SWEET VIOLETS AND PANSIES.

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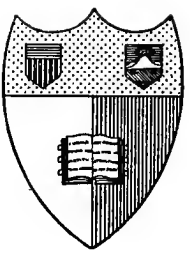

SWEET VIOLETS AND PANSIES


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TUFTED PANSIES IN SIMPLE GROUPS (REGENT'S PARK).

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SWEET VIOLETS AND PANSIES.

AND VIOLETS FROM MOUNTAIN AND PLAIN.

WRITTEN BY SEVERAL AUTHORITIES

AND EDITED BY

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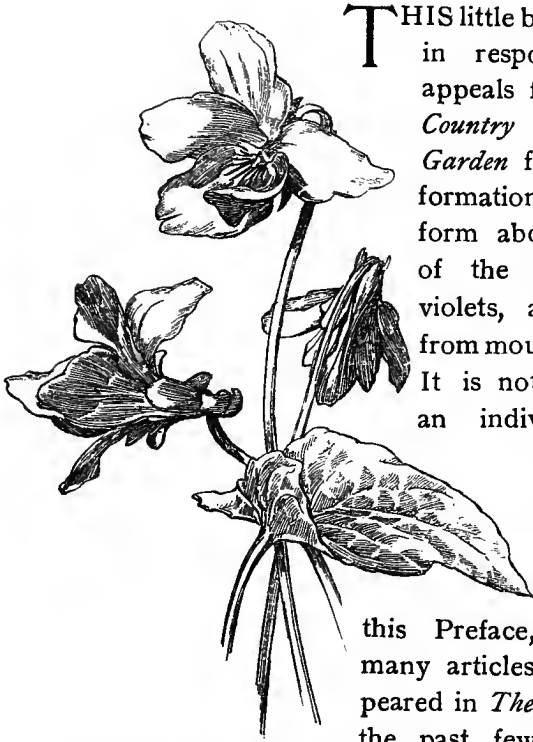
PREFACE



THIS little book is published in response to many appeals from readers of *Country Life* and *The Garden* for practical information in a handy form about the pansies of the garden, sweet violets, and the violets from mountain and plain. It is not the work of an individual, but is the outcome of information willingly given by those mentioned in this Preface, and of the many articles that have appeared in *The Garden* during the past few years. The show and fancy pansies have not been forgotten, and our warmest thanks are tendered to that veteran florist, Mr. Richard Dean, for so much practical and historical information about a type, which still kindles

in the minds of many, an enthusiastic desire to perpetuate by raising new varieties, and by bringing those in existence to perfection in agreement with the laws that govern colouring and form according to the adopted standards.

Although we have no sympathy with the show pansy in its little box at the exhibition, we are not unmindful that those who thus display them are earnest workers in the field of horticulture, and the Scotch growers in particular have accomplished praiseworthy work in the past, a work that is being continued with enthusiasm in the present.

Messrs. Dobbie & Co. of Rothesay, Mr. Wm. Cuthbertson, Mr. Jas. Grieve, Mr. John Baxter, and many others we think of in connection with the show pansy, nor are we forgetful of the late Mr. William Dean, whose knowledge of show pansies made his communications to the periodicals of his day worthy of permanent record.

But it is the tufted pansy, or viola, as it is still foolishly called, that has coloured and scented the gardens of England during recent years, flooding flower-beds in park and private pleasure grounds with colour from early summer until autumn.

When we write of the tufted pansy the great work of Dr. Stuart of Chirnside is recalled, and this is referred to in the chapters concerning the flowers he cherished and so successfully crossed to gain new and beautiful forms. But much of the present popularity of the tufted pansy is due to Mr. William Robinson. His unstinted praise of Dr. Stuart's work and en-

couragement to all who have sought to improve the habit and extend the colouring of the tufted pansy, have strongly influenced the growing appreciation of a beautiful hardy flower.

Many others have been filled with the same desire, and we may especially mention Mr. D. B. Crane, whose writings are well known, Mr. Sydenham of Tamworth, Messrs. Dicksons of Edinburgh, Messrs. Cheal of Crawley, and the Scotch firms already referred to.

Another interesting and welcome introduction is the large-flowered sweet violet, which is the subject of a special chapter.

The book is comprehensive. There are chapters upon tufted pansies, and pansies of the show and fancy forms, violets in winter, and the wild species.

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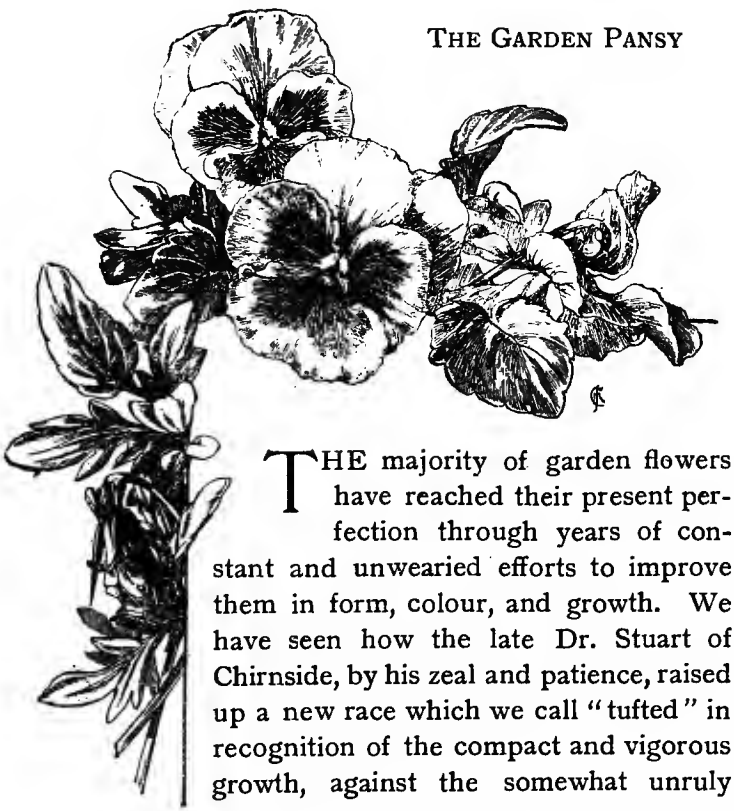


THE GARDEN PANSY

THE majority of garden flowers have reached their present perfection through years of constant and unwearied efforts to improve them in form, colour, and growth. We have seen how the late Dr. Stuart of Chirnside, by his zeal and patience, raised up a new race which we call "tufted" in recognition of the compact and vigorous growth, against the somewhat unruly

varieties of a previous age. It is always interesting therefore to trace back the first beginnings of those flowers which have been moulded into their present forms by the hand of man, and looking back to the origin of the garden pansy, we find that Lord Gambier and his gardener Thompson began experiments with the *Viola tricolor* of the fields as early as 1813–14, and at the pretty village of Iver in Buckinghamshire. W. Bridgewater Page of Southampton in his *Prodromus* (1817) mentions two varieties of *V. tricolor*, namely, *V. t. maculata major* (the large Pied Heart's-ease) and *V. t. m. minor* (the small Pied Heart's-ease), which may be taken as a proof that the improvements in the pansy had not up to that time reached the South of England. It must not be supposed that Lord Gambier was alone in taking an interest in the improvements of the Heart's-ease, as mention is made of two ladies who were also interested in the flower, viz., Lady Mary Bennet and Lady Monke; but it is to Lord Gambier and Thompson that we are indebted for the first steps towards the perfection that has been since reached. A very interesting and now historical account of the early days of pansy hybridisation is given by Thompson in the *Flower Gardener's Library and Floricultural Cabinet*, published in 1841. He wrote: "About seven or eight and twenty years ago, Lord Gambier brought me a few roots of the common yellow and white Heart's-ease, which he had gathered in the grounds at Iver, and requested that I would cultivate them. Always eager to please my worthy and ever-to-be-lamented master

I did so, sowed the seed, and found that they improved far beyond my most sanguine expectations. In consequence thereof, I collected all the varieties that could be obtained. From Brown of Slough I had the blue; and from some other person, whose name I do not now recollect, a darker sort, said to have been imported from Russia. These additions wonderfully improved my breeders. But still, though the varieties I soon obtained were multitudinous, their size was almost as diminutive as the originals. Nevertheless his lordship was pleased, and thus I was amply rewarded. Up to this period, which was about four years after my commencement, I began imperceptibly to grow pleased with the pursuit, for all who saw my collection declared themselves delighted therewith. I then began to think that some of my sorts were worthy of propagation; and this circumstance led me to give one, which took his lordship's fancy, a name. This was entitled Lady Gambier, and as I struck cuttings of it, they were given as presents by my worthy employers to their numerous friends and acquaintances. The character of this flower was so very similar to that which was afterwards spread about under the name of George the Fourth, that I have no doubt but that variety was a seed therefrom. Who raised it I could never ascertain. This, though in comparison with the worst flower now grown, and many even of the named varieties are still bad enough, would even beside them be reckoned little better than a weed. Still, Lady Gambier was the beauty of her tribe, and won golden opinions from every beholder.

It was, indeed, in shape little more symmetrical than a child's windmill, but looked in size among the sisterhood like a giant surrounded by dwarfs. But the giant of those days would be a pigmy now, as Lady Gambier herself appeared in comparison with another flower, which I soon after raised and which, on account of what I then considered its monstrous proportions, I christened Ajax. This, I then thought, could never be surpassed, and yet in shape it was as lengthy as a horse's head. Still I had worked wonders, and I resolved to persevere. I did so, and was at length rewarded by producing rich colouring, large size, and fine shape. The first large and good-shaped flower that I raised was named Thompson's King. Still up to this period, a dark eye, which is now considered one of the chief requisites in a first-rate flower, had never been seen. Indeed such a feature had never entered my imagination, nor can I take any merit to myself for originating this peculiar property, for it was entirely the offspring of chance. In looking one morning over a collection of heaths, which had been some time neglected, I was struck, to use a vulgar expression, all of a heap, by seeing what appeared to me a miniature cat's face steadfastly gazing at me. It was the flower of a Heart's-ease, self-sown and hitherto left to waste its beauty far from mortal's eye. I immediately took it up and gave it a local habitation and a name! This first child of the tribe I called Madora, and from her bosom came the seed which, after various generations, produced Victoria, who in her turn became the mother of many even more

"*HEART'S-EASE.*"

beautiful than herself. Hitherto in the way of colour nothing new had been introduced; white, yellow, and blue in their numerous shades seemed to be the only colours which the Heart's-ease was capable of throwing out, till about four years since, when I discovered in my seedling-bed a dark-bronze flower, which I immediately marked and baptized Flamium — from which have sprung Tarton, Vivid, and the King of Beauties, which only bloomed this spring, and is decidedly the best flower of its kind that has ever been submitted to public inspection."

About forty years ago Mr. John Fleming was creating a sensation at Cliveden, Maidenhead, by his huge beds of pansies. He told Mr. Richard Dean that his Cliveden blue was a Russian variety, and in all probability the one to which Thompson alludes.

Now began a march of progress, and many varieties were in existence in 1830, with new and beautiful colourings, and beginning to approach to show pansies of the future in shape. Apparently the desire of the raisers was to obtain a perfect outline until an almost perfect symmetrical form was gained. The show pansy was regarded as one of the most interesting of "florists'" flowers from the forties until the early eighties, and are seen also at the present day.

CHAPTER II

ENGLISH SHOW PANSIES

Characteristics and Properties

THE varieties forming this section of cultivated pansies are divided into three main divisions, viz., *yellow grounds*, in which the ground colour is of some shade of yellow, pale or deep, and uniform in tint on the three lower segments or petals of the flower; *white grounds*, in which the ground is white or delicate creamy white, and similarly uniform in tints on the three lower segments; and *selfs*, that is, self-coloured flowers, such as white, cream, primrose, yellow, dark, which may be of any uniform tint, from dark mulberry, claret, glossy black, and blue.

The marginal colours of the yellow ground flowers vary from those which have white grounds. Associated with yellow grounds are found shades of bronze-crimson, puce, mulberry claret, and shades of dark crimson. In the case of the white grounds, the most esteemed marginal colours and shades are blue, violet, and purple. There is no hard and fast line drawn as to the particular shade, but from the florist's point of view it is of great importance that the marginal colour be of the same shade in the two top petals and round the edges of the three

lower ones in both the yellow and the white ground varieties, and in the case of the last-named portion of the flower, namely, the lower petals, the margin, or "belting," as it is technically termed, should be uniform in width, whether broad or narrow, without pencillings or tongues breaking into the ground colour. The dense solid blotch round the eye has been the result of many years' selection, and it is rightly held to be an important cardinal point in a perfect flower. It should be uniform in tint, dense, well-defined, and especially without any sharp tongues of colour running out from it and striking into the ground. The eye, in which so much of the life and expression of the flower centres, should be yellow or orange, well-defined, and rayless.

The self pansy, of whatever tint of colour, should be uniform throughout and unshaded, the eye as perfect as possible, and the blotch dense and as destitute of rays shooting out from it as one can get it. The denser the blotch so much greater the contrast between it and the surrounding colour.

Of great importance is the texture of the flower; it should be stout, and possess that attractive glossiness which imparts so much finish.

Mr. R. Dean, in an article in *The Garden*, Oct. 11, 1902, "A Plea for the English Pansy," says: "Few comparatively in the south now cultivate the English pansies—the yellow grounds, white grounds, and selfs. There is a certain refinement about them of a very attractive character. There is a winsomeness about the refined white and yellow grounds which appeals

to all who value the florist's quality in flowers. . . . There is a persistency in many of them that I miss in some of the newer Violas.

"The show pansy, in regard to raising new varieties and cultivating them, is essentially a northern flower, and it is always well when a collection is secured for the south to have the plants from a northern locality. If planted in the autumn the bed should be a rich loam, with some grit mixed with it, and the bed should be raised four inches above the ground level to allow of drainage when drenching autumn and winter rains fall. A few sprays of fir placed on the windward side of the bed will be found a great protection from wintry and March winds. The finest blooms are obtained from well-established plants put out in autumn. If it is advisable to hold over the plants and plant out in spring it is well to pot and winter them in a cold frame, planting them out in March, and disturbing the roots as little as possible. The cultivation of pansies in pots to secure fine exhibition blooms, and also for show as pot plants, was much followed fifty years ago, but is now practically a lost art, and yet it is a process which tests the skill of the cultivator to the utmost.

". . . Red spider and aphides are troublesome at times, and especially in periods of drought and drying winds. The plants should be kept growing as vigorously as possible, and a favourite insecticide with some of the Scotch florists is Taddy's snuff, which they sprinkle on the affected shoots. Mildew is often very destructive to the pansy tribe, and

sulphur, in the form of a fine powder thoroughly dissolved in water and applied by means of a syringe, is found a good remedy, though some apply the powder in a dry state.

" . . . How very difficult it is to get a perfect flower among seedlings is well known to those who raise them, and it is this fact which accounts for the slow increase of the named show varieties. I am bound to say that of the named varieties I cultivate they are, on the whole, of compact growth, free blooming, and continuous, and last autumn, after the fancy pansies and Violas had ceased blooming, the show pansies carried on the floral succession to a much later period. A selection of the best English show pansies will be found as follows :—

" *Yellow grounds.*—James Craik, John Kirkwood, Robert Strang, Busby Beauty, Dr. J. K. Campbell, P. C. D. Boswell, and R. M. Wenley.

" *White grounds.*—Agnes Kay, J. McLellan, Jessie Thomson, Mrs. Brown, Mrs. M. Stewart, and Mary Steward.

" *Dark selfs.*—Leslie Melville, A. Lewis, Dr. Inch, and William Fulton.

