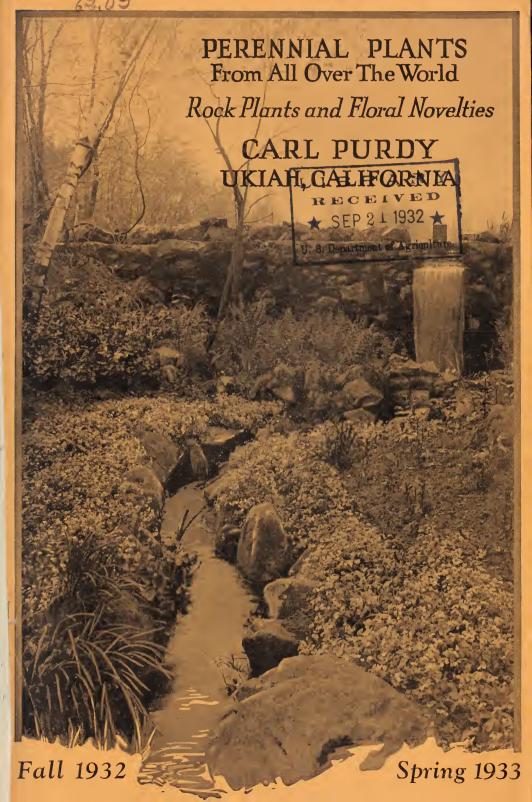
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.





Greetings to Garden-Lovers Everywhere

T is my intention to make firm friends of every person who entrusts me with an order. I have thousands of such friends now, and I fully expect to add

you, the first-time reader of this catalog, to that list.

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 far as a catalog can go in teaching the best use of plants.

If I add that every complaint is met in a spirit of reason, and that I always go farther than I promise in rectifying any errors or oversights, have I not said

enough?

TITHIS HARDY PLANT CATALOG began in 1910 with a leaflet. Every year has seen it grow in size and completeness, and this year is no exception. There are many very good things scattered through it that were not in the last edition.

Carefully read my list of "Not Novelties." We all have had our tryout of novelties that do not come up to expectations. My list is of things, not too common, that I have found well worth emphasizing in this way. There are some real novelties, too-about every one in this country-or superb things which are slowly making their way as their merits become known. Still others are rather rare and interesting.

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), Octo-

ber to April. Prop. (propagate), divisions.

I am constantly securing and trying out new plants, and the large collection that I have is not herein listed. If you want anything not listed, ask for it; perhaps I can help you to secure it.

Landscape Gardening. A considerable portion of my time is given to landscape work in Northern California, especially in the San Francisco Bay region. We

can meet any problem of that sort, large or small,

In gardening problems of a minor sort, we gladly give assistance by mail, without charge. This does not mean, however, that we plan places without charge.

TERMS AND DELIVERY

YE SHIP from September 1 to May 1. We can ship Irises in midsummer, if our customers so desire. Also, if any order is in early, we can retard

many kinds of plants so as to make delivery after May 1.

At the Terraces the season is fully six weeks later than about San Francisco Bay or Southern California. Plants like Phlox or Delphiniums, which are a foot or more high there in early April, are, as a rule, about as dormant on April 1 here as in winter. Our stock is in excellent shipping condition until early April. In fact, I have had shipments dug in Vermont after spring opened which were further advanced than 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.

Quantities. Six of a sort at the dozen rate. Less at single rates.

Remittances can be made by personal check, money order, or, if less than one dollar, in stamps.

Carriage. I pay all carriage and make no charges for packing, with a few exceptions noted. The charges are prepaid at Ukiah. Safe delivery to any point

is guaranteed. In case of loss, we reserve the right to replace goods.

Quality of stocks. I do not grow potted plants, and the stock that I send out is all field-grown, hardened, and stocky. I do not believe that better plants are sent out by anyone in America. This may not be true of every item, for in growing over 700 items some may fail to grow to expectations, but I think that it is true of by far the larger number.

Errors of any sort are carefully corrected. Do not complain to your friends

if something seems wrong, but come straight to me.

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

"GOOD WILL is the disposition of the pleased customer to return to the place

where he has been well treated."-U. S. Supreme Court.

A Complete General Index Divided by Sections Appears on Pages 64 and 65

SPECIAL NOTICE OF IMPORTANCE

If you do not find what you want in this catalog write me. I have many plants on trial and in too small numbers to list and if I do not have it I can probably secure it for you, as I am in touch with many unusual sources.

REDWOOD BURLS

REDWOOD BURLS. At the base of the redwood trees in California many knots are formed of different sizes, and these knots are dense masses of dormant buds.

If such a knot is placed flat side down in a receptacle and water kept a few inches deep, it very soon develops many of these dormant buds into lovely evergreen branches—which keep on growing for at least two years.

A growing Redwood Burl is lovely anywhere, but for home decoration in cold regions in winter they give a touch of green with scarcely any effort that cannot be approached by a fern or other decorative.

Redwood Burls. I can furnish in all sizes, from small burls at \$1 each, with larger ones at \$2, \$3, \$4, and superb specimens at \$5 each, postpaid.

Tiny burls are most intriguing. I can supply at three for \$1, but no order accepted for less than three.



Redwood Burl just started and after a few weeks' growth.

NOT NOVELTIES

Some of these plants are new to my catalogs, some rare in America, but they have been tried and found of worth. A few are plants which I have offered before, but which have proved so meritorious that I wish to emphasize their value in this way. For culture of novelties, see body of catalog under same genus.

ALLIUM VALIDUM is a really beautiful Allium; grows to as much as two feet in height. Its grassy foliage is abundant and the flowers are a brilliant rose magenta. It loves a wet place, and in the wild is often found in swamps. 30 cts. each: \$3 per doz.

ALSTROEMERIA, or the Peruvian Lily, is a most valuable garden and cut flower. When well grown it is from 2 to 4 feet high, making many-stemmed clusters, each stem flowering. I have not considered Alstroemerias hardy in the Northeastern states, but Mr. W. N. Craig, of Weymouth, Mass., tells me that they have been perfectly hardy with him for years and have withstood ten degrees below zero. Sit., sun in a cool, moist place or light shade. Alstroemerias like a soil rich in leaf mold or well-rotted manure. Drainage should be good,

(ALSTROEMERIA—Continued)

but still they ought not to be allowed to dry out. *Prop.*, divisions. Set roots flat, covering 3 inches. I send out very fine roots, but Alstroemeria seldom flowers the first year. The second year, when established, they flower well.

A. aurantiaca has golden yellow flowers. 30 cts. each; \$3 per doz.

A. Chilensis hybrids are quite rare. They vary in shades of reds to pink, overlaid salmon and burnt orange Each 60 cts.

ANTHERICUMS or St. Bruno Lilies are fine plants belonging to the Lily family. There are long grassy leaves at the base and the erect stems are several, flowered with fine pure white flowers which are very fragrant. Well worth while. Flower in early summer.

Soil, any loam, but if rich and quite moist they do better. Sun. Prop., di-

visions. Pl., fall to spring.

Anthericum Iiliago. 30 cts. each; \$3 per doz.

Paradisea Liliastrum is very closely related to above. You will like its fragrant flowers. 30 cts. each; \$3 per doz.

ARUNCUS Sylvester or Goatsbeard is a strikingly fine, strong growing plant related to the Astilbes.

It makes a big clump with handsome pinnated leaves and strong spikes, with very many tiny white flowers in a fleecy mass. A fine plant for shaded spots to harmonize with tall ferns. It is hard to surpass in such a place. 40 cts. each; \$4 per doz.

ASCLEPIAS tuberosa or Butterfly Weed is a very attractive and very hardy plant. It grows from 1½ to 2½ feet in a many-stemmed plant, each stem crowned with a number of umbels of bright orange-colored flowers in midsummer. An excellent plant. Sit., sun. Soil, any, but rich and moist gives best results. Pl., fall to spring. 25 cts. each; \$2.50 per doz.

ASPERULA odorata or "Woodruff" (previously listed "Galium Dwf." in error), is a most excellent ground cover, as it spreads by slender underground runners to make a very open ground cover which is excellent under ferns or woodland plants or even bulbs. The stem is 4 inches high and the small white flowers

are dainty. 25 cts. each; \$2.50 per doz.

CAMPANULA Persicifolia "Grosse Gloecke" is much finer and larger in plant and flower than any of the other *Peach Leaved Bellflowers*. They stand to 3 or 4 feet high, with very large, light-blue flowers. One of the very finest of garden perennials. Sit., sun or light shade. Soil, any good loam, well fer-

tilized; good moisture. Pl., fall to spring. Each 30 cts.; \$3 per doz.

CATANANCHE coerulea makes a strong clump 18 inches high and a foot across and through a long period produces very many pretty cornflower-like flowers of blue on long, slender stems. In the garden they have much charm and they are most excellent cut flowers. On plant, flowers close after midday, but when cut remain open. Very heat and drouth resistant. *Pl.*, fall or spring. *Sit.*, sun to light shade. *Soil*, any loam. *Prop.*, seeds or divisions. 25 cts. each; \$2.50 per doz.

CHRYSANTHEMUMS. I do not carry the large show varieties, but have an exceptionally fine set of hardy garden sorts in Pompons, both large and small, Anemone flowered, the odd quilled sorts, and the regularly formed, hardy, early sorts which can be relied upon for garden use. I do not think there exists a finer set than that from which I have made my selections. See pages 34 and 35.

CERATOSTIGMA plumbaganoides is exceptionally fine, not only for the perennial border in full sun or light to medium shade, but is unexcelled for bril-

liant foliage and flower in the rock garden. See page 11.

CLINTONIA Andrewsiana is one of those very choice plants only to be bought by those who will give it extra pains. The five or six broad, bright green, shiny leaves form a large rosette 7 to 13 inches across from which rise naked stems 15 to 30 inches high, bearing an umbel of many flowers with two to five other clusters along upper stem. The flowers are rose-red lilies ½ inch across and come over a long period, finally being succeeded by glossy purple berries which last until frost. In either fruit or flower it is a lovely plant. Sit., heavy shade. Soil, any loam well enriched with peat or leaf mold; acidity preferred. Plant dormant roots in fall only. See that moisture is constant. 30 cts. each; \$3 per doz.

COREOPSIS grandiflora, Perry's Semi-Double, makes neat bushes 20 to 30 inches high and as wide across of light green foliage, and there are very many flowers borne well above the foliage on slender stems. The semi-double, go'den-yellow flowers are 2 inches across and are borne over a long season. They are among the very best of cut flowers. Pl., fall or spring. Sit., sun. Soil, any loam; better if well enriched. Each 30 cts; \$3 per doz.

DELPHINIUM trollifolium is quite a striking Californian species. It has large deep green glossy leaves, a stout stem 3 to 5 feet high and fine deep blue flowers. *Sit.*, light shade preferable. *Soil*, any loam. *Moisture*, liberal. *Pl.*, fall only dormant roots. 25 cts. each; \$2.50 per doz. For other Delphiniums see pages 12, 36 and 37.

DICTAMNUS fraxinella cannot be offered as anything new, yet so few dealers offer it that it may well even now be classed with novelties. It has strong rooots with many stout stems arising to form a handsome clump. Flowers borne well above foliage are either rose-pink or red. Takes several years to reach maturity or flower materially but when mature one has a hardy, handsom and reliable plant. Sit., sun or light shade. Soil, any loam, but better deep and very rich. Prop., seed but very difficult to germinate. My plants are three years old and fine but will flower little until established. You may have either the rose-pink or the white at 30 cts. each; \$3.00 per doz.

EPIMEDIUM alpinum. What the *Vancouverias* are for the Western United States, the Epimediums are for Europe. They have most beautiful shiny foliage a foot or so high, pretty yellow flowers, and spread by underground runners to slowly make colonies. Most beautiful in lightly shaded locations. Go well with ferns. 50 cts. each.

EUPATORIUM occidentalis is a shrubby perennial 18 inches in height, with many leafy stems terminating in broad umbels of filmy, soft pink flowers. Prefers a well drained, gritty soil. 30 cts. each.

FILIPENDULA hexapetala, often called Meadow Sweet, is related to Astilbes. Its fern-like leaves are borne freely at the ground, while its many white flowers are tipped red and borne in cymes on stems a foot or two in height. Soil, moist loam. Sit., sun. Pl., fall or spring. 30 cts. each; \$3.00 per doz.

GAILLARDIA Portola bears flowers of great size on long stems. The rays are broad, somewhat doubled, and of rich bright crimson tipped with yellow. By far the best of all Gaillardias. It was introduced fully ten years ago yet propagators have never been able to keep up with the insistent demand for it. 30 cts. each; \$3.00 per doz.

GALIUM officinalis, known as Bedstraw, grows to two or three feet and makes a very leafy clump. The very white flowers suggest the Baby's Breath. 30 cts. each; \$3.00 per doz. *Soil*, any. Sun or light shade. *Pl.*, fall or spring. Prop., divisions.

GERBERA Jamesonii Hybrids. Not new to this catalog, but cannot be too much praised. I have an unusually fine mixture of all of the shades from pink to scarlet with light yellow and buff. The plants have basal leaves, while the flowers are borne singly on long slender stems. In the East a greenhouse plant. From state of Washington south on the Western Coast and in the Southern states entirely hardy. Give a warm situation, well worked, rich, well-drained soil. Plant fall or spring. 50 cts. each; \$5.00 per doz.

While the large plants are more satisfactory, I can also supply smaller plants at 30 cts. each; \$3.00 per doz.

Gerbera to Color. I have selected a limited number of strong flowering plants in the following fine colors: White, Yellow, Salmon, Pink, and Reds and Scarlets. These at 60 cts. each.

GYPSOPHILA Bristol Fairy is of the very finest of the newer introductions. Like the double *Paniculata* it forms a large bush as much as 2 feet high by 4 feet across, but of an opener more branching habit and with much larger and whiter flowers. Flowers profusely all summer. The very finest of airy flowers for making bouquets and when cut and dried in a cool place makes a wonderful everlasting. Each, 60 cts.; \$6.00 per doz.

HELIANTHUS angustifolius, Radiance, is without doubt the finest of the perennial sunflowers. Three to four feet high, with stout stems that stand erect without staking, and bearing in the autumn great masses of the most brilliant golden yellow flowers. Most striking and should be in every hardy border. 25 cts. each; \$2.50 per doz.

HELLEBORES are known as Christmas Roses or Lenten Roses. The name Christmas Rose is properly applied to $H.\ Niger$ and Lenten Rose to $H.\ Orientalis$ but the names are now practically interchangeable. They are among the sturdiest of sturdy plants and will be good for a great many years and improve steadily for years when well placed. $H.\ Niger$ is well known as thoroughly hardy and many reports from Virginia to Maine thoroughly establish the hardiness of $H.\ Orientalis$ throughout the East.

H. Orientalis Hybrids. Many large palmate leaves arising from the base make a bold almost evergreen clump 18 inches high and fully as wide. I have had clumps 30 inches across which have borne 125 flowers in season. The flowers in many beautiful shades are often 3 inches across and last for months. In a mild winter they begin to flower here in October and in the East flowers may appear with the first mild spell of the new year. Really pretty of themselves, they are doubly valuable coming at a time when no other flowers are in bloom. Three years ago I imported, under permit, a fine selection that comprised a large part of the very best of the newer introductions of the foremost European breeder and these plants have now been released for sale. A second importation of the still newer introductions of this same breeder came this past winter and I hope to be able to offer them a year from now. Of the set just released I offer strong plants of the following named sorts:

Ariadne. The basic color is white, flecked pink. Some have quite a flush of pink.

Baroness. In this the background is greenish-white, but it is so closely flecked with purplish mauve as to appear a solid color.

Albert Dugourd. Most exquisite. A solid violet-rose, so flecked with a darker shade as to form a pattern to within a quarter of an inch of the margin.

Coquetterie. Pure white ground color with purple flecks tracing the outer contour of the flower ¼ inch from the margin.

Delicatissima. Very like last, but with softer shadings.

Grandiflora Robusta. A very rich deep wine shade without markings. Exceptionally fine.

Mons. Prosper Perthuis. Deep purplish-mauve, flecked closely with a darker shade.

In addition I have selected from seedling stocks:

"Apple Blossom." The name describes it.

White Shades. Selected for size and beauty.

All of the foregoing in strong flowering plants at \$1.50 each.

H. Orientalis Hyb. Fine Mixed. Selected from seedlings and in shades of reddish purple and wine color with some lighter shades. Extra strong flowering plants 4 years old at \$1.00 each; \$10.00 per doz. Fine but smaller plants, some of which will flower, 60 cts. each; \$6.00 per doz.

H. Niger Praecox is seldom over 7 inches tall and looks quite different from H. *Orientalis* as the foliage is smooth and glossy and rounded at margins. The flower opens pure white and later turns pink. Strong plants at \$1.00 each. Good plants at 75 cts. each.

Wellesley Hills, Mass.: "Vancouveria hexandra is perfectly hardy here and spreads rapidly in the shade."

Do you live in a hot, dry climate? The tables on page 68 will help you to select plants which you can grow easily.

Greencastle, Penn.: "The plants arrived, as always, in such wonderfully fresh condition that it was hard to realize that they had come so far."

HEMEROCALLIS or **Day Lilies** are among the finest of perennials for any part of the United States and especially so in the southern part. See page 45.

IRIS fulva is quite an oddity and rather pretty. A rich reddish-brown or coppery-orange, hard to describe. Likes a wet situation. 12 to 18 inches high. Each 30 cts.

ISMENE calathina, or Basket Flower. Also known as Hymenocallis. It belongs to the *Amaryllis* family and has bulbs like a daffodil. The long basal leaves of grey green, too, resemble those of the daffodil. A naked stem 1 to 2 feet tall is produced in midsummer and it bears 2 to 5 or more basket-shaped flowers of pure white; of great beauty and has a most delightful fragrance. A fine cut flower. *Sit.*, sun. *Soil*, a good loam. *Pl.*, fall or spring. In the East dug and stored in winter. 20 cts. each; \$2.00 per doz.

JASIONE humilis is rather novel. Grows 8 to 10 inches tall and has a dense head of pretty blue flowers in midsummer. Sit., sun. Soil, any garden loam.

Pl., fall to spring. 25 cts. each; \$2.50 per doz.

LOBELIA cardinalis, Queen Victoria, is a form of the Cardinal Flower in which the foliage is a deep blood red. Quite novel and well worth while for the foliage alone, yet the flowers of deep blood-red are most striking and attract much attention. Does well in any situation from moderate shade to full sun, but must have liberal moisture. 40 cts. each; \$4.00 per doz.

LILIUMS. In my California Bulb Catalog you will find the Western Lilies

and a few other choice ones such as Regale and Superbum.

MIMULUS Lewisii is another lovely West American mountain plant. Our high mountain meadows have no finer plant. From a thickened root stock many erect stems appear and very many soft salmon pink flowers are borne in a long season. It must have a good mellow, loamy soil which is always rather toward the moist to almost wet. 30 cts. each; \$3.00 per doz.

NERINE Sarniensis or the Guernsey Lily is a very showy plant related to the *Amaryllis*, and a plant that in climates where *Amaryllis Belladonna* thrives will

do as well and give brilliant bloom in late summer.

The mass of foliage is about a foot high, the stout umbels a little taller, and

the brilliant bright crimson flowers are extremely showy.

In climates like the southern tier of states or the Pacifc Coast they can stand out-of-doors planting and should have a good soil and abundant water during the growing season, which is about June 1. The leaves then die off and the flowering stems come from the bare ground in late summer. In cold climates they are treated as greenhouse plants. Hardy in the East if well protected.

In Alabama it has stood 10 degrees below zero.

The mass of foliage is about a foot high and this foliage dies off entirely about midsummer and the naked umbels of crimson flowers appear in late summer. It is most showy.

A good soil and plenty of water while they are growing are the best treatment.

Pl., fall. 30 cts. each; \$3.00 per doz.

OENOTHERAS or Evening Primroses have much usefulness both for the

border and for the rock garden. See page 41.

ORIENTAL POPPIES are magnificent in color and size. When the name is mentioned most people immediately think of a brilliant orange-scarlet that hurts the eyes to look at, but there are also the most exquisite salmon pinks and deep, glowing crimsons, and even the softest of flesh-pink varieties. You'll find them on page 57.

POPPY Olympia is a most unusual new thing. They form a clump, not a heavy one like *Oriental Poppies*, but by underground runners which in time becomes a broad mass. The flowers 4 to 5 inches across are semi-double, and of a very pleasing shade between apricot and light orange. The stems are 2 feet

or more high. 40 cts. each; \$4.00 per doz.

PENTSTEMONS are amongst our most useful plants, and I offer the garden

varieties and some very fine Western species on pages 16, 54 and 55.

PLATYCODON Mariesii is Balloon Flower or Japanese Bellflower, and makes a compact low bush a foot or so high, with large flowers which come from midsummer on. A very beautiful plant which needs a good loamy soil and reliable moisture during its flowering season. Either blue or white at 25 cts. each; \$2.50 per doz.

POTENTILLA Nepalense Roxana is just like the very fine *P. Miss Willmott* in habit and foliage, but the flower is a pale rosy scarlet with strongly contrast-

ing deep crimson center. 30 cts. each.

PRIMROSES in Blue Shades. These are so rare and beautiful that they always attract. I have a very fine lot of them raised from the finest seed obtainable in Europe. These in varying shades of very deep blue. *Cult.*, as for *English Primroses*. Mixed blues only at 40 cts. each; \$4.00 per doz.

SALVIAS in scarlets you all know, but the superb species in the finest of blues you will find on page 56.

SCABIOSA Caucasica has a low, broad tuft of leaves from which long, several-flowered stems arise to $1\frac{1}{2}$ to 3 feet. The pincushionlike flowers are 2 to 3 inches across and of a lovely lavender. There has not been a day in a year and a half when this fine flower has not been in bloom. During that time the temperature has varied from 110 in the shade to 15 above. A good garden soil and good culture suit them and they well repay in cut-flowers any extra care. Strong plants, 25 cts. each; \$2.50 per doz.

Caucasica is a plant which I do not seem to be able to secure enough of. With my customers it is always a favorite on account of the extreme freedom of bloom and the unusually long season. It is worthy of a place in the most pretentious garden of perennials.

SCABIOSA columbaria is a newer form with strong grey-green foliage and exceptionally beautiful pink flowers. Exceptionally lasting when cut. 25 cts. each; \$2.50 per doz.

SCILLA Peruviana is a rare bulbous plant with a heavy mass of dark, grassy leaves and an erect very many flowered stem, with flowers of the deepest delft blue. Very striking. 30 cts. each; \$3.00 per doz.

SCUTELLARIA resinosa is a new plant from Oklahoma. After two years' trial I like it very much. The small deep blue flowers are scattered through a little bush about 6 to 8 inches high and come through a long season. Quite interesting little Skull Caps. 25 cts. each; \$2.50 per doz.

SENECIO Greenii is a real novelty of high class. The round basal leaves come from running roots and these make new plants to form a little colony. The leaves are attractive. From one to three flowers are borne on stems 3 to 5 inches high and well above the foliage. The color is a most vivid orange. Blooms in mid-summer. Colonies I saw in the wild made pictures long to be remembered. Only when well established will their full beauty be realized. *Pl.*, fall to spring. *Soil*, any fair loam, but well drained. *Sit.*, cool sunny or light shade or afternoon shade. Each 50 cts.

TROLLIUS Europeus Goldquelle Hybrids (the Globeflower) are about fifteen inches high, with light lemon yellow flowers incurved to form a rather globeshaped flower. They belong to the Buttercup family and are quite a pleasing plant. They like moist loam and are very hardy. *Pl.*, fall or spring. 35 cts. each; \$3.50 per doz.

VANCOUVERIA hexandra is a woodland plant of the Western forests, popularly called "Redwood Ivy" or "Mexican Ivy"; and easily the prettiest of all American woodland foliage plants. The pinnated leaves rise from a running rootstock to 8 to 12 inches and are used in great number for florists' greens. The wiry running roots make large colonies which have the great merit of forming a lovely ground cover which does not choke out the dainty forest flowers. Perfectly hardy about Boston. Reports that this lovely ground cover did well brought me a flood of orders last spring. At Wellesley Hills, Mass., Vancouveria is perfectly hardy and spread rapidly in the shade. At Salt Lake City it thrives in the shade and is fine for years.

