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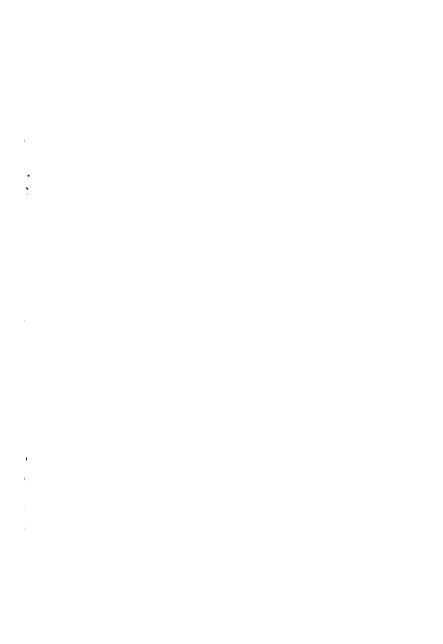
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THE

FLORIST'S GUIDE;

CONTAI NI NG

PRACTICAL DIRECTIONS

FOR THE CULTIVATION OF

ANNUAL, BIENNIAL, AND PERENNIAL

PLOVERING PLANTS.

OF DIFFERENT CLASSES.

HERBACEOUS AND SHRUBBY,

BULBOUS, FIBROUS, AND TUBEROUS-ROOTED;

INCLUDING

THE DOUBLE DAHLIA.

GREEN-HOUSE PLANTS, &c.

BY T. BRIDGEMAN, GARDENER, SEEDSMAN AND FLORIST, NEW-YORK.

New-Xork:

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1835,

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PREFACE.

Perhaps there is no subject on which the mind of man can ruminate, that is better calculated to afford substantial intellectual pleasure and satisfaction, than the study of nature; especially if we view it from the consideration, that as man is subservient to God, so are all instinctive beings, as well as all the productions of the earth, subservient to, and designed for, the use of man.

Man being thus dignified, and endowed with understanding, reason, and moral freedom, is exalted far above all other creatures of the earth. How important, then, that he should maintain his station in society as becomes a rational and intelligent being, instead of sinking himself, as too many do, below the meanest of the mean, by dissipation and vice.

It is a fact which cannot be controverted, that the want of mental and manual employment, often proves an incentive to vice, which infallibly will produce misery; and, so surely as the earth will bring forth noxious weeds when left uncultivated, so surely will one vice beget others; which, if not eradicated, will multiply to an alarming extent, until its victims become a pest to civil society, and a disgrace to mankind.

Now as happiness is preferable to misery, virtue to vice, knowledge to ignorance, and order to confusion, how important is it that those who make pretensions to rationality, should employ their leisure hours in a manner calculated to insure the greatest amount of that which is intrinsically valuable.

What subject can be better calculated to promote such a desideratum than the subject of cultivation when viewed in all its bearings? But as we are about treating of Flowers, I would confine my ideas, as nearly as possible, to the object in view; trusting, that while the hand is employed in cultivating the transient beauties of the Garden, that the attentive mind will feast and fare daintily on the study of nature, and in the end enrich itself with solid and lasting good. As an excitement to such study, the following thoughts are submitted.

Nature in itself is beautiful, enchantingly beautiful, but it is the province of man to adorn it; to collect

about him the scattered and single beauties, and to see, and feel, and enjoy them. Nature is fruitful, inexhaustibly fruitful; but man must improve her fertility, guide it, and give it its most generally useful direction. Nature is full of life, but man is capable of diversifying, elevating, and ennobling this life; and he is amply rewarded for his labour.

"Thine is a glorious volume, Nature! Each Line, leaf, and page, are filled with living lore; Wisdom more pure than sage could ever teach, And all philosophy's divinest stere; Rich lessons rise where'er thy tracks are trod—The book of Nature is the book of God."

But I had almost forgotten that this treatise on the cultivation of the Beauties of Nature, is chiefly designed for the use of the softer sex. I shall not content myself by merely offering an apology for such digression, but will promise, in future, to bear them in mind throughout my studies, not doubting but my humble efforts to amuse and instruct them, will be duly appreciated; which, to an author, is a source of inexpressible satisfaction.

Having thus introduced myself to my fair readers, I shall proceed to treat of the cultivation of all the various kinds of flowering plants; and I flatter myself, that if I should, by implanting a taste for rural subjects, succeed in making them good CULTIVA-

TORS; in the fullest sense of the word, that they will be immeasurably happy in "The Matrimonial Garden," should they ever enter therein; and in like proportion, as they advance in the work of cultivation, will they excel in virtue; which a wise man once declared was to a woman of immense value, "far above rubies," yea, even equal to a glittering; "crown." That we may all attain our object, is the sincere wish of

THE AUTHOR.

Bowery Road, February 14, 1835.

^{*} This refers to an article entitled "The Matrimonial Garden," which will be found at the end of the book.

IF IL O W IB IR S. a.



REFLECTIONS.

Whate'er has beauty, worth, or power,
Or grace, or lustre, is a Flower;
Wit is a Flower; and bards prepare
The Flowers of Fancy for the fair;
While Beauty's flowery fetters bind
In sweet captivity the mind.
Deep in the bosom dwells a Flower,
Nor time shall taint, nor death devour;
A Flower that no rude season fears,
And VIRTUE is the fruit it bears;
Which join'd to PATIESCE, PEACE, and LOVE,
Will smooth the path to realms above.



OBSERVATIONS

ON THE

PLOWER GARDEN.

Previous to forming a Flower Garden, the ground should be made sellow and rah hy hong well pulverised, manured, and prepared in every respect as if intended for a Kitchen Garden. A Flower Garden should be protected from cold cutting winds by close fences, or plantations of shrubs, forming a close and compact hedge, which should be neatly trimmed every year. Generally speaking, a Flower Garden should not be upon a large scale; the beds or borders should in no part of them be broader than the cultivater can reach to, without treading on them: the shape and number of the beds must be determined by the size of the ground, and the taste of the person laying out the garden. Much of the beauty of a pleasure garden depends on the manner in which it is laid out; a great variety of figures may be indulged in for the Flower Some choose oval or circular forms, others squares, triangles, hearts, diamonds, &c., and intersected winding gravel walks.

Neatness should be the prevailing characteristic of a Flower Garden, and it should be so situated as to form an ornamental appendage to the house; and where circumstances will admit, placed before windows exposed to a southern or south-eastern aspect. principle on which it is laid out, ought to be that of exhibiting a variety of colour and form, so blended as to present one beautiful whole. In a small Flower Garden, viewed from the windows of a house, this effect is best produced by beds, or borders formed on the side of each other, and parallel to the windows from whence they are seen, as by that position the colours show themselves to the best advantage. In a retired part of the garden-a rustic seat may be formed, over and around which honey-suckles and other sweet and ornamental creepers and combers may be trained on trellises, so as to afford a pleasant retirement.

Although the greatest display is produced by a general Flower Garden, that is, by cultivating such a variety of sorts in one bed or border, as may nearly insure a constant blooming, yet bulbous plants, while essential to the perfection of the Flower Garden, lose something of their peculiar beauty when not cultivated by themselves. The extensive variety of bulbous roots furnish means for the formation of a garden, the beauty of which arising from an intermixture of every variety of form and colour, would well repay the trouble of cultivation, particularly as by a judicious selection and management, a succession of bloom may be kept up for some length of time. As, however, bulbous flowers lose their richest times about the time that

annuals begin to display their beauty, there can be no well-founded objection to the latter being transplanted into the bulbous beds, so that the opening blossoms of the annuals may fill the place of those just withered, and continue to supply the flower beds with all the gaiety and splendour of the floral kingdom.

But the taste of the florist will be exercised to little purpose, in his selection of flowers, if he does not pay strict attention to the general state of his garden. If there are lawns or grass walks, they should be frequently trimmed, and more frequently mowed and rolled, to prevent the grass from interfering with the flower beds, and to give the whole a neat regular carpet-like appearance. If there are gravel walks, they should be frequently cleaned, replenished with fresh gravel, and rolled. Box and other edgings should be kept clear of weeds, and neatly trimmed every spring. Decayed plants should be removed, and replaced with vigorous ones from the nursery bed. Tall-flowering plants must be supported by neat poles or rods; and all dead stalks and leaves from decayed flowers must be frequently removed.

In the summer season, all kinds of insects must be timely destroyed, and in the evenings of warm days, the flowers will require frequent watering.

A CATALOGUE OF ANNUAL FLOWER SEEDS.

GRAINES DE FLEURES ANNUELLES.

Alkekengi, or Kite Flower, Atropa physaloides. Alyssum Sweet. Alyssum maritium. Amaranthus, three-coloured, Amaranthus tricolor. Amethyst, blue, Amethysica cerulea. Balsamines of various co-Impatiens balsamina. lours, Bladder ketmia. Hibiscus trionum. Blue bottle, great, Centaurea cyanus major. Blue bottle, small, cyanus minor. Browallia elata. Browallia (blue and white,) Cacalia coccinea. Cacalia, scarlet. Candytuft, white and purple, Iberis alba and purpurea. Do. sweet scented. odorata. Catch fly, Silene armeria. Centaurea, great American, Centaurea Americana. China asters of various kinds and colours, Aster sinensis. Chinese mallow, red, Malva sinensis rubra. Chrysanthemum, white, yel-Chrysanthemum coronarium. low and tri-soloured, Cockscomb, crimson and yellow, Celoeia cristata. Convolvulue minor. Convolvulus, dwarf, Corcopsis tinctoria. Coreopsis, Golden, Cuckold's Horn, (two stami-Martynia diandria. ned.) Devil in a Bush, or love in a mist, in varieties, Nigella damaecena. Dew Plant, Messembryanthemum glabrum. * Evening Primrose, Oenothera grandiflora. Eternal flower, yellow, Xeranthemum lucidum.

annum.

Euphorbia variegata.

Do.

Euphorbia, variegated.

purple.

Feather, grass, Flos adonis, Globe Amaranthus, purple, white, and striped, Graceful, branched podolepis, Podolepis gracilis. Hawkweed, yellow, Do. red. Do. white. * Hedge Hogs,

Ice plant,

Stipa pinnata. Adonis miniata.

Gomphrena globosa. Crepisbarbala aurantia. rubra. alba.

Medicago interlexta. Mesembryanthemum chrystal. linum.

Jacobea, or Groundsell, purple and white, Job's Tears, Larkspur, broad leaved, branching and up. Do.

Senecio elegans and alba. Coix lachryma Jobi. Delphinium peregrinium.

right, Lavatera, European, Love lies bleeding, * Lupins of various colours, Malope, great flowered, Marigold, African, D٥. French. Marigold, starry, *Marvel of Peru, (or 4 o'clock) Mirabilis jalapa.

Lavatera trimestris Amaranthus melancholicus. Lapinus var. Malope grandi**flora.** Tageles erecta. patula. Calendula stellata.

consolidum.

* Mignonette, (sweet scented) Reseda odorata. Nolana, trailing, 'Oats, animated, Pansey, or Heart's Ease,

Nolana prostrata. Avena sensativa. Viola tricolor. Anagallis cerulea indiea. Glaucum luteum. Papaver somniferum. Pentapetes Phænica. Amaranthus hypochondriaeus.

Pentapetes, scarlet, Prince's feather. Sensitive plant, Strawberry Spinach, Sunflower, tall and dwarf, Sweet Sultan, purple, white, and yellow,

Poppy, officinal white,

Pempernell, blue, Poppy, horned,

> Mimosa sensitiva. Blitum capitatum. Helianthus annuus.

 Stock Ten Week, or gilliflower, various colours, Touch me not,

Centaurea, var.

Cheiranthus annuus. Noli me tangere.

Trefoil, crimson, Do. sweet scented. * Venus' looking glass, Venus' navel wort. Xeranthemum, or eternal flower, white, Ximenisia, Mexican,

Zinnia, red and yellow,

Trifolium incarnatum. odorata. Campanula speculum. Cotyledon macrophyllum.

Xeranthemum lucidum alba. Ximenisia ensaloides. Zinnia, rubra and lutea.

The following are climbing plants, and will require to be planted in situations where they can be supported by sticks or twine, without interfering with other plants.

Balloon vine, or love in a puff. Cardiospurmum. Cypress vine, Fumitory pink, Hyacinth Bean, Morning Glory, various colours, Balsam Apple and Pear, Gourd, the bottle, Do. two coloured, Do. Orange, Snake Melon. Sweet Peas of various kinds and colours.

Ipomoea coccinea. Fumaria fungosa. Dilichos, purpurea and alba. Convolvulus major. Momordica balsamina. Cucurbita lagenaria.

bicolor. aurantia. Cucumis melo anguinus.

Lathyrus odoratus.

As many city gardens are so limited as not to admit of an extensive assortment of Flowers, a select list may be made from the above catalogue to suit the taste of such as may be so situated; and amateurs, who cultivate on a larger scale, can obtain such additional sorts as may be desired at the different seed stores, under their various names.

Previous to providing annual flower seeds, the cultivator should lay out a plan of the garden, and in making allotments of ground for any particular purpose, provision should be made for a select assortment of such bulbous, tuberous, and perennial plants as may be deemed most worthy of attention, not forgetting to leave room for some of the choicest varieties of the Dahlia, the qualities of which will be described hereafter.

Another consideration is, to have suitable implements ready, so that the work can be performed in a skilful manner, and at the proper season. A spade, rake, hoe, trowel, drilling machine and pruning knife; may be deemed essentials; and in order to have the beds laid out with the edges strait and even, a garden line should be in readiness. If labels be required, they may be made of shingles, which being split into strips of about an inch wide, and sharpened at one end, will serve for marking distinct kinds, either in pots, or on the borders. In order to have the names or numbers written in legible characters, the labels should be painted on the smooth side with white lead, and then marked with black lead pencil before the paint gets dry; inscriptions made in this way will be as durable as the label itself.

The next, and perhaps the most important consideration is, to have the ground in good condition to receive the seed. In order to attain this desirable object, let some good rich compost, or very old manure be provided, and well mixed with the soil; dig it

a full spit deep, pulverising every particle. If the ground could be dug to a great depth at the clearing up of winter, and then again at the period of sowing the seed, it will be an advantage.

All kinds of annual Flower seeds may be sown in the month of April and May, on borders or beds of clean light earth; the beds should be levelled, and the seeds sown either in small patches, each kind by itself, or in drills from a quarter to half an inch deep, according to the size or nature of the seed. Lupins, Peas, &c. should be planted nearly an inch deep. Those who would have their plants to flower early, should sow the hardy kinds the last week in March, or early in April, the most tender (which are marked §) may be sown in boxes or pots of light earth at the same time. These, if exposed to the sun every day, and sheltered in cold nights, will be forwarded in growth, and be fit to transplant early in June. Those marked *. may also be sown in small pots. As these plants do not well bear transplanting, they should be turned out of the pots with the balls of earth entire, and placed in the ground where they are intended to flower; or if the seed be sown in a bed with other kinds, they should be carefully transplanted with a trowel, without disturbing their roots. The most eligible way to obtain early flowers, is to prepare a slight hot-bed for the tender kinds, and either to plunge the pots therein up to their brims, or to sow the seed in the earth in shallow drills, not more than a quarter of an inch deep. may be necessary here to observe, that in favourable seasons, flower seed in general will come up in from

one to three weeks after it is sown, except the seed of Cypress vine, which should be first partially scalded in warm water, and then sown. If some of the hardy annuals be sown in September, they will grow large enough to survive the winter by a slight covering of straw or litter; and if plants thus raised, be transplanted early in the spring, they will produce very early flowers. The following are some of the hardiest:

Alyssum sweet.
Coreopsis, in varieties,
China aster, in varieties.
Catch fly.
Chrysanthemum, in varieties.

Evening Primrose. Larkspur, in varieties. Pansey, or Heart's ease. Poppy, in varieties. Rocket Larkspur.

To prevent disappointment, I would recommend great care to be taken to keep the seed beds as clear from weeds as possible. It cannot be denied but young plants are apt to get smothered, and sometimes pulled up with weeds. To obviate this, I would suggest that the seeds be sown in shallow drills, each kind by itself, and that an account be kept of the contents of each drill in a book; also of all seeds that are sown at different times, and by being particular in the dates, you may always know when to expect your plants to come up. Those persons who may be totally unacquainted with plants, will, by this means, be enabled to identify each particular kind, and thus become familiarly acquainted with them. In order that this may be rendered plain to my readers, I adopt the following plan of entry of six kinds sown in pots, and six in the open ground:

April 20, sowed flower seeds in pots.

Pot marked A, or 1, Amaranthus tricolour.

B, or 2. Balsamines.

C, or 3, Cockscomb, crimson.

D, or 4, Egg Plant.

E, or 5, Ice Plant.

F, or 6, Mignonette.

These pots may be either marked with letters or figures on the outside, to answer with the book, or notches may be cut in wood, or other labels affixed to the pots, and entered accordingly.

April 20, sowed flower seeds in drills, as under:

No. 1, Bladder ketmia.

2, Corcopsis tinctoria.

3, Yellow Eternal flower.

4, Globe amaranthus.

5, Prince's feather.

6, Larkspur branching.

If these numbers be continued to 100, or even 1000, there can be no mistake, provided the rows are all marked according to the entry in the book; or if No. 1 be noted, plain sticks will answer afterwards, if one be stuck at each end of every row. In this case, it would be well to leave a space every ten or twenty rows, and note the number of the rows; by this means, they can be the more easily traced.

If the book be kept by any other than the Gardener, each bag or paper of seed should be marked or numbered according to the entry in the book, and given to the Gardener, with directions to sow them in the regular order.

When seeds are intended to be sown in patches, which is often done for want of an unoccupied border, the best way to perform this business is, after having pulverised the soil, to impress circular drills in the surface, with the rim of a flower pot, which may be large or small, according to fancy. By sowing seeds in such circular drills, the plants can be the more easily traced than when scattered promiscuously over the ground, and the weeds can be destroyed with less risk and trouble. Such kinds as are marked in the catalogue* may remain as sown, or if parted, they should be removed with a scoop trowel in a careful manner, in small tufts, and this business, as well as transplanting in general, should be always done immediately preceding, or after rain, and in cloudy weather. Herbaceous plants will not flourish, or flower well, if grown in clusters; they should, therefore, be transplanted into the regular beds, at all favourable opportunities, after they get to about an inch in length; and as there is always a risk of some plants not taking root, it is safest to plant a few of each sort every time, taking care to diversify the colours, and also to leave a few plants in the seed beds for the purpose of substituting in the room of such plants whose period of flowering may be over; as is the case generally with early perennial plants and bulbs, at about the season that the last of the annuals are fit to remove.

