Historic, archived document

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

Dahlia Guide

EB 28 1923

62.09

READ CHAPTER SIX "EVOLUTION OF THE DAHLIA"

> IT EXPLAINS THE FACTS AND FALLACIES OF DAHLIA GROWING



J. J. BROOMALL Eagle Rock, California

1923

COPYRIGHT 1923 BY J. J. BROOMALL



GLADYS SHERWOOD ... The Greatest of all Whites

For Description See Page 17

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 to 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 introduction, 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,

257 Rosemont Avenue, Eagle Rock, Calif.

January, 1923.

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 February. 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

257 Rosemont Avenue, Eagle Rock, California Phone Garvanza 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 Rosemont Avenue, two blocks north of the terminus of the Eagle Rock City Car Line.

HOW TO GROW FINE DAHLIAS

In a 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 law 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, it 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 began. 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 subsoil 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 the 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 your 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 faborable conditions for quick and healthy root action. Now if a tuber should be four to 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 foliages 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 and 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 or 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. The 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 DISEASES

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 result 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 can not 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 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 ceased 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 the Dahlia 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 $2\frac{1}{2}$ 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 gardens 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 plauting 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, that 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.

NEW DAHLIAS FOR 1923 ORIGINATED AT THE EAGLE ROCK DAHLIA FARM

I take pleasure in offering the following new varieties, believing that they will be satisfactory, and a source of pleasure to those who grow them; visitors at the Farm during the past summer could scarcely find words to adequately express their admiration of them.

each\$	10.00
Halloween, Dec; 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, 6 ft., tubers, each\$	5.00
Limpea, Cact; medium sized flowers of fine form, pure white in color,	
held erect on good stems, 3 ft., tubers\$	3.00
Media, Dec; large flowers on splendid stems, the color is very distinct	
and pleasing, the ground color being a rich buff or jersey cream	
	r 00

Moonlight, Dec; large massive flowers, light primrose-yellow or cream
color, strong stems holding the flowers erect. 4 ft., tubers\$ 5.00
Mrs. Jones, Cact; apricot, shaded salmon, good stems and habit, 3 ft\$ 2.00
Mrs. H. Pitman, Dec; cream shaded pink, large flowers of beautiful
color, and good stems. 3 ft\$10.00
Profusion, 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 va-
riety I have not seen its equal. 3 ft
Samoa, Cact; crimson-maroon, medium large flowers of good shape
and fine stems. 3 ft\$ 2.00
Siskiyou, H. C., pink-tinged mauve, this produced the largest flowers
I have grown, it has created a sensation wherever shown, and at-
tracted 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, 3 ft. Owing to
heavy advance orders we can only offer green plants of this great
novelty. Plants each\$25.00
Sunny South, H. C., this I regard as the finest pure yellow Dahlia I
have seen in any class, 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. $2\frac{1}{2}$ ft.
strong tubers
flowers similar to Gladys Sherwood in shape, might almost be
called a Yellow Gladys Sherwood, and are produced in such
abundance as to make it one of the bright spots in the garden. 4
ft., tubers\$10.00
Tujunga, H. C., rich garnet red blooms of immense size, captured the
fancy of all who saw it. The stems are pendant, but so striking
were the flowers that people ordered it regardless of stems. 4
ft\$10.00
Virginia Harsh, 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. 3 ft\$10.00
and the formage in group profession of formation (1000)

NEW DAHLIAS FOR 1922 ORIGINATED AT THE EAGLE ROCK DAHLIA FARM

Annie Laurie, P., a most pleasing shade of rose-pink with fawn base;	
the habit is dwarf, and the stems good, holding the flowers well	
above the foliage. Tubers, each\$	2.00
Augusta R. Johnson, D., yellow-buff, shaded salmon; flowers very	
large and full centered; the color is very attractive, an extra	
good variety. 3 ft., tubers, each\$	5.00
Exquisite 2nd, 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 me-	
dium size, in shape very similar to California Beauty. The color	
is soft yellow shaded salmon. 3 ft., tubers\$	2.00
Lorraine Woerner, H. C., 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. 3 ft. Having sold	
short on this beautiful Dahlia, we can only supply green plants,	
Each	0.00

- Mr. Alex. Waldie, D., 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 grown. 3 ft., field-grown tubers....\$ 5.00
- Yellow Chrysanthemum, H. D., the name describes the flower, large fluffy flowers with very numerous petals, which are slightly twisted, giving them a very unusual and attractive appearance; plants are rather dwarf, sturdy, upright habit. 2 ft., tubers, each..\$ 2.00

DAHLIAS THAT HAVE MADE EAGLE ROCK FAMOUS

Introduced by J. J. Broomall

OUR 1920 AND 1921 INTRODUCTIONS

- Most of these varieties produce flowers from 7 to 10 inches across without disbudding or special care.
- Ambassador C., 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 in. 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 sun-bleach, 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.
- To the best of our knowledge Ambassador has not been shown in competition in the East but was awarded a Special Prize at the Red Bank, N. J. Show. Mr. C. B. Annett, a well known connoisseur of New Jersey says of Ambassador—"It is surely all you claim for it."



