Historic, Archive Document

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

62.09 1411

Bulbs and Wild Flower Seeds of California

DEVELOPED AND GROWN BY

CARL PURDY

Ukiah, Mendocino Co., Cal.

Terms, Cash With Order

Safe Carriage Guaranteed

I guarantee that all bulbs shall reach my customers safely, and that they shall be of good quality. If bulbs are lost in transit, or are not good, I will either replace them or refund the money, at my option.

Claims for Damage

Claims for damage must be made on receipt of goods.

Quality of Bulbs

A large part of my bulbs are grown at "The Terraces;" all are of superior quality, and, whether collected or imported, it is my aim to sell only the best.

Date of Shipment

All Californian bulbs should be planted either in fall or early winter if the best results are desired. Very few can be kept in good condition later than January 1. I will not fill orders for Erythroniums later than December 1, and after January 1 I can supply only Lilies.

Expressage, Postage or Freight Free

In every instance I deliver goods free of carriage charges within the United States. Under the new postal regulations I can ship 11 pounds by post to Great Britain, Germany, Holland and some other countries. I can pack any order in parcels within these weights, and will in every case prepay postage and guarantee safe delivery. The post is both cheaper and more rapid for foreign shipments.

Prices

Quotations are for one and per dozen. Six will be sent at dozen rates.

If Varieties are all Sold

Unless forbidden in your order, I reserve the right to send you equally good sorts and better value than you asked for, when a stock is exhausted.

One of the hillside gardens at "The Terraces"

The Terraces—An Introduction

When a boy of 18, I began to do "a man's work in the world" as a school teacher. I had already begun the collection of the wild plants, bulbs and seeds of my home region for an eastern firm, which first realized the trade possibilities of the native American plants. During the next nine years, my vacations were given up to botanizing and collecting, my trips became longer, my customers more numerous and my gardening experience wider. In 1888,

I was able to begin giving to this work my undivided attention. Since then my life has been devoted to the collection and culture of flowers.

From the first I sought a location where the conditions would be best for bulb culture. After several trials an ideal vicinity was found in the high mountains southeast of Ukiah. Looking from the higher points here, in one direction we see down into the beautiful basin where Clear Lake glistens in the sun, and in another direction the Russian river region lies below us like a map. I found the natural conditions that I sought, first at Lyons Valley, then at The Terraces, my present home-place, and now my gardens are in four of these mountain valleys: Lyons Valley, the East Canyon and the Lake gardens—all within a mile of the center of my activities at The Terraces.

At The Terraces a favorable climate, abundant spring water, rich and varying soils, and a great variety of exposures combine to make ideal conditions for this class of gardening. From a scenic point of view, The Terraces are probably the most unique gardens in the world. Large springs feed a mountain stream which passes through a rich little valley, and then, over four limestone bluffs in succession, each from 50 to 75 feet high, it plunges in many most charming cascades and waterfalls. Between the bluffs are the terraced slopes from which the gardens get their name. All of the successive terraces, the shelves and nooks, with the endless corners about the falls, afford ideal homes to colonies of lilies and ferns.

During recent years I have become much interested in the hardy perennial plants of the world. I am testing many of the beautiful things of which we read so much in English floral publications, to see how well adapted these plants are to California conditions, and to ascertain which ones best suit the tastes of Californians. I now have a very fine collection of such things as the perennial larkspurs, the variously colored poppies, Orientals and others, harebells in great variety, dainty creeping plants, the various sunflowers and rudbeckias, several fine things in the style of the Shasta daisies, and many others as beautiful.

Beginning as early as February, with the Christmas roses, the flowers come on in season, and in midsummer there is a very fine show. In dahlias, too, I have a collection of some 80 sorts of the best, also many gladiolus, and a fine collection of tigridias. There is never a second burst of bloom to match the tulips, but to the flower-lover there is always something of interest. I am constantly adding to my hardy perennial collection, and it will soon be a leading feature, both in my garden and in my catalogue.

Ukiah is reached by rail, via the Northwestern Pacific, which starts at the ferry depot at San Francisco. Two trains a day arrive in Ukiah; the first leaves San Francisco at 7.40 a. m., arriving at Ukiah at 12.10 p. m.; the second leaves San Francisco at 3.15 p. m., and arrives at Ukiah at 8.10 p. m. From Ukiah the trains are 6.25 a. m. and 3.05 p. m. As there is hardly time for a visitor to make the round trip to "The Terraces" after the arrival of the train at 12.30, the better way is to come to Ukiah on the train which arrives at 8.30 p. m., stay over night, and make the trip the next day. It can be made so as to catch the return train at 1.30 P. M., or an entire day can be taken.

Telephone connects "The Terraces" with all points through the Ukiah central. No telephone number needed.

Brodiaea coccinea (the Floral Firecracker). Dazzling crimson, on tall stems; beautiful for rockeries

BRODIAEAS

These plants have a small bulb, producing grassy leaves near the ground, and very slender, but stiff, naked stems bearing a head of waxy flowers of great lasting quality. All are pretty. They grow exactly like calochortus, and their culture is the same, and just as easy as for that flower. In California they are easily naturalized in almost any soil. Plant them about 2 inches deep, with a trowel or dibble, and leave them alone. They are especially happy under oak or other deciduous trees, in crevices in rocks, or in rough, gritty soils.

The Floral Firecracker (*Brodiaea coccinea*)

A very striking plant. The stems are 2 or 3 feet high, and the flowers are most vivid crimson, tipped with pea-green. The resemblance to a bunch of firecrackers catches any eye. Look at the halftone and fancy the beauty of such a group when set off by ferns or other light green foliage. They prefer a gritty soil with a mixture of leaf mold, and like a lightly shaded place. Large bulbs will cost you 5 cents each, or 50 cents a dozen, while smaller bulbs to naturalize will cost \$1 per 100, or \$7.50 per 1,000.

Other Brodiaeas

All Brodiaeas are pretty, and with them a variety of color can be had. To give an idea of the diversity I mention *laxa* in blue, *ixioides* in yellow, *lactea* in white, *peduncularis* in porcelain (this one thrives in gravelly or sandy soils near the water side), *Californica* in pink, and *Bloomeria aurea* in bright yellow. Better buy in collections and mention the soil; I will then make up a collection in the colors to suit the situation.