The transplanting may be done with a small trowel, or a neat dibble made for the purpose.

BIENNIAL AND PERENNIAL FLOWER SEEDS.

GRAINES DE FLEURS BISANNUELLES ET VIVACES.

Those marked | are Biennials.

Bee Larkspur, Canterbury Bells, (blue and white.) Cardinal flower, scarlet, Cassia, Maryland, Carnation, pink, Chinese, imperial pink, Clove, Ġo. Colutea, scarlet, Coreopsis, elegant, Coreopsis Lanceolatum, Coronet, flowered Lychniss, || Clary, purple topped, Crimson Bergumot, Columbine, double, Dragon's head, European globe flower, Eupstorium, blue, Fox-glove, purple, D٥. white. Fraxinella, red. Gentian, purple, Gentian, Porcelain flowered, Gilliflower, many sorts, Globe Thistle, Hollyhock, black Antwerp, Do. China of sorts, Do. Englih do. Honesty, or Satin Flower, Ivy Leaved Toud Flax,

Adonis, spring flowering.

Alpine Columbine,

Alyssum, yellow, Asiatic globe flower, Adonis vernalis. Aquilegia alpina. Alyssum saxatile. Trollius Asiaticus. Delphinum elatum.

Campanula medium, Lobelia Cardinalis. Cassia Marylandica. Dianthus caryophyllus. Chinensis. hortensis. Sutherlandia frutescens. Coreopsis grande-flora. Coreopsia lanceolatum. Lychnis coronala. Salvia sclara. Monarda Kalmiana. Aquilegia vulgaris. Dracocephalum. Trollius Europaeus. Eupatorium cerulea. Digitalis purpurea. alba. Dictamnus rubra,

Dictamnus rubra.
Gentiana saponaria.
Gentiana adscendens.
Cheirianthus incanus.
Echinops sphorocephalus.
Althea fl. nigra.
Althea Chinensis, var.
Anglica, var.
Lunaria biennis.

Linaria cymbolario.

Jacob's Ladder, Liatris, long spiked. Lupin Perennial, Lychnis, Dwarf Mountain, Do. scarlet, London Pride, or Maiden Pink, Dianthus deltoides. Monks'-hood, Monkey flower, blue, Monkey flower, dark spotted. Mimulus rivalaris. Phlox, or French Lilac, Pink, pheasant-eyed, Perennial Campanula, Perennial Larkspur, Purple Perennial Flax, Pyramidal Bell Flower, 'Queen of the Meadows, Rose Campion, in varieties, Rudbeckia, yellow & purple, Sophora, white and blue, Sun Flower, perennial, many flowering,

Sweet Scabious, Sweet Rocket, Sweet William, Sweet Chili Marigold, Valerian, Garden, Valerian, Greek, Verbena, purple, Veronica, variegated, Veronica, tall blue, Wall Flower, bloody.

Polemonium ceruleum. Liatris spicata. Lupin**us** perennis. Lychnis A/pina. Chalcedonica. Aconitum napellus. Mimulus ringens. Phlox, many species. $oldsymbol{D}$ ianthus plumarius. Cumpanula persicafolia. De'phinium grandiflorum. Linum perenne. Campanula pyramidalis. Spiruća.ulmaria. Agrostemma coronaria. Rudbeckia luten and purpures. Sophora alba and cerulea.

Heliant**hus** a**l**tisv**imus.** Scabiosa atr purpurca. **Hesperis ma**tronalis. Dianthus barbatus. Tageles lucida. Valeriana rubra. Polemonium cerul**eum.** Verbena purpurea. Veronica var iegata. Veronica elata cerulea. Cheiranthus cheiri.

(CLIMBING PLANTS.)

Purple Glycine, Scarlet Trumpet Flower, Sweet Virgin's Bower, Traveller's Joy, Virginian Virgin's Bower,

Everlasting Peas, pink & white Lathyrus latifolius, rosa & alba. Glycine apros. Bignonia radicans. Clematis flammula. vita ba.

Virginiana.

Biennial and perennial flower seeds may be sown inthe month of April, in shallow drills. If this business be performed in the manner recommended for annuals, they can be easily distinguished from each other; and as these plants do not flower the first year, they may be thinned out, or removed from the seed beds as soon as they are well rooted, and planted either into different parts of the flower beds, or in a nursery bed. the latter plan be adopted, they should be planted in rows a foot or more apart, and kept free from weeds by means of a small hoe, which will greatly promote their growth, and prepare them for transplanting into the ground, (where they are intended to flower,) either in the autumn or early in the ensuing spring. It may be remarked that biennials are raised principally from seed sown every year. They seldom survive the second winter to flower in perfection, unless they are renewed by cutting of top shoots, young flower stalks, or casual root-offsets, layers, &c. It will be unnecessary to take this trouble, unless it be with any extraordinary double-flowering plants. Some of the perennials may be increased by root offsets detached from the old plants, and planted in Spring or Autumn; others by hottom suckers and shas of top shoots, layers, and pipings of young shoots, &c.

Many sorts of biennial and perennial flower seeds may be sown in September, or as soon as ripe; and if the plants get strong before the setting in of winter, some of them will flower the summer next ensuing. The following are amongst the hardiest.

Adonis Spring, flowering.
Alpine Columbine.
Alyssum, yellow.
Bee, larkspur.
Columbine, in varieties.
Coronet flowered Lychnis.
Fox-glove, in varieties.
Fraxenella.
Hollyhock, in varieties.

Lychnis, in varieties.
Larkspur, perennial.
Rose Campion, in varieties.
Rocket, in varieties.
Scabious, in varieties.
Valerian, Garden.
Valerian, Greek.
Everlasting Peas.
Virgun's Bower.

It may be necessary to state further, that there are a great variety of beautiful double-flowering perennial herbaceous plants, that will not produce seed; many of these may be obtained of the Florists, and should be introduced into the regular flower beds; the mode of increasing such, is by layers, cuttings, offsets, &c. detached from the old plants. As the earth within the flower beds will need to be fresh dug and replenished with good compost or manure, once in two or three years, it may be necessary to take up all the perennial plants at such times. Such roots as may be overgrown, should be deprived of their surplus offsets, and may be planted in a nursery bed, or returned with the parent, plants into the regular flower beds.

In removing plants into the beds where they are intended to flower, great pains should be taken to preserve some of the earth to the roots, and the ground should be previously brought into good condition, so that they may strike freely, and produce their flowers in perfection. The plants should be so arranged that they may all be seen. The most dwarfish may be placed in front, and there in a regular gradation to the tallest behind; or the tallest may be planted along

the middle of the beds, and the others on each side, according to their varied heights and colours.

There is no part of gardening which requires so much elegance of taste and fancy, as in setting of a border or bed of intermixed flowers to advantage. In assemblage with other flowers, the different kinds of hardy bulbs may be planted in small clumps of six, seven, or eight inches in diameter, three, four, five or more roots in each, according to their size and growth, and these at suitable distances from one another. Likewise, observe to diversify the kinds and colours, so as to display, when in bloom, the greatest possible variety of shades and contrasts.

In my preliminary observations, I directed the attention of my readers to some important points respecting walks, edgings, &c .- Although box is superior to any thing else for egdings; yet in extensive gardens, dwarf plants of various kinds may be used for such purpose. Thrift is the neatest small evergreen next to box; but Violets, Pinks, Periwinkle, Pansey, ' or even Parsley, Thyme, Strawberry plants, &c. may be used for the sake of diversity. These will require frequent watering and trimming, and the Thrift, &c. should be sometimes taken up, divided at the roots, and replanted. Box edgings will also require frequent pruning and trimming; and once in from seven to ten years, the whole may be taken up, divided and replanted, and the surplus slips may be planted in a nursery bed in rows about a foot apart: these will be suitable for making edging the year following.

Flower beds should be kept free from weeds, and watered occasionally in the summer. In the autumn they should be covered with straw or light litter; this should be taken off in the spring, and the ground should be hoed and dressed in such a manner as to enliven the earth around the roots of the plants, as also to give the whole a neat appearance.

FLOWERING AND ORNAMENTAL SHRUBS.

ARBRISSEAUX D'ORNEMENT.

Shrubs are so closely connected with flowering plants, and indeed so many of them are embellished with flowers, that they may be considered as essential to the completion of an ornamental garden. They are all perennial, and are divided into two classes, deciduous and evergreen; the former lose their leaves in the winter, the latter only shed them when others are ready to supply their places. Shrubs are not only necessary to the embellishment of a flower garden, but many kinds of them are eligible for hedges to it, and may be planted at a trifling expense. These hedges should be frequently trimmed and trained, the sides cut even, and the tops sparingly clipped, so as to make them ornamental, as well as useful, and also to increase the vigour of their growth. When the hedges become open or naked at the bottom, they should be plashed down; this is tone by cutting the branches half through near the ground; they will then bend

easily, and may be interwoven with the adjoining branches. When Shrubs, Creepers, or Climbers, are planted against walls or trellises, either on account of their rarity, delicacy, or to conceal a rough fence or other unsightly object, they require different modes of training; some attach themselves naturally, as the ivy, and merely require to be occasionally guided, so as to cause a regular distribution of their shoots; others must be treated like fruit trees, trained thinly, if blossoms are the object, and rather thicker, if the intention be to show the foliage to the greatest possible advantage.

Ornamental shrubs grow from one foot to twelve or more in height; and where such are planted for ornament, the height of each plant when full grown should be considered, and also the mode of growth, that every one may be so planted as to show to advantage, observing that the tall-growing should be planted in the back borders, and those of low growth forward; but if they are required to be planted in clumps, they should be so arranged as to rise gradually from the sides to the middle, and be afterwards neatly trimmed. Shrubs require an annual pruning, at which time, cut out all irregular and superfluous branches, and head down such as require it, forming them into handsome bushes; apply stakes to such as may need support, and see that the low-growing ones do not injure each other, nor interfere with other dwarfish plants near them.

Many kinds of Shrubs may be raised from seed sown

early in the spring, but are more commonly propagated by suckers, layers, or cuttings. Like other plants, they require a good soil, which should be manured every two or three years, and some of the tender kinds should have some protection in winter. The following list, taken from an article in the New York Farmer and Horticultural Repository, furnished by Mr. Floy, contains the most of those usually planted in gardens and on lawns. These will furnish a succession of flowers from spring until fall, and may be obtained at the nursery here at moderate prices.

Amorpha fruticosa.—Indigo shrub, with handsome bunches of purple flowers in great quantities.

Amygdalus nana, Dwarf double flowering Almond; a'very beautiful dwarf shrub, about three feet high.

Aralia spinosa, or Angelica tree, about ten feet high; flowers in very large bunches, and continues a long season.

Cytisus Laburnum, or Golden chain; a most elegant shrub, with long racemes or bunches of yellow flowers, in the greatest profusion; there are two kinds, the English and the Scotch Laburnum. The Scotch is the largest, forming a pretty large shrub; the English kind is greener, more compact, and by some, thought to be the handsomest; they ought to be in every garden.

Calycanthus Floridus, Allspice or sweet-scented shrub, a native of the Southern States; the flowers

are of a very dark chocolate colour, and the fragrance very much resembles ripe strawberries, easily kept where once introduced; this shrub generally grows about five feet high in gardens.

Ceanothus Americanus, Red root, or Jersey Teatree, a plant or two in the collection, as it flowers in profusion, is worth having.

Cercis siliquastrum, or Judas tree. The flowers appear very early before the leaves come out, and make a fine appearance; as it grows rather tall, it is calculated for the back row of the shrubbery.

Colutea arborescens, or Bladder Senna, having bunches of yellow flowers, which are succeeded by seeds in a kind of bladder, calculated for the back or centre row of shrubberies.

Cratægus oxyacantha, the Hawthorn. It makes a pretty appearance planted out singly in the back or centre row; the flowers are very fragrant; it is sometimes called the Pride of May; the double white, double scarlet, and single scarlet Hawthorn, are extremely beautiful, and ought to be in every plantation. Hawthorn hedges are much used in England, where they look very handsome when kept clipped; but they do not answer so well in this country, the heat of our summers causing the leaves to fall off early, often in July; on that account they are not much used. We have several things which are better calculated for that purpose.

Cydonia Japonica, or Pyrus Japonica, a very beautiful scarlet flowering shrub, from Japan, has not been in cultivation here for many years. It is found to be very hardy, resisting our most severe frosts; it is evergreen, flowers very early, and continues a long time. A second flowering takes place in the latter part of the summer. It is every way a desirable shrub.

Daphne mazerium, one of our most early flowering shrubs, often flowering in February, and very sweet scented. It is rather tender in some situations, but will stand our ordinary winters very well in a sheltered situation.

Dirca palustris, or Leather wood, a pretty little shrub, growing very regular in shape, and has the appearance of a large tree in miniature; it is a native of our northern states, the flowers appear very early, are yellow, and come out before the leaves.

Gymnocladus canadensis, or Kentucky Coffee tree. The berries have a resemblance to coffee, and are said to be a good substitute for it; however, it is a beautiful tree, with handsome feathered leaves, and makes a fine contrast with others. It should be planted in the back or centre of the plantation, and is very herdy.

Halesia diptera, and Halesia tetraptera, two winged and four winged Silver Bell, or Snow-drop tree. They are both natives of the southern states, but are perfectly hardy here; our most severe winters do not hurt them. The former kind flowers a month later than the latter, which flowers early in May. They are both elegant shrubs.

Hibiscus Syriacus, fl. pleno. The double flowering Althea frutex, of which there are several varieties, the double white, double red, double red and white, and striped, are the most showy; they commence their flowering late in July, and continue till fall, coming in at a very acceptable time. The single kinds, of which there are many varieties, are scarcely worth cultivating, the double ones being raised quite as well, and are equally hardy. These are indispensable in every plantation.

Hypericum frutescens, Shrubby Hypericum. There are several species of this small beautiful shrub, all natives of the southern states, but perfectly hardy here. They all flower in the greatest profusion, and continue for a long season. They should be planted in the front row.

Kerria Japonica, or Corchorus Japonica, yellow Japan Globe flower; although a native of Japan, like many other Japan flowers, it is perfectly hardy here. It flowers in the greatest profusion at all times, except in the very dead of winter, and will grow almost in any soil or situation.

Kœlreuteria paniculata, Japan bladder tree, or Kœlreterius. This is another hardy shrub from Japan. It has long racemes of flowers, succeeded by bladderlike fruit, and is worthy of cultivation in every good collection.

Ligustrum vulgare, virens. Large European Privet, a very handsome evergreen shrub, flowering in

great profusion, producing bunches of black round berries. It bears clipping well, and is therefore well calculated for hedges, or to enclose ornamental plantations. It grows quick, and is well adapted to our climate, and when planted in a hedge row, and kept clipped, it makes a beautiful hedge, and ought to be in more general use.

Philadelphus coronarius, or common Syringa, is very ornamental, producing its sweet scented flowers early, and in abundance, and also sweet scented Philadelphus inodorous, and P. grandiflorus, Garland Syringa, both natives of the southern states, but quite hardy here. The flowers are large, and they keep their flowering for several months in wreaths or garlands; it is well calculated for the centre row, and also to hide unsightly objects. It has a beautiful effect when mixed with monthly honey-suckle, &c.

Persica, or Amygdalus Persica, fl. rosea pleno, or double flowering Peach, is very beautiful in shrubberies. It sometimes bears fruit, but it is cultivated entirely for its beautiful blossoms. A few trees also of the Chinese double flowering Apple, (Pyrus spectabilis,) have also a beautiful effect.

Rhus cotinus, Venetian sumach, Aaron's beard, sometimes called fringe tree, is a fine shrub, calculated for the centre of the clump or shrubbery. Its large branches of fringe remaining all summer, give it a curious and striking effect.

Ribes Missouriensis, or Missouri currant; there are

two species of this very ornamental shrub from Missouri, introduced by Lewis & Clarke; they are quite hardy, and flower in great profusion.

Robinia glutinosa, and Robina hispida, the former a pretty large shrub, with large bunches of flowers in great abundance, the other a smaller shrub; they are both of them worthy of a place in all large collections.

Robinia pseudo-acacia, or Yellow Locust tree.* This is superior to any other kind of wood for ship-trunnels, mill-cogs, and fence-posts, as well as for various other purposes. Its culture is very easy, and may be propagated in great abundance, by sowing the seed in March, April, or May, in a bed of good sandy loam, which is its favourite soil, and covering half an inch deep. Previous to sowing, put the seed in a basin, pour on scalding water, and let it stand all night; pick out such seeds as are swollen, and plant them immediately; next evening repeat the same process, with such as have not swollen the first night, mix the whole, and sow them; they will come up in the course of the following month numerously; for no seeds grow more freely, notwithstanding what some may say to the contrary. When a year old, transplant them out of the seed-bed into marsery rows, four feet distant. and plant from plant one foot in the row. Having two or three years' growth in these rows, they may be planted successfully in any warm and tolerably rich sandy ground. They may also be propagated by

^{*} This tree is introduced here rather on account of its usefulness, than its heauty, though the latter is very considerable.

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suckers, which they throw up abundantly, especially if some of the wide-extending roots be cut through with an axe. An acre of these trees, planted at two feet distant each way, will contain 10,890; at four feet distant, 2,722: and it is said that no appropriation of land is more lucrative than that devoted to this purpose. [The Three Thorned Acacia Seed, (Gleditschia) should be prepared in the same manner.]

Sorbus aucuparia, Mountain ash, or Roan tree.— This is a very beautiful shrub of the larger size; the leaves are ornamental; the flowers and fruit, which are produced in large bunches, are beautiful; the fruit remains till late in the autumn; it is a native of Europe.

Sorbus Canadensis. This is a native of our northern frontiers and mountains; it does not grow as large as the former; the berries are smaller and red, the former larger and of an orange colour, but otherwise much resemble it.

Spartium junceum, and Genista, two or three species of broom, with bunches of yellow flowers in very great profusion; the Genista or Spanish broom has white flowers, is also very pretty, but not quite so hardy as the former.

Symphoria racemosa, or Snow-berry, sometimes called Snow-apple, a pretty little shrub; the bunches of wax-like white berries which it produces during the whole summer, give it a beautiful appearance.

Syringa vulgaris, or common Lilac, is well known

to all, and needs no comment. The white variety is not quite so common—they are only fit for outside plantings, as they sucker very freely, and soon make themselves common.

Syringa Persica, or Persian lilac, is a delicate low shrub, the flowers very abundant, and the leaves small and delicate. There are two varieties of the Persian lilac; the white flowering, and the blue or purple flowering.

The Chinese cut-leaved lilac is very curious; the leaves are cut like Parsley, the flowers growing in longer racemes than the former.

