for in growing (00 items some may fail to grow to expectations, but I think that it is true of bi far the larger number

Frrors of any surt are carefilly corrected. Do not com Hain to your frients if something seems wrong, but come trairht io ma stialight to me.


BRODIAEA See prage 4 for complete list

1. Capitata $\quad$ i. Volabilis (in bud)
2. hatiodes splendens
3. Grandiflora 11. Califormica

If upon receipt of a shipment there are any shortages wease do not make complaint for at least four days. In the ush times our office cannot keep pace with shipments and redits and explanations may be delayed a mail or two.

GOOD WILL is the disposition of the pleased customer
return to the place where he has been well treated."supreme Court.

## TO THOSE WHO WOULD VISIT MY GARDENS

My gardens are nine miles from lkiah in the mountains

 $1 t$ Weast fel*phont bufort loating likiah so somerne

## SECTION 1.

## Californian and West American Bulbs and Plants

## HARDINESS IN THE EAST AND FAR NORTH

Brodiaeas are unquestionably hardy throughout above regions.

Camassias are not only perfectly hardy, but of very easy culture at all points. Once planted they continue fine for years.

Calochortus. Section 1 and Section 2 are all perfectly hardy as is attested by many letters from widely separated points. They are especially good in rock gardens and at Poughkeepsie flowered year after year.

From New Brunswick: "I never saw anything like Calochortus amabilis to bloom." From Ithaca, N. Y.: "Amabilis does well in this climate." From Ohio: "Amabilis bloomed for six weeks and is most satisfactory." From Detroit: "Albus has been fine for years." From Bronxville, N. Y.: "Lilacinus does well here.'

Of Section 3, the Mariposa Tulips, too much cannot be said. The hardiest are Venustus oculatus, Citrinus, Vesta and Eurycarpus.

Some have had excellent success with Mariposa Tulips while some have failed. In the cold frame they are easy, and with a leaf covering there is very good chance to succeed.

An article in Horticulture (Boston) of August 1st, from a lady in Connecticut, tells of almost perfect success with all of these groups this year and with no particular care and no protection.

Fritillarias are perfectly hardy and have done well in Wisconsin.

Erythroniums are perfectly hardy anywhere, and nearly every one has been able to flower and to establish them well. Some have had remarkable success and from such distant points as Washington, D. C., Montreal, Minneapolls, and Ohio.

They are a great acquisition to Eastern gardens.
Western Lilies are all hardy anywhere in the East. Some are quite easy to grow, others need much care in planting, and failures are not due to coldness of the climate but failure to suit that particular lily, and that can be said as to lilies from any place in the world.

Lewisias are perfectly hardy. But a gritty soil and perfect drainage cannot be too much emphasized in giving their cultural requirements.

Western Lady Slippers are perfectly hardy, but all Lady Slippers are particular as to their soils

Western Trilliums are absolutely hardy and will succeed where Eastern species will.

## INDEX

In this catalog you find my combined offerings of bulbs, plants and seeds. The catalog is divided in three sections. 1. California Bulbs. 2. Hardy Perennial and Rock Garden Plants and Seeds. 3. Seeds of Annuals for Fall Sowing and California Wild Flower Seeds.

INDEX TO SECTION 1

| Allium | 3 | Lady's-Slippers, East <br> American |
| :---: | :---: | :---: |
| Brodiaeas | 4 |  |
| Butterfly Tulips | 6 | Lady's-Slippers, <br> Western ............. 12 |
| Californla Lilies | , 11 | Leucocrinum ......... 10 |
| Calochortus | 5-7 | Bog Lilies |
| Camassias | 5 | Lewisias . . . . . . . . . . . 23, 24 |
| Cat's-Ears | 6 | Lilies. Californian. . . 10, 11, 33 |
| Cypripediums | 12 | Mariposa Tulips . . . . . 6, 7 |
| Dodecatheon | 5 | Star Tulips |
| Dog's-Tooth Violets | 8,9 | S'eeds, Wild Flower.... 34 |
| Eirythroniums | 8.9 | Trientalis |
| Fritillarias | 9 | Trillium .............. 11 |
| Globe Tulips | 5 | Zygadenus |

## SECTION 2.

## Pages 13 to 30 .

Perennial and Rock Garden Plants and Seeds will be found in this section arranged in alphabetical order, with cross references to common names so that the list is an index in itself.

## SECTION 3.

Pages 31 to 34.
SEEDS OF ANNUALS FOR FALL SOWING. CALIFORNIA WILD FLOWER SEEDS. Page 34.
"If your plants are anything like your catalog they must be well worth while. The catalog is the most explicit one that I have ever read."

ALLIUMS are very attractive little bulbous plants, somewhat resembling the Brodiaea, but with 2 closer head of flowers. Perfectly hardy, easily grown, and well adapted to rock gardens or to plant with other small bulbs. Thrive in almost any soil in sunny locations. Cover bulbs two inches.

Except as noted Alliums supplied Sept. 1 to Dec. 1 only.
Acuminatum. An interesting Allium from Southern Oregon. 8 in . stems and heads of purplish red flowers. 6 cts . each; 60 cts. per doz.
Brewerii. 4 inch stems, a few broad leaves, and flower of very deep purplish red. 6 cts. each; 60 cts. per doz.
Cernumm True, The Nodding Onion, is a quite distinct and pretty species. It has a rhizome-like root rather than a bulb and quickly makes quite dense colonies with many 6 to 10 ln. flowering stems and nodding clusters of little bell-like very soft pink flowers. Likes light shade and moisture. Plant either fall or spring. 8 cts. each; 3 for 20 cts.; 70 cts. per doz.

Falcifolium, is 3 inches high, with large umbel of rosy-purple flowers. 6 cts. each; 60 cts. per doz.
Purdyii. (Eastern Lake Sp.) This delightful Allium now named in my honor is one of the prettiest. 4 to 6 inches high, the lovely umbel of flowers, pink tinted lavender. 6 cts each; 60 cts . per doz.
Unifolium is 6 to 10 inches high, with a handsome umbel of rosy-pink flowers. 6 cts. each; 60 cts. per doz.
Validum. Unlike the others, this must have moist situation. One of the most beautiful and ranks with the best of bulbous flowers. Abundant grassy foliage. Stems a foot to two feet high, with showy rose-colored flowers. Makes a large clump in time. Each 30 cts.; 3 for 80 cts.; $\$ 3$ per doz. Plant either fall or spring.

Six of one kind sold at dozen rate.

The above prices are postpaid to your door.

## CALIFORNIA CUSTOMERS NOTE!

California Law requires that Retail Sales Tax be paid on every purchase. Please add 3\% to your order, before making remittance, to care for this requirement.


Brodiaea Bridgesi

## BRODIAEA

See color plate on back cover for the beauty of these flowers, and half-tone (above) for their graceful habit.

Brodiaeas have a small bulb producing grassy basal leaves and very slender, but stiff, naked stems bear heads of waxy flowers of great beauty and lasting qualities. All are pretty. They grow exactly like Calochortus and their culture is the same as for that bulb. They are very hardy and very easy to grow. In California, they are easily naturalized in almost any soil. Plant them 2 inches deep and leave them alone. They are especially happy in the light shade of deciduous trees, in crevices in rocks, or in rough gritty soils.

Reports from many Eastern points indicate that Brodiaeas are perfectly hardy. Mr. Stephen Hamblin of Harvard Botanic Gardens lists Capitata, Lactea, and Laxa as being absolutely hardy and long-lived. As these do not differ in habits from a number of others, I would extend his remark to include all.

Brodiaeas can be shipped from September to December 1.
Culture. As for Calochortus, see page 7.
Time of Flowering. B. Capitata is one of the earliest spring flowers, coming here in March. Other species flower in April and May while Californica. Grandiflora and Purdyii flower into July.
(Harvest Brodiaeas). All of the following group must be in full sun. All flower late-late May to July.

## Brodiaeas will be shipped Sept. 1 to Dec. 1 only.

Californica is one of the two Harvest Brodiaeas, flowering in June to July. The largest and tallest of Brodiaeas, 1 to 2 ft . high, with stout stems, crowned with an umbel of 8 to 12 flowers. Very lasting. Two colors:
Deep Blue, tinted lilac. 5 cts. each; 50 cts. per doz.
Soft Lilac-Pink. 6 cts. each; 60 cts. per doz.
Grandiflora, another Harvest Brodiaea, has an umbel of a few large, glossy, purple flowers of much beauty and great lasting qualities. Naturalizes easlly in any clay soil, especially lf moist. 5 cts . each; 50 cts . per doz.

Minor. Slender stems 6 to 10 in. high with many flowered umbel of small flowers of deep violet blue in late June. New to cultivation. 5 cts . each; 50 cts . per doz.

Purdyii is low growing, say 6 inches high. The color is reddish lilac and the flower ls broadly spreading with tips of petals recurved. Very pretty. 6 cts. each; 60 cts. per doz.
Stellaris. Low growing with starry blue flowers with contrastlng white centers. A real rock garden bulb. 6 cts. each; 60 cts. per doz.

Woodland Brodiaeas. The following do well in sun but are best and last longer in light to moderate shade.

Bridgesii. See No. 3 in color plate, page 35. It is like $B$. Laxa, but with flowers widely spreading and a very fine reddlshviolet color. Makes a large umbel, at its best with as many as 50 flowers. Each 6 cts.; 60 cts. per doz.

Capitata is called California Hyacinth and has slender stems 6 to 12 inches high, capped with a close cluster of vloletblue flowers. See color plate. 4 cts. each; 40 cts. per doz.
Coccinea or Floral Firecracker. The color plate on page 35 gives its wonderfully vivid coloring. The slender stems rise a foot to two feet high and a group mingled with ferns or llke follage plants is most effective. They prefer a loose, gritty soil. Fine bulbs, 7 cts. each; 70 cts. per doz. Extra large bulbs, 10 cts. each; $\$ 1$ per doz.

Ixioides splendens is popularly known as Golden Star. See color plate. Very handsome often with very many flowers. The finest yellow Brodlaea. 5 cts. each; 50 cts. per doz.
Lactea. See picture, page 4 , and No. 8 in color plate. The flowers are cupped and milky white with green mid-vein. Forces easily and most lasting. 5 cts. each; 50 cts. per doz.

Laxa. See colored plate, No. 1. 1 to 2 feet hlgh, with very many flne blue flowers. One of Californla's finest blu. flowers. 6 cts. each; 60 cts. per doz.
Laxa, "Blue King", has deep, almost indigo blue flowers. 7 cts. each; 70 cts. per doz.

Volubilis, the Twining Hyacinth, is most interesting of all. The flowering stem begins to climb at once, and may grow up on other plants or bushes to 3 or 4 feet. Flowers are pink and very lasting. See colored plate No. 7. 10 cts. each; $\$ 1$ per doz.

Mixed Brodiaeas, 40 cts. per doz.; $\$ 3$ per 100.
GET ACQUAINTED OFFER. So that you may know them better I will send Collection, 5 finest sorts, five bulbs each, packed and named separately, for $\$ 1.00$.
Brodiaea Collection. 100 bulbs, 5 varieties, my selection, $\$ 3.50$; 50 bulbs, $\$ 2$.
Brodiaeas per 100. Vars. priced at 50 cts . per doz., $\$ 3.50$ per 100 ; at 60 cts . per doz., $\$ 4$ per 100 ; at 70 cts . per doz., $\$ 5$ per 100; at $\$ 1$ per doz., $\$ 7.50$ per 100 .

The above prices are postpaid to your door.

BRODIAEAS. I feel that these lovely and easily grown bulbs should be more planted and appreciated. Pictures do not do justice to them, but they are very charming, very easy, and as cut flowers, wonderfully lasting.

New Zealand, Jan. 1935: "You will be pleased to know that, thanks to your care, not only in packing but in catching a mail boat, the plants arrived in perfect condition without a single loss. The Lewisias already look healthy and green and are growing. The Cypripediums are in growth and are well out of the ground."

## DODECATHEON

DODECATHEONS or Shooting Stars, also called Wild Cyclamens and Cowslips, are among the finest of early flowering plants throughout the west, and are also among the high Alpines of the West. All alike form close rosettes of broad leaves, from which naked stems arise with umbels of Cyclamen-like flowers. They die down by early summer. The dry roots should be planted quite shallow, and $11 / 2$ to 2 inches depth is enough. A colony in a pocket of the rock garden is a joy. Except D. Meadia, earliest of spring flowers.

Clevelandii is, I think, the prettiest of this pretty genus. The stems are as much as a foot high, with white to soft pink flowers beautifully zoned. 25 cts . each; $\$ 2.50$ per doz.

Hendersonii, a Californian, has proved hardy in the East. It forms a rosette of handsome leaves and in earliest spring has slender stems with umbels of rose flowers. Handsome and fragrant. Dies to the ground later. Nice clumps, 25 cts. each; 3 for 60 cts.; $\$ 1.50$ per doz. Ripe roots, fall planting only.

Meadia. I flowered a beautiful form of this, the Eastern Shooting Star with which all fell in love. About 1 foot high, with broad basal leaves and rose colored flowers, cream at center and with reddish stamens. It likes a moist well drained soil and a rich loam suits it. Flowers in May or June. 25 cts. each; 3 for 60 cts.; $\$ 2$ per doz.

Patulum is a dwarf Shooting Star of great beauty and it is a gem for the rock garden. Foliage very low, stems 6 to 8 in. with quite large flowers for the genus, yellow with black beak. 25 cts. each; 3 for 60 cts.

Patulum Rose. Similar to last but very soft rose pink with white halo at center. 25 cts. each; 3 for 60 cts.

## CAMASSIAS

Whether on the Pacific Coast, in the East, or in Europe, 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 and European customers praise them highly. It is better to plant them not over 4 inches apart in masses of 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.

Leichtlinii may grow to 4 feet in height and have as many as a hundred flowers. The petals are even and form a perfect star-shaped flower as much as an inch and a half across. The flowers appear in long succession. Reports from delighted customers everywhere justify us in most thoroughly recommending all Camassias for common garden culture. There are two fine colors.

Leichtlinii Blue. The colors in those I now have range from lavender blue to aconite-blue. Very fine bulbs, 8 cts . each; 80 cts. per doz.; $\$ 6$ per 100. Immense bulbs for show effects, 12 cts. each; $\$ 1.10$ per doz.; $\$ 9$ per 100.

Leichtlinii Cream to White. Fine bulbs, 8 cts. each; 80 cts. per doz.; $\$ 6.00$ per 100. Note: The white form flowers 2 to 3 weeks later than the blue.

Quamash. Rich deep blue in color and 2 ft . high; they make showy masses in the border or for naturalizing in open spaces. The low price is no measure of their fine quality for I produce them at low cost and price them to you accordingly and no greater bulb value is obtainable. 5 cts . each; 50 cts. per doz; $\$ 3$ per 100; $\$ 25$ per 1000.

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

## ZYGADENUS

ZYGADENUS Fremontii, called False Camass, is related to the Camassias, with the same attractive basal leaves; with stout erect stems bearing a raceme of many yellow flowers an inch across and of real beauty. Hardy anywhere. It is very early flowering, and like the Camassias, adapts itself to any sunny spot with loamy soil. 10 cts . each; $\$ 1$ per doz.

## CALOCHORTUS

These are lovely bulbous plants, which are best described under the separate groups. See page 3 as to hardiness in the East.

Calochortus will be shipped Sept. 1 to Dec. 1 only.

## Section I. GLOBE TULIPS

Words convey only a faint idea of these flowers. Their form is similar, but there is a great difference in color. All are exquisite in tints and the perfection of grace in form. The plants are rather tall and slender, with leaf-wrapped stems of odd shape. They are natives of woodlands, delighting in loose soil and liking leaf-mold and light shades. At the same time, most of them will do well in heavy soils, and are fine subjects to naturalize among rocks or in shaded woods. In the East, as well as the West, they succeed very well if given the care suggested in cultural directions.

Flowering Time of Globe Tulips is late March to early May, according to locality.

Albus, Fairy Lantern, is well represented by the halftone on page 6, but the flower is longer, opening a little at the tip and pure white. I had thousands flowering here this spring, each with many branched stems bearing large numbers of flowers. Each 5 cts.; 50 cts. per doz.; $\$ 3.50$ per 100.

Amabilis, up to 15 in . high and rich yellow. See color plate, page 36 , and cut, page 6. 5 cts. each; 50 cts. per doz.; $\$ 3.50$ per 100.

Amoenus. Eight inches high. stems slender and reclining, like Albus. but a soft rose-pink. Simply exquisite. 7 cts. each; 70 cts. per doz.


Comassia Leichtlinii

The above prices are postpaid to your door.

Greencastle, Penna.: "The flowers I received from you last spring were packed so well that they arrived in better condi. tion than some of same kinds from New Jersey."


## OTHER MARIPOSA TULIPS

There are on the Pacific Coast of North America, from British Columbia to far down in Old Mexico, a wonderful series of other Mariposa Tulips. They must be seen in order to realize the superb variations. At this time I can offer only the following fine species. They flower from May to late June. Soak bulbs of this group 2 hours in Semesan solution. It prevents botrytis attacks to which they are subject.

Catalinae. 15 inches. Lovely large flowers, purest white with contrasting dark eye. Easy to grow. 10 cts. each; $\$ 1$ per doz.; 25 for $\$ 1.60 ; \$ 6.00$ per 100.
Clavatus. The largest flowered and the stoutest stemmed of all Mariposa Tulips. The blooms, which are shaped like a bowl, are often over 4 inches across, of a deep yellow, and the lower half covered by stiff yellow hairs. 15 cts. each; $\$ 1.50$ per doz.

Howellii grows about 8 inches high, bearing large white flowers with green hairs on the lower, inner portion; a wonderfully beautiful flower. 15 cts. each; $\$ 1.50$ per doz.

Kennedyii, the Desert Mariposa, is found in the Mohave desert in California to the arid regions of Arizona. The color is a dazzling vermilion. I doubt if there is a more vividly colored flower in the world. 20 cts. each; $\$ 2.00$ per doz.

Leichtlinii grows in rock masses in the High Sierras and usually not over 6 inches high, with smoky white flowers with vivid spots of almost black. Most splendid for the Rock Garden and hardy anywhere. 7 cts. each; 70 cts. per doz.
Macrocarpus is of the sagebrush regions of the Great Basin. The stem ls stiff, with exquisite lavender flowers of large size, tlnted green on the reverse. 12 cts. each; $\$ 1.25$ doz.

Plummerae is a wonderfully beautiful flower of a shade of lavender, with long, silky hairs covering the interior. A large sort with flowers up to 5 inches across. 15 cts . each; $\$ 1.50$ per doz.

Splendens rubra. This superb Mariposa Tulip has large flowers of a satiny pinkish lilac borne on 2 to 3 ft . much branched stems. Far finer than the type C. Splendens and one of the handsomest of all. 15 cts . each; $\$ 1.50$ doz.

## NITIDUS-LYALLII GROUP

Beginning at the N. E. corner of California in the Great Basin and extending into Canada and Montana is a most interesting group of Mariposa Tulips that have little resemblance to the Mariposa Tulip proper. They grow in sun in grassy meadows and in a cold region. All have a single ovate-lanceolate basal leaf and a slender stem.

Apiculatus is rare and distinct. Erect stems bear an erect cup of soft yellow, an inch across filled with fine hairs. 10 cts. each; $\$ 1.00$ per doz.
Eurycarpus has a single broad basal leaf and a slender stem 6 to 9 lnches high, with an umbel of large white or lavender on white ground flowers. In center of each petal there is a large blotch of purple. Very showy and very hardy. 10 cts . each; $\$ 1.00$ per doz.
Greenii. Rare species with large erect cup; lilac, yellow at base and filled with silky hairs. Very hardy. 15 cts. each; $\$ 1.50$ per doz.
Lyallii is still another play in the same theme. Stem is erect with a small white cup, beautifully barred within with purple. Rare and offered for the first time (1934). 10 cts. each; \$1 per doz.
Nitidus. This, too, is from 12 to 15 in . tall with a large, lovely lavender tinted flower, but without spot. 10 cts. each; \$1 per doz.

The above prices are postpaid to your door

## STANDARD CYCLOPEDIA OF HORTICULTURE <br> By L. H. Bailey.

My set has been worth thousands of dollars to me. If I could have but one gardening book it would be this. Stretch your garden budget to include this for the information it gives will save many times its cost through the years. The one universal horticultural authority. Every gardening question answered, every plant listed and described with over 4000 illustrations all arranged in one simple alphabetical order. Three Volumes, Price $\$ 15$, express prepaid.

OTHER BOOKS. I can supply all standard books. List on applicatlon


MARIPOSA TULIPS

1. Citrinus. 2. Vesta. 3. El Dorado. 4. El Dorado. 5. Oculatus. 6. Clavatus.

Rozelle Park, N. Y.: "You will doubtless be pleased to learn that the last lot of bulbs arrived on time and all did cuite well. The purple Washingtonianum Lily had about a dozen flowers, and the Fairy Lanterns all did well."

## CULTURE OF CALOCHORTUS AND BRODIAEAS IN CALIFORNIA

Drainage must be perfect. If not naturally so, raise the bed 3 inches and give a slight slope.

Soil. May be any friable loam, whether clay or sandy. Several species are native to adobe soils and none of them resent adobe if well drained. Use no manure.

Situation. All should have full sun in the cooler sections, but in the warmer interior valleys give the Globe and Star tulips light shade.

Distance and Depth to Plant. 2 in. apart gives room for development and a cover of $21 / 2 \mathrm{in}$. is sufficient.

Time to Plant. As soon after Oct. 1 as possible, and not later than Dec. 15

Water. During our winter and early spring the rains are sufficient, but if the late spring is dry, kcep the ground barely moist after April 1, and water liberally when the buds show for bloom.

Care after Flowering. If bulbs can be allowed to remain absolutely dry after flowering, leave in ground. Otherwise, it is best to dig and store dry until fall. If only a dozen or two arc to be planted use boxes 10 in . deep and these can be set aside after lipe without disturbing.

Gophers. Gophers are fond of Calochortu's and get away with too many in the garden. Either plant in scleen bottom beds or trap vigilantly.

Culture for East: See next page.

## CULTURE CALOCHORTUS-(Continued)

## EAST OF THE ROCKY MOUNTAINS

Calochortus will endure the coldest weather in the Eastern United States but suffer from premature thawing following freezing. Brodiaeas are not so affected.

In the Open Ground. The directions above apply for the East, except: Better always raise bed to insure drainage and add one-third grit to any friable loam to better insure drainage.

Plant by Nov. 15 or at least before freezing and just as freezing starts give a cover of marsh hay or leaf of 3 to 4 in, Cover should be removed promptly in spring as tender shoots cannot push through.

One customer, eminently successful with Calochortus and Brodiaeas, holds his bulbs to be planted just as ground starts to freeze. No mulch is used and in this way the bulbs do not start roots in fall, pushing leaves up into a mulch, but start naturally as ground warms in the spring and the sturdy leaf growth is uninjured by any spring frosts.

