

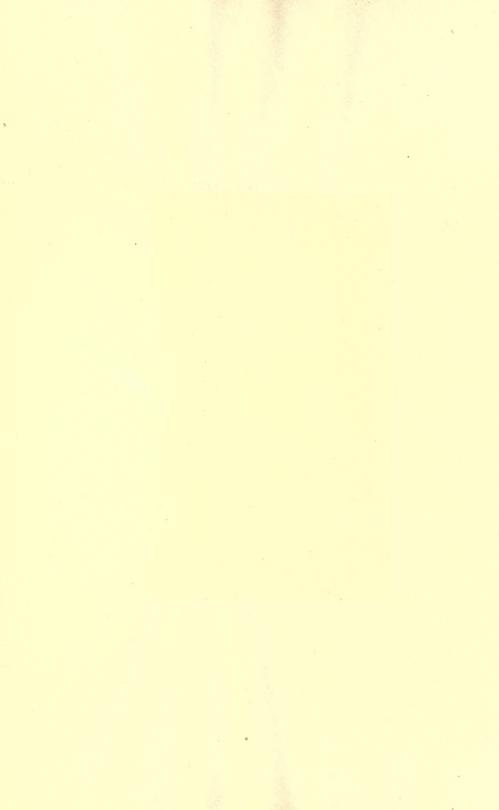


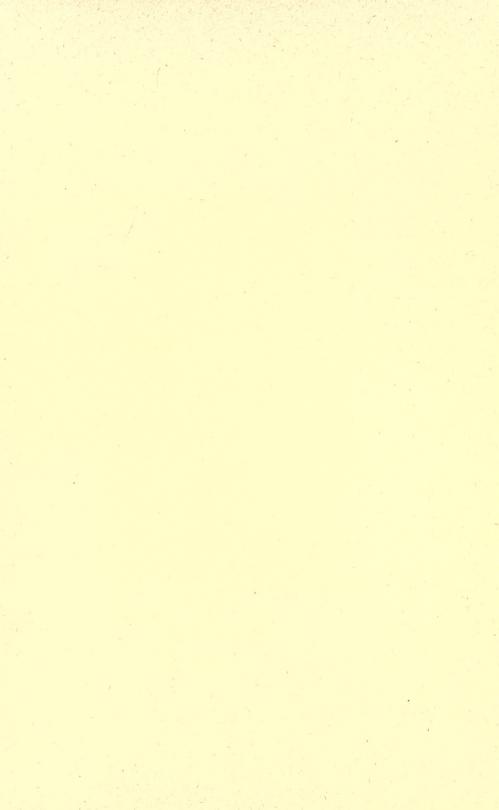
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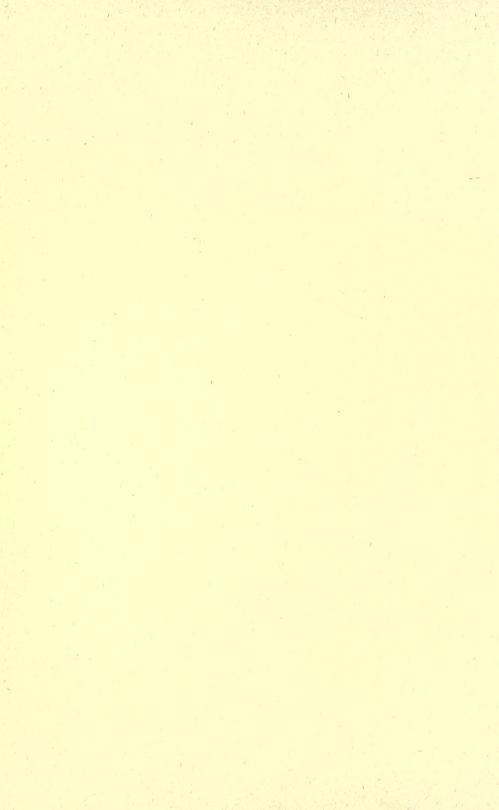


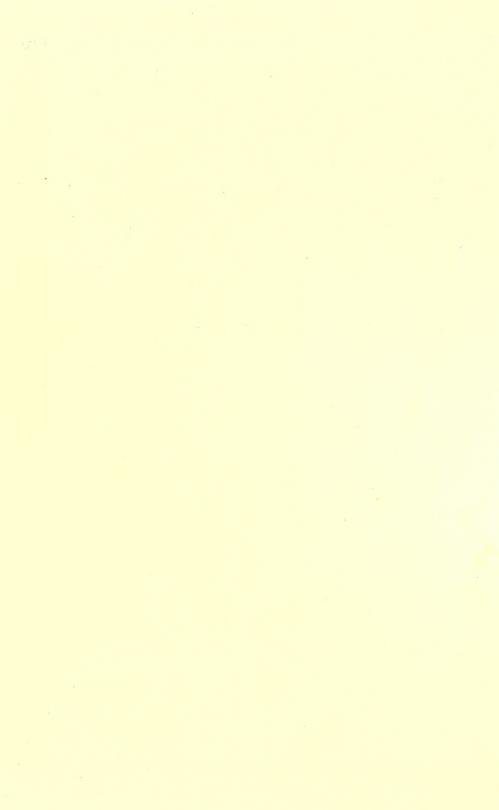
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NEW DECORATIVE CACTUS DAHLIA. Clifford W. Bruton.

THE DAHLIA

A PRACTICAL TREATISE

ON

ITS HABITS, CHARACTERISTICS, CULTIVATION AND HISTORY

BY

LAWRENCE K. PEACOCK,

SECRETARY OF AMERICAN DAHLIA SOCIETY.

BEAUTIFULLY ILLUSTRATED.

PUBLISHED BY

W. P. PEACOCK,
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INTRODUCTION.

HE progress made in floriculture in America during recent years is almost past comprehension. Great floral establishments, aggregating hundreds, if not thousands, of acres of glass have been reared with marvelous rapidity. Hundreds of thousands of acres are annually devoted exclusively to the cultivation of flowers. Hundreds, perhaps thousands, of hor-

ticultural clubs and societies have been formed for the purpose of holding exhibitions and further developing floriculture, with most gratifying results. Everywhere greater attention is given, not only, to the flower garden, but the floral decoration of the lawn. Nor does this interest stop with the autumn frosts and wintry blasts. Flowers are so greatly appreciated that conservatories are erected and window gardens are prepared, that blooming plants may always be near to gladden the heavy heart and revive the drooping spirit, when troubles come or cares oppress. They are rapidly becoming such a necessary luxury that many cannot and will not be content without them. They are, indeed, the joy alike of the rich and the poor, the old and the young; in success or in adversity they are ever our friends, gratefully repaying our small attentions with their profusion of bloom.

At the beginning of each year we dream of delightful grounds and beautiful flowers—flowers for all purposes—flowers so beautiful that our homes promise to be, indeed, a paradise of surpassing loveliness. Our dreams are more than realized during May and June, when we find roses, flowering shrubs, and bulbs in endless variety, to say nothing of other flowers, blooming everywhere in the greatest profusion. But our dreams do not last. June and our flowers, at least most of them, bid us adieu. It is now that we need a first-class flower that will fill our empty vases, beautify our lawns; in fact, a flower that will completely fill the space between roses and chrysanthemums, when other good flowers are not plentiful. Flower after flower has been tried until at last it became evident that the "Dahlia" was the only flower having

the proper qualifications. As soon as this fact was realized, interest was at once aroused; skilled specialists began producing exquisite varieties, and the Dahlia entered on a new era of popularity.

Not only have the older forms and classes been improved, but new types have been produced for special purposes. The most important of these new types are the Cactus and Decorative varieties, which, with their exquisite forms, superb colors, beautifully blended shades and tints, have only to be seen to become favorites with all. Dahlias are of the easiest culture, yet there are drawbacks to their successful cultivation by the amateur. Many devote considerable time and expense to their culture, and fail to get the best results, simply because their well meant intentions were not beneficial, to say the least. The Dahlia can be grown to perfection in every garden with but little care and expense, if attention is given to its simple requirements.

There are, however, no American works on the subject from which the amateur can secure needed information, while foreign works are of little value, owing to the difference in soil and climatic conditions. It is to supply this long felt want and to enable every one to grow lovely Dahlias, even under adverse conditions, that the writer presents this small treatise to the American public.

In the following chapters can be found, in a clear and concise form, such information as has been gleaned from years of practical experience. Particular stress has been laid on several facts, especially upon the necessity of frequent stirring of the surface soil to prevent excessive evaporation of moisture. Many think the only necessity of cultivation is to keep down the weeds; but, positively, weeds do little more harm than hard baked surface soil. The illustrations herein given speak volumes for themselves on this subject; they are all reproduced from photographs taken right out in a ten acre field, Sept. 28, 1895, after a continuous drouth of nine weeks, and are intended to show that Dahlias can be grown successfully, even under adverse conditions, rather than what can be grown, all things favorable. It is the aim of the writer to make the path to successful Dahlia culture so pleasant and easy that all may wish to travel it, knowing full well that once they are planted the pleasure derived will be so great that they will ever after be cultivated and highly prized. Neither labor nor expense has been spared in making this little treatise attractive, useful, and true to nature, that it may receive a cordial wélcome in every flower-loving home.

CHAPTER I.

THE DAHLIA.



HE Dahlia (Dahlia Variabilis of Linnæus) is a tender tuberous rooted perennial; a native of Mexico, and was first discovered by Baron Humboldt in 1789. It was sent by him to Prof. Cavenilles, of the Botanical Gardens, Madrid, who named it Dahlia, in honor of the celebrated Swedish botanist, Prof. Andrew Dahl. It was introduced into England in the same year (1789) by the Marchioness of Bute, who secured a plant

from Prof. Cavenilles. Although this plant was grown under glass and received the greatest care, the stock was finally lost and it was reintroduced into England by Lady Holland in 1804. In France, Spain and Germany the Dahlia also received great attention, and to this day is still prized as one of their finest summer and autumn blooming plants. Although other species were found and introduced from Mexico, yet it is remarkable that they should not hybridize and, except *D. Coccinea*. Cav., were not generally grown. Both *D. Variabilis* and *D. Coccinea* broke into numerous colors and became general favorites with the botanists and gardeners, who raised many new varieties from selected seed. A great impetus was given Dahlia culture in 1814, with the introduction of the first double variety. From this variety and several others that quickly followed, nearly all our present named varieties were produced.

Though the Dahlia was found so close to the United States, as is usually the case, it was not introduced directly from Mexico, but was shortly afterward introduced from England in the form of several improved varieties. In America, as in Europe, the Dahlia soon became a great favorite and was universally grown.

There is one peculiarity that must not be overlooked; during thirty to forty years of constant improvement the one aim was to produce perfectly double, regular, ball-shaped flowers; the nearer a perfect ball they were the more highly they were prized. This type had by 1840 reached almost perfection, and was the only type considered worth growing. At this time, and for many years afterward, the Dahlia was the favorite garden plant with amateurs, gardeners and florists.

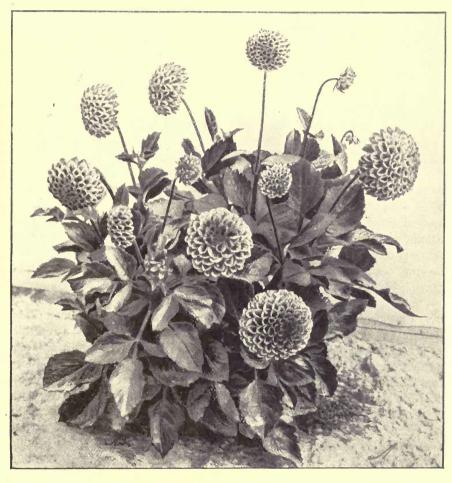
But as the demand seemed to be assured, the seedsmen and florists continued to grow mainly the single and show or ball-shaped varieties, and when

they had reached what they thought was perfection in those types, ceased to strive after new varieties and forms, but continued to grow and offer the same varieties from year to year. This was followed by a decline in the demand for roots, as some had become tired of the stiff form of the old varieties, and others having a complete collection of what was offered, began to look to other flowers for something new. Under these conditions, which were brought about by the florists themselves, the Dahlia received less and less attention as the years went by. In fact, this neglect went so far that at last it was almost impossible to secure good varieties true to name. To illustrate, I will give a few instances out of the many that has been brought to my attention. In one instance three growers offered the same variety under three different names, while in another case one variety was sent out under nineteen different names by the same concern. I, myself, a few years ago, bought five large collections from as many different firms and in some cases had several varieties under the same name, and in others had the same variety under several different names, while many varieties were entirely worthless. Of course we must be charitable enough to believe it was carelessness only, yet such neglect is almost criminal when we consider its evil results.