" *White selfs.*—Annie Muir, Bobby Harper, Busby White, and Mrs. Gladstone.

" *Primrose and cream selfs.*—Annie D. Lister, Mrs. W. D. Crosbie, Allan Primrose, John Kidd, and May Stewart.

" *Yellow selfs.*—John Henderson (extra fine), James Bell, Busby Yellow, Maggie Milne, and Mrs. John Hunter."

Planting out to Bloom

It was the practice of the old cultivators of the pansy to plant out their seedlings in beds about four feet in width and of convenient length. The ground was deeply dug and well manured two or three weeks at least previously. Four or five rows of plants were placed lengthwise, with the tufts six to nine inches apart in the rows according to their size. It is well to plant thickly if inferior varieties are to be taken out as they flower. As the pansy enjoys a firm root-run the soil should be pressed about the roots and the plants put in fairly deep. When the bed is planted a sprinkling with water overhead through a rose watering-pot will be found necessary, and frequent sprinklings should be given when the weather is warm and dry. When once established and watered at the root when required the plants will quickly flower. Nothing imparts such zest to gardening as watching a bed of seedlings for the opening flowers. Inferior forms must be expected, and there is always a tendency in the pansy, as in many other flowers, to revert to inferior characters. But although disappointments will come, there are certain to be pleasant floral surprises in the way of highly promising novelties.

The Fancy Pansy

Mr. R. Dean, an excellent florist, who knows as much about show flowers as almost any living authority, contributes to *The Garden* of July 5, 1902, a most interesting and instructive article about the "Development of the

Fancy Pansy" which we reproduce. He says: "'What beautiful pansies!' was the general remark made by visitors as they contemplated the fine varieties staged in such highly developed character by Messrs. Dobbie and Co., florists, Rothesay, at the Temple show. The term 'fancy' was applied many years ago to flowers charming in themselves which could not be brought into line with the yellow grounds, the white grounds, and the self-coloured show varieties, which are all of English production, flowers very beautiful in themselves and well worth of attention, but amenable to certain properties set forth many years ago and continued to the present day. They are so refined and so distinct from the fancy type; they are generally of vigorous growth and remarkably free-blooming, so that it is not to be wondered at that they should be rising in popular favour, though the large, gorgeously blotched fancy varieties still dominate the gardens. As they are not restricted as to character by a schedule of arbitrary properties which govern the English show varieties, anything which can lay claim to form, size, stoutness of texture, and brilliancy of marking, can be comprehended in the fancy section. . . . The casual visitor, as might be expected, exhibits floral ecstasies over the large fancy flowers, but as one inheriting the floral traditions of half a century ago, the refined show varieties have the greatest attractions for me.

"The first beginnings of the fancy pansy date back to the thirties, when so much was being done in the direction of improving the English varieties.

Among the many seedlings raised came a number of striped and blotched flowers, actually nondescripts, judged according to the grounds upon which pansies were then being selected, and these found favour with some. One man who took a deep interest in them was the late Mr. John Salter, of chrysanthemum renown, then an amateur residing at Shepherd's Bush, and he raised seedlings and improved them in every possible way. In 1843 he went to Versailles, France, and established himself in business there, naming and sending out fancy pansies as well as other leading florists' flowers. In 1848 the outbreak of the French Revolution, which led to the abdication of the Orleans family, caused him to leave France, and he came over to England and established himself in business at Hammersmith, and founded the Versailles Nursery, retaining a good deal of his foreign connection, and he grew and distributed his fancy pansies and other flowers. I think it is probable that in the early fifties some of these found their way into the hands of M. Miellez, Lille, for about 1858 this gentleman sent over to England—to Messrs. E. G. Henderson and Son, then at the Wellington Road Nursery, St. John's Wood (the site of which is now a portion of Lord's Cricket Ground)—a batch of greatly improved fancy pansies, and this firm, doubtful of their ability to do them justice within the range of London fogs and smoke, sent them to my brother, William Dean, then in business at the Bradford Nursery, Shipley, Yorkshire, and in that cool and

moist part of the country they were quite at home and grew freely. As I spent one-half of 1859 and the same of 1860 at Shipley, I had something to do with the culture and propagation of this very fine and distinct strain. They were seeded from new varieties raised and distributed, and, though the older school of florists frowned upon them, they made steady headway, especially in Scotland. Messrs. Downie, Laird, & Laing went in strongly for their culture, and they also raised and distributed many fine varieties. I think it is possible that before M. Miellez had sent his strain to this country, the late Mr. John Downie was at work along much the same lines as John Salter, and a variety named Dandie Dinmont was one of the most distinguished of Mr. Downie's productions. The point to which we have now reached in the improvement of the flowers was seen in the very fine varieties at the Temple show, the productions of several raisers. It is not, therefore, to be wondered at that these gorgeous fancy pansies are so much grown for market purposes. They are found on the stalls of the hawkers, and find a ready sale in the streets."

Mr. Dean then gives a selection of the finest varieties shown by Messrs. Dobbie & Co. at the show referred to; they are as follows:—

Jeanie R. Kerr.—Brown, violet blotches; upper petals yellow, edged with white. A variety of very fine quality.

Jeanie B. Smith.—A very fine pure white self, with large dark central blotches.

John Myles.—Laced with crimson and edged with rosy white; upper petals bright crimson, tinged rosy white.

Mary Travis.—Laced creamy white, clear-cut crimson blotches; top petals purple and white.

Mavourneen.—Dense violet blotches, edged with brown and magenta; upper petals lemon with purple pencilling and heavily banded with magenta; large and stout.

Miss A. Brown Douglas.—A magnificent pansy, dense black blotches, edged with rosy crimson and white; top petals magenta. A very large and perfectly formed flower, quite constant in character.

Mr. Charles Stirling.—A large deep yellow self, with clean-cut circular black blotches. Blooms of great size and perfect form.

Mr. B. Wellbourne.—Large clear brown-black blotches, laced with primrose; the upper of a bluish drab. A very fine and striking flower.

Robert C. Allan.—Dense plum blotches, edged crimson and sometimes white; upper petals crimson, tipped with white; large and stout.

Robert White.—Glossy black blotches, laced with bright yellow; the upper petals of the same colour; a large and very fine yellow self.

Tom Watters.—One of the very best; the dense glossy blotches purple on a red ground, the red showing in a glowing circle round the blotches; the lacing rich yellow; top petals banded with bright maroon, shot with red.

Wm. H. Clarke.—Large glossy black blotches, laced

with rich yellow; top petals yellow, banded with apricot.

William Maxwell.—Large circular blue blotches, edged white, and rose on all petals alike. A very fine and constant variety.

W. P. A. Smyth.—Immense bluish purple blotches, edged pale yellow and tinged pinky rose; upper petals veined with bright purple and yellow. A perfectly formed flower.

Mr. Dean adds: "There are a large number of varieties in cultivation, probably approaching two hundred, as most growers in the trade send out new varieties. The foregoing select collection is chosen quite irrespective of the raisers, and because they were exhibited in the finest character."

Properties of the Fancy Pansy

Few of the properties of the show pansy apply to those of the fancy division. Mr. Alexander Lister, of Rothesay, puts as necessary qualifications that "the colours in fancy pansies may, in the top petals, run into each other, and invariably do. The blotches should be dense and solid, the margins of the under petals should be regular and distinct, as also the margins of the two side petals of the flower. The margins of the three petals should all meet and form, as it were, three parts of a circle. In size the flowers should not be less than one and three-quarters of an inch in diameter." There are very fine and striking self flowers among the fancy pansies, and some possess varied combinations of colours and shades:

in the case of a first-class fancy pansy the flower should be of good shape and stout in texture. Some of the most attractive are of the type of Colonel M. R. G. Buchanan. This variety has a well-defined and distinct band of white as a margin to the lower petals which makes it highly attractive. The flowers are best displayed when the growth is fairly short and tufted. Some very fine varieties are apt to throw out long rambling shoots, which give the plant a loose and untidy look. Many of the newer varieties show improvement in this respect. All the fancy varieties are of stronger and freer growth than many of the English show pansies.

Raising Seedling Pansies

No one variety of pansy, English or fancy, can be depended upon to exactly reproduce itself from seed. There may appear among the seedlings some that approach the type, but some are certain to be inferior. It is only, however, by raising seedlings that new varieties can be obtained. Seed should, therefore, only be taken from the finest varieties. The primary object in raising seedlings is not merely to provide a quantity of plants—though there might be occasions when a lot of stock is desirable—but to obtain new and improved forms. The seed-pods which droop from the stem as soon as the petals of the flower are shed, gradually straighten out as they mature till in a line with the stem, when they begin to turn brown. Careful watching is necessary, as the capsule will burst with the sun's warmth and the seed grains get dispersed.

The pods when gathered can be placed, for the sake of safety, in a paper bag, and when thoroughly ripe and of a ruddy brown colour the seeds can be separated from the pods for sowing. The finest blooms generally appear in May and June, and it is well to make these the seed-bearers as far as possible. Many of the finest flowers will not set seeds. The higher the quality in the bloom, the less seed-producers are there among them. The old florists would not allow a plant to carry more than two or three pods of seeds, and they would occasionally resort to artificial impregnation to encourage such production: they sowed their seed as soon as they could obtain it, and in this way provided a succession of blooms, but any seed they gathered after September they kept until the spring following before they sowed it.

Time is gained by sowing the seed as soon as ripe, say in August or September, but it can be kept until the following February. The usual practice is to sow in early spring in earthenware pans, or in wooden boxes three to four inches deep, placing moss or pieces of fibry turf at the bottom, and over this some coarse soil. Fill up with finely sifted compost made up of a good soft loam, turf mould, and sand mixed together, filling the boxes almost to the brim. Then gently press the surface level and scatter the seeds thinly over it, adding a slight covering of fine sandy compost.

If quick germination is required the box or pan may be placed in a warm house, or if that is not available, in a frame in which the box can be raised

up so as to be quite near the glass. Add some covering to the frame in frosty weather. In the absence of heat it would be wise to defer sowing until the beginning of March, when there is increased solar heat to assist germination. A slight surface sprinkling of water must be given as required. Pricking off is the next process, as soon as the seedlings have their second or third pair of leaves, and this can be done into another box or pan, or into a well-prepared bed, in a cold frame. Place the seedlings in rows two to three inches apart, according to the size of the plants, and place almost as far apart in the lines.

When pricked out, sprinkle them gently and keep the young plants close for a time. A slight bottom heat is of great service at this stage, as it promotes increased growth and therefore size. As soon as growth gets active give air freely, and the boxes may be placed in the open upon an ash bottom. This would harden the growth and prepare the plants for transference to the open ground to flower.

It is the custom of some raisers to make a second sowing in July in much the same way. When the seedlings are of sufficient size prick them out in a prepared bed in a cold frame until April, when they may be transferred to the open garden. This is a course recommended to those who may not have the means of using artificial warmth in which to raise seedlings early in the year, and it might be possible to sow seeds saved the same season from plants which bloomed early.

Propagation by Cuttings

It is possible to strike pansy cuttings at any time of the year, but those taken in October will root best in a greenhouse from which frost can be excluded. Cuttings strike readily enough in spring and in autumn, but not so well during the summer unless they are closely watched. At whatever time cuttings are put in, they should be taken only from varieties that it is desirable to preserve and from healthy plants. The best cuttings are made from the short, sturdy growths sent up from the plants at their base, but cuttings can be got sometimes from the points of the long outside shoots when there has been little else to give a supply. For autumn, winter, and spring striking the greatest success is secured when the cuttings are placed in pots in a sandy compost, which, with the cutting, is pressed firmly against the sides of the pot. The pots should be well drained, and failing a greenhouse in which to place them, they can be stood in a cold frame, and kept shaded from the sun on the one hand, and protected from frost on the other. A raised bed can also be made in a cold frame, and be edged with boards on all sides to have the bed six inches above the ground-level. The cutting-bed can be formed of a compost made of finely sifted garden soil and some grit, and the whole gently pressed down somewhat firmly. The cuttings may be four inches or so in length, cut through just below a joint, and the leaves removed from the two joints

above it. The bed and cuttings duly prepared, lines can be marked out from back to front. One important point is to have the hole in which the cutting is inserted made just the depth required and no more. Mr. Richard Dean says: "I use a flat-handled dibber, like a cedar pencil, and spread a quarter of an inch of silver sand along the course of each line, some grains of which are carried down to the bottom of the hole. The heel of the cutting rests upon the sand, the soil is gently pressed about it, and all made firm. By making the hole in which the cutting is to be placed deeper than is required a hollow space is left below it, the cutting will either fade or root indifferently, and the prospect of having a good plant is spoiled. The cuttings may be two inches apart in the lines, which should be three inches apart. The bed filled, a good sprinkling may be given through a fine rose watering-pot, the light shut down closely and kept so for a few days, and shading provided as required. In a fortnight the light may be raised a little and some air admitted, and this may be done night and day until there is danger from frost. In this way a most valuable supply of plants may be secured."

To have sufficient plants for autumn planting a good batch of cuttings should be put in during June or early in July. In the hot and dry districts of the south it is usual to make a cutting-bed at the foot of a shady border which is well drained, and so prepared that worms cannot disturb the cuttings. Some means are adopted to protect the cuttings from heavy

rains and from exposure to the sun at midday, but they should not be shaded closely, as there is a danger of "damping off." Small frames and hand-lights may be used for this purpose. In this way excellent plants can be secured for planting out in the open during the first week in September, and there is this advantage about autumn planting, that the plants put out in the open at that time of the year are seldom affected by what is a very troublesome pest—red spider.

Propagation by Division

This way of increase can be resorted to when cuttings are scarce or when only a few plants are required. During summer and early autumn the plants throw up young growths from the roots, more or less in quantity, and if they are given an occasional top-dressing of fine soil the young growths root into it, and by early autumn division can take place. The plants so obtained, if sufficiently rooted, may go out into the open or be pricked off into prepared beds in a cold frame for planting out in spring. In some of the colder districts of the north, where pansies in the open suffer severely from frost, storm, and wintry winds, it is customary to lift the plants, divide them, and plant them out in a frame to preserve the stock during the winter.

CHAPTER III

PANSIES AT SHOWS IN PAPER COLLARS

PANSY shows are not the terrifying spectacles of a former age, although there is something to be said for the old-school florist who loved regularity of form and flower-marking, but the petals in their paper collars were grotesque. Such exhibitions conveyed one lesson—"how not to show pansies." It is interesting to notice in *Wood and Garden*, p. 243, Miss Jekyll's opinion of a strange and unbeautiful custom, which we well know applies also to carnations and picotees in the present day. Miss Jekyll writes: "Shows of carnations and pansies, where the older rules prevail, are . . . misleading, where the single flowers are arranged in a flat circle of paper. As with the chrysanthemum, every sort of trickery is allowed in arranging the petals of the carnation blooms: petals are pulled out or stuck in, and they are twisted about, and groomed and combed, and manipulated with special tools—'dressed,' as the show-word has it—dressed so elaborately that the dressing only stops short of applying actual paint and perfumery. Already in the case of carnations a better influence is being felt, and at the London shows there are now classes for border carnations set up in long-

stalked bunches just as they grow. It is only like this that their value as out-door plants can be tested; for many of the show sorts have miserably weak stalks, and a very poor, lanky habit of growth.

