Historic, archived document

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

62.09

Indexed

1923

New
Dahlia
Flowered
Zinnia

PAYNE'S
GARDEN
GUIDE
SEEDS &
PLANTS
& TREES

Theodore Payne
345 S. Main St., LOS ANGELES

TO MY FRIENDS AND PATRONS

In presenting this, my nineteenth annual catalogue, I wish to call the attention of intending planters to the following reasons why I can render them superior service and offer seeds and plants unsurpassed for California and the Southwest.

Experience.—To new and prospective customers I would like to say that, having had thirty-four years' practical experience in the Seed and Nursery business (twenty-nine of which have been spent in Southern California), feel I am in a position to give advice regarding all horticultural matters pertaining to this section.

Sources of Supply.—My sources of supply are world-wide, and my stocks are purchased wherever the best seeds are obtainable. Having traveled extensively through the principal seed-growing centers of Europe, as well as this country, I am personally acquainted with most of the growers. I have seen their crops and observed their methods, and therefore am in a position to secure the best seeds.

Vegetable Seeds.—In my list of vegetable seeds will be found varieties thoroughly tried in California, and adapted to prevailing conditions of soils and climate. I have written special instructions for the growing of each kind.

Flower Seeds.—This is a great specialty of mine, and I wish to call your particular attention to my list of Novelties and Specialties in Flower Seeds on pages 19 to 23, California Wild Flower Seeds on pages 36 and 37, also my superior strains of Pansy, Stock, Antirrhinum, Cineraria, Coleus, Calceolaria, Aster, Scabiosa, Sweet Pea and Mammoth Zinnia. I have written instructions for the growing of annuals under California conditions, and special directions for all other Flower Seeds, thus making this portion of my catalogue the most complete ever published on this coast.

Eucalyptus Seeds.—This is a department to which I have given much study and many years of careful observation. I shall be pleased at anytime to give intending planters advice on this subject. In these pages will be found full directions for sowing the seeds, raising and transplanting the plants. Of those species obtainable here, my seeds are collected by my own men under my personal supervision from specimen trees, and can be relied on to be of the highest quality and true to name. For those species not yet obtainable here, I am in direct communication with the very best and most reliable authorities in Australia, who collect the seeds for me in their native habitats.

Tree and Palm Seeds.—Of these I have the largest and most complete assortment offered on the Pacific coast, including rare and desirable species. I enjoy a large trade in this line among nurserymen, who will testify to their genuineness and high quality.

Nursery Department.—I specialize in the growing of California Native Trees, Shrubs and Plants, but also carry a complete line of exotics, including Shrubs, Shade Trees, Fruit Trees, Citrus and Semi-Tropical Fruits, Berries and Perennial Flowering Plants. My new nursery is located at 2969 Los Feliz Boulevard, just west of the Tropico Potteries and about half way between Hollywood and Glendale. I shall be glad to have customers call there and inspect my stock.

Landscape Department.—Specializing on California Wild Gardens and natural plantings of our native flowers, shrubs and trees, it will afford me a pleasure to consult with those contemplating garden making. Nothing blends so harmoniously with a California landscape as the native flora, and nothing can be more effective at a minimum of expenditure in money, time and labor. I am a partner in a landscape firm, conducting its business professionally, through which we furnish consultation, plans and supervision of construction work for a fee, which is made commensurate with the service rendered.

Gardeners.—I keep a register of gardeners' names, and to all customers wanting such help, I will be pleased to recommend competent men.

Thanking friends and customers for their generous patronage in the past, and assuring them that I will use every endeavor to merit a continuance of their favors,

Sincerely,

PHONE 12480

THEODORE PAYNE.

OBSERVE WHEN ORDERING

How to Order.—Write plainly your name, town, county, and state, giving street numbers and postoffice box when expedient. Send all money by postoffice or express money order, bank draft or check, and small sums by registered letter. Postage stamps received in sums up to one dollar.

Terms.—Orders must invariably be accompanied with the cash, or satisfactory reference.

Prices.—As the prices on all staple articles are governed by the market fluctuations, they are subject to change without notice.

Postage Prepaid.—To customers within the United States I prepay postage at prices quoted in this catalogue on all flower, tree, palm and vegetable seeds, except peas, beans, corn, grass and clover seed, stock beets, or where otherwise noted. All plants, trees, and bulbs are forwarded at purchaser's expense and risk. No plants shipped C. O. D. For further particulars see heading above Nursery Department.

Parcel Post.—Seeds can be forwarded by parcel post, and owing to the convenience of having mail delivered at your door, it is well to take advantage of the low rates.

20 pounds anywhere within the city limits of Los Angeles for 15c.

20 pounds one hundred and fifty miles 24c, and 1c for each additional pound up to 70 pounds.

Nothing heavier than 50 pounds may be mailed farther than 150 miles in one package. The Eighth Zone includes Mexico and Canada. Nothing heavier than 11 pounds can be mailed to Mexico or 4 pounds 6 ounces to Canada in one package.

DOMESTIC PARCEL POST RATES

On Seeds, Plants, Bulbs, Roots, etc., within the U. S. and Possessions

First Zone, Los Angeles and within 50 miles of Los Angeles	
Second Zone within 50 to 150 " " "	
Third Zone " 150 to 300 " " "	
Fourth Zone " 300 to 600 " " "	
Fifth Zone " 600 to 1000 " " "	
Sixth Zone " 1000 to 1400 " " "	
Seventh Zone " 1400 to 1800 " " "	
Eighth Zone " all over 1800 " " "	

First lb. or fraction	Each additional lb. or fraction
5c.	1c.
5c.	1c.
6c.	2c.
7c.	4c.
8c.	6c.
9c.	8c.
11c.	10c.
12c.	12c.

When it is required that postage be added to the purchase price of any article, note the distance from Los Angeles and see which zone you are in. It is then easy to estimate the exact amount of postage required.

Non-Warranty.—While I exercise the greatest care to have all seeds pure and reliable, I do not give any warranty, expressed or implied, as to purity, description, quality, productiveness or any other matter of seeds, plants or trees I send out and will not be in any way responsible for the crop. If the purchaser does accept the goods on these terms they must be returned at once.

GARDEN CALENDAR

NOTE.—In all cases read the special instructions for sowing the different kinds of vegetable and flower seeds, which are given under the headings throughout this catalogue.

JANUARY

Vegetable Garden.—If the ground has not already been worked over this season, spread a good thick dressing of stable manure, and dig deeply, working the surface down finely with a rake. Sow beet, early cabbage, carrot, cress, corn salad, dandelion, endive, kale, kohlrabi, leek, lettuce, mustard, onion, parsley, parsnip, peas, radishes, spinach and turnip. Prepare hot beds and sow peppers and tomatoes. Plant potatoes, asparagus, horseradish and rhubarb roots also cabbage plants.

Flower Garden.—If the ground has not been worked over this season, spread a good thick dressing of stable manure over the surface, and dig as deeply as possible. Sow *acroclium*, *alyssum*, *antirrhinum*, *calendula*, *calliopsis*, *candytuft*, *centaurea*, annual *chrysanthemum*, *clarkia*, *collinsia*, *cosmos*, *eschscholtzia*, *gaillardia*, *larkspur*, *linum*, *lupinus*, *mignonette*, *nemophila*, *nigella*, *poppies* and sweet peas. Continue to plant *narcissus*, *jonquils*, *anemones*, *ranunculus*, *German iris*, *Japanese iris*, *Lilium auratum*, *L. speciosum* and *L. humboldtii*, also *calla lilies*, *gladiolus*, *amaryllis*, *agapanthus*, *lily-of-the-valley*, *spiraera* and *delietyra*.

FEBRUARY

Fruit Trees.—All deciduous fruit trees can be planted this month.

Vegetable Garden.—Sow beet, early cabbage, carrot, corn salad, cress, dandelion, endive, kale, kohlrabi, leek, lettuce, mustard, onion, parsley, parsnip, peas, radish, rhubarb, salsify, spinach, turnip, also egg plant, peppers and tomatoes on hot beds. Plant potatoes, asparagus, horseradish and rhubarb roots and cabbage plants.

Flower Garden.—This is a good month to plant roses and all kinds of ornamental trees and shrubs. Sow *acroclium*, *alyssum*, *antirrhinum*, *calendula*, *calliopsis*, *cosmos*, *eschscholtzia*, *gaillardia*, *larkspur*, *linum*, *lupinus*, *mignonette*, *nemophila*, *nigella*, *poppies* and sweet peas, in the open ground; also *balsam*, *begonia*, *gloxinia*, *lobelia*, *pyrethrum*, *scabiosa*, *verbena*, *petunia* and *salvia* in seed pans or boxes for transplanting later. Continue to plant *anemones*, *ranunculus*, *German iris*, *Japanese iris*, *Lilium auratum* and *L. speciosum*, *gladiolus*, *agapanthus*, *amaryllis*, also *begonia*, *caladium*, *gloxinia* and *tuberose*.

MARCH

Fruit Trees.—Planting of all deciduous fruit trees should be completed during this month. Citrus and other evergreen fruit trees may also be planted now.

Vegetable Garden.—Sow artichoke, asparagus, beans, beets, late cabbage, carrot, celery, chervil, chicory, corn salad, sweet corn, cress, cucumber, dandelion, egg plant, endive, kale, kohlrabi, leek, lettuce, muskmelon, watermelon, mustard, okra, onion, parsley, parsnip, peas, pepper, potatoes, radish, rhubarb, salsify, sorrel, spinach, squash, tobacco, tomato and turnip. Plant out cabbage, tomato and pepper plants.

Flower Garden.—Continue to plant roses and ornamental trees and shrubs. Hardy annuals as mentioned for February and the previous months may still be sown the early part of this month, also sweet peas. Sow *amaranthus*, *aster*, *balsam*, *begonia*, *celosia*, *centaurea*, *cobaea*, *dahlia*, *gloxinia*, *helianthus*, *heliotrope*, *humulus*, *hunnemannia*, *malope*, *mandevilla*, *marigold*, *mina lobata*, *nasturtium*, *pyrethrum*, *salpiglossis*, *salvia*, *scabiosa*, *verbena* and *zinnia*. This is the best month in which to sow most kinds of tree seeds. Plant *gladiolus*, *begonia*, *tuberose* and *dahlia* bulbs.

APRIL

Vegetable Garden.—Sow artichoke, asparagus, beans, beets, brussels sprouts, late cabbage, carrot, celery, chervil, late cauliflower, chicory, corn salad, sweet corn, cress, cucumber, dandelion, egg plant, endive, kohlrabi, leek, lettuce, muskmelon, watermelon, mustard, okra, onion, parsley, parsnip, peas, pepper, potatoes, radish, rhubarb, salsify, sorrel, spinach, squash, tobacco, tomato and turnip. Plant out cabbage, egg plant, pepper and tomato plants.

Flower Garden.—Sow *amaranthus*, *aquilegia*, *aster*, *balsam*, *celosia*, *cobaea*, *morning glory*, *centaurea*, *cosmos*, *cypress vine*, *dahlia*, *fuchsia*, *helianthus*, *heliotrope*, *humulus*, *hunnemannia*, *ipomoea*, *mandevilla*, *African and French marigolds*, *maurandia*, *mina lobata*, *nasturtium*, *Iceland poppy*, *oriental poppy*, *portulaca*, *polyanthus*, *salpiglossis*, *scabiosa*, *Shasta daisy*, *statice*, *verbena*, *wallflower* and *zinnia*. Plant out *begonia*, *tuberose* and *dahlia* bulbs; also *chrysanthemum* and *aster* plants.

MAY

Vegetable Garden.—Sow artichoke, asparagus, beans, beets, brussels sprouts, carrot, late cabbage and cauliflower, chervil, chicory, corn salad, sweet corn, cress, cucumber, dandelion, egg plant, endive, lettuce, muskmelon, watermelon, mustard, okra, onion, parsley, par-

snip, peas, peppers, potatoes, pumpkin, radish, salsify, sorrel, spinach, squash, tomato and turnip. Plant out cabbage, brussels sprouts, egg plant, pepper, tomato and sweet potato plants.

Flower Garden.—Sow *amaranthus*, *aquilegia*, *balsam*, *celosia*, *centaurea*, *cosmos*, *morning glory*, *campanula*, *cypress vine*, *delphinium*, *digitalis*, *helianthus*, *humulus*, *hunnemannia*, *ipomoea*, *African and French marigolds*, *maurandia*, *mina lobata*, *nasturtium*, *portulaca*. Plant *tuberose* and *dahlia* bulbs, also *aster* and *chrysanthemum* plants.

JUNE

Vegetable Garden.—Sow beans, beets, brussels sprouts, late cabbage and cauliflower, corn salad, sweet corn, cress, cucumber, dandelion, egg plant, endive, lettuce, muskmelon, watermelon, mustard, okra, onion, parsley, peas, pepper, pumpkin, radish, spinach and squash. Plant out brussels sprouts, cabbage, cauliflower, egg plant, pepper, tomato and sweet potato plants.

Flower Garden.—Sow *centaurea*, *cosmos*, *nasturtium* and *portulaca*. Plant *dahlia*, *chrysanthemum*, *aster*, *petunia*, *pentstemon* and *salvia* plants.

JULY

Vegetable Garden.—Sow beans, beets, brussels sprouts, cress, cucumber, dandelion, endive, kale, kohlrabi, lettuce, mustard, okra, onion, parsley, peas, pumpkin, radish, spinach and summer squash. Plant out brussels sprouts, cabbage and cauliflower plants.

Flower Garden.—Sow *cosmos*, *nasturtium* and *portulaca* seed.

AUGUST

Vegetable Garden.—Sow beans, beets, brussels sprouts, early varieties of cabbage and cauliflower, cress, dandelion, endive, kale, kohlrabi, lettuce, mustard, onion, parsley, peas, potatoes, radish and spinach; also tomatoes for winter crop in frostless sections. Plant out brussels sprouts plants.

Flower Garden.—Sow *calceolaria*, *cineraria*, *pansy*, *primula*, *stocks* and *Christmas flowering sweet peas*.

SEPTEMBER

Vegetable Garden.—Sow beets, early cabbage and cauliflower, carrot, corn salad, cress, dandelion, endive, kale, kohlrabi, leek, lettuce, mustard, onion, parsley, parsnip, peas, potatoes, radish and spinach, also tomato for winter crop in frostless sections.

Flower Garden.—Sow *calceolaria*, *campanula*, *cineraria*, *pansy*, *pentstemon*, *primula*, *oriental poppy*, *Shasta daisy*, *stocks* and *Christmas flowering sweet peas*. Plant bulbs of *Lilium harrisii* and *L. candidum*.

OCTOBER

Vegetable Garden.—Sow beets, early cabbage, carrot, corn salad, cress, dandelion, endive, kale, kohlrabi, leek, lettuce, mustard, onion, parsley, parsnip, peas, potatoes, radish, spinach and turnip.

Flower Garden.—This is a good month in which to sow hardy annuals in the open ground. Sow *acroclium*, *alyssum*, *bartonia*, *calendula*, *candytuft*, annual *chrysanthemum*, *clarkia*, *collinsia*, *cosmos*, *eschscholtzia*, *godetia*, *larkspur*, *linum*, *lupinus*, *mignonette*, *nemophila*, *poppies*, *pansy* and *stocks*; also *California Wild Flowers*. Plant *hyacinths*, *tulips*, *narcissus*, *jonquils* and other Dutch bulbs.

NOVEMBER

Vegetable Garden.—Sow beets, early cabbage, carrot, corn salad, cress, dandelion, endive, kale, kohlrabi, leek, lettuce, mustard, onion, parsley, parsnip, peas, potatoes, radish, spinach and turnip.

Flower Garden.—Sow hardy annuals in the open ground, such as *acroclium*, *alyssum*, *bartonia*, *calendula*, *candytuft*, annual *chrysanthemum*, *clarkia*, *collinsia*, *cosmos*, *eschscholtzia*, *godetia*, *larkspur*, *linum*, *lupinus*, *mignonette*, *nemophila*, *poppies*, *sweet peas*, *pansy* and *stocks*; also *California Wild Flowers*. Continue to plant *hyacinths*, *tulips*, *narcissus* and other Dutch bulbs.

DECEMBER

Vegetable Garden.—This is a good month in which to spade over the ground, spread a good thick dressing of stable manure over the surface, and dig the ground as deeply as possible. Sow beets, early cabbage, carrot, corn salad, cress, dandelion, endive, kale, kohlrabi, leek, lettuce, mustard, onion, parsley, parsnip, peas, potatoes, radish, spinach and turnip.

Flower Garden.—This is a good month in which to spade over the ground, spread a good thick dressing of stable manure over the surface and dig the ground as deeply as possible. Continue to sow hardy annuals in the open ground, *acroclium*, *alyssum*, *bartonia*, *calendula*, *candytuft*, annual *chrysanthemum*, *clarkia*, *collinsia*, *cosmos*, *eschscholtzia*, *godetia*, *larkspur*, *linum*, *lupinus*, *mignonette*, *nemophila*, *poppies*, *sweet peas*, *pansy* and *stocks*; also *California Wild Flowers*. Continue to plant Dutch bulbs and lilies.

SEEDING TABLE FOR CALIFORNIA

Name of Vegetable	Time to Sow	Seeds Required for		Depth to sow Seeds outdoors	Distance for Plants		Ready for use from seed in about
		Seeds Required for			Distance for Plants		
		100 Ft. Row	One Acre		In Rows	Rows Apart	
Artichoke	March to May inclusive	1 oz.	12 ozs. T.	1 in.	4 ft.	4 ft.	12 mos.
Asparagus	March to May inclusive	1 oz.	2 lbs. T.	1 in.	1½ ft.	3 ft.	3 to 4 yrs.
Beans, Bush	March to August, inclusive	1 lb.	25 to 50 lbs.	2 ins.	4 in.	2 ft.	45 to 65 days
Beans, Pole	March to August, inclusive	½ lb.	25 to 40 lbs.	2 ins.	3 ft.	3 ft.	65 to 90 "
Beet, Table	Any time	2 ozs.	12 lbs.	1 in.	6 in.	1 to 1½ ft.	90 to 120 "
Beet, Mangel	Any time	1 oz.	6 lbs.	1 in.	12 to 15 in.	3 ft.	150 "
Beet, Sugar	Any time	1 oz.	15 lbs.	1 in.	12 ins.	1½ to 2 ft.	90 to 120 "
Brussels Sprouts	April to August, inclusive	½ oz.	6 ozs. T.	½ in.	1½ ft.	2½ ft.	120 to 150 "
Cabbage, Early	August to March, inclusive	½ oz.	6 ozs. T.	½ in.	1½ ft.	2½ ft.	100 to 120 "
Cabbage, Late	March to May, inclusive	½ oz.	6 ozs. T.	½ in.	3 ft.	3 ft.	125 to 180 "
Carrot	September to May, inclusive	¾ oz.	3 lbs.	½ in.	5 to 6 in.	1¼ ft.	75 to 120 "
Cauliflower, Early	August and September	½ oz.	6 ozs. T.	½ in.	1½ ft.	2½ ft.	100 to 135 "
Cauliflower, Late	April to June, inclusive	¾ oz.	6 ozs. T.	½ in.	3 ft.	3 ft.	150 to 180 "
Celery	March and April	½ oz.	4 ozs. T.	½ in.	8 in.	3 to 4 ft.	125 to 150 "
Corn-Salad	September to June, inclusive	1 oz.	5 lbs.	½ in.	6 in.	12 to 18 in.	65 "
Corn, Sweet	March to June, inclusive	½ lb.	10 lbs.	2 ins.	1 ft.	3 ft.	50 to 100 "
Cress	Any time	1 oz.	2 to 3 lbs.	¼ in.	1 in.	1 ft.	30 "
*Cucumber	March to July, inclusive	1 oz.	2 lbs.	1 in.	4 ft.	4 ft.	60 to 85 "
*Egg-Plant	March to June	1 oz.	4 ozs. T.	½ in.	2½ ft.	4 ft.	150 to 160 "
Endive	Any time	1 oz.	4 lbs.	½ in.	10 in.	1¼ ft.	50 to 75 "
Herbs	Any time	1 oz.	-----	½ in.	6 in.	2 ft.	60 to 100 "
Kale	July to March, inclusive	½ oz.	6 ozs. T.	½ in.	1½ ft.	2½ ft.	100 to 120 "
Kohlrabi	July to April, inclusive	½ oz.	4 lbs.	½ in.	12 in.	2 ft.	90 to 120 "
Leek	September to April, inclusive	1 oz.	4 lbs.	¾ in.	10 in.	1½ ft.	120 to 160 "
Lettuce	Any time	1 oz.	3 lbs.	¼ in.	1 ft.	1½ ft.	60 to 100 "
Melons, Musk	March to June, inclusive	1 oz.	1 to 2 lbs.	1 in.	6 ft.	6 ft.	115 to 140 "
Melons, Water	March to June, inclusive	1 oz.	2 lbs.	1 in.	8 ft.	8 ft.	120 to 140 "
Okra	March to July, inclusive	2 ozs.	8 lbs.	1 in.	1 ft.	3 ft.	90 to 125 "
Onion	September to April, inclusive	1 oz.	4 to 5 lbs.	½ in.	5 in.	1¼ ft.	135 to 150 "
Onion Sets	Any time	1½ lbs.	300 lbs.	1 in.	4 in.	1¼ ft.	60 to 120 "
Parsley	Any time	1 oz.	3 to 5 lbs.	¼ in.	4 in.	1½ ft.	100 "
Parsnip	September to May, inclusive	1 oz.	5 lbs.	½ in.	5 in.	1¼ ft.	125 to 150 "
Peas	Any time	2 lbs.	80 lbs.	½ in.	2 in.	1½ to 4 ft.	60 to 90 "
*Pepper	March to June, inclusive	½ oz.	½ lb. T.	½ in.	2 ft.	2 ft.	100 to 150 "
Potato, cut	January to September, inclusive	5 lbs.	600 lbs.	5 ins.	1 ft.	2½ ft.	80 to 140 "
Pumpkin	April to July, inclusive	1 pkt.	2 lbs.	1½ in.	8 ft.	8 ft.	100 to 120 "
Radish	Any time	1 oz.	12 lbs.	½ in.	2 to 4 in.	1 ft.	20 to 50 "
Rhubarb	February to April, inclusive	¼ oz.	4 ozs. T.	½ in.	4 ft.	4 ft.	1 yr. & 60 "
Salsify	February to May, inclusive	2 ozs.	8 lbs.	½ in.	5 in.	1½ ft.	125 to 150 "
Spinach	Any time	2 ozs.	12 lbs.	½ in.	4 in.	15 in.	30 to 60 "
Squash, Bush	March to July, inclusive	1 oz.	3 lbs.	1½ in.	4 ft.	4 ft.	60 to 75 "
Squash, Late	March to June, inclusive	½ oz.	2 lbs.	1½ in.	8 ft.	8 ft.	100 to 125 "
Swiss Chard	Any time	2 ozs.	12 lbs.	1 in.	6 in.	1 to 1½ ft.	60 to 75 "
*Tomato	March to June, inclusive	1 pkt.	2 to 4 ozs. T.	½ in.	5 ft.	5 ft.	100 to 125 "
Turnip	October to May, inclusive	1 oz.	2 lbs.	½ in.	6 in.	1¼ ft.	90 to 120 "

Those marked with a (*) may be started in a hot-bed or small paper pots four or five weeks earlier and transplanted outdoors when safe. We recommend paper pots, as they are very cheap and lessen the danger of losing plants in transplanting.

T.—In the quantity column means the quantity of seed required to raise enough plants to transplant to an acre.

Payne's New Tomato VICTORY

The Most Perfect Tomato Ever Grown

ORIGIN. A cross between Stone and Livingston's Beauty, followed by several years of careful selection so that it now comes absolutely true to type.

SHAPE. Almost round; the most perfect tomato ever grown; not a bad shaped one in the whole field.

SIZE. Of medium size, averaging about half a pound in weight; very solid and with few seeds.

COLOR. A deep, rich red all over; flesh of the same color.

FLAVOR. All those who have tasted it pronounce it the sweetest and richest flavored tomato they have ever eaten. Contains a higher percentage of sugar content than any tomato on the market.

PRODUCTIVENESS. An extremely heavy bearer. On my own ranch produced at the rate of about 20 tons to the acre, without irrigation, as many as 71 ripe tomatoes appearing on one vine. Those who visited the field said they never would have believed it possible to grow such a crop.

FOR HOME USE. Its rich flavor, prolific qualities and handsome appearance, together with its other good points make it the best tomato for the home garden.

FOR SHIPPING. The very solid flesh and the thickness of the cell walls, together with its size and appearance, make it one of the very best varieties for shipping.

FOR TOMATO PASTE. On account of its thick flesh and deep rich color it should prove one of the very best varieties for making tomato paste.

FOR CANNING. To the canning industry this new tomato should prove a revelation. The very smooth skin, convenient size, solid meat and the thickness of the cell walls, which can be very well seen by the illustration on the back cover of this catalogue, together with its rich color and flavor, give it everything that is necessary to make up the most perfect canning tomato.

Mr. G. E. Grier of the Pasadena Canning Company, one of the best authorities on tomato canning in California, was very much impressed with the merits of this new tomato as a canning variety. Mr. Grier had a dozen cans of it put up at his cannery as a test, and when opened up the tomatoes turned out like

so many solid balls. An analysis made of one of these cans and a can of the Stone tomato, also put up by Mr. Grier, showed the following results:

Payne's Victory

VICTORY		STONE	
Total Acid	0.445%	Total Acid	0.365%
" Sugar		" Sugar	
(Invert) 3.58%		(Invert) 3.180%	
" Solids....	6.20%	" Solids ..	5.690%

Thus it will be seen that the Victory tomato is higher in acidity, in sugar and in solids. Worked out in percentages, the increase is as follows:

Acidity, 22% higher. Sugar, 12% higher. Solids, 9% higher.

According to bacteriologists, the high percentage of acidity tends to lessen the development of bacteria. The higher sugar content gives it higher preservative qualities and the advantage of the increase in solids goes without saying.

PRICE OF SEED

Pkt., 15c; ½ oz., 40c; 1 oz., 75c; ¼ lb., \$2.00; ½ lb., \$3.50; 1 lb., \$6.00.

Orange Marrow Pumpkin

The New Enormous Yielding Pumpkin

Which won a Grand Prize at the P.P.I.E.

Orange Marrow Pumpkin.

While I hesitate to offer a new variety of vegetable to the public until thoroughly tested as to its merits, I feel sure that the following description by the introducer is authentic, and the pumpkin the finest that has been placed on the market in years. The yield has been given at from 20 to 40 tons per acre. It is an immense cropper not only in weight but also the number of fruits, many of which are two feet across and weigh 150 pounds each.

Orange Marrow Pumpkin is a very large, round, flat pumpkin, brilliant vermilion orange in color. The flesh is extremely thick and solid, deep orange and of the finest quality. Do not hesitate to plant this variety if you want pumpkins for your table or market. I have a limited amount of seed to offer. Your order placed now will receive prompt attention.

Pkt., 15c.; oz., 35c; $\frac{1}{4}$ lb., 80c; lb., \$2.50.

The Famous Riverside Sweet Spanish Onion

While this onion has been on the market for the past two seasons, I have waited until its merits had been established before offering it to the public. The unusual mildness and excellent flavor has made this variety remarkably popular, and the demand for it is large in the vegetable markets all over the United States. It is a good keeper, large, thin straw-colored skin, and so mild that it can be eaten like an apple. This onion commands the high-

est price in the market and should be planted about the first of February, and will mature in August. It was introduced from Spain four years ago, and is the mildest Spanish onion known. Seed is scarce, but it will be profitable to the grower who plants this variety. Pkt., 15c; oz., 60c; $\frac{1}{4}$ lb., \$2.00; lb., \$6.00.

Plant Strawberries. See description of the New Carolina strawberry on page 62. The Carolina is the strawberry for California.

California Grown Cauliflower

The war has taught us many lessons and opened up many new resources. For years it was considered necessary to import all our cauliflower seed from Europe, but it has now been demonstrated that the best cauliflower seed for Southern California is grown right here at home. Indeed, it is now a fact that about 90% of the cauliflower grown here for market is produced from California grown seed. In view of this fact, I have made arrangements with one of the best growers in Southern California to save seed for me. This seed is carefully selected from only the very best heads and can be relied upon to produce the best results.

CALIFORNIA EARLY GIANT. Large solid heads, the best for early market. Pkt., 10c $\frac{1}{4}$ oz., 60c; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00; lb., \$20.00

CALIFORNIA SECOND EARLY GIANT. Larger than the preceding, for main crop. Solid heads and well protected by foliage. Pkt., 10c; $\frac{1}{4}$ oz., 60c; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00; lb., \$20.00.

CALIFORNIA LATE GIANT. Very large, for late market use. Pkt., 10c; $\frac{1}{4}$ oz., 60c. oz., \$2.00; $\frac{1}{4}$ lb., \$6.00; lb., \$20.00.

Choice Vegetable Seeds

ARTICHOKE

Alcachofa—Artischoke—Artichaut

Culture.—Sow early in spring in beds or drills and the following season transplant 4 feet apart each way.

LARGE GREEN GLOBE. The standard variety. Pkt. 10c, oz. \$1.20, ¼ lb. \$4.00.

ARTICHOKE PLANTS. See page 17.

Large Green Globe Artichoke

ASPARAGUS

Espargao—Spargel—Asperge.

Culture.—Soak the seed in warm water for 24 hours and sow in drills 14 inches apart; keep well watered and cultivated. The following winter transplant to rows 3 feet apart, placing the plants 18 inches apart in the row. The ground must be well manured and trenched 2 feet deep or more and the plants should be set so that when established the crowns will be 8 inches under the surface.

BARR'S MAMMOTH. The largest green variety. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

GIANT ARGENTEUIL. A favorite variety in the Paris markets and now in great demand in this country. Of enormous size, tender and of delicious flavor. Pkt. 5c, oz., 20c, ¼ lb. 50c, lb. \$1.50.

PALMETTO. The standard market variety, bright green color. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

ASPARAGUS ROOTS. See Page 17.

BEANS

Note.—Express or freight charges are not prepaid. Beans can be sent by parcel post at cheaper rates than my "postpaid" price. Where quantities of beans are ordered to be sent by parcel post, remit for the first pound at the "postpaid" rate, to cover postage and packing charges, and for the remainder at the rate quoted by "express" or "freight" and add the correct parcel post charge to your zone. This parcel post charge must be sent additional, or beans will be sent by express. For information, see parcel post schedule on first page of catalogue

DWARF OR BUSH

Frijoles—Bohne—Haricots Nains

Culture.—After danger of frost is over plant in good mellow soil in drills 2 inches deep and 2 feet between the rows, placing the beans 3 or 4 inches apart. One pound will sow 100 feet of row.

GREEN PODDED

BURPEE'S STRINGLESS GREEN POD. Pods long, straight, entirely stringless, brittle and of good flavor; early. Pkt. 10c, lb. 40c, postpaid; by express or freight; lb. 30c, 10 lbs. \$2.75.

CANADIAN WONDER. Long, flat pods, very tender, prolific, and in flavor and appearance unsurpassed. Pkt. 10c, lb. 40c, postpaid; by express or freight; lb. 30c, 10 lbs. \$2.75.

EXTRA EARLY REFUGEE. A favorite for canning, of good quality early and prolific. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

LONG YELLOW SIX WEEKS. A favorite market variety. Pods green, long and tender; very early. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

WAX OR YELLOW PODDED

GOLDEN WAX. Pods rather flattened, light yellow, brittle and with few strings. A standard sort and a good producer. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c; 10 lbs. \$3.50.

PROLIFIC BLACK WAX. Pods bright yellow, nearly round; very early and productive. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c; 10 lbs. \$3.50.

STRINGLESS OR REFUGEE WAX. Pods round, rich golden yellow, entirely stringless and of the best quality. Extremely prolific and a great favorite among market growers. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c; 10 lbs. \$3.50.

VENTURA WONDER WAX. Pods often 9 inches long, straight, oval, entirely stringless, transparently white, and of finest flavor. Hardy and productive. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

POLE OR RUNNING BEANS

Frijole de Bejuco—Stangenbohne—Haricots a Rames.

Culture.—Plant in rich soil in hills 3 feet apart each way. Place an 8 ft. stake to each hill around which plant 5 or 6 beans and afterwards thin out to the 4 strongest plants. They are also grown in hills 4 feet apart, without poles, allowing the vines to run.

ARBOR BEAN. One of the very best of beans to plant where one wants an exceptionally quick growth over arbors, trellises, etc., often attaining a growth of twelve feet in two months. The pods, like those of the Scarlet Runner bean, make excellent string beans, but should be taken young and sliced before cooking.

The vines are very prolific and can be made to bear two crops a year by allowing them to almost die back after the first crop, by withholding water and then heavily irrigating them, when they will break into new growth and bear heavily again until late in the season. Pkt. 10c, ¼ lb. 20c.

ASPARAGUS OR YARD LONG. A curious variety, Produces pods 15 to 30 inches long; excellent for the home garden. Pkt. 10c.

HORTICULTURAL OR SPECKLED CRANBERRY. An old favorite sort. Pods light green streaked with red. Good as a snap bean or shelled, green or dried. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

KENTUCKY WONDER OR OLD HOMESTEAD. The most productive and best pole bean for this climate. Pods hang in large clusters, long, brittle and of fine quality. Pkt. 10c, lb. 40c, postpaid; by express or freight lb 30c, 10 lbs. \$2.75.

WHITE SEEDED KENTUCKY WONDER. A variety of recent introduction possessing all the good qualities of the old variety of that name, but having white seed. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

KENTUCKY WONDER WAX. The best Pole Wax bean, having all the good qualities of the green variety of that name. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c; 10 lbs. \$3.50.

LAZY WIFE. Pods 6 to 8 inches long, produced in clusters, entirely stringless and of a rich, buttery flavor; also a good white shell bean for winter use. Pkt. 10c, lb. 45c, postpaid; by express or freight, lb. 35c; 10 lbs. \$3.00.

WHITE CREASEBACK. Pods 5 to 6 inches long, deeply creased, silvery green, fleshy, of rich flavor and produced in clusters of from 4 to 10, which mature very evenly. It yields a heavy crop and is a splendid shipper. The seed is white and can be used for winter use as a shelled bean. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

SCARLET RUNNER. A favorite variety in English gardens. Prolific and of rich flavor. Also useful as an ornamental vine; flowers are bright scarlet and very showy. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

Ventura Wonder Wax Beans

LIMA BEANS

Culture.—Lima Beans should not be sown until after the ground is well warmed up in spring. Sow the bush varieties in rows 2 feet apart and the pole kinds in hills 4 feet apart each way.

BURPEE'S BUSH. Large and of fine flavor. A popular variety both for market and home use. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

BURPEE'S IMPROVED BUSH. Earlier and more productive than the Burpee's Bush. Both the pods and beans are of enormous size. One of the most valuable of late introduction. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

FORDHOOK BUSH LIMA. This is a variety of recent introduction, and is the most prolific lima bean ever grown. It usually grows from 20 to 24 inches high, and bears in clusters of 2 to 5 pods. The beans are round and thick, averaging 4 beans to the pod, of a mild but delicious flavor. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

KING OF THE GARDEN—POLE LIMA. Produces pods 5 to 7 inches long, well filled with good-sized beans of rich flavor. It bears heavily and is one of the best for general use. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.75.

MONSTROUS BUSH LIMA. This bean, as its name implies, attains a great size. It is the largest of all the limas and is exceedingly prolific as by pruning the bushes at the right season, they can be made to bear at least two crops a year for several years. The beans are exceptionally fine flavored and considered by many to be better than any other lima bean grown.

Plant 6 ft. by 6 ft. about the 1st of April, leaving one plant to the hill. After they come into bearing, they will continue until frost cuts down the tender growth, when they should be pruned similarly to grape vines. Shortly after, new growth will appear which, by early summer, will be producing another crop. In July the vines will become mildewed. They should be pruned as before and by October the 3rd crop will be ready to pick. Pkt. 10c, ¼ lb. 25c, lb. 60c, postpaid; by express or freight, lb. 50c; 10 lbs. \$4.50.

ENGLISH OR BROAD BEANS

Haba—Puffbohne—Fève de Marais

Culture.—Plant in fall or early winter in drills 2 inches deep and 2 to 3 feet between the rows, placing the beans 6 inches apart. When in full bloom nip a few inches off the top of each stem. The plants are quite hardy and bear in winter or early spring. The beans are shelled green and cooked like lima beans and can be had at a time of year when green lima beans are not obtainable.

BROAD WINDSOR. An old favorite variety. Pkt. 10c, lb. 30c, postpaid; by express or freight, lb. 20c; 10 lbs. \$1.75.

BEET

Remolacha—Rothe Ruebe—Betterave

Culture.—Sow in drills 18 inches apart and cover 1 inch deep. When the plants are large enough thin out to 6 inches apart. Beets can be planted in Southern California the year round. One ounce will sow 50 feet of row.

CROSBY'S EGYPTIAN. A selection from the Extra Early Egyptian. Slightly more globe shaped than the parent. Flesh deep red and of the finest quality. Considered by many the best beet on the market. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

DETROIT DARK RED. One of the very best for either market or home use. Tops very small; roots globe shaped, dark blood red, tender and sweet. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

ECLIPSE. Extremely early, round, blood red, small tops. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

EDMAND'S EARLY BLOOD TURNIP. Of finest quality, extra early. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

EXTRA EARLY EGYPTIAN. A standard variety for general use. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

LONG DARK BLOOD. Smooth, dark red, of good size and desirable for light soils. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

SWISS CHARD OR SILVER. Grown for the leaves which are cooked like Spinach; grows quickly and can be cut often. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00.

SWISS CHARD, LUCULLUS. A superior variety with large, crumpled leaves, very tender and of fine flavor. The stalks are very heavy, 1½ inches in diameter, and 10 to 12 inches long below the leaf. These stalks may be cooked and served like Asparagus and are of delicious flavor. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00.

STOCK BEETS OR MANGEL-WURZEL

Culture.—Sow in drills 2½ to 3 feet apart and thin out to 12 or 15 inches in the rows. Six pounds per acre.

GOLDEN TANKARD. The favorite variety among dairymen and the best for heavy soil. Oz. 10c, lb. 70c, postpaid; by express or freight, lb. 60c, 10 lbs. \$5.50.

IMPROVED MAMMOTH LONG RED. Yields immense roots and succeeds well on light soil. Oz. 10c, lb. 70c, postpaid; by express or freight, lb. 60c, 10 lbs. \$5.50.

SUGAR BEETS

Culture.—Sow in drills 18 to 24 inches apart and thin out to 1 foot in the rows. Fifteen pounds per acre.

KLEIN WANZLEBENER. The kind generally grown here for sugar; also used for stock feeding. Oz. 20c, lb. 70c, postpaid; by express or freight, lb. 60c, 10 lbs. \$5.50.

GIANT HALF SUGAR ROSE. A cross between sugar beet and mangel. Produces very large roots of the richest quality; especially valuable for stock. Oz. 20c, lb. 70c, postpaid; by express or freight, lb. 60c, 10 lbs. \$5.50.

BRUSSELS SPROUTS

Berza de Bruselas—Rosenkohl—Chou de Bruxelles.

Culture.—Sow in spring or summer in seed beds, transplant and cultivate like cabbage. One ounce will sow a bed of 40 square feet and produce 2000 plants.

DWARF IMPROVED. The standard sort. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

Premium Flat Dutch Cabbage

CABBAGE

Repollo—Kopfkohl—Chou Pomme

Culture.—Sow in seed beds at intervals for succession. The early varieties in August and each month following until April. The Drumhead varieties sow in spring for late crop. Transplant when large enough to rows $2\frac{1}{2}$ feet apart and $1\frac{1}{2}$ feet in the rows for the early sorts, and 3 feet apart each way for the late varieties. Take care to set the stems in the ground up to the first leaf. Cabbage requires a rich, well-manured soil and should be hoed or cultivated frequently, drawing the soil slightly up around the stems. One ounce will sow a bed of 40 square feet and produce 2000 plants.

DANISH BALL HEAD. Of medium size, heads round, very solid and a good shipper. One of the best winter varieties. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00

DRUMHEAD SAVOY. A favorite variety of Savoy or Curled Cabbage. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

EARLY WINNIGSTADT. The favorite market variety, both for shipping and local sale. Heads cone shaped, solid, of good size and for quality unsurpassed. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb. \$1.20, lb. \$3.50.

LARGE LATE DRUMHEAD. A well known late sort producing immense compact heads. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb. \$1.20, lb. \$3.50.

PREMIUM FLAT DUTCH. A favorite variety for winter, large and of excellent quality. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb. \$1.20, lb. \$3.50.

RED DRUMHEAD. For pickling; large, deep red color. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

CHINESE CABBAGE. Forms long, compact heads, in appearance more like a Cos lettuce than a cabbage. Leaves thick and fleshy, of fine flavor. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.00.

If you are a Market Gardener, send me a list of your wants and I will be glad to quote you special Market Gardeners' prices.

CARROT

Zanahoria—Moehre—Carotte

Culture.—The soil best suited for this crop is a light, rich loam. Sow any time from September to end of May in drills 15 inches apart, covering the seed lightly. When the plants are large enough thin out to 5 to 6 inches apart in the rows. One ounce will sow 150 feet of drill. Three pounds per acre.

DANVER'S HALF LONG. A standard variety. Roots about 6 inches long, rich orange color, very symmetrical and handsome. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

EARLY FRENCH FORCING HORN. The smallest and earliest variety grown; much used for forcing. Roots nearly round. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

IMPROVED LONG ORANGE. Very long, handsome roots, of good quality. Valuable for the table and also for stock feeding. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

LARGE WHITE BELGIAN. Largest of all; grown entirely for stock. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.00.

OXHEART OR GUERANDE. The favorite table sort, often called "French Carrots." Roots about 5 inches long and 4 or 5 in diameter at the top, stump rooted, easily pulled and best for heavy soils. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

Early Dwarf Erfurt Cauliflower

CAULIFLOWER

Coliflor—Blumenkohl—Choufleur

Culture.—To be successfully grown this crop requires very rich soil and careful cultivation. Sow in seed beds, the early varieties in August and September, and the late ones in spring; transplant and cultivate same as Cabbage. One ounce will sow a bed of 40 square feet and produce 2000 plants.

CALIFORNIA GIANT. See page 4.

DRY WEATHER. An early variety producing large, solid heads, pure white and of the best quality. This variety is particularly adapted to California and the Southwest. Pkt. 25c, $\frac{1}{4}$ oz. \$1.50, oz. \$4.50, $\frac{1}{4}$ lb. \$15.00, lb. \$45.00.

EARLY DWARF ERFURT. Of dwarf, compact habit, early, a sure header. Pkt. 25c, $\frac{1}{4}$ oz. \$1.00, oz. \$3.50, $\frac{1}{4}$ lb. \$10.00, lb. \$35.00.

HENDERSON'S EARLY SNOWBALL. The most popular variety, very early and reliable header. Pkt. 25c, $\frac{1}{4}$ oz. \$1.00, oz. \$3.50, $\frac{1}{4}$ lb. \$10.00, lb. \$35.00.

LARGE ALGIERS. A favorite late variety, very large heads. Pkt. 10c, oz. \$1.50, $\frac{1}{4}$ lb. \$5.00.

VEITCH'S AUTUMN GIANT. A large, late variety which thrives well in this section. The heads are solid, compact and well protected by the foliage. Pkt. 10c, oz. \$1.35, $\frac{1}{4}$ lb. \$4.00.

CELERY

Apio—Sellerie—Celeri

Culture.—Sow early in spring in beds of rich, mellow soil, covering the seed very lightly. When 3 inches high, prick out 4 inches apart, and when large enough transplant in well manured furrows, 4 feet apart, and about 8 inches deep. Place the plants 8 inches apart in the rows, and as the plants grow gradually fill up the furrows with earth to bleach the stalks.

Golden Self-Blanching Celery

BOSTON MARKET.—A standard variety of superior quality. Pkt. 5c, oz. 25c, ¼ lb. 75c, lb. \$2.50.

DWARF GOLDEN HEART. Heart golden yellow, stalks large and full, of a rich nutty flavor. Very solid and one of the best keepers. Pkt. 10c, oz. 35c, ¼ lb. \$1.20, lb. \$3.50.

GOLDEN SELF-BLANCHING. (French-grown seed.) This seed is imported from France, from a most reliable grower, and is the best strain offered. A favorite market variety; blanches perfectly, is tender, entirely free from strings and has a rich, nutty flavor. Pkt. 10c, oz. \$1.50, ¼ lb. \$5.00.

GOLDEN SELF-BLANCHING. (California-grown seed.) Pkt. 10c, oz. 80c, ¼ lb. \$2.65, lb. \$8.00.

WHITE PLUME. A well known sort, early, and of rich flavor. Blanches with very little earthing up; one of the best for fall and early winter use. Pkt. 10c, oz. 35c, ¼ lb. \$1.15, lb. \$3.50.

CELERIC OR TURNIP-ROOTED CELERY. Forms turnip-shaped roots, having a celery-like flavor, and is used for soups and salads; also boiled like parsnips or turnips. Pkt. 10c, oz. 35c, ¼ lb. \$1.20, lb. \$3.50.

Mexican Chayote. Quick Vine. Splendid Vegetable.

CHERVIL

Perifollo—Kerbel—Cerfeuil

Culture. Sow early in spring in beds or drills, and when large enough transplant about 1 foot apart. Used for flavoring soups and stews and also for garnishing.

CURLED. The standard variety. Pkt. 10c, oz. 35c, ¼ lb. \$1.20, lb. \$3.50.

CHAYOTE

Culture. A rapid growing perennial vine, valuable for covering fences, sheds, etc., growing thirty feet or more in one season. It produces large quantities of fruit, which are cooked like summer squash, or fried like eggplant. Each fruit contains one seed, which sprouts right out of the fruit, and the vine is propagated by planting the whole fruit in the ground. Supplied from December to March. Sprouted, each, 25c. (By mail 35c).

CHICORY

Achicoria—Cichorie—Chicoree

Culture. Sow in spring in deep, rich soil, in drills 18 inches apart, covering the seed lightly. When the plants are large enough thin out to 8 inches apart in the rows. One ounce will sow 100 feet of drill. Much used by the French as a salad.

COMMON OR WILD. "Chicoree Amere." The roots may be transplanted in the fall into sand in a cellar. The young shoots which soon come up form the "Barbe de Capucin," a salad much used in France. Pkt. 10c, oz. 40c, ¼ lb. \$1.35, lb. \$4.00.

LARGE-ROOTED MAGDEBURG. The roots of this variety are often dried, cut into slices, roasted, ground and used for mixing with or as a substitute for coffee. Pkt. 10c, oz. 40c, ¼ lb. \$1.35, lb. \$4.00.

CORN SALAD

Macha o Valerianilla—Lammer Salat—Mache

Culture. Commonly called Lamb's Lettuce. Can be sown nearly all the year round in California. Sow in shallow drills 1 foot apart.

LARGE ROUND LEAVED. Pkt. 10c, oz. 30c, ¼ lb. \$1.00, lb. \$3.00.

Oregon Evergreen Sweet Corn

CORN

SWEET OR SUGAR

Maiz—Welschkorn—Mals

Note. Express or freight charges are not prepaid. Sweet corn can be sent by parcel post at cheaper rates than my "postpaid" price. Where quantities of sweet corn are ordered to be sent by parcel post, remit for the first pound at the "postpaid" rate, to cover postage and packing charges, and for the remainder at the rate quoted by "express" or "freight," and add the correct parcel post charge to your zone. This parcel post charge must be sent additional, or corn will be sent by express. For information, see parcel post schedule on first page of catalogue.

Culture. Sow any time from March to end of June, in drills or hills. The smaller varieties may be planted in drills 3 feet apart and 1 foot apart in the rows, or in hills 3 feet apart each way, covering the seed about 2 inches. The taller varieties, 4 feet by 15 inches, or in hills 4 feet apart each way. Corn thrives best in a rich, warm soil; use some well rotted manure, and cultivate well so as to keep the ground loose, and draw it up slightly around the roots.

BLACK MEXICAN. The kernels are white when young or at the age when suitable for cooking, but when ripe and dry turn to a bluish black color. Thrives well in this climate; is very productive and the sweetest corn grown. Pkt. 10c, lb. 40c postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

COUNTRY GENTLEMAN. A favorite for home use. It is a very small cob, closely covered with deep, narrow kernels, which are extremely tender and sweet. Ears average 8 to 9 inches in length and from 3 to 4 on a stalk. Pkt. 5c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

EARLY MINNESOTA. The standard early variety, productive and of good quality. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

EXTRA EARLY ADAMS. Not a true sweet corn, but on account of its hardness and earliness it is largely planted for table use. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

GOLDEN BANTAM. An extra early dwarf variety. Ears of medium size, thickly set with rich yellow kernels of a most delicious flavor. This variety has become a general favorite on account of its earliness, hardness and extra fine quality. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

OREGON EVERGREEN. This is without doubt the best sweet corn ever grown, and is a great favorite among market growers in this section. It is very productive, bearing long, well-filled ears, and is of a particularly fine flavor. Many varieties of sweet corn do not thrive as well in California as in the East, and it has sometimes been said that good sweet corn is not to be had here. This variety, however, seems particularly adapted to our local conditions, and produces ears of the very finest quality. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

STOWELL'S EVERGREEN. The standard late variety for home and market use. Grows tall and remains green longer than any other sort. The ears are large and grains exceedingly deep and sweet. Pkt. 10c, lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs., \$2.75.

CRESS OR PEPPER GRASS

Berro o Mastenero—Kresse—Cresson

Culture. Sow thickly, broadcast in small beds or in drills 1 foot apart, at frequent intervals for a succession. It will be ready to cut in about three weeks. Succeeds best during winter and spring, but may be grown in summer if sown in a cool, shady place.