A Splendid Collection

Five sorts, twenty bulbs each, giving splendid color range; 100 bulbs in all for \$1.50; three different types to suit three different situations, as follows. Mention the kind of place you will plant them in. First, for dry, rocky places in sun or light shade; second, for heavy (adobe), sticky soils, dry or wet; third, for shady places in either heavy or light soils or in rock crevices. Small bulbs for any situation at 75 cents per 100, \$5 per 1,000.

A most dainty effect can be had by copying nature. Plant 12 to 50 *Brodiaea laxa* in a pocket in rock work, especially where there are ferns or light, airy greens; they will thrive in either sun or shade. *Brodiaea grandiflora* is wild in grassy meadows; if the grass is not too heavy they give a sheet of lovely purple in June. It takes quantities to produce this effect—several thousands at least—but they are cheap. I have often seen pockets in the bed of a shallow, gravelly stream solid with *Brodiaea peduncularis*—with 1 or 2 inches of water running over them while in flower.

Calochortus venustus oculatus. This lovely Mariposa Tulip is one of the hardiest varieties; it is white, while the variety *citrinus* is deep lemon.

CALOCHORTI

These are lovely, bulbous plants, which are best described under the separate groups.

Section I. Globe Tulips

The beautiful photograph describes *Calochortus albus* better than any words can. The others are similar in form, while differing in color. All are exquisite in tints and the perfection of grace in form. The plants are rather tall and slender, with leaf-wrapped stems of odd shape. They are natives of woodlands, delighting in loose soils, and liking leaf-mold and light shades. At the same time, most of them will do well in heavy soils, and are fine subjects to naturalize among rocks or in shaded woods. In the East, as well as the West, they succeed very well if given the care suggested in cultural directions.

Albus, Fairy Lantern. White. 3 cts. each, 25 cts. per doz., \$2 per 100; medium-sized bulbs for naturalization, \$1.50 per 100, \$10 per 1,000.

Albus, The Pearl. A still finer flower. 4 cts. each, 40 cts. per doz.

Amoenus. Soft rose-pink. 5 cts. each, 50 cts. per doz.

Amabilis. Rich yellow. 3 cts. each, 25 cts. per doz., \$2 per 100; smaller-flowering bulbs, \$1.50 per 100, \$10 per 1,000.

Pulchellus. Most exquisite lemon-color. 10 cts. each, \$1 per doz.

Globe Tulips in Mixture. 25 cts. per doz., \$1.50 per 100.

Section II. Star Tulips; Cat's Ears

Slender woodland plants well shown in photograph. Fine for naturalization in rockwork and woodland.

Benthamii, bright yellow; **Lilacinus**, lilac; **Maweanus Major**, white; **Maweanus Roseus** rosy. These four at 3 cts. each, 25 cts. per doz.

Purdyi. Taller; white flowers. 5 cts. each, 50 cts. per doz.

Mixture of Star Tulips. 20 cts. per doz., \$1.50 per 100.

Calochortus Maweanus (white), dainty and beautiful, 4 to 10 inches high; *C. Benthamii*, yellow; *C. lilacinus*, lilac; *C. Purdyi*, white and much larger than others. Dainty plant for shaded nooks or rockwork in little colonies.

Calochortus albus, Globe Tulip, exquisite for shady places; they vary in color. *C. albus*, white; *C. amoenus*, rose; *C. pulchellus*, lemon; *C. amabilis*, yellow

True Mariposa, or Butterfly Tulips

Until one has seen a good collection of these plants, he has no idea how much nature can do in the variation of one flower. All Mariposas are simply forms of *Calochortus venustus*, yet there are six well-marked strains, all with the slender grace of stem belonging to the species.

Cup-shaped flowers, one to many on a stem, wonderfully marked with eyes and dots and pencilings in rich colors, are characteristics. Yet each strain carries out the plan on a color scheme of its own, and then can only be compared with the orchids in wonderful variability of beauty.

Mariposa is simply the Spanish word for butterfly, and because the eyes and markings of the flowers are so much like those on a butterfly's wings. It is a musical word given to a county and to a town in California, and we would hardly like to give it up for its English equivalent.

Roseus and Eldorado Strains

Of the six strains, two do better in light sandy soils, and prefer light shades. One of these is **Roseus**. Its petals are broad, inside creamy white, suffused with pale lilac. There is a rose-colored blotch at the apex of the petals, a richly marked eye in the middle, while the base is hairy and beautifully tinted. The back of the petal is also richly colored with carmine. It is a very fine plant. My charges for these are 5 cts. each, or 40 cts. per doz.

The plants of the **Eldorado** strain are very vigorous and grow from 1 to 3 feet high; the flowers are simply marvelous in their many colors, and are not exceeded in this by any other flower under the hybridizer's care. Scarcely two are alike, and the colors range from white into all shades of lilac and deep purple, all shades of reddish purple, pink and salmon, and rich, deep reds.

The markings and rich colors are so numerous and so variable as to be indescribable. Some few have a golden or a red blotch near the apex of the petal; all have a richly marked eye in various patterns, and all are beautifully marked and penciled at the base. They all grow together, and a hundred bulbs give a wonderful study in color, affording endless surprises from the same bed.

There is no better investment for the flower-lover than a quantity of these bulbs. In addition to the general cultural directions, I would say that this strain likes some shade and a very porous soil. Avoid heavy soils. I either sell a general mixture at 4 cts. each, 40 cts. per doz., or \$3 per 100, with second size at \$2 per 100; or I sell selected shades in colors at 6 cts. each, 60 cts. per doz., or \$4.50 per 100.

Vesta and Purpurescens

These Mariposa Tulips like full sun and will grow best in heavy soils. **Vesta**, a species of my own, found on heavy clay soils, is the best grower of all *Calochorti*, and will succeed in almost any ordinary soil. It is a most superb thing, with great 3- to 5-inch flowers, borne on long, separate stalks; very numerous.

The color is white; flushed with lilac or rosy purple, red at center, and purple on backs of petals. I think this the best of all *Calochorti*. Reports from European growers put it in the first rank. The fine photograph shown on page 10 does it no more than justice. I have very large bulbs at 10 cts. each, or \$1 per doz.; good bulbs at 7 cts. each, or 60 cts. per doz., and small bulbs to naturalize at \$2 per 100.

