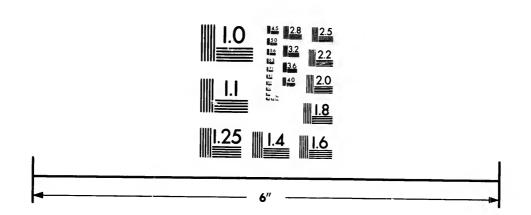


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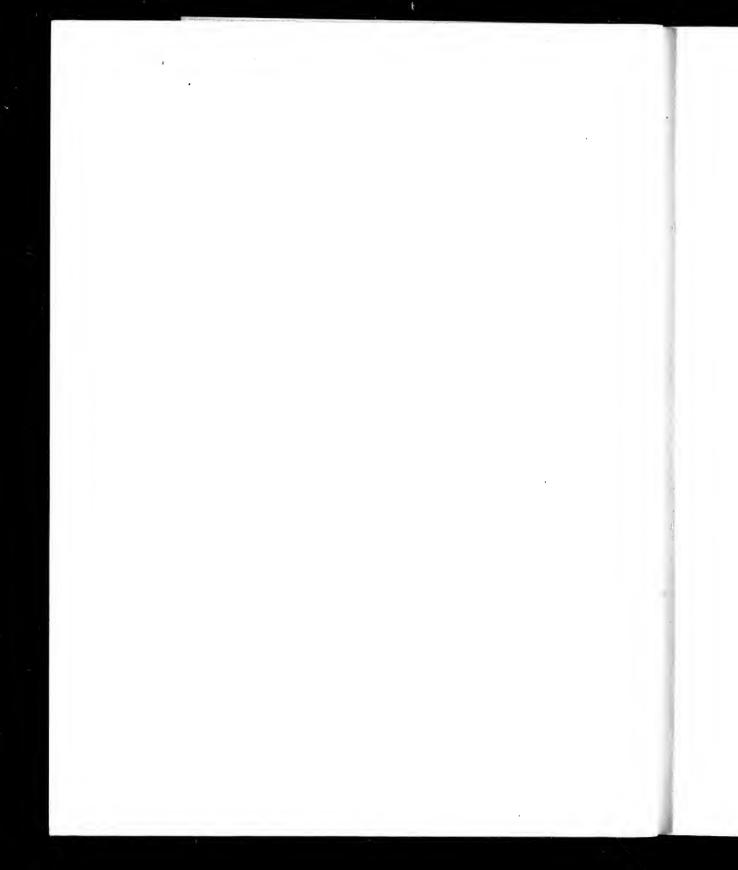
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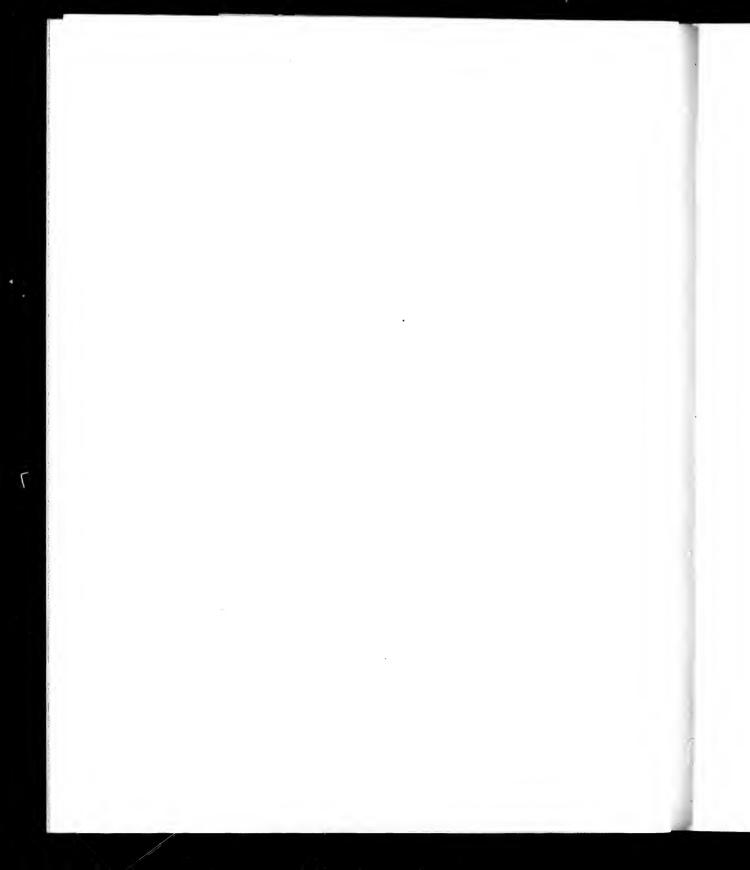
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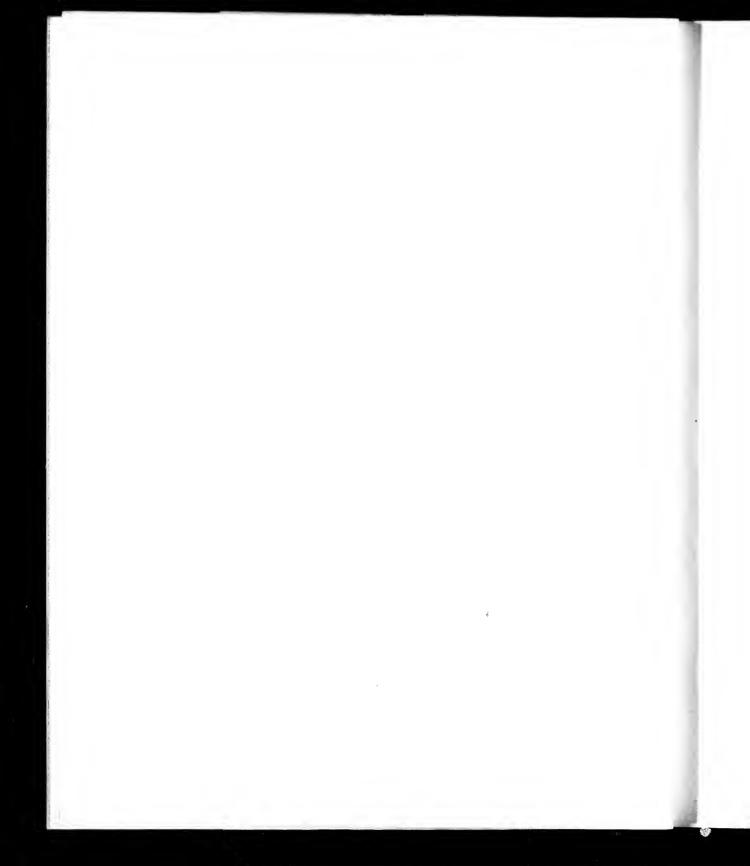
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THE FRINGED GENTIAN.

### THE PRESSED GENTIAN AT CHRISTMAS

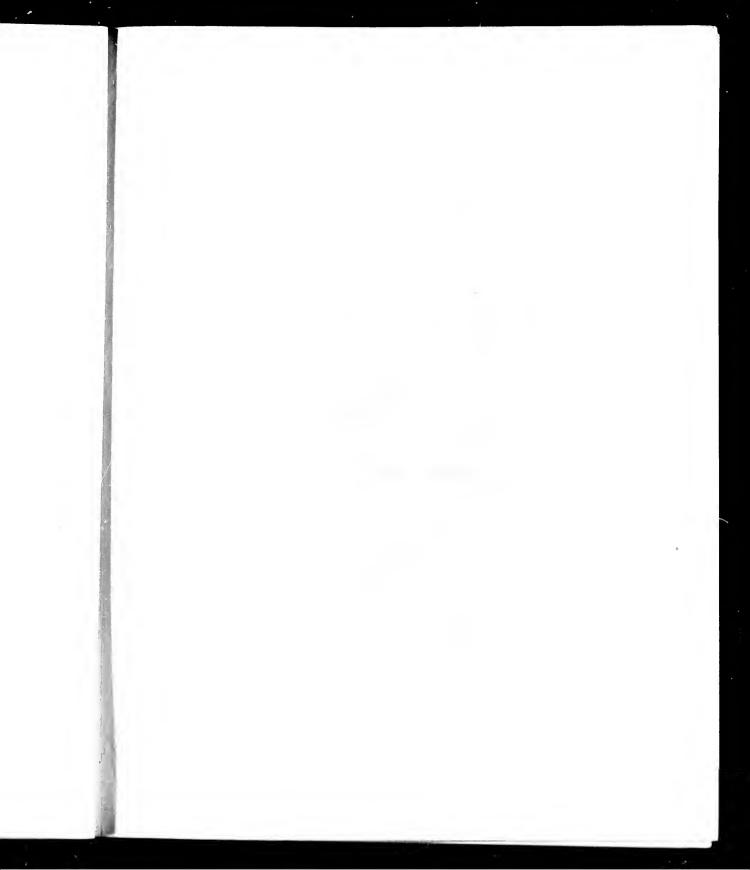
The time of gifts has come again; And on my northern window-pane, Outlined against the day's brief light, A Christmas token hangs in sight. The wayside travellers, as they pass, Mark the gray disk of clouded glass; And the dull blackness seems, perchance, Folly to their wise ignorance.

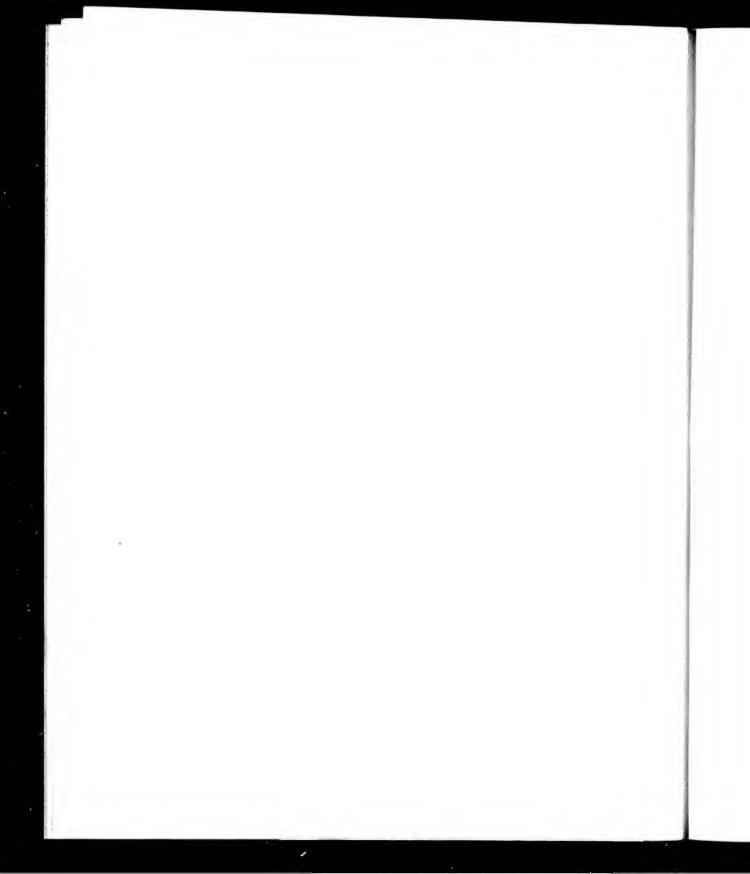
They cannot from their outlook see
The perfect grace it has to me;
For there the flower, whose fringes through
The frosty breath of autumn blew,
Turns from without its face of bloom
To the warm tropic of my room,
As fair as when beside its brook
The hue of bending skies it took.

So, from the trodden ways of earth,
Seem some sweet souls who veil their worth,
And offer to the careless glance
The clouding gray of circumstance:
They blossom best where heart-fires burn,
To loving eyes alone they turn
The flowers of inward grace, that hide
Their beauty from the world outside.

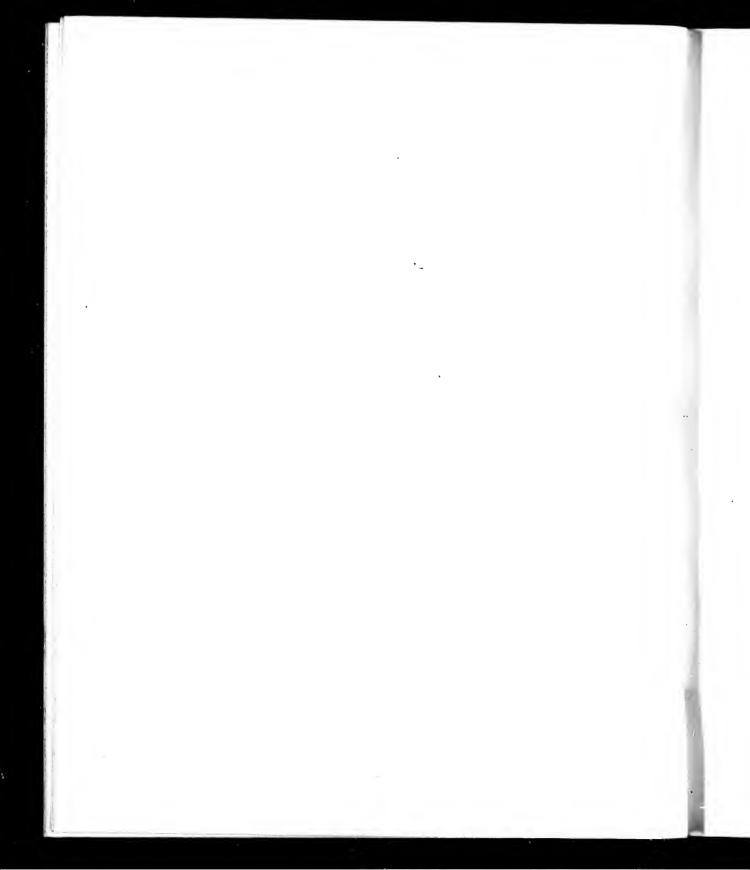
But deeper meanings came to me, My half immortal flower, from thee! Man judges from a partial view. None ever yet his brother knew; The Eternal Eye that sees the whole, May better read the darkened soul, And find, to outward sense denied, The flower upon its inmost side.

Whittier.









## THE FRINGED GENTIAN.

GENTIANA CRINITA, Fral.

To him who in the love of Nature holds Communion with her visible forms, she speaks A various language; for his gayer hours She has a voice of gladness, and a smile And eloquence of beauty, and she glides Into his darker musings with a mild And healing sympathy, that steals away Their sharpness ere he is aware.

Bryant.

In the great Book of Nature, God has uttered his wondrous and majestic thoughts. The poet and the naturalist, each in his own way, translates them to us out of the "original tongues." The poet, with the vision of a seer and the sympathy of a worshipper, enters the silent heart of Nature, and feeling the pulses of thought and emotion beating there, interprets them to the hearts of other men. He is no true poet who does not find in the facts and physical forms of Nature, in sea or sky, in bird, or tree, or flower, some spirit which is akin to that which glows and throbs in human hearts. "Out of the dust of the earth" the same Hand made us all. "Nature

is loved by what is best in us," says Emerson, and loved, I think, because there is something of the best of Nature in man, and something of the best of man in Nature.