EXTRA CURLED. Leaves curled, crisp and pungent. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

WATER CRESS

Berro—Brunnenkresse—Cresson de fontaine

Culture. Sow the seed by the side of running water or in a damp place.

WATER CRESS. Pkt. 10c, oz. 60c, ¼ lb. \$2.00.

CUCUMBER

Pepino—Gurke—Concombre

Culture. As soon as the weather becomes warm and settled commence sowing for the early crop; later plantings may be made up until August. Select good, rich, mellow soil, and sow in hills 4 feet apart each way, 8 to 10 seeds in a hill, covering 1 inch deep with well pulverized soil. After danger from insects is over, thin out to the four strongest plants. One ounce will plant 50 hills, or 2 pounds to one acre.

ARLINGTON WHITE SPINE. A favorite for early crop, coming two weeks earlier than the White Spine. Very uniform in shape and productive. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

BOSTON PICKLING. A favorite for pickling, also good for slicing. Dark green, straight and well formed. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00.

CUMBERLAND. A distinct sort, desirable either for slicing or pickling. When full grown the fruit averages 10 to 12 inches in length and 2½ inches in diameter, with full rounded ends. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

Davis Perfect Cucumber

DAVIS PERFECT. This splendid variety, introduced a few years ago, has now become very popular. The fruits are very symmetrical, 8 to 10 inches in length, dark glossy green, tender and of exceptionally fine flavor. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00.

IMPROVED LONG GREEN. A standard sort, 12 to 16 inches long, dark green, firm and crisp. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00.

IMPROVED WHITE SPINE. A vigorous grower, early and productive. Fruit straight, light green with a few white spines; one of the best for table use. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

KLONDYKE. One of the best for market. The fruits grow very uniform, usually measuring about 7 inches long and 2 inches in diameter; of a rich green color, excellent for slicing. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

Lemon Cucumber

NICHOL'S MEDIUM GREEN. The standard sort for pickling; also one of the best for table use. Fruit well shaped, dark green, crisp and of the finest flavor. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

JAPANESE CLIMBING. One hill will cover a trellis 10 feet square. The fruits are dark green, excellent for table use or pickling. Pkt. 5c, oz. 20c, ¼ lb. 65c.

ROLLISON'S TELEGRAPH. The popular English variety for forcing. Fruits often 2 feet or more in length, firm and crisp. Pkt. 25c.

LEMON CUCUMBER. Quite distinct from other cucumbers, and in shape much resembling a lemon. It is ready to eat when it begins to turn yellow, and has a fine flavor. It is a good shipper, and also one of the best for the home garden. Pkt. 10c, oz. 30c, ¼ lb. \$1.00 lb. \$3.00.

WEST INDIA GHERKIN. A very small fruited variety used for pickling. Pkt. 10c, oz. 30c, ¼ lb., \$1.00, lb. \$3.00.

DANDELION

Amargon—Kuhblume—Pissenlit

Culture. May be grown any time, in drills 12 inches apart, covering the seed very lightly. Much esteemed as a salad.

IMPROVED LARGE LEAVED. Pkt. 10c, oz. \$1.50.

EGG PLANT

Berengena—Eierpflanze—Aubergine

Culture. Sow from February to June in rich soil composed of leaf mold and sandy loam. The earlier sowings should be in a hot bed; the seed germinates very slowly, and should be kept in a warm, even temperature. When 2 or 3 inches high, transplant into small pots and place in a frame, gradually harden off, and when the weather is warm and settled transplant to the open ground. Select light, rich soil, and plant 4 feet apart each way; when about 1 foot high draw the earth up slightly around the roots.

New York Improved Egg Plant

BLACK BEAUTY. Large, rich, dark purple, very early. Pkt. 10c, oz. 75c, $\frac{1}{4}$ lb. \$2.50, lb. \$7.50.

NEW YORK IMPROVED PURPLE. The leading variety both for market and home use. Pkt. 10c, oz. 75c, $\frac{1}{4}$ lb. \$2.50, lb. \$7.50.

French Moss Curled Endive

ENDIVE

Escarola o Endibia—Endivien—Chicoree

Culture. May be sown in drills 15 inches apart any time during the year. When a few inches high, thin out the plants to 10 inches apart, or transplant to other rows. As soon as the plants have reached a good size,

gather the ends of the outer leaves together and tie at the top so as to blanch the inside leaves. One ounce will sow 150 feet of drill.

BROAD LEAVED BATAVIAN. (Scarolle.) Leaves light green, broad and nearly plain. When blanched, makes an excellent salad. It is also used for flavoring soup and stews, and is sometimes cooked as greens. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

FRENCH MOSS CURLED. (Chicoree Frisee.) Leaves deeply cut and curled, giving it a moss-like appearance. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

KALE OR BORECOLE

Col—Blatterkohl—Chou Vert

Culture. Sow the seed in beds from July to March; when large enough, transplant to rich, mellow ground and cultivate same as Cabbage. One ounce of seed will produce 2000 plants.

DWARF GREEN CURLED. (German Greens.) Leaves bright green, tender and of fine flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

TALL GREEN CURLED SCOTCH. Grows from 1 $\frac{1}{2}$ to 2 feet high; the variety most generally used. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

JERSEY OR TREE KALE. A tall growing variety with smooth leaves. Used for poultry and stock food. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

KOHL RABI

Collinabo—Kohlrabi—Chou-rave

Culture. Sow in drills 2 feet apart any time from July to April. When large enough, thin out to 1 foot apart in the rows. One ounce will sow 150 feet of drill.

EARLY WHITE VIENNA. Greenish white outside, flesh white and tender. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

EARLY PURPLE VIENNA. Similar to the above, but of purple color. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

LEEK

Puerro—Lauch—Poireau

Culture. Sow in good rich soil any time from September to April in drills 15 inches apart and $\frac{1}{2}$ inch deep, and thin out to 10 inches apart. One ounce will sow 100 feet of drill.

LARGE MUSSELBURG. A favorite Scotch variety. Pkt. 5c, oz. 35c, $\frac{1}{4}$ lb. \$1.15, lb. \$3.50.

LONDON FLAG. Large and uniform in shape. A popular market sort. Pkt. 5c, oz. 35c, $\frac{1}{4}$ lb. \$1.15, lb. \$3.50.

LETTUCE

Lechuga—Salat—Laitue

Culture. Can be sown at any time in California, in drills 15 inches apart, covering the seed very lightly; when large enough, thin out to 1 foot apart in the rows. Or the seed may be sown in beds and transplanted. The latter is preferable for summer planting, as the seed requires a great deal of moisture to germinate, and when sown in a bed it can be kept moist by spreading burlap or sacks over the surface of the ground and sprinkling well twice a day; after the seed is germinated the sacks may be removed, but care must be taken to keep the plants well watered. One ounce will produce about 3000 plants.

BIG BOSTON. One of the best for California; succeeds well under great variations of temperature. Heads large, solid, crisp and tender. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

BLACK SEEDED SIMPSON. Forms large, loose heads of thin, tender, golden yellow leaves. One of the best curled varieties and stands the heat well. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

CALIFORNIA CREAM BUTTER. Stands the summer heat well, grows slowly and forms a very solid head, remaining fit for use for a long time. The outside leaves are slightly marked with brown, while inside the leaves are rich, creamy yellow. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

EARLY CURLED SIMPSON. Large, curly leaves, forms large, loose heads; a favorite early sort. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

ICEBERG. A popular summer variety; heads well, even in the hottest weather; large, crisp and remarkably solid. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

IMPROVED HANSON. Large, solid heads; leaves bright green on the outside, white within; crisp and tender. A favorite market sort. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Iceberg Lettuce

LOS ANGELES MARKET, OR NEW YORK SPECIAL. This lettuce is largely grown by market gardeners, and is the best selling lettuce in the Los Angeles market, while large quantities are shipped to other points as far north as Portland and east to Salt Lake City and Denver. It forms a very large, perfectly solid head. The outer leaves are green, but after stripping these off there remains a large, white, solid head, which is very crisp and tender. Pkt. 10c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

PARIS WHITE COS. (Romaine.) Long, smooth leaves, remarkably crisp and tender. The outer leaves should be drawn together and tied at the tips about 10 days before cutting, in order to blanch the inside leaves. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

PRIZEHEAD. Forms large, loose heads, remaining crisp and tender a long time; leaves slightly tinged with red. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

TENNIS BALL. (Black Seeded.) One of the earliest heading varieties, similar to Boston Market. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

WONDERFUL. Large, crinkly, dark green foliage, but blanched heart; of delicious flavor. The most popular winter variety on the Los Angeles market. Pkt. 10c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

MELON—MUSK

Melon Almlzeleno—Cantalupen—Muscade

Culture. May be planted from March to end of June. Select light, warm soil and plant in hills 6 feet apart each way, from 6 to 8 seeds in a hill and 1 inch deep. When large enough, thin out to the three strongest plants. One ounce will sow about 100 hills.

BURRELL'S GEM. Oval, of medium size and deeply netted. The flesh is salmon-colored and of the finest flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

EXTRA EARLY HACKENSACK. Large, nearly round, deeply ribbed, and very thickly netted. Flesh green, solid, and of a delicious flavor. A popular sort; nearly two weeks earlier than the Large Hackensack. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

GAUTIER'S PINEAPPLE. This is the favorite melon on the Los Angeles market. Oval, skin thickly netted; flesh green and of delicious flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

HONEY DEW. This new melon is the latest and best development in melon culture. Outer skin smooth, hard and creamy white, flesh light green, very solid and of rich honey flavor. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

LARGE HACKENSACK. Round, flattened at the ends, skin green and thickly netted; flesh green and of a rich, sugary flavor. Very popular among market growers and sometimes called Turk's Cap. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

PERSIAN. New yellow-fleshed variety, sweet distinct flavor. Heavily netted but smooth rind. Good keeper and a money maker. Pkt. 15c, oz. 60c, $\frac{1}{4}$ lb. \$2.00, lb. \$6.00.

TIP TOP. Almost round, of medium size. Flesh yellow, firm and of delicious flavor, edible almost to the rind. A melon of attractive appearance, selling quickly in all the markets. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

Honey Dew Musk Melon

ROCKY FORD. Slightly oval in shape, finely netted, very regular and even in size, weighing about 1 $\frac{1}{2}$ pounds; flesh light green in color and of delicious flavor. A popular early sort, named after Rocky Ford, Colorado, but now grown in immense quantities in the Coachella and Thermal districts, producing the earliest melons in the United States and shipped east by the carload. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

CASABA VARIETIES

CASABA, OR WINTER PINEAPPLE. Large, oval, skin corrugated, grayish green color; flesh firm, light green and of a delicious pineapple flavor. A very late variety; the melons do not usually ripen on the vines, but should be picked and stored in a cool, dry place, and if carefully handled may be kept till late in the winter. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

Golden Beauty Casaba Melon

GOLDEN BEAUTY. Similar to the Winter Pineapple, but of a beautiful golden-yellow color. It is a good keeper, and on account of its handsome appearance it is one of the best of the winter melons for market purposes. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

IMPROVED HYBRID CASABA. Deep green and heavily ribbed, of medium size; flesh thick and of a fine quality. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

SANTA CLAUS. A very late variety. Oblong, mottled yellow and green, flesh light green and of rich flavor. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

MELON—WATER

Sandia—Wassermelone—Melon d'Eau

Culture. Plant from March to July, in good, light, sandy loam, in hills 8 to 10 feet apart each way and from 10 to 12 seeds in a hill; cover the seed from 1 to 2 inches deep, but not more. When large enough, thin out to the three strongest plants.

ANGELENO. Of medium size, dark green, flesh dark red, crisp and very sweet. A good shipper and one of the best market varieties. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 70c, lb. \$2.00.

CHILIAN. Of medium size, almost round, dark green, slightly mottled with blackish green, rind thin, not over a quarter of an inch thick, but very hard and never cracks in shipping. Flesh solid, crisp and deep crimson clear through. This is the favorite Los Angeles market melon. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

BLACK SEEDED CHILIAN. This is preferred by some to the preceding variety, and is considered a little earlier. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

CUBAN QUEEN. Oblong, striped dark and light green, rind thin, flesh bright red. A good shipping sort. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

GEORGIA RATTLESNAKE, OR GYPSY. A popular Southern variety. A large, long melon, light green with dark green stripes, flesh scarlet, crisp and juicy. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

KLECKLEY SWEET. One of the finest melons for home use. Oblong in form, 18 to 20 inches long and 10 to 12 inches in diameter. Skin dark, rich green, flesh bright scarlet, ripening close to the rind. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

KLONDYKE, OR PASADENA. Of recent introduction and a great favorite in the Pasadena market. Oblong, dark rich green, flesh bright red, very crisp and sweet. Pkt. 10c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

YELLOW-FLESHED ICE CREAM. Quite distinct from any other variety. Large and long, rind an even dark green. Flesh of a rich, sugary flavor peculiar to itself; entirely free from fibrous substances, melting in the mouth like ice cream. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

MUSHROOM SPAWN

Seta—Schwamm—Champignon

Culture. Mushrooms can be grown in cellars or sheds, where a temperature of 60 to 70 degrees can be maintained. Procure some good rich loam and some fresh horse manure, and mix thoroughly together, using two-thirds of the horse manure and one-third of the loam. Make a bed of this mixture about 18 inches deep, which should be pressed down firmly. As soon as the temperature of this bed falls to about 70 degrees the spawn may be inserted in places about one inch square. Cover the spawn with good loam about two inches deep and press down firmly. Cover this over with a layer of loose straw. If the conditions are right the mushrooms should appear in from six to eight weeks.

ENGLISH MUSHROOM SPAWN. In bricks of about 1 lb. Per brick 30c (by mail 40c).

MUSTARD

Mostaza—Senf—Moutarde

By mail add 10c per lb. for postage.

Culture. Sow in drills 1 foot apart at frequent intervals for succession. Used for greens and cooked like Spinach, sometimes cut when about 2 inches high and used as a salad, generally with Cress.

BROWN OR BLACK. The common Mustard, much used for greens. The seeds are also used in pickles. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 25c, lb. 75c.

SOUTHERN CURLED. Very large leaves, often 15 inches in length; the best sort for greens. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

WHITE LONDON. The best variety for salads, also used for greens. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 25c, lb. 75c.

OKRA

Quimbombo—Essbarer—Gombo

Culture. Sow from March to July, in drills 3 feet apart, covering the seed 2 inches deep; thin out the plants to 10 inches apart in the rows, cultivate well, and draw the earth up slightly around the stems. One ounce of seed will sow 50 feet of row.

EARLY DWARF. Of dwarf, stocky growth, very prolific, producing pods 10 days earlier than the tall varieties. Pods long and smooth. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

LONG GREEN. Plants of tall growth, pods long and slightly ribbed. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

WHITE VELVET. Of tall growth; long, round, smooth pods with a whitish, velvety covering. The favorite variety for pickling. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

Ailsa Craig Onion

ONION

Cebolla—Zwiebel—Ognon

Culture. Onions require a rich, moist soil; rich, low land is best. It may be either sandy loam or black soil, but should have plenty of natural moisture. Land which has been planted to vegetables—peas or beans preferred—for a few seasons is the best land for onions. They may also be grown on higher lands with irrigation, providing the soil is rich. The land must not be allowed to get dry, as this will check the growth and either force the plant to run to seed or produce "stiff necks." For the home garden the seed may be planted the year round in California, but for main crop from November to end of January is best. In naturally moist soils the seed may be sown in drills 15 inches apart, covering the seed very lightly. When large enough, the plants may be thinned out to 5 or 6 inches apart in the rows. For irrigated lands sow the seed thickly in beds or drills and keep well watered; when the plants are large enough—about half the size of a lead pencil—transplant to rows 15 inches apart and 6 inches in the rows. Trim off about a third of the tops and half the roots before planting, as this helps the plants to bulb out. When sown in drills, and thinned out, it requires from 4 to 5 pounds of seed to the acre, or 1 ounce to 100 feet of row. When sown in beds and transplanted, from 1 to 1½ pounds will raise enough plants for an acre. For the home garden, Onion sets are often planted. These will produce large onions much earlier than the seed. For "Green" or "Spring" Onions, sow the seed of the White Queen or some other white variety.

AILSA CRAIG. An English variety that thrives well in this climate and is becoming very popular here. It is of immense size, globe-shaped, pure yellow on the outside, but white inside. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.00.

RIVERSIDE SWEET SPANISH. See page 4.

AUSTRALIAN BROWN. A favorite market sort of good size and shape; very hardy, early, productive, and the best keeper. The skin is thick and of a rich brown color; flesh solid and of mild flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

CRYSTAL WAX. A pure white variety of the Bermuda type, very flat and extremely early. On account of its handsome appearance, earliness and mild flavor it is in great demand by market growers. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

LARGE RED WETHERSFIELD. Large, slightly flattened, deep purplish red, flesh firm and thick. This is the best known of the red varieties and largely planted. It is a heavy cropper and an excellent keeper. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

MAMMOTH SILVER KING. A large, early white, flat variety of mild flavor. Valuable for the home garden and nearby market, but is not a good shipping or keeping sort. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.00.

PRIZETAKER. A globe-shaped onion, with light yellow skin and white flesh of a mild flavor. It is popular as a market variety, a fairly good keeper, and an immense yielder; onions often weigh two or three pounds, and have been known to weigh as much as four pounds. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

SOUTHPORT WHITE GLOBE. Pure white, mild flavor, a good keeper and very productive. Best variety for bunch onions. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb., \$1.20, lb. \$3.50.

WHITE BERMUDA. This is the standard early market variety and is now grown in immense quantities in the Coachella Valley for early Eastern shipping. It is of large size, flat, and a pinkish straw color. The flesh is white and mild. The seed I offer is of the finest strain and imported from Teneriffe, Canary Islands. Pkt. 10c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

WHITE PORTUGAL, OR SILVER SKIN. A very popular variety, both for market and home use. It is of attractive appearance, flattened, but quite thick; skin silvery white and very thin; flesh firm, snowy white and mild. A good keeper and heavy yielder; onions of large size. Also one of the best for pickling. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb. \$1.20, lb. \$3.50.

YELLOW GLOBE DANVERS. An old standard market variety. Large, globe-shaped; skin brownish-yellow. Flesh white and firm; a good yielder and remarkably good keeper. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

Southport White Globe Onions

ONION SETS

By mail add 10c per lb. for postage.

Australian Brown, White and Yellow Sets. Per lb. 30c. (by mail, 40c). Price on large quantities on application.

PARSLEY

Periill—Petersilie—Persil

Culture. May be sown the year round in California. Sow in good, rich soil, in drills 15 inches apart, covering the seed about half an inch deep. When the plants are 2 or 3 inches high, thin out to 4 inches apart. One ounce will sow 100 feet of drill.

PLAIN OR SINGLE LEAF. Excellent flavor, extensively grown for market. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

CHAMPION MOSS CURLED. Beautifully curled leaves, deep, rich green. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

HAMBURG, OR TURNIP-ROOTED. A plain-leaved variety, forming large roots which are used for flavoring soups etc. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

PARSNIP

Chirivia—Pastinake—Panais

Culture. Sow from September to May, in deep, rich soil, in drills 15 inches apart, and cover the seed about half an inch deep. When the plants are 2 or 3 inches high, thin out to about 5 inches apart in the rows. One ounce of seed will sow 100 feet of row, or 5 pounds to one acre.

HOLLOW CROWN. The standard sort. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

Telephone Peas

PEAS

Chicharos o Guisantes—Erbsen—Pois

Note. Express or freight charges are not prepaid. Peas can be sent by parcel post at cheaper rates than my "postpaid" price. Where quantities of peas are ordered to be sent by parcel post, remit for the first pound at the "postpaid" rate, to cover postage and packing charges, and for the remainder at the rate quoted by "express" or "freight," and add the correct parcel post charge to your zone. This parcel post charge must be sent additional or peas will be sent by express. For information, see parcel post schedule on first page of catalogue.

Culture. May be sown the year round in California. They will grow in almost any soil, but a deep, rich loam is best for main crop; the early varieties for winter will do best on a light, warm soil; deep plowing of the ground is essential. They are sown in single or double rows from eighteen inches to 4 feet apart, according to the height of the variety. The tall sorts should have sticks to climb over. For the field crop it requires from 60 to 80 pounds to the acre; for home garden, plant one pound to 50 feet of row.

FIRST EARLY VARIETIES

AMERICAN WONDER. Extra early, dwarf, compact grower, wrinkled peas of the finest quality. Height 1 foot. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

PREMIUM GEM. A popular early dwarf wrinkled variety. It grows about 18 inches high and bears a heavy crop of good-sized pods filled with 6 to 8 peas of the finest quality. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

GRADUS, OR PROSPERITY. The finest early pea yet introduced. Almost as early as American Wonder, but grows about 2½ feet high and produces very long pods filled with 8 to 10 peas of delicious flavor. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

SECOND EARLY VARIETIES

ADMIRAL OR SENATOR. A new sort introduced on our local market about three years ago. It is a good second early pea, has thick green foliage, and bears abundantly. Pkt. 10c, lb. 50c postpaid; by express or freight, lb. 40c, 10 lbs \$3.50.

STRATAGEM. One of the best peas in cultivation; pods large and well filled; of the finest flavor. Grows about 2½ feet high. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

YORKSHIRE HERO. The popular market variety in this locality. Grows about 2½ feet high, is of fine quality and a good bearer. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

LATE VARIETIES

ALDERMAN. Of recent introduction; grows about 5 feet high; pods dark green, always well filled with large peas of the finest quality. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

CHAMPION OF ENGLAND. Grows from 4 to 4½ feet high; very productive and unsurpassed in quality. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

TELEPHONE. A late variety; grows 5 feet high, produces very long pods, well filled with 8 or 9 large peas of the finest quality. Pkt. 10c, lb. 50c, postpaid; by express or freight, lb. 40c, 10 lbs. \$3.50.

PEPPER

Pimiento—Pfeffer—Piment

Culture. Can be sown from the middle of January to the end of June. Sow the seed in boxes of light, rich soil, and keep in a frame or on a hot bed. When the plants are large enough, gradually harden off, and plant out in the open ground as soon as the weather has become warm and settled, placing the plants in rows 2 feet apart and 1½ feet apart in the row. One ounce of seed should produce about 1000 plants.

ANAHEIM CHILI. In great demand locally; similar to the Mexican chili, but larger. Pkt. 10c, oz. 50c, ¼ lb. \$1.65, lb. \$5.00.

CHINESE GIANT. Of very large size, averaging 10 to 11 inches in circumference. One of the best for stuffing; flesh thick, tender and mild. Pkt. 10c, oz. 80c, ¼ lb. \$2.65, lb. \$8.00.

LARGE BELL, OR BULL NOSE. Large, early and very productive. Flesh thick and mild, much used for stuffing. Pkt. 10c, oz. 80c, ¼ lb. \$2.65, lb. \$8.00.

LONG RED CAYENNE. Pods small, long and pointed, coral red when ripe. Very strong and pungent; largely used for seasoning pickles. Pkt. 10c, oz. 80c, ¼ lb. \$2.65, lb. \$8.00.

MEXICAN CHILI. The well-known "Chili" used so much in tamales and Spanish dishes. Beautiful dark red pods, 4 to 6 inches long, very hot. Pkt. 10c, oz. 50c, ¼ lb. \$1.65, lb. \$5.00.

PIMIENTO. One of the finest peppers of mild flavor that has yet been grown. It lends itself to a variety of uses, on account of its beauty, firmness and attractive shape. It makes an unusually pretty salad, being smooth and bright in color, and it can be either canned or stuffed most satisfactorily, as it is firm and fleshy. Pkt. 10c, oz. 60c, ¼ lb. \$2.00, lb. \$6.00.

RUBY KING. Large, bright glossy red, mild and sweet. Much used for stuffing and for slicing in salads. Pkt. 10c, oz. 80c, ¼ lb. \$2.65, lb. \$8.00.

SWEET MOUNTAIN. A large late variety, bearing fruit often 8 inches long and 2 inches in diameter, deep glossy red, mild and sweet. One of the best for stuffing. Pkt. 10c, oz. 80c, ¼ lb. \$2.65, lb. \$8.00.

Chinese Giant Pepper

POTATOES

Patatas—Kartoffeln—Pommes de Terre

Culture. Potatoes succeed best in a good, rich, well-drained, sandy loam, and may be planted any time from August to May. It requires about 400 pounds of seed potatoes to the acre.

EARLY ROSE, WHITE ROSE, TRIUMPH OR SIX WEEKS AND BURBANK
Prices on application.

PUMPKIN

Calabaza—Kuerbls—Courge

Culture. Sow from April to July in hills 8 feet apart each way and 3 or 4 seeds to a hill. One ounce will sow about 20 hills, or 2 pounds to one acre.

CHEESE. Large, reddish orange, flesh thick and sweet. A good keeper. Pkt. 5c, oz. 20c, ¼ lb. 35c, lb. \$1.00.

CUSHAW. (Crook-necked.) Light cream color. A good keeper, flesh solid and sweet. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

MAMMOTH TOURS, OR JUMBO. (King of Mammoths.) Grows to an immense size, often weighing 150 pounds or more. Skin orange-salmon, flesh bright yellow, fine grained, tender and sweet. Valuable for pies, also for stock feeding. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

QUAKER PIE. Of medium size, slightly oval, skin rich creamy buff, flesh fine grained and of rich flavor. A good keeper. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

FIELD PUMPKIN

CALIFORNIA FIELD. The well-known Field Pumpkin so largely grown for stock. Varies in color from yellow, orange, red to drab. Very large and a heavy bearer. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

LARGE SWEET FIELD. Very large, a favorite variety in this section, heavy yielder and good for stock feeding or for pies. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

RADISH

Rabano—Rettig—Radis

Culture. May be sown the year round in California. They can be grown in any good garden soil, but thrive best in a light loam enriched with plenty of good rotten manure. Sow in drills 12 inches apart. One ounce of seed will sow 100 feet of drill.

CALIFORNIA MAMMOTH WHITE. A large, pure white radish, often 9 to 10 inches long and 1½ to 2 inches in diameter; flesh sweet, solid and crisp. Pkt. 5c, oz. 20c, ¼ lb. 55c, lb. \$1.75.

CHARTIER. A long variety and very attractive. The color is a rosy scarlet, shading to white at the tip. It is larger than the Long Scarlet, and keeps hard and crisp for a long time. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

CRIMSON GIANT TURNIP. A new variety, more than twice the size of the Scarlet Turnip. It matures early, flesh white, crisp and solid. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

EARLY LONG SCARLET SHORT TOP. An old standard variety; grows to about 6 inches long; color bright carmine; flesh firm and brittle; has very small top. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

FRENCH BREAKFAST. A popular early variety and one of the best for forcing. Grows about 2 inches long and stump rooted. The top part of the root is bright rose and the lower part white. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

ICICLE. A white variety; grows about 5 inches long, very brittle and of mild flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

LONG BLACK SPANISH. A large winter radish, skin almost black; flesh white and solid. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

ROUND BLACK SPANISH. Similar to the preceding, except in shape. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

SCARLET TURNIP. A very popular early sort. Roots scarlet, turnip-shaped, crisp and of good flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

SCARLET TURNIP WHITE TIPPED. Bright rosy carmine, with lower part of root white; a very attractive variety. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

WHITE STRASBURG. A large late summer variety; broad at the top and tapering down to a point. Flesh firm and solid, and keeps crisp for a long time. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

RHUBARB—PIE PLANT

Rutbarbo—Rhabarber—Rhubarbe

Culture. Sow from February to end of April in drills 18 inches apart, covering the seed about 1 inch deep. When large enough, thin out to 6 inches apart in the rows. Transplant the roots the following winter or spring to deep, rich, well manured soil, placing the plants 4 feet apart each way.

BURBANK'S NEW EVERBEARING OR CRIMSON WINTER. The most valuable variety ever introduced. It is practically everbearing, and a supply can be had all through the winter when the other varieties are dormant. The stalks are medium sized, rich crimson and of delicious flavor. It grows very quickly, and is enormously productive. Pkt. 10c, oz. 75c, $\frac{1}{4}$ lb. \$2.00, lb. \$7.50.

VICTORIA. A standard variety; stalks large and of fine flavor. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

WAGNER'S GIANT CRIMSON WINTER. A superior variety, producing stems twice as large as those of the ordinary Crimson Winter, and has been known to yield as high as 20 tons to the acre. It is unsurpassed in flavor, and is now in great demand on the local market. Pkt. 15c, oz. \$1.60, $\frac{1}{4}$ lb. \$5.00.

RHUBARB ROOTS. See page 17.

ROSELLE

(Hibiscus subdorisfa)

Culture. An annual plant, native of India, but introduced here from Queensland, Australia, where it is largely grown for making jelly. The plants grow from 3 to 6 feet high, and bear quantities of fruit, each enclosed in a thick, fleshy calyx, from which the jelly is made, which is considered by many superior to guava jelly. The seed should be sown in boxes or seed pans in February or March, and placed on a hot bed. The young plants can be potted up as soon as large enough, and when the weather is warm and settled they should be planted out in the open ground, about 3 feet apart each way. Pkt. 10c, oz. 75c, $\frac{1}{4}$ lb. \$2.50.

SALSIFY OR VEGETABLE OYSTER

Ostion Vegetal—Haferwurzels—Salsifis

Culture. Sow from February to May, in deep, rich soil, in drills 15 inches apart. When large enough, thin out to 5 inches apart in the rows. One ounce of seed will sow 50 feet of row.

MAMMOTH SANDWICH ISLAND. Very large roots, tender and of rich flavor. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. 90c, lb. \$2.75.

Roselle

SORREL

Acedara—Sauerampfer—Oseille

Culture. Sow in spring, in drills 15 inches apart, in any good garden soil. The plant is perennial, and can be taken up every few years and divided. The flower stems should be kept cut off as they appear. The leaves are cooked like spinach, and are also used in soups.

LARGE LEAVED FRENCH. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

SPINACH

Espinaca—Spinat—Epinard

Culture. Can be sown the year round in California, in drills 15 inches apart. One ounce of seed will sow 50 feet of row, or 12 pounds to one acre.

PRICKLY OR WINTER. The hardest variety and the one generally grown for market. Large, smooth leaves shaped like an arrow point. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. 90c.

LONG STANDING. Leaves large, thick and crumpled. Very hardy. Adapted to either spring or winter sowing. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. 90c.

ROUND OR SUMMER. Large, thick, smooth leaves, rounded at the ends. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. 90c.

NEW ZEALAND. Produces large leaves, of thick, fleshy texture. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.25.

SQUASH

Calabacera—Kuerbls—Courge

Culture. As soon as the weather has become warm and settled, commence sowing for the early crop. The summer varieties mature much quicker than the winter varieties, and sowing for late crop may be continued up until the first of August. Sow in hills 4 to 5 feet apart, using 6 or 7 seeds to a hill, and afterwards thin out to the three strongest plants. One ounce of seed will sow about 40 hills, or 3 pounds to 1 acre. The winter varieties take longer to mature, and the later plantings should be completed by about the first of July. Sow in hills 8 to 10 feet apart, using 3 seeds to a hill. One ounce will sow about 20 hills, or 2 pounds to an acre.

SUMMER VARIETIES

BANANA. Grows from one to two feet long. Skin varies from bright yellow to olive green. Excellent quality, very sweet. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$2.50.

EARLY WHITE BUSH SCALLOPED. Very early, creamy white, flat and scalloped; 4 to 6 inches in diameter; exceedingly prolific. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

ENGLISH VEGETABLE MARROW. Large, oblong, pale green, grows from 12 to 18 inches long. Makes a large vine, and should be planted 7 or 8 feet apart. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

ITALIAN OR ZUCCHINI. A bush squash of great merit; rich creamy flavor, and high in vitamins; bears heavily. Pkt. 10c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

SUMMER CROOK-NECK. Long, with crooked neck; bright golden yellow, thickly warted; very rich flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

WINTER VARIETIES

BOSTON MARROW. Large, oval, bright orange with creamy netting. Flesh fine grained, orange colored and of finest flavor. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

FORDHOOK. Oblong, slightly ridged, creamy yellow, flesh thick and of delicious flavor. Hard and solid; a good keeper. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$1.75.

GOLDEN HUBBARD. A very attractive variety of the Hubbard Squash. When matured the color is a deep orange-red, with rich orange-colored flesh, of the finest quality. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

HUBBARD. The popular winter squash. Oblong and pointed, dark green, heavily warted. Flesh orange-colored; a splendid keeper. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Hubbard Squash

TOBACCO

Tabaco—Tabak—Tabac

Culture. The seed can be sown in a frame or on a hot bed; or in well prepared beds in the open ground after danger from cold is past. Select fine, rich soil, cover the seed very lightly, about one-eighth of an inch, and press down firmly with the back of a spade; water with a fine spray. When the plants are about 4 inches high, transplant to rows 5 feet apart and 4 feet apart in the row. Tobacco requires a rich, mellow soil; wood ashes are beneficial as a fertilizer. One ounce of seed will produce enough plants for one acre.

CONNECTICUT SEED LEAF. Well known, the hardiest variety. Pkt. 10c, oz. 60c, lb. \$6.00.

HAVANA. Cuban-grown (Vuelta de abajo). The true Havana tobacco. Pkt. 10c, oz. 60c, lb. \$6.00.

TOMATO

Gitomate—Liebesapfel—Tomate

Culture. Seed can be sown from January to May. The early sowing should be in seed boxes in frames or on a hot bed. When the plants are about 2 inches high they should be transplanted to shallow boxes, placing them about 1 inch apart each way. Protect from cold, and when well established gradually harden off; when all danger from frost is over, transplant to the open ground, placing them from 5 to 8 feet apart each way. Later sowings can be made in the open ground, in seed beds or drills, after danger from cold is past. In frostless localities where winter tomatoes are grown, the seed can be sown from the middle of August to the end of September. One ounce of seed should produce about 2000 plants.

ATLANTIC PRIZE. Large, firm and solid. Will stand more cold than any other sort, and is largely planted in localities where winter tomatoes are grown. Pkt. 5c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

CHALK'S EARLY JEWEL. Large, smooth and uniform; bright scarlet, fine flavor. One of the best early sorts and a good bearer. Pkt. 5c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

LIVINGSTON'S FAVORITE. One of the best for general crop, of perfect shape, rich scarlet, large, solid and a good bearer. A good variety for shipping and canning. Pkt. 5c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

SPARK'S EARLIANA. Extra early, deep scarlet, large, smooth, solid and of the finest quality. The earliest large tomato grown. Pkt. 5c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

PAYNE'S VICTORY. See page 3.

PONDEROSA, OR BEEFSTEAK. A favorite sort for the home garden; of immense size, sometimes weighing from 2 to 3 pounds each; have very few seeds. Pkt. 10c, oz. 65c, $\frac{1}{4}$ lb. \$2.20, lb. \$6.50.

STONE. A favorite sort for general crop, shipping and canning. Large, smooth, bright scarlet, very solid and a good bearer. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.00.

SAN JOSE CANNER. A fine smooth tomato for main crop, largely used for canning. Pkt. 10c, oz. 65c, $\frac{1}{4}$ lb. \$2.20, lb. \$6.50.

TOMATO PLANTS. See page 17.

Purple Top Strap Leaf Turnip

TURNIP

Nabo—Ruebe—Navet

Culture. Sow from October to May, in drills 15 inches apart, covering the seed lightly. When the plants are large enough, thin out to 5 or 6 inches apart in the rows. To grow good turnips it requires rich soil and plenty of moisture; this insures a quick, uninterrupted growth, and the turnips will be tender, and not woody as when slowly grown on poor soil. One ounce of seed will sow 100 feet of drill, or 2 pounds to one acre.

EARLY SNOWBALL. A pure white, globe-shaped variety of extra fine quality. One of the best for shipping. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

EARLY WHITE EGG. A small early sort, oval-shaped; flesh white, fine-grained and sweet. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

EARLY WHITE FLAT DUTCH. Of medium size, flat, clear white and of good quality. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

GOLDEN BALL, OR ORANGE JELLY. Globe-shaped, yellow, flesh yellow, firm and sweet. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

PURPLE-TOP STRAP-LEAF. The standard variety for market or the home garden. Of medium size, flat, white, purple above ground, fine-grained and sweet. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

PURPLE-TOP WHITE GLOBE. Large, globe shaped, flesh white and sweet. An excellent variety and the best for summer use. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

IMPROVED PURPLE-TOP SWEDE OR RUTA BAGA. Very hardy, large, flesh yellow and solid. Used for cooking, also for feeding stock. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

HERBS

Per pkt. 10c.

Anise	Fennel, Sweet
Basil, Sweet	Lavender
Borage	Marjoram, Sweet
Caraway	Rosemary
Catnip	Sage
Coriander	Savory, Summer
Cumin	Savory, Winter
Dill	Thyme, Broad Leaved

CULINARY ROOTS AND PLANTS

Note.—When ordered to be sent by mail, remit, in addition to price: for asparagus roots, 50c per 100; cabbage, cauliflower, sweet potato, tomato, pepper plants and horseradish roots, 5c per doz., 35c per 100; artichoke, 5c each; rhubarb roots, 5c to 10c each; egg-plants, 15c per doz.; hop-vine roots, 2c each; chives, 1c per clump.

ARTICHOKE. Green Globe. Each 20c. doz. \$2.00.

ASPARAGUS. Palmetto, two year old roots. Per doz. 40c, 100 \$2.00, 1000 \$15.00.

CABBAGE PLANTS. Early Winnigstadt, Henderson's Early Summer, and Premium Flat Dutch. Per doz. 10c; 100 60c, 1000 \$4.00.

CAULIFLOWER PLANTS. Early Dwarf Erfurt, Snowball, California Giant. Per doz. 15c, 100 75c, 1000 \$6.00.

CHIVES OR SCHNITTLAUCH. For flavoring soups, salads, etc. Per clump 10c, doz. clumps \$1.00.

EGG PLANT. New York Improved Purple. Each 5c, doz. 50c.

PEPPER PLANTS. Chili, Large Bell or Bull Nose, Sweet Mountain, Chinese Giant. Per doz. 25c, 100 \$1.50.

HOP VINE ROOTS. Each 10c, doz. \$1.00.

HORSERADISH ROOTS OR SETS. Per doz. 25c, 100 \$1.50, 1000 \$10.00.

RHUBARB ROOTS. Burbank's Everbearing or Crimson Winter. Each 15c, doz. \$1.50. Wagner's Giant Crimson Winter. Each 20c, doz. \$2.00.

SWEET POTATO PLANTS. Yellow Nansemond, Red Jersey, Large White. Per 100 75c, 1000 \$5.00.

TOMATO PLANTS. Earliana, Stone, Ponderosa or Beefsteak and Victory. Per doz. 25c, 100 \$1.50.

Lawn Grass and Clover Seeds

DIRECTIONS FOR MAKING A LAWN

The ground should first be spaded over, or plowed to a depth of 8 or 10 inches, and should then be leveled to the proper grade. A good plan is to let it lay for several weeks and water thoroughly. This will give a chance for many of the weed seeds in the ground to sprout, and these can be hoed off as they come up. After the weeds have been removed, rake the surface with a fine rake, and sow the seed broadcast: Blue Grass seed at the rate of 1 lb. to 200 sq. ft., or White Clover seed at the rate of 1 lb. to 300 sq. ft. When both grass and clover are used, they are generally sown one-third clover to two-thirds Blue Grass. It is better to sow them separately, however, going over the ground first with one and then with the other; as in this way they can be sown more evenly than if the seeds are mixed together. After the seed has been sown, it should be covered with about half an inch of good mulch. This is very essential, especially during the hot weather, as it is necessary that the surface be kept continually moist, giving the seed an opportunity to germinate. The best thing to use for a mulch is thoroughly rotted manure, which has been passed through a fine screen. Great care should be taken in selecting this, and it should be taken from a pile that has been thoroughly heated, so that all the weed seeds are killed. When any other kind of manure is used, it will only bring weed seeds into the lawn. For small lawns, burlap is often used in place of a mulch. This is spread out over the surface of the ground, the watering being done over the burlap, which can be removed after the seed has germinated. Burlap is especially valuable on steep banks or slopes, as it both keeps the surface moist, and also prevents the seed from washing out. Watering a newly sown lawn should be done very carefully, and with a fine spray, and as often as is necessary to keep the surface perfectly moist at all times of the day, until the seed has germinated. After the lawn is five or six weeks old, it will be necessary to weed it, as even with the best of care there are bound to be some weeds produced from seeds which have been lying dormant in the ground or blown in from vacant lots, etc. This should be done carefully, pulling out all weeds by the roots.

To keep a lawn in good condition it should be fertilized at least once a year with a dressing of a good commercial lawn fertilizer.

Note.—Express or freight charges are not prepaid. Lawn seeds can be sent by parcel post at cheaper rates than my "postpaid" price. Where quantities of lawn seeds are ordered to be sent by parcel post, remit for the first pound at the "postpaid" rate, to cover postage and packing charges, and for the remainder at the rate quoted by "express" or "freight" and add the correct parcel post charge to your zone. This parcel post charge must be sent additional, or seeds will be sent by express. For information, see parcel post schedule on first page of catalogue.

KENTUCKY BLUE GRASS. This is the grass generally used for lawns in Southern California. I handle only the best grade of seed. 1b. 80c, postpaid; by express or freight, 1b. 70c.

WHITE DUTCH CLOVER. Largely used for mixing with Kentucky Blue Grass, making an excellent lawn. Seed of the best quality. 1b. \$1.20 postpaid; by express or freight, 1b. \$1.10.

AUSTRALIAN RYE GRASS. Often used for making a quick lawn. It requires less moisture than Blue Grass, and will grow on soils where the latter will not thrive. 1b. 40c, postpaid; by express or freight, 1b. 30c, 10 lbs. \$2.75.

PACIFIC RYE GRASS. Similar to the Australian Rye Grass, but finer. Recommended for lawns. 1b. 40c, postpaid; by express or freight, 1b. 30c, 10 lbs. \$2.75.

SHADY LAWN GRASS. This is used for sowing under trees. It makes a rich, velvety lawn, and will grow in dense shade where other grasses will not thrive. 1b. \$1.60, postpaid; by express or freight, 1b. \$1.50.

LAWN FERTILIZERS

NO. 1 GRADE, COMMERCIAL LAWN FERTILIZER. Apply at the rate of 4 lbs. to 100 sq. ft.; 40 lbs. to 1000 sq. ft. of lawn. First mix the fertilizer with about the same quantity of finely sifted soil, then scatter broadcast over the lawn and water thoroughly. 10 lbs. 60c, 25 lbs. \$1.25, 50 lbs. \$2.00, 100 lbs. \$3.75.

Field and Fodder Crops

As these seeds are subject to frequent market fluctuations, I therefore request customers to write for prices, when quantities are required.

Note.—Express or freight charges are not prepaid. Field seeds can be sent by parcel post at cheaper rates than my "postpaid" price. Where quantities of field seeds are ordered to be sent by parcel post, remit for the first pound at the "postpaid" rate, to cover postage and packing charges, and for the remainder at the rate quoted by "express" or "freight" and add the correct parcel post charge to your zone. This parcel post charge must be sent additional, or seeds will be sent by express. For information, see parcel post schedule on first page of catalogue.

ALFALFA. (*Medicago sativa*.) This is without doubt the most valuable forage plant ever introduced into California, and is very nutritious either green or when made into hay. It does well on any good soil, if supplied with plenty of moisture. The land should be prepared by deep plowing and thorough harrowing. Sow broadcast, 20 lbs. to the acre.

ALFALFA, STANDARD QUALITY. This is the best seed on the market and comes from a section totally free from the alfalfa weevil, and also the dodder or Love Vine. I handle only the best, re-cleaned seed. Lb. 60c, postpaid; by express or freight, lb. 50c, 10 lbs. \$4.50. Larger quantities, price on application.

ALFALFA, PERUVIAN. This is considered to be a superior variety to the one generally grown here. It withstands more drought and cold weather, and in addition to this yields a larger amount of foliage of a finer texture. Lb. 70c, postpaid; by express or freight, lb. 60c, 10 lbs. \$5.50. Larger quantities, price on application.

ALFILERILLA OR FILAREE. (*Erodium moschatum*.) A native fodder plant, very nutritious and preferred by cattle, sheep and horses to any other of the natural pasture plants. Especially valuable for sowing on stock ranges where the natural pasture has become worn out. Sow 20 lbs. to the acre. Lb. 85c, postpaid; by express or freight, lb. 75c, 10 lbs. \$7.00, 100 lbs. \$60.00.

BROOM CORN, IMPROVED EVERGREEN. The best variety for California. It grows 7 to 8 feet high, and produces good, straight brush, which retains its green color. Sow 10 lbs. to the acre. Lb. 25c, postpaid; by express or freight, 15c, 10 lbs. \$1.25.

BUCKWHEAT, SILVER HULL. A favorite variety, very productive, and makes the finest quality of flour. Sow 25 lbs. to the acre. Lb. 20c, postpaid; by express or freight, lb. 10c, 10 lbs. 80c.

CLOVER, ALSIKE. (*Trifolium hybridum*.) This variety succeeds well in wet, stiff soils. It makes a fine quality of hay; the blossoms are also valuable as a source of honey for bees. Sow 10 lbs. to the acre. Lb. 90c, postpaid; by express or freight, lb. 80c, 10 lbs. \$7.50.

CLOVER, BOKHARA OR SWEET. (*Mellilotus alba*.) A strong growing plant, highly recommended for planting in citrus groves to plow under as a green fertilizer. The flowers are a great source of honey for bees. Sow 10 lbs. to the acre. Lb. 70c postpaid; by express or freight, lb. 60c. Larger quantities, price on application.

CLOVER, BURR. (*Medicago maculata*.) A well-known plant and now in great demand among orchardists as a cover crop. Sow 15 lbs. to the acre. Lb. 55c, postpaid; by express or freight, lb. 45c, 10 lbs. \$4.00.

Larger quantities, price on application.

COTTON, EGYPTIAN. One of the best varieties, and largely grown in the Imperial Valley section. Oz. 10c, lb. 50c, postpaid.

EGYPTIAN CORN. Largely grown as a fodder plant. The seed is also excellent food for chickens. Sow 5 to 6 lbs. to the acre. Lb. 25c, postpaid; by express or freight, lb. 15c, 10 lbs. \$1.25. Larger quantities, price on application.

FENUGREEK. Largely used for sowing in orchards as a cover crop, being a great nitrogen gatherer, and considered by some superior to Canadian field peas, or vetches. Sow 20 lbs. to the acre. Lb. 25c, postpaid; by express or freight, lb. 15c. Larger quantities, price on application.

GRASS, BERMUDA. (*Cynodon dactylon*.) Of dwarf creeping habit, making roots at every joint. Of value as a pasture grass for hot countries. Sow 5 lbs. to the acre. Lb. 80c, postpaid.

GRASS, ITALIAN RYE. (*Lolium italicum*.) An annual grass which thrives in almost any soil, and produces a good crop of hay. In California the seed should be sown in the fall. Sow 50 lbs. to the acre. Lb. 40c, postpaid; by express or freight, lb. 35c, 10 lbs. \$3.00. Larger quantities, price on application.

GRASS, ORCHARD. (*Dactylis glomerata*.) A valuable pasture grass, also makes excellent hay. Sow 35 lbs. to the acre. Lb. 40c, postpaid. Larger quantities, price on application.

GRASS, PERENNIAL RYE, OR AUSTRALIAN. (*Lolium perenne*.) A valuable pasture grass, which grows very rapidly and makes excellent hay. Also used for planting for lawns on poor soil. Sow 60 lbs. per acre. Lb. 40c, postpaid; by express or freight, lb. 30c, 10 lbs. \$2.75.

GRASS, RED TOP. (*Agrostis vulgaris*.) This grass succeeds well on all soils, makes excellent pasture, and fine quality of hay. It is also valuable as a lawn grass, producing a quick effect. Sow 40 lbs. to the acre. Lb. 60c, postpaid.

GRASS, TIMOTHY. (*Phleum pratense*.) A valuable grass for hay, and on good soil produces a heavy crop. However, it is not of much value as a pasture, and is not suited to dry soil. Sow 20 lbs. to the acre. Lb. 35c, postpaid; by express or freight, lb. 25c, 10 lbs. \$2.50.

Larger quantities, price on application.

KAFFIR CORN. A valuable fodder plant, especially for dry soils. The seed also makes good poultry food. Sow 6 lbs. to the acre. Lb. 20c, postpaid; by express Sow 6 lbs. to the acre. Lb. 25c, postpaid; by express or freight, lb. 15c, 10 lbs. \$1.25. Larger quantities, price on application.

MANGEL OR STOCK BEET. See page 4.

MILLET, GERMAN. This valuable fodder plant will thrive on any good soil, and yields a heavy crop. It makes excellent hay or green feed. The seed is also valuable as food for poultry or stock. Sow in drills, 25 lbs. to the acre. Lb. 25c, postpaid; by express or freight, lb. 15c, 10 lbs. \$1.25. Large quantities price on application.

MILLET, HUNGARIAN. Of more slender growth than the preceding, and largely used for hay. Lb. 25c, postpaid. Larger quantities, price on application.

MIL MAIZE, DWARF. Recommended for dry soils. Very productive and relished by all stock. Lb. 25c, postpaid; by express or freight, lb. 15c, 10 lbs. \$1.25. Larger quantities, price on application.

PEAS, CANADIAN FIELD. Of strong, vigorous growth, and largely planted in citrus groves as a cover crop. Lb. 25c, postpaid. Larger quantities, price on application.

