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Dahlia Guide

J.J. Broomall
Eagle Rock Calif.

Nineteen Hundred and Twenty Six

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*Introduced by
J. J. Broomall
Eagle Rock Calif.*

Gladys Sherwood

GLADYS SHERWOOD

:::

The Greatest of all Whites

FOR DESCRIPTION, SEE PAGE 17.

To My Patrons

TO MY PATRONS—

In presenting my annual catalog and cultural guide I wish to thank you for the liberal treatment with which you have favored me in the past, and to assure you that I will do my best to merit a continuance of your patronage. The improvement in the Dahlia has been so great that it bids fair to be the most popular flower in cultivation.. I believe it is safe to assert that no other flower can be shown in such a great variety of form and color, rivaling the Chrysanthemum in form and size, combined with the most gorgeous of colors and shadings; as well as tints as delicate as can be seen in the rarest of orchids.

Realizing that an enormous list of Dahlias is confusing and can serve no good purpose I have discarded hundreds of varieties, retaining only the best of the older kinds.

I wish to call your attention to the fine new varieties offered, believing that they will give much greater satisfaction to the grower than those that have been discarded. In addition to many varieties of merit, originating with me, I spare no trouble or expense in obtaining the very best novelties of American and European introductions, and I fully appreciate the fact that the very liberal patronage of my customers has made this possible.

Be sure to read the cultural notes on the next pages and oblige your floral friend.

J. J. BROOMALL,

January, 1926.

5221 Dahlia Drive, Eagle Rock, Calif.

TERMS—The prices quoted are (unless otherwise stated) for field grown tubers, postpaid. Cash must accompany all orders. Remit by P. O. or Express Money Order. Do not send stamps except for very small amounts. If coin is sent, it should be securely wrapped in cloth or paper to prevent it from breaking through the envelope.

MONEY ORDERS SHOULD BE MADE PAYABLE AT EAGLE ROCK, CALIFORNIA. FOREIGN CUSTOMERS WILL PLEASE HAVE MONEY ORDERS MADE PAYABLE AT LOS ANGELES, CALIFORNIA.

POSITIVELY NO ORDERS SENT C. O. D. All orders to receive attention must be accompanied by the amount necessary to pay for the same.

WARNING.—Do not send large amounts of money in your letters without having it registered, as much money has been lost by so doing. If possible, procure a money order and I will add sufficient roots to pay for it.

No orders for Dahlias will be filled earlier than March. Always write your name and address plainly.

Broomall's Dahlias have never failed to secure **FIRST PRIZE** when exhibited in competition.

Write your name and address plainly, and address all letters to

J. J. BROOMALL, Dahlia Specialist.

5221 Dahlia Drive, Eagle Rock, California.

Phone Garfield 1163

Come and See

Eagle Rock Dahlia Farm is becoming a "Mecca" for Dahlia Lovers of America. We exhibited some new varieties in October that created a sensation. We hope to have these in bloom from May until Thanksgiving. We will be glad to have YOU see them.

Parties desiring to visit the Eagle Rock Dahlia Gardens should take the cars marked Eagle Rock City, running north on Broadway. Gardens on Dahlia Drive, two blocks north of the terminus of the Eagle Rock City Car Line.

How to Grow Fine Dahlias

In conversation with one of the most successful Dahlia growers in America we found that we had both entered the business in the same manner: i. e., we first raised Dahlias because we liked the flower, and allow me to say that this is the most essential thing in the business of growing flowers, whether by the professional or amateur; indeed, it is hard to conceive how any one could grow flowers successfully if they do not like them well enough to give them the best possible attention. It is my earnest wish that you who read this may be successful, hence I will do my best to give you the benefit of my experience. Owing to varying conditions, it is impossible to lay down rules that will apply everywhere and at all times, and I have seen fine Dahlias produced under conditions entirely at variance with the methods I follow, yet I believe what I shall say will be helpful to many who have not had so much experience in flower culture.

PREPARATION OF THE SOIL

The question is often asked, "What kind of soil should Dahlias be planted in?" I answer, any kind of soil; any soil that will grow cabbage or potatoes will grow good Dahlias; it matters not half so much about the KIND of soil as the CONDITION in which it is kept.

In planting Dahlias, the soil should be put into the best possible condition before planting. The saying, "A task well begun is half done," will certainly apply with full force in this case.

About a week before planting time, if the ground is not already sufficiently moist, is should be thoroughly wet **two feet deep**. Light sandy soil will be fit to dig two or three days after wetting, but in heavy clay or adobe soils it will be necessary to wait longer, as such soils should never be dug or planted when they are wet enough to be sticky; if the lumps crumble easily when struck with the back of the spade, then it will do to dig. As very few private growers have gardens extensive enough to plow, I shall not say much about plowing except that I believe in plowing as deep as possible, and if I could get a sub-soiler, I would use it. In digging ground for Dahlias it is not sufficient to merely turn each spadeful upside down in its original position, as the soil is never well stirred or completely pulverized by so doing. There should be a space of two feet between the dug and the undug ground. To do this it will be necessary to pile the earth up where you start to dig, and to avoid having the surface uneven when you finish, it is advisable to finish digging near where you begin. For instance, should the plot to be dug be six or eight feet wide, dig one-half the width going one way and the other half as you return; then the extra soil will be available to fill in where you finish. The ground should be dug at least 18 inches deep. To do this, a second spading should be made. As this may be in the sub-soil it should not be placed entirely on top of the surface soil, but spread on the side of the embankment. In the miniature pit thus created between the dug and undug ground should be placed all the weeds, leaves, old Dahlia stalks and every kind of litter available that will decay within a year's time; even fine brush may be used to advantage, especially in heavy soils, providing always that it is covered deep enough so that it will not interfere with planting. Now I am well aware of the fact that it is much easier to burn trash, so-called, than to make the best possible use of it, but remember this: When you burn anything that is available for plant food you are **robbing the soil**; when you use it you are **building the soil**. By so doing you are not only improving your chances for success this year but you are making the soil more fertile and more easily worked in the years to follow. I can see no reason why ground used for growing Dahlias should not, with the addition of very little fertilizer, become more fertile as long as it is used for this purpose.

CONSERVATION OF THE SOIL

This conservation of the soil's fertility is of the most vital importance; too much attention cannot be given it. Natural or animal manures are becoming more scarce, while the demand is steadily increasing, with the result that we will have to rely more and more upon chemical fertilizers, some of which give excellent results, but unless the continued use of such fertilizer is supplemented by the addition of some humus-producing material deterioration of the soil is certain to follow.

For this reason every garden should have a compost heap, where all material that is possible to be converted into plant food may be saved until it is convenient to make use of it; if sufficient pulverized earth is added as such material is piled up it will not be unsanitary, as the earth acts as an absorbent and prevents fermentation and offensive odors. Nasturtiums or other quick-growing vines can be used to prevent the heap from becoming unsightly. I believe the system of salvage in the garden or on the farm should be as complete as in the Kansas City packing houses where, it is said, "Nothing is lost about the hog but the squeal," and now that we have the phonograph, even that may be canned.

PLANTING THE DAHLIA

In Southern California, dry roots planted in February and March will begin blooming in May and be at their best in Midsummer. Green plants set out as late as July 15th will, if properly treated, give excellent results in the fall. In the North and East, Dahlias may be planted from March 15th to June 1st, according to locality or a little in advance of corn planting time.

If planted in a single row, plant them at least three feet apart; they may be planted a little closer for hedge effect, but not if large flowers are desired, for when they are planted too close they will rob each other and it will be a question of the survival of the strongest, and not always of the fittest. If more than one row is wanted, the rows should be four feet apart.

There is another thing to which I think growers should pay more attention, and that is the grading of plants according to their height. When planting, if in a single row, begin with the tall varieties at one end and gradually taper down to the more dwarf and weaker growers at the other. For example, if such Dahlias as H. L. Brousson or Frederick Wenham are planted between such rank growers as Dr. Tevis or Stunner, the former will not produce a flower worth looking at.