The Vancouveria has a slender underground stem which grows flat a few inches below the surface of the ground and throws up leaf clusters at intervals. To plant, excavate so that this stem can be laid flat and covered, say three inches deep of course, with any leafy stems erect. 15 cts. each; \$1.50 per doz.;

\$7.50 per 100.

YUCCA filamentosa has broad, sword-like, evergreen foliage which makes a large round clump. The flowering stalks are bare as much as 6 feet high, with large drooping creamy white flowers. It likes loose warm soil and a warm situation. The driest place that you have will do. Good plants, 60 cts. each; 3 for \$1.50.

HOW TO BUILD A ROCK GARDEN

I am not going to give directions to build a rock garden for the subject is too great to give in a catalog. That is something that can only be learned through the study of good books, and I have arranged to supply the reader some of the best known books, which I personally have selected for their merit.

"Rock Gardens," by Rockwell, is a splendid handbook and tells just how to go about building a rock garden. One should not be without it. Postpaid, \$1.

"American Rock Gardens," by Hamblin, treats the subject from a different angle and is the result of Mr. Hamblin's experience as director of the Harvard Botanic Gardens. Postpaid, \$1.25.

"Rock Garden and Alpine Plants," by Henry Correvon, is just such a mine of information as one would expect at the hands of this great Swiss authority. It not only details a world of information gained through a lifetime experience with alpines, but is immensely interesting reading. Postpaid, \$6.

"The English Rock Garden," by Reginald Farrer. If you have passed the beginner's stage and want a book that you will love, make it a point to own this one. Probably the most comprehensive book ever written on a single branch of gardening. Two volumes, 1025 pages, beautifully illustrated. Prepaid, \$25.

PERSONAL SERVICE. I shall be glad to answer specific questions or advise in any problems that my customers may submit to me where no detailed plans are entailed. In the selection of plants to fill the rock garden I am always glad to advise and if you wish, the entire selection may be left to me.

PLANTS FOR THE ROCK AND ALPINE GARDEN

PLEASE NOTE: In bringing to you in one section as complete a set of Rock Garden plants as possible nearly every low growing plant I have is offered here. This does not mean that they are suited to rock gardens only for this list contains the very best low growing plants for every garden use.

SPECIAL OFFER OF ROCK GARDEN PLANTS Perhaps you are a beginner at rock gardening and would like help in making your selection. You may have an odd corner or a difficult corner to fill. Just write to me the details. Where the selection is thus left to me I make the following attractive special offer: For \$5 I will send \$6 worth of plants. For \$10 I will send to value of \$12.50. For larger amount 25 per cent additional value will be sent.

ACHILLEIAS are most excellent in the rock garden to give neat, pretty foliage masses at all times. They are evergreen and every rock garden should have as many such plants to relieve it in winter and the off season. Beauty of mass is quite as essential in the rock garden as beauty of flower. Achilleias in bloom, too, while not showy, are pretty and *Tomentosum* is one of the really fine yellow mass effects.

Ageratifolia has fine cut foliage of a most pleasing gray green. Flowers white.

Millefolium roseum is a rose-colored Millefoil of real beauty. Makes rather a large mass.

Nana makes most neat tufts in light green. Flowers white.

Tomentosum is still more compact; the leaves are light green and very woolly, and the low flower stems bear masses of flat corymbs of bright yellow. Fine for both sun and shade.

Umbellata is most pleasing in gray green. White flowers.

All like hot, dry places and can be planted from September to May. All at 25 cts. each; 3 for 60 cts.; \$2.50 per doz.

AETHIONEMAS are amongst the most valuable of rock garden plants and especially for the dry hot situations. If they have a chance to root deeply, as they will have in a properly constructed rock work, they bloom wonderfully, and in about two years are treasures in bloom and decidedly ornamental little shrubs at all times. (They are really shrubs.) Sit., sun. Soil, any loose soil, fairly rich in leaf mold. A deep root-hold, even if a crevice, just such moisture as happens, and leave them alone. Prop., seeds.

(AETHIONEMA—Continued)

Coridifolium (or is it Persicum?) A prostrate mass of pretty bluish foliage a foot or so across which at flowering time is a solid mass of bloom and at all times is pretty. One of those invaluable off-season foliage masses. I have this in soft flesh pink and in deep rose pink. 30 cts, each.

Grandiflorum stands up to make a low, shrubby mass with flowers borne in erect racemes. The color is a brilliant rose-pink and a plant in full flower is a most pleasing sight. 40 cts. each.

Pulchellum makes a flat trailing mass a foot or so across, with many pink flowers. At its best, excellent. 40 cts. each.

Schistosum is similar to $Ae.\ cordifolium$ but is taller and has soft pink flowers. Very nice. Each 30 cts.

AJUGA. See page 30. Is excellent for moist corners.

ALYSSUMS. All Alyssums stand much drouth and will live in dry, rocky places. When established they will go through our dry hot summers in splendid shape without water. Few plants excel them for the sunny rock garden or for dry hot banks or walls. They are also splendid low plants for the perennial border. Soil, any loam. Pl., fall or spring. Prop., seeds. Following are the best species:

Moellendorffianum makes a dense cushion a foot or so across. In spring it is covered with deep yellow flowers. More compact than Saxatile. 30 cts.

Saxatile Compacta is splendid for border or dry rock garden Flowers of bright yellow. Each 25 cts.; \$2 per doz.

Serpyllifolium is rather rare. It makes a very dense gray, woolly carpet, and has many yellow flowers in time. Always attractive. 30 cts. each; \$3. per doz. Dry walls, too.

Spinosum is a very spiny, woody stemmed little plant with silvery foliage and small white flowers. A good novelty. 50 cts.

ALLIUMS are very attractive little bulbous plants. They are not only very pretty as rock garden plants but are exceptionally adapted to such positions. They must be planted as dry bulbs in the fall and will thrive in almost any soil in a sunny situation. Very hardy. Cover bulbs two inches.

A. Eastern Lake Co. Sp. I cannot identify, but it is one of the prettiest. Four to six inches high, with pink flowers, tinted lavender. 6 cts. each; 60 cts. per doz.

A. falcifolium is 3 inches high, with a large umbel of rosy-purple flowers. 6 cts. each; 60 cts. per doz.

A. unifolium is from 6 to 10 inches tall, with a handsome umbel of rosypink flowers. 6 cts. each; 60 cts. per doz.

A. Vallidum. See page 1. Must have much moisture, but is a gem in a moist, sunny or lightly shaded rock garden.

ANCHUSA Myosotidiflora. A charming plant with the exquisite blue flowers of Forget-Me-Nots and large heart-shaped basal leaves. A clump of this beautiful plant is about a foot high, as much across, and a more beautiful subject for the cool rock garden or the border is not easy to find. 50 cts. each; \$5.00 per doz.

ANDROSACES are counted among the choicest of alpine plants. There are very many in cultivation, although very few are offered in this country. To succeed one must suit their need but so suited they are easy and an everlasting joy. A well drained soil, rich in leaf-mold and evenly moderately moist at all times is the prime factor. They form low carpets made up of many little rosettes and from these rosettes slender stems to 3 or 4 inches crowned by umbels of little primroses.

A. Sarmentosa has rosettes of densely hairy leaves which in winter take on much color. They spread by tiny strawberry-like runners so that they make a very attractive colony. The little primrose-like flowers are a deep rosy color. Each 40 cts.

A. Sarmentosa var. Chumbyii is one of the very choicest. Like the species in habit, but flowers are soft pink. Each 40 cts.

ANEMONE pulsatilla or Pasque Flower, from the Swiss Alps, is a most lovely plant. The flowering stems 9 to 12 inches high arise from the half developed mass of silky foliage in early spring and the flowers 2 inches across are of a fine clear blue. It is a superb rock garden plant for a cool moist situation in light shade. In Oregon I saw it in many gardens in full sun but nowhere to approach my own in light shade. Pl., fall to spring. Soil, a good loam with humus and moderate moisture. Each 30 cts.; 3 for 75 cts.

A. Patens Nuttallianum is one of the loveliest of spring flowers in Minnesota and the Dakotas. Large flowers of bluish purple arise on 6 inch stems from the mass of very silky foliage as if in a mist. Sit., either sun or light shade. Soil, preferably a loose loam with leaf-mold. Pl., fall or spring. Each 25 cts.; 3 for 60c.

AQUILEGIAS. For cool, moist situations these are invaluable. The tall sorts are only fit for the larger rock gardens, the intermediate sorts for almost any rock garden, while the little beauty Arctica will fit the smallest nook. I placed an Olympica in a niche in such a garden this spring and it was perfect. See page 32.

Flabellata is quite a novelty with a very dwarf plant with a white flower

which shows hardly any spur. 30 cts. each.

Pyrenaica is dwarfish and a pretty blue and a good subject in moderately moist corners. 25 cts. each.

ARABIS are compact plants making low masses and flowering very early. All are fine rock plants or for dry borders. Hardy anywhere. Sit., sun and heat. Soil, any but loose and a little gritty suits it better. Prop., seeds or divisions. Pl., fall or spring.

Albida Nana Compacta. Neat plants smothered with flowers of white in very early spring. Fine for the rock garden. 20 cts. each; \$2 per doz.

ARENARIAS have many places in the rock garden or dry wall and Arenaria caespitosa is the very best thing to plant in the spaces between stepping stones. Balearica is, I think, the tiniest plant that I know. It makes broad cushions

of pretty green and in flower is covered with tiny white flowers. Delightful to soften down the cool rockwork. I find that it simply must have even moisture. Clumps, 25 cts. each; \$2.50 per doz. Not hardy north of New York.

Caespitosa looks like a vividly green moss and has little white flowers. But little as it is, it is very hardy, rather drouth-resistant, and I think the very best of plants for the interstices in flagging or rocks as well as for delighful colonies in the rock garden. Divides easily Clumps 25 cts each \$2.50 per doz

in the rock garden. Divides easily. Clumps, 25 cts. each; \$2.50 per doz.

Grandiflora is midway between Caespitosa and Montana. The leaves are linear and many making a nice mossy carpet while the white flowers are of sufficient size to make an attractive effect. Stems 3 inches high. I consider a decided acquisition to my rock garden. Also remarkably good for edging. Each 30 cts.; \$3.00 per doz.

Montana is quite different from preceding species. It forms strong masses of foliage several inches deep and a foot or so across, and its large white flowers of much beauty fairly cover it. One of the very best of the world's rock plants. 30 cts. each; \$3.00 per doz.

SPERGULA pilifera, a near relative of the *Arenarias* I must list here. Leaves vivid green and most mossy, but taller than *A. caespitosa*. Each 25 cts. \$2.50 per doz.

ARMERIA Formosa, commonly called "Sea Pink" or "Thrift", has long been used for margining beds and is excellent for that. They make low dense tufts of linear leaves and bear on short stems very many rose pink flowers. Very attractive and hardy. Rather nice in rock garden and will do in any soil but moisture must be constant. 25 cts. each; \$2.00 per doz.

ASARUMS or Snake Roots or Ginger Roots like a cool place and moderate

moisture. Put there, they are decidedly valuable. See page 33.

In ASPERULA Cyananchina I am able to offer a rather unusual and strictly good rock plant. It makes a dense mass of slender stems covered with slender leaves and a foot or more across. The flowers are small and very numerous; a pinkish white. If in a situation that does not get dry it continues good a long while. 30 cts. each; \$3.00 per doz.

ASTER alpinus Goliath. All alpine asters are fine, but this one quite excels them all. The leafy mats are 3 to 4 inches high and 6 to 8 inches across. The very many flowering stems are 6 to 9 inches tall and the very handsome flowers, often $1\frac{1}{2}$ inches across, are heliotrope. Most beautiful and easy. Likes moisture, either sun or light shade, but a cool lightly shaded situation will greatly prolong the flowering period. 30 cts. each; \$3.00 per doz.

AUBRETIAS are among the very finest of early flowering rock garden plants. Hardy as rocks, resistant to heat and cold and dryness, and as winter bloomers in milder climates and very early spring bloomers everywhere, they are unexcelled. I have a plant that flowers from October to April, in freezing weather and often covered with snow, yet which has survived many summers on one of my dry hillsides without water. They form a low mass of dense, silvery foliage and produce so many pretty flowers that often the foliage is invisible. As border or edging they are unexcelled. *Prop.*, seeds. *Sit.*, sun. *Soil*, any, and will grow in rock clefts or very thin rocky soil. Named aubretias do not come true from seeds, but I offer the following:

Aubretias in Separate Colors. I have propagated by cuttings the following colors to insure their being true to color. The colors are unusually fine. I have never seen named sorts that were finer. In Deep Rose, Clear Purple, Soft Rose, at 30 cts. each; 3 for 75 cts.

Aubretias Mixed. Fine mixed, mostly blue and purples. Each 25 cts.; 3 for 60 cts.; \$2 per doz.

BELLIUM minutum is the tiniest and daintiest of all the daisy tribe. A little plant, scarcely a half inch in height, and bearing many little white daisies on stems a few inches in height. Bellium thrives in a cool moist but not wet place in full sun, and is worth a place in any rock garden. Often used as ground cover for the small bulbs. 30 cts. each.

BOYKINIAS are splendid plants for the quite moist, cool corner in shade for either clefts or little colonies. Always neat and attractive. See page 33.

CAMPANULAS or Bellflowers will not do at all in a dry, hot section of the rock garden, but when the low growing species are placed in a cool nook where moisture is constant or are wedged into a crevice there is no rock plant that excels them in dainty loveliness. There are many of these lovely tufted species and I have found the following especially good:

C. Billardi var Miranda has slender stems 6 to 9 inches high and bears many little blue bells, the bells semi-erect. Most dainty and attractive. 30 cts. each; \$3 per doz.

C. Carpatica makes dense round clumps about a foot across, with large and handsome open bells on slender stems. Either blue or white at 40 cts. each.

Fragilis is one of the very best of all for a hanging basket or window box and a mass in the rock garden or trailing over a wall is most lovely. The trailing stems are often 18 inches long covered with purplish blue flowers 1½ inches in diameter from August to October. A real treasure. Each 50 cts.

Isophylla is a very beautiful trailing plant known in England as *Star of Bethlehem*. An article in *Garden Magazine and Home Builder* alluding to it, brought me endless inquiries. About 2 to 3 inches in height, it trails to a foot or more across, and from midsummer has many large and beautiful flowers. The bell is short and broad. Very fine basket or rock plant or for the window box out of doors. Rather a cool situation is preferable. Perfectly hardy in California, the Northwest, and from Washington south. Otherwise a winter protection is needed. I have very fine plants of the type of Isophylla in white at 50 cts each, and of Isophylla var. Mayii in blue at 50 cts. each.

Laurii. This is the most outstanding new rock plant that has come to me th's year. The foliage mass is very low, and from it rises single, erect stems 2 to 3 inches high, with large violet flowers. A gem. Rather cool treatment and light shade best. 50 cts. each.

Portenschlagiana is a low, tufted species, densely leafy, with many stems a few inches high and violet-blue flowers. For boxes or rockwork. Field-grown plants, 25 cts. each; \$2.50 per doz. Also known as Campanula muralis lavarica.

(CAMPANULAS—Continued)

Pusilla or caespitosa makes a very dense spreading clump of fine foliage. The flowers are many, carried on slender stems 4 to 6 inches high. Nodding little blue bells from June till October. 40 cts. each.

Pusilla alba. Identical with Pusilla, but with pure white flowers. 40 cts. each; \$4 per doz.

Raddeana makes a compact clump from which stems arise 7 to 10 inches high and bear large violet bells from June to August. A really fine rock plant. 50 cts. each.

CERASTIUM is rather large and rampant for the small rock garden, but has a beauty that is well worth a place where space permits a mass two or three feet across. Also, if you have a difficult bank to cover, even if quite rocky, Cerastium will do it well and permanently. See page 34.

CERATOSTIGMA Plumbaganoides (larptentae) is one of the finest late flowering rock or border plants. It makes a close mass a few inches high and has many handsome plumbago blue flowers in late summer and fall. Sit., sun or light shade. Soil, any loam and, if rather moist, better. Pl., fall or spring. 25 cts. each; \$2.50 per doz.

convolvulus Mauritanicus is one of the very best of all rock plants—perhaps better with fair moisture—but does well with heat and less. It makes a low mat as much as 18 inches across and will drape a wall somewhat; flowers for a very long period with lovely blue flowers and never becomes a nuisance. I am for its inclusion with the finest twelve rock plants. It is fully hardy south of Philadelphia and has done well in Mr. Lown's Poughkeepsie (N. Y.) garden. Invaluable for the Pacific Coast. 25 cts. each; \$2.50 per doz.

CORYDALIS cheilanthifolia is related to the little *Bleeding Hearts* and is as dainty in its finely cut fern-like foliage. It makes a most pleasing mass 6 inches high. Pretty yellow flowers. Splendid for moist shaded rock garden or with ferns. Each 40 cts.

COTYLEDONS (or Dudleyas as some botanists have it) are for Western North America, from Northwestern California south to Central America, what Sempervivums are for Southern Europe, and many people use the name Hen and Chickens for them. They have large rosettes of fleshy leaves and panicles of quite showy flowers. Natives of rocks and cliffs, they fit admirably into the rock garden and should be extensively used in the far South and California, but in the East can only be grown in the greenhouse. They are excellent for pots indoors in winter and in summer the pots can be sunk into the rock garden. Also fine for large dish gardens, cactus bowls, etc. Uninjured by moving at any time or often so can be used in a variety of ways through the year.

Botanists disagree as to names and I use as nearly the right ones as I can. I have many more species under observation here. While they vary much, it is very hard to put that variation into words. The picture on page 20 will give a good idea of types. Give a gritty soil, perfect drainage, and I find in our hot summers they do best in a light shade. *Pl.*, any time, even midsummer.

Caespitosa is light green and branches.

Densiflora has round leaves about 8 inches long in a dense rosette and are powdered with white. Flowers creamy yellow in large umbels. Very choice.

Farinosa makes a low, heavy rosette with yellow flowers. Two forms, one powdered with white and one green.

Farinosa, green foliaged var. Like other, but no powder.

Gigantea. Of medium size and the foliage always has some red, while in winter it is well colored. The flowering stems are red as are also the pedicels and flower and as a brilliant flowering plant only C. Plattiana can compare with it.

Laxa. Broad, reddish foliage and a tall panicle of red flowers.

Lurida. Low, with light green foliage and yellow flowers.

Nevadensis. Dark red leaves and bright red flowers.

Plattiana has reddish foliage in a low rosette and showy inflorescence with both stems and flowers showing much coral red.

Pulverulenta makes a very large rosette of broad leaves heavily powdered with white powder.

(COTYLEDONS—Continued)

Purpusii. Narrow, gray leaves, tinted red, in dense rosettes.

Septentrionalis is densely covered with a bluish white powder and is very handsome.

Setchelli. Loose rosette, foliage coppery and the flowers on 8 inch stems are orange.

Price of above is 30 cts. each. Collection of 10, each named, for \$2.50.

DELPHINUMS furnish some unusually fine rock garden subjects and choicest of all are the West American species which are perfectly adapted to the purpose. Only the low-growing sorts should be used. All of them ripen to the ground after flowering just like bulbs do and should be perfectly hardy. The little roots may be dug and stored dry until the following spring or if left in ground the position should be marked so that the invisible roots will not be disturbed.

Columbianum forms a very symmetrical little plant 6 inches high, with many very fine, deep-blue flowers. Often fragrant.

Menziezii is a gem, something like Columbianum, much branched from the base and with glossy, deep green leaves and very large, deep blue flowers.

New Unnamed from Oregon. Still more compact plants, 4 inches high, with rich blue flowers and hairy foliage.

Variegatum Dwf. Form On single stems 8 inches high, this bears a spike of very deepest, pure blue flowers.

Price of either of above is 20 cts. each; 3 for 40 cts.; \$1.25 per doz.

Nudicaule is one of the two "Scarlet Larkspurs". In this region it is one of the plants most often seen in rock crevices. Foliage glossy and prettily mottled brown. Oftener 12 to 18 inches high as a rock plant and most suitable. When given a good loose soil and afternoon shade we grow a plant 18 to 24 inches high and as broad, with very many flowers. A stunning thing. Each 20 cts.; \$2 per doz.

Chinensis Tom Thumb grows from 4 to 10 inches high and makes a compact bush like plant, with most lovely deep blue flowers. Fine in sun or light shade, but must have moderate moisture constantly. 25 cts. each; \$2.50 per doz.

DIANTHUS or Pinks. There are a great many Pinks and all have beauty. The greater part are too large for the small rock garden, although quite suitable for the large one. I have about fifty species and from these I have selected the following as most worthy and compact enough for any rock garden. For best effect shear off stems as soon as through flowering.

Alpinus is a very lovely plant and perhaps the prettiest of all. Not over 2 inches high, it produces large, clear, rose-colored flowers. It absolutely will not stand dryness. I do not mean that it must be wet, but it must have constant moderate moisture. Each 50 cts.

Deltoides Brilliant makes a broad, low, not very dense mass of tiny foliage of deep green, often ruddy, and small, bright red flowers borne on long trailing stems. Well fed, it drapes well over a wall. Will not stand extreme dryness. Each 25 cts.; \$2.50 per doz.

Glacialis. Similar to Deltoides, but compact and low growing. Rose pink.

25 cts. each; \$2.50 per doz.

Graniticus resembles *Deltoides*, but lighter green, but unlike it bears its red flowers almost through the season. Flowers very early and here even in winter. 25 cts. each; \$2.50 per doz.

"Low Rose". I have never been able to identify this very fine pink. It makes a dense, compact mass of bluish foliage 1½ inches high with very many soft rose flowers. Always pretty. 25 cts. each; \$2.50 per doz.

Monspelianus Carmine is one of the most compact and dwarf of all, with fine soft pink, very fragrant flowers. None finer. Excellent between stepping stones. 30 cts. each; \$3 per doz.

Neglectus makes a low and not very dense cushion 1 to 2 inches high and not spreading widely, while the flowers just above the foliage are 1 inch discs of clear salmon pink. Stunning. Each 40 cts.

(DIANTHUS-Continued)

"New Pink" forms a mass as much as 18 inches across and 8 inches high and is solidly covered with rather large, fine, soft pink, very fragrant flowers. One of the very best. 25 cts. each; \$2.50 per doz.

Prichardii. The smallest of all. Has slender, open foliage and small pink flowers. 30 cts. each.

For a cool shaded rock garden Dicentras are invaluable. I have put Dicentra Spectabilis in large pockets in a large rock garden to the great pleasure of everyone seeing it. It is fine. See page 38.

DICENTRA formosa. Its filmy, fern-like foliage makes it splendid in a shaded rock garden, but it must be curbed. 15 cts. each; \$1.50 per doz.

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 $1\frac{1}{2}$ to 2 inches depth is enough. A colony in a pocket of the rock garden is a joy.

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. 15 cts. each; \$1.50 per doz.

DORONICUM Clusii well placed in a cool nook is a beauty. See page 30.

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.

ERIGERON mucronatus or Vittadenia mucronatus, a most useful draper for rock or wall in a moist place. See page 39.

ERINUS alpinus makes a close clump about 2 inches high with pleasing foliage. The flowers are a deep rose. Quite hardy. 30 cts. each.

ERIOPHYLLUM lanata (Bahia). This most excellent daisy-like plant has a low tuft of grayish woolly leaves and throws up many-flowered stems a foot or two high, covered with rich yellow flowers. Drouth resistant and flowers for a long time in summer. Is hardy in Switzerland and should be hardy through out the Eastern United States. A fine rock plant. 25 cts. each; \$2.50 per doz.

ERYSIMUM pulchellum forms dense mats with nice light yellow flowers. Excellent for dry rock gardens. 30 cts. each.