SALT BUSH, AUSTRALIAN. (*Atriplex semibaccatum*.) A forage plant, which succeeds especially well on low lands near the coast, and thriving on soil containing a considerable quantity of alkali. Sow 1 to 2 lbs. of seed to the acre. Oz. 10c, lb. 85c, postpaid. Larger quantities, price on application.

SORGHUM, EARLY AMBER. A very nutritious forage plant which can be fed either green or cured, and will yield 2 to 3 cuttings a year. Sow in drills 10 lbs. to the acre, or broadcast 25 lbs. to the acre. Lb. 25c, postpaid; by express or freight, lb. 15c, 10 lbs. \$1.25. Larger quantities, price on application.

SUDAN GRASS. A valuable plant for arid and semi-arid countries. It is a rank grower and will produce from 2 to 4 tons per acre without irrigation, or from 8 to 10 tons with irrigation. All kinds of stock prefer it to most other forage plants. Lb. 40c, postpaid; express or freight, lb. 30c, 10 lbs. \$2.50. Larger quantities, price on application.

SUNFLOWER, LARGE RUSSIAN. This variety bears immense heads, often 12 inches or more in diameter, and yields a heavy crop of seed, which is used for feeding parrots and poultry. Sow in spring, in drills, using 3 or 4 lbs. to the acre. Lb. 25c, postpaid;

TEPARY BEANS. Valuable for semi-arid sections, producing a heavy crop. As a shelled bean it is equal to the White Navy and more productive and will grow in localities where the latter would not thrive. Lb. 30c, postpaid. Quantity price on application.

TOBACCO. See page 16.

VETCHES, OR TARES. This plant is now used in immense quantities for sowing in citrus groves as a cover crop. Being a great nitrogen gatherer, and making more vine than peas. It is also valuable as green feed for stock. Sow 50 lbs. to the acre. Lb. 25c, postpaid. Larger quantities, price on application.

Flower Seed Novelties and Specialties

Superb New Antirrhinums or Snapdragons

Snapdragons are among the most popular flowers grown in California. In the last few years great advancement has been made in the development of these lovely flowers, both increasing the size of the blossoms and adding many new and delicate shades. The intermediate or semi-dwarf varieties grow from 15 to 24 inches high and are the most desirable for bedding. The tall varieties grow from 24 to 30 inches high and on account of their long stems are particularly valuable for cut flowers. Below I am offering a large assortment of the very best varieties of recent introduction.

INTERMEDIATE VARIETIES

Amber Queen. Bright canary yellow shaded with chamois pink.

Black Prince. Nearly black.

Bonfire. Brilliant orange scarlet.

Cottage Maid. Coral pink with white throat.

Crimson King. Bright rich crimson.

Golden Queen. Pure golden yellow.

Mauve Beauty. Rosy mauve.

Old Rose. Soft blush pink, suffused with a delicate terra cotta tint.

Pink and Terra Cotta Shades. Beautiful new shades of pink, orange and terra cotta.

The Bride. Pure white.

The above varieties, each, per pkt., 10c.

SPECIAL OFFER. Full collection of the above ten varieties, one packet of each, for 75 cents.

TALL LARGE FLOWERED VARIETIES

Defiance. Brilliant orange scarlet.

Firefly. Scarlet and yellow.

Giant Garnet. A rich shade.

Giant Pink. Silvery pink.

Giant Rose. Rich rose.

Giant Yellow. Large clear yellow.

Lilac Queen. White suffused with pale lilac.

Moonlight. Golden apricot and old rose.

Queen Victoria. Very large pure white.

Venus. Pink on white ground, white throat.

The above varieties each, per pkt., 10c.

SPECIAL OFFER. Full collection of the above ten varieties, one packet of each, for 75 cents.

Anchusa italica, Dropmore

This beautiful perennial plant is of recent introduction and should be planted in every garden. The plants grow 4 to 5 feet high and are remarkable for their free and continuous blooming. The flowers, which are produced in long spikes, are of a rich gentian-blue shade. Pkt., 15c.

Long Spurred Hybrid Aquilegias

A magnificent strain of hybrid Columbines producing an abundance of very large flowers, with long spurs and borne on tall, graceful stems. The colors range in all shades of blue, lavender, mauve, yellow, orange, scarlet, rose-pink and white. Pkt., 15c.

New Aster, American Beauty

This grand new Aster is one of the most valuable introductions of recent years and is quite distinct from any other variety. It is similar in growth to the **Late Branching Aster** but differs in that the blossoms are produced on longer and heavier stems. Some of these stems will measure over 2 feet in length. The flowers are produced in succession over a long period, they are very large, perfectly double and especially valuable for cutting purposes. In four colors: **Carmine rose, pale pink, lavender, purple, or mixed.** Each per pkt. 25c; 1/4 oz. 50c.

Payne's Giant Branching Comet, or Ostrich Plume Aster

This magnificent strain is without doubt the best of the late flowering asters for our climate. They grow from 2 to 2 1/2 feet high, and form strong, much-branched bushy plants. The flowers are produced in large quantities, on long wiry stems, and are of immense size, often four or five inches across; they are of the most perfect form, with long, broad and curled petals. For cutting purposes this strain has no equal. I offer them in 8 different colors: **White, shell pink, lavender pink, rose, crimson, lavender, dark blue, royal purple, or mixed.** Each per pkt. 15c, 1/4 oz. 35c.

SPECIAL OFFER. Full collection of the above 8 colors, one packet of each, for \$1.00.

Bidens dahlioides

Bidens dahlioides

A hardy perennial producing large quantities of single, Cosmos-like flowers of a beautiful light pink shade. The flowers keep well in water and are excellent for cutting purposes. If the seed is sown in February or early part of March the plants will flower the first season. Pkt., 25c.

Cardinal Climber

A new and absolutely distinct annual climber, being the result of a cross between *Ipomoea quamoclit*, "Cypress Vine," and *Ipomoea coccinea*. I consider this the most brilliant and beautiful annual vine ever introduced. It will no doubt attract universal attention, not only for the beauty and number of its bright, cardinal-red flowers, but for its hardiness, its quick growth, reaching a height of 20 to 25 feet in a short time, and also for its rich green, lacinated foliage, which resembles that of a fine Japanese Maple. The flowers, which are about 1 1/2 inches in diameter, the tube being about 1 1/4 inches in length, are borne in clusters of from 5 to 7, and their vivid cardinal-red color against the abundant dark green foliage is most effective. This vine thrives best in a good soil and a warm, sunny situation. Sow the seed in the open ground as soon as the weather is warm and settled. Pkt., 15c.

Payne's Large Flowered Cineraria

Cinerarias have become very popular of recent years not only as greenhouse plants but also for out-door culture in sheltered and shady situations, and we regard them as one of the most valuable plants for making a display in the garden during the late winter and spring months. For early flowering, sow the seed in May or June and later sowings up until September. Sow the seed in seed pans of finely screened soil, composed of good loam, leaf mold and sand. As soon as large enough pot off the young seedlings and later transfer to larger pots until ready to plant out into the open ground. Cinerarias like a well enriched soil and will amply repay one for a little extra care and cultivation.

AZURE BLUE, pkt., 50c; OLD ROSE, pkt., 50c; ROYAL BLUE, pkt., 50c; EXTRA CHOICE MIXED, pkt., 50c. MATADOR. Scarlet. Pkt., 50c.

Cineraria

STELLATA AND CRUENTA HYBRIDS

This strain is especially desirable for making a display in the garden and is very hardy, succeeding with little care. It forms strong, pyramidal plants, 2 to 3 feet high, covered with hundreds of star-shaped flowers. The seed I am offering has been carefully selected and will be found to contain a large percentage of blue shades. Pkt., 25c.

Anemone Flowered Cosmos

Anemone Flowered Cosmos

Though not exactly a double flower, on the disk flowers there is produced a thick beard-like growth, giving the flower a full or double appearance in the center, as seen in the accompanying illustration. While they do not come altogether true from seed, a large percentage of the plants produce flowers with this peculiar phenomenon more or less in evidence, the remainder bearing large blossoms of the ordinary type. I offer them in three distinct colors: PINK BEAUTY, pkt., 15c; WHITE QUEEN, pkt., 15c; CRIMSON KING, pkt., 15c.

New Double Cosmos

This new double Cosmos is a selection from the Anemone Flowered Cosmos introduced by me from England three years ago. In this new form a large percentage of the plants produce perfectly double flowers, the remainder being of the Anemone Flowered type. In three distinct colors: DOUBLE PINK, pkt., 25c; DOUBLE WHITE, pkt. 25c. DOUBLE CRIMSON, pkt., 25c.

Chinese Wool Flower

This celosia from China is a novelty of great merit and attracted a great deal of attention during the past season. The plant grows from 2 to 3 feet high and has an immense globe-shaped flower head of crimson-scarlet color, resembling a large ball of wool, often 7 or 8 inches in diameter. Besides the main central stem the plant throws out numerous side branches each terminating in a ball of crimson wool. It blooms profusely during summer and fall and retains its full beauty and color until late in the season. Very effective for planting in beds and borders, also valuable for cutting purposes. Pkt., 25c.

Giant English Cyclamen

A great improvement on the ordinary Giant Cyclamen. The plants are of robust growth with rich heavy foliage. The flowers are very large and produced in great profusion and come in many rich colors. The seed I am offering is imported from a specialist in England.

DUKE OF FIFE. Deep lilac rose. Pkt., 25c.
GIAANT CRIMSON. Brilliant crimson. Pkt., 25c.
SALMON KING. Bright salmon pink. Pkt., 25c.
GIAANT WHITE. Pure white. Pkt., 25c.
GIAANT MIXED. Pkt., 25c.

DELPHINIUM

Belladonna hybrids

This magnificent strain of Delphinium is of recent origin, and is unsurpassed by any other strain ever offered. The plants are of rather dwarf habit, rarely growing more than 2½ feet high. They form numerous stems from the crown, but require no staking. Unlike the original Delphinium belladonna, this new type produces flowers in all shades from sky-blue to the very darkest possible shade of blue, including sapphire, turquoise and indigo, many of these intervening shades being beyond description. The flowers are larger than the old variety, and are arranged rather loosely on the spike, so that they stand out boldly from the main stem, presenting a most graceful appearance. Perhaps the most valuable and admirable feature of these plants is their extreme free flowering qualities. If well cared for, and the old stems are kept cut off, they will flower almost the year round, and even through the winter months. Pkt., 25c.

Belladonna, Light Blue. Pkt., 25c.

Freesia hybrida Ragionieri

This is without doubt one of the most remarkable novelties of late years. The fragrant blossoms are produced in the most exquisite shades of rose, pink, blue, purple, violet, yellow, orange and brown, often delicately veined and spotted. The culture is the same as for the white freesias, and plants can be had in bloom in seven or eight months from the seed. Pkt., 15c.

Didiscus Coeruleus

"Queen Ann's Blue Lace."

Though not new this valuable annual has only recently been introduced into California. The plants are of upright growth and produce numerous heads of sky blue flowers. It succeeds well in the open ground and also makes an excellent pot plant. Pkt. 25c.

GERBERA JAMESONII

"Scarlet Transvaal Daisy"

This beautiful plant from South Africa thrives quite well in our California climate, and is becoming very popular here. The plants require a good rich soil, with plenty of drainage and a sunny location. The flowers resemble a marguerite in shape, but are of an intense scarlet-crimson color. They are produced on long stems, and last a long time when cut. The seed should be sown in seed pans of light, well-drained soil, and kept in a glass house or frame, and the young plants can afterwards be transplanted to the open ground. Pkt., 25c.

Gerbera Jamesonii hybrida

The flowers of these magnificent hybrids of the Transvaal Daisy are of about the same size as those of the parent, but range in all shades from pure white, yellow, orange, salmon, rose, cerise, ruby-red to violet. Pkt., 25c.

LUPINUS PAYNEI

"Payne's Tree Lupine"

A native California species discovered by the writer in the foothills near Santa Susana and named in his honor by Dr. Anstruther Davidson, the well known botanist of Los Angeles. For his description of this plant see Bulletin of the Southern California Academy of Sciences, July, 1918.

I believe this is the most wonderful Tree Lupine in the world. It forms large round topped shrubs 4 to 8 feet high from a trunk-like base 3 to 4 and sometimes 8 inches in diameter. One large specimen measured 8 inches through the trunk, 8½ feet high and 13½ feet through the crown and when in blossom had over 500 flower spikes in bloom at one time.

The foliage is very handsome and silvery green, and the flowers are produced in racemes 8 to 15 inches long. They remind one of wistaria blossoms and appear in many beautiful shades; hardly two plants are just alike; some are pale blue, others lavender, pale lilac, dark blue, purple, rose pink, flesh pink or white; all with a beautiful yellow blotch on the standard. The blossoms are deliciously fragrant, a few flowers being sufficient to perfume a whole house. The plants bloom in the spring and the whole bush blossoms simultaneously. They grow in a heavy reddish clay soil. Soak the seeds in hot water over night and plant about one inch deep in the open ground where the plants are to remain. Pkt., 25c.

MECONOPSIS HETEROPHYLLA

"Flaming Poppy"

This charming little plant is a native wild flower of California, but is worthy of a place in every garden. It is an annual, a slender fragile plant 1 to 2 feet high, succeeding well in partial shade. The flowers are an intense orange scarlet with a deep maroon ring at the base, of exquisite beauty, the petals having the delicate satin texture of the poppy. Sow in fall or very early spring in the open ground. Pkt., 15c.

NEMESIA STRUMOSA SUTTONII

New Hybrids

A beautiful annual of recent introduction which succeeds quite well in California and is especially valuable for winter blooming. The plants grow about 1 foot high and produce large quantities of orchid-like blossoms in various shades of pink, rose, yellow, buff, orange and blue, beautifully marked and shaded. Pkt., 25c.

Nemesia Dwarf, Blue Gem

One of the most valuable introductions of recent years. A very dwarf, compact variety, with bright blue flowers produced in great profusion. Very desirable for beds, for edgings or as a ground cover for bulb beds, a good winter bloomer. Pkt., 50c.

Payne's Royal Exhibition Pansy

This is undoubtedly the most superb strain of Pansies ever offered on this coast. The plants are of vigorous growth, and are particularly free flowering. The blossoms are very large, and of fine, velvety texture, including all the richest shades, many of them exquisitely blotched, spotted and margined. Pkt., 25c; ½ oz., \$1.00.

Petunia, Payne's Giants of California

Ruffled and Fringed

The Petunia is one of the most popular plants in California gardens. This superb giant strain I am offering produces immense flowers of great substance, often 4 or 5 inches in diameter, deep-throated and with the edge of the petals beautifully ruffled and fringed. They include all the richest colors and combinations of colors, many of them beautifully veined, mottled or striped. Pkt., 25c.

Phacelia campanularia

A beautiful native annual, growing about 1 foot high and producing great quantities of large, bright blue flowers. Valuable for beds and borders, a good winter bloomer. Pkt., 15c.

New Poppy, Ryburgh Hybrids

This splendid new strain of annual poppy produces plants of bushy habit, carrying quantities of long-stemmed flowers in charming shades of flesh, salmon, orange, pink, rose and carmine. The flowers are double and semi-double and last well when cut. Pkt., 25c.

Lupinus Paynei

New Poppy, Eldorado

A lovely strain of annual poppies of the Shirley type, producing in great abundance, large double flowers measuring about 3 inches across. They come in the most delicate and brilliant colors, ranging from palest pink through shades of rose and salmon to rosy scarlet. Some are white with salmon-pink or crimson margins, others orange-salmon shaded white, others again are fiery rose-scarlet shaded white, cherry red and white or scarlet with white center. They attain a height of about 2 feet and are of great decorative value for cutting. Pkt., 25c.

The Flanders Poppy

The Wild Red Poppy so familiar to those who served in the recent European conflict, and to those who hold other memories of that continent. All through Western Europe this poppy grows wild in the fields and along the roadsides. Scattered through ripening wheat its flaming red blossoms show in striking and beautiful contrast to the clear, golden yellow of the maturing grain, making a picture of country-side loveliness that is never to be forgotten. It is from this wild poppy that the Rev. W. Wilks of Shirley Vicarage, England, produced the well-known Shirley poppy and from which many other garden varieties have originated. Pkt. 15c, oz. 75c.

Nice Giant Stock

Primula malacoides

This valuable introduction from China has proved to be one of the most free-flowering species and especially useful for out-door culture in partially shaded places. It is quite hardy and is one of the best winter flowering plants we have. It is also well suited for pot culture. The flowers are of a delicate shade of lilac. Seed sown in August produces plants which flower throughout the winter months. Pkt., 25c.

SINGLE SUNFLOWER Miniature Excelsior Hybrids

Beautiful new hybrids of the miniature or single sunflower. The plants grow 5 to 6 feet high and produce from early summer till fall quantities of single flowers about the size of our wild California sunflower. The colors present a rich variety, generally being pale or golden yellow, adorned with broad or narrow zones of shades varying from blood red through purple to dark brown. Pkt., 25c.

Scabiosa caucasica

A beautiful perennial Scabiosa. The plants grow 2 to 2½ feet high and produce large lavender flowers 3 to 4 inches across on long wiry stems. They last well in water and are very desirable for cutting. The plants are very free flowering, blooming continuously from the end of June until late in the fall. Pkt. 15c.

Schizanthus Wisetonensis

One of the daintiest of annual flowering plants and adapted for sowing in beds or borders. The seeds germinate quickly and the plants flower in a remarkably short time. When in bloom the foliage is almost completely hidden by the immense number of delicate butterfly-like flowers which are white, dotted with delicate rose. Makes an admirable pot plant for house or conservatory. Pkt., 15c.

TITHONIA SPECIOSA

"Mexican Sunflower"

A rare plant from Mexico. Perennial throwing up from the root many stout, woody stems furnished with rather large foliage. The flowers are large and remind one of an immense single zinnia; color dazzling orange scarlet. It forms a large shrubby plant, flowers for a long period and is especially desirable for planting among shrubs or in the background of wide borders. Pkt., 15c.

New Verbena, Lucifer

This splendid new Verbena is of low, compact habit, and produces immense quantities of flowers, which are an intense brilliant scarlet with no eye. A great improvement on the old varieties. Pkt., 15c.

Viola cornuta, Papilio

Though not as large as the regular pansy, this variety is so free flowering that it is far superior for bedding purposes. The plants begin to bloom when quite young and produce a never ending succession of delph blue flowers. For making a display in the winter and spring months there is no variety equal to it. It has attracted a great deal of attention during the last few seasons by visitors to the Busch Gardens in Pasadena where a large number of beds were planted with it. Pkt., 15c; ¼ oz. 75c.

NICE GIANT STOCKS

The Nice stock has proved to be pre-eminently the stock for Southern California and has become very popular of late, so much so, that I have discontinued listing many of the other strains. They form well branched plants about 2 feet high, producing spikes of large double flowers not tightly clustered but borne along the entire stem. They are very graceful and especially desirable for cutting. The plants are extremely free flowering, continuing in blossom for a long time. For winter flowering sow the seed in July and August. In transplanting stocks care should be taken to save the small or weak growing plants, as these generally produce double flowers, while the strong, robust growing seedlings often come single. The seed I am offering here is imported direct from the best grower in Nice, France, and contains several new varieties of great merit.

Abundance. Carmine rose, very large spikes. Pkt., 15c; ½ oz., 75c.

Almond Blossom. White shaded carmine. Pkt., 15c; ½ oz., 75c.

Beauty of Nice. Delicate flesh pink. Pkt., 15c; ¼ oz., 65c.

Cote d'Azur. Light violet blue. Pkt., 15c; ½ oz., 75c.

Giant Fire Red. New, bright red, the best of its color ever raised. Pkt., 25c; ½ oz., 85c.

Madame Joseph Paquet. New, deep, rich yellow, extra fine. Pkt., 25c; ½ oz., \$1.00.

Mont Blanc. Improved pure white. Pkt., 15c; ½ oz., 65c.

Old Rose improved. A delicate shade. Pkt., 15c; ½ oz., 75c.

Parma Violet. New, violet purple. Pkt., 25c; ½ oz., 85c.

Queen Alexandra. Delicate lilac. Pkt., 15c; ½ oz., 65c.

Souvenir de Monte Carlo. Canary yellow. Pkt., 15c; ½ oz., 75c.

Summer Night. Deep violet blue. Pkt. 15c, ½-oz., 75c.

Nice Giant. All colors mixed. Pkt., 15c; ½ oz., 50c.

Payne's Giant Double Zinnia

New Giant Picotee Zinnia

The Picotee Zinnia is a new and unique class. The flowers are like those of the Giant Zinnia but the petals are tipped with a different color; flesh pink tipped with chocolate brown is one of the most frequent types, others are orange, lemon yellow, cerise, various shades of pink and crimson all with well defined gold or brown picotee markings. Pkt. 25c.

New Dahlia Flowered Zinnia

(See front cover of catalogue)

A new and distinct race of Zinnia which will no doubt become very popular. The plants are of sturdy growth forming bushy plants 2 to 3 feet high, producing quantities of immense double flowers on long stems. The blossoms are the largest of any Zinnia ever grown and when fully developed often measure 4 inches in depth and 6 inches in diameter. The petals are larger and broader than in the ordinary giant zinnia and give the flower a resemblance to a show dahlia. In the color of the flowers there is a wonderful range, including golden yellow, burnt orange, old rose, cerise, mauve, crushed strawberry, terra cotta, rose pink, Tyrian rose and other charming shades. Pkt 25c.

Payne's Giant Double Zinnia

New Giant Double Quilled Zinnia, Achievement

In this Zinnia we have quite a new departure in this popular class of flowers. It is quite distinct from all other varieties ever raised. The petals are partially tubular or quilled, giving the flower somewhat the appearance of a cactus dahlia and displaying a rich variety of colors mostly of the warmer shades, such as, salmon, old rose, deep rose, lilac, bronze and dark red tones. On the reverse side the petals are light or dark lilac, making a wonderful combination of colors. The plants are of strong, robust growth and produce an abundance of very large, double flowers often 5 inches in diameter, which last a long time when cut. Pkt., 25c.

Payne's Giant Double Zinnia Special Mixture of Pastel Shades

The Zinnia is one of the most desirable of our summer and fall flowers for cutting purposes. They last a long time in water and are very decorative. However, many of the colors are too dazzlingly bright, and though we may admire them in the garden, they are not suited to produce artistic effects in the house. On the other hand, many of the lighter shades are very delicate and desirable for decorative purposes. Of late years there has been a great demand for Zinnias in the pastel shades, and this season I am offering a very carefully made up mixture which will be found to include all the most delicate art tints. Pkt., 15c; 1/4 oz., 40c.

Payne's Giant Double Zinnia

Zinnias are among the most popular of the summer flowering annuals, producing a grand display of brilliant and dazzling colors for many months, with little care and attention. The plants of this giant strain are of extremely robust growth, attaining a height of from 2 to 2 1/2 feet; bearing immense flowers, often 5 inches in diameter, very double, and of the most striking colors. I offer this superb strain in 12 distinct shades.

Burnt Orange. Pkt. 15c, 1/4 oz. 40c.
Crimson. Pkt., 15c; 1/4 oz., 35c.
Cream Color. Pkt., 15c; 1/4 oz., 40c.
Flesh Shades. Pkt., 15c; 1/4 oz., 40c.
Golden Yellow. Pkt., 15c; 1/4 oz., 35c.
Orange. Pkt., 15c; 1/4 oz., 35c.
Pink Shades. Pkt., 15c; 1/4 oz., 40c.
Purple Shades. Pkt., 15c; 1/4 oz., 35c.
Rose Shades. Pkt. 15c; 1/4 oz., 40c.
Salmon Pink. Pkt. 15c, 1/4 oz. 50c.
Scarlet. Pkt., 15c; 1/4 oz., 35c.
Shrimp Pink. Pkt. 15c; 1/4 oz., 50c.
Sulphur Yellow. Pkt., 15c; 1/4 oz., 35c.
White. Pkt., 15c; 1/4 oz., 35c.
All Colors Mixed Pkt., 15c; 1/4 oz., 25c.

SPECIAL OFFER. Collection of any six of the above, one pkt. each, for 75c. Collection of the whole 14 colors, one pkt. each, for \$1.50.

New Zinnia, Buttercup

This new Giant Zinnia is of sturdy growth, forming very large, bushy plants, producing immense, perfectly double flowers of a pure buttercup yellow. A valuable addition to this popular class of plants. Pkt. 25c.

FLOWERS AND PLANTS

FOR DIFFERENT PURPOSES AND SITUATIONS, WHICH CAN BE GROWN FROM SEED

FLOWERING ANNUALS

Including some perennials which flower the first season from seed. Those marked * are the best for massing in beds and borders.

Abronia	*Celosia	*Gilia	Meconopsis	Platystemon
*Acroclinium	*Centaurea	*Godetia	*Mentzelia	*Poppy
*Ageratum	Chinese Wool Flower	Gomphrena	Mesembryanthemum	Portulaca
*Alyssum	*Chrysanthemum	Gypsophila	Mignonette	Primula malacoides
*Antirrhinum	Cineraria	Helianthus	Mimosa	Rhodanthe
*Arctotis	*Clarkia	Helichrysum	Mimulus	*Salpiglossis
Argemone	Collinsia	*Hunnemannia	Mirabilis	*Salvia
*Aster	*Convolvulus	*Larkspur	Myosotis	Scabiosa
Baeria	*Coreopsis (native spec.)	Lavatera	*Nasturtium	Schizanthus
Balsam	*Cornflower	Layia	Nemesia	Silene
*Bartonia	*Cosmos	Linaria	Nemophila	Stevia
Begonia	Dahlia	*Linanthus	Nicotiana	*Stocks
Bellis	Daisy	Linum	*Oenothera	Sunflower
Bidens	*Dianthus	Lobelia	Pansy	Sweet Peas
Brachycome	*Dimorphotheca	*Love-lies-bleeding	*Petunia	*Tagetes
*Calendula	*Eschscholtzia	*Lupinus	*Phacelia	Verbena
*Calliopsis	Floerkea	Malope	*Phlox	Viola cornuta
*Candytuft	*Gaillardia	*Marigold		*Zinnia
		Matricaria		

FLOWERING PERENNIALS

Anchusa	Cilanthus	Geranium	Myosotis	Salvia
Aquilegia	Coreopsis	Gerbera	Nierembergia	Scabiosa caucasica
Auricula	Cyclamen	Gypsophila	Oenothera	Silene
Begonia	Daisy	Heliotropium	Pentstemon	Sisyrinchium
Bellis	Dahlia	Hollyhock	Petunia	Shasta Daisy
Campanula	Delphinium	Hunnemannia	Phlox	Statice
Canna	Digitalis	Lobelia	Polyanthus	Sweet William
Carnation	Erysimum	Lupinus	Poppy, Iceland	Tithonia
Chrysanthemum	Gaillardia	Mimulus	Poppy, Oriental	Verbena
			Romneya	Viola
				Wallflower

FLOWERS FOR SHADED AND PARTIALLY SHADED PLACES

Aquilegia	Cineraria	Daisy	Linaria cymbalaria	Nemophila
Auricula	Clarkia	Digitalis	Lobelia cardinalis	Oenothera
Begonia, Tuberous	Collinsia	Floerkea	Mimulus	Polyanthus
Bellis	Cyclamen	Godetia	Myosotis	Primula
				Viola

Annuals

Cardinal Climber
Convolvulus
Cucumber, Wild
Cypress Vine
Humulus
Ipomoea

CLIMBING VINES

Mina
Momordica
Nasturtium
Sweet Peas
Thunbergia
Tropaeolum

Perennials

Ampelopsis, see page 39
Antigonon
Australian Pea Vine
Cobaea
Ipomoea

Lathyrus
Mandevilla
Maurandia
Smilax
Tacsonia
Wisteria, see page 43

FLOWERS FOR CUTTING PURPOSES

Acroclinium	Calendula	Cornflower	Hunnemannia	Salpiglossis
Antirrhinum	Calliopsis	Cosmos	Larkspur	Scabiosa
Aquilegia	Candytuft	Dahlia	Marigold	Shasta Daisy
Arctotis	Carnation	Delphinium	Matricaria	Statice
Aster	Chinese Wool Flower	Gaillardia	Mentzelia	Stocks
Bidens	Centaurea	Gerbera	Mignonette	Sunflower
Bartonia	Chrysanthemum	Gypsophila	Pentstemon	Sweet Peas
	Coreopsis	Helianthus	Poppies	Zinnia

EDGING AND BORDER PLANTS

Ageratum	Candytuft, dwarf	Dimorphotheca	Myosotis	Phlox, Drummond
Alyssum	Centaurea candidissima	Lobelia	Nasturtium, Tom Thumb	Polyanthus
Begonia, ever-blooming	Cineraria Maritima	Marigold, French, Leg-	Nemophila	Pyrethrum
Bellis	Daisy	ion of Honor	Pansies	Tagetes signata pumila
			Petunia, Rosy Morn	Viola

FRAGRANT FLOWERS

Abronia	Carnation	Lupinus	Polyanthus	Sweet William
Alyssum	Centaurea	Mignonette	Scabiosa	Violet
Candytuft	Cyclamen	Mimulus Moschatus	Stocks	Wallflower
	Heliotropium	Nicotiana Affinis	Sweet Peas	

ORNAMENTAL FOLIAGE PLANTS

Amaranthus
Centaurea candidissima
Cineraria maritima
Coleus
Kochia
Pyrethrum
Ricinus

EVERLASTING FLOWERS

Acroclinium
Gomphrena
Gypsophila paniculata
Helichrysum
Rhodanthe
Statice

PLANTS FOR HANGING BASKETS, ETC.

Alyssum
Asparagus Sprengeri. See page 49
Begonia
Convolvulus mauritanicus
Linaria cymbalaria
Lobelia
Maurandia
Nasturtium
Nierembergia
Petunia
Smilax
Thunbergia

HEDGE PLANTS

For descriptions, see pages 33-43
Acacia armata
Coprosma
Crataegus
Cupressus macrocarpa
Laurestinus
Ligustrum
Prunus ilicifolia
Pittosporum
Privet
Ulex
Viburnum

General List Choice Flower Seeds

READ CAREFULLY

In sowing flower seeds in California it must be remembered that the conditions are entirely different from those existing in the Eastern States. There the time for sowing all hardy and half hardy annuals is in the Spring, while in California the majority of them do best when sown in the Fall and early part of the Winter; this being the season when most of our native annual wild flowers commence to grow. It naturally follows that it is the best time to plant most annuals in our gardens. There are, however, some exceptions to this rule, such as Asters, Zinnia, Portulaca, etc., which are distinctly Summer flowering plants. In the following pages I have endeavored to give special instructions where needed as far as space will permit. Where no special time for sowing annuals is mentioned, it is understood that the Fall and Winter months are the best time.

ACROCLINIUM. "Everlasting Flower." Annual 1 to 1½ feet high. Pretty daisy-like flowers, very effective for bouquets either fresh or as a dried flower. For drying, cut with long stems, just as the flower commences to open, tie in bunches and hang up, with the flower downwards, for 4 or 5 weeks until thoroughly dry. It succeeds best in California when grown in the winter season. Sow in the open ground in fall or early winter.

Rose, white, or mixed. Each per pkt. 10c.

AGERATUM MEXICANUM. Annual, 9 to 12 inches high. A favorite bedding plant; flowers in clusters, of brush-like appearance; very free flowering and in bloom nearly all through the season. Seed should be sown in pots or seed boxes and afterwards transplanted.

Imperial Dwarf Blue. Light blue. Pkt. 10c.

ALYSSUM. Free flowering annual, useful for beds, edgings, etc.

maritimum. "Sweet Alyssum." White; height 6 to 9 inches. Pkt. 10c, oz. 40c.

Little Gem. Dwarf, 4 to 6 inches. Pkt., 10c; oz., 50c.

Carpet of Snow. Very dwarf. Pkt., 10c; oz., 50c.

Lilac Queen. This new and distinct variety is of dwarf compact habit and produces flowers of a pure lilac shade. The plants when in full bloom resemble a miniature candytuft. Pkt. 15c.

ALYSSUM SAXATILE COMPACTUM. "Gold Dust." Perennial 9 to 12 inches high. Excellent for beds and edgings. Sow in spring or early fall, in seed boxes and when large enough transplant. Pkt. 10c.

AMARANTHUS. Annual, ornamental foliaged plants succeeding well in California, especially in the summer season. Sow the seed in spring in a seed box and transplant to a sunny situation.

tricolor. "Joseph's Coat." Leaves red, yellow and green, height 3 ft. Pkt., 10c.

ANCHUSA. See Flower Seed Specialties, page 19.

ANTIGONON LEPTOPUS. "Rosa de Montana." A beautiful perennial climber, producing immense clusters of rose-colored flower-bracts. Sow in pots as early as possible and afterwards transplant. Pkt. 15c.

ANTIRRHINUM. "Snapdragon." A perennial blooming the first season from seed and generally treated in California as an annual. Showy plants for borders or large beds.

Tall mixed. Height, 2 to 2½ ft. Pkt., 10c.

Intermediate mixed. Height, 1½ to 2 ft. Pkt., 10c.

Separate colors. See Flower Seed Specialties, page 19.

AQUILEGIA. "Columbine." Magnificent perennial plants growing from 2 to 3 ft. high and flowering in spring and early summer. The seed should be sown in spring in seed pans or boxes and afterwards transplanted to the open ground. They succeed best in a moist shady situation.

californica hybrida. Very large yellow flowers with long orange-colored spurs, extra fine. Pkt. 10c.

chrysantha. Rich canary yellow. Pkt. 10c.

coerulea. (Rocky Mountain Columbine), pale blue and white. Pkt. 10c.

Long Spurred Hybrids. See Flower Seed Novelties, page 19.

ARCTOTIS GRANDIS. Annual forming large, bushy, much branched plants, 2 to 3 feet high. Flowers large, white on the upper surface, the reverse of petals pale lilac-blue. Of easy culture and remarkably free flowering. Pkt. 10c.

ASTER. A popular annual, largely grown for cut flowers; also for beds, etc. Sow the seed from March to May in seed pans or boxes, and when large enough transplant to rich, well worked soil.

American Beauty. See Flower Seed Novelties, page 19.

Vick's Branching. A large, late flowering variety in great demand for cutting. The plants form strong branching bushes 2 to 2½ feet high, producing large Chrysanthemum-like flowers on long, stout stems.

White, Daybreak pink, rose, crimson, lavender, purple or mixed. Each, per pkt. 10c, ¼ oz., 50c.

Giant Branching Comet. See Flower Seed Specialties, page 19.

Victoria. Fine mixed; height 1½ feet. Pkt. 10c.

Truffaut's Paeony Flowered Perfection. Fine mixed; height 1½ feet. Pkt. 10c.

AURICULA. Perennial, 6 inches. Sow in seed pans and keep in house or frame; can be grown as a pot plant or planted out in sheltered border. Seed saved from splendid collection of finest mixed sorts. Pkt. 25c.

AUSTRALIAN PEA VINE. (*Dolichos lignosus*.) A very rapid growing vine, with pretty foliage and rose and purple pea-shaped flowers. Valuable for covering up fences quickly; stands the heat well. The seed should be soaked in hot water about 12 hours before sowing. Pkt., 10c.

BALSAM. "Touch-me-not." Annual 1 to 1½ feet high. Valuable for summer flowering. Sow the seed in boxes in early spring and afterwards transplant to beds of rich, well prepared soil.

Camellia-flowered. Double mixed. Pkt. 10c.

BARTONIA AUREA. Annual 1 to 1½ feet high. Large golden yellow flowers opening during the sunshine. Pkt., 10c.

BEGONIA TUBEROUS-ROOTED. Beautiful perennial plants blooming the first season if sown early. Much used as pot plants; also for planting out in sheltered places. The seed should be sown in well drained seed pans, using a mixture of loam, leaf-mould and sand; press down firmly, sow the seed on the surface and do not cover, but press firmly with the hand; water with a fine spray. When the plants are large enough, pot off into small pots.

Single varieties. Splendid mixed. Pkt. 50c.

BEGONIA EVER-BLOOMING BEDDING VARIETIES. Perennials flowering the first season from seed. Very popular bedding plants doing well in the full sunlight, also in shady and partially shady situations, flowering for a long period. The plants grow about 1 foot high, forming dense, compact bushes, almost completely hidden by the bright colored flowers. They are also admirable for pot culture or window boxes. Sow the seed the same as the tuberous rooted begonias.

gracilis. Delicate rose-color. Pkt. 15c.

Primadonna. Pale rose, large flowers. Pkt. 25c.

luminosa. Deep fiery scarlet, very fine. Pkt. 25c.

Vernon. Rich orange-scarlet flowers, dark red foliage. Pkt. 15c.

BELLIS PERENNIS. "Double Daisy." Perennial, but flowering the first season from seed. Favorite plants for edgings, low beds, etc. Height 6 inches.

Longfellow. Pink and white. Pkt., 10c.

Snowball. Pure white. Pkt., 10c.

Fine mixed. Pkt., 10c.

Montrosa. A new strain of strong, robust growth with abundance of immense very double flowers. Rose, red, white or mixed. Each, per pkt. 15c.

BIDENS DAHLIOIDES. See Flower Seed Novelties, page 19.

BRACHYCOME IBERIDIFOLIA. "Swan River Daisy." Annual 1 to 1½ feet, forming a close, compact plant, with immense numbers of large single blue or white flowers, in bloom nearly all the year. Pkt., 10c.

CALCEOLARIA HYBRIDA GRANDIFLORA. A magnificent greenhouse perennial, blooming the first season. Large pocket-like flowers of the most brilliant shades of yellow, maroon, crimson, etc., spotted and blotched in the most unique fashion. The strain offered here is from one of the most celebrated growers in Europe and is unsurpassed in quality. Sow in August or September in seed pans and keep in greenhouse.

Large flowered. Tigered and spotted, superb mixture. Pkt., 50c.

CALENDULA OFFICINALIS. "Pot Marigold." Annual, 1 foot. The "Marygold" of Shakespeare. Exceedingly showy and free flowering plants of easy cultivation and requiring very little water. Blooming nearly all the year and most valuable for large beds where a mass of color is desired.

Meteor. Yellow, striped orange. Pkt., 10c; oz., 35c.

Orange King. Deep orange. Pkt., 10c; oz., 35c.

Lemon Queen. Sulphur yellow. Pkt., 10c; oz., 35c.

CALLIOPSIS. Annual, 2 to 3 feet. Showy and free flowering plants of easy culture, doing best in a sunny situation and blooming for a long period. Flowers large, are splendid for cutting purposes.

bicolor. Golden yellow with black centers. Pkt., 10c; oz., 35c.

Golden Wave. Deep golden yellow. Pkt., 10c; oz., 35c.

Fine Mixed. Pkt., 10c; oz., 35c.

CAMPANULA MEDIUM. "Canterbury Bells." Biennial, 2½ to 3 feet. Old-fashioned favorite flowers of easy cultivation. The seed may be sown late in spring or early in fall, in seed beds or boxes, and when large enough, transplant to where they are to flower. The plants will bloom the following spring and summer.

Single, Blue, Rose, White or Mixed. Each, pkt., 10c.

Double, Blue, Rose, White or Mixed. Each, pkt., 15c.

Calycanthema. "Cup and Saucer Canterbury Bells." Differs from the ordinary type in having an extra large calyx, which is the same color as the flower, giving the appearance of a cup and saucer.

Cup and Saucer, Mixed. Pkt., 15c.

Celosia Pyramidalis Thompsoni

CANDYTUFT. Old-fashioned free flowering annuals growing 1 to 1½ feet high, very desirable for borders and masses.

Carmine. Bright rosy carmine. Pkt., 10c; oz., 40c.

Crimson. Dark crimson. Pkt., 10c; oz., 40c.

Empress. White, long spikes. Pkt., 10c; oz., 40c.

Flesh Pink. A beautiful shade. Pkt., 10c; oz., 40c.

Lilac. Rosy lilac. Pkt., 10c; oz., 40c.

Choice Mixed. Pkt., 10c; oz., 40c.

CANNA. Perennial, 3 to 6 feet high. Most effective plants for massing in large beds or for borders, making a great display of color. The plants bloom from early spring till late in the fall and the large, bright-colored flowers contrast well against the heavy, handsome foliage. Soak the seed in hot water a few hours before sowing.

New Large-flowered Hybrids. Saved from a choice collection. Pkt., 10c.

Seedling Carnation

CARDINAL CLIMBER. See Flower Seed Novelties, page 19.

CARNATION. Perennial, 1½ to 2 feet high. Well known favorite flowers much used for cutting purposes. Sow in seed pans or boxes, and when large enough, pot off and afterwards transplant to the open ground. The plants will flower the following year; as they bloom they should be carefully marked, saving only the best double flowered ones and discarding the small and single flowered plants.

Marguerite. Scarlet, white, Yellow or Mixed. Each per pkt. 10c.

Perpetual or Tree, fine mixed. Pkt., 25c.

Redondo. Scarlet or mixed. Each per pkt. 15c.

CELOSIA CRISTATA. "Cockscomb." Annual, 1 foot high. Valuable as pot plants; also very effective for large beds and borders. They succeed best in a rather light, warm soil. The seed can be sown early in spring in seed pans or boxes and afterwards potted or transplanted to the open ground where they are to flower.

Glasgow Prize. The finest strain; combs of deep crimson color and immense size. Pkt., 15c.

Fine mixed. Pkt., 10c.

CELOSIA PLUMOSA. "Feathered Cockscomb." Annual, 2 to 3 feet high. Magnificent plants for large beds or groups. Producing large plume-like flowers, which can be cut and dried for winter bouquets. The seeds should be started in the same way as the other "Cockscombs" mentioned above.

pyramidalis Thompsoni. Plumes of the most brilliant crimson color. Rich, bronze-colored foliage. pkt. 10c.

CENTAUREA CANDIDISSIMA. "Dusty Miller." Perennial, 1 to 1½ feet. A beautiful plant with white silvery leaves and used for beds and edgings. The seeds should be sown in seed boxes and afterwards transplanted. Pkt., 10c.

CENTAUREA CYANUS. "Cornflower." Annual, 1½ to 2 feet high. A well-known annual, much used for cutting purposes.

Single Blue. Bright Blue. Pkt., 10c; oz., 35c.

Mixed Colors. Pkt., 10c; oz., 35c.

Double Blue. Pkt., 15c; oz., 70c.

Centaurea imperialis

CENTAUREA IMPERIALIS. "Royal Sweet Sultan." Annual, 2 to 3 feet. A great improvement on the old strain of "Sweet Sultan"; flowers resemble the "Corn-flower" in shape, but are of immense size. Valuable for florists' use, lasting a long time when cut.

Giant Brilliant Rose. Pkt. 10c, oz. \$1.00.
Giant Delicate Lilac. Pkt. 10c, oz. \$1.00.
Giant Deep Lavender. Pkt. 10c, oz. \$1.00.
Favorita. Rosy lilac. Pkt. 10c, oz. \$1.00.
The Bridegroom. Heliotrope. Pkt. 10c, oz. \$1.00.
Giant White. Pkt. 10c, oz. 75c.
Giant Purple. Pkt. 10c, oz. 75c.
Giant Rose. Pkt. 10c, oz. 75c.
Giant Mixed. Pkt. 10c, oz. 75c.
suaveolens. "Yellow Sweet Sultan." Annual, 1½ to 2 feet high. Flowers beautiful sulphur yellow. Largely grown for cut flowers. Pkt. 10c.

CHINESE WOOL FLOWER. See Flower Seed Novelties, page 20.

CHRYSANTHEMUM. Annual varieties 1 to 3 feet high. Very showy for beds and also useful for cut flowers.

Northern Star. Large, white with soft yellow zone and dark eye. Pkt., 10c.
Morning Star. Beautiful pale yellow. Pkt., 10c.
Evening Star. Golden yellow, large. Pkt., 10c.
Burridgeanum. White and red. Pkt., 10c.
W. E. Gladstone. Rich crimson. Pkt., 10c.
Single Mixed. Pkt., 10c; oz., 50c.
Coronarum. Double yellow. Pkt., 10c.
Coronarum album. Double white. Pkt., 10c.

CHRYSANTHEMUM JAPONICUM. Perennial, 3 to 4 feet. Well known plants, flowering in the fall and early winter. Seed should be sown in seed boxes early in the spring, and when large enough transplanted to the open ground. The plants will bloom the following fall.

Hybrids. Fine mixed. Pkt., 15c.

CHRYSANTHEMUM FRUTESCENS. "White Marguerite." Perennial, 3 to 4 feet high. A well-known flower. Sow the seed in the same way as the Japanese varieties. Pkt., 10c.

CINERARIA HYBRIDA GRANDIFLORA. Biennial, but treated as an annual in California. Height 1½ to 2 feet. Magnificent plant for pot culture in green-houses, or may be planted out in sheltered and partially shaded situations. Sow the seed in August or September in seed pans, and as soon as large enough pot off into small pots and afterwards transfer to larger pots as required. The strain I am offering is the very best, procured direct from

one of the most celebrated growers in Europe, and may be relied upon to produce large flowers of the most exquisite colors. Pkt., 50c.

Separate Colors. See Flower Seed Specialties, page 20.

Stellata. See Flower Seed Specialties, page 20.

CINERARIA MARITIMA ACANTHIFOLIA. Perennial, 1 foot high; beautiful silvery foliage, much used for borders and edgings. Sow the seed in seed boxes and transplant. Pkt., 10c.

Diamond. Perennial, 1 foot high; pretty white foliage, valuable for edgings. Pkt., 10c.

CLARKIA. Annual, 2 to 4 feet high. Free flowering and of easy culture.

elegans. Fine mixed. Pkt., 10c; oz., 40c.

elegans. Salmon Queen. Double, salmon pink. Pkt. 10c.

elegans. Scarlet Queen. Double scarlet. Pkt. 10c.

pulchella. Red. Pkt., 10c.

CLIANTHUS DAMPIERI. "Australian Desert Pea." Perennial, 4 feet high. Bearing clusters of drooping pea-shaped flowers, 3 inches or more in length, of a brilliant rich scarlet color marked with a large black blotch in the center. The plants prefer a dry, sunny situation. Pkt., 15c.

puniceus. "New Zealand Glory Pea." Perennial, 4 feet; large bunches of showy red flowers. Pkt., 10c.

COBAEA SCANDENS. Perennial climbing vine attaining a height of 30 feet or more and blooming freely the first season. Valuable for covering trellises, arbors, etc. Large bell-shaped flowers. Sow the seed early in the spring in seed boxes, and as soon as large enough transplant to the open ground. Pkt., 10c.

COLEUS. Perennial, 1½ to 2 feet high. Magnificent foliage plant. For pot culture or for planting out during the summer season. Sow the seed in pots or seed pans, covering very lightly, and as soon as large enough pot off into small pots.

New large-leaved varieties. The finest strain procurable. Producing large leaves of the most brilliant and showy colors. Pkt., 25c.
Fine mixed. Pkt., 10c.

COLLINSIA BICOLOR. "Innocence." Annual, 1 to 2 feet high. Of slender, graceful habit, with bright green foliage. Flowers in clusters regularly disposed, suggesting rows. Upper lip white or lilac, lower violet or rose-purple. Pkt., 10c; oz., 35c; lb., \$4.00.

CONVOLVULUS MAJOR. "Morning Glory." Annual climbing vine attaining a height of about 15 feet. Useful for covering fences, trellises, etc. Soak the seeds in warm water for a few hours before planting.

White, rose crimson, dark blue, or mixed. Each, per pkt., 5c.

minor. "Dwarf Morning Glory." Annual, 1 foot. Flowers similar to the "Morning Glory," but smaller and remaining open all day in fine weather. Very pretty for borders or grown in masses in beds. All colors, fine mixed. Pkt., 5c.

mauritanicus. Perennial trailing plant. Valuable for rock work or hanging baskets. Flowers a rich shade of lavender. Soak the seeds a few hours in hot water before planting. Pkt., 10c.

COREOPSIS LANCEOLATA. Perennial, 2 feet high. Large, showy, bright yellow flowers produced in great abundance. Much used for cutting purposes. Pkt., 10c.

CORNFLOWER. See **CENTAUREA.**

COSMOS. Annual, producing large single flowers much used for cutting purposes. The plants vary in height according to the time of year at which they are planted. If sown in the spring they grow very tall, from 5 to 8 feet high, and flower in the fall, but if the seed is sown in the fall, about October, they will flower in about 2 months and the plants will be dwarf, from 1½ to 2 feet high and are very pretty for massing in beds. Seed sown in December will form dwarf plants and bloom about March.

Mammoth perfection, white, dark pink, crimson, or mixed. Each, per pkt., 10c; oz., 40c.

Lady Lenox. Very large flowers; a lovely shade of shell pink. Pkt., 10c.

Lady Lenox, White. Very large flowers, pure white. Pkt. 10c.

Anemone Flowered. See Flower Seed Novelties, page 20.

New Double. See Flower Seed Novelties, page 20.

COSMOS KLONDYKE. Annual, 2 to 3 feet. Deep orange-colored flowers 2 to 2½ inches in diameter, blooming in the fall. Pkt., 10c.

CUCUMBER WILD. (Echinocystis lobata.) A quick growing annual vine for covering trellises, etc. Pkt. 10c.

CYCLAMEN PERSICUM. Perennial, 8 to 10 inches. Charming plants with rich colored, fragrant flowers. Blooming in winter and spring. Generally grown as a pot plant. The seed may be sown in the spring or early in the fall in seed pans of rich soil mixed with leaf-mould and sand and potted on when large enough.

persicum. Fine mixed. Pkt., 15c.

giganteum. Fine mixed. Pkt., 25c.

Giant English. See Flower Seed Specialties, page 20.

CYPRESS VINE. A popular annual climbing vine with delicate fern-like foliage and masses of small star-shaped flowers. Sow early in spring; soak the seed in warm water a few hours before sowing. **Scarlet, white or mixed.** Each, per pkt., 5c.

