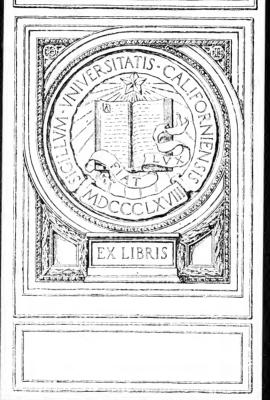
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As a Reminder to Plant to Help Make
"The City Beautiful"

# Tall Bearded Iris

(FLEUR - DE - LIS)

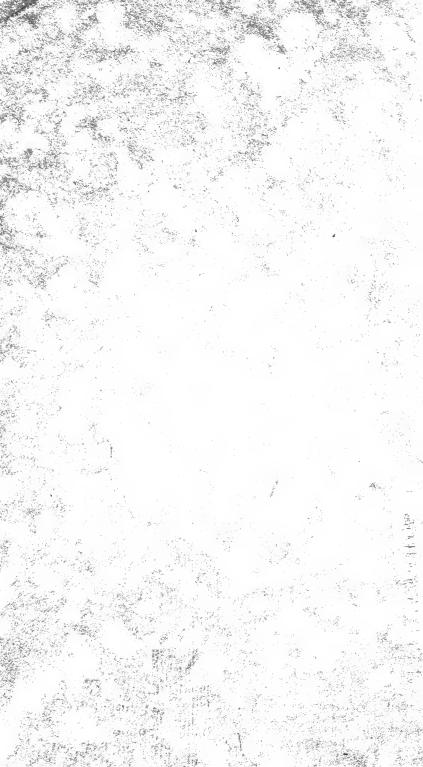


What, When, Where and How to Plant and Subsequent Care

WALTER STAGER

Sterling, Illinois

The Quality Print Shop, Sterling, Ill.



### TALL BEARDED IRIS

(Fleur-de-lis)



of the suit

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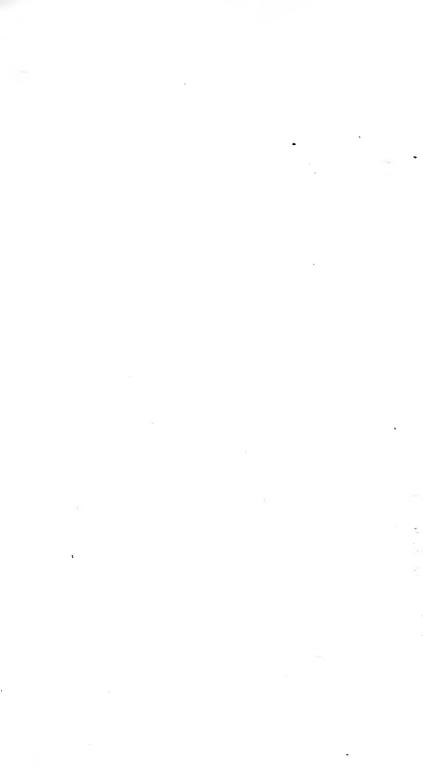


#### FLEUR-DE-LIS

Blue of the skies,
Pink of sunrise,
Red of the sunset-glow,
Purple so bold,
Yellow of gold,
White of the driven snow;
Solid and dashed,
Veined and splashed,
Mottled and reticulated,
Suffused, o'erlaid,
Bordered and rayed—
All colors and shades collated.

Wondrous flower of song and story, Earthly rival of the rainbow's glory, Elegant in all its lines
As the pride of tropic climes,
Light and airy as the fleecy cloud
That can scarce the sunbeams shroud,
Hardy, contented where'er it may be,
Sunshine or shadow, in garden or lea,
Fragrant, stately but replete with grace—
Flora's lovers should all give it place.

Walter Stager.



## TALL BEARDED IRIS (Fleur-de-lis)

Flower of Song—The Iris has long been a flower of song. Ever since the early days we find it in the poets' lays.

"Can bulrushes but by the river grow?
Can Flags there flourish where no waters flow?"

Job VIII, 11, versified by G. Sandys.

"Heil fairer than the Flour-de-lys."

Furnival: Hymn to the Virgin.

"A Friar there was, a wantowne and a merye,

His nekke whit was as a Flour delys."

Chaucer: Canterbury Tales.

"Lo! that spotless creature of grace, so gentle, so small, so winsomely lithe, riseth up in her royal array— a precious thing with pearls bedight. Favored mortals there might see choicest pearls of sovereign price, when all as fresh as a Fleur-de-lys she came adown that bank."

Anon.: Pearl. (14th Century.)

"Behold, O man, that toilsome pains dost take, The flow'rs, the fields, and all that pleasant grows,

The lily, lady of the flow'ring field,
The Flower-de-luce, her lovely paramour,
Bid thee to them thy fruitless labors yield,
And soon leave off this toilsome weary stoure."

Spenser: Fairy Queen.

The garden like a lady fair was cut,
That lay as if she slumbered in delight,
And to the open skies her eyes did shut;
The azure fields of heaven were 'sembled right
In a large round set with flow'rs of light;
The Flowers-de-Luce and the round sparks of dew
That hung upon their azure leaves, did show
Like twinkling stars that sparkle in the ev'ning blue."

Fletcher.

"Iris all hues, roses and jessamines,
Reared high their flourished heads between, and wrought
Mosaic." Milton: P. L., descrip. Paradise.

"My spaniel. prettiest of his race, \*

Now wantoned lost in Flags and reeds, Now starting into sight, Pursued the swallow o'er the meads, With scarce a slower flight."

Cowper: Dog and Water Lily.

"They entered now the chancel tall;
The darkened roof rose high aloof
On pillars lofty and light and small:
The key-stone, that locked each ribbed aisle,
Was a Fleur-de-lys, or a quatre-feuille."

Scott: Lay of Last Minstrel.

"And nearer to the river's trembling edge
There grew broad Flag-flowers, purple pranked with
white.

And starry river-buds among the sedge,
And floating water lilies broad and bright."

Shelley: The Question.

"Through pleasant banks the quiet stream Went winding pleasantly;

The Flag-flower blossomed on its side,
The willow tresses waived,
The flowing current furrow'd round
The water-lily's floating leaf."
Southey: Thalaba.

"Loved Voyager!
When wrapped in fancy, many a boyish day
I tracked his wanderings o'er the watery way,
Roamed round the Aleutian isles in waking dreams,
Or plucked the Fleur-de-lys by Jesso's streams."

Campbell: La Perouse.

"And on many a level mead,
And shadowing bluff that made the banks,
We glided winding under ranks
Of Iris, and the golden reed."

Tennymon: In Memorian

Tennyson: In Memoriam.

"I have remembered when the winter came, High in my chamber in the frosty nights, How in the shimmering noon of summer past Some unrecorded beam slanted across The upland pastures where the Johnswort grew; Or heard, amid the verdure of my mind, The bee's long smothered hum, on the Blue Flag Loitering amidst the mead."

Thoreau.

"How fresh were the Flags on the stone-studded ridge That rudely supported the narrow oak bridge! And that bridge, oh! how boldly and safely I ran On the thin plank that now I should timidly scan!" Eliza Cook: Old Mill-Stream.

"Lilacs and violets—woodbine and brier, Pond lilies drifting up from the black mire; Long files of Iris—bright gladiolus, Dainty anemones, loved of Aeolus. Wm. C. Langdon: Springtime.

"Beautiful lily, dwelling by still rivers, Or solitary mere, Or where the sluggish meadow-brook delivers Its waters to the weir!

Thou laughest at the mill, the whir and worry Of spindle and of loom, And the great wheel that toils amid the hurry And rushing of the flume.