Siberian, or large Persian Elac. The bunches of flowers are very large, and continue in season a long time after the common lilac.

Rosa, or roses, a very numerous variety of them; some reckon five or six hundred kinds. They are accounted the most beautiful of Flora's productions. Perhaps a handsome collection might be made of about fifty of the best sorts, which, by taking said quantity. I suppose might be obtained at about fifty cents each under name; and generally a fine collection unnamed at half that amount. No good garden or shrubbery can be without them.

Tamarix Galica, or French Tamarix, and the Tamarix Germanica, German Tamarix, are two pretty shrubs; the leaves and branches are small and slender, producing quantities of beautiful flowers, and form a

very striking contrast to the other part of the shrubbery.

Viburnum opulus, or Guilder rose, otherwise called Snow-ball, is a very showy shrub, with large balls of snow-white flowers in the greatest profusion; and is indispensably necessary to every shrubbery.

Vitex agnus castus, or Chaste tree, a pretty and singular shrub, flowering the most part of the summer.

Bignonia radicans, or Trumpet creeper, with bunches of red trumpet-shaped flowers, large and showy.

Bignonia grandiflora, is much like the former in habit and appearance, but the flowers are much larger. It is said to be a native of China, and the former a native of this country. They are both perfectly hardy, and will climb up brick work or wooden fences without any assistance.

Clematis, or Virgin's Bower. There are several species, some of them tender, or not sufficiently hardy for our severe winters, without protection. The Clematis Virginica, Viorna, Viticella, and Vitalba, are perfectly hardy.

Glycine Sinensis, or Wistaria Sinensis, is a handsome China creeper of recent introduction from China, and is not yet common in our nurseries. It is a beautiful vine, running to a great height, and loaded with long racemes of purple flowers, and is highly spoken of in the Gardener's Magazine.

American Glycine frutescens, or Wistaria frutescens. This beautiful brother of the Chinese kind, is a native of our Southern states, grows much in the same way as the other, and perhaps not inferior. Although this fine creeper has been long known in England, we have not heard much about it by English writers; the conclusion seems to be that it does not flower well in England. In fact, none of our southern plants do well in that country, while those from China do very well -here, however, it is quite the reverse. I have the Chinese Wistaria Sinensis from fifteen to twenty feet long, and the American Wistaria about the same height. The Chinese does not look so vigorous and green as his American brother.—The American Wistaria should be planted in every garden with other creepers, or run up the trees in shrubberies, according to its natural disposition.

Lonicera, comprehending all the fine sweet scented honeysuckles; of the Italian kinds, the monthly honeysuckle is decidedly superior, continuing to flower all through the summer, until late in the fall, and very fragrant. Some of the other European kinds may be occasionally introduced in large shrubberies—two or three American kinds deserve particular notice.

Lonicera semper virens, or Coral trumpet monthly honeysuckle, is extremely beautiful, flowering the whole of the summer, with its thousands of scarlet bunches, It is, however, destitute of scent.

Lonicera Fraseri, also an American; the flowers

are like the other kind in almost every particular, except colour, this being a bright yellow.

Lonicera, pubescens, or Caprifolium pubescens, a large and beautiful honeysuckle from the North-west coast; the flowers are large and of a bright copper colour, inclining to orange—they are all perfectly hardy.

Lonicera flexuosa.—Chinese honeysuckle of late introduction; it is perfectly hardy, withstanding our most severe frosts without the least injury; it is a very sweet scented honeysuckle, grows rapidly, and to an immense height. It flowers in pairs and threes all up the branches, covering the whole plant completely with flowers. It blossoms spring and fall, and is a very valuable acquisition to our gardens and shrubberies.

Lonicera Japonica, or Japan honeysuckle. This bears flowers in great profusion, which are white, afterwards becoming of a light yellow. This is not so hardy as the former, and requires a little protection in winter.

I shall only add to the above, the running kinds of roses, although there are many other things which might be mentioned.

Rosa multiflora, from China, is pretty well known, producing thousands of small double red roses in bunches. It requires a sheltered situation from some of our keen northwesters. Rosa multiflora alba, from

the same country, is of late importation, but as it increases readily, may be obtained at about the same price as the former; the bunches of flowers are white. Rosa Grivellis, a running rose also from China, the flowers of various colours. Rosa rubifolia, Raspberry leaved rose, from our northern frontiers, and extending over the western country; although a single flowering rose, it produces large bunches of flowers, which are differently coloured on the same bunch, exactly like the former China kind, and is another instance of the similarity of plants, natives of China and our country.

Rosa canina fl. pleno. English double dog rose, is a very pretty little double rose, and will run to a great height. Rosa Banksii, Lady Banks' double white China running rose. It runs up, and spreads much—it may be easily known from others of the running roses, by its being entirely destitute of prickles. Rosa Noisette, and Champney's, are said to have been raised from China seeds in Carolina—they are not strictly running roses, but as they grow up tall, are fine ornaments for the shrubbery, flowering during the whole of the summer and fall, in large clusters. The Madeira rose, or double white cluster, musk-It also flowers all through the summer and fall months, and is therefore well adapted for the shrubbery. Rosa Cherokensis, called the nondescript, or Georgia rose—the flowers are very large and white, the centre yellow. This is a running rose, growing very high around trees, &c.

Rosa rubiginosa, or Sweet briar, is too well known to need description.

Deciduous shrubs may be planted at any time after they lose their leaves, and before the buds begin to expand in the spring, provided the ground can be brought into good condition to receive them; the holes should be dug capacious enough to hold the roots without cramping them, and some earth well pulverised must be thrown equally among the fibres of the roots, which should be well shaken and trodden down around the plants, until brought to the level required. Evergreens should be removed carefully with a ball of earth connected with their roots, and some good mould should be provided to fill in with.

OBSERVATIONS ON THE CULTIVATION OF BULBOUS AND TUBEROUS-ROOTED PLANTS.

These plants exhibit a striking variety of the beauties of nature. It would seem as if every change she was capable of arming, was included in the radiant colours of the Tulip. Never was a cup either painted or enamelled with such a profusion of tints. Its tinges are so glowing, its contrasts so strong, and the arrangement of them both so elegant and artful, that it may, with propriety, be denominated the reigning beauty of the garden, in its season. The Hyacinth is also an estimable flower for its blooming complexion, as well as for its most agreeable perfume and variety.

The Double Dahlia, in its numerous varieties, is

inconceivably splendid. It is only about forty years since the first of these, which was single, was introduced into Europe from Mexico.

Double Dahlias of three colours were first known in the year 1802, since that time the varieties have so increased, that such as a few years ago were considered beautiful, are now thrown away to give place to the more splendid sorts. I have good authority for stating that upwards of twenty thousand seedlings are raised yearly in England, only a few of which are introduced into the collection of amateurs, to take the place of such old sorts as may from time to time be rejected. This is done, in order that none but the very choicest be retained in such collections.

In some gardens in Holland they cultivate, by distinct names, about eleven hundred varieties of Tulips, thirteen hundred of Hyacinths, and six hundred of Ranunculuses and Anemones, some of which are sold as high as sixty dollars the single root. It is stated in the travels of Mr. Dutens, of his having known ten thousand florins, equal to \$4000, refused for a single Hyacinth, and Dodsley says, in his Annual Register for 1765, that the Dutch of all ranks, from the greates t to the meanest, during the years from 1634 to 1637 inclusive, neglected their business to engage in the Tulip trade. Accordingly, in those days, the Viceroy was sold for £250, the Admiral Liefkeens £440, and Semper Augustus at from £500 to £1000 each, and also that a collection of Tulips was sold by the executors of one Wouter Brockholsmentser for £9000. It is stated. that in one city in Holland, in the space of three years, they had traded for a million sterling in Tulips.

As a full catalogue of all the varieties of Bulbous and Tuberous-rooted plants would occupy a number of pages, without affording much general interest, I shall content myself by devoting a short paragraph in describing some of each particular species, which will be accompanied with directions for their culture, in a brief, and, at the same time, explicit manner.

It may be here necessary to define the difference between Bulbous and Tuberous roots. Those designated Bulbous, have skins similar to Onions, or the Allium tribe; and Tuberous roots imply all such as produce tubes something similar to Potatoes.

The soil for Bulbous and Tuberous roots in general should be light, and yet capable of retaining moisture, not such as is liable to become bound up by heat, or that in consequence of too large a portion of sand, is likely to become violently hot in summer; but a medium earth between the two extremes. But as many city gardens do not contain a natural soil of any depth, a suitable compost should be provided in such cases, which may consist of about equal parts of sand, loam, rotten manure, mould, &c.

When ready, the beds may be laid out, from three to four feet wide, and they should be raised two or three inches above the level of the walks, which will give an opportunity for all superfluous moisture to run off. Let the beds thus formed be pulverised to the depth of fifteen or eighteen inches, and at the time of planting,

let a small quantity of beach sand be strewed in the apertures or trenches, prepared for the roots to grow in, both before and after placing them, which will prove beneficial.

A southern exposure, dry and airy, and sheltered from the north-west winds is preferable for most bulbs. But Anemones and Ranunculuses should be in some measure sheltered from the intense heat of noon.

Beds of hardy bulbous and tuberous roots should be covered on the approach of winter with litter, leaves, straw, or such earth as is formed by the decay of leaves, to the depth of two or three inches, as it prevents any ill effects which a severe season may have on the roots; but it should be carefully raked off again in the spring.

Bulbous roots in general should be taken up in about a month or six weeks after the bloom is exhausted; the foliage or leaves then turn yellow. If fine warm weather, the bulbs may be dried on the beds they grew on, by placing them in separate rows, being careful not to mix the several varieties together. To prevent such an accident, labels may be affixed to, or placed in the ground opposite each bulb—they will keep much better for being dried gradually; to this end, a little dry earth may be shaken over them, to screen them from the heat of the sun. If it rain before they get dry, take them in, or cover them with boards; when dry, clear them of the fibres and stem, and then put them away in dry sand; or wrapped in paper,

they may be kept in boxes or drawers until the season of planting again.

The tender tuberous roots, such as Dahlias, and the like, will have to be taken up before the cold becomes severe. As the Dahlia exhibits its flowers in all their splendour, until nipped by the frost, the roots ought. in the event of a very sudden attack, to be secured from its blighting effects. They are not apt to keep well, if taken up before they are ripened; the tops should, therefore, be cut down as soon as they have done flowering, and the ground covered around the roots, with dung or litter; this will enable them to ripen without being injured by frost; and in about a week after being cut down, or on the appearance of severe weather, they should be dug up and packed in dry sand, and then stowed away in a dry place out of the reach of frost. The temperature suited to keep greenhouse plants will preserve them in good order. people complain of the difficulty of keeping Dahlia roots through the winter. I am of opinion that they are often killed from being taken up before they are ripe, and then put in a confined damp place; or are by some, perhaps, subjected to the other extreme, and dried to a husk. I keep mine on shelves in the greenhouse, and seldom lose one in a hundred. be an object with the cultivator to have the names perpetuated from year to year; each plant should have a small label affixed to the old stalk, by means of small brass wire, as twine is very apt to get rotten.

Cape Bulbs, and such tuberous roots as are culti-

vated in pots, on account of their tenderness, should he kept dry after the foliage is decayed, until within about a month of their period of regerminating; at which time they should, after having been deprived of their surplus offsets, be repotted in good fresh earth.

There are some descriptions of bulbous and tuberous roots that need not be taken up oftener than once in two or three years, and then only to deprive them of the young offsets, and to manure the ground. These will be described hereafter under their different heads.

In the articles which follow, I have named the preferable season for planting the various kinds of bulbous and tuberous roots; but as some bulbs will keep in good condition several months, there can be no objection to retaining such out of the ground, to suit any particular purpose or convenience.

DIRECTIONS

FOR THE CULTIVATION OF BULBOUS AND TUBEROUS-ROOTED PLANTS.

AMARYLLIS. Of this genus of flowering bulbs there are about eighty species, and upwards of one hundred varieties; they are natives of South America, and in Europe are generally kept in the hot-house; some of the varieties are hybrids, produced by cultivation; these succeed very well in the green-house, and in this

country we frequently have very perfect flowers in the borders. A few of the choicest varieties are as follows:

Amaryllis Aulica, or Crowned Amaryllis, is one of the most beautiful; it produces four flowers, about seven inches diameter, on an erect stem, about two feet and a half high, with six petals of green, crimson, and fine transparent red colours.

- A. Ballota, produces three or four rich scarlet flowers on the stem, each about five inches in diameter; there are two or three varieties of this species, all beautiful.
- A. Johnsoniensis. The stem of this variety rises about two feet, and exhibits four beautiful scarlet flowers, with a white streak in the centre of each petal, each flower about six inches diameter. It sometimes produces two stems.
- A. Longifolia, or Crinum Capense, is perfectly hardy; it flowers in large umbels of a pink colour, inclining to white, and is a good garden variety.

Amaryllis Formosissima, or Jacobean Lily, produces a flower of great beauty, although a low-priced plant. It throws out gracefully its glittering crimson-coloured petals, which have a brilliancy almost too intense for the eye to rest upon.

The A. Lutea produces its bright yellow flowers in October, in the open air; but the bulb requires a little protection in the winter, or it may perish.

The most suitable soil for Amaryllises is a clean new earth, taken from under fresh grass sods, mixed with sand and leaf mould; the latter ingredient should form about a third of the whole, and the sand about a sixth. Some of the varieties may be planted in pots during the month of April, and others will do very well in the open ground if planted early in May, in a sunny situation. The bulb should not be set more than half its depth in the ground; as, if planted too deep, it will not bloom, the plant deriving its nourishment only from the fibres. When the bulbs have done flowering, such as are in pots should be watered very sparingly, so that they may be perfectly ripened, which will cause them to shoot stronger in the ensuing season, and those in the ground should be taken up and preserved in sand or paper.

ANEMONES & RANUNCULUSES. These are medium, or half-hardy roots, producing beautiful little flowers of various hues, and are highly deserving of cultivation. These roots should be planted in a fresh, well pulverised, loamy soil, enriched with cow dung. If planted in the garden, the beds ought not to be raised above one inch higher than the alleys, and the surface should be level, as it is necessary, for the prosperity of these plants, rather to retain than to throw off moisture. The plants will generally survive our winters; but it is always safest to plant them in such a manner that a temporary frame of boards can be placed over them, when the weather sets in severe; and if they are to be shaded while in flower, the posts intended for the awning may be fixed in the ground at the same

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time; these will serve to nail the boards to, and thus answer two purposes.

Anemones and Rununculuses may be planted in October or November, in drills two inches deep, and six inches apart; the roots should be placed claws downwards, about four inches distant from each other, and covered up, leaving the bed quite level. The awning need not be erected over the beds until they come into flower, which will be early in May.

CROCUSES.—These are hardy little bulbs, said to be natives of Switzerland. There are in all about fifty varieties of this humble, yet beautiful little plant, embracing a great variety of hues and complexions, and their hardiness and earliness in flower offer a strong motive to their cultivation. The bulbs may be planted in October or November, in rows about six inches from the edgings; or if in beds, they may be placed in ranks of distinct colours, about four inches apart, and from one to two deep, which will afford to their admirers considerable amusement and gratification, and that at a very early season. They are generally in full perfection early in April.

CROWN IMPERIAL.—This is a species of the genus Fritillaria, of which there are about twenty species and varieties, chiefly natives of Persia. These squamose bulbs produce tall luxuriant stems, embellished with green glossy foliage, and flowers of various hues; but there are only a few of the most curious cultivated, perhaps on account of their odour, which, to some

persons, is disagreeable. They are, however, very hardy, and produce singular and showy flowers, in April and May, suited to make a variety to the flower border, in which they may be planted in August and September, from three to four inches deep; they need not be taken up every year as other bulbs, and when they are, which may be about every third year, they ought not to be retained too long out of the ground before they are again planted as before.

COLCHICUM.—This curious little bulb, being planted in the month of June, about two inches deep, produces its flowers in October, it then dies, without leaving any external appearance of seeds; they, however, lie buried in the bulb all the winter, and in spring, produce a stalk with seeds, which get ripe by the first of June, just in time to plant for flowering in the ensuing autumn. How wonderful are the provisions of nature!

Double Dahlia:—This may, with propriety, be denominated one of the most important perennial tuberous-rooted plants that can be introduced into a garden; and from the circumstance of its having become so fashionable of late years, I have felt anxious to furnish in this work a very select list; I, therefore, applied to Mr. G. C. Thorburn, who, from a regular correspondence with connoisseurs, both in England and America, is acquainted with all the most rare and beautiful varieties. He has kindly furnished a list and description of about sixty of the choicest, some of which are deemed extra fine; to these I have added about a hundred more, all of which are pre-eminent,

and not a few of them have taken prizes at the English. and American exhibitions. In making this selection, several superb varieties are omitted, not because they are undervalued, but for the sake of brevity, which, in a work of this kind, must be consulted. Those marked A, are considered the very tallest, six feet and Those marked B, from five to six feet. upwards. Those ranging between four and five feet, are marked C, and the dwarfs are marked D. This plan is adopted, because it is difficult to ascertain the exact height they will grow to, even in one uniform soil and situa-The descriptions that follow having been taken by different persons, whose soils and situations are also various, a difference in the height of the plants, of a foot or more, may sometimes be observed. Those marked * obtained the greatest number of prizes at the various Floricultural and Horticultural exhibitions in Great Britain. There are, perhaps, a hundred more in this list not far beneath them, and some equally worthy of the star or asterisk, but none are marked except those which won ten prizes and upwards.

