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# Aucumn Rafatorfe 1928 <br> RORIKMDNT NURSERY 



6-FOOT CLUMP, VERATRUM
D. M. ANDREWS
P.O. BOX 493.

BOULDER, COLO.

## Information and Terms

The Fall Catalogue, the one in hand, is mainly a supplement of seasonable stock to the spring catalogue, which is still in effect for all stock not listed herein. If your spring catalogue is not at hand another copy will be mailed upon request. It should be noted that some articles listed in the fall catalogue cannot be supplied in spring, and you will avoid disappointment by ordering now anything desired from this list.

Order early. I aim to time deliveries to suit the convenience of purchasers, but the inevitable rush season can be partly overcome if patrons will anticipate their wants, order early, and accept delivery when most practicable.

Time of Delivery. Iris can be shipped during the summer and early fall. Mountain flowers and alpines, Peonies, Lilies, etc., can be shipped from late September till December. Shrubs, Evergreens, Perennials, etc., October and November, or till the freezing of the ground, and often at intervals during winter. Seeds can be furnished at all times from the latest catalogue.

Persons or firms entitled to credit may place their orders on open account, bili to be rendered and to include the cost of transportation if shipped prepaid. Cash in full should accompany orders for small amounts.

Cash Earns Free Delivery. To indicate my appreciation of cash business, which eliminates the need for accounting and billing, I am announcing free delivery, anywhere in the United States, of everything in the spring or fall catalogues for cash with order, except evergreens and shrubs. Evergreens and shrubs, including Lilacs, are to be shipped by express, purchaser paying charges.

Note. Free delivery items if included with an express shipment, or if ordered by express, are not subject to a discount or price reduction, but heavier stock or extra count will be given in compensation.

Safe Delivery is assured and guaranteed in the ordinary course of parcel post and express. An immediate report of loss or damage with full particulars is required for adjustment. Where terminal inspection is maintained, delays or losses incident to the regulations of receiving states are to be assumed by the purchaser.

Moisture-proof wrapping materials which are used for all packing make it easy to retain all the natural freshness of our superior irrigation-grown plants to the end of the road, and at the same time eliminate unnecessary weight.

Canadian and Foreign correspondents who receive this catalogue are requested to limit their orders to seeds, remitting cash in full with order.

Correspondence. To insure prompt attention to all orders and correspondence, please use my personal address, D. M. Andrews, P. O. Box 493, Boulder, Colorado.

## Culture of Mountain Flowers

Most garden flowers grow well in Colorado, and, conversely, most Colorado mountain flowers that I grow at Rockmont Nursery should grow well in all the Northern and New England states. Reports come in from East and West proving that little difficulty is experienced by those who have fairly good facilities.

Water and sunshine are universal and their relation to plant growth is much the same everywhere. With soil it is different, and the secret of success, if it can be called a secret, is almost entirely a matter of soil. The best guide to soil for any plant is a study of the natural soil in which each species thrives. Like other investigations involving much study the answer is simple, and is based upon the preference of the plant for soil which is acid or alkaline.

A few piants flourish in alkaline soil. The majority of gar. den plants, both shrubs and flowers, make their best growth in soil that is nearly neutral, that is neither very acid nor very alkaline. If they seem to have no perference they are classed as indifferent or tolerant. A very important group of plants in. cluding many of the Rocky Mountain alpines and subalpines, grow in soil composed partly of humus, with a granite base, and which has a definite acid reaction. While some of these plants may prove indifferent, it is safe to assume that they will thrive best in an acid soil which may be produced by adding humus in the form of leafmold or granulated peat; or if it is known to contain much time it may be replaced with the right mixture. A soil basis of sandy loam having good drainage will accommodate the largest number of species so far as texture is concerned. Commercial tannic acid dissolved in water may be used two or three times a year on acid-requiring plants at the rate of an ounce or less to the square yard, but occasional soil tests should be made to avoid excess.

Most of the mountain flowers have a preference for acid soil, but not many demand more than minimacid, which is just a turn from neutral, pH values 6.5 to 6.0 . Among those of acid preference quite certainly are Aconitum, Anemone patens, Aquilegia coerulea, Bistorta, Caltha, Clematis, Dodecatheon, Erigeron, Erythronium, Gentiana, Mertensia, Primula, Polemonium, Ranunculus, Synthyris, Trollius, Valeriana and Zygadenus. Among shrubs should be included Betula glandulosa, Holodiscus, Jamesia, Pachistima and the alpine species of Salix. With a few exceptions the other plants of this catalogue may be understood to prefer a neutral soil unless otherwise stated.

For additional suggestions and details of rock gardening and the culture of alpines, various books are obtainable, especially those of Mrs. Louise Bebee Wilder and Mr. Herbert Durand, which are dependable for American conditions and supply from actual experience the information needed by the average grower.

## Lovelier Lilacs

In the improvement of the old-fashioned lilac, a favorite from time immemorial, much credit is due French hybridists, particularly the late Victor Lemoine of Nancy, France.

These superb creations are marked by both single and double flowers, individually of large size and produced in very ample clusters. Their wide range of color, delightful iragrance, lasting texture and extended flowering season combine to increase the popularity of an old-time favorite.

Culture. Instead of having a delicate constitution, the hybrid lilacs are hardier, withstand spring frosts with more certainty, are every way more dependable and bloom at an earlier age than the old-fashioned lilac. Particularly is this true when they are propagated upon their own roots instead of by grafting on privet or some inferior lilac which is apt to cause trouble by sprouting. I supply none but own-root lilacs. A little more time is required for own-root propagation but there are advantages. Own-root lilacs remain always true to type and cannot produce sprouts of a different kind. They are long-lived, sturdy of stem, have a perfect root system and bloom while very young. Years of satisfaction will many times repay your investment in this class of stock.

Lilacs like sun and air and require plenty of moisture with rather free drainage. They will repay good care, yet often give splendid results under seeming neglect. In land of moderate fertility freedom of bloom is likely to increase with the age of the plant, and with plenty of room very little pruning is required; in any case avoid cutting the ends of strong branches which would sacrifice flower buds.

The size of bushes will average two to three feet in height, usually with several branches from the base. The actual strength of the plant is not masured in inches, as with a natural root system, plenty of room in the nursery and with perfect climatic conditions I am producing a better grade of stock than I have been able to buy at any price or from any source. Where "small plants" are offered the size furnished will be less than two feet, but thoroughly well established stock.

Lilac bushes should be shipped by express.
Alphonse Lavelle. Lilac-blue, large full truss, medium dwarf. $\$ 2.00$ each.

Charles Joly. Dark crimson-purple, long narrow panicle, vigorous upright habit, very free, one of the best dark varieties. $\$ 1.50$ each.

Congo. Single; very large broad panicle, bright red-purple, profuse bloomer. $\$ 2.50$ each.

Edouard Andre. Clear mauve pink, buds rose pink, dwarf habit, free flowering, very beautiful. $\$ 2.50$ each.

Ellen Willmott. A grand white with immense panicles and individual flowers, midseason to late, rated as the best late white, fine stock. $\$ 2.50$ each.

Emile L.emoine. Pale persian-lilac color with pink-lilac buds, very distinct color, extra bloomer, late. \$2.00 each.

Frau Bertha Dammann. Single, pure white, early. $\$ 2.00$ each.
Hugo Koster. Single, early, large full truss of bluish violet. $\$ 2.00$ each.

Ludwig Spath. Single, very rich dark purple, very long panicle of large flowers. $\$ 2.00$ each.

Mme. Casimir Perier. Large creamy white, very free blooming. $\$ 2.00$ each.

Mme. Antoine Buchner. Panicle very large, the flowers developing slowly, showing at the same time large rosy-mauve flowers, and carmine pink buds, very double, late blooming. $\$ 2.00$ each.

Mme. Lemoine. A very fine pure white, large flower and truss, very double, early. $\$ 2.50$ each.

Marie Le Graye. Single, free blooming early white; one of the best of the older varieties. Small bushes, $\$ 2.00$.