Born in the purple, born to joy and pleasance, Thou dost not toil nor spin, But makest glad and radiant with thy presence The meadow and the lin.

The wind blows, and uplifts thy drooping banner, And round thee throng and run The rushes, the green yeomen of thy manor, The outlaws of the sun.

The burnished dragon-fly is thine attendant, And tilts against the field, And down the listed sunbeam rides resplendent With steel-blue mail and shield.

Thou art the Iris, fair among the fairest, Who, armed with golden rod And winged with the celestial azure, bearest The message of some God.

Thou art the Muse, who far from crowded cities Hauntest the sylvan streams,
Playing on pipes of reed the artless ditties,
That come to us as dreams.

O Flower-de-Luce, bloom on, and let the river Linger to kiss thy feet!

O flower of song, bloom on, and make forever The world more fair and sweet." Longfellow: Flower-de-Luce.

"When thou was full in spring, thou little sleepy thing,
The Yellow Flags that broider'd thee would stand
Up to their chins in water, and full oft
We pulled them and the other shining flowers,
That are all gone today."

Jean Ingelow: Song of Night Watches.

"The mellow moonlight, through the deep-blue gloom, Did all along the dreamy chamber pass,
As though it were a little touched with awe
Of that pale lady, and what else it saw—
Rare flowers: narcissi; Irises, each crowned;

\* \* \* \* \* \* \*

All pinnacled in urns of carven bronze."

Lord Lytton: A Vision.

"We drifted down, my love and I, Beneath an azure April sky, My Love and I, my Love and I, Just at the hour of noon.

While purple, cool, beneath the blue
Of that hot noontide, bravely smiled,
With bright and iridescent hue,
Whole acres of the Blue Flag flower,
The breathy Iris sweet and wild,
That floral savage unsubdued,
The gipsy April's gipsy child."

Mary A. Townsend: Down the Bayou.

"The Iris was yellow, the moon was pale, In the air it was stiller than snow, There was even light through the vale,

But a vaporous sheet Clung about my feet, And I dared no further go.

I had passed the pond, I could see the stile,
The path was plain for more than a mile,
Yet I dared no further go.

The Iris-beds shone in my face, when, whist!
A noiseless music began to blow,
A music that moved through the mist,

That had not begun, Would never be done— With that music I must go:

And I found myself in the heart of the tune, Wheeling around to the whirr of the moon, With the sheets of mist below.

In my hands how warm were the little hands, Strange little hands that I did not know; I did not think of the elvan bands,

Nor of anything In that whirling ring— Here a cock began to crow!

The little hands dropped that had clung so tight, And I saw again by the pale dawnlight

The Iris-heads in a row."

Michael Field: Iris.

"O'er water-daisies and wild waifs of Spring,
There where the Iris rears its gold-crowned sheaf
With flowering rush and sceptred arrow-leaf,
So have I marked Queen Dian, in bright ring
Of cloud above and wave below, take wing
And chase night's gloom, as thou the spirit's grief."

Rossetti: Gracious Moonlight.

"I have sown upon the fields Eyebright and Pimpernel,

King-cup and Fleur-de-lys
Upon the marsh to meet
With Comfrey, Watermint,
Loose-strife and Meadowsweet."

Bridges: The Idle Flowers.

"Ah! there's the lily, marble pale,
The bonny broom, the cistus frail;
The rich sweet pea, the Iris blue,
The larkspur with its peacock hue;
All these are fair, yet hold I will
That the Rose of May is fairer still."

Mary Howitt: Rose of May.

"In their gowns of crinkled silk,
Golden-banded, ranked in order,
Brilliant as the sunset fire is,
Black as bull's blood, white as milk,
Stand within our garden border
Troops of Iris."

Susan O. Moberly: Japan Iris.

"Then in the valley, where the brook went by, Silvering the ledges that it rippléd from—An isolated slip of fallen sky Epitomizing heaven in its sum—An Iris bloomed—blue, as if flower-disguised The gaze of Spring had there materialized.

But most of all, yea, it were well for me, Me and my heart, that I forget that flower, The blue wild Iris, azure Fleur-de-lis, That she and I together found that hour. Its recollection can but emphasize The pain of loss, remindful of her eyes."

Cawein: The Wild Iris.

"But no bobolink of mine,
Ever sang o'er mead so fine,
Starred with flames of every hue,
Gold and purple, white and blue;
Painted-cup, anemone,
Jacob's ladder, Fleur-de-lis—"

John Burroughs: Lapland Longspur.

"Oh beautiful! beautiful flower!
The ward of the sunbeam and shower
In garments of woven delight,
Of the sunset, Aurora and light.
While over thy beauty there plays
Such blending of color and shade,
Such delicate tinting and rays,

Well becoming a heavenly maid. Ethereal lovely and sweet, Thy presence we joyously greet.

Thy mother, fair Iris, in beauty supreme, Took all her rich fabrics of loveliest sheen, The robes of the rainbow, flower garden of air, Of bewildering beauty, resplendently fair, And made for her child such a dazzling dress No daughter of royalty e'er could possess."

Harrison: The Iris.

Origin of Name—The origin of its name is as fanciful as its color.

Pliny wrote that "iris" is Egyptian for "eye" and that the name Iris signifies Eye of Heaven.

The word "iris" is the Greek for "rainbow." In Greeian mythology Iris, the rainbow personified, was one of the minor goddesses and messenger of the greater divinities, particularly of Juno.

"Meantime, to beauteous Helen, from the skies The various goddess of the rainbow flies." *Homer: Iliad (Pope's) III.* 

"Various Iris, Jove's commands to bear, Speeds on the wings of winds through liquid air."

Homer: Iliad (Pope's) II.

"Jove descending shook the Idaean hills, And down their summits pour'd a hundred rills, The unkindled lightning in his hand he took, And thus the many-colour'd maid bespoke: 'Iris with haste thy golden wings display, To godlike Hector this our word convey—'

He spoke, and Iris at his word obey'd; On wings of winds descends the various maid." *Homer: Iliad (Pope's) XI.* 

"Hail, many-colored messenger, that ne'er
Dost disobey the wife of Jupiter;
Who, with thy saffron wings, upon my flowers
Diffusest honey-drops, refreshing showers."

Shakespeare: Tempest.

"High Juno from the realms of air, Secret, dispatch'd her trusty messenger. The various goddess of the showery bow, Shot in a whirlwind to the shore below; To great Achilles at his ships she came, And thus began the many-colored dame:

'Who sends thee goddess, from the ethereal skies?' Achilles thus. And Iris thus replies: 'I come, Pelides from the queen of Jove The immortal empress of the realms above'.''

Homer(Iliad (Pope's) XVIII.

"Then Juno, pitying her long pain,
And all that agony of death,
Sent Iris down to part in twain
The clinging limbs and struggling breath.

So down from Heaven fair Iris flies
On saffron wings impearled with dews,
That flash against the sunlit skies
A thousand variegated hues."
Virgil: Aeneid (Conington's) IV. (Death of Dido.)

"The skies, from pole to pole, with peals resound, And showers enlarged, come pouring on the ground; Then, clad in colors of a various dye, Junonian Iris breeds a new supply To feed the clouds."

Ovid: Metamorphoses, V.

"But light-foot Iris brought it yester-eve." Tennyson: Oenone.

She is generally represented as using the rainbow as her pathway from the heavens.

"While elsewhere thus the war proceeds, Saturnian Juno swiftly speeds Her Iris from above To valiant Turnus: And thus the child of Thaumas speaks, Heaven's beauty flushing in her cheeks:

E'en as she spoke, her wings she spread, And skyward on her rainbow fled."