CATALOGUE OF DOUBLE DAHLIAS.

delicate nink

Amanda, dencate pink,	-	U
Agrippina, mottled, with rosy lilac, [superb,]	-	D
Aurantia Pallida, beautiful orange and red.	-	C
Aurantia Speciosa and Speciosissima, both be	autiful	fine
orange,	-	C
Anne Boleyne, shaded lilac and white,	-	D
Altro Purpurea, two varieties, superba and spedio	sa.	C
Agamemnon, (Widnall's), rich ruby with fine cu	proed per	als.C
Barrett's Susannah, exquisite purple, flower very	compact	. A
Brewer's Rose d'Amour, deep rose tip'd with white	e fexcelle	nt A
Brewer's Peerless Orange, scarlet orange.		^C
Beauty of Chiswick, scarlet,	-	В
	E	

* Beauty of Sheffield, edged, (elever	ı prizes v	vere ob	tained fo	r this
flower last year) in England, * Belladonna, a new shaded flower,	mon alan	an nri	toa	
Buchanan's Compacta, a most per	Mort Com	on pin	cht orim	BOT
[extra fine,]	TOCE TOTAL	ion ntif	er cinii	T, LEVE
Des fine enemes results	•	•	-	<u>ہ</u>
Bona Dea, fine orange scarlet, Brewer's Sulphurum Majestum, de	alianta	llo m	•	2
Brewer's Suprarum Majestum, u	encare ye	mith t	laak atsi	~~~~~~~
Black Prince, (Widnall's), rich dark	liles mes	MICH C	DECK BUIL	pes,O B
* Blanda, or Blush Lilac, beautiful	mac, wor	ı étese	n buzes	B
Beauty of Camden, extra fine ruby,		- 	- 	Č
Camellia Flora Alba, snow white,	very peri	ect, [st	ibern'l	В
Columbine, vivid scarlet, -	-	-	•	ភ
Crimson Multiflera, crimson,		c-	1	
* Countess of Liverpool, crimson so	ariet, [e:	ttra m	ie, j	,A
*Criterion (a new edged flower,) v	von ten j	prizes :	ın Engl	and
Cicero, beautiful crimson, -	-	-	-	Ç
Camellia, black puce, -	-	-	-	Ç
Colvell's Perfecta, fine purple,		-	-	В
* Coccinea Speciosissima and Cocc	ineas Sp	eciosa,	both br	ight_
scarlet,	_	,		В
Coronation, crimson maroon,	-	-	-	В
Carmine Orange, [extra fine,]	-	-	-	C
Canary, fine yellow,			-	D
Daniel O'Connell, orange scarlet,		-	-	C
Duchess of Richmond, extra fine so	carlet,		-	C
Douglas's Augusta, beautiful purple	e, verv la	rge flo	wer.	Á
Desdemona, pure white,		-	_	В
Dennisii, ruby purple, [extra fine,]	-	-	-	$\bar{\mathbf{B}}$
Diana, (Widnall's,) beautiful pink		-	_	B
Donna Maria De Gloria, (Youn	g's). brie	ht ro	sy crime	
[very perfect,]		-	-,	~~,c
Duchess of Braganza, (Young's,)	white	and li	lac with	red
margin [superb,] -	-		-	D
Erecta, fine crimson with black strip	nes.	_	_	ã
Earl Grey, (Miller's,) shaded lilac.	Pool	_	_	č
Emperor of the Yellows, (Sally's,)	grinerh .	vellow	_	Ă
Earl of Chichester, (Young's,) dark	nurnia	finaly) Italiand w	
lilac, -	· Barbie'	mici i	mrhen M	
Fulgida Perfecta, large crimson,	-	-	•	D
Furnes Purpurea, variegated purple	a atrina I	-	-	В
arturea, variegated buildi	osinpau,		-	D

^{* 21} prizes were obtained for the Countess of Liverpool, in England last year, and 12 for the Coccinea Speciosissima.

DOUBLE DARLIA.

Fair Ellen, fine pink and lilac, [superb,]	C
Fimbriata Alba, pure white,	C
Foster's Premier, fine rosy,	B
Foster's Constantia, carmine or crimson,	Ē
Foster's Niagara, very dark coloured,	Ē
Fair Devonian, beautiful rose pink, [extra fine,]	B C D
Golden Yellow, fine yellow,	Ā
Grandiflora, puce purple;	A
Globe Crimson, ball-flower, quilled,	
Groombridge's Matchless, fine large purple, [superb,] -	B
Golconda, (Widnall's,) white spotted, [extra fine,]	- Ē
Grand Duke of Tuscany, fine black puce,	č
Guttata Major, white with purple spots, (extra large flower,)	D B C C B C A B C B
Hermione, beautiful blush, **	č
Harpalyce, white, won eleven prizes,	Ă
Hall's Mogul, dark purple,	Ŕ
Henry the Eighth, dark maroon,	č
Hall's Palmyra, beautiful plum colour,	Ř
Incomparable, (Levick's,) scarlet, tipped with white,	$\tilde{\mathbf{B}}$
Incomparable, (Foster's,) beautiful scarlet,	Ř
Inapproachable, pure carmine, [splendid,] -	B
Imogene, fine variegated,	Ď
Involute Purpurea, crimson purple,	ũ
Inwood's Springfield Rival, dark rosy crimson, with singu-	
larly heautiful cupped petals.	A
Jonquille, (Widnall's) fine lemon colour,	
Juliet, rosy lilac,	ñ
Jaune Insurmountable, yellow,	Ř
Juno, superb lilac,	č
King of Dahlias, pure white, edged with rose pink, [superb,]	č
King of the Whites, delicate paper white, first rate,	Ř
King of the Yellows, (Cutbush's) delicate yellow,	Ř
King Alfred, (Miller's) delicate rose lilac,	č
Lord Derby, a first rate dark coloured Dahlia, won 11 prizes,	ĸ
Lord Liverpool, very dark purple, [excellent,]	ă
Lady Grenville, beautiful rose coloured,	ADBCCBBCBAC
Levick's Commander-in-Chief, crimson, with black stripes,	Ă
Lady Grey, beautiful shaded rose,	AC
Lady Fordwich beautiful blush	×

^{*} Inwood's Springfield Rival won 15 prizes, the King of the Whites 27, the Lord Liverpool 15, the Lady Grenville 15, Levich's Commander-in-Chief, 15, and his Incomparable 11.

Landgravine, rosy mottled with white,	•	D
* Levick's Lord Milton, beautiful orange, won 11 prizes,	-	B
Linn's Fine Striped, lilac and crimson, [superb.]		Ā
Lass of Richmond Hill, beautiful scarlet,	_	B
Lord John Russell, scarlet ball, [extra fine,]	-	B
Lord Brougham, dark velvet purple,		Ē
Levick's Mozart, extra fine crimson,		ō
Laura, white, with lilac edge,		Ď
Lady Sefton, beautiful rose coloured,		č
Lady Fitzharris, fine crimson,		č
Miss Pelham, fine lilac, [beautiful,]	_	B.
Maculatum, white, with purple spots,	-	Ď
Man of Kent, fine rich purple, [superb,] -	_	ć
* Maid of St. Leonard's, beautiful buff,		B
Metropolitan, fine rose coloured,		Ď
Metropolitan striped, fine dove colour, beautifully striped		ć
Miss Dickson, fine lilac,	,	Ã
Magnet, (Wells's) fine ruby,		Ĉ
Matilda, pencil blush, [beautiful,]		ŏ
Marchioness of Abercorn, superb blush, [new,]	,	
Nonpareil, (Widnall's) very compact pink flower,	-	×
Neptune, (Widnall's) exquisite lilac, very large flower,	-	00000000
Nymphæ Flora, white spotted,		×
Ne Plus Ultra, light purple,	-	×
New Scarlet Turban, bright scarlet,	•	×
Navarino, rich purple,	•	×
Negro Superb, very dark,	•	ŭ
Negro Boy, jet black,	-	č
Otholia (Widnella) gunarh derk purela	•	Ď
Othello, (Widnall's) superb dark purple,	-	D.
*Paper White, white,	-,	ñ
* Priestly's Enchantress, white and red, beautifully mottle	∌d,	Ď
Phillis (Widnall's) fine rosy lilac, with cupped petals,	-	D
Pavonia, pencilled straw,	•	č
Prince George of Cumberland, fine crimson,	-	Ċ
Pygmea, beautiful shaded rose,	•	D
Pulla, dark purple,	•	D
Pencilled White, white spotted with purple,	•	В
Princess Augusta, shaded purple,	-	В
Paroquet, cream and crimson, [extra fine,]	•	C
Picta Formosissima, light orange, with beautiful scarlet at	ripes,	B
Paul's Rival, brilliant scarlet,	• •	С

[•] The Maid of St. Leonard's won 10 prizes; the Paper White, 11; Priestly's Enchantress, 12; Picta Formosissima, 14.

Paganini, very dark and fine,		- ,	D
Perfection, (Wells's) rose blush and white, [excellen	t,]		C
Polyphemus, large crimson purple,	• -	-	D
Purpurea Elata, fine purple,	•	-	C
* Queen of Dahlias, white, with rosy lilac edge, [sur	erb,]		C
* Queen of the Whites, (Dennis's) pager white, ver	y larg	e,	В
Queen of Wurtemburg, mottled purple, -		-	В
Queen Adelaide, (Connelly's) fine bright scarlet,		-	В
Queen of the Yellows, yellow,		-	В
Queen of the Purples, plum colour,			A
Queen of Roses, (Widnall's) rose coloured, very fir	le,	-	C
Queen of Sheba, (Wells's) fine deep yellow,	. '	-	D
Queen of Belgium, white, elegantly tipped with pu	rple,		C
Queen of August, beautiful light purple, -	. <i>'</i>	-	Ĕ
Romulus, large scarlet,		-	В
* Royal Lilac, fine lilac, won 12 prizes, -	-	-	Ċ
Royal Dwarf Orange, scarlet orange,	-	-	č
Rising Sun, (Widnall's) extra fine scarlet		-	A
Richardson's Alicia, white spotted, [beautiful,]			A
Star of Sussex, splendid scarlet,		-	Ċ
Seale's Invincible, dark maroon, with bright crimson	ı stri	Des.	CCC
Scarlet Ranunculus, fine scarlet,	-	,	Č
Sulphurea Majestum, fine yellow,		_	Ă
Striata, white, with purple stripes, [beautiful,]	-	_	Ĉ.
* Shannon, (Levick's) large crimson, won 10 prizes		-	Ă
Stephania, fine dark maroon,	•	-	D
Surpass Triumph Royal, rosy lilac,	-	-	c
Squibb's Pure Yellow, very delicate yellow,			Ď
Squibb's Master-Piece, fine scarlet, -	-	-	č
Transcendanta, delicate French white,	-	_	č
Theodore, delicate lilac,		_	č
Widnall's Cleopatra, beautiful blush, lilac,			Ď
Widnall's Salamander, scarlet, extra large flower,		_	Ã
Widnall's Comus, fine brilliant yellow,	_	-	Ĉ
* Widnall's Prince of Orange, beautiful orange,	_	_	Ă
* Widnall's Jason, bright yellow,	-	_	ĉ
* Widnall's Perfection, beautiful rosy lilac, with cur	- mad .	notel-	
* Widnell's Greats prople with supped setals	.herr	~или ,	×
* Widnall's Granta, purple, with cupped petals,	-	-	U

^{*} The Queen of the Dahlias won 24 prizes, and the Queen of the Whites 10. Widnall appears to have been the champion for Dahlias; his Prince of Orange won 20 prizes, his Jason 15, his Perfection 25, and his Granta 15; he also took several prizes for others in this list.

Widnall's Aurora, fine scarlet, -	-	-	-	C
Widnall's Flora, fine quilled rose,	-	-	-	Ď
Wells's Dwarf Yellow, bright yellow, -	-	-	-	D
William the Fourth, (Barret's) fine scarl	et,	-	-	C
Zelinda, heautiful purple	٠.	_	_	Ď

Nothing is more simple than the cultivation of these plants. In March or April, the roots, if properly kept through the winter, will begin to sprout around the old stems and tubers. To forward these sprouts in growth, the roots should be either buried in light earth, on the top of a moderate hot-bed, or else potted, and then set into a warm room, or green-house, and watered. As soon as the shoots have grown to the length of two or three inches, the roots may be divided in such a manner as to have a good strong shoot attached to a piece of the tuber, or old stem; each of these will, if properly managed, make a plant. Those who may commence cultivating at an early season, should put the plants thus separated into small pots, and keep them in a growing state until about the middle of May, at which time they may be turned out of the pots with the balls of earth entire, and planted in the open borders, from three to four feet from each other. Let the ground be well pulverised, and enriched with good old manure, before the plants are set out. If the top soil be shallow, and the subsoil inferior, it would be beneficial to the plants, if holes be dug to the depth of from a foot to eighteen inches, and then replenished with good rich compost, consisting of two-thirds fresh loam, and one-third of well-rotted manure.

Many cultivators have found late planting to suit

better than early, and I myself had more perfect flowers last year, from plants set out about the middle of June. than from those planted in May: this is easily accounted for. In July and August the weather was remarkably hot, which brough the forwardest plants into bud at an early season, and in consequence of a continuation of hot dry weather, such buds failed to produce perfect flowers; whereas those plants which were set out late, kept growing through the hot weather, and produced their buds just in time to receive all the benefit of the autumnal rains. From a consideration of these facts, I think early in June the safest time to set out Dahlia plants; and if those persons who have no convenience of forcing their roots, set them out in May, in ground prepared as before directed, they will generally succeed very well, provided they take care to cover them in case of a cold change of weather. The roots may be thus cultivated entire, as is frequently done; but if it be desired to have them parted, this business is easily accomplished without disturbing the roots, and the offsets may be planted in the ground separately, or potted.

After the plants have grown about two or three feet high, it will be necessary to provide for their preservation through the varied changes of the season, or a sudden gust of wind may destroy the expectations of a year. The branches of the Dahlia are extremely brittle, and, therefore, a good stout pole, or neat stake, should be driven down near each root, of a suitable height, so that the branches, as they progress in growth, may be tied thereto at every joint, which

may be done with shreds of matting or twine. If the poles be in readiness, they are much more easily fixed at the time of planting the Dahlias than afterwards; but it may be done at any time after the ground has been softened by rain, provided it be not delayed too long, so as to to subject the plants to risk. Sometimes a few forward buds of the Dahlia will exhibit their premature beauties to the beams of a July and August sun; but their lustre is quickly dimmed. The latter end of September, sometimes all October, and part of November, witness the Dahlia in all its glory; and dwarf plants, cultivated in pots, will sometimes blossom at Christmas.

GLADIOLUS CORN FLAG, OR SWORD LILY. Of this genus of bulbs there are about 50 species, natives of the Cape of Good Hope. They produce flowers of various colours, in August and September, and are well worthy the attention of those who cultivate tender exotic plants. They may be planted in September or October, about an inch deep in pots, which must be kept in a greenhouse or light room, and watered sparingly until they begin to grow. The following are known to be superb species and varieties:

- G. Alatus, or Wing Flowered, producing bright orange coloured flowers.
- G. blandus, produces flowers of a beautiful blush rose colour.
- G. byzantinus, or Turkish Flag, has large delicate purple flowers.

- G. cardinalis. This variety produces very large slowers, of superb scarlet colour, spotted with white.
- G. floribundus, or Cluster Flower, produces large flowers, of pink and white colour.

The Gladiolus natalensis, or psittacinus, is perhaps the most desirable to cultivate of all others. It blossoms freely, and the colours are exquisitely beautiful. In its progress of blooming, it exhibits variable colours, as vermilion, red, yellow, green, white, crimson, &c. which brighten, as the flower arrives at perfection, to the brilliancy of a rainbow. Another good quality displays itself in the bulb, which, if properly managed, will yield an abundance of offsets; these being cultivated, will flower the third year in perfection, and thus continue to multiply perpetually.

I have named September and October as the season for planting, because it is considered the preferable season for most bulbs; but if these be preserved in good condition through the winter, until early in April, and then planted in a soil consisting of about one half fresh loam, equal parts of leaf mould, and sand well mixed, they may be forwarded in a warm room, greenhouse, or moderate hot-bed, until settled warm weather, and then turned out of the pots into a border, where they can be shaded from the sun at noonday; this will induce each of them to throw up three or four stems from three to four feet high, each stem producing five or six gorgeous blossoms, in great perfection. Those planted in the fall or winter, may also be turned out of the pots in June; and, from the

fibres having taken substantial root in the soil before transplanting, such plants may be taken up again in August, or early in September; and on being planted in large pots, they may be removed, so as to perfect their bloom, within view of the parlour or sitting-room, which will afford considerable amusement and gratification.

HYACINTH.—There are, as has been already stated, about thirteen hundred varieties of this family of plants, comprising all the various hues, as white, pink, red, yellow, blue, purple, crimson, &c., and some of those with various coloured eves. They begin to produce their flowers in the open borders early in April, on short erect stems covered with florets or small bells; each floret is well filled with petals rising towards the centre, and is suspended from the stem by short strong footstalks, the longest at the bottom, and the uppermost florets stand so erect as to form a pyramid. A plantation, or a bed of these, have a very beautiful appearance, provided they are well attended to. In planting them, which should be in the months of October or November, care should be taken to have the colours so diversified as to suit the fancy; they may be placed in short rows across the bed, about eight inches apart, and from three to four inches deep, measuring from the top of the bulb, and covered up at the setting in of winter, as before recommended for bulbs in general. Those who may have a fine collection, should have an awning erected in the Spring, to screen them from the chilling blast, and also from drenching rains and the noonday sun; and they should

be looked over as soon as they make their appearance above ground, to see if they are all perfect and regular; if any faulty or inferior ones should appear to have been planted in a conspicuous part of the bed, by accident or mistake, they can be taken out, and by shortening the rows, others may be substituted with a trowel. When all are regulated, look over them frequently, and as the stems shoot up, tie them to wires, or small rods, with shreds of bass matting or thread, being careful not to injure the florets. In about six weeks after they have done flowering, they may be taken up, and managed as recommended for bulbs in general in a former page.

IRIS, OR FLOWER DE LUCE.—There are two distinct species of plants cultivated under the name of Flower de Luce, each consisting of several varieties. The bulbous species and varieties are designated as English, Spanish, Persian, Chalcedonian, and American. These, if introduced into the flower borders, and intermixed with perennial plants of variable colours, have a very pretty appearance when planted in clumps or patches. This may be done in the month of October, by taking out a spadeful of earth from each place allotted for a plant, and then inserting three or four bulbs, about two inches deep. If the ground be poor, some rich compost may be dug in around the spot before the bulbs are planted, and if several sorts be planted in the same border, let them be of various colours.

The tuberous-rooted are of various colours, as blue, yellow, brown, and spotted; they are easily cultivated,

and flower freely in a loose soil inclining to moisture, if planted in March or April.

IXIAS.—These are tender but very free-flowering bulbs, producing from their stems, which vary in height from six inches to two feet, very delicate flowers of various colours, as orange, blush, white, purple, green, crimson, scarlet, and some have two and three colours connected in the same plant. There are, in all, upwards of twenty species, which may be cultivated in the greenhouse, by planting the bulbs in pots in September or October, and placing them near the light, and then watering them sparingly until they begin to shoot.

JONQUIL.—This is a hardy race of bulbs, and produces very delicate yellow flowers early in May. There are different varieties, some of which are single flowering and others double. Their fragrance is very grateful, being similar to that of Jasmines. The bulbs may be planted about two inches deep in the flower borders, or in pots, in October, or before the setting in of winter; they flower better the second year than in the first, and, therefore, should not be moved and replanted oftener than once in three years.