President Grevy. Very handsome soft blue-lilac flowers of large size, very double; panicle on established bushes nearly a foot long; extremely vigorous habit; considered the best of its color. \$1.50 each.

Princess Alexandra. Single, midseason white; a good grower and free bloomer. Small bushes, $\$ 2.00$.

Rene Jary des Loges. Large panicle of light bluish mauve; dwarf habit. $\$ 3.00$ each.

Senator Voiland. Double; one of the darker varieties described by a French grower as Fuchsia-red. Small, $\$ 2.00$.

Virginite. Clear mauve-pink, fine large truss. $\$ 3.00$ each.
Viviand Morel. Large elongated truss, flowers large, double, clear bluish lilac, the buds purple. A vigorous grower and profuse bloomer. \$1.50 each.

Volcan. Single; open flower rose-purple, bud rosolane purple; dwarf, exceedingly free bloomer, early. $\$ 3.00$ each.

Waldeck Rosseau. Double, medium dwarf, late, fragrant; flowers in large trusses, lilac-rose with paler center; choice variety. Small bushes, $\$ 2.50$.

## Colorado Mountain Flowers for the Rock Garden

Mrs. Louise Bebee Wilder, who has given by her writings a wealth of information to American rock gardeners, has now concentrated the rich experiences of a fully occupied and thoughtful life in her latest volume, "Pleasures and Problems of a Rock Garden." In it she states a self evident truth that "Proportion is beauty." She goes on to say about a well conceived rock garden that "The more restricted in size and scale the small landscape, the more diminutive should be its flora and sylva, for it is a fact that one great gawk of a plant in the wrong place will throw the whole scene out of scale." As to what should be included in the rock garden she says, "Long ago I made for myself this resolution: a rock garden should be devoted to the exclusive use of hardy plants of dwarf stature that require special conditions of soil or situation, and to those too small and fragile to hold their own or to display their charms among the strong growing occupants of the ordinary borders, yet possessing beauty of leaf or blossom in a sufficient degree to make them worthy of a special setting." The book rings true. If you write to Mrs. Wilder at Bronxville, New York, you will learn how it may be obtained.

So many of the Colorado Mountain Flowers answer to Mrs. Wilder's requirements and have been used successfully in her own garden and in many other gardens throughout the East and Middle-west, that a unique collection has resulted from my selected list which follows. Not only are these desirable in any half-hearted way, but many are quite indispensable if one is to realize supreme beauty in rock gardening.

Even in the little garden, and particularly with small-growing species, groups containing several individuals of one kind are most effective. Conforming to this principle, in the following list where the price each is not given, three plants is the smallest quantity sold.

Free delivery. Everything in this section is priced prepaid in the United States.

Aconitum columbianum, Mountain Aconite. Tall slender spikes of showy blue flowers in early summer; easily grown. Three for 75 cents, 10 for $\$ 2.00$.

Aconitum flavescens. Same as the last, except that the color of the flowers is creamy write. Three for 75 cents, 10 for $\$ 2.00$.

Allium recurvatum, Nodding Onion. Growing in clumps, the showy umbels of pink flowers gracefully nodding; a neat rockplant for dry places. Three for 60 cents, 10 for $\$ 1.50$.

Anemone patens Nuttalliana. American Pasqueflower. Silky buds expand with the first few days of spring, into flowers of pale lilac, as large as Crocus. No other flower of Easter time is more beautiful. Three for 75 cents, 10 for $\$ 2.00$.

Aquilegia coerulea. Rocky Mountain Columbine. A marvel among Columbines, four-inch blossoms of blue nad white with long slender spurs. Large size and purity of color are assured by planting our true native stock. Three for 75 cents, 10 for $\$ 2.00$.

Aster Porteri superbus. Porter's White Aster. Noteworthy
in forming neat low clumps which do not spread from the root. In this improved variety we have a pure white aster with more numerous and larger flowers, the rays notably broader than the ordinary type, more closely set around the yellow disc, giving a flower of fine finish. This is par excellence an aster for the rock garden, because of the chaste whiteness of the flowers, dwarf habit not exceeding one foot in height and for its restrained root system rendering it impossible to crowd other plants. Of easiest culture, flowering size clumps 50 cents each, three for $\$ 1.25,10$ for $\$ 4.00$.

Aster apricus. A new, distinct summer-flowering aster. Foliage ample, at the base of short, stocky stems bearing several large flower heads with violet-lavender rays. Less than a foot in height, it is exceptionally vigorous and easily grown; clumps, 75 cents each.

Bistorta bistortoides. Mountain Buckwheat. Slender stems a foot or two tall, with glossy green basal leaves and showy clusters of small white flowers in May. Will succeed in any good soil, full sun; plant 6 inches apart in colonies where other plants will not crowd. Three for 75 cents, 10 for $\$ 2.00$.

Caltha rotudifolia. White Marshmarigold. The two-inch white flowers appear in early spring among the rounded basal leaves of dark green. At home in boggy meadows, it will thrive in half-shade if well supplied with moisture during the growing season. Flowering clumps. Three for $\$ 1.00$, 10 for $\$ 2.75$.

Calochortus Gunnisoni. Mariposa Lily. A very charming lilliaceous plant for the rockery or well-drained light loam; plant about three inches deep in groups. Doubtless the hardiest and most successful species for eastern culture. Three for 50 cents, 10 for $\$ 1.00$.

Campanula petiolata. Western Harebell. (C. rotundifolia of former lists.) Evidently the Colorado Harebell is distinct from the eastern form in its stronger and more floriferous habit, the exquisite bells of blue in utmost profusion for a long season; a satisfactory and valuable rockplant. Three for 90 cents, 10 for $\$ 2.50$.

Clematis eriophora. (Silky Clematis) Bushy species a foot tall with silky foliage and deep purple bell-shaped flowers in May. Clumps 50 cents, 10 for $\$ 4.00$.

Clematis Fremontii, Fremont's Leatherflower. Less than a foot tall, bushy, with flower bells in shades of lavender and violet, leaves oval with entire margins; very distinct species of easiest culture. 75 cents each, 10 for $\$ 6.00$.

Clematis Scottii, Scott's Leatherflower. A foot or two tall, glaucus pinnate foliage, flowers urn-shaped, the tips scarcely spreading, large, bluish-violet, beautiful and distinct. \$1.00 each, 10 for $\$ 7.50$.

Delphinium Geyeri. Geyer Larkspur. Very showy flower of the foothills with grayish foliage and long spikes of most intense blue flowers in June. Easily cultivated; suitable for dry ground, non-acid soil. Three for 90 cents, 10 for $\$ 2.50$.

Dodecatheon radicatum. Colorado Shooting Star. The char-
acteristic dart-like blossoms of bright rose-pink are produced in umbels a foot above the foliage in April. Small turfs containing several flowering pips. Three for 90 cents, 10 for $\$ 2.50$.

Dodecatheon meadia, Shooting Star. One of the most charming and least known of American natives. Our stock is from the Mississippi valley where it reaches its largest size and finest development, often more than two feet tall, the umbels ibearing 20 to 30 white, pink or rose Cyclamen-like flowers of exquisite beauty. All species thrive in rich humus soil in part shade. Three for 90 cents, 10 for $\$ 2.50$.

Dryopteris filixmas. Colorado Male-fern. A vigorous fern with large bi-pinnate fronds of very firm texture, remaining green through December. A valuable all-purpose fern. Strong roots. Three for $\$ 1.00,10$ for $\$ 3.00$.

Erigeron macranthus, Mountain Daisy. Aster-like perennial a foot tall of neat bushy habit, Dearing a glorious profusion of many-rayed showy lilac flowers with yellow centers; partial shade, dry slopes. Three for 75 cents, 10 for $\$ 2.00$.

Erigeron salsuginosus, Subalpine Daisy. The most charming of this varied family, stems a foot tall with 2 -inch flower heads composed of rather broad rays of rosy-violet with yellow centers; moist soil, partial shade. Three for $\$ 1.00$, 10 for $\$ 3.00$.