Digging and Storing. Calochortus and Brodiaea bulbs are injured by summer rains after they have ripened. As soon as ripe, dig, air in shade, and store in a dry place in paper bags without packing material.
(2) In Cold Frames. With any ordinary care, all Calochortus can be grown splendidly in cold frames. They should be treated exactly as for open beds, except the soil will be better with some leaf mold. Do not coddle, but simply protect from freezing and thawing. After ripening, keep the sashes on all summer so that they will stay dry. I have glowing reports from customers who have grown them this way.
(3) In Pots. While they cannot be forced much, they can be grown in pots fairly well as follows: Use a sandy or loamy soil, with good drainage. Plant $11 / 2$ to 2 inches apart, which will give 6 to 12 to a 6 -inch pot. Moisten the soil and put the pot in a dark place, a cellar preferred, for about six weeks, to let them root. Then bring into a warm, sunny place and water moderately. After flowering, let them ripen well and then dry off and leave perfectly dry until fall.

Note: The First group, Globe Tulip, and the Second group, Star Tulips, are all perfectly hardy in the East and are well adapted to pockets in the rock garden where they would be assured of good drainage that most of them require.

The Mariposa Tulips often give fine results in the open, while at other times they fail, very often this being due to poor drainage and wet conditions. The best species to use in the East are Venustus citrinus, Venustus oculatus, Vesta, Nititdus, Eurocarpus, Lyallii and Apiculatus, as these stand much more moisture and are practically immune to lily leat rot which might affect the others.

## DOG'S-TOOTH VIOLETS

## (Erythroniums)

The charm of these enchanting woodland plants is so well shown in color (see plate, page 1) that words seem futile. Had they no other beauty than that of the richly mottled leaves they would be well worth a place in the shady corner. 'The flowers are entrancingly beautiful, and, in these Western species, often 3 to 5 inches across, with stems as much as 18 inches high, although oftener 4 to 6 inches. The colors are in delicate tints of white, pink, cream, lavender, bright yellow and even deepest rose.

They are hardy in the coldest parts of the United States, and while they are at their best in a loose, gritty soil, rich in very old leaf mold, they also thrive in the greatest variety of clays, grits and rock soils. In woodlands, in shaded corners, or in crevices in rockword in shade, is the place to naturalize. Plant in numbers sufficient to carpet the ground.

Culture. I keep the bulbs in a cool place and in barely moist soil. When you receive them, plant at once in moist soil. When the bulbs are out of the ground, they soon suffel from overdrying. Any loamy or gritty soil will do and light shade is preferable. In planting, set the bulb upright, with 2 to 3 inches of soil covering the tip; 2 inches apart will give room enough.

Potting. One of the most experienced Chicago growers made a test of potting for me and writes: "We had the Ery. throniums in flower the first of February without any forcing except a temperature of 45 to 50 . Californicum and Hart weggii were the best." I would say that one could rely on these and all of the varieties of Californicum as well. Handle same as Hyacinths.

Dog's-Tooth Violets can be grown in pots or cold frames to good advantage. For potting, Hartweggii is best. Customers of mine in Michigan, Minnesota, Massachusetts, Ohio, or Delaware, as well as at Pacific Coast points, have had great pleasure from colonies of my Erythroniums planted in woods or other lightly shaded locations.

For naturalizing, the bulbs offered on page 9 are excellent. Seventy per cent of them will flower the first year.

Endless letters from pleased customers tell of success with Erythroniums from Montreal to Washington, D. C., and from Maine to Minnesota. That they are perfectly hardy, thrive with no special care, and stay for years is certain, and especially in all of the country north of California and east of the Rockies.

All of the Eastern species exhaust themselves by the production of endless offsets, which fairly fill the ground, while there are comparatively few flowering stems in a colony. The Western species, with one exception, have no offsets, but reproducc from seeds only, and a very large percentage of the bulbs flower the first and every year. Often there is a 100 per cent bloom. Even small bulbs flower.

Delivery September to December 1. All bulbs are packed against a journey of two months. Plant at once upon recelpt in soil that is at least barely moist. If any delay, store in a cool place.

Flowering Season of Erythroniums: All are among the earliest flowers. Hartweggii is notably early, the Revolutum group latest. The entire season is over a month, which is here from February to April 15. In the East I would say from April 1 on.

Note to those in hotter sections of the Southern States and warmer localities in California: I have never recommended Erythroniums for your regions. If you must try them, plant in the very coolest, deeply shaded situations that you have and never allow soil to completely dry out during summer.

## FIRST GROUP

Californicum has large cream-colored flowers. Leaves richly mottled. Easy to grow, and a large colony is a beautiful sight. Large bulbs, 5 cts. each; 50 cts. per doz.; $\$ 3.50$ per 100; smaller bulbs cheaper.
Californicum Bicolor (Helenae), as its name signifies, has two vividly contrasting colors. The outer half of the petals is pure white, the inner bright chrome yellow, while the stamens are a rich gold. All Erythroniums have a faint fragrance, but "Bicolor" has a pronounced and delicious fragrance, enough so that from a few sprays the fragrance is noted across a room and from a bed in the open instantly catches one's attention. It is an exceptionally good grower. Altogether one of the very best of all. 6 cts. each; 60 cts. per doz.; $\$ 4.00$ per 100.
Californicum "White Beauty". Lovely, large flowers, white, faintly tinged with cream; usually beautifully zoned with maroon at base. A high authority in Europe considers this the finest of all Erythroniums. 7 cts. each; 70 cts. per doz.; $\$ 5$ per 100.
Citrinum is rather more erect in habit, with flowers almost pure white with strongly contrasting deep citron on lower third. One of the loveliest of all. 5 cts . each; 50 cts . doz.
Grandiflorum robustum is a superb species with flowers of the brightest buttercup yellow. The leaves have no mot-tling-just plain green. It always attracts attention. 6 cts. each; 60 cts. per doz.; $\$ 4$ per 100.
Hartweggii is as pretty as Californicum, with more yellow in the flower, and each flower on a separate stalk. Very early and stands much heat. Good for pots. Large bulbs, 5 cts. each; 50 cts. per doz.; $\$ 3.50$ per 100; smaller bulbs cheaper.
Hendersonii. Like Californicum, but the flowers are a lovely light purple, with centers a deep maroon, almost black. Most striking. 5 cts. each; 50 cts. per doz; $\$ 3.50$ per 100.
Howellii is related to Citrinum, creamy with a yellow tint, but soon turns pink. 6 cts. each; 60 cts. per doz.; $\$ 4.50$ per 100.
Purdyi has flowers borne like Hartweggii, but cream colored, with a very delicate light lemon center. 10 cts. each; 75 cts. per doz.; $\$ 5$ per 100.
Purpurascens. The lovely flowers open creamy-yellow, suffissed purple and turn purple as they age. A high altitude species adapted to the East and North only. 6 cts. each: 60 cts. per doz.; $\$ 4$ per 100.
Tuolumnensis is quite new to both the garden and science. Large leaves, not mottled, and golden yellow flowers. The bulbs are very large and by off-setting form large clumps. Not too free flowering, but very distinct. 10 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100.

The above prices are postpaid to your door.

Raleigh, N. C. (1932): "Had some butterfly tulips from you several years ago and they have proven very satisfactory."

## REVOLUTUM, DOG'S-TOOTH VIOLĒTS

The stems are long, the flowers large and exquisitely tinted, often slngle, never more than four to the stem, and the leaves are mottled in white and green. While the plants thrive in garden loam, they do well in heavy soils which are quite wet in winter. See color plate, page 1 .

Revolutum. A most lovely strain, the very large flowers in delicate blendlng shades of white, tinted lavender; deep lavender-plnk; pink; hardly two alike and all most enchanting. 10 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100.
Pink Beauty is a deep lavender pink and most beautlful. It has all the vigor of Revolutum. No Erythronium excels it. 12 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100.

Rose Beauty Is like Pink Beauty, but a deep rose pink. Very striking. Flowers at least three weeks earlier than Pink Beauty. Each 10 cts.; $\$ 1$ per doz.; $\$ 7.50$ per 100.
Johnsonii is perhaps the most lovely of all Erythroniums. With the stout habit of this group, it has exquisite rosepink flowers. From the coastal region of Oregon. 10 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100.
Purdy's White ls a pure white, rather than a lavender white. It is rery richly marked at the base and has an unusually stout stem and large bold flower. An Eastern Erythronium lover writes that it was the most admired of all in her collection. 12 cts. each; $\$ 1$ per doz.
Praecox (Oregonum) is an early blooming unusually fine variety. The leaves are mottled in browns, the flowers are large and of a very fine rich-cream color, richly banded maroon. One of the finest of all. 10 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100.

## MIXTURES AND COLLECTIONS OF ERYTHRONIUMS

A Fine Mixture from those of the flrst group will be supplied at 40 cts. per doz.; $\$ 3$ per 100; $\$ 25$ per 1000 .

A Fine Mixture of the Revolutum group will be sent at $\$ 1$ per doz.; $\$ 7.50$ per 100.

First Group, Splendid Collection of 20 bulbs each of five species ( 100 bulbs), named, for $\$ 3.50$. Half collection for $\$ 2.00$.
Special 25 bulb offer, 5 each, 5 varieties, each named, $\$ 1.10$. Collection of Revolutum Varieties. 100 bulbs, 20 each, 5 sorts, for $\$ 7.50$; half collection for $\$ 4.00$.

Collections and mlxtures are made from flrst size bulbs.

## NAMED ERYTHRONIUMS FOR NATURALIZATION

We offer a smaller slze of Erythroniums for naturalizing. Experlence in our garden shows that up to 70 per cent will flower the first year. Unusual value.

| $\quad$ (Not less than 100 of a kind sold) | 100 | 500 | 1000 |
| :--- | :--- | ---: | ---: | ---: |
| Californicum, Cream ................ $\$ 1.50$ | $\$ 6.00$ | $\$ 10.00$ |  |
| Californicum Bicolor, White \& Gold. . | 2.00 | 8.00 | 15.00 |
| Citrinum, Cream and Lemon. ....... | 2.00 | 8.00 | 15.00 |
| Grandiflorum, Buttercup Yellow..... | 3.00 | 12.00 | 20.00 |
| Hartweggii, Early, Creamy ......... | 2.00 | 8.00 | 15.00 |
| Hendersonii, Lavender ............. 2.00 | 8.00 | 15.00 |  |
| Johnsonii, Rose-pink ............... 6.00 |  |  |  |

A little money spent on Wild Flower Seeds and a very llttle care will make beauty spots of your old corners. See list, page 34.

## A GROUND COVERING FOR ERYTHRONIUM BEDS

TRIENTALIS makes a most delightful covering for these beautiful bulbs. At the top of 4 to 6 in. stems is a circle of very pretty bright green leaves, and on naked stems rising 1 to 2 ln . above the leaves are many delightful little soft pink flowers which come after the Erythronlums have flowered, and last several weeks. The fine green foliage persists throughout the summer and makes a fine ground covering after the Erythronlums have dled down. Trientalis is hardy anywhere. Plant alternately with the Erythronlums and at same depth. May also be used with Fritillarias and any other little bulbous plants in shade. 40 cts, per doz.; $\$ 1.25$ for 50; $\$ 2$ per 100.

The above prlces are postpaid to your door.

## FRITILLARIAS

See color plate, inside back cover, where the beautiful tintings and markings are pictured so much more vividly than words can describe them.

FRITILLARIAS are bulbous plants of the west. The stems are leafy and most graceful, with pendent bell-like flowers. One species found in Southern Callfornia is called Mission Bells, while in other places local species are called Red Bells, Yellow Bells, or Brown or Chocolate Lilies. a name quite justifiable. as Fritillarias so closely approach true lilies in character that some spccies have been confused with them.

There are three groups of these fine plants on the Pacific Coast.

1st Group. These have slender stems with the leaves in clrcles very much like many lilies. Many flowers are bellshaped and nodding, borne in graceful racemes. The bulbs are round. flat disks covered with rice-like grains. These grains are little offsets and will grow if planted. When a bulb is dug they usually fall off and replant the bed.

Recurva is often called Red Bell and Lanceolata is often called Mission Bells. The name Mission Bells, however, rightly belongs to biflora, a species related to Group 2.

These species are woodland plants, perfectly hardy and like a porous, well-drained soil fairly rich in leaf mold.

## FRITILLARIA SPECIES

## GROUP 1

Lanceolata is from $11 / 2$ to 3 ft . high, with a few to many flowers. They are green and brown, mottled prettily. 10 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100 .
Lanceolata Gracilis. A slender sort 12 to 18 inches high, with a flower which in some lights appears to be black while in others it seems to be deep purple-brown. 10 cts . each; $\$ 1$ per doz.
Recurva much resembles a lily and is the finest of the world's Fritillarias. $11 / 2$ to 3 ft . in height with stout stems nodding at top. The strongly recurved flowers are orange scarlet, the throat flecked with yellow. 10 cts . each; $\$ 1$ per doz.; $\$ 7.50$ per 100 . See color plate on inside front cover.

## GROUP 2

The members of this group, instead of being woodland plants, are found in full sun in loam or clay solls. The leaves are few, crowded toward the base. Stems are up to 10 lnches high and bear one to five flowers which are broad, open bells. We find that they do best in full sun in any well drained loam.
Biflora. (True Mission Bell) Rare and unique with large pendant, almost black bells. 30 cts. each; 3 for 70 cts.
Glauca. Related to Pluriflora, grows to less than 10 in. Foliage is a very blue green while the flowers are broad bells of purple, marked with greenish-yellow. 10 cts. each; $\$ 1$ perdoz.
Liliacea. 6 to 10 inches high, with several large open bells. The color is a waxy white, beautiful tinted pale green. 15 cts. each; $\$ 1.50$ per dozen.
Montana. This rare new species is a dwarf, 3-4 lnches high, with dainty reddish-maroon, unspotted bells. An entirely new and novel type. 20 cts. each; $\$ 1.50$ per doz.
Pluriflora grows 6 to 12 in. high, leafy at base with many very beautlful large open bells of a lovely deep rose. Next to F. Recurva, our most beautiful Fritillaria. 10 cts. each; $\$ 1$ per doz.; $\$ 7.50$ per 100 .
Purdyii in this original form, was dlscovered and named 30 years ago, its locality lost and I am now able to offer for the first time. It is 4 to 9 inches tall with one to seven lovely large bells, waxy white, flecked scarlet. Unusually fine and very rare. 10 cts each; $\$ 1.00$ per doz.

## GROUP 3

There is but one member of this group, F. Pudica. They like full sun, perfect drainage and a light, loose soil; either sandy or gritty.
Pudica. From 4 to 6 in. high, with rather large basal leaves and erect stems, bearing 3 to 6 nodding bells $11 / 4$ to $11 / 2 \ln$. long and pure gold in color. Absolutely hardy and a gem for the rock garden. 10 cts . each; $\$ 1$ per doz.

## Very Large Bulbs of any of These at Double Price

Fritillarias have an odd habit of having two entirely different sorts of leaves. If they do not flower they have a single, very large leaf; if they do, they do not have this leap at all, but circles of leaves around the flowering stem. They are not steady bloomers, but are apt to rest the year after flowering. It is my endeavor to send only flowering bulbs, but there is no way in which I can be sure to do so.

L. Kelloggii. L. Bolanderii. L. Pardulinum Giganteuin.

L. Parviflorum. L. Washingtonianum l'urpureum.

## LEUCOCRINUM

LEUCOCRINUM montanum. "Sand Lily". A lovely hardy plant of the lily family with tufts of grassy leaves above which arise several slender stems 4 to 6 inches high, each carrying a single pure white, fragrant lily-like flower. Cult.: Sun; sandy soil, with good drainage. Plant dormant roots in fall. Plant shallow. 25 cts . each; 3 for 60 cts.; $\$ 2$ per doz.

## CALIFORNIA LILIES

In number and beauty of its Lilies, California ranks next to Japan.

Note: Magnificum and Bloomerianum are stem rooting and flower the first year. Others of the Humboldtii group and the Washingtonianum group may or may not flower the first year, but in any case require to become established before blooming freely and then produce wonderful blooms year after year. The Bog Lilies usually bloom the first year.

## LILIUM HUMBOLDTII AND ALLIED SPECIES

HUMBOLDTII. A grand Lily, growing as tall as 10 feet, but usually 4 to 5 feet high, with very stout stem and many large orange flowers, spotted with small maroon spots. This species does well in the adobe soils prevailing about San Francisco Bay. Immense bulbs 50 cts . each; 3 for $\$ 1.25$. frod. 40 cts. each; 3 for $\$ 1.00$.

HUMBOLDTII MAGNIFICUM. A good species, differing from preceding in having darker foliage, and in the spots on the flowers, each surrounded by a circle of crimson. Splendid growing and flowering qualities. It is sure to flower the first year after planting, and is a splendid grower. None better. First size, 75 cts. each; 3 for $\$ 2$ Fine flowering blubs, 60 cts. each; 3 for $\$ 1.50$.

BLOOMERIANUM. Like the preceding in color and flowering qualities, but with a very small bulb and small stem. Very pretty. 40 cts . each; 3 for $\$ 1.00$.

BOLANDERI. One of the rarest of Lilies; 1 to 3 feet high, slender, with bell-shaped, deep crimson-red flowers, dotted purple. Very strong garden grown bulbs. 90 cts. each; 3 for $\$ 2.50 ; \$ 9$ per doz. See cut.

COLUMBIANUM. Like a miniature Humboldtii. Bright golden yellow, spotted maroon, $21 / 2$ to 3 feet. Good, 30 cts. each; \$3 per doz. Very large, 40 cts. each; 3 for $\$ 1.00$.

## LILIUM WASHINGTONIANUM AND NEAR SPECIES

WASHINGTONIAUM PURPUREUM. The celebrated Mount Hood Lily of the Northwest. From 3 to 5 and often to 7 feet high with stout stems and many leaves in whorls and often with 25 flowers to a stem. The flowers are broad open trumpets opening pure white and often changing to deep wine color and are most spicily fragrant. A wonderful lily that has brought fine reports from all parts of the East where happily situated and proper care as to soil has been given. Very fine garden grown bulbs: Large size, 50 cts. each; 3 for $\$ 1.25$; second size, 40 cts. each; 3 for $\$ 1.00$. See cut.

RUBESCENS (The Redwood or Chemise Lily'). A beautiful and very distinct kind, having tall, slender stalks and exquisitely fragrant flowers of a tubular shape. In opening, they are white dotted purple, but soon change to deeper purple, and all colors between white and purple will be seen on one stem. To succeed with this, drainage must be perfect. 40 cts. each; 3 for $\$ 1$. Very large, 50 cts. each; 3 for \$1.25.

KELLOGGII is one of the most distinct as well as one of the rarest and most beautiful of the world's lilies. Except that the bulb and stem resemble that of the foregoing sorts it is entirely different. The petals are closely revolute (see picture), and the color is a delicate pink, lighter at the center, finely dotted maroon. It has a most spicy, distinct fragrance. A well grown plant will be 2 to 4 feet tall with from six to ten flowers, while $v$ fry fine specimens grow six feet high with thirty or more blossoms. Very large bulbs, $\$ 1$ each. Fine flowering bulbs, 75 cts. each; 3 for $\$ 2$.

## CULTURE OF GROUP 1.

Situation of the Lily Bed. They should be planted where they are sheltered from harsh winds. The light, high shade of deciduous trees a part of the day is desirable but a dense shade is not. Do not plant with Rhododendrons as they require more humus and moisture than these lilies like. It is not wise to plant amongst shrubs or tall perennials although their shade and protection at a little distance is desirable. I have very fine results with the Humboldtii group in full sun where temperatures of 100 degrees is not unusual. The same is true for the Washingtonianum group except that they like a little cooler situation and rather more shade.

Drainage. This must be perfect. If ground is heavy and clammy, under-drainage should be given, and the soil made lighter and looser by the addition of sand or grit.

Soils. A fairly good loam, even if a little heavy, is best. Little humus is needed and any great amount decidedly detrimental. Well rotted manure well under, but not touching the bulbs, has been used to advantage.

Planting. They should be planted so that the top of the bulb is not less than 6 inches from the surface; about each bulb put a layer of an inch or so of sand which will carry a way excessive moisture and prevent fungus attacks.

Watering. Lilles should not be kept water-soaked, but should have a moist surface during the growing season. Keep rather dry after they have flowered.

Never move a Lily bulb unless absolutely necessary.

The above prices are postpaid to your door.

## GROUP II-LARGE FLOWERED BOG LILIES

OCCIDENTALE is about the rarest of lilies. I discovered it years ago but for a long period it was lost. I am glad to say I now have found it again. It is between Maritimum and Pardalinum. Foliage is decp green and the medium sized flowers are blood red, with a few maroon dots on inner third and a beautifully contrasting green center. Likes peaty soil and moist situation. $\$ 1$ each; 3 for $\$ 2.50$.

PARDALINUM is one of the very best of all Lilies for both beauty and ease of culture. It is hardy anywhere and thrives under ordinary garden conditions either in the shade or in a cool moist situation in the sun. The rhizome branches and a number of flowering stems increases rapidly until a single rhizome forms a large clump. It grows from 5 to 7 ft . with very many flowers. The outer third of the petal is a deep orange scarlet while the inner two-thirds is bright orange, spottcd and dotted thickly with purplish maroon spots. Very large bulbs, 35 cts . each; 3 for $\$ 1.00$; $\$ 3.50$ per doz. Fine bulbs, 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz.

PARRYII. Quite rare, it is one of the loveliest of lilies. Its slender leafy stems are 3 to 5 ft . tall and bear a few to 25 very fragrant funnel-form flowers with petals slightly flaring at tips. Color is soft lemon-yellow, some flowers with faint brown spots and some without spots. It must be in shade and prefers a sandy loam soil with some humus and in cold regions should have some protection. Splendid disease free bulbs cultivated right on its native streams. Extra large bulbs at $\$ 1$ each. Fine flowering size, 70 cts . each; 3 for $\$ 1.90 ; \$ 7.00$ per doz.

PARVIFLORUM (Pardalinum var. minor) is a very pretty, slender species growing to as much as 6 feet with many blossoms. The petals are revolute like Pardalinum, yellow, finely dotted maroon at center, crimson on upper half. Quite fragrant. This is the Tiger Lily of the Mt. Shasta region. Large bulbs, 50 cts. each; 3 for $\$ 1.25$. See cut, page 10.

ROEZLII CRIMSON. Related to Pardalinum, it is more graceful with slender stems 3-5 ft. tall and slender leaves in crowded whorls. The flower has a small orange central zone, finely dotted maroon with the outer portion a rich crimson. 50 cts. each; 3 for $\$ 1.25$.

ROEZLII, YELLOW. Similar in form and habit to the Crimson form, but the color is a clear reddish orange. A rare Lily; long lost, but reintroduced by me. Each 50 cts.; 3 for $\$ 1.25$.

## SMALL-FLOWERED BOG LILIES

PARVUM. A charming little Lily which, under favorable treatment, grows 5 or 6 feet high, with many small, bellshaped flowers. It is orange at the center, with crimson tips. From the sub-alpine regions about Lake Tahoe. 40 cts . each; $\$ 4.00$ per doz.

PARVUM LUTEUM. Similar variety, with clear yellow flowers. 40 cts. each; 3 for $\$ 1$.