Make the holes five or six inches deep, so that the upper side of the tuber will be four inches below the surface. Lay the tubers in a horizontal position, with the eyes or sprouts, if any are showing, uppermost. **Never stand them on end.** I know not **why**, but fully half of the inexperienced amateurs I have met have the idea that a Dahlia tuber should stand up, and if let alone they will probably stand at least one-third of them wrong end up. The first thing an unsprouted Dahlia tuber does after being planted is to throw out feeding rootlets from the end of the tuber farthest from the eye, and four inches deep provides the most favorable conditions for quick and healthy root action. Now, if a tuber should be four or five inches long and is stood on end, the lower end will be eight or nine inches deep in cold, unaerated soil, where quick root action is impossible, and if the tuber happens to be wrong end up, imagine the struggles of that delicate sprout being obliged to start out in life under such unfavorable conditions.

After the tubers have been properly planted, **let them alone.** Above all, do not attempt to drown them, for, in heavy soil, you might succeed.

Dahlias planted as above directed should not be watered until they are in bud for bloom. A plant uses moisture in proportion to the amount

of foliage it develops, so that until the tops are well developed there should be, under normal conditions, sufficient moisture in the soil to keep the plants in good growing condition. After the plants are up they should be well sprayed with clear water at least once a week in order to keep the foliage clean and healthy to prevent injurious insects attacking them and about every ten days the ground should be hoed deeply, except within six inches of the plants, where it should be very lightly stirred.

IRRIGATION

In a country where irrigation is necessary this (in connection with cultivation) is the most important thing of all. Conditions vary so greatly that it is impossible to say how often they should be watered—the time may vary from five to six days to as many weeks. I have seen fine Dahlias produced in Southern California without any irrigation, and I have seen them suffering from lack of moisture where they were watered every day. The habit that some have of splattering water from the hose on everything every day is simply a waste of time and water; ground so treated will have a hard glazed surface so that the water cannot penetrate far enough to benefit the plants, and the greater part is quickly lost by evaporation. I believe furrow irrigation to be the best for Dahlias. If the Dahlias are in a row, make a furrow on each side of the row and allow the water to trickle slowly through the furrows for 8 or 10 hours, or until the soil is **thoroughly wet underneath**. If single plants are to be watered, make a circular furrow 8 or 10 inches from the plant and fill and refill this furrow until the ground is wet. As soon after each irrigation as the ground is fit to work, it should be hoed and the surface soil well pulverized. **This cultivation after irrigation is the most important thing of all; if this is neglected it would be better many times not to have irrigated at all.**

Bone meal sown in the open furrow after irrigation will improve the size and color of the blossoms; a small handful is sufficient for a blooming plant; the fertilizer should be covered soon after being applied.

If the ground is in proper condition when the tubers are planted, no irrigation should be necessary until the Dahlias are up several inches high. **Never water them before they are up**—in the earlier stages of growth **spare the water but don't spare the hoe**; after they commence to bloom, this rule should be reversed to some extent. Don't irrigate any more than is absolutely necessary until the plants are ready to bloom, but cultivate frequently and thoroughly; after they commence to bloom the ground should not be hoed deeply, and when in bloom they must not suffer for water. In ordinary soil, if the watering is done right, it will not be necessary to repeat the operation in less than ten days or two weeks' time, even when the plants are in full bloom, unless they are planted near trees or shrubbery, in which case the roots from these will use the greater part of the plant food and moisture and this, of course, will call for heavier fertilizing and more frequent watering. Some people apparently do not realize that in a dry country a tree 20 feet high will send out roots for 40 feet from its base in search of moisture, and this ratio will apply to the action of many plants.

INSECTS AND DISEASE

While there are some very good remedies for most of the insect enemies of the Dahlia, I shall, instead of naming them, mention two very effective preventives.

First, I raise chickens for the sole purpose of keeping down the various bugs and worms, with the results that for years I have not been bothered with cut worms, wire worms, root maggots, stalk borers, and many other destructive pests that have been annoying other growers. Ten or twelve hens per

acre is sufficient. True, they do some damage and are sometimes exasperating, but the benefit generally far exceeds the damage. It is of the utmost importance that they should have the run of the gardens at the time the ground is being dug or plowed as that is when they do the maximum amount of good with the minimum amount of damage.

In small gardens, where chickens cannot be allowed to run at large, buy, borrow, or hire an old hen with a brood of young chicks; tie the hen by the leg, and the little chicks will do very effective work and very little damage.

My second preventive is "Overhead Watering," notwithstanding the fact that I have always advocated the "furrow system" of irrigation and believe in it yet.

During the war when help was scarce I obtained some revolving sprinklers and the result has been so satisfactory that I shall continue to use them; in addition to being a great saving in labor they are an **absolute preventive** of Red Spider, Mealy Bugs, and Aphis of all kinds. Overhead watering also greatly lessens the damage from thrip and has a tendency to drive larger insects to the ground, where the chickens can get them; in addition to this, blight and mildew have not been so bad as before the use of the sprinklers. The sprinklers I use wet the surface from 30 to 60 feet in diameter, varying according to the amount of pressure available; I allow them to stand from two to five hours in a place and then move them to the edge of the wet space, so as to insure the wetting of all the ground. This is a good substitute for several hours of gentle rain and the nearer we can imitate nature in this particular the better, for a gentle shower does not pack the soil as do other methods of watering, but has a tendency to make the soil more mellow. Ground wet as above described, if it has been properly cultivated, will be saturated from one to two feet deep, and—watch those plants grow.

I have often been asked, "Does not spraying the plants while the sun is shining injure the plants?" Yes in time of extreme heat when the thermometer is from 90 to 100 degrees in the shade, which in Southern California means 120 to 130 degrees in the sunshine, the flowers are injured, but at such times both buds and blossoms are generally ruined anyhow if no spraying is done. In ordinary normal weather I have never noticed any damage worth mentioning from overhead watering at any time of day.

The greatest damage occurs with me late in the fall, when the stems of some varieties are apt to be weaker and the flowers very large. The weight of the water that collects on the bloom will cause it to droop and sometimes break the stem, or bend it so that it fails to straighten up afterwards; but the damage from this source is, in my estimation, far outweighed by the benefits of "overhead watering."

I would advise those who use other means of irrigation to thoroughly spray the foliage at least once a week during the hot, dry weather.

You should not get the idea that Dahlias are hard to grow. I know of no plant that will more surely and more abundantly reward the intelligent efforts of the grower.

One of the chief characteristics of the Dahlia, at which I have never cease to marvel, is the amazing quickness with which they will respond to good treatment. It is not necessary to be a professional gardener. I have known some very dear old ladies who knew very little about scientific gardening who succeeded in growing fine Dahlias. If you love the flowers and are determined to succeed, there can be no doubt about your success. If there is a commercial grower who did not first grow Dahlias for pleasure—for the love of it—I have yet to meet him or her.

Especially would I urge all who can to plant and tend to their Dahlias with their own hands. Don't be afraid of soiling your hands. It will come

off. Of course you may raise a few blisters before you raise the Dahlias, but blisters are not fatal, while inactivity too often is. By tending to the Dahlias yourself you will not only be rewarded long before they are in bloom by a better appetite and improved health, but your enjoyment will be much greater when they do bloom.

The man or woman who has not watched a beautiful flower expand, that has been brought into being by their own efforts, and has not been enthused and enraptured as Nature unfolded her handiwork, has missed—is missing—one of the joys of living.

GREEN PLANTS VS. TUBERS

There is a great difference of opinion among growers as to which is the best to plant; tubers or green plants. Under ordinary favorable conditions I prefer green plants for several reasons. In the first place, green plants are much less liable to become diseased than roots. It is seldom necessary to thin out the stalks when green plants are used, and they will as a rule produce as good or better flowers, as well as better tubers, which are generally cleaner, more free from disease, and much easier to divide. Henry Cannell, the God-Father of the Cactus Dahlia, advises the planting of green plants; C. G. Forsythe, who always captures first prize at the Pasadena Flower Show, raises his prize-winners from green plants, and my friend, Mr. Alex Waldie, of Santa Paula, who also has a habit of winning first prizes, prefers green plants.