Erythronium parviflorum. Glacier-lily. A fine alpine species with large yellow flowers and green foliage; plant 3 inches deep in light loam, half shade. Three for 75 cents, 10 for $\$ 2.00$.

Gentiana Bigelovi. Bigelow's Gentian. Small blue flowers in clusters; dry north slopes. Strong roots. Three for $\$ 1.00,10$ for $\$ 3.00$.

Gentiana Parryi. Parry's Blue Gentian. Large showy flowers of deepest blue, clustered, on stems a foot or more tall; moist shaded position. Strong roots. Three for $\$ 1.25,10$ for $\$ 3.50$.

Geranium Richardsoni. White Cranes-bill. Easily grown, forming bushy clumps with neat foliage and showy white flowers in spring and early summer. Three for 75 cents, 10 for $\$ 2.00$.

Geum ciliatum. Western Rosy Avens. A little gem of early spring with rosy-pink flowers followed by tinted seed plumes. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Helianthella quinquenervis. Sunwort. An early-flowering Composite with tall slender stems and large yellow-rayed flowers. Three for 75 cents, 10 for $\$ 2.00$.

Iris Missouriensis. The native iris or flag of meadows and mountain valleys, usually wet till after the flowering season in May, later become very dry. A foot tall, forming large clumps, the lavender or pale blüe flowers comparatively large and showy. Three for 75 cents, 10 for $\$ 2.00$.

Iris Missouriensis Bluebird. Similar to the type, but flowers Bradley's violet, falls veined lighter. 75 cents each, 10 for $\$ 6.00$.

Iris Missouriensis Snowbird. Pure white without veining. $\$ 1.50$ each, 10 for $\$ 12.50$.

Leucocrinum montanum. Sandlily or Starlily. Very early spring flower of crystal-white, the size of crocus, from a rosette of narrow foliage. One clump will often bear fifty blooms in one season. Hardy and successful East. Can be furnished in
spring, but autumn planting is recommended. Small clumps, three for 90 cents, 10 for $\$ 2.50$.

Lewisia pygmaea. Least Bitter-root. A small alpine with deep rose-pink flowers in a rosette of narrow foliage from a thick root. Three for 75 cents, 10 for $\$ 2.00$.

Lewisia ređiviva. Bitter-root. The state flower of Montana. Elegant rockplant for a warm sunny slope or crevice in soil of turfy loam and gravel. Flowers two inches or more broad, composed of many narrow petals, the pink or white stars arising from a rosette of succulent foliage which disappears at flowering time; northern stock which is entirely hardy, but requires good drainage. Three for 75 cents. 10 for $\$ 2.00$.

Liatris ligulistylis. Rocky Mountain Gayfeather. A dwarf early species with very large showy heads of rosy purple or pale lilac. Three for 90 cents, 10 for $\$ 2.50$.

Liatris punctata. Dotted Gayfeather. Suitable for the dry rockery, several slender spikes less than a foot tall. Three for 90 cents, 10 for $\$ 2.50$.

Malvastrum coccineum. Scarlet Mallow. Low-growing, colonyforming plant for dry sunny slopes. The gray foliage and copperscarlet flowers in short terminal racemes afford a pleasing effect when planted in groups. Three for 75 cents, 10 for $\$ 2.00$.

Mertensia ciliata, Mountain Bluebells. A luxuriant plant of graceful habit with fine glaucus foliage, the drooping sprays of pale blue flowers continue in bloom for a long period. Flowering roots. Three for 90 cents, 10 for $\$ 2.50$.

Martensia lanceolata, Prairie Bluebell. Grows in open dry fields and blooms in early spring. The delicate blue flowers appear first in a compact cluster which expands with the development of new flowers into an open panicle a foot in length. Three for 75 cents, 10 for $\$ 2.00$.

Mertensia pratensis. A rare plant from the Spanish Peaks, with green foliage and blue flowers. Three for $\$ 1.00,10$ for $\$ 3.00$.

Oenothera brachycarpa, Yellow Evening Primrose. (D) Ros-ette-forming plant for lime-soil on dry slopes. Each rosette bears a succession of stemless 4 -inch yellow flowers which age to orange-scarlet. Colony plantings are most effective. Three for 90 cents, 10 for $\$ 2.50$.

Oenothera caespitosa, Tufted Evening Primrose. An exquisite rockplant for humus soil, forming large colonies on dry sunny slopes of loose granite soil. Quite similar in habit to the last, but with white flowers aging to rose. Plant in groups. Three for 75 cents, 10 for $\$ 2.00$.

Paeonia browni. The only American species, a native of the Pacific northwest. About one foot tall with glaucus foliage, and brownish red flowers. $\$ 1.50$ each, three for $\$ 4.00$.

Pentstemon albidus. White Pentstemon. A low-growing native of sandy plains, easily grown and rather more permanent in cultivation than others. Flowers white. Three for 90 cents, 10 for $\$ 2.50$.

Pentstemon alpinus, Alpine P. Stocky, dwarf habit, the large dark blue flowers in a compact spike. An exceedingly beautiful and satisfactory rockplant. Three for 90 cents, 10 for $\$ 2.50$.

Penstemon angustifolius (Syn. coeruleus), Sky-blue P. Very dwarf and early, the sky-blue racemes carrying a tint of rose in the buds and flower tubes. Three for 75 cents, 10 for $\$ 2.00$.

Pentstemon caespitosus, Creeping P. A unique creeping type covering ground and rocks with a close-fitting mat of diffuse stems and minute foliage, thickly starred at flowering time with the characteristic flowers of pale lilac; rare and exceedingly attractive. Three for $\$ 1.00,10$ for $\$ 3.00$.

Penstemon humilis, Blue-hill P. Blue-tinted hillsides may be due in late spring to the marvelous abundance of this species, which is quite dwarf and forms extensive clumps and patches of deep blue flowers on stems six to ten inches tall. Three for 75 cents, 10 for $\$ 2.00$.

Pentstemon secundiflorus. Formerly listed as P. accuminatus, which is now understood to have a more western range of distribution. Glaucus foliage and racemes of exceedingly showy lilac flowers, the entire plant being about one foot tall. Three for 90 cents, 10 for $\$ 2.50$.

Pentstemon stenosepalus, Turtlehead P. A subalpine easily grown forming rather large clumps, the stems leafy, a foot tall, foliage dark green. Flowers rather large, dark purple or nearly white, the albino form nearly as common as the color. Three for 90 cents, 10 for $\$ 2.50$.

Phlax multiflora, Dwarf Phlox. Noteworthy for its profusion of bloom in spring from small mats of moss-like foliage. Flowers rather large, in shades of lavender and lilac, fragrant. Dry slopes, humus soil. Three for 90 cents, 10 for $\$ 2.50$.

Primula angustifolia, Alpine Primrose. A very small alpine which can be grown on the shady side of a wall or rock in a moderately moist peaty soil. Small crimson flowers on stems an inch high. Furnished in small turfs containing several crowns. Three for $\$ 1.25$, 10 for $\$ 3.50$.

Primula Parryi, Parry Primrose. A very robust subalpine a foot or more tall with rosettes of broad foliage producing large umbels of very showy crimson flowers with yellow centers. Moist humus or peat, partial shade. Three for $\$ 1.25$, 10 for $\$ 3.50$

Ranunculus adoneus, Alpine Buttercup. Found in wet glacialhumus soil at the edge of snowbanks, large yellow flowers; culture as for Alpine Primrose. Three for $\$ 1.25$, 10 for $\$ 3.50$.

Sedum Rhodiola. (Rhodiola integrifolia) Ruby Stonecrop. An alpine of the Colorado mountains for moist soil and partial shade. Forms neat littie clumps, the low stems terminating in small clusters of dark ruby-red flowers which last a long time. Clumps, 75 cents each.

Sedum rhodanthum. (Clementsia rhodantha) Clement's Stonecrop. A native subalpine in moist soil and prefers half shade. Under best conditions it forms clumps a foot in height, with terminal clusters of salmon-pink flowers. Three for $\$ 1.25,10$ for $\$ 3.00$.