A High Compliment—Ambassador was the unanimous choice of the judges at the San Francisco Show. One of the judges upon being asked why the prize was given to this Dahlia from Southern Cal- ifornia, replied, "It was so much better we couldn't help it." 4 ft., field-grown tubers	5.00
Barbara Edwards, D., flush pink, good stems and habit, a fine cut flower, 3 ft	2.00
Bonnie Brae, D., 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 stem, 3 ft	3.00
Catherine Cooper, D., large flowers of fine form, good stems and habit; rosy lavender in color; the blossom the little girl is holding scarcely does the flower justice. Catherine Cooper was one of the 24 best American Dahlias in the New York Show,	
2 1/2 ft\$	2.00



- California Beauty, C., 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. 3½ ft., field-grown tubers.......\$ 3.00
- Della V. Potter, D., 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, 3 ft....\$ 1.00
- 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, 2¹/₂ ft......\$ 2.00

Evelyn M. Dane, 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. 3 ft., tubers, each.......\$ 3.00

Eclipse, C., yellow-buff shaded orange, large, good shape and stem, 4 ft., \$2.00

Goodbye Delice, R. D., color a shade lighter than Delice, is the purest pink I have seen in a Dahlia; the flower, 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 was 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, 5 ft., strong field-grown tuber\$ Grace Allen Fay, D., rosy crimson shading, darker in the center, large well formed flowers on good stem, 2 ½ ft\$	2.00
Grace Darling, C., soft pink blending to buff at the base, long narrow petals, good stems, shape and habit, 2 ft	50c
Helen Keller, D., 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 it is an improvement on that variety, being larger and more beautiful in form, 3 ft., tubers\$	2.00
Ida May, C., rosy pink, shading to white at the tips, fine large flowers borne on strong stems well above the foliage, a first class cut flower, 4 ft\$	
Juliet May, P., lavender pink, shading to white in center, blooms semi- cactus in shape are immense in size and held erect on good stems, free flowering, 5 ft	2.00
Laddie, D., soft yellow shaded orange, the brilliant orange tint in the depth of this flower gives it a glowing appearance that is fas- cinating; the large flowers are produced in profusion and are always held erect on strong stems; a most desirable cut flower, 3 ft	2 00
La Glorietta, P., 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; 2½ ft\$	
Lassie, H. C., buff shaded salmon, large flowers, good stems and habit; a splendid flower under favorable conditions, but it will not stand extreme heat; 3 ft	
Laurine, deep pink, a shade darker than Dorothy Durnbaugh; the flowers are twice as large as that variety, and are held erect on splendid long stems; a strong grower and profuse bloomer. An extra good cut-flower, 3 ft., tubers	
Liberty Bond, 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, 4 ft\$	3 00
Luella, D., one of the most beautiful lavender colored dahlias, of extra large size; while this is distinctly a crotch bearer, I consider it one of the finest garden Dahlias I have seen, 2 ½ ft\$	3.00
Marion Cooper, D., blush pink and cream. A very beautiful flower, 3 ft\$	5.00
Minnie Gore, D., a very distinct shade of pink, with buff base, fine large flowers on long stems and free flowering; 4 ft\$	2.00

 Miss Leota Cota, H. D., a more beautiful blending of creamy buff and pink would be hard to imagine; the flowers as shown in the cut are enormous, coming 10 inches in diameter; this is not good for cutting as the huge flowers are usually too heavy for the stems, but as an exhibition flower it is going to be hard to beat; 3 ft., stock limited, small field grown tubers\$ 1.0 Mrs. Howard Prowse, H. C., lavender colored flower, extra large, 	0
always full to the center; a fine flower, always perfectly erect on strong stems; one of the largest and best we have seen in this class, having no tendency to show an open center; 4 ft\$ 2.0	0
Mrs. Estelle Lawton Lindsey, D., scarlet and gold; the gorgeous color- ing of the well known "Geisha" reproduced in an enormous full- centered decorative, the color varies on different blooms, but the two colors are always on evidence; the immense flowers, 7 to 9 in. in diameter, are in strong stems; keeps well as a cut flower; 3 ft	
Mrs. J. C. Hart, H. D. (Hart), this gigantic flower, grown by one of our customers, as far as color and size is concerned is so far ahead of any red I have seen that there is nothing to compare with it; the color is a pure rich scarlet-red without any shading; the size is enormous, the shape is somewhat similar to Helen Durnbaugh, but I regret to say the stems are not strong enough to hold up the heavy blooms; but as an exhibition flower this Dahlia will create a sensation. This Dahlia must have plenty of room and the very BEST CULTURE in order to produce per- fectly double flowers; 4 ft	
Miss Barber, D., rosy mauve, medium sized flowers, borne in the	
utmost profusion on fine stems; 4 ft\$ 2.00 Mrs. Zadow, P., rosy carmine, tipped buff, semi-cactus in form; the	0
 large flowers are held erect on good stems; 3 ft\$ 3.00 birs. Ethel F. T. Smith, creamy white, shading to a lemon tint in the center. This is the largest Dahlia I have grown, producing blooms up to 10% inches in diameter without disbudding; it is a profuse bloomer, and the flowers are held far above the foliage on strong stems, winning the admiration of all visitors; won the first prize at Oakland, California, for largest flower in show; 5 ft	
Red Rover, D., rich crimson-red; the flowers are extra large, com- posed of very broad flat petals, held erect on finest possible stems; this flower is in a class by itself and is entirely different	J
from any other Dahia; 3 ft\$ 3.00	0
Resplendent, C., bright pink with white tips, beautiful in color and shape: the coloring of this flower is unsurpassed: 3 ft. \$ 3.00	0