Virgil: Aeneid (Conington's) IX. "Fell Juno, while before the mound The games perform their festal round, Despatches Iris from the sky And gives her wings of wind to fly.

Adown her bow of myriad dyes, Unseen of all, the maiden hies." Virgil: Aeneid (Conington's) V.

"Like as are reared within a tender cloud Two parallel and self-same colored bows, When Juno to her handmaid gives command." Dante: Paradiso.

"As large, as bright, as color'd as the bow
Of Iris, when unfading it doth show
Beyond a silvery shower, was the arch
Through which this Paphian army took its march
Into the outer courts of Neptune's state."

Keats: Endymion.

"Is it a dream again or is it truth
This vision fair of Greece inhabited?
A fairer sight than all fair Iris sees
Footing her airy arch of colors spun
From Ida to Olympus, when she stays
To look on Greece and thinks the sight is fair."

Bridges: Prometheus.

The legend runs that under her footsteps on earth rose the flower that bears her name.

"Iris there with humid bow
Waters the odorous banks, that blow
Flowers of more mingled hue
Than her purfled scarf can shew."
Milton: Comus.

"And still before me in the dusky grass, Iris her many-colored scarf had drawn." Shelley: Triumph of Life.

"There's crimson buds, and white and blue—
The very rainbow showers
Have turned to blossoms where they fell,
And sown the earth with flowers."

Hood: Song-O Ladu.

"Flow'rs over all the field, of every hue
That ever Iris wore, luxuriant grew."

Cowper: Elegy III, trans. from Milton.

Anciently her name was given to this genus on account of the bright and varied colors of its flowers—whence one of its names, "The Rainbow Flower."

"Nor Iris in her glorious rainbow clothed So fulgent as the cheerful gardens shine With their bright offspring, when they're in their bloom."

\*Columella: De Rustica X.

Named for the celestial messenger, in flower language the Iris signifies "a message," or "a messenger," or sometimes "ardor" or "my compliments."

"To France, sweet Suffolk: let me hear from thee; For whereso'er thou art in this world's globe, I'll have an Iris that shall find thee out."

Shakespeare: 2 King Henry VI.

The golden device which was on the flag of royal France as far back as, at least, the latter part of the fifth century, when Clovis the First was King of France, is claimed by some to have been modeled after the Iris, and by some, after the lily, and by others, that it is a mere arbitrary design. A story runs that Clovis having taken a vow, when his army was hard pressed in battle, that he would be baptized if successful, an angel brought from heaven this token of favor representing the triune Deity. At first the figures were sprinkled over the surface and of no fixed number, but in the reign of Charles V, about the middle of the fourteenth century, they were reduced to three, the mystical church number. They have been frequently referred to as the "Lilies of France," and from its resemblance to them, it is said, the Iris was called "Fleur-de-lis," Flower of the Lily. Such use of "Lily" instead of "Iris", either through ignorance or disregard of the botanical distinction, was formerly not uncommon. Thus:

"What flower in meadow-ground or garden grows That to the towering Lily doth not yield?

Go forth great King! Claim what thy birth bestows; Conquer the Gallic Lily which thy foes Dare to usurp."

Wordsworth: Archbishop Chichley to Henry V.

"I would I had some flowers o' the spring, that might Become your time of day; \* \* \* \* \* lilies of all kinds,

The Flower-de-luce being one! O, these I lack,

To make you garlands of."

Shakespeare: Winter's Tale.

A particularly noticeable illustration of such use is found in Longfellow's poem, "Flower-de-Luce," which is given on page?.

Tradition also has it that when Louis VII of France joined the expedition of the Crusaders he adopted the Iris flower as his coat of arms, and that hence it came to be known as "Fleur-de-Louis," (Flower of Louis), subsequently corrupted in English to Flower-de-luce.

"I cannot give due action to my words,
Except a sword, or scepter, balance it.
A scepter shall it have, have I a soul;
On which I'll toss the Fleur-de-luce of France."

Shakespeare: 2 King Henry VI.

"Methought, upon the Neva's flood A beautiful Ice Palace stood,

A light through all the chambers flam'd, Astonishing old Father Frost, Who, bursting into tears, exclaim'd: 'A thaw, by Jove—we're lost, we're lost!'

Those Royal Arms, that looked so nice, Cut in the resplendent ice—

Proud Prussia's double bird of prey Tame as a spatch cock, slunk away; While—just like France herself, when she Proclaims how great her naval skill is— Poor Louis' drowning Fleurs-de-lys Imagin'd themselves water-lilies."

Thomas Moore: Dissolution of the Holy Alliance.

"For a' that an' a' that, Guns, guillotines, and a' that, The Fleur-de-lis, that lost her right, Is queen again for a' that!"

Scott: For a' that an' a' that.

According to another account the name "Fleur-de-lis" owes its origin to the circumstance that, according to the account, a ford over the river Lys was indicated to a French King, when hard pressed by his enemies, by the abundance of a yellow flowered water-loving species of Iris.

Some find the origin of the name in "delice," French for "delight"—Fleur-delice, Flower of Delight.

> "Strow me the ground with daffodowndillies," And cowslips, and kingcups and loved lilies; The pretty paunce, And the chevisaunce, Shall match with the fair Flow'r delice." Spenser: Shepherd's Calendar—April.

Irises in the olden-time gardens were sometimes known as "Flags," a name still common for the marsh-loving species.

> "The next pool they came near unto Was bare of trees; there only grew Straight Flags, and lilies just a few." Mrs. E. B. Browning: Vision of Poets.

"The Blue-flag, waving welcomes from the marsh, The lily of the pond and of the vale, The daisy, violet, and butter cup, The elder-berry and the bridal wreath, From garden, grove or roadside—all are cull'd And weaved in wreaths to deck the soldiers' graves." Raymond: A Life in Song.

"But yet from out the little hill Oozes the slender springlet still. And shepherd boys repair To seek the Water-flag and rush, And rest them by the hazel bush, And plait their garlands fair." Scott: Marmion.

"From the bridge I lean'd to hear The milldam rushing down with noise, And see the minnows everywhere In crystal eddies glance and poise, The tall Flag-flowers when they sprung Below the range of stepping-stones, Or those three chestnuts near, that hung In masses thick with milky cones." Tennyson: The Miller's Daughter.

"Oh Darkling River! The dweller by thy side, Who moored his little boat upon thy beach, Though all the waters that upbore it then Have slid away o'er night, shall find, at morn, Thy channel filled with waters freshly drawn From distant cliffs, and hollows where the rill Comes up amid the Water flags." Bryant: Night Journey of a River.

"How graceful climb those shadows on my hill! I fancy these pure waters and the Flags Know me, as does my dog: we sympathize." Emerson: Hamatreya.

"All night long he sailed upon it, Sailed upon that sluggish water, Covered with its mould of ages, Black with rotting water-rushes, Rank with Flags and leaves of lilies.

Then once more Cheemaun he patted, To his birch canoe said 'Onward!' And it stirred in all its fibres, And with one great bound of triumph Leaped across the water lilies, Leaped through tangled Flags and rushes, And upon the beach before them Dry-shod landed Hiawatha."

Longfellow: Hiawatha.

"There is a woodland witch who lies With bloom-bright limbs and beam-bright eyes, Among the Water-flags that rank The slow brook's heron-haunted bank." Cawein: Poet and Nature.

"Where waves the bulrush as the waters glide, And yellow Flag-flowers deck the sunny side." Anon.

In the North of France, the ridge of the thatched cottage is given a coating of clay the whole width of the roof, to hold the thatch and to prevent leaking. In this clay Irises are planted, and their flowers sway in the breeze like flags, and hence, it is said, the name, Flag. By others it is said that the name was given to these plants on account of their flat leaves which sway in the wind. Another version is that the three drooping segments of the flower were called "Flags" because like flags they flutter in every breeze, and that from this circumstance the name, in time, was given to the plant itself.