Rather similar is **purpurescens**. In this the flowers may be 3 inches in diameter, creamy white inside half-way, with purplish center, all over purple outside. They have no rose-colored blotch, but have the usual eye, and are of great beauty. The plant is a strong grower, native to heavy soils, and is a most lovely variety. My price for bulbs of these is 5 cts. each, or 40 cts. per doz.

Oculatus, Citrinus and Luteus

These are most satisfactory flowers. **Oculatus** is almost as varied as **Eldorado**, but in whites and creams. The eye is large and richly zoned, the pencilings about the base are very delicate. I have had the flowers 4 inches across. The plant is a good grower.

Citrinus differs only in the color. The flowers are deep, rich yellow, with almost black eye. It is most excellent, and is in great demand where best known. **Oculatus** and **Citrinus** cost 3 cts. each, 25 cts. per doz., or \$2 per 100.

Like these two, in every way but markings, is **Luteus**. The color is a hardy, clear yellow, and the usual eye is replaced by delicate pencilings. Price the same as of the other two.

Perhaps a collection of some of all these lovely Mariposa Tulips will best suit some, and for them I have: first, a general mixture of Mariposa Tulips at 25 cts. per doz., \$2 per 100; second, 104 bulbs, selected from the six strains, for \$3, all named.

Mariposa Tulips are so remarkable in some ways that the following from Bailey may be interesting: "They are native from British Columbia and Nebraska south to Mexico. While general characteristics are unmistakably the same, the different varieties have the most variable tastes as to soil, exposure and climate. The Colorado desert and the summits of the Sierra Nevadas, the heavy clays of California valleys, the volcanic ash of Oregon, each has its own representative of this beautiful tribe. But, diverse as are their natural habits, one soil will answer the needs of all."

Butterfly Tulips. *Calochortus venustus roseus* (spotted at top) and *C. venustus Eldorado*

Various Species of Mariposa Tulips

All are superb flowers which differ from the true Butterfly Tulips in that they are destitute of eye-like spots on the petals, and vary much less in markings. Every one of these is beautiful, and some of them are simply exquisite in shadings.

SPLENDENS

The Lilac Mariposa Tulip is greatly admired in southern California. It grows as far south as San Diego county. The tall, slender stems bear many lovely lilac flowers that have a pinkish tinge and a satiny luster in the light, with a darker eye at the base. It grows in heavy clay and adobes, often in wet soil. 5 cts. each, 50 cts. per doz., \$4 per 100.

SPLENDENS RUBRA

There is nothing more exquisitely beautiful in the Mariposa family than this tall, strong, Lake county plant. The flowers are large, pinkish lilac and satiny. It likes heavy clays. 6 cts. each, 60 cts. per doz.

PLUMMERAE ROSEA

Often 3 or 4 feet high and much branched, with great satiny pink flowers that are covered on the lower half of the inside with long, silky yellow hairs. It must have a gritty or sandy soil, especially well drained. 10 cts. each, \$1 per doz.

CLAVATUS

The largest-flowered and the stoutest-stemmed of all the Mariposa Tulips. The blooms, which are shaped like a broad bowl, are over 4 inches across, of a deep yellow, and the lower half covered by stiff yellow hairs, each tipped with a translucent knob, which in the light looks like an icicle. The stem is very stout and zigzagged. 15 cts. each, \$1.50 per doz.

NUTTALLII

An exquisitely lovely, white-flowered plant, from the arid portions of the Great Basin. Pure in color and dainty in marking. 5 cts. each, 50 cts. per doz.

GUNNISONI

(The Colorado Mariposa Tulip)

An exquisitely beautiful species with white flowers, banded with green hairs at base, and often with color markings. Very hardy. 6 cts. each, 60 cts. per doz.

LEICHTLINII

A sub-alpine form of the latter, growing as high up in the Sierra Nevadas as 9,000 feet, —a slender plant with smoky white flowers, beautifully marked and quite pretty. It should be perfectly hardy in cold regions. 5 cts. each, 50 cts. per doz.

MACROCARPUS

Unique in the shape of the flowers, which have long, narrow-pointed petals, of a pale silvery-lilac, with bands of green down the back. 6 cts. each, 60 cts. per doz.

CATALINAE

A superb thing in lilac, with almost black spot at base; resembles the Butterfly Tulips. 10 cts. each, \$1 per doz.

NITIDUS

A most unique and lovely plant midway between the Mariposa Tulips and the Star Tulips. It is a native of the northwestern regions, where it grows in cold, wet spots, and endures great cold. Strong-growing, with from five to ten blossoms in a head. The flowers are large and white, with an indigo blotch in the center of each petal, and are covered inside with silky hairs. 3 cts. each, 25 cts. per doz.

KENNEDYI

In this we have good-sized flowers of a most intense vermilion—a color that is simply dazzling. Probably this plant, from the Mohave desert, is the rarest of all of the Mariposa family. 15 cts. each, \$1.50 per doz.

Calochortus vesta. An exquisite Mariposa Tulip, with long stems for cutting; white, lilac or rose

Culture of Calochorti

IN CALIFORNIA

Let the bed be slightly raised, with the drainage perfect. A raise of three inches with a slight slope will assure this.

SOIL. No fresh manure must be used, but any loam will do, although sandy loam best meets the needs of the greater number of species. Still, clay loam, gritty soil, or even adobe, if lightened with sand, grit, spent tanbark or leaf-mold will give good results.

If only a few dozen are grown, it is really better to plant them in a flat box, when 10 inches of soil is ample.

TIME TO PLANT. Plant as soon after October 1 as possible, and not later than January 1.

DEPTH TO PLANT. Two to 2½ inches is ample.

DISTANCE APART. They will thrive 2 inches apart each way.

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

CARE OF BULBS AFTER FLOWERING. If the bed can be left dry all summer, do not dig the bulbs, and they will come up again in the fall. They should not be watered during the summer, and if the bed is where watering is done, it is better to dig the bulbs and store them without packing material in paper bags, in any dry, cool place. One advantage of planting in a box is that the box can be put in a dry place and the bulbs left undisturbed. A box 2 x 3 feet will hold 50 or 75 bulbs.