AND NOW WE COME TO THE GREATEST OF ALL DECORATIVE DAHLIAS

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, if I could have but one Decorative Dahlia this would be my choice, as 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

a, D., the coloring of this damna is very difficult to describe,	
being a blending of salmon, orange and coppery tints, the fully	
opened flower reminding one of the Herriot Rose; 21/2 ft\$ 3.0	00

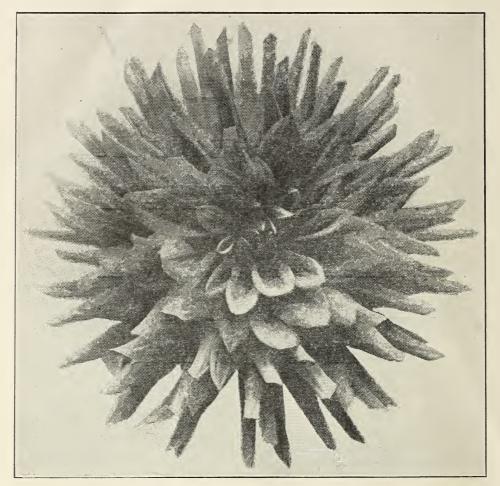
Zenobia, H. D., blush pink, large flowers, and a free bloomer, admired by everyone; 3 ft......\$ 2.00

CACTUS DAHLIAS

GENERAL COLLECTION, INCLUDING THE NEWEST AND BEST FROM VARIOUS RAISERS

Explanation: The name in brackets is the name of the introducer. The letter e following the description of a Dahlia signifies that it is suitable for exhibition; g, that it is desirable for garden; and c, that it is a good variety for cutting; xxx is to show that it is considered fine, and xxxx that it is extra fine, while the numerals, 3, 4, 5, etc., give the average height when grown under ordinary conditions. I believe this system will be a useful guide to the purchaser and it will avoid a useless repetition of words in describing the flowers.

Ajax, orange-buff, large, g., 4 ft.	250
Alabaster (Stredwick), a pure white, of fine form, 3 ft. green plants	
in May	750
Celia, lavender pink, a favorite, g., 21/2 ft	150
Countess of Lonsdale (Cannel), reddish salmon, changing to fawn,	
an old and reliable variety, g. c., 21/2 ft.	15
Dazzler (Broomall), brightest orange-scarlet, e. g., 3 ft	500
Esther, pure soft scarlet, of large size, and fine incurving shape, e.g.,	
3 ft.	500
Etendard de Lyon, large royal purple, 4 ft	500
Excelsior (Broomall), an ideal cut flower of medium size, the most	
beautiful color of shrimp pink imaginable, held erect on long	
stems; this is the tallest grower we have seen, g. c. xxxx, 8 ft\$	1.00
Flare (Broomall), the flowers are bright scarlet, produced on strong	
stems, well above the foliage, the habit of the plant is dwarf; de-	
sirable as a cut flower, g. c., 2 ft.	250
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., 3 ft.	750



GOLDEN WEST-The King of Cut Flowers

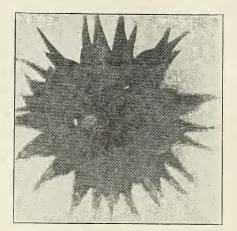
- Golden West (Broomall), large bold flowers with fine stems, shape and habit somewhat similar to Countess de Lonsdale, but the flowers are much larger, color a deep rich yellow, heavily overlaid with orange. Growing by the side of hundreds of varieties of the world's finest Dahlias, Golden West was more admired and praised by visitors to our gardens than any other, easily outselling all other Cactus Dahlias, both as cut flowers and in number of roots ordered; the foliage is a 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, 5 ft., strong field-grown tubers.

35c



17

- Harum Scarum (Broomall), a most decided novelty, the flowers are of medium size and usually only semi-double; the coloring is most unusual, being a bright wine-red shading to light yellow and cream at the tips; the colors vary on different flowers and are borne so profusely as to make it most attractive in the garden; the stems are long and fine for cutting; g. c., 3 ft.....
- 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, 3 ft., field grown tubers

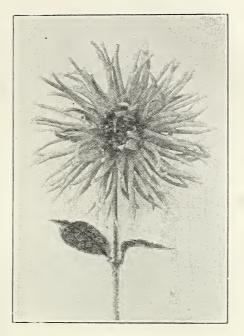


JUAREZI

Irene Satis (Stredwick), amber-buff shading to bronze, flowers of large size and fine form, the habit is good, e. g., xxxx, 3 ft	75c
J. H. Jackson (Vernon & Barnard), crimson-maroon, a good old va- riety, e. g., xxx, 3 ft	15c
John Riding (Stredwick). For exhibitors this is one of the finest, its exceptional size, perfect form, great depth and deep rich crimson	
color placing it in the front rank, e. g., xxxx, 3 ft	75c
Juarezi, crimson-scarlet, this is the original Cactus Dahlia, all the Cactus Dahlias in cultivation are descendants of Juarezi, 4 ft	15c
Kalif (Eenglehart), scarlet, extra large, e. g. c., 3 ft	50c
La Favorita, H. C., medium size flowers of reddish orange, 3 ft	75c
Los Angeles (Broomall), clear canary yellow of large size and most perfect shape; this is the best of its class and color e. g., xxxx, 3 ft	2.00
Madame Le Brun (Broomall), rich violet purple shaded black, good	
shape and stems. THIS DAHLIA WON THE ELKS' SILVER CUP AT THE EVERETT, WASHINGTON, DAHLIA SHOW, 1914, AND AGAIN IN 1915 AND 1916, AWARDED FOR THE BEST PURPLE CACTUS DAHLIA. Mme. Le Brun also won the Elks'	
Silver Cup at the Western Washington show, 1921; 3 ft., tubers	75c

