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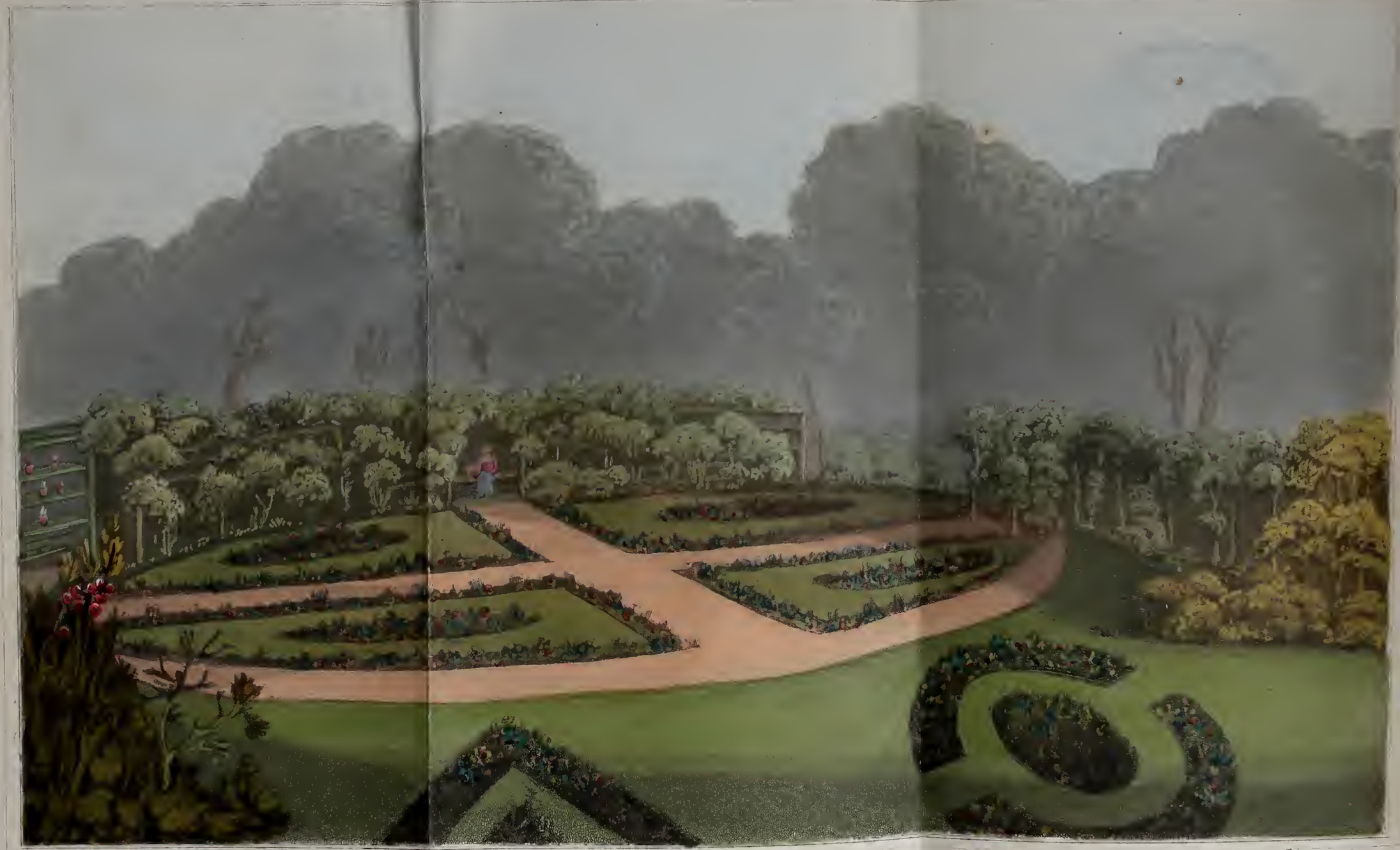

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FRONTISPIECE TO THE FLORISTS MANUAL.

Published May 20. 1822 by Henry Colburn & Co. Conduit Street

THE

FLORIST'S MANUAL,

OR,

HINTS FOR THE CONSTRUCTION OF

A

GAY FLOWER-GARDEN;

WITH DIRECTIONS FOR

PREVENTING THE DEPREDATIONS OF INSECTS.

Second Edition, Enlarged,

WITH OBSERVATIONS ON

THE TREATMENT AND GROWTH OF

BULBOUS PLANTS,

CURIOUS FACTS RESPECTING THEIR MANAGEMENT,

AND DIRECTIONS FOR THE CULTURE OF THE GUERNSEY LILY

AMARYLLIS SARNIENSIS.

BY

THE AUTHORESS OF BOTANICAL DIALOGUES,

AND SKETCHES OF THE PHYSIOLOGY OF VEGETABLE LIFE.

Illustrated with Coloured Plates.

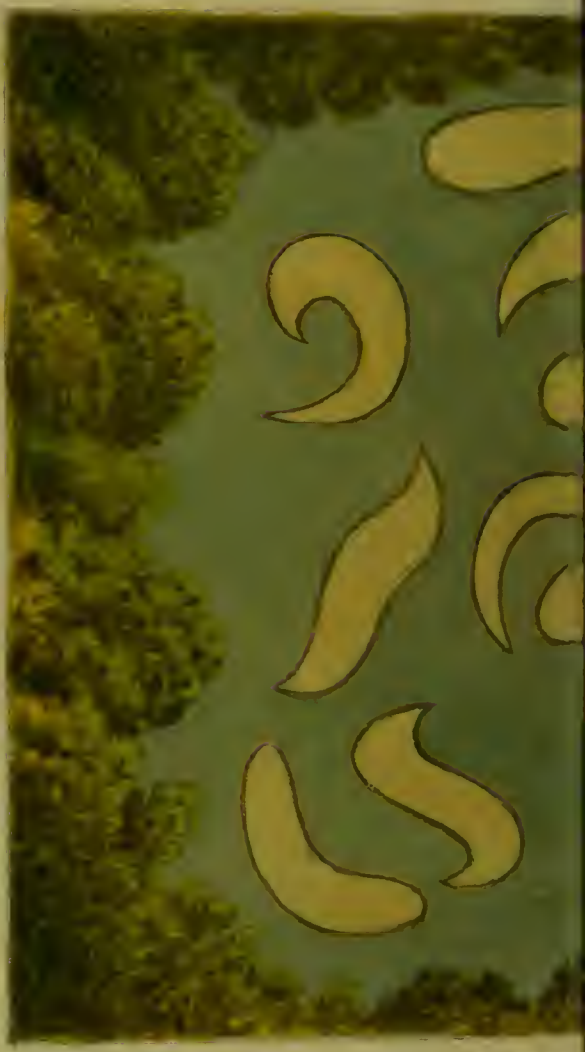
LONDON:

PRINTED FOR HENRY COLBURN AND CO.

1822.

LONDON
PRINTED BY S. AND R. BENTLEY, DORSET-STREET.

Plate I.



2

DESCRIPTION OF THE PLATES.

Plate I.

Plan *of a* Flower Garden *in the midst of Pleasure-Ground, surrounded by Shrubs.*

The borders may be easily arranged for the simple parterre. Forms 1. and 2. peculiarly adapted to the advantageous exhibition of flowers. General length of the beds from twenty-three to twenty-five feet. Width, in the broadest part, about four feet. Five or six feet of grass in the widest part between the beds; all the borders a good deal raised.

The tree at the entrance, which should be one of light, and rather pendulous foliage, must be cut to form a high stem, and the borders, if viewed under the branches, will have a beautiful effect. If the space of grass betwixt the borders appear too great, it may be lessened by baskets of ever-blowing roses, carnations, or any other plants; and these baskets may be formed by circular beds, surrounded by cast iron, made to resemble the open edges of a basket, and painted of a very dark green colour.

PLATE II.

PLAN of a FLOWER GARDEN upon a large scale, and more adapted to the *Pleasure-Ground Garden*, although the form of the borders might be made use of in the common parterres, if judiciously planted so as to blend the variety of colours well with each other. The space of grass betwixt the shrubs and the borders should not be less than six feet.

PLATE III.

PLAN of a FLOWER GARDEN immediately before a house, when that of straight borders is not adopted.

PLATE IV.

VIEW of a MINGLED FLOWER GARDEN as described at page 19. See Frontispiece.

Plate. 2.

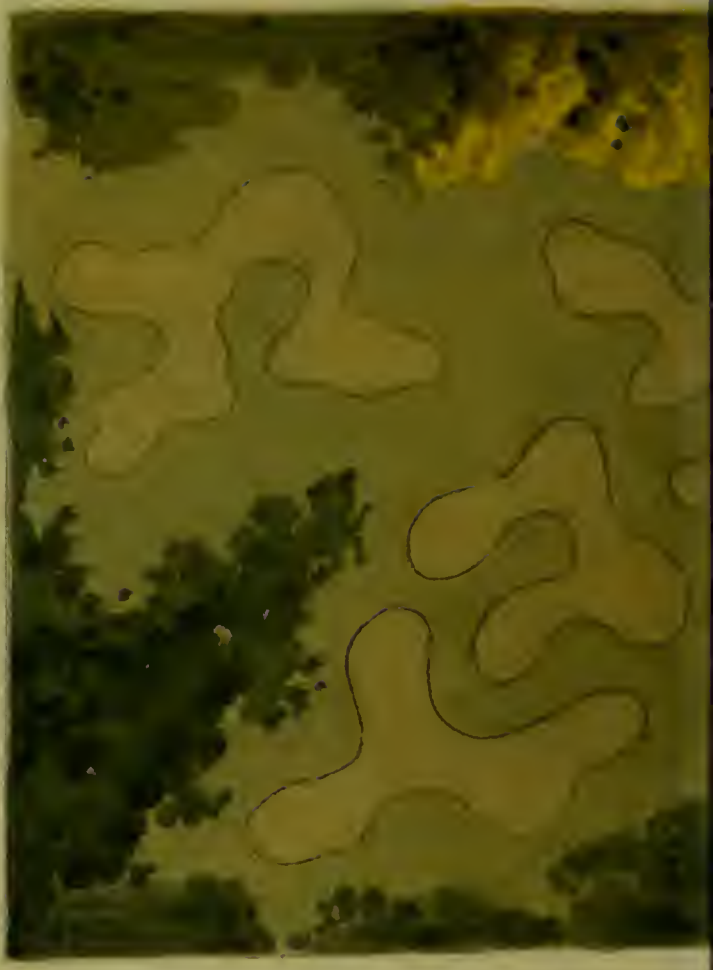
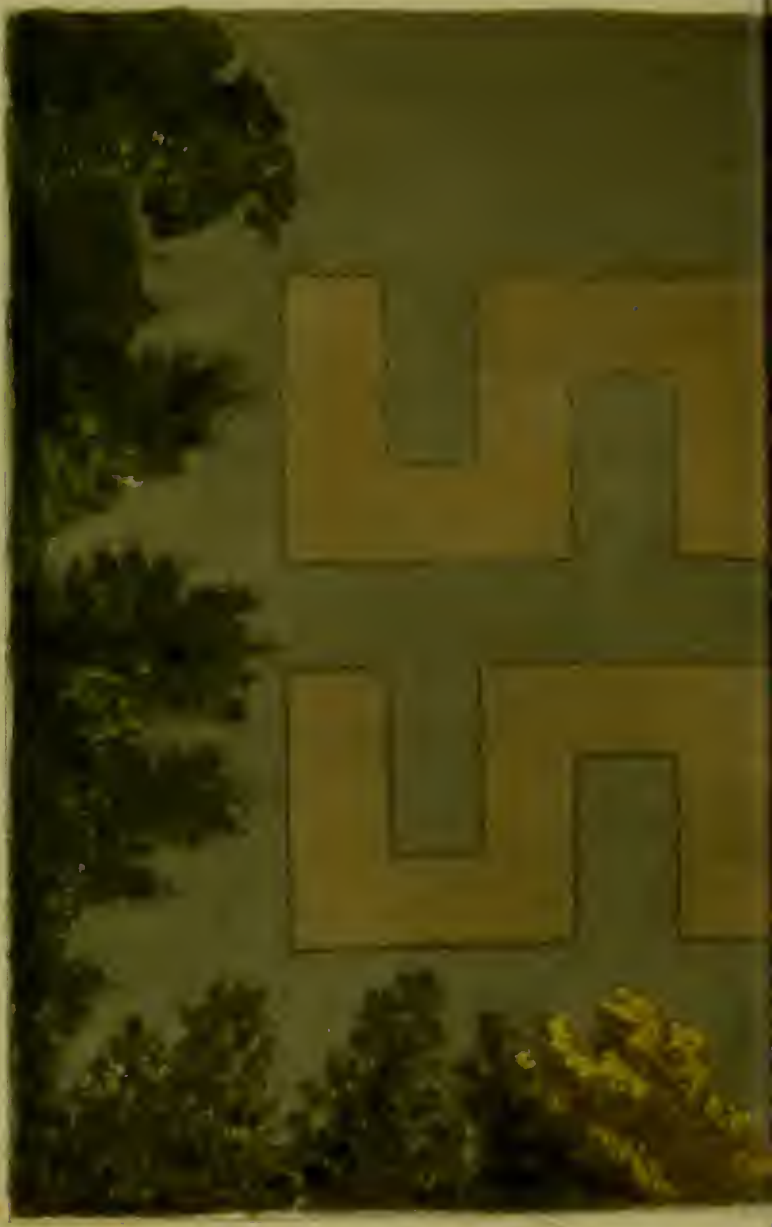