LACHENALIAS.—These are tender little bulbs, natives of the Cape of Good Hope. There are supposed to be in all, about forty species and varieties. Those most cultivated with us, are the Lachenalia quadri-colour, and the tri-coloured, which are very beautiful when in full bloom, exhibiting flowers of

various colours, on a stem of from six inches to a foot in height, and much in the character of Hyacinths. The colours which are yellow, scarlet, orange, green, &c., are very pure and distinct. L. nervosa, L. orchoides, L. punctata, and L. rubida, are all excellent species, and worthy of cultivation. They may be planted from one two inches deep, in small pots, in the Month of August and September, and watered but sparingly until they begin to grow.

LILIUM.—There are several plants under this name, of different genera, some of which are indigenous. The Canada Lily, with yellow-spotted drooping flowers, may be seen in wet meadows towards the last of June and early in July. The Philadelphia Lily blooms also in July; its flowers are red. There are some pure white, and others yellow, growing in various parts of the country. Among the foreign genera are several species. Of the Martagon, or Turks'-cap Lilies, there are some beautiful varieties; as the Caligula, which produces scarlet flowers; and there is one called the Crown of Tunis, of purple colour; besides these, are the Double Violet Flamed, the White, the Orange, and the spotted: these are all hardy, and may be planted in various parts of the garden, by taking out a square foot of earth, and then, after manuring and pulverising it, the bulbs may be planted therein before the setting in of winter, at different depths, from two to four inches, according to the size of the bulbs. Some of the Chinese varieties are very beautiful, as the Tiger, or Leopard Lily, and the Dwarf Red Lilium con colour; there are others with

elegant silver stripes, which are very showy, and there is one called Lilium superbum, that has been known to have twenty-five flowers on a stalk. Besides those above enumerated, there are some others which are generally cultivated in greenhouses, as the Calla, or Ethiopian Lily; and the following, which have been known to endure our winters, by protecting them with dung, &c., Lilium Longiflorum, in two varieties; these produce on their stalks, which grow from twelve to eighteen inches high, beautiful rosecoloured flowers, streaked with white, which are very sweet-scented. These roots are sometimes kept out of the ground until spring, and then planted in the flower borders, but they should be preserved carefully in sand, or dry light mould. Lilium Japonicum. these there are two varieties, which produce several stalks at once, yielding very showy flowers. One of the varieties is blue-flowered, and the other produces flowers of the purest white.

NARCISSUS.—The species and varieties of this plant are numerous. The Incomparable is perfectly hardy, and produces its flowers in April, which are called by some pasche, or paus flowers, by others, butter and eggs; perhaps because their bright yellow petals are so surrounded with large white ones. Some dislike the smell of these, and it is said that the odour has a pernicious effect upon the nerves; but the white fragrant double, as well as all the Roman and Polyanthus Narcissus, are free from this objection, being of a very grateful and agreeable smell. Some of these are justly held in great esteem for their earliness, as well

es for their varied colours. The Grand Monarque de France, the Belle Legoise, and some others, have white flowers with yellow cups. The Glorieux has a yellow ground, with orange-coloured cups; besides these there are some white and citron-coloured, as the Luna, and others entirely white, as the Reine Blanche, and Morgenster. All these varieties are very suitable either for the parlour or greenhouse, and may be planted in pots, from October to December, from two to three inches deep. The Double Roman Narcissus are very sweet-scented; if these be planted in pots, or put into bulb glasses in the month of October, they will flower in January and February.

Polyanthus Narcissus are more delicate than Hyacinths or Tulips; when they are planted in the open borders, they should be covered about four inches with earth, and before the setting in of winter, it is advisable to cover the beds with straw, leaves, or litter, to the depth of six or seven inches, and to uncover them about the middle of March.

Ornithogalum, or Star of Bethleheme.

There are about fifty varieties of these bulbs, natives of the Cape of Good Hope, some of which are from three to five inches in diameter, and shaped similar to a pear; others are much like Hyacinth bulbs.—Amongst those cultivated in America are the O. lacteum and the O. aureum; the former produces fine white flowers, and the spike is about a foot in length; and the latter produces flowers of a golden colour, in contracted racemose corymbs. The O. maritimum, or

Sea Squill, is curious: from the centre of the root arise several shining glaucous leaves, a foot long, two inches broad at the base, and narrowing to a point. If kept in a greenhouse, these are green during winter, and decay in the spring: then the flower-stalk comes up, rising two feet, naked half way, and terminated by a pyramidal thyrse of white flowers. These bulbs are generally cultivated in the greenhouse, and require a compost consisting of about one-half fresh loam, two-sixths leaf mould, and the remainder sand, in which they may be planted in September, When cultivated in the garden, they should be planted four or five inches deep, and protected with dung, &c. They produce their flowers early in June.

Oxalises.—These are natives of the Cape of Good Hope; the species are numerous, and their roots are nery small bulbs, articulated, jointed, or granulated, in a manner peculiar to this genus. They produce curious flowers of various hues, yellow, purple, rose, red, white, striped, vermilion colour, &c. The bulbs should be planted in very small pots in August and September, in a compost, consisting of about two-thirds loam, and one-third leaf or light mould, and treated in the same manner as other Cape Bulbs. They increase in a peculiar manner, by the parent bulb striking a fibre down from its base, at the extremity of which is produced a new bulb for the next years' plant, the old one perishing. These plants will flower freely in a greenhouse.

PRONY. Of this genus of splendid plants there

are known to be about twenty species, and as many varieties. It is said that the Pæonia officinalis rubra, or common double red Pæony, was introduced into Antwerp upwards of two centuries ago, at which time it was sold at an enormous price. It has since been highly esteemed in Europe and America, and is to be found in all well-established gardens, exhibiting its vivid crimson petals early in June. Many superb species have of late years been brought from China, a few of which may be noticed, with some others which are in very great repute.

Pæonia alba Chinensis, is one of the finest of the herbaceous sorts. The flowers are white, tinged with pink at the bottom of the petals.

- P. edulis whitliji has also white flowers, which are very large and splendid.
- P. edulis fragrans, is a fine large double scarlet variety, and produces flowers perfumed like the rose.
- P. Humei has beautiful large double dark blushcoloured flowers.
- P. paradoxa fimbriata, produces fringed double red flowers, which are very beautiful.

These are all hardy, and may be planted about four inches deep in the garden, in October or November. The flowers exhibit themselves to the best advantage when planted on a bed that is elevated, and of a circular form.

The following are half-hardy and half-shrubby; these have been known to survive the winter by being well protected, but are kept much better in a green-house; and they also exhibit their flowers to greater advantage than when exposed to the full sun:

- P. moutan Banksii, or Tree Pæony, produces very large double blush flowers in abundance, with feathered edges to every petal. This variety is highly deserving of cultivation.
- P. moutan rosea is a fine rose-coloured double variety, and produces very splendid flowers.
- P. moutan papaveracea produces large double white flowers, with pink centres. This splendid variety frequently bear flowers from nine to eleven inches in diameter.

Besides the above, are several others of various colours, some of which are semi-double.

Tulip.—The Tulip is a native of the Levant, and has been in cultivation nearly three centuries. It may be justly entitled the King of Flowers, for the brilliancy and endless combination of all colours and shades. The varieties of the Tulip are very numerous, and are divided into different classes. Those cultivated in regular beds by amateurs are rose-coloured, Bybloamen, and Bizarres. There are a great many beautiful varieties, denominated Parrot Tulips, which have notched petals, and striped, or diversified with green; and also some very dwarfish kinds, both

single and double, which are generally cultivated in parlours and greenhouses.

Mr. T. Hogg, of Paddington, near London, has published a work, entitled, "A Treatise on the Culture of Florists' Flowers," which comprises the Tulip. Carnation, Auricula, Ranunculus, Polyanthus, Dahlia, German China Asters, Seedling Heartsease, and New Annuals. In that work, which is dedicated to Queen Adelaide, the author remarks that the cultivation of the Tulip is one of the most fascinating and pleasing pursuits imaginable, and that when the "Tulip mania has fairly got hold of any one, it sticks to him like the skin on his back, and remains with him for the rest of his life." He instances a Mr. Davey, of Chelsea, as being in his seventy-fifth year, and in whose breast the fancy for Tulips was so predominant. that in the autumn of 1832 he was induced to part with a hundred sovereigns for one single Tulip, named "Miss Fanny Kemble." Perhaps a better definition of what constitutes the properties of a good Tulip could not be given than a description of this "precious gem, or loveliest of all Tulips;" but, lest my readers should conclude that the old gentleman was in his dotage, I would inform them that this favourite bulb was purchased of the executors of the late Mr. Clarke, with whom it originated, and that it had not only been the pet of its late owner, but had excited the envy and admiration of all the amateurs who went to view it.

[&]quot;This precious gem, a Bybloemen Tulip, was raised

from one of Mr. Clarke's seedling breeders, and broke into colour three years ago; it has produced two offsets since, and is adapted to the second or third row in the bed; the stem is firm and elastic; the foliage full and broad, of a lively green; the cup large, and of the finest form; the white pure, and wholly free from stain; the pencilling on the petals is beautifully marked with black or dark purple, and the feathering uniform and elegant; it preserves its shape to the last, the outer leaves not sinking from the inner; in a word, it is considered the first flower of its class, and the best that has ever been produced in England."

The article in the work already alluded to, on the cultivation of Tulips alone, occupies ninety-six pages; **?**, therefore, cannot attempt any thing more than an abridgement of the author's ideas on some important points. Those of my readers who may desire full information, are referred to the work itself, which may be obtained of Mr. G. C. Thorburn.

The following description may serve to govern the choice of amateurs: Tulips exhibited at the shows are, in general, classed and distinguished as follows: Flamed Bizarres, Feathered Bizarres, Flamed Bybloemens, Feathered Bybloemens, Flamed Roses, Feathered Roses, and Selfs, or plain coloured.

A Bizarre Tulip has a yellow ground, marked with purple or scarlet of different shades; it is called flamed when a broad irregular stripe runs up the middle of the petals, with short abrupt projecting points, branch. ing out on each side; fine narrow lines, called arched and ribbed, often extend, also, from this broad stripe to the extremity of the leaves; the colour generally appearing strongest in the inside petals; a Tulip, with this broad coloured stripe, which is sometimes called beamed or splashed, is, at the same time, frequently feathered also.

It is called feathered when it is without this broad stripe; but yet it may have some narrow lines, joined or detached, running up the centre of the leaf, sometimes branching out and carved towards the top, and sometimes without any spot or line at all; the petals are feathered more or less round the edges or margin, inside and out, the pencilling or feathering is heavy or broad in some, and light or narrow in others, sometimes with breaks or gaps, and sometimes close, and continued all round.

A Bybloemen Tulip has a white ground, lined, marked, striped, or variegated with violet or purple, only of various shades; and whether feathered or flamed, is distinguished by the same characters and marks which are pointed out and applied to the Bizarred Tulips.

'A Rose Tulip is marked or variegated with rose, scarlet, crimson, or cherry colour, on a white ground; and the Feathered Rose is to be distinguished from the Flamed by the same rules, as described before; the Rose is very often both feathered and flamed.

A Self, or Plain-coloured Tulip, properly so called,

is either white or yellow, and admits of no farther change; other plain-coloured Tulips, whether red or purple, are called breeders, and are hardly worthy of being exhibited. Mr. Hogg informs us, that £100 say \$500, judiciously expended at the present time, will give a moderate-sized bed that shall contain the greater part of the finest varieties grown; such a bed as £250 would not not have purchased twelve or fourteen years ago. To describe minutely the mode of planting a regular bed of Tulips would exceed our limits; suffice it to state that the name of every bulb should be written in a book, and that they should be so classed as to have all the varied colours to show advantageously; to this end, the tallest should be allotted for the middle of the bed, and others in regular gradation, so as to have the most dwarfish on the sides. The bulbs must be covered with good mould, to the depth of three inches from the top of the bulb on the sides of the bed, and about four inches in the middle. Let a small spoonful of clean drift sand be used around each bulb, and see that the bed be left sufficiently round from the middle to the edges. The beginner must understand that no unsightly tallies, or number sticks, are to distinguish the Tulips; but that he must adopt a sort of ground plan, dividing the whole bed into rows of seven bulbs across; for example, take and write down the names and places of the Tulips in the first row, and continue the same form all through to. the other end of the bed.

Row 1st.

No. 1.	Fenelon,	-	-	-	~	this is a B	vbloemen.
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- 2. Duchess of Clarence, Rose-coloured.
- 3. Charlemagne, - Bybloemen.
- 4. Louis the Sixteenth, Bybloemen.
- 5. Memnon. - Bizarre.
- 6. Volney, - Bybloemen.
- 7. Lady Crewe, - Rose-coloured.

Good fresh loam, taken from under healthy grass sods, is the most suitable soil for Tulips to grow in: under which should be buried, to the depth of a foot. about two inches thickness of well rotted cow or horse droppings. The reason for placing the dung so low is, that the fibres may get down to it, (which they will do,) and that the bulbs may not be injured by it, as is apt to be the case if too much dung is used around them. The best time for planting the bulbs, is early in November, and the beds should be made a fortnight previous, in order that the earth may become sufficiently settled. If severe frosts set in after the Tulips show themselves above ground in the spring, some protection should be given; single mats placed over hoop bends answer very well; and at the time of blooming, an awning should be erected over them, sufficient to screen the Tulips from the intense heat of the sun, which awning should be sufficiently spacious to admit of persons walking under, to view the beautiful flowers to the greatest possible advantage.

Tuberose.—This fragrant and delightful flower has been cultivated; in English flower gardens for

upwards of two centuries; with them, the bulbs are generally cultivated in pots, early in the spring, and transferred to the flower borders as soon as it becomes settled warm weather; for they are very tender. They generally succeed very well here, if planted at once in the open borders towards the end of April, and produce flowers which are pure white, and highly odoriferous, on a stem from three to four feet high. The bulbs produce a number of offsets, which should be preserved with the parent plants through the winter, and then parted off and planted by themselves in April or early in May, to produce flowering roots for the ensuing year. These roots thrive best in a light rich soil well pulverised, in which they should be planted about two inches deep, not forgetting to take them up again before the approach of winter.

TIGER FLOWER.—Perhaps there is no flower treated of in this work, that is more beautiful than some of the species of the genus Tigridia. Like all Mexican bulbs, these are tender, and should either be cultivated in the greenhouse, or carefully preserved until settled warm weather, and then planted in good light soil, in a sheltered situation. A bed of these beautiful flowers would afford as much gratification to some as a bed The Tigridia conchiiflora is of a rich of Tulips. yellow colour, tinged and spotted with white crimson; the colours are very vivid and purely contrasted. The Tigridia pavonia is of the brightest scarlet, tinged and spotted with brilliant yellow. The coralla, which is about four inches in diameter, is composed of six petals; the outer petals are thrown backward, and

exhibit the blossom in all its splendour, which exists only a single day; but as if to compensate for its transient visit, each plant will produce numerous flowers; and where a bed of them can be collected, they will amuse their admirers for several weeks, from July to September. In such a case, the bulbs may be planted about two inches deep, and from twelve to fifteen inches apart, towards the end of April or early in May, and taken up again in October, to preserve for planting the ensuing year.

OBSERVATIONS

ON THE

CULTURE OF BULBOUS ROOTS, IN POTS OR GLASSES, IN THE WINTER SEASON.

The culture of bulbous roots in a greenhouse, or light room, during the winter, is comparatively easy, provided two points be attended to; the first is to keep them near the light, and to turn the pots or glasses round frequently, to prevent their growing crooked; and the second is, when the plants have done growing, to give those in pots little or no water; for want of attention to these points, bulbs have been known to produce foliage, year after year, without showing any blossoms. All bulbs have a certain period of the year in which they are in a dormant state; this, in a state of nature, is invariably after the seeds are ripened; but as in a greenhouse, many of this family do not

ripen seeds, the cultivator should watch the period when the leaves show indications of decay; at which time, the supplies of water should be lessened; and shortly afterwards the earth should be suffered to get dry, and to remain so until the season returns, when the bulbs regerminate. Many sorts of bulbs are best kept in pots, under the soil, in a dry shady place, and in the same temperature as that in which they are in the habit of growing; but others, such as Hyacinths, Tulips, Narcissus, &c. may be taken out of the soil and preserved, as before directed, until the proper season for replanting.

Dutch Bulbous roots intended for blooming in pots during the winter season, should be planted during the months of October and November, and be left exposed to the open air until it begins to freeze, and then be placed in the greenhouse, or in a room where a fire is usually made. They will need moderate occasional waterings, until they begin to grow; then they should have abundance of air in mild weather, and plenty of water from the saucers, underneath the pots, whilst in a growing state; and should be exposed as much as possible to the sun, air, and light, to prevent the foliage from growing too long, or becoming yellow.

For this purpose, single Hyacinths, and such as are designated earliest among the double, are to be preferred. Single Hyacinths are generally held in less estimation than double ones, their colours, however, are more vivid, and their bells, though smaller, are

more numerous; some of the finer sorts are exquisitely beautiful; they are preferable for flowering in winter to most of the double ones, as they bloom two or three weeks earlier, and are very sweet-scented. Roman Narcissus, Double Jonquilles, Polyanthus Narcissus, Double Narcissus, and Crocuses, also make a fine appearance in the parlour during winter. It is a remarkable circumstance of the Crocus, that it keeps its petals expanded during tolerably bright candle or lamp light, in the same way as it does during the light of the sum. If the candle be removed, the Crocuses close their petals, as they do in the garden when a cloud obscures the sun; and when the artificial light is restored, they open again, as they do with the return of the direct solar rays.

Hyacinths and other bulbs intended for glasses, should be placed in them about the middle of November, the glasses being previously filled with pure water, so that the bottom of the bulb may just touch the water: then place them for the first ten days in a dark room to promote the shooting of the roots; after which expose them to the light and sun as much as possible. They will blow, however, without any sun; but the colours of the flowers will be inferior. The water should be changed as often as it becomes impure; draw the roots entirely out of the glasses, rinse off the fibres in clean water, and also the glasses inside: care should be taken not to suffer the water to freeze, as it not only bursts the glasses, but often causes the fibres to decay. Whether the water be hard or soft is of no great consequence; but soft, or rain water, is generally preferred, and it must be perfectly clear.

Forced bulbs are seldom good for any thing afterwards; however, those who wish to preserve them, may immerse them wholly in water for a few weeks; and then having taken them up, and dried them in the shade for a few days, they may be planted in a good soil, when they will sometimes flower the second year. It does not clearly appear in what way the water operates when the bulb is wholly immersed; but it is certain that bulbs so treated increase in size and solidity by it, and have an incomparably better chance of flowering the second year, than those which have not been so treated. Most probably their total immersion enables them to obtain a greater proportion of oxygen from the water.