"Then the poor pansies have single blooms laid flat on white papers, and are only approved if they will lie quite flat and show an outline of a perfect circle. All that is most beautiful in a Pansy, the wing-like curves, the waved or slightly fluted radiations, the scarcely perceptible undulation of surface that displays to perfection the admirable delicacy of velvety texture; all the little tender tricks and ways that make the Pansy one of the best-loved of garden flowers; all this overlooked, and not only passively overlooked, but overtly contemned. The show-pansy judge appears to have no eye, or brain, or heart, but to have in their place a pair of compasses with which to describe a circle! All idea of garden delight seems to be excluded, as this kind of judging appeals to no recognition of beauty for beauty's sake, but to hard systems of measurement and rigid arrangement and computation that one would think more applicable to astronomy or geometry than to any matter relating to horticulture.

"I do most strongly urge that beauty of the highest class should be the aim, and not anything of the nature of fashion or 'fancy,' and that every effort should be made towards the raising rather than the lowering of the standard of taste.

"The Societies which exist throughout the country are well organised; many have existed for a great

number of years ; they are the local sources of horticultural education, to which large circles of people naturally look for guidance ; and though they produce —especially at the Rose shows—quantities of beautiful things, it cannot but be perceived by all who have had the benefit of some refinement of education, that in very many cases they either deliberately teach, or at any rate allow to be seen with their sanction, what cannot fail to be debasing to public taste."

Surely there is no reason why the "show" pansy as well as the tufted varieties should not be shown in little bowls or some simple receptacle that will keep the flowers fresh and preserve both their colouring and form.

TUFTED

PANSY

DEVONSHIRE

CREAM.

CHAPTER IV

THE TUFTED PANSY, COMMONLY CALLED VIOLA

WE cannot give a better definition of "tufted pansy" than that in *The Garden* of 16th January 1892, at a time when this beautiful race was having some influence on English gardening. The note is as follows: "These are hybrids of pansies and alpine violets. The term 'tufted' has been very properly used to distinguish plants of a spreading habit, like pinks, aubrietia, and alpine violets, from plants with single erect stems like, say, the stock, lupine, and aster. Sometimes the two forms of habit occur in the same family; for instance, there are violas that are tufted and violas that are not—the German, French, and other pansies in our gardens do not spread at the root as the tufted pansies do. Plants of this 'tufted' habit are often a mass of delicate rootlets even above the ground, so that they are easily increased. Hence when older pansies die after flowering, those crossed with the alpine species remain like true perennials, and are easily increased. The term 'pansies' is a good one in all ways. Without an English name, we shall always have confusion with the Latin name for the name of wild species. To all of these belongs the old Latin name of the genus *Viola*. It is now

agreed by botanists that all cross-bred garden plants —including tufted pansies, of course—should have popular English not Latin names. 'Bedding violas' is a vulgar compound of bad English and bad Latin; whereas 'tufted pansies' is a good English name with a clear meaning."

Tufted Pansies in the Flower Garden

Since the late Dr. Stuart began his beautiful work referred to elsewhere of raising tufted pansies the list of varieties has increased enormously, but happily it is possible to make a small selection to suit all gardens. It is only the enthusiast in one particular flower that requires every variety that has been cultivated set out in rows in the garden, a sort of living history of the plant he delights to honour. Tufted pansies or violas, as some persist in calling them, have come to stay. They are, as many declare, "indispensable" in the garden, and may be grouped in various ways, sometimes with roses, in beds by themselves, among shrubs, or as margins to borders. As pansies are frequently recommended for grouping with roses it may be helpful to point out the colours that may be associated without fear of harsh contrasts. Roses with flowers of clear pink colouring like Captain Christy, or palest pink as in Viscountess Folkestone, must be associated with white pansies, or only the daintiest of the pale lavender shades. With white roses may go any pale yellow, lilac, purple, or blue pansies; with red roses, such as the Duke of Edinburgh, put yellow or white

TUFTED PANSY LAVINIA.

pansies ; and with pale yellow roses, white, yellow, or any lilac or purple pansies.

The salmon-red and salmon-pink roses (some of them are the most beautiful in themselves) are the ones least suited for association with pansies, though white and the very palest yellow pansies will go well with almost any flowers.

In spring all flowers are so welcome that one is glad to have beds of pansies, though as a rule they are better for use as edgings, not formal edgings, but informal, in-and-out edgings to beds and borders of other shrubs or plants. Unlike the greater number of our garden flowers which gain by association and massing, in the case of the pansy each little face-like flower is in itself so daring and interesting that one wishes to treat them as individuals rather than as atoms in a conglomerate. That is why, though they can also be used as colour-masses, it is desirable to have them in edgings. They are also delightful in a Dutch kind of garden, where they would lie in long narrow beds that would hold not more than three rows of plants. We once planted in a bed of azaleas the variety Blue Gown. The soil was surfaced with these far into the autumn, and the bed was considered the prettiest in the garden.

A matter for rejoicing is that the tufted pansies flower so well in the South of England. One reason of the Scotchman's success in growing the florists' pansies was the cool bracing climate, which is exactly what the pansy desires, hence the reason that the tufted varieties are a greater success in the north

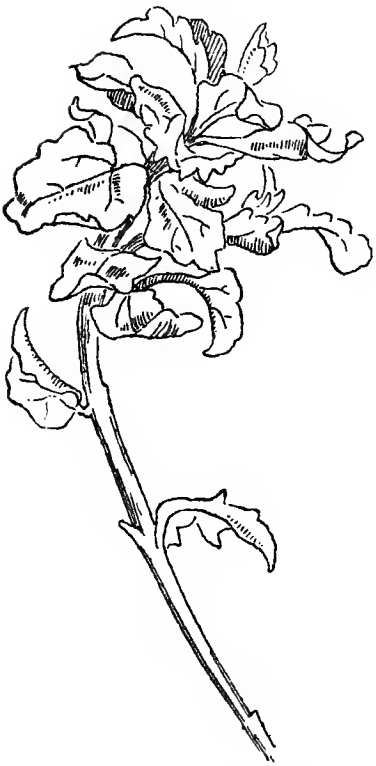
than even in the south. This, of course, suggests that the cooler and shadier spots in the garden are the most comforting to the pansies, but they flower well even in full exposure to the sun, as we have proved in the Thames valley, where pansies have been planted in a warm forecourt garden with the happiest results, except that the flowers are more quickly over. Under these conditions it is wise to pick the flowers before they have approached the seeding stage, to throw all the plants' energies into developing a sturdy or "stocky" growth, to use a gardener's word, and stocky does mean something very strong and stubby, able to give flowers from late spring until autumn.

Propagation

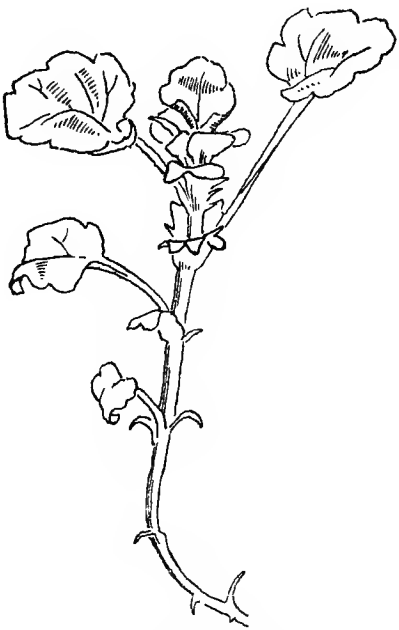
Few plants are more easily propagated than the tufted pansy. The cuttings may be struck at almost any time during the autumn and winter when plants are required to go out in spring. When the plants are desired in spring strike the cuttings in September and early October, and even later when the weather is suitable. Propagation may even be done during a mild winter, such as the one we have just passed through. In the case of cuttings for spring planting the beds should be made up in the warmer parts of the garden, as full advantage must be taken of the sun's influence during the duller months of the year. When there is a choice of all aspects, choose one facing south or south-west, and place round the cutting-bed a rough framework of 8-inch or 10-inch

boards, which will serve as a protection against strong winds, which are frequently more harmful than frosts.

The bed for the cuttings must be carefully pre-



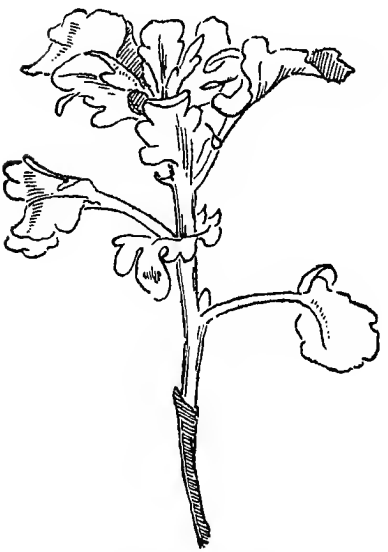
COARSE, HOLLOW-STEMMED GROWTH
(Useless for propagation)



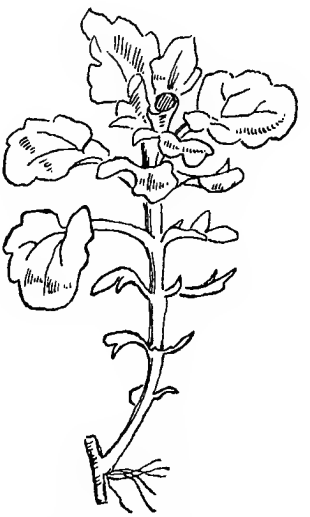
GOOD TYPE OF CUTTING
(Should be cut through just below a joint)

pared. Dig the ordinary soil of the garden deeply, break it up well, and spread over it to a depth of six inches to eight inches a compost made up of equal parts of loam, turf mould, and spent mushroom bed

manure. Add to this mixture another equal part of coarse silver sand or road grit, and thoroughly mix the preparation. Then pass the heap through a sieve with a half-inch mesh, and afterwards spread it evenly over the allotted space. Make the soil fairly firm with boards or the back of a spade, and an hour or two



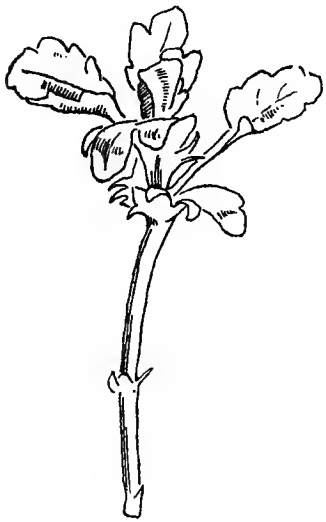
A FAIRLY GOOD CUTTING



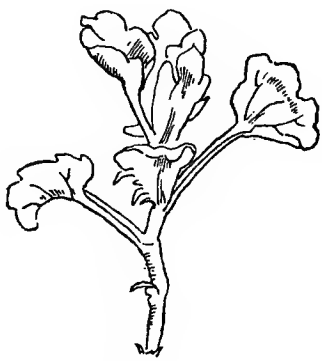
DETACHED ROOTED SUCKER

before the cuttings are inserted thoroughly water the bed with what is known as a fine-rosed can. We may remark that "Haws' patent" is unequalled as a watering-can. It distributes the water evenly, and without running away or causing channels on the surface of the soil. The holes in the rose are so small that the water is distributed in the form of a spray, and such a "rose" may be used to freshen the cuttings or

plants in the evening of a hot summer day. It is of the utmost importance to make a careful selection of cuttings. They must be shoots of recent growth, and not coarse and hollow stems, and their length from two inches to three inches. Remove the two lower leaves, and cut straight across immediately be-



CUTTING PROPERLY TRIMMED AND READY FOR INSERTION



THE BEST CUTTING

low a joint, using a very sharp knife for the purpose. If, when removing the cuttings from the old shoots, any of them can be detached with small roots adhering to them, so much the better.

The man is wise who propagates his pansies with some system. Each variety should be dealt with separately. First get the desired number of cuttings, insert and label them clearly, and then proceed to

the next variety. Put the cuttings in rows, and first place at the head of the row the label with the name of the kind and date of propagation. The rows may be kept straight by the use of a narrow and straight strip of wood, and dibble the cuttings in two inches apart in the rows, press the soil firmly at the base, and thus avoid what the gardener describes as hanging, which simply means that the cuttings do not rest on a basis of soil, but "hang," so to speak, in the hole made by the dibble. When the soil is well pressed at the base of the cutting this is avoided. When the cuttings "hang" they usually die. The distance between the rows should be two and a half inches to three inches, according to the variety. When the whole of the cuttings are inserted, water them well with the fine-rosed can. Cuttings inserted in autumn will naturally require a longer season for rooting than those put in during spring, but generally they will be quite sufficiently rooted to carry the young plants through the winter with little risk of failure. As a rule in about three weeks or a month the cuttings will have rooted.

Many pansy growers strongly advocate the use of cold frames, and we have propagated many thousands in rough frames sheltered from north and east winds. Pansies, however, it must ever be remembered, are quite hardy, and therefore need no protection. So easily are they increased that it is sometimes possible to obtain all the cuttings required without cutting back the plants or interfering with the flower display during summer and autumn. When opportunities occur,

detach young growths from the crowns of the plants. When these are removed with care the flower display will not be interfered with, and this operation may be repeated until a sufficient quantity of cuttings of each kind has been inserted. Those with small gardens, as in the case of the suburbs of large cities, may easily raise a few plants in wooden boxes three inches or four inches deep, or strike the cuttings in pots. Place them in quite a cool position and under a south or south-west wall if propagation is done late in the year.

When autumn planting is adopted, and perhaps this is the better way of the two, take the cuttings in July and insert them in a cool corner, say a north or east aspect, anywhere away from the full force of the sun. Such cuttings will be quite ready for transferring to the places they are to adorn in the following autumn and bloom early, before those struck in autumn and planted out in early March. There are therefore two distinct seasons for planting, early autumn and March, and it is seldom that failure can be recorded. We planted last year (1902) tufted pansies as late as May, and as buyers of plants are aware the tufts were very small and poor owing to the demand upon the stock, but with a little coaxing and mulch they quickly got established. By the summer they were in full bloom, and by the autumn had met each other so as to form an almost solid surface of flowers. The writer has propagated thousands of pansies, and an invariable rule was to go over the beds in summer and remove, with a few roots attached,

the strong flowerless growths which were dibbled in a cool border. The pansies were in a border by themselves, and as a large number of varieties were grown, they formed an interesting study during the summer months. We are writing now of several years ago when *Viola cornuta*, which has played so large a part in the improvement of the pansy, and the almost ever blooming and cheery blue-bell, which still remains a flower of much garden importance, were the favourites.

Tufted pansies are delightful flowers for the small garden, and in many a cottage patch make little groups of colour, bright and welcome from the time of the wallflower until the Michaelmas daisy is a sea of purple and blue. As children we remember the quaint heart's-ease, big flowers that seemed to smile in the sunlight, and sometimes to make grimaces as if to show their dislike to our interference. But there is a charm in the heart's-ease of the gardens of old, and a fascination in the colour painting, sometimes dabbed on the petals without restraint, and sometimes distributed with almost mathematical regularity. A packet of seed will give a large variety, and it is interesting to watch the seedlings opening their flowers, as we in eager anticipation look for some novelty that will excite the admiration of our friends.

Raising Seedlings.—Tufted pansies may be easily raised from seed, and this is a fascinating pursuit, for the good reason we know not what prize a packet may contain. Those who have mastered the rudiments of ordinary pansy raising will probably attempt to

hybridise certain varieties or species, and there is much to accomplish in this direction, species that apparently suggest possible new groups never yet having received attention. This is not, however, a matter that comes within the scope of this treatise. It is for the individual to work out his or her own methods, and by diligence and perseverance to attain the object in view. The hybridist should always work with a certain purpose, thinking out the probable results from crossing two species, and in this way achieving a break away from existing types. Haphazard crossing seldom results in flower prizes, although, of course, not a few of the finest flowers of to-day have been chance seedlings, crossings effected by the agency of birds or wind.