Fortunately, however, during this time the Dahlia was undergoing a complete transformation in Europe, especially in England, where new types and forms were being produced to conform to the prevalent demand for loose, graceful flowers. The term "loose" is not used to denote semi-double or open center flowers, but to distinguish them from the solid compact form of the old varieties. Some of these new Cactus and Decorative varieties are marvels of superb beauty, not only in form, but in their beautiful shades, tints and exquisite finish.

As soon as some of these finer varieties were introduced, interest was at once revived, and as a result we now have specialists who equal, at least, the foreign growers in the production of superior varieties. But owing to the decadence of the Dahlia trade, through multiplicity of names and inferiority of varieties, it soon became evident to these specialists that they must work together, shoulder to shoulder, if they wished to thoroughly popularize the Dahlia. At the suggestion of several amateur admirers of the Dahlia, one of these specialists undertook the formation of a national society, and the "American Dahlia Society," which is fully described in a succeeding chapter, was the gratifying result.

That the proper course was taken is conclusively proven from the fact that in the past three years the demand has increased fully twenty-five per cent. each year, and that the demand was mainly for new and distinct varieties; while the seedsmen and florists are at last awakened to the necessity of offering only the best varieties true to name. Dahlias now form part of the



New Dwarf Fancy Dahlia.—Rev. C. W. Bolton.
Planted June 26th. Photographed Sept 28th, 1895, after nine weeks continuous drouth.
Single stem branching system.

florists stock of cut flowers during their season, and thousands of blooms are used daily for bouquets, designs and decorations, many times at a higher price than paid for roses.

There is really no other flower that will give so much pleasure for so little care and expense. It combines more good qualities than any other flower grown in the open garden, where it can be had in perfection from June until cut down by frost. The plant is a strong, robust grower and such a gross feeder that it will grow in any kind of soil if given proper nutriment. To illustrate how readily they will grow and bloom, where large clumps are used, I will give an experience we had a few years ago.

After planting our Dahlias and while cleaning up the cellar, I came across some very large clumps that had been set aside; finding that they were mixed roots, and having planted all we wished, I ordered them to be thrown on the waste pile, which was to be hauled away to help fill up a large washout. I had intended to have this washout filled up at once, but we were all busy and it went on until July, when, happening along one day, I saw several beautiful blooms of the Dahlia "Mrs. Dexter." To say I was surprised is putting it mildly. Several loads of all kinds of rubbish had been dumped right down on the hard, yellow subsoil bottom, and growing here without any attention the plants were strong and vigorous, while the flowers were as fine as I ever saw. It had been a wet season and as the shoots from the large clumps were so strong they came through nearly two feet of trash, growing luxuriantly.

While in the Dahlia can be found, not only every color, except blue, and every intermediate shade and tint, from the softest to the richest, but the most beautiful combinations of colors and marvelous blendings of shades and tints; yet it is this ease of culture, combined with its varied habits and adaptability to conditions, that makes the plant most valuable and popular. The new Tom Thumb varieties, both double and single, grow but twelve to eighteen inches high, while Imperials and Arborea grow from twelve to fifteen feet high. Between these two extremes are the dwarf, the semi-dwarf and the standard or tall varieties. The gardener can thus select varieties of any height or habit desired for any special purpose, such as bedding, massing or banking, for borders of any height, or for specimen plants for the lawn.

As a cut flower, whether for bouquets, decorations, or exhibition purposes, the Dahlia is unsurpassed owing to the great diversity of form and the brilliant lustre of the colors. In size they vary from the smallest of the Pompon, growing but one-half inch across, to the largest of the Show and Cactus varieties. Specimen blooms of the largest of these latter varieties have been grown seven to nine inches in diameter, on stems three feet long. Such is the history and a few of the main characteristics of a plant that has

been grown and improved for more than a century, and is, to-day, wherever the finer varieties are known, the most popular summer and autumn blooming plant in cultivation.

Possibly no other plant shows the skill of the florist to such a marked degree; and, taking the wonderful improvements of the last few years as a criterion, we may well ask how far the specialist can carry his skill. Unlike many other plants, its vigor seems to keep apace with its other improvements; and, as we consider these things, we must admit that the possibilities of the Dahlia in the future are almost limitless. If you admire beautiful flowers and want them in profusion from June until frost, plant Dahlias and you will be delighted. No matter how many other plants may fail to thrive, or whether the season is wet or dry, you can grow them successfully if you but heed their simple requirements.

CHAPTER II.

CLASSIFICATION.



T is doubtful if two persons would classify Dahlias exactly alike. Some would make so many sections as to be confusing, while others would fail to give a sufficient number to demonstrate marked distinctions. As the latter is the lesser evil of the two I shall, if I err at all, err on that side. Many, speaking on the subject, criticise the forming of so many classes in any flower as confusing to the amateur, and perhaps, to a certain

extend, they are right; but it is more confusing to offer five yellow Dahlias, in one section, than it is to offer the same number in five different sections. Amateurs would not want to buy two or more varieties that are exactly alike, or even similar, and in the former case would hesitate, not knowing which to select, but when offered in distinct sections they would know at once which they wanted from the characteristics of the section to which it belonged.

Dahlias are divided into two parts or general divisions, double and single, while each of these divisions are again divided into sections, according to habit of plant and type of flower.

Part I. Double Dahlias.—Double Dahlias are divided into the following classes, or, more properly speaking, sections:—Cactus, Decorative, Show, Fancy, Pompon or Bouquet, Dwarf and Double Tom Thumb. These sections are again sub-divided by some, but the practice is to be deprecated as it only leads to confusion; and instead of making more classes or sections, any distinctive features should be placed in the description of the individual variety.

Cactus Dahlias.—This section is of recent introduction and is among the most useful and beautiful of the entire family. Juarezzi was the first Cactus Dahlia, and is still quite popular, though it would not now be considered an ideal type. The flowers are very large, flat and of the most exquisite finish, being soft, delicate and graceful. The colors of this class are the most exquisitely delicate and refined, while the blendings of shades and tints are surpassingly lovely. The flowers are perfectly double, loosely arranged, irregular in outline, and are borne on good stems, well supplied with buds and foliage. The plants are mostly strong growers and are very profuse bloomers.

Decorative Dahlias.—This group is similar to the preceding in habit but are of stronger growth and are more profuse bloomers. They are generally sold as Cactus Dahlias but are entirely distinct. In form they are about half-way between the Show and Cactus varieties, being sometimes called Semi-Cactus. The flowers have the same exquisite colors and superb finish of the cactus varieties; are of largest size, beautiful form, and are borne on long stems supplied with buds and foliage. The petals are long, broad, beautiful and regular, though they vary in form in different varieties. This class, as the name would suggest, is the best for general decorations.

Show Dahlias.—These are a branch of the old ball-shaped type, and are very highly prized by all who wish to make a beautiful show in mass. They are very large, of beautiful compact form, and are double to the centre. In many cases the outer petals reflex to the stem, forming a perfect ball. This is the oldest form of the double Dahlia, and is better known and more universally grown than any other section. Some of the varieties are unsurpassed for vases and large decorations, being of immense size, with long stems. They embrace the full range of colors, except blue, and every intermediate shade and tint. The flowers are all either solid self-colored or edged and shaded darker than the ground color. This section is invaluable for banking and massing, or, in fact, for any purpose where a large display is wanted.

Fancy Dahlias.—Also a branch of the old ball-shaped type, but are entirely distinct from the Show Dahlia, and are the most popular everywhere, owing to the lovely combinations of colors in the same flower. They are splashed, penciled, margined, edged and variegated in every conceivable manner and form. The flowers are of large size, beautiful and regular form, while the plants are strong, vigorous growers and free bloomers. They are general favorites, and are largely planted in garden collections and as specmen plants. This section is seldom offered separately, but is included in the Double Large Flowering or Show Dahlias of the catalogues.

Pompon or Bouquet Dahlias.—This is not only a charming section, but one of the loveliest of the entire family. The flowers are of the most beautiful form, and embrace every color, shade, and tint found in Dahlias. They are very highly colored, while many of the varieties are beautifully variegated. The plants are of dwarf, compact growth, and, being continually covered with a mass of flowers, are very effective for bedding or borders, where they produce a beautiful effect. The flowers are largely used for bouquets and decorations, lasting a long time after being cut. This section is especially valuable for pot culture and for planting on small grounds where a large collection is desired, as they can be planted much closer together than the larger varieties.

Dwarf or Bedding Dahlias.—This section is also generally included with the Double Large Flowering or Show Dahlias. The plants are beautiful and



Bouquet of New Pompon Dahlias.

symmetrical, growing but eighteen inches to three feet high, and are strong, sturdy, and compact. Some of the varieties are extensively grown for cut flowers, while they are all unsurpassed as specimen plants or for bedding purposes, owing to their great profusion of bloom and brilliant colors.

Double Tom Thumb Dahlias.—A section of pigmies growing only twelve to eighteen inches high, and the one pre-eminently adapted for bedding and pot culture. The flowers are from two to three inches in diameter, and are borne a few inches above the foliage, being quite distinct and striking. They will undoubtedly be largely used for bedding, and are very appropriate for children's miniature flower gardens.

Part II.—Single Dahlias.—Single Dahlias are certainly very beautiful and useful for bouquets, decorations, specimen plants and bedding, and should be included in every collection. When the new high colored varieties become better known they will undoubtedly be universally grown. All Single Dahlias should have but eight rays or petals, and the rays should be of the same length. Single Dahlias are sometimes divided into numerous sections, but I shall be more conservative, and instead of subdividing sections, will mention the leading characteristics of each section. I will, therefore, divide Single Dahlias into the following sections: Standard, Show, Fancy, Cactus, Dwarf, and Tom Thumb.

Standard Single Dahlias.—These are the old type generally cultivated during the past and still prized by many for their large size and long stems. The plants are tall, strong, robust growers, of a branching habit; they are free bloomers, and the easiest of Dahlias to grow. The flowers are self-colored, though sometimes shaded and edged darker than the ground color; they are large, flat, and embrace the entire range of colors.

Single Show Dahlias.—So named because of their superb exhibition qualities. They are entirely distinct from the preceding, and are the most beautifully formed of all single varieties. The flowers are large, self-colored, though sometimes edged and shaded darker than the ground color. The petals are broad, overlapping each other, and are beautifully reflexed, thus giving a rounded, finished appearance to the flower. This section is highly prized for all purposes.

Single Fancy Dahlias.—The grandest of the single sections, and universal favorites everywhere. The flowers are spotted, striped, splashed, margined, variegated, and blended in every conceivable and inconceivable manner. The colors, shades and tints are the loveliest found in nature, and embrace all from the softest to the richest. The flowers are of beautiful forms, some being reflex, of large size, and are marvels of entrancing loveliness. They are strong growers, profuse bloomers, and are invaluable for all purposes.

Single Cactus Dahlias.—As the name would suggest, these are entirely distinct from any other section. The petals are long, narrow, and irregular,

sometimes twisted at the tip. They are strong, vigorous growers, while the flowers, which are beautifully borne on long, graceful stems, are soft, delicate, and of largest size. They are highly prized for bouquets and decorations on account of their superb colors and unique form.

Single Dwarf Dahlias.—Of strong, sturdy growth, and from eighteen inches to three feet high. The flowers are medium to large, embrace the full range of colors, and are extensively used for borders, bedding, massing and banking. They are very profuse bloomers, sometimes as many as fifty flowers being out at one time on a single plant. They are also largely used for bouquets, decorations, and for specimen plants.