"Sweetest Iris beareth shortest flagges."

T. Moufet.

The Iris has been called "The Poor Man's Orchid," and "Orchid of the North," and rightly, for it is both cheap and hardy, and in diversity, delicacy and richness of color, in texture, and in elegance of form it rivals the choicest floral treasures of the torrid zone.

Ruskin refers to the Iris as the Flower of Chivalry—"with a sword for its leaf, and a lily for its heart."

Iris florentina, a white flower much used in church decoraration, the French call "la flambe blanche,"—The White Torch of the Garden.

#### CLASSIFICATION

The name "German" Iris has been given to a group of various bearded species more or less resembling each other in foliage, shape of flower, and, generally, in root system. This name, however, seems to be a misnomer, for not one of the species included in the group has ever been known to be native to Germany.

Sometimes the dwarf bearded Irises are included under the head of German Iris, but it is only the taller bearded species which are here considered.

Generally it is the hybrid varieties of these tall growing species, which are very numerous, which are offered by plantsmen. Most of the varieties of each species are characterized by the same general color-scheme, but in some there is a very marked deviation from it. The most extensive of these species, and the typical characteristics of the most of the varieties of each, are:

- Germanica (of Germany) Section—The type of the group. Flower early (May) and abudantly. Generally shades of blue or purple.
- Amoena (pleasing) Section—Standards of most varieties white; falls usually of some shade of blue or violet, but frequently with more or less white.
- Neglecta (neglected) Section—Standards usually range from lavender to purple; falls of a darker shade.
- Pallida (pale) Section—Most varieties very tall, strong growers; wide foliage; flowers of the largest. Very handsome shades, both light and dark, of blue, lavender and purple, and numerous approaches to pink and to red.
- Plicata (pleated) Section—Syn. Aphylla (leafless.) Standards and falls have a beautiful colored frill-like margin on a white ground.
- Squalens (daubed) Section—Standards of clouded shades of copper, bronze and fawn; falls darker, of some shade of purple or brown-crimson.
- Variegata (variegated) Section—Standards of various shades of yellow; falls usually brownish.

Among the principal of the less extensive species, a dozen or so in number, are the following: Albicans (whitish)—Standards and falls pure paper white; early and free blooming.

**Flavescens** (yellowish)—Standards and falls delicate shades of soft yellow; early and free blooming.

Florentina (of Florence)—Standards and falls white faintly tinged with lavender; free and very early (May) flowering.

Trojana (Syn. Cypriana and Asiatica)—Flowers of large size, of shades of blue, on very tall stems; late blooming.

Of the foregoing species, germanica and florentina are natives of southern Europe along the shores of the Mediterranean. Albicans is believed to be an Arabian plant. It was found growing in Spain, but it probably had been brought there by the Moors—who conquered the country in the eighth century. Trojana was found growing in Cyprus—whence one of its names, Cypriana—but was probably from the neighborhood of Troy in Asia Minor—whence its names Trojana and Asiatica. All the others are supposed to have originated in central Europe—Austria, Hungary or the Balkan States.

Crosses between the tall and the early blooming (April) dwarf bearded Irises, having a strain of blood from the germanica section, have resulted in a new type commonly classed as:

Interregna or Intermediate (Blooming between the early dwarf and the later tall species)—Flowers large, some unusually so, of various colors; free and early (May) flowering.

A knowledge of the species to which any particular variety belongs, and of the locality in which such species is supposed to have had its origin, is often helpful to a person contemplating purchase. Different plantsmen sometimes give the same name to different varieties, and each of them is entirely within his rights in so doing, but a purchaser may easily be misled thereby if he does not know the species to which each of such varieties belongs, as frequently only the color of the flower is described, and that only in a general way. Black Prince, for instance, is described in one catalog as "standards purple lilac, falls rich velvety black," and in another as "standards intensely deep violet blue, falls velvety purple black." The ordinary reader, without further information on the subject, would naturally understand both plantsmen as referring to the same variety, whereas they

refer to widely different varieties, the first referring to a variety in the germanica section, which is one of the earliest bloomers, and the other to a variety in the neglecta section, which is one of the very latest to bloom. Moreover, some species not only bloom earlier than some others but the foliage of some species remains green for a much longer period than that of some others, a matter that will be referred to further on under the heads "Foliage" and "What to Plant." Hence Iris catalogs are most helpful when they give not only a description of the flowers of the varieties therein listed, but also the species to which they severally belong.

#### SOME STRUCTURAL CHARACTERISTICS

Rhizome—All the so-called German Irises are rhizomatous, that is, having a creeping rhizome or fleshy root-stock which grows just beneath the surface of the ground and in time becomes so thickened that it extends above the surface.

"And the coarse bulbs of Iris-flowers he found Knotted in clumps under the spongy ground." Shelley: Marenghi.

When the rhizome protrudes it should be allowed to remain uncovered, for it delights in full exposure to the sun. The rhizome branches and forms joints of annual growths of three or four inches in length, and each growing point is called a "toe." Rootlets, usually growing from the underside and downwards, furnish the nourishment from the ground, largely through root hairs which appear along the rootlets but not to any great extent until the rootlets have grown their full length.

**Foliage**—The foliage of all the varieties is highly decorative. The strong, erect or gracefully drooping leaves are broad and sword-like.

Living swords, innocent of blood, Never stained with the crimson flood. They grow directly from the rhizome—from its apex, or from protuberances, mostly from the side of the rhizome, which themselves in time form branches or joints—in fan shape—whence a cluster of leaves having a piece of the rhizome attached is sometimes called a "fan"—and, generally, attain a height of 18 to 30 inches, according to the variety, averaging about 24 inches except that the foliage of the interregnas is somewhat more dwarf. Each leaf is folded lengthways in the middle, and the two halves of the lower portion remain distinct, but above that they unite and form a solid blade, and so the outside of the leaf corresponds to what is the under side of leaves generally. Each leaf sits saddle-fashion about the base of the leaf next above and on the opposite side.

Almost invariably the leaves are bright green, but Pallida Folia Variegata (pallida) has green leaves with a broad band of creamy yellow the whole length of the leaf.

Usually from about the forepart of August the leaves of most varieties gradually fade and wither, beginning at the tips, and especially if the plant is crowded or has become matted, and the plant will then look shabby unless from time to time the withered portions are cut off; but the leaves should not be wholly removed —except as hereinafter stated under "Enemies"— until they have fully performed their office and are entirely withered and will come away with the slightest pull. The foliage of species native to countries with mild winters remains fresh and green longer than that of species of countries where the winters are more se-Thus germanica and florentina, native to southern Europe, are there never entirely leafless, practically evergreen, but the species native to the colder countries of central Europe, which are noted ante under "Classification," there lose their leaves in autumn. The varieties of each of the several species, even when grown elsewhere than in the country of the species' origin, retain this characteristic of the species to a marked degree. northern Illinois, which has a trying climate, substantially all the foliage of each of the varieties of the germanica section, of the florentinas and of the interregnas, remains green until late in the season, and in the case of the germanicas and florentinas a considerable portion continues green until the new growth starts in the spring—a touch of summer in the dead of winter.

Flower Stem—The flower stem rises from the middle of a fan or cluster of leaves which sit about it saddle-fashion; but every fan does not produce a flower stem, the different varieties varying considerably in this respect.

The flower stems of the different varieties vary in height from twenty to forty-eight inches, except of the interregnas, which vary from twelve to thirty inches. The stems of some varieties are simple and of others they are branched, and they almost invariably stand erect and carry their flowers well above the foliage.