Nosegays should have the water in which their ends are inserted changed, on the same principle as bulbous roots; and a much faded nosegay, or one dried up, may often be recovered for a time, by covering it with a glass bell, or cup, or by substituting warm water for cold.

Very fine Hyaciaths have been grown in a drawing room, in the following novel manner. A quantity of moss, classically called hypnum, and vulgarly fog, was placed in a water-tight box, about eight or nine inches deep, into which the bulbs were placed at the end of September, without mould, and duly watered. The result of this experiment was highly favourable.

OBSERVATIONS

ON THE

GENERAL MANAGEMENT OF GREENHOUSE PLANTS.

Having already exceeded my limits, I am compelled to be brief in my observations on such ornamental plants as are generally cultivated in hot and green-This description of plants embraces those which are collected from various climates, and thrive best in a temperature and soil similar to that in which nature first produced them: hence they who propagate exotic plants, must provide suitable composts, and also separate departments, where the different degrees of heat may be kept up, according to their nature and description. Some of these are raised from seed sown in the spring, others by layers, suckers, and offsets detached from the old plants, and many by slips and cuttings, planted at different seasons of the year, according to their varied natures, and state of the plants. Many kinds require the aid of glass coverings and bottom heat, created by fresh horse dung, tan, &c.

Were I to attempt to give directions for the propagation of all the varieties of useful and ornamental exotic plants cultivated in various parts of our country, it would require an entire volume. The catalogue of greenhouse plants alone kept by the enterprising proprietor of the Linnean Botanic Garden at Flushing, occupies fifty pages of close matter; it would, therefore, be impossible to do justice to the subject, without

dividing upwards of two thousand varieties of plants into classes, according to their varied natures, and treating of them under distinct heads; I shall, therefore, not attempt, in this edition, to write largely on the subject.

In order to render this little work useful to those who may wish to avail themselves of the pleasure of nursing some of those beauties of nature in their own dwelling-houses, during the most chilling days of our severe winters, and to afford amusement to the ladies, at a season when our gardens are deprived of their loveliest charms, I shall discuss some essential points connected with the management of greenhouse plants, in as explicit a manner as possible.

The following hints were selected for the first edition of the Young Gardener's Assistant, and appear to the author to embrace the most important points connected with the care of plants in the winter season.

The generality of those denominated greenhouse plants, and which are kept in rooms, should be placed where they can have the light of the sun, without being exposed to frost. Air, heat, and moisture are essential to the growth of plants; but these should be given in due proportions, according to circumstances. In frosty weather they should be kept from the external air, and watered very sparingly. When water is necessary, it should be applied in the morning of a mild supny day. The plants should be kept free from decayed leaves, and the earth at the top of the

pots should be sometimes loosened to a moderate depth, and replenished with a portion of fresh compost. Plants kept in private houses are often killed with kindness. The temperature of a room in the winter need not be more than ten degrees above freezing. If plants are healthy, they may be kept so by attention to the preceding hints; unhealthiness generally arises from their being subjected to the extremes of heat, cold, or moisture, or from total neglect.

In order that the ideas above advanced may be duly considered, it may be useful to indulge in a more minute description of the nature of plants, and to show in what manner the elements operate upon them. is an acknowledged fact, that the roots of plants require moisture, and therefore penetrate the earth in search of it, and that the plants themselves are greatly nourished by air, and spread their branches and leaves to catch as much as possible its enlivening influence. Light also is so far essential, that there can be no colour without it; witness the blanching of celery and endive, where the parts deprived of light become white; place a plant in almost any situation, it will invariably show a tendency to turn to the light; the sunflower is a striking example of this singular fact. As the leaves supply the plant with air, and the fibres of the roots supply it with nourishment, to strip off the leaves or destroy the fibres, is to deprive it of part of its means of support. Having shown that air and water are essential to vegetation, and light to its solour, experience shows us that heat, in a greater or less degree, is not less necessary to the growth of

plants; it is therefore requisite, that in taking plants into our rooms, we should attend to these particulars.

The internal structure of plants is composed of minute and imperceptible pores, which serve the same important purpose in the vegetable as veins in the animal system; they convey the circulation of the sap in the former, as the veins do that of the blood in the latter; but it is by no means settled as yet by physiologists how the food of plants is taken up into the system and converted into their constituent parts.

From the foregoing considerations and facts, it is evident, that, as air, heat, and moisture, are each essential to vegetation, that water should only be given in proportion as heat and air are attainable. In the summer season green-house plants may be exposed to the open air, from the early part of May, until the end of September, by being placed on the ledges of windows, or on a stand erected for the purpose, or in the absence of a nursery bed of flowering plants, they may be introduced into the regular flower-beds, to supply the place of such plants as may wither and die in course of the summer, by being turned out of the pots and planted, or plunged in the earth with the pots.

In the heat of the summer season, plants generally require water every evening, and in the absence of dews, the earth about their roots may sometimes need a little early in the morning; but experience shows, that the roots of plants more frequently get injured from

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being soddened in water, than from being kept moderately dry. Having before intimated that exotic plants. will generally thrive best in a temperature and soil similar to that in which nature first produced them, it may be necessary to remind the reader, that we have the means of attaining suitable composts from our own soils, and from sand, decayed leaves, rotten dung, and various kinds of peat, bog, and rock mould; these ingredients being judiciously mixed and prepared may be suited to all the various kinds of plants, and should be used as occasion requires. As the roots of plants make considerable growth in the course of a summer, it will be necessary to examine them by turning them out of the pots; this may be done early in September, at which time all matted and decayed roots should be pared off, and the plants shifted into larger pots, which being filled with suitable compost, and watered, will be ready to be removed into the house on the approach of cold nights, which is generally early in October.

Green-house plants require an annual pruning, and should be occasionally headed down, in order that their size and appearance may be improved; the best time for doing this is soon after they have done flowering, and while they are in a growing state. Having endeavoured to furnish my readers with the artificial means of preserving tender plants in a climate foreign to that which nature has provided for them, I shall call their attention to another class of plants well calculated for the windows of a house.

I allude to the many beautiful varieties of the Chi-

nese Chrysanthemum; these are frequently cultivated in pots, and may be taken from the ground and put into pots, even when in full flower, without injury, and when the bloom is over, returned to the garden. In the spring following, they will throw up an abundance of suckers.

The following list consists of some of the best varieties of the Crysanthemum, and are entitled to a place in every flower garden. In October and November, when the waning year has left our gardens comparatively cheerless, these with their various colours, deck them out in gaiety, and prolong the semblance of summer. They are perfectly hardy, and will brave our severest winters.

CHRYSANTHEMUMS.

White quilled. Pale buff, or orange. Changeable, red and orange flower on the same plant. Purple. Lilac quilled. Rose coloured, or pink. Lilac and white, changeable; the flowers vary to lilac, to white with a purple centre, and to pure white. Dark crimson, or Spanish brown. Straw coloured quilled. Golden yellow. Tasselled white, Superb do. Semidouble quilled do. Paper do.

Quilled light purple. Expanded do. do. Quilled yellow. Double Indianyellow, superb Double Indian white, superb Brown purple. Early Blush. Golden lotus. Quilled purple. Starry purple. Park's small yellow, beautiful. Quilled salmon. Semidouble quilled pale orange. Two coloured red. Curled buff, or salmon. Large lilac. Late pale purple.

Quilled flame yellow. Sulphur do.
Superb clustered do.
Small do.
Single flame yellow.
Quilled pink.
Semidouble quilled do.
Quilled erange.
Semidouble quilled do.
Early crimson.
Curled lilac.

Two coloured incurved. Blush ranunculus. Late quilled purple. Tasselled lilac. 'Tasselled yellow. Yellow waratah. Pale lilac. Large buff, superb. Barclay's. Aiton's. Sabine's.

Chrysanthemums may be propagated from seed and cuttings, and each plant will produce several suckers, which may be separated every spring; as the flowers are liable to be injured by the rain in autumn, it is advisable to take up a few plants, and place them in a light room or green-house, which will preserve them for some time.

Many people keep their late-blooming plants in the house through the winter; this is a bad practice, as the heat and want of air will exhaust or destroy the plants altogether. If the flowers fade before hard frost prevails, it is best either to plunge the pots into the ground with the plants, or turn them out of the pots, and plant them, with the balls of earth entire, into the borders of the flower garden. Early in May, such as may be intended for potting the ensuing season, should be divided at the roots, if not potted and planted, each kind separate. One single stem is sufficient for a moderate sized pot, if the object be to have bushy plants; but if showy plants are desired, one of each of the varied colours may be selected for each pot, which should be sufficiently capacious to hold them without crowding them, as this will cause the plants to grow

weak and slender. If this happens early in the summer, a stocky growth may be produced by clipping the tops, and they will bloom in great perfection at the usual season.

The following articles were first written for the American Gardeners' Magazine; and from their congeniality to the subject matter of this book, the author has been induced to lay them before his readers. The first article exhibits the order of the flowery tribe, perhaps better than it could have been done in any other way; and the latter may be considered worth keeping in print, and is respectfully submitted by the author as an appendage to the flower garden:—

THE BEAUTIES OF APRIL AND MAY.

APRII.

"Descend, sweet April, from yon watery bow, And liberal strey the ground with budding flowers, With leafless crocus, leaf-veiled violet, Auricula, with powdered cup, primrose That loves to lurk below the hawthorn shade."

It is generally admitted that the month of April gives the most perfect image of spring; for its vicissitudes of warm gleams of sunshine and gentle showers have the most powerful effect in hastening the universal springing of the vegetable tribes, from whence

the season derives its appellation. Next comes the favourite month of the year in poetical description,

MAY.

"For thee, sweet month, the groves green liv'ries wear; If not the first, the fairest in the year; Thou dost afford us many pleasant hours, While Nature's ready pencil paints the flowers."

The pious Hervey, in his meditations on the flower garden, has furnished us many sublime ideas respecting the order, variety, and beauty of the flowery tribe. It is in vain to attempt a catalogue of those amiable gifts. There is an endless multiplicity in their characters, yet an invariable order in their approaches. Every month, almost every week, has its peculiar ernaments; not servilely copying the works of its predecessors, but forming, still forming, and still executing, some new design: so lavish is the fancy, yet so exact is the process of nature. Were all the flowery tribe to exhibit themselves at one particular season, there would be at once a promiscuous throng, and at once a total privation.

We should scarcely have an opportunity of adverting to the dainty qualities of half, and must soon lose the agreeable company of them all. But now, since every species has a separate post to occupy, and a distinct interval for appearing, we can take a leisurely and minute survey of each succeeding set. We can view and review their forms; enter into a more intimate acquaintance with their charming accomplishments, and receive all those pleasing sensations which they are calculated to yield.

Before the trees have ventured to unfold their leaves. and while the icicles are pendant on our houses, the snow-drop breaks her waythrough the frozen soil, fearless of danger. Next peeps out the crocus, but cautiously, and with an air of timidity, She shuns the howling blasts, and cleaves closely to her low situation. Nor is the violet last in the shining embassy, which, with all the embellishments that would grace a royal garden, condescends to line our borders, and bloom at the feet of briars. Freely she distributes the bounty of her emissive sweets, while herself retires from sight, seeking rather to administer pleasure than to win ad-Emblem, expressive emblem, of those miration. modest virtues, which delight to bloom in obscurity. There are several kinds of violets, but the fragrant, both blue and white, are the earliest. Shakspeare compares an exquisitely sweet strain of music to the delicious scent of this flower:

> "O! it came o'er my car like the sweet south, That breathes upon a bank of violets, Stealing and giving odour."

The pious Hervey, in his admonitions to those who indulge in sloth, has thrown out the following sublime ideas: "What sweets are those which so agreeably salute my nostrils? They are the breath of the flowers, the incense of the garden. How liberally does the jasmine dispense her odoriferous riches! How deliciously has the woodbine embalmed this morning walk! The air is all perfume. And is not this another most engaging argument to forsake the bed

of sloth? Who would be dissolved in senseless slumbers, while so many breathing sweets invite him to a feast of fragrancy—especially considering that the advancing day will exhale the volatile dainties? A fugitive treat they are, prepared only for the wakeful and industrious. Whereas, when the sluggard lifts his heavy eyes, the flowers will droop, their fine sweets be dissipated, and instead of this refreshing humidity, the air will become a kind of liquid fire.

With this very motive, heightened by a representation of the most charming pieces of morning scenery, the parent of mankind awakes his lovely consort. There is such a delicacy in the choice, and so much life in the description of these rural images, that I cannot excuse myself without repeating the whole passage. Whisper it, some friendly genius, in the ear of every one, who is now sunk in sleep, and lost to all these refined gratifications!

"Awake! the morning shines, and the fresh field Calls you: ye lose the prime, to mark how spring The tended plants, how blows the citron grove; What drops the myrrh, and what the balmy reed; How Nature paints her colour, how the bee Sits on the bloom, extracting liquid sweets."

How delightful is this fragrance! It is distributed in the nicest proportion; neither so strong as to oppress the organs, nor so faint as to elude them. We are soon cloyed at a sumptuous banquet; but this pleasure never loses its poignancy, never palls the appetite. Here luxury itself is innocent; or rather

in this case, indulgence is incapable of excess. This balmy entertainment not only regales the sense, but cheers the very soul; and, instead of clogging, elates its powers."

Our subject is so enchanting, that we had inadvertently wandered from the path we first entered. now retrace our steps, and take a glance at surrounding objects. The fields look green with the springing grass. See the daffodil how it spreads itself to the wind! The leaves of honey-suckles begin to expand, and lilacs, or syringas, of various hues, unfold their buds. The almond exhibits its rosy clusters, and the corchorus its golden balls. Many of the lowlier plants exhibit their yellow and purple colours, and the buds of lilies, and other perennial plants, prepare to show themselves. If we turn our attention to the orchard, we behold the apricots, nectarines, and peaches, lead the way in blossoming, which are followed by the cherry and the plum. These form a most agreeable spectacle, as well on account of their beauty as of the promise they give of future benefits. It is, however, an anxious time for the possessor, as the fairest prospect of a plentiful increase is often blighted. Shakspeare draws a pathetic comparison from this circumstance, to paint the delusive nature of human expectation:

> "This is the state of man; to-day he puts forth The tender leaves of hope; to-morrow blossoms, And bears his blushing honours thick upon him; The third day comes a frost, a killing frost, And nips his root."

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But we now return to the garden. Before we have time to explore nature's treasures, many disappear; amongst those we had almost forgotten the humble daisy, which shrinks from the intense heat, and the several varieties of primulas, or early spring flowers, The various grades of polyanthus deserve a close inspection; these, for a while, exhibit their sparkling beauties, but, alack! soon disappear. Scarcely have we sustained this loss, but in comes the auricula, and more than retrieves it. Arrayed she comes in a splendid variety of amiable forms, with an eye of crystal. and garments of the most glossy satin. A very distinguished procession this! The favourite care of the florist, but these also soon disappear. Who could forbear grieving at their departure, did not the various sorts of bulbous flowers burst ther bands asunder, or rather expand, so as to exhibit their fragrance and While we reluctantly dispense with the sweet perfumes of the hyacinth and narcissus, we behold the tulips begin to raise themselves on their fine wands or stately stalks. They flush the parterre with one of the gayest dresses that blooming nature wears. Here one may behold the innocent wantonness of beauty. Here she indulges a thousand freaks, and sports herself in the most charming diversity of colours. In a grove of tulips, or a bed of pinks, one perceives a difference in almost every individual. Scarcely any two are turned and tinted exactly alike. What colours, what colours are here! these so nobly bold, and those so delicately languid. What a glow is enkindled in some! what a gloss shines upon others. With what a masterly skill is every one of the vary-



ing tints disposed! Here they seem to be thrown on with an easy dash of security and freedom; there they are adjusted by the nicest touches of art and accuracy. Those colours which form the ground are always so judiciously chosen, as to heighten the lustre of the superadded figures; while the verdure of the impalement, or the shadings of the foliage, impart new liveliness to the whole. Fine, inimitably fine, is the texture of the web on which these shining treasures are displayed. What are the labours of the Persian looms; what all the gay attire which the shuttle or the needle can furnish, compared with nature's works? One cannot forbear reflecting in this place, on the too prevailing humour of being fond and ostentatious of dress. What an abject and mistaken ambition is this! How unworthy the dignity of man, and the wisdom of rational beings! Especially since these little productions of the earth have indisputably the preeminence in such outward embellishments. had nearly forgotten the fragrant, the very fragrant wall and gilly-flowers; some of these regale us with their perfumes through various vicissitudes and alterations of the season, while others make a transient visit only. In favoured situations arises the anemone, encircled at the bottom with a spreading robe, and rounded at the top into a beautiful dome. In its loosely-flowing mantle, you may observe a noble negligence; in its gently-bending tufts, the nicest symmetry. This may be termed the fine gentleman of the garden, because it seems to possess the means of uniting simplicity with refinement, of reconciling art and ease. The same month has the merit of producing the ranunculus. All bold and graceful, it expands the riches of its foliage, and acquires by degrees the loveliest enamel in the world. As persons of intrinsic worth disdain the superficial arts of recommendation practised by fops, so this lordly flower scorns to borrow any of its excellencies from powders and essences. It needs no such attractions to render it the darling of the curious, being sufficiently engaging from the elegance of its figure, the radiant variety of its tinges, and a certain superior dignity of aspect.

