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

JAN 231922
(C) CIA655751


## 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 Variation 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" al that the name implies. Read the pages that follow and see if I have made good.

Sincerely yours,


Buomall

## 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 as 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,<br>257 Rosemont Avenue, Eagle Rock, Calif.

January, 1921.
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 envelepe.

MONEY ORDERS SHOULD BE MADE PAYABLE AT EAGLE ROCK, CALIFORNIA. FORFIGN 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 hove 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 his 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 potato 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 suffi ciently 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 advantages, 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 sucess 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 beccming 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, "Ncthing 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.

11 planted in a single row, plant them at least three feet apart; they may he 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, beginning with the tall varieties at one end and gradually tapering 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 nor 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 witl the eyes or sproits, if any are showing, uppermost. Never stand them on end. I know not wi.y, 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 our feeding rcotlets 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 to five inches long and is stood on $\in$ ind, 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 conditions. 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 in 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 necassary 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. T'en 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 scme 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 estmiation 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 missingone 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 piants. 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 $21 / 2$-inch pots they should be planted fully twice as deep as they were in the pois, 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 inchecs 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 eart' 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, uๆdisturbed, 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 comparitive 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 quailties 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 preven ing 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.

# EVOLUTION OF THE DAHLIA <br> CHAPTER FIVE <br> "THE SECRET OF SUCCESS" 

The 1921 "Dahlia Guide" had not been mailed many days before I received the following from a correspondent in New Jersey, "Send me the secret of success. Well, my friend, I am going to give you one secret of success which will apply not only to the development of the Dahlia, but to every undertaking in life, "start in with the determination to succeed;" and do not overlook the smallest detail; it is by careful attention to every small detail that success is attained. In a conversation with the late John Lewis Childs I was surprised at the intimate knnwledge he possessed of every branch of Dahlia growing; if he had the same minute knowledge of the other plants he dealt in it is no wonder that he succeeded in building up a great business from a humble beginning.

It should be understood in my talks on the Dahlia that I am not speaking as a botanist (I know very little of botany), but from the standpoint of a practical gardener; and what I say and believe is based on experience and observation; and whether my conclusions are right or wrong I think my critics must admit that I have been fairly successful in my efforts to improve the Dahlia; and now I will attempt to tell you about-

## SUCCESS IN DAHLIA BREEDING

Probably no flower from the time it was first cultivated until the present has shown a greater tendency to vary in colcr and form than the Dahlia. The introdutcion of D. Juarezi (the original cactus Dahlia) and the subsequent crossing of this with the other species, and later crossing and recrossing of the different varisties, has resulted in a variets of shapes, colors and combination of colors and tints that is endless.

To English growers is due the credit for having developed the Cactus

Danlia to a high state of excellence; giving to the world some of the most magnificently formed flowers ever seen. It is to be rogretted that the majority of the English Cactus Dahlias, with few exceptions are inclined to have weak stems, and some are such weak growers that it requires all the skill of professional gardeners to grow them to perfection; such flowers could never be very popular with amateur growers. The cause of their weakness 1 believe to be the selection of seed, and pollen parents too close to type; excessive inbreeding is as certain to result in weakness in plants as in animals. I have found that almost invariably the greater the difference hetween the parent plants, the more robust the seedlings would be.

The giant decorative, hybrid decorative, hybrid cactus, and peony flowered dahlias introduced hy American growers in the last few years are rapidly becoming more and more popular; not only because of their immense size and gorgeous coloring, but also on account of their robust habit of growth, and the ease with which they can be grown.

While the develonment of the dahlia has been wonderful, I look for still greater improvement in the future, for I believe the only limit to the improvment not only of the dahlia but of every plant of nenamental or economic value that we cultivate is our knowledge of the plant; therefore, it behooves us to learn all we car of such plants.

In improving the dahlia at the present time, hybridists are contending with a force as unfathrmable as it is uncontrollable, and which I believe is as yet but little understood, and this is its inheritability. To make my meaning more thoroughly understcod I will refer to this trait as seen in domestic animals. I have a black Toggenberg goat. Topsy's arrival at the dahlia farm was a surprise, for all of her ancesturs, so far as I knew, were either chocolate brown or some lighter color; so whence came the black? From a man familiar with Toggenbergs I learned that there is a strain of black in that breed; so away back several generations, one of Topsy's ancestors had been black, and it appears the time had arrived for this strain of color to reappear. Now this trait in animals is nothing new. It is common knowledge among all well posted stnck men, and has been for generatiors; but I believe it is not so well known that this same inheritability exists in plants, and in the dahlia perhaps to a greater extent than any other flower because of the innumerable crossings between the ancestors of the varieties wow cultivate.