Synthyris plantaginea, Kittentails. An attractive rockplant of easy culture, silky spikes of bluish flowers in early spring from a rosette of broad foliage. Three for $\$ 1.00$, 10 for $\$ 3.00$.

Synthyris reniformis, Kidneyleaf. Round evergreen dentate
leaves and violet-blue flower spikes in early spring. A charming plant for humus soil and shade. Three for $\$ 1.00$, 10 for $\$ 3.00$.

Synthyris rotundifolia, Roundleaf. Same culture and rosette forming habit as reniformis, the flowers light blue in smaller but more numerous spikes, often during mild weather in midwinter. Three for $\$ 1.00,10$ for $\$ 3.00$.

Tellima grandiflora. False Mitrewort. A charming Saxifrage of the Northwest which grows like a very thrifty Heuchera. Flower stems a foot or more tall, the fringed flowers opening green, soon turning to red. Prefers shade and humus. Strong clumps, 75 cents each, three for $\$ 2.00$.

Trollius albiflorus, White Globeflower. A desirable subalpine for $\&$ moist peaty soil in partial shade. It blooms early, the flowers quite large, sulfur, fading to pure white. Clumps with several flowering crowns, three for $\$ 1.25,10$ for $\$ 3.50$.

Valeriana acutiloba, Valerian. A very charming alpine or rockplant which will thrive under ordinary garden conditions. Forms a nearly evergreen leafy tuft, producing a succession of flowing stems from very early spring till June, and often in autumn. The small white flowers are disposed in rather close heads and the plant resembles a miniature Garden-heliotrope. A rigidly tested novelty of exceptional worth. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Viola belidifolia, Alpine Violet. Low tufts among rocks with blue flowers. Clumps, three for $\$ 1.00,10$ for $\$ 2.50$.

Viola pedatifida, Bird-foot Violet. Finely cut foliage and showy blue flower of large size. Three for 75 cents, 10 for $\$ 2.00$.

Viola rugulosus, White Violet. A magnificent species with large foliage and large white flowers. Three for 75 cents, 10 for $\$ 2.00$.

Yucca coloma, (Colorado-Oklahoma) Soaproot. Best of all the yuccas for the rock garden because of its small size, it is proving to be in the East a most satisfactory grower, originating as it does in a climate of more abundant rainfall than the desert types. With its miniature rosettes of stiff blue-green foliage and slender flower spikes, no hardy species is more beautiful. Strong established plants. Three for $\$ 1.50$, 10 for $\$ 4.50$.

Yucca glauca, Soaproot Yucca. Narrow glaucus stiff foliage and stout flower spikes. Thrives best in a dry soil. Three for 75 cents, 10 for $\$ 2.00$.

Zygadenus elegans, Star Hyacinth. A lilaceous for moist soils with slender stems and racemes of white flowers. Three for 75 cents, 10 for $\$ 2.00$.

Zygadenus gramineus, False Camas. Rosette of grass-like foliage from a bulb, with spike of liliaceous flowers of creamy white in early spring; dry sandy soil, sun. Three for 75 cents, 10 for $\$ 2.00$.

Miniature Shrubs which do not eventually grow too large, are a valuable feature in rock garden design, and for this purpose the following are indispensable; priced prepaid.

Amorpha nana. Dwarf Indigo. Clumps to $11 / 2$ feet with attractive pinnate dark green foliage and terminal spikes of gar-net-red flowers in July. Each, 75 cents and \$1.00, 10 for $\$ 6.50$.

## NEW AND NOTEWORTHY PLANTS—ROCK GARDEN

Betula glandulosa. Dwarf Birch. Rather large for the small rock garden, attaining 3 feet. Extremely hardy, forming rounded clumps with excellent foliage and easily grown. Each, 75 cents.

Caragana aurantiaca. Dwarf Pea-Shrub. Bushy and spreading with showy orange flowers and minute dark green foliage. A very slow-growing diminutive shrub for a limited space and thrives in dry, sumny position; entirely hardy. Each, 75 cents and $\$ 1.00$; 10 for $\$ 6.50$.

Jamesia Americana. Wild Mockorange. A handsome shrub of moderate growth with velvety foliage and clusters of waxywhite fragrant flowers. Best in a well-drained humus soil with partial shade. Each, $\$ 1.00$, three for $\$ 2.75$.

Pachistima Myrsinites. Mountain Myrtle. An exquisite miniature evergreen shrub of shaded slopes growing in humus soil. Its absolute hardiness, attractive Myrtle-like foliage and diminutive size, usually less than 12 inches, are its recommendation, and it grows easily in partial shade with good drainage. Established plants, \$1.00 each.

Potentilla fruiticosa. Cinquefoil. A variable dwarf shrub of northern latitudes. The Colorado form is semiprostrate, a free and quite continuous bloomer and will thrive in dry soil; by far the best type for the rock garden; 75 cents each, three for $\$ 2.00$.

Rosa follolosa. Pixy Rose. A diminutive Texas species with white flowers, the foliage of dark green narrow leaflets. Distinct from all other roses, its neat appearance, non-weedy habit and very small size characterize it as a gem for the rock garden. Each, 75 cents, three for $\$ 2.00,10$ for $\$ 6.00$.

Symphoricarpos vaccinioides. Small-leaved Snowberry. An elegant miniature of the Snowberry, of light graceful habit and attractive appearance. Each, 75 cents, three for $\$ 2.00$.

Symphoricarpos vaccinioides decumbens. This variety is identical with the species except for its decumbent habit, drooping over rock work in a graceful manner. Each, 75 cents, three for $\$ 2.00$.

## New or Noteworthy Perennial Plants

## Including Colorado Mountain Flowers

Plants best for the rock garden will be found in another section. The following flowers are suitable for the hardy border, provide a long seascn of bloom and afford a wealth of material for cutting. All my plants are from the open ground; no potted stock half-established, with tender tops.

Price of plants. Our field-grown, freshly dug plants are moderately priced to include prepaid delivery by parcel post. However, except for small orders, I urge express shipment so that larger and stronger plants can be sent. Where the price each is not given, three plants of that kind is the smallest quantity sold. Refer to the seed list for kinds of which plants cannot be furnished.

Aquilegia coerulea, Rocky Mountain Columbine. Four-inch blossoms of blue and white with long spurs; large size and purity of color are assured by planting my true native stock. Three for 75 cents, 10 for $\$ 2.00$.

Aquilegia hybrida, Rainbow Blend. Rainbow Columbine. An unsurpassed strain in habit, vigor of growth, length of spur and size of flower. It surpasses all other strains in variety and brilliancy of coloring, in the predominance of colorful shades of pink and rose, scarlet, velvety reds and purples, including tints heretofore unknown. A steady improvement has been made by introducing into the strain size from our own A coerulea, and intensity of color that will surprise the most experienced growers. This season I have strong flowering size roots raised from my latest improved stock, five for $\$ 1.00,25$ for $\$ 3.50$. Seed, $1 / \pm$ ounce for $\$ 1.00$.

Aruncus sylvester. (Syn. Spiraea aruncus) Forming elegant clumps three feet or taller, graceful in outline, the creamy white flowers arranged in large terminal panicles; favors moist halfshade. Each 50 cents, three for $\$ 1.25$.

Asclepias incarnata alba. White Milkweed. A pure white sport from the rose-colored species, the showy umbels on 3 -foot stems. Three for \$1.00.

Asclepias tuberosa. Butterflyweed. Prairie flower of the Middle-west, the brilliant orange umbels displayed on two-foot stems for several weeks in midsummer; warm sumny position. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Astilbe hybrids. So=called Spiraea of the florists, forced for Easter, and equally valuable for the garden in partial shade with abundance of moisture. Named varieties in white, pink or rose, each labeled, 50 cents each, three for $\$ 1.25$, 10 for $\$ 3.50$.