> "Amid its waving swords, in flaming gold The Iris towers." Mrs. Charlotte Smith.

"O'er her tall blades the crested Fleur-de-lis, Like blue-eyed Pallas, towers erect and free." *Holmes: Spring.* 

"Mint and Flagleaf swording high Their blooms to the unthinking eye." Clare: Sheph. Cal.

Flower—The flower is of somewhat unusual form. It has no petals or sepals, in the ordinary sense of these terms, but it is a tubular flower, and the upper edge of the short tube is cleft and grows on into two sets of segments or divisions, of three each, the one set being within the other. The three inner segments or divisions, sometimes erroneously called petals, commonly designated as the "standards," are generally nearly erect and slightly incurved, but in some varieties—as Loreley (variegata) and E. L. Crandell (plicata) they are more spreading and open.

"In every flower that blooms around, Some pleasing emblem we may trace;

Peace in the olive branch we see, Hope in the half-shut Iris glows, In the bright laurel victory! And lovely woman in the rose. Chazet: Ms.

The outer segments or divisions, called the "falls," usually droop gracefully, but in a few varieties, as Isoline (squalens) and

Karput (germanica), they hang close to the stem, and in a few varieties—as Loreley (variegata), Anna Farr (plicata), Darius (variegata) and Victorine (amoena)—they spread somewhat horizontally. In the case of a very few varieties both the standards and the falls approach the horizontal. Irises having the standards open and the falls closely approaching the horizontal are sometimes described as "orchid like" or having an "orchid effect."

On the upper part of the base of the falls there is a collection of closely set hairs or down, which is called the "beard," whence the name "Bearded Iris."

Each flower has three petal-like stigmas which in some varieties—as Eldorado—are so conspicuous from their size and color as to give the flower the appearance of being semi-double.

The flowers of all varieties are large, and some are of immense size—as Caterina (trojana), Ingeborg (interregna), Isoline (squalens), Lohengrin (pallida), and Oriflamme (germanica)—five to six inches deep, with segments two or more inches wide.

Most of the varieties are sweetly scented, some being only slightly but others very fragrant. Dalmatica (pallida), Florentina (species), Monsignor (neglecta) and Walhalla (interregna) are among the most fragrant, Fairy (plicata) is perhaps the most fragrant of all, and Caprice and Mad. Pacquitte have an especially delicious fragrance. The very fragrant varieties are probably much more numerous now than in early times, for three hundred years ago a poet wrote:

"The lily and the Fleur-de-lis,
For color much contending;
For that I them do only prize,
They are but poor in scenting."

Drayton.

Many years ago a British poet wrote:

"Choosing for odour,
The violet were mine—men call her modest,
Because she hides, and when in company
Lacks manners and the assertive style of worth—
While this narcissus here scorns modesty,
Will stand up what she is, tho' something prim:

Her scent a saturation of one tone,
Like her plain symmetry, leaves naught to fancy—
Whereas this Iris—she outvieth man's
Excellent artistry; elaboration
Confounded with simplicity, till none
Can tell which sprang of which. Could I but find
A scented Iris, I should be content:
Yet men would call me proud: Iris is pride."

Bridges: Demeter.

In variety of colors the Iris is hardly equalled and is not surpassed by any other hardy plant, and it rivals even the orchids. The colors range through shades of blue, bronze, claret, crimson, lavender, mauve, maroon, pink, purple, red, rose, yellow, violet and white. Some of the varieties are of solid color, the standards and falls being of the same or a different color; some are margined or bordered, and many are more or less mottled, penciled or veined or netted in a variety of colors. The beard is generally yellow, from primrose to orange, but sometimes it is wholly or in part white, and in at least one variety—Blue Boy—it is blue.

There is no flower that during the last few years has been improved more than the Iris. One who has seen only the early forms can have no conception of the marvels of today. If the poets of the past who sang of the Iris as they knew it, could witness the present glories of the hybridizer's art, they surely again would attune their lyres and sing in even nobler strains. And what would Thoreau think if he could witness the gorgeousness of the Iris of our day? Of the purple Flag of the meadows, that now seems dull by comparison, he said—

"Too showy and gaudy, like some women's bonnets."

Blooming—German Irises as a general rule bloom but once in a season, except under especially favorable circumstances as in California. A few varieties begin to bloom a little before the middle of May, and the others from a few days to several weeks later. In ordinary seasons they can be relied upon to furnish an abundance of flowers on Decoration Day when flowers are so much wanted and good flowers for outdoor decoration are usually scarce.

A well-established plant will produce many spikes of bloom, sometimes from 50 to 100. Generally, they shoot up about the same time, but in a few instances, as Caterina (trojana), they to some extent succeed each other. Each stem produces a number of buds—rarely less than four or five, and in the case of many varieties nine or more, and in a few instances, as Caterina (trojana), Rubella (pallida) and Perfection (neglecta), from fifteen to twenty—which open in succession at intervals of from one to three days.

The life of the individual flower is only from 2 to 5 days, but as there is a succession of flowers on each stem, and some varieties produce flower stems in succession, and different varieties bloom at different times, the season is prolonged until the latter part of June.

Hardiness—The Iris is remarkable for its hardiness. It is as easy as a weed to grow—as easy as a burdock, dandelion or thistle—and, given a suitable situation, it is one of the longest-lived of all perennials. It is in a class with the paeony and gas plant, one of the "live-forevers."

#### PLANTING

Where to Plant—The Iris is a sun lover and grows most luxuriantly and flowers most abundantly in full exposure to the sun. It will grow well and flower to some extent in partial shade if normal moisture is available, but the quantity of flowers it will produce will usually be in proportion to the amount of sunshine it receives. In dense shade it is usually flowerless. The florentinas and germanicas are among the best for shady places.

It is not particular as to soil. It will thrive in either heavy or light soil, but the former is preferable to the latter if very light. Ordinary good deep garden loam suits it best. Unless the soil is poor, fertilizers are unnecessary, but if a richer soil is wanted dig in a little well rotted manure that is at least a year old, or a little bone meal. Irises like a little lime. Ordinarily there is enough of this element present, but when it is lacking it may be supplied in the form of pulverized old mortar or powdered slacked lime.

Whatever the soil, good drainage is essential. A moist soil suits the Iris admirably if the drainage is good, but in the absence of drainage much moisture will cause decay. Moist during the growing season and dry the remainder of the year is the condition that suits it best. It does well in a dry situation where most plants would perish of drought, and its ability to withstand heat and drought is one of its most valuable characteristics.

It is as indifferent to atmosphere as to soil. While of course it thrives best in a reasonably pure atmosphere, and is less sightly with soiled foliage, it does remarkably well in an atmosphere frequently and to a considerable extent charged with dust, smoke or soot.

How to Plant—Cut back the foliage to four or five inches. Cut away entirely all old and decayed rootlets and reduce the new ones to manageable length. If any of the latter have been broken, bruised or dried up cut them back to sound fresh tissue. Having dug the ground at least a spade depth, dig a hole a little larger than may be necessary to allow the rootlets to be spread out at full length, and make a mound in the center, with the top a little—about the thickness of the rhizome—below the level of

the surrounding surface. Place the rhizome flat on the mound and after spreading the rootlets in a slanting way downwards over the mound of soil, in order that they may the better resist the action of frost, fill the hole and cover the top of the rhizome with but an inch or so of soil well pressed down. If manure is dug into the ground at the time of planting be careful not to let the rhizome come in contact with any of it. But little moisture should be given until growth begins, or the rhizome will be likely to decay.

Such care in planting—except that the rhizome should not be any more deeply covered and should not be allowed to come in contact with manure—is not essential to success, but it will be well repaid by the extra results that will be thus obtained.