DAISY. See **BELLIS.**

DAHLIA. Perennial, 4 to 6 feet, flowering the first season from seed. Well known plants with large, showy flowers, useful for beds and masses. Sow the seed early in spring in seed boxes and afterwards transplant to the open ground. Dahlias like a rich soil with plenty of well rotted manure and should be watered freely. In raising Dahlias from seed many of them will come semi-double, although the seed is saved from the very best double varieties. The best varieties should be marked when in flower and at the end of the season the poor ones discarded and the better ones can be taken up and divided and again replanted.

Cactus. Double, with long pointed petals; seeds saved from one of the finest collections. Mixed colors. Pkt., 15c.

Double, Large Flowered. Mixed colors. Pkt. 15c.

Paeony Flowered. Large, mixed colors. Pkt. 15c.

Single. All colors; splendid mixed. Pkt., 10c.

DIGITALIS. "Foxglove." Perennial, 3 to 5 feet. An old-fashioned flower with long suikes of tubular-shaped flowers. Sow the seed in spring or fall in seed pans and afterwards transplant.

gloxinioides. Beautifully spotted, fine mixed. Pkt., 10c.

DIMORPHOTHECA AURANTIACA. "African Orange Daisy." Annual, 12 to 15 inches high. One of the very best winter flowering plants yet introduced. By sowing the seed in September or October, it can be had in bloom as early as January and will flower continually until late spring or early summer. The marguerite-like blossoms, about two and a half inches in diameter, are of a unique, glossy orange-gold, this brilliant coloring being rendered more conspicuous by the dark colored disk, which is surrounded by a black zone. When in full bloom on bright sunny days it is truly a magnificent sight, for brilliancy of color almost rivaling the California Poppy. It is especially adapted for planting in masses in beds or borders and parkings. Pkt., 10c; oz., \$1.50.

Hybrida. Splendid new hybrids, colors range from white, lemon yellow, golden yellow, orange to salmon. Pkt., 15c.

ESCHSCHOLTZIA CALIFORNICA. "California Poppy." Annual, 1 to 1½ feet high. A well known native flower with blossoms 2 to 3 inches in diameter.

Yellow, Orange and White. Each, pkt., 10c; oz., 35c.

Burbank's Crimson-flowering. Crimson. Pkt., 10c.

Rose Cardinal. White with rose on outside of petals. Pkt., 10c.

Eschscholtzia californica, "California Poppy"

DELPHINIUM. "Perennial Larkspur." Perennial, 3 to 5 feet high. Beautiful summer flowering plants with long spikes of showy flowers. Sow the seed in spring or early fall in seed boxes and afterwards transplant to open ground.

Belladonna hybrids. See Flower Seed Specialties, page 20.

Gold Medal Hybrids. Extremely large flowers in all the richest shades of blue. Pkt., 15c.

Blue Butterfly. Distinct variety growing about 18 inches high, flowering first season from seed. Plants produce freely spikes of large, single, Salvia-blue flowers. Pkt. 15c.

cardinale. "Scarlet Larkspur." A native California species, with long spikes of scarlet flowers. Pkt., 10c.

DIANTHUS CHINENSIS. Biennial, but generally treated as an annual; 1 foot high. Charming free-flowering plants with flowers of the most brilliant colors. Very effective for planting thickly in beds. **chinesis.** Fine mixed. Pkt., 10c.

Heddewigi. Single fine mixed. Pkt., 10c.

Crimson Belle. Single crimson. Pkt., 10c.

Eastern Queen. Single, marbled carmine-rose mauve and lilac. Pkt., 10c.

hybridus. Double mixed. Pkt., 10c.

lacinatus. Single fringed, fine mixed. Pkt., 10c.

plumarius. Perennial, 1 foot high. A beautiful single pink. Flowers with fringed edge, white with dark center. Pkt., 10c.

Carmine King. Carmine rose on both sides of petals. Pkt., 10c.

Golden West. Canary-yellow with orange blotch at base of each petal. Pkt., 10c.

Mandarin. Inside of petals rich orange, outside orange-scarlet. Pkt., 10c.

Mikado. Brilliant orange-crimson. Large Flowers. Pkt. 15c.

Thorburni. Crimson outside, inside bright flame and gold. Pkt., 15c.

FREESIA. See Flower Seed Specialties, page 20.

GAILLARDIA PICTA. Annual, 1 to 1½ feet high. Sow in early spring.

pecta. Crimson and orange. Pkt., 5c.

GAILLARDIA GRANDIFLORA. Perennial, 1½ feet. Large flowered varieties, fine mixed. Pkt., 10c.

GERANIUM. Well known perennial, single varieties, splendid mixed. Pkt., 10c.

GERBERA. See Flower Seed Specialties, page 20.

GEUM COCCINEUM, Mrs. Bradshaw. Splendid perennial which blooms for the greater part of the year. Grows 1½ to 2 feet high and produces a profusion of large double bright scarlet flowers. Pkt. 15c.

GLOXINIA HYBRIDA. Beautiful perennial greenhouse plant, height about 8 inches, with large handsome foliage and immense trumpet-shaped flowers which are of a texture like velvet, of the most brilliant shades of violet, purple, crimson, scarlet, pink and lavender. Often beautifully blotched and spotted. Sow the seed in February or March in seed pans of light soil mixed with leaf-mould. Do not cover the seed, but sow on the surface and press

Helianthus, New Red Sunflower

down firmly with the hand and water with a fine spray. Keep in a greenhouse; when plants are large enough, pot off as required. All colors, splendid mixed. Pkt., 25c.

GILIA TRICOLOR. "Bird's Eyes." Annual, 9 inches to 1 foot high. Flowers pale lilac, yellow toward the center, with five purple spots. Charming combination of colors. Pkt., 10c.; oz., 40c; lb., \$5.00.

GODETIA. Annual, 1 to 2 feet high, with large, showy flowers. Especially valuable for sowing in partially shady places.

Duchess of Albany. Pure white. Pkt., 10c.

Crimson Glow. Rich deep crimson. Pkt. 10c.

Lady Albemarle. Large, brilliant crimson. Pkt., 10c.

Lady Satin Rose. Bright carmine. Pkt., 10c.

Hybrids, Mixed Colors. Pkt., 10c; oz., 50c.

GOMPHRENA GLOBOSA. "Globe Amaranthus." Annual, 1½ to 2 feet high. Producing numerous flowers resembling clover heads, which are cut and dried as an everlasting flower. White, pink, purple and striped, mixed. Pkt., 10c.

GYPSOPHILA ELEGANS. Annual, 1½ to 2 feet high. Much used for bouquets for mixing with carnations and other flowers. Flowers small, white; blooming best in the winter season. Pkt., 10c; oz., 40c.

paniculata. Perennial, 2 feet high. Flowers smaller than the preceding. White and used for bouquets. Blooms during the summer season. Pkt., 10c.

HELIANTHUS. "Sunflower." Annual, 6 to 7 feet. Well known showy plants for summer flowering. Sow the seeds in the spring in the open ground where they are to remain and flower.

californicus. Double yellow. Pkt., 5c.

globosus fistulosus. Large double globular-shaped flowers. Pkt., 5c.

Chrysanthemum Flowered, Double. Very large, perfect flowers resembling giant chrysanthemums. Flowers on long stems, golden yellow and double. Pkt. 10c.

New Red Sunflower. Flowers vary greatly in size, from 4 to 8 inches across. Color of the flowers also varies, some are solid red, others with petals tipped and other pleasing combinations of red and gold. Planted for a background or a temporary hedge, they are very showy. Pkt. 15c.

cucumerifolius, Stella. Single, extra fine. Pkt., 5c.

Miniature Excelsior Hybrids. See Flower Seed Novelties, page 22.

HELICHRYSUM MONSTROSUM. "Straw Flower." Annual, 2 to 3 feet. A well known "everlasting" flower. Double, fine mixed. Pkt., 10c.

HELIOTROPIUM. Perennial, 4 to 5 feet. A favorite flower on account of its delightful fragrance. Sow the seed in the spring in seed boxes and transplant. Large flowered varieties mixed. Pkt., 10c.

HOLLYHOCK. Perennial, 6 feet high. An old-fashioned favorite flower. Sow the seed in boxes late in summer and transplant. The plants will bloom the following summer.

Chater's superb strain, finest double. White, rose, Newport pink, scarlet, crimson, sulphur yellow or mixed. Each, per pkt., 15c.

Single. Choice mixed. Pkt. 10c.

HUMULUS JAPONICUS VARIEGATUS. "Japanese Hop." A beautiful annual climbing plant. Leaves marbled and splashed with white on light and dark green ground. Very effective for screens, arbors, etc. Sow the seed in spring when the weather is warm and settled. Pkt., 10c.

HUNNEMANNIA FUNARIAEFOLIA. "Mexican Poppy." Perennial, 2 to 3 feet. Large flowers resembling the California poppy, but more bowl-shaped and of a light canary-yellow color. Very free flowering and especially valuable for cutting purposes, the blooms lasting a long time in water. Blooms freely the greater part of the season. If sown in the spring or summer will bloom within a few months of the time of sowing. Pkt., 10c.

IPOMOEA LEARI. "Blue Dawnflower." Perennial climbing vine, 30 to 40 feet. Likes a warm, sunny situation. Soak the seed in hot water a few hours before planting and sow in spring when the weather is warm and settled. Pkt., 10c.

grandiflora alba. "White Moonflower." Perennial climbing vine, 15 to 20 feet. Large white, fragrant flowers 5 inches in diameter. Treat the seed the same as the above variety. Pkt., 15c.

Heavenly Blue. Annual, 15 feet. Flowers large, sky-blue, flowering in the fall. The most beautiful of all. Treat the seed the same as the above. Pkt., 10c.

Imperialia. "Imperial Japanese Morning Glory." Annual, 15 to 20 feet. Flowers large, varying in color from pure white to carmine, through blues and purples of every shade to almost black. Pkt., 10c.

KOCHIA TRICHOPHYLLA. "Summer Cypress." Annual, 3 to 4 feet high. Forms very decorative, compact bushes with fine light green foliage, which turns deep red in the fall. Very ornamental for planting as a background or temporary hedge. Sow in spring. Pkt. 10c.

LARKSPUR. Annual, 3 feet high. Free flowering plants. Useful for beds and also for cutting tall stock-flowered, branching double. Azure blue, dark blue, shell pink, lustrous carmine, white or mixed. Each, per pkt., 10c; oz., 40c.

dwarf rocket. Height 2 feet. Mixed. Pkt., 5c.

LATHYRUS LATIFOLIUS. "Everlasting Pea." Perennial vine, 4 feet. Free flowering plants, mixed colors. Pkt. 10c.

White Pearl. Very large, snowy white blossoms on long stems. Very hardy and grows quickly. Pkt. 15c.

Pink Beauty. Large flowers, bright pink. Pkt. 15c.

LAVATERA TRIMESTRIS. Annual, 3 feet high, producing large saucer-shaped flowers. Sow in spring. Rose color or white. Each, per pkt., 5c.

LINARIA CYMBALLARIA. "Kenilworth Ivy." A charming little perennial trailing plant. Useful for baskets, rock work, etc. The flowers are like a miniature Snap-Dragon; color lavender and purple, and contrast well with the small ivy-shaped leaves. Pkt., 10c.

LINARIA MAROCCANA. Annual, 12 to 15 inches high. Very pretty sown in masses. Mixed hybrids. Pkt., 10c.

LINUM GRANDIFLORUM RUBRUM. "Scarlet Flax." Annual, 1 to 2 feet high. Very effective for planting in masses in large beds; also for sowing broadcast on waste ground. Pkt., 10c; oz., 35c.

perenne. Perennial, 1 to 1½ feet, bright blue flowers. Pkt., 5c.

LOBELIA. Annual, 4 to 6 inches, forming compact, free flowering plants much used for edgings, etc. Sow the seed in February in seed pans of fine light soil. Do not cover the seed, but sow on the surface and press down firmly with the hand and water with a fine spray. As soon as large enough to be handled, the seedlings may be pricked out into shallow boxes and afterwards transplanted to the open ground.

Crystal Palace compacta. Rich deep blue, dark foliage. The finest dark blue for bedding. Pkt., 10c.

Light Blue. Compact growing. Pkt., 10c.

erinus speciosa. Dark blue, dark foliage. Trailing. Useful for hanging baskets. Pkt., 10c.

hybrida Sapphire. New, deep blue, with white eye. Of trailing habit, valuable for hanging baskets and window boxes. Pkt., 15c.

LOBELIA CARDINALIS. *Queen Victoria.* Perennial, 3 feet. Dark bronze foliage and brilliant scarlet flowers. Sow seed the same as the annual varieties. Pkt., 15c.

LOVE-LIES-BLEEDING (*Amaranthus caudatus*). Annual, 2 feet high, with large drooping panicles of blood-red flowers. Seed should be sown in the spring and the plants will bloom during the summer. Pkt., 5c.

LUPINUS, ANNUAL VARIETIES MIXED. 1 to 3 feet high. Well known free flowering plants. Pkt., 10c. *nanus.* Dwarf blue; useful for edging and borders. Pkt., 10c; oz., 50c.

LUPINUS ARBOREUS, SNOW QUEEN. Perennial, 4 feet. A magnificent variety, producing long spikes of pure white flowers. Sow in fall either in the open ground where the plants are to remain, or in pots, and afterwards transplant. Pkt., 15c.

New Hybrids. A splendid new strain, producing large flowers in different colors. Pkt., 15c.

polyphyllus roseus. Perennial, 3 feet. Rosy pink, extra fine. Pkt., 15c.

Paynei. See Flower Seed Novelties, page 21.

MALOPE GRANDIFLORA PURPUREA. Annual, 2 feet high. Flowering well during the summertime. Large crimson flowers. Pkt., 5c.

alba. White. Pkt., 5c.

African Marigold, Prince of Orange

HANDEVILLEA SUAVEOLENS. "Chill Jasmine." Perennial vine, 15 feet. Large white fragrant flowers. Sow in spring in seed boxes and pot off when ready. Pkt., 10c.

MARIGOLD, AFRICAN. Annual, 3 feet. Flowering in summer and fall. The flowers are large, double and very showy. Sow in spring.

Lemon Queen. Soft lemon-yellow. Pkt., 10c.

Prince of Orange. Deep golden-orange. Pkt., 10c.

Double fine mixed. Pkt., 10c.

MARIGOLD, FRENCH. Annual, 1 to 2 feet high. Sow in spring.

Gold striped. Very double; deep brownish-red striped with golden yellow. Pkt., 10c.

Double golden yellow. Pkt., 10c.

Dwarf double mixed. Pkt., 10c.

Legion of Honor. "Little Brownie." A compact growing single variety. Golden yellow marked with large spot of crimson velvet on each petal. Pkt., 10c.

MATRICARIA EXIMIA. "Feverfew." Annual, 1½ feet, of easy culture. Fine for cutting. Double white. Pkt., 5c.

MAURANDIA. Perennial climber, 6 feet. Delicate foliage and pretty trumpet-shaped flowers. Sow early in spring and the plants will bloom the first season. Mixed colors. Pkt., 10c.

MECONOPSIS. See Flower Seed Specialties, page 21.

MESEMBRYANTHEMUM. Dwarf, trailing, annual. Blooming during the summer. Sow the seed in spring in a warm, sunny situation.

crystallinum. "Ice Plant." Flowers white. Foliage has the appearance of being coated with ice. Pkt., 5c.

MIGNONETTE. Annual, 8 inches to 1 foot high. An old-fashioned flower much prized for its fragrance. **Large Flowering.** Sweet scented. Pkt., 10c; oz., 30c. **Machet.** Of dwarf pyramidal habit. Very fragrant. Pkt., 10c; oz., 35c.

Allen's Defiance. A large variety with immense spikes. Pkt., 10c; oz., 40c.

Goliath. Bright red, large spikes. Pkt. 10c; oz. 90c.

MIMOSA PUDICA. "Sensitive Plant." Annual, 2 feet. A curious plant with pinnate leaves which close up immediately when touched. Sow in seed pans early in spring. Pkt., 10c.

MIMULUS. Perennial plants of great beauty, succeeding best in a moist, shady place. Sow the seed in the fall in seed pans of light soil mixed with leaf-mould; sow the seed on the surface and water with a fine spray. Pot off the plants when large enough, and later plant out in the open ground.

tigrinus grandiflorus. "Monkey Flower." Height 1½ feet, spotted and blotched varieties, fine mixed. Pkt., 15c.

cardinalis. "Scarlet Monkey Flower." Perennial, 1 to 3 feet. A beautiful native species with pale green leaves and bright scarlet flowers, with yellow throat. Pkt., 10c.

moschatum. "Musk Plant." Fine for hanging baskets and pots. Small yellow flowers, fragrant. Pkt., 10c.

MINA LOBATA. Beautiful annual climbing vine attaining a height of 10 to 12 feet. Flowers in long, graceful spikes; color bright red, changing to orange and cream. Sow in spring in a warm, sunny situation. Pkt., 10c.

MIRABILIS JALAPA. "Marvel of Peru" or "Four-o'clock." Free flowering annual of bushy habit, growing 3 to 4 feet high and flowering throughout the summer. All colors mixed. Pkt., 5c.

MOMORDICA BALSAMINA. "Balsam Apple." Annual climbing vine, 8 to 10 feet, with large leaves making a dense shade. The flowers are followed by curious orange-colored warted fruits, which burst, showing the seed and its brilliant carmine covering. Pkt., 10c.

MYOSOTIS. "Forget-me-not." Perennial, 6 to 10 inches, succeeding best in a shady, moist situation. Sow the seed in the fall in seed boxes and transplant.

alpestris. Bright blue. Pkt., 10c.

disitiflora. Of compact habit; deep blue. Pkt., 15c.

NASTURTIUM, TOM THUMB. Annual, 8 inches to 1 foot; useful for bedding and borders, flowering through the summer and also through the winter in locations where they are not cut by the frost.

Lady Bird. Orange-yellow, red spots. Pkt., 10c.

Rose. Pkt., 10c.

Ruby King. Light ruby-red. Pkt., 10c.

King Theodore. Almost black, dark foliage. Pkt., 10c.

Golden King. Indian yellow, dark foliage. Pkt., 10c.

King of Tom Thumbs. Scarlet, dark foliage. Pkt., 10c.

Empress of India. Crimson, dark foliage; dwarf and compact; effective for beds and edging. Pkt., 10c.

Yellow. Pkt., 10c.

All colors mixed. Pkt., 5c; oz., 15c.

NASTURTIUM TALL. Climbing annual, 6 to 10 feet, of easy culture. Useful for covering fences, trellises, etc., and also very effective when allowed to run on the ground.

Scarlet. Bright scarlet. Pkt., 10c.

Crimson. Velvety crimson. Pkt., 10c.

Fordhook Fashion. Terra cotta on yellow ground. Pkt., 10c.

Moonlight. Creamy white. Pkt., 10c.

Rose. Pkt., 10c.

Edward Otto. Brownish lilac. Pkt., 10c.

Regelianum. Violet crimson. Pkt., 10c.

Vesuvius. Salmon rose, dark foliage. Pkt., 10c.

Prince Henry. Yellow marbled with scarlet. Pkt., 10c.

Black Prince. Blackish purple, changing to a velvety black; dark foliage. Pkt., 10c.

Chameleon. Flowers of different shades on the same plant. Pkt., 10c.

Jupiter. Very large, rich yellow. Pkt., 10c.

Fine mixed. Pkt. 5c, oz. 15c, lb. \$1.50.

NEMESIA. See Flower Seed Specialties, page 21.

down with a board. Take a piece of burlap the size of the bed and stretch it out over the ground. Place some pieces of wood around the edge to keep the burlap from blowing away, and keep it well watered, using a fine spray. As soon as the seed has sprouted, take the burlap off and nail it over a wooden framework the same size as the bed. Support this at each end by two small posts and a cross piece, placing this frame about one foot from the ground. After about a week, remove this framework, except during the hottest part of the day. In two or three weeks it can be discarded entirely. When the plants are large enough to handle, transplant to beds of rich, well prepared soil, and cover the surface with a layer of well rotten, sifted manure. Pansies prefer a rather heavy soil with plenty of well rotted manure; this is very essential. Indeed, it is almost impossible to use too much manure on pansies and the richer the soil the larger and more perfect will be the flowers. Later sowings may be made up to the beginning of February, but they will not do as well as those sown early in the fall and the blooming period will be much shorter.

Payne's Royal Exhibition Pansies

NEMOPHILA. A beautiful native annual, 4 to 6 inches high and flowering in 8 or 9 weeks from the time of sowing.

Indigals. "Baby Blue Eyes." A delicate little plant; flowers clear azure blue. Pkt., 10c; oz., 35c; lb., \$4.00.

maculata. White spotted with purple. Pkt., 10c; oz., 35c; lb., \$4.00.

NICOTIANA. Annual, 2 to 4 feet. Sow the seed in the spring in seed boxes and transplant.

affinis. Large white, fragrant flowers, 3 inches across. Pkt., 10c.

Sanderae hybrids. Splendid plants, flowers in great variety of colors. Pkt., 10c.

NIEREMBERGIA CALYCINA. Slender growing perennial plant, 1 to 1½ feet. Desirable for hanging baskets, rock work and bedding. Sow the seed in boxes. Flowers white tinted with lavender. Pkt., 10c.

NIGELLA DAMASCENA. "Love-in-a-Mist." Annual; height 1½ feet, with finely cut foliage; curious looking flowers of a pale blue color. Pkt., 5c.

Miss Jekyll. Flowers of a beautiful corn-flower blue, fine for cutting. Pkt., 10c.

OENOTHERA DRUMMOND. "Evening Primrose." Annual, 2 to 3 feet, with large yellow flowers. Succeeds well in a partially shaded place. Pkt., 5c.

PANSIES

Truly speaking, a perennial, but an annual in California. To obtain the best results the seed should be sown in August, September, or early part of October. Prepare a bed in the open ground in the following manner: Dig up the ground and level off the surface. Take some good garden soil and run it through a sieve, mix this with some good rotted manure and sand, which has also been screened, using about two parts of soil to one of manure and one of sand. Spread this out over the surface, press it down, and level off with a board. Sow the seed broad-cast, cover it with about an eighth of an inch of the same soil, and again press the surface

Payne's Royal Exhibition. See Flower Seed Specialties, page 21.

Bugnot's Superb Blotched. Extra large, rich colors, each petal having a broad, deep blotch, many of them beautifully lined or penciled. Pkt., 50c.

Cassier's Large Flowered Blotched. A splendid strain; flowers beautifully blotched, of richest shades. Pkt., 25c.

Masterpiece. "Frisled Pansy." A grand new class, each petal being conspicuously waved or curled, giving the flower a double or globular appearance. Rich colors, mostly of the dark, velvety shades. Pkt., 25c.

Steele's Mastodon. Immense flowers, mixed colors. Pkt., 25c; ½ oz., \$1.00.

Giant Trilmardeau. Large flowered, mixed colors. Pkt., 25c.

English Show or Faced Pansy. Mixed colors. Pkt., 10c.

All colors mixed. Pkt., 10c.

GIANT PANSIES, SEPARATE COLORS

Any of the following varieties, per pkt., 15c; ½ oz., 65c.

Giant Bride'smaid. White and shining rose, beautifully blotched.

Giant Bright Blue. Ultramarine blue.

Giant Dark Blue. Darkest blue.

Giant Golden Yellow, Five Spotted, a beautiful flower of Cassier type.

Giant Golden Queen. Pure yellow.

Giant King of the Blacks. Velvety black.

Giant Light Blue. Pale blue.

Giant Lord Beaconsfield. Violet, upper petals shading to white.

Giant Madame Perret. Beautiful wine shades on white ground.

Giant Peacock. Royal purple, shot with peacock blue.

Giant Snowflake. Pure white.

Giant White. White with purple eye.

Giant Yellow. Yellow with black eye.

PANSIES, SEPARATE COLORS

The following varieties, per pkt., 10c; ½ oz., 40c.

Bright Blue. Ultramarine blue.

Cliveden Blue. Excellent bedding variety.

Cliveden White. Excellent bedding variety.

Cliveden Yellow. Excellent bedding variety.

Faust or King of the Blacks. Velvety black.

Gold Margined. Brown edged with gold.

Lord Beaconsfield. Purple violet, upper petals shaded to white.

Mahogany-colored.

Snowflake. Pure white.

Victoria. Claret red.

White. Pure white, with black center.

Yellow Gem. Pure yellow.

Yellow. Golden yellow with black center.

crimson, red with white eye, pink, yellow, or mixed. Each, per pkt., 10c.

nana compacta Fireball. Dwarf, rich scarlet. Pkt., 10c.

PHLOX DECUSATA. "Perennial Phlox." This splendid, free flowering perennial is deserving of a place in every garden. The plants grow about 3 feet high and produce large heads of flowers of the most beautiful shades. Sow the seed in the fall in seed pans and afterwards transplant. All colors splendid mixed. Pkt., 15c.

POLYANTHUS. (Primula elatior.) Perennial, 6 to 8 inches; succeeding best in a partially shaded place and flowering during winter and early spring. Sow the seed in spring in seed boxes and transplant. Large flowered choice mixed. Pkt., 15c.

Giant Munstead Strain. Very large flowers in beautiful light shades. Pkt., 25c.

Double Fringed Petunia

PENTSTEMON. Perennial, 2 to 3 feet. Free flowering plants for borders or beds. Colors in various shades of white, pink, red and purple; beautifully spotted and marked. Sow the seed in spring or early fall in seed boxes and when large enough, transplant.

Hartwegi grandiflorus. Large flowered, superb, mixed. Pkt., 10c.

PETUNIA. Perennial, 1 to 1½ feet. Charming plants for large beds and borders, succeeding well in a sunny situation and blooming for the greater part of the year. Sow the seed in February in seed pans or boxes of light soil, cover the seed very lightly and water with a fine spray. When the plants are large enough, transplant to the open ground.

Note.—Seed saved from the most carefully hybridized flowers, produce about 30 per cent double flowers, the balance being singles of unusually fine quality. The weaker seedlings should be carefully saved, as these invariably produce the double flowers. In a measure the same is true of the single sorts, the small, weak seedlings generally produce the largest and finest flowers, while the large, strong seedlings usually turn out to be the most common types.

Double Fringed. Large flowered, mixed colors. Pkt., 50c.

Double Large Flowered. All colors mixed. Pkt., 25c.

Payne's Single Giants of California Ruffled and Fringed. See Flower Seed Specialties, page 21.

Single, Inimitable. Blotched and striped. Pkt., 10c.

Rosy Morn. A dwarf, compact variety with rose-colored flowers, especially desirable for bedding. Pkt., 15c.

Single. Choice mixed. Pkt., 10c.

PHACELIA CAMPANULARIA. See Flower Seed Specialties, page 21.

PHLOX DRUMMONDI GRANDIFLORA. Beautiful annuals, growing about 1 foot high with brilliant colored flowers, producing a dazzling display of color when planted in masses, in large beds or borders. Sow in seed boxes and when large enough, transplant to the open ground.

Large Flowered, white, chamois rose, scarlet,

POPPY, ANNUAL SORTS. Showy flowers for beds and borders, also very effective for sowing broadcast on waste pieces of ground. The best results will be obtained by sowing in fall or early winter.

Shirley. Single flowers of the most delicate crepe-like texture and every conceivable shade of color from white, flesh-color, pink, rose, carmine, scarlet to deep crimson. Pkt., 10c; oz., 50c.

Tulip. Large single tulip-like flowers, color dazzling scarlet. Height 1½ to 2 feet. Pkt., 10c; oz., 50c.

Admiral. Large single flowers, pure white with a broad band of brilliant scarlet around the upper part of the flower. Pkt., 10c.

Danebrog or Danish. Large single flower, brilliant scarlet with silvery white spot on each petal forming a white cross. Height 3 feet. Pkt., 5c.

Umbrosum. Single flowers, rich vermilion with deep, black spot at base of petal. Height 2 feet. Pkt., 5c.

Miss Sherwood. Large single flowers, satiny-white, the upper half of petals chamois rose. Height 3 feet. Pkt., 5c.

King Edward. Large single flowers; deep scarlet, shaded crimson, with large black blotch on lower half of each petal. Height 3 to 4 feet. Pkt., 10c.

Carnation Flowered. Large double fringed flowers, mixed colors. Height 3 to 4 ft. Pkt., 10c; oz., 40c.

White, Rose and Scarlet. Each, per pkt., 10c.

Paeony Flowered. Large double globular flowers, mixed colors. Height 3 to 4 feet. Pkt., 5c.

Ranunculus Flowered. Double flowers about 2 inches in diameter and of every imaginable shade of color. Height 2 feet. Pkt., 10c; oz., 50c.

Ryburgh Hybrids. See Flower Seed Novelties, page 21.

New Poppy, Eldorado. See Flower Seed Novelties, page 21.

FLANDERS. See Flower Seed Specialties, page 21.

POPPY, ICELAND. (Papaver nudicaule.) A perennial, blooming the first season from seed. Pretty, grayish, fern-like foliage, formed in tufts, from which rise numerous slender stems about 1 foot high, bearing single bright colored flowers. Sow the seed in seed boxes and transplant. White, yellow, deep orange and mixed. Each, per pkt., 10c.

POPPY, ORIENTAL. (*Papaver orientale*.) A perennial producing many thick, leafy stems, 3 to 4 feet high, with large, deep crimson flowers, having a black blotch on each petal, exceedingly showy. Sow the seed in spring or early in the fall in seed boxes; when large enough, pot up into small pots and later transplant to the open ground. Pkt., 15c.

Oriental Hybrids. Splendid hybrids of the Oriental Poppy, producing immense flowers, 6 inches or more in diameter and of many beautiful shades of pink, salmon, orange, scarlet, etc. Treat the seed the same as the preceding variety. Pkt., 15c.

Admiral Poppy

PORTULACA. A low spreading annual about 6 inches high, flowering in a short time from seed and blooming through the entire summer season. Very effective for massing in beds, producing a perfect carpet of brilliant colors. Sow the seed in spring after the weather has become warm and settled.

Single, White, Yellow, Pink, Crimson or Mixed. Each, per pkt., 10c.
Double, fine mixed. Pkt., 15c.

PRIMULA SINENSIS FIMBRIATA. "Chinese Primrose." Beautiful greenhouse plants, blooming in winter and spring. Sow the seed in August or September in pots or seed pans of rich loam mixed with sand, cover the seed lightly and keep in a greenhouse; when large enough, pot into small pots and later to larger pots as required. The seed offered here is of the finest strains, imported direct from one of the best European growers.

Bright Rose. Large. Pkt., 25c.
Defiance. Rich red, with dark eye. Pkt., 25c.
Holborn Blue. A unique shade. Pkt., 25c.
Snow Queen. Pure white, extra fine. Pkt., 25c.
Choice mixed. Pkt., 25c.

PRIMULA SINENSIS STELLATA. "Star Primroses." A new strain of Primula, though the flowers are slightly smaller than *P. sinensis fimbriata* the plants are of more robust growth and produce flowers much more freely.

Dark Blue Star. Dark blue. Pkt., 25c.
Light Blue Star. Pale blue. Pkt., 25c.
Lord Roberts Star. Pink. Pkt., 25c.
Ruby Star. Deep ruby red. Pkt., 25c.
Snow Star. Pure white. Pkt., 25c.
Choice mixed. Pkt., 25c.

PRIMULA KEWENSIS. Yellow, very desirable for outdoor culture. Pkt., 25c.

PRIMULA OBCONICA GIGANTEA. A charming little plant for pot culture. Perennial but blooming in a few months from seed; height 6 to 8 inches. A profuse bloomer, bearing heads of 10 to 15 flowers on long stems. Sow the seed in August or September in pots or seed pans of light, rich loam and keep in a frame or greenhouse, pot up when ready. Mixed colors. Pkt., 25c.

PRIMULA MALACOIDES. See Flower Seed Specialties, page 22.

PYRETHRUM. "Golden Feather." Pretty foliage plants with deeply cut leaves, useful for edgings; perennial, 6 to 9 inches. The plants should be kept trimmed and all flowers cut off as they appear. Sow the seed in boxes, covering very lightly, and when large enough, transplant.

aureum. Golden yellow foliage. Pkt., 10c.

RHODANTHE. A graceful little "Everlasting Flower," annual, 1 foot high. Treat the same as *Acroclinium*. Pink, rose, white, crimson, etc., mixed. Pkt., 10c.

RICINUS. "Ornamental Castor Bean." Rapid growing plants with immense, rich colored leaves, producing a sub-tropical effect planted on lawns or in clumps. Height 6 to 10 feet. Sow in spring when the weather has become warm and settled.

Cambodgensis. Main stem and leaf stalks rich, shining ebony; leaves large, maroon with red veins. Pkt., 5c.

Gibsoni. Dark purplish red foliage and stems. Pkt., 5c.

Zanzibariensis. Very large, dark leaves, with reddish stems. Plants grow to immense size. Pkt., 5c.

ROMNEYA COULTERI. "Matilija Poppy." A native of California; perennial, 6 to 10 feet high and of shrubby growth. The queen of California flowers; truly a majestic plant. The plant throws up numerous woody stems with handsome gray-green foliage, topped with large numbers of flowers. The blossoms are often 6 to 7 inches in diameter, of a crepe-like texture, pure glistening white with bright yellow centers. The seed is hard to germinate; some claim to have had success by soaking the seed in a weak solution of lye. Pkt., 15c.

SALPIGLOSSIS GRANDIFLORA. Annual, 1½ feet. Free flowering plants for beds and borders; succeeding best in a sunny situation and blooming all summer. The plants are large, funnel-shaped and produced in great profusion; colors yellow, pink, rose, crimson, brown, steel blue, purplish violet, etc.; beautifully veined and penciled. Sow the seed early in spring in seed boxes and transplant when large enough. Mixed colors. Pkt., 10c.

Pentstemon hartwegi grandiflorus

SALVIA SPLENDENS. "Scarlet Sage." For producing a dazzling mass of color all through the summer months there is probably no other flower that can equal the "Scarlet Sage." It is a perennial, but blooms in a short time from seed. Much used for bedding and succeeding best in a sunny situation. Sow the seed in February or March in seed boxes and when large enough, transplant.

splendens. Long spikes of vivid scarlet flowers; height 2 to 3 feet. Pkt., 10c.

"Bonfire." Forms compact, bushy plants about 2 feet high by 2 feet in diameter. The flower spikes stand erect, often bear 20 to 30 blossoms and 200 of these spikes on a plant is not unusual; color vivid scarlet. Pkt., 15c.

SALVIA PATENS. "Blue Sage." Perennial, 2 feet, flowering the first season from seed, succeeding best in a partially shaded situation. Flowers the most perfect shade of bright blue. Sow the seed the same as the preceding varieties. Pkt., 15c.

SCABIOSA. "Sweet Scabious." "Mourning Bride." Annual, 2 to 3 feet, flowering in summer and early fall. Flowers on long stems, produced in great profusion and especially valuable for cutting, lasting a long time in water. Sow the seed from February to April in seed boxes and transplant. The strain I am offering here is a great improvement on the old-fashioned sorts. The flowers are large, often 3 inches in diameter, double and of the most exquisite shades.

Large-flowered double. Azure Fairy, King of the Blacks, crimson, flesh pink, red, rose, white, or mixed. Each, per pkt., 10c.

SCABIOSA CAUCASICA. See Flower Seed Specialties, page 22.

SCHIZANTHUS. Annual, 1½ to 2 feet, producing pretty, butterfly-like flowers in great profusion, exquisitely spotted and marked, resembling some orchids in coloring. Mixed colors. Pkt., 5c.

SCHIZANTHUS WISETONENSIS. See Flower Seed Specialties, page 22.

SHASTA DAISY. One of the most popular of Mr. Burbank's productions. Perennial, about 2 feet high, flowering for the greater part of the year, but at its best in spring and early summer. Desirable for beds or borders and especially valuable for cutting purposes, flowers lasting a long time in water. Sow in spring or early fall in seed boxes, covering the seed very lightly, when large enough transplant.

Alaska. Flowers often 4 inches across, purest glistening white, with yellow centers; broad overlapping petals, long stems. Pkt., 10c.

SILENE PENDULA COMPACTA. Annual, forms compact little plants about 6 inches high, flowers rose-colored; useful for edgings, etc. Pkt., 5c.

SMILAX. Perennial climbing vine, 6 to 8 feet, thriving best in a partially shaded place. Largely grown for decorating purposes. Soak the seed in hot water for a few hours before sowing. Pkt., 10c.

STATICE LATIFOLIA. "Sea Lavender." Perennial, 1½ feet, producing panicles of small lavender blue flowers, which can be cut and dried and used for bouquets. Sow the seed late in spring or early in the fall, in seed boxes, and transplant. Pkt., 10c.

macrophylla. Large, deep blue. Pkt., 10c.

caspia. New, pale blue, extra fine. Pkt. 10c.

Sinuate. Annual, blue. Pkt., 10c.

Bonduelli. Annual, yellow. Pkt. 10c.

STEVIA SERRATA. Perennial, 2 feet, flowering the first season from seed, furnishing quantities of graceful sprays of tiny white fragrant flowers, valuable for cutting. Pkt., 10c.

STOCKS. "Gillflower." A favorite annual, succeeding best in California during the winter season. Largely grown for cut flowers, lasting a long time in water. Very effective for planting in beds or borders. To obtain the best results the seed should be sown in August, September, or early part of October, in seed boxes of rather light soil, and afterwards transplanted to the open ground. In transplanting stocks care should be taken to save the small or weak growing plants, as these generally produce double flowers, while the strong, robust growing seedlings often come single. The seed I offer is obtained direct from one of the best specialists in Europe and can be relied upon to produce a large percentage of double flowers.

Dwarf, Large-flowered Ten-week. Of compact growth, 1 to 1½ feet high, particularly suitable for bedding. White, bright pink, blood red, purple or mixed. Each, per pkt., 15c.

Nice Giant. See Flower Seed Specialties, page 22.

SUNFLOWER. See **HELIANTHUS**.

SWEET WILLIAM. Perennial, 1 foot. An old-fashioned flower for beds or borders, producing a great display of showy and varied colors. Sow the seed early in spring; the plants will flower the following year.

Auricula-flowered. Beautifully ringed and margined, mixed colors. Pkt., 10c.

Pink Beauty. Extra fine. Pkt., 15c.

Single, all colors mixed. Pkt., 10c.

Double, all colors mixed. Pkt., 10c.

Annual Sweet William. A new strain flowering in a short time from seed. Mixed colors. Pkt., 10c.

TACSONIA MANICATA. "Scarlet Passion Vine." A magnificent perennial climber, producing an abundance of large scarlet blossoms. Sow the seed in pots or seed pans and afterwards transplant. Pkt., 15c.

Mollissima. "Pink Passion Vine." Perennial climber, large rose-pink flowers. Sow seed same as the preceding species. Pkt., 10c.

TAGETES SIGNATA PUMILA. A miniature Marigold, forming compact little plants 6 to 8 inches high, and completely covered with flowers, which are bright yellow with brown stripe down the center of each petal. Annual flowering during the summer season, very striking for edgings. Sow the seed in spring in boxes and transplant. Pkt., 5c.

THALICTRUM DIPTEROCARPUM. Perennial, 2 to 3 feet. Beautiful foliage resembling maidenhair fern; tall graceful stems with small panicles of lilac blossoms. Very desirable for cutting. Pkt., 25c.

THUNBERGIA ALATA. Annual climbing vine 5 to 6 feet, useful for low fences; also for hanging baskets. Sow the seed in spring. Flowers white, yellow, orange and buff, with dark centers, mixed. Pkt., 10c.

TITHONIA SPECIOSA. See Flower Seed Novelties, page 22.

TROPAEOLUM CANARIENSE. "Canary Bird Flower." Annual, climbing vine 8 to 10 feet. It does best in California in a rather moist, partially shaded situation. Pretty pale green, deeply cut foliage and canary yellow, fringed flowered. Sow early in spring. Pkt., 10c.

VERBENA. Perennial of reclining habit, height 9 to 12 inches. The plants bloom the first season from seed and are unsurpassed for bedding where a display of color is desired. After they are established they grow with scarcely any attention and a small amount of water, preferring a sunny situation. Sow the seed in winter or early spring in seed boxes and when large enough, transplant.

Mammoth, White, pink, blue, purple or Scarlet Defiance, each, per pkt. 10c.

Mammoth, all colors mixed. Pkt., 10c.

Lucifer. See Flower Seed Specialties, page 22.

VERBENA ERINOIDES. "Moss Verbena." Perennial of trailing habit with finely cut foliage and great quantities of purple flowers; especially useful for planting in parkings and requires very little water. Pkt. 15c.

VIOLA ODORATA. "Sweet Violet." A favorite fragrant flower, perennial, 6 inches. Succeeding best in a rather shady situation. Sow the seed in winter or early spring, in seed boxes of good loam mixed with some leaf-mould, covering the seed lightly, or they may be sown in a well-prepared bed in a shady situation. Violet seed is slow to germinate.

odorata. The old-fashioned Sweet Violet. Pkt., 10c.

VIOLA CORNUTA. "Tufted Pansies." Though the flowers are not as large as the regular pansies, they bloom so freely that many people consider them superior where a mass of color is desired. The plants bloom for a long period and the colors are particularly clear and distinct. The flowers are light and graceful, and not so stiff as those of the regular pansy. Sow the seed from August to January in beds or boxes of light, rich soil and afterwards transplant.

Papilio. See Flower Seed Specialties, page 22.

Lutea splendens. Clear yellow. Pkt., 15c; ½ oz., 75c. Mixed colors. Pkt., 10c; ½ oz., 75c.

WALLFLOWER. An old-fashioned fragrant flower; biennial, 1 to 1½ feet. Sow the seed in spring and transplant. The plants will flower the following winter.

Blood red. Dwarf compact plants. Pkt., 10c.

Single mixed. Pkt., 10c.

Double mixed. Pkt., 10c.

ZINNIA ELEGANS. A favorite summer flowering annual for beds and borders, thriving best in a sunny situation. The seed can be sown early in spring in seed boxes and transplanted, or later on in the open ground.

Double, all colors mixed. Height 1½ to 2 feet. Pkt., 10c.

Lilliput. Dwarf, very small, perfectly double flowers; mixed colors. Pkt., 10c.

Payne's Giant Double. See Flower Seed Specialties, page 23.

New Giant Double Quilled, Achievement. See Flower Seed Novelties, page 23.

New Giant Picotee Zinnia. See Flower Seed Novelties, page 23.

New Dahlia Flowered Zinnia. See Flower Seed Novelties, page 23.

Payne's Sweet Peas

Can be sown at any time from October to March; early planting will produce the best results. They require an open situation, good rich soil and plenty of water. Sow in drills covering the seed about 2" deep or a trifle more in light soils. When about a foot high draw the earth up to the stems with a hoe. They should have brush, sticks or wire netting to climb over. By keeping the flowers gathered and any dead flowers cut off, the plants will bloom for a long period

Payne's Spencer Sweet Peas

A grand new class of Sweet Peas, having large, round, open flowers of extraordinary size, often 2 inches across, with wavy standard and wide-spreading wings, a large number of the flowers coming four on a stem.

Alfred Watkins. Clear lavender. Pkt. 15c, oz. 50c.
Apple Blossom. Bright rose and bluish white. Pkt. 15c, oz. 50c.

Asta Ohn. Lavender shaded with mauve. Very large and wavy. Pkt. 15c, oz. 50c.

Countess Spencer. Clear pink, deepening somewhat toward the edge. A very large flowered variety. Pkt. 15c, oz. 45c.

King Edward Spencer. A magnificent flower, bright crimson scarlet. Said to be the largest sweet pea grown. Pkt. 15c, oz. 50c.

King White. Very large, the finest white variety. Pkt. 15c, oz. 50c.

Margaret Atlee. Immense flowers, cream ground color overlaid with salmon pink. Pkt. 15c, oz. 50c.

Mirian Beaver. Salmon pink on cream ground. Pkt. 15c, oz. 50c.

Nubian. Deep maroon. Pkt. 15c, oz. 45c.

Old Rose. Beautiful old rose. Pkt. 15c, oz. 50c.

Vermillion Brilliant. Clear scarlet. Pkt. 15c, oz. 50c.

Wedgewood. Light blue, extra fine. Pkt. 15c, oz. 50c.

White Spencer. Flowers of immense size, pure white. Pkt. 15c, oz. 50c.

Spencer Mixed. Pkt. 15c, oz. 30c, ¼-lb. \$1.00.

SPECIAL OFFER. Six varieties Payne's Spencer Sweet Peas in separate packets for 75c.

New Winter Flowering or Long Season Spencer Sweet Peas.

A new race of Sweet Peas, having the large waved flowers of the Spencer type, but flowering fully two months earlier. They also continue in flower for a much longer period. For Christmas flowering sow in September; later sowing may be made up until March.

Apricot Orchid. Buff pink. Pkt., 25c; oz., \$1.00.

Early Asta Ohn. Lavender. Pkt., 25c; oz., \$1.00.

Early King. Bright crimson, extra fine. Pkt. 25c, oz. \$1.00.

Early Wedgewood. Bright blue. Pkt. 25c, oz. \$1.00.

Fordhook Pink. Pink suffused with lavender. A distinct shade, particularly pleasing under artificial light. Pkt., 25c; oz., \$1.00.

Heatherbell. Rich shade of mauve. Pkt., 25c; oz. \$1.00.

Hercules. Very large, rosy pink. Pkt., 25c; oz. \$1.00.

Melody. A deeper shade of pink than Songbird. Flowers borne on long stems, generally four large, wavy blossoms to each stem. Pkt., 25c; oz. \$1.00.

Snowflake. Pure white, large flowers on long stems. Pkt. 25c, oz. \$1.00.

Songbird. A beautiful light pink, about the color of Florence Morse Spencer. Pkt., 25c; oz., \$1.00.

Spring Maid. Light flesh pink. Produces a great wealth of blossoms on long stems, generally in pairs. Pkt., 25c; oz., \$1.00.

Yarrowa. Bright rose pink with light wings. Pkt., 25c; oz., \$1.00.

Zvolanek's Blue. Blue, extra fine. Pkt., 25c; oz., \$1.00.

Zvolanek's Red. Dark red, immense flowers. Pkt., 25c; oz., \$1.00.

Zvolanek's Rose. Rose pink, Pkt. 25c oz. \$1.00.

Early Choice mixed. Pkt., 25c; oz., 75c.

SPECIAL OFFER.—Five varieties Payne's New Winter Flowering Sweet Peas in separate packets for \$1.00.

Payne's Christmas Flowering Sweet Peas

The Christmas or forcing varieties of Sweet Peas are quite distinct from the other kinds, being an extra early race, flowering early in winter at a time when the other kinds will not bloom. By sowing them late in summer, they can be had in full bloom at Christmas time.

Christmas Pink. Pink and white. Pkt. 10c, oz. 30c.

Christmas White. Pure white. Pkt. 10c, oz. 30c.

Mrs. Alex. Wallace. Lavender. Pkt. 10c, oz. 30c.

Mrs. F. J. Dolansky. Clear pink. Pkt. 10c, oz. 30c.

Christmas Mixed Pkt. 10c, oz. 25c, ¼ lb. 75c.

Asta Ohn Spencer Sweet Pea

Dobbies Cream. Cream color. Pkt. 15c, oz. 45c.

Elfreda Pearson. Blush pink, deepening toward the edges. Pkt. 15c, oz. 50c.

Florence Morse Spencer. Delicate blush, with pink margin. Pkt. 15c, oz. 45c.

Flery Cross. Brilliant flame color. Pkt. 15c, oz. 75c.

George Herbert. Very large, rose crimson suffused with magenta. Pkt. 15c, oz. 50c.

Helen Lewis. Orange-salmon. Pkt. 15c, oz. 50c.

Illuminator. Brilliant orange scarlet. Pkt. 15c, oz. 60c.

CALIFORNIA WILD FLOWER SEEDS

I make a great specialty of California Wild Flower Seeds, and publish a special illustrated booklet on the subject, describing over 100 beautiful species, with notes on their culture and care. This booklet is the only catalogue of exclusively California Wild Flower Seeds ever published, and will be mailed on receipt of price, 15 cents.

Abronia umbellata. "Sand Verbena." Annual, low trailing habit. Flowers rose-color, resembling a ver-bena. Thrives best in sandy soil. Pkt., 10c; oz., 70c.

Antirrhinum coulterianum. "White Snapdragon." Annual, 3 to 5 feet high. Small white flowers in spikes often 2 feet long. Pkt., 15c.

Aquilegia truncata. "Columbine." Perennial, 2 to 3 feet high. Flowers scarlet tipped with yellow. Succeeds best in a moist, shady place. Pkt., 15c.

Argemone platyceras hispida. "Prickly Poppy." Annual, 1½ to 3 feet high. Flowers white with yellow center. Pkt., 10c.

Baeria gracilis. "Sunshine." Annual, 4 to 8 inches high. Golden yellow, star-shaped flowers. Pkt., 10c.

Castilleja californica. "Indian Paint Brush." Perennial, 1 to 2 feet high. Flower bracts deep scarlet. Pkt., 15c.

Clarkia concinna. "Beautiful Clarkia." Annual, 8 inches to 2 feet high. Flowers rose-pink with crimson sepals. Prefers a shady spot. Pkt., 10c; oz., \$1.00.

Clarkia elegans. "Clarkia." Annual, 3 to 6 feet. A slender growing plant; flowers purple with white and crimson stamens. Thrives best in shade. Pkt., 10c; oz., 40c; lb., \$5.00.

Collinsia bicolor. "Innocence." Annual, 1 to 2 feet high. Flowers white, lilac and rose-purple. Prefers a shady situation. Pkt., 10c; oz., 35c; lb., \$4.00.