## CULTURE OF GROUP II.

The second group into which I would divide California Lilies as to culture comprises all of the so-called Bog Lilies. The Pardalinum and Parvum groups are so classed.

These Lilies grow naturally along the banks of small, living streams, on the borders of lakes and ponds, in deep, alpine meadows, on the borders of or on raised hummocks in bogs. Their bulbs are not so deep as the othcrs, and they are more dependent upon surface moisture. The soil in such places as I have mentioned is always rich in rotten leaves, and usually sandy; sometimes it is peat or pure humus. Low shrubs or tall plants protect surface from heat.

Drainage. The fact that they like moisture does not mean that they like a water-soaked soil. Many failures with Bog Lilies are due to this error. If the roots can go down to moisture, all the better, but don't put the bulb in wet, gummy soil.

Soil. A light, sandy loam, mixed with leaf mold or peat, is the best possible.

Situation. My description of the natural habitat will suggest the best location where large and varied grounds give a choice. On the margin of a pond or brook, planted a foot or so above the water-level in moist, meadow-like expanses in sheltered places, or damp openings in wood are ideal locations. In small grounds, a hydrant can be so arranged as to give a constant drip; the fern corner is good, and the rhododendron bed is perfectly adapted.


Trillinm sessile increases and becomes more valuable year by year.

## TRILLIUMS

Trilliums are very attractive plants of the Lily family. The forms known as Wood Lilies or Wake-Robins are well known in the East and are fine woodland plants. Of these the best is grandiflorum, to be had from most Eastern dealers. In the forms of sessile, we have an altogether different tribe and a much better one from the standpoint of easy culture and ability to hold their own for years in the garden. There is a colony of Trilliums at Ukiah which, with no care, has increased in beauty for at least fifteen years, and I have seen many such.

Time of Flowering. Trilliums are among the earliest of spring flowers.

## SOILS PREFERRED AND CHARACTERISTICS

A better plant for the shaded corner, damp woodland, border of streams where the soil is moist, or for the shaded parts of the garden, does not grow. It takes a year for them to take hold, but they will then improve for years. There is no better bulbous plant to naturalize, and I have them in perfection in gravel, loam, sandy, and heavy clay, and in each case, with no care whatever, and with our dry California summer.

SESSILE CALIFORNICUM. A strong plant a foot high, with the separate leaves $51 / 2$ inches long, by $41 / 2$ inches wide, and the petals $31 / 2$ inches long. Flowers pure white. Very fragrant. Forms masses of many individuals. See above.

SESSILE RUBRA. Of same type with flowers of rich maroon red. Strong and vigorous.

SESSILE SNOW QUEEN. A pure white form having broader petals and leaves and larger flowers. Exceptionally fine.

OVATUM. Nearly related to the Eastern grandiflorum but larger. Flowers open pure white, gradually tinge pink, and finally become deep wine-purple. Requires leaf mold and shade. For the redwood regions the best to naturalize. None of the Trilliums are finer than ovatum; the change in color is an added charm.

PRICES OF ABOVE SPECIES: Fine bulbs, 10 cts. each; 70 cts. per doz.; $\$ 5.50$ per 100. Very large bulbs, 15 cts. each; $\$ 1.25$ per doz.; $\$ 9.00$ per 100 .

PETIOLATUM. A rare species offered to garden lovers for the first time. It differs from all the others by having each leaf on a stem 2 to 3 in . long. Flowers are purplish red. 12 cts. each; $\$ 1.25$ per doz.

RIVALE. A most dainty little sort from Southwestern Oregone and very rare. The delicate mauve flowers are borne on separate stems, and the plants at most are 6 inches high. 10 cts . each; $\$ 1.00$ per doz.
PURDY'S BEST. This is a new form of Sessile with very broad leaves and broad ovate petals. Color is creamy white with deeper cream at center. 10 cts. each; $\$ 1.00$ perdoz.

The above prices are postpaid to your door.

## WESTERN LADY'S-SLIPPERS (Cypripediums)

In the Far West we have three true Lady's-Slippers, and Calypso borealis and Epipactis gigantea so closely related that they are popularly taken for Lady's-Slippers.
CALIFORNICUM is a true bog plant, found only in nature in wet bogs of the Northern mountains, or in the streams issuing from such bogs, and having a rather sandy peat soil. It makes strong clumps, with stout leafy stems 18 inches to $21 / 2$ feet high, with rather small (proportlonately) white flowers. Strong roots (divisions). 50 cts. each; $\$ 5.00$ per doz. Clumps, undivided, at 50 cts. each, plus an cxtra charge of 25 cts. for each eye over two. Such clumps hare from 5 to 20 eyes. For a real show buy a large clump rather than a number of divisions.
MONTANUM is a most lovely Orchid, found in the forest region flom Sonoma County, Calif., northerly. It is not unlike the Eastern pubescens in habit. The large flowers have white sacs and brownish sepals. Very fragrant, with the odor of vanilla. Extra strong plants, 50 cts. each; $\$ 5.00$ per doz. Clumps, undivided, of from 4 to 15 eyes at 50 c each, plus an additional charge of 25 c for each eye over two. Clumps establish more readily and are far better value than a number of separate plants.

FASCICULATUM is a low-growing sort, with much the same hablts as the preceding, but the flowers are brownish. Quite interesting. This variety is offered at the same prlces as Montanum.
CALYPSO BOREALIS is an exquisite little Orchid often taken for a Lady's-Slipper. It is almost always found either in mold and moss on rotted logs or in like soil on the ground in shaded woods. It does not root in the ground; the root is a little white bulb. It is not difficult to flower the first year. 20 cts. each; $\$ 2.00$ per doz.
EPIPACTES GIGANTEA is a strong-growing Orchid which spreads by underground runners to form large, close masses. It loves a silty loam near water, and its many racemes of brownish Lady's-Slippers are quite ornamental. Culture is not at all difficult. 20 cts. each; $\$ 2$ per doz.

## EAST AMERICAN LADY'S-SLIPPERS

CYPRIPEDIUM Pubescens grows to less than a foot $\ln$ height with handsome foliage and large slippers of light yellow. A plant of great beauty which I have been able to make happy in a shaded situation with moist soil rich in humus.
Spectabile grows much taller and stronger than the last, with large pink flowers.
Acaule has opposite leaves with a single rose colored flower of great beauty. Must have a soil and situation like Pubescens, but the soil must be acld.
Of any of above, plant with one crown, 25 cts. each; $\$ 2.50$ per doz. Strong plants, 60 cts each; $\$ 6.00$ per doz.


Cypripedium Spectabile

## HARDY NATIVE FERNS

There has been so great a call for ferns that I list here the most dependable of our Western natlve species for the fern bed, naturalizing along streams or under trees. For an effective planting one must have color with the ferns as well as strong background plants and the following are all hardy, and well proven plants for this purpose. Columbines, Aconites, Lily of Valley, Michaelmas Daisies, Trilliums, Bog lilies, Aruncus, Aralia, and for foreground colonies of Erythroniums, native Silenes, Synthyris, and for carpeting, Boyklnia, Tellima, Tolmeia, Asarum. Colonies of Erythroniums are very effective.

ADIANTUM Pedatum, Five Finger Fern. Well known and particularly lovely in the foreground. Splendid in pots or hanging baskets.

ASPIDIUM Munitum. Sword Fern. Dark green, evergreen frond that looks well at all times. Most satisfactory either in fern bed or in boxes or pots.
ASPIDIUM Aculeatum lobatum. The lace fern, and in my oplnion one of our handsomest ferns, the fronds fine cut and most graceful.

ASPIDIUM rigidum. The Soft Brake of the florlsts, soft green in color and thrives well even in dry places.

The above can be supplied in three sizes: Small, 25 cts. each, 3 for 65 cts. Medium, 50 cts, each, 3 for $\$ 1.25$. Large, $\$ 1$ each, 3 for $\$ 225$; or $\$ 2.00, \$ 4.00$ or $\$ 8.00$ per dozen.
WOODWARDIA radicans. Giant Sweet Scented Chain Fern. Makes bold plants to 9 feet hlgh of a soft green. One of the finest of background ferns. Large plants, 50 cts, each; extra large plants $\$ 1.00$. East of Rockies add $50 \%$ to price for postage.
PTERIS. The Brake. A very common fern yet one of the most pleasing of all with its soft green restful foliage. Each 25 cts.; $\$ 2$ per dozen.

Quantity prices on all ferns sent upon application.

## SEDUMS

WESTERN AMERICAN SEDUMS. Some of the lovellest of all Sedums are found on the Pacific Slope. They are not rampant as are most of the old world species but low growlng and make compact little colonies whlch remaln fine for years. Although occasionally found in sun, except Spathulifolium, they are natives of cool slopes with light to moderate shade and in gritty or sandy soil with much humus. In the garden this soil should be used and the density of shade be regulated according to warmth of the locality. You will be delighted with them.
Obtustatum. A high mountain species which forms dense colonies of thick leaves with a coppery tint. Fine. Each, 25 cts.; 3 for 65 cts.
Purdyii is the little gem of them all, with its densely crowded deep green rosettes which throw out little red threads at the end of which are the tiny new plants. Each 25 cts.; 3 for 65 cts.
Spathulifolium has lovely little rosettes of blue green, of ten tinted much with reddish bronze in winter whlle the yellow flowers are on red tinted stems in spring. Makes lovely little colonies among rocks in either sun or shade, the colonies shaping themselves to the contour of the stones. Each, 25 cts.; 3 for $65 \mathrm{cts} . ; \$ 2$ per dozen. (See pleture, page 17).
Yosemitensis. As it is confined almost entirely to the Yosemite National Park, it is perhaps the rarest of all Sedums to cultivation. The lovely little rosettes ln close colonies are more open than in Spathullfolium, pale green, margined bronze. Outside its rarity it is a gem among Sedums. Each, 50 cts.

## CULTURE OF CYPRIPEDIUMS

They must always be in shade and in Callfornia very dense, complete shade. Best soil is natural woodland soil but to prepare use $1 / 2$ gritty or sandy loam, $1 / 2$ leafmold, preferably from conlfers, or finely screened peat moss, rotted wood or chopped sphagnum. In dry regions a l-inch mulch of pine or redwood shavings. Cover crowns but 1 inch. Constant moderate moisture is essential. Soil should be neutral or acid and for Californicum and Acaule must be acid.

The above prices are postpaid to your door.

## SEEDS

of

## PERENNIALS AND ROCK PLANTS

Of every plant that will come true flom seed, you will find seeds offered in the following pages along with the plants.
The seed is either that of finer specimens saved here in my own garden or is a portion of the seed I buy for my own sowing. Superior in every case.

## SEEDS OF ANNUALS FOR FALL SOWING See pages 31 to 33

## CALIFORNIA WILD FLOWER SEEDS See page 34



## SECTION 2.

## Hardy Perennial and Rock Plants

Old world gardeners have long recognized the importance of Hardy Perennial Plants in the garden, and here in America we are coming more and more to appreciate their great value. Long lived, with moderate care they bring a maximum of beauty over a long period. They range from the tiniest alpine to the stately plants for the background of the border. Careful selection will give a wealth of flowels from earliest spring to late fall, with a few even in winter. They are most effective planted in groups, in smaller gardens, 3 to 6 of a kind; in large gardens, in groups of a dozen.

Old friends will find a change in the arrangement of this catalog. All plants suited to rock gardens and all border plants are now listed alphabetically in this section so that you will not be bothered consulting an index to find plants of various types. The text, and stars before items will indicate the purposes for which each plant is suited.

SPECIAL OFFER: Where selection of varieties is left to me I will give $\$ 6$ worth of plants for $\$ 5.00$; $\$ 12.50$ value for $\$ 10.00$. For larger amounts $25 \%$ additional value will be sent. Such selections can be made for: Perennial Border; Rock Garden; Shaded and Difficult Corners. Just state your problem and soil, and other conditions when ordering.

ACHILLEIA, Millfoil or Yarrow. A group of splendid plants whose charm is not fully appreciated. They make low broad masses of finely cut evergreen foliage that is attractive throughout the year while the flower masses in season are equally attractive. Very drouth resistant. Splendid for border and rock garden. (Cult: Sit., sun, very heat and drouth resistant. Soil, any, even rocky. Pl. Fall to Spring. Prop., Div.)
*Ageratifolia has pretty silvery foliage and white flowers on 12 in . stems in June-July.
*Nana makes dense and vely pleasing mats of soft green feathery foliage with white flowers on 10 in . stems in June to July.
*Tomentosa. July to Sept. Very dense nice green, woolly foliage masses 3 in. high with fine bright yellow flowers borne just above the foliage.
*Urbellatum. Leaves are not feathery but are beautifully cut and of an attractive silvery grey in masses 3 to 4 in. high, surmounted in June to July with corymbs of white flowers on 10 in . stems.
Ptarmica The Pearl. Pure white double; blooms all summer on 15 in. stems. Valuable and lasting in border and cut.
Millefolium Roseur. An effective border plant with dense heads of rosy pink flowers on 18 in. stems. July-Oct.
All at 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz.

ACONITUM Spark's Var. is a very fine Monks Hood, plants closely allied to Larkspurs, and they have hooded flowers and bulbous roots. This variety is 2 to 3 ft . high with the flowers a lovely deep blue coming in late summer. Cult: Cool moist situation in sun to moderate shade: Soil. a rich loam. Pl., Fall is best, can plant in spring. Prop., offsets. 30 cts . each; 3 for 75 cts.

AETHIONEMA, Persian Candytuft. Most fascinating dwart rock plants which are in reality tiny shrubs, and most valuable in the rock garden, odd corner or border. Bluish green leaves and woody stems, bearing an umbel of most charming flowers, May to June. They are treasures in bloom and the evelgreen foliage most attractive the year around.
*Coridifolium makes a prostrate mass of pretty foliage a foot or so across and a solid mass of deep pink flowers. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
*Grandiflora bears its flowers in erect spires as much as 18 in. high. Color is a glowing rose and a plant in flower a delight to the eye while foliage is always handsome. 40 cts. each; 3 for $\$ 1$. Seeds, pkt. 25 cts.
*Persicum. Quite similar to Coridifolium but the foliage more bluish and the flowers very soft pink. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
*Pulchellum makes a flattish half trailing mass a foot or so across, with many clear rose pink flowers. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
*Warleyense makes a very compact many branched mass to 16 in. vide and a foot high. The very many deep rose flowers make a most arresting sight in the garden and is any Aethionema could excel this does. 75 cts. each.
Cult: Sit.. sun, thrive in a hot dry place. Soil. deep and any loose and well drained. Prop., seeds ( 2 years to flower:) or cuttings. Pl., Fall to spring. Shear flowering stems tr foliage at once after flowering.
*ALLIUMS. Native Californian. make internsting colonies in the rock garden. See page 3.

Chevy Chase, Md.: "The Brodiaeas sent my last year were so lovely that I can't resist ordering more."

[^0]*ALYSSUM. Early spring flowers with neat low masses of greyish foliage. Unexcelled for rock garden or low border masses. Drouth resistance. Soil, any; Sit., sun; Prop., seeds.
*Saxatile Compactum. Profuse masses of bright yellow flow ers in very early spring. One foot. 25 cts. each; 3 for 65 cts. Seeds, pkt. 15 cts.
*Serpyllifolium. Dwarf, 4 to 5 in. high with pale yellow flowers and woolly foliage. Charming. 25 cts. each; 3 for 65 cts. Seeds, pkt. 20 cts.
*Moellendorfianum. 15 in.'erect leafy stems bearing long racemes of deep yellow flowers through May and June. Plants, 25 cts. each; 3 for 60 cts. Seeds, pkt. 25 cts.

ALSTROEMERIA, Peruvian Lily. Of the lily family with rambling fleshy roots which in time make a colony. Grows 2 to 3 ft . high with many stemmed clusters of real beauty. Most excellent cut flowers. Flower June to August. Considered tender in the East, but W. N. Craig writes that he has wintered in the open for some 20 years. A heavy protection of straw and ashes should keep them safe anywhere in the U. S., but may be planted in deep pots and taken inside in fall. Plunge pots in soil in open. Cult: Sun to light shade; perfect drainage; a good loam well enriched with well rotted manure and ample moisture. Set roots flat, covering three inches. Seldom flower first year and should never be disturbed. Pl., fall to spring.

Aurantiaca. Flowers a beautiful orange yellow spotted brown. 30 cts. each; 3 for 75 cts.; $\$ 2.50$ per doz.
Chilensis Pink Hybrids. Years of breeding has given us this splendid strain of lovely pink shades. Given a rich compost with liberal addition of cow manure they are glorious beyond all words. Where they will have constant moderate moisture during the growing season they are fine in pots. Fall delivery only but in cold region they may be notted and stored barely moist. 40 cts . each; 3 for $\$ 1.00$.

AMARYLLIS belladonna. 2 ft . with large pink flowers. In colder climates, glow in pots. 30 cts. each; 3 for 75 cts.

ANCHUSA Italica. Showy border perennial, with turquoise blue flowers. June to Acg. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
*ANCHUSA Myosotidiflora (Chinese Forgetmenot). Acclaimed by all who see it, it is a delight in any shaded border or rock garden, flowering for weeks in spring and again in fall. The exquisite clear blue forgetmenot-like flowers are in airy 12-18 in. sprays above the large heartshaped leaves. Sit., light shade; Soil, good loam, well drained but always moist. Prop., seeds. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
**ANDROSACE Chumbyii. Rock Jasmine. Fascinating colonies of tiny silvery evergreen rosettes to 12 in . across, the flower heads of soft pink on slender 3 in. stems, MayJune. Sit., sun or light shade; Soil, good loam with humus (lime lovers) always moist to give cool rootage: Prop., div. 40 cts. each; 3 for $\$ 1$.

ANTHENilS Sancta Johanna. Has the most vivid orange flowers I have ever seen. Two ft. high with erect stiff stems, the large center and short rays of the blooms a uniform bright orange. Plants, 35 cts. each; 3 for 90 cts. Seeds, pkt. 25 cts.

ANTHEFICUM. Fine border plants of the lily family with long grassy leaves at base and stout flowering stem with graceful sprays of pure white fragrant flowers, May to July. Cult: Sun or partial shade; deep rich well drained soil with good moisture. Pl., fall to spring. Prop., divisions.

Liliago, St. Bernard's Lily. 2 to 3 ft . strong growing with pure white fragrant flowers. 35 cts. each; 3 for 90 cts.
Lileastrum (Paradisea Lileastrum), St. Bruno's Lily. 26 to 24 inches high, pure white. 30 cts. each; 3 for 75 cts.

The above prices are postpaid to your door.

* Indicates plants well suited to rock gardens.
** Indicates plants suited to the rock garden only.



## Long Spur Columbines

## AQUILEGIA, Columbines

AQUILEGIA, Columbine. These remarkably beautiful and graceful plants with most charming flowers are so well known as to need little description. With handsome foliage, fine flowers and ease of culture, few flowers satisfy so many needs. Then, too, they harmonize with most anything and are particularly beautiful with ferns and woodsy things. They give color effects in deepest shade where it is so valuable. Cult: Sun or shade, but are finer and last much longer in shade. Soil, any, but finest results obtained with a rich, well drained loam. Pl., fall to spring. Prop., seeds. Seeds should be sown in fall or very early spring. Seeds offered are the finest strains obtainable.
"My Choice" Long Spurred Hybrids. Huge flowers in a balanced mixture of all colors with many colors possessed by no other strain. Simply superb. Plants, 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts . $1 / 16 \mathrm{oz} .80 \mathrm{cts}$.
Dobbie's Imperial Hybrids. A marvelous strain of long spurred columbines in a full range of finest shades in all colors mixed. Seeds, 25 cts. per pkt.
Long-Spurred Blue Shades. The finest strain I have ever seen with flowers often 2 inches across. Seeds, only, 25 cts. per pkt.; $1 / 16$ oz. 65 cts.
Long-Spurred Pink Shades. Of the same strain as preceding but in marvelous shades of pink. Seeds pkt. 25 cts.; $1 / 16$ oz. 75 cts.
Coerulea Mrs. Nicholls. The lovely Colorado Blue Columbine in a form easily grown without petting. Really choice. Seeds, pkt. 25 cts.
NOTE: Nice smaller plants of each of above most of which will flower next spring, ready in Oct. 25 cts . each; 3 for 45 cts.; $\$ 1.50$ per doz.; $\$ 10$ per 100.
Longissima. My favorite of all Columbines; it has soft yellow flowers with extra long spurs, even to 5 in. Pkt. 30 cts.

## WEST AMERICAN COLUMBINES

*AQUILEGIA truncata. Lovely woodland species with rather short spurred flowers, red outside and yellow at center. Fine for woodsy corners. 25 cts. each; 3 for 65 cts.; $\$ 2.00$ per doz.
*AQUILEGIA eximea. A delightful large flowered Columbine that flowers in mid-summer, the flowers, scarlet with yellow center. It loves a cool wet place, sun or shade. 25 cts. each; 3 for 65 cts.
*AQUILEGIA or COLUMBINE is a little large for the small rock garden but in the medium to large one produces delightful effects.
*ARABIS Alpina. 6 in . Dense foliage masses of blue green, always neat with sheets of white flowers in early spring. Splendid for rock garden or low borders or edgings. Drouth resistance. Soil, any well-drained; Sit., sun; Prop., seeds. 25 cts. each; 3 for 60 cts.; $\$ 2$ doz. Seeds,
20 cts. pkt.

ARALIA Californica, the California Spikenard. A large and stately plant with pinnate leaves 3 to 4 ft . long and its creamy flowering spikes 5 to 6 feet. A marvelous background plant in moist situations in either sun or shade. Large roots, 75 cts.
*ARENARIA gives us some of our very finest dwarf growing, creeping plants. Splendid in the rock garden and the finest of plants between flagging or stepping stones. Cult: Sit., sun. Soil, any not too wet. Pl., fall to spring. Prop., div.
*Balearica (Baby Tears). An emerald mat $1 / 2 \mathrm{in}$. high of tiny emerald green rounded leaves with myríads of tiny white star-like flowers in May. A lovely carpet between or over rocks. Must have shade and constant moisture. 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz.
*Caespitosa, often called Japanese or Iris Moss, is $1 / 2$ inch high and makes a dense moss-like carpet and is often mistaken for moss. Tiny white flowers in summer. Its vivid green is most satisfying as a ground cover, in pockets in the rock garden or between flagging. 25 cts . each; 3 for 65 cts. $12-i n$. square which will make many small divisions for $\$ 3$.
*Grandiflora is quite different. It, too, has bright green needle-like leaves to make a fine cushion, the mass of foliage is 6 to 8 in . high and it will of ten make a dense mound to 2 ft . across. Its white flowers are borne in great profusion in May and at intervals throughout the summer. One of the best of rock plants. 30 cts . each; 3 for 75 cts.; $\$ 2.50$ per doz.
*Montana is again different. Close tufts of deep green ovate leaves with masses of silvery white flowers April to May. Wonderful to drape over the crest of a rock. I rate it among the 12 finest rock plants. 30 cts. each; 3 for 75 cts.
*ARTEMISIA frigida. Bushy evergreen plants 1-2 ft. tall. Its great beauty is in the shimmering silvery foliage throughout the year. Rare. Each 50 cts.
ARUNCUS Sylvestris, Goats Beard. Splendid strong growing Western native plant allied to Astilbes and Spirea. 3 to 6 ft . much branched, with handsome pinnate leaves and stout stems, crowned in July with a fleecy mass of cream flowers. Admirable for the shaded spot with ferns and fine as a background in the open border. Cult: Sun or shade. Soil, any loam but responds to ample moisture. Pl., fall or spring. Prop., div. 40 cts. each; 3 for $\$ 1$.