Centaurea rigidifolia. A rare oriental species growing three feet tall with crimson heads for many weeks in summer and autumn; lacks the coarseness of most species; 50 cents each, 10 for $\$ 4.50$.

Clematis Davidiana. Tubular flowers of clear blue in whorls from the two-foot erect stems; fragrant; valuable bush type; 50 cents each, 10 for $\$ 4.50$.

Clematis integrifolia. Low bush, flowering for a long succession, the handsome blue flowers having petals two inches in
Do not write in
this space

length. A most valuable and satisfactory plant. Flowering plants, three for $\$ 1.00$; clumps, $\$ 1.00$ each.

Clematis recta grandiflora. A plant received under the name, Clematis Armandii, but which proved to be a non-climbing species of the habit and appearance of C. recta, having flowers fully two inches across. These appear for a long season in large terminal panicles, are fragrant, pure white, on stems two feet tall. Perfectly hardy, a good thrifty grower and one of the most valuable additions to the Clematis group in a decade. Strong flowering plants. 75 cents each, three for $\$ 2.00$.

Clematis Simsii, Sims' Leatherflower. Handsome vigorous climber with herbaceous stems, producing all summer its dark purple bells and silky seed clusters; Texas. 50 cents each, 10 for $\$ 4.00$.

Clematis Texensis, (C. coccinea) Scarlet Leatherflower. A hardy herbaceous climber which starts from the ground each season, grows rapidly and blooms constantly from June till frost. The flowerrs are broadly urn-shaped, brilliant scarlet, and are followed by the silky seed plumes; hardy and exceptionally valuable. 75 cents each, 10 for $\$ 6.00$.

Convallaria majalis. (Parsons’ Var.) Lily of the Valley. A stout garden type with extra large bells on long stems, followed by showy scarlet fruit; selected pips, ten for $\$ 1.00, \$ 7.50$ per hundred.

Desmodium penduliflorum. (Syn. Lespedeza) Tree Clover. Graceful plant, the branches pendulous in late summer with their weight of flowers; deep purple or crimson, 5 feet tall. 75 cents each, three for $\$ 2.00$.

Dictamnus fraxinella. Gas Plant. Very showy but infrequent border perennial forming a bush two feet tall; aromatic foliage and spikes of orchid-pink flowers in June. Best in a moderately heavy soil and open sunny position where it will thrive if undisturbed a score of years. Three for $\$ 1.00$; strong clumps, 75 cents each.

Dryopteris filix-mas. The Colorado Malefern is one of the most valuable of hardy ferns with fronds two feet tall of firm texture, nearly evergreen, easily grown. Native of a dry climate, it stands wind and lack of humidity better than most species. Strong husky rhizomes, three for $\$ 1.00$, 10 for $\$ 3.00$.

Filipendula. The principal group of plants formerly referred to Herbaceous Spiraea. See also, Aruncus, Astillbe and Gillenia.

Filipendula Camtschatica. Large sprays of white flowers in August; 4 feet. Three for $\$ 1.00$, 10 for $\$ 2.75$.

Filipendula hexapetala (Syn. Spiraea filipendula) Singleflowered variety with fern-like foliage and clusters of tinted flowers. Three for $\$ 1.00$.

Filipendula hexapetala fl. pl. Dropwort. Herbaceous Spiraea. Fern-leaved, with 15 -inch stems bearing corymbs of small double white flowers; 3 for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula purpurea. (Syn. Spiraea palmata) Siberian Meadowsweet. Exceedingly showy rose-red plumes; 4 feet. This,
like most of the others, does best in a moderately heavy loam in the open. Three for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula purpurea elegans. Flowers white with pink anthers; charming effect. Three for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula rubra. Queen of the Prairie. Native of the prairies of Minnesota, with very beautiful rose-colored plumes. Three for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula ulmaria plena. Double, pure white, dwarf. Three for $\$ 1.00$, 10 for $\$ 3.00$.

Geranium pratense. Blue Cranebill. Two feet tall, handsome blue flowers of a desirable shade. Three for $\$ 1.00$.

Geranium pratense album. White Geranium. Three for $\$ 1.00$.
Geranium sanguinєum. Red Geranium. Low clumps with violaceous-red flowers and splendid foliage turning red in autumn. Three for $\$ 1.00$.

Gillenia trifoliata. Bowmanroot. Very elegant plant like an herbaceous Spiraea with sprays of rosy-white flowers. Easily grown, permanent in habit and does not spread at the root. 50 cents each.

Helenium Hoopesii. Orange Daisy. Early flowering with daisy-like heads on 18 -inch stems. Distinct from the fall-blooming types. Three for $\$ 1.00$.

Iris spuria aurea. Yellow Flag. A yellow iris on the order of pseudacorus but less rampant, the flowers more prominent because of shorter foliage. Three for $\$ 1.00,10$ for $\$ 2.50$.

Iris orchroleuca. Yellow-banded Iris. Tall, late blooming, magnificent clumps which flower best if undisturbed for long intervals. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Iris orientalis, Emperor. Two feet, violet. 75 cents each.
Iris, Perry's Blue. (Siberica) Chinese-blue shade with white; very beautiful. 75 cents each.

Manfrieda virginica. False Aloe. Succulent foliage resembling an Aloe or Yucca and entirely hardy. 50 cents each, three for $\$ 1.25$.

Mertensia ciliata. Mountain Bluebells. A luxuriant plant of blue flowers continue to bloom for a long period. Flowering roots. Three for 90 cents, 10 for $\$ 2.50$.

Mertensia pratensis. A large plant from the Spanish Peaks, with green foliage and blue flowers. Three for $\$ 1.00,10$ for $\$ 3.00$.

Phlax hybrid, Silverton. (Named for a town in Colorado for its silver-lavender color.) Among several garden phlox hybrids which have appeared among seedlings grown in the nursery, this has the largest individual flowers exceeding $13 / 4$ inches. Color (Ridgeway) is clear pale lavender, at first suffused light mauve, eye light phlox-purple, with a vely light halo. Of medium height and a strong grower. Transplanted field grown roots, $\$ 1.25$ each.

Potentilla perfecta plena. Double flowers like miniature roses, orange, mingled yellow. 50 cents each, three for $\$ 1.25$.

Rudbeckia montana. Coneflower. Dark purplish-black cones three or four inches long without rays is the unique feature of this Colorado species; 3 feet. 75 cents each.

Salvia azurea, Azure Sage. If limited to one blue flower, it
would be the Salvia in its several shades of blue. It never fails, thrives almost without care, is true blue and has a long season of bloom. Excessive moisture and fertility are to be avoided, as a rank growth results in loppy stems and inferior bloom. Three for 75 cents, 10 for $\$ 2.00$.

Salvia Pitcheri. Dark-azure Sage. Later blooming and much darker blue, but otherwise identical with S. azurea. The stems grow three feet tall and are well adapted for cutting. Try growing both Salvias in a rather dry position. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Veronica amethystina. Speedwell. One-foot clumps, the beautiful amethyst-blue flowers hiding the foliage in June; one of the few that thrive in a dry position. Three for $\$ 1.00,10$ for $\$ 2.75$.

Veratrum speciosum. American Hellebore. One of the most magnificent and outstanding of all our beautiful mountain flowers, favoring a rich, moist, peaty soil and when favorably situated grows fully six feet tall with an enormous panicle of pure white, or at first, creamy flowers followed by showy seed capsules. The deeply veined oval leaves are in keeping with the bold floral display and the foliage at all times is an attractive feature. Very strong crowns $\$ 1.00$ each, $\$ 10$ per dozen.

## Iris Introductions

That real improvement is being made in new iris introductions is strongly indicated in the last symposium of the American Iris Society. Of those varieties rating 90 or more, one was introduced before 1910; five more before 1920; fifteen bear dates of 1920 to 1924 inclusive and eight are more recent.

It is true that the very recent ratings as a rule stand upon a few votes, but on the other hand many very recent introductions are not included which eventually will take high rank.

It is with pardonable pride $I$ am sure that I find two of my introductions in the 90 class, Candlelight having the highest rating in the present symposium.

