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# CHRYSANTHEMUM Culture.



for  
the  
MILLION

by  
GEORGE  
GARDNER  
Prize Medallist.

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MODERN  
CHRYSANTHEMUM  
CULTURE  
FOR THE MILLION.

A HANDBOOK FOR THE AMATEUR AND COTTAGE GARDENER .....

BY GEORGE GARNER,  
SILVER MEDALLIST FOR HIGH-CLASS CHRYSANTHEMUM,  
VEGETABLE AND FRUIT CULTURE; HEAD GARDENER  
TO A. C. DRUMMOND, ESQ., CADLAND PARK,  
SOUTHAMPTON.

With Illustrations.

LIVERPOOL:  
BLAKE & MACKENZIE, PRINTERS AND PUBLISHERS.

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1897.

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## P R E F A C E .

THE writer of this work is well known to the undersigned as a most successful grower of Chrysanthemums. Any information from his pen cannot fail to be of service, and if the details contained in this most useful book be acted upon success will be assured. I have known the author for many years, and must admit I have never met with a grower of this popular plant who has devoted more care and study to master their requirements than he has. From taking cuttings to the flowering stages, he is equally keen. As a grower or exhibitor; when residing in this neighbourhood, he had no equal (note the principal prizes he has won). His awards, when acting as judge at exhibitions are seldom questioned, this duty being made easy for him by his own practical knowledge. The work will be hailed with delight by all who have a love for, and a desire to further the interest in, Chrysanthemum culture. Particularly do I recommend it to amateurs, young beginners, and market growers.

ALFRED SKINNER.

HIGHCLIFFE ESTATE,  
CHRISTCHURCH, HANTS.

PRINCIPAL  
PRIZES WON BY THE AUTHOR.

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TWO SILVER CUPS, open to all England.

TWO FIRST-CLASS CERTIFICATES.

FOUR MEDALS, and many FIRST PRIZES  
at some of the leading exhibitions  
in the Country.



## INTRODUCTION.

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THE enthusiasm inspired by this deservedly popular flower instead of diminishing increases yearly. Amateurs and Cottagers are now taking a keener interest in the cultivation and exhibiting of Chrysanthemums than formerly, and although this little book is written chiefly for those who grow the plants for exhibition, both large and small growers will find the instructions embodied in its pages a help to them, as the only difference between growing for exhibition and for home use is solely that the plants in the latter case are, as a rule, grown more bushy in shape to produce a larger number of smaller blooms. But in many instances large blooms of first-class quality are coveted for conservatory decoration at home, and in all cases, if the right methods be not adopted, such blooms are not forthcoming, notwithstanding all the labour which may have been bestowed upon the plants to bring about that result.

We have endeavoured to give in this book what we consider the most important essentials (which we

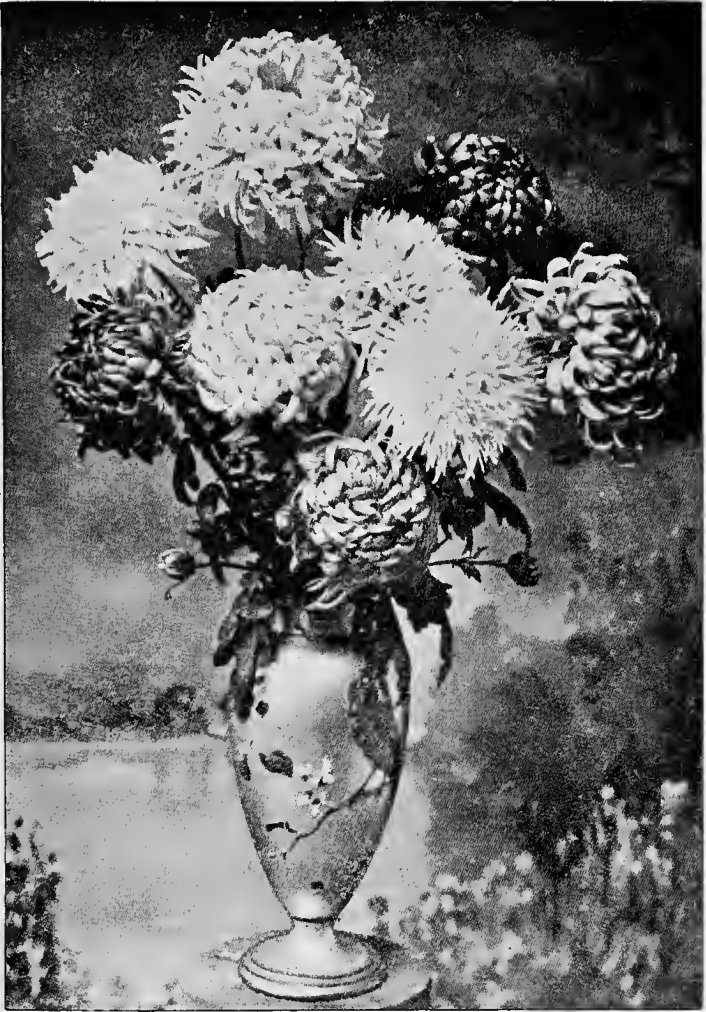
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have found to be absolutely necessary in our own practical experience) in the routine of culture and general management of the plants and flowers, in as few words as possible.

The attention of our readers is especially directed to the growing custom of exhibiting groups of Chrysanthemums with and without foliage plants, and also of cut blooms of Chrysanthemums and autumn-tinted foliage, for effect. Some of the arrangements which have come under our notice have, indeed, been charming, and the large number of people who gather around and admire them testifies to the popularity of such exhibits.

We would like to encourage the use of Chrysanthemums as summer bedding plants in large gardens, especially where there are large borders to be filled up. As dot plants in long borders, as clumps by themselves, and as odd plants in the cottager's garden, Chrysanthemums are most useful. Further, we would desire to say that exhibitors of some experience may find hints and reminders in this little book which will be a help to them in carrying out the work which they all love so well.

The history of the Chrysanthemum is not dealt with in these pages, but only the culture, and that is given in plain language—such as we hope will be understood by all growers.



*Group of Chrysanthemums.*

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## PROPAGATION.

WE are not in favour of rooting the cuttings of Chrysanthemums too early, especially if handsome looking plants with a large number of blooms is the desire of the grower. Late varieties should be rooted in December, and the earlier ones in January and February. Select the strongest cuttings—not the soft, sappy ones, but those which are sturdy in growth and have no bud showing in the point. Take off each cutting just under



*Showing a Chrysanthemum cutting inserted singly in a thumb pot, with coarse sand around its base to encourage root action. This method is adopted generally when growing the plants for exhibition purposes.*

or above the soil in the pot (not off the old stem of the plant, except in cases of necessity), and under a joint, afterwards removing the leaf from that joint also. Have the compost in which it is intended to root the cuttings in readiness, and pots  $2\frac{1}{2}$  inches in diameter (washed clean inside and out). As soil used for the purpose of rooting will be retained throughout the season, it is important that it be of good quality. Loam and leaf mould, in equal proportions, with sufficient sand to make the mass porous, is suitable. Manure in any form at this stage is not needed.

Crock the pots with one piece of broken potsherd, and a little dry moss; fill them with the prepared soil, scatter a small quantity of sand on the surface, make a hole with a small blunt dibber in the centre, and insert the cuttings. One in each pot is sufficient, and make the soil firm around it. Sprinkle a little more sand over



*Showing cuttings inserted around the side of the pot. Best adopted for growing the plants as bushes, and for market.*

the top of the soil in the pots, water gently but thoroughly, and place the pots in a cool frame on a hard bed of coal ashes, or plunge the pots to the rim in the ashes. If a cool frame is not available, the pots may be stood on a stage close to the glass in a greenhouse or vinery. Boxes in lieu of movable frames will answer the purpose if they

are 9 inches deep, and squares of glass are placed on the top. The aim should be to keep the cuttings air-tight till they are rooted, as they will then strike more quickly than if allowed to flag.

Occasionally sprinkle the cuttings over-head with tepid water to keep them fresh. Wipe the glass and the inside of the frame dry, daily. If the soil in the pots becomes too dry, water thoroughly with tepid rain water. Shade from bright sunshine.

Some varieties will root sooner than others. When the cuttings are sufficiently rooted, remove them to another frame, or shelf, where they will be exposed to the full light. Guard against frost. At this stage from 40 to 45 degrees of heat should be maintained. Avoid high temperatures at all stages of growth, as Chrysanthemums are not benefited, but weakened, by forcing, or an undue closeness of atmosphere after they are rooted. Sturdy growth should be encouraged—short jointed, showing plenty of strength. Label each variety correctly, and make a list of each section, stating the number of cuttings put in (which should always be a little in excess of what is finally required), so that a selection of the strongest and best rooted plants may be made.



## FIRST POTTING.

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### PRINCIPAL PARTS OF COMPOST.

Loam.		Soot.
Leaf soil.		Wood ashes.
Horse manure.		Sand.

Size of pots,  $3\frac{1}{2}$  inches.

---

THOSE plants which are sufficiently rooted will need re-potting during the latter part of February and early in March. A mixture of one half good loam, one quarter leaf soil, one quarter horse manure (which has been partially heated in a heap to expel some of the rank steam, is the best for this potting), and a 6-inch potful of soot and one of wood ashes to every barrow-load of the above parts, with a sufficient quantity of coarse sand to make the whole mass porous, will constitute a suitable potting soil. We do not advocate the use of artificial manures in any form at the first potting.

Presuming that the plants have been in  $2\frac{1}{2}$ -inch pots, those which are  $3\frac{1}{2}$  inch in diameter should now be used. Wash the pots quite clean—particularly so inside; also wash the crocks that are to be used as drainage. Both pots and crocks must be quite dry. Place one large crock or oyster shell over the hole in the bottom, then a few small ones, following on with a few half-decayed leaves. The leaves will prevent the fine soil from being washed down and clogging the drainage, and the roots of the



plants will soon fasten upon them. The soil must be in a nice moist condition, but not too wet. After the work of potting is completed stand the plants in a cool frame on a bed of ashes, about 15 inches from the glass.

#### MANAGEMENT OF THE PLANTS IN FRAMES.

Keep the frame close for a few days after placing the repotted plants in it. Shade them slightly from very bright sunshine. Water sparingly at first; a light syringing each day, at noon, if the sun is bright will be beneficial to the plants. When the danger of severe flagging of the leaves is over, and the weather permits, give a little air and cease shading. If mildew is observed on the plants, rub flour of sulphur on the affected parts with the thumb and fingers.