I had intended to confine our meditations to the beauties of April and May, but nature seems to improve in her operations. Her latest strokes are the most masterly. To crown the collection, she introduces the carnation, which captivates our eyes with a noble spread of graces, and charms another sense with a profusion of exquisite odours. This single flower has centered in itself the perfection of all the preceding. The moment it appears, it so commands our attention, that we scarcely regret the absence of the rest. The field we have entered is so extensive and so enchanting, that we cannot extricate ourselves, without taking a cursory glance at the airs and habits, the attitude and lineaments, of each distinct class. See the Pæonia of China, splendid and beautifully grand! View the charming rose, delicate and languishingly fair! and while you inhale its balmy sweetness, you will be constrained to admire it, notwithstanding its thorny appendages. Behold all the pomp and glory of the parterre, where nature's paint and perfume do wonders. Some rear their heads as with a majestic

mien, and overlook, like sovereigns or nobles, the whole parterre. Others seem more modest in their aims, and advance only to the middle stations; a genius turned for heraldry might term them the gentry of the border; while others, free from all aspiring airs, creep unambitiously on the ground, and look like the commonalty of the kind. Some are intersected with elegant stripes, or studded with radiant spots. Some affect to be genteelly powdered, or neatly fringed; while others are plain in their aspect, unaffected in their dress, and content to please with a naked simplicity. Some assume the monarch's purple; some look most becoming in the virgin's white; but black, doleful black, has no admittance into the wardrobe of spring. The weeds of mourning would be a manifest indecorum, when nature holds an universal festival. She would now inspire none but delightful ideas, and therefore always makes her appearance in some amiable suit. Here stands a warrior clad with crimson; there sits a magistrate robed in scarlet; and yonder struts a pretty fellow, that seems to have dipped his plumes in the rainbow, and glitters in all the gay colours of that resplendent arch. Some rise into a curious cup, or fall into a set of beautiful bells. Others spread themselves in a swelling tuft, or crowd into a delicious cluster. In some the predominant stain softens by the gentlest diminutions, till it has even stolen away from itself. The eye is amused

at the agreeable delusion, and we wonder to find ourselves insensibly decoyed into quite a different lustre. In others you will think the fine tinges were emulous of pre-eminence. Disdaining to mingle, they confront

one another with the resolution of rivals, determined to dispute the prize of beauty; while each is improved by the opposition, into the highest vivacity of complexion.

THE MATRIMONIAL GARDEN.

MAN is formed for social enjoyment, and if it be allowed that "it is not good for man to be alone," it may be justly inferred that it is not good that woman should be alone; hence a union of interests indicates a union of persons for their mutual benefit. By this union, a sort of seclusion from the rest of our species takes place; and as a garden is a retired apartment, appropriated to culture and improvements, the married state may not be inaptly compared with it in many respects.

It is good and honourable for the human species, prudently and cautiously to approach this delightful enclosure. Its entrance in general is extremely gay and glittering, being strewed with flowers of every hue and every fragrance, calculated to charm the eye and please the taste; but they are not all so; and as there are many persons who may wish to enter this garden at some time or other, who are yet strangers to its various productions, their attention should be directed to the cultivation of those plants which are beneficial, and to the avoiding or rooting up of those which are injurious.

And first, let me caution adventurers in this garden not to dream of permanent happiness; if you should so dream, experience will soon make you wiser, as such happiness never existed but in visionary heads. If you are desirous that this garden should yield you all the bliss of which it is capable, you must take with you that excellent flower called GOOD HUMOUR. which, of all the flowers of nature, is the most delicious and delicate; do not drop it or lose it, as many do soon after they enter the garden—it is a treasure that nothing can supply the loss of. When you get to the end of the first walk, which contains about thirty steps, commonly called "the Honey Moon Path," you will find the garden open into a vast variety of views, and it is necessary to caution you to avoid many productions in them which are noxious, nauseous, and even fatal in their nature and tendency, especially to the ignorant and unwary. There is a low, small plant, which may be seen in almost every path, called IN-DIFFERENCE.—This, though not perceived in the entrance, you will always know where it grows, by a certain coldness in the air which surrounds it. Contrary to the nature of plants in general, this grows by cold and dies by warmth; whenever you perceive this change in the air, avoid the place as soon as you can. In the same path is often found that baneful flower called JEALOUSY, which I advise you never to look at, for it has the strange quality of smiting the eye that beholds it, with a pain that is seldom or never got rid of. Jealousy is a deadly flower; it is the aconite of the garden, and has marred the happiness of thousands.

As you proceed, you will meet with many little crooked paths. I advise you, as a friend, never to go into them, for although at the entrance of each, it is written in large letters, I AM RIGHT, if you do enter, and get to the end of them, you will find the true name to be PERVERSENESS. These crooked paths occasion endless disputes, and as it is difficult to make the crooked straight, it is better to avoid them altogether, lest, as it sometimes happens, a total separation be the consequence, and you take different paths the rest of your lives. Near this spot, you will meet with a rough, sturdy plant, called OBSTINACY, which bears a hard, knotty fruit, that never digests, and of course must injure the constitution; it even becomes fatal, when taken in large quantities. Turn from it. avoid it as you would the cholera.

Just opposite to this, grows that lovely and lively shrub, called COMPLIANCE, which, though not always pleasant to the palate, is very salutary, and leaves a sweetness in the mouth; it is a most excellent shrub, and produces the most delicious fruit.—Never be without a very large sprig in your hand; it will often be wanted as you go along, for you cannot be happy without it in any part of the garden.

In one of the principal compartments, stands a very important plant, called ECONOMY; it is of a thriving quality; cultivate this fine plant with all your care; it adorns and enriches at the same time. Many overlook it, some despise it, and others think that they shall never want it; it is generally overlooked in the

gaiety and levity with which people enter this place, but the want of it is generally paid for with bitter repentance. There are two other plants of the same species, which are very closely connected, called INDUSTRY and FRUGALITY, and I must take leave to tell you that, unless both the male and the female partake largely of their branches, very little success can be expected; in this they must both unite. Take care that you provide yourself and partner with a supply of each as soon as possible after you enter the garden.

There are two or three paths which run much into one another, and deserve the closest attention of the softer sex; I mean REGULARITY, EXACTNESS and NEATNESS.* Do not think, as some do, that when you have once got into the garden, you may be neglectful of these paths. Remember that your companion will see your neglect, which will affect his eye, and may alienate his heart. Enter on these departments, then, as soon as you enter the garden, and when you are once fairly in, you are in for life; the danger is, that if you do not get into them at an early period, you will not find them afterwards. Near these walks is to be found that modest plant, called HUMILITY:

It is the violet, "doom'd to blush unseen, And waste its sweetness on the desert air."

It appears of little worth in itself, but when joined with other virtues, it adds a charm to life, and spreads a fragrance around its wearer. Cultivate then, with

^{*} In deportment as well as in dress.

all your care; this sweet little plant, and you will find it prevent the growth of all poisonous and noxious weeds.

Allow me also to drop a hint on the subject of CUL-TIVATION, as connected with PROPAGATION, as that most probably will be your employment in this garden, sooner or later. Should you have the rearing of a young plant, remember that it is frail in its nature. and liable to be destroyed by every blast, and will demand all your care and attention. Should you be witness to a blast on its dawning beauties, Oh, how your fond heart will bleed with tenderness, affection, and sympathy! The young shoot will naturally twine around all the fibres of your frame. Should it live and thrive, spare no pains to "train it up in the way it should go." Weed it, water it, prune it; it will need all the cultivator's skill. Without this, many weeds and baneful plants will grow up with it, and blast your fondest hopes. Be ever mindful that this is a TRUST for which both parties are accountable.

Without careful cultivation, what can 'you expect but the most luxuriant growth of unruly appetites, which, in time, will break forth in all manner of disgraceful irregularities? What, but that ANGER, like a prickly thorn, will arm the temper with an untractable moroseness? That PEEVISHNESS, like a stinging nettle, will render the conversation irksome and forbidding? That AVARICE, like some choking weed, will teach the fingers to gripe, and the hands to oppress? That REVENGE, like some poisonous

plant, replete with baneful juices, will rankle in the breast, and meditate mischief to its neighbour? While unbridled LUSTS, like swarms of noisome insects, taint each rising thought, and render "every imagination of the heart only evil continually?" Such are the usual products of unrestrained nature! Such the furniture of the uncultivated mind!

By all means, then, pay due attention to culture. By suitable discipline clear the soil. By careful instruction implant the seeds of virtue. By skill and vigilance prune the unprofitable and over-luxuriant branches:—"direct the young idea how to shoot,"—the wayward passions how to move. The mature man will then become the chief ornament of the garden. Around him CHARITY will breathe her sweets, and in his branches HOPE expand her blossoms. In him the personal virtues will display their graces, and the social ones their fruit—the sentiments become generous, the carriage endearing, the life useful, and the end happy and peaceful.

knowledge of gardering, may regret my having deviated from the subject matter of the book, in connecting the two last articles, I would remind such, that a work devoted wholly to practical subjects, is too dull for the generality of readers; my object has, therefore, been to amuse, as well as to instruct.

T. BRIDGEMAN.

New-York, March 8, 1835.

CALENDAR AND INDEX.

The object of this Calendar is to furnish, in a condensed form, monthly directions for the culture of some plants not previously mentioned in this work; and also, to direct the neader's attention to the regular management of such plants as have been heretofore treated of. In pursuit of the latter object, references will be made to former pages, so as to exhibit, at one view, the business of the Flower Garden, in each month of the year. The figures refer to the pages in which further directions may be found relative to the operations adverted to.

JANUARY.

Having shown in page 79, that heat, air, and water, are the food of plants, and necessary to the preservation of their health and life, if given in due proportions according to circumstances, I would, at this season of the year, especially, salute the gardener with a "be ye temperate in all things."

Temperance, in the use of water, is of the utmost importance in the winter season, for several reasons which may be given. In the first place, water will attract frost, and, therefore, should be used very sparingly in frosty weather; another consideration is that in the absence of heat and air, plants cannot absorb much moisture, and consequently must become injured from excessive watering; and it may be

observed further, that it is not prudent to keep plants in an extremely vigorous state until the season arrives. when the natural air is soft and salubrious; they can then have a due proportion of heat, air, and moisture at the same time.

Perhaps the next important point to be attended to at this time is, to see that the greenhouse, or room, in which plants are intended to be preserved, is calculated for the purpose. The room should be light and airy,

and yet so secure as to prevent the intrusion of external cold air, or the departure of warm air in the night season.

A Fahrenheit thermometer is indispensable in a greenhouse, or room, where plants are kept, and the temperature should be always up as nearly as possible to 40 degrees, in the absence of the sun. If the gardener retires to rest in this variable climate, leaving the mercury much below 40, he may expect to find

his plants frozen by the morning.

At this season of the year especially, sitting-rooms or parlourseare heated in the daytime to full 20 degrees higher than what is necessary for the preservation of plants; consequently, as the heat declines in the night season, plants often get injured, unless a fire is kept up. Air must be admitted to plants kept in this way at all opportunities, and more water will be necessary for such plants, than those kept in a greenhouse would require. For the management of Bulbous roots, in pots or glasses, the reader is referred to page 73.

FEBRUARY.

Having in the previous chapter discussed some importantipoints relative to the general care of plants, . I new proceed to notice a few of those kinds that require attention at this particular season: Camellias. or Japan Roses. These valuable plants are too often injured by amateurs from misapplied care bestowed upon them, so that their whole compensation and enjoyment is reduced to the mere possession of a handsome green shrub. Destined from the extreme beauty and unrivalled delicacy of their flowers to become the chief pride and ornament of the greenhouse and drawing-room in the winter season, the Camellias should have a fair chance given them to exhibit their

bloom in perfection.

It should be observed, that Camellias are by no means tender shrubs, but require to be kept in a medium even temperature, and they generally succeed best in a greenhouse, where the atmosphere is damp. As the buds begin to swell, they will require more water than at any other time, which may be applied from the rose of a watering pot, or syringe, while in bud, but when in blossom, it should be applied to the earth.

If Camellias be kept where there is a dry air, occasioned from fire heat, they must have plenty of the natural air at all opportunities, or the buds will become brown and fall off; and if they are subjected to extreme cold at night, which is too frequently the case, when kept in rooms of an uneven temperature, premature decay of the buds will inevitably be the consequence.

Such bulbous roots as may be in progress of blooming, will require attention this month; turn them frequently to the light, as recommended in page 73, increase the supplies of water as they advance towards perfection, and admit air at all opportunities. Take off and remove yellow and decayed leaves from plants in general; those that are not in bud should be watered very sparingly. Shrubby plants, especially those which bud and blossom in the winter, and early part of the spring, as the several varieties of Acacias, Correas, Coronillas, Daphnes, Diosmas, Eutaxias. Fuchsias, Gnidias, Heaths, Laurustinuses, Lemon and Orange trees, &c., will require water once or twice a week according to circumstances, and air should be given at all opportunities, or the plants will not blossom in perfection.

MARCH.

As the spring progresses, the natural air will be soft and salubrious; at which time it should be freely admitted to plants kept in rooms and greenhouses. In proportion as the plants get air, they should have water applied from the rose of a watering-pot.

Monthly Roses will require attention this month. It should be recollected, that it is from the young wood of these plants, that buds are to be expected; their growth should, therefore, be encouraged, by admitting sun and air at all opportunities, and water when

necessary.

Primulas. There are several species of plants under this name, which exhibit their blossoms in March and April; some of which are very beautiful, as the Polyanthus, English Spring Flowers, Auricula, &c; but I would now direct the reader's attention to the Chinese varieties, some of which are pure white, and others of a lilac colour. They are first raised from seed sown in the spring, and will keep two or three years.

Plants that are full grown, will commence blooming in December, and continue to produce umbels of flowers for five or six months, if well attended to; they are generally in their prime this month, at which time a little water should be applied to the earth about

twice a week.

For the benefit of such as may wish to raise early plants from seed, or to force Dahlia or other roots, I subjoin the following brief directions for making a small hot-bed: In a border exposed to morning sun, let a pit be dug about thirty inches deep, three feet wide, and six long; this will admit of two sashes, each about three feet square. A frame of suitable dimensions may be made of plank; the back plank may be two feet wide, and the end ones may be sloped so as to make a fifteen-inch plank do for the front. The frame being made, set it over the pit, and then get about half a load of horse dung, fresh from the livery

stables, (not such as have lain long, or may have been soddened with water,) spread the dung evenly in the pit until it is full, then put in good light rich mould or compost, to the depth of about ten or twelve inches, and the seed may be sown as soon as the mould gets warm, see page 16. It may be necessary to observe, that in making hot-beds, the quantity of top mould should be regulated according to the substance of manure in the pit, and this may vary according to the use the beds are intended for, or to other circumstances. After the seeds are sown, the beds will require constant attention; cover up warm in cold nights, and give air at all opportunities, to prevent the plants from growing weak.

APRIL.

This is the most important month in the year for gardening operations. If not done towards the end. of the last month, the covering must be taken from hardy flowering plants, early in this month, and the beds and borders attended to as directed, page 15, 25, 59, and 71; at the same time, clip edgings of box, and clean, relay, or make new gravel walks, &c. 11; prune and transplant flowering shrubs, 26 and 39; and hardy herbaceous plants, 22 and 23. Sow flower seeds; the hardiest may be sown in the open borders, and the tender in hot-beds, 16 to 19. All the soil of a garden should be dug this month, if possible, and pulverised as directed, 16 and 41. It will be necessary to look over all the greenhouse plants in the early part of this month; let them be deprived of dead wood, if any, by a careful pruning; at the same time take off all yellow leaves; the earth, at the top of the pots, should be loosened, so as to admit the sun and air to the roots of the plants, 78 and 81. If insects prevail, on roses or other plants, a fumigation, with tobacco smoke, will be necessary. Bulbous roots will require some attention this month; those in bloom, in the garden, should be tied up to wires or small sticks; and those

kept inside should be watered in proportion as they get heat and air. The Calla, or Ethiopian Lily, will need frequent watering while in bud and blossom. Air must be admitted freely to all greenhouse plants towards the end of this month, in order to prepare them. for the exposure of the open garden next month. For the method of managing Dahlia roots, 54; prepare to plant tender bulbous roots, towards the end of this, or early in the next month. The following should be forwarded in pots, which may be kept in a greenhouse or warm room, or they may be plunged in a hot-bed: Amaryllises, 46; Gladioluses, 57; Lilies, 62; Tuberoses, 72; Tiger Flowers, 73. Hydrangeas, Pomegranates, Verbenas, and other deciduous shrubby plants, should be cultivated early in this month, to promote the production of leaf and flower buds.

MAY.

As the warm weather progresses, the gardener should be on the alert, in order to conquer the various kinds of insects. Burn tobacco leaves in the greenhouse, so as to fumigate the plants well, before they are removed into the open garden; and such plants as may show any indications of being infested with the eggs of insects should be sponged with soap-suds, and afterwards well syringed and watered. sprinkling from the rose of a watering-pot, will prevent insects from accumulating; especially if the water be impregnated with tobacco, by a bag of the leaves being steeped therein a few hours previous to using it. Choice Geraniums will need attention this. month, in order that they may exhibit their flowers to advantage. When in full bloom, care should be taken not to wet the foliage or flowers, but this may be done freely before the buds are expanded. If awaings were not provided last month, for the protection of choice flowers, it should be attended to early in this month, 46, 58 and 71. Plant Amaryllises, 46; Double Dah

lias, 54 and 55; Gladioluses, 57; Lilies, 62; Tuberoses, 72; Tiger Flowers, 73. Sow Annual, Biennial, and Perennial flower seeds in the open borders, 16 to 22. Attend to the walks, edgings, &c. and see that tall plants are neatly tied to sticks, wires, or stakes, 11, 24, 55, and 59. Procure and plant such Perennial plants as may be necessary to make variety

in the flower beds, 23.

Greenhouse plants may be set out by about the middle of the month, and it should be done in cloudy weather, in order that they may be prepared gradually for the shining of the sun upon them. A situation, exposed to the sun for only one half of the day, is preferable for most plants, especially if they can be shaded at noon. Many plants, such as Coronillas, Heaths, Aucubas, Myrtles, Oleanders, and several other sorts, are subject to be infested with white and brown scaly insects; if these cannot be effectually taken from the . plants by washing and sponging, let the plants be headed down early in the month of May, and if they are well attended to, new branches will shoot out on the old stem. Such Orange trees as were budded last July or August, should also be headed down early in this month.

JUNE.

The principal sowing season may be considered as past; but if any failures should have happened of former sowings, seeds may be sown the early part of this month, which, if kept watered occasionally, will grow very quick. Greenhouse plants will need watering every evening, in dry warm weather; and in the absence of dews, some sorts may need a little in the morning at sunrise, 80. Hydrangeas, Daisies, Polyanthus, Primulas, &c. should be kept shaded from the noon-day sun, or they will droop, and some may die. Carnations and Pinks will need frequent watering at the roots, and the branches should be tied neatly to rods. Such flowering shrubs as may have.

been planted late in the Spring season, should be frequently watered in dry weather. Give frequent waterings to the flower beds, in general; cut down dead flower stalks; remove decayed plants, and replace them with vigorous ones from the nursery bed, it. Transplant annual flower plants into the regular beds with a small trowel or neat dibble, 19.

Plant Colchicums, 48; finish planting Dahlias, and provide poles for their support, 55; water them occa-

sionally in dry weather.

Many sorts of Bulbous roots will be ripe by the end of this month; these should be taken up, and dried as directed, page 42. Those cultivated in pots should not be watered after the foliage is decayed, until the period of regermination takes place, 44 and 74.