Of first importance is to purchase seed collected from the finest varieties. If there are no prizes amongst the seedlings, it is interesting to see the great differences in colour, and the flowers may be used for cutting or to give to friends. As the years roll on it becomes more and more difficult to raise new and beautiful pansies, through the field having been well occupied by previous generations, and that is the reason for leaving beaten tracks and choosing species that have been hitherto unused as parents in the work of hybridisation. The seed may be sown as soon as ripe, and if very choice and the garden is small, it is wise to sow in shallow boxes, slightly drained and filled with light soil. Over the layer of crocks in the bottom put in a little flaky turf mould, and fill up with any light compost, such as would

result from mixing together loam, turf mould, and sharp silver sand. The seed may also be sown outdoors in a shady part of the garden, but no matter which way is decided upon, cover it with the finer particles of the compost, and when of a size convenient to handle, prick out the seedlings in October into a well-prepared bed. When this is done flowers will appear in the following spring. When spring sowing is decided upon artificial warmth is necessary, and shallow boxes must be used for the purpose, the seedlings being then transferred to other boxes, and finally into the positions they are to adorn.

An Appreciation of the Tufted Pansy

One of our best horticulturists writes as follows about the tufted pansy: "It is a question whether in the whole range of hardy plants used for the decoration of the flower garden we have a more useful or more beautiful plant than the tufted pansy (viola). For long blooming (if treated previously in the way of right cultivation), it gives a return in length of time it is in bloom and in the quantity of flowers it produces, sufficient to satisfy even the most avaricious in this respect. Coming into bloom early in April, it continues to flower in abundance to the end of summer. In varieties and in shades of colour the pansy is the most generous of plants. You may have it in all shades of blue, from the darkest to the lightest of mauve, from the richest of yellows in graduated shades to the softest of primrose. In a

TUFTED

PANSY

MELAMPUS.

small way it can be had in crimson and purple, and with regard to white, it can be had in all shades, from cream to snow-white, while it is deliciously sweet, and of free and easy growth. Its dwarf habit limits its use in the garden to those positions in the fore-front of flower borders or shrubberies, where it will be found invaluable in broad bands or lines of colour as a margin next to the turf. Where distinct colour effect in beds on grass is desired, planted in bold masses in this way no flower that I know of can give a more pleasing or beautiful effect, certainly not in blue, yellow, or white colours. As a plant for carpeting beds, as a base for taller things to spring out of, it is indispensable, and to plant in combination with silver-variegated geraniums the effect is lovely. I remember one season it was planted in this way on the East Terrace garden at Windsor Castle. The varieties were bright-star silver-variegated geranium and pansy bluebell. The effect was most pleasing, and no beds in the garden that season were so much admired. The foregoing are only a few of the positions the pansy will adorn. Many others will suggest themselves. From the middle of September to the middle of October is the best time to propagate, and the best way is by cuttings and divisions. Cuttings should not be taken from flowering shoots. They will not give the same return in the number of flowers which results from small cuttings emanating from the centre of the plants, and if these are not to be had in plenty from plants in the beds, a few should be planted in the reserve garden, and kept especially for propa-

gating. All the flowering growths should be cut off early in August, when an abundance of sturdy cuttings will result, and be available at propagating time in September.

It is also grown from seed, but the varieties cannot be depended upon to come true to name and colour in this way. The seed should be sown in April on light, well prepared soil, with a west or east aspect. The young seedlings will be large enough to transplant in June, about ten inches apart. The position selected should be north or north-east, as the young plants will succeed better during summer in partial shade than when fully exposed to the sun. The young seedlings will be ready for planting in their permanent quarters any time during autumn or the following spring. By sowing the seed in beds under glass early in March plants may be had ready to go out in May, from which a fine show may be obtained the same summer.

No doubt the tufted pansy succeeds better in the cooler and moister atmosphere of the north than in the south. At the same time with a little special attention it succeeds admirably in southern counties. This special attention consists in planting in well manured and well cultivated soil, which must not be too light, and the manure should be short, well decayed, and fairly rich. A free application of water in dry weather and timely attention in picking off dead blooms to prevent seeding, and lastly a light mulching of short manure and road scrapings in equal proportions applied at the time of planting. To secure

TUFTED PANSY MRS. C. F. GORDON.

the best results in propagating the cuttings should be inserted in cold pits or frames at distances of about two inches apart, so that a small frame will hold a large number of plants. They are quite hardy, but better results are obtained with this slight protection during winter, and in the case of severe frost they should be covered over with some protecting material.

Of varieties there are far too many. I have found the following excellent for bedding: *White*, Blanche, creamy white; Seagull, pure white, rayless; White Beauty, one of the best for bedding; *yellow*, Ardwell Gem, Bullion, and Nellie Riding; *blue*, A. W. Parker, light; Councillor Waters, dark; Abbess, light; and Duncan, dark mauve. Of crimson bedding pansies the best is Firefly.

Pansies as Cut Flowers

Miss Jekyll, in "Wood and Garden," p. 57, writes: ". . . There are Pansies, delightful things in a room, but they should be cut in whole bunches of leafy stem and flower and bud. At first the growths are short and only suit shallow dishes, but as the season goes on they grow longer and bolder, and graduate first into bowls and then into upright glasses. I think Pansies are always best without mixture of other flowers, and in separate colours, or only in such varied tints as make harmonies of one class of colour at a time." At many of the summer shows prizes are now offered for tufted pansies, and the result is a very pretty display, the flowers embracing a variety of beautiful shades. Small bowls filled with flowers

of one colour are a relief from hot-house blossoms; and the faint fragrance of the pansy is agreeable, a fresh, wholesome smell, without the almost disagreeable sweetness of the violet. Cutting the flowers of the pansy is a blessing. It prevents seed-pods forming, for the good gardener knows that once a plant is allowed to bear the double burden of flower and seed producing it becomes weakened and eventually gives up the task as beyond its powers. A well-known gardener writes: "Those who have not used these flowers for cutting have lost sight of one of their best virtues. When cut they are not often used in private gardens. They have little or no value when the flowers are picked off singly, all the natural beauty of the flower is lost. But when the shoots with flower and foliage are cut of sufficient length they are very beautiful. . . . I grow them in self-colours principally, as these are far more effective. Recently I noticed some vases and big bowls in a drawing-room. There was a fringe of greenery outside the bowl. The pansies were cut with long stems and arranged lightly, one colour in each receptacle. Although there were cut flowers of many kinds, both from stoves and the open garden, there was nothing to equal the tufted pansies. In low glasses arranged with a little light greenery, one colour in each, I find them most useful for placing on the dinner-table. Another recommendation is the time they last. I have had them stand in a vase from ten to twelve days by giving them fresh water occasionally. They will stand a week and even look well in a warm room." Another lover

of tufted pansies for dinner-table decoration writes: "Very rarely are tufted pansies used for dinner-table decoration, and yet few flowers compare with them for use in this way. Shallow bowls should be used, and the dainty little hand-baskets now frequently seen may be also filled with the flowers. These baskets are usually fitted with shallow metal or earthenware basins, which should be filled with green moss, and a further supply of water added. In these the flowers may be simply and prettily arranged. They need not be regularly arranged, and their arrangement is very easy, without any wire support. If each receptacle is partially filled with green moss as suggested, the flower stems may be stuck into it, and only the foliage of the pansy should be used. It is wise to put the foliage in the receptacles first, as this makes the arrangement of the flowers more effective. Some may prefer to use other foliage. When this is the case, the bright green fronds of the Davallia and Maidenhair in variety but of the lightest shade of green, are useful. Some of the rayless tufted pansies are seen to advantage when used for this purpose, and on one occasion the result was most happy, yellow associated with soft cream. Another pretty arrangement would be that of different shades of yellow. In this way primrose, pale yellow, clear yellow, rich and deep yellow, would be harmonious. The contrast of the pale green foliage with these flowers would also be most effective. I have seen an arrangement of yellow pansies in which the flowers of a fine blue variety were associated. Under artificial

light these colourings were very effective. It is always best to use the self-coloured flowers for this purpose."

Pansies in Summer

Much depends upon the character of the summer whether pansies will flower persistently or dry up during a period of hot and dry weather. Artificial watering is seldom helpful, as the pansy requires a moist atmosphere as well as a cool soil about the roots. During the hottest summers, however, much may be done to alleviate conditions distressing to the plants by sprinkling them with water in the evening and by mulchings. It is in July that the plants seem to succumb, the flowers gradually becoming smaller, and shrivelling before they have half expanded. The pansy appreciates moisture so much that when damp weather occurs after days of hot sun it begins to pick up immediately, until it is once again in normal condition, flowering as profusely as in the days of May and June. As we have previously mentioned, the summer work amongst pansies consists also in removing spent flowers and seed-pods in process of formation.

Treatment of Pansies received by Post

Although pansies are as vigorous as the majority of hardy plants, it is needful to give them every encouragement if a sturdy growth is desired, and it is only those varieties of the true tufted habit that flower more or less continuously from April until autumn. As many receive their plants through the post, it may

be useful to remember that, as there is generally little or no soil at the roots, timely attention to a few details will be necessary. When shrivelled, stand the packets in flower-pots with, of course, the leaves uppermost, and sprinkle with water. This, and a place in a shady corner, has the effect of quickly restoring the tufts to a fresh and healthy condition.

Violets and Tufted Pansy in Rock and Wall

The species of viola, that is, the violets from the mountain and plain, are available for rock or wall garden, always remembering the advice, repeatedly given, that full sun is not congenial to the little flowers. It is also possible to grow pansies in the wall, especially the sweet-smelling Violetta type, which are as small and as pretty as the alpine species, and grow perfectly in cool shady niches between stones. The violets add a fresh joy to rock gardening, and, though apparently not plants for such positions, are quite happy in mossy chinks. Ariel, Blue Cloud, Blue Gown, and those of quite compact growth should be chosen. We have seen also the large single violets of the type of Princess of Wales and Calfornia grown in well-built wall gardens with success, although they were out of place amidst the Arenarias, Arabis, and the hundred little jewels which gem the wall surface. We well remember a pergola walk, or, as it is described in "Wall and Water Gardens," a half-sunk garden passage, leading on a gentle uphill slope from house to stables.

"The walls are of blocks of stone with wide joints, all laid a little sloping back, so that the whole face of the two walls lies back. The wall was planted, both as it was built, and afterwards, with quantities of spring-flowering plants—Arabis, Aubrietias, Violets, Pinks, Cerastiums, and others of early bloom. The crowning pergola, on which grow vines only (late-leafing in England), does not over-shade the early flowers when they are in bloom, while later it rather gives them comfort by sheltering them from the summer sun-heat. The path is paved with flags so that it neither wants weeding nor repair from being washed out, whilst the very easiest sweeping keeps it clean." We simply quote this to show that the species of violet and the tufted pansies, especially the pretty miniature flowered type represented by violetta, may be planted upon walls. Writing of flowers for walls the author says: "By always thinking and trying and combining ideas, the plainest wall can, in a couple of years, be so pleasantly transformed that it is turned into a thing of flowery beauty. There is no wall with exposure so hot or so cold that has not a plant waiting for just the conditions that it has to offer, and there will be no well-directed attempt to convert mural ugliness into beauty whose result will not be an encouragement to go on and do still better."

Pansies in Town and Suburban Gardens

The pansy is an excellent town or suburban flower. The writer has enjoyed in quite a small garden not

many miles from Charing Cross many beds of these flowers, and this in a south aspect and enclosed by fences, a sun trap in which the Alstrœmerias delight and the pansies flag. It is astonishing, however, the good result which comes from painstaking endeavours to give the plants the necessary requirements. Early in the morning the plants are well watered, and dead and decaying flowers are scrupulously removed, and seed-pods also, and the soil is stirred up occasionally to enable the water given to well moisten the roots. After a hot and dry day the bed is gently syringed, slugs are trapped, and in this way the pansies last until the end of summer. We find that much good comes from cutting away long and straggling shoots, which are generally pithy and flowerless. A bed of seedlings is a rare delight in a town garden, but sometimes and generally we think it is necessary to have varieties of a certain colour to fit in with some design. Where a shady border exists, not absolutely sunless but in which day lilies, primroses, Spanish scillas, and other shade-loving plants flourish, we should plant pansies, running them in and out of other things and not setting them out as a hard and formal edging. The tufts will remain from year to year, the only alteration necessary being in the spring, when the practice of the writer is to cut off all straggling growths and leave the crown of the plant to break into fresh and unfettered shoots.

A Small Selection of Tufted Pansies

Beginners in gardening, or those who wish for only a few varieties, are frequently puzzled when a long

list of acknowledged favourites is presented for their choice. There is a small multitude of tufted pansies, all of considerable merit, but it is a certainly perplexing task to choose the finest from this dense throng. We have chosen the rayless types or pure selfs as more effective for bedding than those with streaks radiating from the centre of the flower, and have not forgotten that exquisite class known as the miniature flowered, which the late Dr. Stuart of Chirnside originated. We well remember the beautiful little flowers he was wont to send to *The Garden* office, flowers with the fragrance of the violet of the field, and so dainty that we used the plants for the rock and wall garden and to dibble in between the old flagstone paving in pergola and forecourt. The best

Twelve Rayless Pansies

are the following. There may be differences of opinion about the list, but each variety recommended has been thoroughly proved, and is among the most popular flowers of the garden. Taking the twelve selected in alphabetical order, the first is

Blanche, which is also known as White Empress. Mr. Crane, writing in *The Garden* of February 7, 1903, says : "There is considerable doubt as to which is the proper name, and the same variety is frequently met with as often under one name as the other. The flowers are large, of good form and substance, and the colour may be described as pale creamy white, with a yellow eye. Good habit, robust growth, and free flowering."

Blue Gown.—A lovely variety and more planted perhaps than any other. Dr. Stuart never raised a prettier or more popular pansy than this, and we have planted it largely in conspicuous beds in the flower garden. The growth of the plant is quite tufted, no straggling, bloomless stems, but neat and compact. The flowers are pale blue with a shade of mauve in it, and the eye or centre is yellow.

Devonshire Cream.—This is a great favourite and happily named, the colouring suggesting the famous cream of the south. The plant is of excellent habit of growth, and the well-shaped flowers in the full blossoming season almost hide it. It blooms freely over a long season.

Florizel.—A beautiful rayless pansy, with oval-shaped flowers of a colour best described as blush-lilac. The growth is kept well within bounds, and the flowers appear in profusion.

La Vierge.—A pretty flower of rounded form and rayless. The plant blooms with great freedom, and the white petals seem whiter still against the neat yellow eye.

Leda.—Many admire this pretty pansy. Its flowers are edged, that is, there is a margin of colour to the petals, in this case delicate purplish blue against creamy white.

King of the Blues.—Mr. Crane, who has had much experience with tufted pansies, says: "There is no better blue pansy in cultivation than this. The flowers are not large, and grow out freely. The colour is deep blue with yellow eye; good compact habit. Un-

fortunately the stock is difficult to obtain, so few specialists possessing it."

Melampus.—The flower of this variety is almost circular, and its deep yellow colouring is pretty. Each bloom is borne well above the compact and robust growth upon a sturdy stem.

Pembroke.—Few rayless yellow-flowered pansies are better than this. We have planted it largely, and admire the colour, so pure and clear. This is deeper upon the lower petal than upon the upper one. Its growth is almost too vigorous, and apt to get coarse as summer advances.

Queenie.—This was very charming with us last summer. It is a pretty name for a pretty flower which has a ground of creamy white, and is edged and streaked with lavender. We planted it near some bay trees, and the result was a bright picture of colour through the summer months. It has the true tufted growth of its race, and the flowers stand well up. Late in the year its colouring gets confused, but even with its altered complexion it is winsome.