I believe one reason why amateurs often fail with green plants is that they do not plant them deep enough; if they are taken from 2½ inch pots they should be planted fully twice as deep as they were in the pots, or from four to five inches deep.

If a plant has been rooted between joints, it may grow and bloom and not make any tubers; for, unless the plant is deep enough so that a joint will be at least three inches below the surface, no tubers will form; the germs of life are existent in every joint of the plant and the same joint that would if above ground throw out branches and produce flowers, will, if deep enough below the surface, produce tubers. It depends upon the conditions and environments as to what action those germs take. For this reason it is better to err on the side of deep planting than not to plant deep enough, for, even if two joints should be covered and the lower joint be covered so deep as to render it blind, nothing will be lost, as the tubers formed on the joint above will make up for it.

Another reason why green plants sometimes fail to give satisfaction is because inferior plants are used. Green plants should be grown under moderate heat, and in Southern California they should be kept in a lath house for four or five weeks after being potted, to allow them to become established and thoroughly hardened before being set out in the open ground.

That many plants have been forced under excessive heat and sent out before they were fit to plant has been the cause of many failures; and that is undoubtedly the reason why so many growers are opposed to them. The appearance of my garden in the late summer and fall should be a good argument in favor of the use of green plants, for more than two-thirds of it is generally filled with green plants.

THE PRESERVATION OF DAHLIA ROOTS

In the Northern and Eastern states, Dahlias should be cut close to the ground as soon as frost kills the foliage, and the clumps carefully dug and stored in a frost-proof cellar or basement. I find it a good plan to place the clumps in boxes and cover them with three or four inches of pulverized earth to prevent them from drying out too much. In Southern California

the chief thing to guard against is the dry atmosphere, which is apt to cause the roots to dry and shrivel so badly that all the vitality will be destroyed and the roots lost. In California and with a few exceptions, the entire Pacific Coast west of the Sierra Nevada and Cascade mountains as far north as Seattle, by far the best way to preserve the roots is to leave them where they have grown, undisturbed, until near planting time in the spring, provided they are not in a heavy clay soil or low situation from which the surplus water can not easily be drained, as the standing of stagnant water on the soil is certain to cause decay. After the tops are cut the rows should be slightly hilled up; this will improve the drainage and also protect the crown from severe frosts. The clump should not be divided until planting time, if it can be avoided, as the divided tubers will dry out much quicker than the undivided roots.

It is better for amateurs not to attempt to divide the clumps until after they start to sprout; and it should be understood that the eyes are located where the tuber joins the stalk and nowhere else; if you have had no experience better get some one who understands to show you how it should be done.

THE DAHLIA AS A CUT FLOWER

From a place of comparative obscurity a few years ago the Dahlia has become one of the most popular flowers in the cut flower market; while this increase in popularity is due in great measure to the improved varieties, the fact that florists have found out how to treat them to increase their keeping qualities has also been an important factor in bringing about this important change.

It has been found that by burning or scalding the ends of the stems, thereby preventing the sap from escaping, they will last much longer. I have found scalding to be the most practical. I do this by holding the ends of the stems in boiling hot water for three or four minutes and immediately placing them in cold water fully three-fourths the length of the stems.

During the hot season I think it is best to cut them early in the morning when the flowers are refreshed and vigorous; but late in the fall, when the nights are quite cool, it is better to cut them in the evening, as they will open better in water in the house than on the plants when the temperature drops much below 50 degrees.

Note. In addition to what I have said on pages five and six in regard to insects and diseases I feel it to be my duty to give my customers and others the benefit of a little information that I have learned since the foregoing pages were written.

First. Nematodes which are a serious menace to plant life in some sections of California; a liberal application of air-slaked lime will destroy them. The more thoroughly pulverized, and flour-like the lime the better; I have found what is known to the trade as "Hydrated Lime" to be most satisfactory for this purpose. It should be applied when the soil is DRY, and thoroughly worked into the ground by hoeing or cultivating; the better it is mixed with the soil the more satisfactory will be the results. Lime should never be applied when the surface is wet.

Second. "Stunts."—I confess that this is a disease that I know very little about. I received two Dahlias from a friend last summer that made a very poor growth, and produced no blooms worth looking at, while the Dahlias all around them were thrifty and blooming profusely. An Eastern visitor when I called his attention to these two Dahlias told me they were "Stunts;" as to the cause of this disease (if it be a disease I do not pretend to know, but I do know that green plants raised from one of them appear to be all right, and grew thriftily.)

My remedy in this case will be to destroy the old tubers, and try those of the young plants another year.

EAGLE ROCK BEAUTY

EAGLE ROCK BEAUTY, H. D.—A more beautiful combination of pink and cream than is displayed in this glorious creation would be difficult to imagine. No picture or description of this giant wonder can do it justice. It's in a class by itself, and unanimously admired by all who have seen it. Every Grower who sees this magnificent flower will want it. It is vigorous

in growth, with good habit, and strong stems holding perfectly erect the immense blooms which are full to the center, and produced in abundance until frost. Height 4 feet.

Owing to unprecedented demand and limited supply we cannot accept any more orders for tubers of it this season, we can only offer a limited number of green plants (ready May 15th) at, per plant.....\$50.00

EAGLE ROCK DAHLIA FARM

Birthplace of the Best

New Introductions for 1925

It gives me great pleasure to be able to offer this year what I believe to be the finest lot of New Dahlias I have ever seen.

Friends who have grown my previous introductions KNOW the quality of EAGLE ROCK DAHLIAS. I am confident that they will not be disappointed in those now offered. Prices are for field grown tubers unless otherwise stated.

Explanation—C. denotes that the variety described is in the Cactus class. H. C., Hybrid Cactus. D., Decorative. H. D., Hybrid Decorative. P., Peony, or semi-double Decorative. The word Hybrid is used here not in connection with the parentage of the flower, but to indicate that it is intermediate in shape between the two classes.

AMARILLO GRANDE, H. D.—Light yellow, compared with Sunny South the petals are more broad, and the flowers are much larger, in fact they are enormous and are produced in abundance. 4 feet, stock limited.....\$10.00

ALVERNE, H. C.—Salmon-pink, large flowers on good stems, the color was much admired. It's "different." 3 feet, stock limited.....\$10.00

AZURINA, D.—Dark lavender, large finely-formed flowers on fine stems, one of the best of its class, and color. This fine flower received special mention in the NEW YORK TIMES of September 15th, 1925. 6 feet.....\$10.00

CALIZONA D.—Deep rich Yellow, the large flowers of very distinct shape stand out boldly on splendid strong stems, making it one of the most conspicuous Dahlias in our garden. This variety received much favorable comment in the NEW YORK BOTANICAL GARDENS. 6 feet.....\$15.00

CARISA, D.—Apricot and salmon, medium large flowers, good stems, and very attractive color. 4 feet.....\$5.00

CORAL GEM—See description on page 11.

EAGLE ROCK BEAUTY—See description on Page 9.

EAGLE ROCK SUNSHINE—See description on page 13.