GOPHERS. These troublesome rodents are very fond of *Calochortus* bulbs as well as of Tulips. If they cannot be poisoned or trapped, they can be kept out in several other ways. I have found that an underground fence made of 2-inch planks set 2 feet deep with an inch above the surface will keep them out. Another method is to make a fence of wire screening under ground. This can be had 2 or 3 feet wide. Still another good way is to make a large sunken box, with only the top of the side boards showing above the ground; 10 inches is deep enough. Such a box can have a bottom of wire mesh or roofing tin.

IN EASTERN UNITED STATES

Calochorti will endure the coldest weather in the eastern United States, but suffer from premature thawing followed by freezing.

(1.) **IN OPEN GROUND.** Miss U., living along the Hudson river, has been successful every year with many varieties. She writes:

"I have again had splendid success with my Californian bulbs, and have flowered every one. I have planted the first of November in rather sandy soil. The bed is well drained and in quite a sheltered spot. It gets the full sun until about three o'clock in the afternoon. Before the ground freezes hard, I have given it three or four inches of dried leaves. These have been removed in the spring when all danger of heavy frost is over.

"I have found it a good plan to have a few leaves around the shoots for a while and to keep some extra leaves at hand at night when the frost threatens. In this way, I have succeeded delightfully with the *Venustus* varieties, the *Globe Tulips* and *Gunnisoni*. My bed of *Erythroniums* was a perfect success. The *Globe Tulips* always give a good account of themselves."

(2.) **IN COLD FRAMES.** With any ordinary care, all *Calochorti* can be grown splendidly in cold frames. They should be treated exactly as for open beds, except the soil will be better with some leaf-mold. Do not coddle, but simply protect from freezing and thawing. After ripening, keep the sashes on all summer so that they will stay dry.

I have glowing reports from customers who have grown them this way.

(3.) **IN POTS.** While they cannot be forced much, they can be grown in pots fairly well as follows: Use a sandy or loamy soil with good drainage. Plant 1½ to 2 inches apart, which will give six to twelve to a 6-inch pot. Moisten the soil and put the pot in a dark place, a cellar preferred, for about six weeks, to let them root. Then bring into a warm, sunny place and water moderately. After flowering, let them ripen well and then dry off and leave perfectly dry until fall.

CAMASSIAS

Camassias, with thin, long, slender stems, on which there are but few small leaves, grow to a height of from 2 to 4 feet when planted close together in clumps. They are fine for cutting, and a bunch in a vase makes a splendid show of color.

Very hardy plants, quite easily grown, and most satisfactory either in the garden or naturalized. In the garden, clumps planted rather closely, say from 4 to 8 inches each way, will make fine shows of color, and hold their own for years with no attention. They need only ordinary garden loam, and moisture during the growing season.

For naturalizing in California, in the East, or in Europe, Camassias are among the best and surest things. They like a damp soil, and will thrive among the grasses and sedges, along creeks or ponds, or in wet meadows. The variety *Esculenta* is especially beautiful when planted very liberally in such surroundings. All will grow well, even when submerged in winter. All eastern customers praise their good behavior, while in Europe their fine qualities are conceded.

Esculenta is the purple form. It is very rich in color, and grows as high as 2 feet in the best soils. It is very showy in masses. My prices, 3 cts. each, 25 cts. per doz., \$1 per 100; flowering bulbs to naturalize, \$5 per 1,000, not delivered.

The variety *Leichtlinii* comes in three colors. In deep purple, it is a fine plant that may grow to 4 feet in height, with as many as a hundred flowers, of the finest, even form, star-shaped, and as large as an inch and a half across. It flowers in long succession. These at 5c. each, 50 cts. per doz., or \$3.50 per 100. In cream-color, *Leichtlinii* is as large as in purple, but with the different colored flowers. It, too, is a very fine plant, and when well established reminds one of the *Eremeri*. 7 cts. each, 60 cts. per doz., or \$4.50 per 100. *Leichtlinii* in clear sky-blue is not so tall as the others, but has fine flowers. These at 5 cts. each, 50 cts. per doz.

A Michigan customer writes: "Camassias are perfectly hardy without protection." He planted them wild.

FRITILLARIA (Western Crown Imperials)

These flowers give us splendid coloring, together with the lily-like charm of the genus. All are as pretty as the lilies which they so much resemble. It is a truly imperial plant and rejoices the children early in every spring with its marvelous pearly drops of nectar, which never seem to fall.

Mission Bells

This is the pretty name by which southern Californians call the group that grows in heavy soils in the open. The real Mission Bells is **Biflora** (almost black); but **Agretis** (greenish white), **Liliacea** (white) and **Pluriflora** (reddish purple), are all similar in habit; all easily grown in heavy soils in open places, but still do well in any loam. All are quite hardy.

Woodland Species

The second group of these plants is slender and very graceful, with many pendent bells. They delight in woodland soils and conditions, and naturalize very easily in any shaded place or dell. The flowers are most charming for bouquets when mixed with grasses or other filmy greens.

Lanceolata grows from 18 inches to several feet high; the flowers are mottled in green and brown, and are very odd and pretty. Its variety, **Gracilis**, has purple-black flowers. **Recurva** is another, in most beautiful orange-scarlet, as pretty as a red lily. **Coccinea**, just as pretty in crimson, will do well in heavy soils. One species only, a clear yellow, low-growing sort, called **Pudica**, likes open situations and sandy soil, and flowers with the earliest spring blossoms.

My price for all is 6 cts. each, 60 cts. per doz., and for a collection of ten sorts, ten of each kind, or a hundred bulbs, \$4; for a half collection, \$2.50.

When *Fritillarias* are grown in the garden, treat the same as *calochortus*.