Rosea Pallida.—This is a well-known pansy for the flower garden, with rose-like flowers. The growth is very dwarf and compact.

Sweet Lavender.—A lavender-coloured self, with flowers of good shape, and produced in profusion from early spring until late in the year. It is not quite so tufted in growth as some, but the flowers are so pure in colour that we can forgive a somewhat unruly habit.

Miniature-Flowered Rayless Pansies

These are of greater use in the rock and wall garden or for putting between flagstones than those already mentioned. They are quite alpine flowers, so to say, with small fragrant flowers of dainty colouring. The most precious of all is

Violetta, which was raised by Dr. Stuart. It is the foundation of the group, and still remains one of the most popular. The flowers are very fragrant, 1¼ inches to 1½ inches across, and have long stems, and the growth is quite compact.

Forget-me-not.—A very dainty flower, rayless and white with an edge of bluish lavender. The plant grows and flowers profusely, and its growth is perfect.

Pigmy.—This variety should be valued as a margin to a large bed or border. Its growth is free, and the flowers appear profusely and persistently, while their deep purplish colouring and yellow eye are clear and distinct.

Robin.—A very distinct pansy, dwarf and compact, and having flowers of rosy colouring. It blooms for many months.

Twelve Rayed Pansies.

A rayed pansy is not exactly a self in the same way as such varieties as Blue Gown, for the good reason the flower has rays in the centre, that is, lines of colour coming from the centre. Of these one of the best known is

Ardwell Gem.—This is one of the most popular

pansies in existence. It is planted largely in parks and pleasure grounds, and last year we considered it one of the best of the yellow pansies. It has not deteriorated in the least, notwithstanding that it is one of the oldest pansies in English gardens. It is interesting to refer to a copy of the report of the Viola Conference of 1894, held at the Botanical Gardens, Edgbaston, Birmingham, in August of that year. On that occasion, as the results of the votes of those present, Ardwell Gem was placed first in order of merit under the heading of those of a pale yellow colour. Two years later, at the trial of violas at the Royal Botanic Gardens, Regent's Park, this variety, with a limited number of others, was awarded high marks and was again placed in the premier position among bedding varieties. It seems to stand drought better than others, and continues to flower late in the season. Owing to its creeping growth it quickly covers the ground, and the flowers stand well above the foliage. There are few parks and open spaces in which it is not planted in brave masses.

Bullion.—This is also a rich yellow pansy, with heavy pencilling or rays early in the season. Although its appearance is somewhat frail, it is really a strong and compact grower, very free and bright during the summer months.

Councillor W. Waters.—A crimson-purple flower and very free, excellent habit of growth, robust; continues long in bloom.

William Neil is a well-known variety, with pale rosy-pink flowers.

Maggie has also flowers of a rose-pink shade. It blossoms profusely; the flowers open deep rose, but get clearer with age.

Mrs. A. H. Beadles.—Pure white.

Endymion.—Soft yellow; very vigorous.

J. B. Riding.—Deep mauve.

Kitty Bell.—Lavender, with a bluish shade in it.

Stephen.—Deep yellow.

True Blue.—Imperial blue.

Lord Salisbury.—Soft primrose.

Margined Flowers

These are very pretty, but our experience is that the colouring runs towards the end of the summer or before, and the clear and true markings become indistinct and blurred. Perhaps the most popular of this group are:—

Blue Cloud.—A delicately coloured flower, margined with a bluish shade, the other portion of the petals soft yellow.

Border Witch has an edging of blue; it is a rayless variety with a yellow eye, and in cool summers flowers freely over a long season; but when the weather is hot and dry, the colour goes until little of the marginal colouring is visible.

Duchess of Fife is another well-known edged flower; the principal colouring is primrose, set off with a margin of blue.

Mrs. C. F. Gordon is alternately blotched with purple-violet and white.

Acme is purple-crimson, a warm and effective shade.

Cottage Maid.—Blotched with violet and white.

Stobhill Gem.—Of this the lower petals are violet and the upper ones bluish-white.

Lark is white with a margin of blue.

Mrs. H. J. Jones.—Blue shading on white ground.

Older Varieties.—All the pansies we have mentioned possess strong claims, otherwise they would not have been included in this list; but in spite of the tremendous progress that has been made of late years in acquiring new varieties of tufted growth and beautiful flower colouring, a few of the older pansies should not be ignored. The dark-blue *Archie Grant*, grown in large quantities for the markets, is still popular. Its growth is not perfect, but the flowers are of wonderful colouring, an intense purple, and in the full summer time the whole plant seems blue with the wealth of flowers. *Ardwell Gem* has been already praised, and we still plant it largely for its brave show of rich yellow, and among the white varieties there still remain the beautiful *Countess of Hopetoun* and *Countess of Wharncliffe*, the former in particular being frequently sold in the markets. Of lavender-coloured varieties there is *Duchess of Sutherland*, which is most appreciated for its delicate and pretty colouring, and both *Countess of Kintore* and *The Mearns* must be included. The former has purple and white flowers, and in the latter they are of a warm purple shade; but in the South of England these colours are apt to run or in a way disappear—the air

is too dry to preserve their characteristic beauty. Another pansy seen occasionally in gardens and parks is *Bluebell*, which we well remember as a gay long-flowering pansy in the Chiswick Gardens of the Royal Horticultural Society. It is without the creeping tufted growth of the pansy of to-day, but the pure blue flowers came forth abundantly, and made bright breaks of colour for many weeks. This variety originated in Mr. R. Dean's garden at West Ealing in 1871. Writing of the Chiswick Gardens also reminds the pansy-lover of *Viola cornuta*, which Mr. Barron, at that time the superintendent, planted with happy effect as a margin to large beds, and to run in and out of shrubby borders. It is interesting to know that Dr. Stuart, in a note to "The English Flower Garden," says: "Botanically, violets, pansies, and heart's-ease are all the same. Tufted pansies are crosses from the garden pansy and *Viola cornuta*, the latter being the seed-bearer. Pollen from *V. cornuta* applied to the pansy produces a common enough form of bedding pansy—never the tufty root-growth obtained when the cross is the other way. I have proved this by actual hand-crossing. Most strains of tufted pansies are bred the wrong way, and in consequence lack the fibrous tufty root which makes the Violetta strain perennial." So the English garden is indebted to *V. cornuta* for much beauty.

Fertilisation and Seeding of Violets

This is an interesting question to many amateurs, and is best explained in the following notes by

Professor Henslow, taken from *The Garden* of May 18, 1901. It formed one of a series of "Short Studies on Plant Life." Professor Henslow writes: "Hooker in his 'Student's Flora' recognises seven species of viola, the seventh being the pansy (*V. tricolor*), and of the other six the dog (here illustrated) and the wood violet have varieties.

"Unlike the sweet violet, the dog and the wood violet have no runners, and should be regarded as the same species. This difference is correlated with the fact that the white *V. odorata* bears its cleisto-gamous[1] buds on the runners below the leaves, the others have them, especially the wood violet, all over the plant.

"The ordinary flowers, at least of *V. odorata*, rarely set seed in this country; but I have known the white violet do so by self-fertilisation. The stigma is strongly curved upwards (as the flower is inverted), so the pollen falls directly on to the stigmatic orifice. The unopened buds, which appear after the usual flowers are over, set an abundance of seed by self-fertilisation.

"These little buds consist of a calyx usually without any corolla, or at least only rudiments of petals, five perfect stamens, and a pistil. The five anthers are pressed down upon the stigma, and the pollen tubes enter it while the pollen grains remain within the anther cells. These do not open by slits, but the tubes issue by boring through the end of the anther cell, enter the stigma, and so fertilise the ovules within the ovary.

[1] The word "cleistogamous" means concealed unions.

VIOLET SEEDING.

"The presence of cleistogamous buds is not confined to England, for they occur on North American species, so that it must be a very ancient contrivance, established before the genus Viola had differentiated into species and become spread over the world. Climate acts upon these buds, for in warmer regions not only do the ordinary flowers of the violet set seed, as in Italy, but the buds, which are cleistogamous here, often become perfect flowers in South Europe. I collected them, *e.g.*, in Malta.

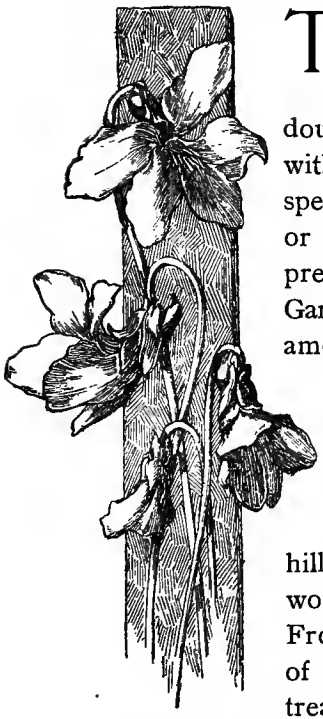
"That the perfect flowers of violets, though specially adapted to receive the visits of insects, should fail to set seed is nothing uncommon, the reader has but to think of orchids. By far the majority of these cannot possibly set any seed without the aid of insects. It is the self-fertilising Bee Ophrys and some cleistogamous species only which set seed in profusion. The details of adaptation in violets consist of an irregular corolla, the front petal being spurred for collecting the honey secreted by two tail-like appendages to the front stamens, the three posterior stamens having none. The purple petals are ornamented with golden streaks or guides to show the way to the honey. The stigma resembles a bird's beak, so situated as to pick up the pollen deposited on a bee, which has already collected it from a previously visited flower. Yet, for all this elaborate machinery, no result usually follows. The setting of seed is deputed to the self-fertilising buds, which attract no insects whatever.

"The pansy has no cleistogamous buds, but several varieties with very small, pale-coloured flowers are but

little attractive and have got over certain difficulties of structure, which exist in the larger flowered kinds, preventing a flower from fertilising itself; so that the smaller-flowered sorts are able to set plenty of seed, without calling in the aid of insects to help them."

CHAPTER V

VIOLETS OF MOUNTAIN AND PLAIN



THE violets are the sweetest of alpine flowers; not the violet of the frame, in single and double varieties that fill the house with fragrance, but the mountain species which delight in the rock or wall garden. As is so well expressed in the "English Flower Garden," p. 805: "Some Violets are among the most beautiful ornaments which bedeck the alpine turf; and even the common Violet itself may almost be claimed as an alpine plant, for it wanders along hedgerow and hillside, along copses and thin woods, all the way to Sweden. From all kinds of Violets the world of wild-flowers derives a precious treasure of beauty and delicate fragrance; and no family has given our gardens anything more precious than the numerous races of Pansies and the various kinds of large, showy, sweet-scented Violets. Far above the faint blue carpets of the

various scentless wild Violets in our woods and heaths, our thickets and bogs, and above the miniature Pansies that find their home among our lowland field-weeds; far above the larger Pansy-like Violas (varieties of *V. lutea*), which flower so richly in the mountain pastures of northern England and even on the tops of stone walls; above the large, free-growing Violets of the American heaths and thickets, we have the true alpine Violets, such as the yellow two-flowered Violet (*V. biflora*), and large blue Violets, such as *V. calcarata* and *V. cornuta*. It would be difficult to exaggerate the beauty of these alpine Violets. They grow in a turf of high alpine plants not more than an inch or so in height. The leaves do not show above this densely-matted turf, but the flowers start up, waving everywhere thousands of little banners. Violets are of the easiest culture; even the highest alpine kinds thrive with little care, and *V. cornuta* and *V. calcarata* of the Alps and Pyrenees thrive even more freely than in their native uplands, the foliage and the stems being much stronger. Some of the many stronger varieties of the sweet Violet might be naturalised with advantage. Slow-growing, compact kinds, like the American Bird's-foot Violet, enjoy, from their stature and their comparative slowness of growth, a position in the rock garden or in the choice border, and in such a position they are of easy culture in moist sandy soil. Violets of all kinds are easily increased by cuttings from short stout runners."

It must be admitted that the violets in general are either unknown or unheeded, and the hybridist seems

to ignore the great possibilities of creating a new race by crossing one or more of the species from the mountains of Europe, perhaps with the effect of obtaining flowers as useful and as beautiful as the violets of our gardens, the Princess of Wales, Marie Louise, and those of that fragrant class. The material is here for some zealous worker to take in hand and give to the gardens of generations to come floral joy and comfort, more so even than from those who have worked diligently in the past. The following are some of the most beautiful species for the rock garden, wall, or border, and they may all be increased by seed, division of the root, or by runners. Some of these may not be obtainable in all English nurseries, but are generally to be got from foreign nurserymen. The species are put into a roughly alphabetical order, and may be therefore readily referred to :—

V. alpina, Jacq. (Alpine Violet). This is quite a diminutive species, growing on the summits of high mountain ranges in Austria and the Carpathians. It may be recognised by its dark blue flowers with even darker stripes; the stem is very short, the leaves heart-shaped, on long petioles, and notched. The plant is distinctly tufted.

V. arenaria, D.C. This pretty violet is found in sandy places, generally in Vallais, Provence, the Alps of Piedmont, and the Caucasus generally. It is distinctly glaucous and somewhat pubescent, the leaves roundly cordate and serrated; the sepals are oblong lanceolate, acutely pointed, and the light-blue flowers appear in May and June.

V. altaica (Altaian). A showy violet from the Altaian Mountains. It has large yellow flowers of much beauty, and therefore worthy of the attention of both gardener and hybridist. The plant is rather tender and of creeping growth, the leaves oval, stipules cuneate, with sharp teeth. It flowers in April and May. There is a showy variety with large purple flowers called *V. a. purpurea*, but is sometimes labelled in gardens with the specific name only, but except in the important colour difference the variety is the same as the type. Both are about four inches high.

V. biflora (Two-flowered Violet). This pretty violet rarely exceeds three to four inches high, and two of the small yellow flowers are produced on each stalk. The root is creeping, stem erect, and the flowers small, yellow, and lined with darker stripes; the leaves are kidney-shaped, serrated and smooth, while the spur is very short. The roundly oval seeds are brownish in colour and obscurely dotted. This interesting species is freely distributed throughout Europe, Siberia, and the north-west of America, frequently on humid mountains. It flowers in April and May. A note in the "English Flower Garden," p. 806, is as follows: "This bright little violet is a lovely ornament on the Alps, and in many parts it densely clothes every chink between the moist rocks. It even crawls under great boulders and rocks, and lines shallow caves with its fresh verdure and its little golden stars. . . . *V. biflora* is especially useful in large rock-gardens where rude flights of stone are constructed to give winding

pathways over the mass. It will run through every chink between the steps, and tend to make the stair replete with life and interest. If obtained in a small or weak condition it may seem difficult to establish, but this is by no means the case; for, once fairly started in a moist and half-shady spot, it soon begins to creep about rapidly, and may then be readily increased by division. When well established in a suitable rock-garden it is able to take care of itself."

V. blanda (Nutt). A pretty small-flowered violet, very delicately fragrant, and with white flowers faintly lined with blue. The roots are jointed, and the leaves press close to the ground; they are somewhat pubescent on the under surface, and kidney-shaped. It is a native of wet and boggy meadows from New York to Carolina, and flowers in May and June. Mrs. Danske Dandridge, writing to *The Garden* in August 10, 1901, about wild violets of Virginia, says: "Most of our American violets lack the great charm of fragrance, but the pretty little *V. blanda*, with its small flowers, which have blue veined lower and lateral petals, and rounded or reniform crenate leaves, possesses the distinction of a faint, sweet perfume, and is prized on that account by all lovers of wild flowers. It is not uncommon in this neighbourhood (West Virginia), and is easy to naturalise in half shady moist places. One of the earliest to bloom, it likes swampy ground, and does not do very well in a dry situation."