> The rounded world is fair to see, Nine times folded in mystery: Though baffled seer cannot impart The secret of its laboring heart, Throb thine with Nature's throbbing breast, And all is clear from east to west. Spirit that iurks each form within Beckons to spirit of its kin.

Emerson.

The naturalist interprets to us the exact definable truth of Nature, as that truth is embodied in the physical facts, laws, and relations of things. From him we learn of the causes, methods, reasons, and adjustments of Nature. Sometimes he teaches us what is the physical basis of that beauty of form and color which, in the sunset sky or June landscape, in fern or flower, ravishes the soul with delight. Not seldom he is able to resolve the reason that runs unheard beneath the song of the poet, when he strikes Nature's most melodious key.

> " All are but parts of one stupendous whole, Whose body nature is, and God the soul."

Having then something of that soul in each of us, it is no wonder we should feel a subtile sympathy with the other parts of this great body which Nature is. So when the poet has woven a web of thought and feeling about any of the beautiful forms of Nature, and imparted to them a human interest and sensibility out of his own soul, he has been illustrating the truest philosophy.

"For the Poet, faithful and far-seeing,
Sees, alike in stars and flowers, a part
Of the self-same, universal being,
Which is throbbing in his brain and heart."

Some day we shall see how closely all this is correlated with the naturalist's most brilliant generalization, the doctrine of Evolution. Then we shall have a scientific reason why "one touch of nature makes all the world akin." For man, last and completest in Creation's mighty series, repeats in himself the whole world's history, from primeval chaos to the perfected Beauty and Order, which the Greeks called Kosmos. He is the world. Into the tissue of his nature are woven fibres from every living thing. Fine, invisible threads reach downward and tie him to every humblest and grandest form in Nature's great expanse,—to rock and river, to sea and mountain, to the trees of the forest, to the birds flying through the azure air, to the flowers of the field, to the crimson plant whose delicate frond, fine and fragile as a spider's web, is held and nourished all gently in the wavy waters of the sounding sea.

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So we will take with us both the poet and the naturalist in our holiday rambles among the beautiful flowers of our forests, meads, and prairies. The naturalist shall guide our feet to their favorite haunts, in green fields, upon the woody hill-sides, or by babbling brooks; and he shall tell us what we care to know of their habits, and forms, and curious histories. But the poet shall have our ear not less, and he shall tell us of the finer and higher meanings of these

"Flowers, so blue and golden, Stars, that in Earth's firmament do shine."

He shall rehearse to us the enchanting legends which ancient fancy has wrapped about these fair forms, or tell us of the loves which children or tender maidens, or hooded monks, or mailed knights, have had for these —

"Emblems of the bright and better land."

Our first plate represents, with an unequalled fidelity to both nature and art, one of our most choice and beautiful autumn Upon the stalks of smooth herbs, from one to two feet high, with leaves set regularly opposite each other, the flowers lift up their sky-blue cups, bordered with four expanding, fringed lobes. In the buds the petals are folded and twisted about each other, as is partly shown in the half-opened flowers at the top of the plate. They may be looked for during September and October, in low places along meadow-brooks and by the edges of swamps. They are rather common from New England to Wisconsin and Kentucky, but rare northward or southward of that region. This genus is a member of a large family of related plants, mostly bearing brilliant and beautiful flowers. Its name is said to have been derived from that of a king of Illyria, Gentius, who lived one hundred and eighty years B. C., and who, Pliny says, greatly prized, for its medicinal virtues, one species of it, which grows in Alpine regions all over Europe.

So beautiful a flower would not escape the appreciative eye of any true lover of Nature. Our American poets have made it the fitting theme of some of their most charming lines. Whittier uses it, as his wont is, to teach a deep lesson of modest worth and gentle charity; Bryant, to paint a picture of autumnal nature, and to find in it inspiration of upward-looking hope for life's autumn days.

#### THE FRINGED GENTIAN.

Thou blossom bright with autumn dew, And colored with the heaven's own blue, Thou openest when the quiet light Succeeds the keen and frosty night.

Thou comest not when violets lean O'er wandering brooks and springs unseen. Or columbines, in purple dressed, Nod o'er the ground-bird's hidden nest.

Thou waitest late and com'st alone, When woods are bare and birds are flown, And frosts and shortening days portend The aged year is near his end.

Then doth thy sweet and quiet eye Look through its fringes to the sky, Blue — blue — as if that sky let fall A flower from its cerulean wall.

I would that thus, when I shall see The hour of death draw near to me, Hope, blossoming within my heart, May look to heaven as I depart,

Bryant.

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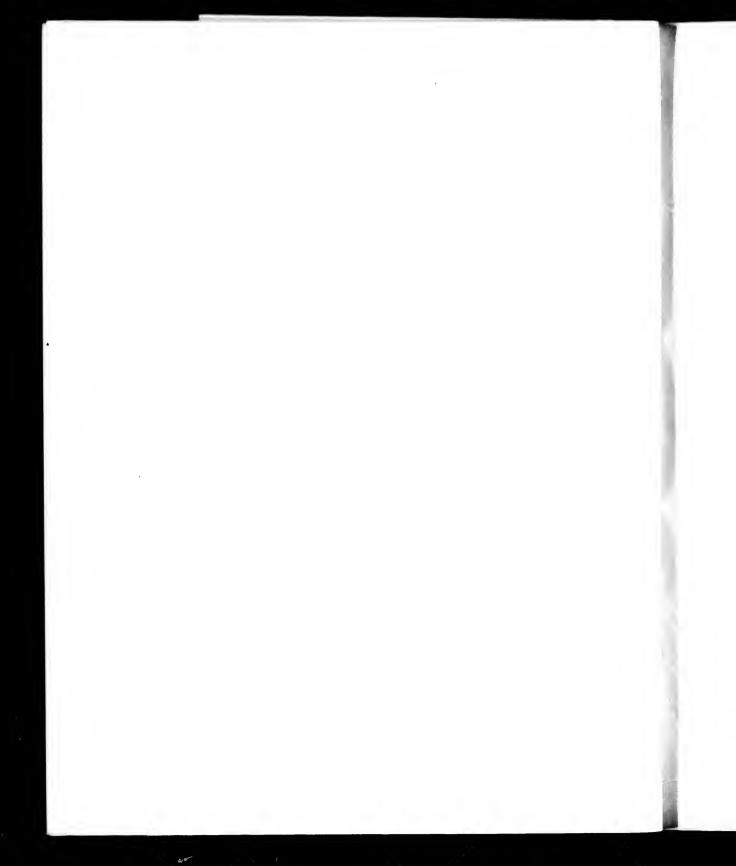
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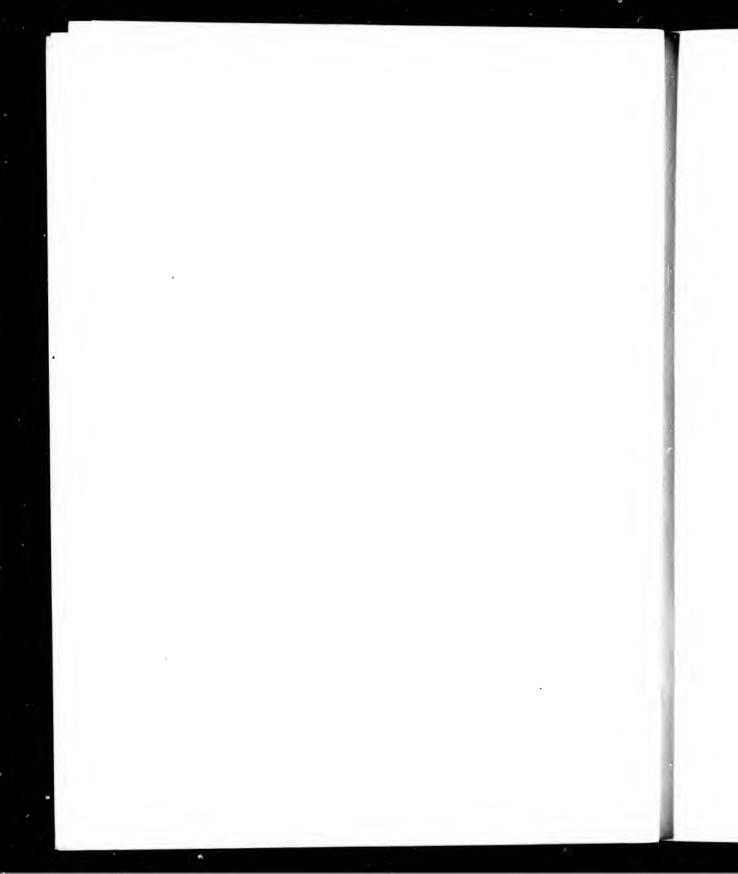
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THE WILD COLUMBINE.











# THE WILD COLUMBINE.

AQUILEGIA CANADENSIS, L.

Thou smiling Spring! again thy praise
Is on the lip of streams;
And the waterfalls loud anthems raise,
By day, and in their dreams;
The lakes that glitter on the plain
Sing with the stirring breeze;
And the voice of welcome sounds again
From the surge upon the seas.

Rockwell.

"SMILING Spring," in our northern climes, adorns itself with many floral gems. In the pages of this book, I shall have the pleasure of making my readers familiar with the forms of a few of the most beautiful of them. Among them all none can be ranked higher, for a certain grace of bearing and a peculiar delicacy as well as brilliancy of coloring, than the Wild Columbine. The green of the small three-lobed rounded leaves is singularly delicate and satisfying to the eye. The flower is elaborately constructed, with its yellow and pink petals prolonged into a bent spur behind, its dark-red sepals protrud-

ing like wings between; and its down-hanging brush of lengthened pistils and stamens, all pendent upon the slender stalk. As it dances in the gentle breezes, it makes a floral treasure that every wanderer in the spring woods or by "meadow's marge" will be glad to find. And you will find it in early spring, not seldom when few other flowers have come; when the "Adder's Tongue," the "Anemone," the "Blue Violets," and the "Sanguinaria," perhaps, will be its only companions. In the warm days of April or early May, before the trees have shaken out their new foliage to the breeze, when the bright sun pours its flood of light and warmth over all the land—over the brown pastures, and down through the shadeless woods, and the thick covering of crisp, dry leaves, the cast-off foliage of last year, stirs and crackles under your feet,—that is the time to go gathering Columbines.

It affects high places, and especially those edges of hill-tops where the rocks push themselves to the surface, and make precipitous steeps. Many a time I have found it thus, in profusion, on the high hills east of the Hudson, about Troy. And my memory of sundry walks, in warm spring days, when the spirit, weary with long months of toil, pent up in brick walls, so deeply enjoys the first glimpse again of the bright loving face of Nature, will be always associated with these charming flowers.

The Columbine of the English woodlands has been held sometimes, the poets say, as the symbol of sorrow and desolation.

> "The Columbine, by lonely wanderers taken, Is then ascribed to such as are forsaken."

Mr. Thomas Meehan quotes an old play of Chapman, of the year 1600, in which reference is made to the Columbine as an emblem of ingratitude.

"What's that — a Columbine?

No, that thankless flower grows not in my garden."

But to me it is a flower associated neither with sorrow nor ingratitude, but with the memory of some of the most beautiful and sunny hours that have come to me in all this "pilgrimage."

The Wild Columbine is a plant a foot or more high, slender, and sparingly branched, with not many leaves. The stem and branches are more or less tinged with pink. It may be found in blossom from April to June, in the North-eastern and Middle States. It takes kindly to cultivation, and may be transplanted into the garden. It was carried to Europe from this country for that purpose about the middle of the last century.

The spurs into which the petals are prolonged are the nectaries, or honey-pots, of the flower. The considerable length of these serves to test the strength, perseverance, or ingenuity of the bees or other insects who would rob the flower of its drops of sweetness. By this means also it compels the robber to serve its economy of reproduction. Being obliged to push and struggle hard to get his tongue into the bottom of the deep nectary, he is sure to get his hairy back covered all over with the flower-dust, or pollen, from the yellow anthers against which he so roughly brushes. So, when in search of more honey, he flies away to another Columbine, he will carry

a load of the fertilizing dust with him. Thus he helps to make the plant more fruitful, and secures plenty of flowers next year for the support, as we might suppose he understands it, of his own progeny.

Some insects, which are not large enough to reach the drop of nectar in the bottom of the vessel with their tongue, ingeniously go around on the outside, and with their sharp jaws cut a little hole through its wall, and take the honey out through that.

The Columbine to which the English poets refer is a purple flower, somewhat stouter than this one, not so long, and with the spurs more incurved at the end. It is the common Columbine of our gardens.

> " Make her a goodly chaplet of azure columbines, And wreathe about her coronet with sweetest eglantine,"

wrote Drayton three hundred years ago; and poor, crazed Ophelia gathers it to deck herself, saying in her plaintive way to Laertes,

"There is fennel for you, and columbines."

The name is said to be derived from *columba*, Latin for *dove*; or from *culvert-wort*, which was its earlier name, and is from Anglo-Saxon *culfre*, a dove, and *wort*, a plant. The appropriateness of the name and the allusion rests upon some fancied resemblance of its blue or purple petals to a circle of doves drinking or eating from the same dish; or, as some say, to the likeness of the separate petals, with the wing-like sepals spreading on each side, to a miniature dove.

The derivation of the name of the genus, Aquilegia, is a matter of dispute among botanists. Some say that it is derived from

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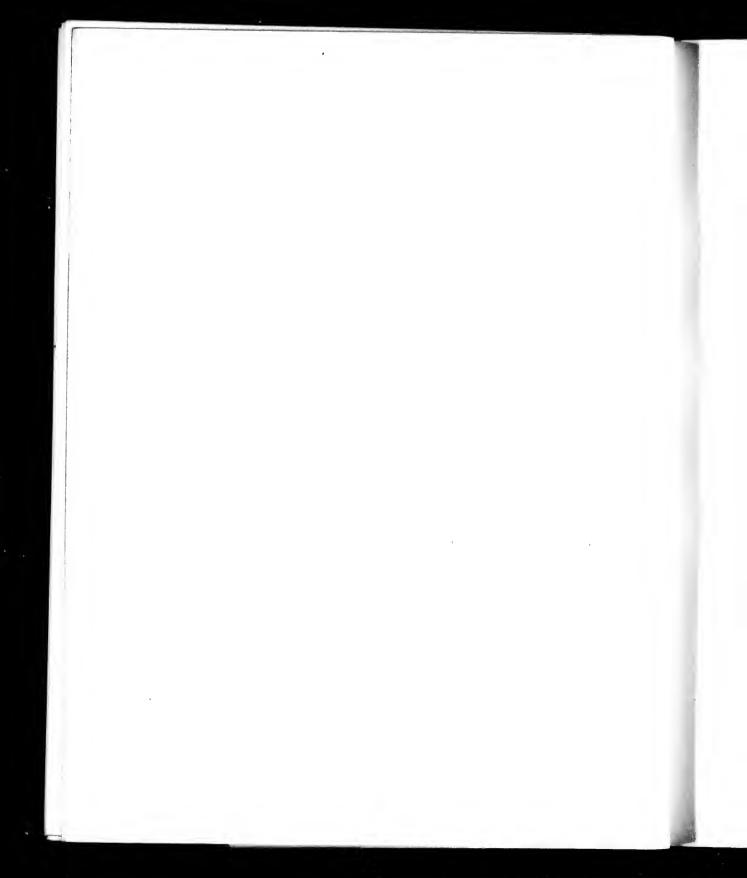
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aton Latin *aquila*, eagle, referring to the likeness which the cluster of bent spurs seems to bear to the talons of that lordly bird. Others derive it from *aqua*, water, and *ligo*, to collect, referring to the apparent design of the petals, with their deep wells, to collect water; which, by the way, they never do, for they always hang horizontal, or mouth downward. If this is the derivation of the word, it would seem more likely to have reference to the open seed-case, which, when ripe, stands erect and might easily serve the uses of a rain-catcher.