Single Tom Thumb.—These, like the Double Tom Thumb, are a race of pigmies, growing but ten to eighteen inches high. They embrace a complete range of colors, and are especially adapted for pot culture and all kinds of bedding. The flowers are small, growing but one and a half to two and a half inches in diameter, while some are beautifully variegated. The plants are sturdy little fellows, and quite distinct and striking with their small, brightly-colored flowers borne a few inches above the beautiful, serrated foliage. Owing to their miniature size they are a very appropriate plant for children's gardens; and are quite interesting if planted for contrast along side of the tall varieties.

CHAPTER III.

PROPAGATION.

HERE are four methods by which Dahlias are propagated; by cuttings, division of roots, and by grafting to perpetuate existing kinds, and by seeds to produce new varieties.

Division of Roots.—This is the easiest and most satisfactory to amateurs, and is so simple as to scarcely need description. As the eyes are not on the individual tubers but on the crown to which the tubers are attached, care must be taken

that each division has at least one eye. It is therefore best to start the eyes by placing the roots in a warm, moist place a short time before dividing. The roots are sometimes placed in a hot-bed, and the shoots grown to considerable size, then divided and set out as plants; but as this plan has many drawbacks, I would not advise it.

By Cuttings.—This method is used mainly by commercial growers, and though the amateur may easily propagate plants successfully, the attention a few cuttings would require would be so great that it would be cheaper to buy the plants. However, as it may be of interest to some, I will describe how Dahlias are propagated by this method on commercial places. The roots are planted closely in benches in the greenhouse early in January, and cuttings are made from the young shoots as fast as they form the third or fourth set of leaves. These cuttings are carefully trimmed and placed in pure sand in the propagating bench, using a dibble, and putting the cuttings in rows two or three inches apart and about a half inch between the cuttings. propagating bench is made by running a flue, hot water or steam pipes beneath an ordinary bench, and boarding up the sides to confine the heat. Although there may be a difference of opinion among propagators, yet a bottom or sand heat of 65 degrees, with the temperature of the house from 5 to 10 degrees less, will give the best practical results. With this temperature the cuttings will root in about two weeks, and will be far stronger than if rooted in less time with greater heat. As soon as the cuttings are rooted, they are potted off into small pots and grown in a cool greenhouse until danger of frost is over, when they are planted out in the open ground.

By Grafting.—This is a very interesting, though not profitable, mode of propagation. The top of the tuber is cut slantingly upward, and the cutting slantingly downward, placed together and tied with any soft, handy material.

They are then planted in a pot deep enough to cover the lower part of the graft with earth, and they will soon adhere if placed under a hand glass or in a frame. But as grafting has no advantages over the ordinary mode of propagation by cuttings it is seldom practiced.

By Seeds.—Though many grow Dahlias from seed instead of planting roots, yet seeds are generally planted to produce new varieties only. This being the case, the matter will be fully treated in another chapter under the head of new varieties.

Excessive Propagation.—I know of no other name for it, and must say that whoever is guilty of it is doing a great deal of harm to Dahlia culture. By excessive propagation is meant the forcing under glass, not only of the roots, but plants grown from the roots, often two or three times removed. In this way many good varieties are so run down that they come absolutely single, and it takes a year or two for them to recover their old time vigor. Especially do florists make a mistake in forcing their new introductions in this way, as they always lose in the end.

A number of years ago, a firm in England introduced a very fine Dahlia, and to meet the enormous demand the stock was forced under great heat; as a result the cuttings were so weak that they made poor, delicate plants, and the few flowers produced had large open centres, many being almost perfectly single. Consequently every one was disappointed and considerable money was refunded. Now mark the sequel. The next year the flowers came perfectly double again, but it was too late for the introducers; they had paid the penalty of their excessive greed.

There are many reasons why these facts should be known by all who grow Dahlias, though the main reason is that every variety will be grown at least two years, and not discarded because they fail to come perfectly full the first year. Had this fact been universally known, it would have saved considerable loss and disappointment, as, undoubtedly, many sorts discarded in the past were really fine varieties. Therefore, if you purchase a new highly praised variety and it should not answer quite to the description, do not condemn it too soon but grow it at least two more years. During this time it will, if properly cultivated, show its true characteristics; and if it still proves inferior write to the source from which it was secured, making your complaints.

If this practice of waiting a year or two was always followed, many complaints would never be written at all, as varieties are very apt to vary under different conditions and according to the seasons. A variety may be pure white this year, yet come tinted pink next, and *visa versa*. As an example, I will mention the Decorative-Cactus Dahlia "Nymphaea." This variety, under favorable conditions, is of a beautiful, clear, light shrimp pink color, and has a delicate refined Water Lily fragrance, but is

devoid of fragrance and almost pure white during an excessively wet, cold and cloudy season, or very late in the autumn. Of course if an entirely distinct variety is received it is something else, and a complaint together with a flower should be sent at once.

Division of roots is not only the easiest and best, but far the cheapest of the three methods of propagation, and the one followed, as far as possible, by all growers. However, with new or rare varieties, where it is not so much cost as quantity, division is entirely inadequate to the occasion, as it would take several years to secure even a limited stock. Accordingly, new and rare varieties are propagated from cuttings and offered as plants, or are grown another year and offered as field, or pot roots, at a price within the reach of all. It will thus be seen that a thorough knowledge of the art of propagation is very useful, but that evil will always result from its being carried too far.

In buying Dahlias it is always wise to give strong field roots the preference, as they give the best results the first year; but, as the roots are easily kept from year to year, the main object is to get the best varieties, regardless of the form in which they are offered.

CHAPTER IV.

POSITION, SOIL AND MANURE.



NE of the most important points in Dahlia culture is to select a suitable location, for unless they are planted in an open situation, where they can get plenty of sun and air, the best results cannot be obtained. True, they will grow and give some blooms in almost any position, even where shaded by trees and buildings; but, as no plant is perfectly satisfactory except at its best, it is always advisable to give such position

and conditions as will conduce to its highest state of development.

The best position for Dahlias is in the garden where, with but little attention, they will grow luxuriantly and bloom profusely during the entire summer and autumn. The house can thus be filled with lovely flowers at a time when, owing to the scarcity of other flowers, they are most appreciated. Beside the garden, Dahlias may be planted along fences; singly or in groups on the lawn, and in beds of any size or form desired, with most pleasing results. A large group or bank of the profuse blooming varieties, planted in a corner or on one side of the grounds in such manner that each succeeding row is higher than the one before it, is most beautiful and effective.

Another favorite position is along an exposed walk or drive, where they may be planted on either side and make a very attractive border. It must be remembered that the Dahlia requires plenty of sunlight, air and water, and it will not grow vigorously or bloom profusely where these elements cannot be obtained.

If planted in the shade of buildings, they will make a tall but soft growth of plant and will bloom but sparingly; while in the shade of trees their position is even worse, as they are not only robbed of sunshine, by the branches above, but of moisture by the roots beneath. Therefore plant your Dahlias where nothing will obstruct the sunlight and the free circulation of air above, or rob them of moisture from beneath, and you have taken the most important steps toward their successful cultivation.

The soil is not so important, except in its ability to hold moisture during severe drouths. Any rich soil that will grow corn will also grow Dahlias to perfection, if all other conditions are favorable. They will grow equally well in clear sand, clay or gravel, if the proper kinds and quantities of plant food is added and thoroughly worked in. While Dahlias will adapt them-

selves to any soil, it may be well to state, however, that a good sandy loam is especially adapted to their culture, owing to its drouth resisting qualities. Yet this is not of great importance as everything depends on the treatment given and the fertility, rather than the quality, of the soil.

Fertility goes hand and hand with position and is of great importance; for, no matter where you plant your Dahlias or how good your treatment, they will not grow luxuriantly or bloom freely unless there is an abundance of available plant food in the soil. The plants being strong, robust growers are not particular as to what particular form or kind of fertilizer is given, provided it contains the necessary elements required for their development. Any kind of well rotted manure that is most convenient will give equally good results, if sufficient quantity is well worked into the soil.

It is always best to broadcast the manure and plow or spade it into the soil, while it is absolutely necessary if it is not well decomposed. On heavy, clay or gravelly soils, loose, coarse manure may be used (broadcasted and plowed or spaded in of course) with excellent results, as it lightens the soil and allows a freer root growth, but on light or sandy soils the manure should always be fine and well rotted.

Commercial fertilizers are also largely used, and are most valuable when used in connection with manure. Any good fertilizer, rich in ammonia and phosphoric acid with a liberal amount of potash, will answer at the time of planting, but as a top dressing later, I have found nothing that would equal pure bone meal and nitrate of soda, in proportion—four parts bone and one part soda.

CHAPTER V.

GARDEN CULTIVATION.

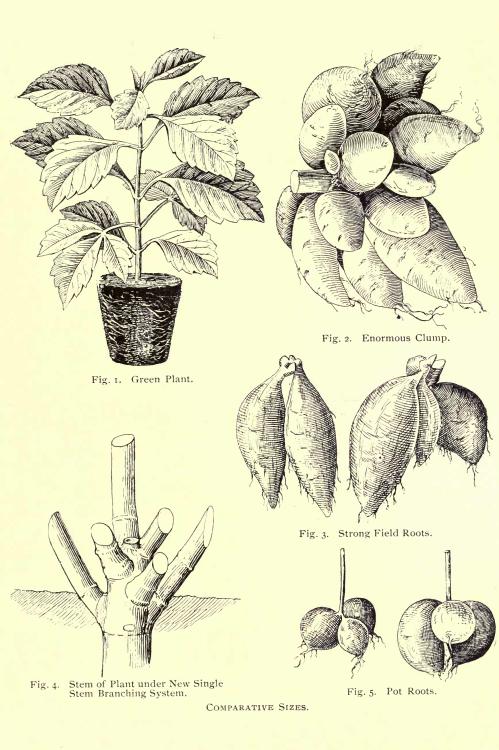


HE garden is the place pre-eminently adapted to Dahlia culture. It is here that they may be grown, in all their loveliness, with so little care and expense that no lover of flowers can afford to be without them. They grow so luxuriantly and bloom so profusely that even a few plants, properly cared for, will furnish a fresh bouquet almost daily from June until frost, while a collection of the finer varieties are ever a source of great pleasure.

Dahlias are offered in five forms:—Immense clumps, strong field roots, pot roots, green plants and seeds (see next page for comparative sizes). The clumps give the best results the first year, but are entirely too large and unwieldy for anything but a local trade. The strong field roots are the most valuable, as they can be easily and safely handled, and always give satisfactory results. Pot roots are largely used in the mailing trade, and, while they will not give as good results the first year, are valuable for shipping long distances where larger roots could not be profitably used, owing to heavy transportation charges.

Green plants are mainly used to make up any deficiency in the field crops, owing to unfavorable seasons, or an unusual demand for certain varieties. Many firms, who offer field roots only, send out strong green plants, rather than disappoint their customers by returning their money, after the supply of roots is exhausted. This I consider a very good plan, as the plants will bloom equally as well if they receive careful attention, and will make good roots for the following year.

There is a diversity of opinion as to the proper time to plant Dahlias, but I have always found it best to plant early and would advise planting large, strong roots about two weeks before danger of frost is over. This would be, in the vicinity of Philadelphia, about April 15th; and as it takes from two to three weeks for them to get up through the ground there will be no danger, while your plants will bloom that much earlier. It is best, however, not to plant small roots or green plants until danger of frost is over—in the vicinity of Philadelphia, about the 1st to the 1oth of May, according to the season. Therefore, a good rule to follow everywhere would be to plant small roots and green plants as soon as danger of frost is over and large roots about two weeks earlier.