I can stil supply Candlelight and my other introductions this fall at the prices here quoted. Since the appearance of the symposium a good many Candlelight have been sold and as it does not propagate rapidly it may have to be withdrawn temporarily. I doubt if any will be for sale next spring, and only a limited number this fall. Do not overlook Odaroloc, the best bloomer and strongest grower without exception in the pallida class. The general list of Iris in my spring catalogue can all be furnished now.

## Descriptions of Andrews Introductions

Alabaster. (Andrews 1926) Pure white flower, medium to large, of exceptionally fine form; well arched broad standards slightly ruffled, meeting at the tips. Falls broadly flaring, rather wide with slightly ruiffled tips. Beard nearly white, shading to yellow within, styles white. The purity of its whiteness, the absence of veining and the beautiful lasting texture of the
flower will doubtless set a new standard in white Iris. Received 1st prize for white, Cleveland show, 1927. Price $\$ 7.50$ each.

Amerind. (Andrews 1926) Metallic bronze in nearly a self color, the standards sligbtly more golden than the falls. Stems low-branched, nearly four feet tall, carrying ten to twelve flowers of large size and excellent substance. Exceedingly vigorous, with ample foliage, increases well and has a long blooming season from midseason to very late. Price $\$ 7.50$ each.

Candlelight. (Andrews 1926) A Caterina x Aurea cross, with large flowers of pale pinkish lavender strongly illuminated from within with a rich golden glow, at once difficult to describe but very lovely. The glow extends nearly to the tips of standards and falls, which afford just enough contrast to give a lively yet soft color effect. The name Candlelight is realistically descriptive. The plant is tall, nearly four feet, and a vigorous grower. Price $\$ 10.00$ each.

Odaroloc. (Andrews 1924) Anagram of Colorado. Although resembling a pallida, its parentage was nearly white plicata seedling crossed with a Germanica-Variegata white seedling, an unique combination of three distinct Iris races. Of vigorous growth with moderate increase, it makes well balanced clumps to 4 feet in height and does not too soon become overcrowded. The 8 or 9 magnificent blooms are carried high and well spaced for best display. The flower is well arched, symmetrical, with flaring falls, all the segments broad and of remarkable substance. It is unusually prolific of flower stems and because of its durability it is among the best for cutting. The color is a pure light mauve, of even tone with a slight suffusion of pink; beard orange. Reported favorably by every grower east and west, without exception. Price $\$ 3.50$ each, three for $\$ 10.00$, 12 for $\$ 35.00$.

Ophir Gold. (Andrews 1925) Golden-yellow flowers of pure color without veining on 33 -inch stems. Growth vigorous, a profuse bloomer, late-midseason variety. A little taller and later than tansy. Each $\$ 2.00$, three for $\$ 5.00$.

Tansy. (Andrews 1925) One of my first seedlings, perhaps a Neubronner-Albicans cross. It has a purity and evenness of color, chrome yellow, not attained in any other Iris. Its additional charm is the slender stem with open inflorescence, a welcome departure from the stiffness characteristic of the Neubronner type. Each $\$ 1.00$, a dozen for $\$ 10.00$.

## Hardy Garden Lilies

Never before have lilies held a higher place in popular esteem. As evidence there may be noted the recent appearance of two books and a host of short articles on lilies and their culture. With a better knowledge of their needs there is less reason for failure, and indeed the varieties here presented are as easily grown as almost any other hardy flowers. Tenuifolium, bulbiferum and the elegans varieties are ideal lilies for the rock garden. The entire list embraces stock of my own
growing and will be freshly dug and delivered without unnecessary exposure. This eliminates at the outset one common source of failure, namely, the long period between digging and replanting, as with imported bulbs, attended with gradual loss of vitality. Early orders are recommended, for delivery during September and October. Prices include delivery.

Lilium bulbiferum. One of the best of the Europan lilies, a dependable bloomer and long-lived in the garden. Apparently a variable species as to height and color. The stock I offer has flowers of rich golden yellow, erect, 4 to 8 in an umbellate raceme, on stems 20 to 30 inches tall. Bulbils are produced in the leaf-axils. Flowering bulbs 3 for $\$ 1.00$, 10 for $\$ 3.00$; extra large bulbs 50 cents each, $\$ 4.50$ per ten.

Lilium candidum. Madonna Lily. The best pure white lily for the garden, easily grown; should be planted before October 1st. Extra strong bulbs 50 cenis each $\$ 4.00$ per ten.

Lilium elegans botanically is L. Thunbergianum a subspecies of $L$. davuricum. Some of the garden varieties are thought to be hybrids. Usually catalogued under the horticultural name, elegans.

Lilium elegans aurantiacum. Salmon-yellow flowers, unspotted. Three for $\$ 1.00$.

Lilium elegans aureum (Robustum). Orange-yellow, spotted black. Three for $\$ 1.00$.

Lilium elegans Horsmannii. Dark blood-red, thickly spotted purple-black. Three for $\$ 1.00$.

Lilium elegans Quilp. Vermillion, overspread with a coppery luster. Three for $\$ 1.00$.

Lilium Henryi. Henry's Lily, frequently called "Orange speciosum'.' Fiowers rather late with the Tiger lily. $\$ 1.00$ each, three for $\$ 2.50$.

Lilium pardalinum. Leopard Lily. Orange, tipped red with dark spots. Three for $\$ 1.00$.

Lilium Sargentiae. A magnificent lily suggesting regale, but blooms later. Recent introduction destined to front rank. \$2.00 each, three for $\$ 5.00$.

Lilium tenuifolium. Siberian Coral Lily. The most brilliant of all lilies. Has proven very permanent in our light sandy loam with dry winter conditions, but is reputed short-lived in heavy soils. Often attains two feet or more in height and carries 8 to 20 flowers, rarely thirty or more. Brilliant scarlet, nodding, fragrant, the petals reflexed, of waxy texture. Especially suitable for the rock garden in full sun with good drainage. Our stock of this lily grown for the wholesale trade is probably the largest in the United States, numbering in the various grades more than 100,000 . Standard flowering bulbs 3 for $\$ 1.00$, 10 for $\$ 3.00$, 100 for $\$ 25.00$; extra size bulbs 50 cents each, $\$ 5.00$ per dozen.

Lilium Tigrinum fl. pl. Double Tiger Lily. Three for $\$ 1.00$.
Lilium Tigrinum splendens. Improved Tiger Lily. Strong selected bulbs, three for $\$ 1.00,10$ for $\$ 3.00$.

Lilium Umbellatum. Orange. flamed scarlet. Very showy erect flowers, early. Nedium flowering bulbs, 3 for 75 cents, 10 for $\$ 2.00$.

Lilium umbellatum grandifiorum. Brilliant orange-red flowers of large size with broad petals. Extra strong bulbs, three for $\$ 1.00$, 10 for $\$ 3.00$.

## Seeds of New or Noteworthy Plants

As the result of recent exploration in some of the less accesible and littie known portions of the Rocky Mountains, a number of exceedingly valuable additions have been made to our unique list of seedis.

Nore Iersons each season are planting seeds of our choice Western flowers, finding them a logical medium of distribution and experiencing pleasure in watching their development.

Many rare flowers here offered cannot be obtained elseWhere and your garden collection may be thus enriched at small outlay. If this prospect pleases you, it would be doubtless equally attractire to your friend who is starting a rock garden; if you will kindly supply the address a catalogue will be mailed with my best thanks to you for your courtesy.

Fall Planting. Successful results from planting the seeds of many perennials in late autumn will be confirmed by the experience of many growers both amateur and commercial. It is Nature's method. Also, it is known that an "after-ripening" process must take place with certain seeds that are rated as "slow", before they can germinate. The proper conditions for this afterripening are afforded while they are lying in cool moist soil during the fall, winter and early spring. Sowing should be made in frames or protected beds late enough to avoid germination before spring. In open beds a mulch of excelsior or boughs is adrised to prevent drying out or heaving. Although many peremials germinate freely at any time, better stands will often result from this method orer spring or summer planting.