ASARUM, Ginger Root or Snake Root. Fine Californian woodland creepers or ground covers, thriving in deepest shade. They have very large heart-shaped leaves of deep green. The flowers appearing under the leaves in spring are queer long-tailed affairs resembling a snake's head and are reddish brown. The plant has a strong glnger odor. They combine well with ferns and other woodland plants.
Caudatum. Its many branches root at the joints so that it soon makes a broad spreading not too dense ground cover like a bed of glant violets. 15 cts each; $\$ 1.50 \mathrm{doz}$.

ASCLEPIAS tuberosa, Butterfly Weed. A most attractive many-branched plant 2 to 3 feet high, crowned in midsummer with umbels of brilliant orange flowers. Most noticeable. Cult: Sun, sandy loam, and stands drouth. Pl., fall to spring. Prop., seeds. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.

## ASPERULA, Woodruff.

* Cyananthina. Unusual and strictly fine, it makes a dense mass 10 in. high composed of slender branches covered with light green slender leaves and for weeks in summer is crowned with a filmy mass of tiny white flowers. Sit., sun or light shade. Soil., any. Moisture desirable for finest effect. A delight throughout the summer and neat. 25 cts. each; 3 for 65 cts.
*Odorata (Sweet Woodruff or Waldmeister). Grows to $8 \ln$. and spread underground to make an open carpet. A delightful ground cover especially with such plants as Columbines, Heucheras and like heights. Foliage is a delightful bright green and the small white flowers dainty. Loved by everyone. Cult: Sit., light to deepest shade. Compact in sun, but keep moist. Pl., fall to spring. Prop., div. 25 cts. each; 3 for 65 cts.

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* Indlcates plants well suited to rock gardens.
* Indlcates plants suited to the rock garden only.

Germantown. Penn.: "The Calochortus albus and amabilis both bloomed. Camassias seem to do well in this climate as the same bulbs have flowered three years."
*ASTER Alpinus Goliath. In my rock garden and border In May and June nothing more attracts visitors than lts showy 2 in. discs of blulsh violet flowers on erect 10 in. stems. The low leafy basal mats of foliage are always neat and thrives in a mellow loam soil. 30 cts. each; 3 for 75 cts.

ASTER, Michaelmas Daisies. Lovely autumn flowerlng plants of inestimable value in the border and for cutting, or in a border all their own. In the mixed border they blend well with anything. Cult: Sun or light shade in warmer cllmates. Soil, any but a rich loam ls best; ample moisture. Pl., fall to spring and most effective in groups of 3 or more of a kind. Prop. dlvisions. divlde every year.

## Following are exceptlonally fine varletles:

ASTER, "Burbank's Charming". Llttle dld I dream when I introduced this as a novelty In 1929 of its increasing popularlty from year to year or of the joy it would bring to countless vlsitors here in late August and September. Its stout bushes are $3-4 \mathrm{ft}$. tall, much branched with lovely arching one sided fan-like sprays of soft pink flowers; a stunning mass in any garden and most effective cut. 40 cts. each; 3 for $\$ 1.00$.

Novae Angliae Asters are stately plants 4-5 ft. high with strong erect stems branching only at terminals. Following varieties are 30 cts. each; 3 for 65 cts. and are tops. Hilda Morris. Purple-violet.

Lil. Fardell. Rosy pink.
Mrs. Raynor. Rosy crimson. Rare. 30 cts.
Rosea superba. Almost red.
S. T. Wright. Rich purple.

Novae Belgiae Asters make leafy much branched bushes of soft foliage literally smothered with flowers throughout. Graceful and charming. Following are 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz. (except as noted otherwise):

Anita Ballard. Distinct, fluffy, soft lavender.
Chamissonis. $31 / 2 \mathrm{ft}$. Native variety. Sky-blue. Very fine.
Effie. Compact 3 ft . plants smothered with the large discs of clear azure blue. 30 cts. each.
Hon. V. Gibbs. 2 ft ., tiny blue.
Jas. Kelway. Tall, deep blue.
King of Belgians. 4 ft . Seml-double lavender. Very fine.
Mary Purdy, 3 ft , deep blue.
Mrs. D. Evans. 4 ft ., azure-blue.
Skyland Queen. 4 ft . Lavender. Very fine. 30 cts. each.
Ericoides Starshower. 2-3 ft. White, starlike flowers.
Tartaricus. 5-6 ft. Bright violet.
Boltonia.
Asteroides. 5-7 ft., white. Late.
Prices (except as noted) : 25 cts each; 3 for 65 cts.
Collection: 1 each, 19 varieties, each labelled $\$ 3.75$.
*NEW DWARF MICHAELMAS DAISIES. Dainty compact plants, none over 12 inches high, and with the soft green follage of the Noviae Belgiae type and shimmering masses of bloom in September, these lovely dwarf hybrlds fill a long felt need for low growlng flowerlng plants at this season when there is such a scarcity.

Countess of Dudley. 15 in . Charming clear pink with contrasting yellow eye. Highly effective.

Daphne. 15 in. Very soft pink in fine sprays.
Nancy. 12 in. Loose discs of true sky-blue. Fine.
Niobe. 8 in. Dwarf, compact; pure white flowers.
Prices of any of above: 30 cts. each; 3 for 75 cts.
Collection Dwarf Asters, 8 plants, 2 each, 4 sorts, $\$ 2.50$.


Aubrietia
*AUBRIETIA. One of the most valuable rock plants. The mounds of slightly greyish foliage are smothered with the bright and attractive blossoms from early spring and on into the summer. In warm climate from late winter on. No plant gives a finer early effect to the rock garden or on well drained banks or for border edglngs. Cult: Sit., sun, stand drouth well. Soil, any. Pl., fall to spring. Prop., seeds.
Purdy's Large Flowered Hybrids. Brightest colors, 25 cts. each; 3 for 65 cts. Seeds, pkt. 20 cts.
Leichtlinii. Compact rosy-carmine. Seeds only (about 50 per cent true but the othels are fine) pkt 20 cts.

## BELLFLOWERS. See Campanulas.

*BELLIUNi Minutum is the tiniest of all daisies. Its tufts are barely $1 / 2 \mathrm{in}$. high and 2 in . across. The dainty little single flowers are white tinted pink on stems 2 in. high. Flowers all summer. Cult: Sit., sun or light shade. Soil, any good, but never dry. Pl., fall to spring. Prop., div. 25 cts, each; 3 for 65 cts.

BITTERSWEET. A splendid climber with brilliant scarlet berries. Each 60 cts.

## *BLEEDING HEART. See Dicentra.

## *BLUE-EYED GRASS. See Sisyrinchium.

*BOYKINIA occidentalis forms a neat clump with brlght green, ivy shaped leaves. The flowers are filmy white panicles on stems to 18 in . and are fragrant. Admirable for heavy shade with moisture or on stream margins or in other moist spots. Flowers in May. Cult: Sun or shade. Soil, any if moist. Pl., fall to spring. Prop., div. 25 cts. each; 3 for 65 cts.
*BRODIAEAS in little groups of 3 to 6 bulbs. add a most delightful late spring effect to the rock garden. See under bulbs, page 4.

## *CALIFORNIA FUCSHIA. See Zauschneria.

*CALOCHORTUS of the Globe and Star tulip forms dotted into the rock garden are truly enchanting. See page 5 .

CAMASSIAS in bold groups in the borders will be a source of enchantment for many weeks in late spring. Ser page 5.

CAMPANULA, Bellflower. One of the most beautiful of plants and almost indispensable in the garden and rock garden. There ale rery many species but here I deal with the dwarfer ones suited to the lock garden, but the list is ly no means exhaustive as there are over a hundred dwarf species. Campanulas will not do for the dryer or sun baked situations of the rock garden but if there is a north or east exposure and if moisture can be kept moda'ate no rock plant excels them in dainty loveliness. Lovely for border edgings. Cult: Sit., a north or east
exposure, or partial shade. Soil, a good loam. Pl., fall to spring. Prop., seed or divisions. All of the spreading sorts are best for biennial dividing. I divide such each year.
*Carpatica Convexity. 6 in. Compact tufts a foot across. Quite large flowers of medium mauve-blue with distinct white markings on the divisions, the petals reflexed to form a large star. New and a delight. 50 cts. each.
*Isophylla is another trailer and most lovely. Open mats are as much as a foot across, the stems covered with the large saucer shaped blue or white flowers from July to frost. Perfectly hardy from Calif, to Washington but might suffer in the East without some protection. Cut back to ground just before frost. A real gem in a cool situation but enduring not too hot a sunny situation. Isophylla Alba in pure white; Isophylla Mayii in fine blue at 50 cts. each.
*Garganica. Emerald green tufts, the flowers medium blue stars with white eye. 30 cts . each; 3 for 75 cts.
*Garganica erinus. Most dainty, with tufts, less than 2 in. high, of heart shaped glossy leaves and star-shaped flower of soft blue just above foliage. 30 cts. each; 3 for 75 cts.
*Istriaca. Tufts similar to Erinus but color is a most lovely china-blue. Rare. 35 cts. each; 3 for 90 cts,
*Muralis Bavarica. From a dense low spreading foliage masy arise 5 in . stems on which are borne the 1 in . bells, making a blue purple mound from June on for many weeks. 30 cts . each; 3 for 75 cts.
*Poscharkyana. From Siberia comes this lovely and entirely new campanula. There is a neat basal tuft and from this spread many 10 in . trailing stems studded with pale blue star-like flowers. If cut it flowers three times, May, July and September. 30 cts. each; 3 for 75 cts.
*Pusilla (Caespitosa) is another real gem in very dwarf plants. Spreading to make a very dense mass hardly 2 in. high, the nodding blue bells are carried on erect 4 in. stems well above foliage appearing from July to October. A delight in a cool pocket in rock garden. 30 cts. each; 3 for 75 cts.
*Pusilla alba. A pure white form of preceding. Same price.
*Pseudo-Rainerii is rather finer than Rainerii and unlike it, quite easy to grow. It is a dainty, compact and quite miniature tuft $11 / 2$ in. high, with the large fine, blue flowers borne above the foliage. July to Aug. 35 cts. each.
*Rotundifolia. A clump of very many slender but erect 12 to 18 in . stems bears a mass of rather broad blue bells from late May to June. It is far the best form of the many Rotundifolia varieties. Stands shade. 25 cts. each; 3 for 65 cts.


Calochortus

[^1]*CANDY-TUFT. See Iberis.
CATANANCHE Coerulea. A most effective garden and cut flower, it bears heads of pretty deep blue flowers on 18 in . stems in profusion from July to Sept. 25 cts. each; 3 for 65 cts. Seeds. Sow spring or summer. Pkt. 20 cts.
*CERASTIUM tomentosum. Prostrate creeper wlth silvery foliage and white flowers in May to June. Splendld to cover banks or to tiail from walls. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
*CERATOSTIGMA Plumbaganoides, makes a close mass 6 inches high and undisturbed becomes quite large. On longer stems many plumbage blue flowers appear from late summer on. A striking blue and a wonderful plant for fine late rock garden effects. A splendid border plant as well. Cult: Sit., sun. Soil, any rlch loam. Pl., fall to sprling. Prop., div. Each 25 cts.; 3 for 65 cts .

CHEIRANTHUS Allionii. The lovely Slberian Wallflowers give masses of deep orange in winter and spring. Sow seeds any time. Seeds only, pkt 15 cts.

CHEIRANTHUS Allionii Golden Bedder. Is identical with the above except the flowers are brighter gold. Pkt. 15 cts.

## CHRISTMAS ROSES. See Hellebore.

CLINTONIA Andrewsiana. A Califormian woodland plant with 5 to 6 broad. emerald green leaves in a rosette 7 to 14 inches across, and a spike 15 to 30 inches high of red lily-like flowers, followed by berrles of most intense glossy purple lasting long. One of those plants that is worth a lot of trouble to grow well. Cult: Shade to delise shade. Soil, loam rich in humus and elther neutral or acid. Pl., dormant roots in fall only. 30 cts each; 3 for 75 cts.

## *COLUMBINE. See Aquilegia.

*CONVOLVULUS Mauritanicus. One of the finest of plants for the rock garden or hot banks. A low broad tuft a few lnches high and often two feet across bears very many large clear blue morning glory flowers from June to frost. A little trimmlng keeps lt in place although it never seeds or spreads by under ground runners. Has wintered for years at Poughkeepsie, N. Y, and on Long Island and is hardy from Phlladelphia southward. Cult: Sit., sun. Endures heat and drought but better for some watering. Soil, any well drained. Prop., rooted cuttings. Pl., fall to spring. Spring ln East. I would not be without it. 25 cts . each; 3 for 65 cts . Seeds, pkt. 25 cts .

CONVOLVULUS Cneorum. A splendid shrubby Morning Glory suited to the Pacific Coast and the South. 1-2 ft. tall with silvery foliage and quite large white flowers, flushed with pink. Each 50 cts.

COREOPSIS Perry's Semi-Double. Imagine this popular perennlal with flowers like seml-double roses on neat bushes 20 to 30 inches high, the golden yellow flowers $21 / 2$ inches across on long, slender stems, throughout the summer. Lovely as cut flowers. Cult: sun. Soil: a good loam. Pl., fall to spring. 30 cts. each; 3 for 75 cts.

COREOPSIS Double Sunburst. Full double golden flowers on long stems from mid-summer until frost. Plants, 30 cts. each; 3 for 75 cts . Seeds, 20 cts . pkt; $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.


Daphne Cheorum


Sedum Spathulifolium
Campanula Pusilla Alba
Campanula Rainerii

COREOPSIS Mayfield Giant. By all odds the largest, deepest colored single flowered garden and cutting variety Sow iall for early bloom or spring. Seeds, pkt. 15 cts.; 1/4 oz. 35 cts.

CYNOGLOSSUM grande, Hounds Tongue. A Californian plant related to Anchusa. A handsome plant, especially in moderate shade. Leaves in broad basal clump, the many flowered branching stem rising 1 to 3 ft . Lovely For-get-me-not flowers of fine blue with white ring at center Early spring. Sit., light shade. Soil, any well drained. Pl., dormant roots in fall. 25 cts. each; 3 for 65 cts. Very large roots, 50 cts . each.

## COWSLIP. See Dodecatheon.

CYPRIPEDIUM, Orchids. See page 12.
*DAPHNE cneorum. A very dwarf evergreen shrub with prostrate stems not over 15 inches high but often two feet across. The head of bright pink flowers completel. smother the plant, not only in early spring. but again in autumn, and are fragrant. Cult: Plefers a well drained sandy loam and in the East full sun; in the West light shade is best. Pl., fall to spring. One year fine plants Daphne must be mulched heavily to keep roots cool.

Plants $10-12 \mathrm{in}$. spread, $\$ 1.25 ; 8-10 \mathrm{in}$. spread, 75 cts. each; Small plants, 6-8 in. spread, 50 cts . each.

## COLOR FOR HEAVY SHADE

Cynoglossum, Mertensia virginica, Corydalis, Hostas, Columbines, Dicentra, Delphinium nudicaule, Mimulus cardalinus, Clintonia. Trilliums, Tradescantea. Iris Purdyii and Iris douglasiana, all flower well in deepest shade and give real color to such difficult situations. Intersperse these suggestions with a variety of ferns using the noble background plants, Aralia Californica, Aruncus sylvestris, and Saxifraga peltata and you will have a shaded planting par excellence.

[^2]
## DELPHINIUMS

The usefulness and beauty of the Delphinium is well known for they are the most popular of all perennials. Justly so, too, for what gives more stately garden masses or a longer successlon of fine cut flowers? Give them a well-drained, rich soil and moderate moisture, and plant 18 to 24 inches apart to give plants plenty of air and light. Manure is the best fertilizer but they respond to any nitrogenous fertilizer.

PACIFIC GIANT DELPHINIUMS. Finest in the world is the verdict of all experts and I confine my offer to this strain to give my customers the best. Outstanding in all respects; practically 100 per cent double, the flowers $21 / 2$ to 3 inches across, beautifully spaced in long spikes. Thin wood stems, 60 to 90 per cent mildew resistant and most remarkable, they come 90 per cent true from seed to color series described.

King Arthur Series. Brilliant royal violet with white bee. Outstanding for show and cut flowers.

Guinevere Series. Light lavender pink with white bee.
Summer Skies Series. Clearest light blue with white bee. Clear white. Pure white, large size, full double; thrifty.

Plants of above: 25 cts. each; 3 for 65 cts. $\$ 2.50$ per doz.
Seeds: Large pkt. $\$ 1.25$; small pkt. 65 cts.
Pacific Giants Mixed. Many lovely shades. Plants, 25 cts.; 3 for 65 cts.; $\$ 2.50$ per doz. Seeds, pkt. 60 cts.; large pkt. \$1.00.

Galahad Series. This 1939 novelty has clear white flowers averaging 3 ln . across, of splendid texture; pyramidal splkes with perfectly spaced flowers. Strong whippy well branched stems and highly mildew resistant. A white on a par with the largest, strongest Delphiniums and excelling many of them. Seeds only, pkt. $\$ 1.25 ; 1 / 2$ pkt. 75 cts . Plants, 25 cts.; 3 for 65 cts.; $\$ 2.50$ per dozen.

Belladonna Type Delphiniums are 2-3 ft. tall, hardy and everblooming and thrive $\ln$ warm and windy climates where the tall ones usually fail. They are the finest of all delphinlums for cutting. Plants, 25 cts. each; 3 for 65 cts ; $\$ 2$ per doz. Seeds, pkt. 20 cts .; $1 / 16 \mathrm{oz} .50 \mathrm{cts} .$, in the two following finest varieties. Seeds sown early flower first summer.
Belladonna improved. Exquisite clear turquoise-blue.
Bellamosum Improved. A beautiful shade of dark blue.
Chinensis Delphiniums have fine feathery foliage and many spikes of lovely large blossoms and make a fine mass in the garden and lovely cut flowers. Flower from seed the first summer and may even be sown where to flower like annuals. Plants, 20 cts. each; 3 for 50 cts.; $\$ 1.40$ per doz. Seeds, pkt. 20 cts ; $1 / 4 \mathrm{oz} .50 \mathrm{cts}$., and I have the following adorable varieties:
Chinensis Cambridge Blue. 2-3 ft. tall. Clear light blue.
Chinensis Blue Butterfly. 2-3 ft. Large flower of intense gentian-blue.

DELPHINIUM, West American Larkspur. Here in California and Western America we have a large number of very lovely Larkspurs. Quite varied in color, stature and form and entlrely hardy and withstanding very dry difficult conditions; they give some of our most beautiful plants for the wild garden, with taller ones suited to the border, while the dwarf species, prefixed by a star are among the most lovely of rock garden plants. After flowering, these Delphiniums ripen to the ground and the root lies dormant until the next fall or spring. For this reason the location should be well marked or the roots should be dug, cured and stored dry. The roots retain full vitality after being stored as much as three years. In the East is best to dig and store the roots and replant the following spring. Soak roots two hours before planting. Culture of this group: Sit., sun. Soil, any, but good loam gives finer results. Pl., dry roots in fall, or in cold region hold for spring planting. Prop., seed, third year to flower. Unless otherwise stated the following have a single many flowered stem. All flower May to July

## LOWER GROWING SORTS

* Hesperium. May grow to 3 ft . loosely branching with many flowers of medium blue.
New. Dwarf Oregon Species is 4 in. high with broad glossy leaves. Its large flowers are deep riolnt-blue with white bee. Very lovely. 25 cts. each; 3 for 65 cts.

*Menziezii resembles Columbianum, being much branched at base. Glossy foliage and fine deep blue flowers with white bee.
*Variegatum Dwarf Form. Single stcms 8 in. high, bear deep pure blue flowers. A gem. These little Larkspurs are among the most admired plants in my rock garden. Prices of above: 20 cts . each; 3 for 40 cts ; $\$ 1.25$ per doz.

DELPHINIUMS-Continued on next page.

## DELPHINIUMS-Continued.

*Nudicaule. One of the two native "Scarlet Larkspurs." In this region it is characteristic of rock masses in shaded situations and is a lovely subject for partially shaded rock gardens. It is most stunning naturalized on shaded slopes, particularly among rocks, and it is very effective in the cool border. It does well in full sun but the flowers last much longer in light to moderate shade. Oftener 8 to 12 inches but may grow to 2 feet. Foliage is glossy and prettily mottled and the deep scarlet flowers come in spring and if watered, for many weeks. 20 cts. each; 3 for 50 cts.; $\$ 1.75$ per doz.

## TALL SORTS of Western Delphinium

Cardinale, the Giant Scarlet Larkspur of southern California is one of the most vivid flower effects of its region and as fine in the garden. It grows from 3 to 7 ft . high and the flowers are in spikes of vivid scarlet. Plant in well drained soil in full sun. See preceding paragraph. 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz. Seed, pkt. 25 cts.

DIANTHUS, Pinks. A fine group of plants for the border, exposed difficult situations are in the rock garden or wall. No rock garden is complete without a liberal planting of many varieties of Dianthus. Hardy anywhere. Not all varieties are suitable for rock gardens and I have selected the following from a large number tested. They are low, compact, their flowers produce stunning color effect, and their neat foliage always pleasant while their spicy fragrance is irresistible. Cult: Sit., full sun and they revel in the hottest, dryest places after established, although bloom is prolonged with good moisture. Soil, any loam and they like lime. Pl., fall to spring. Prop., div.
*Deltoides Brilliant (Maiden Pink). 3 to 6 in. tall with neat tufts of bright green foliage and an abundance of deep carmine rose flowers June-July. A colorful rock garden plant. 25 cts. each; 3 for 65 cts. Seeds, pkt. 20 cts.
*Knapii. A dainty species, unique in being the only yellow Dianthus, it bears clusters of very pretty small yellow flowers on slender stems, 15 in . tall. Rare. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
*Low Rose. Has a compact cushion of bluish deep green foliage, always neat. The soft rose flowers are borne above foliage in great numbers. A favorite. 25 cts. each; 3 for 65 cts.
*Monspelianus Carmine. One of the very best with cushions an inch high and six inches across. Bright carmine flowers in June. A gem and most lovely in crevices. 30 cts. each; 3 for 75 cts.
*Neglectus. Most beautiful of alpine pinks. Low foliage tufts are completely hidden in June and again in fall by the 1 inch discs-bright pink on the face; buff on the reverse. A gem. Plants, 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
*New Pink. Its cushion may be as broad as 18 inches and the eight-inch stems bear many very fine large soft pink flowers most spicily fragrant. June. 25 cts . each; 3 for 65 cts.
*Roysii. A lovely new rock garden and border variety not unlike D. neglectus in habit with large flowers of glistening deep rose. 6 in . 30 cts . each; 3 for 75 cts .
Superbus "Loveliness". This exquisite new pink with delicate fringed flowers of pure mauve on long graceful stems is the delight of every visitor to my gardens. One of the very loveliest of flowers for filmy, graceful bouquets and most spicely fragrant. Strong plants, 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.; 1/64 oz. 70 cts.