Coreopsis douglasii. "Yellow Daisy." Annual, 6 to 12 inches. A graceful little plant with bright yellow daisy-like flowers. Pkt., 15c; oz., \$1.50.

Coreopsis stillmani. "Yellow Mountain Daisy." Annual, 9 to 12 inches high. Bright yellow, daisy-like flowers. Pkt., 15c; oz., \$1.50.

Coreopsis maritima. "Sea Dahlia." Perennial, 2 to 2½ feet high. Flowers large, light canary yellow. Pkt., 15c.

Delphinium cardinale. "Scarlet Larkspur." Perennial, 3 to 6 feet. Produces long spikes of bright scarlet flowers. Pkt., 10c.

Dendromecon rigidum. "Tree Poppy." Perennial shrub, 4 to 8 feet high. Bright yellow flowers, 3 inches or more in diameter. Seed is hard to germinate. Pkt., 15c.

Dicentra chrysantha. "Golden Ear Drops." Perennial, 3 to 5 feet high. Finely cut glaucous foliage and rich yellow flowers. Pkt., 15c; ¼ oz., \$1.00.

Dodecatheon clevelandi. "Shooting Star." Perennial, 1 to 1½ feet high. Flowers in shape like a cyclamen, delicate lilac and white. Pkt., 15c.

Emmenanthe penduliflora. "Whispering Bells." Annual, 1 to 2 feet high. Produces large quantities of bell-shaped, pendulous flowers, cream-colored or yellow. Pkt., 10c.

Encelia californica. "Bush Sunflower." Perennial shrub, 2 to 6 feet high; found on dry banks, blooming in the spring and early summer. Flowers bright yellow with dark centers. Pkt., 10c.

Erysimum asperum. "Wild Wallflower." Perennial, 2 to 4 feet high. Long spikes of large, orange-colored, fragrant flowers. Pkt., 15c; oz., \$1.50.

Eschscholtzia californica. "California Poppy." Annual, 1 to 1½ feet. The most noted of California Wild Flowers. Orange-yellow, with a beautiful glossy sheen. Pkt., 10c; oz., 35c; lb., \$3.00.

Floerkea douglasii. "Meadow Foam." Annual, of low spreading habit; flowers cream-colored. Prefers a moist location. Pkt., 10c; oz., 50c.

Fraseria parryi. Perennial, 1½ to 2½ feet high. Produces loose clusters of star-shaped flowers, brown yellow and green, mottled and blended. Pkt., 15c.

Gilia abrotanifolia. Annual, 1½ to 2½ feet high. Large heads of very pale blue flowers. Pkt., 10c; oz., 60c; lb., \$6.00.

Gilia achillaeifolia. "Blue Gilia." Annual, 1 to 1½ feet high. Small violet-blue flowers in dense heads on graceful, slender stems. Pkt., 10c; oz., 35c; lb., \$4.00.

Gilia capitata. "Large Blue Gilia." Annual, 1½ to 2½ feet high. A slender, somewhat branched plant, with finely cut foliage and light blue flowers. Blooms later than the preceding. Pkt., 10c; oz., 40c; lb., \$5.00.

Gilia californica. "Prickly Phlox." Shrub, 2 to 4 feet high. Prickly needle-like leaves. Fragrant phlox-like flowers of a delicate rose pink color. Pkt., 25c.

Gilia dianthoides. "Fringed Gilia," or "Ground Pink." Annual, 2 to 6 inches high. An exquisite little plant with minute leaves and phlox-like flowers, rose colored or lilac with yellowish throat. Pkt., 15c.

Gilia tricolor. "Birds' Eyes." Annual, 9 to 12 inches. Flowers pale lilac, yellow toward the center, with five purple spots. Pkt., 10c; oz., 40c; lb., \$5.00.

Godetia amoena. "Farewell to Spring." Annual, 1 to 2 feet high. A slender growing plant, usually found on shady banks. Flowers lilac-crimson or red-pink, often with a dark center. Pkt., 10c; oz., 60c; lb., \$7.00.

Godetia hottae. "Farewell to Spring." Annual, 2 to 3 feet high. Flowers pale rose or lilac. Prefers a partially shady place. Pkt., 10c; oz., 70c; lb., \$8.00.

Godetia grandiflora. "Farewell to Spring." Annual, 1 to 2 feet high. Flowers large, delicate pink, marked with rich crimson. Pkt., 10c; oz., 60c; lb., \$7.00.

Helianthus annuus. "Sunflower." Annual, 5 to 8 feet high. Flowers yellow with dark brown centers. Pkt., 10c; oz., 60c.

Lathyrus laetiflorus. "Wild Pea." Perennial climber. Flowers in loose clusters, white or flesh-color veined with purple. Pkt., 10c; oz., 60c. ¼

Lathyrus splendens. "Pride of California." A perennial climbing pea. Flowers large, deep, rich crimson. Pkt., 15c.

Layia elegans. "Tidy Tips." Annual, 1 to 2 feet. A yellow daisy, edged with white or cream color. Pkt., 10c; oz., \$1.00.

Layia glandulosa. "White Daisy." Annual, 9 to 15 inches. Pure white with yellow center. Pkt., 15c.

Linanthus densiflorus. "California Phlox." Annual, 1 to 2 feet high. Flowers in crowded clusters; pink and purple with yellow throat. Pkt., 10c; oz., 60c; lb., \$7.00.

Lupinus affinis. "Blue Lupine." Annual, 1 to 2 feet. Flowers blue and purple. Pkt., 10c; oz., 40c; lb., \$5.00.

Lupinus arboreus. "Yellow Tree Lupine." Shrubby perennial, 4 to 10 feet high. Flowers rich sulphur yellow. Pkt., 15c; oz., 60c.

Lupinus cytoides. "Canyon Lupine." Perennial, 4 to 6 feet high. Flowers in long racemes, deep pink or rose purple and very showy. Pkt., 15c; oz., \$1.00.

Lupinus densiflorus. "White Lupine." Annual, 1 to 1½ feet high. A stout, branching plant with rich green foliage and white flowers in dense whorls. Pkt., 15c; oz., 70c.

Lupinus hirsutissimus. "Hairy Lupine." Annual, 1½ to 2½ feet high. Flowers large, deep reddish purple. Pkt., 15c; oz., \$1.00.

Lupinus longifolius. "Blue Bush Lupine." Shrubby perennial, 3 to 4 feet high. Long spikes of light blue flowers. Very valuable for covering dry slopes. Pkt., 15c; oz., 70c.

Lupinus nanus. "Dwarf Blue Lupine." Annual, 10 to 15 inches high. A very showy plant; flowers rich blue and white, fragrant. Pkt., 10c; oz., 50c; lb., \$6.00.

Lupinus paynei. "Payne's Tree Lupine." Shrubby perennial, 4 to 8 feet high. Flowers fragrant, in long racemes, various shades of blue, lavender, lilac, pink, purple and white, all with a beautiful yellow blotch on the standard. Foliage silvery grey. Pkt., 25c.

Malacothrix californica. "Wild Marigold." Annual, 6 to 12 inches high. Flowers large, resembling a calendula or marigold, cream and yellow, beautifully blended. The blossoms are on single stems and open at daylight but close later in the day. They are produced in great numbers and present a wonderful sight in the early morning sunlight. A pretty little plant doing especially well in sandy soil. Pkt., 15c; ¼ oz., \$1.00.

Meconopsis heterophylla. "Flaming Poppy." Annual, 1 to 2 feet high. Flowers salmon-colored or brick red. Pkt., 15c.

Mentzelia lindleyi. "Blazing Star." Annual, 2 to 3 feet. Showy yellow flowers. Pkt., 10c; oz., 50c; lb., \$6.00.

Mimulus brevipes. "Yellow Monkey Flower." Annual, 1 to 1½ feet high. Flowers large, clear canary yellow. Pkt., 15c.

Mimulus cardinalis. "Scarlet Monkey Flower." Perennial, 1 to 3 feet. Flowers bright scarlet; grows in wet places. Pkt., 10c.

Mimulus fremonti. "Pink Monkey Flower." Annual, 4 to 6 inches high. Flowers large, deep rose pink. Grows in sandy places. Pkt., 15c.

Nemophila insignis. "Baby-Blue-Eyes." Annual, 4 to 8 inches high. A charming little plant of spreading habit, with clear, azure blue flowers. Prefers shade or partial shade. Pkt., 10c; oz., 35c; lb., \$4.00.

Nemophila maculata. "Spotted Nemophila." Annual, 4 to 8 inches. White with large deep purple blotch on each petal. Does well in shady places. Pkt., 10c; oz., 35c; lb., \$4.00.

Oenothera biennis hirsutissima. "Yellow Evening Primrose." Biennial, 3 to 6 feet. Flowers large, light yellow. Pkt., 10c; oz., 60c.

Oenothera biortia vieteliana. "Sun Cups." Annual, of low trailing habit. Flowers large, bright yellow. Grows in sandy places. Pkt., 15c; oz., \$1.50.

Oenothera trielocaiyx. "White Evening Primrose." Biennial, 1 to 1½ feet high. Large white flowers. Grows in sandy soil. Pkt., 15c.

Orthocarpus purpurascens. "Owl's Clover" or "Pink Paint Brush." Annual, 4 to 10 inches high. Rose, pink or purplish lilac shading to cream-color at center. Pkt., 10c.

Pentstemon antirrhinoides. "Yellow Pentstemon." Perennial shrub, 3 to 4 feet high. Flowers large, bright yellow. Pkt., 15c.

Pentstemon centranthifolius. "Scarlet Bugler." Perennial, 2 to 4 feet high. Rich vermilion colored flowers. Pkt., 15c.

Pentstemon heterophyllus. "Violet Beard Tongue." Perennial, 1½ to 2 feet high. Flowers trumpet shaped, royal purple marked with pink. Pkt., 15c.

Pentstemon palmeri. "White Pentstemon." Perennial, 1½ to 2½ ft. high. Flowers large, creamy white shaded with pink. Pkt., 15c.

Pentstemon spectabilis. "Blue Pentstemon." Perennial, 4 to 7 feet high. Flowers in long spikes, and the richest combination of blue and royal purple. Pkt., 10c.

Phacelia grandiflora. "Large Flowered Phacelia." Annual, 1 to 3 feet high. Large saucer-shaped flowers, lavender, beautifully veined with violet. Pkt., 10c; oz., 70c; lb., \$8.00.

Phacelia parryi. "Parry's Phacelia." Annual, 1 to 1½ feet high. Flowers saucer-shaped, deep violet, generally with five yellow spots. Pkt., 10c; oz., 70c; lb., \$8.00.

Phacelia tanacetifolia. "Wild Heliotrope." Annual, 1½ to 2½ feet high. Flowers lavender blue. Pkt., 10c; oz., 35c; lb., \$4.00.

Phacelia whitlavia. "Wild Canterbury Bell." Annual, 1 to 1½ feet high. Large bell-shaped flowers hanging in open, airy clusters; color violet purple. Pkt., 10c; oz., 60c; lb., \$7.00.

Platystemon californicus. "Cream Cups." Annual, 6 to 10 inches high. Cream colored flowers. Pkt., 10c; oz., \$1.50.

Romneya coulteri. "Matilija Poppy." Perennial, 6 to 10 feet high. Blossoms often 6 or 7 inches in diameter, pure glistening white with bright yellow centers. Pkt., 15c.

Salvia carduacea. "Thistle Sage." Annual, 1 to 2 feet high. Pale lavender flowers. Pkt., 10c; oz., 50c; lb., \$6.00.

Silene laciniata. "Indian Pink." Perennial, 1 to 3 feet. Flowers bright scarlet. Pkt., 15c.

Sisyrinchium bellum. "Blue Eyed Grass." Perennial, 8 to 15 inches high. Flowers bright blue with yellow centers. Pkt., 15c.

Trichostema lanatum. "Romero" or "Woolly Blue-curls." Shrubby perennial, 4 to 6 feet high. Flowers rich blue. Pkt., 15c.

Verbascum virgatum. "Mullein." Biennial, 5 to 6 feet high. Flowers in long spikes, rich yellow. Pkt., 10c.

Zauschneria californica. "California Fuchsia." Perennial, 1 to 1½ feet high. Scarlet trumpet-shaped flowers. Useful for covering dry banks. Pkt., 15c.

For a full list of California Wild Flower Seeds, and also for more complete descriptions of the foregoing species, send for my SPECIAL ILLUSTRATED BOOK-LET, "CALIFORNIA WILD FLOWERS: THEIR CULTURE AND CARE." A treatise describing over a hundred beautiful species, with a few notes on their habits and characteristics. Price 15c, postpaid.

Special Souvenir Collection of California Wild Flower Seeds

This collection contains twelve choice species of California Wild Flower Seeds in separate packets, mostly annuals of easy culture, and includes the California Poppy, the Baby Blue-Eyes, the Scarlet Larkspur, the Blue Lupine, the Blazing Star, the Wild Heliotrope, and 6 others of my selection, mailed free to any address for 50 cents.

California Wild Flower Seeds in Mixtures

I particularly recommend these mixtures for sowing on waste pieces of ground, parkings, vacant lots, etc. My No. 1 Mixture has an established reputation, as the many letters of praise I have received will prove. It contains twenty distinct species mixed in their right proportions and will produce a succession of bloom for a long period. Many odd corners and unsightly pieces of waste ground can be transformed into beauty spots by sowing some of these seeds broadcast in the fall about the time the rainy season commences.

In ordering it is only necessary to mention the number of the mixture desired.

Payne's Mixture. No. 1. General mixture of annual wild flower seeds. This mixture is made up of those kinds which will give a succession of flowers for a long period and will succeed under ordinary conditions. Pkt., 10c; oz., 40c; ¼ lb., \$1.45; lb., \$5.00.

Payne's Mixture. No. 2 Mixture of annual wild flower seeds for sowing in shady places. Pkt., 10c; oz., 50c; ¼ lb., \$1.75; lb., \$6.00.

Payne's Mixture. No. 3. Mixture of annual wild flower seeds in orange, yellow and cream shades. Pkt., 10c; oz., 60c; ¼ lb., \$2.00; lb., \$7.00.

Payne's Mixture. No. 4. Mixture of annual wild flower seeds in blue, purple and lavender shades. Pkt., 10c; oz., 50c; ¼ lb., \$1.75; lb., \$6.00.

CALIFORNIA NATIVE PLANTS.

I make a specialty of growing native trees, shrubs and perennial plants, and issue price lists, from time to time, of the kinds I have large enough for sale. The latest list will be mailed free on application.

Remember, I am headquarters for California wild flower seeds and native plants. Through my work in collecting and bringing before the public the beautiful wild flowers of California extending over a period of seventeen years, there is now a considerable demand for these seeds. It is a regrettable fact that some seed stores have resorted to the practice of selling garden varieties of flowers as wild species. Some of these are cultivated forms of wild flowers, greatly changed, and in many cases much inferior to the original types and others are not native species at all. My No. 1 Mixture has been imitated by some firms with an inferior mixture of such flowers and sold at a price at which the true native species could not be furnished. In buying your seeds, patronize the firm making a specialty of the true wild species. For those who wish quantities of flower seeds for sowing on vacant ground and desire a cheaper mixture than my No. 1 Mixture of California Wild Flower Seeds, I have prepared my Surprise Garden Mixture described below and which I am confident will be found superior to any such mixture offered by other firms.

SURPRISE GARDEN MIXTURE

This is not a mixture of wild flowers, but of garden annuals, with a few wild species added. It contains a large number of different kinds, all of them quite hardy and varieties that will grow with the least amount of care and produce quantities of flowers for a long period. Indeed, there are so many kinds appearing in endless succession that it is a continual surprise from the time the first plant begins to blossom. I recommend it for vacant lots and waste pieces of ground. Pkt., 10c; oz., 35c; ¼ lb., \$1.20; lb., \$4.00.

CALIFORNIA WILD GARDENS

I am prepared to give advice on the subject of making wild gardens, and also equipped for carrying out the work. Estimates furnished and correspondence invited.

Tree and Shrub Seeds

Where not otherwise stated all trees and shrubs described in this list are evergreen. Where a height is mentioned it is understood that it is the ultimate height they attain. Space will not permit giving full instructions for sowing seed of each kind of tree but a few general remarks may not be out of place. Most tree seeds are better sown in the latter part of winter or spring, though there are many that can be sown at any time, and some which must be sown while the seeds are quite fresh. Most kinds are best sown in boxes, of light, well-drained soil, covering the seed about its own depth or some of the larger ones a little deeper, press the soil down slightly with the hands. Keep in a lath house, frame, or some sheltered place and water carefully. As soon as large enough to handle, pot and grow on until large enough to plant in the open ground, where they are to remain. Pines and other Conifer seeds are best sown in March and April; use a soil containing plenty of decomposed granite and always water in the morning and not at night, as the young seedlings "damp off" very easily.

Acacia seeds should be soaked in hot water for twelve hours or more before sowing.

Some seeds are good only for a short time and in these cases I have stated the time at which fresh seeds can be had.

ACACIA ARMATA. "Kangaroo Thorn." 10 feet. A spreading shrub, with small yellow flowers, excellent for grouping and also for hedges. Pkt., 15c; oz., 50c; lb., \$5.00.

A. BAILEYANA. 30 feet. A strikingly beautiful tree with glaucous pinnate foliage and covered late in winter with canary-yellow flowers which completely envelop the tree. Pkt., 10c; oz., 40c; lb., \$4.00.

Acacia baileyana

A. CULTRIFORMIS. "Knife-leaved Acacia." 8 feet. A pretty shrub, with triangular shaped leaves of a glaucous green color and yellow flowers in axillary racemes. Pkt., 15c; oz., 50c; lb., \$5.00.

A. CYANOPHYLLA. "Blue-leaved Wattle." 25 feet. Leaves very large, often one foot long, glaucous green, branches drooping, flowers yellow. A beautiful tree and especially valuable for planting on the sea coast. Pkt., 10c; oz., 40c; lb., \$4.00.

A. CYCLOPS. 15 feet. A rather thick growing shrub of spreading habit, bearing quantities of rich, yellow flowers. It thrives particularly well near the coast, and on account of its dense habit, bright green foliage and yellow flowers, it is extremely ornamental, especially for planting in groups. Pkt., 15c; oz., 50c; lb., \$5.00.

A. DEALBATA. "Silver Wattle." 60 feet. A magnificent, rapid-growing tree with glaucous, finely cut foliage and covered late in winter with golden-yellow flowers. One of the best for street planting. Pkt., 10c; oz., 40c; lb., \$4.00.

A. DECURRENS. "Green Wattle." 75 feet. A rapid-growing tree and one of the best for avenues. Finely cut, feathery, light green foliage. Flowers bright yellow. The wood is valuable for turners' work and the bark is rich in tannin. Pkt., 10c; oz., 40c; lb., \$4.00.

A. ELATA. (*A. procera*.) 60 feet. A very ornamental, rapid-growing tree, with large, handsome, pinnate foliage, and bearing quantities of pale yellow flowers. Pkt., 15c; oz., \$1.00.

A. FLORIBUNDA. (*A. nerifolia*.) 30 feet. A very quick growing species of pendulous habit, long narrow leaves; flowers light yellow. Pkt., 15c; oz., 50c; lb., \$5.00.

A. JULIBRISSIN. (*Albizia julibrissin*.) 40 feet. A beautiful deciduous tree of widely spreading habit, with finely divided, feathery foliage. Flowers pink, produced in large clusters, very showy. Pkt., 10c; oz., 50c.

A. LATIFOLIA. See *A. longifolia*.

A. LINIFOLIA. "Flax-leaved." 12 feet. A tall-growing shrub, with long, narrow leaves; yellow flowers in axillary racemes; very pretty for planting in groups. Pkt., 15c; oz., 60c; lb., \$6.00.

A. LONGIFOLIA. "Sydney Golden Wattle." 30 feet. Generally known in California, though wrongly, under the name of *A. latifolia*. Of rather slender habit. If properly trimmed it makes a fine street tree; also does well near the ocean; leaves long, lanceolate, glossy green. Very free flowering. Catkins of light yellow flowers at the axil of every leaf. Pkt., 15c; oz., 50c; lb., \$5.00.

A. LOPHANTHA. (*Albizia lophantha*.) 30 feet. Of rapid growth and useful for temporary shelter; valuable for planting on sand dunes along the sea coast. Pkt., 10c; oz., 15c; lb., \$1.50.

A. MELANOXYLON. "Blackwood." 75 feet. Of compact, pyramidal growth. The favorite tree for street planting in Los Angeles. The wood takes a beautiful polish and is considered almost equal to walnut. It is used in Australia for pianos, billiard tables, etc. Pkt., 10c; oz., 30c; lb., \$3.00.

A. MOLLISSIMA. "Black Wattle." 50 feet. A rapid growing tree of erect and upright growth, with dark green, feathery foliage; flowers yellow; blooms in late spring. Pkt., 10c; oz., 40c; lb., \$4.00.

A. PENDULA. "Weeping Myall." A rare and beautiful tree, with weeping branches, narrow, silvery gray foliage and golden yellow flowers. Pkt., 25c; oz., \$1.50.

A. PODALYRIAEOFOLIA. A very rare and beautiful shrub, somewhat similar to *A. cultriformis*, but with larger leaves and larger flowers, which are produced in immense quantities early in winter and for this reason it is especially recommended for cutting. Flowers rich canary-yellow. Pkt., 25c; oz., \$2.00.

A. PRAVISSIMA. 20 feet. Large shrub of upright growth, but with very long, drooping branches. Foliage similar to *A. cultriformis* but smaller and green. Flowers soft yellow, appearing in February and March. Pkt., 25c; oz., \$1.50.

A. PROMINENS. 40 feet. One of the most beautiful of Acacias; of somewhat pendulous habit with small narrow foliage and great profusion of golden yellow flowers. Pkt., 25c; oz., \$1.50.

- A. PRUINOSA.** 25 feet. A very beautiful tree with large, handsome, finely-cut foliage, which is of a rich light green. The young foliage and shoots being of a soft rose color; flowers pale yellow. Pkt., 15c; oz., 75c; lb., \$7.50.
- A. PYCNANTHA.** "Golden Wattle." 30 feet. Of quick growth; leaves long and very broad; flowers in pendulous clusters, bright golden yellow and fragrant. Pkt., 10c; oz., 40c; lb., \$4.00.
- A. SALIGNA.** 25 feet. Of drooping habit; leaves long, flowers rich yellow. Pkt., 10c; oz., 40c; lb., \$4.00.

Acacia mollissima

- A. VERTICILLATA.** 12 feet. A shrub of rather spreading habit, with small linear leaves and with flower spikes one inch or less in length; flowers deep yellow and extending the entire length of the young branches; one of the best for planting in groups. Pkt., 15c; oz., \$1.50.
- ACER MACROPHYLLUM.** "California Maple." A deciduous tree of great beauty, attaining a height of about 100 feet. Leaves large, deep, five-lobed, rich green, pale beneath. A native tree found growing along the sides of creeks in many of our canyons, but thriving under cultivation in the valleys. Pkt., 10c; oz., 25c; lb., \$2.50.
- ALBIZZIA.** See Acacia.
- AMPELOPSIS VEITCHII.** "Boston Ivy." "Japan Ivy." A handsome deciduous creeper much used for covering stone, brick and wooden walls, to which it clings tightly. The leaves are shining, glossy green, turning red and yellow in the fall. Pkt., 10c; oz., 35c; lb., \$3.50.
- ANGOPHORA LANCEOLATA.** A tall spreading tree with clean, smooth bark, much resembling a eucalyptus, to which it is closely related. It is valuable for planting for ornamental purposes as single specimen trees. Pkt., 15c; oz., \$1.50.
- ANONA CHERIMOLIA.** "Cherimoyer." Peru. A small bushy tree with broad aromatic leaves. The fruits are produced in great abundance of a grayish-brown color, 3 to 5 inches in diameter, heart-shaped and of a delicious flavor. Pkt. 15c; oz., 50c; lb., \$5.00.

ARBUTUS MENZIESII. "Madrone." 75 feet. A native tree found in the coast range. The foliage is thick, bright green and leathery; bark smooth, brownish-red; flowers white and fragrant, followed by red berries. Pkt., 10c; oz., 30c; lb., \$3.00.

A. UNEDO. "Strawberry Tree." South of Europe. 10 feet. Beautiful dark green foliage. In the fall the trees are covered with both blossoms and fruit; the latter in appearance like strawberries. Pkt., 10c; oz., 35c; lb., \$3.50.

ASH, ARIZONA. See Fraxinus.

BAUHINIA PURPUREA. 10 feet. A valuable shrub with dark-green, curiously bilobed leaves, and large, showy flowers, which are reddish-purple and white. Pkt. 15c; oz. \$1.50.

BERBERIS AQUIFOLIUM. "Oregon Grape." 4 feet. A handsome shrub, with shining, purplish, prickly leaves and bright yellow flowers, followed by blue or nearly black berries. Pkt., 15c; oz., 50c.

B. DARWINI. 3 feet. A beautiful shrub with many slender branches, drooping towards the ends. The foliage is dark green and prickly, somewhat like holly, and often turns a bright red in fall, which color it holds through the winter. In early spring the plants are covered with a profusion of golden yellow flowers. Pkt., 25c.

B. JAPONICUM. 3 feet. Leaves about one foot long, bright yellow flowers, produced in terminal clusters. In hot, dry climates it should be planted in a shady situation. Pkt., 15c; oz., 50c.

B. STENOPHYLLA. 4 feet. A very desirable shrub with long, slender, arching branches and small, long, narrow, dark green leaves, which are silvery on the underside. The flowers are golden yellow and produced in great profusion. Pkt. 25c.

BROOM. See Spartium.

CALLISTEMON RIGIDUS. "Bottle Brush." A beautiful shrub, with large red, brush-like flowers. Especially valuable for dry places. Pkt., 15c; oz., \$1.50.

CALLITRIS ROBUSTA. "Cypress Pine." In Australia it grows to a fair-sized tree, sometimes exceeding 90 feet in height, but the specimens in Southern California have only attained the size of large shrubs. The branchlets are short, crowded and erect, giving the foliage the appearance of growing in tufts. It is very ornamental for planting in gardens, having a particularly bright, clean appearance. Pkt., 15c; oz., \$1.00.

CAMPHORA OFFICINALIS. "Camphor Tree." China and Japan. 40 feet. A very ornamental, symmetrical growing tree, with bright green, glossy foliage, the young foliage being of a pleasing delicate rose color. Well adapted for lawns or for street planting. The tree from which the camphor of commerce is extracted. Fresh seed from January to April. Pkt., 10c; oz., 25c; lb., \$2.50.

CARPENTERIA CALIFORNICA. A rare native shrub, with handsome, glossy foliage, and bearing large, fragrant, pure white flowers with yellow stamens. Pkt., 25c.

CASSIA ARTEMISIOIDES. Central Australia. A pretty shrub, with finely cut silvery gray foliage and clear yellow, sweet-scented flowers; will stand any amount of drought. Pkt., 15c; oz., \$1.00.

C. FLORIBUNDA GRANDIFLORA. 10 feet. Free blooming shrub, of rather loose, spreading habit. Leaves and stems smooth, deep green; flowers large, bright yellow with brown anthers. Pkt., 15c; oz., 50c.

C. TOMENTOSA. Mexico. A quick growing shrub, with bright yellow flowers, blooming all through the winter. Very effective for planting in groups. Pkt., 10c; oz., 40c; lb., \$4.00.

CASUARINA EQUISETIFOLIA. "Beefwood." Southeast Australia. 50 feet. A striking tree of rapid growth, with drooping branches, dark green, needle-like leaves. Pkt. 15c; oz. \$1.00.

C. QUADRIALVIS. "Coast She Oak." Southeast Australia. 60 feet. Valuable for planting on the sea coast for holding the sand. Pkt. 15c; oz. \$1.00.

C. STRICTA. "She Oak." Attaining a height of about 75 feet. It forms a very handsome tree, is particularly valuable for planting along roadsides. It produces a very tough wood, suitable for tool handles. Pkt. 15c; oz. 75c.

CATALPA SPECIOSA. "Hardy Catalpa." 50 feet. A well known deciduous tree of rapid growth, much used for planting on timber claims. Flowers white, in large panicles. Pkt. 10c; oz. 30c; lb. \$3.00.

CEANOTHUS DIVARICATUS. "California Lilac." A beautiful native shrub, with glaucous leaves and large clusters of pale blue flowers; blooms in spring. Soak the seed in hot water a few hours before sowing. Pkt. 15c; oz. \$1.00.

CEDRUS ATLANTICA. "Mt. Atlas Cedar." 100 feet. A splendid tree of upright, pyramidal growth with silvery green foliage. Pkt. 15c; oz. 60c, lb. \$6.00.

C. DEODARA. "Himalayan Cedar." 120 feet. One of the most handsome trees in cultivation, succeeding most remarkably well in California. Drooping branches and silvery green foliage. Pkt. 15c, oz. 60c, lb. \$6.00.

C. LIBANI. "Cedar of Lebanon." Of spreading habit, the whole top seeming to grow in "shelves," the branches growing horizontally; of darker green than the preceding. Pkt. 15c; oz. 60c, lb. \$6.00.

CERATONIA SILIQUA. "St. John's Bread," or "Carob Tree." 40 feet. A thick-growing tree with masses of dark green foliage; will grow in any soil and thrives with scarcely any water. Pkt. 10c, oz. 25c, lb. \$2.50.

CHAMAECYPARIS LAWSONIANA. "Lawson's Cypress." California and Oregon. 200 feet. One of the most striking and graceful of all evergreen trees, with horizontally spreading pendulous branches and flat, compressed foliage; unsurpassed for specimens on lawns. Pkt. 15c, oz. 50c, lb. \$5.00.

CHORIZEMA ILICIFOLIUM. A spreading shrub or half-climber from Australia. The leaves are long with wavy margins and spine-like teeth, somewhat like holly. The flowers are small, pea-shaped; red, purple and yellow. It blossoms in winter and early spring when the plants are simply a mass of brilliant colors. Pkt. 25c.

CINNAMOMUM PEDUNCULATUM. "Cinnamon Tree." The cinnamon tree of commerce. A splendid tree for lawns or street, with bright green, glossy foliage. Fresh seed from January to April. Pkt. 10c, oz. 50c, lb. \$5.00.

COPROSMA BAUERI. A very handsome low growing shrub. The leaves are almost round, of a clean, glossy green color and have the appearance of having been varnished. It is especially valuable for planting in small beds, around a porch or against a wall. Pkt. 15c, oz. \$1.00.

CORNUS CAPITATA. (*Benthamia fragifera*.) "Evergreen Dogwood." 15 feet. Large shrub with flowers resembling those of the Eastern Dogwood, cream-colored, changing to a reddish shade before falling. This shrub is better suited to California conditions than the eastern species and has the advantage of being an evergreen. Pkt. 15c, oz. 50c, lb. \$5.00.

CORONILLA GLAUCA. A small shrub with glaucous foliage and quantities of bright yellow pea-shaped flowers. Pkt. 15c, oz. 75c.

CRATAEGUS PYRACANTHA. "Evergreen Thorn," or "Burning Bush." 10 feet. A thorny, thick-growing, evergreen shrub, with small dark green leaves and white flowers followed by masses of deep orange-red berries which are particularly attractive, remaining on the plant all winter. Pkt. 10c, oz. 30c, lb. \$3.00.

CRATAEGUS CRENULATA. Similar to the preceding but has narrower leaves and bright red berries. Pkt. 10c, oz. 30c, lb. \$3.00.

CRYPTOMERIA JAPONICA. "Japan Cedar." 120 feet. The largest tree of Japan, attaining 35 feet in circumference and yielding a valuable timber. Very effective for planting in large grounds. Pkt. 10c, oz. 30c, lb. \$3.00.

C. ELEGANS. "Fine-leaved Japan Cedar." Very ornamental, fine feathery foliage, which in winter turns to a reddish brown. A splendid tree for planting on lawns. Pkt. 15c, oz. 50c.

CUPRESSUS ARIZONICA. "Arizona Blue Cypress." 70 feet. A tree of great scenic value, and without doubt the most silvery of all the Cupresses. It grows quite rapidly, and forms a perfect tree, thriving in almost any soil, standing intense heat, and much frost. The accompanying cut is reproduced from a photograph of a tree in its native habitat in Arizona, where my stock of seed was collected. Pkt. 15c, oz. 50c, lb. \$5.00.

C. BENTHAMII KNIGHTIANA. "Knight's Cypress." 70 feet. A remarkably handsome tree with drooping, feathery branchlets and glaucous foliage. Pkt. 15c, oz. 50c.

C. FUNEBRIS. "Weeping or Funeral Cypress." 60 feet. A tree with wide spreading, pendulous branches and rich, green, graceful foliage. Pkt. 15c, oz. 50c, lb. \$5.00.

C. GOVENIANA. "Govens Dwarf Cypress." A native species of erect growth, forming a handsome crown rich, dark green foliage. Pkt. 15c, oz. 50c, lb. \$5.00.

C. MACROCARPA. "Monterey Cypress." 70 feet. A native tree, extensively planted for hedges and equally valuable for single specimens. The tree becomes very picturesque in old age. Pkt. 10c, oz. 35c, lb. \$3.50.

C. LUSITANICA. (*C. glauca*) "Blue Cypress." A rapid growing tree of rather spreading habit with glaucous foliage. Pkt. 15c, oz. 50c, lb. \$5.00.

C. SEMPERVIRENS VAR. FASTIGIATA. "Italian Cypress." 75 feet. A tall, tapering tree with erect branches, growing close and parallel with the trunk. Largely used in formal gardens. Pkt. 10c, oz. 40c, lb. \$4.00.

Cupressus arizonica

CYDONIA JAPONICA. "Flowering Quince." China and Japan. A beautiful deciduous shrub, bearing a great profusion of bright, crimson-scarlet flowers early in the spring. Pkt. 15c, oz. \$1.00.

CYPHOMANDRA BETACEA. (*Solanum betaceum*.) "Tree Tomato." Grows to a height of about 8 feet, with large, handsome foliage. It produces quantities of egg-shaped fruits, which are of a bright orange color, and are sometimes used for preserves. Pkt. 15c.

CYTISUS LABURNUM. "Golden Chain." A beautiful deciduous tree, with pretty foliage and long, pendulous panicles of pea-shaped flowers, of a rich yellow appearing in great profusion early in spring. Pkt. 15c, oz. 50c.

CYTISUS PROLIFERUS. "Tagasaste." A shrub growing to a height of about 12 feet. It produces large appearing in great profusion early in spring. Pkt. 15c, oz. 60c.

DENDROMECON RIGIDUM. "Tree Poppy." A native perennial shrub, 4 to 8 feet. Graceful, willow-like foliage and bright-yellow flowers, 3 inches or more in diameter; blooms nearly all the year. Seed is hard to germinate. Pkt. 15c.

ERYTHRINA CRISTA GALLI. "Coral Tree." Brazil. 30 feet. A beautiful deciduous tree, with large, deep green foliage and immense brilliant-red, pea-shaped flowers. Pkt. 15c, oz. 75c.

FICUS AUSTRALIS. "Australian Banyan Tree." 100 feet. A handsome tree with large, glossy foliage. Suitable for planting on large lawns, etc. Pkt. 15c, oz. \$1.00.

F. MACROPHYLLA. "Moreton Bay Fig." 100 feet. A magnificent tree, forming a large, compact, spreading head; very effective for planting in large grounds. Leaves a bright, glossy green, more than twice the size of the preceding species. Pkt. 15c, oz. \$1.00.

FRAXINUS VELUTINA. "Arizona Ash." A deciduous tree, largely planted in Arizona and New Mexico for shade purposes, and is of great value, being of quick growth, and standing both heat and drought remarkably well. Pkt. 10c, oz. 40c.

FREMONTIA CALIFORNICA. "California Slippery Elm." A beautiful native shrub, growing from 5 to 20 feet high. It reaches its greatest perfection on the desert side of our mountains. The flowers are large, golden-yellow, two to three inches across. The seed is hard to germinate. Pkt. 15c, oz. \$1.00.

GENISTA ANDREANA. A free flowering shrub. Flowers bright yellow, marked with crimson. Pkt. 15c, oz. \$1.00.

G. CANARIENSIS. A pretty shrub, very effective for planting in groups, being covered in spring with bright yellow flowers. Pkt. 15c, oz. 75c.

G. FRAGRANS. (*G. ramosissima*.) Of rather compact growth, covered with bright yellow fragrant flowers. Often grown as a pot plant. Pkt. 15c, oz. \$1.25.

G. MONOSPERMA PENDULA. "Bridal Veil." 10 feet. A rare and handsome shrub with fine, drooping, silvery branchlets. The flowers are white and produced in immense numbers. Pkt. 25c.

HETEROMELES ARBUTIFOLIA. "California Holly" or "Christmas Berry." 10 feet. A native California shrub; found plentifully in all our foothills. Very desirable on account of its handsome foliage and also for its bright colored berries. Pkt. 10c, oz. 25c, lb. \$2.50.

JACARANDA MIMOSAEFOLIA. (*J. ovalifolia*.) Brazil. 30 feet. One of the finest of our flowering trees, literally covered in early summer with large blue bignonia-like flowers. The foliage is finely cut like a fern and very pretty. In pods containing from 30 to 40 seeds. Pod 5c, doz. pods 50c.

JUNIPERUS CALIFORNICA. "California Juniper." A native shrub or small tree of spreading habit, found in dry washes. The foliage is of a beautiful, deep, rich green. Pkt. 10c, oz. 40c, lb. \$4.00.

J. BERMUDIANA. "Bermuda Juniper." 40 feet. A beautiful tree of densely branched pyramidal form; foliage of a pale bluish-green color. Pkt. 15c, oz. 50c.

Ficus macrophylla

G. STENOPETALA. (*G. maderensis*.) A magnificent shrub with handsome trifoliate foliage and very long spikes of large, bright yellow flowers. Very ornamental and useful for cutting. Pkt. 15c, oz. \$1.25.

GNEVILLEA ROBUSTA. "Silky Oak." 150 feet. A large tree with pretty fern-like foliage, covered late in spring with orange-colored flowers which are a great source of honey for bees; does well in all parts of California and is one of the most stately trees for avenue planting; thriving with scarcely any water. Pkt. 15c, oz. 60c, lb. \$6.00.

GUAVA. See Psidium.

HAKEA ELLIPTICA. A shrub of rather compact habit, growing to a height of 8 or 10 feet. The older leaves are glabrous, while the young shoots and leaves have a bronze or rusty appearance. Very ornamental for lawn or shrubby planting. Pkt. 25c.

H. LAURINA. (*H. eucalyptoides*.) 10 feet. A winter blooming shrub, with foliage similar to the Blackwood Acacia, bearing curious, globose heads of red flowers with white stigmas. Pkt. 25c.

H. PUGIONIFORMIS. Much branched shrub of spreading habit, having short, needle-like leaves and large numbers of white flowers. From a short distance it has the appearance of a dwarf pine. It is of rapid growth and especially valuable for dry soils. This is the true *H. pugioniformis* and must not be confused with *H. pectinata*, a very different plant, but which has been known by many nurserymen under the former name. Pkt. 25c.

H. SALIGNA. Of similar habit to *H. laurina*, but has narrower leaves and white flowers. Pkt. 25c.

H. SUAVEOLENS. (*H. pectinata*.) A dense shrub attaining a height of 8 to 10 feet, with deeply cut sharp-pointed leaves and white flowers. Pkt. 25c.

J. COMMUNIS. "Common Juniper." 40 feet. A tree of upright, rather compact growth; beautiful grey green foliage. Pkt. 10c, oz. 40c.

J. SABINA VAR PROSTRATA. "Dwarf Trailing Juniper." A dwarf trailing variety, with handsome glaucous foliage. Very valuable for rock gardens, etc. Pkt. 15c, oz. 50c.

J. VIRGINIANA. "Red Cedar." U. S. 100 feet. A well known tree with green or bronze green foliage. Pkt. 10c, oz. 35c, lb. \$3.50.

LAGUNARIA PATERSONI. 20 feet. A small pyramidal tree with ovate leaves, whitish underneath; flowers something like Hibiscus, pale rose color. Pkt. 15c, oz. 75c.

LAURESTINUS. See Viburnum.

LAVATERA ASSURGENTIFLORA. Native of San Clemente Island. It forms a spreading shrub and is especially valuable for planting on sand dunes and banks to hold the soil, also used for planting in chicken yards for temporary shade. Flowers deep lake red. Pkt. 10c, oz. 35c.

LEPTOSPERMUM LAEVIGATUM. This beautiful shrub does particularly well in California, and is very valuable for planting in masses and for filling up odd corners. It grows rapidly and in the spring is laden with a profusion of white blossoms. Pkt. 25c, oz. \$2.00.

LEUCADENDRON ARGENTEUM. "Silver Tree." Cape of Good Hope. 30 feet. A rare tree, some fine specimens of which are to be seen in Santa Barbara. It has lanceolate, silvery leaves, densely covered with silky hairs. Great care must be taken to have good drainage in the seed pans or boxes as the young seedlings "damp" off very easily. 10 seeds 25c, 100 seeds \$2.00.

LIBOCEDRUS DECURRENS. "Incense Cedar." 100 feet. A native California tree, thriving well under cultivation. It forms a very handsome, compact growing tree, with cinnamon red bark and bright green foliage, glaucous underneath. Pkt. 15c, oz. 60c, lb. \$6.00.

LIGUSTRUM NEPALENSE. "Small-leaved Privet." 10 feet. Much used for hedges in Southern California. It grows quickly and can be trimmed in any way desired, making a dense, thick hedge. Leaves small, light green, flowers white, in large sprays. Pkt. 10c, oz. 25c, lb. \$2.50.

LIGUSTRUM JAPONICUM. "Japanese Privet." 20 feet. A large shrub or small tree, with glossy, dark green, leathery leaves; often used for hedges and stands trimming well. Pkt. 10c, oz. 25c, lb. \$2.50.

MAGNOLIA GRANDIFLORA. 80 feet. One of the finest of American evergreen trees; the leaves are thick, bright green and rusty on the under side; flowers large, waxy-white and fragrant. Fresh seed from November to January. Pkt. 10c, oz. 30c, lb. \$3.00.

MELALEUCA ERICIFOLIA. "Bottle Brush." A large shrub with small, narrow leaves and spikes of yellowish-white, brush-like flowers. Pkt. 15c.

M. ARMILLARIS. "Bottle Brush." 15 feet. Of spreading growth with slender drooping branches covered with small soft green leaves. Flowers creamy white. Pkt. 15c.

M. DECUSSATA. "Bottle Brush." 15 feet. Large shrub with arching branches; leaves, small, opposite, gray green. Short spikes of lilac flowers. Pkt. 15c.

M. NESOPHILA. "Bottle Brush." A handsome shrub of spreading habit with gray green foliage and rosy lilac blossoms. Pkt. 15c.

M. HYPERICIFOLIA. "Bottle Brush." A tall shrub with pretty, bright green, opposite leaves, and producing large spikes of rich red flowers. Pkt. 15c.

MELIA AZEDARACH UMBRACULIFORMIS. "Texas Umbrella Tree." A well known deciduous tree. The branches are erect and in a manner radiating from the trunk and with drooping foliage, give it the appearance of a gigantic umbrella. It is a handsome shade tree and will stand a great amount of heat. Pkt. 10c, oz. 20c, lb. \$2.00.

METROSIDEROS TOMENTOSA. A beautiful shrub from New Zealand. Leaves thick and leathery, green on the upper side but whitish beneath. The flowers appear in rounded terminal clusters, and are rendered particularly showy by their profusion of long crimson stamens. It forms a particularly handsome shrub at any time, but when in flower will attract attention from quite a distance. Pkt. 25c.

PARKINSONIA ACULEATA. Shrub or small tree. 15 to 25 feet. It has thorny, drooping branches, with long, feathery foliage, and showy yellow flowers. Pkt. 15c, oz. 50c.

PEPPER TREE. See Schinus.

PICEA EXCELSA. "Norway Spruce." 150 feet. A magnificent tree; the branches assume a very graceful drooping habit when the tree is 20 feet high. Pkt. 15c, oz. 50c, lb. \$5.00.

PINUS AUSTRIACA. "Austrian or Black Pine." 100 feet. A spreading tree; leaves in pairs about 4 inches long, rigid, very dark green. Pkt. 15c, oz. 50c, lb. \$5.00.

P. CANARIENSIS. "Blue Pine." 80 feet. A beautiful tree with long pendant needles of a glaucous blue color. It is of rapid growth, stands drought well and is one of the best pines for Southern California. It has the peculiarity of sprouting from the stump when cut down or even burnt off, which is a valuable feature in the reforesting of our mountains. Pkt. 15c, oz. 50c, lb. \$5.00.

P. COULTERI. "Big Cone Pine." 80 feet. A native species from the San Bernardino and San Jacinto Mountains at an elevation of 4500 to 7000 feet, but, unlike most of our native pines from high altitudes, it succeeds well under cultivation in the valley. It has rough bark, the needles are in clusters of three, stiff and erect and of a dark blue green color. Pkt. 15c, oz. 50c, lb. \$5.00.

P. HALEPENSIS. "Aleppo Pine." Western Asia. 60 feet. A tree of rapid growth and spreading habit, with light yellowish-green foliage. It thrives well in California, and is a valuable ornamental tree. Pkt. 15c, oz. 50, lb. \$5.00.

P. INSGNIS. (*P. radiata*.) "Monterey Pine." 100 feet. A well known native species of rapid growth, succeeding best near the coast. Pkt. 10c, oz. 40c, lb. \$4.00.

P. MARITIMA. (*P. pinaster*.) "Seaside Pine." Southern Europe. 60 feet. A beautiful tree with deep furrowed bark, needles a bright glossy green, 6 to 9 inches in length; valuable for planting along the coast. Pkt. 10c, oz. 30c, lb. \$3.00.

P. MURICATA. "Bishop Pine." A native California species, found growing on swampy flats and low hills from San Luis Obispo northward, always near the coast. It forms a tree 40 to 80 feet high, with roundish or flat top, and is valuable for wind breaks or for ornamental purposes. The seed cones are produced in circles around the main trunk from near the ground to its summit, and also on the main branches. These cones are persistent for an indefinite time, often 15 to 25 years, and give the tree a most unique appearance. Pkt. 15c, oz. 60c, lb. \$6.00.

P. PARRYANA. (*P. quadrifolia*.) "Parry's Nut Pine." A small tree from 15 to 30 feet high, with rounded top and short needles from 1 to 1½ inches long of a glaucous color. Found in the dry mountains of Lower California, and extending northward over the border into San Diego County. Pkt. 10c, oz. 40c, lb. \$4.00.

P. PINEA. "Italian Stone Pine." 60 feet. A very picturesque tree; branches spreading and usually confined to the top of the tree. Pkt. 10c, oz. 30c, lb. \$3.00.

P. SABINIANA. "Sabin's Nut Pine." A native tree found in Antelope Valley and from there northward; needles light green or glaucous, three in a cluster and drooping. It succeeds well under cultivation and forms a handsome tree. Pkt. 10c, oz. 30c, lb. \$3.00.

Pinus insignis

P. TORREYANA. "Torrey Pine." A native pine found on the bluffs at Del Mar, in San Diego County; a rather small tree of spreading habit, needles long and five in a cluster; succeeds well under cultivation. Pkt. 10c, oz. 40c, lb. \$4.00.

P. TUBERCULATA. (*P. attenuata*.) "Knob Cone Pine." A native species especially valuable for dry hillsides. Handsome light green foliage. Pkt. 15c, oz. 60c, lb. \$6.00.

PITTIOSPORUM EUGENIODES. 20 feet. A handsome shrub of upright growth, with light green leaves and dark stems. Very pretty for hedges and also as single specimen plants. Pkt. 15c, oz. 75c.

P. PHILLYRAEODES. A rare and graceful tree attaining a height of 20 to 25 feet. In habit and general appearance it resembles the Weeping Willow, having drooping branches and narrow green leaves, but it has the advantage of being an evergreen tree. Pkt. 25c.

P. CRASSIFOLIUM. A tall growing shrub, with grey green, downy foliage and small deep red flowers. Thrives especially well near the coast. Pkt. 15c, oz. 50c.

P. NIGRICANS. Shrub of upright growth; small shiny green leaves and dark, almost black stems. Pkt. 15c, oz. 75c.

P. TOBIRA. A handsome shrub, with dark green, shiny leaves and numerous white, fragrant flowers. Pkt. 15c, oz. 50c.

P. RHOMBIFOLIUM. A beautiful tree and highly recommended for street planting. It is of compact growth and the foliage is of a bright, rich green. It bears large umbels of white, fragrant flowers, followed by orange-colored berries in the fall of the year. Pkt. 25c.

P. UNDULATUM. A shrub or small tree, with large lance-shaped, deep green, glossy leaves and white fragrant flowers. It makes a splendid hedge and is very handsome as single specimen plants; also suitable for street trees. Pkt. 15c, oz. 50c.

PRIVET. See *Ligustrum*.

PRUNUS CAROLINIANA. "Carolina Cherry." A large shrub or small tree of pyramidal growth; pretty, glossy green leaves and white flowers. Makes a splendid street tree. Fresh seeds from January to April. Pkt. 10c, oz. 15c, lb. \$1.50.

P. ILICIFOLIA. "California Cherry." A beautiful native shrub found in most of our foothills. It has pretty, holly-like foliage and small white flowers; very fine for single specimens and also makes a splendid hedge. Fresh seed from November to April. Oz. 15c, lb. \$1.50.

P. INTEGRIFOLIA. "Catalina Cherry." From Catalina Island. A tree of great beauty, leaves large, oval, rich, glossy green; very pretty as single specimens or as a street tree. Fresh seed from November to April. Pkt. 10c, oz. 15c, lb. \$1.50.