If the plants are small, and a mass effect as soon as possible is wanted, they can be planted a foot apart each way and they will soon completely cover the ground. Ordinarily, however, a greater distance will be found more desirable. Irises flower most profusely when well established, and they increase quite rapidly, and it is therefore advisable to set the plants at such a distance apart that division and resetting will not be necessary for a few years—at least two, and better three feet apart. vacant spaces, until required by the Irises themselves, can be utilized with annuals, and for this purpose nothing is better than the gladiolus, which has the same sword-like leaves, and which will be in bloom after all the Irises are done. The gladiolus itself will look all the better in such setting because of its own sparse foliage. Care should be taken not to shade the Iris rhizomes completely—which is likely to be the case if low growing trailing plants are used as fillers—as they need the sunshine to ripen them.

The taller varieties should of course be planted at the rear. Of varieties of the same height the earlier blooming, except those—which keep their foliage throughout the entire season, should be—planted back of the others. If the Iris bed or border is located where it will be much in evidence when not in bloom, in the extreme front only such varieties should be planted as retain their foliage in good condition for the longest period. These are noted ante under "Foliage."

"Just arrangement rarely brought to pass
But by a master's hand disposing well
The gay diversities of leaf and flow'r
Must lend its aid t' illustrate all their charms,
And dress the regular yet various scene.
Plant behind plant aspiring, in the van
The dwarfish, in the rear retired, but still
Sublime above the rest, the statelier stand."

Cowper: The Task.

As Irises are out of bloom for so long a period it is better to plant them in groups rather than in large masses, and to plant between the groups something that will bloom after the Irises are through.

When to Plant—The Iris can be successfully transplanted any time when the ground is not frozen deep. If planted in the spring, and especially late in the spring, it seldom blooms the same season. Plantsmen generally recommend August and September as the ideal time for transplanting, as this is its dormant season and it will afterwards make a root growth and become fairly well established before the ground freezes, and will be in good condition to bloom the following spring. A better time, however, is just after the plant has ceased blooming—provided the rootlets are not allowed to become dry—as then a new vigorous growth begins, and the rootlets are then short and have sent out few, if any, branches or root hairs and are therefore less liable to be injured when the plant is taken up, and the plant will have that much more time to become established and will bloom more freely the following spring.

The Iris is pre-eminently the plant for the renter's garden. With Irises he can quickly make his abode look like a home instead of a mere stopping-place, and whenever he moves, except when the ground is deeply frozen, he can dig them up and take them with him and know that they will do well in their new home.

What to Plant—All Irises are beautiful, so the selection of varieties is largely a matter of individual taste.

"Blue Flags, yellow Flags, Flags all freckled, Which will you take? Yellow, blue, speckled, Take which you will—speckled, blue, yellow—Each in its way has not a fellow."

A non.

There are, however, a few matters besides a preference for special colors which it will be well to observe. A mass of one color is the most showy, but a number of small groups of different colors are preferable to a large mass of one color. In massing different colors care should be taken to select such as harmonize. Varieties of the squalens section, for instance, do not, as a general rule, go well with other varieties. It is a striking characteristic of blue that all of its shades go well together. White is generally recommended to separate discordant colors but while it separates it also accentuates sharp high colors. A better way to prevent "clashing" of different colored masses is by separating them with some other kind of plants of taller growth and different flowering period, or with flowering shrubs. This also prevents monotony from the Irises being so long out of bloom.

"Here also grateful mixture of well match'd And sorted hues (each giving each relief, And by contrasted beauty shining more) Is needful." Cowper: The Task.

Light and shadow should be considered. Most Irises look best in full sunlight, but a few—as those of a bluish color—look equally as well in light shadow.

The point of view should receive attention. Some Irises are very beautiful when seen close at hand, but much less so when seen from a distance, and colors should therefore be chosen which will carry well the distance from which they will usually be seen. The Queen of May, for instance, lavender pink, is fine close at hand in strong sunlight, but has a duller appearance from a distance. The large flowers of some of the varieties of the plicata section, having a ground of white edged with another color, are exceedingly beautiful when nearby, but at a distance the border is hardly noticed and the flowers seem to be small white ones.

In Iris catalogs some varieties are sometimes described as "good for cutting," or "excellent for cut flowers." All Irises are desirable for cut flowers. Sometimes what is meant is that the varieties thus described have long flower stems which show off their flowers to great advantage, or, that their flowers are especially showy on account of their size. Generally it seems that

all that is intended is that those varieties are very free bloomers—either having an unusual number of flower stems or an unusual number of flowers to a stem.

Some varieties are sometimes described as "fine for massing," by which is ordinarily meant merely that those varieties are especially good for producing a mass of color.

For foundation planting use some variety of the germanica section, as Kochii—listed by some plantsmen as "Purpurea" and by others as "Atropurpurea"—or Crimson King. The leaves of the latter are not quite as erect as those of the former, but they are longer and wider. If a double row is desired, for the back use Oriflamme which has larger foliage. All these do very well even on the shady side, and on the sunny side they fairly revel in the intense heat of the direct and reflected rays beating down on their exposed rhizomes—a characteristic indicative of the high temperature of the country of their origin. For such a situation these Irises are not surpassed by any other plant. During the summer not only does their foliage look almost as well as that of a fern, but they also have beautiful flowers and ferns have none; and in the winter when ferns are flat on the ground, withered and brown, a considerable portion of these Irises continue green and more or less erect. When the house is a frame one on a very low foundation, these Irises are better than most flowering shrubs. for in summer their leaves are long enough to hide the foundation but not long enough to keep the woodwork damp during a long continued rainy season, and during the winter nearly every shrub is leafless. The flowers of these varieties are reddish purple. If white flowers are preferred use Florentina (species) or Ingeborg (interregna), but the foliage of these varieties does not last quite as long as that of the varieties first named.

There are Irises for every purse. The old standard sorts usually sell at fifteen to twenty cents a single root, later introductions at twenty-five to fifty cents, and the very latest and finest at seventy-five cents to two dollars. Even the cheapest sorts will give great satisfaction, and when the price must be considered they will probably constitute the main purchase; but every purchaser should include in his order at least several of the newest and finest varieties. Even if a plant should cost as much as two dollars, in two or three years it will increase to such

extent that it can be divided into so many that each will have cost less than ten cents. And anyway two dollars is a small price for a section of rainbow that can be seen not only for a few minutes after a shower but all the time during the whole blooming season and throughout the planter's lifetime, and which increases in size as the years go by.

### SUBSEQUENT CARE

Cultivation—There is no other desirable flowering plant that requires less care, when once established. Even if planted in the sod, if cared for the first year or two it will thereafter not only maintain itself, but bloom abundantly and increase, without further attention. It is above all others the plant for the lazy man and also for the la—for the lady indisposed to any more exertion in the flower garden than is required to gather the blooms. Nevertheless it will well repay whatever care it may receive. Give it ordinary cultivation. In the spring remove the dead leaves, for sightliness. Stir the ground occasionally to prevent a crust from forming, and keep the plants free from grass and weeds—

"Because sweet-flowers are slow and weeds make haste." Shakespeare: King Richard III.

For best results, after growth starts in the spring an abundance of water should be supplied up to and immediately following flowering, unless the soil is naturally moist.

