

POPULAR FLOWERS OF THE SEASONS.
JANUARY AND FEBRUARY.

At the earliest period of the year, when the holly branch and the mistletoe bough are lingering within doors, there is little of activity—little to attract the eye—amongst out-door vegetation. The masses of the Christmas Rose will, indeed, be continuing to blossom—their flowers, at first snowy white, undergoing, at this season, curious changes of colour; and the garden may be further enlivened with so-called “evergreens” of variegated dress; but it is not until the first month of the year is somewhat advanced, and then only under favourable conditions of weather, that the true floral harbingers of spring may with certainty be looked for. Then the Winter Aconite (*Eranthis hiemalis*), the Snowdrop (*Galanthus nivalis*), and the Early Crocus (*Crocus*, several kinds) appear, sometimes even rearing their delicate heads from beneath a mantle of snow, ready to greet, as with a burst of joy, the early sunshine of the opening year.

One of the first of these to produce its blossoms is the Winter Aconite, a dwarf plant, extremely useful in gardens, on account of its bright yellow colour, as a companion for the snowdrop and other early small bulbs. This plant has permanent fleshy underground stems (which are what is called tuberosus), and requires to be treated in a manner exactly similar to the smaller bulbs. The name of winter aconite seems to have been given to it in allusion to its season of flowering and its aconite-like cut leaves. The underground stem grows slowly in a horizontal direction, and produces, at short intervals, on its upper side, buds, whence the leaves and flowers arise, the whole being not more than from two to four inches high. Those which bear the flowers consist of a slender succulent stalk, supporting near its summit, close below the flower, a pair of stalkless leaves, which, being cut down into narrowish segments, furnish as it were a green frill beneath the solitary flower. A few leaves grow up in addition, on stalks nearly as long as the flowering stems; these are parted into from five to seven divisions or segments, the segments being long and narrow. The flowers, which stand upright without stalks at the top of the short stalks, consist of the following parts:—An outer whorl or circle, varying in the number of parts from five to eight, forming the calyx, here of a bright pale yellow colour, and the conspicuous part of the flower; within this is an inner whorl or circle—the corolla—consisting of from six to eight very short tubular bodies, quite inconspicuous, and not seen without close examination; next, within these comes a crowd of stamens; and, in the centre of all, a group of five or six separate ovaries, which become the seed-vessels. An examination of the flowers may serve to convey a first lesson in that branch of botany which bears on the classification of plants, the peculiarities here to be observed being accordant with the structure of the great natural group of Ranunculaceae, or the Crowfoot family, a race of plants generally acrid, and familiarly represented in the buttercups of our meadows, the traveller's-joy of our wayside fences, and the anemones, larkspurs, and pæonies of our gardens. The winter aconite is a native of the countries of the middle and south of Europe, and is sometimes found naturalised in thickets in England, though, probably, in all cases a remnant of previous cultivation. It is, however, a garden flower well known to the initiated, and especially to be recommended for its early blooming property, as it commences to flower in January, and sometimes, according to season or situation, continues into March. Once planted, it needs no other care but that of guarding against the tubers being dug up and destroyed during the season when the plants are dormant. They may, too, be planted in pots like crocuses, and bloomed on the window-ledge. It should, however, be borne in mind that the plant is poisonous.

The Snowdrop, perhaps, yields to no flower in graceful delicacy; and is well known as one among the first to awaken from the repose of winter. Though reputedly a native of England, there seems reason to doubt whether it is truly indigenous, and to conclude that those places in which it now appears as if wild are the sites of ancient gardens. It is known to be a native of the more southern parts of Europe, and was doubtless introduced at a very early date. The structure of this plant is quite unlike that of the winter aconite, and may be viewed in contrast with it. In the snowdrop the underground portion, a fleshy stem (erroneously called the root), forms a true bulb—a bulb being a hypocaustum, or dormitory, in which, after one season's growth, the whole vital energy of the plant becomes stored for the succeeding year. This bulb consists of thin fleshy layers, one within the other, from the circumference to the central bud, whence the stem in due time appears, the layers being arranged upon a cone-shaped fleshy base, from the edges of which spring the true roots. The above-ground portion consists of a few long grassy leaves, blunt-ended, and of what is called a glaucous or sea-green colour, and a flower-stem or scape scarcely taller than the leaves, terminated by a solitary pendent flower. The perianth, which is the technical name given to the more conspicuous coloured parts of the flower in this case, consists of six pieces, of which the three outer ones are between egg-shaped and lance-shaped, concave, spreading, pure white, and veiny; while the three inner pieces are not more than half as long as the outer, very blunt, and notched at the end, each having a green blotch on its outer side, not spreading, but almost or quite joining at the edges, so as to form a kind of inner cup. Within there are six short stamens, and a longer cylindrical style terminating the ovary, which occupies the centre, and is formed of three cells, inclosing many embryo seeds; the ovary when mature becomes the capsule, or seed-vessel. It belongs to the Amaryllis family. In the great natural division of plants to which the snowdrop belongs (the monocotyledons, or one-seed-leaf bearers) development almost always takes place by threes; while in the other great division (the dicotyledons, or two-seed-leaf bearers) the development is usually by fours (tetramerous) or fives (pentamerous), the latter being most prevalent. Thus, it will have been observed, the outer whorls of the flower (answering to calyx and corolla) consist of three outer parts (sepals) and three inner parts (petals); within these are six stamens—two series of three; and the ovary is three-celled. This simple circumstance often furnishes a ready index to classification so far as the division into the large primary groups is concerned. There is a curious property belonging to the snowdrop, in common with other bulbous plants, which deserves mention—it is both oviparous and viviparous; that is to say, it produces seeds from which young plants may be obtained, and it also produces from the outside of the bulbs what are called offsets, which are in fact little bulbs, and from these, too, young plants may be obtained, the latter being, in fact, the most simple process, and the young plants so obtained sooner reaching maturity. The snowdrop in warm seasons sometimes comes into blossom by the middle of January, but it is more commonly the beginning of February ere they are seen in flower. It seems to have been from this

circumstance of flowering about Candlemas-day that they obtained the monkish name of “Our Lady of February,” which afterwards became changed into “Fair Maid of February.” The kind with double blossoms is most usually preferred for cultivation, but there is much graceful beauty about the common kind. Snowdrops are very easily cultivated. Like all bulbous plants they require a season of repose alternating with that of growth and flowering; and this their natural habit and the conditions of our climate sufficiently secure to them, the dry hot weather of summer serving to ripen, as it is called, the dormant bulbs, the leaves naturally dying away in summer. If taken out of the ground, they should not be longer than six or eight weeks exposed to the air; and they are much better left undisturbed in the ground. August is the time for planting them; the bulb should be placed about two inches beneath the surface, and set one or two inches apart. They may be had in pots for flowering in-doors, or in the window. In the open ground they produce little effect when first planted, unless the roots are massed; but after a few years, when they have had time to form thick tufts, they are very ornamental, either along the edges of flower borders, or grouped beneath bushes or trees, or on grassy slopes, or in shrubberies, or by shrubby walks. Patches a foot in diameter occurring here and there are far more effective than single plants more continuously disposed.

Sliv'ry bud, thy pensile foliage,
Seems the angry blast to fear;
Yet secure thy tender texture
Ornaments the rising year.

Drooping harbinger of Flora,
Simply are thy blossoms dress'd;
Artless, as the gentle virtues
Mansioned in the blameless breast.

More gay than either of the foregoing is the Crocus, with its blossoms of many hues; indeed, this flower is the greatest enlivener of the garden from February onwards, and, when it is planted in sufficient quantities to give effect, its gaiety is scarcely to be surpassed; but, as an old writer has well remarked, “it is generally planted too sparingly or placed in rows on each side of the walk, reminding us of street lamps by night.” As there are many distinct kinds, of different and brilliant colours, they should be planted in rather large patches, each colour by itself, and then under the influence of sunshine, which causes the flower to expand, they have a very brilliant effect. There are yellows of various shades, deep purples, whites, and various striped and parti-coloured varieties sufficient to impart comparatively great variety as well as brilliancy to the garden. They should be planted in August, and the less they are disturbed the better. They also bloom extremely well in pots, so that they may be had in-doors with the ordinary trouble bestowed on plants for this purpose. The crocus is generally called a bulbous plant, but this is not quite a correct designation; its so-called root, really a dormant stem in which its energies are stored up in the inactive season of its existence, is not, like the bulb of the snowdrop, composed of layers of succulent matter, but consists of a solid, homogeneous, fleshy mass, containing the bud or growing point, and this mass becomes wasted by the growth of the leaves and flowers, and a new one formed annually above the old; technically this mass is called a corm, not a bulb. The plant consists of a tuft of grass-like leaves, which shoot up just after the flower appears, the latter rising two or three inches out of the ground on a long slender tube, which is not a stalk but a part of the flower itself. The flower consists of a perianth of six nearly uniform, oblong, concave divisions, which are highly coloured; within them are three stamens, and a pencil-like fringe, usually orange-coloured, which is the stigma, or termination of the style, the base of which, attached to the young seed-vessel, must be sought underground at the end of the stalk-like flower tube. Afterwards, however, the seed-vessel becomes elevated above the surface, to facilitate the ripening and dispersion of the seeds. The stigma just mentioned is a kind of saffron—the saffron of commerce being produced from that part of a particular species of crocus cultivated for the purpose. Though naturalised in a few places in England, the crocus does not appear to be truly indigenous; its native country being the more northern and eastern parts of Europe. It belongs to the Iris family.