50c

75c



LOS ANGELES

Magnificent (Broomall), one of the grandest Cactus Dahlias, of fine form and immense size, coming 8 inches in diameter without dis- budding; the color is such as to attract attention among hundreds of varieties, and is very difficult to describe, the ground color be- ing oriental buff, overlaid with satiny rosy salmon, wonderfully free blooming, e. g., xxxx, 3 ft.; strong field-grown tubers, each\$ Magnificent won first prize at San Diego Flower show for best dahlia in show.	1.50
Miss Nannie B. Moor (Broomall), 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, 2 ft	50c
Miss Stredwick (Stredwick), pink, one of the finest yet raised, e. g.,	F 0
xxxx, 3 ft Mme. E. P. De Normandie (Broomall), silvery pink, shaded lilac,	50c
large, flowers of most distinct appearance, fine for cutting, g. c.,	
xxxx, 3 ft., strong field-grown tubers	50c
Mrs. Stern (Howard Smith), lavender, petals serrate, very distinct in	
color and shape, 3 ft.	25c
Natick, H. C., pure yellow, medium large, 21/2 ft	50c
New York (Stredwick), yellow shaded pinkish salmon, an attractive	
color and of fine form, e. g., 3 ft Nibelungenhort, old rose, tinted apricot, large, 3 ft	75c 50c
Pierrot (Stredwick), this we regard as one of the finest of the new En-	000
glish introduction, 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, 3 ft., tubers	50c

Peace (Broomall), a fine white of large size, producing perfect flow- ers until middle of December, e. g., xxx\$	3.00
Phenomenal (Stredwick), light pink with narrow incurving florets, an English variety of much beauty, e. g., 3 ft\$	1.00
Skookum Tillicum (Strong Friend) (Broomall), named in honor of my old friend, Skookum the Trapper, immense star-shaped flowers on bold strong stems, well above the foliage, crimson-red shaded maroon, xxxx, e. g., 4 ft	50c
Sunburst (Broomall), orange-buff, xxx, 3 ft Surprise (Broomall), rich orange-amber, bright yellow center, fine habit, xxxx, e. g. c.	25c 50c
Talamasmico, H. C., (Broomall), rich crimson-maroon flowers of large size, and held well above the foliage on splendid stem, e. g. c., 4 ft.	1.00
Tom Lundy, H. C. (Fenton), bright crimson, one of the largest Hybrid Cactus, e. g., 3 ft	50c
Valiant (Stredwick), crimson-scarlet, one of the best English varieties of its class and color, e. g., 3 ft	1.00
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	75c
White Perfection (Broomall), a pure white of good size, and fine form and habit, very free flowering, e. g. c., xxx, 3 ft	50c
White Japanese Chrysanthemum (Broomall), a large Chrysanthemum- like Dahlia with long twisted petals, a decided novelty and greatly admired, field grown tubers, each	1.00
Wolfgang Von Goethe, medium sized flowers of a pleasing salmon color, 3 ft	25c

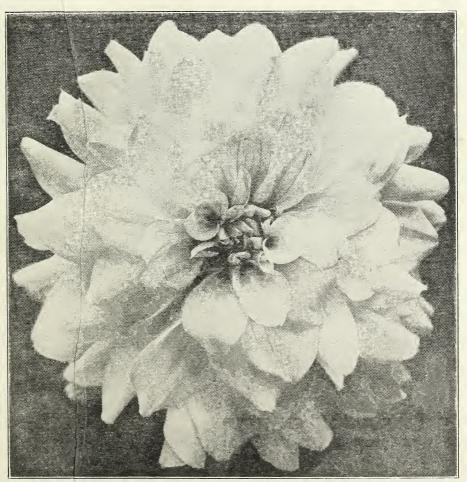
NEW GIANT DECORATIVE DAHLIAS

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 graceful habits of some of the recent introductions in this class are attracting the attention and admiration of the lovers of fine flowers, and they are likely to become a rival of the narrow-petaled 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.

Amarillo (Broomall), one of the best yellow decorations yet raised, large, well formed flowers of true decorative type held erect on	
splendid stems, xxxx, e. g. c\$	1.00
Beauty of Rosemont (Broomall), rosy pink, buff base, fine stem, extra	~ .
fine for cutting, e. g. c., xxxx, 3 ft.	50c
Copper (Doolittle), yellow shaded bronze, very large, e. g., xxx, 3 ft	50c
Dr. Tevis (Pelicano), old rose shaded copper and bronze, very large flowers held erect on strong stems, e. g. c., xxxx\$	1.00
Mrs. Bertha S. Morris (Broomall), large, finely formed flowers of deep rich garnet red, the best dark red of this class, e. g. c., xxxx, 3 ft\$	1.00
Oneonta (Broomall), rosy pink, large, close-built flowers, extra strong grower. Will succeed anywhere, e. g. c., 4 ft\$	1.00