Grow the plants as hardy as possible, admitting air on all favourable occasions, but avoid subjecting them to draughts. They will at this stage make rapid progress in growth, and no check must occur. During the bright sunny days which will at this time of the year become more frequent, great care and attention will be required in the management of Chrysanthemum plants.

Being in small pots, and the sun shining strongly upon them, the soil soon becomes dry, and flagging of the foliage results. It will be advisable to examine the plants several times each day and water any which may require it, rather than leave them till a fixed time and then water all indiscriminately. Use tepid rain water. If hot water from a boiler or other vessel is not available for warming the water in bulk before using it, keep a large can full in the frame in which the plants are growing, the water will thus always be of the same temperature

as that in the frames. By adopting this simple plan, risk of check to the growth of the plants will be greatly lessened. Should mildew appear on the leaves, apply flour of sulphur as before advised. Spells of bright sunshine and cold winds are generally followed by black and green fly, which infests the points of the shoots, and if not eradicated they soon cripple the plants. Tobacco powder lightly sprinkled on them while the plants are damp will quickly clear the enemy. Afterwards syringe the powder off with clean water, which will greatly benefit the plants. Some of the tallest of the plants will now require slender stakes to support them. Due allowance must be made for the swelling and lengthening of the stems of the plants, therefore do not tie the ligatures too tight. Pay regular attention to airing, and when the weather is favourable take the lights off altogether. The climatic conditions are not favourable when the sun is warm, and at the same time a cold east wind is blowing; more harm than good would be done to the plants if the lights are removed under such circumstances. Tilt the lights so as to avoid draughts, and wait for more genial weather before exposing the plants fully.

#### TOPPING PLANTS TO FORM BUSHES.

If it is the intention of the grower to eventually possess a large plant with many blooms, the point of each one should be taken off when the plants are about 6 inches high, say in February. Three or four new shoots will grow afterwards, these will in due time produce a bud, each of which should forthwith be removed. Three more young growths may be selected from each parent shoot and trained to stakes. After the points of the shoots have

been removed, the soil in the pots should be kept somewhat drier until fresh growth begins. Thus one plant will produce a much larger number of flowers, but of course smaller than would be the case if only one stem was retained till the first natural break, and from that period three more only, to produce as many blooms. The potting, tying, feeding, and general treatment in other matters of bush-grown plants should be much the same as that advised for those grown for the production of large blooms only, excepting the pinching out of side shoots which on the latter must be promptly removed as fast as they appear.



*Queen of England, Blush, Inc.*

## SECOND POTTING.

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### PRINCIPAL PARTS OF COMPOST.

Loam.		Finely ground Bones.
Leaf soil.		Soot.
Horse manure.		Ordinary wood ashes.
Chrysanthemum ashes.		

Size of pots, 5 and 6 inch.

---

WE have just described how to top plants which it is intended shall be grown on to form bushes. These plants will now be in the right condition to re-pot. In most cases the plants in the general collection will be in 3½-inch pots, and will require to be shifted into 5-inch and 6-inch ones. Put the weaker growing varieties into the former, and the strongest into the latter size. A richer compost may, with advantage, be used at this re-potting. A suitable mixture will be the following, viz.: fresh loam—with the grass in it just decayed—pulled in pieces, and the finest soil sifted out. Sweet leaf soil and sand should be added to the above in the following proportions, viz.: two parts loam, one part leaf soil, and one part old mushroom bed manure, or fresh horse manure; a 6-inch potful of ground bones, one of soot, and one of wood ashes, to every barrow-load of compost. If the stems of the old Chrysanthemums are burnt, and a 3-inch potful of the ashes also added, the plants will be much benefited, and the foliage will assume a darker green colour and have more substance in it. Mix all the parts together

and keep the compost in a shed, for if wetted with rain it will clog together and form a mass in the pots, which the young roots will not readily penetrate. Pot more firmly than hitherto, using clean pots and have sound drainage in them. All plants which are, up to this stage, without the support of stakes should have some placed to them forthwith and be neatly tied. Return the plants when potted to the frames, and treat them as advised at the last potting.

The variety, Mrs. Alpheus Hardy (a white, hairy, and delicate sort), must have pots smaller than the above mentioned to grow in, and should be potted in one part loam and two parts leaf soil, with which plenty of sand and a small quantity of old mortar have been mixed. No manure must be used in the soil in which this variety is grown; also pot less firmly. It is more satisfactory if grown in a cool greenhouse during the summer months.

#### PLANTING CHRYSANTHEMUMS IN OPEN BORDERS.

Some varieties are most useful for planting out of doors where they will flower freely. Flora, deep yellow; very free-flowering. This is a Pompon variety and flowers early. Other Pompon varieties suitable are M. W. Piercy, orange-red, 2½ feet high; Frederic Marronet, bronze, 2 feet; Mrs. Cullingford, white, 2 feet; Strathmeath, rose, 2 feet; Précocité, red, 2 feet; Canari, yellow, 18 inches. Suitable Japanese varieties are Madame Desgranges, white; its sport G. Wermig, yellow, 2 feet; Harvest Home, bronze, 2½ feet; Carrie Denny, amber, 2 feet; M. G. Grünerwald, white, 2 feet; Goldmine, rich bronze, 2 feet; Roi des Précoces, deep crimson, 2 feet; and Ryecroft Glory, rich yellow, 3 feet. These are a selection of varieties which, if

planted on sheltered borders, will give a wealth of bloom in the autumn very useful for cutting purposes.

Where these autumn-flowering sorts are planted outside, provision should be made to protect them from early frosts, and to facilitate this work we would advise that a place be chosen and the Chrysanthemums planted in groups near to a wall or hedge, on a border facing south, south-west, or west. A temporary covering can then be easily fixed to a rough framework over them. Treat the plants in their early stages of growth the same as the others. Towards the end of April plant them out in the positions as above suggested; water, mulch, and tie the branches to stakes as required. Neglect in this respect will result in the loss of many branches through breakage by wind and rain, and will also cause them to grow in a very straggling manner. Pinching of the points or side shoots is not necessary, as the aim of the grower will be to produce a large number of neat blooms.

Excepting in very severe winters, the majority of the plants will survive if left out in the borders where they have flowered, but it is safer to lift the stools (as soon as the flowering stems have been cut off) and place them in a cold frame, in a mixture of leaf soil and loam. Protection from excessive frost may thus be easily afforded to the plants at a minimum of labour, and they will be in good condition for planting out again the following April.

Before transferring the plants to outside borders all weakly growths should be removed, retaining only the strongest. As a means of securing strong stocky shoots, give air fully on all favourable occasions. Young plants should not be neglected for the sake of old ones, but the stock may be greatly increased by taking care of old

stools, and, if need be, dividing them into several portions in the manner just described, instead of allowing them to suffer through exposure to frosts. Cottagers and

amateurs who do not possess greenhouses need not despair of having a nice show of Chrysanthemums in the early autumn months if they will follow these instructions.

#### CHRYSANTHEMUMS FOR MARKET.

Where large numbers of these plants are grown for producing a plentiful supply of medium-sized flowers for market, much labour is necessary if proper attention be given to their many wants. If grown in pots, constant regard to the requirements of the plants is essential, or the return at the end of the season will not be a favourable one.



*This Engraving shows a branch which has not been disbudded, consequently all the shoots and buds are growing, and will form a mass, or bush, of numerous small flowers suitable for cutting and placing in small vases.*

The young plants should be treated up to the end of April as advised for the growing of bush plants. At this stage they should be planted in open, but sheltered, borders in well-prepared soil. The staking and watering of the plants must be carefully attended to, and a mulch of rotten dung placed on the surface of the soil early in June. The aggregate amount of work during summer will be much less than if the same number of plants were grown throughout the season in pots. But for general use, and for convenience, pot plants are the best in the autumn. We are only recommending planting out in borders in exceptional cases, such as extreme pressure of other work during summer, and an insufficient supply of empty pots at the time of final potting. Just before the advent of frost, lift the plants very carefully, retaining as much soil as possible around the roots, and transfer them to the borders of peach or tomato houses without unnecessary delay. Fill up all open spaces around each root firmly with fine soil; syringe the plants well; place a shading on the roof of the house—which should be kept rather close for a few days—when full ventilation may be gradually given and the shading removed. If these instructions are carefully attended to but little check will be felt by the plants, although a certain amount must be expected owing to the unavoidable mutilation of the roots. We would only advise this method of growing Chrysanthemums for market where circumstances warrant it. We have seen it practised with great success. Small plants are the most useful for market purposes. Cuttings should not be rooted too early; February and March being the best months for their propagation. The aim of the grower should be to obtain a plant with foliage on it of a dark green colour down to the



base. Ample room should be allotted to these plants during the summer, confining the roots to as small pots as possible without causing a stunted growth. When confined to small pots the plants will require nourishment after the middle of June. Judicious applications of soot and liquid manure water; and approved artificial manure applied in a dry state to the surface of the soil, and also dissolved in water (according to the directions given with each kind), will answer the purpose. When the time arrives for placing these plants under glass, the same principle as to room must be observed. Crowding of the plants together will, in three week's time, undo the whole season's work. Strive to preserve the foliage in a robust, healthy state. Customers will be found who will readily buy such specimens for the adornment of their windows, porches and small greenhouses, and the grower will be well repaid for his labour.

Select a few of the best varieties and grow large numbers of each, rather than many sorts and few of each one. White, yellow, bronze and dark red are the best colours to choose, but the two first named are the most popular. For early flowering the following are good and reliable sorts, and command the readiest sale, viz.:—Madame Desgranges, white; Lady Selbourne, white, very free flowering; Yellow Selbourne, in both the growth and flowers this variety resembles its parent, except colour, which is a very pleasing yellow; Niveus, pure white; Gloiré du Rocher, orange-amber; Mrs. Rundle, white; Lady Laurence, pure white; Boule de Neige, white; Flora, red, shaded rose (Japanese variety); W. H. Lincoln, rich deep yellow; H. W. Rieman, this is a later variety than Lincoln, similar habit, and pure yellow flowers produced very freely; Source d'Or, orange

and gold; Ryecroft Glory, yellow; V. Morel, deep mauve, from buds secured on terminal shoots; W. Holmes, chestnut-red; Lady Fitzwygram, white; Golden Gem, bronze; Mrs. Hawkins, deep yellow; L. Canning, white, very late; Mdle. Lacroix, white; Val d'Andorre, orange-red; and Elaine, pure white. These are a few sorts which may be depended upon to give satisfaction. There are others also good. New varieties are constantly coming to the front, but few of them possess sterling merit. We would recommend that new ones be tried on a small scale at first, and thoroughly tested, before replacing older and tried sorts with them.