The Columbine has been a favorite, not only with the poets, but with the artists also, in the ages past. It appears not infrequently as an element of decorative art. It is found as a border upon an illuminated manuscript as early as the fifteenth century. It was at one time combined with the red rose, as a badge of the royal house of Lancaster. And long before that it had been associated with the more familiar Broom-flower, *Planta genista*, as the badge of the royal house which thence derived its historic name, Plantagenet.



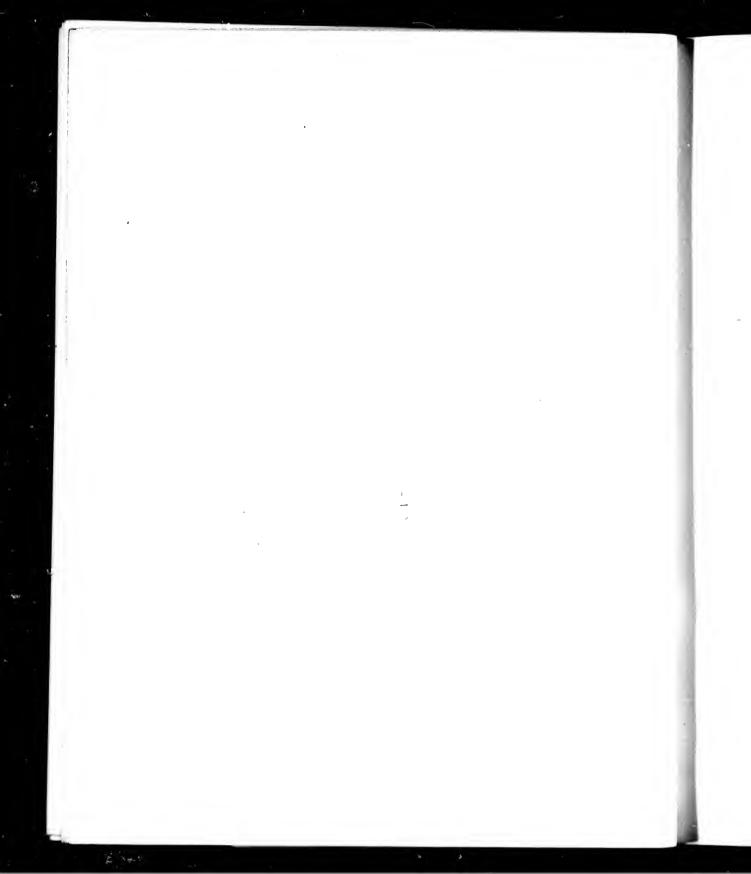
THE MOUNTAIN FRINGE.











# THE MOUNTAIN FRINGE.

ADLUMIA CIRRHOSA, Raf.

For I have learned To look on Nature, not as in the hour Of thoughtless youth; but hearing oftentimes The still, sad music of humanity, Nor harsh, nor grating, though of ample power To chasten and subdue. And I have felt A presence that disturbs me with the joy Of elevated thoughts; a sense sublime Of something far more deeply interfused, Whose dwelling is the light of setting suns, And the round ocean and the living air, And the blue sky, and in the mind of man. Therefore am I still

A lover of the meadows and the woods, And mountains; and of all that we behold From this green earth; of all the mighty world Of eye, and ear, — both what they half create, And what perceive; well pleased to recognize In Nature and the language of the sense, The anchor of my purest thoughts; the nurse, The guide, the guardian of my heart, and soul Of all my moral being, — Wordsworth.

It would not be strange if sometime we should learn to know that the evolutionist had actually laid bare the fine, mysterious chain, which, as the poet found out long ago, binds all beings in a common kinship and a universal sympathy. There is no fact of nature more obvious even to the casual observer than the great variety of forms existing side by side in the vegetable world. It would task the most vivid and active imagination to conceive of a form of plant-life of which the naturalist does not already know something which would more than parallel it in novelty or strange eccentricity of habit. And there is a place for everything, and a chance for all,—for the feathery fern in the deep shade of the woods, and for the gray lichen upon the bare rock, or the smooth bole of the beech, not less than for the lily and the rose. Even the ugly and uninteresting fungus, great and small, has its place and its opportunity, living though it does, like a human sycophant and parasite, upon the bounty of others. It is certainly a misnomer to call that sort of people sponges, for sponges in nature are an honest folk, and live industrious and useful lives. But the fungus eats what others have earned, and subsists by making the world poorer.

I think it something more than a mere fancy which discovers analogies between the forms and habits of plant-life and the qualities of human nature, or the experiences of human life. The unity of the world might easily furnish grounds for an inner and deeper correspondence. We can easily suppose that there is one spirit in all and through all; that there is one type of architect ure, so to say, for the visible and the invisible worlds.

How many meanings might we gather from the whisperings of the winds through the leaves of the trees! How significant the voices of the woods! What grander creation is there among Nature's living things than the great forest-trees?

Father, thy hand
Hath reared these venerable columns, thou
Didst weave this verdant roof.
Grandeur, strength, and grace,
Are here to speak of thee.

This mighty oak — not a prince
In all that proud land beyond the deep,
E'er wore his crown as loftily as he
Wears the green coronal of leaves with which
Thy hand has graced him. — Bryant.

How they typify the procession of human life in their grand march, generation after generation, down the countless centuries, far antedating man's most venerable historic memory!

With men, as with trees, -

Lo! all grow old and die,—but see again How on the faltering footsteps of decay Youth presses—ever gay and beautiful Youth, In all its beautiful forms. These lofty trees Wave not less proudly that their ancestors Moulder beneath them.

Life mocks the idle hate
Of his arch enemy Death — yea, seats himself
Upon the tyrant's throne — the sepulchre,
And of the triumphs of his ghastly foe
Makes his own nourishment. — Bryant.

The great trees! what an emblem are they of strength and stability in the compact, slowly nurtured, manly character, rooted in eternal righteousness, and growing upward and expanding outward, evermore toward light and heaven.

"With his gnarled old arms, and his iron form, Majestic in the wood, From age to age, in sun and storm, The live-oak long hath stood.

And the generations come and go,
And still he stands upright,
And he sternly looks on the wood helow,
As conscious of his might."

So stands a strong life and a noble character. And it stands there immortal. "Over such, Death hath no power." "Being dead," in respect to this mortal form, "they yet speak." And such lives and such souls are shade and shelter to the multitude of smaller lives that grow like flowers, or blades of grass, around and beneath. For there are little and great, in the world of men, as in the forest of trees.

But I take note that the greatest men, unlike what the poet has imagined of the "gnarled live-oak," do not "look sternly on the woods below." They look kindly down and around. The greatest souls have most of pity, and kindliness, and sweet charity, for those who are smaller than they. Mercy is "mightiest in the mighty," all the way up, from the greatest human souls to the great Over-Soul, who is—

"Immortal Love forever full,
Forever flowing free,
Forever shared, forever whole,
A never-ebbing sea!"

Hate may go up, but Love comes down forever. That is Heaven's answer to Earth's cry. The wild discord of human cursings, and mockings, and cruel blows, is echoed from the blue arch in tones of pitying tenderness. "Father, forgive them, for they know not what they do."

Nor can I doubt that there is a teaching of wisdom from the Mountain Fringe,—a delicate twining vine. It is one of a large class of plants, which, while they have a root of their own, and draw their life from the common stock of food and force stored up in earth and air, have not the ability to stand up and face the winds and pelting storms alone. These weak ones roust twine themselves about, or lean upon, the strong.

From time immemorial it has been thought the proper and gallant thing in poetry, and in after-dinner speeches, to refer to the fair sex as a vine which twines about the oak, getting support and lending beauty at the same time. But I learn that some of the fair creatures are, in these modern times, quite disposed to repudiate this suggestive simile and all that it implies. They declare their willingness to come down to the platform of "natural selection" in the struggle of life, and abide the verdict, along with the sterner sex, of the inexorable law of "the survival of the fittest." Far be it from me to affirm that even then the angelic partners of our earthly course would not carry off the prizes; for are not they the "fittest" of all sublunary things to achieve, or merit, the best sweets and glories which this poor world of ours can afford?

Still, I am inclined to believe that the discarded simile is not altogether without its worth. I think, with Tennyson, that woman has not quite found her natural place in the world,—

"Till at the last she set herself to man, Like perfect music unto noble words." Be this as it may, it seems proper to think that at least one important use of the dependent vines, in whatever relation of life, is to call out and develop the gallantry, gentleness, or helpfulness of the strong oaks. I have the memory of an old legend, that once our blessed Lord suffered one of his saints to become a beggar by the roadside, there to sit all day long, to solicit and receive alms. But he who had all his life been a helper of the poor and a giver of alms, by no means liked this hard fortune, and made complaint of it. But the Lord explained that if there were no poor there would be no charity; that the helpless are the best gift of God to the helpful; and that as a beggar he was perhaps doing more to save souls, by keeping them gentle, and unselfish, and thoughtful of the weak, than when he went about strong and self-dependent, giving to the needy.

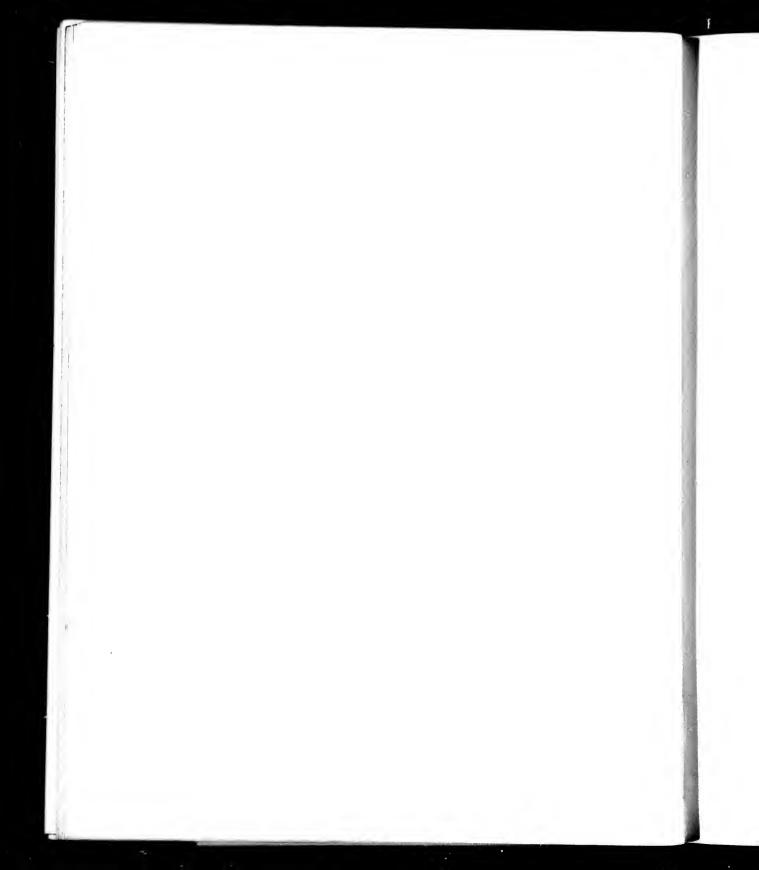
The artist has given a most admirable representation of one of our most beautiful climbing plants. It is quite common in the woods of New York and the West. It was described in the first years of the century by one of our earliest and most justly celebrated botanists, Professor Rafinesque, who dedicated the genus to Major Adlum, "who is said by Dr. Torrey to have been a distinguished cultivator of the vine." It is sometimes called Climbing Fumatory, from the Latin *fumus*, smoke, on accourt of the supposed resemblance of the fine sprays of branches and flowers, in this and related plants, to—

"Light-winged Smoke! Tearian bird Melting thy pinions in thy upward flight,"

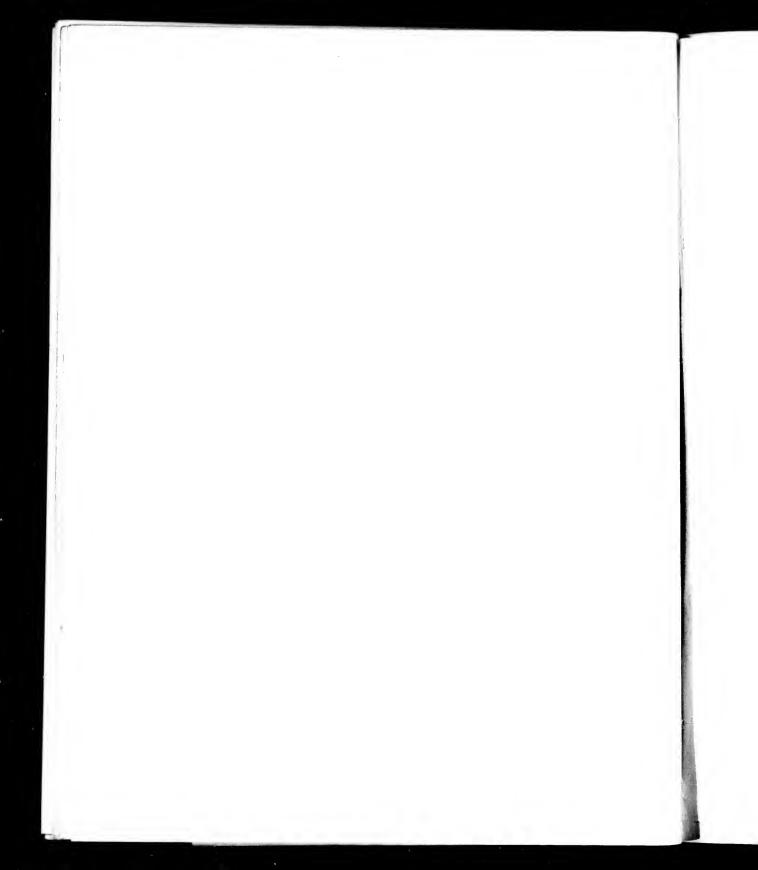
— the subtile spirit of which, the blue envelope, that wraps the distant hills about, the poet sings of here:

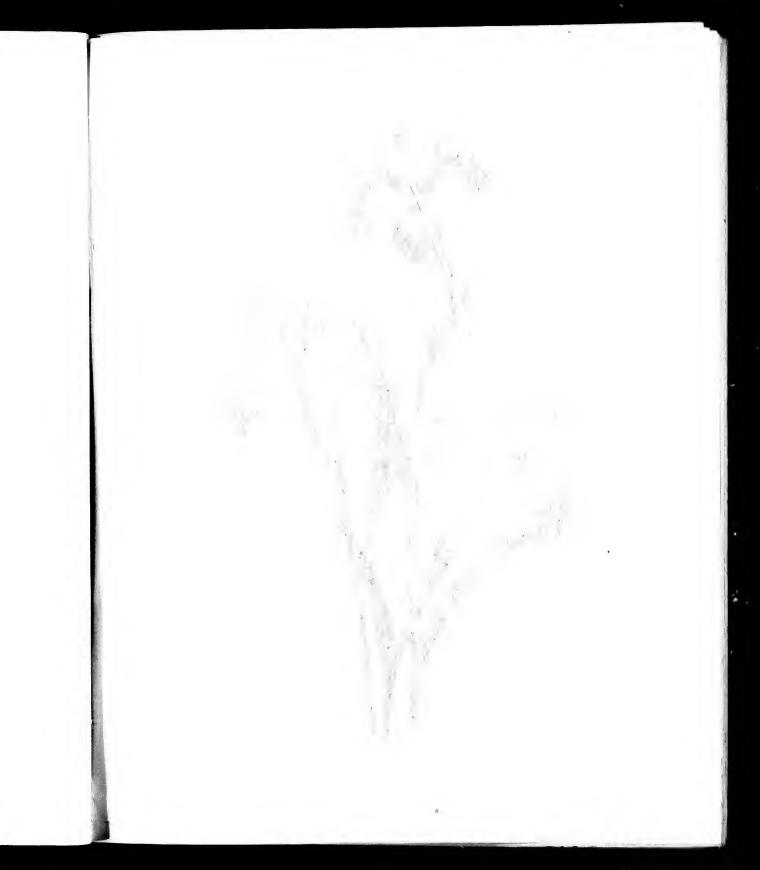
Woof of the fen, ethereal gauze, Woven of Nature's richest stuffs,— Visible heat, air-water, and dry sea, Last conquest of the eye; Aerial surf upon the shores of earth, Breakers of air, billows of heat, Fine summer spray on inland seas.