EAGLE ROCK SENTINEL, H. C.—The color is very difficult to describe, being a blending of apricot, bronze, and salmon tints, possibly brownish salmon would give a fair idea of the general effect, the medium large flowers are borne in the utmost profusion on long, straight stems that hold the blooms far above the foliage, towering above its neighbors like a "Sentinel." 6 feet.....\$5.00

CORAL GEM

CORAL GEM, H. C.—A most attractive shade of soft coral-pink, flowers of medium size held erect on good stems, a very desirable cut-flower of good habit and a free bloomer. Height, 5 feet, tubers.....\$10.00

EULALIA, H. D.—The ground color is a rich jersey cream, suffused with peach pink, a very attractive variety. The blooms are large and supported by good stems. Height, 4 feet. Stock limited.....\$10.00

GRANDOLA, D.—Brilliant orange, medium size blooms held erect on fine

stems. Certain to be very popular as a cut-flower. A Dahlia that attracts immediate attention. This variety also caused favorable comment in the NEW YORK BOTANICAL GARDENS. Height, 5 ft. Stock limited. **\$10.00**

HESPERIA, C.—Orange-bronze, shading to rich yellow in center, large fine shape and wonderful color. Height, 4 feet. Stock limited.....**\$10.00**

MIRAFLORA, C.—White tinted, violet-pink the petals are long, straight and rather narrow, this variety might almost be called a Giant Delicatissima, the flowers eight to ten inches in diameter without disbudding are borne profusely on first-class stems, there is nothing like it in Dahlias. Height, 4 feet.....**\$10.00**

MARENGO, D.—Lavender, large well formed flowers on good stems. Height, 4 feet.....**\$5.00**

MARIAN BROOMALL, H. C.—Pink and white, descendant of Gladys Sherwood, it is more Cactus in shape than Gladys Sherwood, with better stems, and habit, a beautiful flower. Stock very limited. Height, 5 feet.....**\$15.00**

MAURITANIA, D.—Light rose, flowers about the same size as Rosa Nell, but a lighter shade of color, and it is entirely different in form, the petals are rather narrow, and are inclined to be convolute, first-class stems and habit. We have a good stock of this fine Dahlia. Height, 4 feet.....**\$5.00**

MRS. FRANCES E. BULLARD—Peony, beautiful light pink, flowers of immense size and borne on rather short, but strong stems in the greatest profusion, blooms are extra deep and full for a Peony Dahlia. Height, 5 feet.....**\$10.00**

NANCY SUE LANG, H. D.—Immense star-like flowers, red tipped gold, larger and stronger grower than Mrs. E. L. Lindsey, habit of plant is dwarf and very robust. A flower that attracts immediate attention. Height, 3 feet. Stock very limited.....**\$25.00**

ORANGE GOLD, H. C.—Rich orange-yellow, a very attractive color that was admired by every one, medium large, good free-blooming habit, producing full-centered flowers in abundance until frost. Height, 5 feet.....**\$10.00**

PRIMULA REX, D.—Very light cream or primrose color. I regard this as one of the BEST DECORATIVE DAHLIAS IN EXISTENCE, the flowers are immense with every good quality, certainly far ahead of anything in its class and color. The illustration gives a good idea of the form of this magnificent Dahlia. This variety was highly spoken of in the NEW YORK BOTANICAL GARDENS. Stock limited. Height, 4 feet.....**\$15.00**

VIOLA, D.—Violet-rose or magenta purple, medium large flowers on first-class stems. Height, 5 feet.....**\$5.00**

EAGLE ROCK SUNSHINE

EAGLE ROCK SUNSHINE, C.—Not since the introduction of Ambassador have we been able to offer such a great Cactus Dahlia as this, the engraving gives a fair idea of the shape, the color is a deeper shade of yellow than Sunny South, the flowers are larger than that variety and are held perfectly erect on strong stems, it shows no tendency to become pendant even under the most unfavorable conditions, and produced blooms full to the center until frost. It is unquestionably the **BEST YELLOW CACTUS DAHLIA**. Height, 5 feet. Tubers, each.....\$25.00

PRIMULA REX

Cactus and Hybrid Cactus Dahlias

General Collection

Explanation:—C indicates Cactus, Am. C., American Cactus, H. C. Hybrid Cactus. Names in brackets indicate the name of the introducer, all that are marked B have been introduced by J. J. Broomall.

The numerals 3, 4, 5, etc., indicate the approximate height of the plants when grown under ordinary conditions.

AMBASSADOR, C. (B)—The floral sensation of Los Angeles; the color is a soft yellow buff, shaded salmon-pink; flowers of pleasing form and enormous size, 7 to 10 inches without disbudding. The splendid flowers are held erect well above the foliage on the strongest stems I have ever seen on a Cactus Dahlia. After five hours of drenching spray, when the weight of accumulated moisture was sufficient to break down many well known varieties, the flowers of Ambassador were still standing gloriously erect.

Under date of November 14th, 1921, Mr. Alex Waldie, of Santa Paula, writes of this Dahlia as follows: "My plant has been a wonder. It overtops all others in merit—the one which all visitors instantly pick out as the 'BEST OF ALL DAHLIAS.' Is free from sunburn and sunbleach, its lasting qualities on the plant and keeping powers when cut on the peak." Mr. Waldie won FIRST PRIZE at the San Francisco show for the BEST AND MOST ARTISTIC DAHLIA, with Ambassador.

In 1923 Ambassador again won First Prize at the San Francisco show; it also won the Sweepstakes Prize at the Red Bank, New Jersey, show; in fact, so far as we have been able to learn it has been first everywhere it has been shown in competition.

Mr. C. B. Annett, a well-known connoisseur of New Jersey, says of Ambassador: "It is surely all you claim for it." The Garden Magazine speaks of it as: "THE FINEST OF ALL CACTUS DAHLIAS."

Ambassador was the unanimous choice of the San Francisco judges. One of the judges, upon being asked why the prize was given to this Dahlia from Southern California, replied: "IT WAS SO MUCH BETTER WE COULDN'T HELP IT."

Height, 5 feet. Field-grown tubers, each.....\$1.50

CALIFORNIA BEAUTY, C. (B)—The color is the nearest approach to a pure copper I have seen in a Dahlia. The flowers, of medium size, are produced in great profusion, much resembling the "Golden West" in shape and habit, but probably not quite so large. As a cut flower this is certain to be in much demand. This beautiful Dahlia was recently featured in the Rotogravure section of the New York Evening Post. Height, 3½ feet. Field-grown tubers.....75c

COUNTESS OF LOUNSDALE (Cannel)—Reddish salmon, changing to fawn; an old and reliable variety; g c. Height, 2½ feet.....15c

DAZZLER, C. (B)—Brightest orange-scarlet. Height, 3 feet.....50c

EVELYN M. DANE, H. C. (B)—Pink and cream, flowers large, stems and habit good. I consider this one of the most beautiful Dahlias I have seen; stock limited. This is another lovely variety that was pictured in the New York Evening Post. Height, 3 feet. Tubers, each.....\$1.00

ETENDARD DE LYON, C. (Rivoire)—Royal purple, good stems and habit. Height, 5 feet.....50c

EXQUISITE, H. C. (B)—After four years' trial we consider this beautiful Dahlia worthy of a place in any catalog; many visitors upon being shown Exquisite exclaim that "it IS Exquisite." The flowers are of medium size, in shape very similar to California Beauty. The color is soft yellow shaded salmon. Height, 3 feet. Tubers.....\$1.00

FLARE, C. (B)—The flowers are bright scarlet, produced on strong stems, well above the foliage; the habit of the plant is dwarf; desirable as a cut flower; g. c. Height, 2 feet.....25c

AMBASSADOR

F. W. FELLOWS, (Stredwick)—Extra large and fine, the color is a light orange-scarlet or terra cotta; the best of its color; xxxx e. g. Height, 3 feet.....50c

GEE WHIZ, Am. C. (B)—Of large size and pleasing shape; the color is a soft buff shaded with salmon; a Dahlia that **always comes perfectly double**; never shows an open center; e. g. Height, 4 feet. Strong tubers.....\$1.50

GOLDEN WEST—The King of Cut Flowers

GEO. WALTERS, Hybrid Cactus (Carter)—Very large flowers of a dark salmon color with buff base; e. g., xxx. Height, 3 feet.....**50c**