Fritillaria recurva. The finest of the world's *Fritillarias*; orange and scarlet

Giant Dog's-tooth Violets, *Erythronium Californicum*. Rich creamy tint. Imagine the beauty of thousands dotted among low ferns and wood plants

DOG'S-TOOTH VIOLETS (*Erythroniums*)

The charm of these most beautiful woodland plants is well pictured in the accompanying half-tones. If they had no other beauty than that of their richly mottled leaves, they would be well worth a place in the shady corner. Their flowers are indeed very fine, and, in the Western species, often 3 inches across, with stems at the most 18 inches high, although oftener from 3 to 6 inches. The colors run in delicate tints of white, pink, cream, bright yellow and even rose. If given a winter covering of leaves, they are hardy in the coldest parts of the United States, and while they are at their best in a loose, gritty soil, rich in leaf-mold, they also thrive in the greatest variety of clays, grits, and rocky soils. In woodlands, in shaded corners, or in the crevices of rockwork in shade, is the place to naturalize them; they should carpet the ground. Plant in early fall 2 inches deep and from 2 inches apart up. Dog's-tooth Violets can be grown in pots or in the coldframe in the way recommended for Calochortus. *E. Hartwegii* is the best for pots. All my varieties are described on the next page.

"Our one great success was with Dog's-tooth Violets."—E. O. ORPET, New York, in *Country Life in America*.

"*E. grandiflorum robustum* flowered beautifully with long stems. *E. Californica* flowered finely," writes a Michigan customer who planted them in open woods last winter.

GRANDIFLORUM ROBUSTUM

A very attractive plant with unmottled leaves and flowers of the brightest buttercup-yellow. 4 cts. each, 40 cts. per doz., \$3 per 100.

CALIFORNICUM

Flowers cream-colored, often with four or five on the stem. Leaves richly mottled. Easy to grow and a large colony is a beautiful sight. Large bulbs, 2 cts. each, 20 cts. per doz., \$2 per 100, \$12 per 1,000; smaller bulbs cheaper.

HARTWEGGII

As pretty as Californicum, with more yellow in the flower, and each flower on a separate stalk. Very early, and stands much heat. Good for pots. Large bulbs, 2 cts. each, 20 cts. per doz., \$2 per 100, \$12 per 1,000; smaller bulbs cheaper.

HENDERSONII

Like Californicum, but the flowers are a lovely light purple, with the centers a deep maroon, almost black. Most striking. 4 cts. each, 40 cts. per doz., \$3 per 100.

PURPURASCENS

A hardy sort from the high mountains. Yellowish flowers, tinged purple. Quite pretty and well worth growing. Dog's-tooth Violets do well in England, and are fine there for borders or naturalizing. 4 cts. each, 40 cts. per doz., \$3 per 100.

Giant Dog's-tooth Violets, *Erythronium Hendersonii*. A charming variety; purplish, with nearly black center

Revolutum Dog's-tooth Violets

A bed of these superb flowers is shown very true to nature in the halftone accompanying. The stems are long, the flowers large and exquisitely tinted, often single, never more than four to the stem, and the leaves are mottled in white and green. While the plants thrive in garden loam, they do well in heavy soils which are quite wet in winter. I have seen them where a stream flowed over them constantly in winter.

Revolutum is the type with white flowers, more or less tinged purple. For these the price is 5 cts. each, 50 cts. per doz., \$3.50 per 100.

Pink Beauty. A soft shade of pink. 6 cts. each, 60 cts. per doz.

Johnsonii. A deep rose, unique in color and beauty. It sells for \$1 per doz.

Watsonii is also known as **Giganteum**, and is hardly of this class. It has white flowers, beautifully toned with brown. My price for it, 4 cts. each, 40 cts. per doz., \$3 per 100.

Regarding **Revolutum præcox**, years ago I first found this fine form and named it. Then for a long time I could not secure it. It is of a creamy color, with tall stems and most beautifully marked flowers. Can now supply good bulbs at 4 cts. each, 40 cts. per doz., \$3 per 100.

Mixed Erythroniums. I put up a fine mixture at 20 cts. per doz., \$1.50 per 100, \$10 per 1,000.

It is a pleasure to me to know that many of my Eastern customers have succeeded in making the lovely Western Dog's-tooth Violets bloom at home without any special care. Instances are common.

A gentleman at Kalamazoo, Michigan, wrote last fall that several species, bought four years before, had bloomed each year, increasing in number of flowers and getting finer with time. Mr. Jansen, of Chicago, reported last fall that the bulbs bought the previous fall had done wonderfully well. A lady living on the Hudson says of Erythroniums that "These always do well with me." A noted gardener of South Lancaster, Mass., writes in *Garden Magazine*, "Our one great success with California bulbs has been with the Dog's-tooth Violets."

It is useless to expect the best effect from small plantings. They need to be massed to look best. Better buy the cheaper but excellent bulbs for naturalizing and plant a thousand or more. If some enthusiast would once go into planting with tens of thousands, he would never again be satisfied with any less number.

Dog's-tooth Violets, *Revolutum* type. White flowers, beautifully tinged with purple; one to four on a long stem

CALIFORNIA LILIES

In number and beauty of its Lilies, California ranks next to Japan. My Terrace gardens contain what a great many people say is the largest and most complete collection of Lilies in the world. It is worth a long journey to be here at flowering season.

Lilium Humboldtii and Allied Species

HUMBOLDTII

A grand Lily, growing as tall as ten feet, but usually 4 or 5 feet high, with very stout stem and many large orange-red flowers, spotted with small maroon spots. Immense, 9 inches and upwards in circumference, 40 cts. each, \$4 per doz.; very large, 8 to 9 inches in circumference, 30 cts. each, \$3 per doz.; fine, 7 to 8 inches in circumference, 20 cts. each, \$2 per doz.

HUMBOLDTII MAGNIFICUM

A grand species, differing from preceding in having darker foliage, in the spots on the flowers, each surrounded by a circle of crimson. Splendid growing and flowering qualities. It is sure to flower the first year after planting, and is a splendid grower. None better. Good bulbs, 30 cts. each, \$3 per doz.

HUMBOLDTII BLOOMERIANUM

Like the preceding in color and flowering qualities, but with a very small bulb and a small stem. Very pretty. 30 cts. each, \$3 per doz.

BOLANDERII

One of the rarest of Lilies; 1 to 3 feet high, slender, with bell-shaped, deep crimson-red flowers, dotted purple. 40 cts. each, \$4 per doz.

COLUMBIANUM

Like a miniature *L. Humboldtii*. Bright golden yellow, spotted maroon. $2\frac{1}{2}$ to 3 feet. Good. 20 cts. each, \$2 per doz.