The first requisite of successful garden cultivation is to thoroughly stir the soil to considerable depth, and enrich it, if it is not already so, by broadcasting and plowing or spading in a good coat of well rotted manure. Too much stress cannot be placed upon the thorough preparation of the soil, as it not only allows the roots to go down deep after the moisture more readily during dry weather, but affords good drainage during excessive rains. Having prepared the soil as above, mark out rows four feet apart and six to eight inches deep, and plant the roots from eighteen inches to three feet apart in the row, according as you wish a solid row or specimen plants. If perfectly symmetrical specimen plants are wanted, they should be planted, at least four feet apart each way, which allows plenty of room for the circulation of air between the plants and a larger surface from which they can draw nourishment and moisture.

Before covering the roots, spread a small shovelful of well rotted manure in each space between the roots, and a small handful of fertilizer to two spaces, taking care that the manure and fertilizer does not come in contact with the roots. This done, cover the rows with plow, hoe or any other convenient method. As soon as the shoots appear, remove all but the strongest one and pinch that one off, thus forcing it to branch at the surface of the ground. By this method the entire strength of the root and the soil is concentrated on the one shoot, causing it to grow vigorously; while the pinching or cutting back of the shoot not only causes it to branch at the surface and thus brace it against all storms without staking, but also removes all of those first imperfect, short-stemmed flowers that appear on some varieties. (See cut page 23 showing how the plants branch, also illustration of field of Nymphaea Dahlias, page 26, grown under this system without staking.)

I am, I think, the first to use and advocate this method of cultivation, and, by its practice, have grown many thousands of Dahlia blooms, on stems from eighteen inches to two feet long; selling them to florists, by the thousands, for four times the ruling price of carnations, and higher than that asked for roses.

During its early stage of development, the Dahlia grows very rapidly, and should be kept thoroughly cultivated; that is, the rows should be kept scrupulously clean by frequent hoeings, and the space between the rows frequently and deeply stirred. Among the many benefits thus derived is to make the plant root deeply, but it must be remembered that while deep cultivation is beneficial during its early stage of development, it is almost fatal to the production of flowers if practiced after the plants come into bloom. Therefore, when your plants commence to bloom, cease deep cultivation and stir the soil to the depth of one to two inches only, but stir it often, and never allow the surface to become hard and baked. This will not only prevent excessive evaporation of moisture and keep the under soil cool and moist, but will also prevent the destruction of immense quantities of feeding roots.

The nearer the directions for preparing the soil and planting the roots are followed, the longer the plants will continue to grow and bloom freely, for the roots push out in every direction in search of nourishment and moisture, thus forming a complete network of strong, vigorous feeding roots. This immense system of roots not only more than supply the needs of the plant, but enables it to withstand extreme droughts owing to the large amount of moisture they hold in reserve.

As long as the roots supply more nourishment than is needed to support the plant, both the plant and the flowers increase in size and beauty; but as the supply gradually becomes exhausted, the plants cease growing and the flowers become much smaller. This condition is what is generally called "bloomed out," but what is really "starved out," and can easily be prevented if the proper attention is given to the plants. As soon as the flowers commence to grow smaller, broadcast around each plant a small handful of pure bone meal and nitrate of soda, in proportion four parts bone to one part soda, and carefully work it into the soil.

This will be carried down where the roots can reach it by the first rain, and will restore full vigor to the plants and size to the flowers. In the absence of above mixture, any good fertilizer rich in ammonia and phosphoric acid will give excellent results. This top dressing, and a thorough stirring of the soil from time to time as already advised, will insure an abundance of beautiful flowers until the plants are killed down by severe frosts.

As soon as the plants are killed by frost, lift the roots and, after removing all the soil from them possible, allow them to dry in the air for a few hours, when they should be stored in the cellar or some other cool place secure from frost. If your cellar is very dry or is not frost proof, put the roots in a barrel or box and cover completely with dry sand or some other suitable and convenient material, such as saw dust or tan bark, to prevent freezing or loss of vitality by drying and shriveling. Roots handled in this way will keep safely over winter and will be in excellent condition for planting the following spring.

Staking.—It has always been thought necessary to tie Dahlias up to stakes to prevent them from being blown down by heavy winds, but how much more beautiful is a field or collection of Dahlias in full bloom without stakes. The system of staking is not only unsightly during the early stage of their growth, but is attended with considerable labor and expense. Staking, however, is unnecessary if the directions already given on page 24 are followed, as the plants will branch out at the surface of the ground and the stems will become so heavy as to resist the strongest winds. It may not be out of place to add that this is the best method for growing Dahlias, as the plants are one-third dwarfer, compact and regular in form, and produce much finer flowers on long stems well supplied with buds and foliage.



FIELD OF NYMPHÆA DAHLIAS.

Planted May 30th. Photographed Sept. 28th, 1895, after nine weeks continuous drouth. Single stem branching system.

Watering.—This is a debatable subject, and although a judicious application of water during a severe dry spell is very beneficial, yet in nine cases out of every ten where water is applied a thorough stirring of the surface soil would give better results. Not that I am opposed to watering where it can be done thoroughly and conveniently, but it is much better and easier to save the moisture already in the soil, than it is to put moisture in the soil artificially after nature's supply has been wasted. The soil acts as capillary tubes, thus drawing the moisture to the surface where, if unchecked, it is rapidly evaporated. If the surface is stirred this waste is prevented, as the dry loose soil completely seals those small tubes, and the moisture is held in reserve beneath until it is required and removed by the plant. It is really astonishing how long Dahlias will withstand the drought if they are not planted too closely and the soil is properly stirred.

The summer and autumn of 1895 was one of the dryest on record; there being after July 4th but two showers—July 20th and 28th respectively—until October, and during this period there was at no time sufficient rainfall to lay the dust. Despite this extreme drouth, Dahlias given the treatment herein described bloomed freely throughout, as may be seen from the illustrations contained in this book. These illustrations were reproduced from photographs taken right out in a ten acre field, September 28th 1895, after nine weeks of continuous drouth. This field of Dahlias was grown under the new system, as described in this chapter, without staking or watering, and was pronounced by many to be a signal triumph of science and skill over adverse conditions.

This instance proves how easily Dahlias may be grown, without the labor and expense of staking and watering, during the most trying season ever experienced. Not but what watering, at least, would have been beneficial; but it would have been worse than folly to have dreamed of watering a ten acre field in New Jersey, with nothing but a windmill to pump the water and not enough wind to run it.

Many people believe Dahlias should be watered every evening, and as soon as they are up commence watering them daily unless it rains. This practice is very injurious as it causes a rapid, but soft, growth; and, as the soil is seldom stirred, the roots become so enfeebled for want of air that they are unable to supply the needs of the plant; as a consequence, but few buds are formed and they generally blast before developing into flowers.

In other cases, as the enthusiasm wears off, watering is stopped, probably, right at the beginning of a severe drouth, and the weak, pampered plants are fortunate to survive, much less bloom.

If large, strong roots are planted and the soil is kept thoroughly stirred, there will be little need of artificial watering until after the plants come out in full bloom. However, if it should become hot and dry after your Dahlias

come into bloom, it would, if convenient, be very beneficial to give them a thorough watering once each week or ten days during the continuance of the drouth. But care must be taken to stir the soil to the depth of one to two inches the next day, carefully pulverizing it later, in order to seal those natural capillary tubes by which the moisture is evaporated.

The best rule to follow is not to allow your plants to suffer from want of moisture; nor to water them except they need it; but to water them *thoroughly* when you do water them, and not to allow *excessive evaporation* for want of frequent stirring of the soil.

CHAPTER VI.

NEW VARIETIES.



HE popularity of a plant is always increased by the production of new varieties. Whether this is, altogether, because we tire of existing kinds, or because the production of distinct forms and types disproves the old adage of there being "nothing new under the sun," each reader must decide for themselves. The scientist would demonstrate that nothing new had been created—that it was only new combinations

of what existed before; but in this very demonstration, however, he would admit that which he was trying to disprove; it is these new and marvelously beautiful combinations that excite the admiration of the flower-loving world. No other flower has been so improved by the production of new varieties as the Dahlia, and, strange to say, without impairing its vigor of growth.

Although many new varieties are produced by sports from existing kinds, the most important method, and only one by which real progress is made, is by planting selected seeds. To secure the best results, seed should be saved from dwarf, very double varieties only, as they not only bloom earlier but give a greater percentage of good flowers. Crossing varieties also offers great possibilities in the production of superior sorts, and many specialists secure the exact kinds they wish by the judicious selection of parent plants.

Artificial crossing of varieties is very easily accomplished if the proper care is taken, although growers have, in the past, been content to depend chiefly on bees and other insects for all crossing, and simply gathered seed from the finest flowers. All that is necessary is to select the varieties it is desired to cross, and apply the pollen of one to the pistil of the other with a fine camel's-hair brush. It will take several operations on each flower-head, as each head is composed of numerous individual flowers which open slowly, commencing at the base of the rays or petals. Care must be taken to remove the stamen from each flower of the head, before it can impregnate the pistil with its own pollen, also to cover the flowers operated on with wire screens, to keep off bees and other insects.

The seed can be sown thinly in the greenhouse, in a box in the house, or in a mild hot-bed early in April, and transplanted into the open ground



New Show Dahlia.—Miss May Lomas.

as soon as danger of frost is over. They require the same treatment as other Dahlias, except that they must be watered until thoroughly established, and will bloom freely the first season.

Growing new varieties from seed is most fascinating to amateurs, owing to the uncertainty and expectancy; for beside the possibility of raising a finer variety than was ever before produced, they have the pleasure of watching each plant as it first unfolds its hidden secret.

Sports have the same form and other characteristics of the variety from which they spring, and are simply a reproduction of the old variety in a different color or colors. In some instances they have simply a change in the ground color, as is seen in the "Fawcett" sports, whilein others there is a complete change of colors. They are seldom an improvement on the old variety, and are most frequent among the Fancy sections. Some varieties sport permanently, while others sport back and forth and cannot be depended on unless selected very carefully. An example of the latter class can be found in the Fancy Dahlia "Dandy," which is a red pink, striped and heavily penciled, reverse black, and is so apt to sport that, unless care is exercised, ninetenths of the flowers will be solid black. There is also a pink sport of this variety, but if care is taken to throw out all but the striped type for a few years, but little trouble will be experienced in keeping it true.

Some of the new varieties recently introduced are marvels of entrancing loveliness, being of largest size, most beautiful form, and of exquisite finish. While there has not been a blue variety produced as yet, many believe it is only a question of a little time, for we already have several purples containing blue shades; all that is needed is to develop those shades, and we have the greatest floral novelty of the century.

A great deal has been said regarding the value of new varieties of flowers, both pro and con; but it is now generally conceded that new varieties of merit are, not only beneficial to floriculture, but are absolutely necessary to keep up a popular interest, in any class of plants. The past history of the Dahlia is sufficient proof of this; but, while new varieties are essential, improvement is of still greater importance, and no variety should be introduced unless it has more good points than any other variety of a similar color and type.

CHAPTER VII.

DAHLIAS FOR SPECIAL PURPOSES.



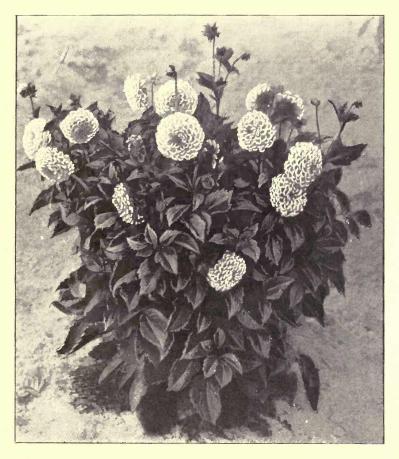
HERE are now varieties of almost every conceivable color, form and habit; and, where the finer varieties are known, they are largely used and highly prized, for all floral purposes. There are many varieties that are similar in color, and from a general description would be called identical; yet, owing to form and habit, they are entirely distinct, and each are preeminently adapted to some special purpose. It is, therefore,

of the greatest importance that the various characteristics of each variety should be given in the descriptions, that the monotnoy and general similarity of the descriptive list can be avoided, and thus assist the buyer in selecting varieties for any special purpose. In the past, Dahlias were grown chiefly as garden plants, where color was of importance, and little attention was given to any particular shade or tint of that color; but with the knowledge of the adaptability of the plant to conditions, and its value for so many special purposes, varieties to supply these needs were produced. Therefore, the time for buying and growing Dahlias under color is past, and both the amateur and the grower will select certain named varieties for a certain purpose.