Plate 3.



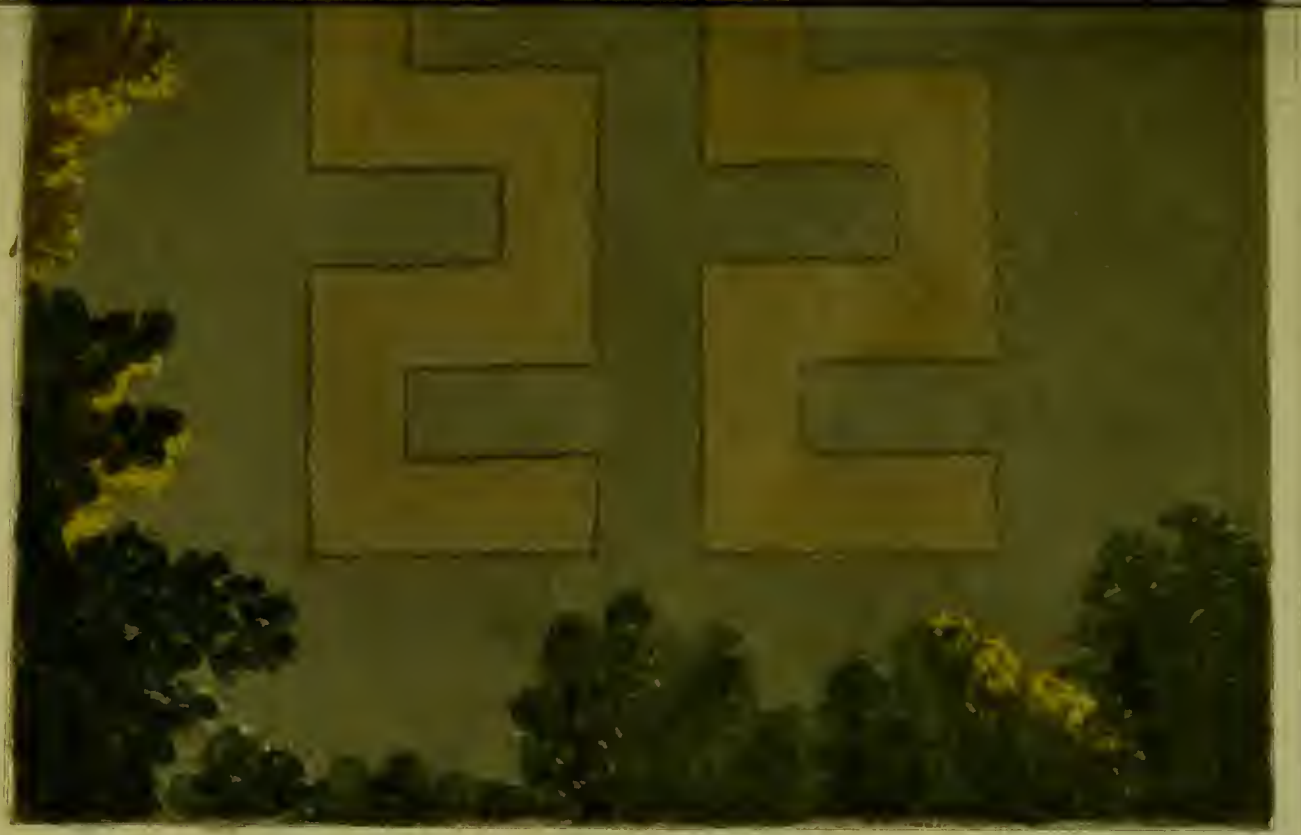
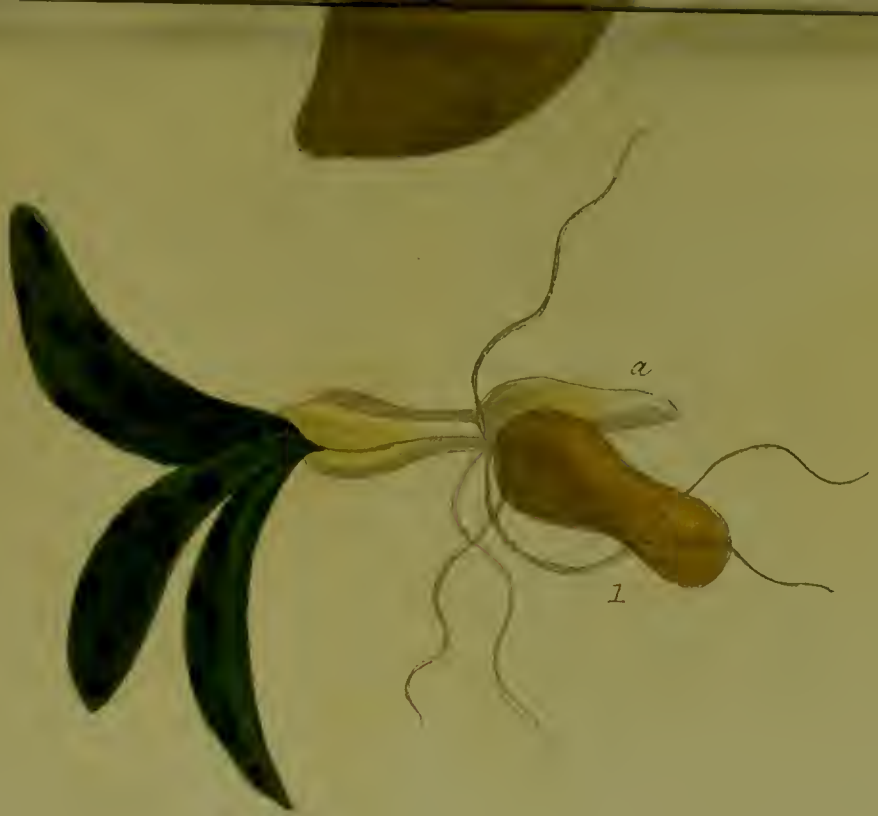


Plate 5.



N°1.

Plate V.

Orchis Bulbs.

No. I. Orchis Mascula, common spotted Orchis, taken out of the ground March 9th. Shews the single bulbs, with the green leaves protruded. a, the base of the bud, from which the leaves put forth, and from which a new bulb arises.

No. II. The Orchis bulb, No. I, after having been replanted, taken up May 24th. C, the new bulb proceeding from point a. of No. I, firm and hard to the touch. c, the last year's bulb, beginning to soften.

No. III. A root of Orchis Mascula taken out of the ground August 10th. Not any appearance of the old bulb remaining.

No. IV. A root of Orchis Mascula taken out of the ground October 24th. d, the green bud, which when cut open, shews the embryon flower surrounded by small green leaves faintly marked by very small black spots.

Plate VI.

Bed of Hyacinths.—See page 130.

THE

FLORIST'S MANUAL.

THE beautiful varieties of colour, form, and scent, exhibited in the structure of the vegetable creation, have, from the beginning of time, forcibly attracted the attention of mankind; and from the early age of infancy to the latest period of the decline of life have excited admiration, from the inhabitant of the cottage, to him, the wisest of the human species, who dwelt in

palaces, and spake of plants, "from the cedar of Libanus, to the hyssop which grew upon the wall." We may then, perhaps, be allowed to consider it as a part of the wisdom of the present sapient æra, that the vegetable species is become a subject of general enquiry, and of prime consideration in the arrangement of every modern dwelling.

Omitting the scientific investigation into the modes and habits of vegetable existence, which affords a study of exquisite delight to the ingeniously curious, we confine ourselves to those gratifications only, which may be derived from vegetables, to the visual, the olfactory, and the saporific senses; their importance to the latter being evinced by the expensive buildings, extent of

ground, and numerous attendants appropriated to their culture and accommodation, near all the habitations of the opulent; also, in every degree, from the luxurious exotic, fostered by the great, to the vine, which creeping around the cottage window, delights, at once, the eye, and gratifies the palate, of the humble inhabitant.

These grosser charms of vegetables, form, however, no part of our present enquiry. The universal taste (may it not be termed passion?) now manifested for the accumulation and cultivation of flowers, is the main object of immediate consideration. Having, from early childhood to advanced age, possessed, I may almost say, an hereditary liking for this lovely order of creation,

and having, from the subject, in all its branches, derived the most interesting amusement of my youth, I am solicitous to render my sister-florists partakers of my pleasures, so far at least, as by laying before them a few hints, the result of experience, I may enable them so methodically to arrange and blend the colours of their flowers, that through most part of the spring and summer months they may procure a succession of enamelled borders, which without the knowledge of the tints afforded by each season, cannot be made to exhibit half the charms that a flower-garden, well conducted, has the capacity of presenting to the view.

It is to hints only that I pretend, nor should I presume even so far, were

I not frequently consulted on the subject of procuring a GAY *Flower-Garden*, and did I not receive complaints from my florist friends, that they find labour and expense exerted in vain to the attainment of this much desired object: and labour and expense will ever be in vain, unless the lady herself is capable of directing them to their wished-for purpose, and it is to effect this purpose that these few pages are composed.

A Flower-Garden is now become a necessary appendage of every fashionable residence, and hence it is more frequently left to the direction of a gardener, than arranged by the guidance of genuine taste in the owner; and the fashionable novice, who has

stored her borders, from the catalogue of some celebrated name, with variety of rare species, who has procured innumerable rose-trees, chiefly consisting of old and common sorts, brought into notice by new nomenclature, who has set apart a portion of ground for American plants, and duly placed them in bog soil, with their names painted on large headed pegs, becomes disappointed when, instead of the brilliant glow of her more humble neighbour's parterre, she finds her own distinguished only by paucity of colour, and fruitless expenditure.