The Primrose (*Primula vulgaris*) is too well known to need a very lengthened description, few, indeed, being unacquainted with the delicately-perfumed and modestly-coloured early wilding, which is considered the emblem of youth. The soft tints of its blossoms, like the mild beams of the moon, seem to invite us to quiet contemplation, and the sight of its flowers, recall, in later years, the early friends and rural walks of childhood and youth. The plant is one of those which are called perennial herbs—herbs, that is dwarf plants without woody stems, and perennials from their quality of enduring year after year without renewal from the seed. There is at the base a short, thickish, fleshy stem, which produces strong, coarse roots, striking deeply into the tenacious soil, in which the primrose delights. Then comes a tuft of bold, wrinkled leaves, oblong, and tapered towards the stalk, among which rise in profusion the delicate flowers, each on a separate slender stalk or scape. The flowers consist of calyx and corolla; the former is a five-angled tube, with five pointed teeth at the upper end; the latter is salver-shaped—that is, it has a longish, slender, cylindrical tube, which is placed within the calyx-tube, and above this a flat, expanded limb of five inversely heart-shaped divisions, forming the familiar pale yellow flower. Near the base of the corolla-tube are five stamens, and the style rising up the tube from the ovary at its base is terminated by a little globular head like that of a pin. This belongs to the Primrose family, and has given origin to many beautiful varieties cultivated in gardens; some of which have large double blossoms, and others clusters of flowers elevated on a common stalk.

The Mezereon (*Daphne Mezereum*) is a small shrub, deciduous—that is, casting off its leaves in winter, and producing its blossoms on the naked branches before young leaves are produced in spring. It belongs to the family of Spurge Laurels, and is a plant of acrid qualities, the bark being used medicinally. The mezereon, which is a native plant, found rarely in woods, forms a small branched shrub of from three to five feet high; its stoutest branches bearing thin lanceolate leaves, which appear after the flowers, and fall away in autumn. The flowers grow in small clusters, so close together as to loosely envelop the branches with blossoms—the clusters springing from the buds formed in the axils of the leaves of the previous year. The flowers, which are very sweet-scented, consist of a single envelope only, here called the perianth, which is tubular below, and divided above into a limb of four acute, ovate, spreading segments, the colour being a pale red or white, the former succeeded by red, the latter by yellowish, berries. There are eight stamens fixed to the tube, four near the orifice, and four lower down. The berry is single-seeded. This is one of the plants of the great dicotyledonous group, which shows a tetramerous, or four-part, structure; the pentamerous, or five-part, being illustrated by the primrose. The mezereon is an early flowerer, blooming in February, and continuing into March.



JANUARY AND FEBRUARY.

POPULAR FLOWERS OF THE SEASONS.

MARCH AND APRIL.

AMONG the flowers of early spring which decorate our gardens or our woodlands, the following, selected as particularly interesting, viz.—the Almond (*Amygdales communis*), the Violet (*Viola odorata*), the Great Jonquil (*Narcissus odora*), the Crown Imperial (*Fritillaria Imperialis*), and the Hyacinth (*Hyacinthus orientalis*)—are represented in the opposite engraving.

The Almond, which in an ornamental point of view is of more importance than the peach, although they are nearly identical in general appearance, forms a small tree, conspicuous in shrubberies in the early spring for the profusion of lively pink flowers with which the branches become loaded, almost before the foliage shows any indications of activity. The tree forms a spreading mass of twiggy branches, which are furnished with the long narrow or oblong lance-shaped saw-edged leaves; and the flowers burst singly from the round prominent buds with which the twigs of the previous year's growth are studded. These flowers consist of a bell-shaped reddish calyx or outer cup, having five blunt segments; next, a corolla of five pink, spreading, ovate, concave petals, much larger than the calyx, and notched irregularly; then numerous stamens from the edge of the calyx-tube; and, finally, in the centre, a woolly ovary, which grows into a moderate-sized fruit, in which, encased in a thin fleshy covering, surrounded by a velvety outer skin, lies the oblong rugged stone which incloses the seed, this seed being an almond. There are two kinds of almond-tree—one having larger flowers, and bearing sweet almonds; the other having much smaller flowers, and producing bitter almonds. The former are familiarly known as an article of dessert—the latter from their use for flavouring in confectionery and domestic economy. Sweet almonds are farinaceous, and contain a large proportion of oil; but they are apt to prove indigestible, and their skin is irritating, and should always be removed before they are eaten. Bitter almonds yield an extremely poisonous oil, containing, as well as the distilled water, abundance of prussic acid. In this instance, therefore, we have the bland sweet almond, and the poisonous bitter almond, both produced from one kind of tree, of which there are different varieties, having these distinct properties. The well-known luscious peach is scarcely different from the almond, except in the abundant juicy flesh, which forms its grateful fruit, and even of this the kernels abound in the same kind of poisonous oil which is obtained from the bitter almond. In our gardens the almond is of more importance as an early-flowering ornamental tree than for its fruit. It has been noticed that the spring frosts, which often occur about the flowering period of this tree, and do considerable injury by destroying the germs of the fruit, do not damage the flowers, but rather increase their brilliancy. Thus an almond-tree, white with frost in the evening, will be of a brilliant rose-colour the following morning, and will often retain its beauty for a considerable period. The almond, as a standard tree, one of the principal ornaments of shrubberies and plantations in early spring, flowering in mild seasons so early as February, but more usually in March. The almond-tree prefers a dry, sandy, or chalky soil, of some depth, and should be planted in sheltered situations. Being, moreover, planted for the sake of its flowers, and these flowers appearing while the tree itself is bare of leaves, its full effect is not realised unless it is planted among evergreens. It represents the Almond family. The blossoms usually become whitish in age, hence:—

The hope, in dreams of a happier hour,
That alights on misery's brow,
Springs forth like the silvery almond flower,
That blooms on a leafless bough.

The Violet, that universal favourite, which so sweetly perfumes the morning air of spring, and embroiders the wayside banks, is considered the emblem of modesty; while the White Violet, a variety of the common kind, is made the emblem of innocence. The violet is found naturally in thickets, or on banks where it has a partial shade, and prefers a rich lightish soil. It is a perennial herb, with a short erect stem, sending out long, prostrate stems, called runners, by means of which new plants are established around the old. The leaves are roundish, heart-shaped, with the margin slightly scalloped, long-stalked, the base of the stalks having on each side a lance-shaped toothed leaflet of a peculiar kind, called a stipule. The flowers grow up from amongst these leaves singly, their stalks being of about the same length as those of the leaves themselves, having about halfway up a pair of small, awl-shaped, and leaf-like bodies. The flowers consist of a calyx of five blunt segments, which are unequal at the base; a corolla of five unequal petals, of which the lateral ones are hairy at the base, the upper ones smallest, oblong, and the lower one largest and having a spur at its base; five stamens, nearly sessile, furnished with a thin lance-shaped appendage, tipped with orange, extending beyond them, the two lower ones having at their base a broad, curved, green appendage, extending into the spur of the lower petal; and the ovary, which is surmounted by a hooked stigma, and grows into an ovate, oblong, triangular seed-vessel, of three valves, which, when ripe, burst with some force, and scatter the seeds to a considerable distance. Some flowers of the violet, produced in summer, do not possess any visible corolla, but as they contain what are called the essential organs—namely, the stamens and pistil—these inconspicuous blossoms generally perfect seed. The structure of the flowers of the violet is very curious, and will well repay a careful examination. When the calyx and corolla are carefully removed, leaving only the essential parts of fructification, a miniature bird is represented, the stigma forming the head and beak, the anthers a golden breast, and their appendages appear like a pair of green wings. The petals of this flower have a somewhat laxative property, and are used medicinally for children; the root is emetic and purgative. An aqueous tincture of the flowers forms a useful chemical test, the blue colour being changed by acids to red, and by alkalis to green. The flowers are by some persons considered anodyne; while in some constitutions they produce faintness and giddiness. Violets are easily cultivated; they require good soil and moderate shade, and should be occasionally, but not often, transplanted. In gardens their place is mostly occupied by double-flowered varieties, which have been produced by cultivation, and which are superior to them in fragrance and in an ornamental point of view; although they are far less interesting in structure than the wildings of the woods. The violet is the representative of a small family of plants.