#### PLACING THE PLANTS IN THE OPEN-AIR, FEEDING, AND INTERMEDIATE POTTING.

In the Southern counties of England the best time to place the plants out of doors is the end of April and early in May. In the North, it will be advisable to defer this work till towards the end of May. In each case the plants should be protected. Select a sheltered position, but one not under, nor too near, tall trees, as they would obstruct the light, draw the young plants up, and thus weaken the growth. Stand the pots on a firm bed of ashes, tiles or boards to keep the worms out. If on the two latter, provision must be made for the water to drain away freely. If the foliage becomes dry, a few degrees of frost will not harm the plants, but it will be best to temporarily protect them at night until all risk is over. A framework of laths, upon which a few mats or some coarse canvas can be laid, will answer the purpose admirably. Cold east and north-east winds do much injury to the tender foliage at this time of the year. We always guard against such

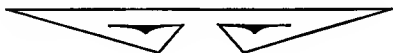
danger by placing scrim, or mats, 3 feet high, fastened to stakes driven into the ground all round the plants, and which is allowed to remain in this position for a few weeks. The Spring time is a very busy one for the gardener; generally more work demanding his attention than can be properly done. Consequently something has to be neglected, and Chrysanthemums are often the things which suffer. Once we neglected them, under pressure of other work at this time, and we were constantly reminded of our remissness all through the remainder of the season by the unsatisfactory appearance of the plants. The final potting of Chrysanthemums can be delayed for a time, argues the busy gardener, and so it may, but at what expense? There is no appreciable difference to be noticed in the spring, but, undoubtedly, the autumn display of bloom will be affected. Not only should the final potting take place as soon as the plants need it, but intermediate potting is sometimes necessary before the final shift is made. By selecting those plants which are urgently in need of more root-room, and giving it to them forthwith, the general high standard of quality of the whole of the stock will be increased, whereas if this is neglected it will be lowered. Only a very small shift on into a larger pot is necessary. We advocate a little feeding at this time to the majority of those plants not re-potted. Weak liquid manure twice within seven days, and a table-spoonful of artificial manure, dissolved in two gallons of rain water, given once a week will assist the growth of the plants very much. We are strongly in favour of giving such assistance, but must warn our readers not to exceed the quantity of stimulant stated. The same kind of soil should be used at the intermediate potting as that used for the previous one. These re-potted plants will

not require any help from manure water until the roots have taken a good hold of the new soil.

#### THE FIRST BUD.

During the greater part of May, and throughout June, the first bud will form in the points of the shoots. Some of the earliest varieties may be retarded by retaining this bud for a short time instead of forthwith removing it. To secure a few later crown buds of the "Queens," and of some of the earliest varieties of Japanese and Incurved, pinch off one inch of growth when removing the first buds. The buds which form on the growths afterwards produced will be delayed a week or thereabouts. Only treat a few plants in this way. As soon as the bud is taken out, or the tops pinched off—as in the case of the those just mentioned; and also the very late varieties (of which "Boule d'Or" is an example) which should have the tops removed—some on April 20th, and others on April 30th—the whole strength of the plant goes to the production of the new growths, which were visible around it. Moderately late varieties need the bud to be removed as soon as possible without injuring the young shoots, as the object of the cultivator is to hasten the production of the crown bud on the succeeding shoots. "Viviand Morel" and "Charles Davis" are generally very troublesome in the matter of bud formation; that is, instead of growth shoots following the removal of the first bud, more buds are formed. Experience teaches us to persistently remove all successive buds as soon as they are large enough to handle; that is the right thing to do. Growth shoots will eventually assert the lead, and from them splendid flowers, of good colour and large size, may be looked for at the proper time.

When the buds appear, and are large enough, snip them out and reserve the three top shoots, and these will afterwards grow freely if the plant be in good health. Remove all side growths beneath the above-mentioned three, so that they may have all the support of the plant concentrated in them. This selection of three shoots applies to those plants which are grown specially for the production of fine blooms. We have always found the varieties "Princess of Teck," "Hero of Stoke Newington," and "Mrs. Norman Davis" to be failures when the crown bud has been "secured" in the ordinary way, for it invariably formed a hard bud with a short, hard flower stem; the flower opening in an irregular and altogether unsatisfactory manner. We mention this here as the reason why. Towards the end of June, or very early in July, the points of the shoots should be removed once more, as the resultant growths which then form give the most desirable blooms. Although rather later in forming, instead of being hard the buds open more freely and regularly, and develop into fine, deep blooms of good shape and colour.





*Yellow Dragon, Jap*

## FINAL POTTING.

---

### PRINCIPAL PARTS OF COMPOST.

Loam.	Bone meal.
Leaf soil.	Chrysanthemum ashes.
Horse manure.	Dry lime.
Soot.	Artificial manures.
Ordinary wood ashes.	Sand.

Size of pots, 8 inch, 9 inch and 10 inch.

---

### TIME FOR FINAL POTTING.

**T**OWARDS the end of May, and during June, the plants must be placed in the large pots. Do not pot all of them in a haphazard manner, whether they require it or not, but pick out those which are sufficiently advanced in root action and deal with them first, and the others in due course before they become pot-bound.

### SOIL.

This, the rooting medium for the plant, has been described by some cultivators as of secondary importance during the growing period; feeding, being in their estimation, the chief essential. We grant that feeding is a most important item in the culture; but, unless the potting compost be of the right kind, as regards quality and lasting properties, feeding will not be so effectual; thus we see that neither is independent of the other. With regard to the quality of the soil as affecting the growth of different sections of Chrysanthemums, we maintain that,

especially in dealing with the Japanese, it is not possible to obtain blooms of the highest merit from plants which have been grown in soil of poor quality. Very rich soil will not answer so well for the Incurved section, because depth, solidity, and general refinement of bloom would not be forthcoming from plants grown in such material; neither would this desirable quality be apparent in the Japanese section if the plants were loosely potted, *i.e.*, the soil not firmly rammed into the pots. It will be clearly seen by the grower that Chrysanthemums must be potted finally in two different qualities of soil, namely, one well-enriched for the Japanese, and the other not so rich for the Incurved. The soil suitable for the latter section is also better adapted for the Anemone-flowered, Reflexed, Single and Pompons.

We were once engaged in potting some Chrysanthemums when a gentleman came upon the scene and enquired whether we were pounding medicine with pestle and mortar, he remarking that the "ramming" suggested that operation to him. Let it be clearly understood that excessively hard potting is not recommended, but the soil should be pressed down firmly, no spaces ought to be left around the sides of the pots, and the roots on each ball of soil must not be bruised. Soil which is sufficiently firm for Geraniums will not be so for Chrysanthemums.

Before beginning to pot have all the pots and crocks washed clean; especially the insides of the pots. Any plants which may be found to be dry should be watered copiously, and allowed to remain a few hours before handling them.

For Japanese, mix well together the following compost: one half sound loam with the grass only just decayed, chop it small enough for use, and remove the finest fibreless



portion by sifting the whole through a half-inch sieve, one quarter part moderately fresh horse manure, and one quarter part half decayed leaves. To each barrow load of the above add a 5-inch potful of soot, one of bone meal, one of some approved artificial manure, one of ordinary wood ashes, half a potful of Chrysanthemum ashes, a handful of dry lime, and sufficient coarse sand to make the whole porous. In mixing the soil for the other sections use a smaller quantity of horse manure, and a 4-inch pot for measuring out the manure, ashes, soot and bones. If the soil be mixed and placed in a heap in an open shed, facing north, for a month prior to use, it will prove of still more value.

After the pots are crocked by placing a large potsherd with the hollow side down over the hole, and then smaller ones to the depth of two inches, put a few leaves (oak or beech preferably), or very thinly-cut fresh turf over them, and a sprinkling of soot. This will help to keep the worms out, and benefit the plants also. Then place a small quantity of the coarser parts of the soil on the soot, and make it firm with the blunt end of the rammer; upon this portion put the ball of soil attached to the plant without more disturbance of the roots than is necessary through the removal of the old crocks. With the wedge-shaped end of the stick make each layer of soil firm as the potting proceeds. Leave a space of  $1\frac{1}{2}$  inches below the rim of the pot, then watering may be done effectually, and room will be provided for top-dressing in the summer. Amateurs especially err in this matter by filling the pot too full of soil at first; a difficulty is caused when, later on, it is necessary to apply additional soil as a top-dressing. Eight, 9 and 10-inch pots will be quite large enough to use; we

have seen very fine plants grown in 7-inch pots ; but, except for special purposes, these are too small for the final potting.

Replace the small stakes with stronger ones, and stand the plants in their summer quarters ; which should be sheltered from the south-west winds. Tiles or boards should be used to stand the pots on ; in fact, anything that will keep out worms, and not block the drainage of the water from the pots, will do. When the plants are growing taller they are easily blown down by strong winds, unless they are secured to some support. String tied to posts driven firmly in the ground should not be used. Wire is most suitable. Two strands for the tall varieties, and one for the dwarf ones, will be sufficient. These wires must be stretched tight from post to post, and the stakes which support the plants made secure to the horizontal wires. Do not, however, tie any portion of the plant to the wires.





*Madame Carnot, White Jap.*

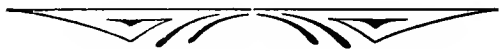
## TREATMENT OF THE PLANTS DURING THE SUMMER MONTHS.

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**A**FTER the last potting, every care must again be exercised in watering; the plants will soon lose their bottom leaves if the soil is constantly saturated with water. If grown for grouping, and as specimens, the loss of the basal leaves will cause much disappointment, as such plants would look very ordinary when placed besides others which were clothed with healthy foliage to the rim of the pot. In very dry, hot weather, a thorough syringing will be of more service to them than watering the soil too much. Of course we do not mean that the syringing is to take the place of watering, as the soil must be thoroughly saturated when dry enough to require it, but during the first month after potting only water when really necessary, always picking out the dry ones, and not beginning at one end of the row and watering all the plants indiscriminately. When the pots have become nearly full of roots more water will be required, and in very hot weather watering several times each day is necessary. Those plants which are at this time (end of June or thereabouts) showing the first bud should be treated as previously advised.