The Iris requires a year or two to become established, and the finest flowers are obtained from established clumps which should therefore not be disturbed oftener than necessary. As most of the varieties increase quite rapidly, every five or six years the clumps should be divided. Unless many plants are desired the divisions should not be made very small, or there will be but few flowers the first season. Three or four branches or joints to a division, with a cluster of leaves attached, will usually be found to be most satisfactory. The whole clump may be taken up, divided and, discarding any old dried up or decayed parts, reset as described ante under "How to Plant." A better way is to cut the clump into portions as it stands in the ground and remove all but one-disturbing that one as little as possible-and reset them, and fill with fresh soil the hole from which they were taken. Unless divided the clumps will in time crowd each other, and the individual plants will become matted into a thick mass and will in time exhaust the soil within reach of their roots and the center will gradually cease to bloom. When this condition exists, if it is not convenient to transplant, the ground should be enriched in the spring with a top dressing of bone meal.

If the same spot is to be used for replanting it will usually be well to first add to the soil a little bone meal.

Irises planted in the fall, especially if planted late, should be given a covering of an inch or so of some light material that will not pack and hold moisture, as loose straw, as soon as the ground freezes, to lessen the danger from alternate freezing and thawing, and this should be raked off in the spring. Established clumps will winter well without protection.

Diseases and Enemies—The Iris is little subject to disease or the attack of insects. Rot caused by fungi, induced by extreme moisture and insufficient drainage, or by manure, is the principal trouble to be guarded against. There is a moth which, in some seasons, in some sections of the country occasions more or less injury. It lays its eggs in the leaf sheath during the fall, and the larvae bore in the rhizome, causing the foliage to turn yellow and finally die, while the rhizome becomes a rotting slimy mass. The insects do not cause the rots directly but merely make wounds for the entrance of fungi. The falling of the leaf to the ground, although still green and fresh-looking, is often the first indication that there is anything wrong with the plant. As soon as the trouble is noticed dig up the plant and cut or scrape away, down to the sound tissue, all the decayed portion, which has an extremely offensive smell, and burn it. Dip the remainder of the plant, leaves and all, into a solution of potassium permanganate—about a teaspoonful of the crystals to a quart of water and then replant in well drained ground and if possible in a fresh situation.

As a preventative of rot some extensive Iris growers dress the-ground, before planting, with superphosphate of lime—about a pound to five square yards—or apply a 4 per cent formalin solu—tion—about six tablespoonfuls of the usual commercial 40 per cent solution of formaldehyde, to a quart of water—and spray the plants in spring and early summer, at intervals of a month, with some disinfectant, as a 2 per cent solution of formaldehyde—about three tablespoonfuls of formaldehyde to a quart of water

—or with a solution, as just mentioned, of potassium permanganate, and then to counteract any acidity in the soil apply in the fall or winter a dressing of finely ground limestone or water-slacked lime.

If in any season there has been damage by larvae of the moth, as soon after the first of November as may be, before the larvae have left the leaf, all the Iris leaves, new and old, should be cut off just above the rhizome and burned—cutting underneath the soil if necessary even if a few of the buds on the rhizome be thereby destroyed.

#### **PROPAGATION**

Division—Propagation by division is the usual method. The cluster of root-stocks may be separated, by cutting or breaking them apart, and each cluster treated as a separate plant. Such a separate cluster is meant by the term "clump" in plantsmen's Iris price lists. The clusters may in turn be separated into individual root-stocks, and such a root-stock—and sometimes, in the case of very rare and expensive varieties, merely a toe—is what is meant by the term "single root" in Iris price lists. The individual root-stocks may be cut into short pieces of an inch or two in length, and each piece planted separately. The pieces, even most of those without either leaves or rootlets, will in time produce as good plants as the others, but a longer time will be required.

Seed—The varieties of the germanica section seldom produce seed, and most of the varieties of the other sections, by reason of the peculiar relative positions of the anthers and stigmas, rarely produce seed unless fertilized by external agency, as by bees or by hand.

"Ah! the droning of the bee!
In his dusty pantaloons
Tumbling in the Fleurs-de-lis;
In the drowsy afternoons
Dreaming in the pink sweet-pea."

Cawein: The Farmsted.

Pollination can readily be accomplished by the aid of a small brush of camel's hair, with which the pollen can be transferred from the anthers—which are directly under the strap-like division of the style—to the stigma—which is on the upper surface of the style at the rolled-up tip—of the same flower, or to the stigma of a different flower if a cross is desired. In the latter case the anthers of the flower to be fertilized should be removed as soon as the flower opens. The pollen should be applied when the upper edge of the stigma drops and exposes the upper surface.

The seeds should be gathered as soon as ripe—they are ripe enough as soon as they turn brown, even if the pods are yet Take them from the pod and dry them in the shade in an airy place and then at once sow in any good garden soil, thinly in drills, half an inch deep, firming the soil, as by patting with a block or back of a spade or with the hand, and cover lightly with straw or a screen of some kind to hold the moisture. is usually slow to germinate. Under some conditions it will come up in three weeks, but it will be more likely to lie in the ground until the next spring, and a few may not start for several years. The seedlings should be cared for the same as seedlings in general, and may be transplanted to permanent quarters when two or three inches high, and should be protected in the winter with a light cover, as recommended above under the head of "Subsequent Care," to prevent them from being thrown out by the frost, as they will not then be very strongly rooted. Some, if in rich ground and abundantly watered and well cared for, will bloom the second spring but most of them after the second spring.

Plants obtained by division will of course bear flowers the same as the parent plant, but there is likely to be a great variation in the colors of the seedlings.

Persons whose only enjoyment of a flower is in inhaling its perfume or seeing the beauty of its form and color, should buy Irisplants instead of raising them from seed, for they will get flowers sooner and with less trouble. But the flower lover who has patience and finds pleasure in anticipation, in addition to setting out plants may well sow a few seeds, for he will be quite sure to get from the latter something new and it may be very fine, and the chance and hope will give zest to his garden work. Then, too, the plant will last his lifetime, and the consciousness of having himself originated it will add to his satisfaction.

#### USE

For Planting—The usefulness of the Iris is not confined to the home grounds. By reason of its hardiness, fewness of its requirements and its suffering but little from dust, smoke or soot, the varieties which retain their foliage throughout the season—which are noted ante under "Foliage" and "What to Plant"—are ideal plants for factory and depot grounds and public parks; and such of these varieties as bear white flowers are unexcelled for cemetery decoration. For the same reasons, and from the fact that they bloom early in the season, before the schools close, all varieties are especially valuable for embellishing school grounds.

Road-side planting is coming into favor, and for this purpose there is no better plant than the Iris. Though of ample increase it would never become troublesome. The standard varieties—all of them beautiful—are so cheap that every land-owner can afford generous planting along his highway frontage. The flowers are so large that their beauty could be clearly seen even from the swiftly moving autos; an abundance of the especially fragrant varieties would scent the air as does the later blooming clover; long stretches of the nearly evergreen varieties would be a most welcome sight to the winter traveler. May the time be not far distant when plans for beautifying the Lincoln Highway, the Indian Head Trail and other like important lines of travel, will include planting the Iris!

Cut Flowers—The flowers are fragile and when fully open do not bear much handling.

"The sweetest flowers are ever frail and rare." Shelley: Marenghi.

For house use the flower stems should be taken just as the first buds are about to open, and they will open readily in water and the color will be deeper. As the flowers fade remove them from the stem and shorten the stem and change the water, and the remaining buds will all open in succession, and a single stem will sometimes furnish flowers for a week or more. Thatching—In countries where the Iris grows in abundance, its broad leaves, sometimes called "flags," are used by the peasantry to thatch their cottages.

"And at the utmost point \* \* \* stood there The relics of a weed-inwoven cot, Thatched with broad flags."

Shelley: Marenghi.