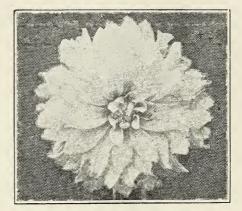
Polaris, (Broomall) a fine pure white, of fine form as shown in the picture (which was taken from a photograph). The flowers are held well above the foliage on good stems, e. g. c., 3 ft\$	2.00
Pride of California (Lohrmann), dark rich crimson of pleasing form and large size, flowers held erect on splendid stems, the best red decorative Dahlia for cutting yet introduced, e. g. c., xxxx. Field grown tubers, each	75e
Rosemawr (Broomall), immense flowers, rich rose pink, dwarf branching habit, by far the best pink decorative we have seen, it captivates every one; e. g., 2 ½ ft	
Shasta (Broomall), a very fine large white, borne on long stems, the petals are serrate, very free flowering, the best white for cutting we have seen, e. g. c., 5 ft	
Snowdrift (Broomall), 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 Dahliz in cultivation. 2½ ft., field grown tubers	



POLARIS

- Whopper (Broomall), the manager of a leading Los Angeles flower shop, upon being shown this Dahlia, called it a "Whopper." Yellow-buff shaded orange, such a rank grower that the plants are almost tree-like in proportions, e. g. c., xxxx, 6 ft.......\$ 1.00

DECORATIVE DAHLIAS GENERAL LIST



ALTADENA

Altadena (Broomall), a fine large white, stems and habit good, e.g. c.,	50c
Black Prince, dark maroon, e. g., xxx	15c
Challenge (Gill Bros.), light red, tips, white stem, and habit good	50c
Countess (Broomall), the purest and deepest lavender color we have seen in a Dahlia, flowers medium size, 2½ ft	25c
Crimson Giant, bright crimson red of fine shape and perfect habit, e. g. c., xxxx, 3 ft	50c
Delice, a bright clear pink, medium size	25c
Eagle Rock (Broomall), 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	1 0 0
blooming, 3 ft., tubers\$	1.00
Grand Mogul (Wilmore), red tipped white, 3 ft	15c

NAXESolutionNOTE—The majority of variegated Dahlias have a tendency to produceflowers of solid color. This is especially true of Le Grand Manitou, manyof the flowers running to the darker color, when it becomes a fine purplishmaroon, and one of the best of that color.Lucero (Broomall), brown-buff shaded bronze, extra long stems andfine habit, fine for cutting, sure to become popular, e. g., xxxx, 4ft.ft.dwarf, 2 ft.dwarf, 2 ft.e. g. c., 4 ft.g. c., 4 ft.g. c., 4 ft.good stems and habit, 3 ft.ft.state and the purplish is a popular variety.ft.good stems and habit, 3 ft.ft.good stems and habit, 3 ft.good stem stems, 50cProf. Mansfield, a variegated flower, frequently showing yellow, red, bronze and white in one flower; the color, however, is quite variable, 3 ft.good stems of this class, e. g., xxxx, 3 ft.good stem and habit, a great favorite as a cut flower, xxx, 3 ft.ft.good stem and habit, a great favorite as a cut flower, xxx, 3 ft.ft.	Jack Rose (Peacock), small crimson, 2½ ft
fine habit, fine for cutting, sure to become popular, e. g., xxxx, 4 ft.25cMaiden's Blush (Broomall), white shaded blush pink, 4 ft.25cMillionaire (Stillman), light lavender, large flowers, plant rather dwarf, 2 ft.1.00Minna Burgle (Burgle), large bright red, a favorite with the florists, e. g. c., 4 ft.25cMme. Van Den Dael, light pink, a popular variety.25cMrs. Hartong (Wilmore), salmon-buff tipped pinkish white, 4 ft.15cNevada, a fine pure white, good stems and habit, 3 ft.1.00Nieva, pure white, extra full and double, good stem, free blooming, 3 ft.50cProf. Mansfield, a variegated flower, frequently showing yellow, red, bronze and white in one flower; the color, however, is quite variable, 3 ft.25cSouv. de Gustav Douzon (Bruant), orange-red, one of the largest and most popular of this class, e. g., xxxx, 3 ft.25cSylvania (Broomall), creamy blush shaded pink, fine stem and habit,25c	NOTE —The majority of variegated Dahlias have a tendency to produce flowers of solid color. This is especially true of Le Grand Manitou, many of the flowers running to the darker color, when it becomes a fine purplish
Maiden's Blush (Broomall), white shaded blush pink, 4 ft	fine habit, fine for cutting, sure to become popular, e. g., xxxx, 4
Minna Burgle (Burgle), large bright red, a favorite with the florists, e.g. c., 4 ft	Maiden's Blush (Broomall), white shaded blush pink, 4 ft
Mrs. Hartong (Wilmore), salmon-buff tipped pinkish white, 4 ft15cNevada, a fine pure white, good stems and habit, 3 ft\$1.00Nieva, pure white, extra full and double, good stem, free blooming, 3 ft	Minna Burgle (Burgle), large bright red, a favorite with the florists,
Nevada, a fine pure white, good stems and habit, 3 ft\$ 1.00Nieva, pure white, extra full and double, good stem, free blooming, 3 ft	Mme. Van Den Dael, light pink, a popular variety
Nieva, pure white, extra full and double, good stem, free blooming, 3 ft	Mrs. Hartong (Wilmore), salmon-buff tipped pinkish white, 4 ft 15c
3 ft	Nevada, a fine pure white, good stems and habit, 3 ft\$ 1.00
bronze and white in one flower; the color, however, is quite variable, 3 ft	
Souv. de Gustav Douzon (Bruant), orange-red, one of the largest and most popular of this class, e. g., xxxx, 3 ft	bronze and white in one flower; the color, however, is quite
	Souv. de Gustav Douzon (Bruant), orange-red, one of the largest and

PEONY DAHLIAS

This class is composed of large semi-double flowers, mostly of the decorative type. They were first introduced from Holland several years ago. For a number of years they attracted comparatively little attention, but of late are becoming very popular. Just why they have been termed "Peony Flowered" is beyond our comprehension. However, they possess considerable merit, the large size and long stems of most of the varieties making them very desirable for decorative purposes.