Few garden flowers are more highly esteemed than the Hyacinth, which, as it admits of being cultivated in pots and glasses within doors, is also one of the most domesticated of all popular flowers. Its popularity is by no means of recent date, for it is said that crowns of hyacinths were won

by the young Greek virgins of ancient times, when assisting at the weddings of their friends. The plant is a native of the East, and was introduced to this country during the sixteenth century. The hyacinth is a true bulbous plant, its bulbs consisting, like those of the onion, of concentric coats laid one over the other, these coats or layers being seated on a depressed conical base, from the edges of which the fibrous roots issue. The leaves appear from the crown of the bulb, few in number, long, narrowish, and somewhat hollowed on the upper surface, of a fleshy texture, and bright green colour. In the centre appears a stem, averaging about a foot in height, supporting a spike or truss of flowers, which are either spreading or pendent, varied in colour through many shades of blue, rosy red, and pink to pure white, and deliciously fragrant. The single kinds have bell-shaped flowers, the centre of the bell being open, and containing only the stamen, while the double-flowered sorts have the centre of the bell filled up with small coloured leaves into which the stamens are converted. As regards the individual flowers, the double kinds are generally larger and more durable than the single ones, but the latter are produced more numerous on the spike, so that the mass is generally larger and more compact, and hence the effect of a fine single hyacinth is superior to that of many double kinds, besides which they are more vigorous in habit. The flowers of the hyacinth have no separate calyx and corolla, but the whole of these parts are blended, as it were, into one coloured series, which is here called the perianth, the base of which is tubular, ending in six reflexed segments. These plants are cultivated both in the open garden and in pots and glasses for the house. In light, rich garden soil they will grow very well, and have a fine appearance, either planted in patches of distinct colours in the borders, or in a bed with the colours judiciously intermixed. To have them good the soil should be removed annually, and renewed with a mixture of rotten turfy loam, decayed cow manure, and coarse river or sea sand, in about equal proportions; but this will not be necessary for the production of blooms of ordinary quality, although, if the garden soil is not good, and of a rather light, open texture, it will require to be rendered so. The bulbs should be planted, in dry weather, about the end of September, or in October; they should be put five or six inches beneath the surface. For pot culture the bulbs should be planted about the end of August and the end of September, using similar compost to that recommended for the beds, and pots of about five inches diameter for single bulbs. The soil should be pressed rather firm, and the bulbs about half buried, having the upper part exposed. After planting and watering the pots are to be covered over with five or six inches of old tan or coal ashes, which is to remain until the bulbs have filled the pots with roots, when the leaves will be just beginning to grow; they are then to be taken out, cleaned, and removed to a greenhouse, or frame, or the window of a room, being kept constantly in a light and airy place, so that the leaves and flowers may grow up sturdily. They should never be allowed to grow on the mantelpiece, which is in any case too dark, and, if a fire is kept up, much too exciting for the leaves and stems; but in severe frosty nights they are better removed from the window and returned in the morning. Hyacinths for glasses may be planted by the end of October, or during November. Dark-coloured glasses are the best. In all cases they should be kept in a dark place until the roots have grown to some length in the water. Rain-water should be used, and requires to be changed occasionally during the growth of the plants. The base of the bulb only should come in contact with the water. The hyacinth possesses a viviparous nature, and throws off perfect plants from its sides beneath the earth. It belongs to the Lily family.

The Jonquil, in floral language the emblem of desire, is the most fragrant of this fragrant race of Narcissus, and is distinguished among them by its rush-like leaves and bright yellow flowers. It is a bulbous plant, of a nature similar to the hyacinth, but is of a more hardy character. The leaves are few in number, and the flower stems grow up a foot or more in height, producing generally about two flowers, which are more or less drooping, and of a uniform bright yellow. The flower here, though composed entirely of coloured leaves, and of the kind called a perianth, as in the hyacinth, is yet very different in structure; there is first a long narrow tube, and then a flat spreading limb, producing a general outline like that of the primrose flower. This limb consists of two alternating series, each of these parts differing slightly in breadth, but recognisable, forming the petaline and sepaline segments; from the mouth of the tube, however, springs up a part altogether wanting in the hyacinth, and called a coronet, which in this case forms a chalice-like body in the centre of the flower; within the tube are six stamens, three longer than the rest, and the style; the entire flower growing at the end of the three-cornered ovary, which again grows into the three-valved seed-vessel. The plants are quite hardy, and only require to be planted in good garden soil, and left undisturbed. The double-flowered jonquils, however, a race produced under high cultivation, require to be taken up and replanted annually, in order to preserve their peculiarities. The flowering season is April. The plant belongs to the Amaryllidaceae family.

The Crown Imperial, a native of Persia, was received by way of Constantinople during the latter part of the sixteenth century. It is a stately liliaceous plant, towering above the flowers of our vernal parterres in truly regal state. The stem grows a yard or more in height, erect, furnished plentifully with long narrowish leaves, and near the top, on a naked part of the stem, is supported a circle of tulip-shaped flowers, which are turned downwards, and have the appearance of so many gay bells, the stigma answering to the clapper; the whole is crowned with a coma or tuft of the green leaves, which produce a singular and very pleasing appearance. The stems spring from a large fleshy bulb. The flowers are very curious; they consist of a perianth of six petal-like segments, sometimes yellow, and sometimes coppery red, at the base of each of which is an excavation or pit, technically a nectary; this singular organ, which cannot but engage the attention of the curious observer, is a white glandular cavity, and has a drop of limpid juice standing in it when the flower is in vigour; within the flower are six long stamens, and the ovary grows into a hexangular capsule. The bulbs have a peculiar, unpleasant odour compared to that of the fox; they are large, round, scaly bodies, and increase by means of offsets, which are young bulbs that separate from the sides. The plant is quite hardy, and may be grown in any good garden soil, the bulbs being planted about six inches deep, and left undisturbed from year to year. The beauty of this magnificent flower will even secure it a situation in pleasure-gardens; and it is equally suitable for the centre parts of large flower borders, or to intermix with dwarf shrubs in more sylvan scenery. It is, moreover, says Phillips, one of the few flowers which, like noble personages, is seen to the best effect when planted singly.



MARCH AND APRIL

POPULAR FLOWERS OF THE SEASONS.
MAY AND JUNE.

THE accompanying Engraving of spring and early summer flowers represents the following plants, which are well-known favourites:—The Hawthorn (*Crataegus Oxyacantha*, varieties); the Lily of the Valley (*Convallaria majalis*); the Lilac (*Syringa vulgaris*); the Rose (*Rosa centifolia*); and the Tulip (*Tulipa Gesneriana*). They each rank in the first class of popular flowers.

The Hawthorn, or the "May-tree," as it is often called, has been from time immemorial identified with the floral games of the merry month of May; and its profusion of snowy, agreeably-perfumed blossoms are universally recognised among the beauties of spring. It belongs to the pome-bearing division of the great Rose family, and forms a small tree of very elegant habit, the branches spreading or often pendulous, furnished with long sharp spines, and glossy leaves, broadish, and generally tapered towards the stalk, with the margin deeply slashed into coarse, pointed lobes, and saw-toothed; at the base of the leafstalk are two half-oval, saw-edged small leaves, of the kind called stipules; the leaves are deciduous—that is, they fall off in autumn, the branches continuing leafless until spring. The flowers grow in little flat-headed bunches called corymbs, at the ends of short twigs growing from the branches of the preceding year, and consist of a calyx having a conical tubular base (which grows up together with the ovary into a fleshy mass, forming the exterior of the fruit or pome peculiar to this class of plants), the upper end of the tube being divided into five sharp-pointed segments; a corolla of five petals, roundish, concave, and with a short claw or stalk; a crowd of stamens on longish filaments, and an ovary sunk in the calyx-tube, the two blending to form the pome, or law—that is, the well-known coral-red fruit, which consists of a fleshy exterior surrounding a variable small number (normally five, but some are usually abortive) of hard bony carpels. The tree is found wild in Great Britain, and in most parts of Europe, but is very extensively cultivated as a hedge-plant, forming the familiar quickest hedges so common by waysides; the common kind also occurring in the form of detached trees in parks and forest wastes; while some of its varieties are highly-prized in shrubberies and pleasure-grounds. Wordsworth has thrown a charm around the ancient thorns, with their stunted members, as sometimes met with on the mountain waste:—

There is a thorn: it looks so old,
In truth, you'd find it hard to say
How it could ever have been young,
It looks so old and gray.
Not higher than a two-years' child,
It stands erect, this aged thorn;
No leaves it has, no thorny points;
It is a mass of knotty joints,

A wretched thing forlorn.
It stands erect, and, like a stone,
With lichens it is overgrown.
Like rock or stone, it is o'ergrown
With lichens to the very top,
And hung with heavy tufts of moss,
A melancholy crop.

Hawthorns flourish on any tolerably good soil, provided it is well drained. The more ornamental kinds to be preferred for shrubby plantations are those which bear pink or scarlet flowers, those with double white or double red flowers, or that called the Glastonbury Thorn, which is remarkable only for blooming unseasonably early, being often in flower in mild winters at Christmas. "The custom of going a-Maying—that is, going out early in the morning of the 1st of May to gather bunches of hawthorn flowers—is of very great antiquity. The Greeks and Romans gathered the May in honour of Flora, to whom the plant was dedicated, and whose festival began on May-day; and the Greeks even of the present time preserve the memorial of this custom by hanging a garland of hawthorn flowers against their doors on the 1st of May. In Britain, Stowe tells us that Henry VIII., with his Queen Katharine, and the lords and ladies of their Court, rode out a-Maying from Greenwich to Shooter's-hill. In decking the maypole with flowers a branch of hawthorn was formerly always put at the top; but since the alteration of the style in 1752—May-day occurring eleven days earlier—the hawthorn is seldom in blossom on that day, except in the southern parts of England."—*London*. The flowers have a peculiar and powerful fragrance, highly agreeable to many persons. They are regarded as an emblem of hope, and were carried by the girls in the wedding processions of the ancient Greeks, and laid on the altar of Hymen, which was lighted with torches made of the wood. We must not omit to mention that it is not to the flowers only of this tree that its ornamental properties are owing. When loaded with their coral berries, either in autumn or winter, the trees have a very rich and pleasing effect.