Thus it may occur that a hybridist using parents with perfect stems finds among the seedlings some that have very poor stems and which are much inferior to either of the parents; now whence came the poor stems? Why, away back no man knows how many gnerations, one of the ancestors had poor stems and this trait heing in the "blood," figuratively spreaking, was rer" tain to reappear in the cycle of plant life.

This inheritability which might appear to be a barrier to the improvement of the dahlia I believe to $\mathrm{b}^{\wedge}$ of the greatest advantage because I have found by experiments that in some flowers the good strains of blood predominate, and the seedlings from such will skow a high percentage of good flowors, while there are others. including some of our very best dahlias, that are very poor parents, nearly off of their nrogeny being retogades.

And here is the secret of success in dahlia breeding: the selection for breeding of those parent plants in which the desirable traits predominate; in other words, those whose progeny have shown the greatest percentage of improvement.

This rule, if followed in coriunction with intelligent culture and a favorable environment, can hardly fail te give satisfactory results.

It seems to me of the greatest importance that we should more thoroughly understand the habits and characters of the varieties we already have, in nrder that we may give them more inteliigent treatment, and thereby obtain the best possible results from growing them; for this reason I am going to reiter-
ate and repeat with emphasis some things I have previously written in regard to their culture.

First of all, I consider this talk about Dahlias "running out" a fallacy; DAHLIAS DO NOT RUN OUT; a dahlia once double is always double. Here are my reasons for making this positive assertion. In 1899 I published my first price list, in which I described 153 varieties, about one-half of which I am still growing, to the best of my knowledge and belief not one of those dahlias ever ran out, if as some claim dahlias run out I wish they would explain how it happens that in all those 23 years none of those varieties ever ran out.

There have been years when some of them failed to make good flowers, but the next year, IF CONDITIONS WERE FAVORABLE, they were as good as ever. When a dahlia fails to make good there is always a REASON; but it is not always easy to determine the cause.

There are some causes that are not easy to guard against among which are unfavorable climatic conditions; extremes of heat and cold, and sudden changes from one to the other are certain to cause imperfect flowers. In Southern California after October 20th very few dahlias will come full to the center, which I believe is due to the fact that owing to the cool nights both plants and ground become chilled, and the flow of sap is thereby restricted. Cultivation of the soil is good even this late, as soil that is loose and pulverized will better absorb both heat and moisture, and retain them longer; and that is one reason why I do not believe in mulching dahlias. It prevents the proper loosening of the soil.

It is true that mulching saves labor and moisture, and where manure is used for mulching, the flowers may show an improvement for a time after mulching as some of the fertilizer is carried to the roots, but for a long continued season of bloom I think it far better to have the manure mixed in with the soil where the plants can reach it as needed, and keep them cultivated so that the feeding rootlets will reach it.

Another very serious objection to mulching is that it is an ideal harbor for insects, and a breeding place for fungic diseases; if your chief object is to save water and labor "mulch;" but if you want fine flowers CULTIVATE, often and thoroughly, especially after each rain or irrigation that in my opinion is the secret of producing fine flowers, and preventing them from running out or misbehaving contrary to your wishes

And once more remember this so-called running out is only temporary, NEVER permanen ${ }^{*}$, and is ALWAYS due to some CAUSE which you should endeavor to understand.

## NEW DAHLIAS FOR 1922

## 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.
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$\$ 5.00$
Augusta R. Johnson, D., yellow-buff, shaded salmon; flowers very large andfull centered; the color is very attractive, an extra good variety.3 ft. tubers, each ............................................................... $\$ 10.00$
Eckford, D., a fancy decorative, of medium size, white ,striped crimson,3 ft .$\$ 1.00$


#### Abstract

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 medium size, in shape very similar to California Beauty. The color is soft yellow shaded salmon. 3 ft . tubers


Lorraine Woerner, H. C., creamy yellow shaded salmon-pink. The beautiful blossoms cf this variety are larger and of finer shape than Evelyn M. Dane, and have longer stems. 3 ft., tubers
$\$ 10.00$
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 populuar variety, 3112 f $:$. , strong field-grown tubers, each $\$ 10.00$

Mrs. Clara S. Ellis, H. C., yellow at the base shading to salmon, large and fine, good stems holding the flowers above the foliage, 3 ft .$\$ 10.00$

Mr. Crowley, D., 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 petals 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, which are rather short; to obtain stems suitable for cutting it will be necessary to remove the crown bud, and leave the terminal buds on the branches. 2 ft .; strong field-grown tubers$\$ 25.00$

Orchidea, H. C., a beautiful blending of orchid-pink and cream, the color is as pleasing as it is unusual; the large flowers are produced on good stems. 3 ft .; field-grown tubers
$\$ 10.00$
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

## 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 meisture 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 sun-burn and sun-bleach; it's 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.