Cut Flowers.—There is no flower more useful for cut flower purposes than the Dahlia, coming, as they do, at a season when there is a dearth of other good flowers. Varieties having large flowers of perfect form, good texture and finish, pleasing and attraclive colors, and borne on long stems well supplied with buds and foliage, are the most useful. The Decorative Cactus varieties are the most valuable for this purpose and the following are among the very best: Nymphæa, Clifford W. Bruton, Harry Freeman, Lyndhurst, Delicata, Evadne, Black Prince, Mrs. Hawkins, Oban, Princess Harry, Marchioness of Bute and Sunlight.

Many of the Show and Fancy varieties are also largely used for vases and large decorations, among the best being Miss May Lomas, Miss Florence Shearer, Mrs. Gladstone, Pluton, Souv. de Mad. Moreau, Purity, Penelope, Lucy Fawcett, Crimson Giant, Mrs. Langtry, Grand Duke Alexis, Ruby Queen, Frank Smith, and Arabella.

The Pompon or Bouquet Dahlias are great favorites, especially for bouquets, and decorations where small flowers and brilliant colors are wanted. The best for cut flowers are: Snowclad, Loveliness, Fairy Queen, Beauty In-



New Bedding Dahlia.—Psyche.

Planted June 12th. Photographed Sept. 28th, 1895, after nine weeks continuous drouth. Single stem branching system.

constant, Catherine, La Petite Jean, Aillet's Imperial, Sprig, Crimson Beauty, Little Prince, Daybreak and Fashion.

All of the single varieties are especially adapted for cutting, and many of the Dwarf varieties are used by florists for design work; of the latter Alba Imbricata, Cameliaflora and Mary Bruant are the most important.

Massing and Banking.—Nothing can be lovelier or grander than a mass or bank of bright colored Dahlias tastefully planted so as to display the beautiful colors to advantage. The Show, Dwarf and Single varieties are especially valuable for this purpose, as are also a few of the Decorative Cactus, Fancy and Pompon. They must be profuse bloomers, of sturdy growth and of bright and intense colors. Of the Decorative Cactus varieties, Nymphæa, Wm. Agnew, Lyndhurst, Clifford W. Bruton, Beauty of Brentwood and Henry Patrick are among the best. Of the Show and Fancy sections the following are unsurpassed: Lucy Fawcett, A. D. Livoni, Pluton, Arabella, Miss Florence Shearer, Princess Bonnie, Wacht Am Rhine, Marg. Bruant, Grand Duke Alexis, Crimson Giant, Red Head, Colibre, Bird of Passage, Hercules, Marguerite. All of the free flowering Dwarf, Tom Thumb and Single varieties are valuable for this purpose; also, such Pompon sorts as Klein Domatia, Snowclad, Fairy Tales, Catherine, Vivid, Loveliness, Dandy and Virginale.

Bedding.—Gardeners are now beginning to realize the great possibilities of the Dahlia as a bedding plant. For this purpose they must be of strong, sturdy, branching growth, and profuse bloomers, while the flowers must be of good substance, rich and brilliant colors, and be able to withstand the hot summer sun without fading. The height of the plant will depend on the kind of bedding; tall and semi-dwarf varieties for large beds, and dwarf sorts for small beds or for low bedding purposes. Some very attractive beds have been grown by planting tall varieties in the center, around which were planted rows of proportionately dwarfer varieties. These rows may be of dwarfer varieties of the same color, or may be of different colors as desired, there being no limit to the possible arrangements or combinations, owing to the numerous good varieties at command.

Specimen Plants.—This is one of the most pleasing and valuable forms in which the Dahlia is grown, and, perhaps, the most popular. Any of the free blooming varieties will produce fine specimen plants, if large roots are planted, but one shoot allowed to grow, and that pinched off and forced to branch at the surface of the ground; though on small grounds the dwarf or bedding varieties are generally grown. By selecting different varieties they may be grown to all sizes and well-grown specimens of some of the newer varieties is an entrancingly lovely sight, and one long to be remembered.

Borders and Hedges.—Along open and exposed walks and driveways Dahlias are sometimes planted with excellent results. They may all be of one

color, or of different colored varieties of same height and habit, according to the taste of the grower. Another useful purpose is to grow them in hedge form around the garden, or anywhere a hedge is desired, and it is impossible to imagine anything lovelier. Just think of a garden enclosed on every side by a hedge four feet high, two and a half feet wide and completely enveloped with beautiful flowers of the loveliest shades, from the softest to the richest. Nor is this picture overdrawn. It is impossible to convey with the pen the great beauty of the scene just described, and it is the wish of the writer that every reader of this little work could have beheld this scene, just as the writer did one beautiful September morning about three years ago.

Dahlias are used for many other purposes, and are grown in many other forms with most pleasing effect. Some train the tall varieties on trellises in espalier form; many train them to tall supports, while a few spread them out on the ground, and peg them fast, to give them the appearance of a bed of large flowering pigmies. This latter form is very pleasing, as a plant of some varieties will bloom profusely, and seem to thrive unusually well, while giving the impression of being a number of sturdy plants growing but eight to ten inches high. The Fancy Dahlia, Uncertainty, is especially adapted to this purpose. It is a beautiful, variegated variety, of a sprawling habit, and will produce more flowers under this system than any other.

CHAPTER VIII.

DAHLIA EXHIBITIONS.



O flower is better adapted for exhibition purposes than the Dahlia, which fact is fully appreciated in England where Dahlia shows not only exceed the chrysanthemum shows in number, but in surpassing beauty and popularity. In England, France, and Germany, but especially in England, Dahlias are universally grown by all classes, and almost every town and hamlet as well

as the large cities, have a Dahlia show of their own. There, in almost every garden, can be found the most beautiful varieties, grown especially for the local Dahlia exhibition, where the titled gentleman and his humblest laborer compete on equal terms for the same prizes. Nor does the humbler man compete in vain, for, in many cases, he wins the prize for which he has striven so hard. As the Dahlia requires no special conditions or greenhouses, it is entirely a matter of science and skill, and there is everywhere such a strong, yet friendly, competition, as to arouse the greatest popular interest and enthusiasm.

How different in America. Here we have no shows during the summer and early autumn months; but, early in November, there comes such a deluge of Chrysanthemum shows as to almost bewilder us. Our florists and horticulturists seem to think the Chrysanthemum the only flower worthy of an exhibition; and, then complain because the masses do not agree with them. The November Chrysanthemum shows are losing in popularity, simply because the masses are not interested in a flower they cannot grow; they admire them, but, lacking interest, do not care to see about the same thing from year to year.

Somehow our leading horticulturists do not realize this, for they are now discussing this monotony of, and lack of interest in, the flower shows. They attribute it to the system as may be seen from the following quotation: "The next question is, how to get the masses to lend us their eyes and ears. The present system seems to fall short somewhere, and is pretty near a failure."

For summer and early autumn shows, especially in small cities, towns, and even country villages, the Dahlia offers great possibilities, as it requires no special condition and can be grown to perfection in every garden, with



New Decorative Cactus Dahlia. Clifford W. Bruton.

but little trouble and expense. In this respect, it has no equal, and can truly be called the flower for the masses, as its superb beauty can be as fully developed in the workingman's garden, as on the more pretentious grounds of his more fortunate neighbors.

I am often told that the Dahlia can never supplant the Chrysanthemum, and that the Dahlia shows would never reach the popularity of the Chrysanthemum shows. As to the first no one would wish it, nor could it be, as they occupy two distinct seasons, and one follows the other in perfect succession. The Dahlia is in bloom from June until October, while the finer Chrysanthemums do not commence to bloom until the last of October and November; as they thus occupy two distinct seasons, it is useless to compare their relative qualities. One is a popular garden plant, the other, to be fully developed, belongs to the greenhouse; both have their missions—neither can be spared.

But in popularity, the Dahlia shows are destined to surpass every other floral exhibition in the near future, as they require no special conditions; no greenhouses, and can be grown in every garden, thus insuring spirited competition, without which the popularity of a show is sure to wane as the novelty wears off. Nor is this popularity undeserved; there is no other flower can compare with them in range of colors or variegations, while the beautiful lustre of the colors is unsurpassed in nature.

It is only at a comprehensive Dahlia exhibition, that its many wonderful characteristics can be seen. Flowers of almost every conceiveable form and color, all of superb beauty, are tastefully arranged so as to give the most pleasing effects. Some plants only ten inches high are exhibited in full bloom, while near by is a giant of ten, perhaps fifteen feet high. There are so many classes and types of Dahlias, that a person seeing a complete exhibit for the first time would be very apt to ask:—"But which are the Dahlias?"

Among the new introductions are varieties that resemble the Chrysanthemum, the Water Lily, the Cactus, and the Rose, besides improved forms of all the older types; and it is not unusual to see specimen blooms six to eight inches in diameter, on stems two to three feet long. This diversity of types and forms, precludes the possibility of that monotony so common at flower shows. The rapidly increasing popularity of the Dahlia will do much towards developing floriculture, especially in the rural districts, and will undoubtedly encourage the formation of local societies, for the purpose of holding Summer and early Autumn flower shows, throughout the country.

CHAPTER IX,

CONCLUDING REMARKS.



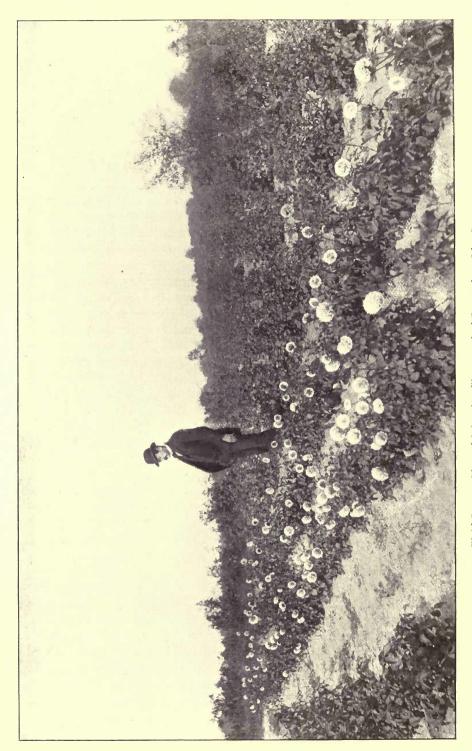
HILE a thorough stirring of the soil will generally give better results than watering, in garden cultivation; yet, when Dahlias are planted near trees, hedges, or large shrubs, they will require liberal watering, especially in dry weather, as the roots of the trees and shrubs will rob them of nature's supply of moisture. Specimen plants on the lawn will also need watering during dry

weather, and will well repay this extra attention with their wealth of bloom. A very common, yet fatal, error, is to start the roots in a hot-bed and allow the shoots to become a foot or more in height before planting on the lawn, as a plant started this way will need staking, and will always have a top-heavy appearance. A perfectly symmetrical Dahlia bush is one of the loveliest plants for any open position on the grounds, and can be grown with half the attention required by almost any other flower.

It is best to prepare a circular bed, at least two feet in diameter, and thoroughly stir the soil to the depth of eighteen inches to two feet. Plant large roots six to eight inches deep, and, under the single stem branching system (see figure 4, page 23,), the plant can be grown in any desired form, by securing the branches to small supports.

It is not generally known that Dahlias make beautiful pot plants, and that, by feeding them properly with manure water, they fully equal the Chrysanthemum as an exhibition plant. In growing plants in pots for exhibition, give them plenty of air and sunshine, though as cool a position as possible, and never allow them to suffer from lack of moisture; but, during very hot weather, partially protect them from the intense mid-day sun, which would injure the delicate petals, and in some cases cause the flowers to fade.