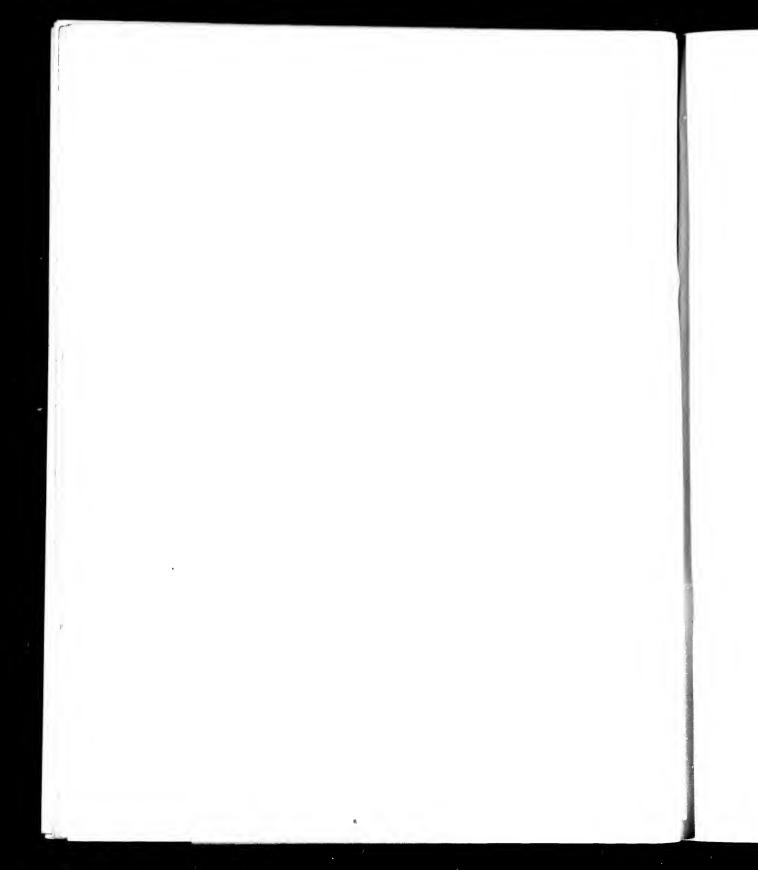
Thoreau.



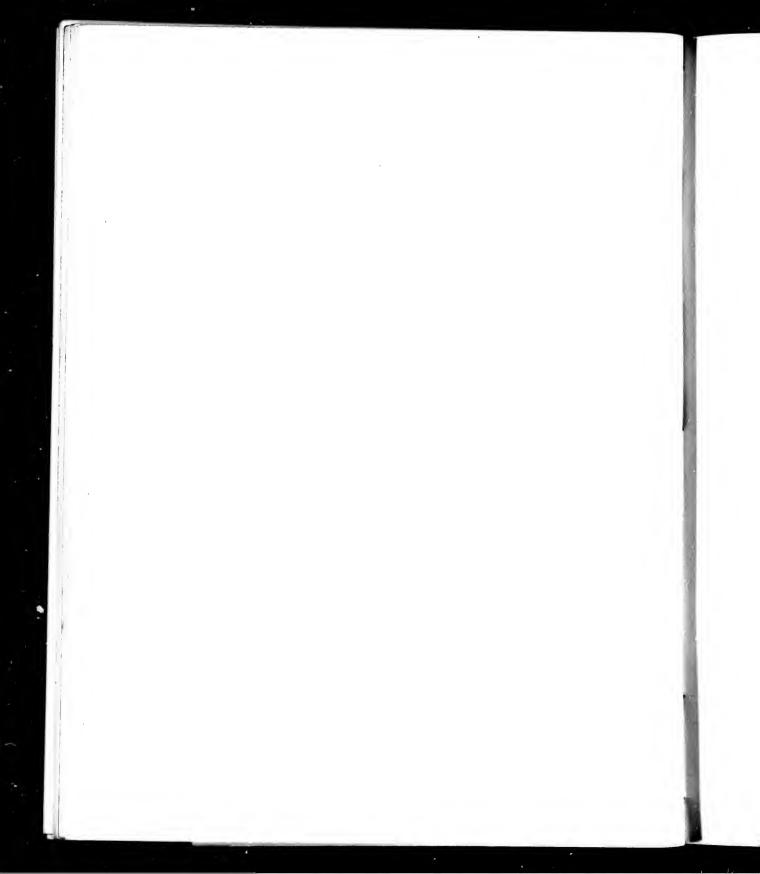
THE FLOWER DE LUCE.











### THE FLOWER DE LUCE.

(LARGER BLUE FLAG.)

IRIS VERSICOLOR, L.

#### THE RAINBOW.

Trinmphal arch, that fill'st the sky
When storms prepare to part,
I ask not proud philosophy
To teach me what thou art.

How glorious is thy girdle cast
O'er mountain, tower, and town,
Or mirrored in the ocean vast,
A thousand fathoms down.

For, faithful to its sacred page,
Heaven still rebuilds thy span;
Nor lets the type grow pale with age,
That first spoke peace to man.

Campbell.

PLUTARCH says the word *Iris* is from the Egyptian, and means "The Eye of Heaven." The Greeks named this plant from the Rainbow, which they called "Iris," in allusion to

the mingling of brilliant colors in its blossom. Iris was also the goddess of the Rainbow, and the fair messenger of Juno, the latter being the goddess of the sky and clouds, and of the powers and phenomena of the air.

Iris was sent to earth bearing messages of peace to the children of men; she filled the clouds with water from the lakes and sea, and poured it in gentle showers again upon the fertile ground. And she it was who bordered every retreating storm-cloud with the gorgeous fringe of the rainbow, a symbol of peace and plenty.

Now overhead, a rainbow, bursting through The scattering clouds, shone, spanning the dark sea, Resting its bright base on the quivering blue.

— A heavenly chameleon,
The airy child of vapor and the sun,
Brought forth in purple, cradled in vermilion,
Baptized in molten gold, and swathed in dun,
Glittering like crescents o'er a Turk's pavilion,
And blending every color into one.

Byron.

Many legends tell how Juno made the Iris flower, among the few most beautiful of all the flowers of the field, to spring from the earth, in recognition of her much-loved and favorite Maid of Honor. So the chaste and beauteous Iris, the fleet messenger of the gods, has her perpetual memorial in the splendid bow of color which the storm projects upon the sky, and in this group of radiant flowers, which bespangle the green of meadow and forest over the mountains and valleys of two continents.

Louisa Ann Twamley tells a charming story of the meaning of the Iris. At one of the courts held by Flora,

All with their petals so fair, The gay flowers wreathed were. But 'midst them all Crowned at the rainbow festival, A sapphire-colored blossom shone The loveliest there; no other one Her jewels wore So gracefully. Her robe all o'er Was radiant, yet deep blue, like twilight sky, And softly shaded as when clouds do lie Upon the deep expanse. 'Twas strange none knew A name for this fair form, so bright and blue; But sister-flowerets fancifully said, As they to note her beauty had been led. By its enchantment in the rainbow shower, They e'en would call her IRIS from that hour.

Christian legend, not less than the Greek, has been busy with the Iris. Long centuries ago the "Flower de luce" was said to be a favorite with the Queen of Heaven, the Virgin Mother of Our Lord. The story is told of an old knight who, though very devout, was also very stupid. He could never retain in his memory more than two words of a prayer to the Lady Mother. These were "Ave Maria;" and with these he constantly addressed his prayer to Heaven. He was spending his last years in a convent, and the wordy monks there had unbounded contempt for a man with so limited a vocabulary of devotion, and they did not fail to let him know it. But the good old knight possessed his soul with patience, and night and day his simple prayer continued, till at last he died and was laid in the chapel yard of the convent,—when, as a proof of the acceptance of his brief though earnest prayer, a plant of the

"Flower de luce" sprang up on his grave, displaying on every flower, in golden letters, the words "Ave Maria." The sight of this miracle induced the scoffing monks to open his grave, and they found the root of the plant resting on the lips of the good old soldier who lay mouldering there.

"The historical importance of the Iris," says Mr. Thomas Meehan, "is due to the fact that it became the national flower of France. As such it has acquired a world-wide reputation, under the name of 'Fleur de lis,' which is nothing but a corruption of 'Fleur de Louis.' But it had a political significance long before it was officially adopted by the kings of France. It was used as an emblem of the Byzantine emperors, although in what relation it does not now appear. The early Frankish kings also employed it. There is a legend, quoted by Prior, that a shield filled with these flowers was brought to King Clovis while engaged in battle. King Louis VH. adopted the flower in June, 1137, as the national emblem of France, possibly to perpetuate the memory of some such event."

The Larger Blue Flag of our swamps and meadows is, perhaps, the most brilliant representative of the genus growing on this continent. It has a wide geographical distribution, being found almost equally common and luxuriant from Maine to Minnesota, and from Arkansas to Florida. It grows two or three feet high in swampy or damp places. Its foliage consists of long, slender, sword-shaped leaves. It flowers in May and June. Our plate sufficiently represents the rare beauty and grace of the flower. A little study of its parts, in nature, will show how curiously it is contrived so as not to be fertilized by its own pollen; but with great ingeniousness is designed to be frue-

tified by pollen brought to it from other flowers, by the bees and other insects, who visit it in search of the drop of nectar which lies concealed in its heart. In "How Flowers Behave," Professor Gray has given an extremely interesting account of the methods and devices by which this is done.

I cannot close this account of one of the chief glories of our early-summer flora without quoting those exquisite lines addressed to this flower, from one of the sweetest poems with which Mr. Longfellow has enriched our literature.

#### FLOWER DE LUCE.

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

Born to 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.

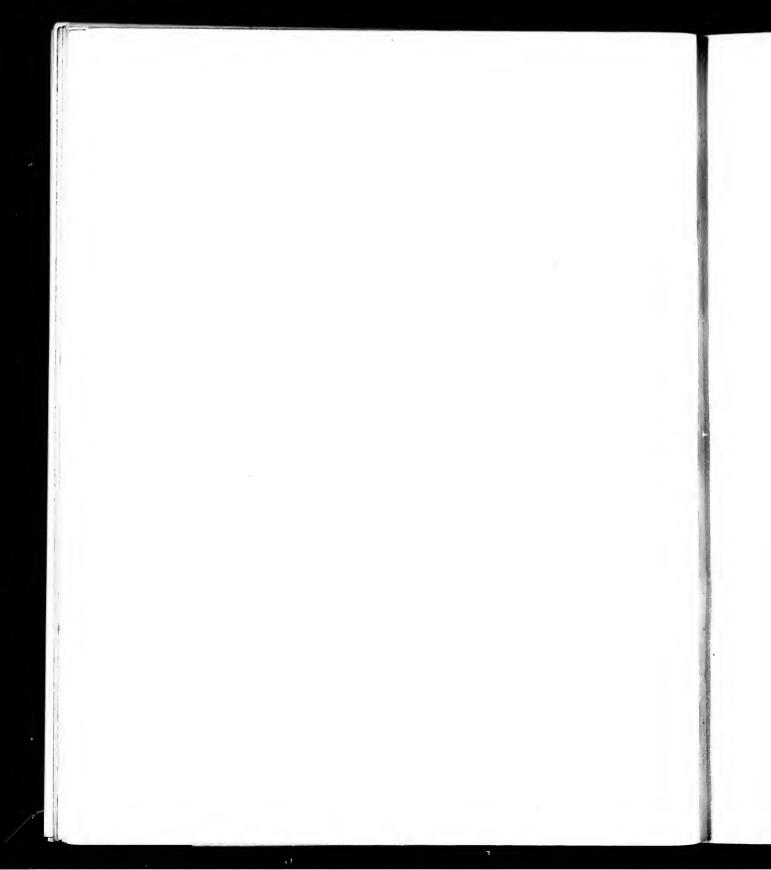
The wind blows, and uplifts thy drooping banner,
And round thee throng and run
The rushes, the green yeomen of thy manor,
The outlaws of the sun.