EUPHORBIAS are striking plants for the rock garden and stand much drouth. After flowering the plants should be sheared to about half height. This makes them more compact and stimulates growth of small branches, which insures very free flowering the succeeding year.

Cyparissima makes a compact mount 8 to 12 inches high, with very finely cut foliage, which in fall takes on fine coloring. Inconspicuous flowers are

yellow. Fine for rock garden or border. 35 cts. each.

Myrsinites is a very striking plant. From stout central rosette long sprawling branches reach out horizontally and in season are covered with yellow flowers. Foliage is a pleasing glossy green. It takes well to rock garden conditions and visitors here admire it greatly. 50 cts. each.

FELICIA rosea is too large for the little rock garden, but for a drape on the dry wall or in a larger garden, or even to drape a hot cement wall, it has few superiors. See page 37.

GENTIANA acaulis is one of the most beautiful and most sought-for alpines. A very low tuft of light green leaves, with large flowers of the deepest blue. A perfect gem, but not for the casual gardener. It must have—first, perfect drainage; second, a cool situation; third, moisture always. 75 cts. each.

GYPSOPHILA repens is one of the very best of draping rock plants. It has every virtue and takes heat and drouth if it has to. Will summer in California without water. See page 44.

HELIANTHEMUMS have no superior for the sunny rock garden or for hot walls or banks. When well established will go through summer in California without water. They are really tiny shrubs and should be sheared back heavily each year after flowering to give the greatest beauty. See page 44 for an unusually fine list.

HERNIARIA glabra is a very dense, low-growing plant which trails freely and will thrive on poor soils. A nice rock garden subject. 30 cts. each.

In HEUCHERAS we have the best of rock plants for the shaded situation. See page 47.

HORNED POPPIES on a large rock garden give a fine touch of color and they lke heat.

IBERIS Gibraltarica is a very handsome *Candytuft* which as a winter bloomer in California or a very early spring bloomer in the colder regions is unexcelled, while a second planting of seedlings in spring will give a fine later bloom. An evergreen, it forms mats a foot or more across and 10 inches high and in season solidly covered with large umbels of rosy-lavender flowers. It stands unlimited drouth and heat. Shear closely after flowering. 15 cts. each; \$1.50 per doz.

ICELAND POPPIES. See Papaver nudicaule.

IRISES. Most Irises are too large for the rock garden, but *Iris Pumila*, which is very dwarf like the *German Iris*, fits perfectly, while some of the tiny Iris species are as good.

IRIS Pumila has the characteristic foliage of the *German Iris*, but is only about 4 inches high. They are among the earliest of spring flowers and in California flower in winter. The little clumps are very charming. I offer the following varieties:

Aurea maculata. Light yellow, mottled brown.

Atroviolacea is deep blue-purple.

Bride. Pure white.

Prairie Gem. Soft yellow.

Royal Purple is self descriptive.

Either of these at 30 cts. each. Collection of 10 plants, 2 each of five varieties, for \$2.

1. cristata has foliage but 2 to 3 inches high, with very dainty blue flowers, crested orange. Fine for moist corner. 25 cts. each.

I. chrysophylla has sparse foliage 6 to 8 inches high with creamy flowers tinted yellow and purple. 25 cts. each.

I. Purdyii has glossy, deep green, grassy foliage 6 to 8 inches high with large, handsome, creamy flowers tinted yellow and purple veined. 25 cts. each.

1. Tenax. One of the most dwarf of all Irises, 3 inches high, with reddishpurple flowers. Quite striking. Likes quite moist soil. 25 cts. each.

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 this one does. The greyish foliage is 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.

LAVENDER Dwarf Munstead. Is invaluable for the rock garden. It is an evergreen shrub and makes a round-headed little tree a foot high. I had never thought of this fine plant as of value in flowering, but this spring I came to realize that its masses of tiny bluish-lavender flowers are really fine. Each 50 cts.

LEWISIAS are the New World's best contribution to the rock garden and I doubt if the world has produced a rock plant more attractive than Lewisia Tweedi. That lovely species with its picture and many others in my Californian catalog.

LINUM Lewisii is a very fine plant for a sunny situation. You see them in rocks in the Sierra Nevada Mountains. See page 50. Linum Narbonense is equally fine and flowers remain open all day.

LIPPIA repens makes a delightful cushion in a warm situation in a rock garden. Must be curbed a little, though. See page 50. Price for clumps, 25 cts.

MANZANITAS are botanically Arctostaphylos. While most of them are large shrubs or small tres, two are admirably adapted to the rock garden.

Nummularia forms a low mound and flowers at 6 inches. Pink flowers. Each 75 cts.

MAZUS Pumilio makes a flat mat not an inch high, with pretty snapdragonlike flowers, bluish, with yellow centers. A choice plant for a moist spot. 30 cts. each; \$3 per doz.

MENTHA Requienii is a most delightful Mint which makes dense mats scarcely a half-inch high, has a cloud of tiny purplish flowers and is most fragrant. One of the finest of the rock garden midgets. It must have a moist situation in sun or light shade. Pl. fall or spring. Each 30 cts.

MERTENSIA pulchella. Those who know and love the Eastern M. Virginica will appreciate this little Westerner. On one or two erect stems about 7 inches high the blue bells are produced. A fine plant for a fairly moist rock garden in either sun or shade. They have little bulbs not unlike Ranunculus. Each 25 cts.

M. Virginica in a cool, shaded spot makes a wonderful rock garden plant.

MONARDELLAS belong to the Mint family. The root stocks are creeping and form mats 8 to 18 inches across and 5 to 7 inches high and from midsummer on, in the hottest weather, they are covered with flowers. Both foliage and flowers are fragrant.

Villosa is the best of the larger forms and a very fine plant for a hot position or on banks or in walls. It is very often a rock plant in our mountains and is found in the very hottest, gravelly places and on dry banks. Greyish, fragrant foliage and lavender flowers, making a mass of great beauty over a long period. Will make a mass two feet across, but in the rock garden should be curbed by pruning and rooting up the outer stolons. Pl., fall to spring. Sit., sun and a warm spot. Prop., Div. 25 cts. each; \$2.50 per doz.

Macrantha makes a low mass not over 3 inches high, with dark green foliage.

The flowers are scarlet. 30 cts. each; \$3 per doz.

OENOTHERA or Evening Primroses. There are a number of West American species which form low rosettes or masses and that are fine for the rock garden. I do not know anything lovelier than a fine plant of Oe. America or Oe. Missouriensis in large pocket with a rock background. The flowers open in the evening and last until noon next day and, except the yellow, turn color.

Childsii makes a low, trailing, vine-like growth. Leaves tinted reddish, while the fine pink flowers last some days. Exceptionally fine. 25 cts. each; \$2.50 per doz.

Missouriensis. Has broad, light green foliage and very lovely flower of pure lemon-yellow, two or more inches across. Each 25 cts.; \$2.50 per doz.

Ovata. In this fine Oenothera we have a real treasure. It has a carrot-like root and at the top of root is a rosette 3 to 10 inches across of many broad, soft green leaves pressed flat to the ground. In early spring very many flowers come up, each on a slender stem a few inches high and of the brightest yellow. At times the flowers almost conceal the plant. What appears to be the flower stem is really the calyx tube and the seed pod is below the ground. After flowering for weeks the leaves ripen off and the root ripens like a bulb. Reported as hardy, but the ripe root may be lifted and stored in sand until the next spring. A pocket 8 inches across would hold three of these, while a single plant will make a beautiful showing. Pl. I sell dormant roots in fall only, but these may be held until spring. Sit., full sun and any soil. Fine for potting. 25 cts. each; 3 for 60 cts.; \$2 per doz.

OXALIS Oregona makes fine cushions in shaded places. See page 54.

PAPAVER nudicaule is the Iceland Poppy. From low tufts of greyish foliage arise slender stems 8 to 12 inches high, bearing a single handsome flower. While it is useless to plant these in a rock garden that may get dry, they give a most lovely touch to one that has good soil and even moisture. You may have these either mixed in many colors or in orange shades alone. 25 cts. each; \$2.50 per doz.

Ruprifraga has the daintiness of the Iceland Poppy on a strong, lasting plant. It withstands much drouth. Color, orange apricot. 25 cts. each; \$2.50

per doz.

PENTSTEMONS. In the West they are in our finest natural rock masses. Often one will find them rooted in a rock crevice or filling a pocket in a rock mass. I have never seen an effect in a rock garden as lovely as some of these wild clumps. There is a very large number of species and some are too tall for the ordinary rock garden. The following are compact enough and are very lovely:

Heterophyllos var. Purdyii, just named in my honor, I have for years called "CALIFORNIA BLUE BEDDER". It makes a low mass 5 to 8 inches in height, and through the entire summer produces great quantities of blue to pinkishlavender flowers of real beauty. 25 cts. each; 3 for 45 cts.; \$1.50 per doz.

Newberryii or Mountain Pride makes a low, flat mass, not at all dense, and has bright, rosy-red flowers. Considered one of the most lovely of all Sierran

plants. 25 cts. each; \$2.50 per doz.

Roezlii has a fine mass of bluish foliage and very lovely, clear blue flowers. Flowers profusely for a few weeks in early summer and is most charming, but it has not the long flowering period of California Blue Bedder. Each 25 cts. \$2.50 per doz.

PHLOX subulata in its varieties and Amoena are very fine rock plants, preferring moderate moisture and sun, but standing rather dry, hot conditions. Then there is Phlox adsurgens, an inimitable creeper from Oregon, for shade and moisture, and a long list of little tufted Phlox from the Northwest and alpines not yet much in the trade. See page 56.

PINKS. See "Dianthus". PLUMBAGO. See under Ceratostigma.

POTENTILLAS are as a rule too large for the rock garden, although Miss

Willmott is lovely where space allows.

P. repens spread by long runners like strawberries and make a close ground cover but an inch in height, with many bright yellow flowers ½ inch across. An admirable ground cover or splendid between stepping stones in light to medium shade or a nice lacy drape over cool, moist walls. Each 25 cts.

PRIMULAS or Primroses. For the moist rock garden, and still more for the moraine, are many Primroses of great beauty. Of the Asiatic Primroses especially suited for this, I have a nice collection, but not sufficient to offer except of the following: Bulleyana, tall, with dense heads of apricot; Cockburniana, with deep yellow flowers; Pulverulenta, rich crimson; "Red Hugh", a most dazzling red. These are 75 cts. each, or one each of the four varieties for \$2.50. Polyanthus Primroses and my Blue Primrose are also excellent. See pages 58 and 59.

PTEROCEPHALUS Parnassi forms dense, low masses of grayish foliage and produces, on 4-inch stems, many lilac-pink flowers much like those of Scabiosa. Grows in any soil, but is especially good in the dry, hot rock garden. Each

25 cts.

PYRETHRUM Tchihatchewii is a very nice, tiny carpeting daisy for the

rock garden and takes heat and drouth well. See page 59.

ROSES. Rosa Spithamea is usually from 3 to 6 inches high and its creeping underground root makes little colonies. Its bright pink flowers borne so low are lovely. 50 cts. each.

SAPONARIAS cannot be excelled for the large pocket or where a wall or a large rock is to be draped. Fine to hang down over cement walls in hot places.

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



Saxifrages, one of Burstana Group; Decipiens (mossy), McNabiana, Atzoon, Pyramidalis. London Pride (Umbrosa).



Sempervivums—Tectorum, Arachnoideum, Soboliferum, Braunii, Lagycrii, Rubicundum Hybridum, Albertii.



Lewisias—Taltnum Calycinum, Cotyledon, Finchii, Columbianum New Sp., Leeana, Howellii



Sedums—Spathulifolium, Altissimum, Reflexum minor, Hispanicum, Acre minor, Spurium, Album, Moranense.



Dianthus-Sylvestris, Low Rose, Monspelianus Carmine, Deltoides Brilliant, Plumarius.



Sedums—Rupestre, Dasyphyllum, Altissimum, Album, Purdyii, Acre, Moranense, Hispanicum, Lydium.

SAXIFRAGAS

All of the many encrusted Saxifragas are unusually fine for the cool, lightly shaded nooks and pockets. The mossy ones for quite cool places; they need decidedly moist corners or the moraine. *Mertensiana* for clefts in cool rocks or covering a rock face where moisture is good. *Umbrosa* for any cool place.

Aizoon alba. A close tuft a few inches high. White flowers, 25 cts. each.

Aizoon Lagaveana. Like last, creamy flowers. 35 cts. each.

Aizoon rosea. Same as last, with rose flowers. 40 cts. each.

Apiculata. Spiny green rosettes and in very early spring, soft yellow flowers. 35 cts. each.

Apiculata alba. White flowers. 35 cts. each.

Cotyledon. A strong grower, with flowering mass as much as 2 feet high. 75 cts. each.

Hostii. Of same type as last. White flowers. 50 cts. each.

Lingulata Bullardiilong. Narrow, encrusted leaves. White. 50 cts. each.

Lingulata var. lantoscana. Strong growing with creamy flowers. 40 cts. each.

Macnabiana. Very fine flat rosettes and tall spray of white. 35 cts. each.

Pyramidalis is the strongest with large rosettes and panicle 2 to 4 feet high. 35 cts. each.

Collection of 11 Encrusted Saxifragas postpaid for \$4.00.

OTHER SAXIFRAGAS

Decipiens rosea hybrids give quite a nice variety in mossy Saxifragas. They form cushions, with pretty little flowers. Glistening rose. 25 cts. each; \$2.50 per doz.

Mertensiana is one of the prettiest of true rock plants. The heart-shaped leaves form a rosette from which arise the slender stems bearing white flowers with brilliant red antlers. Forms masses on damp rock surfaces. 25 cts. each; \$2.50 per doz. for clumps.

Umbrosa, the London Pride, is a very handsome, low massing sort for shade. 25 cts. each; \$2.50 per doz.

Hemerocallis or Day Lilies survived and flowered wonderfully during the drouth that so much of America suffered from a year ago.

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."

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

Fredonia, N. Y.: "The Delphinium cardinale that I bought of you two years ago survived the winter and I am very fond of their color."

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



Cotyledons—Farinosa, Lanceolata, Pulverulenta, Densiflora, Ligulata.



Dwarf Campanulas—Rotundifolia, Carpatica, Pusilla, Fenestralis.



Some Rock Plants—Iris Pumila, Thymus Nitidus, Thymus Aurea Citriodora, Thymus Lanuginosus, Aubrietia Achillea Tomentosa, Thymus Serpyllum Coccineum, Thymus Albus.

SEDUMS

A most interesting and beautiful group of very hardy and drouth-resisting plants, unusually fine for their evergreen foliage, but by no means to be neglected for their dainty flowering effects. In early summer the plants are fairly smothered with tiny flowers. The low and creeping sorts are unsurpassed for colonies in rock or alpine gardens, for low effects in the mixed border, and excellent for cemetery carpeting.

THE ACRE GROUP

All are delightful plants, moss-like, and spreading to make dense masses. Admirable edgings or for covering difficult spaces. The finest of rock plants and for hanging baskets. Leaves thick and either round or slightly flattened.

Acre spreads to make a pleasantly light green, moss-like mat; in time it will hang over a wall or from a basket several feet.

Album is very compact, with foliage of a very soft green.

Album purpureum. A form retaining its reddish-purple tints throughout the season. Very effective.

Brevifolium. A delightful sort with subglobular leaves and white flowers.

Coloniensis is a blue-green variety, making a fine mass of foliage about 4 inches high. One of the *Hispanicum* group and a fine one. 30 cts. each.

Dasyphyllum is a tiny plant, hardly an inch high, with grayish-blue, bead-like leaves.

Hispanicum, 4 to 6 inches high, with larger foliage, but thick and fleshy.

Hispanicum. Perennial form. Delicate grayish foliage. Mossy.

Hispanicum minus. More dwarf than above and one of the best of the mossy Sedums.

Lydium. Daintiest and most dwarfed of the group and one of the smallest known. Makes dense cushions of light green, which in winter take a most attractive, bright red tint, making it even prettier than in summer.

Moranense is a mossy sort from Mexico, making nice mats, and taking pleasing winter colors. 30 cts.; \$3 per doz.

Pulchellum is perhaps the finest of all Sedums. Low and mossy with fine foliage and pink flowers. It must have a shady, moist situation. 50 cts. each.

Sexangulare is between Acre and Acre minor. Very slender.

Tenuifolia. Long leaves and white flowers.

Ternatum makes a low mass with white flowers.

25 cts. each; \$2.50 per doz.

TALLER MOSSY SORTS

Forsterianum is related to Rupestre. Very compact and quite glaucous. 40 cts; each.

Linearis sends erect stems to 5 or 6 inches to make a good mass and the flattish leaves are of a very light green. I also have a Variegated S. Linearis. Either at 30 cts. each.

Reflexum Cristatum quickly covers difficult spaces in either sun or shade. Leaves have cockscomb-like crests.

Reflexum Minor. Low growing. Tints beautifully in winter.

Rupestre. Rather like Reflexum, but larger. Excellent.

Sarmentosum makes a low mass with very light green or almost yellowtinted foliage and yellow flowers. All at 25 cts. each.

WEST AMERICAN LOW SEDUMS

These are all from the Western United States, but fully proved hardy throughout the East. The leaves are fleshy but flattened; they form close, dense rock covers.

Jepsonii is the giant of American Sedums. Much larger than any of the others. The leaves are wedge-shaped and emarginate; flowering stems often 18 inches high. Fine.

(SEDUMS-Continued)

Obtusatum is a mountain form of the West which forms dense colonies with thick leaves on a coppery tint and quite handsome.

Oregonum is a vivid bright green, and most satisfactory.

Purdyi, the most interesting of all, has densely crowded leaf rosettes which throw out red threads at the end of which are tiny plants.

Spathulifolium is of more open growth than Oregonum, and has rich red tints to leaf and flowering stem. Fine.

25 cts. each; \$2.50 per doz.

I find that our Western **Sedums**, at least here in a sunny climate, do much better with some shade. An exposure where they have sun in the forenoon and shade in the afternoon answers very well, but one where sun and shade alternate throughout the day, as, for instance, where shaded by a rather openheaded deciduous tree, is still better. *Purdyi*, shaded most of the day by open oaks, does much better than in a sunnier place.

THE STOLONIFERUM GROUP

Also Known as Spurium, Cupreum, Lydium

These handsome Sedums form low, carpet-like masses very attractive and evergreen. The leaves are not thick or fleshy. The flowers are quite showy.

Stoloniferum. (True.) Has much smaller leaves than *spurium*, with light pinkish flowers. Quite rare and sometimes sent out as *ibericum*.

Spurium differs from the preceding trailing sorts in having thin, broad leaves. The dense foliage mass is a little over an inch high and the flowering stems 6 inches. Often takes bronzed tints. Flowers pink.

Var. Coccineum has crimson flowers and is quite showy.

25 cts. each; \$2.50 per doz.

STRONG-GROWING SEDUMS, NOT MOSSY OR SPREADING

These sorts are too large for the small rock garden, but in a large rock garden they make most interesting groups.

Altissimum has round leaves. It makes an interesting, tree-like growth. Previously offered as *Arboreum*. 25 cts. each.

Arboreum (Dendroideum). The tree Sedum of Mexico. Interesting and drouth-resistant. Not hardy in colder climates. 25 cts. each.

Borderii is another large-leaved form, doubtless of hybrid origin, as the flowers vary much in pinks. 30 cts.

Ewersii is a little like *sieboldii*, but more erect; 4 to 12 inches high, with pink or pale violet flowers. 30 cts each; \$3 per doz.

Fabaria. A tall and very strong species with attractive blue-green foliage. Flowers lilac-purple. Each 30 cts.

Kamtschaticum is an interesting plant 6 to 10 inches high with yellow flowers. 25 cts. each; \$2.50 per doz.

Maximowiczii is related to *spectabile* and has a strong stem 12 to 18 inches high, with yellow flowers. 30 cts. each.

Nicaeense. A small form of Altissimum in which the mature foliage resembles Arboreum. 30 cts. each.

Sieboldii, 6 to 8 inches high, makes a dense cluster, and has most attractive bluish-green foliage and pink flowers. It is a fine plant in any place and one of the best hanging basket plants that I know of. 25 cts. each; \$2.50 per doz. Strong plants, 35 cts. each.

S. Seiboldii trails beautifully. These are excellent plants for the general garden. Especially fine for pots or tubs.

Spectabile is a strong species, 1 to 2 feet high, with rose-colored flowers. Fine garden plant. 25 cts. each; \$2.50 per doz.

No less than six of any sort at the dozen rate.

SEMPERVIVUMS

SEMPERVIVUMS are among the most attractive plants for rock gardens, wall gardens, dry banks, and collections of succulents.

The name Hen and Chickens is popularly applied to *Tectorum*, the commonest sort. All, however, have the same habit of propagating by short stolons, the Chickens.

Collecting Sempervivums gets to be quite fascinating, for there is an endless variety, each with some individual charm.

Culture: First, perfect drainage. The books will tell you to use poor, gritty soil. They will grow in such soil, but we have found that by using a porous, gritty soil, enriched with leaf mold and a fair dressing of well-rotted cow manure, the plants are very much handsomer in coloring. At Ukiah we find they do much better in a medium shade, which shifts from time to time so that there is alternating sun and shade. Next to that an eastern exposure with shade in afternoon. In my observation elsewhere this is also true, although in a foggy climate it might not make a difference. Pl. at any time. Divide and reset every two or three years, as they get too thick.

The names of Sempervivums are hopelessly confused. I have, besides my original set of 90 varieties, two considerable collections from the most reliable European sources comprising over 200 varieties, yet from these I cannot surely identify 10 per cent, even with the additional aid of Henri Correvon's book and other authoritive written works. I refuse to send them out longer under names I am not sure of or which are at all questionable. This leaves unnamed some of the very finest varieties in my large set, and I offer these under number until they are definitely identified. After all, one who loves these Sempervivums is collecting charming plants, not names. For convenience I am listing them in four groups, giving the dimensions of well-grown plants. The numbered ones are some of the very finest.

SPECIES DEEPLY COLORED

Atropurpureum has rosettes 4 inches across, is pale green with purple tips, and in winter turns very dark. Each 50 cts.

Lown's Seedling No. 60 is one of the finest of all Sempervivums. 2 to 3 inch rosettes; base of leaf green, outer part deep red. Many silky hairs on margins and at center. So silky as to suggest an arachnoideum. Very scarce. Each \$1.

Rubicundum. The plant I have under this name is the very largest and one of the finest colored of all Sempervivums. One plant here is 12 inches across a single rosette and many 7 to 9 inches. The broad leaves are suffused throughout with soft violet red, the color being constant. Rare and scarce. Each \$1.50 for small plants.

Rubicundum Hybridum. Little like the last, but very fine. Rosettes 3 to 4 inches. From base of leaf to outer third deep red, while tip and margin are bright green. Most striking. Each \$1.

No. 50-3. (Sent out before as "Amber Green.") 6 to 7 inch rosettes. Leaves dark grey-green, tinted purple, purple at base. 60 cts. each.

No. 60-1. (I sent out as *Funkii Red*. Not a *Funckii*.) Rosettes 5 to 7 inches. Leaves narrow and long, tapering to a long point. Reddish-purple and in winter a vivid red. This is the most vividly colored one I know of. Very rare and scarce. Each 75 cts.

No. 60-2. (Last year sent out as Blandum, incorrectly.) 2 to 3 inch rosettes. Leaves narrow and pointed, reddish-purple at base and much colored throughout. One of the brightest colored. Each 50 cts.

No. 80-1. 4 inch rosette. Leaves short and blunt, of a glossy, deep green with red base and dark red tips. Handsome. 50 cts. each.

No. 80-4. A densely crowded rosette 5 to 6 inches across, spreading flatly. Medium green, overlaid pink, with brown tips and out margins. A peculiar bloom in wavy streaks over foliage make it quite distinctive. 60 cts. each.

No. 80-8. 4 inch, with erect leaves. Dark green, overlaid purplish-pink. Purple tip. Fine. Each 40 cts.