DICENTRA, Bleeding Heart. Most delightful plants, all having graceful fern-like foliage and enchanting flowers. There is nothing more lovely for the fernbed, moist shaded situation, or the cool border, and the dwarfer ones are most effective in the cool and shaded rock garden. Cult: Sit., cool or shaded. Soil, any moist loam. Pl., fall to spring. Prop., div.

[^3]

## Blecding Ileart

*Formosa, Western Dutchman's Breeches. Filmy fern-like foliage and soft pink flowers, making it a splendid foreground for the shaded garden, and as an accompliment or foil for ferns, Columbines and other woodsy plants. Alone it is a splendid ground cover. 15 cts. each; 3 for 40 cts.; $\$ 1.25$ per dozen.
*Glauca (Oregona). With silvery fine cut foliage it makes a compact clump ten inches high surmounted by the spikes of flowers which are creamy white, tipped with red. May to July. Rare and most worth-while. 35 cts . each; 3 for 90 cts.
Spectabilis, Bleeding Heart, a most noble plant, favorite of our mothers and grandmothers and equally as popular now. It grows to 2 ft . with graceful branches, fern-like foliage arching stems with lovely hcart-shaped pendant flowers of a rosy pink. It thrives in any shaded situation, but in the well planned bed, in combination with ferns, Columbines and Heucheras, it is most charming. Strong roots, 50 cts. each.

DICTAMNUS fraxinella, Gas Plant. Noble old-fashioned border plant forming a bush two feet high. The ash-like leaves are fragrant when brushed and the flowers on upright spikes are rosy pink. Flowers emit a gas, which on hot, still evenings may be ignited without damage to plant. June and July. Cult: Sun and a deep, rich, well drained loam. Slow to establish; once planted never disturb. 35 cts. each; 3 for 90 cts. Seeds, pkt. 25 cts.

DODECATHEONS, see page 5 , are a delight in the shaded rock garden or in a cool well drained situation.

EPIGAEA Repens. "Trailing Arbutus." Charming trailer with very fragrant pink flowers in spring. Must have complete shade and a cool moist soil rich in humus and quite acid. Happily situated, I know of nothing sweeter in early spring carpeting subjects. Strong sods, fall to spring, 90 cts. each.
**EPILOBIUM Obcordatum is one of the most beautiful plants of the Californian alpine regions. Imagine coming across a little pocket or crevice below a snowbank filled with a close mat of fine bluish foliage and fairly smothered with relatively large rose-colored flowers of real beauty. It is at its best simply exquisite. While alpine by nature, I have it here at "The Terraces" in gravelly moraine soil with ordinary watering, and flowering well. With a constant drip it promises to be almost as good as in its high home. 50 cts. each.

## EPIPACTES, Creek Orchid. See page 12.

*ERIGERON mucronatus (Vittadenia mucronatus). This forms low dense masses a foot high and as broad, and during almost the entire season is covered with little daisy-like flowers of white tinted pink. Splendid for large pockets, and planted at top of a wali makes a beautiful drape. Plant in sun or light shade and any soil, either fall or spring. Not hardy in cold regions but may be kept over by cuttings taken into the house in fall. 25 cts. each; 3 for 65 cts.
"Can you ship plants so far?" Eastern friends often ask. That I do deliver safely to all parts of the world and guarantee safe delivery should satisfactorily answer this question. Customers who buy from me cannot lose.

ERIGERONS. If rou could see these two lovely garden and cutting flowers in my garden now (June 20) there would not be plants to meet all denmands. 2 ft . high with a profusion of disc-like flowers related to Michaelmas Daisies for a long period in summer. Sit., sun to shade. Soil, any good loan, preferably moist. Divide each year.
The Quakeress. Lovely dises of soft lavender pink. 25 cts. each; 3 for 65 cts.
Speciosus Idaho Variety. Far superior to the usual type with very large discs of pure lilac mauve. 25 cts. each; 3 for 65 cts .

ERINUS Alpinus. 4 in. Neat rock or border plant with closc mounds of feathery foliage completely smothered with lavender-rose flowers in June. 25 cts. each; 3 for 65 cts.

ERIOPHYLLUM lanatum. See Eriophyllum Oregon Sunshine, page 26 .
**ERODIUM Chamaedryoides. A wee plant forming feathery tufts less than an inch high and throughout summer, studded with flowers that are pretty white stars. Cult: Sun; deeply worked, light soil. Pl., fall to spring. A gem on a sunny lcdge. 40 cts .
*ERYTHRONIUMS. Can you imagine anything more enchanting in your shaded rock garden than little pockets of Erythroniums as pictured in color, front cover.

EUPATORIUM occidentale. A rare plant of the Sierra Nevada Mts., 18 inches high with fleecy clouds of soft pink flowers in autumn. Sit., sun. Soil, a well drained loam. Pl., fall to spring. 30 cts . each; 3 for 75 cts.

## *EVENING PRIMROSE. See Oenothera.

*FELECIA petiolata rosea. Has many long trailing branches which will root where they touch soil, with a pleasing soft green foliage. The pink, daisy-like flowers are pretty and are borne all summer; perpetually in California. Will drape from a wall to six feet. Not hardy in the East but a single plant taken indoors will provide cuttings for the next season. A most useful and fine plant. Cult: Sun or shade. Soil, any. Will stand some drouth but best in moister rich soils. Pl., fall to spring. Spring in colder regions. 25 cts . each; 3 for 65 cts .; $\$ 2.00$ per doz.
*FLAX. See Linum.
FERNS, Hardy Native. See page 12.
*FRITILLARIAS are most effective in rock garden, see page 9.

FUNKIA. See Hosta.
GAULTHERIA Procumbens. "Wintergreen Berry." Really a low slowing trailing shrub with large brilliant green and bronze evergreen leaves and edible bright red berrics in winter. Require complete shade, an acid soil rich in humus and constant moisture. Plant Oct.-April. Sods 80 cts. each.

## GAS PLANT, is Dictamnus.

Gaura Lindheimeri grows 2 to 4 ft . and branched like an open headed shrub with an endless succession of white flowers flushed pink. One of the most useful plants for hot and dry climate, yet good anywhere, and a very fine background for plants such as Delphiniums and Phlox. Sit., sun. Soil, any, to rocky. Pl., fall to spring. Prop., seeds. 25 cts . each; 3 for 65 cts .
*GERANIUM Sanguineum. Neat foliage on spreading plants 6 in. tall. Hardy and does well in both sun and shade, but its hright rose flowers are most valuable for a color touch in the shaded bed. 25 cts . each; 3 for 65 cts .
*GEUM Purdy's Low Orange. Charming dwarf a foot high with luxuriant basal foliage and abundant flowers of deep orange in May-June. 25 cts. each; 3 for 65 cts. Seeds, pkt. 20 cts.
*GLOBULARIA cordifolia is a dwarf with basal tuft of glossy deep green leaves. The flowers are balls of steely deep blue fluff on 3 inch stems. Attractive in sunny rock garden in any good soil. 30 cts. each; 3 for 75 cts .
Ginger Root. See Asarum.


Perennial Phlox (See Page 2i)
GLAUCIUM. See Horned Poppy, page 26.
GOLDEN ROD, "Golden Wings". \& ft. With its immense spreading panicles of gold, it makes one of the finest color masses in my garden in mid-summer. 25 cts . each; 3 for 65 cts.

## GUERNSEY LILY. See Nerine.

GYPSOPHILA Bristol Fairy, By far the best Baby's Breath. Bushes 2 to 3 ft . high and as much as 4 ft . across freely branching, with multitudes of fully double white flowers. Cult: Sun, good loam. Pl., fall to spring. Give room. Large plants 75 cts . each. Good plants 50 cts. each.

GYPSOPHILA OIdhamii. This delightful new variety grows to 40 in ., somewhat like paniculata but the flowers are deep rosy-pink. Exceptionally fine. Sown early indoors flower first year from seed. Plants, 35 cts. each; 3 for 90 cts.; $\$ 2.50$ per doz. Seeds, 25 cts. per pkt.

GYPSOPHILA Repens Rosea. Low trailing foliage masses always neat, bear airy trailing sprays of soft pink flowers in May and June and if moist, well into summer. Unexcelled for rock walls, drapes in rock garden and border edgings. Sit., sun, stand douth; Soil, any; Pl., fall to spring; Prop., seeds. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
*HELIANTHEMUM "Sun Rose." Showy trailing, small evergreen shrubs, which from May to July are almost hidden with flowers, like little single roses. Showy, long lived, drouth resistant, they are excellent for rock garden, front line effects on rock walls, and for covering difficult banks, etc. Sit., sun; Soil, any, but best a deep well drained one; Pl., fall to spring. Shear half back after blooming. Prop., cuttings. Following include the finest of the new varieties:
American Beauty. Very large bright rose flowers.
Appeninum Roseum. Strong grower with large soft pink flowers.
Apricot. Luxuriant foliage and very large soft apricot.
Ball of Gold. Soft yellow with full double flowers.
Boule de Feu. Full double deep red. Very fine.
Dazzler. Strong, attractive foliage and vivid blood red.
Goldilocks. Very large flowers of brightest yellow.
Flame. Luxuriant soft foliage. Very large brilliant flamepink flowers. Superb.
Mitchell's Red. Very large bright red flowers. New.
St. Mary's. Very large pure white. New.
Seattle. Very large flowers of rich apricot-bronze. New.
Prices: 30 cts. each; any 3 for 75 cts.; per doz., 3 or more of 1 kind, $\$ 2.50$. Fine Mixture, $\$ 2.25$ per doz.
Collection. 1 each of above 12 for $\$ 3.00$ One each of five fine avrieties my choice for $\$ 1.10$.
Seeds Mixed, saved from finest named varieties, pkt. 25 cts.

[^4]
## HEMEROCALLIS

HEMEROCALLIS. Day Lily: Lemon Lily. Beautiful and thoroughly reliable old time favorites belonging to the lily family. They are perfectly hardy anywhere and as they stand much heat are especially valuable in the South and in California. They stand much moisture, even to being partially submerged which makes them Ideal for stream-sides and at margins of ponds. Cult: Best in partially shaded situations but do well in full sun. To have them at their best a rich moist soil is essential, yet they will stand much abuse. Pl., fall to spring. Divide every four years. I send plants that flower the first year but they are not at their best until the second. As each variety flowers at a different date, you should plant a wide selection of varieties to prolong the bloom.

## NEW INTRODUCTIONS AND SUPERFINE VARIETIES

Bay State. 45 in. July-August. Very large deep yellow with delightful fluted petals. Splendid. 75 cts. each.
Burbank. 30 in. July. At last a few plants of this rare and almost lost variety. Soft lemon, long slender tube, petals recurved on upper third; flagrant. $\$ 1.50$ each.

Calypso. Without question one of the very finest; in fact a foremost authority on Hemerocallis so rates it. Grows to 42 inches high with flowers 5 to 7 inches across. The petals recurve broadly from the base, the larger petals wavy on upper margin. Color is light canary yellow, with a fine satiny sheen. In milder climates it has flowered from July to December. Usually flowers late July. 50 cts. each; 3 for $\$ 1.25$.

Gold Imperial. A splendid recent European introduction of medium height, with the flowers very large, much recurved and of pure gold, with a beautiful satiny sheen. An unsurpassed mid-season bloomer. 75 cts. each.

Golden Bell. 36 in. July-Aug. Very large fluted flowers, of shimmering rich gold. Extra choice. 75 cts. each.

Hyperion, a magnificent variety, which in rich moist loam grows to 45 inches in height, the flowers 5 to 7 inches broad, with a satlny sheen and a clear, medium canary. \$1 each.
J. A. Crawford. Late June. Rich apricot-yellow shader cadmium. Many flowers on the 4 ft . stems. 75 cts . each.
Maggie Perry. 48 in. July-Aug. Very large. deep orangescarlet. The nearest red of day lilies. 75 cts. each.

Mikado. 30 in. July. Two-toned, bright orange-yellow with a soft deep red zone. Splendid. 75 cts. each.

SUPER HEMEROCALLIS COLLECTION: From my large private collection of super-fine varieties and the above I will send 10 plants, 1 each of 10 varieties, labelled $\$ 4.50 ; 5$ varieties, $\$ 2.50$. This is a super-value.

## FINE OLDER HEMEROCALLIS

These splendid old varieties make a fine show over a long season at low cost. Descriptions appear in previous catalogs. Aurantiaca, Aureole, Dummortieri, Gold Dust, Florham, Sovereign, all in orange shades and in yellow, Flava, Thunbergii; reds, Fulva and Kwanso Dbl. 25 cts.; 3 of one kind, 65 cts; 6 of a kind, $\$ 1.25$.
HEMEROCALLIS VALUE COLLECTION OF 10 SORTS. One each of 9 finest old and new varicties and one lovely Calypso for $\$ 3.00$.

## HELLEBORES

HELLEBORES, Christmas Rose; Lenten Rose. Hardy perennials admired for their attractive early flowers and for their handsome leaves. There are two quite distinct types. H. Orientalis Hybrids, the Lenten rose, have many large palmate leaves, rising from a heavy root to make a bold evergreen clump, 18 inches high and as wide in old plants. Once established they continue for years. The flowers are in many beautiful shades and often 3 inches across. They last fresh for many months, here in California from October to April and in colder regions each milder spell in winter brings out the buds. I imported from Millet of France his finest varieties and these are now ready to scll My collection of over 25


Hemerocallis or Day Lilies
named varieties is doubtless the largest in America and here conditions for their growth are unusually good. Cult: They thrive in ordinary garden soil but for best results use rich loam and coarse sand, with a top dressing or rotted manure. A moist well drained, partly shaded situation is preferable. In California give rather deep shade. I offer the following Millet Hybrids:

## HELLEBORE ORIENTALIS VARIETIES

Baroness. In this the background is greenish-white, but it is so closely flecked with purplish mauve as to appear a solid color. Very fine. $\$ 1.25$ each.
Delicatissima. Very free blooming, large flowers, white pencilled and flecked with a beautiful rose. Extra strong plants. $\$ 1$ each; 6 for $\$ 5$.
Mad. Marcelle. Delightful with white ground heavily flecked plum-violet. \$2 each.
Note: If interested in fine varieties previously offered a few plants ale available and will be priced on application.
Orientalis Hybrids Mixed in lovely shades. Extra strong 4 -year-old at 75 cts. each; $\$ 7.50$ per dozen. Fine, but smaller plants, most of which will flower, 60 cts. each; $\$ 5$ per doz.
*HELLEBORE Niger Praecox. The Christrras Rose. Entirely different from the preceding. Their habit is much lower and the leaves deeply lobed and glossy. The flowers are pure white, turning pink as they age. Large plants \$1.50 each, smaller plants, \$1.

HEPATICA Triloba. Pretty lobed leaves above which are borne on six in. stems in earliest spring white flower which may turn either pink or blue. Requires deep shade, acid soil and moisture. Lovely. 30 cts. each; 3 for 75 cts .

FOR THAT HALF-SHADED BED I suggest a combination of Erigerons, Long-Spur Columbines, Campanula Grosse Gloecke, Michaelmas Daisies, Phlox, Aster Alpinus Goliath, Anthericums, and if you would like a touch of orange and yellow three plants of Hemerocallis fulva dotted in the background and two or three plants of Coreopsis. Such an accidental combination gave me one of $m y$ finest effects.

The above prices are postpaid to your door.

* Indicates plants well suited to rock gardens.
** Indicates plants suited to the rock garden only.

Stratford, Conn.: "Exhibited your Fairy Lanterns (Calochortus albus) at the garden viub exhibit in June and they were the hit of the show."


Lewisia, Brachycalyx
HOLLYHOCKS. This stately old border plant needs no description for excepting Delphiniums, it is the most popular of all perennials. May be sown April-Nov., but I prefer to sow Aug. to Nov. 1 to have clean young plants to set out in spring.
Chaters Improved Strain is supreme in double Hollyhocks. I have Salmon Rose, Sulphur Yellow, Scarlet, White, Newport Pink and Supreme Mixed, blended of many shades. Any of these, pkt. 15 cts.; 2 pkts. for 25 cts.; $1 / 4 \mathrm{oz} .60 \mathrm{cts}$.


Hollyhocks
HOSTA (Funkia), Plantain Lily. Beautiful hardy plants with handsome, broadly spreading, large ovate leaves. The beautiful half-nodding lily-like flowers are in graceful spikes on stout stems and well above foliage. Splendid plants for the border or partially shaded bed. Cult: Sit., in the East either sun or partial shade. In the West, partial to deep shade. Soil, a moist loam, well enriched with rotted manure. Pl., fall to spring. Prop., div.
Coerulea (Lanceolata). Luxuriant broad green leaves and blue flowers in July and August. 35 cts. each; 3 for 90 cts.; \$3 per doz.
Subcordata grandiflora. Large fragrant, pure white flowers on 2 ft . stems from August to October. 35 cts . each; 3 for 90 cts .
Lancifolia. Like Coerulea but narrower leaves and flowers three weeks earlier. Fine. 35 cts. each; 3 for 90 cts.
*HEUCHERA, Alum Root. Thriving in any well drained soil, sun to deep shade with lovely begonia-iike foliage and filmy flowers, they meet every need for a fine low plant.
*Micrantha. Lovely begonia-iike foliage that attains deep bronzy shades in winter. Filmy white flowers.
*Rubescens. Spread by underground stolons to form broad masses. The pretty pink flowers are most iasting.
*Sanguinea. Coral Bells. Bears panicles of rich coral bells in profusion in spring and often again later.
All Heucheras: 25 cts. each; 3 for 65 cts ; $\$ 2.00$ per doz.
HORNED POPPY, in a large rock garden, gives a tine touch of color and stands much heat and drouth. See page 26 .
HOUNDS TONGUE. See Cynoglossum.
*HYPERICUM Coris. Pretty heath-iike foliage smoothered with large soft yellows, flower June-July. Stunning for rock garden or border. 6 in. Moist loam. Sun. 25 cts. each; 3 for 65 cts.
IBERIS Gibraltarica. See page 23 .
*INDIAN PINK. See Silene.

## IRIS

IRIS. Californian and other Pacific Coast species are splendid plants in the rock garden, margin of the shaded border, or in woodland planting. With their long glossy foliage, they make striking clumps and the fiowers are exceptionally pretty.
Cult: Sit., light to moderate shade or a cool sunny situation. Soil, a well drained gritty soil, rich in leaf mold; neutral or slightly acid; and with moderate moisture. A mulch of pine sawdust is good. Perfectly hardy but a little difficult to establish. Pl., fall to spring; spring in East.

* Bracteata. 12 in . Evergreen foliage and golden yeliow flowers.
* $\ddagger$ Californica Varied. 8 in. Varied in many rich shades, no two alike, in blues, yellows, bronzes, violets.
*California Golden Yellow. Identical, but with lovely golden yellow flowers.
*California Blue. 6 in. Rather dwarf with deep blue flowers.
*Chrysophylla. 6-8 in. high with slender evergreen foliage and creamy flowers, tinted yellow and purple.
* $\ddagger$ Douglasiana. 12 in. A bold species with broad evergreen foliage and creamy flowers. Of very easy culture.
*Hartweggii. 6 in . Sparse bluish foliage and soft yellow flowers.
*Innominata. Rare species, with dark slender foliage and lovely golden yellow flowers on 6-10 in. stems. Fine plants, 50 cts. each.
* $\ddagger$ Purdyii. 8 in . Glossy deep green foliage and handsome, creamy flowers, tinted yellow and purple veined.
* $\ddagger$ Tenax. One of most dwarf of all iris, 3 inches high, with reddish-purple flowers. Quite striking. Like moist loam.
*Tenuissima. 12 in . Long, very slender leaves, with very pretty soft hlue flowers.
*Watsoniana. 12 in . Broad soft green leaves and light blue flowers.
Prices of above: 25 cts. each; 3 for 60 cts.; $\$ 2$ per doz. $(\ddagger)$ SEEDS of species prefixed by an asterisk, 25 cts. per pkt. Easily grown in shade in soil rich in leafmold.
*IRIS Cristata. 3 in. A gem for the shady rock garden or shady bed with rich amethyst flowers in May. Prefer a moist loam. Choice. 30 cts. each; 3 for 65 cts.
IRIS Foetidissima. Gladwyn. Masses of luxuriant deep green foliage two ft. tall. Flowers inconspicuous but followed by very ornamental bright red seeds which may be cut and lrept for months as everlastings. 50 cts . each; 3 for \$1.15.
IRIS Siberica Perry's Blue. 40 in. Spiendid border iris with large flowers of clear sky-blue. 30 cts. each; 3 for 75 cts.
*IRIS Tectorum. Japanese Balcony Iris. 12 in . tall with delicately crested blue flowers. Excellent for rock garden border or moist wall. 40 cts. each; 3 for $\$ 1.00$.
IRIS Pseudoacorus Gigantea. Its brilliant emerald green foliage makes it one of the finest background plants I know either sun or shade. May be grown directly in stream or pool. 50 cts. each; 3 for $\$ 1.25$.


## WINTER FLOWERING IRIS

IRIS Stylosa, the beautiful Algerian Iris, has charming grassy, evergreen leaves, and the most delightful, fragrant soft violet-blue flowers from mid-winter until spring. Hardy south of Philadelphia.
IRIS Stylosa Alba is identical, except it is an iridescent white.
Either in strong plants, 40 cts. each; 3 for $\$ 1$; $\$ 3.50$ per doz.
The above prices are postpaid to your door.

* Indicates plants well suited to rock gardens.
** Indicates plants suited to the rock garden only
*IBERIS Gibraltarica, Perennial Candytuft. The low clumps of evergreen foliage are often a foot across. In late winter in California and early spring in cold regions the beautiful broad umbels of rosy lavender flowers completely submerge the plant, making a wonderful mass effect. Fine not only in the rock garden but for the border and to cover hot difflcult places. Cult: Sun. Soil, any, even rock piles. Pl., fall to spring. Self-seed, and seedling plant to late spring give long succession. 20 cts. each; 3 for 45 cts.; $\$ 1.50$ per doz. Seeds, pkt. 25 cts.

ISMENE calathina, Peruvian Daffodil or Basket Flower. Bulb and leaves like a narcissus, with stems 1 to 2 feet bearing several large basket-shaped flowers of pure White. Pl., fall to spring in full sun and loamy soil. Lift and store in winter in East. 25 cts. each; 3 for 60 cts.; and store

## LADYSLIPPERS. See Cypripediums, page 12.

*LAMIUM maculatum. Often we professional gardeners overlook a good thing. When I planted Lamium in a new rock garden this spring it was simply as a filler, but no plant has been more admired and no plant better fills a pocket than thls one does. The greyish foliage ls beautifully variegated white with purple mottling and the very pretty rosy-purple flowers appear over a long season. Curb it when it overgrows, as it may. Either sun or shade. 25 cts. each.