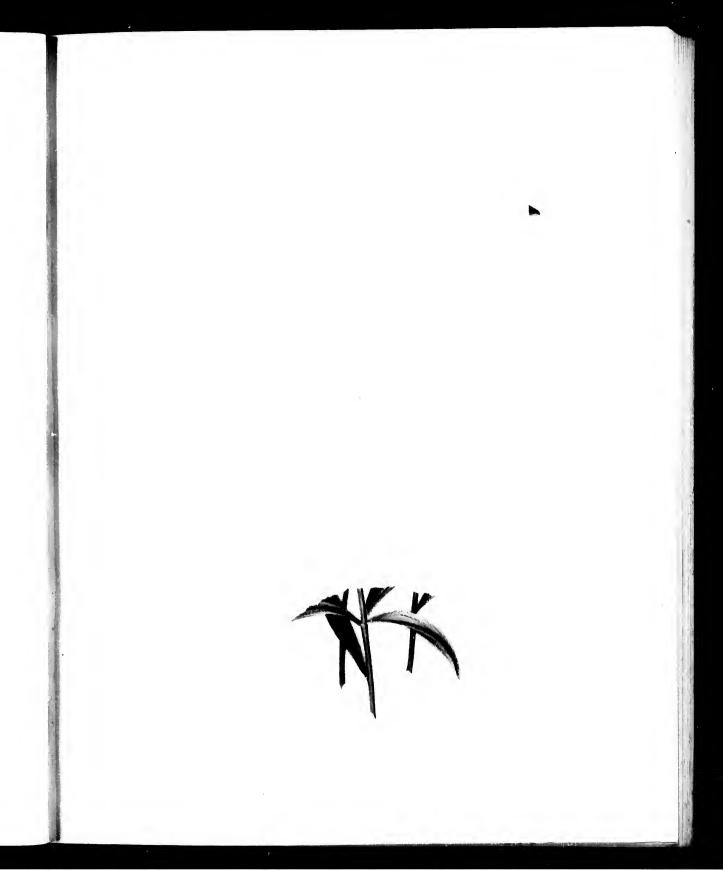
Thou art the Iris, fair among the fairest,
Who, armed with golden rod,
And winged with the celestial azure, bearest
The message of some god.

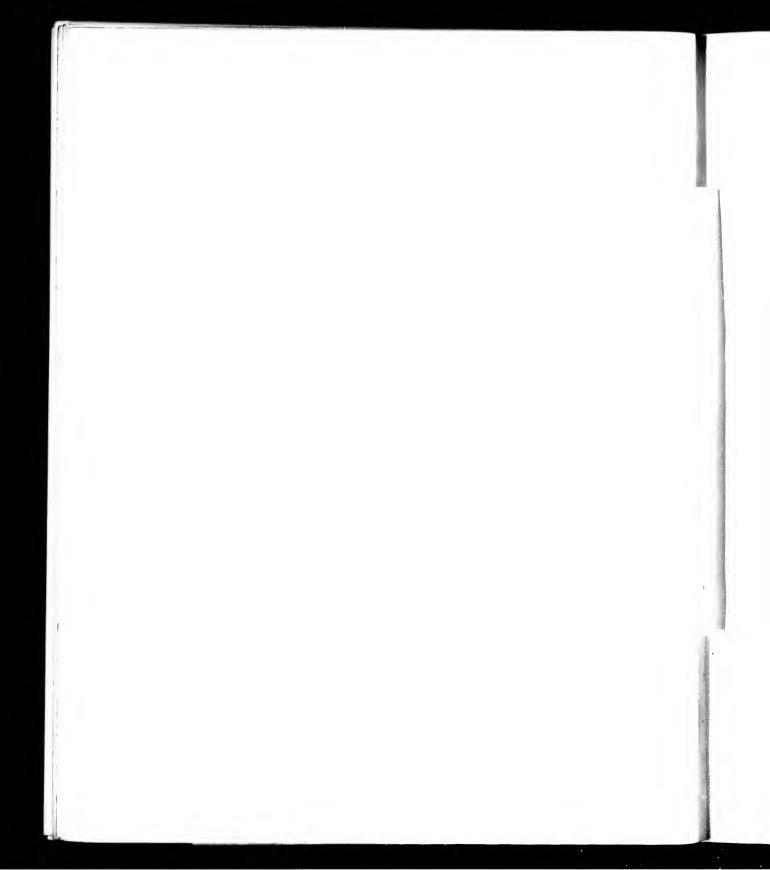
Thon art the Muse, who, far from crowded cities,
Hauntest the sylvan streams,
Playing on pipes of reed the artless ditties
That come to us as dreams.

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

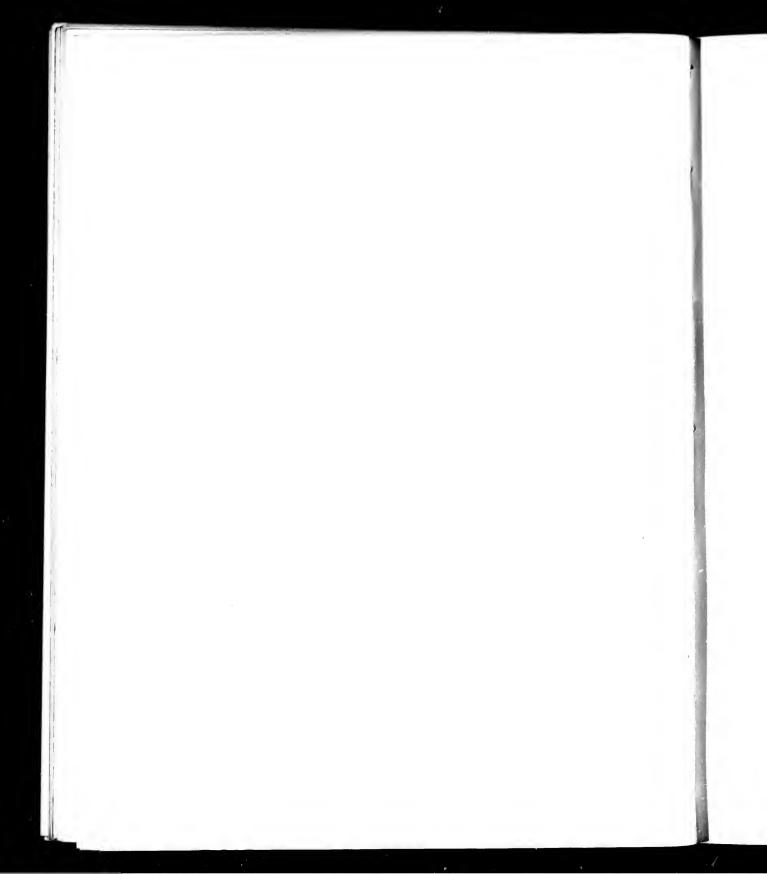
O flower of song, bloom on, and make forever The world more fair and sweet. THE WILD ORANGE-RED LILY.











#### THE

# WILD ORANGE-RED LILY.

### LILIUM PHILADELPHICUM, L.

O lilies, upturned lilies,
How swift their prisoned rays
To smite with fire from heaven
The fainting August days!
Tall urns of blinding beauty.
As vestals pure they hold
In each a blaze of scarlet,
Half blotted out with gold.

Thro' trellised roadway edges,
And open woodland range,
By ruined walls and hedges,
In every phase of change,
They lift in holy vigils
The year's unquenched desire,
And break the moveless verdure
With shifting lines of fire.

Elaine Goodale.

This, our most noble and truly elegant native Lily, grows quite common throughout the whole of eastern North America, in fields where the soil is sandy, in open copses, and by the edges of the woods. The very beautiful and life-like representation of it which Mr. Sprague has given in the plate makes it quite unnecessary that I should enter into a particular description of its form or color. It is propagated by bulbs or seeds. It attains a height of two feet or more, and flowers in June and July. Its graceful form, with its upturned, open, brilliantly colored flower-cup, and slender pointed whorl of green leaves, is familiar to all lovers of Nature's floral gems.

It early attracted the attention of botanists in this country, and bulbs were sent by Mr. John Bertram, of Philadelphia, to Miller, a famous floriculturist of London, more than one hundred years ago. No doubt, also, it was from one of Bertram's plants that the great Linnaus named and described the species.

The Lily has been much admired in all ages, and has held a large place not only in fiterature and the symbolism of religion, but also in armorial and decorative art. Professor Mechan says the name of the Lily is contemporaneous with history, having been used by Homer, and meaning "the most charming of flowers." But the modern, not the Homeric name, Iily, Professor Wittstein derives from the Celtic Ii, white, referring to the color of the best known species. While we find that the poet has given to the Lily the adoration of his heart and the loving tribute of his genius, in song and legend, it is not to be denied that it is most commonly the white Lily, and not our gorgeously-colored one, all red and gold, that has carried captive the poet's soul, as he has told in melodious verse how the

<sup>&</sup>quot;Queen of the field, in a milk-white mantle drest, The lovely Lily waved her curling crest."

The author, just now referred to, quaintly tells us how the ancients gave to the Lily a miraculous origin, as, indeed, all do to-day, except the evolutionist, though not exactly by the same process as that believed in by the Greeks.

"It is said that a very excellent young goddess, Sylvia, who was as fair as she was good, had but a poor opinion of Jupiter, who paid his addresses to her. Jupiter was not accustomed to such rebuffs, and treated the fair lady rather roughly; but she being much shocked at such rudeness, her nose took suddenly to bleeding, and from a few drops which fell to the ground the red Lily sprung up. The white Lily is said to be a later creation, and to have sprung from the milk of Juno, and, we are sorry to say, when she was in a somewhat intoxicated condition from imbibing too freely of nectar." "Considering the more respectable origin of the red Lily," our author further remarks, "it seems scarcely just that most of the best lily-poetry has been given to the white."

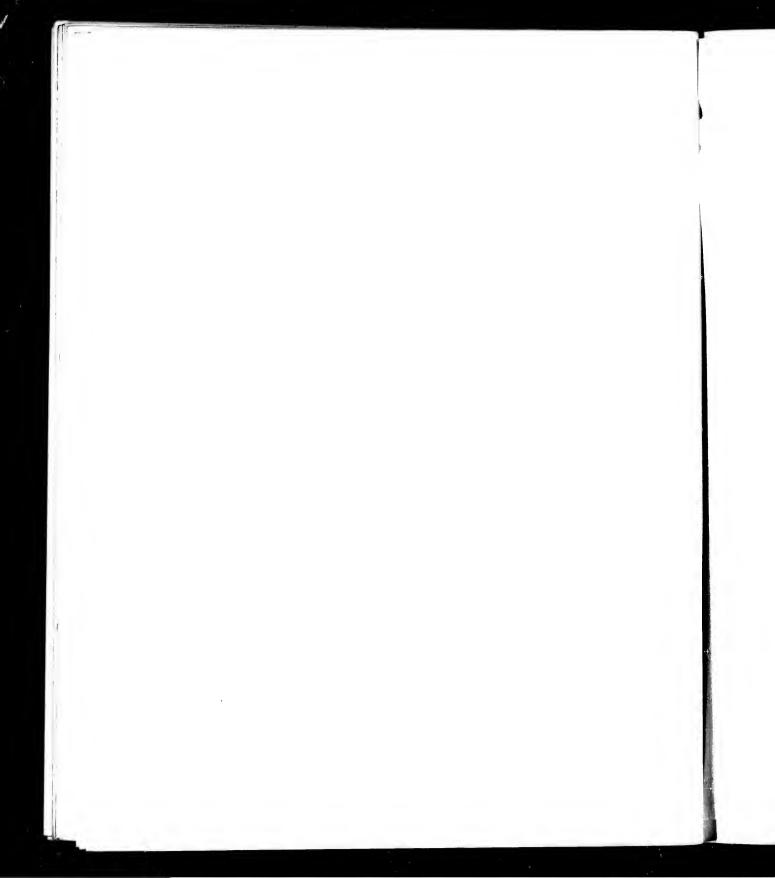
Ever since He, who is called "The Lily of the Valley," said, warning men against over-anxiety, "Consider the lilies of the field, how they grow; they toil not, neither do they spin; yet I say unto you that even Solomon in all his glory was not arrayed like one of these," the Lily has had a peculiar charm and interest for the Christian. He has always seen in it not only the emblem of a divine care, which regards the humblest creation with thoughtful solicitude, but also finds it ever keeping memory of One, who, though King of Heaven, found it no condescension to be a lover of fragrant flowers and tuneful birds.

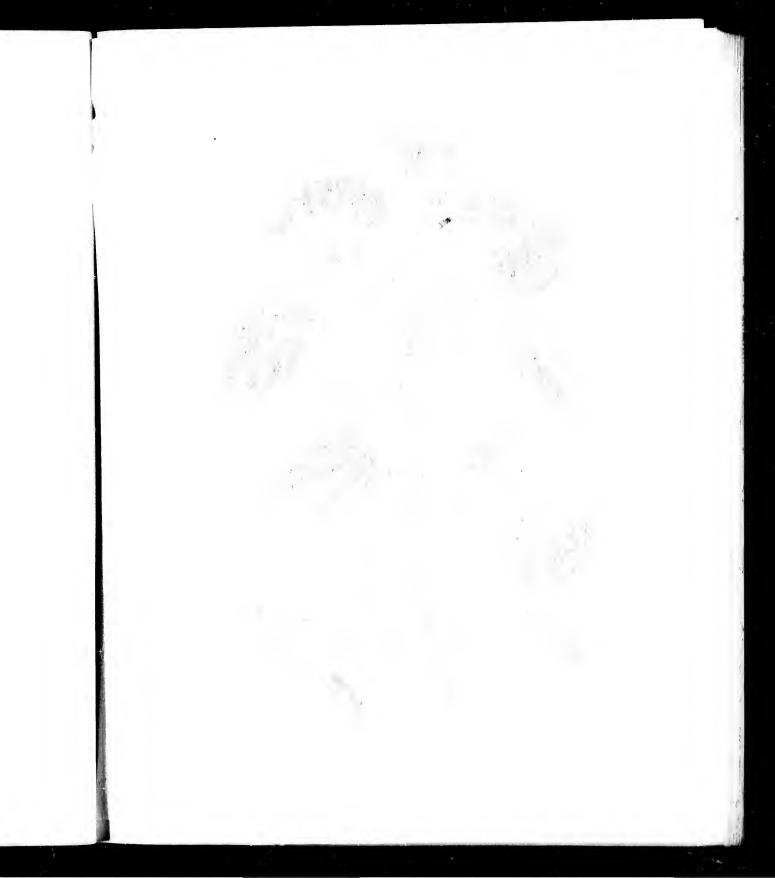
The Lily has long been used as an emblem of the Blessed Virgin Mary by the great church which adores her.

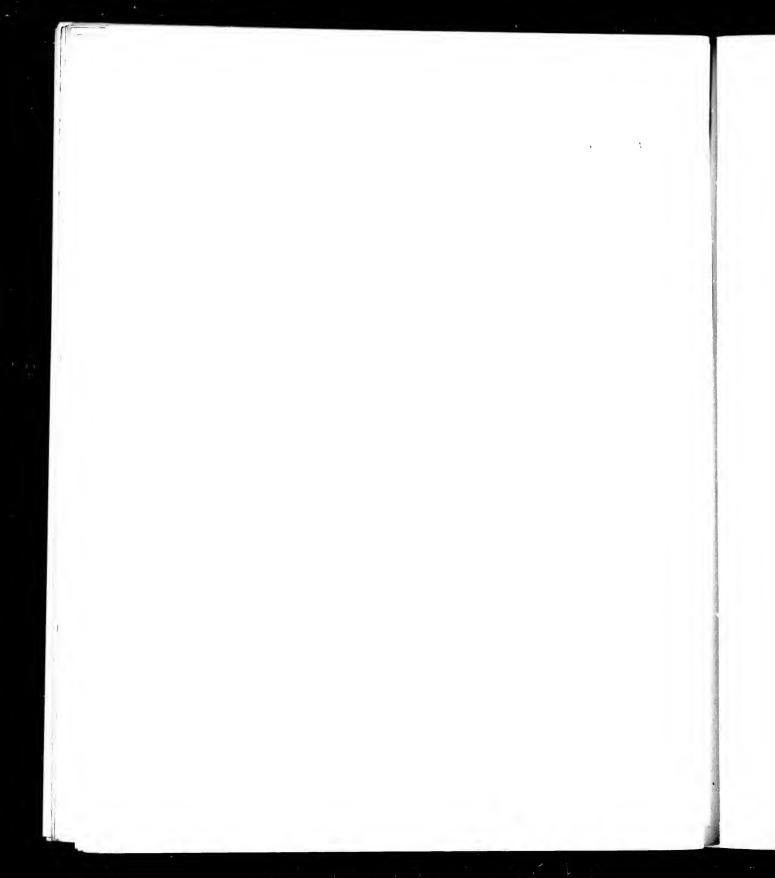
"Seest thou that diadem bending low,
As if modestly shunning its beauty to show?
Look at those petals of silvery white,
Girt round with a halo shining bright.