Lilium Washingtonianum and Near Species

WASHINGTONIANUM PURPUREUM

The fine halftone on page 21 shows the flowers to perfection as to form. They are from white to a rich wine-color, and change after opening; often 6 to 7 feet high, with a stout stem and many leaves, and as many as 25 very fragrant flowers. The bulbs are easily handled, but will not give a good bloom the first year. The Shasta Lily is a variety of this one. Large bulbs, 8 to 9 inches in circumference, 30 cts. each, \$3 per doz.

RUBESCENS

(The Redwood, or Chemise Lily)

A beautiful and very distinct kind, having tall, slender stalks and exquisitely fragrant flowers of a tubular shape. On opening, they are white dotted purple, but soon change to deeper purple, and all colors between white and purple will be seen on one stem. To succeed with this, drainage must be perfect. It is not easily grown. 40 cts. each, \$4 per doz.

KELLOGGII

Three to 4 feet high, with a slender stem and from three to fifteen flowers with pink, revolute petals. Very fragrant. 40 cts. each, \$4 per doz.

Culture of Group I

The Lilies of the Humboldtii and the Washingtonianum groups are natives of cool slopes in mountainous regions, where they grow in forests, or where protected by a growth of shrubs. The soil is deep, perfectly drained, composed of clay or a rich loam, mixed with leaf soil and the debris from broken-down rocks. In cultivating these Lilies, we should take lessons from nature.

SITUATION OF THE LILY BED. They should be planted where they are protected from cold winds and where the soil is not dried out by the direct heat of the sun. On large grounds, the ideal location is a glade in the woods. The partial shade of deciduous trees, the shelter of rhododendrons or bamboos, or similar shrubs, or of tall-growing perennial plants, may give conditions quite suited to their culture. A protected nook on the shady side of the house is best on small grounds, and ferns are congenial neighbors.

DRAINAGE. This must be perfect. If the ground is heavy and clammy, underdrainage should be given, and the soil made lighter and looser by the addition of humus.

SOIL. This should be a fairly good loam, mixed with humus and sand. New manures are always to be avoided with Lilies.

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

WATERING. Lilies should not be kept water-soaked, but should have a moist surface during the growing season. Kept rather dry after they have flowered.

Never Move a Lily Bulb Unless Absolutely Necessary.

My very best success with Lilies of this group has been in a very loose, gravelly soil, rich with leaf-mold, and with water running above and percolating under the roots.

Lilium Humboldtii. One of the grandest of the world's Lilies. The type, orange, spotted maroon.
The easily grown variety *Magnificum*, the same, richly eyed with scarlet

LEOPARD BOG LILIES

PARDALINUM

This is one of the best Lilies for the garden. It grows well in any loam or gravelly soil, in sand, or lighter clays, as long as given some shade and water. The stout stems are very leafy and from 3 to 6 feet high, and the many large and very showy flowers are richly colored with orange centers and crimson tips, with many spots in the central section. No Lily is more likely to give satisfaction in the garden. 10 cts. each, \$1 per doz.

PARDALINUM, GLOW

A grand Lily with the good qualities of Pardalinum; it has a flower in which the upper part is an intense crimson, and the center orange-red, finely dotted with brown. Almost as intense in color as Tenuifolium. \$1 each.

PARRY'S LILY

Parryii is one of the world's finest species. The slender, leafy stem is from 3 to 5 feet high and bears from a few to 25 long, trumpet-shaped, lemon-yellow, sweetly fragrant flowers. In some forms, the center is faintly dotted brown; in others solid. Large bulbs, \$1 each; fair bulbs, 40 cts. each, \$4 per doz.

ROEZLII

Stem slender, leaves crowded, very long and slender, the closely revolute perianth a clear reddish orange, dotted maroon. Needs to be well massed to get its best effect. As it grows quite tall, it can be planted in low places. A rare Lily; long lost, but reintroduced by myself. I found it high up in the mountains, in damp soil along a little stream. 20 cts. each, \$2 per doz.

SMALL-FLOWERED BOG LILIES

PARVUM

A charming little Lily, which, under favorable treatment, grows 5 or 6 feet high, with many small, bell-shaped flowers. It is orange at the center, with crimson tips. From the sub-alpine regions about Lake Tahoe. 20 cts. each, \$2 per doz.

PARVIFLORUM

A very charming Lily, like a miniature Pardalinum, slender of stem, spare of foliage and small of flower. Does not give any moss effect and is at its best when mixed with hardy perennials. The earliest-flowering of our species. 15 cts. each, \$1.50 per doz.

PARVUM LUTEUM

A taller variety, with clear yellow flowers. 20 cts. each, \$2 per doz.

MARITIMUM

Beautiful, with dark red funnel-formed flowers. 20 cts. each, \$2 per doz.

Culture of Group II

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

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

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

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

SITUATION. My description of the natural habitat will suggest the best location where large and varied grounds give a choice. On the margin of a pond or brook, planted a foot or so above the water-level, in moist, meadow-like expanses in sheltered places, or damp openings in woods. These are ideal locations for all of these Lilies.

In small grounds, a hydrant can be so arranged as to give a constant drip; the fern corner is good, and the rhododendron bed is perfectly adapted.

Forms of the Leopard Lily. The best of all Garden Lilies. It thrives in any good garden soil, and will hold its own for many years. A most showy Lily; 3 to 8 feet high

Washington Lily, *Lilium Washingtonianum purpureum*. A grand Lily, opening white and gradually turning purple

Trillium sessile Californicum. An old group in a fern-bed

TRILLIUMS

Trilliums are very attractive plants of the Lily family. The forms known as Wood Lilies or Wake-Robins are well known in the East and are fine woodland plants. Of these, the best is *T. grandiflorum*, to be had from most eastern dealers. In the forms *T. sessile*, we have an altogether different tribe and a much better one from the standpoint of easy culture and ability to hold their own for years in the garden. The accompanying photograph is of a colony at Ukiah which, with no care, has increased in beauty for at least 15 years, and I have seen many such

Soils Preferred and Characteristics

A better plant for the shaded corner, damp woodland, border of streams, where the soil is moist, or for the shaded parts of the garden, does not grow. It takes a year for them to take hold, but they will then improve for years. The flowers come early, are fine and very lasting and the leaves are handsome. There is no better bulbous plant to naturalize, and I have them in perfection in gravel, loam, sand and heavy clay, and in each case, with no care whatever, and with our dry Californian summer. I have three color forms.