As the Dahlia is so free from insects and diseases, it was thought unnecessary to give the subject a separate chapter. Mildew is the only disease worth mentioning, and is caused by climatic conditions and unfavorable positions. Give your plants an open situation, and keep them in a growing condition during dry weather by frequent stirring of the surface soil, or by a thorough watering once each week during the drouth, and mildew will be unknown. If your plants are badly effected they will never bloom, so cut them down to the ground, when they will send up healthy shoots, and with proper attention, bloom until frost.



Showing value of early flowering semi-dwarf varieties, under new single stem branching system. Field Scene. Planted July 4th. Photographed September 28th, 1895.

There are but few insects affecting Dahlias in America, and these are easily disposed of by hand picking. The brown cut worm will sometimes cut off small shoots; as they will shoot up again, destroy the worm, and but little damage is done. The black aster bug sometimes attack the flowers but are easily picked off, as are also the spotted cucumber beetle—a small yellowish green, black spotted beetle about oue-fourth to three-eighths of an inch long, that feeds on the shoots and flowers. As these insects are but few and scattering, and as mildew is seldom seen, the Dahlia can, practically, be called free from insects and diseases,

Dahlias can be planted as late as July 1st, and still bloom profusely before frost, as may be seen from the field view on opposite page. This enables every gardener to have plenty of superb flowers during September and October, by planting Dahlias where early garden crops have been removed, and thus at the same time turn what would be a waste of weeds into a lovely flower garden. Young plants always produce larger flowers than those that have been blooming all summer; this is only a hint for those who wish to grow prize flowers for the coming Dahlia Exhibitions.

The scene opposite represents one row each of the Semi-dwarf (long stem dwarf) Dahlias, A. D. Livoni and Arabella, with the standard varieties on either side, and is intended to demonstrate the value of early flowering Dwarf varieties, over the later flowering tall varieties, during drouth and for late planting. This scene also shows the advantage of the single stem branching system, over the old method of tying to tall stakes.

While Dahlia roots may be easily divided, it is much better to plant the same clumps from year to year, and, if but one shoot is allowed to grow, it will make an enormous plant and produce hundreds of flowers. Specimen plants of Mrs. Dexter and Crimson Giant will grow eight to ten feet high and four to five feet across, if enormous clumps are planted in rich soil and liberally fed, while the Dwarf varieties will resemble an immense bouquet.

CHAPTER X.

THE AMERICAN DAHLIA SOCIETY.



HIS Society, which already has members in several States, even as far west as Colorado, was organized at Hotel Hanover, Philadelphia, on March 20, 1895. Unlike most societies, it was organized at the earnest solicitation of several amateur admirers of the "grand old flower," who saw the need of such an organization to thoroughly introduce the new types and forms.

The Dahlia had underwent a complete transformation, and these admirers saw that it was necessary to show the marvelous results of more than a century's constant improvement. But there were other reasons for forming the society. The flower has always been popular with amateurs and gardeners, even if neglected by professional horticulturists, and has been largely grown, especially in the rural districts; but, owing to multiplicity of names and inferiority of varieties, the demand was becoming less each year, and the admirers of the flower, having been deceived so many times by beautiful pictures and glowing descriptions, were willing to buy only where they could see the varieties in bloom. As soon as the specialists realized this fact, they at once joined hands with the amateurs, and the formation of the American Dahlia Society was the gratifying result.

It is the intention of the society to carefully classify all the existing varieties, and make a meritorious list of all scoring a given number of points. This will greatly increase the popularity of the plant, by restoring perfect confidence in the varieties offered for sale.

The society was organized solely in the interest of floriculture in general, and not to make money, as may be seen from the fact that the yearly dues are but one dollar. This subject was carefully considered, and it was decided to make the society a popular one.

It is also the desire of the National Society, to assist the formation of Local Societies in every floral community, for the purpose of holding local exhibitions during the Summer and Autumn months. True, there are exhibitions in all the large cities during November, but the majority of gardeners and amateurs are unable to compete, as they have no greenhouses or other facilities for growing roses, chrysanthemums, carnations, and other flowers during that season of the year. November is therefore too late for

popular shows, and it is only in large towns and cities that they can be held with even partial success.

In speaking of this subject an amateur said:—"Of course early shows would not be popular with the florists; but as the florists have exhibitions in November, why should not the people have exhibitions during the summer and early autumn, when the garden can compare favorably with the best of greenhouse establishments?" This is all true, except their not being popular with florists. Whatever would increase popular interest in floriculture would always be most pleasing to florists, and they would be only too willing to exhibit and render every assistance possible to the holding of early shows; this is most evident from the fact that they could exhibit their finest plants without danger of chilling, injury from gas, or other dangers, and at a time when popular interest and demand would be greatest. If these early shows were held throughout the country they would increase the interest in floriculture and, perhaps, the Chrysanthemum exhibitions would be more liberally patronized than during the past few years.

The organizers of the "American Dahlia Society" were aware of the lack of popular interest in the late shows, and believed it was, partly, because the amateur could not grow and exhibit flowers at that season, and partly because the exhibits were so stiff, formal and monotonous. Therefore they do not advocate an exhibition of Dahlias only; but, as the family is so large and the range of colors, forms and habits so extensive, Dahlias are urged as a nucleus around which can be gathered all the other gems of the garden, conservatory and greenhouse. In exhibitions of this kind there is always something new at every step, and no two shows are alike; this with the interest displayed by the amateur and gardener, who can compete for every prize on equal terms with the large grower, imparts the greatest popular interest, appreciation and enthusiasm.

One of the chief attractions at these early shows, is the lack of that monotony so common at floral exhibitions held at a later date; vases, hanging baskets, festoons of wild flowers and vines, intermingle with the various exhibits in an ever-changing, yet pleasing, manner; while, here and there, groups of large decorative plants break the outline, and the visitors behold a charmingly distinct view at every turn.

The new society realized the necessity of holding these early and popular shows, and next September (1896) propose to give such a comprehensive show as was never seen before. Skilled decorators will have charge of the exhibition hall, and everything will be gracefully and artistically arranged to give the most pleasing effect. Many new departures will be made in the manner of exhibiting, while the prize list will be so arranged as to give amateurs an equal chance with florists and growers, also with the view of giving a beautiful, novel, and entirely distinct exhibition.

At the first regular stated annual meeting of the American Dahlia Society, held in Philadelphia, on October 9, 1895, the following officers were elected for the ensuing year: Robert Kift, Philadelphia, *President*; Henry F. Michell, Philadelphia, *Vice-President*; Lawrence K. Peacock, Atco, N. J., *Secretary*; E. Clifton Taylor, Germantown, Philadelphia, *Assistant Secretary*; Frank C. Bruton, Philadelphia, *Treasurer*; A. Blanc, Philadelphia, *Chairman Executive Committee*.

The Society is National in its scope, and is receiving the earnest support of both amateurs and professionals. The Executive Committee represents three states,—Pennsylvania, New York and New Jersey, while the membership extends as far east as Massachusetts, as far west as Colorado, and south as far as Texas. The society is also a popular one, and not devoted to any one class, but to the interest of every class; and the only qualification needed is an interest in floriculture; every amateur, gardener, seedsman, nurseryman and florist are cordially invited to membership.

Every floral community should be represented in the society, as one of its chief objects is to assist and further, in every way possible, the holding of floral exhibitions throughout the country. That every one interested in flowers might become members, the annual membership fee was placed at one dollar, which can be sent to the Secretary, Lawrence K. Peacock, Atco, N. J., who will, also, cheerfully give any further information relating to the society or its exhibitions.

A society organized on such broad principles as the American Dahlia Society is worthy of the liberal support of every admirer of beautiful flowers. It has risen above any one flower by advocating an exhibition of all, and only adopted its name because the Dahlia, being the only flower qualified in every way to fill the space between roses and chrysanthemums, is the best as a nucleus for popular summer and autumn shows, where millionaire, workingman and florist can compete for the same prizes, with equal chances of success; where greenhouses are unnecessary, and victory follows in the footsteps of the skillful.

CHAPTER XI.

SELECT LIST OF VARIETIES.



N the following pages will be found the very cream of all the new and standard varieties, carefully selected from the many hundreds of varieties now in cultivation. The varieties named in each class represent a complete range of colors and forms, and each are the best of their particular color and type. To avoid confusion it was thought advisable to group the varieties, in the following list, according to the present prac-

tice in the American catalogues. This will, undoubtedly, be appreciated by amateurs and others who are not familiar with the various sections, and it will be both interesting and instructive for them to classify their collections, which they can readily do, by referring to the Chapter on Classification (page 12); while of course, those well acquainted with Dahlias would know at once to which section each variety belonged.

DECORATIVE CACTUS DAHLIAS.

Asia.—A beautiful, delicate peach pink. Flowers are large and distinct; an early and free bloomer, excellent for cutting.

Baron Schroeder.—An entirely distinct Cactus variety, of large size and great substance.

The petals are beautifully arranged and of a rich, glowing imperial purple.

Beauty of Arundel.—A sport from and similar to Juarezii in form, but of a glowing crimson, shading toward the tips to a bright, rosy purple.

Beauty of Brentwood.—The flowers are of good size, fine form and a distinct shade of purplish magenta.

Beauty of Wilts.—Soft, rich terra-cotta, shaded red; the flowers are of medium size, with long, twisted petals.

Bertha Mawley.—A distinct and pleasing variety, with long, spiral petals, tapering to a point; the flowers are large and of a rich cochineal color.

Black Prince.—Of perfect form, dwarf and compact habit; color an intense velvety maroon, almost black. One of the best.

Blanche Keith.—A beautiful pure yellow, with long, twisted petals. A dwarf, compact plant and profuse bloomer.

Blushing Bride.—Soft, delicate rose, of large size and beautiful form.

Bronze Cactus.—A very strong grower, early and profuse bloomer. Flowers large, buff yellow, overlaid reddish bronze, tipped red.

Clifford W. Bruton.—This superb new variety is acknowledged, by all who have seen it, to be the finest yellow Cactus Dahlia ever produced, and is the greatest acquisition since Nymphaea. It is a very strong, sturdy grower, and an extremely

profuse bloomer for so large a flower. The flowers are large, five to six inches in diameter, perfectly full to the center, while the outer petals reflex to the stem. The color is a solid pure yellow, the clearest, richest shade I ever saw. Unlike many other varieties, there is no green center at any time, even when the buds are just expanding. The flowers are borne on long stems and are invaluable for cutting or exhibition purposes. (See illustration, page 37.)

Constancy.—Of perfect form, a rich reddish orange, sometimes shaded bronze and tipped white; beautiful, distinct and profuse.

Countess of Pembroke.—A distinct and pleasing lilac; the base of each petal is seagreen, forming a beautiful combination.

Countess of Radnor.—A beautiful, free blooming variety, in color a combination of shades of orange, yellow and bronze.

Dawn.—Quite a distinct and striking variety; of large size, good form, and having the appearance of burnished copper.

Delicata.—In individual flowers this is my favorite. The petals are long, narrow, twisted and of such a soft, delicate yellow, overlaid with delicate pink, as to suggest and merit the name. While a great favorite, candor forces me to admit it is a weak grower and needs high culture.

Duke of Clarence.—Of large size; deep crimson maroon, suffused scarlet toward the the tips of the petals; fine form.

Earl of Pembroke,—A pleasing variety, with long, beautifully arranged petals; color a bright plum, becoming richer toward the center.

Electric.—Glowing crimson scarlet, profuse; excellent for massing.

Empress of India.—Of medium size, fine form; profuse. Color a deep crimson magenta, shaded maroon.

Ernest Cannell.—Flowers large, good form; a distinct shade of red, deepening toward the center.

Ernest Glasse.—A rich, purplish magenta, of good form, with long, twisted petals.

Evadne,—A lovely free blooming variety, of beautiful form; soft, rich primrose yellow, tipped creamy white, sometimes tinged delicate pink.

Glare of the Garden (Fire King).—Rich, dazzling red; constantly a mass of bloom. Flowers not always perfect, but excellent for massing.

Gloriosa.—Of medium size, with long, narrow, twisted petals; of perfect form and rich, velvety crimson color.

Grand Duke Alexis.—A grand flower, at once both beautiful and unique, as the petals are rolled up so that the edges overlap each other. Pure white, shaded pink.