That lily is lovely, but lovelier still
Was the flower that blossomed on Bethlehem's hill;
And white as the snow though its petals are,
That Virgin of virgins was fairer far."

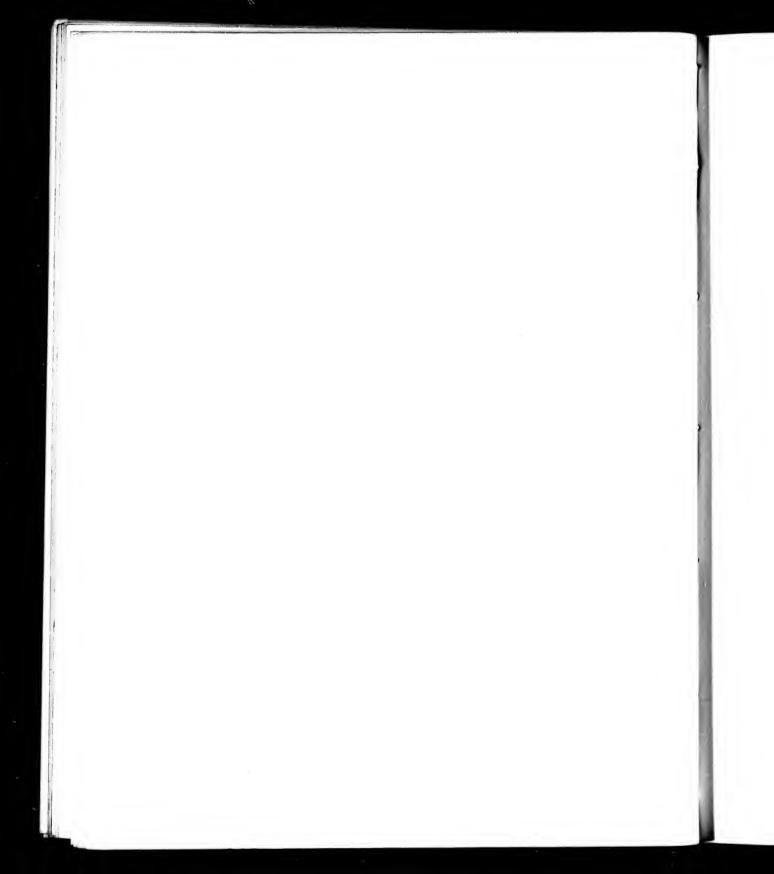
THE WILD CLEMATIS.











## THE WILD CLEMATIS.

(Virgin's Bower.)

CLEMATIS VIRGINIANA, L.

Where the woodland streamlets flow,
Gushing down a rocky bed,
Where the tasselled alders grow,
Lightly meeting overhead;
When the fullest August days
Give the richness that they know,
Then the Wild Clematis comes,
With her wealth of tangled blooms,
Reaching up and drooping low.

Dora Read Goodale.

The Wild Clematis, or Virgin's Bower, is an attractive native vine, common in all our northern woodlands, especially by the side of brooks and on river banks. It blooms in July and August with an abundance of white, fragrant flowers, and in the fall, when the seeds are ripened, their plumed tails, fine, long, and feathery, cover the branches with a gray mist, like pale smoke. If gathered at the right time, the seeds somewhat firmly

adhere to the vine, and thus it becomes a favorite, along with autumn leaves, for interior decoration. The foliage of the growing plant, so finely represented in the plate, is extremely graceful and beautiful.

And her fresh leaves only shade
That which is within her bower,
Like a curtain, lightly made,
Half to hide her virgin flower.

D, R, G,

So many curious and wonderful facts have recently been discovered in regard to the movement and behavior of plants, and especially, of climbing plants, that I think I can give my readers no greater pleasure than to make the Clematis the occasion for briefly detailing some of the more striking of them.

It is commonly thought that there is an essential, radical difference between the life of plants and animals. "There are differences of administrations, and diversities of gifts, but the same spirit." The more closely we observe the facts, and the more deeply we push our inquiries into the arcana of life, the more difficult we find it to make any division which shall separate the two at all points. Indeed, we are constantly being pressed toward the conclusion that life is one in all its forms,—that it, though

"Changed through all, is yet in all the same; Lives through all life, extends through all extent, Spreads undivided, operates unspent."

It was once thought that motion, or, at least, locomotion, was a distinctive mark of animal life. But in the microscopic world innumerable plants are found which possess the power of locomotion in a high degree. And now we are assured that among the most highly organized growing plants, motion, and not rest, is the normal state. Professor Gray, Mr. Darwin, and others, have made elaborate studies of this phase of plant life, and unite in assuring us that the stems and branches of growing plants, under the influence of light and other vital excitants, are constantly in motion, describing many forms of curves and angular figures in their movements. The motion is usually very clow, and can be detected only as the motion of the hour hand of a clock is, by marking its place at different times.

Climbing plants illustrate this power of motion in a more conspicuous and remarkable way than any other. Those most notable for this quality are the regular twiners, such as the Hop and the Morning-Glory, and those which climb by means of twining tendrils, or leaf-stalks, as the Passion-Flower and the Clematis. It has been observed that if a regular twiner be allowed to grow up higher than its support, the upper joints will "lop over" and bend outward, horizontally, and then commence to swing around the point of last attachment, like the hands of a clock; the end joints of a Hop plant, for instance, were observed to make no less than thirty-seven such revolutions, at an average of two and a half hours for each. This is not caused by a twisting of the stem of the plant, as might be supposed, for the joints would not be twisted more than two or three times, even after so many revolutions, and in many plants the twisting is in a direction opposite to the motion. It has been found that the revolving end of the plant actually rolls over as it swings around, so that what is the upper side when the plant is in one point of the circle will be the under side when it is at the opposite point. The number and rate of the revolutions of the free ends of twiners greatly vary in different species.

This reaching out and swinging around serves the purpose of finding a support to twine about, if there is one within the radius of its widest possible circle. If at any point it impinges against an object, like an upright stick or string, of course the motion is arrested, but that part of the growing stem which is beyond the point of contact, continues to swing around and so coils up about the new support.

It is said by the botanists that this "swinging around the circle" of the twiners is caused by the process of growth going on in the cells of the stem, not on all sides simultaneously, but on one side at a time. The rapid increase of the cells of, we will say, the north side of the stem, while those on the south side remain at rest, would have the effect to make the stem longer on that side than on the other, and bend it over toward the south. Now if this growth process creeps slowly around toward the east, the stem will be slowly bent and rolled over more and more toward the west, and, as the process continues quite around the plant, the extremity of the stem will be made to swing around through the whole compass of the circle. It is evident that this swinging motion of the end of the stem must continue as long as the process of growth goes on, in the internodes, and must stop in respect to any given internode, when the growth process stops in it. So we observe that consecutively, joint after joint, in the older parts of the plant, becomes stiff and immovable, while the newer parts continue the motion. But this exactly adapts it to the needs of the situation, for the growing

and the motion enable it to twine and climb, and the stiffening of the internodes at last keeps it in place as it is wound closely about its support.

The tendril and leaf climbers have those organs endowed with a sensitiveness or irritability which causes the tendril or the petiole of the leaf to wind about any small object which it is made to be in contact with for any considerable length of time. The end of the stem of some of the leaf climbers, the Clematis, for example, has the power of rotatory motion, like the true twiners. The sensitive leaves and tendrils of all have this power in a marked degree. When a tendril, reaching out and swinging around, comes in contact with some small object, it directly winds about it three or four times, and then begins to coil up from the middle, the coils running both ways, in opposite directions, thus compensating for each other, and not twisting the tendril off. This has the effect to draw the stem up near its support, and, at the same time, to fasten it by what is in effect an elastic cord. The coiled tendril is like a coiled wire spring, which allows the stem to have considerable lateral motion under the pressure of the wind, or other force, and yet suffers no injury itself, by straining or breaking, as it would if it remained a straight, "taut" string.

A remarkably curious fact is thus noted by Dr. Gray: "In revolving tendrils the most wonderful thing to remark is the way in which they avoid winding themselves around the stem they belong to. The active tendrils are, of course, near the top of the stem or branch. The growing summit beyond the tendril, now seeking a support, is often turned over to one side, so that the tendril, revolving almost horizontally, has a clear sweep above

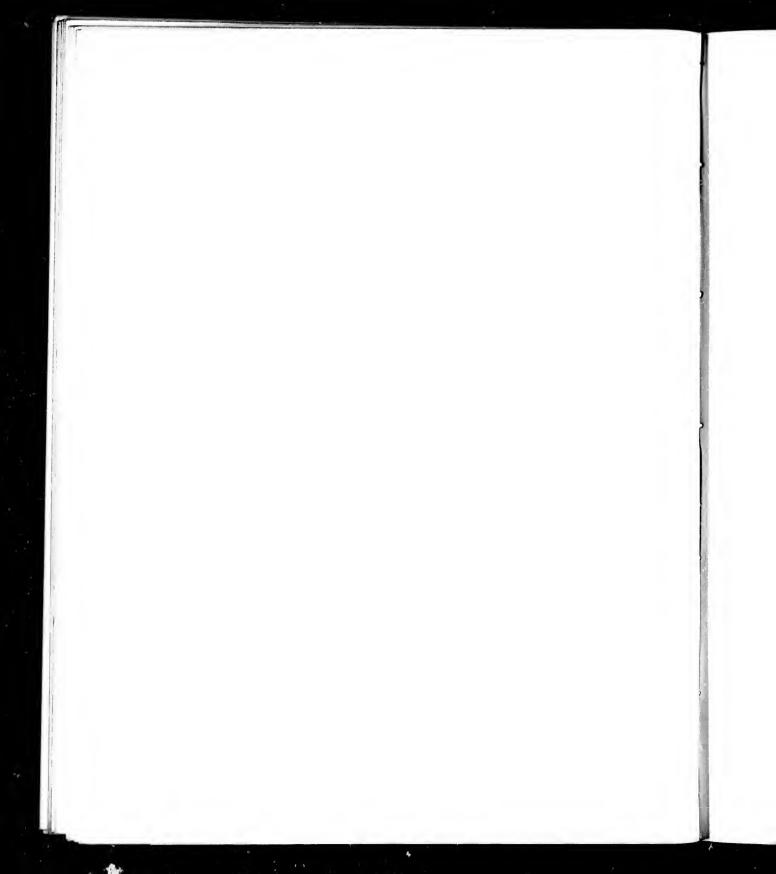
it. But as the growing stem lengthens and rises, the tendril might strike against it and be wound up around it. It never does. If we watch the slender Passion-Flower, which shows the revolving so well in a sultry day, we may see, with wonder, that when a tendril, sweeping horizontally, comes around so that its base nears the parent stem rising above it, it stops short, rises stiffly upright, moves on in this position until it passes by the stem, then rapidly comes down again to the horizontal position, and moves on so until it again approaches, and again avoids the impending obstacle."

The Clematis is a true leaf climber, although most of the species have the power of revolving their ultimate branches and internodes to a certain limited extent. Darwin gives the rate in several of the species as being from three to five hours. The sensitive petiole will clasp the small object which it is brought in contact with, in a period varying from a few hours to one or two days.

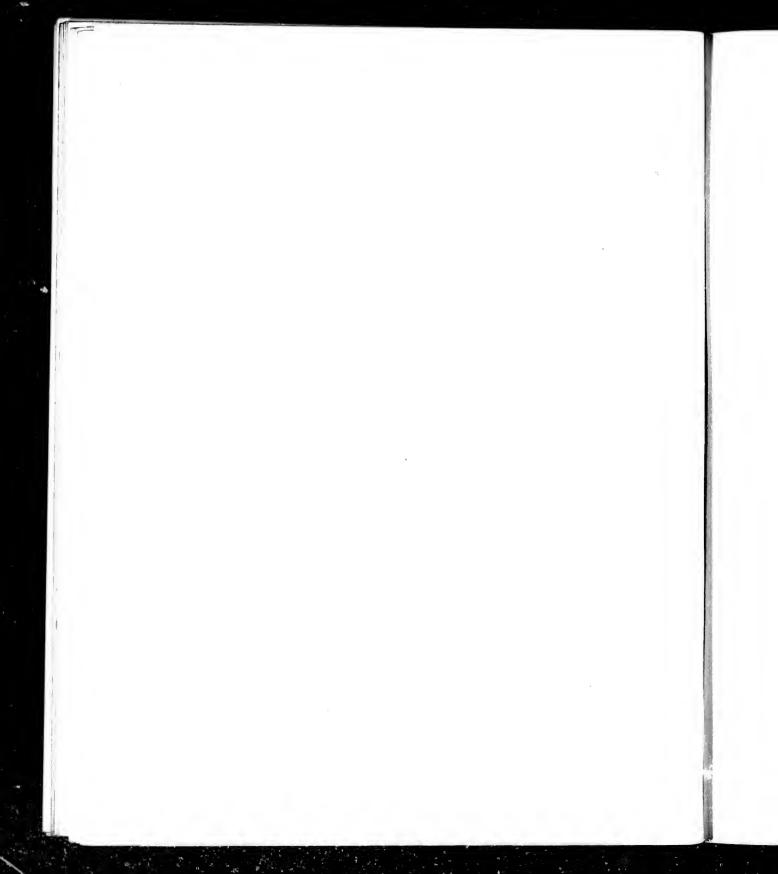
The behavior of these twining leaf-scalks cannot fail to be a matter of deep interest to any observant lover of nature. They seem to be incapable of discriminating as to what they will twine around, in this respect differing from the tendrils of the Passion-Flower, described above, for they will frequently be found coiled tightly round the other branches or leaves of the parent stem. It is an interesting and beautiful plant when growing, and not less so when matured and ripened, for,—

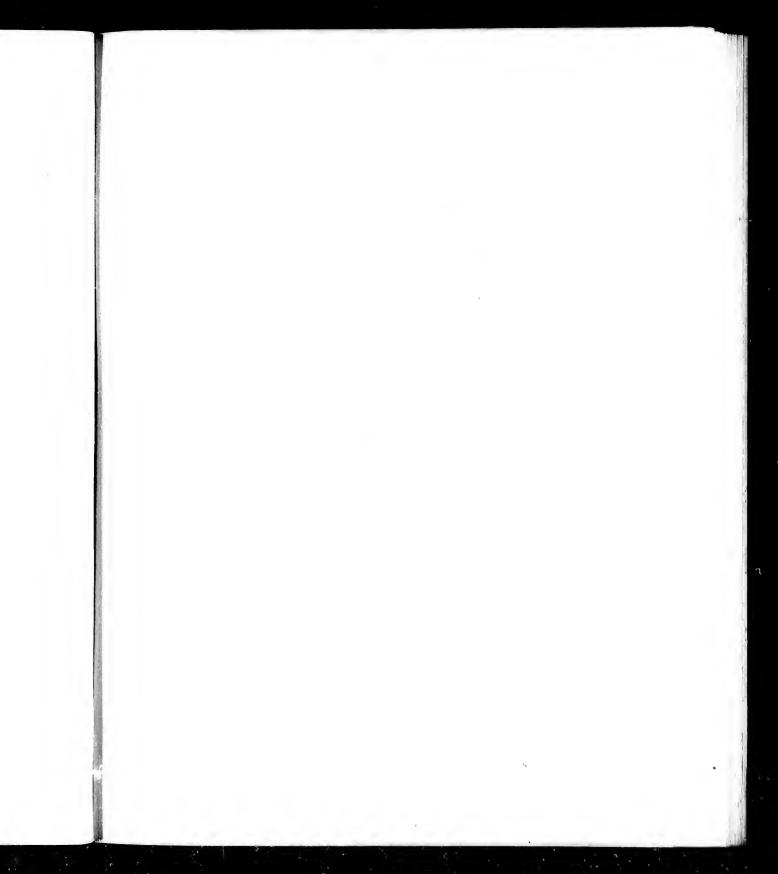
When the autumn days are here,
And the woods of autumn burn,
Then her leaves are black and sere,
Quick with early frosts to turn!
As the golden summer dies,
So her silky green has fled,
And the smoky clusters rise
As from fires of sacrifice,—
Sacred incense to the dead!