V. calcarata (Lin.).—The spurred violet, as it is called, is very variable and native of high mountain pastures

from Austria to Provence. The flowers are blue or white, the stem short, the leaves roundly spathulate, elongated and crenate. The root is fibrous. Of this species there are several recognised varieties, namely, *V. c. Halleri*, with large blue flowers, and *V. c. Bertolonii*, which is found in the Apennines. This has large purplish flowers which appear from April to June. The plant is from four to six inches high. To quote the "English Flower Garden," this plant resembles the well-known *V. cornuta* in flower and spur, but instead of forming leafy tufts, it increases itself by runners under the soil, somewhat after the manner of *Campanula pulla*. *V. calcarata* is as charming in the rock garden as in its native wilds. "G. J.," writing in *The Garden* from Rochers de Naye, Aug. 9, 1902, p. 98, says: "The steep grassy slope that faces the south is thickly studded with the bright deep purple bloom of the scentless *Viola calcarata*. It has something in common with *Viola cornuta*, as it has the long spur that is one of the characters of the latter, but this is a plant of the Pyrenees. In this handsome alpine violet the colour sometimes varies to a bright red purple such as one sees in some of the varieties of English iris, but as a rule there is very little variation to the paler shades. The foliage is small and mostly hidden in the grass."

V. canadensis (Lin.).—When seen close to the eye this is a species of dainty beauty; the flowers are purplish blue on the outside, but white and beautifully veined within. The leaves are ovate cordate and acuminate. It is a native of North America in shady woods, and

is sweet-scented. It grows a foot or more high and flowers in early summer. A pure white variety of it is called *V. c. albiflora.* Mrs. Dandridge writes: "One of our mountain violets is *V. canadensis*, which I sometimes find on cliffs and rocky heights along the river bank. Some people have claimed fragrance for this species, as well as for *Viola blanda*, but I have not been able to detect it as it grows here. It is a tall violet, often a foot in height, with leafy stems, the leaves often ovate cordate, but sometimes orbicular, and with finely serrated margins. The flowers are small, only about half an inch broad, and white or nearly so, purplish sometimes on the outside, and veined with purple."

V. canina (Dog Violet).—This pretty violet of hedgerow and ditch is widely distributed through Europe and North America; it is also found in Persia, Japan, and other parts. A species so well known to all who have gathered wayside flowers needs no description. The white variety is perhaps more distinctly British than the other. There are many forms.

V. cenisia (Mt. Cenis Violet).—A pretty dwarf violet freely distributed throughout the Alps of Switzerland, Piedmont, and Provence. It is only three inches or so high, of semi-procumbent growth, and has ovate spathulate and entire leaves. The flowers are blue, and appear in May and June. Distinct varieties of this are *V. c. ovalifolia* and *c. diversifolia.*

V. cornuta (Horned Violet).—Among violets which in the past have played a somewhat prominent part in the adornment of British gardens, this is one of the

more notable. This is not so true perhaps of the typical plant as of its progeny, and it is still valuable to those who are working on sound lines because of its tufted growth. The plant is fibrous rooted and has pale blue flowers, much longer than those of many species and with awl-shaped sepals. It is six inches high, and flowers from May to July. Native of the Pyrenees and Switzerland, and also on Mount Atlas. Better in moist soils than in dry and warm ones.

V. cucullata (Hooded-leaved Violet).—This is a valuable and interesting species, very hardy, with large flowers, and is most happy in wet or half boggy places, where in its North American home it is usually found. It varies, but the form usually seen in gardens has blue flowers, streaked with white, and sometimes almost white at the base. The flowers usually appear in May onwards. It is figured in the *Botanical Magazine*, t. 1795. Some recognised forms are *V. c. glaberrima* and *V. c. hispidula.* There is also a form with variegated leaves. *V. c. laciniata* has finely cut foliage, but the flowers are the same as those of the type. Mrs. Dandridge writes: "If any violet deserves the name of blue, perhaps it is *Viola cucullata* in some of its many forms. This violet is very abundant in the Eastern States of America, so much so that it is known as the Common Blue Violet. It will flourish in sun or shade, but prefers the latter. Its flowers are finer and their colouring richer in deep and somewhat moist soil than in dry situations, but it is found in wood, marsh, pasture field, and dry uplands, and also near

the sunniest of our mountains, 5000 feet above the level of the sea. It may be known by its large bright green, ovate or sometimes reniform leaves, which push up early in spring, the sides rolled inward when young." And in Miss Jekyll's "Home and Garden" occurs this passage, p. 101: "In one corner of the rock garden are two kinds of Violet, both good and worthy of their place, though both without scent. One is a white Dog-Violet, the white strikingly pure and bright. The leaves are of a very dark green, sometimes with a tinge of blackish bronze: two rather narrow upright petals stand up in a way that always reminds me of a frightened rabbit. The other is the splendid North American *Viola cucullata.* Its large round flowers, of a strong pure purple colour, nearly an inch and a half across, are on purplish stems from nine inches to a foot long. Where the lower petal leaves the small white eye there is a sharply-distinct veining of still darker purple. The size of the flower is all the more remarkable because it is a true Violet; there is nothing of the Pansy about it. Pansy and Violet are, of course, closely related, but their characters are quite distinct; and though, as a rule, Pansy is large and Violet small, yet there are many small true Pansies, and in this case there is one very large Violet."

V. gracilis (Sibth. and Smith).—This is a slender and graceful violet with creeping roots and rather crowded leaves. The flowers are similar in size to those of *V. lutea*, and usually of a purplish blue colour, though sometimes yellow. It is a native of

Mount Etna, and flowers in midsummer. Height about six inches.

V. hastata (Mich.) (Halberd-leaved Violet).—This species may sometimes be recognised by dots or blotches on the leaves, which are halberd-shaped and smooth. The flowers are yellow, with a purplish tinge on the under side. It is found in North America. A variety called *V. h. glaberrima* is found in the woods and on hills in North Carolina, and flowers in May and June. Height four inches. Mrs. Dandridge writes from West Virginia: "*Viola hastata* is the halberd-leaved violet, one of our not uncommon yellow violets, often found side by side with *Viola rotundifolia* on hilly and rocky slopes. The simple erect stem of this viola is sometimes a foot in height, with the stem-leaves high in the air. Sometimes these halberd-shaped leaves are truncate at the base; sometimes the basal leaves are cordate. This species has small yellow flowers, which have the lateral petals bearded."

V. hederacea (syn. *Erpetion reniforme*) (Ivy-leaved Violet).—This is one of the most minute species, but none the less interesting for this reason. It must be remembered that the plant occasionally suffers in very severe weather, especially when exposed, but with frame protection it is usually content. It is perhaps better known as *Erpetion reniforme*, and is distinctly tufted in growth, slightly stoloniferous, and with a very short stem. The leaves are crowded, often into a mound-like tuft, or again, where greater freedom obtains, they are more spreading, kidney-

shaped, and roundish. The flowers are blue and white, and poised on frail stems two or three inches long. It is a native of Australia, and sometimes called the "New Holland Violet," being found near Port Jackson. A little gem.

V. hirta (Hairy Violet).—This is a widely-spread British species, found chiefly in woods and thickets, on chalk and limestone. The flowers are greyish-blue, with dark streaks or lines, and almost scentless. The scapes, which are taller than the leaves, are furnished with two narrow opposite bracts about the centre. In some respects this species resembles *V. odorata*, but the foliage generally is more triangular. There are several varieties, and the plant also varies according to the soil and position in which it is growing. It blooms in April and May, and is four inches to six inches high.

V. lactea (Milky Violet).—A distinct species found in but not confined to Britain, as it is also seen in Switzerland and France. It is usually discovered in boggy heaths. The flowers are milk-white or pale blue, with purplish streaks, and the two lateral petals are distinctly bearded. The leaves are ovate-lanceolate and blunt, while the lower ones are small and ovate. This has been regarded as the same as *V. canina* and *V. montana*, but according to the Kew Hand-list it must have specific rank. It is four inches high, and flowers in May and June.

V. lanceolata.—Mrs. Dandridge of West Virginia says: "So singular is the appearance of *Viola lanceolata*, the lance-leaved violet, that when it is out of

bloom it would take an experienced eye to perceive that it is a violet at all. The narrow leaves are sometimes five inches in length, and are slightly crenate. The sepals, too, and the petals to some extent partake of the elongated appearance of the plant. These petals are white and beardless, the lower and lateral ones striped with violet. A slight fragrance is claimed for this species."

V. lutea (Mountain Violet).—This is also a British species, with fibrous roots and ovate oblong leaves. It is found also in Wales as well as Scotland and England, usually in the north in the latter case, and generally on mountain pastures. The yellow flowers are large, freely lined with black. Its height is four inches, and the flowers appear from May to August.

V. montana (Mountain Violet).—This species is widely distributed over the temperate parts of Europe and Siberia, particularly Austria and Germany. It grows about twelve inches high and has pale blue flowers, which when first open are of a whitish colour. It flowers from May to July. Two distinct forms are *V. m. stricta* and *V. m. pubescens.*

V. munbyana.—A pretty Spanish violet, four inches to five inches high, with somewhat large violet flowers in April and May. There is a yellow form of this called *V. m. lutea.*

V. Nuttalli.—An interesting species, because it is considered the only one found on the plains of the Missouri river. The flowers are yellow and purplish on the inner side, and appear from May to July. Its height is six inches.

V. odorata.—This is the fragrant violet of pasture and hedgerow, and is one of the best-known flowers of the British flora. It is also, however, widely distributed throughout the whole of Europe, and also Siberia and other parts, even to the Himalaya. It quickly increases by its stoloniferous growth, and flowers throughout the spring months. There are many varieties, some scentless, and others double, such as *V. pallida plena*, which is the famous Neapolitan or Parma violet. It is the origin of the many beautiful double or single violets which are described on p. 95. There is a white form of *V. odorata* as well as one with reddish flowers, and our advice is to plant them everywhere, as in few places are they unhappy; it is a "weed," but as "E.V.B." declares, "the most lovely and most native among all the natural weeds of my garden." In a paper contributed by "E.V.B." to the Royal Horticultural Society on the subject of weeds, it is interesting to read the reference to "wild white violets," against which there is no law: "In February and March the whole garden is white with them in every part, and in the grass at the north-east end and under the apple trees you would almost think there had been a hailstorm, so white and thick the white violets lie. But it is only violets and wood strawberries that may spread and multiply at will like this. Without question the violets are native to the place. Wood strawberries were brought home for remembrance, from the old grey walls of a little church in Hampshire, about a quarter of a century ago. They seed now everywhere and are welcome; and they

forget not the old church walls whence came their parent plant, and will climb joyfully all among the *Linaria Cymbalaria*, or Mother of Thousands, or Wandering Sailor, to the top of our ivied buttresses 6 ft. high and more. A little barren strawberry has been my pet for years. For many years it has lived close under the house wall, creeping up supported by wild ivy, looking very pretty, with an embroidery of humble little blossoms. And only lately have I learnt that it is no strawberry at all, but *Potentilla Fragariastrum*." Mrs. Dandridge, writing from Virginia, says: "We prize the English single violets, both white and purple, more than any of our native species, however, both because they are earlier than ours, and because they are so delightfully fragrant, while ours are, with one exception, scentless. The fragile-looking, single white English violet grows wild in our shady grove, and spreads quite freely, even in poor, uncultivated soil. It is perfectly hardy here, and has been naturalised at Rose Brake for at least thirty years. It blooms with the Forsythia. The ground under some old Forsythia bushes is carpeted with this gentle and charming flower. In other places the purple English violet has formed vigorous colonies. This species *Viola odorata*, is described in Britton and Brown's 'Illustrated Flora of the Northern States and Canada,' because, though it came originally from England, it has escaped from gardens, and is now naturalised in many places, especially in the Virginias and other long-settled parts of America. Outdoor violets begin to flower here about the first week in April or the last

of March, according to the season, but the native sorts are not much in evidence until May, which is our great violet month."

V. palmata (L.).—This violet is sometimes confused, we believe, with a variety of *V. cucullata* known as *V. palmata* or *V. c. laciniata.* The species is figured in the *Bot. Mag.*, t. 535. There are several forms, but, the true character is a slightly pubescent and much dissected leaf. It is four inches to six inches high, is frequently found in Carolina and Upper Georgia, and blooms in May and June. About this violet Mrs. Dandridge writes: "One of the earliest of all (Virginia) is *Viola palmata,* which is found in the dry soil of wooded uplands. Its leaves are palmate and its flowers are bright blue-violet in colour. Some older botanists called this a variety of *V. cucullata,* but it is now considered distinct enough to be classed as a separate species. I do not see much resemblance in this violet to *V. cucullata.* The flowers are usually smaller, and have not the variety of colouring that distinguishes those of that species. The whole appearance of the plant is distinct. It is pubescent. *V. cucullata* is glabrous. The leaves vary very much in size and shape. Sometimes they have three lanceolate lobes; sometimes none at all; sometimes they are cordate, with crenate-dentate margins. No two leaves are cut after the same pattern, a peculiarity which makes this little plant interesting. It is very pretty when it is covered with its charming flowers, which are borne in great profusion. *Viola palmata* is a good subject for the rock garden in a situa-

tion partially shaded. It does not need much moisture."

V. palustris (Marsh Violet).—A well-known British violet, usually found in moist meadows or even bogs, especially in the northern counties; the leaves are kidney-shaped, and the flowers white or pale lilac and scentless. It blooms from April to June, and is four inches high.

V. Patrinii.—A very dwarf violet from Siberia, Northern Asia, &c. It is easily known by the petioles being three or four times longer than the leaves; the flowers are pale blue, and appear in June and July. Height, four inches.

V. pedata (Bird's-foot Violet).—Mrs. Dandridge, writing from Virginia, says of *V. pedata:* "Wild violets are always interesting, and some of them are beautiful subjects for the shady rockery and for naturalising in woods and copses. The flora of Virginia is rich in species of viola, and it is no difficult matter to gather six or seven kinds of these pretty flowers in the course of a morning's walk in the immediate neighbourhood of Rose Brake, and, with one exception, all our native species are easy to transplant to the home grounds, where they do well without any special care. Unfortunately, that exception is the most beautiful of all our native violets, the bi-coloured variety of *Viola pedata*, which has, so far, resisted all attempts to naturalise it here, though it covers a hillside within a mile of our little village. This hillside is mainly stiff clay on limestone foundation, and here *Viola pedata* does fairly well. But it is much finer on shady banks

along the roadside, where I have often found it in a very hot, dry, and sunny situation. I have taken it up with all possible care, and, for its comfort, brought home with it a basketful of its favourite shaly, sandy soil. Planting it in this, on a sunny clay bank, I have had it to live a season or two, but that is all. At other times I have tried to naturalise it in the shade, but with equally disappointing results. This is one of the few species of viola that produce no cleistogamous flowers. Many of the flowers are seedless, and it seems to increase mainly from its rootstock. 'Its premorse root,' says Professor Meehan, 'is nothing but an underground stem, a little trunk, and the real roots, thread-like, proceed from it. This stem makes a new addition to its crown every year, and some of the lower portion dies away, just as in a Gladiolus corm, and this leaves the bottom of the little stem flat, or as if bitten off.' Besides our beautiful wild variety of *Viola pedata*, of pansy-like appearance, which has the two upper petals of rich purple velvet, and the others pale lavender, there is a pure white variety which I have sometimes seen, and others of different shades of light and dark lavender and mauve."