SPECIES WITH LARGE ROSETTES

Bourgeanum. Rosettes to 8 inches. Broad, pale green leaves, tipped brown. Each 75 cts.

Calcareum. (True). (Previously sent out as *Queen Amalia*.) This is the finest of all Sempervivums. 3 to 4 inch rosettes, with bluish foliage and a broad, nut-brown section at tip. Leaves sharp pointed and incurved. Most striking. Each 50 cts.

Cantalicum. (This is sold generally as Calcareum.) 3 to 4 inch rosettes. Light green leaves, broader toward tip. Each 30 cts.

Glaucum. Rosettes 2 to 4 inches. Leaves few and slender and of light green, tipped brown. Glaucous in winter. 30 cts. each.

Pallidum. 5 inch. Incurved leaves. Bright blue-green, edges brown. Each

Pittonii. Rosettes 2 to 4 inches. Leaves narrow and rather erect and of a light green, tipped brown. Very distinct. Each 40 cts.

Rhodonicum. A broadly spreading, 5 to 7 inch rosette. Leaves medium green and brown tipped. Scarce. Each 50 cts.

Schlehani glaucum. Rosettes 5 to 7 inches. Spatulate leaves, drawing sharply to a point. Light green, glaucous and brown tipped at times. Each 30 cts.

Speciosum. A large, pale green rosette, uniform color throughout. 30 cts. each.

Tectorum. (Type.) 5 to 6 inch rosettes. Broad, pale green leaves, spreading widely, are brown tipped. 30 cts. each.

No. 3-30. Resembling *Tectorum*, but with broader leaves and an even, medium green. 30 cts. each.

No. 10-20. Like *Tectorum*, but leaves densely crowded. Light green, brown tip, end of leaf margined brown. Each 30 cts.

No. 50-7. An 8 to 12 inch rosette. Deep emerald green with purplish tip. A handsome plant. Each 50 cts.

SPECIES WITH RATHER SMALL ROSETTES BUT NOT COBWEBBY

Arenarium. (For years erroneously sold as *Montanum*, which is entirely different.) One of the smallest of all. The tiny ¼ to ½ inch rosettes form dense, crowded colonies of bright green, often red tinted in winter. A gem. Each 30 cts.

Braunii. (True.) 2 to 3 inch. Bright green with short hairs on margin of leaf and tufts of white hairs at tips. Each 30 cts.

Dolomiticum. One of the neatest and most compact rosettes, 2 inch. Densely leafy, the incurved leaves being a vivid green. Each 30 cts.

Fauconette. 2 inch, with vivid green, very narrow leaves, crowded into very neat little rosettes, with white hairs at center. Each 40 cts.

Fimbriatum. 2 inch, with vivid green, crowded leaves, tipped with tufts of white hairs. Each 30 cts.

Penniculatum. (Listed previously as Albertii.) 2 inches or less, very compact, light green rosette. Leaves hairy at margin. Each 30 cts.

Potsii. Has a densely imbricated, 2 inch light green, one-sided rosette. Long white hairs throughout connect to give an *arachnoide* appearance. Distinct. Each 30 cts.

Pyrenaicum. A very densely, leafy, symmetrical, 2 to 4 inch rosette of light green, bright red at tips. Each 40 cts.

Wanderii. Very compact little rosettes to 2 inches across. Light green, with nut brown tips. Each 30 cts. (By error, sold as "Brauni" in past.)

Soboliferum. 1 to $1\frac{1}{2}$ inch, the leaves densely crowded into globular rosettes. Light green. Offsets are round balls carried on side of mother, falling off at a touch and growing wherever they roll. Nature's method of propagation. Each, 30 cts.

COBWEBBY SPECIES

Arachnoideum. (Type.) Has very small rosettes which in time make densely crowded colonies. The rosettes are densely covered with cobwebs. Each 30 cts.

Arachnoideum Tomentosum or Arach. Major. (Often sold as Laggeri.) Is the largest of the group. Flattened rosettes $1\frac{1}{2}$ to 2 inches across, with much red in foliage. Cobwebbed so densely as to completely obscure the foliage. Large umbel of red flowers. Each 30 cts.

Doellianum. (True.) Has 1 inch grey rosettes with much white cobweb. A plant of another group has long been sold under this name and we, too, were guilty. Each 50 cts.

Arachnoideum rubrum. Similar to type, but colors a deep purple in winter. Each 40 cts.

SPECIAL SEMPERVIVUM COLLECTION OFFERS

My full collection of these delightful plants comprises about three hundred species of which only a few are offered above. From this full collection I make the following special collection offers at greatly reduced prices. The selection must be left to me, but if you already have species you do not want duplicated, mention them in your order and I will send other species.

Collection of 12 species, each named, selected for well-marked differences. for \$3. Orders will be filled for as many as six such collections and containing all different species.

Collection of 25 species, all different and each named, for \$6.

Collection of 100 species, each named, which would include many very rare ones, \$30.

Collections not named. To fill your rock garden, or where you would like a lot of varieties, but do not care for names, I make the following very special offers:

12 sorts, unnamed, but distinctly different, for \$2.

50 sorts, unnamed, but all different, for \$7.50.

SILENES have as popular names Catchfly and Wild Pink. They are related to the Pinks and some of them are very fine plants. One group naturally grows either in rocks or in gritty or gravelly soil, and makes wonderful rock plants.

Acaulis makes a very dense mound 3 to 4 inches across and not over $2\frac{1}{2}$ inches high, and bears many pink flowers. An ideal rock mass. Easily grown and hardy. 30 cts. each.

Californica has a root going straight down like a very slender parsnip. Just below the ground this throws out a number of stems so that a single root will form what looks like a colony. The very handsome scarlet flowers are produced through a very long season if moisture is moderate.

Hookerii has a like habit, but the underground runners may appear a foot from the root and the above-ground stems are only a couple of inches high. The exquisitely beautiful, soft pink flower is deeply cut. One of the loveliest of rock plants.

Maritima makes a flat cushion, very dense, of a very pleasing blue-green tint. The white flowers are odd. However, it makes a very pleasing rock plant.

Schaftii makes a fine flat clump and has many pink flowers late in the summer or in the fall. One of best fall bloomers.

All of these at 25 cts. each; \$2.50 per doz.

Sit., sun or better, light shade. Soil, loose and well drained. Pl., best in fall. Prop., seeds only.

SISYRINCHIUMS. Blue-Eyed Grasses or Star Grass. The name Blue-Eyed Grass was bestowed on these pretty Iris-like flowers before it was known that they come in other colors. They have grassy leaves at the base, and slender stems with many flowers in spring or early summer. Soil, any loam if rather moist during their growing season suits them. Here in California they are perfectly dry later.

Bellum, a foot or so high. Blue. 25 cts each; \$2.50 per doz.

(SISYRINCHIUMS—Continued)

Californicum has fine golden-yellow flowers on stems 4 to 6 inches high. Flowers long, and likes a permanently moist situation. All at 25 cts. each; \$2.50 per doz.

Grandiflorum. Reddish or reddish-purple flowers. Same height. 25 cts. each; \$2.50 per doz.

SPERGULA pilifera is so similar to Arenarias that it is described with them. See page 9.

SYNTHYRIS are Western contributions to the rock garden. They like a cool, shaded corner in the rock garden or fern bed, thriving even in the densest shade, and the first two are delightful little miniatures.

Reniformis is one of the prettiest of woodland plants. It likes a gritty soil, rich in leaf mold, and light to dense shade. Thrives in densest shade. The dainty, pink flowers are delightful, while the deep green, reniform leaves are deep reddish-purple underneath. 25 cts. each; \$2 per doz.

Rotundifolia is one of the pretty woods plants which have their best place in the shaded rock garden. We have no prettier foliage plant in the forests, and they are as beautiful in the garden. The dainty flowers are soft blue. *Cult.* As for *Reniformis*. Each 25 cts.; \$2 per doz.

Schizanthus. In this beautiful Synthyris we have a first-class novelty of great worth. The rounded, crenately-margined leaves are 2 to 3 inches broad on stems 3 to 5 inches high, and make a close clump. The flowering stems are densely covered with deep blue flowers in early spring. Color is unusually vivid and foliage handsome. This species revels in leaf mold and reliable moisture and a cool situation. Ordinarly it will form a cluster 6 to 9 inches across, but it is capable in the very best situations of making a mass 3 feet across. Each 50 cts.

TALINUM spinescens is closely related to the *Lewisias*. From a rather low cluster of tiny linear leaves arise slender stems 6 inches high, bearing a spray of delightful little deep rose-colored flowers. A gem for the sunny rock garden. Each 40 cts.

TELLIMAS, Tolmiaes and Tiarellas are all members of the Saxifrage family and related to Heucheras. Excellent for the coolest and most shaded rock gardens.

TUNICA saxifraga is a pretty grassy-leaved plant of the Pink family, with numerous wiry stems and many rosy-white flowers which are small and rather suggest the *Gypsophila*. Very hardy and a nice filler for borders, or good for rock work. 6 to 10 inches high. *Sit.*, sun or light shade. *Soil*, any garden, even poor. *Pl.*, October to April. 15 cts. each; \$1.50 per doz.

The Dwarf Thymes are most useful. Either in light shade or full sun, in the moist section or the decidedly dry, they make delightful cushions and are very hardy.

THYMUS albus is not over ½ inch high, has light green foliage and whi'e f'owers. A dainty, dense mat. 30 cts. each; \$3 per doz.

Azoricus is a very compact *Thyme* but 1½ to 2 inches high, with dense foliage of tiny leaves and pink flowers. Excellent for carpeting interstices between stepping stones. Each 30 cts.

Citriodora aurea is a very handsome variegated *Thyme*, which makes a plant perhaps a foot high and as wide. Delightfully lemon-scented. 25 cts. each.

Lanuginosus, Woolly Thyme, is a gem which makes a dense, grayish mass little taller than the *Albus*. 30 cts. each; \$3 per doz.

Nitida makes a very compact plant 6 inches or so high, with very tiny leaves. A good rock garden subject. 25 cts. each.

Serpyllum coccineus, also very low, has reddish flowers. 30 cts. each; \$3 per doz.

Serpyllum type grows to 5 inches, with a dense mass of very pretty foliage. 30 cts. each; \$3 per doz.

Vulgaris variegated is a form of common *Thyme*, and is a handsome thing, too. 30 cts. each; \$3 per doz.

TRADESCANTIA Virginica is a plant one would be unlikely to think of for the rock garden, but if given a cool, moist position it fits admirably and produces its very pretty blue flowers for months. Each 25 cts.; \$2.50 per doz.

VIOLAS give the cooler and moister sections of the rock garden some of its most delightful groupings. Do not overlook any Violas. See page 63 for many species.

Gracilis. A tufted species, producing a mass of rich purple, small, starry flowers from early spring to midsummer. Most charming, 30 cts. each; 3 for

Hederacea, the Australian Violet, makes a very low-leaf mass of tiny heartshaped leaves, spreading by underground stolons. The very pretty, rosy-purple flowers appear on 2 inch stems in great profusion over a long period. A real

acquisition to the rock garden. Each 25 cts.; \$2.50 per doz.

Jersey Gem. This splendid Viola flowers from April to late fall. A compact clump with rich, dark, violet-blue flowers with long stems and delicious fra-

grance. 30 cts. each; 3 for 75 cts.

Pedata, the Bird's Foot Violet, is a gem. It is about 4 inches high, with leaves cut so they resemble a bird's foot. The handsome, large flowers are a delightful shade of lilac, with a lighter halo at center. They flower well in mid-spring and again once or twice even to late fall. 25 cts. each; \$2.50 per doz.

Pedata Bicolor. In this beautiful form the two upper petals are dark violet while the three lower ones are soft violet, forming a beautiful contrast. A most lovely and striking plant. Each 35 cts.

VIOLAS of West American species are very fine rock plants. Especially V. Chrysantha and V. Beckwithii. See page 63.

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 gravish leaves.

Cana grows from 11/2 to 2 feet, with grayish foliage. A wonder when in

All are hardy in Europe and presumably in the East. 25 cts. each; \$2.50 per doz.

ZEPYRANTHYS candida or Zephyr Lily. The 12 inch slender leaves appear in fall along with flowers and remain in mild climates until spring. Slender stems, 6 to 8 inches tall, bear single pure white flowers 11/2 to 2 inches long, spreading at top of trumpet. A little colony in the rock garden lies dormant all summer and delightfully surprises with its chastely beautiful bloom in early fall. 15 cts. each; \$1.50 per doz.

BULBS FOR THE ROCK GARDEN

The rock garden books that I have recommended have lists of small bulbs well fitted to the purpose. I will, therefore, only call attention to some very fine West Americans for the purpose.

BRODIAEAS. In my Californian catalog will be found a fine list of these. My information is that they are perfectly hardy in the Eastern states, and groups of from 6 to 12 planted closely in a sunny nook will be perfectly at home and give much beauty.

CALOCHORTUS. A test of years in New York has shown that one group of Calochortus will do well and flower year after year.

These little bulbous plants are very beautiful and the entire Globe and Star Tulips sections are hardy, easy and lovely.

ERYTHRONIUMS. Here in the West we very often find colonies of these lovely bulbous plants inhabiting rocky places or even rooted in crevices until their bulbs are as thin as cardboard. Plant close groups of from 12 to 24 of a sort in shaded pockets in a soil rich in leaf mold, and you cannot go amiss. See Californian catalog.

PLANTS FOR SHADE

By light shade I mean such shade as that made by a lattice or an open deciduous tree. By medium shade, a position like the northeast side of a building under a dense deciduous tree. By deep shade, such as the shade under dense conifers or the north side of buildings. L.S. means light shade. M.S. is medium shade. D.S. is dense shade. Star (*) indicates plants with bright flowers.

*Actaea, M. S. to D. S.

*Amaryllis Belladonna, M. S.

*Anemones, M. S.

*Aquilegia, M. S.

Aralia, M. S. to D. S.

Aruncus, M. S. to D. S. Asarum, M. S. to D. S.

*Asters, M. S.

*Bleeding Heart, M. S. to D. S. Boykinia, M. S. to D. S.

Carpenteria, M. S.

*Clintonia, D. S.

*Columbines, M. S.

Coptis, D. S.

*Cynoglossum, L. S. to M. S. Cornus, M. S. to D. S.

*Cypripedium, M. S.

*Day Lilies, Hostas, M. S. Dicentras, M. S. to D. S.

*Digitalis, M. S. to D. S. Epimedium, M. S. to D. S.

*Erigerons, M. S.

*Gentiana, M. S.

*Helleborus, L. S. to M. S. Heucherus, L. S. to D. S.

*Iris. M. S.

Lamium, D. S.

*Lewis'a, L. S. to M. S.

*Lily-of-the-Valley, L. to M. S.

Lysimachia, M. S.

*Mertensias, L. S. to M. S.

*Michaelmas Daisies, M. S. Nepeta Glechoma, L.S. to D.S. Oxalis Oregona, L. S. to D. S.

Petasites, L. S. to D. S.

*Phlox. L. S. to M. S.

*Plantain Lilies (Hosta.), L. S. to M. S.

*Potentillas, L. S. to M. S.

*Saxifragas, L. S. to M. S. Sempervivums, L. S. to M. S.

Smilacina, L. S. to D. S.

*Solidago, L. S. to M. S.

Synthyris, L. S. to D. S. Tellima, L. S. to D. S.

Thalictrum, L. S. to M. S.

Tiarella, L. S. to D. S.

Tolmiea, L. S. to D. S. Vancouveria, L. S. to D. S.

Violas, L. S. to M. S.

PLANTS FOR HOT AND DRY CLIMATES

With abundant watering.

Asters, perennial Coreopsis

Day Lilies Eupatorium coelestinum Evening Primroses Hemerocallis Mallow Marvels Michaelmas Daisies Rudbeckias Some Pentstemons Tigridias

Zauschnerias

Will give fine results with only moderate moisture. Will stand drouth. Will flower early if not watered and hold on, excepting the Ptarmicas:

Achilleias Aethionema

Agathea rosea Anchusa

Amaryllis Belladonna Catananche caerulea

Centranthus

Convolvulus mauritanicus

Dianthus, like Caesius and

Plumarius Doronicum Er'ophyllum Gaillardias

Gaura Lindheimerii Glaucium

Gynsonhila Helianthus Helianthemum

Heucheras Hollyhocks

Kniphofia (Tritoma)

Linaria Laucoium Linum perenne

Lippia

Luninus Tree Monardellas Oriental Poppies Pentstemons Romneya

Salvias, excepting Patens

Scabiosa Shasta Daisy Sunflowers Talinum Tritoma Yucca

Flowers which flower early and remain dormant in summer, needing no watering

Aethionema

Cynoglossum grande

Daffodils

Doronicum Mertensias

Dodecatheons

Delphiniums Western Iris German, sorts

Dicentra spectabilis, in shady

Hellebores, when established Lily-of-the-Valley

Oriental Poppies Ranunculus Silene Hookerii, and S. Californica

Sisyrinchium Violets, most Western Many bulbous plants.

A FEW FINE CALIFORNIA SHRUBS

Carriage on shrubs is customers' expense. We usually ship by express, charges collect. If for any reason our customers desire us to prepay the charges, we will do so and bill them.

AKEBIA quinata is a half evergreen twiner with graceful pinnated foliage and grows to 12 feet or more. The very interesting flowers are from reddish to purplish brown and both fragrant and attractive. 75 cts. each.

AZALEA Occidentalis is one of the most admired of all Californian shrubs. They grow from 3 to 10 feet high and bear great trusses of flowers from cream to pinkish in color and very fragrant. I have superb nursery-grown plants with a wonderful root system. Two feet high, very bushy, and many of them budded for flower, \$2.50 each; 15 to 18 inches, stout and bushy, \$1.50 each.

CALYCANTHUS Occidentalis or Spice Bush. This is one of our best natives. The foliage is handsome and the double flowers of bright red are pretty. Every part of this shrub is fragrant, from root to flower. It likes a rich moist soil where it will thrive for a lifetime. Deciduous. (Not hardy north of Washington.) Each 75 cts.

CARPENTERIA Californica is a choice evergreen with leaves more like a small laurel. It belongs to the rose family and its pure white flowers with golden anthers are very fine. Fine potted plants, 2 feet, \$1.25 each and carriage.

CEANOTHUS are Wild Lilacs. I can supply quite a number of species through my nursery connections and supply collected shrubs of the same.

Integerrimus Terrace var. This is found here at "The Terraces," in many colors. There are whites, creams, blues in all shades, mauve, and even deep rose pink. I cannot tell what color a shrub will be. 75 cts. each.

Chinese Tree Honeysuckle. This is one of the introductions of "Chinese Wilson," but I had three of them and have crossed names. It forms a large bush or small tree; very full headed. The foliage is a soft green. Flowers are tiny yellow *Honeysuckles* but they are followed by innumerable berries of curranted which persist until well into winter. Splendid as cut decoratives. Any soil, but rather moist suits it best. Deciduous. Each 75 cts.

CORNUS Nuttallii, the large, white Flowering Dogwood of California, is one of the most admired of Western American small trees or shrubs. A well-grown specimen with 4 to 6-inch flowers is a glorious sight. I have a very fine supply of nursery-grown stock of this which is the first good stock to be offered for many years. These are strong, stocky plants, with good trunks and good roots. They are shipped with bare roots packed in damp moss. 6 to 8 feet, \$2.75; 4 to 6 feet, \$2.25. Stock very limited.

FREMONTIA Californica makes a large, spreading shrub, with many large, golden flowers a little like the large-flowered Dogwoods in shape. I can supply very fine potted plants at \$2 each.

MANZANITAS are Arctostaphylos botanically. They vary from little prostrate shrubs to small trees. I can supply the following:

Nummularia, which has small, shining leaves and makes a lovely little shrub like a mound of green 2 to 3 feet high, but will flower at 4 inches. 75 cts. each.

Manzanita, the large, green shrub of Northwestern California. Same price. Stanfordiana, one of the finest in Nower, with bright green foliage and pink flowers. Same price, balled.

REDBUD. The shrub so greatly admired when its great bloom comes in the spring is Cercis occidentalis.

I can supply very nice small nursery-grown trees at 75 cts. each. The Redbud once well established is very hardy and drouth-resistant. A wonder in flowers.

ROSA hugonis creates a sensation wherever seen. It makes a symmetrical bush about 6 feet high and bears long, arching sprays of delicate single yellow flowers of great beauty. Exquisitely beautiful. Very strong plants, 3 years old. \$1.00 each.

RHODODENDRON Californicum is a large evergreen shrub with rose-colored flowers in large clusters. It thrives best in shade in a soil in which there is plenty of leaf mold or peat, and they should be mulched with light material. I have fine plants which have been established here at "The Terraces" 2 to 3 feet high, \$2 each; 1 to 2 feet, \$1.25 each. Good collected balled plants, 2 to 3 feet, \$1.50; 1 to 2 feet, \$1.00.

ROMNEYA Coulterii, or Matilija Poppy, is a noble plant or shrub with smooth, bluish foliage and very large, white flowers filled with golden stamens. The roots run underground and form large colonies in time, and if left to grow it may make a bush 12 feet high. If, however, the stems are either cut to the ground yearly, as I do, or cut by frost, strong shoots appear which soon flower the same season. The Romneya has withstood winters near New York City in sheltered positions. Good stock is very hard to procure, but I can supply this year nice potted plants. 4-inch pots, 6 to 10 inches, \$1.00.

GENERAL LIST OF PERENNIALS

NOTE: In bringing together the plants suitable for rock garden in a separate section of this catalog, a great part of the low-growing plants have been taken from this general list. For a long list of low growing plants suitable for the lower plantings in the border and general garden use, see under "Plants for Rock and Alpine Gardens", pages 7 to 27.

Postage prepaid on following plants unless otherwise noted:

ACHILLEAS. Useful plants that vary much in character. See under "Rock Gardens" for other. For the following good soil and moisture.

A. Ptarmica, The Pearl, has tiny, white, double flowers on slender stems and its variety, Perry's White, has larger flowers. Both are wonderful foils in making bouquets. Either at 20 cts. each; \$2 per doz.

A. Millefolium Roseum. From low masses of feathery foliage arise many stems a foot high, crowned with dense, broad umbels of pretty rose-colored flowers. 25 cts. each; 3 for 60 cts.

A. Millefolium Roseum, Tall Form. I have found a sport of this species having strong stems to 36 inches high, making it very valuable in the border. 30 cts. each; 3 for 75 cts.

ACONITES are related to the tall *Delphiniums* and are very lovely plants for moist places in either cool, sun or light shade. The common name is Monk's Hood.

Autumnale has light blue flowers in autumn with stems 3 to 5 feet high. 25 cts. each; \$2.50 per doz.

Sparks Var. is a very ornamental spring bloomer with deep blue flowers and stems 2 to 3 feet high. 30 cts. each; \$3 per doz.

ACTEAE spicata rubra has finely cut foliage and makes a handsome plant for shady to very shady places. Its brilliant red berries are very ornamental, but are poisonous. A fine companion for ferns. 25 cts. each; \$2.50 per doz.

AGAPANTHUS Umbellatus, "The Blue Lily of the Nile," while considered a greenhouse plant in the East is quite hardy in the South and on this coast. The 2-foot grassy leaves form a dense mass, above which are borne great umbels of 20 to 30 lily-like flowers of porcelain blue on two to three foot stems. Sit., sun or light shade. Soil, any not wet. Prop., div. Pl., October to March. A good loam and light shade will give fine results. Clumps 50 cts. each.

ADJUGA REPTANS Brockbankii. Creeping stems rooting at each joint form a close carpet 2 to 3 inches high, of richly bronzed purple leaves. Mint-like flowers of deep blue. Even prettier in winter. Splendid ground cover in wet or shaded spots where grass will not grow. I just saw it used under dense live shade as a ground cover and most successfully. Cult., any soil with fair moisture. Pl., fall or spring. Strong plants 25 cts. each; 3 for 60 cts. As ground cover plant 12 inches apart and for this purpose I supply Rooted Runners at \$6.00 per 100.