## *LARKSPUR. See Delphinium, pages 17-18-19-32.

**LAVENDER, Dwarf Munstead. A compact little deep green shrub with deep lavender flowers in July. Wonderfully effective either ln the rock garden or border. May be trimmed to little round headed trees. Cult: Sun to light shade. Soil, any. Pl., fall to spring. 35 cts. each; 3 for \$1. Large plants, 75 cts. each. Seeds, pkt. 25 cts.
*LEUCOCRINUM, Sand Lily. See page 10.

## LEWISIAS

Lewisias are the New World's finest contribution in lovely plants and as a group rank with the most lovely plants to be found anywhere. They are splendid rock garden plants and are most worthy of having a speclal section of the garden set aside and prepared for them alone.
Lewisias from Seeds. Lewisia seeds seem to require freezing to insure prompt and good germination. In cold regions they may be sown in boxes in fall and the boxes be set outside to insure freezing. In warmer regions or for spring planting stratified for three weeks at 38 degrees they come quite readily.

## *DECIDUOUS LEWISIAS

Lovely and distinctive West American plants and a real acquisition for the alpine and rock garden. All grow in early spling, flowering in April to May. The leaves ripen as the flowers fade and the roots lie dormant through the summer.

Culture of Deciduous Lewisias. All grow where it is decidedly molst during the growing season or where roots may reach into moist rock crevices. Drainage should be perfect; soil, best a light loam; situation, full sun; moisture, liberal during growing season but may be dried off after flowering. The scree is ideal for them. I urge fall planting of dormant roots, although growing plants may be planted ln the spring.
**Bernardensis. A rare species new to gardens. The narrow linear leaves are in little wheels and the flowers are of fair size and whlte. Very rare. 40 cts. each; 3 for $\$ 1$.
**Brachycalyx. Without question, this lovely species is one of the most notable additlons in many years to the really flne in rock garden plants. Exceptionally hardy and easily grown. it has brought the highest praise from all who have seen it. It has many lcaved rosettes of lanceolate leaves which cling closely to the earth. The stemless flowers come in such profusion as to completely hide the plant and are $11 / 2$ to 2 inches across, white, tinted pink. See beautiful plcture opposite. 40 cts. each; 3 for $\$ 1$.
**Nevadensis is a little alpine, with rosette of linear leaves and the very many flowers on separate, almost naked stems are an inch across, white tinted lavender. Qulte pretty. 15 cts. each; 3 for 40 cts.; $\$ 1.50$ per doz.
** Oppositifolia has linear leaves, broadened at tip, and few in number. Stems 6 to 12 inches high arise erectly and bear a number of beautiful white flowers an inch across. A most beautiful little species. 15 cts . each; 3 for 40 cts ; $\$ 1.50$ per doz.


Lewisia, Hecknerii
**Rediviva is Bitter Root. Many slender, round leaves, an inch or two long, crown the root to make a dense rosette Through these leaves arise many stems, each bearing a single flower. The flowers are white to pink, an inch and a half across and have the satiny texture of the Cactus flower. An admirable species and most effective in Ilttle raised pockets in the rock garden. See picture, page 35 . 25 cts. each; 3 for 60 cts.; $\$ 2$ per doz. Seeds, pkt. 25 cts.
**EVERGREEN LEWISIAS, Rock Roses. In all the world there is not a more beautiful or interesting group of rock plants. Varying widely, each variety is distinct, beautiful and interesting. All have low rosettes of fleshy leaves, pretty and interesting at all seasons, with the flowers on slender stems 4 to 15 inches high, in MayJune. In the wild they grow into rocky slopes with roots horizontal and kept cool by overlaying rocks. I plant similarly or in large pots tilted and plunged into a slope.
Culture of Evergreen Lewisias. They are hardy anywhere in the U. S., or Canada, or Europe. This does not mean that they can be stuck any place in any garden and thrive. They have definite requirements, which we give below, and unless these can be met, it is useless to plant them.
Drainage. Must be perfect, so that no excess moisture may stand about the roots or in or around the axils of the leaves. Prepare deeply, at least one foot.
Caution. To insure drainage of excess moisture from axlls of leaves, set crown of plant one inch high and fill around it with chip stone, pea gravel or screenings.
Soils. All like a porous sandy or gritty loam. I find soil must be slightly acid. They have little or no humus in the wild and I begin to think it undesirable. Silty loam with which I mix aluminum sulphate for acidity, a small amount of Vigoro for nutriment, washing in added doses from time to time gives me the finest plants and flowers ever obtained. Sandy or gritty loam or half sand and half loam with the two elements should bc your best possible soil.
Situation. Evergrcen Lewisias are best in light shade. In cool damp regions plant in full sun. A fine situation is one to the East or North of a large rock in rock garden. Another in pockets in face of a rock wall.
Time to Plant. Evergreen Lewisias handle easily at any time, except that they bruise easily when in bud. I can ship the year around, but recommend spring planting, especlally for the East.

## LEWISIAS-Continued on next page.

[^5]
## LEWISIAS-Continued.

These Lewisias are best divided into three groups:
First group all have narrow. usually almost round leaves in close rosettes, and slender branching stems of many dainty small flowers.
**Columbianum has a rosette of deep green lcaves and tlowers are rosy with a dark line down midrib. 30 cts. each; 3 for 75 cts.
**Leeana with slender, pine-like leaves and many smaller magenta flowers. It forms many-headed clusters. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
**Howellii-Cotyledon Group of Evergreen Lewisas. These very fine rock plants are almost alike in size and shapc of the flowers, (see picture of $L$. Hecknerii), but are very different in the appearance of the plant. The usual rosette is 4 inches across and well grown specimens are as broad as 8 inches. Flowers are from 1 to $11 / 2$ inches across.
**Cotyledon has dark green, slightly glaucous long spathulate leaves, often much tinted dark red. Unopened buds yellowish orange and flowers usually salmon rose, margined white. Scapes more often 5 to 9 flowered. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.
**Finchii. This species varies considerably and I have now selected its very finest strain. In this the foliage is deep emerald green with leaves overlapping closely to make a solid rosette often 8 in . across. Its few to 20 scapes each bear 5 to 40 flowers and plants have been seen with 600 flowers. The buds are bright orange. Open, the flowers are soft pink with rose strips and the petals margined orange. A fine specimen, is a wonderful sight. Each 40 cts.; 3 for $\$ 1.00$. Seeds, pkt. 25 cts.
**Hecknerii is perhaps the best marked of the group. First, the broad dark green leaves, red beneath, are margined with slender spines each tipped brown. These tiny spines give the effect of a silky fringe. Then the fine large flow ers are a solid rose pink, without stripe. The bracts and scpals are margined like the leaves with even finer spines. A plant bears from a few to many scapes each having a few to 12 flowers. Very distinct and desirable. Each 40 cts.; 3 for $\$ 1.00$. Seeds, pkt. 25 cts.
**Hecknerii "Elegans". A most outstanding new variety (1937) with strong rosettes as much as 8 in. across. The very dark green leaves have charmingly undulated margins and these are lined with slender spines as in Hecknerii. The scapes bear 14 to 40 flowers each, of large size and a lovely medium rose without stripe. A decided acquisition. Strong plants, 50 cts. each; 3 for $\$ 1.25$.
**Howellii. Leaves beautifully crisped and crinkled on margin, are deep green much tinted red. Its many scapes carry 3 to 10 flowers of pink, margined white and with a broad purplish violet central band. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25 cts.

The third group has but one member, that, one of the world's four best rock plants.
**Tweedyii. This is a plant of the very highest merit. When I first sent to England about thirty years ago, "The Garden", England's highest garden authority, spoke of it as "The greatcst acquisition in a lifetime". Almost as much might now be said, with the addition that it ranks with the four best rock plants of the entire world.

The picture (page 25) tells what it is better than words; if it is added that the flowers are a soft salmon pink and that the picture is not quite one-third actual size. It branches from the crown and in old plants there are as many as four rosettes io make up one very large one, and such a plant in the wild was observed with 300 flowers open at one time. Leares are 3 to 5 inches long and the flowers 2 to 3 inches across.
Cult: As given for the others of the evergrcen Lewisias but I must add that spread flat all water must be kept away from crowns so it is best to plant with the roots horizontal. A simple way is lay the plant so that the crown projects over a stone with the roots back and horizontal: then cover the roots with 2 inches of the soil mixture and place a stone over this to kecp roots conl and moist. Splcndid planted in a crevice in a rock wall.

I have very fine plants of Lewisia Tweedyii and offer: Large plants $\$ 1.00$ each; medium size plants 75 cts. each; small plants 60 cts. each.

LILIES. For many beautiful species for border and lily bed see pages $10,11$.


Lilies of the Valley
LILY-OF-THE-VALLEY clumps have been hard to secure for several years. l now have a fair supply. They require a light to medium shade and a rich, loose soil kept moderately moist. Well-rotted manure and leaf mold should form at least a part of it and I think that the best of soils is a sandy loam so enriched. The beds should be topdressed with well-rotted manure every fall. They should be reset about the third year, and the fall is generally considered the best time for resetting. Clumps of several pips, or growing buds, 30 cts. each; $\$ 3$ per doz.
*LINUM alpinum. A rare alpine species of prostrate growth a foot across and six inches high with soft blue flowers throughout the summer. 30 cts. each; 3 for 75 cts. Seeds, pkt. 40 cts.
*LINUM Lewisii. Airy foliage and each morning through a long season. covered with soft blue flowers on graceful, 12 to 15 inch stems. Plants, 25 cts. each; 3 for 60 cts . Seeds, pkt. 25 cts.
*LINUM Narbonense. The many slender erect stems, 18 to 24 inches high, bear large sapphire blue flowers from June to September. The flowers do not drop each day, but last for several days, remaining open all day. The finest large flax and a real beauty. 25 cts. each; 3 for 60 cts. Seeds, pkt. 25 cts.
Linum Culture: Sun. Soil, any and very drought resistant, but respond to good loam and moisture. Pl., fall 10 spring. Seeds flower second year.
*LIPPIA repens. Neat cushion trailer with greyish foliage and lavender flowers. In milder regions largely used for lawns, for which purpose it is excellent. as it requires a minimum of moisture, the rooted cuttings set 12 inches apart soon covering solid. Clumps, 25 cts. each. Rooted sections for lawns, $\$ 1.50$ per 100; \$10 per 1000.

LEPACHYS Pinnata. 3-4 ft. Splendid late summer cut and border plant with deep yellow cone-flowers. 25 cts. each; 3 for 65 cts.

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Chihuahua, Mexico: "The plant on my order came in splendid condition, much better than any I have received from the East. Thank you very much for the extra ones. I am sorry that I did not discover you earlier."

Seeds of California wild flovers will be.found on page 34. Worthy a place in the most sophisticated annual border. Unsurpassed for beautifying waste spaccs.
*MANZANITAS are shrubs or small trees, mostly of the Far West. Botanically they are Arctostaphyllos.
*A. Nummularia is an admirable rock garden subject with small glossy but. ruddy leaves and heath-like pink flowers. Forms a low bush flowering at 6 inches. Winters in Penna. Requires neutral or acid soil. 75 cts. each.
*MARIPOSA TULIPS. See beautiful color plate, page 36 , and list of varieties, pages 6, 7.
MATILIJA POPPY. Beautiful shrubby poppy for the border, see Romneya, page 27 and picture below.
MELISSA officinalis, Lemon Balm. Lovely garden herb with pretty soft green foliage and a delicious odor of lemon. 2 ft ., 25 cts each; 3 for 60 cts.
*MERTENSIA, Blue Bells. Delightful plants for a moist cool situation, preferring moderate to deep shade, preferring a well drained moist loam. Pl., fall with dormant roots best. Cover two inches.
**Pulchella. A most lovely native with 6 to 8 inch stems bearing clusters of pendant clear blue flowers, often tinted pink. Bloom early spring. 25 cts. each; 3 for 60 cts .
*Virginica, Verginia Bluebells. Quite leafy stems, branched from the ground, bear terminal clusters of lovely por-celain-blue bells, often tinted pink. A favorite at sight. 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz.

MICHAELMAS DAISIES. See Aster.
MIMULUS cardinalis is a gorgeous Calif. perennial, 1 to 2 ft. high with leaves of soft green. The fine fiery-red flowers come from June to Oct. Cult: Give a sand loam soil, ample moisture and a situation in either sun or shade. Magnificent along a stream or under the spray of a waterfall. Pl., fall or spring. 30 cts. each; 3 for 75 cts.
MIMULUS Lewisii. The neadows and springy spots in the alpine regions of Calif. have no finer plant than this. From a thickened, horizontally spreading rootstalk many erect stems arise bearing delightful soft salmon-pink flowers throughout the summer. Cult: Same as M. Cardinale. 30 cts , each; 3 for 75 cts .
*MONARDELLA villosa, of the Mints, is one of our finest late flowering Californian plants in hot dry situations. Forms broad mats from which arise very many 8 -inch stems bearing lavender flowers from July to Oct., the flowers somewhat resembling a verbena. Most valuable for hot dry spots in the rock garden where a fine mass of bloom is of great beauty after spring bloom wanes. Cult: Sun. Soil, any even to gravelly. Pl., fall to spring. Prop. Divisions. 25 cts each; 3 for 65 cts.


Matilija Poppy


Lewisia Tweedyii
MONKSHOOD, see Aconitum.
*NEPETA Glechoma. 2 in . high with deep green foliage and bluc flowers it spreads rapidly to make a carpet. One of the best ground covers under trees. Stands voor soil and minimum of moisture. Plants 25 cts. each. Small sections for carpeting, $\$ 5$ per 100; plant 12 in. apart.
*NEPETA Mussini. A lovely fragrant Catnip. quite dwarf and compact in habit, and when in bloom about 10 inches high. Flowers produced in great profusion are soft lavender. Splendid in border or rock garden. Cult: Sun. any soil. Pl., fall to spring. 25 cts. each; 3 for 65 cts.

NERINE sarniensis, Guernsey Lily. Of the habit of A maryllis Belladonna, the narrow leaves come early and die off and the flowering stem appears from bare ground in late summer. A brilliant crimson lily-like flower. Cult: Sun. Soil, sandy loam. Pl., fall or spring. Hardy for temperatures above zero. 25 cts . each; 3 for 65 cts .
*NIEREMBERGIA rivularis. From a dense carpeting mantle of spoon-shaped leaves many 3 -inch stems arise, each bearing a 1 -inch creamy cup-shaped flowers with yellow centers. Flowers all summer. Most choice. Cult: Sun, light soil. Pl., fall to spring. 30 cts. each; 3 for 65 cts.

OENOTHERA, Evening Primrose. Among this varied genus are a number of American species which form low masses and which are very fine for the rock garden. I do not know anything more lovely than Oe. America or Oe. Missouriensis in a deep pocket unless it is Oe. Caespitosa. The flowers open at dusk and last until the next noon.
*Burbanks America. An introduction of the late Luther Burbank. It has a deep seated root, not spreading, and the few branches, eventually long and trailing, bear many pure white flowers 5 inches across from May to frost. As they fade they turn pink. Quite rare. 50 cts. each.
*Caespitosa. Has compact leafy rosettes with underground runners slowly increasing the colony. The pure white flowers are four inches across and turn pink as they fade. Blooms all summer. 30 cts , each; 3 for 75 cts .
*Missouriensis. From a central deep seated root many leafy prostrate stems spread, eventually to make a clump up to 2 ft . across and 10 inches high. The flowers are 3 to 5 inches across and the most lovely clear yellow I know. See cut, page 27. 25 cts. each; 3 for 60 cts. Seeds, pkt. 25 cts.
*Tetraptera is a South American species with deep seated root and a few rather openly leafy ascending stems, bearing pure white flowers two inches across. Very floriferous through the long season from May to October. 25 cts. each; 3 for 65 cts .
Culture: Soil, any but preferably a good loam. Will stand much heat and drouth but it is with moderate moisture that they show their real beauty. Pl., fall to spring. Prop., seeds.

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Orcyon Sunshine

## "SOMETHING NEW UNDER THE SUN"

*OREGON SUNSHINE. Not really new, for this superb plant has adorned the slopes of Oregon and California for ages, yet it has been almost entirely overlooked by man in his quest for fine garden flowers. Entirely hardy anvwhere in the U. S. and most drouth resistant. Thrives in any well drained soil (even the poorest) in full sun, and may be planted either fall or spring. The basal tuft of evergreen foliage is neat throughout the year and from this arise in May many 12 to 15 in. stiff stems which are crowned throughout the long summer with masses of the most delightful golden yellow daisies. Fine cut. You will adore it. (Botanically, Eriophyllum lanatum.) Strong plants, 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz. Seeds, sown in fall flower the next summer, pkt. 25 cts.
*ONOSMA Taurica. Neat grey foliage in spreading 12 in . plants. Semi-erect stems bear clusters of large tubular soft yellow fragrant bells. July-Sept. Sit. sun. Soil, any. Rare and very fine. 35 cts each.
*OXALIS Oregona. In the Redwood region of California it often densely carpets large areas in the deepest shade. Most useful to carpet shady places, either under trees or on north exposures and is a most lovely associate of taller woodland plants. To make a mass, plant the runners flat, covered two inches and ten inches apart. The large rose colored flowers are handsome. 20 cts. each; 3 for 40 cts.; $\$ 1.50$ per doz.; $\$ 5.00$ per 100 .

PARADISEA. See Anthericum.

## *PASQUE FLOWER. See Anemone Pulsatilla.

*PAPAVER Ruprifraga. Rare alpinc similar to an Iceland Poppy with deep orange silky flowers on 18 in. stems, May-June in great profusion. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.

POPPY Olympia. A most unusual and brilliant poppy of unknown origin. Spreads by underground runners to form a clump, which in time is a broad mass. The flowers, 4 to 5 inches across, are semi-double, and are a most beautiful orange-apricot. Two feet. Flower May to June. Cult: As for Orientals. 35 cts. each; 3 for 90 cts.

HORNED POPPY is Glaucium flavum tricolor and no plant that we grow pleases visitors more or gives more effect for so little trouble. The foliage is pretty and plant stout and much branched, carrying very many showy flowers from a clear yellow to flame color through a long period. After bloom cut it back and another crop comes and then a third. Heat just suits it, it is one of the very hest drouth resisters. An average plant is 3 ft . high and as broad and in flower there is no more brilliant effect. 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz. Seeds, pkt. 25 cts.

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PENTSTEMON. There is no finer genus of flowering plants in the world. The garden forms are pretty well known, but all too little known are the beautiful West American specics, than which there are no more beautiful rock garden plants. Many of them are splendid in the border while many are low and compact, and some are quite dwarf. In the natural rock gardens of our western mountains they are often the leading feature, and with their ability as a whole to stand drouth and root in grit and narrow crevices they are ideal rock garden subjects. Strangely, however, I have found that these same drouth resisting plants revel in a well drained loam where moisture is always present, and in such conditions their bloom is greatly prolonged. Cult: Excepting confertus, full sun. Soil, any that is loose and well drained from grit to loam. Pl., fall to spring, but they move best in spring when growth is just starting.
*California Blue Bedder (Heterophyllos var. Purdyii), récently named in my honor, I discovered years ago and sent out under the very appropriate name, "California Blue Bedder." It is a decumbent form found only in my immediate locality and is particularly suited to rock gardens. Makes a low mass 5 to 8 inches high and if not allowed to seed, from May through the entire summer, produces great quantities of blue to pinkish lavender flowers of great beauty. 25 cts. each; 3 for 45 cts.; $\$ 1.50$ per doz. Seeds, pkt. 25 cts.

Heterophyllus "Erectus," has all of the charm and beauty of California Blue Bedder, but is of erect habit, making it a most fitting plant for the hardy border. 12 to 18 inches high with blue flowers. 25 cts. each; 3 for 45 cts.; $\$ 1.50$ per doz. Seeds, pkt. 25 cts.
*Diffussus. Compact little bushes 10 in. high with toothed, arrow shaped leaves and above these the fine deep blue flowers for weeks, May-June. A stunning rock garden or low border subject. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25c

Laetus var. Typicus. 18 in. high, with slender erect stems and long spikes of deep blue flowers, with contrasting white stamens. A splendid garden and cut flower. Plants, 25 cts. each; 3 for 65 cts . Seeds, pkt. 25 cts.
*Newberyii ("Mountain Pride" of the Sierras), makes a low and flat, not at all dense mat of dark green and the bright rosy flowers are borne just above foliage. Flowers all summer. One of the notable Sierran plants. 30 cts. each; 3 for 75 cts. Seeds, pkt. 25c.

Hirsutus (Pubescens). A much neglected and very worth while species. From a base of ruddy lanceolate leaves 12 to 24 inches, stems arise, bearing very long panicles of soft porcelain blue flowers from June to September. Fine for a bold mass in the rock garden and a lovely border plant. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
*Procerus. 8 in. A delightful and reliable rock and border sort with low foliage masses smothered with very rich blue flowers in June. 25 cts. each; 3 for 65 cts.

PHLOX, Mossy or Creeping. Splendid plants needing no introduction, without which no rock garden is complete.
*Amoena. Has a low mass of shining foliage with a wealth of delightful, bright salmon-rose flowers in May and at intervals through the summer. Cult: Sun to light shade. Soil, any but it is in good loam with abundant moisture that it is at its best. 25 cts. each; 3 for 65 cts.
*Subulata, the Mossy Creeping Phlox so popular in the rock gardens of Europe. With neat moss-like evergreen foliage all the year, it is completely hidden under the shimmering masses of flowers in early spring, giving marvelously fine effects on walls, in the rock garden, or as a border edging. Cult: Full sun. Soil, any light soil, not too rich; will withstand drouth and hard conditions. Shear back every year. Prop., layers.

## Subulata Varieties:

*Alba. Compact, pure white.
*Rosea. Compact. Deep rose with darker eye.
*Sensation. Shimmering lilac.
Prices: 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz.
PHLOX-Continued on next page.

## PHLOX-Continued.

## HARDY PERENNIAL PHLOX

One of the most valuable of flowers for summer bloom giving unsurpassed mass effects in fine colors

Give a well prepared and enriched soil and plenty of water and wherc there is much summer heat, a mulch of manure or peat moss is invaluable to protect their sensitive surface roots. Plant 16 inches apart.