Cecelia, light primrose yellow, a most attractive color, extra large and fine, one of the best, 4 ft	.50c
John Green (Stredwick), yellow and scarlet, 3 ft	15c
Liberty (West), salmon red, large and fine	$50\mathrm{c}$
Mrs. Jack Green, large, brilliant red, 3 ft\$	1.00
Ruby (Broomall), rich garnet red, fine stem and free flowering, fine for cutting, 3 ft	25c
Sunbeam (Broomall), sulphur yellow or cream color, one of the largest in this class, coming 8 to 9 inches without disbudding, xxxx, 4 ft., strong tubers, each	1.00

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. On account of orders placed in advance we are unable to offer any Pompoms this year. We are going to stock up and hope to have a very fine collection to offer in next year's "Guide."

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, color pink and white	0 c
Aunt Dinah, dark maroon, collar shaded lighter	0 c
Cream Cups, creamy blush, collar cream	5c
Crown Princess Charlotte, crimson-scarlet, collar yellow and red	0c
Crusader, crimson-rose, collar white, extra large and fine, one of the best	0c
Etolle de Lyon (Broomall), rich crimson-scarlet, collar light yellow, 3 ft56	0 c
Firefly (Broomall), bright scarlet, collar yellow, rather small but very	
bright and showy	5c
Flambeau (Broomall), bright scarlet, collar yellow, extra large and fine,	
one of the best	0 c
Geant de Lyon (Rivoire), very large flowers, crimson-maroon, collar	
white, the finest of this class, 2 ft. Green plants in May	5 c
Herald, light rose, collar white, large and fine, 3 ft	0 C
Maurice Rivoire, rich crimson-red, collarette white	5c



MAURICE RIVOIRE

Mme. E. Poirier, rich violet-purple collar, pure white, a most extraordin-	
ary and pleasing contrast, beautiful xxxx, 3 ft	С
Prince Galatbin, crimson-maroon, collar white	С
Souv de Chabanne (Rivoire), yellow-buff, and red, collar yellow and	
white, extra large and fine, xxxx, 3 ft	С
Swallow, pure white, collar white	C
Yellow Prize, canary yellow, collar sulphur yellow and white	С

EVOLUTION OF THE DAHLIA CHAPTER SIX

STUNTED PLANTS, PROPAGATION AND CULTIVATION

(Explanation: It was my intention to devote this chapter to "Color in Dahlias," but there appears to be so much misunderstanding in regard to the habits, action and requirement of Dahlias, that I am going to give more space to cultural talk.)

There are certain basic principles in the culture of this great flower, that I propose to repeat, reiterate, and continue to repeat until I make my method of culture understood if it becomes necessary to take up two-thirds of the space in the "guide" in order to do it, as I believe a better understanding of the Dahlia to be of greater importance than anything else.

When I buy a machine with which I am not familiar, I reason about it in this fashion—If some one had brains enough to make the machine, I should have brains enough to use it, if the instructions are sufficiently explicit; and to you gentle reader I would say if some one has produced a flower of great size or rare beauty, you should be able to successfully grow it, if its requirements as to culture are thoroughly understood.

And now as to "Stunted Plants," and imperfect ...owers, these may be due to a variety of causes among which are unfavorable c.imatic conditions, lack of moisture, too much moisture, and what I believe to be the most frequent cause of all UNFAVORABLE CONDITION OF THE SOIL.

I sold a neighbor two dozen Dahlia tubers last Summer, these were planted at the same time as some of mine were, in soil as fertile as mine. Any soil that will grow weeds several feet higher than my head WITHOUT cultivation should produce fine Dahlias WITH GOOD CULTIVATION.

Part of those Dahlias grew from two to three and one-half feet high, and bore a few small flowers, some only got up a few inches and failed to bloom at all.

Now why was this? I advise that if the ground is not sufficiently moist that it should be wet TWO feet deep. That ground was only wet a few inches deep I say the ground should be plowed, or dug as deeply as possible. That was only plowed five or six inches in depth; I say the soil should be thoroughly pulverized; that was left in hard lumps, but was smoothed on the top so that it APPEARED to be in better shape than it really was. My Dahlias planted at the same time, were put in ground that had been plowed deep as possible and thoroughly harrowed early in the Spring, and when I was ready to plant it was plowed and harrowed the second time. In addition to this I dig the ground as deep as possible and thoroughly pulverize it from

one to two feet in width when I plant, so that when the tubers are put in the ground it is in IDEAL CONDITION, and they just cannot help but grow.

After they are well started I cultivate with a horse running cultivator as deep as it will go, about every ten days or two weeks. My last cultivating was done this year, September 19th, by which time many of the plants were so large that it was difficult to go through them with a horse without breaking some of them.

When I can no longer cultivate with a horse, I use a hoe. Not a light garden hoe, but a heavy "Planter's Hoe," and instruct my men to hoe lightly near the plants, and as deeply as possible in the middle of the rows, so that there is an abundance of loose soil as mellow and as finely pulverized as an ash heap, with the soil in such condition the feeding rootlets can and do reach out and obtain all the plant food they need. And the result—why from the latter part of September until Thanksgiving my gardens were a joy to behold, a kaleidoscopic mass of colors.