There are more varieties in cultivation at the present time which produce flowers of even greater excellence than most of the older ones, and which do not grow very high, consequently stakes are not required so long as they were

formerly, and the plants are more easily housed to advantage in the autumn. Three stakes (one to each shoot) should be placed to every plant, and in the case of dwarf varieties all the stakes—which need not be so stout for these—may be inserted in the soil in the pot. For tall plants, one central stake only is needed; this should be driven firmly into the soil, and two small side sticks attached to the wires only and the shoots fastened to them. Very sturdy-growing varieties do not require side stakes at all, but simply looping to the central one with matting. Drive the stakes down the insides of the pots in the new soil in which the plants have been potted, and not too near to the stem, or many roots may be destroyed. Keep all suckers regularly removed throughout the summer months, and, indeed, these should be pulled off until the blooms are one quarter open.



INSECTS AND MILDEW.

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**M**ILDEW usually infests the leaves on the under side; it is white in colour, like hoar frost, and is easily eradicated by rubbing flour of sulphur on the affected parts. Two ounces of soft soap dissolved in four quarts of boiling water, and, when cool, syringed on the plants will also destroy the mildew. Use the remedies on the first appearance of the mildew and prevent it from spreading.

Black and green fly should be dislodged by applications of tobacco powder. These pests generally gather round the points of the young growths. There is a small yellow thrip which also infests the growths at the point and cripples the young leaves very much if left long undisturbed. Apply tobacco powder also in this case while the plants are wet with dew. Ladybirds are often found on Chrysanthemums in the summer, and are destroyed by some growers, but it is a mistake to kill them as they are the gardener's friend, they eat the fly, but do absolutely no harm to the plants.

Worse than any of the pests just mentioned is a disease which sometimes destroys many plants, viz.—the loss of leaves, and often the entire plant, through the leaves from the base upwards turning black. Half of each leaf at first is discoloured, the other half turns a dull yellow, and they either fall off or dry up. This is caused, we believe, through giving too much water to those plants which are defective in root action. The disease is aggravated when strong

liquid manure is given to such plants. On the first sign of blackness in the leaf, the plants so affected should be turned out of the pots and the roots examined; if few roots are to be seen, only clear water should be given until root action is freer, keeping the soil somewhat drier than formerly for a short time.

Another disease which affects the young growths of the "Queen" family only is also a disastrous one. This occurs about the month of August, just before the formation of the flower bud which is so eagerly looked forward to by the anxious grower. The whole of the point of the shoot is affected, but not always every shoot on each plant. The young leaves wither and go soft and flabby. Free growth is arrested for a period of ten days or so, then it again commences, but these particular leaves, instead of growing to the normal size, remain stunted, showing at the end of the season the exact place on the shoot where the check occurred. On many plants so affected the flower buds which follow are worthless, as they never develop into shapely blooms. The cause of this withering of the points of growth we are not able confidently to state, but undoubtedly a check to growth has occurred, given, we believe, through over dryness at the roots after a top-dressing of fresh soil has been put on. This is the chief cause of the evil. Why it does not affect other sorts in the same way is a puzzle to us, unless it be that the constitution of the "Queen" section is entirely different to that of other varieties.

## FEEDING THE PLANTS.

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COMMENCE feeding the plants as soon as the roots begin to entwine round the ball of soil at the sides of the pots, and keep on applying manure water (at first in a weak state) up to the time that the blooms are nearly half open. Most of the artificial manures, if applied according to the directions given with each kind, are highly beneficial to the growth of Chrysanthemums. Soot water, too, is invaluable as a stimulant to growth. It should be placed in a bag, tied up, and then put into a barrel or tank of rain water. Stir the bag about in the water occasionally, but always use the water in a clear state, and not immediately after moving it to and fro in the tank. Sheep, goat, cow, and fowl dung may be similarly treated.

Artificial manure may be applied in a dry state, or dissolved in water first. If given dry apply it immediately after watering, or after rain, and not while the soil is dry in the pots, as it would very probably burn the surface roots, and so do more harm than good. Sulphate of Ammonia and Nitrate of Soda hasten the growth, but if used indiscriminately a vast deal of harm would soon be done. We once tried Nitrate of Soda on a plant (Alfred Salter) to test its strength and effect. Immediately after applying it the leaves assumed a dark green colour; they very perceptibly thickened, being twice as large as those on plants which were not treated in this manner. The Nitrate was given about three times each week for two months at



the rate of a tea-spoonful each time. The plant at the end of that period was nearly two feet higher than the others of the same variety in the row. Final result—a large bud, deformed even in that stage of growth, which developed into a large, flat, coarse bloom, very inferior to those on the other plants. If less than half the quantity of Nitrate of Soda had been given once in two weeks during the two months, the plant would have received quite sufficient stimulant. We give this statement as a guide to growers. It should also be clearly understood that with the Nitrate of Soda only weak liquid manure, soot water, and clear water should be given alternately, with an occasional sprinkling of some good artificial manure, and not Sulphate of Ammonia as well. Use the latter as you would Nitrate of Soda, in the place of it, and not in conjunction. Pigeon dung is stronger than fowl's dung; both are valuable as a soluble manure in a weak state—that is, well diluted with clear rain water—but if used in a raw state, either as a top-dressing alone, or mixed with the soil, it is dangerous, as it burns the roots, and also causes worms to breed in it.



## TOP-DRESSING.

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WE like to top-dress with rich soil twice during the season, viz., towards the end of July, and again after the bulk of the buds which are to remain on the plants have been secured. The soil for this purpose should be collected and stacked two months before it is wanted for use.

Cut off the main portion of the grass, and when the remainder has dried chop the turf into pieces, sift out the fine soil, and mix with it a 7-inch potful of ground bones, one of soot, and a bushel of horse manure to each barrowful of soil. Place the compost in a solid heap in an open shed where rain can be kept off it till required for use. If the heap remains in this position for a month it will be of more value at the end of that time than if used immediately after the mixing. Put the top-dressing on at the two periods previously mentioned, leaving room at the first one for the second application.

Use the rammer freely and so make the soil very firm on the surface. Ring the pots after top-dressing to be sure that the soil is not too dry underneath, or, what is better, well water all that require it, about an hour before performing this operation, as the damp appearance of the new soil may otherwise deceive the eye, and harm to the plants accrue. Feed the plants so as to obtain a free, luxuriant growth, but avoid over-forcing. The aim should be to secure wood which will thoroughly mature in our climate. Wood which is not ripe at the time the plants are housed in the autumn will not give the best flowers. Continue to syringe the plants freely in hot weather, and pay constant attention to the tying of the shoots as growth advances.

## SECURING THE FLOWERING BUDS.

**F**LOWER buds on the plants of certain varieties will, sometimes, make their appearance in the points of the leading shoots at most inconvenient dates, when exhibiting



Securing "taking" the Crown Bud. The cross lines denote which shoots to remove.

is the real purpose for which they are grown. Some kinds, especially of the "Queen" family among the Incurves, and "Viviand Morel" (and its sport—"Charles Davis") among the Japanese, are more troublesome in this respect than others. We strongly recommend the removal of all buds which show on these plants during July and the early part of August, and also those on all other very early varieties. Further growth will then commence, which will in due time produce another flower bud. These resultant buds may not grow into such large flowers as the cultivator

may desire to have, but they will contain good qualities, which flowers from too early buds rarely possess. "Boule d'Or," and other very late varieties, may show buds in the last week in July if the plants were "topped" about April 20th. Such buds will be ready for "securing"—that is, removing all young shoots which grow around them, and leaving the buds—about August 3rd, and all secured at that date will be in bloom in November at the right time. We have often seen advice given about the "Princess of Wales" type, namely, that the 28th of August is quite soon enough to secure the buds of these varieties, which now embrace a rather large section of the best quality Incurved sorts. We have obtained very good blooms from buds secured at the date just named, but they would not bear comparison with others taken about the 15th August. All buds of these varieties should be secured by August 25th, and then deep, high quality blooms may be looked for in November. Such buds will be fully developed by November 5th. Only about 5 per cent. of good blooms will develop from buds of the "Queen" and "Empress"



*Securing "taking" the Terminal Bud. The cross lines are a guide as to which buds should be removed.*

family which have been secured during the first week in August. The last week in that month and the first in September being a safer time; though buds which show on August 15th should be retained. The best date for securing



*The "Crown Bud" swelling properly.*

the buds of each variety of Incurved and Japanese is given in the table at the end of this book, together with other details of prime importance. Do not remove all the growths at one time when securing the bud, but a few at a time, when they are large enough to be taken off without

injuring what is left. If the plants are growing freely at that period, there is no necessity for feeding with chemicals.

Carefully watch the growth, and as soon as help is needed give weak soot water first, follow that in a few days with diluted liquid manure ; after which artificial manures will be beneficial in assisting to plump up the buds. Keep a sharp watch for earwigs, which do much damage at this period by eating the centre of the bud out, and also the stem below the bud. During the daytime examine all curled leaves, and between the stem of the plant and the stake, for these pests ; and at night, with a lantern, examine not only the stems and leaves but particularly the buds. All side shoots on the stems of the plants must be pinched regularly while they are in a small stage, for if left to grow several inches long before removal, they will rob the plant of much strength.

#### RETARDING THE BUDS.

When the buds on some of the plants are too forward remove such plants to a cool place facing north, if possible, where they will be screened from the sun in the middle of the day, but in an open position, not under trees, nor too near to a high wall. We remember a gardener—a beginner in Chrysanthemum culture—once trying to retard, and to keep dry some buds which were just beginning to show colour, by tying small paper bags over them. When he removed the bags he found, to his dismay, that he had provided an excellent harbour for earwigs, which had in the meantime entirely destroyed his most forward blooms. This experiment was never repeated.