We regret that our stock of this great dahlia is very Iimited. Field-grown tubers, per tuber
Barkara 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 steam, 3 ft . $\qquad$
Catherine Cooper, D., large flowers of fine form, good stems and habit; some rosy lavender in color; the blossom the little girl is holding scarcely does the flower justice, $21 / 2 \mathrm{ft}$.


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; $31 / 2 \mathrm{ft}$., field grown tubers, each


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, $3 \mathrm{ft} . \ldots .$.
Eliza Moulton, P., salmon-pink and buff, good stems, 3 ft. ................. . $\$ 2.00$
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, $21 / 2 \mathrm{ft}$.
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; tubers, each

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

Gerald Milier, C., color mauve pink; medium size flowers of true cactus form, the outer petals incurving so that they cover the center of the bloom very free flowering; 3 ft ., tubers, each
Goodoye Delice, H. 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 tubers, $\$ 2.00$

Grace Allen Fay, D., rosy crimson shading, darker in the center, large well formed flowers on good stems, $21 / 2 \mathrm{ft}$.
$\$ 5.00$
Grace Darling, C., soft pink blending to buff at the base, long narrow petals, good stems, shape, and habit, 2 ft .
Helen Keller, D., named by request in honor of one of the world's most noted women; the color is almost identical wtih the well-known pink Dahlia, Rosemawr, but it is an improvement on that variety, being larger and more beautiful in form, 3 ft . tubers
$\$ 5.00$
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 semicactus in shape are immense in size and held erect on good stems, free flowering, 5 ft .
Laddie, D., 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 fiower; $3 \mathrm{ft} . . . . . . \$ 3.00$
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; $21 / 2 \mathrm{ft}$.
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; 3 ft .
$\$ 15.00$
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; and extra vigorous grower of branching habit; requires plenty of room and good culture to produce full centered flowers; 4 ft .
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; $21 / 2 \mathrm{ft}$.
Marion Cooper, D., blush pink and cream. A very beautiful flower, $3 \mathrm{ft} ., \$ 5.00$
Minnie Gore, D., a very distinct shade of pink, with buff base, fine large flowers on long stems and free flowering; 4 ft .


#### Abstract

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$\$ 2.00$


Mrs. Howard Prowse, H. C., lavender colored flower, extra large, always
full to the center; a fine cut 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 . ..... $\$ 5.00$

Mrs. Estelle Lawton Lindsey, D., 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 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 withou; any shading; the size is enormous the shape is somewhat simioar to Helen Durnbaugh, but I regret to say the stems are not strong enough to hold up the heavy blcoms; but as an exhibition flow this Dahlia will create a sention

Miss Barber, D., rosy mauve, medium sized flowers, borne in the utmost
profusion on fine stems, 4 ft .

Mrs. Zadow, P., rosy carmine, tipped buff, semi-cactus in form; the large flowers are held erect on good stems; 3 ft .


GERALD MILLER
Mrs. 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 $103 / 4$ 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 .$\$ 5.00$
Pont‘ac, D., color an unusual shade of deep cherry red; flowers large and fine, stems good; 3 ft . ..... $\$ 5.00$
Red Rover, D., 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 itsell, and is entirely different from any other Dahlia; 3 ft . ..... $\$ 5.00$
Resplendent. C., bright pink with white tips, beautifuı in color and shape; the coloring of this flower is unsurpassed; 3 ft . ..... $\$ 5.00$
AND NOW WE COME TO THE GREATEST OF ALL DECORATIVE DAHLIAS
Rosa Nell, D., the color is a clear 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 choics, 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 received from all parts of the country where it has been tried. Mr. Alex. Waldie, of San'a 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 received the highest praise everywhere. Mr. C. Louis Alling says "Rosa Nell was all you claimed for it, and then some." 3 ft ., strong field- grown tubers ..... $\$ 7.50$
Ruth Phillips, H. C., sulphur yellow flower of immense size, on fine stems, very attractive, 5 ft . ..... $\$ 5.00$
Yellow Prince, D., in form this resembles Yellow Collosse, but it is more than double the size, and far surpasses it, color being a rich golden yellow, late in the season the flowers are inclined to be rather too heavy for the stems, it is nevetheless a desirable flower, 3 ft . ..... $\$ 2.00$
Ysleta, D., the coloring of this dahlia is very difficult to describe, being a blending of salmon, orange and coppery tints the fully opened flower reminding one of the Herriot Rose, $21 / 2 \mathrm{ft}$. ..... $\$ 5.00$
Zelda Meadows, D., blush pink, large flowers of good form, always full to the center, good stems and habit, a fine cut flower, 3 ft . ..... $\$ 5.00$
Zenobia, H. D., blush pink, large flowers, and a free bloomer, admired by everyone, 3 ft . ..... $\$ 2.00$