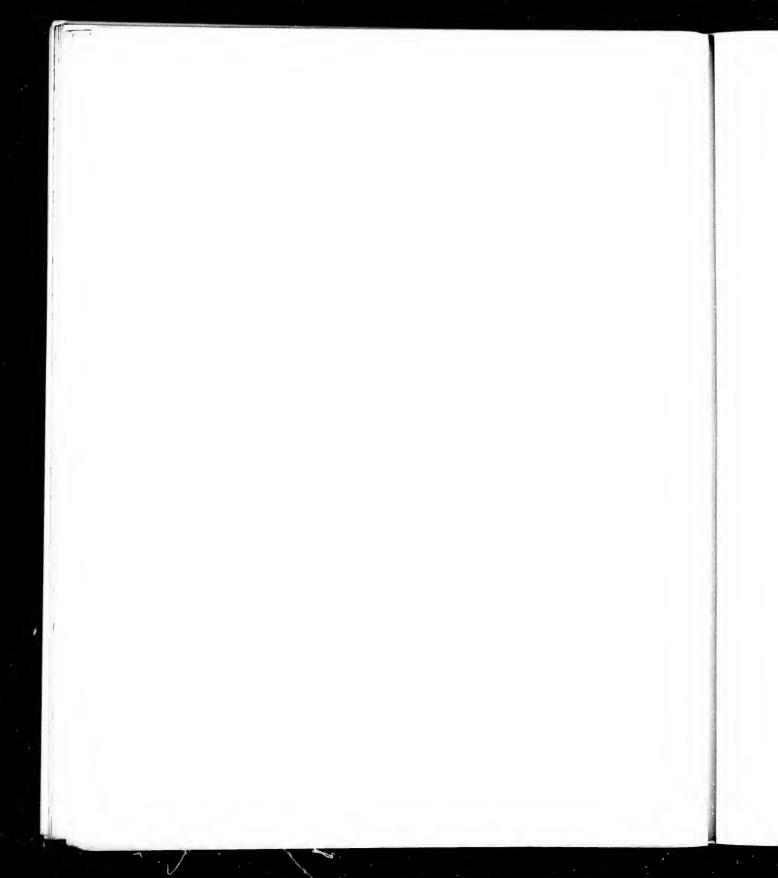
D. R. G.



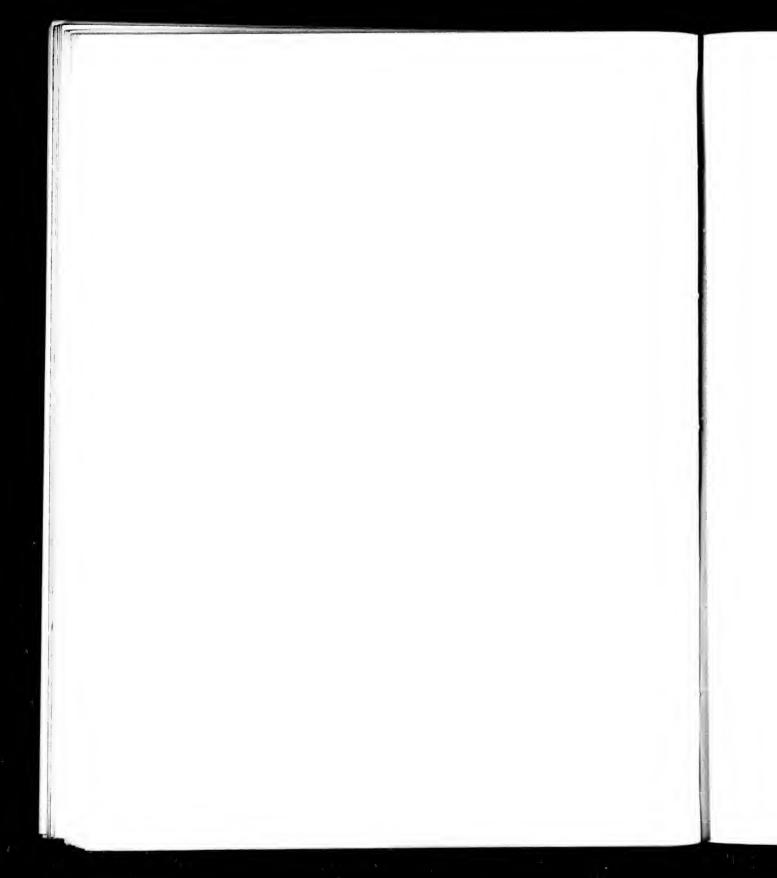
THE SWAMP ROSE.











## THE SWAMP ROSE.

ROSA CAROLINA, L.

While we invoke the wreathed spring, Resplendent Rose, to thee we'll sing; Resplendent Rose, the flower of flowers, Whose breath perfumes Olympus' bowers; Whose virgin blush, of chasten'd dye, Enchants so much our mortal eye; Oft has the poet's magic tongue The Rose's fair luxuriance sung; And long the Muses, heavenly maids, Have reared it in their tuneful shades, When, at the early glance of morn, It sleeps upon the glistening thorn, Tis sweet to dare the tangled fence. To cull the timid floweret thence, And wipe, with tender hand, away The tear that on its blushes lay! Tis sweet to hold the infant stems, Yet dripping with Aurora's gems, And fresh inhale the spicy sighs That from the weeping buds arise.

Anacreon.

We have two wild roses, quite widely, I might say almost universally, distributed in this country, east of the Mississippi River. One is named above, and the other is the Dwarf Wild Rose. The latter is the more fragrant, but is in no other sense the rival of the other. The Swamp Rose differs from its smaller companion, not only in its greater size, but in having the under side of its leaves of an ashen-gray color, while the upper is a brilliant green, and also in having decidedly hooked spines, or thorns, while those of the Dwarf Rose are straight. It grows to a height of four to six feet, generally on low ground, and flowers profusely from June through the summer. In the fall the orange-brown foliage and the brilliant red fruit make it an extremely attractive shrub, and oftentimes no inconsiderable element in the coloring of the autumn landscape.

Mr. Sprague has made such an exquisite picture of this most charming wild flower, that I do not deem it important to make particular mention of the details of its color, form, and habits.

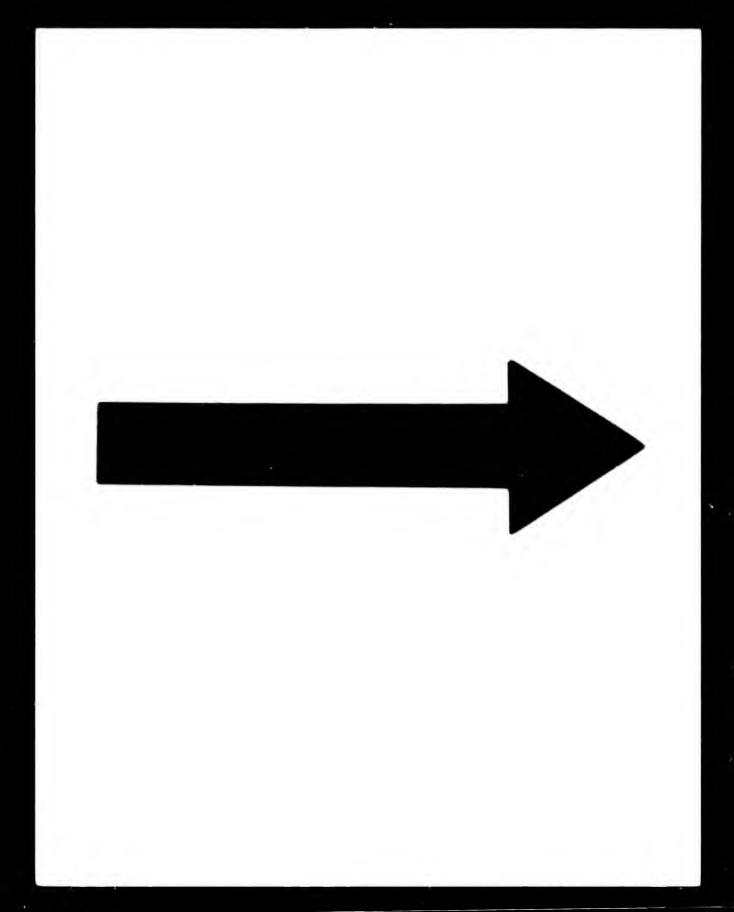
Of all the flowers of the field, none has had so large a share of human regard as the Rose. If Anacreon could write two thousand five hundred years ago of the poets then ancient to him.—

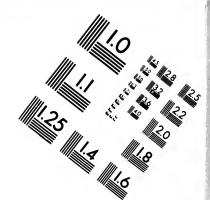
"Off has the Poet's magic tongue. The Rose's fair huxuriance sung,"

certainly we ought to be able to find volumes of rose poetry in our larger inheritance from the lengthening ages of the past. And we may. In song and legend, in political association and social and religious rite, the Rose has an abundant history.

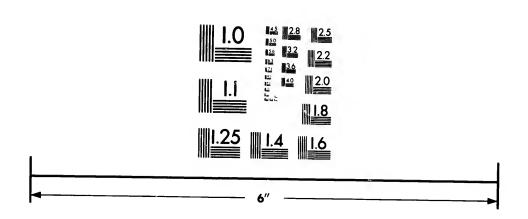
It was cultivated and admired in Babylon and Jerusalem more than a thousand years before the Christian era. Homer uses its brilliant colors to paint the picture of the rising sun. Aurora, according to this poet, has fingers of roses, and perfumes the air with these flowers. The Rose was consecrated to Aurora, or the Morning, and also to Harpocrates, the patron of silence, of which it is considered the symbol. Hence arose the expression, sub rosa, under the rose, which signifies that all things said under that ban should be held as private, and not to be repeated. It was a not infrequent custom to suspend a rose over the table in the banqueting hall, to remind the guests that all utterances there should be considered sub rosa.

The miraculous and divine origin of the Rose is represented in many fables of the mythologies. The most significant is, perhaps, the following, for it shows how much the Greeks must have prized and admired a flower which they called in the whole court of Heaven to help create. A favorite Nymph of Flora's royal train, whose rare beauty was equalled only by her purity and goodness, was one day found dead. The Queen of Flowers thereupon solicited the aid of all the Olympic deities to change the "inanimate clay" into a flower which should fitly commemorate on earth a divine creature so sweet and beautiful. So Apollo lent the life-giving power of his beams, Bacchus bathed it in nectar, Vertumnus gave it perfume, while his wife. Pomona, added fruit. Flora herself gave it its diadem of flowers, and called it a Rose. The Greeks were never forgetful of Flora's wish to have this beautiful creation of her tender love and her consummate skill considered and honored as the Queen of Flowers. And I confess I do not think Nature has ever, before or since, produced a plant which could successfully dispute the royal title with the Rose,



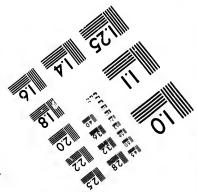


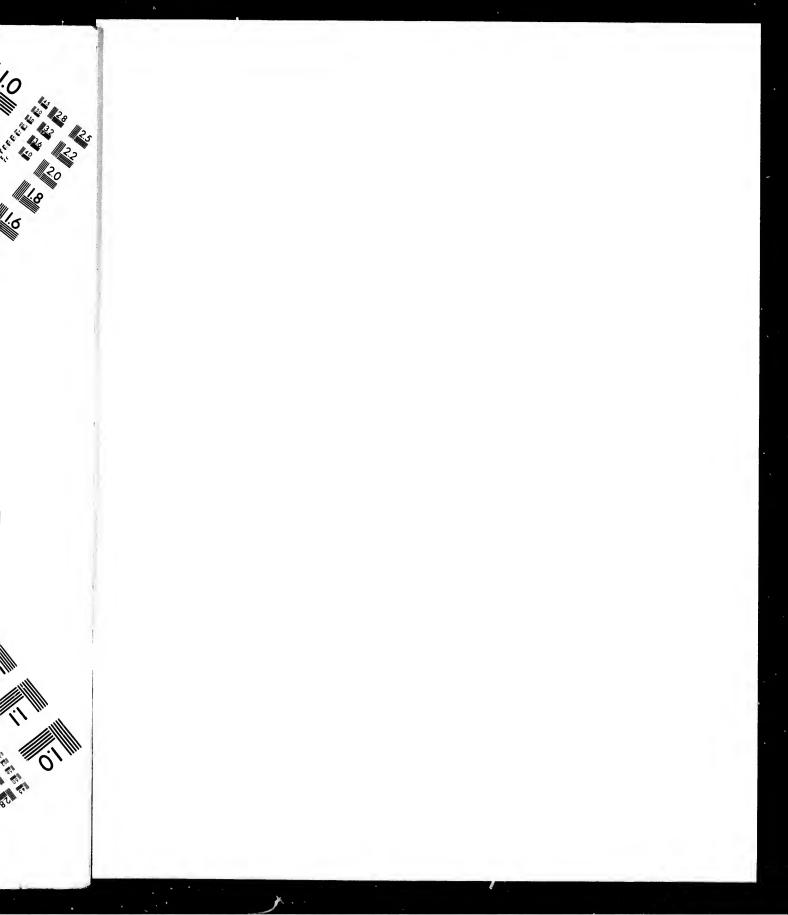
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There is a strange, though probably an unintentional suggestiveness in this old fable, which gives Vertumnus and Pomona both a hand in its creation, in the fact that the Rose belongs and gives its name to that order of plants which furnishes us with all our common fruits, from the apple and pear to the raspberry and plum.