Numerous beautiful flowers exhibit themselves this month; some of which are noticed in an article entitled. The Beauties of April and May, page 89 to 91. There are, however, several others worthy of notice, which are omitted in that article. The several species of the Phlox, are remarkable showy plants, and very desirable to cultivate, as they blossom in their several varieties the whole season. Besides these, are all the splendid varieties of Roses, Pæonies, Pinks, Lychnises, Sweet Williams, Fox Gloves, Snap-dragons, Perennial Lupins, Verbenas, Veronicas, Valerians, &c. These should be all attended to, and their branches should be tied to neat stakes, so as to enable them to exhibit their flowers to the greatest possible advantage.

JULY.

Greenhouse plants will need daily care at this season; let them be watered every evening in dry weather. Such Geraniums as may have grown large and unwieldy, may now be pruned, in order that their size and appearance may be improved, 81. Garden Roses having done flowering for the season, should also be pruned. Cut out all old exhausted wood, and where

it is too thick and crowded, shorten such shoots as have flowered to a good fresh strong eye, or bud, accompanied with a healthy leaf. All wood that grows after this pruning, will ripen perfectly, and

produce large flowers the ensuing year.

If dry warm weather, it may be necessary to water such flowering shrubs and roses as were planted in the spring; and if Dahlia plants could be watered two or three times a week, it would be beneficial to their growth. Give regular syringings or sprinklings from the rose of a watering-pot, to shrubby plants in general, but particularly to Camellias, Orange and Lemon trees, &c., in order to keep them in a healthy state.

Such bulbous roots in pots, whose foliage may have withered, should be kept dry until the period of regerminating, 44 and 74; others may be taken up as soon as ripe, after which the offsets may be parted off, and both these and the parent bulbs dried for planting in Autumn, 42.

The Flower Garden should be kept weeded and watered, and the seeds gathered as they ripen; apply neat rods to the tall-growing and running kinds of plants. Nip off curled and dead leaves, and destroy

insects.

Orange and Lemon trees may be budded any time this month, and those which were headed down in the spring, should be examined, and all superfluous shoots must be pruned off with a sharp knife, leaving only the strongest; the tops of which should be pruned off to promote their branching. Myrtles, Oleanders, and such other plants as may have been headed down in May, will need similar treatment.

AUGUST.

Greenhouse plants will need particular attention this month. They should be watered every evening in dry weather, and as soon as the extreme heat of

the Summer is past, preparation must be made for replenishing them with fresh compost, by repotting them. Previous to the commencement of this business, let such compost as is suited to the various kinds of plants be provided, 81. Those who may have a number of plants in various sized pots, should provide a few new pots a size larger than the largest in use; the largest plants being shifted into the new pots, leaves the next sized pots for the second-sized plants, and by pursuing this plan of shifting until the whole are done, the smallest pots will be left for such plants as may have been propagated in the course of the Summer. shifting of plants requires considerable attention and judgment, as some plants, if kept in over large pots. will sustain considerable injury; therefore, in such cases, where the fibrous roots have not spread around the pot, nothing more is necessary than to rub off a little of the outside mould, and then to substitute fresh compost for the roots to run in. Such plants as may have become pot-bound, and whose roots are matted around the pot, will, in many cases, bear reducing. If the matted roots are carefully pared off, and the plants shifted into good fresh compost, they will soon take root, and grow freely; but it will be necessary to prune off all surplus branches of the plants, previous to repotting them, and to shade them for a week or ten days. Pieces of tile, or broken pots, should be laid over the aperture at the bottom of the pots, to enable the surplus moisture to drain off, or the roots will sustain injury.

The flower beds will need attention this month. Water Dahlias and other choice plants in dry weather; cut down all decayed flower stalks, as soon as the seed is gathered, and pull up annuals as they cease to flower. Plant Oxalises in small pots, 64, and prepare compost for other tender Bulbs to be planted in pots

next month.

SEPTEMÉER.

Such greenhouse plants as may have been repotted, and pruned in the course of the last month, should be looked over, and if they have taken root, they should be exposed gradually to the sun, and watered moderately in dry weather. If any of the Greenhouse plants were planted in flower beds, they should be taken up and pruned early in this month, and then put into suitable sized pots. Half hardy Perennials, such as Carnations, Daisies, Primulas, Lilies, Hydrangeas. &c. should be taken up, divided carefully at the roots. and then put into moderate-sized pots, and attended to as before directed for Greenhouse plants.

Many hardy kinds of flower seeds may be sown this month, 17 and 23. This is a good season to propagate all kinds of hardy Perennial plants, by parting the roots; and those that were raised from seed in the Spring, may be planted in the regular flower beds, in cloudy or wet weather, 22 and 23. Plant Crown Imperials, 48: Ixias, 60; Lachenalias, 61; Lilies, 62; Ornithogalums and Oxalises, 64. Some species of the Persian Cyclamen are worthy of cultivation in pots: the varieties, Coum and Persicum, will bloom in a Greenhouse or warm room, from January to April, if planted in a good light compost early in this month. The foliage of these plants is of a dark green velvet colour; and the flowers of the variety Coum are of a deep crimson colour; those of the variety Persicum are of a delicate French white, tipped with pink, and their fragrance is similar to that of the wild rose.

OCTOBER.

In the early part of this month, preparation must be made for the housing of Greenhouse plants. Previous to this being done, let the room or Greenhouse be white-washed with lime; which will prove pernicious

to insects, and prevent their generating amongst the plants. Begin the first week of this month, and place all the tall shrubby plants, such as Orange and Lemon trees, on the back shelves; others should be placed so as they can be cultivated to advantage, and they should all be arranged in regular gradation, so as to have the low-growing, or dwarf plants, on the front shelves. If any Chrysanthemums were planted in the garden with a view to their being potted, they should . now be taken up carefully, and prepared for blooming, · 82. Stockgillies and Wall flowers should also be taken up, potted, and kept in a shady situation, until they have taken root. Such Dahlia plants as may have been cultivated in pots should be sheltered from the chilling air, and those in the ground will need atten-Prepare the ground for all the hardy kinds of Bulbous flower roots, 41. Towards the end of the month, plant Anemones, Ranunculuses, and Crocuses, 47: Crown Imperials, 48; Gladioluses, 57; Hyacinths, 58; Irises, 59; Ixias and Jonquils, 60; Lilies, 61; Narcissus, 63; Ornithogalums, 64; Pæonies, 65; Tulips, 70 and 71. For the management of Bulbous roots in pots and glasses, see pages 74 and 75. Prune flowering shrubs, and make new plantations of them, 39.

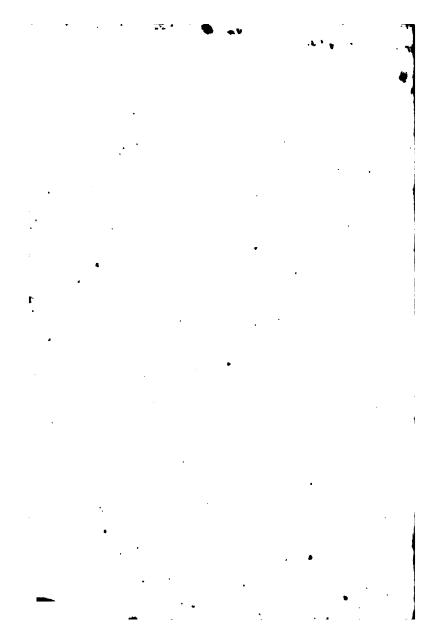
NOVEMBER.

During the continuance of mild weather, Greenhouse plants should have air at all opportunities, and water in proportion, as heat and air is attainable, 80. Bulbous roots in pots and glasses will also need attention, 73 to 75. Half hardy plants, such as Stock Gillies, Wall Flowers, Carnations, Primulas, Hydrangeas, Daisies, &c., must either be placed in frames, or in a Greenhouse, early in this month. If Dahlis, Tuberose, and other tender roots were not taken up last month, let it be done in due time this month, 43. Cover up flower beds with leaves, straw, or light

litter, 25: finish planting Bulbous roots, before the frost sets in. Plant Anemones, Ranunculuses, and Crocuses, 47; Hyacinths, 58; Irises, 59; Ixias and Jonquils, 60; Lilies, 61; Narcissuses, 63; Pæonies, 65, and Tulips, 70 and 71. These, and all other kinds of plants will need protection before the setting in of the Winter, 42. Flowering and Ornamental Shrubs may be planted in mild weather, 39; lay long litter round the roots of them, and also of the Grape Vines and other tender plants, shrubs, &c. Before the Winter sets in severe, let such Chrysanthemums as may have been cultivated in pots be planted in the garden, 83. Plant Gladioluses in pots, 57; also such other Bulbous roots as may be required to be kept in rooms, page 74.

DECEMBER.

If all was not done as directed last month, there is now no time to be lost. All kinds of tender plants in pots, should be set into frames or pits, and plunged in old tan or light mould; and in the event of severe frosts, coverings of mats, straw, &c. must be laid over them. Greehouse plants will need constant care and attention. When water is necessary, let it be given in mild weather, 78. In the event of an accident happening from frost, I would remark, that the sudden transition from cold to heat is often more destructive to plants than the frost itself. If, therefore, plants get frozen, and cannot be screened from the rays of the sun, they should be watered as the air get warms, and before they begin to thaw. If sufficient attention be paid so as to have the temperature of the house gradually rising as the water is sprinkled over the leaves, it may be a means of preserving plants that would otherwise be destroyed. See that the Greenhouse, or room in which plants are kept, is so secure as to prevent the intrusion of cold air, or the departure of warm air in the night season.



HINTS ON COOKING RARE VEGETABLES.

In order to make this little work generally interesting to the female sex, for whose use it is chiefly intended, the following hints on cooking such sorts of vegetables as are not in daily use are submitted; from a consciousness that a true estimate cannot be formed of the luxuries of the vegetable kingdom, unless their peculiar qualities be preserved in cooking.

ARTICHOKE.—This vegetable is esteemed as a luxury by epicures. To have it in perfection, the heads should be thrown into cold water as soon as gathered, and after having been soaked and well washed, put into the boiler when the water is hot, with a little salt, and kept boiling until tender, which generally takes, for full grown Artichokes, from an hour and a half to two hours. When taken up, drain and trim them; then serve them up with melted butter, pepper, salt, and such other condiment as may best suit the palate.

Asparagus.—This is considered a wholesome vegetable, and should not be kept long after it is gathered; after being well washed, it may be tied in bundles of about a dozen buds each. Let the water be boiled with a portion of salt, and after having been skimmed put in the Asparagus, and watch until the stalks become tender, which will be in from twenty to thirty minutes; take them up before they lose their true colour and flavour, and serve up on toasted bread, with melted butter, &c.

Beans.—The English Broad Beans should be gathered young, and shelled while fresh; and after having been washed, let them be boiled in plenty of water with a little salt and a bunch of green parsley; they take from thirty to forty minutes boiling, according to

10*

age, and may be served up with melted butter, gravy, &c.; but they are very good when cooked and eaten with fat pork, or good old-fashioned Hampshire bacon.

BEARS, KRDNEY.—These should not be suffered to get old and tough before gathered; be careful in trimming them to cut off the stalk end first, and then turn to the point and strip off the strings; put them into the water while boiling, which should be previously seasoned with salt; when they are tender, which will be in from fifteen to twenty minutes, take them up, and drain them through a colander, in order to render them capable of absorbing a due share of gravy, melted butter, &c.

Beans, Lima.—These should be shelled while fresh, and boiled in plenty of water until tender, which generally takes from fifteen to twenty minutes. Some cook them in the winter after having been dried, in which case they should be soaked in soft water for a few hours, and then put into the water cold and boiled until tender with a little salt; but salted meat being boiled with them, answers the same purpose, and makes them sweeter and more wholesome. They are served up with butter, &c.

BROCCOLI AND CAULIFLOWER.—These delicious vegetable luxuries should be gathered while the head is close and perfect. After having trimmed off some of their outside leaves, let them be boiled in plenty of water seasoned with salt, taking care to skim the pot before putting the vegetables therein, and also to ease the cover so as not to confine the steam. Take them up as soon as the fork will enter the stems easily, which will take from ten to twenty minutes, according to their size and age; drain them so as to make them susceptible of absorbing a due proportion of gravy, melted butter, &c. this renders them a palatable and dainty dish.

Cabbage, Colewort, Kale, and greens in general, should be put into hot water seasoned with salt, and

kept boiling briskly until tender. If you wish to preserve their natural colour, put a small lump of pearlash into the water, which also makes the coarser kinds of Cabbage more tender in the absence of salted meat.

EGG-PLANTS.—Select the fruit when at maturity. Cut them into slices and parboil them in a stewpan; when softened, pour off the water, and drain them; they may be then fried in batter made with wheaten flour and an egg, or in fresh butter with bread crumbled fine, which may be seasoned before it is put into the pan with pepper, salt, thyme, and such other herbs as may best suit the palate. Some use Marjoram, Summer Savory, Parsley, Onion, Garlick, &c.

Parsnip.—Parsnips require from thirty to forty minutes boiling, according to their size and age. Some boil them in water seasoned with salt until tender; but they are better when boiled with salted pork, and afterwards mashed and fried in butter.

PEAS.—To have Peas in perfection, they should be gathered while young, and shelled and boiled while fresh; as they soon lose both their colour and sweetness. Let the water, after having been seasoned with salt, be skimmed, then put in the Peas with a small bunch of Spear Mint, and ease the cover so as toletoff the steam; they require about fifteen minutes hoiling, or five minutes, more or less, according to the age and care bestowed.—Taste and try in time, so as to have them done to a nicety.

Rhubars.—The stalks of this plant are used for pies and tarts. After being stripped of the skin, or outer covering, and divested of its small fibres, or stringyness, which it is liable to, in an advanced stage of growth; it should be cut transversely into very small pieces, and then parboiled with sugar, and such spices as may best suit the palate. It will keep this way the same as ether preserves, and may be used, not only in pies and tarts, but it makes excellent pud-

ding by flattening a suet crust with a rolling-pin; then spreading on the fruit, rolling it up in an oval shape, and boiling it in a cloth. The fruit this way will retain its virtues, and the padding may be served up hot by cutting it in slices of from half an inch to an inch thick, and then spreading butter and sugar between the layers.

Some boil the stalks to a juice, which being strained through a colander will keep for years, if well spiced and seasoned with sugar.

Salsify.—The mode of cooking this vegetable, as recommended by an American author, is "to cut the roots transversely into thin pieces, and then boil them in water, or milk and water; when boiled soft, mash them, and thicken the whole with flower, to some degree of stiffness; then fry them in the fat of salt pork or butter; they are a luxury." In England the tops are considered excellent food when boiled tender, and served up with poached eggs and melted butter. They are by some considered salutary for persons inclined to consumptive affections. Those afflicted with any symptoms indicating an approach to such a state of health, cannot harm themselves by eating the tops, when they are to be got, which is in the month of April, and if the roots are eaten when attainable, they may perhaps answer a still better purpose, and even the liquor in which they are boiled, may possess some of the most valuable properties of the plant.

Scorzonera.—This vegetable is very similar to the Salsify, only that the roots are of a darker colour, but they, no doubt, possess the same good qualities. Some boil and eat them like carrots, &c. in which case they should be deprived of their rind and immersed in cold water for half an hour, to take off the bitterness to which old roots are liable, as this plant, being perennial, is often cooked when three or four years old. Those who choose, may prepare them for the table in the manner recommended for Salsify.

Sina Kale.—To have this rare vegetable in perfection, it should be cooked as soon as gathered. Let it be first soaked in water, seasoned with salt, for half an hour; then wash a in fresh water, and put it into the cooking utensil; keep it boiling briskly, skim clean, and let off steam; when the stalks are tender, which may be expected in from fifteen to twenty-five minutes, according to size and age, take it up, dish it, and serve it up with melted butter; gravy, and such condiments as may be most agreeable to the palate.

SKIERET.—The mosts of the Skirret are very wholesome for food. They are composed of several fleshy tubers, as large as a man's finger, and joining together at top. They are eaten boiled and stewed, with futter, pepper, and salt, on relled in flour and fried, or else cold, with oil and vinegar, being first boiled. They have much the taste and flavour of a Parsnip, but are a great deal more palatable.

SPINACE.—Some cook Spinach in a steamer over boiling water, but it is very good boiled, provided it be well drained in a colander before it is dished; this is absolutely necessary, if you wish to have it so as to absorb a moderate quantity of gravy, melted butter, &c. which is indispensible with green vegetables.—Spinach retains its flavour best by being stewed without water.

Turnir.—This is a favourite vegetable with some, and in England a leg of mutton and caper sauce is considered by epicures as but half a dish without mashed Turnips. To have them in perfection, they should, after having been deprived of their rind, be equalised by cutting the largest transversely in the centre, and then, after being boiled tender, let them be taken up and pressed as dry as possible; at the same time let a lump of butter and a due portion of cayenne pepper and salt be added, and be beaten up with the turnips until properly mixed. Use the natural gravy from the meat unadulterated, and such condiment as may be most esteemed.

VEGETABLE MARROW, as well as all other kinds of Squashes, should, after having been boiled tender, be pressed as close as possible between two wooden trenchers, or by means of a slice or skimmer, made of the same materials, until dry, and then prepared for the table in the same manner as Turnips.

In conclusion of this article, it may be necessary to observe, that all vegetables should be drained as dry as possible before they are dished, as the liquid running from them in the plate, weakens such gravies or condiments, as may be served up with them, and, consequently makes them less reliable.

quently, makes them less palatable.

FORWARDING RHUBARB.

Those who may desire to have this excellent substitute for fruit at an early season, may procure it without much trouble. It is customary with some persons in the Southern parts of England to keep this plant growing in their kitchens, so that they may have it for use at any time. They have strong neat boxes. made for the purpose, about three feet deep and two wide, and in length according to the demand, from four to eight feet; these being kept clean, have the appearance of flour-bins, and they are sometimes so contrived as to have shelves over them in imitation of a kitchen dresser. The plants being taken up out of the garden towards winter, are placed as close at the bottom of the box as they can be put, with their crowns level; and some sand being thrown over sufficient to fill up the interstices, and to cover the crowns about half an inch, finishes the operation. further trouble is necessary, except to give a little water just to keep the roots moist, as they need no light at all, and if the roots be replanted in the garden when spring opens, they will, after having taken root, vegetate as strongly as before they were removed.

Roots of Rhubarb being taken up in the autumn, and packed in sand deposited in a warm cellar, will produce stalks earlier than if kept in the garden, and if placed in hot-beds they will yield abundantly.

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FRACTICAL DIRECTIONS, FOR THE CULTIVATION OF BULBOUS AND OTUBBROUS-ROOTED PLANTS,

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