GLADYS SHERWOOD, H. C. (B)—As compared with other white Dahlias this is a giant among pygmies; flowers 9 inches in diameter without dis-budding. The flowers are of fine form and are held erect on strong stems; very free flowering; as a garden flower this has no equal among the whites. Another year's trial has convinced us that Gladys Sherwood is not only the greatest of all whites—it is one of the greatest garden flowers yet produced, as month after month through the long, hot summer it continues to be covered with an abundance of perfect blooms, full centered, and held on fine stems up above the foliage. Mrs. A. Ross, of Everett, Wash., says: "It was better than the picture; people came from far and near to see it. Your description cannot do it justice." Gladys Sherwood was a prize winner in five classes in the New York show. It is the white supreme. Gladys Sherwood won First Prize at the Short Hills, N. J., show for "The Most Beautiful" Dahlia. Height, 4 feet. Tubers, **75c**

GOLDEN WEST, Am. C. (B)—Large bold flowers with fine stems; shape and habit somewhat similar to Countess de Lounsdale, but the flowers are much larger; color, a deep rich yellow heavily overlaid with orange. Growing by the side of hundreds of varieties of the world's finest Dahlias, Golden West was more admired and praised by visitors to our gardens than any other, easily outselling all other Cactus Dahlias, both as cut-flower and in number of roots ordered. The foliage is very distinct light green, remarkably clean and healthy, making a fine setting for the rich golden flowers. No collection should be without this Dahlia; e. g., xxxx. Height, 5 feet. Strong field-grown tubers.....**35c**

HELEN DURNBAUGH

HELEN DURNBAUGH (Broomall), (Hybrid Cactus)—In this variety we have one of the grandest flowers yet produced. While the petals are not narrow, it is of most pleasing shape and large size, with fine upright habit, and the coloring is indescribably beautiful, being a delicate blush, deepening toward the center to a soft rosy glowing tint that must be seen to be appreciated. One of the best for cut flowers; its keeping qualities

can scarcely be surpassed. Helen Durnbaugh requires warm sunshine to bring it to perfection; in cold, foggy weather it is apt to be disappointing, but in ordinary weather it can scarcely be surpassed. Height, 3 feet. Field-grown tubers.....50c

JUAREZI

J. H. JACKSON (Vernon & Barnard)—Crimson-maroon; a good old-variety; e. g., xxx. Height, 3 feet.....25c

JOHN RIDING, C. (Stredwick)—For exhibition this is one of the best, its rich crimson color and fine form placing it in the front rank. Height, 3 feet.....75c

JUAREZI—Crimson-scarlet; this is the original Cactus Dahlia, all the Cactus Dahlias in cultivation are descendants of Juarezi. Height, 4 feet.....15c

KALIF (Englehart — Scarlet, extra large; e. g. c. Height, 3 feet.....50c

LAURINE, C. (B)—Deep pink, a shade darker than Dorothy Durnbaugh; the flowers are twice as large as that variety, and are held erect on splen-

did long stems; a strong grower and profuse bloomer. An extra good cut-flower. Height, 3 feet. Tubers.....\$1.00

LORRAINE WOERNER, H. C. (B)—Creamy yellow-shaded salmon pink. The beautiful blossoms of this variety are larger and of finer shape than Evelyn M. Dane and have longer stems. Height, 3 feet. Tubers each.....\$5.00

LOS ANGELES, C. (B)—Clear canary yellow, of large size and most perfect shape; this is the best of its class and color; e. g., xxxx. Height, 3 feet.....\$1.00

MAGNIFICENT, C. (B)—Oriental-buff overlaid satiny rosy salmon. Height, 3 feet.....\$1.00

MORNING LIGHT, C. (B)—Cactus, primrose yellow, extra large flowers with long, narrow petals slightly incurving; very free blooming; the habit is good and the flowers are held well above the foliage on stiff stems. This is entirely distinct from any other yellow cactus. Height, 5 feet.....\$3.00

MISS NANNIE B. MOOR, C. (B)—Rosy lavender pink, large well formed flowers, very full and double; strong upright habit; one of the best. Won the First prize at the Los Angeles Dahlia Show, 1917, for Best Dahlia Shown by Amateur; e. g., xxxx. Height, 2 feet.....50c

LOS ANGELES

- MISS STREDWICK** (Stredwick)—Pink, one of the finest yet raised; e. g., xxxx. Height, 3 feet.....**50c**
- MRS. STERN, H. C.** (Howard & Smith)—Lavender, petals serrate; very distinct in color and shape. Height, 3 feet.....**25c**
- MRS. ETHEL F. T. SMITH, H. C. (B)**—Creamy white shading to a lemon tint in center, produces flowers up to 10½ inches in diameter without budding, the flowers are held far above the foliage on strong stems. Won first prize at Oakland, California for largest flower in show. Height, 5 feet.....**75c**
- PIERROT, C.** (Stredwick)—This we regard as one of the finest of the new English introductions. The very large flowers are of splendid form and are borne in wonderful profusion; the color varies considerably, the ground color being a rich shade of amber slightly tinged with bronze; a part of the flowers are tipped with white, while others are solid color, but in this case the variation adds to the charm of the flowers; e. g., xxxx. Height, 3 feet. Tubers.....**50c**
- PROFUSION, H. C. (B)**—A medium-size pure white, and pleasing shape, so full and double that it never shows an open center; the flowers, which are held above the foliage, are produced in such marvelous profusion that they cover the plant with a mass of white. As a bedding variety I have not seen its equal. Height, 3 feet.....**\$1.50**
- SISKIYOU, H. C. (B)**—Pink-tinged mauve. This produced the largest flowers I have ever grown. It has created a sensation wherever shown and attracted more attention than any other flower in our gardens the past summer. The plants are extra sturdy and vigorous, and the flowers are held perfectly erect on strong stems. SISKIYOU won the first prize for the largest flower in the 1924 Los Angeles Dahlia Show, the blossoms shown being 12¾ inches in diameter; this was 1¼ inches larger than the largest Dahlia shown at the 1924 San Francisco Show. SISKIYOU also won first in Boston, and Baltimore. In 1923 it was shown at Short Hills, N. J., 14 inches in diameter; can you beat it? Height, 3 feet. Tubers.....**\$7.50**
- SUNNY SOUTH, H. C. (B)**—The color is a bright clear yellow without any shading, the flowers are immense in size, most pleasing in form, very full and deep in the center. The plants are quite dwarf and sturdy in habit; the flowers are held erect. Height, 2½ feet. Strong tubers.....**\$5.00**
- SURPRISE, H. C. (B)**—Rich orange-amber, bright yellow center; fine habit; xxxx, e. g. c.....**50c**
- TEHACHEPI, H. C. (B)**—Very large flowers of canary yellow on fine stems; flowers similar to Gladys Sherwood in shape, might also be called a Yellow Gladys Sherwood, and are produced in such abundance as to make it one of the bright spots in the garden. Height, 4 feet. Tubers.....**\$1.50**
- WASHINGTON CITY, H. C. (Broomall)**—The gigantic pure white star-like flowers of this variety were more greatly admired than any other Cactus Dahlia in our gardens last season; the stems are extra long, holding the immense blooms well above the foliage. Stock limited. Strong field tubers.....**50c**
- WHITE PERFECTION, C. (Broomall)**—A pure white of good size and fine form and habit; very free flowering; e. g. c., xxx. Height, 3 feet.....**\$1.00**

DECORATIVE DAHLIAS

GENERAL LIST

The Decorative Dahlias are between the Cactus and Show Dahlias in form, the majority of them being large, with broad flat petals. The immense size, pleasing form and habits of some of the recent introductions in this class are attracting the attention and admiration of lovers of the fine flowers, and they are now a rival of the Cactus varieties in popularity.

In the following list you will find some of the finest ever introduced by any grower in this or any other country.