Variety of species, bog borders, and largely lettered pegs, are all good in their way, but they will not produce a *gay* flower-garden; and the simple

cause of the general failure in this particular is the prevalent solicitude for rarity and variety, in preference to well-blended quantity; as, without the frequent repetition of the same plant, it will be in vain to attempt a brilliant flower-garden, and, as in the judicious mixture of every common colour the art of procuring it consists. Hence, the foundation thus laid, the solicitude of those who wish to complete the superstructure must not be for rare species, but for new colour, so that the commonest primula* which presents a fresh shade of red, blue, yel-

* The generic term Primula includes all the species of Primrose, Cowslip, and Auricula, but is more generally applied to the division of Auriculas.

low, &c. ought to be esteemed more valuable than the most rare American plant which does not bring a similar advantage.

In the formation of that assemblage of flowers, which may be distinguished by the term of the Mingled Flower-Garden, it is essential that the separate parts should, in their appearance, constitute a WHOLE; and this appearance is more easily effected, if the borders are straight, and laid sideways, one before the other; but it is not incompatible with any form into which the ground may be thrown, if attention be given to the manner of planting.

In some gardens this appearance of a *whole* is entirely destroyed by the injudicious taste of setting apart dis-

tinct borders for pinks, hepáticas, prímulas, or any other favourite kinds of flowers; also for different species of bulbs, as anémones, ranúnculuses, hyacinths, &c.; these distinct borders, although beautiful in themselves, break that whole which should always be presented to the eye by the mingled flower-garden; as single beds, containing one species only, form a blank before that species produces its flowers, and a mass of decaying leaves when the glow of their petals is no more.

The reverse of this mode of planting is essential to the perfection of the mingled flower-garden, in each border of which there should be, at least, two of every species; but the precise number must be regulated by the force of

colour displayed by the plant, and the size and the relative position of the borders. It will be only necessary to observe that, to whatever view the garden presents itself, the eye should not be checked by the failure, in any part of it, of the prevalent colours of the season. The situation of a flower-garden is rarely left to the free option of the owner, that option being generally controlled by a variety of small circumstances, to which she will, in some degree, be obliged to submit; and more particularly so in that humble flower garden, for the construction of which alone I pretend to offer hints of direction; but this, although the one most easily to be obtained, should not be neglected, even by those who have

the power of cultivating exotics in their highest perfection.

The common, or Mingled Flower-Garden should be situated so as to form an ornamental appendage to the house; and where the plan of ground will admit, placed before windows exposed to a southern or south-east aspect; and, although to this position there may appear the objection of the flowers turning their petals to the sun, and consequently from the windows, this predilection in the tribe of Flora for the rays of that bright luminary, will produce the same effect in whatever place our flowers may be situated, when in the vicinity of a building, as they invariably expose the front of their corols to the light, from which

both the petals of flowers and the leaves of plants are believed to derive some material essential to their existence.

The compass of ground appropriated to flowers must vary according to the size of the place of which that ground forms a part, and should in no case be of great extent. The principle on which the parterre should be laid out, ought to be that of exhibiting a variety of colour and form so nicely blended as to present one whole. In a flower-garden viewed from the windows of a house, this effect, as has been observed above, is best produced by straight borders laid sideways of each other, and to the windows from whence they are seen, as by that position the colours shew themselves in one mass,

whereas, if placed end-way, the alleys, which are necessary for the purpose of going amongst the flowers, divide the whole, and occasion an appearance of poverty. Should an intermixture of turf with the flower borders be preferred, then the borders should be of various forms, examples of which are prefixed to the volume*, or they may be laid out in a plain Etruscan pattern as in plate 3.

It is more difficult than may at first appear, to plan, even upon a small scale, such a piece of ground; nor perhaps, would any but an experienced scientific eye be aware of the difficulties to be encountered in the disposal of a few shaped borders interspersed with

* See plates 1. and 2.

turf. The nicety consists in arranging the different parts so as to form a connected glow of colour: to effect which it will be necessary to place the borders in such a manner that when viewed from the windows of the house, or from the principal entrance into the garden, one border shall not intercept the beauties of another; but in avoiding this error, a still greater must be guarded against, that of vacancies betwixt the borders, forming small avenues, by which the whole is separated into broken parts, and the general effect lost.

Another point to be attended to is the just proportion of green turf, which, without nice observation, will be too much or too little for the colour with which it is blended; and lastly, the

breadth of the flower borders should not be greater than what will place the roots within reach of the gardener's arm without the necessity of treading upon the soil, the mark of footsteps being a deformity wherever it appears amongst our flowers. If the form of ground where a parterre is to be situated is sloping, the size should be larger than when a flat surface, and the borders of various shapes and on a bolder scale, and intermingled with grass; but such a flower-garden partakes more of the nature of pleasure-ground than of the common parterre, and will admit of a judicious introduction of flowering shrubs.

Although, in general, a flower-garden should not be upon a large scale,

it frequently occurs in the ground allotted for that purpose near small villas, that the appearance of more space than what can be procured on a confined flat surface may be desirable: this I have seen ingeniously effected by removing the earth until a hollow was produced, about the size of a common marl-pit, with hill and dale, the outer part of which, being planted with shrubs, formed one side of a shady walk leading to the valley, the inside of which was laid out in rockery. On rising out of the valley, the eye was agreeably deceived into the belief of entering upon ground not entirely of a flat surface, as by the skilful management of elevated banks, raised by earth taken from the hollow,

an appearance was given of greater extent and inequality than actually existed, and the idea suggested of walks winding through shrubberies; while at the same time, these banks screened from the sight, and protected from the wind, a portion of ground appropriated to culinary purposes, and sheltered on two sides a small gay parterre, which lay before the parlour windows.

This ingenious plan had yet the farther merit of having been formed upon the basis of utility. The site of the house and gardens being upon high ground of a wholly flat surface, and close to public roads, afforded shelter neither from weather, nor from the view of passengers; but in the artifi-

cial little valley a retreat was secured, completely secluded from the public eye, and between the banks there was placed a rustic seat formed of dried branches of trees, entwined by honeysuckles, and other sweet and ornamental climbers, well calculated for the retirement of a solitary student, and sufficiently spacious for the accommodation of a social party, who might equally wish to escape the observation of the idle or inquisitive traveller.

If it happen that a house be nearly surrounded by a flower-garden, the variety of aspect thence afforded will be favourable to the continuance of the bloom of our flowers far beyond what can be obtained if confined to a

southern exposure. South, south-east, and east, are the aspects most advantageous to the growth of flowers; and, possessing these varieties of exposure, the bloom of a garden may be protracted some weeks beyond the time it could be preserved under a single aspect. When apart from the house, the Mingled Flower-Garden may be introduced with great advantage, if situated so as to form a portion of the pleasure-ground :* in this case it should not be distant from the house, but so contrived as to terminate one of the walks of the home shrubberies.

The garden must be situated south, or south-east, and the fence, which will be necessary for protection from

* See frontispiece.

hares and other animals, should be made of wire, and, in some peculiar situations, might, perhaps be nicely hidden by low shrubs, periwinkle and other running plants, which will readily grow upon mossy trunks, roots, or arms of old trees: and these, thrown carelessly on the ground, and judiciously planted, might form a part of the beauty of the garden, while they served the purpose of veiling the fence from the eye; also, fragments of stone may be made use of, planted with such roots as flourish among rocks, and to which it might not be difficult to give a natural appearance, so far as by bringing forward to the view the utility of these stones in the culture of the vegetables growing thereon,

while the real purpose of breaking the line and concealing the boundary fence might be disguised.

The present fashion of introducing into flower-gardens this kind of rock-work requires the hand of taste to assimilate it to our flower borders, the massive fabric of the rock being liable to render the lighter assemblage of the borders diminutive and meagre: on this point, caution only can be given, the execution must be left to the elegant eye of taste, which, thus warned, will quickly perceive such deformity.

I must venture to disapprove the extended manner in which this vegetable rock-work is sometimes introduced; not having been able to reconcile my eye, even in gardens planned

and cultivated with every advantage which elegant ingenuity can give them, to the unnatural appearance of artificial crags of rock and other stones interspersed with delicate plants, to the culture of which the fertile and sheltered border is evidently necessary; being decided that nothing of the kind should be admitted into the simple parterre that is not manifestly of use to the growth of some of the species therein exhibited.

In pleasure-grounds or flower-gardens on an extensive-scale, where we meet with fountains and statuary, the greater kinds of vegetable rock-work might probably be well introduced; but to such a magnificent display of art I feel my taste and knowledge

wholly incompetent. I attempt only to assist in the humble path of exhibiting to the best advantage the moderately-sized flower-garden, replete with colour of every variety; and in order to the procuring such variety I shall annex to this little book a short list of the commonest plants which expand their beauties at the same season, and of the colours prevalent in that season; so that by consulting that list any one may be enabled to form a gay and well-mingled garden throughout the spring and summer months at a small expense; and thus, having formed the basis, more rare plants, or a more extended variety may be superadded, as choice or circumstances may admit.

Where neither expense nor trouble oppose their prohibitory barrier, many of the vegetable tribe may be cultivated to greater perfection, if we appropriate different gardens to the growth of different species; as, although it is essential to the completion of our first kind of garden to introduce, on account of their scent and beauty, some of the more hardy species of the flowers termed annuals, in that situation room cannot be afforded them sufficient to their production in that full luxuriancy which they will exhibit when not crowded and overshadowed by herbaceous vegetables; and hence becomes desirable that which may be called the Annual Flower-Garden, into which no other

kind of flower is admitted besides that fugacious order, and under which is contained so great a variety of beauty and elegance, as is well calculated to form a garden vying in brilliancy with the finest collection of hardy perennials.

Also, the plants comprised under the bulbous division of vegetables, although equally essential to the perfection of the Mingled Flower-Garden, lose much of their peculiar beauty when not cultivated by themselves, and will well repay the trouble of an assiduous care to give to each species the soil and aspect best suited to its nature. Two kinds of garden may be formed from the extensive and beautiful variety of bulbous-rooted flowers;

the first, wherein they should be planted in distinct compartments, each kind having a border appropriated to itself, thus forming, in the Eastern taste, not only the "garden of hyacinths," but a garden of each species of bulb which is capable of being brought to perfection without the fostering shelter of a conservatory. The second bulbous garden might be formed from a collection of the almost infinite variety of this lovely tribe, the intermixture of which might produce the most beautiful effect, and a succession of bloom to continue throughout the early months of summer.

A similar extension of pleasure might be derived from a similar division of all kinds of flowers; and here

the taste for borders planted with distinct tribes may be properly exercised; and, as most of the kinds of bulbs best suited to this disposition have finished their bloom before the usual time at which annuals disclose their beauties, the annual and the bulbous gardens might be so united, that, at the period when the bloom of the latter has disappeared, the opening corols of the former might supply its place, and continue the gaiety of the borders; nor is there the same inconvenience in planting together annuals and bulbous roots, as when annuals are mingled with a mass of herbaceous plants: the leaves of the bulbs being past their period of growth, and on the decline, may be tied together

without the hazard of injury to th *forming bulb, and thus kept from over-shadowing the tender growing plants of the annuals. The ingenious Florist will perceive that by the skilful conduct of separating and combining, she may multiply and vary the display of her flowers to the utmost extent that her fancy may suggest; but in such a fantastic extent of her power I do not pretend to accompany her, nor even to offer directions for

* As all bulbs are supposed to be annually renewed by the growth of a new bulb, formed and nourished from the bulb of the preceding year, and from the juices of its decaying foliage, many bulbs are destroyed, or materially weakened, by the ignorant practice of cutting off the leaves as soon as the flowers are faded.

See Sketches of the Physiology of Vegetable Life, page 156, plate 12.

any kind of garden except that which may be generally attainable.

I must, however, recommend a spring conservatory, annexed to the house, consisting of borders sheltered by glass and heated only to the degree that will produce a temperate climate, under which all the flowers that would naturally bloom betwixt the months of February and May, might be collected, and thence be enabled to expand their beauties with vigour, which, when they are exposed to the vicissitudes of the open air, become so impaired by the harsh winds of spring as annually to blight their charms, and disappoint our expectations; so that we usually think ourselves fortunate if we are able to pre-

serve the roots alive, encouraging ourselves with the hope of the future year, which hope is again disappointed as spring with its chilling blasts returns.