PSIDIUM CATTLEYANUM. "Strawberry Guava." A small shrub grown for the fruit, which is round, deep claret color, of strawberry flavor. Much used for jellies and preserves, also for eating fresh. Pkt. 15c, oz. 60c, lb. \$6.00.

P. GUAJAVA. "Lemon Guava." Fruit yellow, pear-shaped; valuable for jellies and preserves. Pkt. 15c, oz. \$1.00.

RAPHIOLEPIS JAPONICA. (*R. ovata*.) Japan. 12 feet. A beautiful compact shrub of rather slow growth. The leaves are oval, thick and leathery, and of a dark, rich green. In spring the plants are covered with white, fragrant flowers. Pkt. 10c, oz. 30c, lb. \$3.00.

ROBINIA PSEUDACACIA. "Yellow or Black Locust." 60 feet. A deciduous tree of rapid growth, largely used for planting on timber claims. Handsome pinnate foliage; flowers pea-shaped, white, fragrant, in slender drooping racemes. Pkt. 10c, oz. 25c, lb. \$2.50.

RHUS LAURINA. "Sumach." A native shrub, of compact form with smooth green foliage and small white flowers. Pkt. 10c, oz. 40c.

R. OVATA. Has large, rich, bright green, leathery foliage and forms a compact growing shrub of great beauty. This and the preceding are particularly valuable for planting where there is a scarcity of water. Pkt. 10c, oz. 40c.

SCHINUS MOLLE. "Pepper Tree." Peru. 50 feet. The most graceful of all our cultivated trees; with its long branches of finely cut, delicate green leaves and coral red berries, it is the admiration of every tourist who visits our state. Oz. 10c, lb. \$1.00.

S. TEREBINTHIFOLIUS. "Brazilian Pepper." 40 feet. Of upright spreading growth, leaflets larger than in the preceding. Large, erect clusters of coral red berries appearing in winter. Pkt. 10c, oz. 35c.

SCIADOPYTIS VERTICILLATA. "Umbrella Pine." Japan. 100 feet. A remarkably handsome tree of slow growth, doing well in California near the coast; well suited for planting on lawns. Branches in regular whorls, covered with deep green, narrow leaves 3 to 5 inches long. Pkt. 15c, oz. 75c, lb. \$7.50.

SEQUOIA GIGANTEA. "California Big Tree." 300 feet. A magnificent tree of perfect pyramidal form. Foliage bluish green. Pkt. 15c, oz. 90c, lb. \$9.00.

S. SEMPERVIRENS. "California Redwood." 300 feet. Of rapid growth; a splendid ornamental tree, succeeding well in all parts of the state. Leaves dark green, paler underneath. Pkt. 15c, oz. 50c, lb. \$5.00.

SPARTIUM JUNCEUM. "Spanish Broom." 10 feet. A quick growing shrub of upright habit. Large, yellow, pea-shaped flowers in great profusion on round leafless branches. Pkt. 10c, oz. 40c.

S. MULTIFLORUM ALBUM. "White Portugal Broom." 8 feet. A pretty shrub with large, white, pea-shaped flowers. Pkt. 15c, oz. 60c.

S. SCOPARIUM. "Scotch Broom." 6 feet. A rather thick growing shrub; bright green stems and yellow pea-shaped flowers. Pkt. 10c, oz. 30c.

STERCULIA ACERIFOLIA. (*Brachychiton acerifolium*.) "Flame Tree." 50 feet. A tree of rather sturdy habit, with deeply-lobed, maple-like leaves; produces scarlet flowers in clusters which stand well up above the foliage. Pkt. 15c, oz. 60c, lb. \$6.00.

S. DIVERSIFOLIA. "Victorian Bottle Tree." 60 feet. Of compact pyramidal growth; leaves bright, glossy green and of many different shapes. Thrives with a small amount of water and has been largely planted as a street tree. Pkt. 10c, oz. 50c, lb. \$5.00.

THUJA OCCIDENTALIS. "American Arborvitae." "White Cedar." 60 feet. A handsome tree for single specimens and also for high hedges or screens. The foliage is bright green, lighter underneath and assumes brown or bronze tones in the winter. Pkt. 15c, oz. 50c, lb. \$5.00.

T. ORIENTALIS. (*Biota orientalis*.) "Chinese Arborvitae." 25 feet. A small thick growing pyramidal tree. Bright green foliage turning bronze or brown in the winter. Desirable as single specimen trees or for hedges. Pkt. 10c, oz. 30c, lb. \$3.00.

T. ORIENTALIS AUREA. "Golden Arborvitae." 10 feet. A form of the preceding; the foliage assumes a golden tint in spring; very regular and compact in growth. Pkt. 10c, oz. 40c, lb. \$4.00.

T. ORIENTALIS COMPACTA. 8 feet. A dwarf, very compact form of the Chinese Arborvitae. Pkt. 10c, oz. 35c, lb. \$3.50.

TORREYA CALIFORNICA. "California Nutmeg." 75 feet. A beautiful native tree, somewhat resembling the English Yew in appearance. Forms large, compact head; leaves 1 to 3 inches long, dark, shining green. Pkt. 10c, oz. 20c, lb. \$2.00.

TRISTANIA CONFERTA. "Brisbane Box." A particularly beautiful tree, with large, handsome foliage and white flowers. It forms a dense compact head and is very ornamental for single specimen trees, and also for street planting. Pkt. 25c.

ULEX EUROPAEUS. "Gorse" or "Furze." 4 feet. A low growing, prickly shrub, with yellow, pea-shaped flowers. Pretty for grouping; also makes a good hedge. Pkt. 10c, oz. 40c.

UMBELLULARIA CALIFORNICA. (*Oreodaphne californica*.) "California Laurel" or "Bay." 80 feet. Found growing near streams in many of our canyons, where it forms a large shrub or small tree. Farther north, however, it reaches a height of 80 feet or more. Under cultivation it grows rapidly and forms a well shaped, compact tree suitable for lawns or for avenues. Handsome, shining dark green foliage. Oz. 15c, lb. \$1.50.

UMBRELLA TREE. See *Melia*.

Umbrella Tree

VIBURNUM TINUS. "Laurestinus." 12 feet. A well known shrub with showy umbels of white flowers, blooming profusely in the winter. Makes a splendid hedge. Pkt. 10c, oz. 20c, lb. \$2.00.

WIGANDIA MACROPHYLLA. (*W. caracasana*.) A shrub attaining a height of from 15 to 20 feet, remarkable for its leaves of immense size and large trusses of violet-blue flowers. Pkt. 15c.

WISTARIA CHINENSIS. "Chinese Wistaria." A splendid, rapid growing, deciduous climber, producing long pendulous clusters of pale blue, pea-shaped flowers. Pkt. 15c, oz. 50c.

Headquarters for EUCALYPTUS SEEDS

I am headquarters for eucalyptus seeds, having the most extensive trade in this line of any firm in the United States, and supplying the largest planters here as well as exporting to many foreign countries. To this department of my business I have devoted much study and personal attention. My seeds are carefully collected by my own men, under my personal supervision, from selected specimen trees, and are both true to name and of the very best stock obtainable. So extensive has become my trade in this line that a trifle under 1800 pounds was the total amount of seed thus collected in one season. For a few species of which the seed cannot yet be obtained in California I am in direct communication with the most reliable authorities in Australia who collect the seeds for me in their native habitats.

Theodore Payne and men gathering eucalyptus seeds

PHOTOGRAPH BY T. P. LUKENS

EUCALYPTUS TIMBER CULTURE

REQUIREMENTS. The requirements for propagating the seedlings are:

A lath house or lath or cloth covered frames to shade the seed beds during the day. When growing on a large scale it will pay in every case to build a lath house. Shallow boxes or flats; a good light soil and water convenient for sprinkling.

FLATS OR BOXES. These should be 3 inches deep and any size desired, though the size most convenient and generally used is about 20 inches square and will hold 100 plants. Some are using 18 inches square, the latter being mostly made of shakes sawed in half, using inch pieces for ends and split shakes for the sides. This makes a box 16x18x3 inches inside measurement and does very well.

SOIL. This should be a good light, sandy loam passed through a screen so as to take out any lumps or stones. If good leaf mould is procurable a small quantity of this may be mixed with the soil, as it helps to retain the moisture.

SEED. Procure the best seed possible from the most reliable source; it does not pay to use cheap seed, for by getting seed not true to name the loss cannot be calculated.

QUANTITY OF SEED. The quantity of seed to produce a given number of trees varies according to the species; as a fair average, however, 1 lb. should produce 20,000 seedlings, though as high as 30,000 has been known.

TIME OF SOWING. This varies somewhat according to the locality and the species to be sown. The usual time, however, is in June, or early July, and seedlings from these sowings will be ready to set out in the field by the following February; later sowings are also made in August and early part of September, and these seedlings will be ready to plant out in April.

SOWING THE SEED. There are two methods of sowing the seed, viz.: In seed beds and seed boxes. For raising limited quantities the latter method is preferable. Fill the boxes carefully with the prepared soil, smooth off the surface and press down lightly with a board, tamping it slightly in the corners. On this smooth surface, sow the seed broadcast, using about $\frac{1}{4}$ oz. of seed to a box, then cover the seed with the same kind of soil. This should be sifted over the surface through a fine-meshed sieve and not be more than $\frac{1}{4}$ of an inch deep. The boxes should then be placed in the lath house or in some place where they can be covered with lath or cloth covered frames. The soil must be kept moist at all times, the watering should be done with a pot or a loose hose-nozzle so fine as to produce nothing but a spray.

As soon as the young seedlings show through the surface great care must be exercised in watering or the seedlings will "damp off." Always water in the morning and never at night. When raising the seedlings in commercial quantities, sowing in beds is often practiced. The soil for these should be prepared in the same way as already mentioned, the surface smoothed out evenly and the seed sown and covered as already mentioned. After this cover the beds with burlap stretched over a wooden frame work. This may be laid right on the ground and kept moist. As soon as the seedlings break through the crust of the ground this should be raised a little at first and gradually up until it is a foot above the ground. As the seedlings grow and get stronger this covering may be gradually removed so that they will harden to the full sun.

TRANSPLANTING. When the seedlings are 2 to 3 inches high they are ready for transplanting, but they must first be hardened off by exposing them to the sun; transplant to the same kind of boxes as already mentioned, 100 to a box, in perfect rows or checks, using the same kind of soil as that in which the seed was sown though a trifle heavier or less sandy. Fill the boxes, press down the soil and smooth off the surface then mark the soil off by lines into ten divisions each way and plant where lines cross, 100 to a box. This may be done by marking the edges of sides of box and using a small straight edge that will drop inside of box or any other contrivance that will check off the soil in centers of 100 to each box. A method often used by commercial growers is to have a board just the size of the inside of the box; in this are placed 100 screws, set at the right distance apart for the trees; the heads of the screws are left protruding about $\frac{3}{4}$ of an inch from the board. This board is laid on the smooth surface of the soil and hammered slightly with a wooden mallet, thus making 100 impressions at the exact places for the plants. In planting, make a hole for each seedling with a sharpened stick about the size of a lead pencil, firming the soil after putting in the plant. Sprinkle a thin layer of sand over the surface of the soil; this helps to hold the moisture and will keep the surface from baking. Before the young seedlings are taken from the seed box or bed they should have a thorough watering so that they will come out of the soil easily without breaking the roots, which must not be allowed to dry on any account during the process of transplanting. When growing the plants for sale it is advisable to grade seedlings into sizes at the time of transplanting, so that when the plants are ready for sale they will be of an even size in one box and the boxes containing the larger size plants can be sold first and the smaller ones later in the season. As soon as the seedlings are transplanted they must be watered thoroughly and set in complete shade for a few days until they thoroughly recuperate; after that they should be gradually hardened to the sun and cared for until they are ready to set out in the field.

PLANTING OUT IN THE FIELD. The land should be plowed as deeply as possible and well harrowed. The time to plant varies according to the climatic conditions. In localities where there is little or no frost, planting may be done in the winter time, thus getting the benefit of the rains, but in sections where frost prevails, it should be deferred until spring. The size at which the plants are best to set out is from 6 to 10 inches. The boxes may be taken to the field and left at convenient points. One side of the box should be taken off and each plant cut out with a square of earth and then planted with a trowel, taking care not to break this ball of earth, and the plants should be set about one inch deeper than they were in the box. A quart or so of water should be given to each tree as soon as it is set and afterwards hoe a little dry soil up around each plant. The distance at which to set the young trees varies according to the species, the soil and the purpose for which they are grown. On heavy soils where irrigation is not practiced, they may be planted 6x6 feet apart, where irrigating and cultivating is practiced 4x8 feet is a suitable distance and leaves an 8-foot space for plowing and irrigating. On lighter soils 8x8 feet is a good distance. Some are planting 7x8 feet on the alternate or triangle system, placing the trees 8 feet apart in the rows and 7 feet between the rows, which makes the trees 8 feet apart every way. It is claimed for this system that they do not throw so much shadow and get a more even amount of sunlight, causing the trees to make a straighter and more even growth when young.

CARE OF THE YOUNG TREES. As the value of the grove depends largely upon the trees making a good start, it will pay wherever practical to irrigate and cultivate the trees for at least the first two seasons.

THINNING THE TREES. To produce good lumber it is necessary that the trees grow straight. Close planting induces a straight growth. It is therefore better to plant closely and at the end of the first season grub out all weak and inferior trees.

SPECIES TO PLANT FOR PROFIT. Eucalyptus trees are gross feeders and to be grown profitably require a deep, rich soil with a fair amount of moisture, and only under these conditions will they make good, straight timber trees. When planted on poor or impoverished soil they make stunted, crooked trees, which are worthless for timber purposes. The best species to plant for profit depends largely upon the locality where the trees are to be grown. For general timber purposes, taking all conditions and uses into consideration, *E. tereticornis* is considered the most profitable tree to plant. But in sections

where *E. globulus*, "Blue Gum," thrives there will be quicker returns by planting this species than any other. For the hot interior sections *E. tereticornis* and *E. rostrata* are recognized as the leading commercial kinds, while *E. viminalis* might be grown very profitably under the same conditions. In localities not subject to frost *E. corynocalyx* may be planted. For those who have the right conditions and can afford to wait longer for returns *E. resinifera* will probably prove one of the most profitable on account of its very valuable wood, which is used for furniture and interior finishing and is imported very largely by railway companies for the inside of cars under the trade name of Australian Mahogany.

SPECIES FOR FENCE POSTS. This is an important item on large ranches. By setting aside a small portion of land a great quantity of fence posts could be produced in a few years. The best species for this purpose are *E. tereticornis*, *E. robusta*, *E. rostrata* and *E. corynocalyx*.

SPECIES FOR WIND-BREAKS. This is also of great importance in many parts of the country where heavy winds prevail. Probably the best species for this purpose are *E. globulus*, *E. botryoides*, *E. robusta*, *E. cornuta*, *E. diversicolor* and *E. polyanthema*, and for irrigated sections on the desert, *E. rudis*.

Eucalyptus seed vessels, spread out on canvas to dry

PHOTOGRAPH BY T. P. LUKENS

EUCALYPTUS AMYGDALINA. "Peppermint Gum," An exceedingly tall growing tree; in fact, to this species belong probably the tallest trees in the world. Baron Von Mueller having recorded trees over 400 feet high and with diameters of 18 to 35 feet. The tree is very variable in growth, however, the great heights mentioned being attained in moist ravines; under less favorable conditions it forms a much smaller tree, and in some cases is comparatively dwarf. The timber is useful for shingles, flooring, etc., but does not usually last well under ground. One of the most valuable for oil, producing more volatile oil than any other species yet tested. Recommended for planting in swampy places as a preventative for yellow fever, etc. Pkt. 15c, oz. 75c, lb. \$7.50.

E. AMYGDALINA, VAR. ANGUSTIFOLIA. See *E. linearis*.

E. AMPLIFOLIA. Much resembling *E. tereticornis*, but having large, almost round leaves when in the young state; generally known in California as the "Cooper" or "Round-leaf tereticornis." In correspondence I received from Professor J. H. Maiden in regard to this tree he states that it is known botanically under the above name, under which it was described by Naudin. Professor Maiden states, however, that it is possible that this tree should, properly speaking, be treated as a variety of *E. tereticornis*, but he is not prepared to say further until he deals with *E. tereticornis* and its varieties in his "Critical Revision of the Genus Eucalyptus and Forest Flora of New South Wales." The wood is similar to that of *E. tereticornis*, and this tree has been planted quite extensively in California for commercial purposes. It forms a handsome tree, and is valuable for ornamental purposes. Pkt. 15c, oz. \$1.00, lb. \$10.00.

E. BOSISTOANA. "Bairnsdale Grey Box." A tree of medium size, most suited to the coast sections, but has not yet been thoroughly tested in California. Mr. J. Blackburne, Forest Inspector of Maryborough, Victoria, Australia, speaks of this tree as follows: "It produces a clean, sound wood, much esteemed for the construction of wharves, jetties and bridges. It grows to large dimensions. Trees are to be found in South Victoria containing 20,000 feet super of timber. It furnishes also good railway sleepers and street paving blocks. This Eucalyptus grows naturally near the coast and is never found far inland." Pkt. 15c, oz. \$1.50.

E. BOTRYOIDES. "Bastard Mahogany, or Bangalay." Grows to a fairly large size, reaching 75 to 150 feet, when fully grown. Of stately appearance with large, leathery green foliage; succeeds well near the coast and is of very rapid growth; one of the best for shade purposes and wind-breaks. The wood is very durable, adapted for wagon building, knees of boats, etc. Pkt. 15c, oz. 75c, lb. \$7.50.

E. CALOPHYLLA. A moderate sized tree, thriving in warm, moist situations near the coast, but not enduring much cold. It is one of the most ornamental of the genus, has very large, glossy leaves and large clusters of white flowers which are valuable for bees. The wood is useful for rafters, spokes, fence rails, handles of agricultural implements, etc.; one of the very best for planting as a street tree. Pkt. 15c, oz. \$1.00.

E. CAPITELLATA. "Mountain Stringy-bark." A large tree with rough, stringy bark, and thick, leathery leaves. It is best adapted to cool, moist land near the coast. It is said to furnish a valuable lumber, but in California it has only been grown as an ornamental species. Pkt. 15c, oz. \$1.00.

Eucalyptus sideroxylon var. *rosea*

E. CITRIODORA. "Lemon-scented Gum." A fast-growing species soon becoming tall and slender. In favorable situations it has attained a height of 60 to 100 feet in 10 or 15 years. It thrives best near the coast, but will not endure much frost and is not adapted to the warm, interior valleys. The wood is strong and durable, useful for fencing, implement handles, shipbuilding, paving, railway ties, bridge building, telegraph poles, also for inside work of houses, carriage buildings and railway cars. Pkt. 15c, oz. \$1.50.

E. CORNUTA. "Yate Tree." A medium size tree of fairly rapid growth. It endures high temperatures, but not heavy frosts; thrives well near the coast and will endure the hot summers of the interior valleys. Grows remarkably well in alkali land. One of the best for shade trees. The wood is very hard and heavy and according to tests of the Australian Government is the strongest wood in the world. It is used for various artisans' work and is preferred for the strongest parts of carts, wagons and other work requiring hardness, toughness and elasticity. Pkt. 15c, oz. \$1.00.

E. CORNUTA, VAR. LEHMANNI. A rather small tree with thick spreading branches and of great value for ornamental purposes. Pkt. 15c, oz. \$1.00.

E. CORYNOCALYX. "Sugar Gum." 120 feet. This tree succeeds in a great variety of climates; thrives near the coast and does equally well in the interior

and in the hot valleys of Arizona, but will not stand much frost. It is considered the most drought-resisting of all and is one of the best for planting on dry hillsides. The wood is one of the strongest and is very durable, useful for railway ties and underground work. Pkt. 15c, oz. \$1.00, lb. \$9.00.

E. CREBRA. "Narrow-leaved Ironbark." 100 feet. It succeeds under a great variety of climatic conditions, withstanding great extremes of heat and cold. The wood is hard, elastic and of a reddish color; very durable under ground and used for railway ties, poles, piles, etc. Pkt. 15c, oz. \$1.00.

E. DIVERSICOLOR. "Karri Gum." One of the most magnificent of all trees, specimens having been recorded in Australia nearly 400 feet high. It grows quickly and forms a straight trunk. Succeeds best in fairly moist situations near the coast and will thrive on alkali land. It is also one of the most handsome for avenue planting. The wood is very strong and used for masts of ships, wagon building, etc. Pkt. 15c, oz. \$2.00.

E. FICIFOLIA. "Scarlet-flowering Gum." 30 feet. A very ornamental species with large, leathery leaves and immense clusters of large, bright crimson flowers. 25 seeds 25c, 100 seeds 85c.

E. GLOBULUS. "Blue Gum." The best known species and one of the most important of the genus, also the fastest growing of all. The usual height in Australia is 200 to 300 feet. In California trees 30 years old have attained the height of 150 feet and a diameter of 3 to 6 feet. It is usually of erect growth, succeeds best near the coast and on account of its rapid growth is probably the most profitable tree to plant. The wood is durable above ground; large quantities of it have been sawed at San Jose, Cal., for felloes, poles, reaches and singletrees of wagons, flooring, insular pins and anything requiring strength. It takes a fine polish and is valuable for furniture and interior finishing. Pkt. 15c, oz. 75c, lb. \$7.50.

E. GOMPHOCEPHALA. "Tooart." A medium sized tree attaining a height of 120 feet. It succeeds well in California, near the coast, but has not been thoroughly tested in the interior. The wood is one of the strongest in the world and is principally used for shipbuilding and bridges. Pkt. 15c, oz. \$1.00, lb. \$10.00.

E. GONIOCALYX. "New South Wales Blue Gum." A large tree, reaching a height in Australia in favored situations of 300 feet. It succeeds well in California in the coast regions. The timber is hard and tough, used for wheelwrights' work and shipbuilding. Pkt. 15c, oz. \$1.00.

E. GUNNI. "Tasmanian Cider Tree." This is one of the hardest of the genus. In its native habitats it grows in low lands where it forms a fair sized tree and sometimes reaches 150 feet or more. It also ascends the mountains to an elevation of 5000 feet, but here becomes a dwarf tree or mere shrub. It is extremely hardy, growing where there is snow for several months in the year. Should prove one of the best for planting in our mountains for forest cover. The wood is used for various artisans' work. Pkt. 15c, oz. \$1.00, lb. \$10.00.

E. HEMIPHLOIA. "Common Box." 100 to 150 feet. It thrives in California near the coast and also in the hot interior valleys, standing extremes of heat and cold. One of the best for shade purposes. The timber is strong, close grained and used for wheelwrights' work, piles, railway ties, posts, etc. Pkt. 15c, oz. 75c, lb. \$7.50.

E. LEUCOXYLON. "Victorian Ironbark." 100 feet. The trees are apt to grow crooked, but by giving them some attention when young they may be made to grow straight. This species will grow in a greater variety of climates than most eucalyptus, thriving near the coast or in the hot desert valleys of the interior and will endure minimum temperatures of 15 degrees to 20 degrees F. It is one of the best for forest cover. The wood is hard and durable, excelling hickory in strength; used for railway ties, mining purposes, wagon building, shipbuilding, etc. Pkt. 15c, oz. \$1.00, lb. \$10.00.

E. LEUCOXYLON, VAR. ROSEA. A variety of the preceding, having beautiful pink flowers, and of great value as an ornamental tree, and can be grown in localities where *E. ficifolia* will not thrive. Pkt. 15c, oz. \$1.50.

E. LINEARIS. An ornamental species of somewhat weeping habit, with small, very narrow leaves. It has been known in California, though wrongly, under the name of *E. amygdalina*, var. *angustifolia*. Pkt. 15c, oz. \$2.00.

E. LONGIFOLIA. "Woolly Butt." A moderate sized tree, but in Australia under favorable conditions has sometimes reached a height of 200 feet. In California it thrives best near the coast. The timber is useful for posts, ties, street paving, etc. Pkt. 15c, oz. 75c.

- E. MACULATA.** "Spotted Gum." Attains a height of 150 feet, growing remarkably straight. The wood is used for shipbuilding, wheelwrights' and coopers' work. It is closely allied to *E. citriodora* and succeeds under the same conditions. Pkt. 15c, oz. \$1.00.
- E. MELLIODORA.** "Yellow Box." A fair sized tree, reaching a height of 120 to 150 feet. In California it thrives near the coast, on the sides of low mountains and in warm, dry interior valleys. The wood is hard and durable, used for wheelwrights' work, shipbuilding and supplies one of the best fuels. The young trees have been used for telegraph poles. On account of its profuse fragrant blossoms it is one of the best as a source of honey for bees. Pkt. 15c, oz. \$1.25.
- E. MUELLERIANA.** "Yellow Stringy-bark." A tree of medium size, best suited to the coast region, but it has not been thoroughly tested in California. The wood is remarkably durable. Mr. J. Blackburne speaks of the timber of this tree as follows: "A fence erected of this timber at Greemount, near Yarram, in Gippsland, sixty years ago, is at the present time sound and in use. The posts of another one on the old Cascade run (Gippsland) are still in good order after being in the ground for seventy years." Pkt. 15c, oz. \$1.50.
- E. OBLIQUA.** "Stringy-bark." A tall, straight-growing tree, sometimes attaining a height of 300 feet in Australia. In California it grows fairly well near the coast, but does better some distance inland; will not succeed, however, in the hot, dry interior valleys. The timber is straight and easily split, used for rough building purposes, shingles, etc. Pkt. 15c, oz. 75c.
- E. PILULARIS.** "Black Butt." In Australia under favorable conditions it has attained a height of 300 feet, but the average height is 100 to 150 feet. In California it succeeds well near the coast, but will not thrive in the hot, interior valleys. The timber is strong and durable, useful for house building, shipbuilding, bridges, telegraph poles and railway ties. Pkt. 15c, oz. \$1.00, lb. \$10.00.
- E. PIPERITA.** "White Stringy-bark." A fair sized tree. It succeeds well near the coast and in cool, inland situations. The timber is easily split and used for fencing and general building purposes. Pkt. 15c, oz. \$1.00.
- E. POLYANTHENA.** "Red Box." In Australia this tree attains a height of 150 feet or more. In California it thrives under a great variety of climatic conditions. It grows near the coast, in the foothills and mountains and in the hot, dry valleys of the interior. It is one of the most ornamental species; the leaves are nearly round and with a silvery lustre; the flowers are small, white, in large clusters and are a great source of honey. The wood is extremely hard and lasting, used for railway ties, mining purposes and wheelwrights' work. It is of a light color and takes a good polish. Pkt. 15c, oz. 75c, lb. \$8.00.
- E. PUNCTATA.** "Leather-jacket." A medium sized tree attaining a height of 100 feet in Australia. In California it succeeds best near the coast, though some fine specimens are to be seen in Riverside. The young trees at the Forestry Station at Santa Monica have made a rapid growth and grown remarkably straight. The wood is one of the strongest, of a light brown color, very hard and durable, useful for railway ties, wagon work and other purposes. This species promises to be one of the best for planting commercially in situations near the coast. Pkt. 15c, oz. \$1.00, lb. \$10.00.
- E. RESINIFERA.** "Red Mahogany." 100 feet or more. This tree thrives in the coast regions and is suited to moist, semi-tropical climates, but will not thrive in the hot interior valleys and will not resist severe frost. The trees are of remarkably straight growth. It has been said that this tree is of slow growth, but trees on the dry mesa near Santa Monica have made a growth that compares favorably with many of the foremost species. The wood is of a rich, red color, resembling true Mahogany; it takes a fine polish and makes the most beautiful furniture. The timber is very strong, hard and durable and is used in Australia for piles, posts, paving and general building purposes. Pkt. 15c, oz. \$1.00, lb. \$10.00.
- E. ROBUSTA.** "Swamp Mahogany." 100 feet. This tree thrives best in low, moist land, but has been grown under many varying conditions. It is symmetrical in growth when young and has been largely planted as a street tree and for wind-breaks. It has large, glossy foliage and white flowers which are valuable for bees. The wood is brittle and not very valuable, but is durable under ground. Pkt. 15c, oz. 60c, lb. \$6.00.
- E. ROSTRATA.** "Red Gum." In Australia it is said to attain a height of 200 feet under favorable conditions. It succeeds under a greater variety of conditions and soils than probably any other species, growing well on moist land near the coast and in the hot interior valleys, standing extremes of heat and cold. It has done remarkably well at Imperial and all other irrigated sections on the desert. When grown near the coast it is not of rapid growth, but in the hot interior sections it grows quickly, making about the same growth as the "Blue Gum" will in the coast regions. This tree has been planted very extensively and is recognized as one of the best commercial species for the hot interior sections. The wood is strong and durable, useful for railway ties, piles, street paving, fence posts, etc. It takes a fine polish and is used for cabinet work. Pkt. 15c, oz. 50c, lb. \$5.00.
- E. RUDIS.** 75 to 100 feet. One of the best for street planting. It stands extremes of heat and cold; thrives near the coast and has grown so well in irrigated sections on the desert that it has been termed by some "The Desert Gum." Pkt. 15c, oz. \$1.00, lb. \$10.00.
- E. SIDEROPHLOIA.** "Broad-leaved Ironbark." 100 feet. This tree thrives in California, in the coast regions, but is not suited to the dry, hot interior valleys. The wood is very strong and durable, useful for wagon building, railway ties, etc. Pkt. 15c, oz. \$1.00.
- E. SIDEROXYLON.** "Red Ironbark." A medium sized tree. In California it succeeds on dry soils near the coast and on plains and hillsides farther inland and will endure minimum temperatures of 16 degrees to 20 degrees F. The wood is of a dark red color, hard and heavy, useful for railway ties, bridges, wagon work, etc. Pkt. 15c, oz. \$1.00.
- E. SIDEROXYLON, VAR. ROSEA.** A variety of the preceding, with deep pink flowers, which contrast well with the dense silvery gray foliage. By many this is considered the most ornamental of all the eucalyptus. Pkt. 15c, oz. \$1.50.
- E. STUARTIANA.** "Apple-scented Gum." A medium sized tree. It thrives near the coast and will endure minimum temperatures of 10 degrees to 18 degrees F., and can be planted at higher elevations than most species. The wood is mostly used for fence posts and for fuel; it is also useful for furniture manufacture, being of a dark color and taking a good polish. Pkt. 15c, oz. \$1.00.
- E. TERETICORNIS.** "Forest Red Gum." 150 feet. One of the very best for commercial use, closely allied to *E. rostrata*, but forming a straighter tree. For general timber purposes I believe this is the best of the whole genus, taking all conditions and uses into consideration. It stands considerable heat and cold, thrives in sections near the coast, further inland in the hot interior valleys and in irrigated sections of the desert. Under the latter conditions it makes a remarkably rapid growth. This tree has been planted on a very large scale in California and also in other countries. I have received very favorable reports of it from Arizona, Texas, Florida and also Brazil. The wood is of a pretty, reddish color, heavy, strong and durable, valuable for railway ties, telegraph poles and for furniture and interior finishing of houses. In 1910 I cut a number of trees of this species and had these cut up into lumber. The wood has a fine grain and is really the most beautiful eucalyptus wood I have ever seen. A table I have made from this wood has been greatly admired by everyone who has seen it, and many think it superior to mahogany. The seed I am offering is extra selected stock, from the very best specimen trees. Pkt. 15c, oz. 75c, lb. \$7.50.
- E. TERETICORNIS.** "Cooper or Round-leaf." See *E. amplifolia*.
- E. VIMINALIS.** "Manna Gum." In Australia this tree has attained to a height of 300 feet with a diameter of 15 feet. It is an exceedingly handsome tree with long pendulous branches, and is one of the most picturesque for avenue planting. This tree will thrive under a great variety of conditions, growing near the coast, also in irrigated sections on the deserts of California and Arizona. It stands considerable heat and cold and will thrive at a higher altitude than most of the other species. In the coastal regions it is of very rapid growth, being only rivaled in this respect by the "Blue Gum," while in the hot interior sections it is unsurpassed by any other species. The wood is not lasting under ground, and is not so hard and has not the strength of many of the other eucalyptus; for this reason it has been neglected by timber planters in California. The fact that the wood is softer than other kinds should really be regarded in its favor, as it is so much easier and less expensive to work than the "Blue Gum" and most of the other kinds. Still it is as hard as many of the so-called hardwoods that are now used. It takes a high polish, and its chief uses would be for furniture and all kinds of interior work. The fact that the tree will thrive over a wide range of country and also that it is of such rapid growth should make it one of the most valuable for timber plantations. Pkt. 15c, oz. 75c, lb. \$7.50.

PALM SEEDS

The seeds of all the species offered here, except the Cocos, can be germinated without artificial heat. Sow the seeds thickly in shallow boxes of light soil mixed with about the same quantity of leaf-mold. When a few inches high pot up into small pots. Some species are very slow to germinate, while others will come up in 5 or 6 weeks. *Washingtonia filifera* and *W. robusta*, *Phoenix canariensis* and *P. reclinata* can be sown out in the open ground in spring after the weather has become warm and will germinate quite easily.

CHAMAEROPS EXCELSA. (*Trachycarpus excelsus*.) "Wind-mill Palm." China, Japan and India. 30 feet. One of the hardiest palms known, standing heavy winds without injury to the leaves and also several degrees of frost. The leaves are fan-shaped, finely and deeply cut. One of the best palms for street planting. Oz. 15c, lb. \$1.50.

C. HUMILIS. The Mediterranean region. 20 feet. A dwarf growing hardy species, with fan-shaped leaves, especially desirable for lawns, also for growing in tubs for porch plants. Oz. 20c, lb. \$2.00.

C. HUMILIS ARGENTEA. Similar to the last, but with more silvery foliage. 10 seeds 15c, 100 seeds \$1.00.

Chamaerops excelsa

COCOS. A large genus of very beautiful pinnate-leaved palms from tropical and semi-tropical South America. Many of the species are quite hardy in California and are especially desirable for planting on lawns. The seeds may be sown in boxes or seed pans as mentioned for other palms, but require bottom heat to germinate the seed.

C. AUSTRALIS. "Pindo Palm." 15 feet. A rather slow growing but very ornamental palm with glaucous green recurved leaves. One of the hardiest of the genus and the one best known in California. 10 seeds 15c, 100 seeds \$1.00.

C. ALPHONSEI. Of stocky habit and rather quick growth for this group of palms. The leaves are blue-green, beautifully arched. The seeds are covered with edible pulp of rich apricot flavor. One of the hardiest of all palms, having stood in Northern Florida during the freeze of 1895 a temperature of 8 degrees Fahr., unharmed. 10 seeds 20c, 100 seeds \$1.50.

C. BONNETTI. A very graceful palm. Leaves gray-green in color when in full sunshine, but when grown in houses, of a darker green. One of the best for house culture and also quite hardy out of doors in California. 10 seeds 20c, 100 seeds \$1.50.

C. CAMPESTRIS. 10 to 15 feet. Leaves spreading and recurved, but slightly rigid. 10 seeds 20c, 100 seeds \$1.50.

C. ERIOSPATHA. 10 to 15 feet. Leaves blue-green in color. The seeds are covered with edible pulp of a rich flavor. One of the best of the hardy Cocos. 10 seeds 20c, 100 seeds \$1.50.

Cocos plumosa

C. ODORATA. Similar to *C. Australis*, but really more graceful. The fronds are more silvery in color and have broader segments. 10 seeds 20c, 100 seeds \$1.50.

C. SCHIZOPHYLLA. 8 to 10 feet. Dark green spreading leaves, gracefully arched. Petioles bordered with red, edges armed with stout red spines. 10 seeds 20c, 100 seeds \$1.50.

C. YATAI. 12 to 15 feet. Leaves recurved, spreading 6 to 9 feet long similar to *C. australis* in general appearance. 10 seeds 20c, 100 seeds \$1.50.

The following are all rare kinds, similar to *C. australis* in general appearance, but varying somewhat in color, size of leaf, etc.: *C. ARGENTEA*, *C. BRAZILIENSIS*, *C. COMOSA*, *C. GAERTNERI*, *C. HUMILE*, *C. LAPIDEA*, *C. MARITIMA*, *C. PETERIA*. Seeds of these can be furnished at the uniform price. 10 seeds 20c, 100 seeds \$1.50.

C. PLUMOSA. Brazil. 50 feet. One of the best for street planting and largely planted in Santa Barbara. It is a rapid growing palm with slender trunk, crowned with graceful pinnate leaves. 10 seeds 20c, 100 seeds \$1.50.

Erythea armata

ERYTHEA ARMATA. "Blue Palm." Lower California. 40 feet. A rather slow growing Fan Palm. Leaves of a fine glaucous blue. Very hardy and a pretty palm for lawns. 10 seeds 20c, 100 seeds \$1.50.

E. BRANDEGEI. Lower California. 125 feet. The most beautiful of fan palms. Leaves rich green above, glaucous beneath. 10 seeds 25c, 100 seeds \$2.00.

E. EDULIS. "Guadalupe Palm." Guadalupe Island. 30 feet. A rapid growing Fan Palm of great beauty. Leaves deep green and without any threads. 10 seeds 15c, 100 seeds \$1.00.

PHOENIX CANARIENSIS. "Canary Island Palm." Without doubt the most popular in California and one of the most graceful of our hardy palms. Leaves pinnate and of a deep dark green color. Very effective for lawns and large grounds. 10 seeds 10c, 100 seeds 50c.

P. DACTYLIFERA. "Fruiting Date Palm." Arabia and North Africa. 100 feet. Produces the dates of commerce. Of rather stiff growth when young and not very ornamental, but when fully developed it is hard to be surpassed for scenic effect. Oz. 20c, lb. \$2.00.

P. LEONENSIS. (*P. spinosa*.) Africa. 40 feet. A large palm of strong growth, attaining about the same proportions as *P. canariensis*. Fronds with a slightly glaucous tinge, armed at the base with formidable spines. 10 seeds 15c, 100 seeds \$1.00.

P. RECLINATA. South Africa. 12 to 20 feet. Of slender, graceful habit. Pinnate leaves beautifully arched, usually hanging edgewise. A fine palm for avenue planting or for single specimens on lawns. 10 seeds 15c, 100 seeds \$1.00.

Phoenix canariensis

P. ROEBELENI. Siam. A beautiful little species growing only a few feet high, with finely cut leaves, especially valuable for growing as a pot plant. 10 seeds 25c, 100 seeds \$2.00.

WASHINGTONIA FILIFERA. "California Fan Palm." 30 feet. The common Fan Palm of California. Trunk attains a diameter of 4 feet. Leaves fan-shaped with numerous divisions and whitish filaments. Oz. 15c, lb. \$1.50.

W. ROBUSTA. (*W. gracilis*.) 100 feet. Of more slender growth than the preceding and more graceful in general appearance. The leaves are brighter green and with less filaments. This is the palm now so largely used for street planting. Oz. 25c, lb. \$2.50.

W. SONORAE. Lower California. 25 feet. A beautiful palm resembling the well-known California Fan Palm, but more symmetrical in growth and more dwarf in habit. The leaves are of medium size with few or no filaments and retain their dark green color during the winter months. Leaf stem short and thorny, of upright growth with dark leaf-sheaths. Oz. 35c, lb. \$3.50.

DECORATIVE PLANT SEEDS

Sow the seed in pots or boxes of light, well-drained soil; when the plants are large enough to handle, pot up into small pots and afterwards transfer to larger pots or plant out in the open ground, as desired.

ASPARAGUS PLUMOSUS. "Asparagus Fern." A favorite climbing vine, suitable for shady locations. Also grown as a pot plant. Soak the seed in hot water 12 hours before sowing. Pkt. 10c, 100 seeds 50c.

A. SPRENGERI. A favorite plant for hanging baskets. Treat the seed the same as the preceding variety. Pkt. 10c, 100 seeds 30c.

DRACAENA AUSTRALIS. (*Cordylina australis*.) New Zealand. 20 feet. A popular plant for pot culture, also for lawns and street planting. Forms a stout branched stem with broad leaves 2 to 3 feet long. Pkt. 10c, oz. 50c.

D. DRACO. "Dragon Tree." Canary Islands. 50 feet. Forms a stout stem crowned with numerous sword-shaped leaves. 10 seeds 10c, 100 seeds 50c.

D. INDIVISA. (*Cordylina indivisa*.) New Zealand. 30 feet. Grows much more rapidly than either of the preceding, with long narrow leaves and slender stems. Pkt. 10c, oz. 35c, lb. \$3.50.

DORYANTHES PALMERI. A valuable decorative plant from Australia. The plants throw up numerous leaves 5 to 7 feet long, and flower stems 8 to 10 feet high, each bearing a large thyrus of deep scarlet flowers. It takes the plants several years to reach the blooming stage, but the young plants are very valuable for decorative pot plants. 25 seeds 15c, 100 seeds 50c.

MUSA ENSETE. "Abyssinian Banana." A splendid decorative species forming a single stout trunk and immense broad leaves 10 to 15 feet long. 10 seeds 25c, 100 seeds \$2.00.

PHORMIUM TENAX. "New Zealand Flax." 6 feet. A fine plant for sub-tropical beds. Large, erect-growing, dark green leaves. Pkt. 15c, oz. 75c.

STRELITZIA NICOLAI. South Africa. 15 to 20 feet. A rare species with large flowers of grotesque form, white and blue. Forms a heavy stem and large, broad leaves. Soak the seed in hot water for 24 hours before sowing. It is better to use bottom heat in germinating this seed, though it has been grown fairly well without. 10 seeds 25c, 100 seeds \$2.00.

YUCCA BACCATA. Arizona. Of low, compact growth, leaves rigid, with thick marginal threads. Flower spikes 5 to 6 feet long. Pkt. 10c, oz. \$1.00.

Y. RADIOSA. Arizona and Mexico. An exceedingly handsome species with many narrow, rather rigid, pale green leaves. Flowers white, bell-shaped, in large panicles on long stems. Pkt. 15c, oz. \$1.00.

Y. WHIPPLEI. "Spanish Bayonet." California. A magnificent plant with narrow glaucous green leaves. Flower stems 8 to 15 feet high with often two, three and even six thousand waxen, pendulous blossoms. Pkt. 10c, oz. 50c.

Nursery Department

OBSERVE WHEN ORDERING

SHIPPING.—All goods forwarded at purchasers' expense and risk. Please state the way you wish goods sent, whether by express, freight or mail. I advise the shipment of all plants by express, as it insures prompt delivery. In the case of heavy balled plants, as orange trees, etc., shipment can be made by freight, and by my careful system of packing they travel long distances in good condition. If to be sent by mail add postage at Parcel Post rates. No Plant orders shipped C. O. D.

PACKING.—On all plant orders packing is charged for at cost of labor and material; add 15 per cent for packing charges.

INSPECTION.—A Horticultural Inspector's Certificate goes with every shipment sent out, thus insuring stock free from insect pests and disease.

NON-WARRANTY.—While I exercise the greatest care to have all seeds pure and reliable, I do not give any warranty, expressed or implied, as to purity, description, quality, productiveness or any other matter of seeds, bulbs, plants or trees I send out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they must be returned at once.

Field Grown Roses

Strong Field Grown Roses in dormant state supplied from January to April 1st.

NEW AND RARE BUSH ROSES

BRITISH QUEEN. Hybrid Tea. One of the finest white roses. A free bloomer, producing flowers of perfect form; very fragrant. In the bud it shows a slight suspicion of pink opening to the purest white. Each, 75c.

CRIMSON QUEEN. Hybrid Tea. Bright, rich, velvety crimson. A strong, upright grower; flowers large and full, borne on long stiff stems. A constant bloomer. Each, 75c.

Juliet

EDWARD MAWLEY. Hybrid Tea. This wonderful rose named after the well-known English Rosarian, is a splendid addition to the family of roses. It is a rich velvety crimson color, a true hybrid tea. Its size, form, color, freedom of blooming and perfect habit of growth are all that could be desired. Each, 75c.

HADLEY. Hybrid Tea. Deep velvety crimson; flowers carried on long stiff stems. The best of the deep red hybrid tea roses. Each, 75c.

HOOSIER BEAUTY. Hybrid Tea. Glowing crimson scarlet with darker shadings, velvety texture and very fragrant; long pointed buds on stiff stems. Of robust growth and a continuous bloomer. Each, 75c.

HARRY KIRK. Deep sulphur-yellow with edges of petals lighter. Well formed, full, free and vigorous. Each, 75c.

JULIET. Hybrid Tea. A remarkably beautiful rose, inside of petals rich red, outside old gold. Extremely fragrant and a free and constant bloomer. Each, 75c.

Harry Kirk

LOS ANGELES. Hybrid Tea. A glorious rose of Southern California origin. In color it is distinct from any other rose grown, being a rich flame pink shaded with golden yellow. It produces perfect buds and is a strong, vigorous grower. Each, \$1.00.

MADAME EDOUARD HERRIOTT. Coral red shaded with yellow at the base, passing to shrimp red. One of the greatest rose novelties ever introduced. Winner of the Gold Cup offered by the Daily Mail and the Gold Medal of the National Rose Society of England. Each, \$1.00.

MADAME LEON PAIN. Hybrid Tea. Silvery pink shaded with salmon. Of robust growth with dark glossy green foliage. A free bloomer continuing in flower throughout the entire season. Each, 75c.

SUNBURST. Hybrid Tea. A grand new rose, very large and perfectly formed flowers and long, pointed buds, yellow shaded with orange, the outer petals of a lighter shade. Of strong, vigorous growth, sending up stout stems heavily clothed with handsome foliage. One of the very best roses of late introduction. Each, \$1.00.

BUSH ROSES

GENERAL COLLECTION

AMERICAN BEAUTY. Hybrid Perpetual. Rosy crimson, shaded carmine, very sweet and a favorite forcing variety. Each 60c.

DEAN HOLE. Tea. Silvery carmine with salmon shadings. Flower large and of great substance and perfect form both in bud and full flower. Each, 60c.

FRAU KARL DRUSCHKI. Hybrid Perpetual. Pure snow white, large perfect flowers on long stems; free flowering; rich, handsome foliage. Each, 60c.

GEORGE DICKSON. Color velvety, dark crimson; of splendid shape and good substance. Each, 60c.

GENERAL McARTHUR. Hybrid Tea. Dazzling crimson scarlet. Buds are of good shape and produced on long stems; foliage is a clear glossy green. A free bloomer and one of the best for cutting. Each 60c.

Frau Karl Druschki.

GLOIRE DES ROSEMANES. (Ragged Robin.) Bengal. One of the most popular roses grown, largely used for hedges and for planting along driveways or roadsides. Large semi-double flowers, growing in clusters. Color, brilliant crimson. Very free-flowing. Each, 50c.

GRUSS AN TEPLITZ. Hybrid Tea. Rich fiery scarlet shading to velvety crimson; blooms freely and succeeds well in a hot climate. Each, 60c.

IRISH ELEGANCE. Hybrid Tea. A beautiful single rose; apricot shading to bronze at base. Each 75c.

KAISERIN AUGUSTA VICTORIA. Hybrid Tea. Pure white, large, of good form and a continuous bloomer. Each, 60c.

KILLARNEY. Hybrid Tea. The "Irish Rose." Bright carmine pink, marbled in creamy white. Extremely long buds on long, stiff stems; fine foliage; one of the very best varieties for cutting. Each, 60c.

LA DETROIT. Hybrid Tea. Large cup-shaped flowers, pale pink, shading to soft rose. Handsome glossy green foliage. Each, 60c.

LA FRANCE. Hybrid Tea. Soft rose with silvery luster. An old favorite. Each 60c.

LADY HILLINGDON. Tea. A splendid rose of recent introduction. Long, pointed buds. Color, clear, deep apricot yellow without any shading. It is of vigorous growth, with handsome, deep green foliage and blooms continuously throughout a long season. By many this is considered the best yellow rose yet introduced. Each, 75c.

MADAME CAROLINE TESTOUT. Hybrid Tea. Clear pink, large full flowers, very sweet, a strong grower and good bloomer. Each, 60c.

MADAME CECIL BRUNNER. Polyantha. "The Baby Rose." Color salmon-rose; the finest of the miniature roses. Each, 60c.

MAMAN COCHET. Tea. Deep rose pink, inner petals silvery rose, shaded and touched with yellow; fine buds; keeps well when cut; great favorite with florists. Each, 60c.

MRS. AARON WARD. Hybrid Tea. Deep orange yellow shading to creamy yellow at the ends of the petals. The buds are cupped and very deep, showing the glowing heart to the best advantage. Each, 75c.

OPHELIA. Salmon flesh shaded with rose and chamois at center; long pointed buds, free bloomer. Each, 75c.

PAUL NEYRON. Hybrid Perpetual. Deep rose; the largest of all roses, strong, erect grower, large, handsome foliage. Each, 60c.

RADIANCE. Hybrid Tea. A lovely rose pink with opal shadings. Very sweet scented; a strong grower and free bloomer. Each, 60c.

ULRICH BRUNNER. Hybrid Perpetual. Brilliant cherry red, flowers large and produced on long stems. Each, 60c.

WHITE MAMAN COCHET. Tea. White, sometimes tinged with blush, long stems; fine for cutting. Each 60c.

CLIMBING ROSES

CHEROKEE. Single. Pure white, large yellow stamens, a lovely contrast against rich, glossy foliage, a rapid grower; valuable covering for fences, etc. Blooms in spring. Each, 60c.

CLIMBING BELLE SIEBRECHT. Tea. One of the best climbing roses. Flowers large, full and double, long pointed buds. Color rich pink. Each, 60c.

CLIMBING CAROLINE TESTOUT. Hybrid Tea. Clear bright pink; large, well-formed flowers. Each, 60c.

CLIMBING KAISERIN. Hybrid Tea. Considered the best pure white climbing rose, continuous bloomer. Each 60c.