AMUN RA, (Seal)—Reddish coppery-bronze, large flowers on good stems, in cool weather late in the season this is one of the most gorgeous Dahlias but with us in hot weather is apt to show a green button in the center. Height, 5 feet. Tubers.....\$2.00

AVALON, (B)—Pure clear yellow, the large flowers are very distinct and pleasing in shape, always full to the center, and produced in great abundance on strong stems. This is a flower with every good quality. A remarkable good keeper when cut, in fact I regard it as the **best yellow decorative for cutting**. Height, 4 feet. Tubers.....\$2.00

AUGUSTA R. JOHNSON, (B)—Yellow-buff shaded salmon; flowers very large and full centered; the color is very attractive; and extra good variety. Height, 3 feet. Tubers, each.....\$1.00

BEAUTY OF ROSEMONT, (B)—Rosy pink, buff base, fine stem; extra fine for cutting; e. g. c., xxxx. Height, 3 feet.....50c

BONNIE BRAE, (B)—Cream, shaded blush-pink. The flowers are of true decorative form and immense in size, but not suitable for cutting, as the enormous flowers are apt to be too heavy for the stems. Height, 3 feet \$1.00

BREEZE LAWN, D. (Dreer)—Orange-scarlet, this is the most brilliant red decorative Dahlia we have seen. The flowers are medium large and produced in great abundance on rather dwarf plants. Height, 2½ feet.....50c

CATHERINE COOPER, (B)—Rosy lavender large and pleasing shape. Stock limited. Height, 3 feet.....\$2.00

COVINA, (B)—Pure rose pink, certainly the best shade of pink I have seen in this class. The flowers, of medium size, are borne in great profusion on good stems well above the foliage. This variety is larger and much better in color than either Delice or Goodbye Delice. Height, 4 feet \$3.00

DELLA V. POTTER, (B)—A pleasing shade of lavender, part of the flowers coming with white tips. The flowers are very large and beautifully formed; an extra fine variety for the garden or exhibition. Height, 3 feet.....\$1.00

DR. MARSHALL A. HOWE, (B)—A magnificent large light pink, edge of petals a shade darker; flowers nine inches in diameter. For beauty of form and color I have not seen its equal. This variety is not good for cutting, but for the garden and for exhibition it will be hard to beat. Height, 3 feet. Strong field-grown tubers, each.....\$3.00

DR. TEVIS (Pelicano)—Old rose shaded copper and bronze; very large flowers, held erect on strong stems. Height, 5 feet.....50c

EAGLE ROCK (B)—Large massive flowers, approaching the show type in form; the coloring is exquisite, being a creamy white blended with apple-blossom pink; a strong grower and free blooming. Height, 3 feet. Tubers.....\$1.00

MR. CROWLEY

EVELYN ADAMSON, D.—The color of this lovely Dahlia is so unusual that we confess we do not know how to describe it unless we call it fawn pink, becoming lighter in color and more beautiful as the flower matures; large, well-formed flowers. Height, $2\frac{1}{2}$ feet.....\$2.00

FRANCES SEAMAN, (B)—Silvery rose-pink, large finely formed flowers held erect on fine stems; sure to become a favorite. Height, 3 feet. Tubers, each.....\$3.00

- GRANADA, (B)**—Clear lemon yellow, large flowers, good stems and habit. This Dahlia so closely resembles Tillamook that many mistake it for the same variety, the distinctive feature of it is the extraordinary width of the petals which have been grown from 2 to 2½ inches in width. Height, 3 ft. **\$5.00**
- GRACE ELLEN FAY, (B)**—Rosy crimson, shading darker in the center, large well formed flowers on good stems. Height, 3 feet.....**\$3.00**
- GOODBYE DELICE, (B)**—Color a shade lighter than Delice; is the purest pink I have seen in a Dahlia; the flowers of medium size, larger than Delice, are produced in the utmost profusion and are always held erect on good stems. Our rows of this Dahlia are the brightest spot in our gardens until November 15th, presenting a glowing mass of beautiful pink that is the admiration of everyone. As a cut flower I believe this to be without a rival in its color—a flower that no one will want to be without. I have put a low price on this most desirable variety because I want it to be tried in all parts of the country. Not more than one tuber to a customer. Height, 5 feet. Strong field-grown tubers.....**\$1.00**
- HALLOWE'EN, (B)**—Buff-yellow, shaded orange-bronze; in color this is very similar to "King of the Autumn," but produces flowers fully twice as large and many more of them. The flowers are held perfectly erect on the finest possible stems. This is an extra strong grower of branching habit, and should be planted five feet apart to be seen at its best. Height, 6 feet. Tubers, each.....**\$1.00**
- HELEN KELLER, D. (B)**—Named by request in honor of one of the world's most noted women; the color is almost identical with the well-known pink Dahlia, Rosemawr, but is an improvement on that variety, being larger and more beautiful in form. Height, 3 feet. Tubers.....**75c**
- INSULINDE (Hornsveld)**—Orange-bronze, beautifully formed flowers; very distinct in shape and coloring; blooms always perfectly erect on fine stems. I regard this as the best Holland variety I have seen. Height, 3 feet...**\$1.00**
- LADDIE (B)**—Soft yellow shaded orange. The brilliant orange tint in the depth of this flower gives it a glowing appearance that is fascinating; the large flowers are produced in profusion and are always held erect on strong stems; a most desirable cut-flower. Height, 3 feet.....**\$1.00**
- LA CRESCENTA (B)**—Sulphur yellow; blooms of ideal decorative shape and much larger than Stunner are produced in abundance on splendid stems standing perfectly erect. Height, 5 feet. Tubers.....**\$3.00**
- LA GLORIETTA, P. (B)**—Yellow at the base, shading to a beautiful rosy pink shade; the flowers are enormous in size; the habit is pendant; nevertheless I consider this the most beautiful Peony Dahlia I have seen; it will be sure to attract attention in any collection; won first prize at Los Angeles Show, 1920, for best Peony Dahlia. Height, 2½ feet.....**\$1.50**
- LIBERTY BOND (B)**—A blending of buff, bronze and salmon shades very difficult to describe. The flowers are very large and attracted more attention than any other Dahlia in our garden the past season; stems are strong, always holding the flowers erect; an extra vigorous grower of branching habit; requires plenty of room and good culture to produce full centered flowers. Height, 4 feet.....**\$1.00**
- MAY BLUMER (B)**—Lavender-pink, medium large flowers, held erect on good stems. Height, 3 feet. Tubers.....**\$5.00**
- MILLIONAIRE (Stillman)**—Light lavender, large flowers, plant rather dwarf. Height, 2 feet.....**75c**

MINNA BURGLE (Burgle)—Large bright red; a favorite with the florists; Height, 4 feet.....**25c**

MR. ALEX. WALDIE (B)—I regard this as one of the most beautiful decorative Dahlias; the flowers are large, held above the foliage on fine stems, and the coloring is unsurpassed—a creamy ground overlaid with delicate salmon-pink. While the flowers are not quite as large as Bonnie Brae or Miss Leota Cota, it surpasses both of those favorites in beauty of form and color, which makes it certain that it will be a most popular variety. This splendid Dahlia was among the Prize Winners in the East and has received high praise everywhere it has been shown. Height, 3 feet. Field grown tubers.....**\$1.00**

MR. CROWLEY (B)—The exquisite color of this Dahlia is most remarkable, being the brightest, most glowing shade of salmon-pink I have seen. The base of the petal is yellow. A flower that attracts immediate attention. The foliage is extra good in color and substance; the habit is dwarf; the flowers are of medium size and are held erect on strong stems. During the past season this Dahlia on account of its extraordinary color was more admired than any flower in our gardens, with the possible exception of "Siskiyou." Usually we do not advocate disbudding, but it is necessary in order to obtain the best results with Mr. Crowley. The crown buds should be removed and also but one of the buds on the branches, as they are borne on close terminal clusters. When this is done it can be cut with very good stems, and as a cut-flower it can not be surpassed. Height, 2 feet. Tubers, each.....**\$1.50**

MRS. ESTELLE LAWTON LINDSEY (B)—Scarlet and gold; the gorgeous coloring of the well known "Geisha" reproduced in an enormous full-centered decorative; the color varies on different blooms, but the two colors are always in evidence. The immense flowers, 7 to 9 inches in diameter, are on strong stems. Keeps well as a cut-flower. Height, 3 feet.....**\$1.00**

Mrs. Estelle Lawton Lindsey won First Prize at the Los Angeles Show for **THE LARGEST DAHLIA IN THE SHOW**, 1923. It also won first prize at the San Diego Flower Show, 1925.