The Bird's-foot Violet is one of the most beautiful of all the violets we have received from America. In its native home it is frequently found in sandy and dry hills and in fields, but it is not so generally known that it may be planted in somewhat damp spots, and in soil composed chiefly of peat. Mr. Jenkins says: "I have grown the plant as well in peaty soil as in gritty loam, and I generally find that in any good

admixture unpoisoned by humus, it is safe enough. I believe I am correct in saying that there are several more or less closely linked allies that have been hitherto regarded as species." Of *V. pedata* we have at least two distinct forms both in cultivation at the present time. These are known respectively as *V. p. bicolor* and *V. p. alba*, and with this type make a trio of pretty garden flowers. *V. pedata* grows about four inches high or rather more in open lands, and has blue flowers white at the base or nearly so. The leaves are about one inch and a half long, and generally thrice notched at the tip. The variety *bicolor* has blue and white and *alba* white flowers. A violet with much the same growth has been described as *V. septemloba*, and inhabits the same region as *V. pedata*. This is said to be much stronger and more worthy of the name "pedata" than the plant which bears it; the flowers are also said to be two inches in diameter, and to come from the pine woods of Georgia and Carolina. Whether a species or variety we should like to make acquaintance with a plant answering to this description; indeed, a more vigorous *V. pedata* would be welcomed by many. It flowers in spring as a rule, but is not confined to any one season when the plants are seedlings and flowering for the first time.

V. pedatifida.—This is much like *V. pedata*, but the leaves are not alike, and the beautiful blue flowers in this species are bearded, whilst in *V. pedata* they are quite smooth. It is three inches high, and flowers in May and June. Native country North America.

V. primulæfolia (Cowslip-leaved).— Mr. Jenkins

writes: "It is not improbable, I believe, that the plant in commerce under this name is the variety *V. p. cordata*. The flowers of the species are small, white, and veined, the lower petal distinctly so with dark purple. The leaves are rather smooth and somewhat cordate at the base. In the variety *cordata* the flowers are blue and sweet-scented, and the sepals twice the length of the leaves. The type inhabits wet or humid spots, and is found in Virginia, Carolina, &c."

V. pubescens (Downy Violet).—A well-named and distinct species with yellow flowers. The leaves are covered with a soft down, and the stems somewhat decumbent. This species is abundant in North America in shady woods and on limestone rocks, especially about Philadelphia. It is four inches high, and flowers about midsummer. This species is either not in cultivation at present or is very rare. Mrs. Dandridge writes: "*Viola pubescens*, the hairy yellow violet, is easily distinguished from *V. hastata* by the pubescence of the entire plant, while the latter is quite smooth. It is also distinguished by the reniform shape of the leaves, which are much wider than they are long. The stout, erect, usually solitary stem is crowned with a bright yellow nodding flower, the veins of which are purple. This is one of our prettiest yellow violets."

V. rothomagensis (Rouen Violet).—A pretty and interesting violet with branched and diffuse zigzag stems, and generally ovate leaves, but the lower ones are somewhat cordate and fringed. The tubular spur is very short and blunt, and the flowers bright blue, with the side petals and lip striped with black. In

some ways this reminds one of *V. tricolor*. *V. rothomagensis* blooms profusely from April to July, and is found in cretaceous rocks and in fields from Rouen to Melba; height about six inches.

V. sagittata (Arrow-leaved Violet).—A distinct species owing to the well-marked leaves, which are arrow-shaped, as suggested by the name, and sometimes slightly pubescent. The flowers are blue, the lower petal whitish near the tip, and veined with purple; it is found on dry hills from New England to Virginia. A variety, *V. s. emarginata*, from New Jersey, has deep blue flowers. Height six inches, and flowering time from April to July. Mrs. Dandridge writes: "*V. sagittata* is an early flowering purple violet with leaves of a deep green, which are sometimes sagittate, but which vary very much. Sometimes they are ovate, sometimes oblong, sometimes lanceolate, cordate or truncate at the base, and crenate-dentate, or sometimes nearly entire as to the margins. The flowers resemble those of *V. cucullata*, and are usually dark bluish purple. They may be distinguished from those of *V. cucullata* by the fact that the flower stalks are longer than the leaf stems, so that *V. sagittata* carries its blossoms well above the leafage, while the opposite is usually the case in *V. cucullata*, whose leaf stems are longer than its flower stalks. The darker colour of the leaves is another guide in discriminating between this species and the common blue violet."

V. sarmentosa.—A pretty blue-flowered violet from North-Western America and other parts. The plant is

of procumbent growth, hairy, and the leaves roundish; the peduncles or flower stems are shorter than the leaves. The flowers are blue, with a short obtuse spur, and appear in May and June; height four inches.

V. striata (Striped Violet).—This is not a happy name, as several violets have flowers more or less striped, but it is a species that cannot be well confused with any others. The plant is about nine inches high, with branched stems and minutely notched leaves, and the flowers are whitish with purple veins. It is a native of woods from Pennsylvania to Carolina, and flowers in midsummer.

V. suavis (Sweet Violet).—A dainty violet from the Caucasus; about six inches high only, and of creeping growth, producing long stolons that root freely. The leaves are kidney-shaped and pubescent, and the flowers pale blue, and whitish at the base. It is very fragrant, and much appreciated from March to May.

V. rotundifolia.—Mrs. Dandridge writes from West Virginia: "Early in May we find *V. rotundifolia*, the round-leaved violet, a species which is a true mountain lover, climbing to a considerable height, and clinging to the face of rocky cliffs and precipitous and inaccessible places. The slender stems, four inches in height, bear aloft the pale yellow blossoms, which are about two-thirds the size of those of *V. cucullata*, so well known in England that I use it for a standard of measurement. This little flower you see does not hide beneath its foliage in true violet fashion. On the contrary, it is the pretty, rounded, and unlobed leaves that seem to wish to

pass unnoticed. They hug the ground on their short stalks, making the plant inconspicuous when out of bloom. I follow the botany in calling the flowers of this violet yellow. The form of it that we have naturalised here has cream-coloured blossoms. The foliage is a delicate light green."

V. sylvestris (Wood Violet).—A British species with a close, compact root stalk and broadly ovate heart-shaped leaves. The flowers are bluish or purplish lilac, and the plant smooth. There are several well-marked forms. The flowering time is from April to June; height five inches.

V. scabriuscula (the smooth yellow Violet).—Mrs. Dandridge, writing from Virginia, says: "This has lovely blossoms of a distinct lemon yellow, very prettily veined with dark maroon, almost black. This is now, April 22, in bloom on a bank at Rose Brake. It has sometimes been considered a variety of *V. pubescens*, from which, however, it differs very much in shape and size of leaves and in general appearance. It is smooth, or only slightly pubescent, and is a tall-growing species, sometimes fifteen inches in height. The heart-shaped leaves are rather coarsely toothed, and of a medium shade of green. It is usually found in marshy places and in wet woods, but is sometimes met with at an elevation of 4000 feet."

V. tenella.—"In bloom in my wild garden," writes Mrs. Dandridge, "is a tiny little wild pansy, which seems to be a variety of *V. tenella*, our field pansy, to judge from its foliage, which is very pansy like, with rounded upper leaves, the lower oval and all

crenate dentate, the stipules foliaceous, laciniate, or lyrate pinnatifid. The little blossoms are about one-third of an inch broad, the two upper petals faintly stained with lilac, the others white, veined with dark purple. This is abundant on dry clay banks, where it spreads about happily in the hot sunshine. I have always found it in the same faint colouring, though our field pansy, as described in books, is said to have yellowish petals spotted with purple, a form with which I am not familiar."

V. tricolor (Heart's-ease).—Probably no more interesting violet exists than *V. tricolor*. It is the parent of a remarkable race, varied in growth and flower character and easily grown, so much so that the quaint heart's-ease of the cottage garden is as familiar as the cabbage rose or the honeysuckle peeping into the diamond-paned window. If so much has been accomplished with *V. tricolor*, surely the hybridist should turn his attention to other species which might create flowers of beautiful colouring and prove the foundation of good garden plants. This species is variable not only in size but also in colour, ranging from a tiny flower to one nearly one inch and a half across. It is a native of Europe and North America, and is abundant in Britain. In the "English Flower Garden" occurs the following note about *V. tricolor*: "The pansy is usually classed under the head of *V. tricolor*, though it is probably descended from *V. altaica*—a species to which a good many pansies seem nearly allied. But the pansies are so numerous, so varied, and withal so distinct from any

wild species of violet, that little can be traced to their origin. Of one thing we may be certain: the parents of this precious race were the mountaineers. Only alpines could give birth to such rich and brilliant colour and such noble amplitude of bloom. Its season never ends; it often blooms cheerfully enough at Christmas, and is sheeted with gold and purple when the hawthorn is white with blossoms. Such a flower must not be ignored in our rock garden, even though it thrives in almost any soil and position. It may be treated as an annual, a biennial, or a perennial, according to climate, position, and soil. One of the commonest weeds in Scotland, the wild *V. lutea* may be grown in the south of England, if sheltered from the mid-day sun. It thrives capitally with a north, or, better still, a north-east exposure, if sheltered by tall trees or buildings, so that it may get the cool sun of the early morning only."

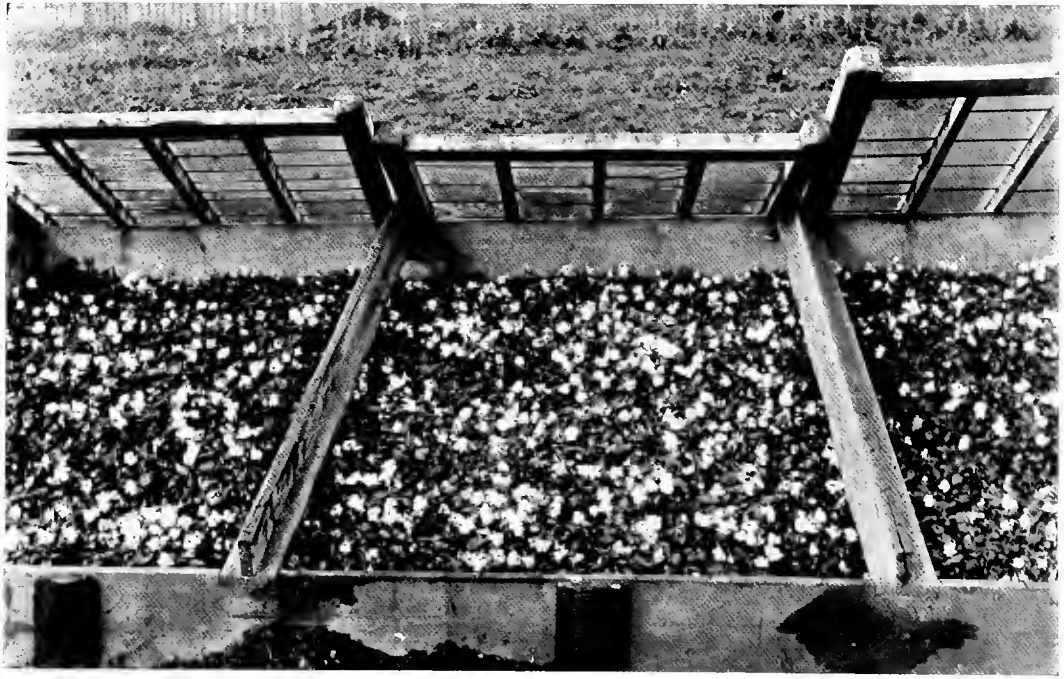
V. villosa.—Mrs. Dandridge writes from Virginia: "The grove at Rose Brake is, in some places, colonised by stretches of a pretty lilac-blue violet, which is now (April 29) just beginning to bloom. This is *V. villosa*, the Southern Wood Violet of the botanies. It spreads abundantly under the trees where grass is sparse, and flowers so profusely that it is difficult to avoid crushing the pretty blossoms beneath the feet in many parts of the grove when we are taking our morning survey of our little kingdom of flowers. When the leaves of this violet are first discernible early in spring they are a dull plum colour, and hug the ground as if they were afraid to trust themselves an inch above

the surface. As the season advances they become bolder, the leaf stems lengthen a little, and the colour changes to dark green. The flowers assume various tints and shadings of almost pure blue, true violet, and mauve. They are about two-thirds the size of those of *V. cucullata.*"

V. Zoysii.—A violet of small growth from the Alps of Carinthia and Carniola. The plant is allied to *V. calcarata*, but may be known by the absence of lobes to the stipules, and is generally smaller, quite smooth, and green, not glaucous. The flowers are yellow, rather large, and with dark or nearly black lines on the lower part. For its size it is a showy plant, quite hardy, and flowers from April to June; height three inches or four inches.

In the foregoing descriptions of a few of the most beautiful of the wild violets we have mentioned that many of them are grown by Mrs. Dandridge, an American lover of flowers, whose affection for this pretty race is shown by the collection grown at her home, Rose Brake, in West Virginia, from whence have come several of the species recorded in this chapter. The following words of Mrs. Dandridge remind us of the wild white violets at Huntercombe: "All of these violets (American) are pretty and interesting in a large collection. Here we use some of them to naturalise under the trees and among the rocks of the grove. We do not cultivate any of them in garden beds or borders, but like to see the ground carpeted with them here and there in the wilder parts of the place. None that we have tried, except *V.*

pedata, has been found very hard to establish. Besides these there is what we call Violet Hollow, a rare form of *V. ovata*, which is a species of violet not often seen in this neighbourhood. The form of it that my eldest daughter found when on a visit to some friends who live ten miles from here grew on a shady and dry bank at the edge of a wood of pine trees. We have established it here, and prize it for the unusual colouring of its flowers, which have slender petals of pinkish mauve, unlike those of any other violet known to me. The leaves of this variety of *V. ovata* are not over an inch in length, and are oval, with cordate base. In the type the blades are sometimes three and a half inches in length."



THE DOUBLE WHITE VIOLET (Comte de Brazza) IN MR. HEATH'S NURSERY AT KINGSKERSWELL.

CHAPTER VI

SWEET VIOLETS

"VIOLETS, sweet violets," is the cry of the flower-girl in crowded cities; flowers filled with a fragrance that never cloys and dyed with deepest purple, for the violet of the city streets is the finer form of the wilding that scents the winds of early spring and lies hidden "midst woods obscure and native glooms." An industry of no small importance has arisen in violet culture, and the beautiful varieties of late years have increased the desire of the public to possess the flowers whenever it is possible to produce them, hence the popularity of the flowers in winter. There are two distinct groups, the single and the double, and in almost every garden an attempt is made to grow a few clumps in a frame, perhaps of the deliciously scented Marie Louise or the popular De Parme and the Neapolitan. Violets, of course, can be grown with success in the open without a frame or covering of any kind, except near large towns, where they are a complete failure, smoke and fog quickly destroying, not the flowers only, but also the leaves.

VIOLETS IN THE GARDEN

One sunny October the writer, attracted by the sweet odour of violets at Munstead, sought the spot from whence the perfume came, and the variety was

the Czar, which is described on p. 140 of "Wood and Garden." Information from so sound a gardener as Miss Jekyll is worth reproducing. "Czar violets are giving their fine and fragrant flowers on stalks nine inches long. To have them at their best they must be carefully cultivated and liberally enriched. No plants answer better to good treatment, or spoil more quickly by neglect. A miserable sight is a forgotten violet-bed where they have run together into a tight mat, giving only few and poor flowers. I have seen the owner of such a bed stand over it and blame the plants, when he should have laid the lash on his own shoulders. Violets must be replanted every year. When the last rush of bloom in March is over the plants are pulled to pieces, and strong single crowns, from the outer edges of the clumps or from late runners, are replanted in good, well-manured soil, in such a place as will be somewhat shaded from summer sun. There should be eighteen inches between each plant, and as they make their growth, all runners should be cut off until August. They are encouraged by liberal doses of liquid manure from time to time, and watered in case of drought; and the heart of the gardener is warmed and gratified when friends, seeing them at midsummer, say (as has more than once happened), 'What a nice batch of young hollyhocks.'"