AMARYLLIS belladonna is the beautiful Belladonna Lily and one of the finest things in the California garden. The great tubers make foliage in winter or early spring, and these leaves die off in early summer, but later, usually late August, the tall, naked scapes rise, bearing lovely pink flowers in umbels. Bulbs are not likely to flower the season that they are moved and seem to flower more freely when somewhat root-bound. They do well in sun but possibly better in light shade. Plant in clumps about a foot apart. Soil, loose and sandy is preferable. Prop., bulblets. Pl., August to spring. Heavy bulbs, 30 cts. each, \$3.00 per doz.; 10 cts. each more, east of the Rockies.

Amaryllis Belladonna is hardy on the Pacific Coast from the Columbia River south and throughout the Gulf region, and as far north as Washington, D. C. In colder regions it is usually treated as a pot plant, but a report from Payette, Idaho, states that the writer has had them in the open for 15 years without protection. Once it was 35 degrees below zero and in 1930 and 1931 there was no snow and ground was frozen 30 inches deep. Much would depend on soil and in an open loam in the lee of deciduous trees they may be hardy in the north. For potting use a rich soil and large pots, potting the dormant bulbs in fall. Keep indoors until spring and then sink pots in the open ground if desired in the garden. Repot with fresh rich soil each fall.



Fall Anemone.

ANCHUSA italica, in either of the fine named sorts, is one of the very best plants for the hardy border. Most hardy and vigorous, it makes a great mass 3 to 4 feet high, with innumerable flowers like deep, glistening blue forget-menots and blooms a long time. If cut off before it seeds, they soon flower again.

(ANCHUSA—Continued)

The garden can have no more attractive massings in blues. Sit., sun. Soil, any garden. Prop., divisions of roots. I have the Dropmore variety. Splendid roots 25 cts. each; \$2.50 per doz.

Myosotidiflora is very fine in the foreground of the border or in light shade.

See under "Rock Garden Plants."

FALL ANEMONES have no competitors in their style of beauty in the autumn. Tall and stately, they bear many large, showy flowers, most delicate in texture and very lasting as cut-flowers. In the cooler positions in sun or in shade, they are most useful, either as single plants, in strong groups, or mingled with ferns in shaded corners. In such regions as along our California coast or the San Francisco Bay region they do excellently in any open situation. Sit., cool position in sun or shade. Soil, any garden soil, but a good well-worked loam is best. Prop., suckers. Pl., October to April. In cold climates they are hardy but must have a covering of 2 to 3 inches of leaves or litter. Plant 18 inches apart. If soil is good allow the runners to fill up and only give a winter dressing of well-rotted manure. If it packs, do not allow the underground runners to grow; cultivate between plants.

Queen Charlotte is a silvery pink, the exquisite shade of the La France rose.

It is semi-double. 30 cts. each; \$3 per doz.

Prince Henry. Rich pink, 2 to 3 feet. 30 cts. each; \$3 per doz.

Whirlwind. Semi-double, white, 2 to 3 feet. Same price.

AQUILEGIAS

Columbines combine as many good points as any group of garden flowers. With hardiness and ease of culture, they have handsome foliage at all seasons and beautiful flowers borne gracefully on long stems. While a light shade and loose, loamy soil are best, they do well in the full sun, and in any soil from light loam to adobe. Fall or winter planting is preferable. They are admirable for a fern-bed. *Prop.*, seeds or divisions in fall or early spring. Seedlings seldom flower the first year.

Alpina is a very dwarfed Northern sort with blue flowers. A fine rock plant.

25 cts. each; 3 for 60 cts.

Chrysantha is a very strong grower with long-spurred, light yellow flowers.

None better. 25 cts. each; \$2.50 per doz.

Long-spurred hybrids are hybrids of *Caerulea* and *Chrysantha* and are one of the finest of all garden flowers. My own are a mixture of the very finest English strains. 25 cts. each; \$2.50 per doz.

Skinnerii is a strong species with flowers of yellow and crimson. Very

showy. Small plants 20 cts. each; 3 for 50 cts.

Rose Queen is a long-spurred hybrid with flowers of a uniform soft rose. Most admired. Small plants 20 cts. each; 3 for 50 cts.

For other fine Columbines see under "Rock Garden Plants."

WEST AMERICAN COLUMBINES

AQUILEGIA truncata grows to 2 or 3 feet and has rather short-spurred flowers, red outside and yellow at center. A fine plant for light shades in woodsy places. 25 cts. each; \$2.50 per doz.

Aquilegia eximia loves a cool, wet place, sun or shade, and flowers late, with much larger flowers than any other of its class. Colors like the last. 25 cts. each; \$2.50 per doz.

ARALIA Californica, the California Spikenard, is a very large and noble plant which does excellently in either sun or shade. Its pinnate leaves may be 3 to 4 feet long and its flowering spike 5 to 6 feet. A well-grown plant is most stately. It likes moist situations. Heavy roots, \$1 each.

ARTEMISIA lactiflora. Large panicles of fragrant white flowers on erect stems 2 to 5 feet high. 25 cts. each; \$2.50 per doz.

Fredonia, N. Y.: "The Delphinium cardinale that I bought of you two years ago survived the winter and I am very fond of their color."

ASARUM caudatum, the Ginger-Root, or Virginia Snakeroot, is among the very finest of ground-covers for heavy to light shades, especially where a little moist. A creeping rootstock sends up large single leaves which are evergreen and like large violet leaves in form. They are 5 inches across on stems 8 to 10 inches high. They make a complete cover through which, however, bulbous plants will grow. The plant has a spicy fragrance. Excellent plant under large ferns. Lay roots flat and cover lightly. Sit., shade. Soil, a loam with leaf mold best, but any will do. Prop., runners. Pl., fall to spring. 15 cts. each; \$1.50 per dozen.

ASTERS. The fall-flowering sorts are known as Michaelmas Daisies. See page 51.

Aubretias. Splendid for edging walks, at front of perennial border or in rocky clefts in waste spaces. See full description under "Rock Garden Plants."

BELLFLOWERS. See "Campanula."

BALAMCANDA Chinensis. The Blackberry Lily, also known as Gemmingsia Chinensis and Pardanthus Chinensis. It belongs to the Iris family. Grows 2 to 3 feet high from a base of grassy leaves. The large flowers are orange, spotted brown, and like the Day Lilies do not last long, but are followed by quite ornamental clusters of black berries. Each 30 cts.; 3 for 75 cts.

BALM (Melissa officinalis) is one of the old pot herbs, but, next to *Lemon Verbena*, the sweetest thing in the garden. The foliage is green. 20 cts. each.

BITTERSWEET. A freely climbing vine growing to 20 feet and bearing an abundance of orange-yellow fruits which when open show their crimson seeds and stay all winter. Strong plants, 60 cts. each.

BLEEDING-HEART. See "Dicentra spectabilis."

BOCCONIA cordata, or the Plume Poppy, is a very large, noble plant, charming in every way. The very stout stems bear many large, heart-shaped, deeply lobed leaves, making strong masses, and the innumerable small pinkish-cream flowers are borne in great plumy clusters, high above the foliage. They flower in midsummer, but the plumes remain attractive till cut by frost. For bold groups in lawns, specimens in the hardy border, or masses in shrubbery, they are alike attractive. Sit., sun. Soil, any good soil but if deep and rich and well worked the results will pay for the trouble. Pl., October to April. For grouping in the perennial border, use six or more plants, 18 inches apart; while single specimens are attractive, Plume Poppies are most effective in masses. 25 cts. each; \$2.50 per doz.

BOLTONIAS. See "Michaelmas Daisies," where they are well illustrated.

BOYKINIA occidentalis has ivy-shaped leaves of a shining green and dainty flowers. It does wonderfully well on wet rocks or near water. They are the very best plants for a fern-bed to cover the ground under and among the ferns; or for moist places in the rock garden, either shade or sun. If planted 12 inches apart each way they will cover all ground. Quite fragrant. Each 25 cts.; 3 for 60 cts.

CAMPANULAS

All Campanulas are known as Bellflowers, and they are flowers that do well for everyone—hardy, of easy culture, and free-blooming. With the exception of the Canterbury Bells, which live two years, they are long-lived perennials and respond most gratefully to good care. Splendid plants for window-boxes and hanging-baskets and the finest of plants for the border and garden beds. They are so diverse that no general description would be satisfactory. While generally hardy in the Northern States they should have a winter covering of leaves 3 inches thick.

CAMPANULAS FOR GENERAL PLANTING

In Glomerata we have a strong-growing perennial which, by underground runners, forms dense colonies, with the flowering stems a foot or so high, bearing a dense head of violet-blue flowers. Fine border plant. 25 cts. each; \$2.50 per doz.

(CAMPANULAS-Continued)

Grossekii is an excellent plant. Few or many in the garden will give a fine effect with the lavender, slender bells. It brightens a shady bed, while to plant in mass-planting with foxgloves, harmonizes well in habit, and continues the season of such a bed for months after the foxgloves have done flowering. About 2 feet high. 20 cts. each; \$2.00 per doz.

Lactiflora caerulea is a most charming plant which grows 2 to 3 feet high and whose branching stem bears a loose panicle of dark lavender-blue, rather small flowers. A most delightful Bellflower. Sit., sun or light shade. Soil, good and preferably moist. Pl., fall to spring. Prop., seeds. Large plants this fall at

40 cts. each.

Persicifolia. I have discarded this and now offer the improved variety, Grosse Gloecke, which is by far the largest and grandest form of the Peach-

Leaved Bellflower I have ever seen. See page 3.

Pyramidalis. The prince of all is the Chimney Bellflower. There are varieties which make compact plants 4 to 5 feet high, while others grow as high as 10 feet, with a perfect sheet of handsome flowers produced through months of the fall. These are very fine in a mass by themselves, or alternating with perennial larkspurs which they admirably supplement. Strong plants potted in spring make superb veranda or court ornaments, or household decoration on special occasions. They group well with hollyhocks also. Either blue or white. 25 cts. each; \$2.50 per doz.

Dwarf Campanulas are splendid for margins of the perennial flower border.

These will be found under "Rock Garden Plants."

CELASTRUS scandens. See "Bittersweets," page 33.

CERASTIUM tomentosum, or Mouse Ears, makes a dense mass of silvery foliage not over 4 inches high and often 2 feet across. The white flowers are produced in myriads in early summer and sparingly later. It withstands drouth wonderfully and for dry, sunny rockwork or banks, for carpeting dry spots, and for covering graves, is very useful. Fine for front of hardy borders. Sit., sunny and warm. Soil, any even, light soil. Prop., seeds or divisions. Pl., October to April. Fine plants, 15 cts. each; \$1.50 per doz.

HARDY CHRYSANTHEMUMS FOR GARDEN PLANTING

CHRYSANTHEMUMS of these hardy sorts are most excellent garden plants. Their beauty is both for cutting and in the wonderful profusion of single flowers in many colors, and in endless variations of quilling and shape of petals. Their culture is like that for the double ones, but as large flowers are no object, disbudding is unnecessary, and garden culture is the simplest. There are no better flowers to grow in profusion, to cut for all purposes, and to give away.

The treatment is the simplest possible. Plant in well-worked soil in April or May; place strong stakes not less than 4 feet high by them; cut tops off at a foot or so, to make the plants branch and give ordinary garden care for the rest.

They are fine to work into hardy borders to give liberal fall color.

Chrysanthemums are best planted in the spring. We ship fresh, fine plants

after March 1st.

I have a large collection of the very finest varieties and from these I have selected to offer the following representative set, all of the very highest merit.

BUTTON VARIETIES

Vivian Martin. Early. Medium height. Creamy outer petals and yellow center. An unusually fine cut flower.

Kadar. Early and dwarf. Bronzy-crimson, yellow center.

Gold Dot. Early. Dwarf. Sunflower-yellow.

Red Glow. Mid-season. Dwarf. Rich deep red.

POMPONS

Elidge. Early. Medium height. A striking red with reverse of petals yellow. La Purite. Early. Tall. Pure white.

Leilah. Early. Medium height. Rosy-lavender. Fine.

(POMPONS—Continued)

Mrs. Chas. Stout. Early. Dwarf. Outer petals creamy-bronze, center deep pink. Very satisfactory.

Mrs. Francis Bergen. Early. Medium height, of a delicate blend of white and rosy-pink. Very fine.

Mary Nan Kirk. Early and of medium height. A violet-rose. Excellent in form and color.

Red Doty. Medium height and early. Wine-red, with reverse of petals silverywhite.

Rose Charm. Early, with compact clusters of pink flowers.

Vera Victoria. Early and tall, with large clusters of pink flowers.

Yellow Fellow. Mid-season and medium height. Primrose-yellow. Most graceful and free flowering.

SINGLES

Betty. An early dwarf. Violet-rose.

Billy. An early dwarf in creamy-white.

Little Barbee. Early. Medium height. Large sprays of canary-yellow.

Mary Fentiman. Early. Tall. Delicate shades of canary-yellow and pink blended.

Milo Artell. Mid-season. Medium height. Semi-double in red-bronze. Disbud to get best flowers.

Mrs. William Buckingham. Late and tall. Loveliest of single pinks. Graceful cut flower.

President Hoover. Early. Medium height. Base of petal yellow and remainder a rich crimson-rose, softened to deep rose.

Ruby King. Dwarf. Late, but stands frost. Small ruby-red.

ANEMONE FLOWERED

Bronze Cup. Mid-season. Tall. Golden-bronze, with petals cupping around center. Disbud for best flowers.

Floradora. Late, but resists frost to 20 above. Rich bronze.

Golden Pheasant. Early. Medium height. Fine yellow. Disbud. Maple Leaf. Mid-season. Dwarf. Blended shades of autumn maple leaf coloring. Very beautiful.

Princess Illeana. Mid-season. Dwarf. Shell-pink.

FANTASTIC FORMS

Queen Florence. Early. Buttercup-yellow with spidery quilled rays. Rayonnante. Early. Medium height. Long cord-like petals of silvery-pink. A

very lovely cut flower. PRICES OF ABOVE. While many of these are priced much higher by

others, I make a uniform price of 25 cts. each; 3 for 65 cts.; \$2.50 per doz.

FINE CHRYSANTHEMUM COLLECTION OFFERS

From my wide collection, many not listed here, I make the following very fine collection offer:

7	bronze shades, including all types, each named, for\$1.50
7	yellow shades, including all types, each named, for\$1.50
7	rose shades, including all types, each named, for\$1.50
7	reds, including all types, each named, for\$1.50
T	he four collections, 28 plants in all, each named, for\$5.00

COLUMBINES. See "Aquilegias."

CONVALLARIA majalis. See "Lily-of-the-Valley."

COWSLIPS. For American Cowslips see "Dodecatheon."

CYNOGLOSSUM grande is a Californian related to Anchusa, and is a very handsome plant especially happy in moderate shade. The basal leaves are large. and the many-flowered branching stems have forget-me-not-like flowers of a deep blue and with a white crest at center. A fine rock plant and good in the border. 25 cts. each; \$2.50 per doz. for heavy plants. CYPRIPEDIUMS. See "Californian Catalog."

DAY LILIES. See "Hemerocallis."

DELPHINIUM GARDEN HYBRIDS AND RELATED SPECIES

DELPHINIUMS, or Perennial Larkspurs, are among the most popular of garden flowers. Look at the fine illustration below and picture to yourself grand masses 5 to 7 feet high, with the entire gamut of fine light, medium, and dark blues represented, together with deep sapphire and rich purple, all with centers as beautiful and varied. Any fine blue can be had among them and there are single and double varieties. Each spike has a long life of beauty in the garden, and if they are cut close to the ground when they wane, others follow in succession, with sometimes three crops a year. Wonderful for garden massing, they are also fine for cut-flowers. They have many places in the garden; singly or in groups in the border or along walks or drives; in large masses by themselves. Among open shrubbery plantings, or combined with, we will say, Campanula pyramidalis and C. persicifolia in separate groups, they are alike fine. Sit., sun or at most partial shade. Soil, any garden loam, but for the best results a richwell-drained soil, a mulch of well-rotted manure, and liberal watering. Prop., seeds which do not flower fully till the second year. Pl., October to April. Plant in pots till later. Delphiniums are lime lovers and some experience in the East points to the fact that a dressing of lime will ward off the disease prevalent in some sections. There are many named sorts in Europe, but I, as well as most American dealers, have found them unsatisfactory to handle. During the last few years a great deal attention has been given to the improvement of these noble plants—both in England and in this country—by a number of specialists. The Wrexham Strain, a race of giants, was originated by an English amateur and its blood has given size.

One who knew the best Delphiniums of twenty years ago would hardly know the best of today. I am not a plant breeder, but aim to watch for and secure the

very best. I have now as good as can be had.

Belladonna grandiflora is both one of the most beautiful and also one of the most useful of plants for cut-flowers. As it seeds but little, if at all, the plants go on flowering throughout the season. In color it is a light turquoise-blue which is much lighter than sky-blue. Every order should contain this fine plant. *Prop.*, divisions. Fine 2-year-old plants, 25 cts. each; \$2.50 per doz.

Bellamosum is like the last, but a deep sky-blue. Price as last.

Belladonna Fanny Stormonth is a most lovely variation, with both light and dark blues mixed. Quite superior to type. Strong plants at 50 cts; good at 25 cts. each; \$2.50 per doz.

Vanderbilt's Best are from selected seed from that breeder. Measurements this summer showed many flowers much larger than a dollar. In the finest colors of the species. Strong, two-year plants. 25 cts. each; \$2.50 per doz.

Wrexham Strain, as improved by a prominent breeder, also has very large flowers. Colors unusually fine. Strong, two-year plants. Great value at 50 cts. each; 3 for \$1; \$3.75 per doz.

Chinensis Azure Fairy grows to 24 inches, with finely cut foliage and deepest of deep blue flowers. Very free flowering. Each 25 cts; 3 for 60 cts.; \$2 per doz.

Chinensis Alba. A pure white form of the above. Both are fine for bouquets. Same price.

CALIFORNIAN SCARLET LARKSPURS

There is a large group of Western American *Delphiniums* of much beauty. All have the same habits. They start early and flower abundantly in early summer, then die to the ground as *Ranunculus* do. The roots become perfectly chip

dry and so remain until fall moisture starts them.

If these dormant roots are lifted and kept perfectly dry they will retain full vitality for at least two years. A wonderful bed of *D. cardinale* now just coming into flower, are from roots that I kept out of the ground two years to test; and were so dry that we could hardly handle the roots without much breaking when we planted them in April. A gritty soil is best and only moderate moisture. In the East planting should be in the spring. After ripening, roots should be dug, dried, and be stored dry for replanting the following spring.

D. nudicaule does not stand this treatment so well and as we have many reports of their hardiness I advise leaving this species in the ground. In Michi-

gan plants continued for years and self-seeded.

DELPHINIUM cardinale is the Giant Scarlet Larkspur of Southern California and grows from 3 to 7 feet high, with long racemes of vivid scarlet. 25 cts.

each; 3 for 65 cts.; \$2.50 per doz.

DELPHINIUM nudicaule grows from 1 to 3 feet high. Branches strongly from the base with handsome mottled leaves and brilliant scarlet flowers. It is much larger in full sun but does well in even deep shade which makes it particularly valuable by giving a brilliant touch in spots where few other plants will flower. Excellent in any garden position from odd corner to perennial, border or rock garden. Its habit is to die down in midsummer but full watering will keep it in flower much longer. 20 cts. each; \$2.00 per doz.

Delphiniums. Other Californian species in beautiful blue shades are listed

'at front of this book under "Not Novelties" and "Rock Garden Plants."



Delphinium Hybrids.

DIANTHUS or PINKS are among our finest plants for the border and for the rock garden, offering many variations of size and form and with few exceptions thrive in any soil with a very minimum of moisture. Best in full sun but will do in light shade.

DIANTHUS in Low-Growing species you will find offered under "Rock Garden Plants". These low varieties, *D. Alpinus* excepted, are invaluable for front line planting of the perennial border, for edging walks or for planting in odd corners. They are most attractive in flower and most of them very fragrant.

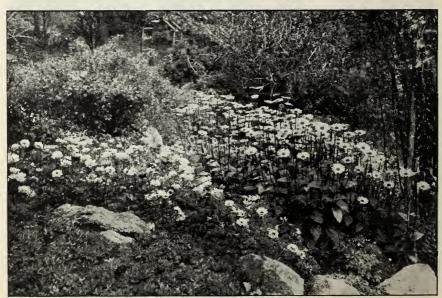
DIANTHUS Caucasicus, also called Cruentas, belong to a novel race of Pinks. They have good basal foliage from which arise tall, slender stems tipped with close clusters of flowers in red to crimson. Each 20 cts.; \$2 per doz.

DIANTHUS semperflorens rubra are a new variation of the well-known *Pheasants-Eye Pinks*. They have large masses of blue green foliage and bear many long stemmed flowers over a long period. This variety has rather stouter stems than the common variety and the flowers are of a very rich deep old rose in color. It is one of the plants most admired by visitors to my grounds. Each 25 cts.; 3 for 60 cts.; \$2.00 per doz.

DICENTRA spectabilis is the Bleeding-Heart of the old gardens and a very handsome plant. It grows 1 to 2 feet in height, with graceful branches, fernlike foliage, and a long raceme of heart-shaped, rosy pink flowers, pendent below. It is an excellent plant for winter forcing. It thrives in a shaded position, but in the well-planned fern-bed where an exquisite combination of contrasting ferns, mingled with Heucheras and similar shade-loving plants, is completed by a soft, solid ground-cover, it is most charming. Sit., shade to deep shade. Soil, any loam. Prop., divsions. Pl., October to March. Strong roots, 80 cts. each. See back cover for fine picture.

Eximia, one of the East American species, has unusually fine and lasting foliage, and whether in sun or shade flowers through a long period in spring and summer. The flowers are dark rose. 40 cts. each.

Formosa is the Western Dutchman's Breeches. It is most beautiful in its feathery foliage and makes a fine ground-cover. Sit., shade to heavy shade. Soil, loose and preferably with mold. It spreads by underground runners to make very handsome colonies. 15 cts. each; \$1.50 per doz.



Doronicum Clusii, fine in either sun or shade.

DORONICUM Clusii, or Fleabane, is a plant that, either in the garden or as a cut flower, is greatly admired. With light yellow flowers nearly as large as the *Shasta Daisies*, and blooming very early and for a long season, it is invaluable for cutting, while a bold mass in light shade is most attractive. It will stand neglect, yet most liberally repays care. A well-worked, rich soil, in light shade, best develops its beauty. The leaves are on the ground, and the slender stems 2 feet or more in height. For massing, plant a foot apart each way. 35 cts. each; \$3.50 per doz.

ERIGERONS are closely related to the *Michaelmas Daisy* type of Asters, but are not so tall and have many very slender rays to the flowers. The most dainty of the Aster group of flowers. All like sun or light shade, a loamy soil, and if tending to rather moist, the better. *Pl.*, fall or spring. *Prop.*, divisions.

Speciosus grows to 2 feet, flowers freely with lovely soft pinkish-lavender to blue-lavender flowers an inch and a half across. While the plant thrives in a moist, sunny place the flowers are apt to fade in hot sun and an east exposure or light shade is better. 25 cts. each; \$2.50 per doz.

The Quakeress is a fine pink form which has a very long flowering period in summer. 25 cts. each; \$2.50 per doz.

ERIGERON Mucronatus (Vittadenia Mucronatus) forms low dense masses a foot or so across and a foot high, smothered through a long season with tiny daisy-like flowers of white-tinged pink. Splendid for a large pocket in the rock garden or if planted at top of a wall makes a beautiful trailer or drape. Useful at margin of perennial border. Each 25 cts., \$2 per doz.

ERYNGIUM amethystinum or Sea Holly has lower leaves a foot long, finely cut, a glaucous green and when in bloom the tall panicled stem, the foliage, the bracts and flower are a steely blue. Striking in the garden and if cut green makes a fine everlasting. Sit., sun. Soil, any garden loam but if rich and rather moist they are finer. Pl., fall or spring. Each 50 cts.; 3 for \$1.25.