## PLACING CHRYSANTHEMUMS INDOORS.

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THE dates given are for the Southern counties. In the North of England, Midlands, Scotland, and the North of Ireland, all plants which are grown to produce exhibition blooms should be safely housed before the advent of frost in those localities. Unless they can be protected at night none should be left exposed to the night air after September 20th. In Scotland a week earlier even will be a better date for housing the late blooming sorts. Bush plants for general decorative use may be left out a little later than the dates given above, but they, too, must not be exposed to frost, as it cripples the shoots, and undoes the work of a whole season. The evil effects of frosts on opening buds is soon apparent in the wholesale decay of the flowers after housing. The latest flowering varieties should be housed first. Those which are very backward may be put under glass about September 20th, if the blooms are required at an early date, and others before the colours of the florets can be seen. The 1st of October is the date generally accepted by growers as the best one for housing the bulk of the plants. From the 1st to the 10th of October we have, with few exceptions, experienced rather severe frosts; during which time any plants that are not housed are safer if placed in an open shed at night, not only to be protected from frost, but also from the dew, which soon ruins the flowers, by causing decay after housing. Remove all decayed leaves before housing the plants, and

do not crowd them too close together, but admit all the light possible to preserve the foliage in a green condition as long as you can. Stand specimen plants by themselves. Greenhouses, vineries, peach houses, glass verandahs, and even porches and large windows may be utilised for the protection of Chrysanthemums at this season of the year, but very lofty, dark conservatories, and similar structures, are not suitable. A few of the earliest plants may be placed in a house which faces north, north-east, or east (if such be available). The opening of the blooms will thus be retarded, and the grower have an opportunity of exhibiting some of his best blooms—it may be at the same time as those which are naturally much later. The late kinds must be fully exposed to light and sunshine, and also placed in a slightly warmer house in order to have the blooms quite out at the desired time. Place the plants so as to avoid having the blooms too near to the glass; they must not be closer than 3 or 4 feet. Ventilate freely at first both at the top and front of the house, and also leave the door open. Do not syringe the plants after housing, if the buds are opening, as the water would lodge in the florets and cause decay.

Water as usual when the plants are in need of it. Place a large lump of lime in a tub, or can, and mix it with water. When the lime has settled at the bottom, use the clear water for watering the plants once every ten days till the blooms are three parts developed; it will help to prevent damping of the blooms.

When the blooms are about half expanded, and are considered to be too forward, the house must be shaded. This is best done by laying mats or other material on the glass outside, immediately over those flowers which require it. The advantage of this kind of shading is that it can be removed



when dull weather supervenes. We always shade exhibition blooms from strong sunshine, especially the Incurved varieties. If this precaution be not taken some of the petals will reflex instead of incurving naturally. It is advisable, also, to turn the blooms of the Incurved varieties—especially the “Queens”—from the sun. Keep the blooms of the last named in an upright position until nearly fully developed, the petals will then form into place and produce a deep, solid bloom. At this stage the branches may be depressed so as to admit of the flower hanging downwards towards the light; support must be given to the flowers while in this position, or their weight will cause many losses through breaking of the flower stem immediately below the bottom petals.

#### FIRE HEAT AND VENTILATION.

These are two important items at this stage, and will require careful manipulation. Too much fire heat is harmful, as also is excessive ventilation, when the flowers are nearly open. The ventilators at the top of the house should be left slightly open to admit a little air night and day, except in foggy weather, when, if the sun be entirely obscured by the fog, all ventilators should be closed. If, however, the sun shines upon the house it must not be closed, even during fogs, but a small opening should be left at the top. It is wise to hang scrim canvas over the ventilators in foggy weather. Indeed we always had some coarse scrim fastened to the ventilators when the flowers were opening; cold draughts were thereby prevented, while sufficient air was admitted. From 43 degrees to 50 degrees is a suitable temperature for Japanese, and a few degrees lower for the Incurved and other varieties.

## DAMPING OF THE PETALS.

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LARGE numbers of fine blooms are lost every year through damping. The blooms are affected in different ways. Sometimes they are speckled all over as if pepper had been dusted on them; the spots turn to a rusty brown colour, and the effect is to render the blooms thus damaged worthless for exhibition. The spots are caused by a too low temperature in the house at night; the blooms being colder than the surrounding atmosphere, moisture condenses on them, and the sun shining upon them the following day causes the spots just referred to. Prevention is better than cure in this, as in other cases. During very cold weather, especially when fogs are prevalent, suspend a piece of scrim or tiffany cloth about a foot above the blooms; this covering will retain much of the moisture which would, in its absence, descend upon the blooms and thus cause injury to them. Remove the covering the next morning as soon as the air in the house feels drier. Another form of damping is the decay of the ends of the petals, which occurs at intervals over the entire bloom, and is caused by too much moisture at the roots of the plants. On the first appearance of this decay remove all damaged petals, keep the soil drier for a few days, and then give a watering of clear lime water. This malady is not so disastrous to the blooms as the "spotting" is. We have occasionally found whole flowers decay at the base of the florets. Water dripping from the roof (in some cases the result of syringing) and lodging in the blooms soon brings on decay. This may easily be prevented, unless the roof of the house be very defective.



*Etoile d'Lyon, Reflexed.*

## DRESSING THE BLOOMS WHILE OPENING.

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THE final dressing of the flowers will of course be done when they are cut and are under preparation for exhibition. We have been offered good remunerations by gardeners if we would give them a few lessons in "dressing," and have had much difficulty in convincing some that the dressing is *commenced* while the blooms are still only partially developed on the plants, and not left until they are cut and ready to place on the show boards. What we mean by "dressing" the blooms while they are growing on the plants, is the removal of all twisted and mal-formed petals; and this applies more particularly to the Incurved section. The Japanese, Japanese Anemone, and all the other sections are greatly improved in shape and appearance by judicious manipulation of the blooms while they are expanding. We must, however, give a word of caution to intending exhibitors, or our instructions may cause some to incur loss through recklessly following our advice. It is this: do not injure the petals which are left in each individual flower by pinching or twisting them with the tweezers, which should be used for removing the mis-placed ones. The flowers should be examined in the following manner, viz., after they are a quarter or half open carefully take out all unruly petals—pull them clean out, do not leave a portion in, or it will decay, and may cause others to do so. By removing these ill-shaped petals the others will grow into their proper

places, thus improving the bloom, and causing much less labour to be bestowed upon each one at the last moment. This will allow of more time on the morning of the show to attend to other necessary details. When the blooms are three parts out a number of seed florets will be visible—in some varieties, notably the “Princess of Wales” type, more than others—carefully pluck out all such florets. They are yellow in colour, short and sturdy, and if left cause the petals to grow outwards, and not inwards as they should do. When the Incurved varieties are well advanced, and the sun is strong, guard against an undue rise of temperature by placing mats (several in thickness if need be) on the glass outside. If once the petals are reflexed through too much heat it will be a difficult matter to place them right again. Flowers of this section growing on unripe wood never incurve gracefully as do those which are produced on thoroughly matured stems.



## PRESERVING FULLY-EXPANDED BLOOMS.

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CHRYSANTHEMUM flowers last for a considerable time in a fresh condition after they are quite developed. Growers of these plants are, consequently, not troubled in this respect so much as are those of Roses for exhibition purposes. But, notwithstanding the good keeping qualities of Chrysanthemums, some blooms are difficult to preserve for any length of time in a fit condition for exhibiting. It is much better to retard the opening of the blooms by keeping the plants in a cooler temperature than to try to keep them fresh for a long time after they are fully expanded; but when they are open too soon it is imperative that something should be done to preserve them. We have removed plants with blooms quite out, to an empty stable, and kept them fresh for more than ten days. Others we have cut with long stems and placed them in bottles of water in a spare bedroom. They will keep in excellent condition in such a position for a week.

Incurved flowers should have thin wire tied to the stems, and then they can be bent in a slightly pendulous position (so as not to disarrange the petals) without breaking the stem.

The blooms on specimen plants, and those which are intended for grouping purposes, may be preserved, for a *short time only*, in sheds, as the leaves would suffer too much by being placed in semi-darkness; and these, as well as the blooms, should be as fresh as possible. Water very sparingly all plants after the blooms are at their best.

## FINAL DRESSING, AND PLACING THE BLOOMS ON THE BOARDS.

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### ARRANGING THE BLOOMS ON BOARDS.

SOME of the Japanese varieties produce such immense blooms that it would be impossible to place all the largest sorts in one row on the board without undue crowding. Therefore intermix the large and smaller sorts so as to have an even stand of blooms. Place a good bloom, one with great depth, at each corner and elevate all so as they will present the best front to the judges, and show the form and characteristics of each variety. There are cups and tubes offered for sale by various makers which possess the latest improvements, and make the work of staging a very pleasant occupation. Blend the colours on the stand in a pleasing manner. Select all the blooms in the daylight and then determine the position which they are to occupy on the stands, or boards, as this work can be carried out much more satisfactorily in daylight than by artificial light. Remember that if the colours are well arranged on the stands it will help very much towards winning the prize.

Read very carefully the *rules* contained in the schedule as to size of boards, number of varieties admitted in each class, &c., of the show, and comply with them in every particular, so as to avoid disqualification.

### FINAL DRESSING.

The Incurved varieties will require much attention in the matter of dressing and general finish. Place the largest in the back row, the medium in the middle, and the smaller

sized ones in the front, so that each row of blooms appears even in depth and width. Have depth and freshness in the selected specimens; also rich colour. Nearly all the deformed petals will have been removed while the blooms were on the plants. Take each bloom separately, tie a very small stake to the flower stem of Incurves—and others which require support—to keep the bloom in an upright position, then place it in a suitable sized cup, and take out with the tweezers those petals which will not properly incurve and overlap the others. Begin at the top of the bloom and place all petals in regular order all over it. Do not dwarf the flower by drawing the stem down too much in the tube. If patent fasteners are not attached to each cup and tube, then use pieces of cork. Fill the cup half full of water. All this work must be done with great care and judgment so as not to injure the tender petals.

The Japanese do not require any formal dressing, but only irregular petals removed. Single, Pompon, Reflexed, and Anemone-flowered should have extra long individual petals and seeds removed, and be placed on the stands so that the full beauty of each flower will be clearly seen.