MRS. BERTHA S. MORRIS (B)—Large, finely-formed flowers of deep rich garnet red; the best dark red of this class. Height, 3 feet.....**\$1.00**

PRIDE OF CALIFORNIA (Lohrmann)—Dark rich crimson of pleasing form and large size; flowers held erect on splendid stems; the best red decorative Dahlia for cutting yet introduced; Field-grown tubers, each.....**50c**

PRINCESS PAT (McWhirter)—Reddish old rose on lighter ground, good stems and habit. Height, 4 feet.....**\$1.00**

RED ROVER (B)—Rich crimson-red. The flowers are extra large, composed of very broad flat petals, held erect on finest possible stems. This flower is in a class by itself and is entirely different from any other Dahlia. Height, 3 feet.....**\$3.00**

ROSA NELL, D.—The color is a bright rose, the flowers are large, and I consider it the best shaped Decorative Dahlia I have seen, coming perfectly full and double until frost; good stems and habit. The color is a rare one in Dahlias and attracts immediate attention, while the form cannot be surpassed. This Dahlia, when it becomes known, will be in every flower lover's garden. The highest praise of this grand Dahlia has been received from all parts of the country where it has been tried. Mr. Alex. Waldie, of Santa Paula, California, the best informed Dahlia expert on the Pacific Coast says; "**It's the Best New Dahlia of 1920.**" This great Dahlia has given delight to those who have grown it in all parts of the country and has

ROSA NELL

received the highest praise everywhere. Mr. C. Louis Alling says; "Rosa Nell was all you claimed for it, and then some." A New Jersey customer writes that he won First Prize for BEST DAHLIA IN THE SHOW with a Rosa Nell bloom $11\frac{1}{4}$ inches in diameter. Height, 3 feet. Tubers..... \$1.00

- SNOWDRIFT (B)**—This giant white deserves its name. A very full deep-built flower with broad, waxy petals. Snowdrift won Gold Medal at Salem, N. J., show, and was also among the Prize winners in other shows. It is beyond question the finest pure white Dahlia in cultivation. Height, 2½ feet. Field-grown tubers.....75c
- STUNNER (B)**—A large light yellow of fine form; a strong, sturdy grower of upright habit. Height, 4 feet.....50c
- SOUV. DE GUSTAV DOUZON (Bruant)**—Orange-red; one of the largest and most popular of this class; e. g., xxxx. Height, 3 feet.....25c
- SYLVANIA (B)**—Creamy blush-shaded pink, fine stems and habit; a great favorite as a cut flower; xxx. Height, 3 feet.....50c
- TILLAMOOK (B)**—Canary yellow, magnificent in form and very large; has produced blooms 8 inches in diameter; the habit is good. Height, 3 feet. Field-grown tubers, each.....\$5.00
- U. S. A. (Hy. Cact.)**—Stillman, Brilliant Orange, the best of its class and color, while this is classed as a Peony Dahlia by some growers, I regard it as a Hybrid Cactus, and it is certainly one of the most satisfactory Dahlias in cultivation. Height, 4 feet.....\$1.50
- VIRGINIA HARSH (B)**—Peony. A most unusual and pleasing shade of pink; the large flowers, similar in shape to "Geisha," are borne well above the foliage in great profusion. Height, 3 feet. Tubers.....\$3.00

Pompom Dahlias

These are the same shape as the Show and Fancy Dahlias, but are much smaller. The neat, compact flowers are very fine for bouquets, and include nearly every color but blue.

- ALEWINE**—White tipped lavender, rather large. Height, 3 feet.....25c
- AMBER QUEEN**—Light ground shaded amber. Height, 3 feet.....25c
- BELLE OF SPRINGFIELD**—The smallest red, very dwarf. Height, 2 feet 25c
- CANARY**—Light yellow. Height, 3 feet.....50c
- CARISA**—Rosy lavender, good stems. Height, 3 feet.....50c
- CHIKUITA**—Orange-red yellow base.....50c
- CENSOR**—Purple plum color. Height, 2½ feet.....25c
- CLARRISA**—Cream, rose tips. Height, 2½ feet.....50c
- DISTINCTION**—Rich golden yellow with distinct orange tips, rather large. Height, 3 feet.....\$1.00
- ELSIE**—Orange-salmon. Height, 2½ feet.....50c
- GLOW**—Salmon-rose. Height, 2 feet.....25c
- GRACIE**—Clear pure yellow, petals closely quilled, a very neat and attractive flower. Height, 2 feet.....50c
- JUANITA**—Light yellow. Height, 3 feet.....25c
- JOHNNIE**—Dark maroon red. Height, 2 feet.....50c
- JULIUS**—Golden yellow, tipped orange. Height, 2½ feet.....50c
- KITTIE**—Yellow-buff, tipped rose red. Height, 2½ feet.....50c
- KLEIN DOMATIA**—Orange-buff.....50c
- LOTTIE**—Rosy purple. Height, 2½ feet.....50c
- LITTLE JIMMIE**—Sulphur yellow Height, 2½ feet.....50c
- MICKIE**—Scarlet. Height, 2½ feet.....25c

MURIEL —Purple-maroon, small, fine stems. Height, 2 feet.....	50c
NEATNESS —Cream tinted salmon. 2½ feet.....	50c
NELLY FRAZIER —Blush pink, tipped rose. Height, 3 feet.....	25c
ORANGE —Rich yellow, tipped orange, fine color. Height, 2½ feet.....	75c
PAPOOSE —Indian-red, brown-buff base. Height, 2 feet.....	50c
PHOEBE —Orange, yellow base. Height, 2½ feet.....	50c
PURE LOVE —Lavender, one of the best. Height, 2½ feet.....	50c
SNOWCLAD —Pure white. Height, 2 feet.....	25c
SUNSET —Orange, good color, but is apt to show open center. Height, 2 feet.....	25c
SECUNDA —Orange, yellow base. Height, 2½ feet.....	50c
TOT —Buff, crimson tips. Height, 2 feet.....	25c
VIRIDIFLORA —The green dahlia, this is a freak, in good soil it is apt to produce some crimson flowers. Height, 2 feet.....	25c
WHITE ASTER (Guiding Star)—White, with serrate petals. Height, 3 ft.	25c
YELLOW GEM —Golden yellow, dwarf and compact. Height, 2 feet.....	25c

Collarette Dahlias

These are similar to Single Dahlias, but they have a number of small petals around the central disk, generally of a different color, making a pleasing and striking contrast.

ABBE HUGONARD —Maroon-edged white, collar pink and white.....	50c
AUNT DINAH —Dark maroon, collar shaded lighter.....	50c

MAURICE RIVOIRE

CRUSADER — Crimson-rose, collar white, extra large and fine; one of the best.....	50c
FIREFLY (Broomall)—Bright scarlet, collar yellow; rather small but very bright and showy.....	15c
FLAMBEAU (Broomall)—Bright scarlet, collar yellow; extra large and fine; one of the best.....	50c
GEANT DE LYON (Rivoire)—Very large flowers, crimson-maroon, collar white; the finest of this class. Height, 2 feet. Green plants in May	75c
HERALD —Light rose, collar white; large and fine. Height, 3 feet.....	50c
MME. E. POIRIER —Violet-purple, pure white collar, very attractive, one of the best. Height, 3 feet.....	50c
SOUVENIR DE CHABAUNNE (Rivoire)—Yellow-buff and red, collar which is extra large and distinct is buff and white. Height, 3 feet.....	50c
SWALLOW —Pure white, collar white. Height, 3 feet.....	50c
YELLOW PRIZE —Canary yellow, collar Sulphur yellow. Height, 3 feet.....	50c

Evolution of the Dahlia

CHAPTER NINE

Seeds and Seedlings, and some other topics. I have received requests for the earlier chapters of "Evolution of the Dahlia," some of my friends desiring to obtain all of the previous chapters. I regret to say that it is impossible for me to supply them, as my stock of some of the issues of the "Dahlia Guide" is entirely exhausted. I have no copy of my 1903 Catalogue and would be glad to exchange a \$10.00 tuber for one.