SESSILE CALIFORNICUM

A strong plant, a foot high, with the separate leaves $5\frac{1}{2}$ inches long, by $4\frac{1}{2}$ inches wide, and the petals $3\frac{1}{2}$ inches long. Flowers pure white, with purple centers. Very fragrant. Forms masses of many individuals.

SESSILE, SNOW QUEEN

Same, with broader petals, flowers pure white, creamy centers.

SESSILE RUBRUM

Same, with narrow petals; deep maroon-purple to reddish purple.

All of the above at 5 cts. each, 50 cts. per doz., \$4 per 100; good small bulbs of the first two at \$3 per 100, \$25 for 1,000. The larger part of these small bulbs are of flowering size

Beautiful Hardy Plants of California

From a vast number of beautiful things in this line I am selecting a few of easy culture and special merit. There are hundreds of others.

AMERICAN COWSLIPS (*Dodecatheons*)

These earliest of spring flowers are known and loved under a variety of names and are much like a *Cyclamen* in flower. They like a loamy soil and naturalize easily.

There are several Californian forms. In San Diego county is *Clevelandii*, tall, with white flushed soft pink flowers; in the north *Hendersonii*; very hardy, with rich reddish flowers. Other pretty ones are the pink *Patulum*, with exquisite little pink blossoms, and the *Patulum*, with light yellow flowers. The roots become as dry as tinder and are handled dry. They are good for pot-plants and will force well. The price of all is 3 cts. each, 30 cts. per doz., \$2.25 per 100.

LARKSPURS (*Delphiniums*)

We have in California a most charming race of Larkspurs that grow year after year. Two are scarlet. *Cardinale*, known as the scarlet Larkspur of the South, grows as high as 8 feet, and is most showy; it demands a warm situation and a loose soil. *Nudicaule*, on the other hand, likes shade even if it is heavy, and grows a foot or two high; it is ornamental in every part. My price for *Cardinale*, 25 cts. each, or \$2.50 per doz.; for *Nudicaule*, 10 cts. each, \$1 per doz., \$7.50 per 100.

Different, but just as beautiful, are the sorts in blue and purple, growing from a foot to 3 feet high. Of these *Decorum* is deep blue-purple; *Emilæ*, light sky-blue. The roots of all are handled dry, and they take well to ordinary garden culture. I can supply the blue sorts at 60 cts. per doz.

OENOTHERAS, or EVENING PRIMROSES

All the kinds are pretty, but in *Ovata* we have something unusually attractive. The root is like a small parsnip, and ripens in the summer, so that it can be handled dry like a bulb. It starts very early and would doubtless force well. Early in the spring a circle of leaves is formed flat on the ground, then a large number of bright yellow flowers follow for a long time. Planted 8 inches apart, it would make a most attractive early border for a bulb bed, or planted any place in the garden it would be fine. Strong roots of this are worth 5 cts. each, 50 cts. per doz.

As pretty in a way is *Oenothera speciosa*, which has a running root that throws up stems every little way. Each stem has a circle of leaves, and, through midsummer, each night sends out pure white flowers of great beauty. Plant a cluster in some dry, sunny spot and you will be delighted. Price 15 cts. each, \$1.50 per doz.

PLANTS FOR THE FERN BED

All Fern-lovers are looking for plants to go in the Fern bed, and I will put up a collection of 12 plants, in four fine sorts, that will please all for this purpose. Price for the twelve, \$1.50.

ROCK ROSES, or LEWISIAS

In the dry great basin there are lovely plants called Rock Roses, Bitter Root, or *Lewisias*, which are found in rocky or gritty soils, often in the scant soil on a rock face. These flower most beautiful early in the summer, then dry off and rest till fall. All are exquisitely lovely. *Tweedii* is a great plant, with soft salmon flowers, and is both rare and beautiful; this at \$1 each. *Howellii* is not so big, but a most lovely plant, 50 cts. each; while *Oppositifolia* is still smaller, with white, satiny flowers, 10 cts. each, \$1 per doz. Smaller yet, but most exquisite in its satiny pink flowers, is *Rediviva*, which might be pressed in a book for a season and then would grow if planted. These at 5 cts. each, 50 cts. per doz.

SAXIFRAGA MERTENSIANA, HOUND'S-TONGUE AND OTHERS

The dainty *Saxifraga Mertensiana* is a splendid rock plant. I doubt its hardiness in the East, but in California it grows in loose soil on moist rock faces where there is a drip. It has a bulb, and starts with early rains in generous clumps. In every part it is very lovely; the leaves are scalloped and of a shiny green; flowers small and white with red stamens in pretty contrast. It takes kindly to cultivation and would be a dainty companion for the potted ferns in a cool house. 5 cts. each, 50 cts. per doz., \$4 per 100.

Another most charming plant with us is the *Hound's Tongue*; large leaves; it has a panicle of blue flowers, each one rimmed with white, like Forget-Me-Nots. The stem is about 2 feet high. Price of these, 15 cts. each, \$1.50 per doz.

All of our native *Pentstemons* are most charming subjects for hot, dry, places, especially if rocky. I can supply them in reds or blues and in a dozen sorts, all at 15 cts. each, \$1.50 per doz.

Wild Flower Seeds

California is far-famed for its wild flowers. In former days these could be seen, during the spring, in tracts hundreds of miles long; and they still grow profusely on untilled lands. The greater part of these are annuals which are self-sown in the summer, and they start into growth when the first rains come in the autumn. With them, however, were many perennial plants which nature had wonderfully fitted to endure the four months of drought every summer. Many of these died to the ground during the dry period, but the root, which had ripened absolutely dry, was ready in the fall to start into growth like the annuals.

Many of our best annuals have long been in cultivation, and are to be found listed in all the best seed catalogs throughout the world. Most of these, however, have been changed by cultivation so that they are little like the wild flowers. I have experimented with many sorts and am offering those that are most easily grown and most effective. Their uses are various, but the first and best use of all is to brighten up the corners and wild spots about the home, where water will not reach, or where lack of time does not allow well-cared-for beds.