My plants were not only two or three times larger than my neighbors, but the flowers were fully twice as large, and many times as numerous, plant for plant. I have no "Runts," no flowerless plants, no failures among thousands of blossom-laden plants.

True some of the propagated plants will throw imperfect blooms at first, but as the plants increase in size and vigor, "get on their own feet," as it were (when conditions are IDEAL they seldom fail to do this) they will generally improve until they produce perfect flowers.

I do not believe that a Double Dahlia ever "goes back." When I say this I refer to the DOUBLENESS of the flower, not to the COLOR, which is a different matter entirely.

If a Dahlia fails to make perfect flowers there is always a CAUSE for it, although it may sometimes be difficult to determine what the cause is. Climatic conditions I believe to be one of the causes as yet but little understood, sudden changes of temperature, especially to extreme heat, may cause a contraction of the fibres that will restrict the flow of sap, (the life-blood of the plant), and this would certainly prevent the perfect development of the flowers.

The planting of old tubers, "Mother Roots," as they are called, is another cause of deterioriation, and I do not believe in planting them, but even they can be successfully used if at least three-fourths of the tuber is cut off, and the cut allowed time to heal before being planted. When they are cut in this manner the plants are forced to throw out new tubers from the base of the sprout, with the result that the plants will soon be drawing more than 90 per cent of their sustenance through the newly formed tubers, so that the remnant of the old tuber having served its purpose will be practically in the discard as far as its influence on the growing plant is concerned.

Plants grown from cuttings will sometimes make single or semi-double flowers when they first begin to bloom, but it has been my experience that if the soil is in proper condition so that the plants can readily obtain all the nourishment they can assimilate they will rapidly increase in size and vigor and will soon produce perfect blooms.

It does seem to me to be absurd, and a useless waste, to throw away roots because the plants have made imperfect flowers. Nature created tubers for the purpose of preserving the germ of life from season to season.

The heredity of the plant determines the character of the seed, and if a seedling produces perfect double flowers two seasons in succession, that Dahlia will never lose its character. If it fails to come good in after years, it has not "gone back" permanently, but has only failed temporarily, and there is ALWAYS A CAUSE FOR IT. It is up to us to find out the CAUSE.

I have never discarded a Dahlia for having "run out" as far as doubleness was concerned. I have seen Golden West a failure, and Helen Durnbaugh come perfectly single, yet I planted the tubers from those plants, and this year they were as perfect and double as ever.

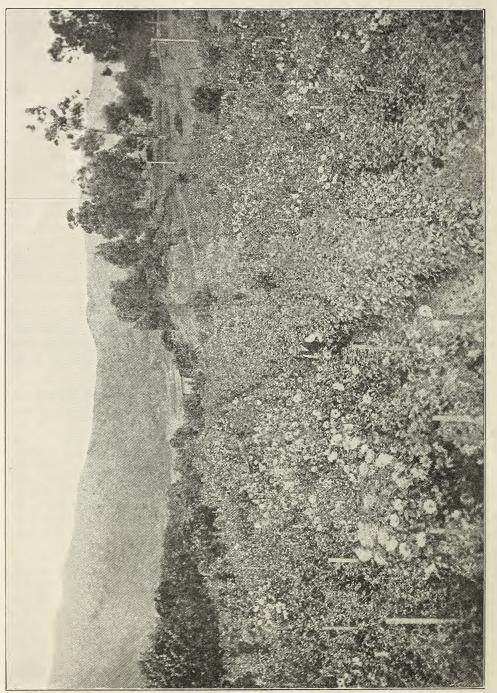
It should be borne in mind that it is the young tubers, the newly formed root systems that provides the sustenance for the plant, and what the old tubers may have done or failed to do the previous season has very little to do with the production of flowers this season.

If the thousands of delighted visitors who viewed my gardens saw any evidence of "run out" Dahlias or "runts" they certainly made no mention of it. The influence of changes of climate on the habits and color of Dahlias is a never-ending study, and he who keeps his eyes open may always learn more about them.

As a rule I believe that Dahlias bred in a hot climate will stand more heat without deterioration than those raised in a cooler region. But it seems that there are exceptions to every rule; take Dorothy Durnbaugh for instance: Here in it's native place it is one of the weakest growers and a shy bloomer, yet in many parts of the East it has proved to be very satisfactory.

Many of the Cactus Dahlias of English origin are not a success here, and I think the change from a cool environment to a much warmer and dryer one has a great deal to do with it, but here again there are exceptions, for it would be hard to find more satisfactory varieties, for instance, than F. W. Fellows, or that old standby, the Countess of Lonsdale, and others I might mention.

Yours for the better understanding of the Dahlia, and BETTER DAH-LIAS. J. J. BROOMALL.



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.

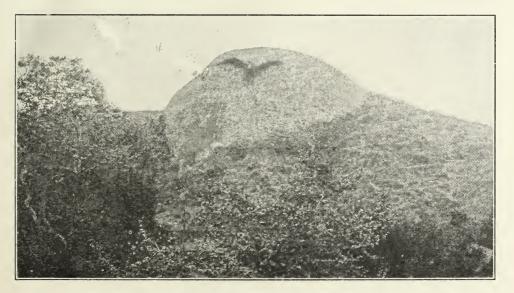
Dahlia Variabilis, the forerunner of the common or Show Dahlia, was single in its wild state. The first perfectly double flowers were obtained by M. Dankelaar, of the Botanical Gardens of Belgium, in 1814, and from this source came the well-known double varieties so common in the gardens of the East 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 Juarez, 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 Eniglish florist who exhibited it in England in 1882. The graceful form 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 descendants 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.