Weather, however, is not the only enemy from which we have to fear the destruction of our plants; insects of all kinds and degrees attack our seeds, our roots, and our flowers: hence directions for the prevention of such depredators become a necessary part of a work which has for its object the exhibition of the floral world to its greatest advantage; and as amongst the various receipts given by all gardeners for the destruction of insects, I have not found any which can be esteemed efficacious, I hope I

may not appear too diffuse in my detail of the only method which, I believe, will clear our borders of these enemies, and which, if skilfully followed, may nearly effect their annihilation.

The simple and laborious mode of picking away the animal, is the only one to which recourse can be had with permanent advantage; and to give full efficacy to this method of rescuing our plants from caterpillars, snails, &c. our attacks must be made upon them at particular seasons, and a knowledge acquired of their history, so far as to enable us to have swarms of them destroyed in the destruction of an individual of the species. Without, however, much research into their

natural history we may, from common observation, understand that in the winged insect we may free our plants from an innumerable tribe of those which crawl, and which, in that reptile state, have the capacity of devouring the whole product of a garden.

The two periods of change of form in the caterpillar species seem to afford the most advantageous times of putting an end to their existence, as in the ephemeral butterfly, if timely attended to, we may destroy the animal before it has acquired the power of disseminating its young progeny; and, in the intermediate and voracious state of caterpillar, every single one which is prevented attaining the

winged form preserves our flowers from an host of enemies.

The green caterpillar is the most common foe to our flower-borders, and in autumn attacks the branches of mignonette in such numbers, as to afford an easy opportunity for their destruction. A more persevering enemy, and one more difficult to exterminate from gardens, is the snail, or common slug, which, forming its habitation under the soil, attacks the roots of flowers, and frequently destroys them, before the gardener can be aware of the mischief, that too often becoming visible only when past reparation. Under a vigilant eye, however, plants will not twice suffer from the enemy not being

ostensible; as the symptoms of his vicinity may be marked by flowers perishing as they first emerge from their buds or bulbs, by the leaves or petals being pierced into small holes, or having the appearance of being gnawed, or from, almost, any failure in vigour which cannot be accounted for by external causes.

In my early acquaintance with the pernicious effects produced by snails, having observed a root of hepatica, which had been recently planted, fade and shew symptoms of some fatal malady, I caused it to be taken out of the ground, and found amongst the fibres of its roots a number of those beautiful pearl-like substances, which are the eggs of the snail. Having

caused these, with some snails, which were also found amongst the roots, to be taken away, and the hepatica to be re-planted, I soon perceived the good effects of having dislodged the enemy, as the plant flourished from that period.

In cold and dry weather the snail rarely appears, but after warm showers it may generally be found. Early in the morning, and about the close of evening, are the usual times of these insects coming abroad, when they may be picked up in large quantities. They will, however, frequently molest a plant for a length of time, without being visible ; in which case, when there is reason to suspect the hidden attacks of snails, different methods

should be used, by which they may be entrapped, as I do not believe there is any thing which can be strewn upon or around the plant, which will preserve it from the depredations of these insects. Slices of turnips scattered upon the borders, and upon plants peculiarly infested by snails, have been found very efficacious in collecting them; also by affording them food apparently more adapted to their palates, they are diverted from preying upon the flower-roots, insomuch that if at the time when any choice or tender flower-root is planted, slices of turnips are carefully supplied, they will attract the snails, and thus preserve the more valuable flower-root from their voracious ra-

vages until it has acquired more strength to resist them, weak and diseased plants being those which are usually attacked, and which suffer most by insects.

The efficacy of this method of entrapping snails has been proved in fields of green wheat, in an early stage of germination, where the experiment has been tried of strewing slices of turnips upon alternate furrows, and having the snails picked off the turnips daily; and it is related that from a piece of ground of eight acres so managed, nearly a bushel of snails have been taken, the benefit of which was manifested by the furrows thus cleared producing their just proportion of vegetation, while those left to

their fate brought weaker plants, which did not arrive at maturity.

Similar means have also been employed for the destruction of the wire-worm, a pernicious insect which is generally introduced into gardens with soil recently taken from pasture-land. Newly-sown annuals have been known to suffer peculiarly from the attacks of the wire-worm, so as in some instances to have been wholly destroyed. The method recommended to ensnare the enemy, is to bury slices of potatoe near the seeds at the time they are sown, by which means great numbers, it is said, have been collected.

Another method of entrapping snails is, to place an inverted garden-pot or

dish over the infested plant, and it will rarely occur that the enemy is not discovered, as snails fasten themselves to the sides or tops of pots, or to boards or mats so placed, and thence are easily taken. In droughty seasons it will be of use to water the plant before it is covered, as the moisture of the earth will be an additional motive of attraction to draw the animal from its hiding-place.

It must be observed, that the times of collecting the snails from whatever is placed to entrap them, should be early in the morning, and at the close of evening, as those are the periods at which they come out to feed, retiring again under the earth in the middle part of the day

Various are the enemies in the insect tribes from which vegetation is liable to suffer; caterpillars, earwigs, black-beetles, &c. are very injurious to all kinds of plants, and can only be kept within due bounds by an assiduous attention to their destruction by the different means recommended in all books which treat on gardening; and I particularly recommend to my readers the observations which they will find in "The Villa Garden Directory," by Mr. Walter Nichols.

And here I must be allowed to recommend to all those, who, for the protection of their flowers and fruits, are obliged to destroy an order of creation, most certainly endowed with sensations of pleasure and pain, to

take care that their existence is put an end to with humanity; if thrown immediately into water, the snail is instantly destroyed, and consequently can scarcely be susceptible of suffering.

The smaller insects which infest rose-trees, and some herbaceous plants, can only be kept within moderate bounds by sweeping them from the branches, or by cutting off those whereon they are found in most profusion.—In carrying off these diminutive enemies, birds are peculiarly serviceable; and a well-authenticated fact, which I have received, of the conduct of a hen with her chickens, seems to hint that we might render poultry of use in our gardens, al-

though it may be doubtful whether the injury liable to be sustained by the scratching of their claws, would not counterbalance the advantage of the number of insects cleared away by their beaks.—The fact was stated to me as follows.

A lady, whose garden was enclosed by a hedge of rose-trees, and which rose-trees were covered by swarms of minute insects, saw a hen lead her flock of chickens into the garden; her immediate intention was to have them driven out, but she soon perceived their eyes fixed upon the rose-trees, and watched them until they had satiated their appetites, and perfectly cleared some of the trees.

It is a fact well known that through-

out the order of creation every tribe of animated beings is preyed upon by another, and thus, it is supposed, each tribe is kept within the due bounds of space originally prescribed for its existence. The cause of this wonderful dispensation is probably hidden from the power of the human faculty to find out—but the fact remains indubitable; and we see our trees and shrubs apparently preserved from the destructive ravages of those innumerable small flies, known under the denomination of Aphides, by the great variety of species of different orders and genera to which, in their larva or grub state, they serve as food. Amongst these devourers of the Aphis fly, the beautiful little beetle, known

commonly under the name of Lady-bird, is pre-eminently serviceable, and in that amusing work "Kirby's Introduction to Entomology," it is related that in the year 1807, the shores at Brighton, and of all the watering-places upon the south coast, were literally covered with them, after having, in the state of grubs, devoured thousands and ten thousands of the Aphis, which had infested the neighbouring hop-grounds. And the hop-growers are said now to be so sensible of their services, as to place boys to prevent the birds destroying them.

In the attention given to the habits of snails and other insects, it should be peculiarly exerted at the time when a plant is first put into the

ground, and again when it shoots forth its vernal buds; also when, after having flowered, the leaves begin to decay. At this period bulbs are apt to be lost, and most frequently in consequence of the attacks of snails, as at that time they are not only infested by the snails of complete growth, but also with numbers recently come forth from their eggs, and of a size scarcely equalling that of the head of a large pin. These minute animals, if not destroyed, will deprive many bulbs, and also many buds of herbaceous plants of their existence.

It is remarkable that insects generally attack those plants which are least vigorous; and the reason of

their selection of such leaves as are beginning to decay may be, that in their declining state they have usually a peculiar sweetness, perhaps owing to some saecharine material, which is preparing for the nutriment of the bulb or bud that is forming in their bosoms; it being believed by botanie philosophers that the nascent vegetable in part derives its sustenanee from the juiees of the declining foliage of the one from which it takes its birth.

And now, trusting that the hints contained in these few pages may enable my sister gardeners to eultivate their flowers to a degree of perfeetion suited to their wishes, and, by so doing, render them objects of their

genuine admiration, I will not disguise my earnest desire to lead them from the pleasure they receive in the superficial view of a profusion of gay and varied colours before their windows, to the investigation of the habits and properties of these elegant playthings; as in every change of season, amusement, ever new and varying, may be derived from the study of vegetable existence.

The dreary months of winter, which, to the uninformed eye, exhibit only destruction and desolation, present to that of the botanic philosopher a scene of order, renovation, and beauty, while he contemplates the infinite variety which forms the whole of that vast plan of care and preserva-

tion evinced in the mechanism of the minutest bud, which awaits only the genial breath of spring to expand its wonders to the day.

In the slow and gradual decay of the foliage of his trees, he sees, with the decline of that foliage, an increase as slow and gradual of the buds which are preparing, in their turn, to enjoy the transient pleasures of existence; and as the leaves of the flower-borders fade away, and, apparently, perish, the philosophical florist perceives, in their decay, new birth given to a viviparous progeny, with the same certainty as the seed buried within the earth reproduces its seminal posterity, or as the butterfly arises from its chrysalis.

I hope I shall not be deemed presumptuous in recommending to the perusal of *genuine* florists, a small tract, entitled, *Sketches of the Physiology of Vegetable Life,** which, being chiefly the result of simple experiments, is calculated to instruct those young persons, who, while they amuse themselves by the culture of their gardens, may not have either leisure or inclination for actual study, and may be pleased to find collected, in a few pages, a variety of interesting and highly curious facts relating to the cherished objects of their attention, and which may be understood without the labour of close applica-

* Sold by Hatchard, Piccadilly.

tion. Therein, also, the young florist will find a view of the wonderful process which takes place in the reproduction of all bulbs, the knowledge of which may be esteemed essential to the conduct of their increase, and which ought to be acquired by all who are desirous of possessing, in perfection, those prime treasures of the floral amateur.

In having condemned the search after rarity and variety, I must be understood to confine my disapprobation of this pursuit to the general Florist only: to the classical Botanist variety and rarity are of the first value; hence the gardens of the classical botanist and general florist differ, even in their first principles.

The botanist will justly estimate the value of her garden by the number of genera, and the variety and rarity of species therein collected; and while, to the comprehension of the florist, there is little exhibited besides the lettered pegs which obscure, while they enumerate, the plants, the classical botanist will exult in the possession of a greater number of species of some rare individual genus than, perhaps, it may be within the power of botanists, in general, to obtain.

The philosophical botanist and the general florist, for I speak not of those florists who confine their admiration of flowers to the greater or less number of stripes in the petals of a tulip or of a carnation, are more

nearly allied in their tastes than may at first appear. That which pleases one, gratifies the other; and it is only in the extent of their observation that they will be found to differ. The sleep of plants, their various modes of inflorescence, the annual phenomenon of germination, the change of position of the seed-vessels, through the marvellous process of fructification, have each excited the surprise and admiration of every intelligent florist. She observes, and is amused by such appearances, but exerts her intellect no farther; while the philosophic botanist reasons from effect to cause, until she cannot refuse her belief that the curious and beautiful economy of vegetable ex-

istence must proceed from laws not purely mechanical. Notwithstanding the distinction we find between the classical and the philosophical botanist, and yet greater betwixt the scientific pursuit of the knowledge of flowers, and that of merely arranging them into an assemblage of colours, I venture to assert that, while it is essential to the botanical philosopher to be acquainted with an accurate view of the science of classification, the florist will increase her amusement ten-fold by making herself familiar with the ingenious system of the great parent of botany, Linnæus, and some knowledge of which seems unavoidable in those ladies who, in cultivating their favourite flowers, exercise

the mental along with the corporeal faculty.