## CACTUS DAHLIA

## 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 the 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.

Acacia (Broomall), clear yellow, good shape and stem, e. g. $5 \mathrm{ft} . \ldots .{ }^{2}$... 25c
Ajax, orange-buff, large, g. 4 ft. ..................................................... . . 25 c
Alabaster (Stredwick), a pure white, of fine form, 3 ft . green plants in May, 75c
Aviator Garros (Charmet), light yellow, resembles a chrysanthemum, very profuse bloomer, g. 2 ft.

25 c
Bertha Werden (Broomall), apricot shaded salmon, large and attractive, e. g. 3 ft. ..... 50c
Calumet (Broomall), purple maroon, large flowers on good stem, g. 3 ft ., 50 cCelia, lavender pink, a favorite, g. $21 / 2 \mathrm{ft}$.15c
Conquest (West, crimson maroon, fine shape and habit, e. g. c., 3 ft . ..... 25c
Countess of Lonsdale (Cannel), reddish salmon changing to fawn, an oldand reliable variety, g. c., $21 / 2 \mathrm{ft}$.15 c
Dazzler (Broomall), brightest orange-scarlet, e. g., 3 ft. ..... 50c
Dorothy Durnbaugh (Broomall), a most attractive shade of deep rich pink, flowers are immense in size; of fine form and habit, with strong stems, that hold up well; one of the best Cactus Dahlias in cultivation, fine for cutting; e. g. c., 3 ft .; on account of limited stock we can only supply green plants of this variety ready May 15 th ..... $\$ 1.00$
Delight, a beautiful shade of pink, medium size, 3 ft . ..... 50c
Esther, pure soft scarlet, of large size, and fine incurving shape, e. g., 3 ft ., 50 c
Etendard de Lyon, large royal purple, 4 ft . ..... 50 c
Etna, deep lavender, fawn base, 4 ft . ..... 25 c
Excelsior (Broomall), an ideal cut flower of medium size, the most beauti- ful 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 desirable as a cut flower, g. c., 2 ft . ..... 25 c
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. c., 3 ft . ..... 50cGee Whiz (Broomall), of large size and pleasing shape; the color is a softbuff shaded with salmon; a dahlia that always comes perfectly double,never shows an open center, e. g., 4 ft., strong tubers$\$ 5.00$


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 gradnes 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
Geo. Walters, Hybrid Cactus (Carter), very large flowers of a dark salmon color with buff base, e. g., xxx, 3 ft.
Golden Wave (Stredwick), nure yellow, e. g., 3 ft. ......................... 25c
Gladys Sherwood (Broomall), as compared with other white Dahlias this is a giant among pygmies; flowers 9 inches in diameter without disbudding; 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 Sher-
wood 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, ho: summer it continued 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, e. g. c., xxxx., 4 ft . tubers, $\$ 3.00$
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. $\qquad$
Homer (Burrell), crimson-maroon, fine shape and free bloomer, xxx, 3 ft . 50c
Irene Satis (Stredwick), amber-buff shading to bronze, flowers of large size and fine form, the habit is good, e. g., xxxx, 3 ft.

J. H. Jackson (Vernon \& Barnard), crimson-maroon, a good old variety,
e. g., xxx, 3 ft

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.......................... 75 c
Johannesburg (Stredwick), brownish yellow or old gold, one of the best of
this class, e. g., xxxx, 3 ft . Green plants in May....................... 50 c
Juarezi, crimson-scarlet, this is the original Cactus Dahlia, all the Cactus Dahlias in cultivation are descendants of Juarezi; $4 \mathrm{ft} . . . . . . . . . . .$.


JUAREZI
Justice Bailey (Wilmore), lavender-pink, fowers are large, habit upright, 3 ft. ..................................... ................................... $\$ 1.00$
Kalif (Englehart), scarlet, extra large, e. g. c. 3 ft. .......................... 59c
Kingfisher, bluish lilac, incurved, 4 ft. ....... ................................. 50 c
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, $3 \mathrm{ft} . \ldots . . . . \$ 2.00$
Madame Le Brun (Broomall), rich violet purple shaded black, good shape and stems. THIS DAHLIA WON THE ELKS' SILVER CUP AT THE EVERET' 5 , 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., stock limited so we can only offer green plants this season

LOS ANGELES
Magnificent (Broomall), one of the grandest Cartus Dahlias, of fine form and immense size, coming 8 inches in diameter without disbudding; the color is such as to attract attention among hundreds of varieties, and is very difficult to describe, the ground color being 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.