Few of our wild flowers are held in more esteem than the Lily of the Valley. No flower of May has a more exquisite fragrance or more delicate form:—

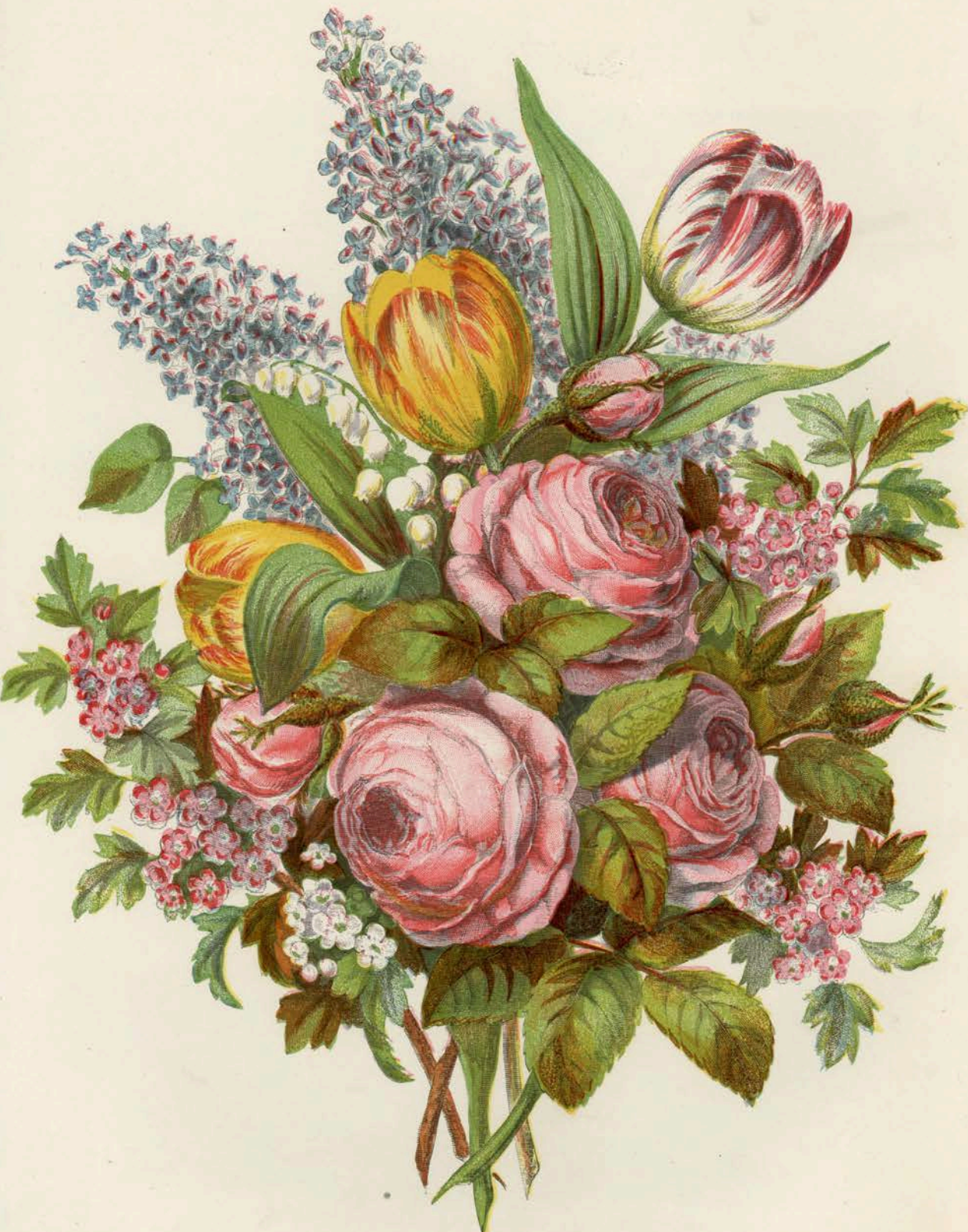
Sweet flower o' the valley, wif' blossoms of snow,
And green leaves that turn the candle blast frae their stems;
Bright emblem o' innocence, thy beauties I lo'e
Aboon the King's coronet circled wi' gems!
There's nae fensel abint' thee to make thee mair bright,
Sweet lily; thy loveliness a' is thine ain;
And thy bonny bells, danglin' sae pure and sae light,
Proclaim thee the fairest o' Flora's bright train.

This plant has no very near relationship to the true Lilies, although belonging to the Lily family. It is a native plant, growing in woods and groves, whence it has been transferred to our gardens, in which it is so highly esteemed that the roots are potted and subjected to artificial heat, to supply the luxurious with their charming flowers long before they would be produced naturally. The more ruralised and rusticated shady parts of the garden are those which best suit this plant, and in which it seems most appropriately placed. Under ground the lily of the valley has a perennial, branching, prostrate, stem, producing roots at intervals, the tip of all the branches forming a tapered bud, whence the leaves and flowers arise; these stems naturally grow in a densely-matted condition, so that the plants form thick tufts. The leaves—of which two or three come from each bud—are from four to six inches high, dark green, streaked with parallel veins, their stalks overlapping each other. The flowers grow in raceme on a slender stalk nearly as long as the leaves, each flower (a perianth, with all the six divisions similar) forming a globosely bell-shaped cup, hanging pendent by a little stalk; this cup is notched at the margin into six sharp-pointed turned-back teeth, which indicate the six divisions of which it is composed, and which are united by their edges into one-piece; these are the pure white delightfully fragrant flowers. Six short stamens will be found in the interior, joined to the base of the cup. The ovary grows into a round scarlet berry. These plants will grow in almost any soil, but they prefer that which is sandy and moderately moist; they also prefer shade, and a northern aspect is decidedly preferable. For shady shrubby walks, or north borders, they are specially adapted. They flower better when the soil is not too rich.

The Lilac, which gives its name to a recognised pale purplish-red colour, like that borne by the flowers of some of the common kinds, is a very favourite garden shrub. Several kinds are to be met with; they form compact-growing erect shrubs, increasing freely by suckers (young stems growing up from the root), and adding much to the gaiety of gardens and shrubberies during the month of May. The branches are stoutish, and bear smooth, heart-shaped, ovate, sharp-pointed leaves, which stand in twos at intervals along the stem, one opposite the other, thus being an example of what is called an opposite-leaved plant. The flowers grow from the buds of the last year's shoots, some of the upper buds usually producing the pyramidal clusters of blossoms, some being developed into new leafy shoots, augmenting the size of the tree. The flowers of the original lilac, which appears to be a native of Persia, and of the eastern part of Europe, is of a pale purple, but there are several shades of colour, as well as white. These flowers consist of a small four-toothed calyx, and a funnel-shaped corolla, divided into a four-parted limb; there are but two stamens; and the whole is succeeded by compressed ovate capsules. This shrub was introduced about the end of the sixteenth century, and has become quite common in shrubberies, being increased freely by means of the suckers, or by layering. It requires no particular care in cultivation, and will grow in any garden soil, and is hence a useful shrub for town gardens, where its flowers prove particularly welcome. The plant, being common, is adapted for planting near to a boundary fence which it is desired to hide in some measure by means of vegetation, being used either alone or in company with other plants. It is of deciduous habit, casting off all its leaves in autumn. The lilac is perfectly hardy, being uninjured by the severest winters. It belongs to the family of Oliveworts.

The Rose, in any of its many forms pre-eminently beautiful, is universally admitted to be the queen of flowers. In the mythology of the ancients it was dedicated to Aurora as an emblem of youth, from its freshness and reviving fragrance; to Venus as an emblem of love and beauty, from the elegance of its flowers; and to Cupid as an emblem of fugacity and danger, from the fleeting nature of its charms and the wounds inflicted by its thorns. The rose was, it is said, given by Cupid to Harpocrates, the god of silence, as a bribe to prevent him from betraying the amours of Venus, and it became adopted as the emblem of silence; hence it was, no doubt, that the rose was frequently sculptured or suspended from the ceilings of drinking and feasting rooms, as a warning to guests that what was said in moments of conviviality should not be repeated; so that that which was intended to be kept secret was said to be told "under the rose." In the East the rose has ever been a favourite with the poets. In the history of our own country white and red roses have been made the badges of a deadly feud between the rival Royal houses. It has been observed that the roses engraved on seals always appear very double, as if copied from the form of *R. centifolia*, while those employed in Gothic architecture are comparatively flat, with large open petals, like *R. gallica*. Roses are now so numerous and so varied that no general description can convey any idea of their character. Suffice it they are shrubs, usually with prickly stems, having pinnate leaves (that is, leaves made up of distinct leaflets set along a common axis, thus feather-like), and at the base of the leafstalk is a leafy expansion on each side, which really consists of a pair of stipules joined to the stalk by one of their edges. In the common dog-rose of our hedges the flowers consist of a calyx contracted at the mouth, tubular, which is eventually converted into a fleshy fruit, terminating in five pinnate sepals; a corolla of five inversely heart-shaped petals, forming a roundish saucer-shaped flower; and within this a ring of densely-packed stamens surrounding the aperture at the apex of the fruit, on the inner surface of which the numerous carpels are disposed. Single roses have flowers more or less exactly of this character. They are the types of the Rose family. The double garden-roses, of which the old-fashioned double Provence rose is represented in the Engraving, differ in the conversion of the ring of stamens into a multitude of petals, forming much larger flowers crowded with the petals, and in a general incapacity, proportioned to the degree of the doubleness, to produce seed. The garden roses of the present day are pre-eminently beautiful, and so varied in size, colour, and habit of growth, as to be adapted for every possible situation in the garden. Roses are applied to various uses besides that of decorating our gardens. In some countries—Syria, Egypt, and India, for example—they are largely cultivated for making the delicious perfume known as attar of roses. In this country they are largely grown for the purpose of distilling rose-water, or for drying as a perfume. Thus there are derived from these plants the dried flower-leaves, rose-water, vinegar of roses, spirit of roses, conserve of roses, honey of roses, oil of roses, and attar (or otto or essence) of roses—the latter being obtained in very small quantities, and bearing a very high price. The medicinal use of roses is not very extensive; they, however, possess laxative properties.