It is certain, however, that an inquiry into the science of the subject is by no means essential to the pleasure which may be derived from the culture of a flower-garden; and, notwithstanding I recommend to the genuine florist a more extended acquaintance with the economy and habits of the vegetable tribe, the wonders of which are hourly passing before her eyes, I have too much experience of the delight which may be excited by the bare view of the simplest flower of our meadows, or of our hedge-banks, to entertain a doubt of the gratification received by the general florist from the superfi-

cial contemplation of her cultivated borders. I shall, however, esteem myself happy if by these trivial observations I induce, even a few of my sister florists to exercise their intellect, or relieve their *ennui*, by an inquiry into the causes whence those effects proceed, which, while gathering a common nosegay, cannot but frequently have solicited their attention.

Nor is it only the amusement of the present moment that I seek to afford. To use and not to fatigue the understanding, to interest and not to absorb the mind, is the true art by which happiness is to be attained; and, while from the wonderful structure of the creature, we are led to

the contemplation of the Creator, we shall find this a more certain panacea to the daily chagrins of human life, than all that the dissipation of the gilded hours of indiscriminate society has ever been able to afford.

M. E. J.

Somersal Hall.

CATALOGUE

OF

COMMON HERBACEOUS PLANTS.

CATALOGUE

OF

COMMON HERBACEOUS PLANTS,

With their Colours, as they appear in each Season from FEBRUARY to AUGUST.

The Names of the Flowers accented according to the Lichfield Translation of the System of Vegetables of Linnæus.

V. marks *varieties*, of a true species.

FEBRUARY. MAY.

RED.

Anémone,

hepática, . Single and double.

horténsis, . With varieties.

Béllis, . . . Daisie.

perénnis, . V. from deep crimson to pink and white.

FEBRUARY. MAY.

RED.

Erica carnea, . Flowers early in February, very handsome.

Erinus Alpinus, . Very pretty, grows low.

Erythrónium dens canis, . Dog's tooth violet.

Fritillária imperiális, . . Crown imperial.

meleágris, . . With Vs.

Fumária, ... Fumitory.

solida, . Bulb-rooted, flowers early, troublesome, from seeding profusely.

Hyacínthus orientale, Oriental, single and double.

Orobus vérnus, . . . Spring vetch.

Phlox, . . . Lychnidea.

subuláta, . . Awl-shaped.

setácea, . . Bristly.

Prímula vulgáris, . Common primrose. Vs. in shades of red, single and double, including double Polyanthus,

FEBRUARY. MAY.

RED.

Primula vulgáris, which gives a very rich deep shade of red.

farinósa, . . Mealy.

integrifolia, . . Entire-leaved.

longifolia, . . Long-leaved.

villosa, . . . Villous.

decora, Comely,—beautiful and showy.

Helvetica, . . Swiss.

BLUE.

Alyssum deltoidéum, . Purple Alysson.

Anémone hepática, . Single, semi-double, and double.

pulsatílla, . . Pasque flower.

Apennina, . . Apennine.

Cynoglóssum, . . Hound's tongue.

omphalódes, . Comfrey-leaved.

FEBRUARY. MAY.

BLUE.

Crócus vérnus, . . Spring.

Hyacínthus,

botryoídes, . . Grape.

racemosus, . . . Starch.

Iris púmila, . . . Dwarf.

Prímula, . . Auricula, deep blue, with the eye brimstone-coloured.

marginata, Margined: very pretty in large patches.

Pulmonária, . . . Lung-wort.

officinális, . . Officinal.

Virgínica, . Virginian, bright blue.

Scílla,

præcox, . . Early-flowering.

bifólia, . . Two-leaved.

vérna, . . . Vernal.

All pretty, grow low;—many bulbs should be planted together.

FEBRUARY. MAY.

BLUE.

Viola, . . Pansie—large flowered, rich deep blue petals, also with smaller flowers and paler blue.

YELLOW.

Adónis vernális, . . Spring Adonis.

Alyssum, . . Alysson of Crete.

saxátile, . . . Rock.

**montanum*, Mountain: a brilliant yellow of low growth.

Crócus,

vernus, . . Spring.

sulphureus, . . Sulphur.

susiánus, . . Cloth of gold.

Draba airoides, . Sengreen or Whitlow grass of Curtis, v. 5, p. 170.

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* See Curtis's Magazine, vol. 12, page 419.

FEBRUARY. MAY.

YELLOW.

Erythrónium, . . Dog's tooth.

Americánum, American. Not so handsome as the other species.

Fritillária imperiális, . . Crown imperial.

Helléborus hyemális, . . Winter aconite.

Narcissus,

minor, . Very pretty: several bulbs should be planted together.

odorus, . . Sweet-scented.

bulbocodium, Hoop petticoat, gold-coloured.

Jonquilla, Jonquil, double and single.

triandrus, Pale yellow, three-stamined, very pretty.

Pseudo-Narcissus, Daffodil with Vs., pale yellow, double.

FEBRUARY. MAY.

YELLOW.

Narcissus,

bicolor, . Two-coloured.

Taretta, . Polyanthus.

Primula,

veris elatior, V. Oxlip and Cowslip.

auricula, . Single and double, the double beautiful.

WHITE.

Anémone, . . . Wood.

nemorósa, . Single and double.

hepática, . More rare and more tender than the coloured.

Arabis Alpina, . . Wall-cress alpine.

Béllis, . . . Daisie.

perénnis, . . V. double, very pretty.

Cardámine praténsis, . Lady's smock, double.

Crocus, . . . Scotch crocus.

biflórus, Two-flowered. Valuable for blowing some

FEBRUARY. MAY.

WHITE.

weeks before Crocus vernus. The white petals and golden stamen beautiful in the sunshine.

Erythrónium,

dens canis, Dog-tooth. More rare than the red, a beautiful feature in the mingled flower-garden: not less than ten bulbs should be planted together.

Galánthus nivalis, . Snow-drop, single and double.

Helléborus niger, . . Christmas rose.

Leucójum, ... Snow-flake.

vernum, . . . Spring.

Primula nivalis, . . . White auricula.

FEBRUARY. MAY.

WHITE.

Primula vulgaris, . V. paper-primrose, single and double, hose in hose.

Ranúnculus amplexicáulis, Stem-clasping plantain-leaved crow-foot.

Sanguinária Canadense, . Puccoon, Canadian.

Tiarélla cordifólia, . . Heart-leaved.

RED.

MAY. AUGUST.

Antirrhínum, . Snap dragons; various shades.

Astrántia,

major,

minor.

Aquilégia, . . . Colombine.

vulgáris, Common; many varieties, the starry very pretty.

Canadénse, Canada; red and yellow.

Anémone,

horténsis, Coronária or Poppy. Many Vs.; from deep

MAY, AUGUST.

RED.

Anémone hortensis, scarlet to pink and white. By sowing seed every spring, and planting the roots at different periods, the bloom of this beautiful flower may be continued through most part of the spring and summer months. Double scarlet Anémone blows well in common borders.

Béllis prolífera, . Hen and chicken daisie.

Cistus,

heliánthemum, . . . Dwarf.

Cheiránthus, cheiri, . Bleeding wall-flower.

annuus, . Stock, ten weeks.

incanus, . . Brompton stock.

MAY. AUGUST.

RED.

Chelónc, ... Persian.
barbáta, . . Beard-flowered.
obliqua, . . Red-flowered.
Diánthus, . . . Sweet-William.
barbátus, . Mule and tree-mule.
supérbus, . . . Superb.
cæsius, . Mountain: star-pinks and variety of carnations.
Dictámnus, . . . Fraxinella.
Dodecátheon,
Meadia, . . Virginian.
Epilóbium, . . . Willow-herb.
angustissimum, . Rosemary-leaved.
Fumária, ... Fumitory.
formósa, . . Red-flowered.
Gaura,
biennis, . Biennial, red and white striped, flowers till October.

MAY. AUGUST.

RED.

Geránium macrorhizum . . Long-rooted.
sylvaticum, . . . Wood.
sanguineum, . . Bloody.
Lancastriénse, . V. Lancashire.
Gladiólus commúnis, . Corn-flag, common.
Iris versícolor, . . Various-coloured.
Láthyrus latifólius, . Everlasting pea.
Lílium chalcedónicum, . Martagon, scarlet.
Lychnis,
Alpina, . . . Alpine.
viscária, ... Viscid.
flos-cucúli, . Ragged robin, double.
chalcedónica, Scarlet, single and double.
Lythrum,
Salicária, . . Common.
virgátum, . . Twiggy.
Monárda dídyma, . Common scarlet and pale purple.
Orobus várius, . Red and yellow vetch.

MAY. AUGUST.

RED.

Orchis máscula, . Deep shade of purple red : very good effect. See Observations, p. 93.

Papáver, . . . Poppy.

orientale, ... Eastern.

Pæónia, ... Peony.

officinális, . Common, dark, double red, and rose-coloured.

tenuifólia, . . . Fine-leaved.

Phlox, ... Lychnidea.

glaberrima, . . . Smoothest.

stolonífera, . . . Creeping.

ováta, . . . Oval-leaved.

amœna, ... Fine red.

intermedia, . . . Intermediate.

pilósa, . . . Very pretty.

maculáta, ... Spotted.

Rudbéckia purpurea, . . . Purple.

Scílla, ... Hare-bell.

nutans, . . . Flesh-coloured.

MAY. AUGUST.

RED.

Túlipa gesneriána, . Garden tulip. Single and double; single, rich deep red: very good effect: shades of striped red.

Túlipa, . . . Tulip, dwarf.

suavéolens, . Van Tol. sweet-scented.

Cleremont, . . Pink and white.

Thalictrum aquilegifólium, . Meadow rue. Columbine-leaved, with purple flowers.

Valeriána, ... Valerian.

rubra, . . Red, two shades.

Verónica, ... Spiked.

carnea, . Flesh-coloured, two shades.

BLUE.

Anémone, . Coronaria, or Poppy Anemone.

Varieties, The double kinds, except

MAY. AUGUST.

BLUE.

the scarlet, not adapted to mingled flower borders, as they require peculiar culture to bring them to perfection.

Aster alpinus, . Handsome; grows low.

Aconítum, . . . Monk's-head.

napellus, . V. Blue and white.

Campánula,

persicifolia, Peach-leaved, single and double.

púmila, . . . Dwarf.

Carpática, . . Carpathian.

Catanánche cærúlea.

Cheiránthus, incanus, . . Brompton stock.

annuus, . . Ten weeks. By sowing the seed of stocks, and putting out the plants at different times, the bloom may be con-

MAY. AUGUST.

BLUE.

tinued until destroyed by frosts.

Centauréa, cyanus, . Corn-bottle; large flower; one bright deep blue; not in esteem with florists, but worthy of a place in the Mingled Flower-Garden.

Dracocéphalum,

grandiflórum, Great-flowered, bright deep blue, very handsome.

Delphínium, . . . Larkspur.

grandiflórum, . . . Bee.

elátum, . A variety of the Bee Larkspur, pale blue, very handsome. There are two kinds of the double Perennial Larkspur, of a less and

MAY. AUGUST.

BLUE.

larger size, both beautiful.

Delphínium azureum, ... Azure.

Gentiana, ... Gentian.

saponaria, . . Soap-wort.

septemfida, . . Seven-cleft.

asclepiadea, . . Swallow-wort.

acaulis, . . Gentianella.