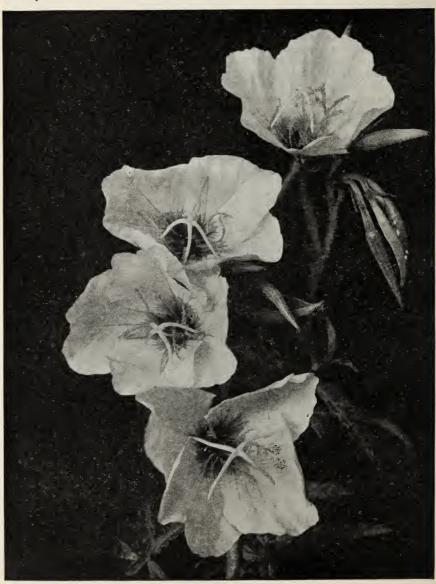
EUPATORIUM coelestinum grows to 18 inches high, forms a fine mass, and bears many panicles of flossy light blue flowers. Coming late in the season it is most welcome and is very beautiful. It likes moisture and sun. Divide to small sections every year. A fine cut flower and much admired as such. Each 25 cts.; 3 for 60 cts.; \$2.00 per doz.

Occidentalis. See "Not Novelties."



Dwarf Campanulas (see pages 10 and 11)

EVENING PRIMROSES are Oenotheras, and are too seldom seen in our gardens, for with their habit of opening the flowers in the evening and closing before midday an added charm is given them. They like hot climates and loose, warm soils, although any garden soil will do. A pretty idea is to use them in combination with morning glories, Daturas and Nicotianas for morning and evening effects. The Oenotheras flower profusely and when used in the combination noted are peculiarly desirable in our Western gardens. They should be planted freely because of the interest that is always occasioned by evening-flowering plants, as well as for the delicate texture and beauty of the flowers. In cool weather the flowers last all day. I hope more Western gardeners will know these plants.



Oenothera Speciosa.



Adiantum pedatum, Five-Finger Ferns.

OENOTHERA or EVENING PRIMROSES—Continued)

Childsii is a form of the *Mexican Primrose*. It forms close colonies and produces clear pink flowers in great profusion. It does not fade in sunlight and continues for a long period. It is a most delightful plant, and is especially good for hot climates. 25 cts. each; \$2.50 per doz.

Fruticosa is a fine perennial, making a bush-like growth from 1 to 3 feet high, and bearing, for a long while in summer, a profusion of large, bright lemon-colored flowers. 25 cts. each; \$2.50 per doz.

Missouriensis is a first-class plant of great beau'y. Many leafy stems come from a woody base and produce flowers of the most delightful soft lemon color for a long time. A single plant is a foot high by 1½ feet across. 25 cts. each; \$2.50 per doz.

Ovata. See "Rock Garden Plants."

Rosea has bright rose-colored flowers which last well through the day. Stems a foot or so high. Drouth resistant. 25 cts. each.

Speciosa, Bright Rose, was offered last year and I still more heartily endorse it this year. The flowers last several days and are a very fine color. The stems are about 8 inches high. 25 cts. each; \$2.50 per doz.

Tetraptera grows to a foot in height, with many fair-sized, pure white flowers. Excellent. 40 cts. each; \$4 per doz.

FELICIA petiolata (Agathea rosea) is a most desirable trailing plant with pink, daisy-like flowers. Planted on a wall it will hang down from 2 to 4 feet and it flowers almost continuously. 25 cts. each; \$2.50 per doz.

FERNS

I am not a Fern specialist, but herein offer the best of the easily grown Pacific Coast Ferns suitable for ordinary garden culture in shaded places.

ADIANTUM pedatum, the Five-Finger Fern. A most beautiful Fern, satisfactory as a pot plant if the caution above is noted. 25 cts., 50 cts., and \$1 each; \$2.50, \$5, and \$10 per doz.

ASPIDIUM munitum. The dark green Sword Fern of the coast region. The illustration shows its fine habit well. A most satisfactory Fern, either outside or in boxes. May be planted in rustic vases with splendid effect. 25 cts. and 50 cts. each, and very large plants at \$1 each.

Aculeatum lobatum. In my opinion our handsomest large Fern. The large fronds are finely cut and graceful. 25 cts., 50 cts., and \$1 each.

Rigidum. One of the Sword Ferns with light-colored fronds. The large Fern so much used by florists in floral pieces in California. Very satisfactory and will do well in dry places. 25 cts. and 50 cts. each.

ASPLENIUM filix-foemina is the Lady Fern, and I consider the two forms that I offer of this among the very best of our native Ferns. It is a large Fern and the fronds may rise to 4 feet in height. It likes moisture and shade, and the fronds are of the most pleasing green and very fragrant. They die to the ground in the winter, but make an astonishingly rapid growth in the early spring. I especially recommend planting this with other Ferns liberally in new beds, for they grow almost as well the first year as afterward, and keep the bed attractive while slower Ferns are establishing themselves. Very large plants, \$1 each; good plants, 50 cts. each, and very satisfactory small plants at 25 cts. each. Special rates on quantities.

Greencastel, Pa.: "The plants I received from you last spring were packed so well that they arrived in better condition than some of the same plants from New Jersey."



Aspidium munitum.

(FERNS-Continued)

Filix-foemina cyclorum is a synonym for the Asplenium spinulosum of a previous catalog. It is an evergreen. A most useful Fern. Price as above.

Pteris (The Brake). A very common Fern, yet one of the best in a garden. It grows well and is most graceful and restful, especially the new fronds early in the season. Makes a vigorous growth from 2 to 6 feet high. 25 cts. each.

Woodwardia radicans. The great Chain Fern of California. Grows as high as 12 feet. Splendid in cultivation. Large plants, 50 cts. and \$1 each.

Special rates on quantities of all ferns on application.

FUNKIAS. See "Hosta."

GAILLARDIAS are among the brightest, hardiest, and most easily grown hardy plants. Indeed you don't have to grow them, for they grow with or without care, and flower most profusely throughout the season from June on, and in California practically the entire year. Their colors are very showy. A center of dark reddish-brown, then successive circles of scarlet or crimson, finished with a border of yellow. Some are yellow throughout. They are excellent for cut flowers. Sit., sun, and the warmer the better. Soil, any. Pl., October to April, or even later, if potted plants can be secured. I offer good strong plants, sure to give quick bloom, in the following fine varieties:

Grandiflora Kelwayi has a center of crimson with a wide border of deep vellow. Each 20 cts.; 3 for 50 cts.; \$1.50 per doz.

Portola bears flowers of great size on long stems. The rays are broad, somewhat doubled, and of rich bright crimson tipped with yellow. By far the best of all Gaillardias. It was introduced fully ten years ago, yet propagators have never been able to keep up with the insistent demand for it. 30 cts. each; \$3 pr doz.

GAURA Lindheimeri is a most hardy plant, with strong, leafy stems growing from 3 to 4 feet in height, bearing a very large number of white flowers, flushed with pink, throughout a long season. They make a most excellent background for such tall plants as perennial *Phlox*, *Michaelmas Daisies*, or anything of that habit. No plant stands heat or drouth better, and after the first season the Gaura will live through the California summer with ease if necessary. It is especially adapted to the hotter sections, although it thrives in the coastal regions. *Sit.*, full sun or light shade. *Prop.*, seeds or divisions. *Pl.*, winter. Flowers second year from seed. Any soil will do. Especially sun-loving and drouth-resisting.

A lovely combination is to plant Gaura in front of *Hollyhocks* with a few plants of *Salvia farinacea* mingled with the Gaura. The flowering seasons

supplement admirably. 25 cts. each; \$2.50 per doz.

GEUM, Mrs. Bradshaw, is one of the best hardy plants lately introduced. Its foliage suggests the strawberry, and the flower is like a large, brilliant red strawberry flower. Flowers are borne in abundance on tall, branching stems. Sit., sun, or better, light shade. Soil, any garden loam, but it is an excellent rock plant. Prop., seeds. Pl., October to March. Flowers second season. 25 cts. each; 3 for 60 cts.

GEUM, Lady Strathedon, is like Mrs. Bradshaw, but has full double, very fine, deep yellow flowers. 25 cts. each; 3 for 60 cts.

GLAUCIUM flavum tricolor is the Horned Poppy. See under "Poppies." It is a most satisfactory cut flower. It is very artistic, the buds opening in water and the bloom lasting a long time. Glauciums are amongst the best of drouth-resistants. Here at "The Terraces" they naturalize on my dry, unwatered slopes. Give them perfect drainage and loose soil and get their best growth.

GOLDENRODS. I have many species, all interesting, but the two following best suit most garden needs. Give a good soil with moderate moisture, planting either in fall or spring, and then to single shoots each year, and you will be well repaid.

Canadensis. A fine Goldenrod, growing to 5 feet, with large panicles of golden-yellow flowers in late summer and fall. Each 15 cts.; \$1.50 per doz.

Golden Wings is the finest of all Goldenrods, with immense, widely-spreading panicles of pure golden-yellow throughout midsummer. Each 30 cts.; 3 for 75 cts.; \$2.50 per doz.

GRASSES. In my garden there is a fine-leaved evergreen grass growing about a foot high that makes the finest and most decorative clumps for water gardens or moist spots that I have ever seen. 50 cts. each.

GUERNSEY LILY. See under Nerines in "Not Novelties."

GYPSOPHILA acutifolia is a valuable, strong-growing plant which branches widely and grows to 3 feet. The many tiny white flowers are flushed pink and make an attractive mass. Flowers in midsummer. It is excellent for bouquet greens. Sit., sun. Soil, a loose, well-worked loam. Pl., October to March. Strong plants, 25 cts. each; \$2.50 per doz.

Paniculata forms a filmy mass 2 to 3 feet high and as much through, consisting of light green foliage and innumerable tiny white flowers. The plant is charming and the stems are valuable for bouquet greens. They are everlasting. 25 cts. each; \$2.50 per doz.

"Bristol Fairy." See page 3.

In Repens monstrosa I offer one of the best flat-growing plants that I know. They make compact masses a foot or more across and the small, white flowers fairly cover the plants. Foliage always good. Excellent for rock work, walls, or edgings, making a perfect carpet of green. 25 cts. each; \$2.50 per doz.

HELENIUM Riverton Gem is a tall, strong-growing plant related to the *Sunflower*. It attains a height of 4 feet and in fall bears a great number of old-gold flowers which turn to wallflower-red. A great favorite in the East for abundant fall flowering. *Sit.*, sun. *Soil*, any garden loam, but if rich and moist, larger plants will be produced. *Prop.*, divisions. *Pl.*, October to April. Perfectly hardy anywhere in the United States. Fine for cutting. 20 cts. each; \$2 per doz.

HELENIUM Rubrum. Like the last, but with deep red flowers. 25 cts. each; \$2.50 per doz.

HELIANTHEMUMS, or Sun Roses, are low-spreading evergreen plants which for months in summer are almost hidden by their dainty flowers, which are usually single and resemble little roses. We have nothing prettier in their class, and they are hardy, long-lived and easily grown. In colors they give wide choice, as they vary from white to rose and red. They are drouth-resisting, but respond wonderfully to rich soil and care and are lime-lovers. I have a single plant, 5 feet across, which is a sight to be remembered when at its best. For sunny rock work, the front of the border, banks, or the top of a wall, they are good. Sit., sun or light shade. Soil, any, but light preferred. Prop., from cuttings. Pl., from September to April.

HELIANTHEMUMS TO COLOR. Very best selected colors in Blood Red, Single Red, Bright Rose, Flame Pink, Yellow, Henna, Orange. 35 cts. each; 3 for 90 cts, for fine plants.

H. Apricot. What its name suggests, handsome apricot. 40 cts. each.

(HELIANTHEMUMS—Continued)

- H. Double Red. Most showy, full double flowers. Each 40 cts.
- H. Appeninum Roseum (Rhodanthe Carneum). This lovely Rock Rose has leaves hoary with fine, silky hairs and a most lovely flower, which can best be described as between rose and salmon-rose. 40 cts. each.
 - H. Rose Queen. Large flowers of glistening pink. 50 cts. each.

HELIOPSIS Pitcheriana. A very sturdy and very hardy plant of the Sunflower family which grows 2 to 3 feet high and produces many bright yellow flowers in midsummer. Exceedingly hardy and drouth-resisting. 25 cts. each; 3 for 60 cts.

HEMEROCALLIS

HEMEROCALLIS are the Day Lilies, also called Lemon Lilies. They have an abundance of grass-like, graceful folage and funnel-shaped flowers of large size, borne on many flowered stems well above the foliage. They much resemble true lilies. Perfectly hardy throughout the North and East, and as they stand much heat they are very valuable in the South. Not until the second year does a Day Lily show its true worth and only in a rich loam with ample moisture will it reach its greatest beauty, yet in very dry summers of recent years it has often been the only plant to come through unscathed, and in any fair soil with fair moisture it will give good results and still give pleasure. Stands extreme moisture, which makes it ideal to naturalize along streams and on margin of ponds. Even if half submerged, it thrives. Instead of bulbs, it has thick, fleshy, fibrous roots. Pl., September to April. Sit., sun to moderate shade. Soil. as above. Prop., divisions, reset every four years. Day Lilies, except Fulva and Kwanso, are very fragrant and all are splendid for cutting. A spike cut today had eight flowers 5 inches across and 5 inches long. As the varieties flower at different times, you should have a wide selection to get a long flowering season.

NEW INTRODUCTIONS AND SUPERFINE SPECIES

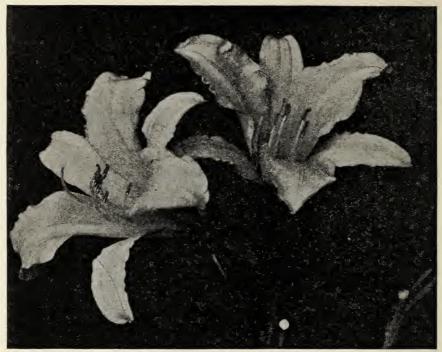
Ajax is one I imported two years ago. Well grown, it is 4 feet high and the medium lemon-colored flower is 5 to 6 inches across and of excellent form. 40 cts. each.

Burbank. Produced by Luther Burbank years ago and my small stock is probably all there are in the trade. Rather dwarf, while the bright lemon-colored flower is unique in that the tube is very long and slender, with the petals spreading flat and broadly on the upper third. It is longer flowering than most. Each 50 cts.

Calypso will grow to 42 inches in good soil and give flowers 5 to 7 inches across. The petals recurve broadly from the base, the larger petals having wavy ones on upper margin. The color is light canary, with a fine satiny sheen. One of the best authorities in America, a man who knows Hemerocallis unusually well, rates Calypso with the very best. Late season. Each 75 cts.; 3 for \$1.50 for extra strong plants.

Gold Imperial. One of the finest of recent introductions from Europe. My plants are not tall, possibly from lack of richest soil, but the flower is very large, much recurved and pure gold with a beautiful satiny sheen. Each \$2.

Hyperion was exhibited in England last year at the Wisely Show by its originator, Mr. Mead, and won the "award of Merit" of the R. H. S. In a rich loam it grows to 45 inches and the flower is from 5 to 7 inches across, with a satiny sheen and of a clear, medium canary. Each \$2.50.



Day Lilies.

GENERAL COLLECTION OF FINE HEMEROCALLIS VARIETIES

Aureole grows to 3 feet and is orange with crimson tint. 40 cts. each.

Aurantiaca is of good height, with a large flower in a very distinctive shade which may be called bright cadmium orange with deep shades at the center. A very distinctive color. 40 cts. each.

Dr. Regel. Early and rich orange-yellow. 30 cts. each; \$3 per doz.

Dumourtierii. 1½ to 2 feet. Orange. 25 cts. each; \$2.50 per doz.

Flava, or Lemon Lily, is about 2 feet high, with fine, very fragrant lemonyellow blossoms. Early (June 1 here). 25 cts. each; \$2.50 per doz.

Florham. A large, trumpet-shaped flower of rich golden-yellow color. Plants grow 3 to 4 feet high at their best. July. 35 cts. each; \$3.50 per doz.

Fulva has large, bronzy-red flowers, very striking. It is 3 to 4 feet high. Flowering fully here July 1, earlier about San Francisco. 25 cts. each; \$2.50 per doz.

Gold Dust. 2 to 3 feet. Bright yellow buds and back of petals bronze-gold. May-June. 25 cts. each; \$2.50 per doz.

Kwanso, Double. Like Fulva in color, but double and the flowers last longer than any single sort of Day Lily. 25 cts. each; \$2.50 per doz.

Luteola. Midseason. Height 2 feet. Orange. 30 cts. each; \$3 per doz.

Middendorffii. To 1½ feet. Lemon-yellow. Early. 25 cts. each; \$2.50 per doz. Sovereign. 18 inches. Midseason. Rich orange. 30 cts. each; \$3 per doz. Thunbergii is a Lemon Lily, almost exactly like Flava, but flowering about six weeks later, so that Flava is gone before Thungerbii comes in. Just as sweet-scented. 25 cts. each; \$2.50 per doz.

HEMEROCALLIS Special Collection of 10 Sorts, one each in ten fine varieties and including Calypso, for \$3.

Note: I only send roots that have flowered beautifully here this year and with good soil they are sure to bloom for you.

(HEMEROCALLIS—Continued)

Hemerocallis to Naturalize. At low cost I offer for naturalizing fine plants of mixed Day Lilies, or you can specify for all tawny or all yellow, if you prefer, for \$2 per dozen, postpaid. Not less than a dozen sold; 100 or more sent express collect for \$12.50.

HEUCHERAS have beautiful heart-shaped leaves which form a low clump 6 to 8 inches high, always beautiful and evergreen. Some have especially finely colored spring foliage, while all take on a rich winter coloring. Above this pretty mass of foliage, slender, many-flowered scapes bear small flowers in a panicled, filmy mass of most delicate coloring. Very hardy and drouth-resisting. There are no finer plants for the shaded rock work, for shaded beds, or to blend with ferns and make a good ground covering. Sit., shade or cool places in the sun. Soil, any, but loose is better and good drainage a necessity. Prop., divisions. Pl., October to April.

Americana is especially lovely in its new foliage, which is highly colored. A large-leaved, handsome plant. 25 cts. each; \$2.50 per doz.

Heuchera brizoides-gracillima seedlings. Sanguinea has low, compact panicles, but these lovely hybrids are taller and loosely branched, and make lovely spray-like masses of flowers. From white to deep rose. 35 cts. each; \$3.50 per doz.

Micrantha is a California Alum Root, with beautiful foliage, richly colored in winter. Many small, white flowers in panicles. 20 cts. each; \$2 per doz.

Rubescens. The stems spread horizontally and root at the joints, making a broad, flat carpet. Above this the slender panicles rise with very pretty, pinkish flowers. As in this species, it is the calyx rather than the corolla that is colored. The flowers are much like everlastings and retain their beauty for a long time. 20 cts. each; \$2 per doz.

Sanguinea (Coral Bells; Crimson Bells). Low-growing plants with sprays of coral-red flowers. 20 cts. each; \$2 per doz.

HOLLYHOCKS grow easily anywhere and need no description. An Englishman named Chater developed the finest known strain of double Hollyhocks and I get new seed of this strain direct from Europe each year, insuring pure colors. I offer Apricot, Crimson, Flesh, Golden Yellow, Maroon, Newport Pink, Rose, Salmon Rose, Scarlet or White in separate colors or a mixture in strong plants for 20 cts. each; 3 for 40 cts.; \$1.50 per doz.

HORNED POPPY you will find under "Poppies."

HOSTA or Funkias are called Day Lilies or Plantain Lilies. Unlike the true Day Lilies the *Hemerocallis*, they have large ovate leaves more like Calla leaves and graceful stems with nodding tubular flowers of good size. I find that here in California they must have a cool situation, a good, rich, loamy soil and at least light shade. So placed, they are fine plants. *Pl.*, fall or spring.

Coerulea grows to 3 feet high, with broad basal leaves and blue flowers well above the foliage. Each 35 cts.; 3 for 90 cts.; \$3 per doz.

Subcordata grandiflora grows 12 to 20 inches in height. Basal leaves of soft green, with pure, waxy-white flowers well above foliage in late summer. A fine pot plant. To be at its best must have a rich soil, ample moisture and shade. A fine thing. 40 cts. each; 3 for \$1.

IBERIS Gibraltarica is listed under "Rock Garden Plants." It is not only one of the finest of plants for the rock garden, but is splendid at the margin of the perennial border, to beautify difficult and out-of-the-way places, or even to naturalize on hillsides along with wild flowers. I have it doing wonderfully on my dry, unwatered hillsides.

IRISES

RARE HYBRIDS AND ONCOCYCLUS SPECIES OF IRIS

Wonderfully attractive Irises of which I. Susiana is the best known.

Ipfall. Iberica X. Pallida. Petals deep red-violet. \$1 each.

Hoogiana. Large flowers on stout stems of a very lovely lavender-blue, with yellow crest and orange beard. \$1 each.

Leichtlinii is bronzy-violet and yellow; a very rich shade. \$1 each.

Susiana, or the Mourning Iris, has flowers of enormous size, grayish, covered with an intricate system of brown-black veins and dots. A single flower in a florist's window will attract a crowd. \$1 each.

Zwanenburg. Lutescens X. Susiana hybrid. Is a large flower of unusual coloring. S. cream blotched greenish-buff; F. chamois and olive-brown. 50 cts. each.

Culture. All of this group are lime-lovers; all must have perfect drainage. They must be ripened hard and be left dry for a complete summer rest. This is hard to do in the garden and it is best to lift as soon as ripe and store in dry sand until October. Then replant in the open. In Pennsylvania a customer panted in lime chips and a soil rich in leaf mold, with protection from north and east. They ripened off hard and have flowered continuously for years.

SIBERIAN IRISES

The Iris Sibirica has narrow foliage and tall, slender stems, with handsome flowers very like those of the *Spanish Iris*. It forms strong, grassy clumps and they are excellent for cut flowers. 3 to 4 feet high. *Sit.*, sun; any garden soil, but better if rich and moist to wet. *Prop.*, divisions in winter. *Pl.*, October to March.

Perry's Blue is a very fine shade of sky-blue and considered the best. 30 cts. each; \$3 per doz.

Snow Queen. Height 3 feet. Large, well-formed flowers of snow-white. Foliage excellent. 25 cts. each; \$2.50 per doz.

Superba has large, violet-blue flowers and good foliage. Excellent for massing at the water's edge. 25 cts. each; \$2.50 per doz.

MIDWINTER-FLOWERING IRISES

Midwinter-flowering Irises are novelties of the greatest merit. They flowered continuously at "The Terraces" during the last winter. There was frost day after day, with 16 degrees as a low point. Snow was on them over a week and yet they produced lovely flowers which would be prized in Iris season.

The leaves of Iris stylosa var. marginata are 2 feet long and form clumps like our wild Irises. The flower-stems are often 8 inches long and the open flowers $3\frac{1}{2}$ to $4\frac{1}{2}$ inches across. S. clear soft lilac; F. white, beautifully veined purple at the center, while the outer half is soft lilac, deepening inward to rich purple. They are very fragrant. Strong plants 40 cts. each; \$4 per doz.

Iris stylosa alba adds another exquisitely beautiful winter-flowering sort, and I am glad to offer it at 50 cts. each; \$5 per doz.

ORNAMENTAL SEEDED IRISES

Iris foetidissima, or Gladwyn, has evergreen foliage. The flowers are not pretty, but in the late fall the seed-pods open out to show rows of scarlet seeds of much beauty. They are much prized as winter decorations. 50 cts. each.

IRIS SPURIA

These include *I. orientalis* and similar species. They have a stout running root stock, erect, handsome leaves, 2 to 4 feet tall and fine flowers. The foliage lasts in fine shape a long time, making them very desirable to plant along streams or around pools or ponds, and in the garden they make fine groups.

They will do very well in any well-watered garden, but all alike do best with much moisture. *I. orientalis* does splendidly in the bed of a running creek.

A. J. Balfour. Height 2 to 4 feet. S. deep blue; F. narrow, deep blue on the claw, lined with yellow; half yellow. Fine. 50 cts. each.