If the rose is the sweetest, the Tulip is probably the most flauntingly gay, of the floral race. This flower has from time immemorial been prized in Eastern lands on account of the splendour of its finely-variegated flowers. In Persia it is said that the presentation of a tulip flower amounted to a declaration of love; the lover intimating thereby that, like the flower, his countenance was all on fire and his heart reduced to a coal. It appears it was introduced to England about the close of the sixteenth century; and has ever since been a favourite flower among florists, a great number of richly-coloured and variegated-marked varieties having been obtained from the somewhat dingy-coloured original. These varieties—the only ones that are now prized—are divided into three classes: byblossoms—those with white grounds marked with purple variegations; roses—those with white grounds marked with rose or cherry-coloured variegations; and bizarres—those with yellow grounds marked with dark-coloured variegations. The few which are plain-coloured are called selfs. The tulip is one of those bulbous plants the possession of choice varieties of which was in former times a mania. It is a bulbous plant, furnished with a small brown-coated bulb, producing an upright stem of one to two feet high, bearing one or two sword-shaped sea-green leaves, and terminating in a single flower, which, when moderately expanded, forms a cup or vase. This flower consists of a perianth of six nearly equal divisions, and, in most cases, is either white or yellow, with beautiful irregular dark or rose-coloured variegations. Within the cup stand six stamens, and a large three-cornered black ovary. The choice kinds require highly-skilled cultivation; but the less rare kinds—equally ornamental—may be had in patches in the open border, if the soil is tolerably good and lightish in texture. The bulbs should be planted at the end of October, or the beginning of November. It belongs to the family of Lilies, and is one of the great monocotyledonous group.



THE ILLUSTRATED LONDON ALMANACK FOR 1858.

POPULAR FLOWERS OF THE SEASONS. JULY AND AUGUST.

We are now arrived at the height of summer, and all nature is redolent of flowers. Let us pluck a bouquet. We select the Clove or Carnation (*Dianthus Caryophyllus*), the Stock or Gillyflower (*Mathiola annua*), and the Sweet Pea (*Lathyrus odoratus*) as the most inviting among the beauties of the garden, both on account of their beauty and fragrance; whilst a ramble in the corn-fields, where the reaper has already begun to put in the sickle, reveals the gay and profuse bells of the Bindweed (*Convolvulus arvensis*). To these we must add the stately Hollyhock (*Althea rosea*).

The Clove or Carnation (very inadequately represented in the opposite Engraving) is altogether a child of culture, the wild original from which it sprang being comparatively insignificant; yet it has yielded under the florist's hand some of our most lovely garden flowers—namely, carnations, which have plain, i.e. smooth-edged, petals, striped lengthwise with one or two colours on white ground; picotees, which are, or should be, of fine quality, smooth-edged, and in colour white, rarely yellow, with bold or faint red or purple margins; and clove pinks, a class which includes various colours and kinds, with smooth or saw edged petals, the true clove being large, of a very deep crimson, and having a rich, aromatic fragrance. The original carnation is a native plant found here and there on rocks or on old walls. The name of clove was applied to this plant from the perfume being similar to the spice so called; and old books record that the flower was on this account used to flavour dainty dishes as well as liquors, and that it was thought to possess medicinal properties. Gerard says:—"The conserve made of the clove gilliflower and sugar is exceeding cordiale, and wonderfully aboue measure doth comfort the heart, being eaten now and then." In the reign of Charles II. the Dutch florists had more than a hundred varieties, "all of them fair, large, and double flowers." The plant is a perennial herb, furnished with sea-green grassy foliage, and a stem averaging about two feet high, branching in the upper part, and bearing several flowers. The flowers consist of a stoutish cylindrically-tubular calyx, notched at the end into five pointed teeth, and clasped at the base by a couple of pairs, set crosswise, of short, broad bracts. The original flower has a single row of five petals, which have a narrow claw as long as the calyx-tube, and then a somewhat inversely wedge-shaped portion set at a right angle with the claw, forming that portion of the petal which is exposed to view; there are within these ten stamens and a pair of curly styles, like the feelers of an insect. The garden flowers, instead of having one row only of petals, have no stamens, and a sufficiently-increased number of petals to make a more or less full or double flower as it is called. Carnations are varied in colour: there are bizares, which means that there are stripes of two colours on a white ground, usually either scarlet, or purple, or crimson, along with maroon or rose colour, or pink; then there are flakes, which means that the white ground is striped with some one colour. The picotees are white, with an edging of red or purple, sometimes forming only a thread-like line, sometimes forming a heavier mass of colour, more or less dashed inwards. The plant gives a name to the Carnation family. It is increased by layering the grass-like shoots, and requires a rich, light, loamy soil, thoroughly well drained. The flowers are very durable, even when cut and put in water, and hence are valuable for bouquets.

The Gillyflower, or Stock Gillyflower, is another highly fragrant and thoroughly popular flower, belonging to the family of Cruciferous plants, of which the cabbage is a member, and of which one prominent characteristic is that the flowers (the wild or simple forms of course) are formed of four petals set crosswise. The stock is an annual plant, of somewhat shrubby habit, furnished with oblong, blunt, soft, greyish leaves, the branches terminating in racemes of flowers, of which there are different kinds—scarlet (a kind of bright purple rose), purple, and white. The flowers of the double kinds, which only are prized, consist of numerous petals forming a full semiglobular flower, but in all crops raised from seeds a portion of the plants, more or fewer in number, bear only the single four-petaled flowers. The flowers have six stamens, of which two are longer stalked than the rest, and the ovary becomes a long, narrow, linear-kind of pod. There are two or three classes of stock, nearly related, the most commonly grown being the ten weeks' (*Mathiola annua*), a strictly annual kind; but there is a larger kind of a biennial character called the Queen's stock, of a similar branching character, and affording the same variety of colour, and also the Brompton stock, which is a larger, less-branched, upright-spiked sort, of the crimson colour. These plants are all raised from seeds, the ten weeks' being sown in March, or the larger ones in May or June, the former blooming in the course of the same summer, the latter during the succeeding summer. They are all best sown in a kind of store patch, and transplanted three or four in a group where they are wished to flower. They should have a rich soil, and then the double-flowered plants are really beautiful, as well as deliciously fragrant. The seeds required for propagation must be saved from single-flowered plants, those with double flowers not producing seeds; hence, in the ordinary course, it is impossible to tell whether a particular group or plant will produce single or double flowers; and, when it is required to plant double ones only, the plan of potting the plants, retaining them in the pots until the first flowers show, and then selecting and planting those only which show double blossoms, is resorted to. The best mode yet suggested of obtaining a large proportion of double-flowered plants is to select as seed bearers only those single ones which show a tendency towards multiplication of parts by producing five, instead of the usual four, petals, and to preserve the seed only of those flowers which are thus formed, some few of which may be found in most plantations.

The Sweet Pea, emblem of delicate pleasures, was introduced to this country from Sicily, in the beginning of the eighteenth century. The plant is an annual, with a slender climbing stem, the leaves consisting of few distinct leaflets, and furnished with tendrils by which it supports its stems. The flowers grow usually two on a stalk, and are curiously formed, their shape being compared to that of the butterfly, and hence called papilionaceous. They are of various colours; but in the commonest kind (which is frequently the handsomest) the standard is a rich velvety claret colour, the wings bluish-lilac, and the keel faint rose tinted with azure; sometimes the standards are pink or rose colour, and the keel and wing white. The keel consists of the two lower petals, which are folded so as to resemble the keel of a boat, and within which the elongated ovary is inclosed; the wings consist of two other petals which hang over the keel like a penthouse; and the larger upper petal is the standard. Within the keel lie ten stamens, joined into two parcels; and the ovary grows into a small hairy pod, containing, when ripe, several round black seeds. The

flowers are very fragrant; the scent, which is similar to a mixture of orange-flowers and roses, being almost too powerful for a close apartment. The plant is easily managed, growing freely in good garden soil. The seeds should be sown about the beginning of March, and the plants require to have placed about them some twiggy branches of about a yard in height, up which they will climb. These plants flower about the beginning of July. Others, sown a month later, will bloom in August. They may be sown in pots, and trained up the side of the window with very good effect in company with convolvulus major and the richly-coloured common nasturtiums.