Harmony.—Of beautiful cactus shape, the color is yellowish bronze, shading to a reddish bronze toward the outer petals.

Harry Freeman.—Pure, glistening, snow white; it is of medium size, good form and substance and borne on long stems.

Henry F. Michell.—Of largest size and great substance. It is impossible to describe the shades and colors, which range from soft yellow to deep orange red; it is a beautiful variety, the shades and tints blending with perfect harmony. The petals are very large, broad, pointed and beautifully arranged.

Henry Patrick.—Pure white, full and perfect; one of the best.



TYPES OF DECORATIVE CACTUS DAHLIAS.

Princess Harry. Oban. Mrs. E. C. Monroe.
Marchioness of Bute.
Oriental. Nymphæa. True Model.

John Bragg.—Black velvety maroon, the richest of its color.

Juarezii.—The original Cactus Dahlia from which the class was produced. Intense scarlet, long, narrow, twisted petals.

Kenerith.--Of good form, large and free; bright vermilion.

Lady Penzance.—Rich deep yellow, of perfect form, good size, and a remarkably free bloomer.

Lady Montague.—Rich bright salmon; beautiful and effective.

King of Cactus.—Very large full flat flowers; rosy crimson magenta; a strong vigorous grower.

Lemon Giant (New Weeping Dahlia).—Of largest size, 6 to 7 inches in diameter; perfectly full, of a clear lemon yellow. The flowers are borne in clusters of two to four, on long stems that gradually become slenderer as they approach the flowers, causing them to droop most gracefully.

Lyndhurst.—Deep glowing scarlet; of perfect form and one of the best.

Maid of Kent.—Crimson shading to cherry red, tipped white.

Marchioness of Bute.—A lovely variety; pure white heavily tipped bright rosy pink.

The first flowers are much darker.

Malay.—Flowers of fine form and full; maroon black, striped purple.

Matchless.—Very large, rich velvety maroon; petals long and twisted.

May Pictor.—Soft yellow, of medium size and long twisted petals.

Minerva.—A distinct and pleasing variety; of large size with broad petals cleft almost to the base, resembling a fine petaled chrysanthemum. Color soft yellow, overlaid soft red pink, shading to bright reddish purple.

Miss Barry.—Deep rosy lake; distinct and striking.

Miss Jennings.—Large, full and distinct; a beautiful combination of shades of yellow, salmon and pink; strong and profuse.

Miss Merridew.—Very large flat flowers; soft rosy crimson; free and full. A very pleasing variety.

Mrs. A. W. Tait.—Pure white; cleft petals, resembles a chrysanthemum.

Mrs. E. C. Monroe.—A lovely shade of sulphur yellow; large flat flowers of perfect form; a strong grower and very profuse bloomer.

Mrs. Francis Fell.—A beautiful and distinct snow-white Cactus Dahlia, of large size and pleasing form. The flowers are flat, while the petals are long, narrow, slightly twisted, with revolute margins, causing them to taper toward the tips.

Mrs. Geo. Reed.—One of the best of this class; pure white, beautifully edged and flaked rosy lake. The petals, which are numerous and overlap each other, are deeply cleft, giving it a novel fringed appearance.

Mrs. Hawkins.—One of the most beautiful of the Cactus varieties and a general favorite everywhere; the flowers are large, perfectly formed and of a rich soft sulphur, beautifully shaded toward the tips and margin of the petals.

Mrs. J. Douglass.—A new and distinct shade; flowers are a rich pinkish salmon.

Mrs. John Arnold.—A pleasing shade of rose pink, of good form and profuse.

Mrs. Peart.—This is the new Cactus variety that has created so much comment. The flowers are pure white shaded soft yellow at the base of petals, of peculiar form and medium size; the petals roll backward, the edges overlapping each other, giving them a distinctly unique appearance. The plant proves a moderate

- or indifferent grower in America and needs good culture. A very pretty flower, but not always perfectly full to the centre.
- Mrs. Vince.—A lovely variety and a great favorite on account of its delicate shades. The flowers are large, with slightly quilled petals; color a beautiful silvery rose, slightly suffused magenta at base of petal.
- Nymphæa (The Pink Water Lily Dahlia).—This variety, all things considered, is the finest in the entire list. The plant is a very strong, sturdy grower, while the flowers, which are always full to the center, are produced in endless quantities on long stems well supplied with buds and foliage; the color is a soft, delicate, light shrimp pink, shading slightly darker toward the outer petals, while the flowers are of large size, perfect form and of most exquisite finish, being soft, waxy, delicate and graceful. This variety is more extensively grown for florists' cut flowers than any other, and under favorable conditions has a delicate, refined Water Lily fragrance; this odor, together with its striking resemblance to the ideal pink Water Lily, suggested the appropriate name of Nymphæa. Nymphæa is not only entirely distinct from "Delicata" in color, but the form of both flower and petal in each variety represent extremely opposite types.
- **Oban.**—A beautiful variety of large size, perfect form and an entirely distinct color, being a rosy lavender, overlaid delicate silvery fawn.
- Orange Scarlet.—A very dwarf decorative variety of an intense orange scarlet color; the flowers are perfectly full to the center, while the petals are cupped or incurved, an unusual form in the Dahlia; the foliage is heavy, of great substance and of a very dark green color.
- Oriental.—Large, rich pale salmon, of fine form and perfectly double; the petals are broad, regular and of exquisite glossy finish; plant a strong, vigorous grower.
- Panthia.—While not always full to the center, a favorite on account of its lovely form and distinct, striking shade of rich reddish salmon.
- **Prof.** Baldwin,—Bright orange flowers of striking form; the petals are beautifully twisted at the tips, which gives it a peculiar and pleasing appearance.
- Princess Harry.—One of the richest and loveliest of this beautiful section, and one that will undoubtedly become a great favorite; the flowers are full to the center, of perfect form, with broad petals artistically cleft, and bound with a rich yellow silken-like cord; at the base of the cleft this cord extends upward, giving it a beautiful spiked appearance. The color is a rich cream, shading to soft primrose yellow at the base of petals, while sometimes lightly tinted pink; the flowers are soft, waxy and of exquisite finish.
- Rayon d'Or.—Bright orange, with a conspicuous band of white running through each petal.
- Red and Black.—An entirely distinct combination; deep wine red, heavily margined with deep black maroon; flowers are of good size and fine form; petals regular and somewhat cupped shaped; the foliage is very dark green, edged purplish maroon and beautifully serated.
- Robert Cannell.—Rich magenta with a bluish tinge toward the tips of the petals.
- Sidney Hollings.—Large, deep maroon, shading to black; good form; a profuse bloomer.

- Sunlight.—Very large, soft pale lemon; of perfect form, clear, deep and full, outer petals reflexed; a very strong grower and profuse bloomer.
- True Model.—In form this is perfection, the petals are perfectly even, regular and symmetrical; color buff, overlaid and suffused reddish bronze.
- **Unique.**—Center pure yellow, shaded old gold, tipped and margined rose and shades of blue, giving it a glistening bluish bronze appearance.
- Wm. Agnew.—The grandest red Cactus Dahlia ever produced, and one that will eventually find its way into every collection. The flowers are of largest size, sometimes measuring more than 7 inches in diameter, always full to the center; of perfect form and of exquisite quality and finish, while the color is the richest shade of intense dazzling red. The petals are very long, the outer rows being beautifully twisted; the plant is a strong symmetrical grower, and, owing to perfect habit, will be especially valuable for specimen plants.
- W. T. Abery.—Semi-double, white margined and striped bright cherry red. This is the seed parent of American Flag.

DOUBLE LARGE FLOWERING OR SHOW DAHLIAS

Including Show, Fancy and Large Flowering Dwarf varieties.

A. D. Livoni.—Beautiful soft pink, with quilled petals and full to the center; an early and profuse bloomer, and valuable for all purposes; height about 3 feet.

American Flag.—Ground color snow-white, heavily bordered brilliant cherry red, sometimes a central stripe of same color; distinct and pleasing.

Arabella.—An early and profuse flowering variety, of large size and perfect form; color pale primrose tipped and shaded old rose and lavender. One of the lovliest of this section.

Armorer,—Deep red; of fine form, dwarf, and a profuse bloomer.

Beauty.—Snow-white, of perfect form and good texture; one of the very finest whites and valuable for all purposes.

Bird of Passage.—White, faintly suffused and heavily tipped red pink.

Blumenfalter.—Rosy lavender; flowers medium sized, densely quilled; an excellent variety for bedding.

Buff Pink.—Clear buff, heavily tipped pink and edged royal purple.

Chorister.—Fawn striped crimson and rose; a pretty combination.

Colibri.—Deep scarlet; shows green center; profuse; valuable for bedding.

Comedian.—Rich orange, striped and flaked crimson, tipped white.

Countess.—Pinkish white, tipped and shaded lavender and rosy lake.

Country Lad.—Large rich sulphur yellow, tipped pink, edged darker; dwarf and profuse; a beautiful variety and invaluable for bedding.

Crimson Ball,-Perfect form, bright crimson purple; one of the best.

Crimson Giant.—Very large, deep crimson richly shaded; vigorous and profuse, sometimes growing 6 to 8 feet high and a mass of flowers.

Dandy.—A peculiar and pleasing variety; pink striped and penciled with black, though sometimes solid black and occasionally solid pink.

Dazzler.—Deep rich yellow, flaked and striped with bright scarlet; beautiful and effective.

Diadem.—Deep rich crimson, of good substance and a constant bloomer.

Duchess of Cambridge.—A beautiful variety, of large size and perfect form; white suffused pink, tipped and edged shades of purple.

Emily.—Very large, bluish blush; of large size, perfect form and full to the center; one of the best.

Ethel.—Large, rich yellow; sometimes tipped and flaked white.

Fanny Purchase.—A favorite pure yellow variety; large and fine.

Fascination.—Large, white suffused and tipped pink and lavender; flowers borne in the greatest profusion on long stiff stems.

Fern Leaf Beauty.—A new and distinct variety, with fernlike foliage and of dwarf branching habit; color creamy white, with a distinct margin of dark crimson around each petal.

Frank Goodman.—A grand show variety of large size and perfect form; color a rich bright purple.

Frank Smith.—One of the best of the fancy type and a general favorite; color a rich dark purplish maroon, tipped pinkish white; as the two colors meet they blend into each other most beautifully, making a lovely combination of shades and tints. The flowers are of medium to large size and perfect form, while the plant is a vigorous grower and blooms early and continuously until killed by frost

Gloire de Lyon.—A pure white of good form and substance.

Glowing Coal.—Rich glowing crimson scarlet; while not a profuse bloomer it will more than make amend in the quality and color of flowers produced.

Golden Ball.—Pure deep yellow, sometimes tinted pink and shaded old gold; large, perfectly double, strong dwarf grower and profuse bloomer.

Golden Bedder.—Golden yellow, tipped pinkish red; always a mass of flowers; grows but 2 feet high and is one of the best for bedding.

Hercules.—Large, pure yellow, striped red; a beautiful and effective variety, and the largest and best of this type.

Honest John.—A beautiful and distinctly unique variety; brilliant purple maroon, richly shaded; sometimes mottled with deep velvety black petals.

James Vick.—Intense purple maroon; full and symmetrical.

John Keynes.—Large and full; peculiar orange scarlet, base of petals yellow; dwarf and effective.

John Sladden.—Of perfect form, large, dark maroon, almost black; a very strong grower and the best dark variety.

Juniata.—Deep, rich yellow, suffused, margined and tipped bright red; dwarf, compact in habit; of lovely form, free and constant.

Kaiser Wilhelm.—One of the finest of this section; of large size, fine form and finish; yeilow tipped and shaded cherry red.

Lucy Fawcett.—Very large, pale straw, striped and penciled rosy magenta; constantly a mass of perfect flowers; one of the best.

Miss Florence Shearer.—Very beautiful clear soft lilac, of exquisite finish; perfectly double, dwarf and a profuse bloomer; the best of its color.