CLIMBING LIBERTY. Hybrid Tea. Brilliant, velvety crimson; large and of beautiful form. A free bloomer, lasting well when cut. Each, 75c.

CLIMBING MADAME CECIL BRUNNER. Polyantha. Rosy pink, salmon center, very free bloomer. Each 60c.

CLIMBING SUNBURST. Hybrid Tea. The climbing form of this beautiful yellow rose. Each \$1.00.

CLIMBING WHITE COCHET. Tea. Identical with the well known White Maman Cochet bush rose, except that it is of climbing habit. Each, 75c.

CLIMBING WOOTON. Tea. Velvety crimson, vigorous grower, fine foliage and profuse bloomer. Each 60c.

GOLD OF OPHIR OR BEAUTY OF GLAZENWOOD. Noisette. Apricot-yellow, suffused with coppery-red, rapid grower, free from disease, blooming abundantly in spring. Each, 60c.

MARECHAL NIEL. Noisette. Pure sulphur yellow, perfectly formed buds and large globular flowers, deliciously fragrant. Each \$1.00.

PINK CHEROKEE. A climbing rose of rare beauty and without doubt one of the finest varieties ever introduced. The beautiful single flowers are produced in great profusion, in color a most charming shade of light pink and deliciously fragrant. The plants are of rampant growth with bright, shining green foliage, and present a magnificent sight when in full bloom. Each, 60c.

REVE D'OR. Tea. Apricot-yellow with orange and fawn tints, free bloomer, hardy and rapid grower. Each, 60c.

CANNAS

FIREBIRD. Flowers of immense size, often 8 inches across; intense deep scarlet. Each, 35c; doz., \$3.50.

HUNGARIA. Delicate rose pink, one of the very best. Each, 25c; doz., \$2.50.

KING HUMBERT. One of the most magnificent varieties ever introduced. The color is an intense reddish scarlet. Foliage of enormous size, of a very deep purplish bronze shade. Each, 25c; doz., \$2.50.

MADAME CROZY. Petals red, edged with gold. Each, 20c, doz., \$2.00.

MRS. A. F. CONRAD. Clear salmon pink, fine foliage. Each, 25c; doz., \$2.50.

OLYMPÉ. Beautiful carmine rose, with lighter shade towards the center. Each, 25c; doz., \$2.50.

WYOMING. Scarlet and orange. Each, 25c; doz., \$2.50.

DAHLIAS

CACTUS DAHLIAS

COUNTESS OF LONSDALE. Salmon red and rose. Each 35c.

EDITH CARTER. Yellow tipped, bright red. Each 50c.

GOLDEN WEST. Chrysanthemum-flowered type, buff orange shaded sunset. For cutting purposes this is the best dahlia ever grown. Each 50c.

HELEN DURNBAUCH. Delicate blush deepening toward the center to a soft tint. Each, 75c.

Cactus Dahlia

PIERROT. Deep yellow, tipped white; fine flower. Each, 50c.

WASHINGTON CITY. Gigantic, white star-like flower. Each, 75c.

GEORGE WALTERS. Gold medal P. P. I. E. Beautiful pink salmon. Long erect stems. Each, 75c.

SURPRISE. Rich orange amber. Each, 75c.

LA FAVORITA. Wonderful cactus; perfect form; reddish salmon. Each, \$2.00.

PAEONY FLOWERED DAHLIAS

COOPER. Broad twisted petals. Copper and apricot. Each, 75c.

DR. PEARY. Deep moroon; large flower. Each, 75c.

MADAM VARD. Currant red shading to yellow in the center. Each, 50c.

HAMPTON COURT. Long stems; bright pink. Each, 50c.

GEISHA. Rich variations of scarlet and gold. Each 75c.

PERRY WEIDNER. Large flowers, strong stems; striking cherry red. Originated by Mr. Mulkey. Each, \$1.00.

LIBERTY. Beautiful coral pink. Each, 75c.

DECORATIVE DAHLIAS

ABALONE. Shell pink, extra fine. Each, 50c.

AUG. NONIN. Red, very large flowers on long stems. Each, 50c.

DELICE. Rosy pink. Each, 35c.

MINNA BURGLE. A wonderful cut flower; red. Each, 35c.

MADAM GUILLOT. Attractive lavender and pink. Each, 35c.

MOONBEAM. Lemon yellow, perfect form. Each, 50c.

SHASTA. Large white flower. Long keeper. Each, \$1.00.

YELLOW PRINCE. Free blooming; Large, golden yellow. Each, \$2.00.

PRIDE OF CALIFORNIA. The American Beauty of dahlias. Each, \$1.00.

PRINCESS PAT. One of the best of the newer sorts. Old rose. Each, \$2.50.

SOUV. DE. GUSTAVE DOAZON. Fiery red, immense flower. Each, 35c.

KING OF THE AUTUMN. Burnt amber, shaded old rose. Each, 75c.

SHOW DAHLIAS

A. D. LIVONI. Clear pink, an old favorite. Each, 35c.

GRAND DUTCHESS MARIE. Soft buff, overlaid with orange. Each, 50c.

W. W. RAWSON. Amethyst blue and lavender. Each, 50c.

MRS. LAUGTRY. Buff, red edge striking contrast, each, 50c.

COLARETTE DAHLIAS

GEANT D. LYON. Dark maroon; white center petals; a striking flower. Each, 75c.

MAURICE RAVORIE. Bold red collar. Each, 50c.

POMPON DAHLIAS

BELL OF SPRINGFIELD. Brick red, small flower. Each, 35c.

DARKNESS. A very deep maroon, almost black. Each 30c.

SNOWCLAD. Pure white, yellow center. Each, 35c.

BRUNETTE. Red and white. Each, 35c.

LITTLE BEESWING. Yellow tipped with crimson. Each, 50c.

MISCELLANEOUS FLOWERING PLANTS

ANEMONE JAPONICA. "Japanese Wind-Flower." White. Each, 25c; per doz., \$2.50.

Queen Charlotte. Pink. Each, 25c; per doz., \$2.50.

AQUILEGIA. "Columbine." Long spurred hybrids. Each, 20c; per doz., \$2.00.

ASTER. Giant Branching Comet and Vick's Branching, separate colors or mixed. Per doz., 50c; per 100, \$3.00.

BEGONIA. Bedding varieties, separate colors. Per doz. 75c, per 100 \$5.00.

BELLIS PERENNIS. "Double Daisy." Mixed colors. Per doz., 50c; per 100, \$3.00.

CENTAUREA CANDIDISSIMA. "Dusty Miller." Silvery foliaged plant for beds and edgings. Each 10c, per doz. \$1.00.

COREOPSIS LANCEOLATA. Large deep yellow. Each 10c, per doz. \$1.00.

DELPHINIUM BELLADONNA HYBRIDS. Various shades of blue. Balled. Each, 35c; per doz., \$3.50.

DAISY. See Bellis.

FUCHSIAS. We have a splendid assortment of the single and double varieties. Each, 50c.

GERANIUMS, IVY LEAVED. All the popular kinds. Each, 20c; per doz., \$2.00.

GERANIUMS, LADY WASHINGTON. See Pelargonium.

GERANIUMS, SINGLE AND DOUBLE VARIETIES.

We can supply all the popular kinds. Each, 20c; per doz., \$2.00.

GERBERA JAMESONI HYBRIDS. Beautiful hybrids of the Transvaal Daisy. Each, 50c; per doz., \$5.00.

HELIOTROPE. Leading varieties. Each 25c, per doz. \$2.50.

LANTANA. Leading varieties. Each 20c; per doz., \$2.00.

LIPPIA REPENS. Used for lawns and for covering banks requiring very little water. In flats, each. \$1.50.

LOBELIA. Crystal Palace Compacta. Per doz., 50c; per 100, \$3.00.

PAMPAS GRASS. Strong plants in gal. cans. Each, 50c.
PANSY. Giant mixed. Per doz., 50c; per 100, \$3.00.
PELARGONIUMS. We have a splendid assortment of varieties. Each, 35c; per doz., \$3.50.
PENTSTEMON. Large flowered, mixed colors. Each 15c, per doz. \$1.50.
PETUNIA. Double fringed, mixed colors. Single fringed, mixed colors. Each, 25c; per doz., \$2.50.
PHLOX PERENNIAL. We can supply the following splendid varieties: Albion, pure white large trusses; Bridesmaid, pale flesh with deep rose center; Inspector Elpel, salmon-rose; Lothair, dwarf light crimson; Mrs. Jenkins, dwarf pure white; Mrs. Robinson, deep rose. Each, 25c; per doz., \$2.50.
POINSETTIA. Strong plants in pots. Each, 50c.
RUDBECKIA, GOLDEN GLOW. Large double yellow flowers, appearing in fall. Each 15c, per doz. \$1.50.
SALVIA SPLENDENS, "Scarlet Sage." Valuable for beds and borders. Each 10c, per doz. \$1.00.
SHASTA DAISY. Alaska, large white. Each 10c, per doz. \$1.00.
STOCKS. Ten-week, separate colors or mixed. Per doz., 50c; per 100, \$3.00.
THALICTRUM DIPTEROCARPUM. Beautiful foliage resembling maidenhair fern; tall graceful stems with small panicles of lilac blossoms. Very desirable for cutting. Each 35c; per doz., \$3.50.
VERBENA. Mammoth, separate colors or mixed. Per doz., \$1.00; per 100, \$7.00.
VINCA MAJOR. Pretty trailing plant with shiny green foliage and pale blue flowers. Each 15c, per doz. \$1.50.
VIOLA CORNUTA, PAPILLIO. Delph blue, very free flowering, excellent for bedding. Per doz., 50c; per 100, \$3.50.
VIOLETS. Princess of Wales. Deep blue, large flowers, very fragrant. In pots, each, 10c; per doz., \$1.00.

SUMMER FLOWERING BULBS

AGAPANTHUS UMBELLATUS. Blue African Lily." Flower stalks 2 to 3 feet high crowned with large umbels of from 30 to 90 sky blue, lily-like flowers. Long glossy evergreen leaves. Each 25c to 50c.
AMARYLLIS BELLADONNA. "Belladonna Lily." Large rose pink flowers. Each 25c.
AMARYLLIS JOHNSONI. Flowers very large, red, striped with white in center of petals. Each, 25c.
AMARYLLIS VITTATA HYBRIDS. A great variety of shades, mostly white grounds marked with pink, scarlet, crimson or maroon; very large flowers, extra fine. Each, 50c.
CALADIUM ESCULENTUM. "Elephants' Ears." Large, handsome leaves, often 3 feet long by 3 feet wide, very effective on a lawn; requires plenty of water. Each 10c, per doz. \$1.00.
CALLA, WHITE. (Richardia Aethiopica.) "Lily of the Nile" or "Calla Lily." Each, 20c; per doz., \$2.00.
CALLA, YELLOW. (Richardia Elliottiana.) One of the finest introductions for many years. Flowers fully as large as the ordinary white variety, but deep, rich, golden yellow; foliage dark green faintly spotted with white. Each 35c.
GLADIOLUS

Gladiolus can be planted in any good garden soil, eight to twelve inches apart, two to three inches deep.
ALICE TIPLADY. Primulinus hybrid. New, one of the most beautiful Gladioli ever introduced. Color, orange salmon and flame pink, a shade now in great demand in flowers. Excellent for cutting. Each, 25c; doz., \$2.50.
AMERICA. Soft flesh pink, large flowers, extra fine. Each, 10c; doz., 75c.
BARON J. HULOT. Blue. Each, 10c, oz. \$1.00.
CHICAGO WHITE. Pure white with faint lavender streaks in the lower petals. Each, 10c; doz., \$1.00.
CRACKERJACK. Rich dark red, extra fine. Each, 15c; doz., \$1.50.
GOLDEN WEST. Color of a brilliant sunset. A wonder shade in Gladioli. Each, 15c; doz., \$1.50.
HALEY. Delicate salmon pink. Immense flower; one of the very best. Each, 10c; doz., \$1.00.
MRS. FRANCIS KING. Bright scarlet, extra fine. Each, 10c; doz., \$1.00.
MRS. FRANK PENDLETON. Salmon pink with blood red blotch on lower petals. Each, 30c; doz., \$3.00.
NIAGARA. Cream color, large. Each, 20c; doz., \$2.00.
PANAMA. Pink, immense flower. Each, 15c. doz. \$1.50.
SALMON QUEEN. Salmon pink. Each, 10c; doz., \$1.00.
SCHWABEN. Citron yellow. Each, 25c; doz., \$2.50.
SUPERB MIXTURE OF ALL SHADES. Each, 10c; doz., 75c; 100, \$4.00.

CLIMBING PLANTS

AMPELOPSIS VEITCHI. (A trilucidata.) "Boston Ivy. A splendid vine for covering walls, chimneys, stone work or board fences. Glossy green foliage, which turns to beautiful shades of yellow and red in the fall. Each 25c, per doz. \$2.50.
AMPELOPSIS SEMPERVIRENS. "Evergreen Ampelopsis." A beautiful evergreen vine of slender graceful appearance. Leaves small, divided into 5 leaflets rich dark green. Each, 35c; per doz., \$3.50.
AUSTRALIAN PEA VINE. (Dolichos lignosus.) A very rapid growing vine, with pretty foliage and rose and purple pea-shaped flowers. Valuable for covering up fences quickly; stands the heat well. Each, 25c; per doz., \$2.50.
BIGNONIA CHERERE. A magnificent climber producing large tubular-shaped flowers, blood red with yellow at the base. Each, 75c.
BIGNONIA VENUSTA. Produces large clusters of deep orange, tubular-shaped blossoms. A valuable climber, growing to a great height; often seen covering the roofs of houses. Each, 75c.
BIGNONIA TWEEDIANA. A very tall growing variety of clinging habit, very useful for covering walls, high pillars, etc. Blooms in spring, large canary yellow trumpet-shaped flowers. Each, 50c.
BIGNONIA MACKENNI. A very hardy, strong growing vine, bright green foliage and pink, trumpet-shaped flowers. Each, 50c.
BOUGAINVILLEA GLABRA SANDERIANA. Blooms when quite young, and is very free flowering; color rich magenta. Each, 75c.
CLEMATIS MONTANA. A very desirable vine. Flowers in spring, pure white and fragrant. Each, 50c.
FICUS REPENS. "Climbing Rubber." A splendid vine for covering stone or brick walls, to which it fastens itself tightly by means of aerial roots and makes a dense mat of small, dark green leaves. Each 25c, per doz. \$2.50.
HEDERA HELIX. "English Ivy." A well-known climber, with large, thick, shining dark green leaves. Each 20c, per doz. \$2.00.
HONEYSUCKLE. See Lonicera.
IPOMOEA LEARI. "Blue Dawnflower." A very rapid grower and a great favorite for covering fences, sheds, etc. Large blue flowers and rich green foliage. Each 25c.
IVY. See Hedera.
JASMINUM OFFICINALE. "White Jasmine." A rather slender vine, with finely divided pinnate leaves, and quantities of white, fragrant, star-shaped flowers. Each, 50c.
JASMINUM PRIMULINUM. A rapid growing vine from China, bearing immense quantities of large rich yellow flowers. It blossoms in winter and spring, when the plants are simply covered with masses of bright yellow flowers. Each, 50c.
LONICERA HALLIANA. "Hall's Honeysuckle." Flowers white changing to yellow, very fragrant. A splendid vine of rapid growth. Each, 50c.
MANDEVILLEA SUAVEOLENS. "Chili Jasmine." Large white fragrant flowers. Each, 50c.
MUEHLENBECKIA COMPLEXA. "Wire Vine." A rapid growing evergreen vine with wiry stems and small leaves. Desirable for covering fences, trees, posts, etc. Each, 50c; per doz., \$5.00.
SOLANDRA GUTTATA. "Copa de Oro." A rare vine of rapid growth, with large, handsome foliage and immense, bowl-shaped, deep yellow flowers. Each, \$1.50.
SOLANUM JASMINOIDES. "Potato Vine." A very rapid growing vine; flowers in clusters, white with yellow centers. Each, 50c.
SOLANUM WENDLANDI. Immense clusters of large, light lavender blue flowers; large, glossy, dark green foliage. A magnificent plant. Each, 50c.
SOLLYA HETEROPHYLLA. "Australian Blue Bell." A thick growing vine, useful for covering banks. Dark, glossy green foliage and quantities of bright blue flowers. Each, 50c.
TACSONIA MANICATA. "Scarlet Passion Vine." A splendid climber, producing an abundance of very large, bright scarlet blossoms. Each 50c.
TECOMA JASMINOIDES. Bright glossy green foliage; flowers white, with purple throat. Each, 50c.
TECOMA AUSTRALIS. Thick handsome foliage, flowers creamy white, in great profusion. Each 50c.
VITIS CAPENSIS. "Evergreen Grape." A rapid growing vine, with large handsome foliage. Each, 60c.
WISTARIA CHINENSIS. "Chinese Wistaria." A splendid, rapid growing climber producing long pendulous clusters of pale blue flowers. Each, \$1.50.

CALIFORNIA NATIVE PLANTS

I make a specialty of growing California Native Trees and Shrubs and have a large assortment in my nursery. The principal kinds will be found in the following list. I also have several species in quantities not sufficient to pay for listing here. If you are looking for anything not described in these pages, write and send a list of your wants. I may have a few of them in stock.

TWO NEW SPECIES

Fremontia mexicana. A new species found just over the line in Lower California and described by Dr. Anstruther Davidson in the Bulletin of the Southern California Academy of Sciences, July, 1917. Both the flowers and foliage are larger than those of *Fremontia californica*. The flowers are also a much darker color, being almost orange yellow and are a rich reddish brown on the under side. The seeds are about half the size and jet black. Much more desirable from an ornamental standpoint. A splendid shrub for a dry hot place. In gal. cans. Each, \$1.50. In 5-gal. cans. Each, \$3.00.

Lupinus Paynei. "Payne's Tree Lupine."—A native California species discovered by the writer in the foothills near Santa Susana and named in his honor by Dr. Anstruther Davidson, the well known botanist of Los Angeles. For his description of this plant see Bulletin of the Southern California Academy of Sciences, July, 1918.

I believe this is the most wonderful Tree Lupine in the world. It forms large round topped shrubs 4 to 8 feet high from a trunk-like base 3 to 4 and sometimes 8 inches in diameter. One large specimen measured 8 inches through the trunk, 8½ feet high and 13½ feet through the crown, and when in blossom had over 500 flower spikes in bloom at one time.

The foliage is very handsome and silvery green, and the flowers are produced in racemes 8 to 15 inches long. They remind one of wistaria blossoms and appear in many beautiful shades; hardly two plants are just alike; some are pale blue, others lavender, pale lilac, dark blue, purple, rose pink, flesh pink or white; all with a beautiful yellow blotch on the standard. The blossoms are deliciously fragrant, a few flowers being sufficient to perfume a whole house. The plants bloom in the spring and the whole bush blossoms simultaneously. They grow in a heavy reddish clay soil. In small pots, each 35c.

BERBERIS NEVINII "Nevin's Barberry"

A very rare species found only in one locality, now almost extinct and never before grown under cultivation. It was discovered in 1882 by Dr. J. C. Nevin of Los Angeles and named after him by Asa Gray. The plants grow in a dry sandy wash withstanding extremes of heat and drought. From observations on my own grounds, however, I find they will stand considerable amount of water and will also thrive well in the shade. In fact, I believe the plants will be hardy under all conditions. In the young state the plants are of rather sparse growth but eventually form thick, well branched shrubs, 6 to 9 feet high. The foliage is gray green and very attractive. The blossoms which appear from Christmas until March are about the size of those of *Berberis darwini* but of a bright canary yellow. They are produced in large clusters at the axils of the leaves forming long sprays often 2 to 4 feet in length. When in full bloom this shrub presents a magnificent sight and I consider it a great acquisition to my list of native plants. In gallon cans. Each, \$1.00.

TREES AND SHRUBS

All Species in the following list, unless otherwise stated, are evergreen.

Acer macrophyllum. "California Maple." A deciduous tree of great beauty. Leaves large, deeply fine-lobed, rich green, paler beneath. Found growing along the sides of creeks in many of our canyons, but thriving under cultivation in the valleys. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

Aesculus californica. "California Buckeye." Deciduous tree with broad rounded top. Leaves large, palmate, divided in from 5 to 7 leaflets. Flowers borne in large cylindrical clusters, white or sometimes pale pink. In gal. cans. Each, 75c.

Atriplex lentiformis. "Desert Salt Bush." Silvery grey foliage. Very pretty as single specimens, planted in groups or for a hedge. In 3 inch pots, each 20c; doz. \$2.00.

Audibertia nivea. "Button Sage." Small shrub especially valuable for dry places. Pretty silvery grey foliage and lilac blossoms, very beautiful when in bloom on the hillsides. In pots, each 35c.

A. polystachya. "White Sage." Valuable for dry places. Very beautiful grey foliage and tall spikes of white flowers. In pots, each 35c.

A. stachyoides. "Black Sage." Valuable for dry places. Deep green foliage and purple flowers. In pots, each 35c.

Carpenteria californica. "Tree Anemone." A rare and beautiful shrub found in some of the gorges of the Sierra Nevada mountains. Leaves rather narrow, glossy green. Flowers in clusters, usually of 5 to 7, and occasionally 12 or more; large, pure white with yellow stamens and with a fragrance like the Mock Orange. In gal. cans. Each, \$1.00.

Ceanothus. "California Wild Lilac." The Ceanothus is among the most desirable of our native shrubs and particularly useful for planting in dry places. The following are some of the most beautiful species:

C. arboreus. From the islands off the coast of Southern California. A large shrub or small tree of rapid growth. Flowers in large trusses, bright blue; large, handsome foliage. In gal. cans. Each, \$1.00. In 5-gal. cans. Each, \$2.50.

C. arboreus hybridus. A hybrid between *C. arboreus* and *C. spinosus*. Of very rapid growth with large glossy green foliage and immense trusses of bright blue flowers. Very free flowering and one of the best of the Ceanoths. In gal. cans. Each, \$1.00. In 5-gal. cans. Each, \$2.50.

C. cyaneus. A rare species from San Diego county and now offered for the first time. A splendid shrub with dark green foliage and large trusses of dark blue flowers, which appear late in spring after other kinds are over. In gal. cans. Each, \$1.00.

C. megacarpus. Of thick branching habit; small dark green foliage, white flowers. In gal. cans. Each, 75c. In 5-gal. can. Each, \$2.00.

C. spinosus. Of very rapid growth. Bright green stems and foliage. Flowers in large trusses, pale blue. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

C. thyrsiflorus. Of rather thick, compact growth; dark green shiny foliage, deep blue flowers. In gal. cans. Each, 75c.

C. verucosus. A much branched shrub, becoming very dense. Small dark green foliage, long sprays of white flowers. In gal. cans. Each, 75c.

Cercocarpus betulaeifolius. "Mountain Mahogany." A handsome shrub with rich green foliage. Of rapid growth and especially valuable for dry places. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

Cornus pubescens. "Common Dogwood." A deciduous shrub with handsome foliage; especially suited to moist shady places. In gal. cans. Each, 75c.

Encelia californica. "Bush Sunflower." Low shrub, valuable for dry banks. Flowers bright yellow with dark brown centers. In pots. Each, 35c.

Eriogonum fasciculatum. "Wild Buckwheat." Low shrub with short needle-like leaves. It is especially valuable for dry banks and flowers in middle of summer. The blossoms are in large heads, white, tinged with pink. In 4-inch pots. Each, 35c.

Fraxinus dipetala. "Flowering Ash." A deciduous shrub; small, white, fragrant flowers in long panicles. In gal. cans. Each, \$1.00.

Garrya elliptica. "Silk Tassel Shrub." A very handsome shrub, with dark, leathery leaves. Flowers in long catkins, often a foot in length. In gal. cans. Each, \$1.00.

Heteromeles arbutifolia. "California Holly" or "Christmas Berry." Very desirable on account of its handsome foliage and also for its bright colored berries. In gal. cans. Each, 75c.

Juniperus californica. "California Juniper." A shrub or small tree of spreading habit, found in dry washes. In the young plants the foliage is glaucous but later changes to deep rich green. In gal. cans. Each, 75c.

Lupinus arboreus. "Yellow Tree Lupine." A shrubby species especially valuable for covering dry sandy slopes. It produces great quantities of rich sulphur yellow, fragrant flowers in spring. In pots, each 20c; doz., \$2.00.

Lupinus longifolius. "Blue Bush Lupine." Very desirable for covering dry, sandy slopes. Flowers abundantly all through the winter and early spring months. It can be planted with the preceding kind, producing a very pretty effect. In pots, each 20c; doz., \$2.00.

Lycnothamnus floribundus var. **asplenifolius**, "Catalina Ironwood." A very rare and beautiful tree from the islands off the coast of California. It has beautiful foliage like a fern and large trusses of white blossoms. In gal. cans, 2 to 3 ft. Each \$1.50.

Mimulus glutinosus, "Sticky Monkey Flower." Small shrub 2 to 5 feet high. Flowers buff or salmon-colored resembling an azalea in shape. In 3-inch pots. Each 35c. Doz., \$3.50.

Mimulus glutinosus. Brown flowered form. A form of the preceding, differing only in the color of the flowers, which are mahogany brown. In 4-inch pots. Each, 50c; doz., \$5.00.

Mimulus glutinosus. Cream-colored form. Another form of the preceding having cream-colored flowers. Each 50c; doz., \$5.00.

Mimulus puniceus. "Red Sticky Monkey Flower." A species from San Diego county; flowers bright red. In 4-inch pots. Each, 50c; doz., \$5.00.

Parkinsonia aculeata. Shrub or small tree. 15 to 25 feet. It has thorny, drooping branches, with long, feathery foliage, and showy yellow flowers. In gal. cans. Each, 75c.

Pentstemon antirrhinoides, "Yellow Bush Pentstemon." Very handsome, flowers large, bright yellow. In pots. Each 25c.

Pentstemon cordifolius, "Scarlet Honeysuckle." A woody plant, 6 to 8 feet high, flowers orange scarlet. In pots. Each 25c.

Pinus insignis (*P. radiata*). "Monterey Pine." A well known species of rapid growth. In gal. cans, 4 ft. Each, 75c. In 5-gal. cans. Each, \$2.00.

P. muricata. "Bishop Pine." A very desirable species found near the coast, forming broad, compact, growing trees of great beauty. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

P. parryana. "Parry's Nut Pine." A very handsome species from San Diego county. It forms a small tree with rounded top and short needles of a glaucous color. In gal. cans. Each, 75c.

P. torreyana, "Torrey Pine." Found on the bluffs at Del Mar, in San Diego County; a rather small tree of spreading habit, needles long and five in a cluster; succeeds well under cultivation. In gal. cans. Each, 75c.

Platanus racemosa, "California Sycamore." A well known deciduous tree. In gal. cans, 2 to 2½ ft. Each, 75c. In 5-gal. cans. Each, \$2.00.

Prunus ilicifolia, "California Wild Cherry." One of the most beautiful of native shrubs. Pretty holly-like foliage and small white flowers. In gal. cans. Each, 60c.

P. integrifolia, "Catalina Cherry." Leaves large, oval, rich glossy green. In gal. cans. Each, 60c.

Quercus agrifolia, "Live Oak." A well known tree. In gal. cans 3 ft. Each, 50c. In 5-gal. cans. Each, \$2.50.

Q. chrysolepis, "Golden Cup Oak." A very handsome tree with rich green foliage, lighter on the underside. In gal. cans. Each, 75c.

Q. dumosa, "Scrub Oak." Shrub or small tree, very desirable for dry places. In gal. cans. Each, 50c.

Q. engelmanni, "Mesa Oak." A large tree with grey green foliage, semi-deciduous. Very common around Pasadena. In 4-inch pots, 2 to 3 ft., each 50c.

Q. lobata, "Valley Oak," "White Oak," "Roble." Beautiful deciduous tree, with wide spreading and drooping branches. In gal. cans. Each 50c.

Rhamnus californica, "Wild Coffee." A beautiful shrub with rich green foliage. One of the best shrubs for a shady place, also does well in the full sunlight. In gal. cans. Each 75c. In 5 gal. cans. Each \$2.00.

Rhus integrifolia. Handsome shrub with thick, leathery foliage. The very best shrub for a dry place. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

R. laurina, "Sinnach." Of compact form with smooth green foliage and small white flowers. Especially valuable for dry places. In gal. cans. Each, 75c.

R. ovata. Has large, rich green, leathery foliage and forms a compact growing shrub of great beauty. One of the very best shrubs for a dry place. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

R. trilobata, "Squaw Berry." A pretty deciduous shrub with three lobed leaves, which turn red in the fall. In 4 inch pots. Each 35c.

Ribes malvaceum, "Pink Flowering Currant." A very pretty shrub, with pale pink flowers appearing from late fall to spring. In gal. cans. Each, 75c.

R. hesperium, "Wild Gooseberry." Pretty light green foliage and greenish red flowers, followed by large prickly fruits. In 4-inch pots, each 35c.

R. tenuiflorum, "Yellow Flowering Currant." A small shrub which sends up new shoots from the root, making quite a large clump. From mid-winter to spring it is covered with a perfect shower of dark yellow flowers, followed by quantities of fruit which make excellent jelly. In 4 inch pots. Each 35c.

R. speciosum, "Fuchsia-flowered Gooseberry." Large cardinal red flowers resembling a fuchsia. In gal. cans. Each, 75c.

Rosa californica, "California Wild Rose." Pink, fragrant flowers appearing until past midsummer. Thrives especially well in heavy soil and will grow in the full sun or in shade. In gal. cans. Each, 50c.

Sambucus glauca, "California Elder." A deciduous tree but coming out into leaf very early in spring. Beautiful light green foliage and clusters of creamy white flowers. In gal. cans. Each, 50c.

Sequoia gigantea, "California Big Tree." Balled. Each, \$3.00.

S. sempervirens, "California Redwood." In gal. cans, 3 to 4 ft. Each 75c.

Symphoricarpos mollis, "Dwarf Snowberry." A low growing deciduous shrub which likes a shady place. In gal. cans. Each, 50c.

Umbellularia californica, "California Laurel" or "Bay." A handsome tree with shining dark green foliage. In gal. cans. Each, 75c. In 5-gal. cans. Each, \$2.00.

PERENNIAL PLANTS

Aster greatae, "Wild Aster." Flowers large, rich lavender. Prefers a moist place. In pots, each 15c; doz., \$1.50.

Aster hesperius, "Wild Aster." Flowers pale lavender. Prefers a moist place. In pots, each 15c; doz., \$1.50.

Aquilegia truncata, "Columbine." Flowers deep scarlet tipped with yellow. In 2½ inch pots, each, 15c; doz., \$1.50.

Audibertia grandiflora, "Humming Bird Sage." A stout growing plant with large leaves and spikes of red flowers. Prefers a shady situation. In 4 inch pots. Each 25c; doz., \$2.50.

Coreopsis maritima, "Sea Dahlia." Large flowers, 3 to 4 inches in diameter, light canary yellow. In 3 inch pots. Each 20c; doz., \$2.00.

Dicentra formosa, "Pink Bleeding Heart." A graceful plant with finely cut foliage and pink flowers. Very desirable for shady places. In gal. cans. Each, 50c.

Fragaria californica, "California Wild Strawberry." Valuable as a ground cover, especially under trees. In 2½ inch pots. Per doz. 75c; 100, \$5.00.

Lupinus cytoides, "Canyon Lupine." A magnificent species, often growing 6 feet high or more. It has large, handsome foliage and very long racemes of deep pink or rose-purple flowers. Grows in moist places. In 3 inch pots. Each 20c; doz., \$2.00.

Palmerella debilis serrata, "Blue Lobelia." Pale blue flowers. Grows in moist places. Each 20c; doz., \$2.

Pentstemon centranthifolius, "Scarlet Bugler." Glaucous foliage, rich vermilion flowers. In 3 inch pots, each, 20c; doz., \$2.00.

Pentstemon heterophyllus, "Violet Beard Tongue." A bushy plant, 1½ to 2 feet high. Flowers trumpet-shaped, royal purple. In 2½ inch pots. Each 20c; doz., \$2.00.

Pentstemon palmeri, "White Pentstemon." A spreading plant with thick glaucous foliage and large flowers, creamy white shaded with pink. In 3 inch pots. Each, 20c; doz., \$2.00.

Pentstemon spectabilis, "Blue Pentstemon." A magnificent plant; grows 4 to 7 feet high; flowers large, blue and royal purple. In 3 inch pots, each 15c; doz., \$1.50.

Romneya coulteri, "Matillia Poppy." Strong plants established in 5 inch pots. Each \$1.00.

Sidalea parviflora, "Wild Hollyhock." Rose pink flowers; prefers a moist situation. In pots, each 20c.

Solidago occidentalis, "Western Golden Rod." Large yellow flowers. Thrives best in a wet place. In pots. Each 20c; doz., \$2.00.

Thalictrum polycarpum, "Meadow Rue." Beautiful foliage resembling Maidenhair fern; panicles of yellow green flowers. Prefers a moist, shady place. In 3 inch pots. Each 20c; doz., \$2.00.

Woodwardia radicans, "Chain Fern." A very beautiful fern of easy culture; fronds 3 to 5 feet long. In 5-inch pots. Each, 75c.

Yucca whipplei, "Spanish Bayonet." A well known plant. In 4-inch pots. Each, 50c.

Zauschneria californica, "California Fuchsia." Vivid scarlet, trumpet-shaped flowers. Especially valuable for dry banks. In pots. Each 20c; doz., \$2.00.

Ornamental Trees and Shrubs

All trees and shrubs in the following list, unless otherwise stated, are evergreen.

ABELIA RUPESTRIS. A pretty shrub with spreading, drooping branches, small, glossy green leaves and numerous tube-like flowers, pink shaded with white. In favorable locations this shrub will bloom almost the year round. In gal. cans. Each, 60c.

ACACIA BAILEYANA. 30 feet. A strikingly beautiful tree with glaucous pinnate foliage and covered late in winter with canary-yellow flowers which completely envelop the tree. In gal. cans, 2 to 3 ft. Each 75c. In 5-gal. cans. Each, \$2.50.

A. ARMATA. "Kangaroo Thorn." 10 feet. A spreading shrub, with small yellow flowers, excellent for grouping and also for hedges. In gal. cans. Each, 75c.

A. CULTRIFORMIS. "Knife-leaved Acacia." 8 feet. A pretty shrub, with triangular shaped leaves of a glaucous green color and yellow flowers in axillary racemes. In pots, 2 to 3 ft. Each 50c.

A. DEALBATA. "Silver Wattle." 60 feet. A magnificent rapid growing tree with glaucous, finely cut foliage and covered late in winter with golden-yellow flowers. One of the best for street planting. In gal. cans, 2 to 3 ft. Each 60c.

A. DECURRENS. "Green Wattle." 75 feet. A rapid growing tree and one of the best for avenues. Finely cut, feathery, light green foliage. Flowers bright yellow. The wood is valuable for turners' work and the bark is rich in tannin. In gal. cans, 2 to 3 ft. Each 60c.

A. FLORIBUNDA. (*A. nerifolia*.) 30 feet. A very quick growing species of pendulous habit, long, narrow leaves; flowers light yellow. In gal. cans, 3 to 4 ft. Each 50c.

A. LONGIFOLIA. "Sydney Golden Wattle." 30 feet. Generally known in California, though wrongly, under the name of *A. latifolia*. Of rather slender habit. If properly trimmed it makes a fine street tree; also does well near the ocean; leaves long, lanceolate, glossy green. Very free flowering. Catkins of light yellow flowers at the axil of every leaf. In gal. cans. Each, 75c.

A. MELANOXYLON. "Blackwood." 75 feet. of compact, pyramidal growth. The favorite tree for street planting in Los Angeles. In gal. cans, 3 to 4 ft. Each, 75c.

A. PODALYRIAEFOLIA. A very rare and beautiful shrub, somewhat similar to *A. cultriformis*, but with larger leaves and larger flowers which are produced in immense quantities early in winter and for this reason it is especially recommended for cutting. Flowers rich canary-yellow. In gal. cans, 2 to 3 ft. Each, 75c.

A. PRUINOSA. 25 feet. A very beautiful tree with large, handsome, finely-cut foliage, which is of a rich light green. The young foliage and shoots being of a soft rose color; flowers pale yellow. In gal. cans. Each, 75c.

A. VERTICILLATA. 12 feet. A shrub of rather spreading habit, with small linear leaves and with flower spikes one inch or less in length; flowers deep yellow and extending the entire length of the young branches; one of the best for planting in groups. In gal. cans, 3 to 4 ft. Each 75c.

ANGOPHORA LANCEOLATA. A tall spreading tree with clean, smooth bark, much resembling a eucalyptus, to which it is closely related. It is valuable for planting for ornamental purposes as single specimen trees. In gal. cans. Each, 75c.

ARBUTUS UNEDO. "Strawberry Tree." A very desirable shrub with beautiful dark green foliage. In the fall the plants are covered with both blossoms and fruit; the latter in appearance like strawberries. In gal. cans. Each, 75c.

BERBERIS AQUIFOLIUM. "Oregon Grape." 4 feet. A handsome shrub, with shining, purplish, prickly leaves and bright yellow flowers, followed by blue or nearly black berries. Balled. Each, \$2.00.

B. DARWINI. 3 feet. A beautiful shrub with many slender branches, drooping towards the ends. The foliage is dark green and prickly, somewhat like holly, and often turns a bright red in fall, which color it holds through the winter. In early spring the plants are covered with a profusion of golden yellow flowers. In gal. cans. Each, 75c.

B. WILSONAE. A valuable shrub of late introduction. The plants form low, dense, spreading shrubs, often only a foot or so high, but with several feet of spread, completely covering the ground with a dense mass of small, bright green foliage, which turns to a reddish brown in fall. The flowers are in clusters, golden yellow and followed by salmon-colored berries. In gal. cans. Each, 75c.

BUDDLEYA ASIATICA. A tall shrub with spreading and slightly drooping branches, producing large terminal spikes of small, white, deliciously fragrant flowers. A splendid shrub for planting as a background for smaller shrubs and flowers. In gal. cans. Each, 75c.

B. MAGNIFICA. Of similar habit to the preceding but having larger foliage and large spikes of purple flowers. In gal. cans. Each, 75c.

BROOM. See *Spartium*.

CALLISTEMON SPECIOSUS. "Bottle Brush." A beautiful shrub, with large red, brush-like flowers. Especially valuable for dry places. In pots, 1½ to 2 ft. Each 50c.

CAMPHORA OFFICINALIS. "Camphor Tree." China and Japan. 40 feet. A very ornamental, symmetrical growing tree, with bright green, glossy leaves, the young foliage being of a pleasing delicate rose color. Well adapted for lawns or for street planting. The tree from which the camphor of commerce is extracted. In gal. cans, 3 to 4 ft. Each 50c.

CARISSA GRANDIFLORA. A very handsome shrub with glossy green foliage and fragrant blossoms followed by large, red, edible fruits. In gal. cans. Each, 75c.

CASSIA ARTEMISIOIDES. Central Australia. A pretty shrub, with finely cut silvery gray foliage and clear yellow, sweet-scented flowers; will stand any amount of drought. In pots. Each 50c.

C. TOMENTOSA. Mexico. A quick growing shrub with bright yellow flowers, blooming all through the winter. Very effective for planting in groups. In gal. cans. Each, 60c.

CASUARINA STRICTA. "She Oak." Attaining a height of about 75 feet. Of rapid growth, forming a handsome tree, and particularly valuable for planting along roadsides. In cans, 3 ft. Each 50c.

CEDRUS DEODARA. "Himalayan Cedar." 120 feet. One of the most handsome trees in cultivation, succeeding most remarkably well in California. Drooping branches and silvery green foliage. Balled, 2 to 3 ft., each \$2.00; 3 to 4 ft., each \$2.50.

CERATONIA SILIQUA. "St. John's Bread," or "Carob Tree." 40 feet. A thick-growing tree with masses of dark green foliage. Will grow in any soil; thrives with scarcely any water. In gal. cans, 2 to 3 ft. Each 75c.

CHAMAECYPARIS LAWSONIANA. "Lawson's Cypress." 200 feet. One of the most striking and graceful of all evergreen trees, with horizontally spreading pendulous branches, and flat, compressed foliage; unsurpassed for specimens on lawns. Balled, 2 to 3 ft. Each \$2.50.

CHOISYA TERNATA. A pretty shrub with bright green, deeply cut foliage and clusters of white, fragrant flowers. In gal. cans. Each 50c.

CISTUS LADANIFERUS MACULATUS. "Spotted Rock Rose." A free flowering shrub of low spreading habit. Flowers 3 to 4 inches in diameter, pure white with crimson spot at base of petals. In 4-inch pots. Each, 50c.

COPROSMA BAUERI. A very handsome low growing shrub. The leaves are almost round, of a clean, glossy green color and have the appearance of having been varnished. It is especially valuable for planting in small beds, around a porch or against a wall. In gal. cans, 2 ft. Each 50c.

CORONILLA GLAUCA. A small shrub with glaucous foliage and quantities of bright yellow pea-shaped flowers. In gal. cans. Each 50c.

COTONEASTER ANGUSTIFOLIA. A shrub of upright spreading habit, with small narrow foliage and covered during winter with bright orange colored berries. In gal. cans. Each, 75c.

COTONEASTER FRANCHETI. A handsome shrub with many gracefully arching branches. Foliage of medium size, distinctly downy. Flowers pink, followed by reddish yellow berries. In gal. cans. Each 75c.

C. HORIZONTALIS. Of low, almost prostrate growth. Foliage small, turning red in winter. Berries rich red, produced in great quantities. In gal. cans. Each, 75c.

- C. MICROPHYLLA.** Much branched and almost prostrate. Small, dark green, glossy leaves, large red berries. Very handsome for rock work. In gal. cans. Each 75c.
- C. PANOSA.** Of spreading habit, with many gracefully drooping branches, grey green downy foliage; covered in fall and winter with quantities of bright red berries. In gal. cans. Each 75c.
- CRAPE MYRTLE.** See *Lagerstroemia*.
- CRATAEGUS PYRACANTHA.** "Evergreen Thorn," or "Burning Bush," 10 feet. A thorny, thick-growing evergreen shrub, with small dark green leaves and white flowers, followed by masses of deep orange-red berries which are particularly attractive, remaining on the plant all winter. In gal. cans. Each 60c.
- CRATAEGUS CRENULATA.** Similar to the preceding but has narrower leaves and bright red berries. In gal. cans. Each 60c.
- CRATAEGUS YUNNANENSIS.** A very desirable shrub lately introduced from Yunnan, China. It is of low spreading habit, many of the branches being perfectly prostrate. The foliage is rich dark green, and in fall and winter the plants are literally covered with brilliant scarlet berries. For covering banks this shrub probably has no equal. In gal. cans. Each 75c.
- CUPRESSUS ARIZONICA.** "Arizona Blue Cypress," 70 feet. A tree of great scenic value, and without doubt the most silvery of all cypresses. It grows quite rapidly and forms a perfect tree, thriving in almost any soil, standing intense heat and much frost. In gal. cans. Each 75c.
- C. MACROCARPA.** "Monterey Cypress," 70 feet. A native tree, extensively planted for hedges and equally valuable for single specimens. The tree becomes very picturesque in old age. In flats of 100 plants, per flat, \$2.50. In gal. cans 2 to 3 ft. Each 50c.
- C. SEMPERVIRENS, VAR. FASTIGIATA.** "Italian Cypress," 75 feet. A tall, tapering tree with erect branches, growing close and parallel with the trunk. Largely used in formal gardens. Balled 3 to 4 ft. Each \$3.00; 6 ft. each \$5.00.
- DIOSMA ERICOIDES.** (*D. alba*.) "Breath of Heaven." A favorite shrub of small size, with fine, heath-like, fragrant foliage and quantities of small white flowers. In gal. cans. Each 60c.
- DURANTA PLUMIERI.** "Golden Dew Drop." A beautiful shrub with light green foliage and large clusters of pale blue flowers, followed by bright yellow berries. In gal. cans. Each 75c.
- ERICA MEDITERRANEA.** "Mediterranean Heath," 4 feet. A densely branching shrub of globular shape, with small dark green foliage. In late winter and spring the plants are a perfect mass of small pink blossoms. The best of the Heaths for California. In gal. cans. Each \$1.00.
- E. MELANTHERA.** 4 feet. A very desirable shrub. In late winter and spring the whole plant is literally covered with pale pink flowers. In gal. cans. Each 75c.
- ESCALLONIA ALBA.** 10 feet. A beautiful shrub of upright growth; leaves deep, glossy green; flowers pure white, in large terminal cymes, appearing abundantly in fall and early winter. In gal. cans. Each 75c.
- E. MONTEVIDENSIS.** 12 feet. A large shrub, flowers in immense terminal cymes, pure white. It blossoms in late summer and the flower clusters are produced in great profusion, almost completely covering the plant. In gal. cans. Each 75c.
- E. ROSEA.** 10 feet. A very desirable kind, with conspicuous pink blossoms. In gal. cans. Each 75c.
- E. RUBRA.** 6 feet. Of rather compact, dense growth; flowers dark red. In gal. cans. Each 75c.
- EUCALYPTUS CITRIODORA.** "Lemon Scented Gum." Largely planted for ornamental purposes. In gal. cans, 2 to 2½ ft. Each 50c.
- E. CORNUTA.** "Yate Tree." A very handsome tree of spreading habit, especially valuable for highway planting. In gal. cans. Each 35c.
- E. CORYNOCALYX.** "Sugar Gum." One of the best for planting on dry hillsides. In cans, 2 to 3 ft., each 35c; in flats of 100 plants, per flat \$3.50.
- E. FICIFOLIA.** "Scarlet-flowering Gum." 30 feet. A very ornamental species, with large leathery leaves, and immense clusters of large, bright crimson flowers. In gal. cans, each, 75c.
- E. GLOBULUS.** "Blue Gum." A well known tree. In cans, 2 to 3 ft, each 35c. In flats of 100 plants, per flat \$3.50.
- E. POLYANTHEMA.** "Red Box." One of the most ornamental species and valuable for roadside planting. In pots, 2 to 3 ft. Each 35c.
- E. ROSTRATA.** "Red Gum." One of the best for timber purposes. In cans, 3 to 4 ft. Each 35c. In flats of 100 plants, per flat \$3.50.
- E. RUDIS.** One of the best for street planting. Largely planted in irrigated sections on the deserts. In cans, 2 to 3 ft., each 35c. In flats of 100 plants, per flat \$3.50.
- E. SIDEROXYLON VAR. ROSEA.** "Red Ironbark." A handsome tree with drooping branches, silvery foliage and deep pink flowers. In gal. cans, 3 ft. Each 50c.
- E. TERETICORNIS.** "Forest Red Gum." The most valuable for timber purposes. In cans 2 to 3 ft., each 35c.
- E. VIMINALIS.** "Manna Gum." An exceedingly handsome tree with long pendulous branches, one of the most picturesque for avenue planting. In cans 3 to 4 ft., each 35c. In flats of 100 plants, per flat \$3.50.
- For full description of the above *Eucalyptus* trees see pages 46 to 47.
- EUGENIA MYRTIFOLIA.** "Australian Brush Cherry." A pretty shrub or small tree. It has small, clean, bright glossy-green foliage, the young growth often of a reddish color. It is of compact growth, suitable for shrubberies or hedges, or can be trimmed up as a small tree. In gal. cans, 1½ to 2 ft. Each 75c.
- E. HOOKERII.** A rare species lately introduced. Foliage similar to the preceding, but larger. In gal. cans. Each, 75c.
- FRAXINUS VELUTINA.** "Arizona Ash." A deciduous tree, largely planted in Arizona and New Mexico for shade purposes, and is of great value, being of quick growth, standing both heat and drought remarkably well. Bare roots, 5 to 6 ft. Each 75c.
- GENISTA CANARIENSIS.** A pretty shrub, very effective for planting in groups, being covered in spring with bright yellow flowers. In gal. cans, 2 to 3 ft. Each 60c.
- GREVILLEA ROBUSTA.** "Silky Oak," 150 feet. A large tree with pretty fern-like foliage, covered late in spring with orange-colored flowers which are a great source of honey for bees; does well in all parts of California and is one of the most stately trees for avenue planting, thriving with scarcely any water. In gal. cans., 2 to 3 ft. Each 60c.
- G. THELEMANNIANA.** A beautiful shrub, especially valuable for planting in dry places. It has pretty, feathery foliage and produces a great profusion of bright scarlet flowers. In gal. cans. Each 60c.
- HAKEA LAURINA.** (*H. eucalyptoides*.) 10 feet. A winter blooming shrub, with foliage similar to the Blackwood *Acacia*, bearing curious, globose heads of red flowers with white stigmas. In gal. cans. Each \$1.00.
- H. ELLIPTICA.** A shrub of rather compact habit, growing to a height of 8 or 10 feet. The older leaves are glabrous, while the young shoots and leaves have a bronze or rusty appearance. Very ornamental for shrubbery planting. In gal. cans. Each, 75c.
- H. SALIGNA.** Of similar habit to the preceding, but has narrower leaves and white flowers. In gal. cans. each 75c. In 5-gal. cans, each \$2.00.
- HIBISCUS SINENSIS.** A favorite shrub with bright green foliage and large, showy flowers. Single red or double red. In pots. Each \$1.00.
- HYDRANGEA HORTENSIS.** A well known deciduous shrub, with large leaves and immense heads of pink flowers. Valuable for small beds around a porch or against a wall, continuing in flower nearly all summer. In gal. cans. Each 50c.
- HYPERICUM FLORIBUNDUM.** A pretty shrub with small foliage and large clusters of bright yellow flowers. In gal. cans. Each 60c.
- H. MOSERIANUM.** A low growing shrub, producing quantities of large, single, bright yellow flowers with numerous long, showy stamens. Excellent for massing, flowering almost continuously. In gal. cans. Each 50c.
- JACARANDA MIMOSAEFOLIA.** (*J. ovalifolia*.) 30 feet. One of the finest of our flowering trees, literally covered in early summer with large blue bigonia-like flowers. The foliage is finely cut like a fern and very pretty. In cans, 2 to 3 ft. Each 75c.
- LAGERSTROEMIA INDICA ROSEA.** "Pink Crape Myrtle." A well known deciduous shrub, producing an abundance of showy pink flowers. Each \$1.00.
- LAGUNARIA PATERSONI.** 20 feet. A small pyramidal tree with ovate leaves, whitish underneath, flowers something like *Hibiscus*, pale rose color. In gal. cans, 3 to 4 ft. Each 75c.
- LAURESTINUS.** See *Viburnum*.
- LAURUS CERASUS.** "English Laurel." A splendid shrub with broad shining leaves and creamy white flowers. In pots. Each 75c.