The last species planted at the edge of a border facing the South, in a row of four or six inches broad, makes a superb appearance.

Geránium, palustris, . Single and double.

Hemerocállis, . . . Day-lily.

cerúlea, . . Blue-flowered.

Iris,

cristáta, . . . Crested.

sambucina, . . . Deep blue.

MAY. AUGUST.

BLUE.

Iris, German, . . Pale blue, beautiful.

xiphium, xiphioides, Small and great bulbous.

Linum, ... Flax.

perenne, . . . Perennial.

púmila, . Dwarf.—Marked annual in Mr. Donn's catalogue; certainly continues more than one year.

Lupinus, ... Lupine.

perennis, . Perennial, two kinds.

polemonium cæruleum, Greek valerian.

Phytéuma, . . Bright deep blue.

orbiculáre, . Round-headed.

Scílla,

campanuláta, . . Bell-flowered.

nutans, . . . Hare-bell.

Sophóra austrális, . . Blue-flowered.

Verónica,

prostráta, . . Trailing.

MAY. AUGUST.

BLUE.

Verónica chamædrys, . . Germander.

incana, . . . Hoary.

spicáta, . . Spiked.

cruciata, . . Cross-leaved.

Very pale blue, of a shade very uncommon; very good effect.

Vinca major, . . . Periwinkle.

When the trailing branches are cut off, the Vinca major with its varieties will grow in small bushes, and is pretty; in its natural trailing state it is very ornamental among rockwork.

YELLOW.

Allium moly, . Disagreeable,—from its strong onion smell; va-

MAY. AUGUST.

YELLOW.

luable as it supplies a shade of deep yellow, late in June.

Antirrhínum spartium, Annual broom.—Grows very low, and should be sowed near the edges of the borders; essential to the beauty of mingled flower-gardens, from June to September.

Cáltha palustris, . Meadow bout, double.

Cheiránthus cheiri, Green-top, or yellow wall-flower, double.

Cístus heliánthemum, . . Dwarf.

Coreópsis, . . Tick-seed sun-flower.

tenuifólia, . . Slender-leaved.

aúrea, . . . Golden.

verticillata, . . Whorl-leaved.

Hemerocállis, . . . Day lily.

MAY. AUGUST.

YELLOW.

Hemerocállis flava, . . Yellow.

fulva, . Copper-coloured.

Lílium, ... Lily.

Canadénse, . . . Turk's cap.

bulbíferum, . . Bulb-bearing.

tigrínum, . . Tiger-spotted.

Œnothera, . . . Tree-primrose.

púmila, . . Dwarf; very low.

Missouri, Paler yellow, flowers large, the calyx spotted with crimson spots, of lower growth than the common Œnotheras. Two common kinds, with deeper and lighter shades of yellow.

fruticósa, . . Perennial.

Papáver, ... Poppy.

Cámbricum, . Welsh; perennial.

MAY. AUGUST.

YELLOW.

Túlipa, . . Dwarf; very pretty.
sylvestris, . Single; flowers nodding; blows early.
Gesneriána, Single and V. Double yellow.
Tróllius, . . . Globe.
Europæus, . . . European.
Asiáticus, . Asiatic; colour of Asiaticus peculiarly good effect.
Vióla, ... Pansie.
trícolor, . . . Varieties.
lutéa, ... Yellow.
Altaica, . Very pale, petals curled.

WHITE.

Antirrhinum, . . Snap-dragon.
Anthéricum,
liliágo, . . Grass-leaved.
liliástrum, . Savoy spider-wort.

MAY. AUGUST.

WHITE.

Actæa racemósa, . . Branched.

Anémone, . . Snow-drop leaved.

dichótoma, . . Two-forked.

Bellis, ... Daisie.

perénnis, . Double, very pretty.

Campánula persicifólia, Peach-leaved, single and double.

púmila, . . . Dwarf.

Cheiránthus, . . Stock.

incánus, . . Brompton.

ánnuus, . . Ten-weeks.

Convallária polygonátum, Solomon's seal, single and double.

Dictámnus, . . Fraxinella.

Hésperis matronalis, . Rocket, double.

Iris, . . . Large.

xiphioides, . . Bulbous.

Lílium, . . . Lily.

candidum, . . White.

MAY. AUGUST.

WHITE.

Narcissus,

poeticus, . Poet's; double and single.

Ornithógalum,

pyramidale, . . Pyramidal.

Phlox, . . Lychnidea.

suavéolens . . Sweet-scented.

Pancrátium,

maritimum, . . Sea.

Polygonum,

vivíparum, Viviparous; grows very low, pretty.

Ranúnculus,

aconitifolius, Mountain; double.

Saxífraga, . . Double.

granuláta, . Grain-rooted; very ornamental before flowering by the green patches of the foliage amongst the early spring flowers.

MAY. AUGUST.

WHITE.

Scilla,

campánulata, . Bell-flowered.

nútans, . . Hare-bell.

Stipa, . . Feather grass.

pennáta, . . Soft.

spiræa,

arúncus, . . Goat's beard.

filipéndula, . Drop-wort; double.

ulmária, . Meadow-sweet; double; the single kinds have little beauty.

trifoliáta, . . three-leaved.

Thalictrum, aquilegifólium, . Columbine-leaved.

Túlipa, . . . Tulip.

gesneriána, . V. slightly streaked with pink.

Verónica,

spicáta, Spiked.

pinnáta, . Pinnate; the prettiest of the spiked Veronicas.

MAY. AUGUST.

WHITE.

Vinca minor, . Periwinkle, with variegated leaves, very pretty when cut into bushes.

List of PLANTS which have blown this year, 1812, in March :—some of them were in blow in February, and continued in beauty so as to form, with those of March, a beautiful specimen of the Mingled Flower-Garden.

RED, SHADE FROM PINK TO SCARLET.

Anémone,

hepatica, Hepatica, single and double : various shades of single Anemone, or Wind-flower.

Béllis,

perennis, . Plain red, and variegated.

Erica,

carnea, . Heath, very showy.

RED, SHADE FROM PINK TO SCARLET.

Erythrónium,

dens-canis, Dog's tooth, violet.

Fritillaria imperialis, . Crown imperial.

Orobus,

vernus, . Spring vetch.

Prímula, . Double lilac. Double crimson. Double velvet; and all the varieties of Primrose and Polianthus in shades of red.

BLUE TO PURPLE.

Alyssum,

deltoidéum, . . Purple alysson.

Anémone,

hepatica, . Hepatica, single and double Wood: single varieties of Wind-flower.

Crocuses.

Cynoglossum omphalodes, . Comfrey-leaved.

BLUE TO PURPLE.

Hyacinthus,

botryoides, See Curtis, vol. 15, p. 157.

Primula,

marginata, . . Single blue.

Pulmonária,

officinális, . Jerusalem Cowslip.

Scilla,

præcox, . . Early.

bifolia, . . Two-leaved.

Viola, . . Violets.

YELLOW.

Draba, . . Sengreen.

aizoides, . Whitlow grass. Curtis, vol. 5, page 170.

Crocuses.

Fritillaria imperialis, . Crown imperial.

Narcissus,

minor, Smallest double pale yellow.

odorus, . . . Sweet-scented.

Polianthus, . White, with a conspicuous yellow eye.

YELLOW.

Primula, . Double and single primroses.

WHITE.

Anémone,

hepatica, . Wind-flower, very pale tint of yellow, has the effect of white.

Bellis, . . . Daisie.

perennis, . . Double.

Crocus,

bifolia, . Two-leaved, late-flowering.

Erythrónium,

dens-canis, . Dog's-tooth violet.

Primula, . . Double and single, very pretty. Hose in hose.

Viola, . . Violets.

OBSERVATIONS.

MANY flowers in the foregoing Catalogue continue in bloom from July to October: and we have also a variety of beautiful herbaceous plants which peculiarly belong to Autumn; these are generally large, some of them extremely handsome, and in extensive flower-gardens produce a very ornamental effect. Holly-hock, alcea rosea, with all its beautiful and various shades of colour, many species of perennial asters, the common sun-flower, and some other species of heliánthus, will not escape

the attention of the genuine Florist, if the compass of her ground be large enough to admit of their introduction. To the common-sized mingled flower-garden, the recent introduction of the Dáhlias has brought a variety of rich and brilliant colours, which must be esteemed a valuable acquisition to the Florist whose eye is delighted with gaiety. Nor perhaps are any of the plants above mentioned of too great size to be allowed a place in the outskirts of the garden; while in those borders which do not admit of the large-growing Autumnal plants, the chief dependence for gaiety at that season must be upon annuals; the hardy kinds of which are so generally known as to render unneces-

sary the enumeration of them in this place.

Carnations, beautiful in all their varieties, contribute largely to the splendour of our Autumnal borders: nor must we omit a plant so peculiarly ornamental at that season, as the double dwarf poppy; but this will require attentive care to keep it within the bounds of neatness, so essential to the appearance of a flower-garden. When once poppies have been introduced into our borders, the difficulty will be to keep them under due regulation; which must be done by early weeding out such plants as are not placed according to our wishes: they must also be firmly tied to a short stick at an

early period of their growth, and attention given to keeping them well supported at the root, as otherwise they are liable, from the brittleness of their texture, to be broken off at the bottom by the first high wind. The carnation poppy is also beautiful in its kind, but, like the dwarf poppy, and all other profuse seeders, requires much care to keep it within bounds. Stocks, cheiránthus annuus, and incanus, (the annual and the Brompton stock,) of which we now possess some beautiful varieties both in size and colour, may, by judicious management in sowing the seeds, be procured through every season of the year, from the early part of May, to the period in Winter when the flowers

are cut off by the frost. The Persian stock, lately introduced, has added a new colour to those before afforded by the rest of its tribe; producing large double flowers resembling those of the rosa multiflora. Stocks, china-asters, and marigolds, are the more valuable as they may be transplanted into the borders occasionally, as vacancies occur, without injury to their growth: whence the use of them is peculiarly adapted to basket gardening, so much in fashion near towns and villas.

The single and double colchicums are beautiful, and give gaiety to our gardens at a late season. The popular belief, that the fruit or seed of the colchicum is produced previously to

the flower, is wholly unfounded; and, as the peculiarities in the appearance of the fructification of this plant generally excite the curiosity of Florists, I venture to refer the ingeniously inquisitive to "Physiological Sketches of Vegetable Life," page 160, plate XI. where they will find full information on that interesting subject. The orchis máscula, which from the rich purple of its petals, and dark-spotted leaves, merits a place among our cultivated flowers, is rarely seen in gardens, it being generally supposed that there is some peculiar difficulty in removing the roots of this curious tribe of plants from their native situations of growth. I have in a former work* hazarded the conjecture, that

* See Physiological Sketches, &c., page 136.

the orchis, in removal, did not require different treatment from that necessary to be given to all other bulbous plants under the same circumstances; and I have since confirmed the justness of this conjecture by experiment.

It is requisite that the leaves of all bulbous plants should be wholly decayed before their roots are transplanted, as, until that change has taken place, the process of growth in the annual renewal of the bulb continues in progress, and the growth of this new bulb is checked by any injury which the leaves or the old bulb may sustain. Nevertheless, as it is frequently expedient to remove bulbous plants while their leaves are

green, and even during the time at which they are in flower, this may be safely effected, if done with proper precaution, and also the root may be preserved in a healthy state, although it will certainly be weakened. All bulbs, if transplanted while their leaves are in vigour, should be removed with as much soil as will adhere to the bulbs, and great care must be taken not to cut or bruise the root, or the root-fibres. When transplanted, their leaves should be carefully tied to a stick, and suffered to remain until they naturally fall from the plant. If bulbous plants, during their state of vigorous foliage, are sent to a distance, they should have the same attention given them, and the soil

should be closely pressed round the bulbs, and their leaves nicely tied together, and the whole wrapped in sheet lead, which, by keeping them from the air, will prevent the evaporation of their juices, and preserve them for a week or ten days nearly as well as if they were placed in soil for that period.