EAGLE ROCK--A MASTERPIECE OF NATURE Photo by Fleckenstein

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 succees, I would say:

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

EAGLE ROCK—THE DAHLIA CITY

Eagle Rock City, the home of the BEST DAHLIAS, is located in a beautiful little valley nestled among the foothills. It is eight miles north of Los Angeles and two miles west of Pasadena.

At the head of the valley stands the great bird rock, a huge mass of conglomerate rising about 150 feet above the valley; an overhanging ledge on the face of the rock causes the shadow, resembling an eagle in flight, as shown in the photograph. This is one of the noted land-marks of California and is famed in legend and story. The incomparable climate of Southern California is world famous. Eagle Rock is one of the most favored spots, in a land of almost constant sunshine, where it is possible to work out of doors without a coat in comfort about 350 days in the year. It will pay our Eastern friends who visit Los Angeles to see Eagle Rock and its famous Dahlias.

The City of Eagle Rock has a population of about 4,000, and because of its favored location is growing rapidly.

The building permits issued in 1922 were approximately \$2,000,000, a sum not equaled by any other city of it's size in the United States. It has three public schools, several churches, and many miles of paved streets; the principal street running east and west is Colorado Boulevard, 120 feet wide, and paved the full width. This is a part of the Foothill Boulevard system and is one of the most traveled thoroughfares in the State.

In recognition of our success in producing THE FINEST DAHLIAS IN AMERICA, EAGLE ROCK has been declared to be THE DAHLIA CITY, and the DAHLIA has been chosen as the CIVIC FLOWER OF EAGLE ROCK. This idea was advocated and adopted by the ladies of the WOMEN'S Twentieth Century Club, and endorsed by the Chamber of Commerce and other civic bodies. Thus it will appear that a "Prophet is not always without honor in his own country," and it scarcely need be said that we deeply appreciate the honor.

Visitors desiring to see the Eagle Rock Dahlia Farm, should take the Eagle Rock City cars running north on Broadway in Los Angeles, and ride to the end of the line.

Visitors from Pasadena should take the Pasadena-Ocean Park Bus, at the corner of Colorado and North Fair Oaks Avenue, and ride to Rosemont Avenue in Eagle Rock. COME AND SEE the world's most famous Dahlias.

J. J. BROOMALL, DAHLIA SPECIALIST,

257 Rosemont Avenue, Eagle Rock City, California. Phone Garvanza 1163.

SOME EXTRA GOOD DAHLIAS FROM VARIOUS GROWERS

In making up our Catalog the following varieties were overlooked.	We
can supply field-grown tubers of each:	
Lady Ray, Dec. Pure yellow; a strong grower and good bloomer;	
flowers held erect on good stems; 4 ft	50c
Insulinde, (Hornsveld), Dec. Orange-bronze, beautifully formed flow-	
ers, very distinct in shape and coloring; blooms always perfectly	
erect on fine stems. I regard this as the best Holland variety I	
have seen; 3 ft\$	2.00
Princess Pat, (McWhirter), Dec. A beautiful old rose with lighter	
shading; fine stems and habit; 4 ft\$	2.00
Shudow's Lavender, (Bessie Boston), Dec. Silvery white, shaded lav-	
ender; large flowers, erect on good stems; one of the best; 3 ft\$	7.50
U. S. A. (Stillman), Hy Cact. Brilliant orange, the best of its class and	
color; 3 ft\$	5.00

AN OPEN LETTER TO MY FRIENDS

The great increase in my mail-order business, involving so many details that require my own personal attention, has made it very difficult to give my correspondents the prompt attention they should have.

To avoid overstraining of the eyes I must make my letters as brief as possible. Now please do not misunderstand me; no man likes to read, and talk Dahlia more than I; and if YOURS was the only letter I had to answer I would be glad to give it all the attention it deserves; but when such letters are coming by the hundred, I must either make my answers very brief, or soon be in such a condition as to be unable to tend to business.

Therefore, I would ask you when writing for information to put your questions in such a way that it will be possible to answer them with as little writing as possible.

In the description of Dahlias and in the articles on planting, culture, etc., I have endeavored to anticipate and answer in advance a great many questions. I hope you will read these articles, and also the chapter on "Evolution" carefully. I do not claim what I say to be the sum of all wisdom, but I have endeavored to give you the benefit of years of experience and close observation.

I have promised in my advertisements that I would make the "Guide" all the name implies.

Sincerely yours,

J. J. BROOMALL



MISS LEOTA COTA

FOR DESCRIPTION SEE PAGE 14



J. J. BROOMALL

Dahlia Specialist

257 Rosemont Avenue Eagle Rock, California Phone *Garvanza* 1163



PARTIES DESIRING TO VISIT EAGLE ROCK DAHLIA FARM SHOULD TAKE CARS MARKED Eagle Rock (ity, RUNNING NORTH ON BROADWAY. GARDENS ON ROSEMONT AVENUE, TWO BLOCKS NORTH OF THE TERMINUS OF THE EAGLE ROCK CITY CAR LINE