The Bindweed is a native plant, common in corn-fields, and often seen on wayside banks. It is a troublesome weed to the farmer; but is, nevertheless, a very beautiful flower, fully deserving of examination and admiration. It has an underground perennial stem, which spreads to a considerable distance; and, as a weed, is difficult of extirpation. From this the annual leafy stems are produced; the latter trail along the ground or climb up about any tall plant in the vicinity. They have alternate leaves of a somewhat arrow-shaped outline, with a blunt point; and from the axils of the leaves the pretty pinkish or creamy convolvulus-like flowers are produced. They consist of a calyx of five ovate, obtuse, hairy pieces, and a bell-trumpet-shaped corolla, which has five plaits and five indistinct lobes; the colour is usually delicate pink, with a yellowish centre. There are in the interior five stamens. This plant belongs to the Convolvulus family—a group which is generally to be recognised by their trumpet-mouthed flowers. There is in the corolla of these flowers a peculiarity of structure worth pointing out: having five plaits, and five indistinct lobes, there is no doubt they are formed of five petals, but yet they consist of only one piece, the edges of the petals being in this case joined together from nearly the earliest stage, instead of continuing separate, as in many other flowers; and thus becomes formed what is called a monopetalous or one-petaled flower. This monopetalous group is extensive, and the characteristic is made use of to assist in dividing the larger dicotyledonous group into subdivisions, which are separated into the monopetalous or one-petaled and the polypetalous or many-petaled flowers. Bindweed is hardly a plant for the garden; and yet there are few prettier summer flowers for a dry sterile part of the garden, or a dry piece of rock-work. The only culture required would be to dig up, towards autumn, portions of the underground perennial stems, and to plant them where they are required to grow, guarding afterwards against the too great extension of the plants.

The Hollyhock is, perhaps, one of the most effective of plants cultivated for ornament, on account of its large size, peculiar habit, and richly-coloured noble flowers, ranged in masses along the stems. It is, in truth, a majestic plant, such as a painter would love to represent. The accompanying figure represents the double-flowered hollyhock of some years back; those of the present day being filled out nearly to the full size of the outer petals, with a semi-globular mass of florets, adding greatly to the size and richness of the flower. It appears to be chiefly a native of the Levant, and was introduced during the sixteenth century; but, though long cultivated and admired, it is only within the last ten or twelve years it has received the special attention of florists, and advanced rapidly as a popular flower. This has, perhaps, arisen from the hardy nature and easy cultivation of the plant, though these qualities should rather recommend it than otherwise. The plant is perennial, but not naturally long-lived; it produces from the root a few coarse, large, roundish leaves, more or less lobed at the margin, and a stout, erect stem, three to six feet or more in height, according to the nature of the variety, or the richness of the soil in which they are planted. These stems are furnished below, here and there, with similar leaves to those from the root, only on shorter stalks, which leaves gradually become smaller and closer as they are placed nearer the top of the stem; from the axil of these upper leaves, extending halfway down the stem or even lower, the flowers are produced, and, when the leaves are moderately close and the flowers large, the result is a long dense spike of blossoms, with here and there a green leaf protruding between them. These are the double kinds, in which the central bunch of stamens becomes converted into a mass of petal-like bodies, forming a dense, even, semi-globular mass, with the broad, flat, natural petals (technically called guard petals), lying all round beneath, and projecting a little beyond the central mass. The single-flowered parents of the double flowers differ in having but a single row of large, obversely, heart-shaped petals within the apparently double five-pointed calyx, and in the centre stands, as it were, a pedestal, the sides and top of which are covered over by a crowd of stamens. The ovary, or rather circle of ovaries, is buried beneath the pedestal of stamens, and becomes exposed when the corolla falls away, the ring of ovaries being converted into a ring of thin compressed seeds. The flowers are to be had of nearly all shades of colour, from a bright crimson-scarlet to a deep crimson and maroon, almost to black on the one hand, and, though rose pink, and blush, to white on the other; some also being yellow, and others variously mottled. No flower yields to this in grandeur; the noble aspiring stalks, garnished, as it were, with roses, produce a rich effect planted either on the borders of shrubby plantations, or behind dwarfier flowers in wide borders of the flower garden. It rises with a degree of dignity from amongst clumps of dwarf flowering shrubs, that is not excelled by any plant whatever. The hollyhock is propagated freely by seeds, but the progeny is varied and uncertain as to colour and quality. Hence, although seedlings may serve very well for planting in quantity in shrubberies, the choicer kinds, adapted for more prominent positions in the garden, must be increased by cuttings taken from the stem. It is quite desirable that the old plants of these choicer kinds should not be allowed to perfect seed, which they naturally do in great abundance, as this is apt to exhaust the plants, and cause them to die away, the plant, though a perennial, being naturally short-lived; hence the seeds of such kinds should be removed, and the stems themselves cut away as early as possible, in order to encourage new growth from the root. When a little seed from a choicer kind is required for the purpose of obtaining new kinds, one or two of the seed-clusters may be left to ripen. The seeds should be sown about April, and the young plants planted where they are to remain, during showery weather, in the course of the summer or in autumn. They like a rich, light, dry soil best; but grow very well in good ordinary garden earth. Though in garden scenery the plants look well in groups, particularly in groups of one colour, yet they should not be crowded, but so placed that every spike may be distinctly seen. The plant belongs to the Mallow tribe, and affords an example of the consolidation of the filaments of the stamens into a common mass, forming a tube through which the stamens of the buried ovaries reach the air and light.



JULY AND AUGUST.

POPULAR FLOWERS OF THE SEASONS.
SEPTEMBER AND OCTOBER.

WHOEVER has traversed the heathy wastes of England (Woking-common, for example), towards the approach of autumn, cannot but have been struck with the rich effect which is produced by the association of two common plants, the Purple Heath and the Yellow Furze. These plants form rich masses of purple and gold, often spreading over an extensive surface. The vast extent of purple heath is itself sombre, and furze bushes, though brilliant, are so commonplace as to be passed unheeded; but it is when they are seen, as they often are, commingling their blossoms that the effect becomes so striking that they cannot be overlooked. This heath is *Erica cinerea*; and the Furze particularly alluded to is that of a dwarf trailing habit, *Ulex nana*, though the common Furze (*Ulex europæus*), shown in the engraving, frequently appears also in company.

The Heath is a low, slender, dark-looking branched shrub, six inches to a foot high, which almost monopolises the surface in many districts of peaty waste land. Its slender twiggy shoots are plentifully clothed with small needle-shaped leaves, disposed in whorls of three around the stems, the upper ones becoming more decidedly whorled, the whorls or circles more distant, and evident. From the axils of the upper leaves the flowers are produced, also in whorls; they consist of a small calyx, cut into four narrow segments; a corolla of ovate-ureolate form, pendent, and of a deep purple colour, and within this eight stamens of peculiar form; there is also a four-celled ovary. This heath is, evidently, therefore, an instance of tetramerous development, four being the governing number as to its parts. The flowers grow from several contiguous whorls of leaves at the upper part of the branches, which thus become converted into whorled racemes. The Picts, it is said, made a wholesome liquor from this plant, but the mode of preparing it is lost. This plant, together with the ling, another gregarious kind of heath, is used for a variety of domestic and economical purposes. The heaths are cultivated in peat soil, and the present species is well adapted for edgings to beds of the choicer peat-earth plants, the gay rhododendrons and azaleas of modern flower gardens and shrubberies.

The Furze, also called Gorse or Whin, is a native shrub, found abundantly in waste or heathy places. There are two distinct kinds—the common, which is the larger and more erect grower; and the dwarf, which is a prostrate and more slender plant; but, beyond these peculiarities, the general aspect of both plants is the same. As contrasting and intermixed with the purple heath, our remarks apply rather to the last mentioned; but as the more conspicuous of the two, and that represented on the opposite page, we shall chiefly allude to the common sort. This, then, forms an erect, branching, evergreen shrub of from two to six feet high, the branches themselves very much ramified, and branches, branchlets, and ramifications terminating in a rigid spine. The plant thus seems a mass of rigid spines. The leaves are small, and soon lost, so that the bushes may almost be regarded as leafless. The flowers are very numerous, and grow singly or in pairs from the axils of the lateral spines. They are bright golden yellow, and with a sweetish but strong heavy odour. The calyx is formed of two pieces, the upper lip with three and the lower with a pair of short teeth; the corolla is papilionaceous; the stamens ten in number—monadelphous—that is, all united into one collective group; and the flowers are succeeded by a pod or legume, the usual seed-vessel of papilionaceous-flowered plants. The bushes are scarcely ever out of flower, so that it has become a proverb that "Love goes out of fashion when the furze is out of blossom." About the year 1825, the double-flowered variety was found wild in Devonshire, and has since been very extensively cultivated in gardens as an ornamental evergreen flowering shrub. The furze will grow in any light soil, but especially in that which is sandy. The garden sort is increased by layers and cuttings; the common sort by seeds. The furze is not without its use, being employed as a fence plant, a double row being planted, and the alternate sides cut down after two or three years' growth, in order to keep the hedge thick and close near the ground. The plant is also useful in agriculture, being planted to afford fodder for cattle; the young tender tops are cut and bruised, and prove a highly nutritive food. It is also used in many parts of England as fuel by the labouring classes.