There are fine old varieties which are still among the best and late years have brought unusually fine new ones. This is a flne selection of both old and new

## B. Compte. Wine color.

Baron von Heckner. Delicate salmon-pink.
Champs Elysee. Bright rose
Coquelicot. Red with salmon eye.
Colonial. Lavender
Dr. Chas. Mayo. White with crimson eye.
Fuerbrand. Brilliant orange scarlet, almost vermilion. One of most brilliant known. Flowers all summer
Jules Sandeau. Pink with white center.
Lothair. Bright crimson.
Marechal French. Massive flower heads, deep scarlet with blood red eye.
Mrs. Jenkins. Immense heads of pure white.
Rheinlander. Salmon pink with red eye.
Thor. Splendid salmon-pink.
Special French. An unnamed sort of beautiful clear pink.
Phlox prices: 25 cts. each; 3 for 65 cts.; $\$ 2.25$ per doz.
Phlox Collection. 1 each above 14 varieties, $\$ 3.00$.
*PINKS. See Dianthus.
*PLUMBAGO. See Ceratostigma.
*POLEMONIUM carneum. A delightful native plant 12 to 20 inches tall; fern-like, pinnate foliage and graceful stems carrying large flowers, opening creamy or flesh color and soon turning to deep rose. Most beautiful of Polemoniums. Cult: A good moist loam. Prefers partial shade. 35 cts . each; 3 for 90 cts.
*POTENTILLA Repens. 1 in. Neat creeper with fine-cut ruddy foliage and yellow flowers. Fine for a ground cover, or between steps or stepping stones. 25 cts each.
*PRIMULA or PRIMROSES. Primula acaulis is the English primrose and differs from the Polyanthus in having each flower on a separate stem and they continue to flower over a much longer season. They thrive in any situation in light or medium shade and in ordinary rich soil. Splendid alike in shady border and rock garden. Pl., fall or spring. I offer the following rare sorts:
*Primrose Heavenly Blue. So rare and beautiful that they always attract. Of the Acaulis type with stems 6 to 8 inches with flowers in varying shades of very deep blue. 40 cts. each; 3 for $\$ 1$. Seeds, pkt. 50 cts.
*Primrose "Double Lavender." Of the acaulis type and very free flowering with very double deep lavender flowers. If you do not just love them on sight you will differ from every visitor to my gardens. 40 cts. each; 3 for $\$ 1$.

POLYANTHUS PRIMROSE Perfect Model. To those who share my love of fine primroses I commend this fine strain for the variety and richness of color and the size.
Mixture in lovely shades of cream, yellow and reds, 25 cts. each; 3 for 65 cts ; $\$ 2.50$ per doz. Seeds, pkt. 35 cts.
**PRIMULA Juliae has a ncat tuft a half inch high and lovely deep claret colored flowers with a golden eye on 2 -inch stems. A jewel among alpines. Give a cool sunny situation, light shade, and a good moist loam. Pl., fall to spring. 35 cts. each; 3 for 90 cts.
*PTEROCEPHALUS parnassi forms low dense clumps, grayish foliage and above this produces many lilac-pink, scabiosa-like flowers through the summer. Cult: Sun. Soil, any. Pl., fall to spring. Prop., div. 25 cts. each; 3 for 65 cts.

PYRETHRUM Roseum. "Painted Daisy." Enchanting garden and cut flowers with the large daisy-like flower's in mixture of loveliest shades of red, pink, white on slender 18-24 in. stems, May-June and again in fall.


Oenothera Missouriensis
Sit., sun or light shade: Soil, rich, mnist loam; Pl., fall to spring: Prop., Div. or seeds. Supreme Single Mixed. Plants 25 cts each; 3 for 65 cts. Seeds, pkt. 20 cts.; $1 / 8$ oz. 50 cts. (A de luxe strain.)

REDBUD, Cercis occidentalis. A beautiful shrub from 4 to 10 feet in height and spreading broadly and in May it is literally smothered with its blooms, which are large pea blossoms of purplish rose studded densely on the hranchlets. When they are in flower, tourists come hundreds of miles to this region to admire them. Hardy and drouth resistant and of rapid growth. Nursery grown trees, 12 to 15 inches high, at 85 cts . each, postpaid.
ROMNEYA Coulterii, the Matilija Poppy. Noble deciduous perennial with very large white flowers with gold stamens. I have really discontinued but so many continue to ask for it, so I will continue to supply potted plants. Only half-hardy in colder regions. East of Rockies, $\$ 1.50$; west of Rockies, $\$ 1.15$, postpaid.
*ROSA spithamea. Creeping by underground rumners, this lovely native rose makes little scattered colonies. Never over 6 inches high and its large, bright pink blossoms are lovely. 50 cts. each.

SALVIA in Blue. Many people ask for blue flowers and there are no finer blues than in these Salvias. Gracefully branched woody plants with beautiful masses of flowers and very drouth resistant, except $S$. patens. Cult: Sun and any soil. Pl., fall to spring.
Azurea. With many stout and wiry stems this makes a bush-like mass with flowers of clear azure-blue after midsummer. 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz. Seeds, pkt. 25 cts.
Bracteata Rosea makes a much branched plant, 3 to 4 ft . in height with heavy bluish basal leaves. On the branches are many lavender bracts which give the effect of flowers in June and July. Striking and a favorite with visitors here. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
Farinacea Blue Bedder. This splendid new variety with its deep blue flower throughout the summer is indispensable in the border and a fine cut flower. It grows 2-21/2 ft . tall with slender, wiry stems. 30 cts. each; 3 for 75 cts.; $\$ 2.50$ per doz. Seeds, sown early will flower first season, pkt. 25 cts.
Pitcheri, like azurea, but the splendid flowers are an intense deep blue. It blooms from August to frost. One of the best late fall flowers. 30 cts . each; 3 for 75 cts .
Patens. 18 in. Velvety deep blue flowers 2 in. long above a luxuriant basal foliage. It has aptly been called the world's finest blue. Prefers moist mellow loam. Sun. Not hardy below 15 degrees but roots may be stored. 30 cts. each.

SANQUINARIA Canadensis. "Blood Root." 4-6 in. high with lovely snow white flowers, followed by the large maple-like leaves of blue green. A jewel for the deeply shaded bed with ample moisture, acid soil rich in humus. Pl., fall or early spring; Prop., div. 30 cts. each; 3 for 75 cts.; $\$ 2.50$ per doz.
*SAPONARIA Ocymoides splendens is a most useful plant. Makes a broad carpet, even to 3 ft . across, on the level, and, planted at top of walls will drape as much as ten feet in a year. The foliage is good and the show of pink flowers in spring very attractive. Splendid for dry banks. Cult: Sun or light shade. Soil, any, to poorest. Pl., fall to spring. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
*SATUREIA alpina. Calamintha. A splendid plant for sunny siluations, 4 inches high with spreading mats of rounded leares and deep blue, white tipped flowers from May to August. Cult: Sun and any soil. Pl., fall to spring. 25 cts. each; 3 for 65 cts.
*SATUREIA pygmaea. Like a tiny erect shrub, 8 to 12 inches high, with narrow leaves of softest green and dainty llowers of shimmering clear pink in August and September. Cult: Sun and any soil to very poor. Most delightful. 40 cts. each.

SAXIFRAGA Peltata. 3 to 5 ft . with very large round leaves of richest green terminating tall stems, it is of the finest of background or foliage plants for deep shade. Likes moisture and will grow in water. 50 cts. each.
*STATICE artica Californica. Sea Peak. 6 in. Neat tufts of grassy foliage and bright pink flowers all summer. Fine for rock garden or edging. Sun. Soil, any. 25 cts. each; 3 for 65 cts.


California Native Iris (see p. 22)
SCILLA Peruviana. A rare bulbous plant with heavy mass of dark grassy leaves and erect, very many flowered stems with flowers of deepest delft blue. Very striking. Cult: Sun. Soil. sandy loam. Pl., fall to spring. 30 cts. each; 3 for 75 cts.

SEDUMS. See page 12.
SEMPERVIVUMS. See page 30.
SHASTA DAISY. Superbly effective in the border or in long rows. nothing gives more bloom, either in the garden or for cutting, with so little trouble. Cult: Sun; fair to good loam. Pl., fall to spring. Divide every second year.
Shasta Daisy, "Double Fringed" or "Chiffon Daisy." 2 ft . high with rery double flowers of pure white, the petals shredded, quilied, and incurved to give a most enchanting effect. Most effective as a cut flower. 25 cts. each; 3 for 65 cts.
Shasta Daisy, "Burbank's Alaska". 18 to 24 in. high, of graceful habit. The pure white flowers are 4 to 5 inches across. 25 cts. each; 3 for 60 cts. Seeds, pkt. 15 cts.
*SHOOTING STAR. See Dodecatheon, page 5.


Shasta Daisies

## SILENE

Silenes are popularly known as Catchfly or Wild Pink. They are related to the pinks. Those I offer grow naturally in rocks or gravelly soil and are admirably suited to the rock garden.
WESTERN AMERICAN SILENES. In California, S. Californicum is the "Indian Pink". The three species described below rank near the top of the world's best rock plants, and are worth much painstaking to have them at their best. All have deep reaching fleshy tap roots with its crown about two inches below the surface. From this radiate laterally numerous tendrils which push through the soil at some distance from the crown making a single plant appear like a colony, producing such a lovely effect as that pictured above. Foliage dies to ground soon after flowering, after which the dormant roots handle easily.

Cult: Light shade. Soil, well drained and a good loam or rich gravelly one. Pl., best dormant in fall; live plants supplled in spring. Set tap root with crown two inches below surface and spread tendrils laterally and upward.
*Californicum makes a clump 8 to 18 inches across with flowering stems a foot high, but oftener more compact. The cardinal-red flowers come from late spring on through the summer, and are a show indeed. 25 cts. each; 3 for 65 cts . Seeds, pkt. 25 cts.
*Hookerii has many small detached tufts 2 inches high, each producing exquisitely laciniated flowers up to two inches across, unexcelled in their delicacy. Soft pink with a white halo. 25 cts. each; 3 for 65 cts.
*Ingramii, pictured above, needs little description. It is more floriferous than Hookerii and the less laciniated flowers are of deep rose. New and a real acquisition. 50 cts. each; 3 for \$1.25.
*Schaftii. A most charming rock garden or border plant, 4 to 6 inches high with low cushions, and masses of bright pink flowers from July to October. Cult: Sun; any soll and stands drouth. Prop. seeds. 25 cts. each; 3 for 65 cts. Seeds, pkt. 25 cts.
*SISYRINCHIUM, Blue Eyed Grass; Star Grass. Dainty iris-like plants with grassy leaves and slender stems and many very pretty flowers. Cult: Sun. Soil, any loam with plenty of moisture during growing season. Pl., fall or spring, but better dormant in fall. Prop. Divisions.
*Bellum. A foot high, with star-like blue flowers in April.
*Californicum. A few inches high with rich yellow flowers from May to October. Require constant moisture.
Price of all is 25 cts. each; 3 for 65 cts.
*STAR TULIPS. See Calochortus, page 6.
The above prices are postpald to your door.

* Indicates plants well suited to rock gardens.
* Indicates plants suited to the rock garden only.

SYNTHYRIS. Splendid contributions from the Pacific Coast to the shadiest portions of the fern-bed, woodland or rock garden. The neat evergreen clumps are always beautiful and the flowers are enchanting. Each is quite तlstinct, and all to be highly prized. Cult: Shade to deep shade. Soil, good rich woodland soil. Pl., fall to spring. Prop. Divisions.
*Cordata. A few long cordate leaves, deep green above, purple beneath. The dainty pink flowers come in AprilMay. 25 cts. each; 3 for 60 cts .
*Rotundifolia. No prettier woodland plant in foliage. The round leaves make a close mound a few inches high and the very many soft blue flowers appear in early spring. 25 cts. each; 3 for 60 cts.
*Stellulata. Is large with glossy green, fluted leaves. The deep blue flowers are on long erect racemes for weeks in early spring. With rich soil and ample moisture it makes large masses. 30 cts. each; 3 for 75 cts.
*TELLIMA grandiflora. A Western woodland plant to be prized for its lovely begonia-like foliage and splendid for the shaded rock garden or with ferns. Makes beautiful clumps 6 in. high and a font across. Cult: Any soil in shade. 25 cts. each; 3 for 60 cts.

THYMUS, Thyme. The dwarf (Thymes) are splendid creeping plants, fine betwecn flagging, for a mantle over a rock or for edging the border and they make delightful masses in nooks among rocks. The taller ones are nice in the border and the herb garden. Cult: They thrive either in sun or light shade and in poorest soils. Pl., fall to spring. All flower in June and July.
*Albus. Dense carpets $1 / 2$ inch high covered with pure white flowers in season.
*Lanuginosa, the Wooly Thyme. With its soft grey foliage it is most attractive as a mantle or in a pocket.
Nummularia. A very pretty almost unknown species with glossy deep green ovate leaves and pinkish flowers.
*Serpyllum coccineum. Foliage is a low carnet of small dark green leaves. Flowers rosy-red in great profusion.
*Serpyllum, Purdy's var. (right name doubtful), grows 2 in. high, spreading rapidly to make a dense mass and has lavender-pink flowers in a fleecy cloud. Always neat, it is alike valuable to drape over a bank or rock to even 3 or 4 feet down or to fill a pocket. Easily kept in bounds by trimming. A wonderful ground cover.
*Lanicaulis. Entirely distinct with leaves like tiny mouse ears in a flat mass while the very pretty flowers which are $11 / 2$ inch balls of soft pink are on 6 in. stems. Very desirable.
*All Creeping Thymes, 25 cts. each; 3 for 65 cts.; set of 5 for $\$ 1$.

## Taller Thymes.

*Nitida makes a very compact, tiny tree-like shrub of greyish-green. Flowers are lavender and it has the most delicious fragrance of any Thyme, which alone should sell it. Fine in rock garden, herb garden or border. Cult: Sun. Soil, any. Pl.. fall to spring. Prop. Cuttings. 25 cts. each. Seeds, pkt. 25 cts.
*THYMUS Brousonetti. A rare new thyme with neat crect habit and large heads of rosy flowers. 35 cts . each.

TIGRIDIA. These gorgeous flowering bulb for spring planting will be offered in a Spring List which will reach you in January.
TOLMEIA Menziezii. This hardy Californian plant has soft, green, heart-shaped leaves and creeps by underground runners to make broad low masses. A lovely foil or ground cover in the moist woodland garden. 25 cts. each; 3 for 60 cts.; $\$ 2$ per doz.

VANCOUVERIA hexandra, "Redwood Ivy" or "Mexican Ivy" is a woodland plant of the Western forests and easily the prettiest of all American woodland foliage plants. Perfectly hardy about Boston and plantings seen there have brought me floods of orders. Vancouveria has slender underground roots which grow laterally a few inches under the surface, and from these leaf cluster push up at intervals, in time making a dense mass of the glossy pinnate leaves. Cult: Shade to deep shade. Soil, any well drained. Pl., fall to spring. To plant, excavate so that roots may be laid flat and covered three inches deep, of course with any leafy stems erect. 15 cts each; $\$ 1.50$ per doz.; $\$ 7.50$ per 100.


Silene Ingrami

THALICTRUM Rochebrunianum. Rare new Meadow Rue from Japan. Foliage and stems are ruddy blue green. $3-5 \mathrm{ft}$. tall with large panicles of quite large lavender flowers. Sun or light shade and in rich moist loam. 75 cts. each.

TRADESCANTIA. "Spider Wort." Handsome perennials, dependable and hardy and flowering for weeks through summer. Foliage is grassy while on 18 in. stems are borne the large clusters of flowers, which are three petalled open cups with a feathery tuft at center. Sun to deep shade and a rich moist loam is best. Exceptionally fine cut. Following new varieties are in lovely shades and much larger flowered:
Bluestone. Compact. Rich blue flowers. 35 cts. each.
Iris Prichard. White shaded violet with violet tuft. 40 cts. each.
J. C. Weguelin. Light azure blue. Delightful. 40 cts. each.

Leonora. Deep rich glowing violet. 40 cts. each
Pauline. Late. Purest rosy-mauve. 35 cts . each.
Purple Dome. Vigorous. Large clusters of rich purple. 35 cts. each.

## Collection of above six, $\$ 2.00$.

Lilac Time. New and scarce. Pure deep lilac. 50 cts. each. Virginica Blue. The old reliable for filling shaded beds and for naturalizing in shade. 25 cts. each; 3 for 60 cts ; $\$ 2.00$ per doz.

## TRAILING ARBUTUS. See Epigaea, page 19.

VERONICA. Most charming plants for the border, moister sections of the rock garden, or in walls. They have dense masses of flowering stems and in spring are fairly smothered with flowers. Cult: Sun or light shade. Soil, best a good loam always moist. Pl., fall to spring. Prop. Div.
*Pectinata rosea is a low carpet of wooly foliage, the flowcrs rose colored. Distinctive.
*Teucrium "Sky Blue". 12-15 in. with airy spikes of sky-blue flowers, May-June. Splendid.
All Veronicas 25 cts. each; 3 for 65 cts.

[^6]

Liwisia Ridiviva (sce page 23)
VIOLA. In any garden Violas should have a conspicuous position, for the most modest are delights. Cult: Sun or light shade. Soil, a rich loam with constant moisture for finest effects. Pl., fail to spring. Seeds.
*Pedata, the Bird's Foot Violet, is a gem. 4 inches high with leaves cut like a bird's foot. Large handsome flowers are a delightfui shade of violet with lighter halo at center. They flower well in May, and several times through the summer, 25 cts. each; 3 for 65 cts.
*Pedata Bicolor. Varies from Pcdata in having the two upper petals deep violet, while the lower ones are lilac. Irresistible in its beauty. 35 cts. each; 3 for 90 cts.
VIOLA odorata, Sweet Violets. Lovely old-fashioned garden violets, thriving in any good light loamy soil in shade.
Double Russian. Rare. Fragrant double deep violet. 35 cts. each.
Czar. Very free flowering, single white. 25 cts. each; 3 for 60 cts.
*Marie-Louise. An improved form of the lovely, old-fashioned, very fragrant, double light blue Violet. 25 cts. each; 3 for 60 cts.
*Princess Mary. A lovely new deep blue violet with very long stems, and very double at center. A new form and most striking. 30 cts . each; 3 for 90 cts .
*Rosina. A new fragrant deep rose violet, flowering both spring and fall. Delights in light shade and good moisture. 25 cts. each; 3 for 65 cts ; $\$ 2.50$ per doz.
*Swanley White. Makes strong clumps with large double flowers of purest white on long stems. 25 cts. each; 3 for 60 cts.
*Princess of Wales. Very decp blue single flowers on long stems. Strong grower. 25 cts . each; 3 for 60 cts .


Sempervivums
The above ririces are postnaid to your door.

## *WEST AMERICAN VIOLETS

The West is very rich in this genus and fully forty varieties and species are described by botanists.

To one who only knows European and East American Violets, they will offer many surprises-for many of them have cut foliage. They can be divided into two groups:

First group is of the Eastern Canina or lobata habit; plants that hold their foliage some time during summer and more or less creeping.
*Canina adunca, the Dog Violet, makes wide clumps with blue flowers. A very fine rock garden plant for moist places.
*Glabella has the true violet-shaped leaf and a yellow fiower. Makes mats.
*Ocellata is half way between violet-shaped leaves, several stems making a nice clump, and flowers white, tinted purple. A fine plant.
*Praemorsa. Leaves orbicular, a close clump, with yellow flowers.
Second Group. In this the plants have a single, deep-seated bunch of fibrous roots which may produce severai stems. They flower early and then ripen hard for a summer rest. Many grow in situations that are dry and hot in summer, but they flower early. Fall planting for these. Fine rock garden plants.

This group should be planted deepiy, so that the tip of root is covered $11 / 2$ to $21 / 2$ inches. Use a heavy mulch. which may be raked off in very early spring.
*Beckwithii has three parted leaves. Flowers violet and purpie.
*Chrysantha has finely cut leaves. Flowers rich yellow within, maroon on back. A beauty.
*Hallii has palmate ieaves, finely cut upper petals dark purple, and lower yellow.
*Lobata has three parted leaves like an oak leaf, and yellow flowers.
*Purpurea. Rounded, grayish leaves. Rich yellow flowers, with the outside of flower a deep purple.
*Sheltonii has finely divided leaves, a half creeping habit. and yellow flowers.
Prices of above 15 cts. each; 3 for 40 cts.; $\$ 1.50$ per doz.

## WINTERGREEN BERRY. See Gaultheria, page 20.

ZAUSCHNERIAS are West American plants locally called Wild Fuchsias. They make dense masses of foliage from 6 inches to 2 feet high, according to species. and in fall are a solid mass of the most brilliant scarlet. Here they are oftener found on rock faces where there is a little seepage. Fine border plants, too.
*Californica is about 6 inches, with light green foliage.
*Californica var., a little taller, with grayish leaves.
Cana grows from $11 / 2$ to 2 feet, with grayish foliage. A wonder when in flower.
All are hardy in Europe and presumably in the East. 25 cts. each; 3 for 65 cts.; $\$ 2.50$ per doz.

## SEMPERVIVUMS, "Hen and Chickens"

Sempervivums are intriguing little plants for rock garden, for walls or for special little colonies and every garden has a place for some of them. Cult: Perfect drainage. Sit: Sun or shade but colored ones retain color longer in shade. Soil: A rich friable loam with some humus.

Unfortunately demand has diminished to the point where I cannot afford to catalog long lists of named varieties but for those who are still interested I still grow the finer varieties and have prepared a mimeographed list which will be sent on application to all interested.

COLLECTION, 20 FINE COLORED SORTS. Each highly colored, each named and packed separately, for $\$ 6.00$.

COLLECTION 12 SEMPERVIVUMS, each named and packed separately. Seiected for well marked differences, for $\$ 3.00$. My most popular collection and if you list varieties you already have we will not duplicate.
TO COLLECTORS OF SEMPERVIVUMS. Write about the unusual and rare varieties you are seeking. I have many rare varieties in numbers too small to list.

[^7]* Indicates plants suited to the rock garden only

NOTE: To bloom next year Delphinium and Columbines must be sown by September 15.
Fresh seed ready. See pages 14, 18. Order and sow at once.

# SECTION 3. <br> <br> SEEDS OF ANNUALS FOR FALL SOWING 

 <br> <br> SEEDS OF ANNUALS FOR FALL SOWING}

## You woill find seeds of Perennials listed with the plants, pages 13 to 30 .

A Seed Catalog will reach you in January offering the finest strains of your old favorites and the finest novelties of European and American breeders. Wait for this list.

SEEDS OF PERENNIALS best sown early summer to fall to give you bloom next year: Alyssum, Columbines, Arabis, Aubrietias, Cheiranthus, Delphiniums, Dianthus, Gypsophila, Helianthemum, Hollyhocks, Linums, Pentstemons, Horned Poppy, Oregon Sunshine, Salvia, Pyrethrum, Primroses, while Lewisias and Natlve Iris are best fall sown but do not flower until third year. Seeds of above listed pages 13 to 30 .
The following annuals in all milder climates sown in late summer and fall will produce sturdy plants for winter and early spring bloom. Some, specially noted, are best sown in fall even in cold regions while the others should be sown in very early spring in such regions. My spring seed lists give many named varietles in each group not offered here. If you do not have it send for a copy.

ARCTOTIS Giant Hybrids. 12 in. Free flowering, with large single daisies $2-3 \mathrm{in}$. across on wiry stems in most varled color range from cream to light orange. Pkt. 25c; $1 / 8$ oz. $\$ 1.25$. Sow Sept.-June.
CALENDULAS (Pot Marigolds). These sturdy old-fashioned flowers sown from Aug. to Nov. will give a brilliant show in winter and early spring in all mild climates. In cold regions sow from early spring to summer for a succession. Following are extra fine:
Sunshine (Chrysantha). Clear buttercup yellow flowers on wiry stems, much resembling a Chrysanthemum with lts incurved petals; it is splendid for garden and cutting alike. Pkt. 15 cts.; $1 / 4$ oz. 25 cts.