Lord Wolsely. S. rich violet; F. blue, spotted yellow. 50 cts. each.

(IRIS SPURIA—Continued)

Monnierii is a species close to *Spuria*, growing to 3 feet and preferring a moist situation, although doing very well in any good garden loam. The foliage is fine, and the light lemon-yellow, unspotted flowers are quite pretty. 50 cts. each.

Mrs. A. W. Tait. Soft porcelain-blue. 50 cts. each.

Notha. S. rich violet; F. blue, spotted yellow. 50 cts. each.

Orientalis gigantea (ochroleuca) has fine white flowers with orange-yellow blotch on falls. 25 cts. each; \$2.50 per doz.

VARIOUS SPECIES OF IRIS

Iris cristata is a dwarf, free-flowering sort with beautiful deep blue flowers fringed and spotted orange. Likes a warm situation and a damp soil. 25 cts. each.

Fulva. A wet land species, odd and pretty. Rich, reddish-brown or copperyorange. Striking for pool margin. Each 30 cts.

Pseudoacorus gigantea. Forms strong masses of broad, bright green, sword-like leaves often growing to 6 feet in height, and has small, yellow flowers. It likes much water and is fine for pool-side plantings, stream banks or margin of ponds. It is the only Iris that will grow with roots completely submerged. Drop a root in your pool or in your shallow pond and you will have a strong clump in one season. Most attractive foliage. Each 30 cts.; 3 for 75 cts.

Tectorum, of the *Evansia* group, is from Japan and is light lilac with a handsome wavy crest. 50 cts. each.

CALIFORNIAN AND OTHER WEST AMERICAN IRISES

The Pacific Coast is very rich in wild Irises. All have rather wiry roots and make broad, loose masses. When once established they are extremely hardy and long lasting, but they are not too easy to establish. I think that the best time to plant is early fall, as they take a summer rest like bulbous Irises, and with us start root growth with the early fall rains. A New York correspondent writes that they are perfectly hardy there. Collected plants only.

- x Bracteata is rather like last golden-yellow.
- x Californica, varied. Has as many shades as Mixed Spanish would give—blues, yellows, bronze, and violets.
- x Chrysophylla is slender with light yellow flowers.
- x Douglasiana. About 12 inch leaves, with flowers from blue to cream. Mixed only.

Hartweggii is very dwarf with yellow flowers.

Iris Californica is rather dwarf, say 6 inches. Flowers deep blues.

x Longipetala grows more like Japanese Irises. It likes wet to almost swampy situations, makes a dense group with erect foliage and tall, stiff stems, with light blue flowers. Plants 25 cts. each; \$2 per doz.

Macrosiphon. Dwarf flowers, deep blue.

New Golden Yellow Iris. I found this year in the Sierras an Iris standing erect and carrying flowers above the foliage. Flowers a rich golden-yellow. A most unusual Iris. 50 cts. each.

x Purdyi is still lower growing, with the handsomest flowers of any American species. Large, creamy, with purple lines. A fine clump is very lovely.

Tenax is very dwarf, say 3 inches, with reddish-purple flowers. It likes quite moist soil.

Watsoniana. Similar, with blue flowers. Strong grower.

Prices of above, except where priced otherwise, 25 cts. each; 3 for 60 cts.; \$2 per doz.

Seeds of species prefixed with an "x" at 25 cts. per pkt,

LADY SLIPPERS. See "Cypripediums," Californian catalog.

LAVENDER is the well-beloved, fragrant plant of all old-fashioned gardens, and quite a pretty plant as well. Fragrant blue flowers are borne over a long season. I have fine plants at 25 cts. each.

Lavender Dwarf Munstead. See "Rock Garden Plants."

LEPACHYS pinnata, related to the *Rudbeckias*, a most excellent plant. It grows 3 to 4 feet high and branches well, and the yellow flowers are very decorative, both on the plant and cut. Midsummer flowering. Extremely hardy. 30 cts. each.

LEUCOJUM Vernum is a spring flowering, bulbous plant with fine grassy foliage and pure white flowers tipped with green. 3 for 35 cts.; \$1 per doz.

LEWISIAS. See Californian catalog, especially for *Tweedii*. One of the finest rock plants in the world.

LIATRIS, Spicata (Blazing Star). Grassy basal leaves and a stout flowering stem 2 to 5 feet, and the lavender flower is in a long spike. Splendid for a hot, dry situation. Each 25 cts.; \$2.50 per doz.

BLUE LILY-OF-THE-NILE. See "Agapanthus."

LILY-OF-THE-VALLEY clumps have been hard to secure for several years. I 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 top-dressed 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 Lewisii, a variety of *perenne*, is an excellent plant with many small leaves and erect stems forming a nice group. For a long period beautiful blue flowers appear daily in the morning. It always pleases. 20 cts. each; \$2 per doz.

LINUM Narbonense is taller than *L. Lewisii* and has much larger flowers of deep azure-blue. The flowers of the other Linums drop off at noon, but in this species they remain open all day and last for several days. Each 30 cts.; \$3 per doz.

LIPPIA repens has proved most useful in California as a lawn material and is also a most excellent plant for rocks or steep banks or to hang over walls. It spreads by prostrate stems which root freely at the joints and soon make a flat, dense ground-cover of a pleasing green which can be mowed or left as time allows. The flowers are borne in low heads and are white, tinted lavender, and give the effect of clover. For planting a lawn or ground-cover, place pieces of the stem not over a foot apart each way; closer is better. If a foot apart they will meet by fall; if closer, that much quicker. Sit., sun or light shade. Soil, anything from stiff clay to sand, rich or poor. It will grow where less hardy plants could not exist. Prop., by cuttings, or better, sections of the stems with some root. Plant with a trowel. Water freely at first and until well set. After the first year it will hold on with no water, but with a winter top-dressing and plenty of water it is an excellent springy lawn. It does not seed nor tend to spread and become a weed. Root sections \$1.50 per 100; \$10 per 1000; small clumps for rock garden at 25 cts.

MALLOW MARVELS. Are very strong growing hybrid Hibiscus with smooth foliage and stout stems as much as 5 feet high. The very large, satiny, single flowers as much as 10 inches across. Sit., sun. Soil, any loam; if moist, better. Pl., fall to late spring. My strain is a very soft shade of pink and rose. 30 cts. each; \$3 per doz.

MERTENSIA Virginica is Virginia Bluebells. Quite leafy stems, branched from the ground, bear terminal clusters of the lovely porcelain-blue flowers, often tinted pink. A favorite at sight. The thick, fleshy roots are handled dormant like bulbs in the fall. Soil, any loam, and if moist it is better. Sit., a cool situation in light shade is best. Each 25 cts.; \$2.50 per doz.

MICHAELMAS DAISIES are among the very best hardy plants known and for fine masses of soft coloring in the garden they have no superior. In planting hardy borders they should never be omitted, for they have the merit of making soft masses of any desired height from 2 to 7 feet. The foliage is a soft, pleasing shade of green and makes an excellent filler and foil for other groups. Most superb groups can be planned with Michaelmas Daisies alone. The varieties do not all flower at the same time and, if after a plant blooms and before seeds can form it is cut close to the ground, it will flower a second time. Indeed, one customer of mine had three crops last year from one plant.

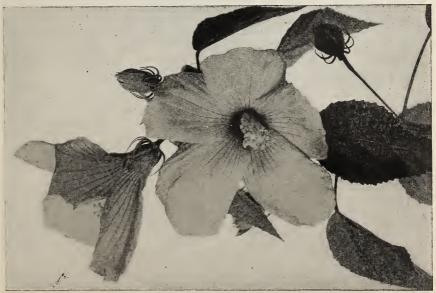
Again, if in a massing of these alone a portion is cut down after they are well up, say in May, the bloom will be retarded enough so they will supplement the first flowering lots most beautifully.

Their culture is most easy. They will do fairly in any garden soil with moderate watering and either in full sun or very light shade. The very best results will be had in a rich, well-worked soil of any class, with rather abundant watering. Plant 15 to 18 inches apart each way in strong groups of not less than six of a sort. If hoed, they will do better. Plant from October to April. Reset not later than the second year. In resetting use only the outer vigorous shoots and, if single shoots are used and they are set about a foot apart each way each winter, the very finest obtainable results will be had. Summer mulching is an advantage and can be made of old leaves, sawdust, well-rotted manure, or grass cuttings, but manure is preferable.

My set of Michaelmas Daisies is, without doubt, the best in America. With the assistance of Amos Perry, the greatest breeder of these in Europe, I am continually dropping out worn sorts and adding the very finest European varieties. From now on I will introduce the new sorts at the same time that they are introduced in England, thus keeping my collection strictly up to the minute.

Amellus Rudolph von Goethe. The Amellus grow to a foot or so with large lavender-blue flowers 2½ inches across. Long flowering and prefer rather moist soil. Very fine. 50 cts. each.

Burbank's "Charming" is quite distinct from the following Asters. 3 to 4 feet high, with broad, one-sided panicles of soft pink flowers. A real beauty. 50 cts. each; \$5 per doz.



Mallow Marvel (See page 47).

ASTER ERICOIDES

Ericoides varieties have narrow, hairy leaves and make a low, compact clump smothered with little erica-like flowers. Most dainty for a foreground for taller plantings. Culture as for *Novi-belqii*.

Ericoides Starshower bears arching sprays of tiny heather-like flowers of creamy white. Dainty, low, massing, 1 foot to 18 inches high. 50 cts. each.

1 Ericoides Sensation is 18 inches high, with dainty sprays of tiny flowers, white, tinted pink. Fine in making bouquets. Each 30 cts.

ASTER NOVAE-ANGLIAE

ASTER novae-angliae. These varieties make quite stout, stiff bushes 3 to 4 feet high, with narrow grayish leaves and many rather large flowers. Unlike the others, they do not like very much moisture, but thrive better in only a fairly well-watered soil.

Hilda Morris has extra large, flat heads with rich, large, purple-violet flowers. 35 cts. each.

Lil. Fardell in rosy pink is striking. 30 cts. each; \$3 per doz.

Mrs. Raynor. A very stout, many-branched bush, rich, rosy-crimson flowers. 30 cts. each; \$3 per doz.

Mrs. S. T. Wright in rich purple with a golden center. 4 feet. 25 cts. each; \$2.50 per doz.

Rosea superba is almost red and a very free bloomer. Best of the type. 30 cts. each; \$3 per doz.

ASTER NOVAE-BELGAE

The Novi-belgii group of *Michaelmas Daisies* is one on which endless care has been bestowed in Europe. All are alike, having smooth, glossy foliage, very many fine flowers, and in liking best a soil that is at least well-watered. With me they are at their best in decidedly moist soil; in dry soil they are not good.



Boltonia Asteroides, much like Michaelmas Daisies in habit.

(ASTER NOVAE-BELGAE—Continued)

Blue Gem. A clear, medium blue. 25 cts. each; \$2.50 per doz.

Edith Goodwin forms a bush 3 to 4 feet high and at blooming time is completely covered with deep blue flowers 1½ inches across. 30 cts. each; \$3 per doz.

Effie is a very compact plant, 3 feet high, with azure-blue flowers, and is one of the most admired in my garden. 30 cts. each; \$3 per doz.

Esmee. Neat dwarfed bushes, smothered with snow-white flowers, 30 cts.

Forget-me-not. About 3 feet. Deep blue. 25 cts. each; \$2.50 per doz.

Grey Lady is most exquisite shade of opal gray. Large, semi-double flowers. 50 cts. each.

Honorable Vicary Gibbs. Height 2 to 3 feet. Is an exquisitely beautiful sort with many-flowered panicles. Very graceful and many tiny, light blue flowers. 40 cts. each.

lvy Logan bears long sprays of dark blue circular flowers. Late. 25 cts. each; \$2.50 per doz.

Jas. Kelway. Tall, with large, deep blue flowers. 25 cts. each; \$2.50 per doz. King of the Belgians is a late novelty in Europe. The stout bushes are smothered with semi-double, lavender-blue flowers, much larger than Climax. 35 cts. each; \$3.50 per doz.

Lady Lloyd grows to 3 feet, and has pretty pink flowers. 30 cts.; \$3 per doz.

Mrs. Davis Evans is always a favorite and forms a compact, handsome bush 4 feet high, with bold, azure-blue flowers. 25 cts. each; \$2.50 per doz.

R. E. Hay. A compact plant full of rosy-pink flowers. 40 cts. each; \$4 per doz. Robinson V. C. A compact bush 2 to 2½ feet high, fully double flowers of a bluish mauve. 40 cts. each; \$4 per doz.

Royal Blue. Medium height, with stout, branching stems full of large, dark blue flowers. 30 cts. each; \$3 per doz.

Sam Benham is exceptionally fine—a snow-white Climax. 35 cts. each; \$3.50 per doz. Wavy crest. 50 cts. each.

In St. Egwin we offer one of the finest pink *Michaelmas Daisies*. To see it at its best, with its glistening rose-pink flowers in full sunlight, is to be charmed. Height 2 to 3 feet. 25 cts. each; \$2.50 per doz.

RELATED TO ASTERS

BOLTONIAS are stout-stemmed, much-branched plants which in late summer and fall produce myriads of pretty aster-like flowers. They make fine mass effects for the back of the border. Sit., sun or light shade; does well in hot regions. Soil, any garden soil, but rich, moist, well-worked soil is better. Prop., divisions. Pl., October to April. Perfectly hardy.

Asteroides is white and grows from 5 to 7 feet high. A stately plant and excellent for cutting. 15 cts. each; \$1.50 per doz.

Latisquama. Similar to last, with fine sprays of soft lavender blossoms. Each 25 cts.; \$2 per doz.

SPECIAL ASTER COLLECTION OFFER. Two each of six varieties from the *Noviae-Angliae* and *Nov. Belgiae*, including *Boltonias*, 12 in all, for \$3. You may select the varieties yourself or, if you prefer, leave it to me.

NEPETA Glechoma, or Ground Ivy, is a most dainty and useful Mint. The leaves are crenated and pretty, the stems run on the ground and root, making solid carpets. I know of no better ground-cover for a shaded bed, while for hanging baskets, or in pots or tubs under trees or shrubs, it is excellent. For covering a steep bank in a shaded position there are few prettier things. One of the strictly useful plants. Sit., sun. Soil, any garden loam, but a moist situation is best. Prop., divisions. Pl. October to April. Price for plants, 20 cts. each; \$2 per doz. Prices of divisions by the hundred on application.

Mussini is of dwarf, compact habit, and when in bloom about 10 inches high. Flowers produced in great profusion and are soft lavender. Fine in the sea air. Hardy. 25 cts. each; \$2.50 per doz.

ORIENTAL POPPIES. See "Poppies."

OXALIS Oregona, the Oxalis of the Redwood Forest, where it carpets considerable areas densely, is a most useful plant for carpeting under ferns, for the shaded north border, or to make a dense ground-cover under trees. It spreads quickly to make a solid cover, but never becomes a nuisance by overspreading or seeding. The large flowers are a handsome rose. To make mass covers plant the long, underground runners flatly, with about 2 inches of soil cover and, say, 10 inches apart. 15 cts. each; \$1.50 per doz.; \$5 per 100.

PARADISEA. See "Not Novelties" under Anthericum.

PENTSTEMONS

Gloxinoides, the Garden Pentstemons, are easily the best garden flowers for California or other mild climates. The plants branch freely from the base and make broad clumps, say a foot across, with many erect flowering stems about 12 to 18 inches high, with many flowers through a very long season. They can be expected to be in full bloom in June, and if cut back in August to about 4 inches they will flower well through a mild Californian winter. The large flowers—as much as 2 inches across—are pretty in texture and fine in colors. As a rule the body of the flower is of one color, the throat of another, and the throat mottled often in rich colors. The general mixture will vary from white through lavender to purple and from bright red through pinks to softest of pink. Free from disease and vigorous. Hardly hardy in New York excepting in most protected situations. Easily standing 12 degrees above zero. Sit., sun. Soil, any, but repay rich soil. Pl., fall to spring, but possibly better in spring. Prop., cuttings or seeds. Good plants, 15 cts. each; \$1.50 per doz. Strong plants, 25 cts. each; \$2.50 per doz.

PENTSTEMON Barbatus Torreyi is a most satisfactory and long-flowering species, with bright, scarlet, tubular flowers. The graceful stems are 2 to 3 feet high and altogether they are most satisfactory, especially for hot, dry places. 25 cts. each; \$2.50 per doz.

WEST AMERICAN PENTSTEMONS. In the region from Eastern Colorado to the Pacific there are something like 150 wild Pentstemons in wonderful variety. There are dwarfs not 2 inches high, climbing varieties, and semishrubby sorts growing to 6 feet. Culture: There are a very few Pentstemons which are native to moist or wet meadows, but otherwise all belong to either rocky sections or to semi-arid regions. They must have perfect drainage, and a soil containing some fine rock or grit will give that. They like heat, and given sharp drainage are none the worse for watering. Admirable rock plants, and some of them almost perfect for the dry rock work.

Centranthifolius grows erect with several slender stems 1 to 4 feet high. Many slender scarlet tubes are borne along the upper sections. Altogether a very pretty plant. 30 cts. each.

Heterophyllus Purdyii is my California Blue Bedder, recently named in my honor. It is a wild form, native at my place, and a superb garden plant of easy culture. The stems are erect from a decumbent base, and each bears many handsome flowers in a most delightful shade of deep gentian-blue. Some are tinted pink. I have seen many plants with 50 of these flowering stems in bloom at once, and on one counted 105. The plant continues in bloom all summer if not allowed to go to seed. I have very fine plants at all seasons and can supply my Eastern customers in spring with plants which will flower the same season. 25 cts. each; 3 for 45 cts.; \$1.50 per doz.

Heterophyllus when well grown has a large number of slender flowering stems 2 to 3 feet high, bearing a myriad of small, light blue flowers. 20 cts. each; \$2 per doz.

Newberryi, Mountain Pride, is one of the finest of Sierra rock plants. Often in crevices, although doing better in a gritty soil. It makes a low mass of handsome foliage and bears many bright, rosy-red flowers. 30 cts. each.

Richardsonii has slender, graceful stems a foot or so high and good blue to rosy purple flowers. A nice rock garden plant. 30 cts. each.

(PENTSTEMONS—Continued)

Roezlii. A very compact species with bluish foliage about 9 inches high and very many stems, with fine light to deep blue flowers. I had one this spring with a hundred flowering stems. 25 cts. each; \$2.50 per doz.

Spectabilis grows from 3 to 4 feet in height, with large, light blue flowers of much beauty. 25 cts. each; \$2.50 per doz.

PEONIAS. With this catalog I discontinue offering Peonias, but I still have a wonderful planting of them and will gladly submit prices upon application. **PERUVIAN LILIES** are *Alstroemerias*.

PETASITES Japonicus, or Coltsfoot, is one of the finest of plants for bold leaf effect. From a running rootstock great heart-shaped or nearly round leaves, 2 to 2½ feet across, are thrown up, with stems 2 to 4 feet high. In a moist place and with loose soil they make grand groups. 50 cts. each.

PERENNIAL PHLOX

The Perennial Phlox most commonly known are all forms of *Phlox paniculata* or *Decussata*. They are among the very best perennial plants known for midsummer effects and especially in bold groupings. The flowers are in many shades of both soft and brilliant colors, so that by selecting colors they will blend with any planting. As they vary in height from 10 inches to 5 feet, it will be seen that they have great possibilities for hardy borders. The best effect is to be had by massing in groups of from six plants on of a single color. They can be planted to good advantage in open shrubbery or in front of tall shrubs.

Culture. Sit., in sun if in cool climate; in light shade or where the sun is cut off in the heat of the day if in a hot climate. Dense shade is not good and a hot, dry position out of the question. Soil, best of all a well-worked garden loam, whether sandy clay or even fairly gravelly, with a liberal dressing of well-rotted manure worked in. Pl., September to March. Fall is better than the spring. Prop., 2-year-old plants are best. They can be propagated in three ways: (1) Divisions of old clumps. In this case the vigorous young shoots on the outside are to be kept. (2) By young shoots cut off in spring and rooted in a house or frame. (3) By root-cuttings cut off and planted in the winter. All of these make fine plants the second season. Seeds are worthless; they grow easily, but produce a large percentage of poorly colored flowers.

Mulching. In California a summer covering of any fibrous material, such as fairly well-rotted manure, grass clippings, leaf mold, or even shavings, will prevent the surface of the soil from getting dry, and is a great help.



Phlox is seen to best advantage in masses with a background of greenery.

(PERENNIAL PHLOX—Continued)

Watering. Phlox do not need any more water than is needed for general summer gardening, but they are especially averse to having their thick mass of upper roots dried out, hence the mulch. They should be thoroughly watered when it is done, and with a mulch this need not be often. Whenever a plant drops its lower leaves and the flowers come out small, you may be sure that the manner of watering is at fault, and that it should be promptly corrected.

Phlox about San Francisco Bay. Using the methods I have outlined, and especially the summer mulch, I have grown superb Phlox all about the Bay region, whether in Alameda sand, Berkeley adobe, or San Francisco sand and fog. They do as well in light shade in all of the Peninsula region and, with a little more care, throughout California, and luxuriate in the North of Bay regions.

Quality of Stock. I have found that a certain valley in the State of Washington will produce plants of Phlox of superlatively fine quality. They are by far finer than I have seen elsewhere, and I am having all of my stock grown there. No finer plants can be bought. They are several times heavier than most of the stock sent out.

PHLOX VARIETIES

Chas. Mayo is white, with a fine crimson eye.

Frau Buchner is a fine pure white.

Gen. Von Heutz. A bright salmon-red with white center and very brilliant. Lothair is a brilliant crimson.

Mrs. Jenkins is dwarf, and a pure white. Not excelled in white.

Pantheon is a clear, deep carmine-pink with a faint halo.

R. P. Struthers is a fine carmine with claret-red eye.

Rheinlander. Striking salmon-pink. Flower trusses very large, 3 feet. 40 cts. each: \$4 per doz.

Rynstrom has immense trusses of clear rose-pink, and is one of the finest of all Phlox.

Siebold's Scarlet is tall and strong (3 to 4 feet), of a dazzling scarlet like that of Coquelicot.

Thor. A beautiful shade of deep salmon overlaid with scarlet.

Jules Sandeau is dwarfish, of a pure pink and with light center. 30 cts. each; \$3 per doz.

Miss Lingard has glossy foliage unlike the others and waxy white flowers. Any of the above, 25 cts. each, \$2.50 per doz., except where noted otherwise. No less than 6 of any one variety at the dozen rate.

MOSSY OR CREEPING PHLOX

There is a large group of these very pretty plants in Western America, but few are to be obtained for gardens.

Amoena makes a broad mass 4 inches high, covered with bright pink flowers in early spring. A lovely plant. 25 cts. each; \$2.50 per doz.

Subulata has long been a favorite in Europe and is varied in color. It makes a broad, dense mass, not over 6 inches high, and in season is completely smothered with its flowers. The leaves are dense and like pine needles. Splendid to cover banks or walls and in the rock garden. I have the following two varieties:

Subulata Lilacina is pale lilac and fine.

Subulata Rosea is a deep rose of denser habit.

Either at 25 cts. each; \$2.40 per doz.

POLYGONUM Affine has pretty foliage and many stems 1 to 1½ feet high. The flowers are bright rose-red, borne on spikes a few inches long, and are very lasting. A very pretty plant for moist, shaded places. Very hardy anywhere, 40 cts. each; \$4 per doz.



Oriental Poppy.

ORIENTAL POPPIES. The only word which can fitly characterize these grand flowers is "gorgeous". Even tulips pale in comparison. With the texture of fine silk the open flowers measure as much as 10 inches across. Their season is May and June, but some flowers come later, especially if half dried off and then liberally watered. Single plants or groups of a few are showy objects in the mixed border, but they are best placed in strong groups at some point where they can be seen in flower but dried off later and given a summer rest exactly as with bulbs. They may be left undisturbed for years. Some of the soft-colored sorts, as Mrs. Perry, blend well with almost any color massing. A sowing of the common Gypsophila among the plants in spring will give a light cover after they dry off. Sit., sun. Soil, deep, and better if sandy or gritty. Prop., root-cuttings in summer. Pl., September to March.