The Mountain Ash, or Rowan, or Withen, or Fowler's Service-tree, is a small native tree growing in mountainous situations; a great favourite in plantations, on account of its neat growth, its elegant foliage, and its brilliant berries. The mountain ash is erect, with a roundish head and greyish smooth bark; the leaves are pinnate, and the leaflets, of which there are several pairs, acutely elliptic, and sharply serrated. The flowers grow in terminal corymbs or flat heads, and are small, white, numerous, consisting of a calyx with five sharp divisions, a corolla of five roundish, concave petals, numerous stamens, and an inferior ovary, which grows into the globose scarlet fruit, and ripens in September. This fruit makes an excellent jelly, which is much in demand in Scotland for use with venison. A very good spirit is distilled from them, and, according to Evelyn, ale and beer brewed from them when ripe is an incomparable drink, familiar in Wales. Infused in water, the berries, which are very juicy, sour with a bitter aroma, make an acid drink somewhat resembling perry, much used in Wales by the poor. In suburban gardens this is almost the only small tree which makes any considerable display by means of its fruit, and one great advantage attending its introduction to such situations is that it does not require pruning, and does not grow out of shape. It is one of the pome-bearing members of the Rose family. The tree has in modern times been considered a preservative against witchcraft, and in the Highlands of Scotland is very frequently seen planted near houses and villages for the purpose of keeping off evil spirits. Lightfoot observes that it is probable this tree was in high esteem among the Druids, as it may to this day be observed to grow more frequently than any other in the vicinity of those Druidical circles or stones so often seen in the north of Britain. The superstitions still continue to retain a great veneration for it, which was undoubtedly handed down to them from early antiquity. They believe that any small part of this tree carried about them will prove a sovereign charm against all the dire effects of enchantment and witchcraft. Their cattle also, as well as themselves, are supposed to be preserved by it from evil. The same superstitions exist also in India, only the tree, according to Bishop Heber, is a mimosa, with leaves much resembling those of the mountain ash. The rowan-tree will grow in any soil and the most exposed situations, and is hence an excellent tree for plantations intended to resist the sea breeze; but, to attain its full growth, it requires a free soil and a moist climate. The flowers, bark, and root of this tree are said to contain so much of the peculiar essential oil of almonds as to yield fully as much hydrocyanic

acid as is procurable from an equal weight of cherry-laurel leaves. The berries contain an abundance of malic acid.

The Meadow Saffron, or Colchicum—called also Naked Lady, from the circumstance of its flowers growing up without the leaves—is indigenous in moist meadows in many parts of the country. Its underground stem is a corm, and this sends up its pale purple flowers in succession in September. These flowers are very similar in appearance to a purple crocus, but are quite without foliage. They consist of a perianth of six deeply-divided and nearly equal segments, united to the neck of the corolla, which forms a long tube reaching down to the bulb, where the seed-vessel is seated. When the flower decays the fruit continues to grow on under ground until spring, when it is thrust forth with the leaves, which are obtusely and elongately lance-shaped, and disappear again before the flowers are produced. The flowers have six stamens and three styles, unlike the crocus, which has three stamens and one style, so that they need not be mistaken the one for the other. The plant has been much used in this country in alleviating the pain and diminishing the paroxysms of gout, over which, and rheumatism, it seems to possess almost a specific control. It is, however, highly poisonous, and can only be safely administered by skilled persons. The corolla of this plant is sent out of the earth with its parts of fructification at a season when there is only time for the maturation of the anthers, in order that the stamens may receive and convey their fertilising particles to the numerous embryo seed-shells that are prepared to receive them in the three-lobed capsule. As the season of the year would not allow the fruit of this late-flowering plant to ripen so as to multiply its kind, Providence has so contrived its structure that the hidden processes may go on at a depth within the earth out of the reach of frost; and, as seeds at such a depth would not vegetate or become dispersed, provision is made to raise them when they are perfect, and to sow them at a proper season, for which purpose the seed-vessels are lodged in the bosom of the embryo leaves, and are thrust up with them in spring. By the end of May they are generally ripe; the leaves then wither, the corm decays, having finished its duties by giving birth and nourishment to a new corm, which takes its rise from the stem at the base of the flower-tube. It is then that the corm possesses the most powerful medicinal properties. Besides its medicinal interest the meadow saffron is a very pretty border flower. It has been suggested that they have the best effect when planted so as to spring out of a surface of turf, the naked appearance of the flower not being then so conspicuous, and doubtless this is so; but they are very pretty in patches here and there in the borders. The bulbs may be planted any time between May, when their leaves decay, and the beginning of August, and do not require when once planted to be again disturbed. They should be put four or six inches under the surface. There are several varieties: light and dark purple, white, double-flowered and chequered-flowered—the latter a species from the East, often blossoming in November. The meadow saffron belongs to a group of plants called Melanthaceæ.

The Dahlia is recognised as the king of autumnal flowers. It was introduced in 1789, from Mexico; the kinds known then, and for some time after, being either single-rayed or with a slight tendency only towards duplication, as shown in the old-fashioned dahlia represented in the engraving. The flower is now totally altered, being increased in size, rendered full double, and formed with the utmost symmetry. Of such as these many hundred varieties have been produced through the persevering labours of the florists; few of them continuing in repute for more than a season or two, when they are cast aside for more perfect flowers. The dahlia is one of those flowers to which the terms single and double are not properly applicable, though they are generally employed, and are here adopted because they are better understood than any technical term. The flowers in the original, or, as it is called; the single, state are even then compound, every one of the large petal-like bodies round the circumference being a separate flower, and properly called a floret; so also every one of the smaller yellow tubular bodies forming the central mass are separate flowers or florets. What takes place in the so-called double dahlias is the conversion of these short yellow-disc florets into petal-like florets; and, when this change is complete, the result is a close convex mass of the latter. The form of these petal-like bodies has also been modified by the agency of the florist. When first known the ray florets of dahlias were oblong, pointed bodies of considerable length; and it is evident that no association of these could produce the compact, symmetrical outline which it was the florist's aim to secure, and which has at length rewarded his perseverance. At first the mere rounding of the points of the florets was obtained; but this was made a step to further improvements, the new varieties obtained year after year being always raised from those which showed the greatest advances towards ideal perfection. The shortening of the florets followed; then the cupping; and, gradually, a reduction of their size and augmentation of the numbers on a given area. Thus resulted the dense, semiglobular masses of florets disposed with the greatest regularity and symmetry that are characteristic of a first-rate dahlia of the present day. These refinements, indeed, go further than is necessary in the case of flowers required merely as decorations to the flower garden; but the florist's successes have no doubt added greatly to the richness and beauty of even the commoner varieties. It is a peculiarity inherent in this plant to vary greatly in colour; and thus we have nearly every shade of colour represented except blue; and some beautifully variegated sorts—light grounds with darker markings, and dark flowers with light markings, striped flowers, tipped flowers, and blotched flowers in every possible variety. The dahlia has a tuberous root, which it is necessary to take up in autumn, and preserve from frost in winter. This is planted out again in April, and produces new stems for flowering in the autumn. The stems vary in height in the different kinds from two to six feet high; they form hollow tubes, with transverse divisions at the joints where the opposite large, deeply-lobed leaves are produced. The flowers are stalked, but in some the stalks are long, and the flowers stand out boldly; those of the latter habit, and of bright rich colours, should be chosen for ornamenting the garden. They are appropriate at the back part of broad borders of flowers, in borders skirting shrubberies, and in groups (not too large) on the lawn. They require rich light soil. The choicer kinds are increased by cuttings, the old roots being put in a warm place in February or March, and the young shoots, cut close off when three or four inches long, planted as cuttings, and kept in a hotbed till rooted. The single objection to the dahlia as a garden flower is that it has, both in the leaves and flower, a strong smell which is not at all agreeable. It represents the composite group of plants—that in which the upper flower consists in reality of a head of numerous flowers of peculiar structure.



POPULAR FLOWERS OF THE SEASONS.

NOVEMBER AND DECEMBER.

THE Chrysanthemum (*Pyrethrum sinense*), which is the principal ornament of our gardens during the dreary late autumnal months, was obtained originally from China about 1764, and, subsequently, in 1725, since which time, in the hands of our enthusiastic florists, it has yielded so many beautiful and varied and long-enduring kinds that winter can scarcely be said to assert its sway over our parterres until after the year has reached the last stage of its journey. Even at the date when first introduced to Europe the Chinese were known to cultivate numerous varieties of chrysanthemum, and from its frequent occurrence in their paintings, where it is often represented as growing in ornamental vases, we may conclude that it has been long held in high esteem by that remarkable people. It appears also to be in equal favour in the empire of Japan, the beautiful flower of the chrysanthemum being often displayed on the lackered ware for which the Japanese are so highly famed. It is within the last quarter of a century that the chrysanthemum has attracted the marked attention of the florists; previous to that time the imported kinds only, of which, however, there were several of various colours, were the only sorts cultivated; but now these are quite discarded, and new kinds, much more ornamental in character, have taken their places. Another revolution, which may be traced up to the influence of Fortune, the traveller, took place in the ranks of this flower but a few years since. When in Chusan Mr. Fortune procured and sent to England plants of a peculiar dwarf, compact-growing variety, called the Chusan daisy, which bore small and insignificant flowers, not much larger than a common daisy. With this, however, the florists set to work in earnest, and soon produced several varieties of similar habit, very dwarf, compact, and free-blooming; the flowers from one inch to one inch and a half each in diameter, and quite double. These dwarfs are now known as the pompone varieties, and are numerous and very beautiful.