Size of packets and prices. The ordinary packet will usually suffice for the small garden. These are priced at 25 cents per packet, except novelties and scarce items. You may select fire $2 ⿹$-cent packets for $\$ 1.00$, and additional 2 - cent packets at 20 cents each. There is no discount on the price of norelties, nor ony any packet or quantity priced at more than 25 cents per item. Attention is invited to certain very desirable items offered by weight or in packets of stated quantity. These are intended for commercial planters, estate owners and others who require larger quantities and accept our serrice in supplying such stocks quite largely as a matter of accommodation rather than a source of profit.

Guararty. I sumply seeds which I believe to be of sound quality and able to geminate under proper conditions. Ther are sold at a nominal price. Successful culture depends upon conditions not under my control. Cpon these considerations, please do not ask for replacement or reimbursement in case of failure.

## List of Seed Novelties

Astragalus or Vetch. Leguminous plants with handsome peashaped blossoms in a variety of colors. Best planted where they are to remain, or should be transplanted while small. Lime should be added to acid soil, enough to neutralize acidity. The same suggestions apply also to Hedysarum, Lupinus, Oxytropis and Thermopsis.

Astragalus bisulcatus. Glaucus foliage, flower spikes white or lilac. Packet 25 cents.

Astragalus Drummondii. Foot-high clumps with silvery foliage and spikes of creamy pea blossoms. Packet 25 cents.

Astragalus pictus. Birds-egg Plant. Attractive low plant for dry sandy soil, the inflated pods speckled purple-brown, resembling small birds eggs. Packet 25 cents.

Astragalus Shortianus. Bright purple flowers from a rosette of pinnate foliage, appearing in early spring; dry sunny position. Packet 25 cents.

Cactus. Strictly hardy kinds for the dry sunny rockery. Start seeds in a light soil of sand and loam or leafmold. A sunny window or greenhouse is perhaps best until the seedlings are large enough to plant out. Hardy cacti will suffer in winter from excessive moisture but not from cold if the plants are properly matured by keeping them on the dry order through late summer and fall, allowing the plants to shrink somewhat before winter. See Echinocereus and Opuntia.

Echinocereus aggregatus. Turk's Head Cactus. With age forming cushion shaped clusters, containing fifty to one hundred or more heads. The whole clump is covered in early spring with brilliant flame-scarlet flowers; the most gorgeous thing of the semi-desert table lands adjoining the Sangre de Christo Mountains of Colorado. Small packets 50 cents, 300 seeds, $\$ 1.00$.

Opuntia arborescens. Tree or Candelabrum Cactus. Cylindrical stems and branches of dark green to 4 feet in height. Large showy flowers of deep purple followed by yellow fruits. Packets 50 cents; $1 / 4$ ounce $\$ 1.00$.

Opuntia Phaeacantha. Great Pricklypear. The large glaucus joints tinged purplish, with dark brown spines, yellow flowers and purple fruits; handsome and distinct. Packet 25 cents; $1 / 2$ ounce $\$ 1.00$.

Opuntia polyacantha. Hedgehog Opuntia. Both the joints and the fruits are thickly clothed with long spines in a variety of colors; flowers yellow. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Castilleja integra. Fairy Paintbrush. The vivid scarlet flower bruches appear on 6 -inch stems from spring till midsummer. A perennial species of the dry slopes of the foothills. Packet 50 cents.

Clematis Douglasii. Bush Clematis. A plant of half-shaded foothill slopes, in appearance midway between C. Scotti and C. eriophora; the glabrous foliage is cut into linear divisions and the purple flower bells are followed by silky seed plumes. The true species. Packet 50 cents.

Crassina grandiflora. (Syn, Zinnia grandiflora) Yellow Zinnia. A most exquisite dwarf perennial for the rock garden, and suggested for non-acid soil in a very dry position with full sun. I have this on trial and offer seeds only at this time. The flowers of rich gold entirely cover the low rounded clumps and remain apparently fresh for a long season, finally drying upon the plant like an everlasting. Packet 75 cents.

Dodecatheon Media. Shooting Star. Easily grown from seeds sown in autumn. Packet 25 cents; 1000 seeds for $\$ 1.00$.

Erysimum asperum. Western Wallflower or Yellow Phlox. An easily grown annual with yellow or orange phlox-like flowers on foot-high stems. Packet 25 cents.

Lepachys columnaris pulcherrima. Painted Coneflower. Outstanding for its remarkable color and as a garden flower of easy culture. Identical with the yellow form except that the rays are a rich mahogany-red. A true-to-color strain, not a mere variant, and blooms true from seed. Liberal packets. 75 cents; 1000 seeds $\$ 2.50$. (See general list for yellow.)

Lilium Hybridum. Hand pollenated hybrid lily seeds from Croceum, bulbiferum, Umbellatum and Elegans including the varieties Alice Wilson, Horsmanniae and Orange Queen; six distinct crosses between species. My first lot of similar hybrids which bloomed this year far exceeded my expectations in size, quality and range of color. In mixture only; 100 seeds for $\$ 2.00$. Plant in autumn.

Lilium tenuifolium. Siberian or Coral Lily. Packet 25 cents; $1 / 8$ ounce $\$ 1.00$; ounce $\$ 6.00$.

Melampodium leucanthum. White Zinnia. Grows in similar situations and resembles the Yellow Zinnia, Crassina, but the flowers are pure white and are produced throughout the spring and summer. A miniature perennial of easy culture for the rockery in full sun; neutral to alkaline soil. Packet 75 cents.

Mirabilis multiflora. Perennial Four-o'clock. Perennial from a large deep root, necessitating a deep well drained position, preferably a bank or slope exposed to sun and favors alkaline soil. Low and broad-spreading in habit, its dark green foliage adds a touch of luxuriance to the desert, highly accentuated by the multitude of showy purple fiowers the size of a dollar, 100 blooms or more opening each evening on a large clump for several wecks. Packet of 25 seeds $\$ 1.00$.

Polemorium occidentale. Belongs to a distinct group of this genus, producing violet blue bells for a long season on 12 -inch stems. Easily grown in humus soil in half shade. Packet 50 cents.

Ratibida, see Lepachys.
Sphaeralcea cuspidata. Tall Scarlet Mallow. A much taller plant than the Scarlet Malvastrum but with similar flowers and forms bushy clumps three feet tall; for dry soil, new. Packet 50 cents.

Thelesperma ambigua. A miniature Coreopsis a few inches tall with yellow flowers in long succession, for dry sunny rockery. Packet 25 cents.

Verbena ciliata. Mountain Verbena. Perennial in dry soils,
hardy, a profuse bloomer the entire summer, elongating heads of lilac or lavender flowers. Packet 25 cents.

Zinnia, see Crassina and Melampodium.

## General List of Seeds

Aremone patens Nutt. American Pasqueflower. Silky buds in spring expand into showy flowers of pale lilac. Packet 25 cents.

Aquilegia coerulea. Rocky Mountain Columbine. Four-inch blossoms of blue and white with long spurs. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$; ounce $\$ 3.00$.

Aquilegia hybrida, Rainbow Blend. Rainbow Columbine. Surpasses other hybrid strains in variety and brilliancy af coloring and in the predominance of colorful shades of pink, rose, scarlet, velvety reds and purples. White, yellow ad pale tints are reduced to their proper proportion. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Arenaria Hookeri. Sandwort. A low, tuft-forming rockplant of stony hillsides with a profusion of star-like white flowers in eariy spring; the foliage remains green all summer. Packet 25 cents.

Argemone hispida. Dwarfest of the Prickly Poppies with large white flowers of satiny texture and bluish green foliage. Packet 25 cents.

Campanula petiolata. Western Harebell. The blue bells on slender stems are borne in utmost profusion for a long season. Packet 25 cents.

Clematis Davidiana. Bush, two feet, fragrant blue flowers in whorls. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Clematis integrifolia. Crisped Blue Clematis. Low bushy plant producing an abundance of broad, deep blue flowers for a long season; Asiatic. Packet 25 cents; ounce $\$ 2.00$.