## BEST METHOD OF LABELLING THE BLOOMS.

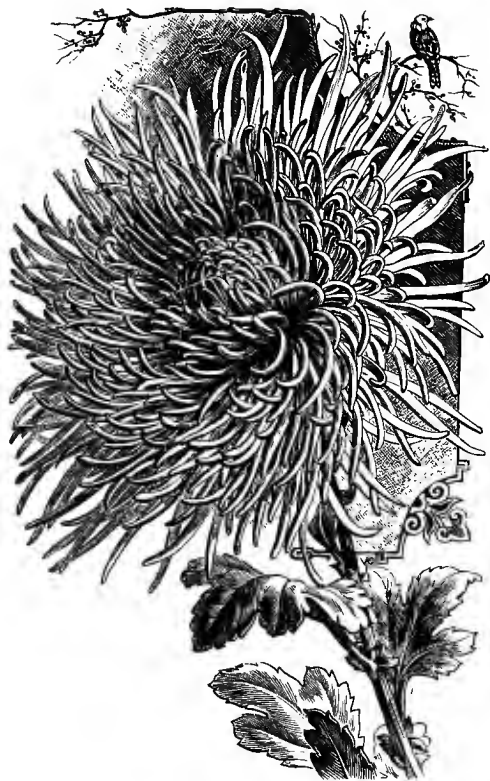
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STANDS of Chrysanthemums are frequently seen at shows labelled in a very slovenly manner. A piece of paper is torn up and the names often carelessly written upon it. The papers are simply laid loosely upon the front of the stand, or stage, sometimes they are knocked off and are hastily replaced, probably, in the wrong positions. Two methods of labelling to be commended are, first:—fastening securely to the stand a neatly cut label in front of each row of blooms, bearing three names each, which will be for the back, middle and front row blooms respectively. But the following is a better method, viz. :—fasten the labels on an upright wire which has been firmly attached to the stand at the back, each label bearing the names of the three blooms immediately in front of it. Write the names with black ink legibly and correctly. If any variety be replaced by another after the labelling has been done, be careful to correct the name on the card also.

## TAKING THE BLOOMS TO THE SHOW, AND STAGING.

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WHEN the blooms are placed on the stands the latter should be securely fastened in tiers, in boxes which have been specially made for the purpose, and which are dust proof. The inside of the box should be very smooth, or much damage may be done to the outside petals of some of the blooms through rubbing against the sides. Have the boxes made wide enough to enable the stands to be put in and taken out with ease. The stands are easily made secure in their respective places by wedging them with pieces of wood. Use a cart with springs if possible, and take every care throughout the journey, whether it be short or long, by road or rail, to prevent damage from jolting. However assiduous the exhibitor may be in this matter the blooms will require all his attention after he arrives at the show, in readjusting some of the petals, especially of the Incurved section, before they can be placed on the stage in a condition that will bear the critical examination of the judges. When taking plants to a show place them so that the pots fit tightly against each other in a covered van, should one be available.



*Golden Thread.*

## HOW TO ARRANGE A GROUP OF CHRYSANTHEMUMS.

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**E**XPERIENCED exhibitors always group their plants at home before taking them to the show; they are then able to place every plant in the most advantageous position. Having once arranged the group, the work of re-constructing it in the show room will probably be done with even better judgment. Always contrive to have a few plants bearing high-class blooms of the Incurved sorts, as they greatly improve the merits of the group. Dwarf, and semi-dwarf plants with healthy foliage and carrying deep, high-coloured fresh blooms are the best with which to form a group. Avoid stiffness in arrangement. Procure an undulating surface of blooms. Wash the pots before taking them from home. Do not have unnecessary stakes visible; all supports should be painted green. Place the best foliated and dwarfest plants on the outsides of the group. Fill all the space allotted, but avoid undue crowding. Blend the colours in a pleasing and effective manner.

## HOW TO STAGE A GROUP OF CUT CHRYSANTHEMUMS AND COLOURED FOLIAGE.

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CLASSES for these are more numerous provided now than they were formerly. This is a step in the right direction. and charming exhibits are seen at all the principal shows. Such arrangements deserve every encouragement. We will presume that a given space has to be filled in the most artistic manner; if too many colours are used the effect will be marred. The following colours are quite sufficient for the purpose, viz.—yellow, bronze, white, and dark-red or crimson-maroon. Autumn-tinted foliage—especially beech branches and hardy ferns—judiciously intermixed with Chrysanthemum blooms (to which a foot or more of stem is attached, clothed with healthy leaves) are materials with which a most pleasing effect may be produced.

The same remarks apply to bouquets and epergnes of Chrysanthemums and foliage. Lightness in the arrangement and suitability of colours are the two essentials to be studied.

## JUDGING CHRYSANTHEMUM BLOOMS, GROUPS, &c.

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JUDGING by points in close competition is admitted by all good growers and adjudicators to be the only safe and reliable method in awarding the prizes.

Depth of bloom—especially of the Incurved varieties—freshness, size, form, good colour, solidity and general finish are the chief features to be considered. Coarse blooms will not win when smaller ones possessing refinement—which is the result of careful manipulation of the buds at the right time, and general good culture—are staged against them. In judging groups of Chrysanthemums, the above enumerated qualities in the blooms are necessary, with the additional ones of well-grown, thickly foliaged plants, and artistic arrangement.

With regard to bouquets, epergnes, and cut blooms with foliage arranged for effect, lightness and harmony in colours are the principal points to be observed. These remarks on judging are few, but sufficient. Complicated instructions are not necessary, but will harass and not assist a person in awarding prizes for exhibits.



*William Falconer, hircute, Inc. Jap.*

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## A TABLE OF

In this table we give, in an abbreviated form, a list of some management, which we trust will be of great service to those w.

ABBREVIATIONS generally used in reference to Chrysanthemum Japanese Reflexed ; *Inc.*, Incurved ; *Ref.*, Reflexed ; *Anem.* *Anem.*, Pompon Anemone ; *Sing.*, Single.

## JAPANESE

Name.	Variety.	Colour.	Height.
Avalanche.....	Jap. ....	white .....	dwar
Beauty of Castlewood.	Jap. Inc...	red, reverse buff.....	dwar
Beauty of Exmouth...	Jap. Inc...	ivory white.....	med.
Boule d'Or .....	Jap. Inc...	yellow, shaded orange ...	dwar
Cecil Wray .....	Jap. ....	light yellow .....	dwar
Charles Davis .....	Jap. Ref...	buff-yellow .....	med.
Colonel Chase .....	Jap. ....	blush .....	med.
Col. W. B. Smith.....	Jap. ....	terra-cotta .....	med.
Commandant Blusset..	Jap. ....	carmine-purple .....	dwar
E. Beckett .....	Jap. Ref...	yellow .....	dwar
Edith Tabor .....	Jap. ....	lemon-yellow .....	med.
E. Molyneux.....	Jap. ....	maroon, gold reverse .....	med.
Etoile de Lyon .....	Jap. Ref...	rose-purple .....	dwar
Eva Knowles .....	Jap. ....	apricot, gold reverse .....	med.
Florence Davis .....	Jap. Inc...	white, green centre .....	med.
G. C. Schwabe .....	Jap. ....	carmine-rose .....	med.
Golden Gate .....	Jap. ....	yellow, shaded buff .....	dwar
G. W. Childs .....	Jap. ....	dark crimson .....	dwar



## CHRYSANTHEMUMS.

best varieties in each section, with other details relating to their culture.

—*Jap.*, Japanese; *Jap. Inc.*, Japanese Incurved; *Jap. Ref.*, Japanese Reflexed; *Jap. Anem.*, Japanese Anemone; *Pom.*, Pompon; *Pom.*

### VARIETIES.

Variety, if known late.	Size of Pot for Final Potting, in inches	When to secure the Final Bud.	Date to House the Plants.	Size of Blooms in inches.	
				dia.	depth.
ly ...	10	crown, August 20 .....	Oct. 5	6½	by 5
e ...	10	crown, August 10 .....	Sept. 25	7½	" 5
e ...	10	crown or terminal, Aug. 20..	Oct. 1	7	" 5
e ...	10	crown, August 1 .....	Sept. 25	7	" 6
d. ...	10	crown, August 20 .....	Oct. 1	7	" 5
d. ...	10	crown or terminal, Aug. 20..	Oct. 5	8	" 6
d. ...	9	crown, August 10 .....	Oct. 1	7	" 6
d. ...	10	crown, August 12 .....	Oct. 1	7	" 5
d. ...	10	crown, August 12 .....	Oct. 1	7	" 6
ly ...	10	crown, August 15 .....	Oct. 5	6½	" 5
ad. ...	10	crown, August 15 .....	Oct. 1	7	" 6
ly ...	10	crown, August 12 .....	Oct. 5	7	" 5
e ...	10	crown or term., Aug. 20-30..	Oct. 1	8	" 6
ad. ...	10	crown, August 15 .....	Oct. 1	7½	" 5
e ...	10	crown or term., Aug. 10-25..	Sept. 25	6½	" 5
ad. ...	9	crown, August 12 .....	Oct. 1	6½	" 4
ad. ...	10	crown, August 15 .....	Oct. 1	7½	" 5
ad. ...	9	crown or term., Aug. 10-25..	Oct. 1	6	" 4

Name.	Variety.	Colour.	Height.
Hairy Wonder .....	Jap. ....	reddish bronze .....	med
Henri Jacotot fils.....	Jap. Inc...	crimson, gold reverse.....	dwa
H. L. Sunderbruck ...	Jap. ....	bright yellow .....	med
International .....	Jap. ....	salmon-red .....	dwa
J. Shrimpton .....	Jap. Ref...	crimson and scarlet .....	dwa
Le Verseau .....	Jap. ....	rose, striped white.....	dwa
Lord Brooke .....	Jap. Inc...	orange, shaded red.....	dwa
Louise .....	Jap. Inc...	white, suffused lilac .....	dwa
Mdme. Ad. Chatin ...	Jap. Inc ..	creamy white .....	dwa
Mdme. Ad. Moulin ...	Jap. ....	white .....	dwa
Mdme. Carnot .....	Jap. ....	white .....	med
Mdme. M. Ricoud ...	Jap. ....	rose-lilac .....	med
Mdme. Marie Hoste ...	Jap. Ref...	creamy white .....	dwa
Mdme. Thérèse Rey ...	Jap. ....	ivory white.....	med
Mons. Bernard .....	Jap. ....	rosy purple .....	dwa
Mons. Charles Molin...	Jap. Ref...	bronze and yellow .....	dwa
Mons. Panckoucke ...	Jap. ....	rich yellow .....	med
Miss Dorothea Shea...	Jap. ....	terra-cotta .....	dwa
Miss Maggie Blenkiron	Jap. Inc ..	orange-red and yellow ...	dwa
Miss Rita Schroeter...	Jap. ....	white, striped lilac.....	med
Mrs. Alpheus Hardy...	Jap. Inc...	white (hairy) .....	med
Mrs. Charles Blick ...	Jap. ....	white .....	dwa
Mrs. C. H. Payne.....	Jap. ....	rose and white .....	med
Mrs. E. G. Hill.....	Jap. Inc...	white, shaded lilac.....	med
Mrs. Falconer Jameson	Jap. ....	orange-bronze, str'k'd yell.	dwa
Mrs. W. H. Lees .....	Jap. ....	white, tinged pink .....	med
Mutual Friend .....	Jap. ....	white, tinted lilac .....	dwa
Philadelphia .....	Jap. Inc...	sulphur-white .....	dwa
Phœbus .....	Jap. Ref...	clear yellow .....	dwa