The chrysanthemum is a herbaceous perennial of a subshrubby tendency. Ordinarily its flowering stems are either killed or damaged by the winter's frost, and are cut away, numerous young stems issuing from the root taking their place; and this is what ought to be done when the plant is under cultivation, if only for the sake of neatness. These stems in the different sorts vary from a couple of feet to four or five feet in height, the upper part of which becomes loaded with flowering branches, and the lower clothed with greyish-green leaves, deeply cut at the sides, and varying a good deal in the form of their divisions. The greyish colour is due to the presence of a thin coating of cottony hairs which covers the surface. The flowers are, like the dahlia, of the composite kind. Thus, what is usually called a flower is in fact a flower-head, containing a very large number of individually not very attractive flowers. These are called florets, and, when the so-called flower is double, the whole head consists of florets which are more or less altered from the condition of the original kind. Sometimes all the florets become ligulate, like the ray in the daisy-flower, and then results a "double flower," with the form of the common double china aster. In some there are no ligulate florets, but tubular florets (as seen in the centre of a daisy flower) are very much amplified, and occupy the whole head, and this produces the "quilled double flower;" while in other cases the original forms are retained—a row of ligulate florets at the circumference, and a mass of enlarged quilled florets in the centre, and this produces the "double ranunculus-flowered" kinds. All these forms, and several modifications of them, occur among the larger kinds; the first and last chiefly among the pompones. The colours now embrace nearly every shade, except blue and bright red. Venetian reds are not uncommon, and there are various two-coloured flowers. The general odour of the chrysanthemum resembles that of the chamomile; but there are a few kinds in which the flowers are agreeably scented. The want of a pleasant pervading odour is, as in the case of the dahlia, the one objection to the chrysanthemum.

Being one of those flowers which succeed in town gardens, and blooming at a season to enliven that which is naturally the dreariest portion of the year, we are tempted to explain something of the mode of culture which should be adopted with the chrysanthemum. As an out-door garden plant it should be planted against the boundary fences, and is admirably suited to assist in covering the monotonous dwarf walls which are the usual boundaries to the slips of town garden. This situation is preferable, because the shelter of the fence, or such shelter as may readily be afforded, very much lengthens the blooming period, by warding off the damaging influences to which the flowers would be exposed. In such cases they must not be smothered during summer by tall plants immediately before them, depriving them of light and air, for from this would result weak growth or immature stems, which would not be capable of bringing good flowers to perfection. The plants are best planted in spring, any time in March or April, in mild genial weather. They are increased readily. For out-door planting the old stems with the clusters of young shoots may be pulled out or cut asunder, retaining with each part a small portion of root, and these planted rather deeply in the earth are soon established plants. Every one of the young shoots, when two or three inches long, planted in the early spring as a cutting, makes an independent plant, but for this purpose a slight artificial warmth is desirable. They may be struck in the window of a warm room, being protected from evaporation by a glass turned over them. These furnish the kind of plants preferable for pot culture. They are to be potted singly, at first in small pots, and then transferred to large ones from time to time during the summer, until the prescribed limit is reached; very good plants may be bloomed in pots six inches in diameter. The soil should be a rich loam, that is, a loamy basis, enriched with a fourth part decayed manure. Any light earth is suitable for the cuttings and earlier stages. When the cuttings first begin to grow up, after they are rooted, the tops are to be taken off to make them branch; again, when the shoots thus produced are two or three inches long their tops should be removed, and the same may be done a third time if desired, the result being a bushy dwarfed plant, producing, if sufficiently fed, a much greater mass of blossoms than would have been borne by the single stem had it been allowed to grow up in its own way. If a few very large individual flowers are wanted, on the contrary, the single stem must be retained and well fed; and even the weaker blossom buds, all beyond the number of flowers desired, removed as soon as they are visible. The pompone or dwarf compact sorts do not need so much topping, as they naturally grow in a close bushy form. The plants should not be repotted too late in the season; it is best to keep them growing freely from the first, and to get them into the flowering-pots some time before the period of showing these buds, which is August or September. If, after that

time, they get exhausted from the pots becoming too full of roots, they should be fed by weak and frequent applications of liquid manure, which will have the effect of throwing out the flowers with vigour, and rendering their colours brilliant and effective. The chrysanthemum seems to be an exhaustive plant, sending out a great quantity of fibrous roots, and abstracting a large amount of nutriment from the soil. Hence the earth in which they are planted soon gets impoverished, and they need to be transplanted to fresh positions annually, or else to be manured.

As winter favourites we notice further the Strawberry-tree (*Arbutus Unedo*), the Holly (*Ilex aquifolium*), the Mistletoe (*Viscum album*), and the Christmas Rose (*Helleborus niger*).

The Strawberry-tree is so called from the resemblance which its warty berries have to that well-known fruit. It is an evergreen shrub of rather large growth when mature, of bushy habit, forming an evergreen mass of great beauty, and remarkable for having at the commencement of the winter the flowers of the present year and the ripe berries of the preceding, both hanging in perfect clusters at the same time. The fruit, though ripening perfectly, is with us not at all pleasant in flavour, and has, therefore, only its ornamental properties to recommend it; but in the warmer climate of the south of Europe it is said to become better flavoured, and is used either preserved with sugar, or pickled with salt; the juice is also pressed out, and either converted into wine or vinegar, or a spirit resembling brandy is distilled from it. The stems of the tree have a reddish-brown bark. The leaves are obovate, or oblong-lanceolate, and saw-edged, smooth, and of a thickish or leathery texture. The flowers grow in drooping bunches from the ends of the young shoots, and consist of a calyx cleft into five pieces, a globose or ovate corolla contracted at the mouth, pinkish-green, and semi-transparent; ten stamens, which are hairy on the lower part of their filaments; the ovary growing into a largish globose berry of a fine scarlet colour, thickly covered over with hard granular points. It is a native plant found amidst the lovely scenery of Killarney, and belongs to the same family as the heath. It is one of the best and choicest of evergreen shrubs, and grows very well in any good garden earth, preferring a deep sandy loam. There are several varieties, not, however, differing very materially from the common sort.

The Holly is an indigenous tree, which has always been much admired no less for its utility than its beauty. It is a small evergreen tree, with a tendency to pyramidal growth, furnished with numerous smooth dark green leaves, with a wavy, sharply-spinous margin. The flowers are small, white, produced in May, succeeded by the bright scarlet fleshy berries so familiar in English homes at Christmas-tide. The holly, as a cultivated plant, claims attention as an ornamental evergreen shrub. There are numerous varieties, differing in peculiarities of their foliage—the variegated-leaved kinds being among the gayest of our shrubs, assisting by their variety of colour and marking in enlivening the garden in the dreary winter season. In allusion to the well-known practice of ornamenting chambers and dwelling-houses with holly at Christmas, it has been remarked that "the custom of placing evergreens in places of religious worship prevailed before the introduction of Christianity; but the evergreens originally used were branches of the pine-fir and cedar, and sprigs of box. Holly appears to have been first used for this purpose by the early Christians at Rome, and was probably adopted for decorating the churches at Christmas because it was used in the great festival of the Saturnalia, which occurred about that period. It was customary among the ancient Romans to send boughs of holly during the Saturnalia, as emblems of good wishes, with the gifts they presented to their friends at that season, and the holly became thus to be considered as an emblem of peace and good-will. It was for this reason, independently of any wish to conciliate the Pagans, well adapted to be an emblem of the principal festival of a religion which professes more than any other to preach peace and good-will to man." The holly grows well in any dryish soil, but prefers a sandy loam. The leaves and bark are bitter, and have been used in cases of intermittent fevers. It is said that they are equally efficacious with Peruvian bark.

The Mistletoe, well known at least to our youths and maidens, is a plant of very remarkable habit. It affords an example of true vegetable parasitism—of one kind of plant growing on, and being entirely nourished by, another. It has a much-divided, forked-branched stem, the base of which is deeply imbedded in the branch of its foster-parent; and the leaves grow in pairs at the end of the short branches, hard, leathery, flat, blunt, oblong. The flowers are quite inconspicuous, the male and female separate, the latter succeeded by the white, pellucid berries. It is a native plant, but is found also throughout Europe. The mistletoe, particularly that found on the oak (now very rarely seen), was held in great veneration by the ancient Druids. It has always been associated in our ideas with the remembrance of Christmas and its festivities. In the feudal ages it was gathered with great solemnity on Christmas-eve, and hung up in the great hall with loud shouts and rejoicings:—

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| On Christmas-eve the bells were rung; | The hall was dressed with holly green; |
| On Christmas-eve the mass was sung; | Forth to the woods did merry men go |
| That only night in all the year | To gather in the mistletoe. |
| Saw the stole'd priest the chalice rear. | Then opened wide the Baron's hall |
| The damsel donned her kirtle shoon; | To vassal, tenant, serf, and all. |

Some slight medicinal properties have been attributed to this plant; but we believe it is now only esteemed "for the license which it gives to youths at Christmas time to salute the maidens who may be caught under it so long as a berry remains upon its branches."

The Christmas Rose is a Christmas flower, valued not only for its beauty, which is considerable, but for the season at which the flowers are produced. It is called the Christmas rose from its blooming about that season, and its flowers somewhat resembling those of the dog roses of our hedges. It belongs to the Ranunculus family, and has poisonous properties, so that it should be cautiously handled. It is a dwarf herbaceous perennial, growing in masses, from which numerous large white flowers are thrown up a few inches above the surface in December and January. These are at first quite white, but change gradually to pink; and, being very enduring, ultimately become greenish. This conspicuous part is the calyx, within which are placed five small tubular petals, a crowd of stamens, and a few unconnected ovaries. The leaves, which begin to grow up in spring, and continue throughout the year, forming a dense green mass, are of a singular form, to which the term pedate is applied. It is a native of the south of Europe.

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| Fade, flowers, fade; nature will have it so; | So in the grave shall we as quiet lie, |
| 'Tis but what we meet in our [winter] do; | Miss'd by some few that lov'd our company; |
| And, as your leaves lie quiet on the ground, | But some so like to thorns and nettles live, |
| The loss alone by those that lov'd them sound. | That none for them can, when they perish, |
| | grieve. |



NOVEMBER AND DECEMBER.