In regard to my articles on the Dahlia I will say that it is my intention to re-write and re-arrange the chapters I have written, also to write several additional chapters covering all the principles of Dahlia culture and propagation, and to publish the same in book form. This book will be sold for not less than \$1.00 nor more than \$2.00, and I expect to lose money on it at that, as it costs considerable to publish a book, and at best the demand is likely to be quite limited.

I am not writing this with the expectation of making anything on the venture but wholly with the idea of giving others the benefit of my years of experience with Dahlias. As to how soon the publication of this work is undertaken depends largely upon you who read this. If you think you would be interested in reading it drop me a post-card to that effect so that I may know that there are some who would be interested in it.

I will tell the best I can about my methods of raising seeds and seedlings and give such other information as may appear to me to be useful and interesting to growers of the Dahlia. I have had a great many requests for Dahlia Seed. I will state that I have no Dahlia Seed for sale. I cannot raise enough GOOD seed for my own use, and I will not sell any other kind.

I suppose the would be buyers have an idea that they would get something good from my seed; I will say in all candor that they are very liable to be disappointed, they would probably get some very pretty flowers, (I throw away thousands of them), the real good Dahlia, the Dahlia that is distinct from and better than any of its predecessors will seldom average more than one in a thousand, and the real top-notchers such as Eagle Rock Beauty for instance is one in Ten Thousands; it is true that growers sometimes obtain a fine Dahlia from a limited number of seedlings but such may be regarded as accidents, and are far from being the rule. I see that some Growers offer for sale hand-pollinated seed, this I regard as BUNK. Such Growers are either wilfully misleading the public or else they know very little about Dahlias; unless the flower from which seed has been obtained has been protected from ALL insect visitation, it is incorrect to call it hand-pollinated, for the work of bees and other insects will be many times more effective than all the work that may have been bestowed upon them by the grower with his brush. When all insects have been excluded from a blossom you will obtain very few seeds, and they will usually produce weak plants and undesirable flowers. I am speaking now from experience. Purely han-

pollenized seed could not be sold for any reasonable price, and in the great majority of cases would be disappointing.

I believe that there is a way to obtain the crosses desired, and in a future chapter I may endeavor to explain how it might be done. Even then we are gambling with Nature, for with the parent flowers which we now use which are the results of years of crossing and re-crossing the heredity of the Dahlia steps in and is likely to upset our calculations for the seedlings are just as liable to partake of the characteristics of some of their many more remote ancestors as they are to resemble their direct parents; hence the importance of selecting parents in which the best traits of inheritability are shown. I have found that some of the best Dahlias we now have are deficient in this respect.

At the risk of being monotonous I am going to say more in regard to the failure of Double Dahlias to come perfect. I suppose I have received a greater amount of praise for Ambassador than for any Dahlia I have introduced and also a greater number of complaints of its failure to come double. In the first place there is a vast difference in the constitution and action of Dahlias under unfavorable conditions. An extreme of temperature for instance may have but little effect upon one variety, but be little short of disastrous to another. I have carefully watched the actions of Ambassador under various conditions. I have some rows of it that have grown in the same place undisturbed for four years, when they bloomed last summer probably not more than 10% came double, which I think was due to the overcrowded condition of the much too numerous stalks, they were robbing each other in their struggle for existence. Where there was a break in the row and a plant had plenty of room it produced nearly 100% perfect flowers. A row in my main garden which was newly planted, began blooming in hot weather and produced only about 5% perfect flowers, but later on when we had quite a long spell of cooler weather, nearly 75% of the flowers were double, this would seem to indicate that the Ambassador does not like extreme hot weather. Extreme heat causes the hardening of fibres in the stalks or stems so that the flow of sap is restricted, the blooms cannot fully develop unless the sap (the life-blood of the plant) can flow freely and uninterruptedly. Some stems may be affected and others not; for I have seen perfect flowers and others almost single on the same plant which show that the cause of failure is in the branches or stems, and not in the roots for if it was the fault of the tubers or the root system ALL of the flowers would be poor. While this is only one of many causes of poor flowers, I am convinced that in the majority of cases the trouble is above ground, and not in the tubers.

The Head of one of the largest retail firms in America told me that they were going to discard their stock of Ambassador and procure fresh stock from a nearby Grower whose Ambassadors grow to perfection. Now unless the tubers are diseased or infested by insects (of which I have no knowledge) I would not discard them, for I do not believe the fault lies with the tubers.

In 27 years I have never discarded Dahlias on account of their failure to make perfect flowers. I have planted such Dahlias year after year, and

seldom have I been disappointed. I will repeat a previous statement, "When a Dahlia starts to grow it quickly forms a new set of tubers and by the time it has reached the blooming stage it is obtaining by far the greater part of its nourishment through the newly formed root system, and it matters little what the old tuber may have done the previous year. So why blame all the shortcomings on the tubers?"

Yours for a better understanding of the Dahlia.

J. J. BROOMALL.

EAGLE ROCK—A MASTERPIECE OF NATURE

The Dahlia Honored Again

The Los Angeles Council, acting upon the request of the Chamber of Commerce of Eagle Rock, has changed the name of our street to

DAHLIA DRIVE

and our address is now

5221 DAHLIA DRIVE

EAGLE ROCK, CALIFORNIA

A Brief History of the Dahlia

WHERE IT CAME FROM AND HOW IT HAS BEEN IMPROVED

The Dahlia is a native of Mexico and before the invasion of Mexico by Cortez was grown by the Aztecs under the name of ACOCTLI.

It was named DAHLIA in honor of Professor Andrew Dahl, a Swedish Botanist, and was first cultivated in Europe about 130 years ago.

Dahlia Variabilis, the forerunner of the common or Show Dahlia, was single in its wild state. The first perfectly double flowers were obtained by M. Dankelaar, of the Botanical Gardens of Belgium, in 1814, and from this source came the well-known double varieties so common in the gardens of the East a half century ago.

The specific name Variabilis was given because plants grown from seed of the original type produced flowers of various colors without hybridizing.

Dahlia Juarezi, the original Cactus Dahlia, was named after a former President of Mexico and was discovered in Juxphaor, Mexico, in 1872, by J. T. Vanderberg, and sent by him to an English florist who exhibited it in England in 1882. The graceful and brilliant color of the flower at once captured the fancy flower lovers, and today there is no flower more popular.

The progeny of Dahlia Juarezi not only "broke" into various colors, but into different shapes as well. It was by selecting the most desirable of these and re-selecting the finest from each succeeding generation of plants, that the CACTUS DAHLIA has been worked up to its present high state of perfection. The contrast between Juarezi and some of its gorgeous descendents is so great that it almost staggers belief. Indeed the marvelous transformation wrought in this wonderful flower in the past 34 years must seem to those unacquainted with the possibilities of plant life more like a tale from Arabian Nights than actual reality.

There are three important factors in connection with this improvement. These are HYBRIDATION, SELECTION and CULTIVATION, and the latter two are by far the most important. (This statement will apply not only to Dahlias, but to all cultivated plants that have been improved in beauty and usefulness by the industry of man.) Without good cultivation, selection would be impossible, for that is necessary to determine the merits of the plant; and without intelligent, discriminating selection, hybridation would in most cases be of little avail. GOOD CULTIVATION, then, having been the most important factor in bringing the Dahlia to its high state of development, it naturally follows that the best possible cultivation is necessary in order to maintain the high standard. The finest plants that grow will not prove satisfactory if they are treated indifferently or unintelligently. If you would succeed, I would say:

"All that you do, do with your might;
Things done by halves are never done right."

PARTIAL VIEW OF OUR GARDENS

Photo taken in October after five month's blooming.