Miss May Lomas.—One of the grandest varieties in the entire list; the plant is a strong, vigorous grower and is constantly covered with the large perfect shaped flowers. The form is entirely distinct, having immense shell-like petals of most



Types of Show and Fancy Dahlias.

Uncertainty.

Beauty. Frank Smith.

Souv. de Mad. Moreau.

John Sladden. Arabella.

A. D. Livona.

exquisite finish, while the color is charmingly lovely, being pure white, delicately suffused soft rosy lavender, a most unusual shade. (See illustration, page 30.)

Magnificent.—Entrancingly lovely, clear yellow, very delicately tinged and edged soft pink; the flowers are regular, being a perfect model in form; very dwarf and a very profuse bloomer; the best of all bedders.

Marg. Bruant.—Pure white, good form, dwarf and profuse.

Mercedes.—A beautiful variety, silvery white at base of petals, blending into a rosy lilac.

Marguerite.—Rosy lilac of fine form, a free and constant bloomer; flowers borne on long stems; excelled for cutting.

Meteor.—Very large, brilliant deep red; a very strong vigorous grower.

Miss Browning.—Rich clear yellow, tipped white; a general favorite.

Miss Valentine.—Large, bright lavender pink, full and regular; a superb flower.

Miss S. Blanc Pennybaker.—A surpassingly lovely variety and one that always attracts marked attention. The flowers are of perfect form, good substance and exquisite finish; the center petals are silvery white delicately tinged soft bright pink, while the outer petals are of same color, heavy tipped bright rosy red pink.

Mrs. Cannel.—Buff yellow, edged bright cherry red.

Mrs. Langtry.—Cream color, tipped red pink, edged purplish crimson.

Mrs. Chas. Noyer.—A beautiful flower, of a pleasing light fawn color.

Mrs. Dexter.—Very large, fine form; a beautiful shade of salmon; a tall, vigorous grower, and valuable for back rows.

Mrs. Gladstone.—One of the grandest of all show varieties; of exquisite form, delicate soft pink color, a free and constant bloomer, a favorite exhibition flower.

Nellie Bly.—Pure white, penciled and spotted carmine, distinct; certainly a lovely variety, but sometimes shows small center.

Nero.—Deep crimson maroon, richly shaded.

Pelican.—Large, pure white, distinctly striped purple.

Penelope.—Pure white, beautifully flaked lavender, beautiful form; invaluable for cutting and decorations.

Pluton.—The finest of all yellow show Dahlias; very large, of perfect form and a pure, clear yellow color; a strong grower, free and constant.

President. -- White, suffused rosy lavender, shaded darker, fine.

Princess Bonnie.—Rich creamy white, shaded lemon yellow at base of petal. A beautiful variety and a free and constant bloomer.

Prince Bismarck.—Very large and full, deep purple, fine.

Priscilla.—A lovely quilled variety; yellow, tipped orange scarlet, sometimes deep scarlet; reflex rich pale buff, making a lovely variegation.

Purity.—An improvement on all pure whites up to date; dwarf and profuse.

Rev. C. W. Bolton.—Large, salmon buff, penciled and spotted deep rich crimson; a distinct and pleasing variety (see illustration, page 9).

Ruby Queen.—A beautiful variety, resembling an American Beauty rose when fully expanded; clear ruby red, richly shaded; early and profuse bloomer.

Ruth.—Large, creamy white, sometimes tinted pink; perfect form; the plant is a dwarf shrubby grower of branching habit and is continually covered with flowers.

Souv. de Mad. Moreau.—Of immense size and deep red pink color; of perfect form, and one of the best for general cultivation or for cutting.

Sport.—A sport from Penelope, and of same form; bright rosy lavender.

Triomphe de Solfereno.—Intense solfereno, of immense size, dwarf and compact; the best of its class, and invaluable for bedding.

Uncertainty.—Pinkish white, mottled and variegated carmine and crimson maroon.

Village Maid.—Soft primrose yellow, blended, penciled and suffused soft pink and rosy carmine; one of the loveliest of all Dahlias.

Zephyr.—Fawn, tipped peach and edged deeper color, and an entirely new combination of shades and tints; a beautiful variety, dwarf and profuse.

NEW DOUBLE TOM THUMB DAHLIAS.

Double Tom Thumb.—The first of this section and grows but 12 to 15 inches high; pure golden yellow, tipped and lightly margined red. The flowers are produced in endless quantity and last on the plant for weeks.

Edith Connor.—The outer petals are rosy blush white, the center is a rich rosy red; a lovely variety and grows but 15 to 18 inches high.

POMPON OR BOUQUET DAHLIAS.

Allie Mourey.—Pinkish white tipped deep pink, quilled; fine form.

Aillets Imperial.—White suffused pink, tipped imperial purple.

Alwine.—White edged soft rose; a beautiful variety of fine form.

Beauty Inconstant.—A profuse bloomer and always perfect form and beautiful, yet inconstant in color; yellow margined red, sometimes white margined yellow, and sometimes all three colors are combined in the same flower. It is entirely district and one of the loveliest of this beautiful section.

Catherine.—Pure yellow, of fine form and borne on long stems.

Crimson Beauty.—Richest crimson, of beautiful form; the finest of its color.

Cupid.—White, tipped and suffused rose; fine.

Dandy.—Bright crimson purple; very profuse; fine bedder.

Darkness.—Very dark maroon; one of the best of this color.

Daybreak.—Color of Daybreak Carnation, occasionally mottled darker; of exquisite finish and form; of strong dwarf growth, and blooms profusely.

E. F. Jungker.—A rich shade of amber; small compact flower.

Eleanor.—Soft light pink, densely quilled; very lovely.

Elfin.—Pale primrose, changing to rich creamy white; perfect, free.

Eleganta.—A superb variety; soft pink, tipped deep pink, reflex light pink, making a lovely combination of shades; a constant bloomer and beautifully quilled.

Fairy Queen.—Light sulphur yellow, edged deep peach; beautiful flowers of perfect form and produced on long stems; excellent for cutting.

Fairy Tales.—Delicate primrose, fine shape; very free and early bloomer.

Fashion,—A very pleasing and effective shade of orange.

Iolanthe.—Orange shaded buff and salmon, fringed petals; peculiar.

Iseult.—The smallest of all Dahlias; pure, clear yellow.

Juliette.—Yellow shaded orange and scarlet; fine shape, beautiful.

Klein Domatia.—Rich orange buff, flowers of beautiful compact form.

Le Petit Jean.—Dark, orange crimson maroon; perfect ball shape, profuse; flowers borne on long stems; invaluable for cutting.

Little Bessie.—Densely quilled, creamy white; perfect ball shape and constant.

Little Cactus.—Beautiful light salmon; really a pompon cactus of fine form.

Little Diavola.—Beautifully quilled, base of petals light pink, tipped black velvety maroon, with a distinct green shade; reflex light purple.

Little Prince.—Red tipped flesh, mottled dark crimson; of perfect shape and an early and profuse bloomer.

Loveliness.—White suffused pink, tipped and edged pink and lavender.

Little Valentine.—Beautiful compact shape, rich dark purple.

Miss Lou Kramer.—Base of petals yellow, heavily tipped clear bright crimson, overlaid pink; quilled, reflex fawn; a pleasing variety.

Mignon.—Very dark rich crimson scarlet; small, of fine form.

Prince Charming.—White, penciled suffused and heavily tipped purple pink.

Raphael.—Very fine, maroon crimson; one of the best.

Red Piper.—Dark red of a peculiar rich shade, good shape.

Rudolph Kuhl.—Rich crimson maroon, tipped white; a dwarf, strong grower, of branching habit, and constantly a mass of blooms.

Sappho.—Dark velvety maroon, tipped rich pink-flesh; petals beautifully fringed.

Snowclad.—The grandest of all white pompons; pure snow-white, of perfect form, and such a profuse bloomer as to suggest the name. Should be in every collection.

Sprig.—A beautiful variety that received marked attention everywhere during the past year; it is beautifully quilled, of perfect form and full to the centre. The color is a rich buff yellow, beautifully shaded and tipped bright imperial purple.

Stella.—A great improvement on Guiding Star, being larger, stronger and always full to the centre, but in every other way similar to that variety.

Sunshine.—One of the best scarlet pompons ever raised; of perfect shape, fine form, good habit and a very free bloomer.

Tommy Keith.—Cardinal red, tipped white; dwarf, good shape and free.

Virginale.—Small, ball shape, creamy white color; a very fine variety, of strong growth and blooms profusely.

Vivid.—Intense vivid scarlet; good form, free and constant.

Whisper.—Clear yellow, edged with gold; blooms continuously.

SINGLE DAHLIAS.

Ami Barillet.—Scarlet crimson flowers; deep purplish maroon foliage.

Amos Perry.—A very fine reflexed flower; velvety maroon, sometimes lighter.

Annie Fell.—Rich maroon, with a band of rose pink encircling disk.

Butterfly.—Orange red, with gold blotch on tip of each petal.

Cetewayo.—Beautifully reflexed, rich blackish maroon.

Corrinne.—Pure yellow, striped crimson scarlet; beautiful and regular.

Duchess of Fife.—Bright clear amber, heavily bordered reddish orange.

Duchess of Westminster.—Pure white, broad overlapping petals.

Eclipse.—Rosy mauve and salmon; rich crimson band encircling disk. Ellen Terry,—Bright pink, beautifully reflexed; one of the best. Fern Leaf.—Orange scarlet, suffused violet; fernlike foliage. Harold.—Black velvety maroon, fringed petals; distinct. Highland Chief.—Large, bright salmon pink, shaded yellow at base of petals. Isaac Pitman.—Large, of fine form; lilac, striped crimson maroon. Kate,—Bright rich orange maroon; high colored and effective. Kathleen.—Rich sating white, delicately suffused soft pink. Lucy Ireland.—Beautifully reflexed, rich magenta, suffused crimson. Mrs. L. C, Bassett.—A lovely variety, striped orange maroon and lilac. Maude.—Pure white, each petal beautifully margined maroon. Miss Ramsbottom,—Of perfect form, a lovely pink, richly shaded. Nance.—A most pleasing shade of mauve, perfect form; desirable. Nellie.—Intense crimson maroon; broad golden zone encircling disk. Northern Star, -Bright red; each petal margined golden yellow. Paragon.—Soft deep maroon; edged bright purplish maroon. Sandusky.—A soft pleasing shade of salmon; fine shape, Snow Queen.—Pure white; strong and vigorous grower. Titan.—Immense size, orange scarlet; of great substance and fine form. Yellow Gem.—A very pleasing pure yellow; of dwarf branching habit.

SINGLE CACTUS DAHLIAS.

Althea.—Rich glowing crimson; a beautiful variety, with long, twisted petals.

Fair Maid.—Large, pale flesh deepening to rose at tips of petals.

Guy Mannering.—Creamy white, shaded sulphur; long, twisted petals.

Highland Mary.—Large, clear cardinal red; petals uniquely twisted.

Ivanhoe.—Bright rose; with crimson band around the disk.

LucyAshton.—White; petals broad, twisted at the points and slightly incurved.

Maid of Bute.—Soft rose color; long, flat petals twisted at the points.

Meg. Merrilies.—Beautiful clear yellow; petals slightly incurved, large and twisted.

Rob Roy.—Purple, beautifully tinged violet; petals twisted very gracefully.

Victoria.—A lovely pure white flower with yellow disk; long, pointed petals.

SINGLE TOM THUMB DAHLIAS.

Bantam.—Dark scarlet; plant very bushy, only 12 inches high.

Bo Peep.—Deep maroon; dark ring encircling center.

Bootles.—Color a rich velvety red; very dwarf, strong and bushy.

Hoop-la.—Deep velvety maroon; yellow ring around center.

Irene.—The loveliest of all; delicate rose, penciled pinkish crimson.

Lilliput.—Bright scarlet, lined orange; petals somewhat pointed.

Mignon.—Bright pink; white zone encircling center,

Miniature.—Clear bright yellow; very dwarf and bushy.

Miss Grace.—A most pleasing and effective light orange.

Pearl.—Deep Mauve; well formed, distinct and effective.