Miss Stredwick (Stredwick), pink, one of the finest, yet raised, e. g., xxxx,



Mrs. McMullen, lavender-pink . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25c


Mrs. Turner (Wilmore), yellow, extra large, e. g., $3 \mathrm{ft} . \ldots . . .$. . . . . . . . . . 15c
Mrs. T. W. .Willis, lavender-pink, pleasing shape, 3 ft. . . . . . . . . . . . . . . . . 25c
Natick (Broomall), clear yellow, very large star-like flowers 7 to 8 inches across, $21 / 2 \mathrm{ft}$.
New York (Stredwick), yellow shaded pinkish salmon, an attractive color and of fine form, e. g., 3 ft . ..... 75 c
Nibelungenhort, old rose, tinted apricot, large, 3 ft . ..... 50 c
Nubian (Broomall), rich, deep purple, very large and wonderfully free blooming, e. g., xxx, 3 ft. ..... 25 c
Ormond (Broomall), rich maroon, xxx ..... 25 c
Pacoima (Broomall), purple-maroon, serrate petals, xxx ..... 25 c
Pierrot (Stredwick), this we regard as one of the finest of the new English 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 ., green plants in May ..... 50c
Peace (Broomall), a fine white of large size, producing perfect flowers until middle of December, e. g., xxx ..... $\$ 3.00$
Phenomenal (Stredwick), light pink with narrow incurving fiorets, an Eng- lish variety of much beauty, e. g., 3 ft., green plants in May ..... $\$ 1.00$
Prima Donna, H. C. (Broomall), cream flushed with a delicate shading of pink, while the petals are not narrow, this is a flower of much beauty, the large, bold flowers being held well above the foliage; with the pos- sible exception of Golden West this vraiety was probably the most ad- mired of all by visitors to the gardens, xxx, $41 / 2 \mathrm{ft}$. Strong tubers, each ..... $\$ .100$
Red Admiral, large well formed flower of the brightest scarlet, e. g., xxx, 3 ft . ..... 25 c
Reliable, buff and fawn, shaded salmon, e. g., xxx, 4 ft. ..... 25 c
Royalist (Stredwick), finely formed flowers of a deep coral red color, e. g., 3 ft . ..... $\$ 1.00$
Ruth Gleadell, H. C. (Seal), large, yellow shaded pink, very attractive, ft., 75c
Safrana (Broomali), large flowers buff shaded orange, a great favorite for cutting, e. g. c., 3 ft. ..... 25 c
Skookum Tillicum (Strong Friend) (Broomall), named in honor of my old friend, Skcokum the Trapper, immense star-shaped flowers on bold strong stems, well above the foliage, crimson-red shaded maroon, xxxx, e. g., 4 ft . ..... 50c
Snowden (Stredwick), a good pure white, e. g., 3 ft . ..... 25 c
Star (Stredwick), yellow overlaid bronze-red, one of the best Cactus Dahlias in cultivation, e. g., xxx, 4 ft . ..... 25 c
Sunburst (Broomall), orange-buff, xxx, 3 ft. ..... 25 c
Surprise (Broomall), rich orange-amber, bright yellow center, fine habit, xxxx, e. g. c. ..... 50c
Talamasmico, H. C., (Broomall), rich crimson-maroon flowers of large size, and help well above the foliage on splendid stem, e. g. c., 4 ft . ..... $\$ 1.00$
The Quaker (Stredwick), lavender blush, a very delicate and unusual shade, e. g., xxx, 3 ft. ..... 50c
Tom Lundy, H. C. (Fenton), bright crimson, one of the largest Hybrid Cactus, e. g., 3 ft . ..... 50c
Valliant (Stredwick), crimson-scarlet, one of the best English varieties of its class and color, e. g., 3 ft . ..... $\$ 1.00$
Verona (Broomall), purple-crimson, good stems, 4 ft . ..... 25 c
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 im- mense blooms well above the foliage, stcek limited, strong field tubers, $\$ 1.50$
White Perfection (Broomall), a pure white of good size, and fine form and habit, very free flowering, e. g. c., xxx, 3 ft . ..... 50 c
White Japanese Chrysanthemum (Broomall), a large Chrysanthemum- like Dahlia with long twisted petals, a decided novelty and greatly ad- mired, field grown tubers, each ..... $\$ 1.00$
White Progenitor, pure white with serrate petals, similar in shape to Pro- genitor, has good stems ..... 25 c
Wodan, salmon pink shading to fawn at base, 3 ft . ..... 50 c
Wolfgang von Goethe, large, apricot shaded carmine, 3 ft . ..... 25 c
Yellow Queen (Broomall), a large pure yellow ..... 25 c
Yellow Star (Broomall), golden yellow, upright habit ..... 25 c
WE GROW HUNDREDS OF VARIETIES OF DAHLIAS THAT ARE NOT IN THE CATALOG. IF YOU DESIRE SOME VARIETY NOT LISTED LET US KNOW.
$\infty$
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 narrowpetaled 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., ft. ..... $\$ 1.00$
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 flow- ers held erect on strong stems, e. g. c., xxxx ..... $\$ 1.00$
D. W. Coolidge (Broomall), a most attractive shade of rosy pink, beautiful shape and fine stem, e. g. c., 3 ft. ..... $\$ 1.00$
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
Polaris (Broomall), this I regard as the best pure white decorative Dahlia yet produced, flowers of immense size and perfect form, held well above the foliage on strong stems; habit of plant is rather dwarf and strong and vigorous; a flower with every good quality, xxxx, e. g. c., $21 / 2 \mathrm{ft}$. Green plants in May
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
Rosemawr (Broomall), immense flowers, rich rose pink, dwarf branching habit, by far the best pink decorative we have seen, it captivates every one; on account of heavy local demand our stock of this fine variety is limited, e. g., $21 / 2 \mathrm{ft}$.
Shasta (Broomall), a very fine large white, borne on long stems, the petals are serrate, very free flnwering, the best white for cutting we have seen, e. g. c., 5 ft .