Ground under trees, and especially newly broken ground where grading has been done, or roads have been made, can be made beautiful by sowing wild flower seeds liberally in the fall. All of these flowers are beautiful when planted in regular beds, like common annuals. At summer homes, old and new, throughout the region of our beautiful mountain and coast resorts, it is especially desirable to sow wild flower seeds liberally.

The Leading Varieties

For hot gravelly or sandy places, the best of all are *Abronias*, or "Sand Verbenas." These need no water, and bloom profusely all summer, forming a beautiful carpet in lilac, lilac with white eye, and yellow. Others are *Argemone hispida*, a beautiful white poppy; *Oenothera Missouriensis*, tall, with large yellow flowers; *Pentstemons*, which flower after the first year and are very showy; *Bartonias*, with golden flowers.

For open places in sun or light shade, there is *Calliopsis bicolor*, rich in yellow and maroon; *Clarkia elegans*, in medium pink; *Clarkia pulchella*, in lighter pink; *Eschscholtzia maritima*, in yellow and orange; *Eschscholtzia Californica*, the immense reddish orange California poppy of the great valleys; *Lupinus nanus*, the best bedder, a splendid blue-purple with white markings; *Cream Cups*, sometimes called Owls' Cover, which gives a wonderful mass effect in white or soft pink.

On hills or rough places, plant *Bahia arachnoides*, a splendid, hardy, yellow, daisy-like flower; all *Clarkias*; all *Godetias*; *Dicentra chrysantha*, a yellow Bleeding Heart; *Phacelia Parryii*, in deep blue; *Viola pedunculata*, the much-loved yellow violet of the South.

In light shades splendid success will be had with *Collinsia bicolor*, a fine bedder; *Spanish poppy*, in coppery red; *Clarkias*, the exquisite *concinum* especially; *Phacelia Parryii*, and all the *Violets*.

I can supply seed of all these wild flowers at 10 cts. per packet, 12 packets for \$1. Ounce rates will be quoted on application.

Sowing Wild Flower Seeds

THE TIME.—If the land does not produce a dense growth of grass, sow with or before the first fall rains. No raking in of seed is then necessary. If the grass is dense, allow the rains to start it, then turn it under by shallow spading, or hoe it off, and rake the seeds into the fresh dirt as early as possible. If the seeds are not in before frosts come, they are liable to be lifted out by the freezing later. If sowing is not done by December 1, it had better be left until late February, when it may be done in the same way as in fall.

MANNER OF SOWING.—Mix a small quantity of seeds with a large bulk of dry dirt or dust, and sow this as evenly as possible. It is almost impossible to spread the seed thinly enough in any other way. If the coarse grasses are subdued, wild flowers will resow themselves, but if the grasses reseed much, it will be necessary to sow the flowers every year. Under trees or on rough ground the wild flowers come even too thick, and it may help them there to thin by raking, after they are well established.

How One Man Did It

On one large place not far from San Francisco bay, several acres were sown in wild flower seeds last December. The space between a large number of ornamental trees had been plowed to keep down the weeds and grass, and the seeds were sown, without any raking in, just before a rain. The rain covered them and an excellent stand was secured. In April there were sheets of *Baby Blue Eyes* in both the deep blue (*Insignis* type), and the *maculata*; then came wide masses of *Gilia tri-color*, following these *Clarkias* and *Godetias* galore, and finally abundant *Eschscholtzias*. The *Eschscholtzias* are perennial in California and improve greatly with age. Next year *Lupines* will be put in early with a coarse harrow, and their flowers will vary the effect with great expanses of orange and purple in early May. The smaller flowers will seed themselves, and, if all are mowed off in June, and the ground given a wetting then, there will be a heavy second crop of *Eschscholtzias* in midsummer. The cost of the seed for this place was about \$60.

CATALOGS ISSUED BY CARL PURDY

CALIFORNIA BULB BOOK

This catalog of Californian bulbs is issued in September, and will be sent to all persons already on my mailing list, and also to others on request. A new edition is gotten out usually every other year.

DUTCH AND OTHER EUROPEAN BULBS, JAPANESE LILIES, ETC.

I issue a catalog of Tulips, Daffodils, Hyacinths, Irises, Japanese Lilies, Pæonies, and roots for fall planting and many other fine bulbs. It is usually in the hands of my customers by September 1. Cultural directions are very full and the illustrations are beautiful. Mailed on application to inquirers, and sent to customers.

HARDY PERENNIAL PLANT BOOK

About December 1 of each year, a preliminary list of Hardy Plants will be issued. It will cover the very best sorts for Californian planting, especially the novelties that I have tried and proved the previous summer. About March 1, my spring and fall book of Hardy Perennial Plants will be issued. It also will be well illustrated and will have ample cultural directions. I am now making a specialty of hardy perennials and add many fine things every year to my already large collection.

FERNS AND PLANTS FOR THE FERN-BED LIST

A little essay on the culture of our native ferns, and of the best plants to accompany them to make a beautiful picture, will be included in the Hardy Plant Catalog. There is nothing so well fitted as ferns for the cold, shaded corners that in most homes are bare.

RARE NATIVE PLANTS LIST

My first work was in collecting rare plants as well as bulbs. But the demand for our beautiful native hardy plants has never justified me in growing a stock of them. Through the traveling collectors whom I have on the road all of the season, and through a large number of collecting correspondents, I am able to reach a great variety of Western plants and to collect to order. A typewritten list of a large number will be sent on application. If rare plants are wanted, special collecting trips will be undertaken.

INDEX TO CONTENTS

	Page
Brodiaeas	3
" Floral Firecracker	3
Calochortus	5
" Globe Tulips	5
" Star Tulips	5
" Mariposa or Butterfly Tulips	7
" Various Mariposa Tulips	9
" Culture of all Tulips	11
Camassias	12
Fritillarias	13
Fritillarias, Mission Bells	13
Dog's-tooth Violets	14-16
Lilies	17-21
Trilliums	22
Hardy Plants of California	23
American Cowslips	23
Perennial Larkspurs	23
Evening Primroses	23
Plants for Fern Beds	23
Lewisias, Bitter Root, or Rock Roses	23
Pentstemons	23
Wildflowers Seeds and How to Grow Them	24

CARL PURDY

**UKIAH, MENDOCINO COUNTY
CALIFORNIA**