As the leaves of the common hardy kinds of bulbs give an unneat appearance to gardens, it is a general practice to cut them off soon after their time of flowering is over; and if this practice is pursued with bulbs which have not been planted more than one or two years, it will weaken them so much as to prevent their flowering vigorously, and probably destroy the plant; but when the ordinary kinds

of narcissus, crocuses, and snow-drops, have continued long in the ground, and are in large patches, their leaves may be cut off when about half decayed, without materially injuring the appearance of the bloom of the ensuing year. The leaves of the more delicate kinds of bulbs must be tied to thin sticks, and the want of neatness occasioned by their withered appearance, borne with; as cutting off the leaves of jonquils, Narcissus jonquilla, dog's-tooth violet, Erythrónium dens-canis, hyacinths, &c. would be certain destruction to their roots: and if the leaf-stem of the crown-imperial, Fritillária imperialis, is not allowed to decay on the bulb from whence it springs, that

bulb will rarely produce a successional one strong enough to bear a flower*. The same theory applies to herbaceous plants, but, as from some particular circumstances, too long to be detailed in this short work, they do not apparently receive equal injury with the bulbous tribe by being deprived of their leaves, it is not necessary to treat farther on the subject than to suggest to the intelligent Florist carefully to preserve the foliage of any delicate herbaceous plant until it spontaneously decays.

N. B. The generic, specific, and English names, are given after those of Mr. Donn's catalogue: that useful work being in the hands of most florists.

* See Additional Observations, page 116.

ADDITIONAL OBSERVATIONS ON THE GROWTH AND TREATMENT OF BULBOUS PLANTS.

In the demand for a new edition of "The Florist's Manual," I find that some additional particulars respecting the growth and treatment of bulbous plants may render the work more generally useful. I therefore subjoin such remarks, as may direct the novice in the art of gardening to those times and seasons at which her bulbous plants may be removed with safety; and from the ignorance of

which, numbers, I believe, are annually destroyed. Notwithstanding, however, the expediency of attention to the state of growth in a bulb at the time of removal, it is certain that with the particular care detailed in these pages, it may so far safely be transplanted in full vigour both of flower and foliage, as not materially to injure the health of the bulb, although not without considerable hazard of so much impairing its strength, as to prevent the product of a handsome flower the ensuing year.

The process of the annual renewal of the bulb in tulip has been long understood,—even in the time of some of our oldest botanists; and indeed the marks of such a process are so

evident, that I cannot imagine that any one who had planted and taken out of the ground any number of tulip-roots, could remain ignorant of it; the flower-stem manifestly rising from the centre of the bulb when planted in Autumn, and as manifestly appearing on the outside of the one taken out of the ground in July or August—a change which could only have taken place from the decomposition of the bulb from the centre of which the flower-stem had proceeded, and the production of a fresh one to which the same flower would necessarily have become external.

It is extraordinary that, although this fact as been so long known, it has not led to more general infor-

mation on a subject so essential to the knowledge of the flower-garden, and so interesting in its own nature. And it is with surprise that we find in the works of our oldest and most ingenious botanical writers, the orchis, the crocus, and gladíolus, (corn-flag, or sword-lily,) described as having two bulbs, in the crocus, and the gladíolus one bulb growing upon the other; and even Linnæus, notwithstanding his minute and accurate research into the nature and habits of the vegetable kingdom, suffered himself to be deceived by these appearances, and without farther investigation marked these bulbs as distinct from the common tribe, and discriminated them by the appropriate

term of bulbus duplicatus, or double-bulbed; when, had he examined a few of them at their different stages of growth, he would have arrived at the important fact, that this duplicated appearance arose solely from the process of the formation of a new bulb, deriving its growth from the absorption of the juices of the old one, which he would have found gradually diminishing in size, as the dimensions of the new bulb above it enlarged.

The crocus and gladíolus commúnis (corn-flag, or sword-lily,) being generally found in the commonest gardens, and the luxuriancy of their increase rendering the destruction of a few of their bulbs a matter of no consideration, present to the inqui-

ring Florist, specimens of the annual renewal of bulbs, which, I flatter myself, may induce her to pursue her investigations through the whole tribe, as she will find those investigations productive both of utility and amusement. In hyacinths, narcissuses, and various other genera, the new bulb being formed *within* the old one, its progress is more difficult to be observed. Erythrónium dens canis, dog-tooth violet, exhibits an elegant and more distinctly apparent specimen of the process of the formation of a new bulb *within* the old one; and if examined at different periods from the first show of decay in its leaves, even to the time beyond which they have wholly disappeared, the process

will be agreeably visible; and farther, in November or December, and the early part of spring, if a formed bulb be carefully cut open, the embryon flower, perfect in all its parts, with its stalks and leaves, will be found in the centre with a small substance at the base of the flower-stem, which, had it remained undisturbed, would have been gradually formed into a flowering bulb for the ensuing year; a process which clearly evinces, that whatever tends to check the growth of the old bulb, as transplanting or cutting off the leaves, must greatly impede the growth of the one newly formed in its bosom.

It is not, however, my intention to enter farther into the subject, than

what may be introductory to the more general study of this branch of floral knowledge, and rendered subservient to the management of the more delicate species of bulbs: I therefore, confine myself to the most obvious specimens of the habits which I believe to obtain in every species of the bulbous order; and while I consider with surprise the limited view which was taken of this subject by the most respectable botanists of former periods, I cannot omit remarking, with all due deference, upon the inertness which appears to prevail in the highly ingenious botanical writers of the present time, and who are so justly distinguished for the accuracy and utility of their researches on most

other branches of vegetable history. We find the orchis tribe characterised as bearing two distinct bulbs, and the difficulty of removing any of the species from the fields into our gardens ascribed to some peculiarity in the plant. Also the rare circumstance of the autumnal colchicum not ripening its seeds until the spring after their formation in the preceding autumn, has given rise to an unwarranted opinion, that the fruit is produced previously to the expansion of the flower, and which, from want of a little farther investigation, has become an established popular belief.

I am desirous to rouse my sister florists to the exertion of seeing for themselves; and by shewing with how

little trouble the errors mentioned above may be confuted, I hope to excite them not to acquiesce in the belief of any extraordinary fact, until they have examined the foundation on which it rests. I have annexed some representations (see Plate 5,) of the bulb of the large purple orchis, Orchis mascula, which will fully refute the belief which obtains of that order of plants bearing double bulbs, and will also exhibit the extraordinary change which takes place in the form of the bulb from its early state of growth to the time when it has attained perfect maturity; and respecting the difficulty of removal, I can aver from experience, that there will not be found any circumstance necessary to be re-

garded, but what occurs in the transplantation of all other bulbous flowers during the periods of their growth; and as the large purple orchis will be found peculiarly ornamental in the borders of the mingled flower-garden, our trouble in bringing it thither will be well repaid.

As this orchis is usually found growing in hay-meadows, and the leaves having generally disappeared before the grass is cut, it is commonly expedient that it should be transplanted in a state of active growth, and I should recommend the removal of the plant to take place as early in the spring as its beautifully spotted leaves have attained about half their size; when, if it be taken up with a clod of

earth completely enveloping the root, and carefully shaded, and occasionally watered, it will rarely fail of producing a vigorous flowering bulb the ensuing year, and might probably bloom the year of removal; but, in order to strengthen the root, it will be better to pinch off the flower-stem as soon as it appears, as during the time of flowering a large portion of nourishment is drawn by the fructification from the old root, and, consequently the newly forming bulb is robbed of its due share of sustenance.

I am the more inclined to enter a little into the detail of the habits of the bulbous tribe of vegetables, by having recently met with some remarks upon the failure in the flowering of the

Guernsey lily, (*Amaryllis Sarniensis*,) the second year after importation into this country, which seem to shew that, notwithstanding the necessity of preserving the green leaves in vigour until their natural period of decay is pretty generally allowed, the principle from which this practice is deduced, has not been fully attended to. In that valuable repository of ingenious inquiry, the "Horticultural Transactions," there are various papers on the treatment of the Guernsey lily, written with the view of obtaining an annual succession of bloom: the writers all agree in the expediency of preserving the green leaves from injury, but do not appear to have investigated the prime cause from whence this ex-

pediency arises, as they all seem to concur in the supposition that the bulbs of Guernsey lily continue *individually* through a course of years, and that the flower formed within the bulb of one season, may, by various accidents, be so retarded in its growth as to require a succession of seasons to bring it to maturity. This little work does not admit of much detail upon the subject; but as many florists have found it impracticable to bring not only Guernsey lily, but other choice bulbous plants to bear flowers annually, they may not be uninterested in a short discussion of the principle on which the methods of treatment of that beautiful tribe should be founded.

It is with genuine diffidence that I bring forward an opinion which in any degree militates against such authorities as Mr. Knight, and other eminent botanists, to whom horticulture and vegetable physiology are so greatly indebted; and I am led to this presumption solely by the wish I entertain of inducing all florists not only to become acquainted with the methods of treatment of their bulbous plants, but also to examine the principle on which that treatment is believed to rest.

Contrary to the supposition that the bulb of Guernsey lily continues *individually* from year to year, gradually acquiring increase of strength, until it attains the power of produ-

cing flowers, I believe it to be governed by the same laws, which by repeated experiments, I have uniformly found to obtain in all bulbous roots, and from which I have deduced the following position ;—that every bulb, whether arrived at the mature state of flowering, or the less perfect one of producing leaves only, annually becomes absorbed by a similar bulb proceeding from the flower-stem, or from some other part connected with the old bulb, the perfect formation of the new bulb being effected in the course of a few months. At whatever season the leaves of bulbous plants are entirely decayed, at that period the bulb for the ensuing year will be perfectly formed, and in possession

of all the parts which are to be developed in the Spring or Autumn following; and if at that season a bulb of mature age be carefully cut open, it will display an embryon flower, exhibiting in miniature the various parts of fructification. If the bulb remain in the ground, it will continue at rest several weeks after these parts are perfected, and will then begin to vegetate; first shooting forth root-fibres and green leaves, which generally appear in the form of a bud, and the whole will proceed slowly, until in Spring, both leaves and flowers come forth in full perfection: but, if from any untoward circumstance, the flower should have been injured in its growth, so as to prevent its appear-

ance at the usual period, no lengthened time, nor the most assiduous care, will bring it to perfection; the flower will perish, and the process of the formation of a new bulb must take place by the absorption of the juices of the bulb of the preceding year, before a flower can be produced, and to this process the green leaves seem essential; but whether from their juices contributing to the increase of the new bulb, or from their action being necessary to the well-being of the parent bulb, while fostering the young one in its bosom, I cannot presume to determine. Be that as it may, the necessity of nurturing the old bulb, with its leaves, after flowering, seems to be nearly established.

Notwithstanding, however, the concurrence and experience of the most respectable testimony, in the necessity of the preservation of the green leaves in order to the production of bloom the ensuing year, we find an exception in the management which the florists of Holland are said to give their hyacinths, which is worth inquiring into. The treatment directed is to take the roots out of the ground, and to *cut off* the leaves as soon as they *begin* to wither,—a practice entirely contrary to that which I have uniformly seen succeed with hyacinths which have been blown in glasses or pots, or such as have flowered in borders; as I have always found the bulbs shrivel and decay, if I have

happened to remove them before their leaves had wholly disappeared, and have not attended to carefully preserving the leaves. Various experiments also which I have made, have all tended to ascertain the advantage of suffering the leaves to decay upon the plant.