Orris Root—"Orris root" is a corruption of "Iris root." The violet scented chalky appearing orris root of commerce is obtained from several species—Iris florentina, Iris germanica and Iris pallida—the first named yielding the principal supply. The rhizomes are taken from the ground in the spring, and after the removal of the rootlets and the skin or bark they are put aside to dry. When fresh they have an earthy odor but in drying they acquire the pleasant smell of violets—which is fully developed after about two years—which they retain indefinitely,

" \* \* \* like the violet, which decayed in bloom, Survives through many a year in rich perfume." Scott: Epilogue.

Orris root is much used in perfumery. It is principally used in powdered form, for sachet powders, tooth and hair powders and other scented dry perparations. The dried root is sometimes chewed to conceal an offensive breath, but care should be taken not to swallow it, for it is diuretic, emetic, and cathartic and apt to occasion nausea and prostration.

Formerly powdered orris root was used as a complexion beautifier. The root of a species of Iris grown on the thatched roofs in China and Japan, is used for the same purpose, and the origin of such roof-growing, is thus given in Mrs. Fraser's Book of Japanese Tales:

"Once there was a great famine in the land, and it was forbidden to plant anything in the ground that could not be used for food. The frivolous Irises only supply the powder with which the women whiten their faces, but their little ladyships could not be cheated out of that. 'Must we look like frights as well as die of hunger?' So every woman set a tiny plantation of Irises on the roof of her house, where they are growing to this day."

The following lines, written for The United Press, July, 1917, indicate that if the present European War continues much longer the ladyships of other lands than China and Japan may find a similar use for the Iris:

"In France they've taken all the rice
To hoard for food supply,
So powderless all dames must go,
Of low degree or high.
Henceforth each Gallic feminine
Will feel she looks a fright,
And shiny noses soon become
A common Paris sight."

Margaret Mason.

Pieces of orris root are sometimes placed with clothing in chiffoniers, trunks and chests, to impart to it an agreeable perfume. The French peasants string pieces together, pour boiling water on them, and immerse their bed linen in the liquid, in order to give it a pleasant odor. After use the pieces are re-dried and stored away for future use.

## A FEW VARIETIES

The following are only a very few of the hundreds of varieties of Tall Bearded Iris, and most of them of comparatively recent introduction—just enough to indicate the wide range of colors of the early and late varieties. They are numbered in the approximate order of their blooming—approximate only, for situation, soil and season are greatly modifying factors—and those beginning about the same time to bloom are given the same number.

In the description the figures indicate in inches the height of the flower stalk, "S" refers to the three standards or upright segments, and "F" to the three falls or drooping segments. The descriptions of the flowers are necessarily only general, for there is hardly any other flower as difficult as the Iris, "The Rainbow Flower," to either describe in words or represent in colors.

"What skillful limner e'er would choose To paint the rainbow's varying hues, Unless to mortal it were given To dip his brush in dyes of heaven?"

Scott: Marmion.

White standards and falls:

2—Florentina (species). S. creamy white, faintly flushed lavender; F. creamy white, more deeply flushed lavender. flaked vellowish white at base. 29 inches.

1—Ingeborg (interregna). Pearly white; very large flower.

17 inches.

4—Mrs. H. Darwin (amoena). S. white; F. white, penciled crimson at base. 26 inches.

White, feathered with purple or bordered with blue:

Anna Farr (plicata). S. white, lightly bordered pale blue; F. white with pale blue marking at base. 36 inches.

4-Mad. Chereau (plicata). S. and F. white with frilled lav-

ender edge. 42 inches.

5—Fairy (plicata). S. and F. white, delicately bordered and suffused soft blue; most fragrant. 36 inches.

White or slightly tinted standards, and purple falls.

4—Harlequin Milanais (neglecta). S. white flaked violet with white reticulation. 34 inches.

6—Rhein Nixie (amoena). S. white; F. raspberry purple,

edged white. 36 inches.

5—Thorbecke (amoena). S. white faintly tinged with lavender; F. deep velvety purple with white reticulation at base. 30 inches.

5—Victorine (amoena). S. white with irregular spots of violet blue; F. violet-blue, upper half striped white.

inches.

Purple bi-colors:

3—Amas (germanica). S. violet-blue; F. deep purple-violet, flaked white at base. 24 inches.

4—Archeveque (neglecta). S. rich violet-purple, F. deep purple-violet. 24 inches.

8-Monsignor (neglecta). S. satiny violet; F. velvety purple-crimson, with darker veinings and lighter margin, and whitish penciling at throat. 24 inches.

6—Oriflamme (germanica). S. light blue; F. dark purple; exceedingly large flower. 30 inches.

2-Walhalla (interregna). S. rosy lavender; F. violetpurple, paler toward the edge. 24 inches.

Purple selfs. (A) Lavender Purple.:

3—Celeste (pallida). S. pale lavender; F. deeper lavender. A somewhat lighter-colored flower than Dalmatica.

7—Dalmatica (pallida). Delicate lavender with pink reflections. Very large flower and foliage. 40 inches.

(B) Blue-Purple:

3—Ciengialti Loppio (pallida). S. lavender-blue; F. violetblue, 18 inches.

(C) Red-Purple:

5—Caprice (pallida). S. reddish purple; F. deeper and richer. A good "wine red" Iris. 24 inches.

2—Crimson King (germanica). S. rich claret-purple; F.

velvety claret-purple. 24 inches. 9—Ed. Michel (pallida). Reddish purple. Close in color to Caprice but darker. 32 inches.

2—Kochii (germanica). Deepest purple. Falls have a

translucent black coating. The buds are soot-black. inches.

Yellow selfs:

2-Mrs. Neubronner (variegata). Rich golden yellow, falls finely veined with brown around the crest. 18 inches.

Sherwin-Wright (variegata). Go'den yellow without any markings. 24 inches.

Pale yellow standards and purple falls:

4—Loreley (variegata). S. light yellow; F. creamy white, with purple reticulations blending into a velvety purple mass near the ends which are margined with deep canary. 30 inches.

7—Ossian (variegata). S. pale yellow, very slightly netted purple at base; F. light claret-red, deeply veined with creamy white. 31 inches.

Deep yellow standards with purple falls:

3—Darius (variegata). S. lemon-yellow; F. amethyst bordered and deeply veined with light yellow. 26 inches.

3—Maori King (variegata). S. rich golden yellow; F. velvety maroon, veined yellowish white and edged yellow. 30 inches.

5-Miss Eardley (variegata). S. clear golden yellow; F. rich madder-red, with yellow edge. 24 inches.

Shot shades. (A) Yellow the most obvious color note:

7—Iris King (squalens). S. bronze-yellow; F. rich crimson, bordered and upper half veined with yellow; beard orange. 24 inches.

(B) Bronze effect:

5—Eldorado (squalens). S. rosy bronze; F. bright violet-purple, touched down the sides with the brown or yellow of the haft; style arms clear gold. 32 inches.

4—Prosper Laugier (squalens). S. light bronze-red; F. velvety ruby-purple, with orange beard. 30 inches.

Lilac and Rose shades:

6—Isolene (squalens). S. silvery lilac; F. mauve, golden at the throat, with yellow beard. 36 inches.

4—Lohengrin (pallida). S. and F. soft silvery mauve shad-

ing nearly to white at the claw. 33 inches.

3—Mrs. Alan Gray (pallida). S. and F. pale rose-mauve; much like Dalmatica but earlier. 18 inches.

3—Plumeri (pallida). S. rosy mauve with metallic sheen;

F. vinous mauve, veined at base. 33 inches.

4—Queen of May (pallida). S. lilac-pink; F. lilac blended

with white. General effect pink. 30 inches.

3—Rose Unique (pallida). S. bright violet-rose, slightly flaked white at base, with pale red veins; F. bright violetrose, flaked white at base, with deeper red veins.



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