Soil

Violets are not in the least particular about soil, and one of England's best gardeners told the writer that

soil "which will produce good vegetables will be found equally suitable for violets." In preparing the bed or border to receive the plants it is a mistake to fill the soil with rank manure, as this leads to much leaf growth but few flowers, and these puny and colourless. Those who have a light hungry soil to treat might certainly improve it by digging in thoroughly decayed cow manure. This, while feeding the roots, would tend to keep the ground cool and moist during summer, and it is these conditions that violets enjoy. The violet does not grow naturally in a place where rank manure prevails; the plants rather require shade and moisture, and a soil rich in humus, viz., the accumulation of decayed leaves for many years. A free addition of leaf-mould is an advantage, especially to heavy soils that are inclined to bake and then crack under the influence of the sun. Decayed leaves in the ground would prevent this, while the roots would revel in what is naturally their chief requirements.

Some are so placed that they find it difficult to secure either cow manure or leaf-mould, but the violet is not particular, thriving quite as well when the bed is dressed with what we may term a mixed compost. The ordinary rubbish heap contains more valuable plant food than many imagine, especially after all the nondescript material has gone through a process of decay, the germinating power of the seed of weeds destroyed, and the whole turned and well mixed. A good heap of this compost may be used with advantage for most crops, and none would

succeed better than violets. Of other suitable dressing, mention might be made of spent mushroom manure, or the remains of an old hotbed. Lime, wood ashes, or fresh horse droppings should be avoided, as these are not moisture-holding agencies, therefore they are not suitable for the plants under notice. Whatever dressing is used should be dug into the ground deeply some time before the plants are put out.

Position of Beds

In summer, while the plants are making their growth, a shady spot is the best, or partially so, as the foliage, being so liable to red spider, is more likely to become infested in a hot dry position than if the plants are grown in a cool and shady one. Choose north or east borders, or the shady side of a hedge between fruit trees and bushes, or any position where the plants will receive shade during summer. In such places, too, the plants often produce an abundance of flowers in autumn, and give a wealth of bloom in spring, but to maintain a continuous supply throughout the winter the plants must be lifted in September and planted in the warmest and most sunny spot in the garden, such as at the foot of a south wall or in frames. Thus, while the plants require shade and moisture during summer, all the sun possible should reach them throughout the winter months.

Raising Young Plants

Our experience is that of Miss Jekyll's: violets should be propagated yearly. It is natural for the plants to increase rapidly, the same as the strawberry, by means of runners. Allow strawberry plants to grow at will and the beds the second year would be one mass of crowded foliage, as the runners spread quickly, but there is little or no fruit. So it is with violets, and instead of the beds being a tangled mass of side shoots, each plant should be grown separately and quite a foot or more apart. Then by nipping off the runners during summer strong individual crowns or clumps are formed, which not only produce fine flowers abundantly, and on long stems, but are more valuable for cutting. A limited number of the plants, however, should be reserved for stock, allowing these to form runners, which become rooted in the ground. The desired number should be severed from the parent plants with a lot of roots attached and transplanted in properly prepared beds. If these are to flower in the open, plant fifteen inches apart each way. Water and syringe frequently if the weather is dry after planting, keep the soil hoed, and then they will soon become established. Much depends upon circumstances, but one good gardener recommends that new beds be made in September for the following reasons, but it is a matter of personal experience. In some gardens violets are over before March is out, but in others they may be in full bloom.

This gardener gives the following reasons for making new beds in autumn :—

First, the plants are more easily and quickly established in September than is possible, say, in March, when there are often trying winds and a bright sun. Then, again, the plants should be in full flower in March, and one is reluctant to disturb them for increasing the stock, while when propagation is delayed until after the flowering period the season is too far advanced and the weather generally too hot for the divisions or off-sets to make progress, and they either remain stunted during summer, or, what is worse, many may fail to grow at all. If it is necessary to transplant the autumn struck plants in spring there will be no risk, as each can be lifted with a good ball of earth, and will begin to grow at once in the new quarters. Such young stock would probably show flower-buds, but these should be pinched out, as the established beds would furnish the supply. If after planting a slight mulch of decayed manure could be spread about the plants so much the better, as subsequent rains would carry the manurial properties down to the roots, and the residue on the surface would help to keep the ground cool and moist during a hot and dry summer. During this period encourage leaf growth free from red spider, keep the runners picked off, and the ground between the plants free from weeds. Treated in this way the plants would not fail to give a wealth of bloom in due season. There are two seasons, therefore, for propagating—spring and autumn.

Varieties for the Open

The most suitable are undoubtedly the single ones, although the double-flowered Marie Louise and Lady Hume Campbell might be included. Of the single varieties, *Princess of Wales* and *California* should be made special note of. Both grow strongly, and should be allowed plenty of space for their large leaves to develop. The flowers are also very large and borne on long stems, and when gathered they can be used with greater taste than is generally seen in the arrangement of cut violets. *Victoria Regina* is an old favourite, and having these three one need not seek further in forming a collection. There are, of course, the wild violets, but in this selection we are thinking of the garden varieties only.

Double-Violets in Frames

Mr. Owen Thomas, writing in *The Garden* of September 13, 1902, p. 176, says : "One essential to the growth of the violet is pure air. In the absence of this it is useless to attempt its cultivation. Those living in or near great cities and towns know this only too well, for however much they would like to grow their own violets, and how hard they may try, the modest little flower consistently refuses to grow except in the pure air of the country. I have not come across a single instance of successful violet culture in the immediate suburbs of the great city."

This should be convincing to those who attempt its growth in the suburbs of great cities. Even at

Syon House, Middlesex, Mr. Wythes finds that it is impossible to grow violets, and many other opinions could be quoted. Violets are not grown in frames throughout the year. Sometimes a temporary wooden frame is placed over the bed in which they are growing; but, at the risk of repeating advice already given, we may say that the best position for growing the plants entirely in the open is under a wall or fence facing north-east.

The Start

Those intending to grow violets should begin in April, when the plants have done flowering, or in autumn, whichever season is considered the most suitable; but in spring the thoughts of amateur gardeners turn towards giving practical expression to their desires. As previously mentioned, the first thing will be to take up the old plants, shake the soil away, and pull them into pieces. One plant will make half-a-dozen strong little tufts, which must have a few roots and healthy leaves. Pot these pieces into three-inch pots filled with loam and leaf-mould in equal proportions, and put in drainage, or the tufts may be planted in the garden. Much depends upon whether violets are happy in the district. In planting out in stiff soil add some road scrapings or river sand. The distance apart at which the double violet should be planted is sixteen inches in the row, and the same distance between the rows. Before the plants are turned out of the pots ready

THE CZAR VIOLET
(Nat. Size).

VIOLET ADMIRAL AVELLAN.

for planting they should again be carefully examined, in order to be sure that red spider is not present, and if the pest is suspected let all the plants be dipped in the emulsion as recommended in the paragraph upon insect pests. In planting, select the strongest plants to go by themselves, and the weaker ones to plant by themselves at a less distance apart (fifteen inches will suit them). Let them be planted deep enough to cover the whole surface of the ball, when transplanted from pots, about half an inch, and let the soil be pressed firmly round them.

The only pest that may be considered formidable is red spider, and at the time of propagation in spring, when the young plants are detached from the parent clumps, they must be very closely examined to ascertain whether this enemy has established itself upon the leaves. It is needful, if the slightest trace of red spider is discovered, to dip the young plants in the following mixture before they are either potted or put out. The emulsion should consist of one wineglassful of paraffin to a gallon of water, adding a quarter of a pound of soft soap and the same of flowers of sulphur. These ingredients should be mixed to a paste in a mortar first and the gallon of water added afterwards. As soon as the plants are dry pot them in small pots and place them close together in a cold frame. Syringe the young plants four or five times a day and shade from strong sunshine. After they have been potted two or three days well water them, and under this treatment—shade and moisture—an abundance of fresh leaves and roots will result. When the

violets are well established less shade is required and admit air freely. Towards the middle or end of May the plants will be well rooted and of sufficient size to go into their summer quarters.

Summer Management

The question of soil has been already alluded to, but the summer management of the plant upon which so much depends must not be forgotten. As this little book is written for beginners, minute details are needful to prevent failure. Summer management consists in timely attention to watering, syringing, hoeing, mulching, and removal of runners. They should receive a good soaking as soon as they are planted. This will suffice for a week or two ; but the young plants should receive a spray from the syringe at least three times a day when the weather is dry and warm, namely, in the morning about eight, in the afternoon about three, and in the evening between six and seven. The hoe should be plied as often as convenient, not only to keep down weeds, but also to sweeten the soil, and thus promote healthy growth in the shortest time. Always remove the runners, for when these are allowed to grow they exhaust the plants, and prevent that full development of the crown upon which a rich harvest of bloom entirely depends. In the case of varieties it is desired to increase, the runners may be preserved and planted close together in a shady position, where they will soon root and form useful plants for stock another year at planting out time.

As soon as the violets are fairly well established, spread a layer of short manure round their roots; this forms a mulch to prevent the plants drying up too quickly, and also stimulates the roots by the ammonia washed down from the manure by the action of rain. If possible syringing should be done every evening throughout the summer; this not only encourages growth, but keeps red spider at bay, if this should unfortunately attack the plants during their season of growth in summer. The best remedy to apply will be to syringe the plants thoroughly with the emulsion recommended in the paragraph about insect enemies, reducing its strength by one-half. Whilst the plants are growing freely they should be given a moderate application of weak liquid manure from the stable-yard every ten days or a fortnight. If all these details of culture have been well attended to, by the end of August the grower ought to have fine sturdy plants ten inches across and with strong and well-developed crowns.

Violets during Winter

It frequently happens that the English winter is so kind, especially in the southern counties, that the double varieties even may be trusted in the open garden, but usually cold frames or pits are essential. Many amateurs grow melons or cucumbers in summer, and it is in these that the violets will flower during winter, the exhausted soil being of the right kind for the plants. The crowns of the plants should be within six inches of the glass, so that it will be neces-

sary to make the bed to the required height. Before the violets are lifted from the border soak them well with water the day before, and take them up with a ball of soil as large as the plant itself. When planting put them about one foot apart, and water immediately. Place the lights on, give plenty of air, and shade for a few days to prevent the leaves flagging. It must not be forgotten that the frames should have a sharp pitch and face south. Snow and rain then pass off quickly, and there is less fear of the foliage suffering from damp and mildew. In a week or ten days they will have recovered from the effects of removal, the shade must be discontinued, and as long as the weather continues mild and warm, the lights should be left off the frames and the plants exposed to the weather day and night. The violet, it must be remembered, is *quite hardy*, and protection alone is necessary. Early in October frost may be expected, when the lights must be placed over the plants at night, leaving plenty of air on, unless severe frost is anticipated, but they should be exposed whenever possible. Even in wet weather tilt the lights well at the back, guarding against harsh winds, heavy rains, and frosts. During hard winter weather cover the frames with double mats to keep out frost, and pack leaves, bracken, straw, or stable litter round the sides. The plants are more likely to succeed in such quarters than in heated brick pits. These are the simple lines upon which to work, and by getting the plants placed in the frames in the first or second week in September, flowers may be expected in October. When several varieties are

VIOLET PRINCESS OF WALES (Reduced about one half).

DOUBLE VIOLET MARIE LOUISE (Reduced about one half).

planted a succession of bloom is maintained until the end of April.

Double Violets

Of these the famous *Marie Louise* is the most welcome. Its double pale-like flowers are filled with sweetest perfume, and no violet, we believe, is more largely grown in trade and private gardens. *Mrs. J. J. Astor* is a very distinct and beautiful variety, sweet, and in colour a mixture of violet, heliotrope, and pink. *Bertha Barron*, a very dark purple, is one of the best. *De Parme*, with flowers of pale blue colouring, is exceptionally sweet. *Neapolitan* is an old and well-known favourite, not of very strong growth, and therefore is difficult to grow well. *Blue and White* is the name of a variety of delicate colour and strong fragrance; and of white violets, *Comte de Brazza* is the only one worth growing.

During October and November flowers should appear in plenty, but there will be fewer in December and January, as the plants are then more or less dormant. As soon as February comes, however (if they have wintered well), flowers appear more or less abundantly until well into April, when the season is over, and the plants are ready to be again propagated. This ends the career of the double violet for one year.

Single Violets

The single violet, as may be well supposed, is hardier than the double. It is grown in some places for market,

and we know how the little wilding spreads in field and wayside bank. It should be propagated at the same time and in the same way as the double violet; but it is quite unnecessary to pot the young plants after they have been divided and taken from the parent, a practice some advocate in growing double varieties. The small divisions must be strong and with plenty of roots, and are most happy in the same aspect as recommended for the double varieties, *i.e.* north-east with partial shade, and the border should be enriched with a liberal dressing of rich, short manure, as well as an addition of leaf-soil, lime, and road scrapings. The ground must be dug in the ordinary way but bastard-trenched, that is, the top spit turned over, and the bottom spit also, and left at the bottom. The single violets are of much stronger growth than the double, and therefore they must be planted wider apart, three feet each way being none too much for such varieties as *Princess of Wales*, *California*, *La France*, and others of this class. They attain such a size by the autumn that they more than meet even at this distance, and when lifted in the autumn for planting in pits they have a ball of earth attached as large and heavy as a man can carry. The young divisions may be at once dibbled into the prepared border in the same way that cabbages are planted. Once planted in their summer quarters the same routine of culture should be followed as recommended for the double variety, and if the best is to be made of them they should be replanted into cold pits in the early autumn, the same as advised in the case of the

VIOLET LA FRANCE (Flowers over an inch across).

others. Should this not be possible, single violets will give a good return out of doors during the autumn and winter, and in spring, towards the end of March and through April, they flower abundantly; they are perfectly hardy.

The following conditions should be observed in growing violets if the best results are desired. Pure air, partial shade, well-drained and well-cultivated soil, not too heavy, immunity from red spider, the provision of divisions in spring, with a good supply of roots and healthy foliage. More important perhaps than all is a good ball of soil round the roots when the plants are transferred to the pits in autumn.

Varieties.—The most beautiful single violet is undoubtedly that named *Princess of Wales*, which was introduced a few years ago to English gardens from Hyères. The flower is large, of a lovely blue colouring, powerfully and sweetly scented, and poised upon a stem often twelve inches in length. It is very robust, and if there is space for only one violet in the garden, Princess of Wales should be chosen. It is almost pansy-like in size and appearance. Another variety that is of equal merit perhaps to Princess of Wales is *La France*, which has a deliciously fragrant flower of deep blue colouring. One well-known violet grower writes: "This is, in many respects, the best single blue violet yet introduced, and should be grown in every garden." *California* has fallen on evil days. At one time every violet grower grew California, which was, if we are not mistaken, the first of the large-flowered pansy-like race. It reminds one of

the two preceding varieties, but as it is inferior to them in every respect no reason exists for growing it. *Princess Beatrice* is like the foregoing, but dwarfer, and later in flowering. *Admiral Avellan* is a violet for all gardens. The colour is warm purple with a reddish shade; it is one of the single varieties that may be well grown in a frame to give in their fulness those purple shades which are so charming a feature of the flower. *Princess de Sumonte* is an Italian violet, very fragrant and beautiful, the flowers white with flakes of blue. *White Czar* is the only single violet worth growing, except the little wilding referred to elsewhere.

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THE END