Day, Month, Year.	Size of Pot for Final Potting, in inches.	When to secure the Final Bud.	Date to House the Plants.	Size of Blooms in inches.	
				dia.	depth.
.. ...	8	crown, August 20 .....	Oct. 5	6½	by 4½
l. ...	10	crown, August 15 .....	Oct. 1	7½	" 6
l. ...	9	crown, August 20 .....	Oct. 1	6½	" 4½
l. ...	10	crown, August 15 .....	Oct. 1	8	" 5
l. ...	10	crown, August 15 .....	Oct. 1	7	" 5
l. ...	9	crown or terminal, Aug. 20..	Oct. 1	6½	" 4½
l. ...	10	crown, August 15 .....	Oct. 1	7	" 4½
l. ...	10	crown or term., Aug. 10-25..	Oct. 1	7	" 5
l. ...	10	crown, August 15 .....	Oct. 1	7	" 6
l. ...	10	crown, August 15 .....	Oct. 1	7	" 5
l. ...	10	late cr. or term., Aug. 20-30.	Oct. 5	7½	" 6½
l. ...	9	crown, August 15 .....	Oct. 1	6½	" 4½
l. ...	10	crown or term., Aug. 20-30..	Oct. 1	7	" 5
l. ...	10	crown or term., Aug. 15-30..	Oct. 1	7	" 5
l. ...	10	crown or term., Aug. 5-25...	Oct. 1	6½	" 5
l. ...	10	crown, August 10 .....	Oct. 1	6½	" 5
l. ...	10	crown, August 15 .....	Oct. 1	7	" 5½
l. ...	10	late crown, August 20 .....	Oct. 1	6½	" 5
l. ...	10	crown, August 15 .....	Oct. 1	6½	" 5
l. ...	9	crown, August 15 .....	Oct. 1	6½	" 4½
l. ...	8	crown, August 5-15 .....	Sept. 20	6	" 4
l. ...	10	crown, August 15 .....	Oct. 1	7	" 5
l. ...	10	late crown or term., Aug. 20	Oct. 1	6½	" 5
l. ...	10	crown, August 12 .....	Oct. 1	6½	" 5
l. ...	9	crown, August 5.....	Sept. 25	6½	" 4½
l. ...	10	crown or term., Aug. 20-30..	Oct. 1	8½	" 7
l. ...	10	crown, August 10 .....	Oct. 1	7	" 6
l. ...	10	crown, August 15 .....	Oct. 1	6	" 4
l. ...	10	crown, August 15 .....	Oct. 1	7	" 5

Name.	Variety.	Colour.	Height.
President Borel .....	Jap. ....	purple-rose .....	med.
Puritan .....	Jap. Inc...	pink and white (at its best)	dwarf
Richard Dean .....	Jap. ....	crimson, gold reverse.....	dwarf
Rose Wynne.....	Jap. ....	blush .....	med.
Souvr. de Petite Amie	Jap. ....	white .....	dwarf
Stanstead White .....	Jap. Inc...	pure white .....	dwarf
Sunflower .....	Jap. ....	golden yellow .....	med.
Thomas Wilkins .....	Jap. ....	yellow .....	dwarf
Viviand Morel .....	Jap. ....	mauve .....	dwarf
W. G. Newitt .....	Jap. ....	white .....	med.
W. H. Lincoln .....	Jap. ....	golden yellow .....	dwarf
W. Seward .....	Jap. ....	dark crimson .....	med.
W. Tricker .....	Jap. ....	rich rose .....	dwarf

## INCURVED

Name.	Colour.	Height.	Early, Medium or Late
Alfred Salter .....	lilac-pink .....	med. ...	med. ...
Baron Hirsch .....	golden-buff, reverse crim.-red	med. ...	early ...
Brookleigh Gem .....	rosy purple .....	tall.....	early ...
Chas. H. Curtis .....	rich yellow .....	med. ...	med. ...
D. B. Crane .....	bronze-buff, shaded red .....	dwarf...	med. ...
Emily Dale .....	straw-yel., suffused bronze...	med. ...	med. ...
Empress of India.....	pure white .....	med. ...	med. ...
Globe d'Or .....	buff-yellow .....	med. ...	med. ...
Golden Empress .....	pale yellow .....	med. ...	med. ...
Hero of S. Newington	deep rose-pink.....	dwarf...	late ...
J. Agate .....	white .....	med. ...	med. ...

Size of Pot for Final Potting, in inches.	When to secure the Final Bud.	Date to House the Plants.	Size of Blooms in inches.	
			dia.	depth.
10	crown, August 12 .....	Oct. 5	6½	by 4½
10	crown, August 10 .....	Oct. 5	6½	" 4½
10	crown, August 12 .....	Oct. 1	6½	" 4½
10	crown or term., Aug. 10-25..	Oct. 1	6½	" 5
9	crown, August 15 .....	Oct 1	6	" 4
10	crown or term., Aug. 10-25..	Oct. 5	7½	" 5
10	crown, August 5.....	Oct. 1	6½	" 5
10	crown or term., Aug. 10-25..	Oct. 1	7	" 4½
10	late cr. or term., Aug. 20-30.	Oct. 5	8	" 5
9	crown, August 15 .....	Oct. 1	6½	" 5
10	late cr. or term., Aug. 15-30.	Oct. 5	6½	" 5
9	terminal, August 30 .....	Oct. 1	6½	" 4½
10	crown or term., Aug. 10-30..	Oct. 5	7	" 5

VARIETIES.

When to secure the Final Bud.	Date to House the Plants.	Size of Blooms in inches.	
		dia.	depth.
late crown or term., Aug. 15, Sept. 8.	Oct. 1—5	5	by 3½
crown or terminal, Aug. 15, Sept. 8...	Oct. 1	5½	" 4½
late crown or term., Aug. 15, Sept. 8.	Oct. 5	4½	" 3
crown or terminal, Aug. 15, Sept. 8...	Oct. 5	4¾	" 3½
terminal, August 30 .....	Oct. 1	4½	" 3
crown or terminal, Aug. 15, Sept. 8...	Oct. 5	5½	" 4
crown or terminal, Aug. 15, Sept. 8...	Oct. 5	5½	" 4
crown, August 20 .....	Oct. 1	4½	" 3½
crown or terminal, Aug. 15, Sept. 8...	Oct. 5	5	" 3½
terminal, August 30 .....	Sept. 25	4	" 3
crown, August 25 .....	Oct. 1	5½	" 4

Name.	Colour.	Height.	Earl Med. or L.
Jeanne d'Arc .....	purplish white.....	tall.....	earl.
John Doughty .....	fawn, suffused rose .....	tall.....	med.
John Fulford .....	crimson-red .....	med. ...	med.
John Salter .....	cinnamon-red .....	tall.....	late
Lady Hardinge.....	rose .....	dwarf..	earl.
Lord Alcester .....	primrose-yellow .....	med. ...	med.
Lord Rosebery .....	rose-purple .....	med. ...	med.
Lord Wolseley .....	bronze-red .....	tall.....	earl.
Lucy Kendall .....	red .....	tall.....	med.
Mdme. Darier .....	yellow, shaded purple-red ...	med. ...	med.
Miss M. A. Haggas ...	yellow .....	tall.....	med.
Mr. Brunlees .....	Indian-red .....	med. ...	late
Mrs. Heal.....	pure white .....	tall.....	med.
Mrs. J. Mitchel .....	amber .....	dwarf..	med.
Mrs. Norman Davis...	golden yellow .....	dwarf..	late
Mrs. R. Bahuant .....	rose-purple .....	tall.....	earl.
Mrs. R. C. Kingston...	lilac-pink .....	med. ...	med.
Mrs. Robinson King...	deep yellow .....	med. ...	med.
Mrs. S. Coleman .....	rose, shaded yellow.....	tall.....	med.
Mrs. W. Shipman.....	fawn.....	dwarf..	earl.
Nil Desperandum.....	orange-red .....	tall... ..	med.
Owen's Crimson .....	crimson .....	dwarf..	med.
Prince Alfred .....	carmine-rose.....	tall.....	earl.
Princess of Teck .....	white, suffused pink .....	dwarf..	late
Princess of Wales.....	blush rose .....	tall.....	med.
Queen of England ...	rose-blush.....	med. ...	med.
Robert Petfield.....	silver-rose.....	med. ...	med.
Violet Tomlin .....	violet-purple .....	tall.....	med.
W. Tunnington.....	buff-brown .....	med. ...	med.