E. A. Bowles. Medium-sized flowers, prettily crimped and of a most charming shade of apricot, changing to shell-pink with age. 50 cts. each.

Enfield Beauty. Perhaps the finest of the salmon-pink shades. 50 cts. each. Olympia. See "Not Novelties."

Royal Scarlet. A wonderful glowing scarlet. 50 cts. each. Finest Mixed, 30 cts. each; \$2.50 per doz.

The HORNED POPPY is Glaucium, and in Glaucium flavum tricolor I found one of the very best things that I have had in years. The foliage is bright, shining and pretty. This bush is 2 feet high and as far through. Bears a large number of orange-scarlet flowers 4 inches across, which have four black spots at the center. It flowers for months and blooms even with nightly frosts. 25 cts. each; \$2.50 per doz.

POTENTILLA, Miss Willmott, makes a strong, many-branched clump a foot or two high and through a very long period bears bright cerise flowers like large strawberry blossoms. Fine. Sit., sun or shade, but shade better. Soil, a good loam and if moist, better. Pl., September to April. Prop., seeds. 35 cts. each. Other Potentillas under "Not Novelties" and "Rock Garden Plants."

PRIMROSES. Of the true Primroses, the *Polyanthus* Primroses, doubtless derived from the English *Cowslip*, are far and away the best for the ordinary garden and as now developed give a wonderful variety of fine colors. In California they often begin to flower in late fall and are at their best in February, and are well worth the while of every flower-lover. Primroses do best in shade, and are excellent for the shaded side of the house. After flowering the foliage tends to brown and, for this reason, they are not good for edgings. Grouped among other plants, they are satisfactory *Pl.*, October to March. Divide every two or three years in early fall; any loam will do. *Prop.*, seeds or divisions. Strong plants, mixed, in white, yellow, reds and rich maroons, all at 25 cts. each; \$2.50 per doz. Either red or yellow of a new strain at same price.



Rudbeckia purpurea.

PRIMROSE, Heavenly Blue. Rare shades of deep blues. Each 50 cts.

PYRETHRUM roseum grows a foot or more in height, with very many fine flowers on long stems, most excellent for cutting. The flowers are both single and double in shades of white, pink, and red to deep crimson. The flowering season is long. An ordinary loam, either in sun or light shade, suits it well. Heavy plants in a fine mixture of all colors, 25 cts. each; \$2.50 per doz. Good plants of same, 15 cts. each; \$1.50 per doz.

Tchihatchewii is more like a Daisy. Its dense foliage mass is less than an inch in height and from this many little white daisies rise on slender stems a few inches high. It spreads rapidly, making a dense carpet, and is quite valuable for a close ground-cover in rather dry spots and for rock work. 25 cts. each; \$2.50 per doz.

RANUNCULUS repens fl.-pl. A neat plant which by runners spreads to make colonies. The very double flowers are produced in spring and early summer, and are the original *Double Buttercups*. 15 cts. each: \$1.50 per doz.

RUDBECKIAS, or Coneflowers. Of the unique flowers which we can all grow well, these are among the most useful, either for cutting or show. All have showy flowers; many sorts have a long, cone-like center which usually is black. Sit., sun or light shade. Soil, any well-watered garden loam, but it is in a rich, moist or almost boggy soil that it attains its most superb growth. Prop., divisions; divide at least the third year. Pl., October to March.

Golden Glow is one of the very best yellow-flowered plants we have, making bold masses in the garden 3 to 6 feet and even to 12 feet in height. Splendid in the garden and a most lasting and useful cut flower. Divide, planting single side shoots each year. Each 15 cts.; \$1.50 per doz.

In Newmannii we have one of the finest of plants for a rich yellow mass effect. The flowering stems are 18 inches to nearly 3 feet in height, with many fine, rich orange-yellow flowers with black centers. For a most showy border, plant a foot apart each way. I sell them at 25 cts. each; \$1.50 per doz.

Nitida Herbstonne, or Autumn Sun, is a most lovely plant. Its handsome foliage is much like that of *Golden Glow* and it forms a many-stemmed, erect plant 4 to 5 feet high. The many large lemon-yellow flowers are single, with the full petals bending in most decorative manner. As a cut flower it is wonderfully artistic. Very late. I have few finer things. Likes much moisture. 25 cts. each; \$2.50 per doz.

Purpurea is the Purple Coneflower, and one well worth growing. The stems, 2 feet or so in height, bear large, spreading and very showy flowers of a vivid lilac-purple shade which last with scarcely a change for months. Many people consider them valuable as cut flowers. 25 cts. each; \$2.50 per doz.

SALVIAS of the various perennial sorts are well adapted to hot, dry climates and also do well in ordinary garden conditions. All are most hardy and most of them will withstand cold climates. I do not carry *Splendens*, so much used for summer bedding. *Soil*, any garden; if warm and light, better. *Sit.*, full sun. *Prop.*, seeds or divisions.

Argentea has great basal leaves so heavy with white hairs that they are like plush. In them is its beauty. 25 cts. each; \$2.50 per doz.

Azurea is very much to be recommended and especially for hot, dry places or hot climates. Many slender but wiry stems are produced from a woody base and grow from 3 to 4 feet in height and in late summer produce graceful, airy panicles of exquisite light blue flowers. Its flowering season is late summer when flowers are not too plentiful, and it makes very fine masses. I think very highly of it. 25 cts. each; \$2.50 per doz.

Bracteata rosea or Turkestanica makes a bold, much-branched plant with heavy basal leaves. On the upper branch are many colored bracts, whitish or lavender, that give the full effect of flowers. A fine plant is a beautiful picture. 25 cts. each; \$2.50 per doz.

Farinacea is another very fine one that should be used widely. With really pretty foliage and good habit, its long racemes of true lavender color come for many months from early summer on. Always good. Cut back in midsummer and take a very late bloom. 30 cts. each; \$3 per doz.

(SALVIAS—Continued)

Nemorosa is 2 to 3 feet and leafy. The many flowering branches are well filled with bright purple flowers. 30 cts. each; \$3 per doz.

Pitcheri is exactly like Azurea, but has intense gentian-blue flowers (deep blue) and blooms from late summer until very cold weather. One of the best late fall flowers. 30 cts. each; \$3 per doz.

Patens is a too little known species, 18 inches high. Throughout the summer it bears flowers of a deep indigo blue, the most wonderful blue known. Prefers a rich, moist soil in full sun. 25 cts. each; \$2.50 per doz.

All of these Salvias are strong-growing and drouth-resisting, and among the best plants for hot, dry climates.

SAPONARIA Ocymoides splendens is a most useful plant. It makes a broad carpet even 2 to 3 feet across if planted on the level or covers a rocky spot or drapes a cement wall, no matter how hot, perfectly. The foliage is good and the show of pink flowers in spring very attractive. Good for rock garden or walls. 25 cts. each; \$2.50 per doz.
Ocymoides white is rare. 30 cts. each.

The SAXIFRAGAS are a fine race. In "Rock Garden Plants" you will find a number of the Encrusted Saxifragas, while here I offer some fine garden species.

Crassifolia or Megasea crassifolia has large, handsome leaves and very early (in winter, where mild), has many pretty cerise-pink flowers. Fine for

shade to deep shade. 40 cts. each.

Peltata is a noble California plant which has become a great favorite in England for bold groups in lawn or sides of pools or streams. It loves moisture, and from large root stocks throws up immense leaves on stems 3 to 5 feet high, the leaves a foot or more across. A very handsome plant near a spring or brookside. It likes moist, rich soil. 50 cts. each.

Saxifragas. Mossy and Encrusted and Dwarf varieties. See "Rock Garden

Plants."

SEDUMS are now all listed under "Rock Garden Plants." A number of the "Strong Growing Sedums" make splendid masses in the border and are useful for filling odd corners. S. Sieboldii and S. Spectabilis are splendid for potting. The lower sorts are splendid for edgings and for covering banks.

SEMPERVIVUMS are most intriguing little plants that have many uses. Splendid for potting, for dish gardens, and no Succulent Collection is complete without a long list of them. The collector will find a long list of Sempervivums in the "Rock Garden" section of this catalog.

SHASTA DAISIES. From a much-branched base, which is quite leafy, very many slender branching flower stems arise to 1½ to 3 feet, according to variety. The large, single flowers have golden centers and are 2 to 3 inches across. For many months, beginning with May, they make a fine mass of white. As cut flowers they are excellent. There is no garden flower which will give better results with like care, and Shasta Daisies will give results without any care. They are fine for masses along walks or drives and look well in front of Hollyhocks. I made a superb mass planting with Scabiosas at the back. Many fail with Shasta Daisies because they leave the clumps undivided for years. They should be divided at least every other year, and I prefer every year, in the fall. Sit., sun. Soil, any. Prop., divisions. Pl., any time from September to May. No garden should be without the following:

Alaska I consider the best. Of graceful habit, with large, perfectly formed

flowers. 15 cts. each; \$1.50 per doz.

Double-Fringed is wonderful in the garden and a splendid cut flower. The very double flowers are pure white, the petals finely shredded, quilled and incurved to give an enchanting flower. Each 25 cts.; 3 for 60 cts.

SHOOTING STARS. See Dodecatheon in "Rock Garden Plants."

SMILACINA amplexicaulis is related to the Eastern Solomon's Seal, and, like it, very decorative. It forms large clumps with stems a foot or two long, handsomely leafy, with white flowers. The fruits hang long and are pretty. One of the very best plants for shaded places. 15 cts. each; \$1.50 per doz.

(SMILACINA—Continued)

Stellata has many underground runners and leafy stems 8 to 12 inches high of a most pleasing green. There is no prettier ground cover for shady places or to p'ant with ferns. It grows best in a loamy soil, rich with mold. A fine companion for *Lily-of-the-Valley*. 15 cts. each; \$1.50 per doz.

SOLIDAGOS. See "Goldenrod."

STATICE latifolia, or the Great Sea Lavender, is a handsome, shiny-leaved plant with crowded panicles of flowers 1 to 2 feet high of pinkish-lavender. The cut flowers are everlastings, and very much in use. Stt., sun. Soil, well enriched and deep. Prop., seedlings. Pl., any time, if from pots Fine potted plants, 25 cts. each; \$2.50 per doz.

STOKESIA cyanea, or Cornflower Aster, grows to 12 to 18 inches high and flowers for a long period, beginning in June. The flowers are lavender-blue. Easily grown in any garden soil in sun. 15 cts. each; \$1.50 per doz.

TELLIMA grandiflora is closely reated to *Heuchera*, and is a most excellent plant for rock work for shady places. The leaves are quite ornamental. 25 cts. each; \$2.50 per doz.



Thalictrum aquilegifolium.

THALICTRUMS, or Meadow Rues, are handsome plants. The foliage has excellent color; stays in good condition till late, and without any flowers is worth a place, especially in shady places in connection with ferns. That does not mean, though, that they do not thrive in full sun. Sit., cool place in sun or shade to rather heavy. Soil, any loam, but if rather moist they will do better. Pl., preferably fall, but until April. Prop., divisions or seeds.

Aquilegifolium makes a noble plant and in bloom has a solid mass of filmy, cerise-pink of great beauty. No flowering plant in my garden receives more favorable attention than this. 30 cts. each.

Dipterocarpum. This lovely plant grows to from 3 to 5 feet and is handsome as a plant. The great branching panicles are most graceful and the mauve flowers are very attractive. One of the very best hardy perennials. Good plants, 30 cts. each; \$3 per doz. Strong plants, 50 cts. each; \$5 per doz. Extra good stock this season.

Fendlerii has very handsome foliage, long lasting. The flowers are greenish and not conspicuous. Fine for shade. 25 cts. each.

Glaucum makes a fine clump up to 6 feet high, with pretty light yellow flowers. 30 cts. each; \$3 per doz.

TIARELLA unifoliolata, the Foam Flower, belongs to the same group as *Tellima* and *Heuchera*. It has pretty leaves and filmy white flowers on tall stems, which will make a beautiful effect when the plants are placed closely. 15 cts. each; \$1.50 per doz.

In TOLMIEA menziezii we have one of the most useful of ground covers or covers for rough banks in the shade. It is related to *Heuchera* and *Tiarella*, spreads by strawberry-like runners, and makes a solid cover of much beauty. Flowers reddish on slender, erect stems. 25 cts. each; \$2.50 per doz.; by the hundred to mass, \$7.50.

TUNICA are most excellent little plants for a dry, rocky place and give a delicate bloom for a long time. See under "Rock Garden Plants."

LOW GARDEN VERONICAS

Amongst these are some most charming plants for the border, the rock garden, and the wall. They make dense mats of good foliage which in season is fairly covered with their pretty flowers. Most of the garden sorts are forms of *Veronica Teucrium*, but vary much in height and color.

Incana grows erect to about 10 inches, with wooly gray foliage and blue flowers. 30 cts. each; \$3 per doz.

Teucrium var. prostrata is the name under which I have one which grows only about 2½ inches high and has dark blue flowers. 25 cts. each; \$2.50 per doz.

Teucrium Rupestris grows to 8 inches, with medium blue flowers. 25 cts. each; \$2.50 per doz.

Teucrium Royal Blue is probably the very best of all for the rock garden. About 2 inches, with very deep, dark blue flowers. 30 cts. each; \$3 per doz.

VINCAS, known under the popular names of Periwinkle and Myrtle, are evergreen, trailing plants of much beauty and wonderful hardiness. No other green thing will grow better in shade in dry places, such as under eucalyptus or in cemeteries. If planted a foot or so apart and the stems allowed to root the first winter and after that the plants are cut close to the ground every winter, a wonderfully fine ground cover can be made for road fills, shady banks, or bare places almost anywhere. Plant in fall or winter.

Minor makes a mass of dark green about 4 inches high. Var. alba is the same, but white, 15 cts, each; \$1.50 per doz.

Major is the common large, green sort. 15 cts. each; \$1.50 per doz.; \$5 per 100.

Alpina is dwarf, with a reddish flower. 30 cts. each.

A bouquet of "Horned Poppies" is both beautiful and lasting.

Eryngiums, Gypsophila and Statice, cut while fresh, are most attractive "Everlastings".

Golden Rod "Golden Wings" makes a most attractive large decoration.

Rudbeckia Purpurea has a showy flower with wonderful lasting qualities either as a cut flower or in the garden.

VIOLETS AND VIOLAS

CARDEN VIOLETS OR VIOLA ODORATA

These are the sweet-scented Violets so much loved for cut flowers. They need no introduction.

 $\mathit{Sit.}$, sun or better, moderate shades. $\mathit{Soil.}$ a well-prepared loam manured suits their needs, and a top dressing in the fall adds value. $\mathit{Pl.}$, fall or spring. $\mathit{Prop.}$, divisions.

Should be reset about every third year to give good results, and the second season is best.

Well-rooted runners, 10 cts. each; \$1 per doz. Fine flowering clumps, 25 cts. each; 3 for 60 cts.; \$2 per doz.

Marie Louise is the old-fashioned, very fragrant, double, light blue Violet. Princess of Wales. Deep violet. The Violet of the markets.

VIOLAS are splendid plants for the front of border, for edgings, or for an odd corner. Several very fine low-growing species are offered under "Rock Gardens".

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 flower. 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 several 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 deeply, so that the tip of root is covered $1\frac{1}{2}$ to $2\frac{1}{2}$ inches. Use a heavy mulch, which may be raked off in very early spring.

Beckwithii has three parted leaves. Flowers violet and purple.

Chrysantha has finely cut leaves. Flowers rich yellow within, maroon on back. A beauty.

Cuneata has wedge-shaped leaves. Flowers purple and white.

Hallii has palmate leaves, 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.

01		CHD	i, oki	AII, ORLIFORNIA			-
	es				SS O		
	Not Novelties	Rock Garden	General List		Not Novelties	Rock Garden	General List
	t	ck	ne	0	t ve	ck	tel
	25	Ro	E Se		25	33	Sie
	AA				HH	H O	OH
INDEX OF COMMON		,		Doggue Flower (Anomena)		9	
NAMES				Pasque Flower (Anemone) Peruvian Lily (Alstroemeria)	1	9	
Agathea (Felecia)			47	Pin Cushion (Scabiosa)	6		
Alum Root (Heuchera)			47	Pinks (Dianthus)		12	38
Baby's Breath (Gypsophila).	3		44	Pink, Indian (Silene)		25	
Basket Flower (Ismene)	5	10		Plantain Lily (Hosta)	4		47
Bahia (Eriophyllum) Balloon Flower (Platycodon)	5	13		Redwood Burls	$\frac{1}{6}$		
Bane Berry (Actaea)	0		30	Rock Cress, Blue (Aubretia)	0	10	
Bayonet, Spanish (Yucca)	6			Rose, Christmas (Hellebores)	4	10	
Bedstraw (Galium)	3			Sage, Blue (Salvias)			59-60
Bellflower (Campanula)	7	10	33	Sea Holly (Eryngium)			39
Bittersweet			33	Sea Lavender (Statice)			61
Blackberry Lily (Balamcanda)			33	Shasta Daisy			60
Blazing Star (Liatris)		* * * *	50	(Dodecatheon)		13	
Bleeding Heart (Dicentra)			38	Spanish Bayonet (Yucca)	6		
Bluebells (Mertensia)		15	50	Spring Snowflakes			
Blue Eye Grass		05 0		(Leucojum)			50
(Sisyrinchum)	1	25-6		Squills (Scilla)	6 2		
Candytuft (Iberis)	1	14		Star Grass (Sisyrinchum)	2	25	
Cardinal Flower (Lobelia)	5			Sun Rose (Helianthemum)		20	44
Christmas Roses				Transvaal Daisies (Gerbera)	3		
(Hellebores)	4			Violets			63
Columbines (Aquilegia)		9	32 59	Wind Flower (Anemone)		9	32
Coneflower (Rudbeckia) Cowslip, American			99	BOTANICAL NAMES			
(Dodecatheon)		13		Allium	1		
Day Lilies (Hemerocallis)	111		45-6	Achillea		7	30
Evening Primroses				Aconitum			30
(Oenothera)		15	41 42-43	Actaea		7	30
Ferns (Many varieties) Flax (Linum)			50	Aethionema		1	30
Flea Bane (Doronicum)			39	Ajuga			30
Foam Flower (Tiarella)			62	Alyssum		8	
Gas Plant (Dictamnus)	3			Alstroemeria	1		
Ginger Root (Asarum)	C		33	Amaryllis		8	31
Globe Flower (Trollius) Goats Beard (Aruncus)	6 2	1 6		Androsace		8	31
Golden Rods	-		44	Anemone		9	32
Grasses			44	Anthericum	2		
Guernsey Lily (Nerine)	5			Aquilegia		9	32
Hen & Chickens		23 - 25		Arabis		9	32
(Sempervivums)		20 - 20		Aralia		9	32
(Cotyledons)		11		Arenaria		9	
Horned Poppies				Aruncus	2		
(See poppies)			58	Artemisia			32
Hounds Tongue			25	Asarum	2		33
(Cynoglossum)		16	35	Asperula	2	9	1
Ivy, Redwood or Mexican		10		Aster		10	
(Vancouveria)	6			Aster (Michaelmas Daisy)			51
Larkspur (Delphinium)	3	12	36-7	Aubrettias		10	00
Lily of Nile, Blue		1	20	Balamcanda		10	33
(Agapanthus)			30 50	Bellium		10	33
Lily, Zephyr (Zephranthus).		27		Boltonia (See			32-
Lilies (See Calif. bulb cat.).				Michaelmas Daisies)			34
Meadow Rue (Thalictrum)	}		62	Boykinia	0	10	33
Meadow Sweet (Filipendula)			99	Campanula	2 2	10	33
Balm			33 51-53	Catanche	4		33
Mint (Mentha)		15	- 00	Cerastium			34
Monkshood (Aconite)			30	Ceratostigma		11	
Morning Glory (Convolvulus)		11		Chrysanthemums			34-5
Mouse Ears (Cerastium)			34 62	Clintonia Convallaria (See Lily of	2		1
Myrtle (Vinca)			57	Valley)			50
	,	1				-	

PE	RENN	IALS	AND C	ALIFORNIA BULBS			- 55
	y,				w.		
	Not Novelties	_	General List		Not Novelties	_	=
		s de	10.		e E	. <u>او</u>	er.
	\$ t	201	st		<u>\$</u>	2 2	st
	žž	Rock Garden	B G		22	Rock Garden	General List
~ , ,				70 71 1 1 1 1			
Convolvulus	11			Paradisia (Anthericum)	2	10	
Coreopsis	3	11		Papaver		16	- 4
Corydalis		11 11		Pentstemon		16	54
Cotyledon		11	35	Petasites			55 55-6
Cynoglossum			99		5		55-0
Cypripedium (See Calif. Bulb Cat.)				Platycodon	J	11	
Delphinium	3	12	36-7	Polygonum		11	56
Dianthus	"	12	38	Poppies		16	57-8
Dicentra		13	38	Potentilla	5	16	58
Dictamnus	3	10		Primula (See Primroses)	6	16	58-9
Dodecatheon	i -	13		Primroses	6	16	58
Doronicum			39	Pyrethrum			59
Epilobium		13	1	Pterocephallos		16	
Epimedium	3			Ranunculus			59
Erigeron			39	Rosa		16	
Erinus		13		Rudbeckia			59
Eriophyllum		13	0.5	Salvia			59-60
Eupatorium	3		39	Saponaria			60
Euphorbia		13	20	Saxifraga	0	19	60
Eryngium		10	39	Scabiosa	6		
Erysimum		13	4.1	Scilla	6		
Felecia	3	i	41	Scutellaria	6	21-2	
Funkia (See Hosta)	3		47	Sempervivums	1	23-5	
Gaura			43	Senecio	6	20-0	
Gaillardia	3		43	Silene	0	25	ĺ
Galium	3	İ	10	Spergula (under Arenaria)	i	9	
Gerbera	3			Smilacinus			60
Gentiana or Gentians		14		Statice			61
Geum	İ		43	Stokesia			61
Glaucium (Horned Poppy,				Sisyrinchum		25-6	1
See Poppies)			58	Synthyris		26	1
Gypsophila	3		44	Talinum		26	
Helianthemums			44	Tellima			61
Helianthus	4			Thalictrum			62
Helenium			44	Thymus, Thymes		26	0.0
Heliopsis			45	Tiarella			62
Hellebores	4	1	45-46-47	Tolmeia		27	62
Herniaria		14	45-40-41	Tradescantia		26	
Heuchera		11	47	Trollius	6	20	
Hollyhocks			47	Vancouveria	6		
Hosta			47	Veronica	ľ		62
Iberis	İ	14		Vinca	İ		62
Iris	5	14	48-9	Viola	İ	27	63
Ismene	5			Yucca	6		
Jasione	5			Zauschneria		27	
Lamium		14		Zephyranthus		27	
Lavender		14	50	OUDUBO AND TOTAL			1
Lepachys			50	SHRUBS AND TREES			
Leucojum			50	Akebia29			
Lewisias (See Calif. Bulb	1	}		Arctstophyllos			
Cat.) Liatris	1		50	(Manzanita)29			
Linum			50	Azalea			
Lippia		15	50	Carpenteria29			
Lobelia		1	00	Ceanothus29			
Mallow Marvels			50	Cercis (See Redbud)29			
Manzanita		15		Chinese Honeysuckle29			
Mazus		15	1	Cornus (Flowering			
Mentha		15		Dogwood)29			
Mertensia		15	50	Fremontia29			
Mimulus			1	Manzanita29			
Monardella		15	V	Matiliza Poppy			
Nepeta			53	(Romneya)30			
Nerine	5			Red Bud29			
Oenothera (See Evening		1.5	41	Rhododendron30		1	
Primrose)	1	15	41 54	Romneya30	1		1
Oxalis		1	94	Rosa 29	1		

Hardy Perennials for California Gardens

BLEEDING HEAR

CARL PURDY UKIAH, CALIFORNIA