Clematis ligusticifolia. Western Virgins-bower. (Vine.) Packet 25 cents.

Clematis Orientalis, Yellow Clematis. (Vine.) Packet 25 cents.

Clematis recta graniflora. Magnificent clumps, foliage finely cut, dark green, each stem producing 25 or more fragrant white flowers two inches across. Packet 50 cents.

Clematis Simsii. Vine from Texas, purple bells. Packet 25 cents.

Clematis Texensis. (C. coccinea) Scarlet Clematis. Scarlet bells in great profusion, all summer, herbaceous climber, seeds slow to germinate. Packet 25 cents; ounce $\$ 2.00$.

Corydalis montana. Golden C. Profusely blooming annual forming low mats for filling spaces in the rock graden. Packet 25 cents.

Delphinium Geyeri. Geyer Larkspur. Grayish foliage from which arise slender spikes of most intense blue; succeeds best in a dry, sunny position. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Delphinium Neisoni. Nelson's Larkspur. Early April flower, dark blue, racemes a foot high, froma fascicled tuber; exquisite rockplant for well-drained half-shade. Patket 25 cents.

Dictamnus fraxiella. Gasplant. Border perennial meriting more general culture. Packet 25 cents; ounce $\$ 3.00$.

Euploca convolvulacea. (Heliotropum) Wild Heliotrope. Low tufted anmual a few inches tall of the Heliotrope family, the satiny-white fragrant flowers like a miniature morning glory, and blooms for a long period. Grows in dry sandy soil in full sun and should be treated like Portulaca. Packet 25 cents; one-sixteenth oince $\$ 1.25$.

Gaillardia aristata. Blanket-flower. The original wild type is preferred by some for its smaller center and less flashy color. Packet 25 cents.

Gaura coccinea. Gaura. Low plant of dry ground with slender lacemes of fragrant white flowers turning red with age. Packet 25 cents.

Gentiana elegans. Western Fringed-gentian. Deep azure blut fringed flowers, plant biennial, growing in wet subalpine meadows. Packet 25 cents.

Gentiana Parryi. Parry's Gentian. Large flowers of deepest blue on stems a foot tall. Packet 25 cents.

Note. The gentians are difficult to grow from seeds.
Harbouria trachypleura. Golden Parsley. Slender stems with foliage delicate as a fern, and showy umbels of golden flowers; a valuable rockplant for a dry sunny place. Packet 25 cents; $1 / 4$ once $\$ 1.00$.

Hedysarum pabulare. Jointpod. Sprays of rosy pink pea blossoms on stems a foot tall; dry limestone slopes. Packet 25 cents; $1 / \pm$ cunce $\$ 1.00$.

Helianthella quinquenervis. Sunwort. Early flowering Composite with tall slender stems and yellow-rayed flowers. Packet 25 cents.

Heuchera bracteata. Alum-root. Small tufted species for filling rock crevices.

Ipomoea leptophylla. Giant Bush Morning Glory. Low bushy plant growing in deep dry soil from an enormous root; file through shell before planting. Packet 25 cents.

Iris missouriensis. Blue-flag. Native spring-flowering iris of pale blue. Packet 25 cents; ounce $\$ 2.00$.

Iris missouriensis, Bluebird. Seed saved from Bluebird; color may vary. Packet 25 cents.

Iris missourienses, Snowbird. Pure white, comes mostly tiue from seed. Packet 50 cents.

Lepachys columnaris. (Ratibida columnaries) Coneflower. A sem for the rock garden or low border, yellow drooping rays and dark cones. Blooms the first year from seed and for a long season; excellent and easily grown. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Liatris ligulistylis. Rocky Mountain Gayfeather. Dwarf, early species with very large heads of rosy magenta. Packet 25 cents.

Lilium tenuifolium. Coral Lily. Brilliant scarlet, easily grown from seed. Packet 25 cents; $1 / 8$ ounce $\$ 1.00$.

Lupinus argenteus. Bluebonnet. Two feet, showy blue spikes, deep well-drained soil. Packet 25 cents.

Lupirus decumbens. Lupine. Three feet, much branched lilac, free bloomer for a long season. Packet 25 cents.

Lupinus Plattensis. Bicolored Lupine. Remarkable for the
conspicuous dark blotch in the upper half of each flower; rare low growing species. Packet 50 cents.

Mentzelia decapetala. (M. ornata) Evening Star. Marvelous five-inch, ten petaled stars of creamy white, opening late afternoon for several weeks; peremial in dry calcareous soil. Packet 25 cents.

Oenothera coronopifolia. White Evening-primrose. A gem for the rock garden, forming colonies on sunny slopes, the flowers white, turning pink, a constant succession all summer. Dry soil with little fertility is suggested. Packet 25 cents.

Oxtropis Lambertii. Crimson Loco. Many spikes of crimson pea blossoms from a rosette of pinnate foliage. Packet 25 cents.

Oxytropis villosus. Silky Loco. Silky-gray rosettes and creamy fllowers. Packet 25 cents.

Pentstemon. The seeds often germinate slowly but nearly all will give a full stand of seedlings in the spring from late fall seeding. Barely cover the seeds and mulch with excelsior. Too deep covering is responsible for much failure with small seeds.

Penfstemon albidus. White Pentstemon. A low-growing native of sandy plains, easily grown and rather more permanent in cultivation than others. Flowers white. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Pentstemon alpinus. Easily grown alpine with compact spike of deep blue. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Pentstemon angustifolius. (F. coeruleus) Dwarf, early, skyblue flowers, tinted rose. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Pentstemon cyanthophorus. Distinct new type with broad foliage. Packet 25 cents.

Pentstemon humilis, Quite dwarf, deep blue, sunny rocky slopes. Packet 25 cents; $1 / 8$ ounce $\$ 1.00$.

Pentsiemon secundifiorus. (Formerly listed at P. acuminatus, which is now understood to have a more western range.) Glaucus Roliage and racemes of lilac flowers; one foot. Packet 25 cents; $1 / 4$ ounce $\$ 1.00$.

Pentstemon unilateralis. Tall, deep purple flowers in long racemes. Packet 25 cents.

Polemonium confertum. Musk-flower. A treasure among Colorado alpines, forming clumps at high altitudes, the very conspicuous flower clusters reflecting the intense blue of the alpine sky. Packet 50 cents.

Polemonium melitum. Polemonium. Similar to P. confertum except in color of the flowers which are sulphur-white. Easily grown in light soil and partial shade. Packet 50 cents.

Polemonium molle. A foot tall with panicles of small blue flowers. Packet 25 cents.

Polemonium robustum. Two feet tall, long season of bloom. Packet 25 cents.

Primula Parryi. Parry's Primrose. Large umbels of crimson flowers from a rosette of light green foliage. Packet 25 cents.

Primula veris. English Cowslip. Seeds of my own saving, from a fine strain. Packet 25 cents.

Pyrethrum hybridum. Painted Daisy. Fine mixed strain of single and double. Packet 25 cents.

Quincula lobata. Low rock plant for dry, sunny spot, with purple star-shaped flowers. Packet 25 cents.

Salvia azurea. Azure Sage. Light blue; avoid excessive moisture and fertility. Packet 25 cents; ounce $\$ 1.50$.

Silene acaulis. Cushion Pink. A most charming alpine formtufted mais, studded with pink stars. The true species. Packet 50 cents.

Stanleya pinnata. Prince's Plume. The golden plumes, with long exserted stamens suggest a yellow Cleome. Two feet, dry limestone soil. Packet 25 cents.

Thermopsis montana. Buffalo Pea. A foot high, early spring, showy yellow pea blossoms. Packet 25 cents.

Thermopsis rhombifolia. Very dwarf species; yellow. Packet 25 cents.

Yucca glauca. Soapweed. One of the hardiest and easily grown from seed. Packet 25 cents.


IRIS, ODAROLOC, (Andrews, 1924)
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