Snowdrift (Broomall), this siant white deserves its name, a very full deep-built flower with broad waxy petals, e. g., xxxx, 3 ft., tubers, each
Stunner (Broomall), immense canary yellow flowers of the finest form; this is so far ahead of any other yellow decorative that there is absolutely nothing of its class and color to compare with it; the plants of this variety are unusuallv strung sturdy growers, and to develop to its best should be planted at least four feet apart (five feet would be better) with good soil and liberal treatment this Dahlia is bound to create a sensation, e. g. c., xxxx, 5 ft. Our stock of Stunner is sold out. We cannot furnish either roots or plants this season ......... $\$ 1.00$
The Red Flag (Broomall), bright velvety crimson-red, very large and always full to the center, e. g., xxxx, 3 ft
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 .

## DECORATIVE DAHLIA

 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....... $\$ 1.00$
Countess (Broomall), the purest and deepest lavender color we have seen
in a Dahlia, flowers medium size, $21 / 2 \mathrm{ft}$................................ 25 c

Delice, a bright clear pink, medium size ...................................... 25 c
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 strrng grower and free blooming, 3 ft ., tubers, $\$ 1.00$
Eldorado, medium sized flowers, rich golden yellow shading to copper at the base, good stems and habit, fine for cutting, $31 / 2 \mathrm{ft}$., tubers ..... 50 c
Futurity, a pretty shade of old rose pink, medium sized flowers on good stems, good for cutting, 3 ft . ..... $\$ 1.00$
Golden Tassle (Broomall), rich orange-yellow, fringed petals, 3 ft . ..... 50c
Grand Mogul (Wilmore), red tipped white, 3 ft . ..... 15 c
Hortalanus Fiet (Hornsveld), large flowers of a salmon pink color, $21 / 2 \mathrm{ft}$., 50 c
Jack Rose (Peacock), small crimson, $21 / 2 \mathrm{ft}$. ..... 15 c
J. W. Goodridge (Ross), pink tipped gold, very pretty, 3 ft . ..... $\$ 1.00$
La Luna, large cream colored flowers, petals slightly pointed, 2 ft , tubers, 50 c
Le Grand Manitou (Charmet), sround culor light lilac-rose stripod crim-son-lake, very large flowers, plant dwarf and compact, e. g., xxx, 2 ft ., 50 cNOTE-T'he majority of variegated Dahlias have a tendency to produceflowers of solid color. This is especially true of Le Grand Manitou, many ofthe 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 and fine habit, fine for cutting, sure to become popular, e. g., xxxx, 4 ft. ..... . 25 c
Maiden's Blush (Broomall), white shaded blush pink, 4 ft . ..... 25 c
Millionaire (Stillman), light lavender, large flowers, plant rather dwarf, 2 ft . ..... $\$ 1.50$
Milky Way, cream color, large compact flowers, 3 ft ..... 25 c
Minna Burgle (Burgle), large bright red, a favorite with the florists, e. g. c., 4 ft. ..... $25 c$
Mme. Van Den Dael, light pink, a popular variety ..... 25 c
Mrs. Hartong (Wilmore), salmon-buff tipped pinkish white, 4 ft . ..... 15 c
Nevada, a fine pure white, good stems and habit, 3 ft ..... $\$ 1.00$
Nieva, pure white, extra full and double, good stem, free blooming, $3 \mathrm{ft} .$. ..... 50 c
Primula (Broomall), primrose yellow, large and fine, 3 ft . ..... 50 c
Prof. Mansfield, a variegated flower, frequently showing yellow, red, bronze and white in one flower; the color, however, is quite variable, 3 ft ..... 25 c
Radnor (Broomall), very light fawn-buff, an unusual shade, large, similar in shape to Mrs. Roosevelt, 4 ft . ..... 50 c
Souv. de Gustav Douzor (Bruant), orange-red, one of the largest and most popular of this class, e. g., xxxx, 3 ft . ..... 25 c
Sylvania (Broomall), creamy blush shaded pink, fine stem and habit, a great favorite as a cut flower, xxx, 3 ft. ..... 50c
Thoreau, dark crimson 10 aroon, large, xxx, 3 ft . ..... 50 c
Transcendent (Broomall), sulphur yellow flowers, large and compact, an extra strong growing variety, e. g. c., xxxx, 5 ft . ..... 50 c