- L. LUSITANICA.** "Portugal Laurel." Dark green glossy leaves; flowers in large panicles, quite fragrant. A very desirable shrub. In gal. cans. Each 75c.
- LEPTOSPERMUM LAEVIGATUM.** This beautiful shrub does particularly well in California and is very valuable for planting in masses, and for filling up odd corners. It grows rapidly and in the spring is laden with a profusion of white blossoms. In gal. cans, each 60c. In 5-gal. cans, each \$1.50.
- LIGUSTRUM JAPONICUM.** "Japanese Privet." 20 feet. A large shrub or small tree, with glossy, dark green, leathery leaves; often used for hedges and stands trimming well. In flats of 100 plants, per 100, \$3.50.
- L. LUCIDUM VARIEGATUM.** "Variegated Privet." Very similar to the preceding, but with variegated foliage. In gal. cans. Each, 50c.
- L. NEPALENSE.** "Small Leaved Privet." 10 feet. Much used for hedges in Southern California. It grows quickly and can be trimmed in any way desired, making a dense, thick hedge. Leaves small, light green, flowers white, in large sprays. In flats of 100 plants, per 100, \$3.50.
- LONICERA NITIDA.** "Upright Evergreen Honey-suckle." A small shrub of recent introduction. It has very small foliage and white flowers followed by purple berries. Suitable for hedges or single specimens. In gal. cans. Each 50c.
- MAGNOLIA GRANDIFLORA.** 80 feet. One of the finest of American evergreen trees. The leaves are thick, bright green and rusty on the under side. Flowers large, waxy white and fragrant. In 5 gal. cans, 4 to 5 ft. Each \$1.50.
- MELALEUCA ERICIFOLIA.** "Bottle Brush." A large shrub with small, narrow leaves and spikes of yellowish-white, brush-like flowers. In pots, 1½ to 2 ft. Each 60c.
- M. HYPERICIFOLIA.** "Bottle Brush." A tall shrub with pretty, bright green, opposite leaves, and producing large spikes of rich red flowers. In pots, 1½ to 2 ft. Each 50c.
- MELIA AZEDARACH UMBRACULIFORMIS.** "Texas Umbrella Tree." A well known deciduous tree. The branches are erect and in a manner radiating from the trunk and with drooping foliage, give it the appearance of a gigantic umbrella. It is a handsome shade tree and will stand a great amount of heat. Bare roots, 4 to 6 ft. Each \$1.00.
- MYRTUS COMMUNIS.** "Common Myrtle." Handsome shrub of rather compact growth, with small, glossy green, aromatic leaves. Bears quantities of small, white, fragrant flowers. Valuable either for single plants for a hedge. In gal. cans. Each 50c.
- NANDINA DOMESTICA.** "Japanese Nandina." A small shrub growing about 5 feet, but increasing by new stalks coming up from the root. The leaves are compound, divided into many small leaflets, very graceful, rich red when young, dark green at maturity but taking on beautiful coppery tones in winter. Flowers white in upright panicles followed by quantities of bright scarlet berries. This shrub thrives remarkably well in California, growing in full sun, shade or partial shade. It also makes a splendid pot or tub plant. In gal. cans. Each, \$1.00.
- OAK.** See Quercus.
- OLEANDER.** A well known and favorite shrub. Double pink and double white. In gal. cans. Each, 75c.
- PEPPER TREE.** See Schinus.
- PICUNIA DIOCA.** One of the most rapid growing trees known, with large, bright green foliage. Trees have been known to form a trunk 1½ feet in diameter in three years. Valuable for planting to produce quick shade. In gal. cans. Each 50c.
- PHILADELPHUS MEXICANUS.** "Evergreen Mock Orange." Small shrub of somewhat trailing habit. Large white fragrant flowers. In 4-inch pots. Each 60c.
- PINUS CANARIENSIS.** "Blue Pine." 80 feet. A beautiful tree with long pendant needles of a glaucous blue color. It is of rapid growth, stands drought well and is one of the best pines for Southern California. It has the peculiarity of sprouting from the stump when cut down or even burned off, which is a valuable feature in the reforesting of our mountains. In gal. cans, 2 to 3 ft. Each 60c. Balled 3 to 4 ft. Each \$1.50.
- PITTSOPORUM EUGENIOIDES.** 20 feet. A handsome shrub of upright growth, with light green leaves and dark stems. Very pretty for hedges and also as single specimen plants. In gal. cans. Each 75c.
- P. PINEA.** "Italian Stone Pine." 60 feet. A very picturesque tree; branches spreading and usually confined to the top of the tree. In gal. cans, 2 to 3 ft. Each 60c. Balled, 2 to 2½ ft. Each \$1.50.
- P. CRASSIFOLIUM.** A tall growing shrub, with grey green, downy foliage and small deep red flowers. Thrives especially well near the coast. In gal. cans. Each 75c.
- P. NIGRICANS.** Shrub of upright growth; small shiny green leaves and dark, almost black stems. In gal. cans. Each 60c.
- P. PHILLYRAEOIDES.** A rare and graceful tree attaining a height of 20 to 25 feet. In habit and general appearance it resembles the Weeping Willow, having drooping branches and narrow green leaves, but it has the advantage of being an evergreen tree. In gal. cans. Each, 75c.
- P. TOBIRA.** A handsome shrub, with dark green, shiny leaves and numerous white, fragrant flowers. gal. cans. Each 60c.
- P. UNULATUM.** A shrub or small tree, with large lance-shaped, deep green, glossy leaves and white, fragrant flowers. It makes a splendid hedge and is very handsome as single specimen plants; also suitable for street trees. In gal. cans. Each 75c.
- PLATANUS ORIENTALIS.** "European Sycamore." "Oriental Plane." A deciduous tree of great beauty. Leaves bright green, deeply cut. It thrives well in California and is valuable for park and avenue planting. Bare roots, 5 to 6 ft. Each \$1.00.
- PLUMBAGO CAPENSIS.** Spreading shrub or half climber producing great quantities of sky blue flowers. In gal. cans. Each 50c.
- PRIVET.** See Ligustrum.
- PRUNUS CAROLINIANA.** "Carolina Cherry." A large shrub or small tree of pyramidal growth, pretty, glossy green leaves and white flowers. Makes a splendid street tree. In gal. cans. Each 50c.
- QUERCUS SUBER.** "Cork Oak." A splendid tree of upright growth with rounded head. It thrives well in California and is desirable for parks or for street planting, and is one of the very best trees for planting along country roadsides. In gal. cans, 1½ to 2 ft., each 40c; 2 to 3 ft., each 50c; 3 to 4 ft., each 60c. Special prices quoted on large quantities.
- RAPHIOLEPIS JAPONICA.** (R. ovata.) Japan. 12 feet. A beautiful compact shrub of rather slow growth. The leaves are oval, thick and leathery, and of a dark, rich green. In spring the plants are covered with white, fragrant flowers. In gal. cans. Each, 75c.
- R. INDICA HYBRIDA.** A cross between R. indica and R. japonica. A very handsome shrub of rather compact growth with rich green foliage and many large clusters of pink and white, fragrant flowers. In gal. cans. Each, 75c.
- SCHINUS MOLLE.** "Pepper Tree." 50 feet. The most graceful of our cultivated trees, with its long branches of finely cut, delicate green leaves and coral red berries. It is the admiration of every tourist who visits our state. In gal. cans, 3 ft., each 50c.
- SOLANUM RANTONNETI.** A very desirable shrub with spreading, drooping branches, small green foliage and great quantities of violet-blue flowers. Blooms nearly the year round and requires very little water. In gal. cans. Each, 75c.
- SPARTIUM JUNCEUM.** "Spanish Broom." 10 feet. A quick growing shrub, of upright habit. Large, yellow, pea-shaped flowers in great profusion on round, leafless branches. In gal. cans. Each 50c.
- STREPTOSOLON JAMESONI.** A small shrub, particularly valuable for planting in dry, sunny situations. It blooms for a long period, and produces immense quantities of yellow and orange colored flowers. In gal. cans, 1½ ft. Each 50c.
- THUJA ORIENTALIS.** (Biota orientalis.) "Chinese Arborvitae." 25 feet. A small thick growing pyramidal tree. Bright green foliage turning bronze or brown in the winter. Desirable as single specimen trees or for hedges. Balled, 3 ft. Each \$3.00.
- TRISTANIA CONFERTA.** "Brisbane Box." A particularly beautiful tree, with large handsome foliage and white flowers. It forms a dense compact head and is very ornamental for single specimen trees or for street planting. In gal. cans. Each, 75c.
- ULEX EUROPAEUS.** "Gorse or Furze." A low growing, prickly shrub with yellow, pea-shaped flowers. Pretty for grouping; also makes a good hedge. In gal. cans. Each 60c.
- UMBRELLA TREE.** See Melia.
- VERONICA DECUSSATA.** A rather small shrub of compact habit. Foliage bright green; flowers in spikes, violet blue. In gal. cans. Each 50c.
- VIBURNUM TINUS.** "Laurestinus." 12 feet. A well-known shrub with showy umbels of white flowers blooming profusely in the winter. Makes a splendid hedge. In gal. cans. Each 50c.

Avocado or Alligator Pear

The Coming Tropical Fruit of Southern California,
Destined to Become the Most Profitable of all the Orchard Crops

Four-year-old Budded Avocado Tree

AVOCADO. (*Persea gratissima*.) "Alligator Pear." "Aquacate." This splendid tropical fruit has attracted much attention of late in Southern California since it has been found that it can be grown successfully in sections where the orange and lemon thrive. It will, no doubt, be planted on a large scale, and become one of the best paying orchard crops. The trees now bearing have yielded high returns, many of them netting the owner from \$100 to \$200 per tree, and in one case \$400 for one season's crop. It is the most wholesome and nutritious of all fruits, and in countries where grown extensively is a staple article of food. On account of the limited number of trees now bearing in California the fruit commands a very high price, good specimens selling as high as 75c each, and consequently only enjoyed by the more wealthy classes. Being as easy to grow as other fruit crops it will without doubt be planted on a large scale, the prices of the fruit will necessarily be lower but will be within the reach of everyone, and it will become a staple article of food. As the fruit stands shipping well the market is almost unlimited, and it is destined to become one of the best paying fruit crops for Southern California. The tree is of rapid growth, and particularly handsome with large, deep green leaves. It succeeds best in a deep loamy soil and attains a height from 20 to 40 feet.

DICKINSON. Fruit oval to obovate, dark purple, thick skin, 7 to 12 ounces. Flesh greenish yellow of good flavor. Of vigorous growth and very prolific. Ripens June to October. Balled 3 to 4 feet. Each, \$5.00.

FUERTE. Considered by many the best Avocado yet introduced. The fruit weighs a trifle under a pound and are smooth and green in color. The flavor is very rich. In the laboratories of the University of California this variety was found to contain 30.72 per cent of fat or oil which places it among the very best varieties for quality. The trees are very hardy, of vigorous growth and come into bearing much sooner than most varieties and produce a very heavy crop. Ripens from January to March, the time of year when Avocados bring the highest price. Balled, 3 to 4 ft. Each \$5.00.

PUEBLA. Fruit obovate, dark purple, skin thick, nearly smooth; 10 to 12 ounces. Flesh yellow of rich flavor. A rapid grower and very prolific. Ripens December to February. Balled 3 to 4 feet. Each \$5.00.

SHARPLESS. Fruit large, averaging a pound to a pound and a half in weight. Skin thick and coarse, purplish black; flesh of rich flavor. A strong grower and prolific bearer. December to April. Balled 3 to 4 ft. Each \$5.00.

SPINKS. Fruit nearly spherical, purplish black, thick skin; 16 to 20 ounces. Flesh cream-colored, of rich flavor. A prolific bearer. Ripens June to September. Balled 3 to 4 feet. Each \$5.00.

Fruit of the Avocado

New and Rare Fruits

Should be Planted Freely in all Gardens

Desirable for their beauty as Ornamental Plants as well as Economic Values

CALIFORNIA WILD CURRANT (*Ribes tenuiflorum*.)

Many people have tried to grow the red or white garden currants in this vicinity, only to meet with disappointment. Of course we must list them in our catalogues for we have customers in northern California and other parts, who want them and where they do quite well, but here in Southern California as a general thing they are a total failure. However, we, in Southern California, have a Wild Currant of our own which does quite well under cultivation and is not only worth growing for its fine fruit but also for its value as an ornamental shrub. For several years I have grown the Wild Yellow Flowering Currant for ornamental purposes. It has done so well under different conditions and borne such quantities of fruit, that I have decided to list it also for its economic value. It forms a small shrub, sending up new shoots from the root making quite a large clump. From mid-winter to spring it is covered with a perfect shower of deep yellow flowers, followed by quantities of fruit about the size of the ordinary red currant. When the fruits begin to ripen they turn first a bright amber color, then red and finally black. In the first two stages they are quite tart, but when black, are sweet. They can be pickled in any stage and make delicious jelly or currant tarts.

In the wild state it is found growing in light sandy soil, but under cultivation has done well in a variety of soils and some plants in heavy black adobe, grew very rank and the second year bore a tremendous crop of fruit. In 4-inch pots. Each 35c; per doz., \$3.50.

CHERIMOYER (*Anona cherimolia*.)

This is one of the finest fruits ever grown and succeeds well in Southern California. The tree is very handsome, with broad, velvety green foliage, often deciduous during the winter months. It is best suited to a light sandy soil but can be grown on heavy soils providing the drainage is good. The tree is hardy enough to be grown wherever the orange thrives. The fruits, which ripen in spring, are 3 to 5 inches in diameter, heart-shaped, or a grayish brown color and produced in great abundance. The flesh is a white, melting, custard-like pulp of delicious flavor.

DELICIOSA. Fruit large, weighing up to 1½ pounds: of delicious flavor. Ripens in January. Budded trees. Each \$4.00.

CHOICE SEEDLING TREES. Grown from seed selected from the largest, free fruiting trees. In gal. cans. Each 75c.

WHITE SAPOTE (*Casimiroa edulis*.)

This tree was introduced into California by the early Mexican settlers and several old trees have been bearing here for many years. It forms a handsome spreading tree, with palmate, glossy green foliage and is extremely drought resistant. It is hardier than most semi-tropical fruits, withstanding quite low temperatures and is found in Mexico at altitudes up to 7,000 feet. The fruit is about the size of a quince and similar in appearance, with thin skin and sweet pulp of a flavor unlike any other fruit. The trees usually come into bearing when 7 or 8 years old.

SEEDLINGS. Grown from seed saved from choice fruit. In gal. cans. Each \$1.00.

FEIJOA OR PINEAPPLE GUAVA (*Feijoa sellowiana*.)

Fruit delicious, mingling the flavor of the pineapple, raspberry and banana, and so aromatic that a few of them will impart a pleasing fragrance in a room. It is somewhat acid and has good cooking qualities. Size about that of an English walnut. Besides being valued for its fruit, it is an ornamental, glaucous-leaved evergreen shrub and very beautiful when in flower. The blossoms have heavy, waxy petals, pure white beneath and shaded to a purplish crimson on the upper side, well meriting a place in the garden for its flowers alone.

CHOICEANA. A very large fruited variety. Grafted plants. Balled. Each \$3.00.

CHOICE SEEDLINGS. Grown from seed selected from the largest free fruiting plants. In gal. cans. Each 75c.

EVERGREEN RASPBERRY (*Rubus ellipticus*.)

A giant evergreen raspberry from the Himalaya mountains. The plant grows from 12 to 15 feet high and is a true evergreen, standing 6 to 8 degrees of freezing without injury and is a handsome foliage plant. In spring it produces quantities of fine yellow berries that are delicious for home use but too soft for distant shipments. Strong pot grown plants. Each 60c.

NATAL PLUM (*Carissa grandiflora*.)

An interesting shrub from South Africa, worthy of a place in every garden, for ornamental purposes as well as its fruit. Forms a thick growing, thorny shrub a few feet high, with rich, dark green oval leaves. In spring and early summer it is covered with many white fragrant blossoms about an inch and a half in diameter. These are followed by bright scarlet fruits about the size of a plum, of a peculiar acid flavor, and make excellent jelly. The shrub is very hardy, and ornamental planted either as single specimens or as a hedge. In gallon cans. Each 75c.

CAROB OR ST. JOHN'S BREAD (*Ceratonia Siliqua*)

A very ornamental evergreen tree which thrives well in Southern California and requires very little water. The trees bear quantities of pods which are high in protein and sugar and make valuable food for stock. They are largely grown in the countries bordering on the Mediterranean sea, from which regions immense quantities are shipped to the United States and other countries and used in the making of stock foods. The trees grow to a height of 40 feet, and mature trees of good budded varieties have been known to yield 900 to 1,000 pounds of pods.

BOLSER. An extra fine variety and good producer. Chemical analysis shows 52% sugar. Budded trees, boxed 2 to 3 feet. Each \$3.50.

Seedling Trees. In gal. cans, 2 to 3 feet. Each 75c.

YELLOW STRAWBERRY GUAVA (*Psidium lucidum*.)

Similar to the red strawberry guava, except in the color of the fruit which is a bright yellow. Considered by some to be of finer flavor than the red variety. In gal. cans. Each 75c.

FRUIT TREES AND GRAPE VINES

ALMONDS

Price, each, 75c.

I. X. L. This variety is highly recommended by those who have grown it. It bears regularly and heavily. The nuts are large and shell easily, no machine being needed, nor is it necessary to bleach them. The tree is a sturdy upright grower.

NE PLUS ULTRA. A rapid grower and heavy and regular bearer. The nuts are large, very long and soft shelled.

APPLES

Price, each, 75c.

DELICIOUS. Large, rather conical in form; bright red, splashed lightly with yellow; flesh crisp, sweet and juicy. A good bearer. November.

GRIMES GOLDEN PIPPIN. Of medium size, golden yellow, sprinkled with gray dots. December.

WINTER BANANA. Large, of perfect form, golden yellow shaded with blush, flesh yellow, rich flavor. A strong grower and heavy bearer; three year old trees frequently bearing a heavy crop. September.

JONATHAN. Yellow and red, of medium size, flesh rich, tender and juicy. Very productive and a good winter variety. November to December.

RED ASTRACHAN. Large, deep crimson, rich acid flavor. July.

WHITE WINTER PEARMAIN. Of medium size, oblong, pale yellow, sprinkled with miniature brown spots; flesh crisp and juicy, with pleasant sub-acid flavor. A standard market sort. Succeeds well in all parts of the state. November to February.

WINESAP. Greenish yellow, striped with red and purple, of medium size, flesh firm, with rich high flavor. Excellent for the table. November to February.

YELLOW BELLFLOWER. Of large size, oblong, yellow, flesh crisp and juicy, sub-acid flavor. A standard variety in California and succeeds well in the Interior. October to January.

YELLOW NEWTOWN PIPPIN. Golden yellow, large; flesh firm, crisp and juicy. One of the standard varieties in California, and very largely planted. January to March.

CRAB APPLES

HYSLOP. Large, deep crimson. A very popular variety. September.

TRANSCENDENT. Large, yellow striped with red, of pleasant aromatic flavor. A vigorous grower and very productive, the best variety for general use. August.

APRICOTS

Price, each, 75c.

BLLENHEIM. Large, oval, deep yellow, flesh yellow, sweet and juicy. Regular and heavy bearer, in great demand for canning and drying.

NEWCASTLE EARLY. Of medium size, round, ripens two to three weeks earlier than Royal. May.

ROYAL. Medium size, oval, dull yellow, flushed with red. A standard variety. It is a favorite sort for canning and drying; succeeds well in all parts of the state and is more extensively planted than any other variety.

CHERRIES

Price, each \$1.00.

BING. Large, dark purplish black. Flesh firm of delicious flavor. A good shipping variety.

BLACK TARTARIAN. Very large, purplish black; flesh juicy, rich and delicious. The best black cherry. June.

NAPOLEON BIGARREAU. (Royal Ann.) Large, pale yellow, richly dotted with deep red and with a bright red cheek; flesh sweet and juicy. A good bearer.

FIGS

Price, each 75c.

BLACK CALIFORNIA. (Mission.) Large dark purple. A good grower and bearer. The large black fig so common in California.

KADOTA. A white fig of medium size, rich flavor and one of the best for table use. It is very prolific and the trees bear when quite young.

WHITE ADRIATIC. Large, skin greenish yellow, pulp red. Extensively planted for drying purposes.

GRAPES

Price, each 25c; per doz. \$2.50.

BLACK HAMBURG. Very large bunches; fruits round and large; flesh sweet and juicy. A fine table grape.

BLACK MOROCCO. Bunches of medium size; fruits oval, very large, dark red, turning black when fully ripe; flesh sweet and juicy; ripens late and keeps well. A good shipper.

CONCORD. Bunches large and compact; fruits large round and sweet.

CORNICHON, BLACK. Long, loose bunches; fruits oval, tapering at both ends; flesh firm and of fine flavor; ripens late and is a splendid sort for shipping.

FLAME TOKAY. Bunches very large; fruits large, pale red covered with bloom; flesh firm and sweet. An old and popular sort; largely planted for table grapes.

EMPEROR. Bunches very large; fruits large, oblong, deep rose colored. One of the best late varieties for the market. A strong grower and heavy bearer.

MALAGA. Very large bunches, often weighing 10 pounds; fruits very large, oval, yellowish green. A good shipping variety, commanding a high price in the eastern markets. The vine is a strong grower and very productive.

MUSCAT OF ALEXANDRIA. Bunches long and loose shouldered; fruits oval, yellowish green, rich flavored. Very largely grown for raisins.

ROSE OF PERU. Large bunches; fruits large and round, flesh firm. A good market variety. Vine a strong grower.

THOMPSON'S SEEDLESS. Bunches very large; fruits greenish yellow, oval, firm and seedless. A rapid grower and enormous bearer.

LEMONS

EUREKA. Medium size; a good keeper; the best for general use. Each, \$2.50.

LOQUATS

CHOICE SEEDLINGS. Grown from seed saved from choice large fruited varieties. In gal. cans. Each 75c.

NECTARINES

Price, each 75c.

BOSTON. Of medium size, yellow with red cheek; flesh yellow and of good flavor. August.

STANWICK. Large, pale greenish white, shaded with rich violet; flesh white, rich and juicy.

OLIVES

Price, each \$1.50.

MANZANILLO. Large, purplish black, with light colored specks. One of the best commercial varieties, both for pickling and oil.

MISSION. Medium size; desirable for pickling, either green or ripe; also a good variety for oil. An old standard variety introduced by the Spanish padres and now grown here probably more than any other sort.

ORANGES

MEDITERRANEAN SWEET. Medium size, ripens late. Tree thornless and a good bearer. Each \$3.00.

TANGERINE. (Dancy's.) Medium size; very sweet; rind thin and separates easily. Each \$3.00.

VALENCIA, LATE. Large, oblong; ripens very late. Each, \$2.50.

WASHINGTON NAVEL. The standard variety in California. Fruit large, luscious and seedless; a good bearer and shipper. Each, \$2.50.

PEACHES

Price, each 75c.

BRIGGS' RED MAY. Medium size; greenish white with red cheek; flesh greenish white, melting and juicy. A popular early variety. Middle of June.

EARLY CRAWFORD. Large, oblong; skin yellow, with red cheek; flesh yellow and sweet. Middle of July.

ELBERTA. Very large; bright yellow, with mottled red cheek; flesh yellow, juicy and sweet. One of the best market varieties. Late in July.

J. H. HALE. Large, highly colored, flesh yellow and of rich flavor. The best peach for general use. August.

ORANGE CLING. Very large, yellow with red cheek; flesh golden yellow, rich and sweet. Late August.

STRAWBERRY. Medium size, white with dark red markings; flesh white, sweet and juicy. Early July.

GEORGE THE FOURTH. Fruit large, white, with red cheek; flesh pale, rich and juicy; very popular as a table variety. End of August.

LATE CRAWFORD. Very large, yellow, with dark red cheek; flesh deep yellow, rich flavor. A popular variety for drying and canning.

SALWAY. Large, creamy yellow, with brownish red cheek; flesh deep yellow, red at pit, sweet and rich; a standard late variety. Middle of September.

SAUCER. Small, flattened at both ends, white with red cheek, flesh white, delicious flavor. One of the best for home use.

PHILLIP'S CLING. Large, round, yellow, with slight blush on the sunny side. Flesh firm, clear yellow. A favorite for canning.

PEARS

Price, each 75c.

BARTLETT. Large, clear, lemon-yellow with soft blush; flesh white, juicy and rich. The most popular variety.

SECKEL. Small, brownish green with russet-brown cheek. For rich flavor it has no equal.

WINTER NELIS. Medium size, yellowish green, dotted with gray russet; flesh yellowish white, rich and juicy. Especially adapted to a dry, warm climate; a regular bearer, good shipper and keeper.

PERSIMMONS

Price, each, \$1.50 to \$2.00.

HACHIYA. Large, conical, bright red. Flesh yellow, of highest flavor.

TANE NASHI. Very large; light yellow, changing to red when fully matured; flesh yellow, seedless, very fine quality.

POMEGRANATES

WONDERFUL. Large and very attractive, of the finest quality. Each \$1.00.

POMELO OR GRAPE FRUIT

MARSH'S SEEDLESS. Medium size, practically seedless; thin, smooth skin; fine flavor. Each \$2.50.

PLUMS

Price, each 75c.

APEX PLUMCOT. A cross between Apricot and Plum. Large, globular fruit, rich flavor. June.

BURBANK. Large, red with lilac bloom; flesh deep yellow, very sweet. A strong, vigorous grower; often commences bearing when 2 years old.

GREEN GAGE. Medium size, round yellowish green, rich flavor. An old favorite variety. August.

KELSEY JAPAN. Very large; green, changing to rich yellow, shaded with reddish purple when ripe and covered with bloom; flesh yellow, firm and sweet; a good bearer. July to October.

SANTA ROSA. Large, oval, purplish crimson with light blue bloom. Flesh pale amber near the stone, shading to deep, purplish crimson near the skin. Regular bearer; valuable for both shipping and home use. For beauty and quality of fruit it is unsurpassed. Early July.

SATSUMA. "Blood Plum." Large, globular, dark red with thin lilac bloom; flesh dark red, firm and juicy. July.

WICKSON. Very large, deep cherry red, changing to rich claret color; flesh amber, rich and juicy. This variety was originated by Mr. Luther Burbank and is a cross between Satsuma and Kelsey Japan, and is considered by him one of the best of the Japan plums.

PRUNES

Price, each 75c.

FRENCH PRUNE. Medium size, violet purple; rich and sugary. A standard variety for drying.

SUGAR. Large, dark purple with white bloom, flesh yellow and sugary. Late July.

TRAGEDY. Medium size, dark purple; flesh greenish yellow, rich and sweet.

QUINCE

PINEAPPLE. Large, flavor has a suggestion of pineapple; a good bearer. Each \$1.00.

WALNUT

EUREKA. Nuts large, soft shelled, of fine quality. Blooms late and is especially desirable for cold sections. Grafted on California Black root, 4 to 6 ft., each \$2.00; 6 to 8 ft., each \$2.50.

PLACENTIA PERFECTION. The standard variety in Southern California. Nuts large, full, white meat, extra fine quality. Trees grafted on California Black Walnut root, 4 to 6 feet, each \$2.00; 6 to 8 feet, each \$2.50.

SMALL FRUITS BLACKBERRIES

CORY'S MAMMOTH THORNLESS. A vigorous grower, often making a growth of 20 to 25 feet in one season. The berries are very large, with few seeds, and of delicious flavor. By many considered to be the best blackberry ever introduced. Vines thornless, which is a great advantage. Each 30c; per doz. \$3.00.

CRANDELL'S EARLY. Large, firm; rich flavor; very early; bears through the entire blackberry season. Each 15c; per doz. \$1.50.

MAMMOTH. A cross between the Wild Blackberry of California and Crandell's Early. The canes are very large and of vigorous growth, often growing 20 feet in one season. It bears very early and is exceedingly productive. The fruit is very large, often 2½ inches long, and of delicious flavor. Each 20c; per doz. \$2.00.

HIMALAYA GIANT. Introduced some years ago from the Himalaya mountains. It is of remarkably rapid growth, the canes sometimes reaching 40 feet in one season. The plants should be trained over a trellis and carefully pruned during the winter. It is a heavy bearer and the berries are large with few seeds and stand shipping well. Each 20c; per doz. \$2.00.

CURRANTS

Price, each 35c; per doz. \$3.50.

FAY'S PROLIFIC. Large, deep red; a standard sort.

WHITE GRAPE. Large, yellowish white; the best of the white varieties.

DEWBERRIES

GARDENA. Large, glossy black; rich flavor, good bearer. Each 15c; per doz. \$1.50.

GOOSEBERRIES

Price, each 35c; per doz. \$3.50.

OREGON CHAMPION. Very large; brownish-red, very sweet and one of the best for table use and for pies; a strong grower and good bearer.

HOUGHTON. Medium size, pale red, very sweet; enormously productive.

GUAVA

STRAWBERRY. Fruit round, deep claret color, of strawberry flavor. Much used for jellies and preserves; also good for eating in the fresh state. In gal. cans. Each 50c.

LEMON. Fruit yellow, pear-shaped; valuable for jellies and preserves. In gal. cans. Each 75c.

LOGAN BERRY

LOGAN BERRY. A hybrid between the raspberry and blackberry. Fruit dark red, often 1¼ inches long and produced in immense clusters. In flavor it partakes of both the raspberry and blackberry, a mild pleasant, vinous flavor, delicious and peculiar to this berry alone. Excellent for the table, jams or jellies. Each 20c; per doz. \$2.00.

RASPBERRIES

CALIFORNIA SURPRISE. The best red raspberry. It begins to ripen in April and continues through the entire berry season. Prolific and of good quality. Each 15c; per doz. \$1.50.

STRAWBERRIES

CAROLINA. The new strawberry for California. Very early and will bear a crop 8 to 12 weeks after transplanting. A continuous bearer of fine large red berries and does better in California than the so-called overbearing varieties. Per doz 35c; per 100 \$2.50; per 1000 \$20.00.

BRANDYWINE. Large, roundish, conical; bright red; flesh firm and of rich flavor. A popular medium to late. Per doz. 35c; per 100 \$2.00; per 1000 \$15.00.

KLONDYKE. Very uniform, rich blood red, juicy and of delicious flavor; medium early. This variety is of recent introduction and is becoming very popular here. Per doz. 35c; per 100 \$2.00; per 1000 \$15.00.

Garden Helps and Accessories

HORTICULTURAL BOOKS

	Postpaid		Postpaid
California Garden Flowers.....Wickson	\$2 00	Tropical and Sub-Tropical Fruits.....Popenoe	5 00
California Vegetables.....Wickson	2 50	Date Growing.....Popenoe	2 50
California Fruits: How to Grow Them..Wickson	4 00	The Rose Book.....Thomas	3 00
Roeding's Fruit Growers' Guide.....	1 10	The Nursery Book.....Bailey	3 00
Henderson's Book of Horticulture.....	4 00	The Pruning Book.....Bailey	3 00
Standard Cyclopedia of Horticulture, Six vols.	Bailey	(Postpaid)	\$40 00

TROWELS AND WEEDERS

	Postpaid
All Steel Transplanting Trowel.....	\$0 35
All Steel Garden Trowel.....	35
All Steel Claw Weeder..	35

BUNT'S GAS BALLS

Get the Gophers

5c each, 50c per dozen. Box of 125 \$3.50. Postage 5c doz.

Mole Trap
Postpaid \$1.35

Roy Gopher Trap. 25c
Postage 5c

Imported Fine Steel Garden Knives. 75c to \$2.50

Imported Fine Steel Budding Knives. 50c to \$2.50

Roy Box Gopher Trap
Postpaid 35c
Western Style
Postpaid 35c

American and Imported Pruning Shears. \$1.50 to \$4.50.

TREE TANGLEFOOT

Keeps the scale carrying Argentine Ant out of fruit and other trees. Postpaid

1-lb. can	\$0 55	\$0 60
6-lb. can	2 50	2 75
10-lb. can	4 75	5 00
20-lb. can	9 00	9 50

Perfection Compressed Air
Sprayers
Galvanized \$8.00. Brass \$11.00

Continuous Sprayers

Galvanized Iron, \$1.50 Brass \$1.75

GARDEN HOSE

Finest moulded rubber. 1/2 inch 15c per foot, 5/8 in. 18c per foot, 3/4 in. 20c per foot.

Hand Sprayers 65c each.
Heavy End Sprayer. 75c each.

PLANET JR.
PLOW AND CULTIVATOR

A Little Giant for Work, \$6.50

Planet Jr. Seeders and Cultivators carried in stock. Ask for prices.

STIMUPLANT TABLETS.

The Concentrated Fertilizer; it makes plants grow. 20c, 30c, 90c and \$3.75 per box.

TWO IN ONE SPRINKLER

For Lawns and Shrubbery. \$1.10 postpaid.

Rich Bermuda Grass Rake, \$5.00
Rich Lawn Comb, \$2.50

Circle Fountain Sprinkler. \$1.25 each.

Ideal Spray Pump. Portable
Capacity, 18 gals. 250 lbs. Pressure. \$38.00 complete.

MY OTHER PUBLICATIONS

California Wild Flowers, Their Culture and Care. A treatise describing over a hundred species, with a few notes on their habits and characteristics. Mailed upon receipt of 15c.

Eucalyptus Timber Culture. I publish in separate pamphlet form the pages in this catalogue, devoted to Eucalyptus culture. Mailed free upon request.

Pamphlet on Alfalfa. Giving its history, uses as a fodder plant, for golf links, etc. Mailed free upon request.

Revolving Sprinkler

Low Standard \$1.25
High Standard. \$2.00

Patented March 5, 1912

Secure Hose Washer

You cannot lose it.
20c per dozen, postpaid.

The Shower Sprinkler

60c each.

Magic Bucket Pump

Compressed air
60 lbs. Pressure, \$6.50 ea.

Half Circle Fountain. 60c each

LAWN MOWERS

Henley's, Republic and Pennsylvania. From \$12.00 to \$35.00 each

Pull Easy Cultivator and Rake
Five tine, \$1.35. Nine tine, \$1.50

OSGOOD LAWN COMB.

Removes Bermuda grass. Fits any lawn mower. \$2 10 postpaid.

We carry a full line of Garden Tools
Write for information on any you may need.

Pamphlet on Beautifying Vacant Lots. This deals with the beautifying of vacant lots and waste ground, by sowing California wild flower seeds. Mailed free upon request.

Bulb Catalogue. Every fall I publish a catalogue of bulbs, giving cultural directions for same. This also contains a large list of flower seeds for fall sowing. Mailed free upon request.

Trade Price List. For Nurserymen, I publish a special list of tree, shrub and palm seeds, which will be mailed free to bona fide Nurserymen upon application.

GENERAL INDEX

	Page		Page		Page		Page		Page
Vegetable Seeds, Novelties.....	3-4	Flower Seeds, General List.....	25-35	Nursery Department.....	50-62				
Vegetable Seeds, General List.....	5-16	California Wild Flower Seeds.....	36-37	California Native Plants.....	54-55				
Field and Fodder Crops.....	18	Tree and Shrub Seeds.....	38-43	Ornamental Trees and Shrubs.....	56-58				
Lawn Grass and Clover Seeds.....	17	Eucalyptus Seeds.....	44-47	New and Rare Fruits.....	60				
Flower Seed Novelties and Specialties.....	19-23	Palm Seeds.....	48-49	Fruit Trees and Vines.....	61-62				
		Decorative Plant Seeds.....	49	Small Fruits.....	62				
	Page		Page		Page		Page		Page
Abella.....	56	Daisy, plants.....	52	Hunneemannia.....	29	Nigella.....	31	Scabiosa.....	22-34
Abronia.....	36	Dandelion.....	9	Ipomoea, seeds.....	29	Oak.....	55	Schinus, seeds.....	43
Acacia, seeds.....	38-39	Delphinium, seeds.....	20-28-36	Ipomoea, plants.....	53	Oenothera.....	31-37	Schinus, trees.....	58
Acacia, trees.....	56	plants.....	59	Jacaranda, seeds.....	41	Okra.....	12	Schizanthus.....	22-24
Acer, seeds.....	39	Dendromecon.....	36-40	Jacaranda, trees.....	57	Olives.....	58	Sciadopitys.....	43
Acer, trees.....	54	Dewberries.....	62	Jasminum.....	53	Onion.....	4-12-13	Seeding Table.....	2
Acroclonium.....	25	Dianthus.....	28	Juniper, plants.....	55	Onion, sets.....	13	Sequoia, seeds.....	43
Aesculus.....	54	Dicentra, seeds.....	36	Juniperus, seeds.....	41	Oranges.....	61	Sequoia, trees.....	55
Agapanthus.....	53	Dicentra, plants.....	55	Kafir Corn.....	18	Orthocarpus.....	37	Shasta Daisy, seeds.....	34
Ageratum.....	25	Didiscus.....	20	Kale.....	10	Palmerella.....	55	plants.....	53
Albizzia.....	39	Digitalis.....	28	Kochia.....	29	Pampas Grass.....	53	Sidalcea.....	55
Alfalfa.....	18	Dimorphotheca.....	28	Kohl Rabi.....	10	Pansy, seeds.....	21-31-32	Silene.....	34-37
Alfilerilla.....	18	Diosma.....	57	Lagerstroemia.....	57	Pansy, plants.....	53	Sisyrinchium.....	37
Alligator Pear.....	59	Dodecatheon.....	36	Lagunaria, seeds.....	41	Parkinsonia, seeds.....	42	Smilax.....	34
Almonds.....	61	Doryanthes.....	49	Lagunaria, trees.....	57	Parkinsonia, trees.....	55	Solanandra.....	53
Alyssum.....	25	Dracaena.....	49	Lantana.....	52	Parsley.....	13	Solanum.....	53-58
Amaranthus.....	25	Duranta.....	57	Larkspur.....	29	Parsnip.....	13	Solidago.....	55
Amaryllis.....	53	Egg Plant, seeds.....	10	Lathyrus.....	29-36	Peaches.....	61-62	Sollya.....	53
Ampelopsis, seeds.....	39	Egg Plant, plants.....	17	Laurestinus, seeds.....	41	Pears.....	62	Sorghum.....	13
Ampelopsis, plants.....	53	Egyptian Corn.....	18	Laurestinus, plants.....	57	Pelargonium.....	13-14-18	Sorrel.....	15
Anchusa.....	19	Emmenanthe.....	36	Laurus.....	57-58	Pentstemon, seeds.....	32-37	Spartium, seeds.....	43
Anemone.....	52	Encella, seeds.....	36	Lavatera.....	29-41	Pentstemon, plants.....	58	Spartium, plants.....	58
Angophora, seeds.....	39	Encella, plants.....	54	Lawn Comb.....	64	plants.....	53-55	Sprayers.....	63
Angophora, trees.....	56	Endive.....	10	Lawns, Directions for making.....	17	Pepper, seeds.....	14	Spray Pump.....	63-64
Antigonon.....	25	Erica.....	57	Lawn Mowers.....	64	Pepper, plants.....	17	Sprinklers.....	64
Antirrhinum.....	19-25-36	Eriogonum.....	54	Lawn Fertilizers.....	64	Pepper Tree, seeds.....	42	Squash.....	15-16
Anona, seeds.....	39	Erysimum.....	36	Layia.....	36	Pepper Tree, plants.....	58	Stalica.....	34
Anona, trees.....	60	Erythrina.....	40	Leek.....	10	Persimmons.....	62	Sterculia, seeds.....	43
Apples.....	61	Escallonia.....	57	Lemons.....	61	Petunia, seeds.....	31-32	Stevia.....	34
Apricots.....	61	Eschscholtzia.....	28-36	Leptospermum, seeds.....	41	Petunia, plants.....	53	Stocks, seeds.....	22-34
Aquilegia, seeds.....	19-25-36	Eucalyptus, Culture.....	44-45	Leptospermum, plants.....	58	Phelladelphus.....	58	Stocks, plants.....	53
Aquilegia, plants.....	52-55	Eucalyptus, seeds.....	44-47	Lettuce.....	10-11	Phlox, seeds.....	32	Strawberries.....	62
Arbutus, seeds.....	39	Eucalyptus, trees.....	57	Leucodendron.....	41	Phlox, plants.....	53	Streptis.....	49
Arbutus, plants.....	56	Eugenia.....	67	Libocedrus, seeds.....	42	Phoenix.....	49	Streptosolon.....	58
Arctotis.....	25	Feljo.....	60	Ligustrum, seeds.....	58	Phormium.....	49	St. John's Bread.....	60
Argemone.....	36	Fenugreek.....	18	Ligustrum, plants.....	58	Picea.....	49	Sudan Grass.....	18
Artichoke, seeds.....	5	Ficus, seeds.....	40	Linaria.....	29	Picunia.....	58	Sunflower.....	18-22-34
Artichoke, plants.....	17	Ficus, plants.....	53	Linanthus.....	36	Pinus, seeds.....	42	Surprise Garden Mixture.....	37
Ash.....	39	Figs.....	61	Linum.....	29	Pinus, trees.....	56-58	Sweet Peas.....	35
Asparagus, seeds.....	5	Floerklia.....	36	Lippia.....	52	Pittosporum, seeds.....	42-43	Sweet Potatoes.....	17
Asparagus, roots.....	17	Flowers and Plants, Aids in selecting.....	24	Lobelia, seeds.....	29-30	Pittosporum, trees.....	58	Sweet William.....	34
Asparagus mu- mosus.....	49	Fragaria.....	55	Lobelia, plants.....	52	Plant Tablets.....	63	Symphoricarpos.....	55
Asparagus spre- geri.....	49	Fraseria.....	36	Logan Berry.....	62	Platanus.....	55-58	Tacsonia, seeds.....	34
Aster, seeds.....	19-25	Fraxinus, seeds.....	49	Loniceria.....	53-58	Platystemon.....	37	Tacsonia, plants.....	53
Aster, plants.....	52-55	Fraxinus, tree.....	54-57	Loquats.....	61	Plumbago.....	58	Tagetes.....	34
Atriplex.....	54	Fremontia, seeds.....	41	Love-lies-bleed- ing.....	80	Plums.....	62	Tanglefoot.....	63
Audubertia.....	54-55	Fremontia, plants.....	54	Lupinus, seeds.....	21-30-36	Poinsettia.....	53	Tecoma.....	64
Auricula.....	25	Fuchsia.....	52	plants.....	54-55	Polyanthus.....	32	Tepary Beans.....	19
Australian Pea Vine, seeds.....	25	Gaillardia.....	28	Lyonothamnus.....	55	Portulaca.....	33	Thalictrum, Seeds.....	34
Avocado.....	59	Garden Calender.....	1	Magnolia, seeds.....	42	Potatoes.....	14	Thalictrum, plants.....	53-55
Baeria.....	36	Garden Hose.....	63	Magnolia, trees.....	58	Primula, seeds.....	22-33	Thuja, seeds.....	43
Balsam.....	25	Garden Tools.....	63-64	Malacothrix.....	36	Privet, seeds.....	43	Thuja, trees.....	58
Bartonia.....	25	Garrya.....	64	Malope.....	30	Privet, plants.....	58	Thunbergia.....	34
Bauhinia.....	39	Genista, seeds.....	41	Mandevillea, seeds.....	30	Prunes.....	62	Tithonia.....	22
Beans.....	5-6	Genista, plants.....	57	Mandevillea, plants.....	53	Pruning Knives.....	63	Tobacco.....	16-18
Beet.....	6-7	Geranium, seeds.....	28	Mandevillea, plants.....	53	Pruning Shears.....	63	Tomato, seeds.....	3-16
Begonia, seeds.....	25	Gerbera, seeds.....	20	Marigold.....	30	Prunus, seeds.....	43	Tomato, plants.....	17
Begonia, plants.....	52	Gerbera, plants.....	52	Matricaria.....	30	Prunus, trees.....	55-58	Torreya, seeds.....	43
Belis, seeds.....	25	Geum.....	28	Maurandia.....	30	Psidium.....	43	Trichostema.....	37
Belis, plants.....	52	Gilia.....	29-36	Mecanopsis.....	21-36	Publications.....	64	Tristania, seeds.....	43
Berberis, seeds.....	39	Gladolus.....	53	Melaleuca, seeds.....	42	Pumpkin.....	4-14	Tristania, trees.....	58
Berberis, plants.....	54-56	Gloxinia.....	28	Melaleuca, plants.....	58	Pyrethrum.....	33	Tropaeolum.....	31
Bermuda Grass		Godeitia.....	29-36	Melia, seeds.....	42	Quercus.....	55-58	Trowels.....	63
Rake.....	64	Gomphrena.....	29	Melia, trees.....	58	Quince.....	62	Turnip.....	16
Bids.....	19	Gooseberries.....	62	Melon, musk.....	11	Radish.....	14-15	Ulex, seeds.....	43
Bignonia.....	53	Gopher.....	63	Melon, Water.....	12	Raphiolepis.....	43	Ulex, plants.....	58
Blackberries.....	62	Gopher Traps.....	63	Mentzella.....	36	Raphiolepis, plants.....	58	Umbellularia, seeds.....	43
Bougainvillea.....	53	Grapes.....	61	Mesembryanthemum.....	30	Raspberries.....	60-62	Umbrella Tree, seeds.....	43
Brachycome.....	25	Grass.....	17-18	Metrosideros.....	42	Rhamnus.....	55	trees.....	55
Broom, seeds.....	39	Grevillea, seeds.....	41	Mignnette.....	30	Rhodanth.....	33	Vegetable Plants.....	17
Broom, plants.....	56	Guava, seeds.....	41	Millet.....	18	Rhubarb, seeds.....	15	Verbascum.....	37
Broom Corn.....	18	Guava, plants.....	60-62	Mil Maize.....	18	Rhubarb, roots.....	17	Verbena, seeds.....	22-34
Brussels Sprouts.....	7	Gypsophila.....	29	Mimosa, seeds.....	30-36	Rhus, plants.....	55	Verbena, plants.....	55
Buckwheat.....	18	Hakea, seeds.....	41	Mimulus, plants.....	55	Rhus, seeds.....	43	Veronica.....	58
Budding Knives.....	63	Hakea, plants.....	57	Mina.....	30	Ribes.....	55-60	Vetches or Tares.....	17
Buddleia.....	56	Hedera.....	53	Miscellaneous Flowering Plants.....	52	Ricinus.....	33	Viburnum, seeds.....	43
Bulbs, Summer Flowering.....	53	Helianthus.....	29-36	Momordica.....	30	Robinia.....	43	Viburnum, plants.....	55
Cabbage, seeds.....	7	Helichrysum.....	29	Mole Traps.....	63	Romneya, seed.....	33-37	Vicia.....	57
Cabbage, plants.....	17	Heliotrope, seeds.....	29	Muehlenbeckia.....	53	Roselle.....	15	Viola, seeds.....	22-34
Caladium.....	53	Heliotrope, plants.....	52	Musa.....	49	Rosa.....	55	Viola, plants.....	5
Calceolaria.....	26	Herbs.....	17	Mushroom Spawn.....	12	Roses.....	50-51	Violets.....	5
Calculula.....	26	Heteromeles, seeds.....	41	Mustard.....	12	Rubus.....	60	Vitis.....	5
California Wild Flower Seeds, Souvenir Collection.....	37	Heteromeles, plants.....	54	Myrtosia.....	58	Rudbeckia.....	53	Wallflower.....	3
California Wild Flower Seed Mixtures.....	37	Hibiscus.....	57	Myrtus.....	58	Salpiglossis.....	23	Walnut.....	6
California Wild Gardens.....	37	Hollyhock.....	29	Nandina.....	58	Salsify.....	15	Washingtonia.....	4
California Native Plants.....	54-55	Honeyuckle.....	53	Nasturtium.....	30-31	Salt Bush.....	15	Weeders.....	6
Calla.....	53	Horseradish.....	17	Natal Plum.....	60	Salvia, seeds.....	33-34-37	Wigandia.....	4
Callistemon, seeds.....	39	Horticultural Book.....	63	Nectarines.....	61	Salvia, plants.....	53	Wild Currant.....	6
plants.....	56	Hose Washers.....	64	Nemesia.....	21	Sambucus.....	55	Wistaria, seeds.....	4
Callopsis.....	26	Hydrangea.....	57	Nemophila.....	31-37	Sapote.....	60	Woodwardia.....	5
		Hypericum.....	57	Nicotiana.....	31			Wistaria, plants.....	5
		Humulus.....	29	Nierembergia.....	31			Yucca, seeds.....	4
								Yucca, plants.....	4
								Zauschneria, seeds.....	5
								Zauschneria, plants.....	5
								Zinnia.....	23-24

PAYNE'S NEW TOMATO VICTORY

THE
Most Perfect
TOMATO
Ever Grown

See page 3