The dates given for "securing" the buds are suitable for nearly all districts from on some varieties in the Northern districts, and, as a general rule, the shows, too, are advisable to pick the dates given in

No of \$ for final thing, pches.	When to secure the Final Bud.	Date to House the Plants.	Size of Bloom in inches.	
			dia.	depth.
10	terminal, August 30 .....	Oct. 5	5	by 4
10	crown or terminal, Aug. 15, Sept. 8...	Oct. 1	5	" 3½
10	terminal, August 25 .....	Oct. 1	5	" 3½
9	terminal, August 20 .....	Oct. 1	4½	" 3½
8	crown, August 25 .....	Oct. 5	3½	" 2½
10	crown or terminal, Aug. 15, Sept. 8...	Oct. 1—5	5½	" 4
9	crown, August 20 .....	Oct. 1	4	" 3
10	crown or terminal, Aug. 20, Sept. 15..	Oct. 5	5	" 3½
9	crown, August 20 .....	Oct. 1	4½	" 3
9	crown, August 25 .....	Oct. 1	4	" 2½
10	crown or terminal, Aug. 15, Sept. 8...	Oct. 1—5	4½	" 3
10	crown, August 20 .....	Oct. 1	4½	" 3½
10	crown, August 20 .....	Oct. 1	4½	" 3
8	crown, August 20 .....	Oct. 1	3½	" 2½
10	terminal, August 30 .....	Oct. 1	4½	" 3½
10	crown, August 25 .....	Oct. 1	5	" 3½
9	crown, August 20 .....	Oct. 1	4½	" 3½
10	crown or terminal, Aug. 15, Sept. 8...	Oct. 1	5	" 4
10	crown or terminal, Aug. 15, Sept. 8...	Oct. 1—5	4½	" 3
8	crown or terminal, Aug. 20 .....	Oct. 5	4	" 2½
10	crown, August 20 .....	Oct. 1	4	" 3
10	crown, August 20 .....	Oct. 1	5	" 3½
10	crown or terminal, Aug. 20, Sept. 8...	Oct. 5	5	" 3
10	terminal, August 30 .....	Oct. 1	4	" 2½
10	crown or terminal, August 20 .....	Oct. 5	5	" 3
10	crown or terminal, Aug. 15, Sept. 8...	Oct. 1	5½	" 4
8	crown, August 20 .....	Oct. 1	4½	" 3
10	crown or terminal, August 20—30 ...	Oct. 1	5	" 3
10	crown, August 20 .....	Oct. 1	4	" 3

th to South of Great Britain; but the best buds will naturally be a little later in showing than in the South. But as regards the right time for housing the plants, it will be going to

To tabulate the undermentioned varieties would be to repeat the same details in reference to most of them; we therefore propose to give a selection of the best sorts in each section (those which will be found to be most useful to growers) together with their colours. If the cultivator wishes to exhibit; to obtain the best blooms he must not secure the very early crown buds. Late crown and terminal buds give the best formed and neatest flowers, especially of the Pompon, Pompon-anemone, and Single varieties. Crown buds should be secured as late as possible—in the ordinary way of cultivation, of course. Between August 15th and September 15th is the best period in which to secure the buds of the following varieties to obtain the blooms in their best form:—

#### EIGHTEEN REFLEXED.

Annie Salter, golden yellow, dwarf; Cloth of Gold, light yellow, tall; Chevalier Damage, yellow, dwarf; Cullingfordii, crimson, dwarf; Dr. Sharpe, purple-magenta, dwarf; Distinction, golden yellow, tall; Emperor of China, white, suffused blush, tall; Elsie, pale yellow, dwarf; Golden Christine, fawn yellow, dwarf; Irene, white, shaded rosy buff, medium; Julie Lagravère, cinnamon-red, dwarf; King of Crimson, crimson, dwarf; Peach Christine, rose-pink, dwarf; Pink Christine, light pink, dwarf; Putney George, crimson, medium; R. Smith, crimson, yellow base, medium; White Christine, white, dwarf; William Neville, orange and red, medium.

#### SIXTEEN JAPANESE ANEMONES.

Bacchus, crimson, dwarf; Fabian de Mediana, lilac, shaded purple, medium; Jeanne Marty, blush-white, shaded lilac, tall; Judge Hoitt, pink, tall; Madame Berthe Pigny,



rose, shaded yellow, medium; Madame Clos, rose-lilac florets, tipped yellow, medium; M. Pankoucke, purple, disc tipped bronze, medium; Madame R. Owen, white, disc shaded yellow, tall; Mademoiselle Cabrol, rose-pink, dwarf; Marguerite Solleville, rose-lilac, medium; Marguerite Villageoise, blush, disc rose, medium; M. Charles Lebocqz, buff, disc yellow, tall; Sabine, sulphur-yellow, medium; Sœur Dorothee Souille, light rose, dwarf; Sir W. Raleigh, pale blush, medium; W. W. Astor, blush, shaded rose, medium.

#### EIGHTEEN LARGE ANEMONES.

Acquisition, rose-lilac, disc yellow, medium; Empress, blush, disc rose, tall; Emperor, blush, disc sulphur-yellow, dwarf; E. C. Jukes, purple, medium; Fleur de Marie, white, dwarf; Georges Sand, bronze, disc red, dwarf; Gluck, yellow, dwarf; George Hawkins, yellow, dwarf; Gladys Spaulding, pale yellow, dwarf; J. Thorpe, Jun., rich yellow, medium; Lady Margaret, pure white, tall; Miss Annie Lowe, yellow, tall; Miss Margaret, blush, disc yellow, medium; Mrs. Pethers, lilac, disc rose, dwarf; Mrs. C. J. Salter, orange-buff, dwarf; Mrs. Judge Benedict, rose, disc yellow, medium; Mademoiselle Nathalie Brun, white and gold, medium; Prince of Anemones, lilac, dwarf.

#### TWENTY POMPONS.

Bijou de l'Horticulture, white, early; Black Douglas, dark crimson, dwarf; Bob, reddish brown, dwarf; Cedo Nulli, white, gold, brown, and lilac, especially useful for specimens; James Forsyth, orange; Lizzie Holmes, light yellow; Mademoiselle Elsie Dordau, lilac-pink, early, dwarf; Mademoiselle Marthe, white, dwarf; Marabout, white, dwarf; Marion, deep orange; Model of Perfection, rosy lilac, dwarf; Miss Lily Stevens, white, dwarf; Nellie

Rainford, bronze-yellow ; Prince of Orange, orange-amber ; Snowdrop, pure white, grand for specimens ; Sœur Melaine, white, dwarf ; W. Westlake, yellow, striped red, dwarf.

#### TWELVE POMPON ANEMONES.

Antonius, golden yellow, dwarf ; Eugène Lanjoulet, yellow guard florets, disc orange, dwarf ; Emily Rowbottom, creamy white ; Firefly, scarlet guard florets, disc yellow, tall ; Jeanne Hachette, white guard florets, disc yellow, late ; Mr. Astie, yellow guard florets and disc, dwarf ; Madame Montels, white guard florets, yellow disc, dwarf ; Magenta King, magenta guard florets, yellow disc, medium ; Marie Stuart, lilac guard florets, yellow disc, dwarf ; Miss Nightingale, blush guard florets, light yellow disc, dwarf ; Queen of Anemones, crimson-rose, dwarf ; Regulus, cinnamon guard florets, bronze disc, dwarf.

#### TWELVE SINGLE-FLOWERED.

Admiral Sir T. Symonds, yellow, tall ; D. Windsor, brownish red, tall ; Effie, rich crimson, medium ; Ethel Smith, pink and white, medium ; Florence, white, suffused rose, medium ; Lily Owen, chestnut-red, medium ; Mary Anderson, white, suffused blush, dwarf ; Marigold, brownish red, tall ; Magenta King, magenta, white disc, medium ; Miss Mabel Wilde, rose, tall ; Miss Rose, white, suffused pink, medium ; Mrs. W. Wood, pure white, tall.

#### EIGHTEEN SUMMER-FLOWERING.

Blushing Bride, rose-lilac ; Captain Webb, pink ; Curiosity, lilac ; Golden Madame Desgrange, yellow ; Grace Attick, white, quilled petals ; Lady Fitzwygram, white, very dwarf ; L'Ami Conderchet, white and yellow, free ; Madame Desgrange, white, dwarf ; Madame Jollivart, white ;

Mrs. Hawkins, rich yellow; M. Gustave Grunerwald, pink, suffused blush; Mr. W. Piercy, red, changing with age to orange; Precocité, crimson, good; Precocité, yellow; Piercy's Seedling, bronze and yellow, good; Snowdrop, pure white; White St. Crouts, white, dwarf; Yellow L'Ami Conderchet, deep gold.

#### FIFTEEN EARLY-FLOWERING.

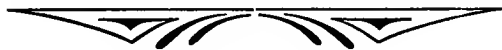
La Neige, white; La Vierge, white; La Vogue, yellow; Mens. Cossart, orange, good; Mons. Hoste, deep crimson; Mons. W. Helmes, rich crimson, good; Mrs. Cullingford, blush-white; Mrs. Dixon, golden yellow; Mrs. G. Glenny, primrose-yellow; Mrs. G. Rundle, pure white; Rycroft Glory, bronze and yellow; Samuel Barlow, salmon-pink; Sœur Melaine, white; Souvenir de Madame Menier, crimson and gold; Vierge Japonaise, white, good.

#### VARIETIES ADAPTED FOR SMALL POT CULTURE.

Sœur Melaine, white, dwarf habit. This may be grown in pots and sold in the market in a growing state. Other sorts which will answer this purpose, too, are Source d'Or; Lady Selbourne, white; Yellow Selbourne; Peter the Great, yellow; W. H. Lincoln; William Robinsen, salmon-orange; October Yellow, bright yellow; Edwin Beckett, yellow, dwarf. Of single varieties suitable for growing in small pots either for market or home purposes the following will be found most useful, viz.:—Miss M. Anderson, pure white; Terra-cotta, a splendid variety; Freedom, yellow, fragrant; and Gus Harris, rose, dwarf. When the cultivator decides to grow plants in small pots for market, or for decorative purposes at home, the cuttings should not be struck before March or April, then, if the plants receive

proper attention afterwards, they will be well furnished with leaves, and this is very desirable.

There are a great number of varieties of Chrysanthemums—considerably more than a thousand. The names selected and enumerated in this book are, therefore, only a few out of such a vast array of sorts. They are, nevertheless, the pick—the ones which possess the greatest merit—and as new sorts are introduced every year in such bewildering numbers, and with such high credentials, the young grower will be puzzled as to which is the best to select. If he makes his beginning, or adds to his collection by choosing some of the varieties described in this book, and thereafter cautiously adds each year a few new sorts of undoubted merit, and does not discard old favourites before he is sure he has better ones to put in their place, he will be on the safe and sure way to success. Finally we would remind growers that only about forty per cent. of plants undergoing average good culture may be expected to yield exhibition blooms.



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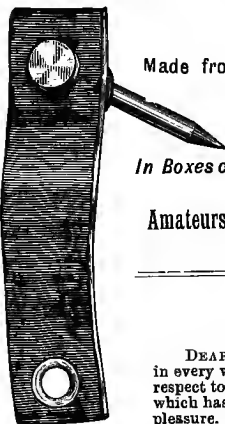
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