Calendula, Sunshine
Campfire (Sensation) HA. Largest of all pot marigolds with full double flowers on strong stems. Rich orange overlaid with a sheen of scarlet. Pkt. 15 cts . $1 / 4 \mathrm{oz} .35 \mathrm{cts}$.
Calendulas Finest Mixed. All types and colors. Pkt. 10 cts.; $1 / 4 \mathrm{oz} .25 \mathrm{cts}$.
CANDYTUFT Umbellata Mixed. 18 inch. Lovely shades of red, rose, white. Bloom from April to August. Pkt. 10 cts.; 1/4 oz. 25 cts.
CANTERBURY BELLS. These lovely biennials must be sown July-Sept. if they bloom next year. Single Mixed in blue, rose, pink, pkt. 10 cts.; $1 / 4 \mathrm{oz} .25 \mathrm{cts}$. Cup \& Saucer Mixed, pkt. 15 cts.; $1 / 8 \mathrm{oz} .35 \mathrm{cts}$.
CLARKIA Elegans, Double Mixed, in loveliest shades. Sow Sept.-Nov. Pkt. 10 cts.; $1 / 4$ oz. 30 cts.
CALIFORNIA WILD FLOWERS, page 34 , give some of the finest spring garden effects. Best sown in fall.


California Poppies
CORNFLOWER Jubilee Gem. This lovely variety, a dwarf 12 inches high and simply covered with the bright deep blue flowers is truly a gem. Sow in fall for early bloom. Pkt. 20 cts.
CORNFLOWER—Bachelor Button. 19 in. Exceptionally fine garden and cut flowers which may be sown in fall where to bloom. Your choice of the lovely double, Blue Boy; Pinkie; Red Boy; Snow Man; Supreme Mixed at 15 cts. per pkt. Any 4, 50 cts.; $1 / 4 \mathrm{oz} .30 \mathrm{cts}$.
DELPHINIUMS. Pacific Giants and other perennial sorts, sown July-Oct. will give finest blooms next summer. See page 18.

ESCHSCHOLTZIA, California Poppy. In milder reglons and the West sow Sept. to Dec. to give strong plants for next spring. Sow where to flower and thin. (For the native varieties see Wild Flower Seeds.)
Supreme Blend of loveliest colors and new varieties. Pkt. 15 cts . $1 / 4 \mathrm{oz} .35 \mathrm{cts}$.
GODETIA. In California and milder climates these showy annuals are best sown in fall where to flower and thinned to 6 in. apart. In colder regions sow in early spring.
Kelvidon Glory (New). Glorious flowers of salmon-orange. Pkt. 15 cts.; $1 / 8$ oz. 60 cts.
Supreme Dwarf Single Mixed. 8 in . The brilliant hued flowers give an unsurpassed low mass effect for weeks in summer. Pkt. 15 cts.; $1 / 4 \mathrm{oz} .30 \mathrm{cts}$.
Supreme Godetia Mixture. 15-18 in. No annual surpasses the Godetia for the abundance of showy garden and cutting flowers through a long season. Pkt. 15 cts.; $1 / 4 \mathrm{oz} .30 \mathrm{cts}$.

FOXGLOVES. Sow these hardy biennials summer to fall for next year. Rose, Purple, White, 15c pkt. Mixed, 10 c.
HOLLYHOCK Indian Spring. While it flowers the first year from seed, sown now you will have an early bloom of its exquisite pink and rose blooms. Pkt. 25 cts.

GIANT IMPERIAL LARKSPURS. Most showy and useful flowers for either garden or cutting. In milder regions best sown in fall where to flower and thinned to 8 in. apart. Other regions, early spring.
Blue Bell, clear light blue; Blue Spire, intense deep; Coral King, coral pink on salmon; Exquisite Rose, loveliest deep rose; Lilac Spire, beautiful clear lilac; White King, glistening pure white closely spaced on long spikes.
Supreme Mixture. Blended from named varieties in a perfect balance of the loveliest colors. Simply superb.
Each of above: Pkt. 15 cts.; 1/4 oz. 40 cts.; 1 pkt. each 6 colors, 75 cts.
Myosotis Alpestris Mixed in blue, white and pink, mostly pink. Splendid low annual for border. edgings, or bulb beds. Plants in Oct. 3 for 50 cts.; $\$ 1.50$ per doz. Seeds, pkt. 15 cts .; $1 / 4 \mathrm{oz} .45 \mathrm{cts}$.


PANSIES
Superb Pansies are produced only by planting selected seeds of finest strains and here are the best. Sow July-Oct. to produce vigorous plants for early spring bloom. In colder regions winter the plants in cold frame. To obtain good germination use a rich finely pulverized soil with constant moderate moisture. Soil cannot be too rich for the plants.
"My Choice" (Supreme Mixture Swiss Giants). This I consider the finest strain for all localities. Color range is superb, flowers very large and mostly beautifully frilled. Longest and freest flowering strain I know. Pkt. 40 cts.; 1/32 oz. \$1.
Steele's Super Swiss 400. Huge jewels of velvety red and gold and combinations of those colors unsurpassed in richness of tones. You simply must have some of them. Pkt. 40 cts.; $1 / 32$ oz. $\$ 1$.

Select Large Flowered Mixture. For those wishing an economical, but really fine mixture. Pkt. $20 \mathrm{cts} . ; 1 / 4 \mathrm{oz} .80 \mathrm{cts} . ;$ $\$ 2.75$ per oz.

ICELAND POPPIES. In regions where winters are not too severe Iceland Poppies are best sown in fall, the earlier the better. In cold regions very early spring. Following are top-notchers:

The Emperor. Tall wiry stems and huge flowers of brilliant tangerine-orange. Pkt. 20 cts .; $1 / 16 \mathrm{oz} .65 \mathrm{cts}$.
Imperial Jewels Mixture (New). Contains all the colors known to the Iceland Poppy with many new tints and combinations of colors. By far the finest strain yet produced. Pkt. 25 cts.; $1 / 16$ oz. 75 cts.
Papaver Californica. Sow them in a hot situation and the large silky flowers of pure orange on well branched 15 in. plants will give rou a month of thrill in snting, long to be remembered. Sow fall or early spring. Pkt. 15 cts.

SHIRLEY POPPY. Sown in fall they give sturdy plants for stunning late spring effects. Single Mixed, pkt. 10 cts.; oz. 40 cts. Double Mixed, pkt. 10 cts.; oz. 50 cts.

The alove prices are postpaid to your door.

California, Dec. 28, 1934: "I must tell you, your Calypso Day Lily has not been out of blossom one day since the middle of July and though the leaves are gone, the flower stalks are going strong.'

Almost daily I receive inquiries, asking if it is possible for me to ship plants safely to the East. I think that the following letters from customers will still any doubts on this point:

Dunedin, New Zealand: "Plants alrived in perfect condition and we are exceptionally well pleased with them. Had we known that they would have arrived in such order we would have taken dozens instead of singles."

SCABIOSA, Mourning Bride. While these fine garden and cut flowers bloom the first year, in milder climates it is recommended they be sown in fall, as early as possible. Indispensable cut flowers.
Purdy's Supreme Blend. Customers say, unsurpassed for balance of fine colors. Pkt. $10 \mathrm{cts} . ; 1 / 4 \mathrm{oz} .30 \mathrm{cts}$.


## Scabiosa

SWEET WILLIAM. Beloved hardy perennials of rich and varied color. Sow spring, or fall in boxes. Will bloom first year. Newport Pink; Scarlet Beauty; Superb Mixture. Either pkt. 10 cts.; 1/4 oz. 25 cts.

SWEET ALYSSUM. White flowering annual which may be sown any time for long succession and invaluable for borders, banks or to cover bulb beds. White. Pkt. 10 cts.; $1 / 2$ oz. 25 cts.; oz. 40 cts.
STOCKS, DOUBLE PERPETUAL BRANCHING. The finest of all winter flowers for California and mild regions. Sow Aug.-Nov., Aug.-Sept. best.
Supreme Blend. Very finest colors. Pkt. 15 cts.; $1 / 8$ oz. 45 cts.
White, Rose, Sapphire, Red, Yellow, Lilac, separate. Pkt. 15 cts.; 1/8 oz. 60 cts .


Stocks


Snapdragons
SNAPDRAGONS. With the near perfection of rust-resistant strains in all the popular colors we may again enjoy their lovely masses of bloom in our gardens with ample spikes for cutting. For spring bloom sow Aug.-Nov. For summer and fall bloom sow February to April.
Supreme Super Majestic Mixture. (Rust resistant). The very finest strain producing huge spikes in all the colors known to the Snapdragon, including many lovely shades not yet introduced as separate colors. Pkt. 25 cts.; 1/16 oz. 50 cts.

## SWEET PEAS

Nothing gives more joy or more fine blooms for the house than a well-grown row of fine Sweet Peas. The Early Types are specially suited to give winter bloom in mild regions if sown August to October and in colder regions come several weeks earlier from spring sowings. The lates are the best for cold or damp climates and are the old stand-bys generally.

Culture: In California and mild regions Aug.-Nov. sowings will give a wealth of early bloom. In colder regions sow as soon as ground warms in spring. For superlative results give; good drainage is essential. Dig a trench 12-15 inches deep, fill either with manure or with peat and leafmold and give a good dressing of bone meal and cover with 2 inches of fine soil. Sow seeds 1 inch deep and 2 inches apart. Water moderately until plants appear, then copiously. Water sparingly when buds appear and pick flowers clean daily.

A really good mixture suits the purposes of the home garden best and the mixtures offered are carefully blended from choicest named varieties in perfect color balance.
Supreme Blend Early Sweet Peas. Pkt. 15 cts.; oz. 40 cts. Supreme Blend Late Sweet Peas. Pkt. 10 cts.; oz. 25 cts.

VIRGINIAN STOCK Choice Mixed. Profuse blooming hardy annual 6 in. high, in mild regions sown late summer it will give fine winter bloom. Sown at frequent intervals it may be had in continuous bloom. Very easy. In mixture of red, rose and white. Pkt. $10 \mathrm{cts} . ; 1 / 2 \mathrm{oz} .25 \mathrm{cts}$.

VISCARIA. Easily grown and beautiful hardy garden and cutting annual 1 ft . high. Sown Sept.-Oct. for spring bloom. March to May for summer bloom. Sow where to bloom.
Blue Pearl. Lavender blue. Pkt. $15 \mathrm{cts} . ; 1 / 8 \mathrm{oz} .35 \mathrm{cts}$.
Rose Beauty. Bright rosse. Pkt. 15 cts.; $1 / 8 \mathrm{oz} .35$ cts.
Brilliant Mixed. Pink, rose and blue. Pkt. 10 cts .; $1 / 4 \mathrm{oz}$. 30c.
OLD FASHIONER WALLFLOWERS. A charming perennial for earliest spring bloom, best treated as a biennial sown in early fall. Single or double in mixture of yellow, brown, orange and red. Height 1 to 2 ft . Should be in every garden.
Supreme Single Mixed. Pkt. $10 \mathrm{cts} ; 1 / 4 \mathrm{oz} .25 \mathrm{cts}$.
Supreme Double Mixed. Extra choice. Pkt. 20 cts.; 1/16 oz. 85 cts.

NOTE: In the foregoing paragraphs I have called your aitention to outstanding annuals that in milder regions are best sown in summer and fall and that will give brilliant masses of color to fill usual winter and early spring voids and give ample blooms for cutting. In colder regions you should have the seed ready for earliest spring sowing.

Do not overlook that California wild flowers are best sown in fall in all mild regions both for naturalizing and for charming masses of color in the garden. See next page.

Then too, most perennials are best sown in the summer and fall in all climates and fall sown, most things will flower next year. You will find seeds of many finest perennials listed with the plants in the earlier pages of this catalog. Seeds of perennials germinate best while fresh in fall and only new crop seeds are sent out.

## NOTE REGARDING CATALOGS

I take pleasure in sending you this catalog and I hope that in its pages you will find much information and that you want to add some of its lovely offerings to your garden.

My catalog is sent to all regular customers each year and I shall gladly send it to anyone interested in gardening.

However, this catalog is quite expensive and to be frank, while I try to make it as informative as possible, its prime purpose is to bring business without which it would be ir possible.

Therefore good business practice dictates that its distri. bution be limited to those actively interested. Hereafter it will be sent to all regular customers without request. To all customers two or more years after their last order.

All names that have not ordered after the second issue has been mailed to them will be withdrawn from my list.

In January I will mail you a catalog of seeds and some bulbs and plants for spring planting. Watch for it.


Virginian Stock


Sweet Peas


Godetia, Keluidon Glory. Sce page 31

## CALIFORNIA WILD FLOWER SEEDS

California is unrivaled in the number and beauty of its wild flowers but it is the vast stretches of certain lovely annuals that so attract visitors and I am offering here the loveliest of these. California Wild Flowers have two distinct and important uses:

1. In brilliance and loveliness they vie with the World's finest garden annuals and are worthy a place in the most sophisticated annual border. They are dainty and bright as cut flowers and colorful in the garden and most easy to grow. As they may be sown in place where to bloom successive sowings may be made to fill vacancies.
2. For naturalizing, beautifying vacant lots and odd corners nothing excels nor gives more lasting effects for so little cost. In the East and at Lake Talioe sow as soon as the ground can be worked in spring. In California and milder regions in unwatered area they may be sown from October to Marclı 1 and fall sowing just after the first rains brings the finest and longest bloom. Where watered they may be sown up to May 1, and watering will prolong the bloom into August. In the East up to June 15.

Culture: In the border may be sown in boxes to transplant, but it is easier and better to sow whele they are to bloom, and thin. In Naturalizing hoe off weeds and grass and scarify at least 2 inches deep but thorough-plowing and harrowing or spading and raking will enhance the results. (Broadcasting seeds among weeds and grass is a waste of time and seed, and I do not knowingly supply seeds to be sown in that manner). Mix the seed with twenty times its bulk of sand to insure more even distribution. Quantities: 5 to 8 pounds per acre; 1 pound to 5000 square feet; 1 ounce to 200 square feet.

ABRONIA umbellata. "Pink Sand Verbena". Fragrant lilac rose flowers resembling a Verbena. Prefers sandy soll. Spring sown, it flowers all summer. Oz. 70 cts.

BARTONIA Aurea. "Blazing Star". 2-3 ft. with fine foliage and large cup-shaped flowers of pure gold, with orange center. Fine in any border. Oz. $\$ 1$.

CALANDRINIA Menziezii. "Red Maids." 12 in. spreading plants. Flowers cups of rose-red in sun. Pkt. 15 cts.; $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.

COREOPSIS Stillmani. "Stillman's Daisy". 12 in. Fine cut foliage and large deep yellow flowers. Oz. \$1.

CLARKIA Concinnum. "Red Ribbons." 8 in. Petals deeply cut and shredded of lovely rose-pink. A gem. Pkt. 10 cts.; $1 / 4 \mathrm{oz} .30 \mathrm{cts}$.

CLARKIA Elegans. "Rose Clarkia". 9 to 15 in. with lovely lobed flowers of soft rose. Oz. 60 cts .

CLARKIA Pulchella. 10-15 inch. Very large deeply lobed flowers of bright deep rose. Ideal cut. Oz. 50 cts.

COLLINSIA Bicolor. "Chinese Houses". 8-12 ln. with ascending whorls of bright rose flowers, tipped white. Very lovely in sun or half shade. Oz. 50 cts.

DOWNINGIA Pulchella. Fascinating low annual. Lobelialike flowers are deep blue, the lower llp creamy. Entrancing ln a sunny border. Pkt. 20 cts.

ESCHSCHOLTZIA. "California Poppy". The most noted California wild flower, of which the loveliest are:
Californica (Aurantiaca). The California Poppy whlch each spring covers our hills and fields with such glorious splendor. Flowers are $2-3 \mathrm{in}$. across. brilliant orange with a glossy sheen. Oz. 50 cts.; 1/4 lb. $\$ 1.25$; per lb. $\$ 2.50$.
Maritima (Golden West) is as lovely; the color, deep golden yellow with center orange. Oz. 50 cts.; $1 / 4 \mathrm{lb} . \$ 1.50$.

FLOERKIA Douglasii. "Meadow Foam." 6-9 in. spreading with large flowers, yellow at center, shading to cream at edges. Likes moisture. Pkt. 10 cts.; oz. 50 cts.
GILIA Capitata. "Queen Anne's Thimble". 1-11/2 ft. branchlng plant with delightful soft blue flowers. Late. Oz. 50 cts.; $1 / 4 \mathrm{lb} . \$ 1.25$.

GILIA Dianthoides. "Fringed Gilia." 3 in . high, the dianthuslike flowers flinged at edges, bright rose with light throat. A gem for rock garden or bed. Pkt. 25 cts.

GILIA Linifolia. 12 in . Panicles of dainty Phlox-like flowers. Finc to cut. Either lilac or white. Oz. $\$ 1$.
GILIA Tricolor. "Birds' Eyes". Low, with charming flowers like Phlox Drummodii; smoky-lilac, with a yellow halo and purple centcr. Oz. $50 \mathrm{cts} ; 1 / 4 \mathrm{lb} . \$ 1.25$.

GILIA Achillaefolia. "Blue Gilia". $1-1 \frac{1}{2}$ ft., with graceful stems and lovely heads of violet-blue. Oz. 50 cts.

GODETIA Amoena. "Summer Darling". 15-24 in. with slender branching erect stems and large flowers of silvery-rose, with a red blotch at center. Oz. 60 cts.; 2 oz. $\$ 1.00$.
LASTHENIA Glabrata. Crop failure this year.
LAYIA elegans. "Tidy Tips". 12 in. Large daisj-like flowers; yellow, edged with white or cream. Oz. $\$ 1.50$.
LINUM Lewisii. "Blue Flax". 1-2 ft. The lovely "Sierran" flax ls a perennial blooming in four months from seed. Flowers are large and sky-blue. Pkt. 25 cts.

LUPINUS nanus. "Dwarf Blue Lupine". "Blue Bonnet". The flowers are rich blue, shaded white. A bed of this and Callfornia Poppy makes a glorious show. Fragrant. Oz. 40 cts.; $1 / 4 \mathrm{lb} . \$ 1.25$; per lb. $\$ 3.00$.

NEMOPHILA. "Baby Blue Eyes". "Baby Eyes". Charming low plants with the flowers open cups an inch across.
Insignis. "Baby Blue Eyes". Deep blue with lighter center. Oz. 40 cts.
Insignis Alba. Its pure white is needed as contrast with other colors. Pkt. 10 cts.; oz, 40 cts.
Maculata. "Spotted Baby-Eyes". White with vivid purple spots. Oz. 40 cts.
Atomaria. Very dark blue and lovely. Oz. 40 cts.
Discoidalis. Very dark red with an outer rim of white. Most intriguing and attractive. Oz .40 cts .
All Nemophilas, $1 / 4$ lb. $\$ 1.25$; per lb. $\$ 3.00$.
PAPAVER Californica. "Wind Poppy." 15 in. Slender wiry stems with flowers like fluffs of brilliant coppery-red silk. Stands drouth. Pkt. 15 cts.
PHACELIA Campanularia. "Bell-flowered Phacelia". 6-15 in. with delightful open bells of intense blue. Oz. 70 cts.
PHACELIA Viscida. 12 in . Its cups are most divine gentianblue smothering the plants for months in summer. A "must have" in any garden. Pkt. 15 cts.; oz. 70 cts.
PHACELIA Tanacetifolia. "Wild Heliotrope." 18 in. Much curled large heads of pure lavender-blue. Favored by bees. Oz. 35 cts.

PHACELIA Whitlavia. "Wild Canterbury Bell". 1-11/2 ft. Large bell-shaped flowers of violet-purple hanging in open clusters. Oz. 70 cts.

PHACELIA Whitlavia Alba. 12-18 in. Lovely pure white bells. Pkt. 10 cts.; oz. 70 cts.
SALVIA Carduacea. Thistle Sage. 1-2 ft. Interesting and unusual perennial with white woolly foliage, the flowers long beaks of lilac. Pkt. 10c.

PURDY'S SUPREME WILD FLOWER MIXTURE. A personally prepared blend from separate named varieties based on my long experience of kinds that will do well in all localities. Oz. 60 cts.; 2 ozs. for $\$ 1.00 ; 1 / 2$ pound, $\$ 2.35$; per pound, $\$ 4.50$.
PACKET PRICES OF ABOVE. Unless otherwise priced, 10 cts. per pkt.; 3 pkts. for 25 cts. Any 1310 -ct. pkts, your choice for $\$ 1$. $1 / 2$ oz. at ounce rate. Write for prices on larger quantities.

The above prices are postpaid to your door.

# ORDER BLANK CARL PURDY, Ukiah, Calif. 

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FRITlLLARAAS (See Page:9)
1 aul 4. Lanceolata, 2. Recurva, 3. Pudica, 5. Liliacea. 6, lia:iflora. i. I'ardyit, waried form.

Fritillarias are among the very choicest of Californian bulbous flowers, and they are quite easy to grow, if plauted according to the cultural rules set forth for each group.

You will find those pictured together with several more equally as fine on page 9 and three new ones on this page.

## BULBS FOR SHADE

Allium Cermum and a Vallidum Broditeas of the woodland group Dodecatheons. Globe and Star Tulips Ersthroniums Fritillarias of group 1. Trilliums. Grehids.

FOR THAT SHADE PROBLEM
The growth of trees and shrubs in the gardens of many of us comper us to search for subjects that will stand the ever increasing shade. Gardens once sunny now offer few sunns situations and to assist in solving this problem, lists. for two special conditions are given on pages $1 \bar{i}$ and 21 and here I add a list of further splendid sulbects that thrive in moderate to very deep shade.

## PERENNIALS FOR SHADE

Hardy Ferns, Anchusa myosotidiflora, Cohmbines, Ammous. Asarum, Boykinia, Clintonia, ("ynoghosum shamde Whhinium nurliaule, Dicentras. Epigata, qautherin, Hopatica, Hosta, Native Iris, Ir is Tectorum, Litmium maculatum, Lily of V'alles, Mertonsia, Nxalis oregonit, Pobemonimm canmedm, Primmoses, sthene, Tradescantia, Vanmouresia, Siont perdata and bicolon, V'iolets.


MARIPOSA OR BUTTERFLY TULIPS
Lower left-hand flower with crimson blotch, the two purplish ones and the top flowers are all forms of El Dorado Strain. The golden one is Citrinus. Vesta is at left of Citrinus and Oculatus is at the right side. Drooping one at bottom is Amabilis, a Globe Tulip.

## Lovely Calochortus

Colorful and showy Mariposa Tulips, Delightful Globe Tulips, Jaunty Little Star Tulips. Together they make a group of spring flowering bulbs of intriguing loveliness to fit a variety of situations in your garden, for pots, boxes or window box. You will find those pictured and many more on pages 5, 6 and 7

With the certainty that this year supplies of Tulips and other Holland Bulbs will be scarce or entirely lacking, gardeners must turn to other subjects to fill their beds.

Your attention is invited to the beauty of Mariposa Tulips and other Californian bulbs and their versatility in filling a variety of situations.


l/bus


[^0]:    The ahove prices are postpaid to your door. * Indicates plants well suited to rock gardens.
    ** Indicates plants suited to the rock garden only.

[^1]:    The above prices are postpaid to your door.

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