It is however certain, that our knowledge of the laws of nature is but in its infancy, and that our knowledge of the laws of vegetable life has scarcely passed its first stage, and that a year does not elapse without presenting us with some new fact, which apparently contradicts our reasoning upon those which had gone before, and to which, from that reasoning, we have yielded our assent.

It is therefore my wish not only to lay before my readers what I believe to be a well-established theory, but also to make them acquainted with every objection which may appear adverse to that theory.

Light having hitherto been esteemed essential to the vigorous growth of vegetable life, I cannot omit mentioning here a fact which I have lately received from respectable authority, of hyacinth flowers being blown in perfection, by being placed in the dark until their blossoms were expanded. Such extraordinary deviations from general practice founded on established principles, are worth attending to, in order that their utility may be proved or disproved by

farther experiment: and although the prime intention of this little volume is to assist general florists in their endeavours to produce from their flower-borders brilliant effect, a short detail of a few curious and recently-discovered facts, relating to vegetable life, may to some readers not only prove interesting, but may lead to investigations, which may be useful both to the philosophical and practical parts of the science.

A practice which now seems to be coming into general use in the treatment of geraniums ought to have its place here,—a practice so contrary to our established belief of the theory of life, that it may at least afford matter of laudable curiosity; and the more,

as it may be useful to the cultivators of the geranium tribe, who do not enjoy the means of conveniently housing their plants through the winter. The method adopted is, to take the plants out of the pots or borders wherein they have grown the preceding summer, so early in the autumn as to preclude their having been, even in the smallest degree, affected by frost, and before the ground has been saturated with rain; the leaves must be stripped off, and the branches and fibres pruned, leaving only the woody part of the stem, and the larger roots. The object in cutting off the top and leaves is to prevent the plant from decaying by the sap, which abounds in the more tender shoots, and it is

thought more likely to be kept in a state of rest, by taking away the more fibrous part of the root. The plants must then be laid in a dry shady place to *heal;* after which the bottom of a box should be covered with dry sand, and layers of Geraniums and sand placed alternately until the box is filled; then put the box into a cellar, or any place safe from the effects of frost. When re-planted in May, they will shoot vigorously, and make a more shewy appearance than newly-raised plants.

We so little understand on what that principle which we call life depends in either the animal or vegetable world, that we ought not to be surprised by any mode in which we

may see it act, however contrary to that which usually passes under our observation. We also find some analogy in that tenacity of life now discovered in geraniums, to that which is said to exist in the tribe of mosses, which, it has been asserted, have resumed their original verdure after having been preserved dry for several years; but whether they likewise retained their vegetative faculty, has not, I believe, been ascertained:—another extraordinary instance of our indolence of research into the wonders of Nature!

The treatment of the Dahlia genus which has now been adopted with success for some years, is similar to that to which geraniums are beginning to be

subjected; there is, however, this difference in the plants—the Dahlias, like carrots, die to the ground annually, leaving roots stored with saccharine matter, for the support of the germinating bud in spring; the geranium seems to be composed of woody fibres only, without any reservoir of nutriment from which life can be sustained;—but even if this be so, the fact of reviviscence in the vegetable creation after the plant is apparently become a dry stick, is not more surprising than what is recorded in the animal kingdom of the return to life of caterpillars and other insects, after having been frozen into masses of ice.*

* See Kirby's Entomology, vol. 1. page 453.

Crown Imperial, Fritillaria imperialis, page 97.

It must be understood that although the leaf-stem of the crown-imperial being suffered to decay on the bulb from whence it sprang, is believed to be essential to the vigorous formation of the bulb for the ensuing year, it will be advantageous to the growth of that bulb, carefully to cut off the flowers as soon as their petals have lost their colour, in order that the nutriment which the germs might require to bring their seeds to maturity, may be expended solely upon the growing bulb.

In corroboration of this theory of strengthening the root by taking away

the flower, I detail the following experiment of Mr. Daniel Carter of Fulham, as stated by him in the first volume of the Horticultural Transactions, page 362, and by which gardeners may see that they may obtain as fine bulbs of various species in their own gardens, as any they can import from foreign countries. Mr. Carter, in his cultivation of Narcissus Polianthus, gathered all the flowers as soon as two or three were expanded, cutting the stalks close to the root, and being very *careful not to injure the leaves*. By this management he obtained an abundant crop of healthy bulbs every year; whereas in a bed left for the purpose of perfecting seed, very few roots produced, the follow-

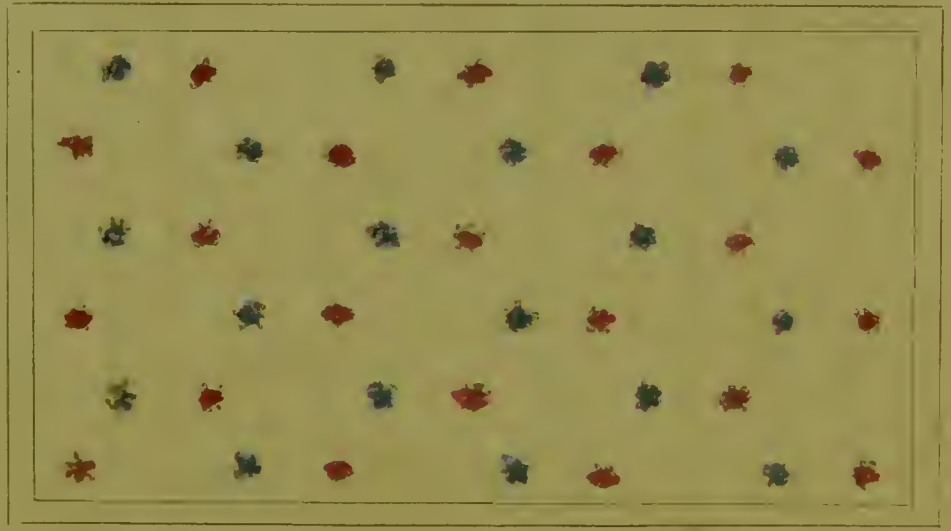
ing season, a complete bunch of flowers, and many roots none at all. The bulbs from which the flowers were taken, and which formed vigorous new bulbs, had been blown in pans of water, a method by which bulbous roots are generally supposed to be so much weakened, as not to recover their strength for two or three years, nor could I have imagined, that the process of the growth of a vigorous new bulb could have been completed under such treatment; and it is to be wished that Mr. Carter had given a full account of the manner in which he managed the bulbs, both before and after the time at which their flowers appeared.

Hyacinths, when blown in glasses, are only laid *upon* the water, and frequently decay, from being exposed, it is believed, to too much moisture. This, however, may not be the cause, as the larvæ or grubs of insects are not unfrequently found within the coats of the bulb, which becomes diseased by their depredations, and would perish, if not carefully attended to, in whatever situation it might be placed. Be the cause what it may, hyacinths blown in glasses are so liable to perish by the decay of their bulbs, that an account which I lately met with of the restoration of a decayed bulb by the anti-putrescent properties of charcoal may be worth attending to.

A hyacinth bulb placed in water, threw out only a few fibres, which soon died at the extremities, and the bulb became in such a state of decay as to be offensive. A table-spoonful of powdered charcoal was stirred into the water, which immediately corrected the disagreeable smell; but on the second morning, after the application of the charcoal, the offensive smell began to recur. Charcoal and water being renewed three times, at the interval of two days, the bulb became perfectly sweet, and flowered as well, and nearly as soon, as one of the same variety (*Groot verst*) which was placed on the same chimney-piece near it.

To those of my readers who may wish to cultivate Hyacinths in beds separate from their mingled flower-borders, I flatter myself that the following directions, with the plate annexed, may be acceptable. The bulbs of double hyacinths may be planted at any time from the middle of October to the middle of November. The bed on which they are to be planted should be situated in rather a dry and airy part of the garden: a southern aspect is to be preferred, sheltered on the north and east by trees or buildings about the distance of six or seven feet from the border, care being taken to have them sufficiently distant to prevent the droppings of the trees falling upon them. A shelter of evergreens would protect and give beauty to the whole; and in this age of discovery it has been imagined that evergreens emit warmth, by which tender

Plate. 6



plants placed near them are nurtured, and it is said that many delicate plants so situated, have been preserved through severe winters, when others which have not had that advantage have perished. Of the advantage of the shelter formed by the continuance of the leaves on those plants denominated ever-greens throughout the winter, we cannot doubt: the rest must be left to future investigations,—it will, however, require a series of judicious and accurate experiments to establish the fact.

The plan of the border of hyacinths, as described by the plate, is esteemed superior to any other for its elegance and simplicity.* Each bulb, those of the outside excepted, will be in the centre of a hexagon, and the whole at equal distances from each other. The

* Scale of the plate, half an inch to a foot.

width of the surface of the bed is four feet, the six rows across it are eight inches asunder, and the two outside rows are each four inches from the sides of the bed. Under the heads of red, white, or blue, all hyacinths may be comprehended, except a few yellow sorts which may be classed with the whites. It is advisable to have pots of the different kinds of hyacinth in reserve, that if any of the bulbs on the border perish, their places may be immediately supplied by others of a similar colour.

The earlier blowing sorts should be planted about an inch deeper than the rest, from four to five inches; the whole being planted from three to four inches deep: the deeper planting will retard the bloom, and bring it to perfection with the later flowering kinds. A bed of hyacinths never requires watering at any period: the rains

that happen after planting, are generally more than sufficient, both for the roots and bloom; and after the bloom is over, they are rather prejudicial than otherwise, unless very moderate.

The following curious circumstance has been observed. If frost penetrate into the soil so as to reach the bulbs, especially about the time that the plants begin to appear above ground, it will cause some of them to shoot forth their flower-stems, and blossoms; but, if the roots become entirely frozen through, they are in danger of being destroyed.

The above directions, with the plan of the hyacinth-bed, are taken from "*The Florist's Directory*," by James Maddocks, a book containing much useful knowledge, and some beautiful-coloured specimens of the flowers of hyacinths, tulip, ranunculus, &c. with minutely detailed methods for bringing them to the highest perfection.

Guernsey Lily, Amaryllis Sarniensis.

As the culture of the Guernsey Lily seems to have become an object of much interest to all admirers of green-house plants, the following observations, extracted from a paper in the Horticultural Transactions by the Hon. and Rev. W. Herbert, may be found useful in the direction of its treatment. Mr. Herbert esteems the Guernsey lily decidedly a native of the Cape, from whence he has received the bulbs dug up in a wild state. He has found that the only attention the plant requires is to give it sufficient air, *while the leaves are growing*, that they may be strong and bark-coloured; to protect the leaves from frost, keeping the pots near the light, if under glass; to give moderate and regular supplies of water; and to leave the bulb nearly dry, from the time the

leaves decay, that is, about Midsummer, at latest, till the end of August, when the flower-bud should appear. Whenever the sprouting of the bulb is tardy, it should be assisted by placing it for a short time in a warmer situation. If the stigma does not expand so as to become after a few days trifid, it is a sign that the temperature is rather too low to suit the plant, and the leaves will probably not push freely without more heat.

A good yellow loam without any manure will suit Guernsey lilies very well; but they will probably thrive in any wholesome compost which does not tend to canker the bulbs. They should be planted partly above ground, for the wet earth round their necks will prevent their flowers thriving, and will even sometimes destroy them. The old coats about the neck of the bulb, which hold water

like a sponge, should be pulled off. It is at the time that their leaves are growing, that a very free admission of air is most necessary; and on the health of the leaves will depend the strength of the bulb.

It might be advantageous to cut off the flower-stem immediately the flowers begin to decay. Also, by adopting Mr. Carter's method in the management of Polianthus Narcissus, a certain number of flowering bulbs might be annually procured.

I cannot omit a practice in the common culture of flowers, which I have found very advantageous, viz. whenever a plant is removed or brought into the borders, to fill the hole with fresh soil.

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THE END.

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