## 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.

Dr. H. H. Busby (Wilmore), clear lemon yellow, large, 4 ft. ............... . 25c
Geisha (Hornsveld), scarlet and gold, the colors making a vivid yet pleasing contrast, 4 ft . Green plants in May

50 c
Hugh Moor (Broomall), rich cherry red shaded darker, wonderfully free flowering, 4 ft . ..... 35 c
John Green (Stredwick), yellow and scarlet, 3 ft. ..... 15 c
Liberty (West), salmon red, large and fine ..... 50c
Mildred Wight (Broomall), clear yellow, large flowers with broad flat petals, fine stems and habit, ex ra good cut flower, e. g. c., xxxx, 4 ft . 50c15 c
Paloma (Broomall), lovely shade of pink, large flowers and fine stems ..... 50c
Ruby (Broomall), rich garnet red, fine stem and free flowering, fine for cutting, 3 ft . ..... 25 c
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 ..... $\$ 1.00$
Village Belle, amber shaded cherry, 5 ft . ..... 25 c

## POMPOM DAHLIA

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.

NOTICE WHAT WE SAY IN REGARD TO SHOW DAHLIAS ON PRECEDING PAGE. THIS ALSO APPLIES TO POMPOMS. WE CANNOT FILL ANY ADDITIONAL ORDERS FOR THESE THIS SEASON.

Alwine, white, flushed pink, 2 ft. ............................................... . . . . 15c
Amber Queen, amber-buff, shaded apricot, 3 ft. ............................. 25 c
Arthur West, deep crimson, 3 ft. ............................................. 15 c
Belle of Springfield, red, the smallest of all Pompoms, $2 \mathrm{ft} . . . . . . . . . . . . .25 \mathrm{c}$
Bobby, plum color, $21 / 2$ ft. ............................................................. . . . 50 c
Canary, bright yellow, with good stems, 3 ft. ................................... . . . 15c
Censor, purple-plum color, 2 ft. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50c
Cheerfulness, orange, suffused and tipped red, very attractive.............. 50c
Clarissa, lavender pink ..... 25c
Cyril, scarlet
Darkest of All, maroon, 3 ft . ..... 25 c
Donald, buff and pink, xxx ..... 25 c
Dr. Jim, light ground edged purple, 3 ft. ..... 25c
Elegante, white-tipped crimson ..... 25 c
Fairy Queen, yellow, tipped red ..... 25 c
Fashion, orange-buff ..... 15 c
Fascination, pink and lavender ..... 50c
Glow, salmon-cerise, a most unusual and attractive color, 2 ft . ..... 75 c
Joe Fette (Bessie Boston), the smallest white ..... $75 c$
Johnnie, dark maroon-red, a very small neat compact flower, the best of its color, green plants in May ..... 50 c
Julius, buff, tipped pink, xxx ..... 25c
Juliet, orange yellow, tipped scarlet, 3 ft . xxx ..... 25 c
Little Beauty, light pink ..... 25c
Little Bessie, buff, tipped lavender, xxx, 3 ft. ..... 25c
Little Jimmie, yellow ..... 25c
Mars, bright rese, light ground, one of the best, 2 ft . ..... 50c
Nellie Broomhead, cream tipped and shaded lavender, small, xxx, 3 ft . ..... 25 c
Nellie Frazier, pink shaded lightre, fine ..... 50 c
Phoebe, orange red, buff base, 2 ft . ..... 25 c
Pure Love, lavender, $21 / 2 \mathrm{ft}$. ..... 25 c
Santoy, white tipned carmine, a good variety, 2 ft . ..... 25 c
Snowclad, pure whita, fine shape, 2 ft . ..... 25 c
Snowdrop, white ..... 25c
Sunset, pure orange color ,a most attractive variety, 2 ft . ..... 50c
The Duke, yellow, 3 ft . ..... 15 c
Tommy Keith, red and white, green plants in May ..... 50 c
Viridiflora, the flowers, which are small, are as green as the foliage, a great curiosity, 3 ft . ..... 25 c
White Aster (Guiding Star), beautiful pure white, fringed Dahlia, one of the finest, splendid for cut flowers, $21 / 2 \mathrm{ft}$. ..... 15 c
Winifred, white shaded lavender ..... 50c
Yellow Gem, light yellow, good ..... 25c

## COLLARETTE DAHLIA

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.................50c
Aunt Dinah, dark maroon, collar shaded lighter.................................. 50 c
Cream Cups, creamy blush, collar cream.........................................25c
Crown Princess Charlotte, crimson-scarlet, collar yellow and red...........50c
Crusader, crimson-rose, collar white, extra large and fine, one of the best, 50c
Etolle de Lyon (Broomall), rich crimson-scarlet, collar light yellow, $3 \mathrm{ft} . \mathrm{ftac}^{\mathrm{c}}$
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 ........................................................... 50 c
Geant de Lyon (Rivoire), very large flowers, crimson-maroon, collar white,
the finest of this class, 2 ft Green plants in May .................. 75c
Herald, light rose, collar white, large and fine, 3 ft. .............................. 50 c
Jos. Goujon, red with yellow base, collar light yellow............................25c
John Bull (Stredwick), crimson-scarlet, collar white, large and fine, one of the best, xxxx, $21 / 2$ ft., tubers, each ........................................ 50 c
Maurice Rivoire, rich crimson-red, collarette white


MAURICE RIVOIRE
Mme. E. Poirier, rich violet-purple collar, pure white, a most extraordinary
and pleasing contrast, beautiful, xxxx, 3 ft. ................................. 25 c c
Negro, dark maroon, white collar ............. . ................................ . 50 c
Prince Galatbin, crimson-maroon, collar white .............................. 25c
Souv. de Chabanne (Rivoire), yellow-buff, and red, collar yellow and white, extra large and fine, xxxx, 3 ft. ................ ................................ 50 . 5
Swallow, pure white, collar white ................. ........................... 25c
Yellow Prize, canary yellow, collar sulphur yellow and white.................50c
Pre-Announcement:-I have now on second years' trial, and expect to introduce in 1923, the GREATEST set of new Dahlias of real merit ever sent out.


PARTIAL VIEW OF OUR GARDENS
Photo taken in October after five months' bloom

# A BRIEF HISTORY OF THE DAHLIA WHERE IN CAME FROM AND HOW IT HAS BEEN IMPROVED 

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

It was named DAHLIA is 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 f^om seed of the original type produced flowers of various colors without hybridizng.

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 form and brilliant colcr of the flower at once captured the fancy of 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 unacauainted 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 use-


EAGLE ROCK-A MASTERPIECE OF NATURE
Photo by Fleckenstein
fulness 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 lttle avail. GOOD CULTIVATION, then, having been the most impor ant 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." 

## EAGLE ROCK

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. 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 travelled thoroughfares in the State.

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, California. Phone Garvanza 1163.
## EAGLE ROCK CITY

Is the fastest growing city of its size in the world today. "There's a reason." It is well known that Southern California is the most healthful and comfortable place to live, and Eagle Rock Valley is an unexcelled gem in this land of sunshine.

If you want to live in the best place on earth, you should buy a lot in DAHLIA HEIGHTS, the most desirable location in EAGLE ROCK CITY. Adjoining the Eagle Rock Dahlia Farm where the World's Finest Dahlias are produced.

For further information write to

H. E. BARNUM \& CO.,

## J. J. BROOMALL

## Dahlia Specialist

257 Rosemont Avenue
Eagle Rock, California
Phone Garbanza 1163


PARTIES DESIRING TO VISIT
EAGLE ROCK DAHLIA GARDENS SHOULD TAKE
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