The presence of thorns on the Rose tree, which has given rise to the proverb, "No rose without its thorn," is accounted for in different ways in the ancient authors and legends. Basil, a theologian of the early Christian centuries, says it is a result of the fall of man, and the corruption of the world by the human race. A poet has put the same thought in a more fanciful shape, in telling how, when Eve sought to come at the tree of the forbidden fruit, she ruthlessly trampled on the Rose, which, with other plants, fenced the sacred tree about, and, at this violence, and on account of its sense of shame at Eve's conduct,

"The native white its petals left, Which, blushing, turned to red."

This accounts also for the color and true beauty of the Rose, and to many will be, at least, some compensation for the unfortunate performance of our respected maternal ancestor. But the thorns came by the same cause, for,

"Ere this event of sin and shame,
No prickly thorns were found;
But now they burst from every stem,
And with the rose abound."

Another poet has given a still more poetical, and quite as

probable, reason for the thorns and the brilliant red of the Rose, in the following legend. Cupid, coming along one bright morning, found a splendid white rose, which he stood gazing upon with rapturous delight. But, as the flower itself relates, unknown to him,

"It chanced a bee was busy there,
Searching for its fragrant fare:
And Cupid, stooping too, to sip,
The angry insect stung his lip —
And gushing from the ambrosial cell,
One bright drop on my bosom fell!
Weeping, to his mother he
Told the tale of treachery;
And she her vengeful boy to please,
Strung his bow with captive bees;
But placed upon my slender stem
The poisoned sting she plucked from them:
And none, siace that eventful morn,
Have found the flower without a thorn."

Since the earliest times, Roses have been used in social fêtes and festivals, for crowns and garlands; in religious rites for decorating the altars, shrines, and images of the gods; and in funeral ceremonies, and memorial services, by being scattered freely upon the coffin, or planted by the grave, and in after years heaped upon the monument or wreathed about the urn holding the precious dust. Thus are we but reviving an old, old custom, when we with reverent hand place a wreath upon the resting-place of our "Martyred Dead" on "Decoration Day," or when we pay the tribute of private grief to departed loved ones by bringing garlands of fragrant flowers to lay upon the green sod above their still forms.

"Bring flowers to crown the cup and lute,— Bring flowers—the bride is near; Bring flowers to soothe the captive's cell, Bring flowers to strew the bier!"

The Rose has given its name to one of the sacred utensils of the Roman Church, the rosary, which is specially dedicated to the Virgin Mary, each of the small beads marking an *Ave Maria*, and each of the large ones a *Pater Noster* recited. The name is supposed to have come from the fact that the Virgin is often called the *rosa mystica*, or "Mystic Rose" of the Church.

"Our Lady of the Rosary!

What name can be so sweet,
As what we call thee when we place
Our chaplets at thy feet."

She is also called "Saint Mary of the Rose."

First, take these crimson roses,
How red their petals glow!
Red as the blood of Jesus,
Which heals our sin and woe.

See in each heart of crimson
A deeper crimson shine!
So in the foldings of our hearts
Should glow a love divine.

Adelaide Proctor.

The political, economical, and medicinal history of the Rose, would each make a chapter of itself. In the days of chivalry the gallant knights often decorated their shields or helmets with roses, "implying that sweetness should always be the companion

of courage, and that beauty was the only prize worthy of valor."

The "Wars of the Roses," so called, make one of the bloodiest and suddest pages of English history. The Count of Egmont, the founder of the House of Lancaster, as early as 1277 adopted for his heraldic device the Red Rose, which Thibaut, Count of Brie, a French nobleman, had brought home with him from Syria, in the wars of the Crusades. It may have been a Damask Rose, which is a native of Damascus, and, therefore, of Syria. The House of York had adopted the White Rose for its heraldic emblem, and the thirty years of civil war between the powerful factions contending for the crown, drenched England with the best blood of the realm. Nor was the sanguinary strife ended until the two rival houses were united in one by the marriage of Henry VII. with Elizabeth of York, and the Tudor sovereigns took as their badge a Rose, half red, half white, emblematical of the union of the rival houses. This has continued to be the recognized emblem of England in the same way that the Thistle and Shamrock (probably the wood-sorrel, not the clover) have been dedicated to Scotland and Ireland, respectively.

Many almost incredible stories are told of the extravagant luxury and magnificence of the Roman emperors and other eastern despots, in connection with the use and cultivation of the Rose,—of the profuse, almost boundless, employment of them in ministering to their pleasure and luxuriousness. Some of them are said to have slept on pillows of rose-leaves. And it is related that Cleopatra, in a feast given to Mark Antony and his friends, one day had the floor of the banqueting hall bedded in roses a foot and a half deep, and held down by a fine net-

work, so that the company walked upon them, a most costly and fragrant carpet. Nero, at a single feast, given at Baiæ, spent one hundred thousand dollars on roses alone. The ability to command such a great supply of these beautiful but short-lived flowers implies that a great deal of labor and skill was expended in the cultivation of them, and that immense gardens and great fields were devoted to their growth in the neighborhood of the capitals and centres of civilization of the ancient world.

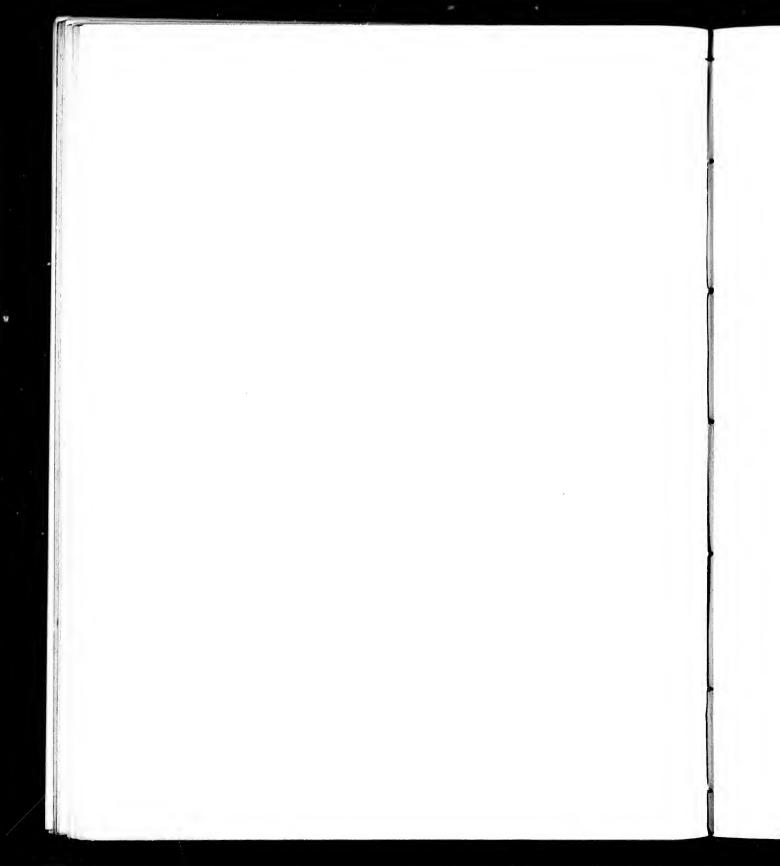
Of the Golden Rose, which it was the custom for the pope to send to the most wise or virtuous prince among all who held allegiance to the church,—of the attar of roses, the most delicate, precious, and costly perfume known to the arts, of the manner of making it, and of the great prices paid for it,—and of many other such things I must not take the space to write. But of the sentimental symbolism of the Rose, I must be permitted just to make mention in closing. From time immemorial it has been dedicated to the strongest and noblest passion which dwells in the human heart,—Love,—and it is everywhere reckoned the fittest emblem of a fair and virtuous maidenhood, at once the object and the shrine of the tenderest and purest love.

The Rose is fairest when 'tis budding new,
And Hope is brightest when it dawns from fears:
The Rose is sweetest washed with morning dew,
And Love is loveliest when embalmed in tears.

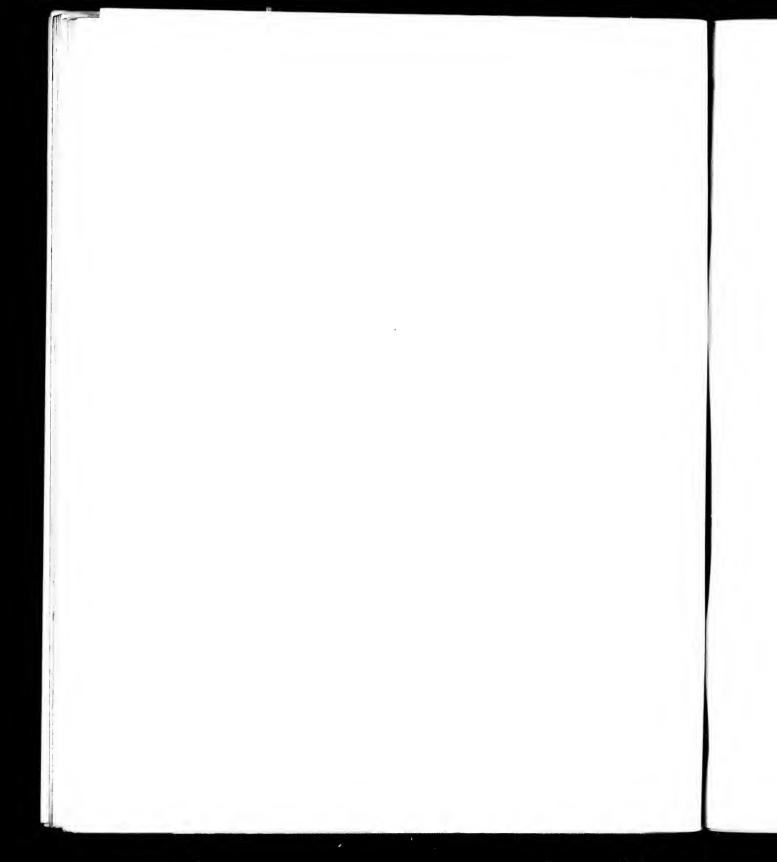
Scott.

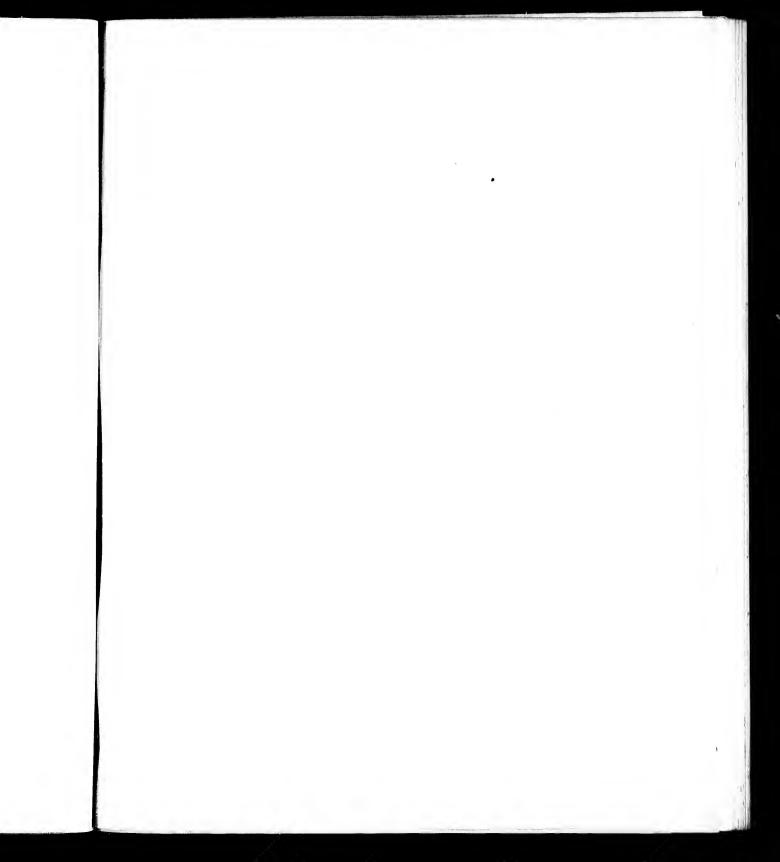
Dear flower of Heaven and Love! thou glorious thing,
That lookest out the garden nooks among;
Rose, that art ever fair and ever young;
Was it some angel or invisible wing
Hovered around thy fragrant sleep, to fling
His glowing mantle of sunset hues
O'er thy unfolding petals, wet with dews
Such as the flower-fays to Titania bring?
O flower of thousand memories and dreams,
That take the heart with faintness while we gaze
On the rich depths of thy inwoven maze;
From the rich banks of Eden's blessed streams
I dreamed thee brought, of brighter days to tell,
Long passed, but promised yet with us to dwell.

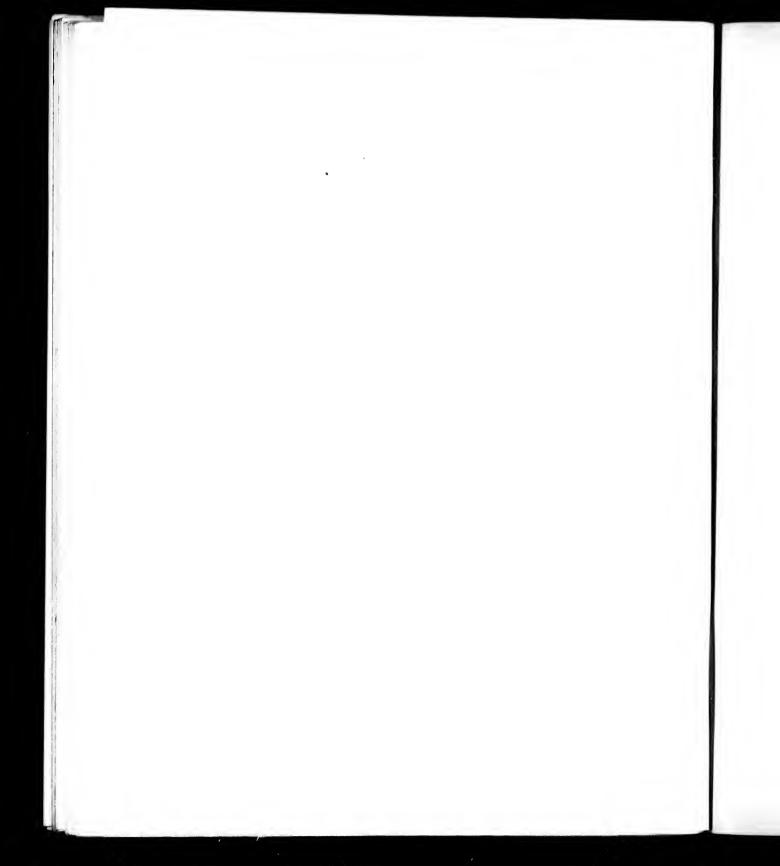
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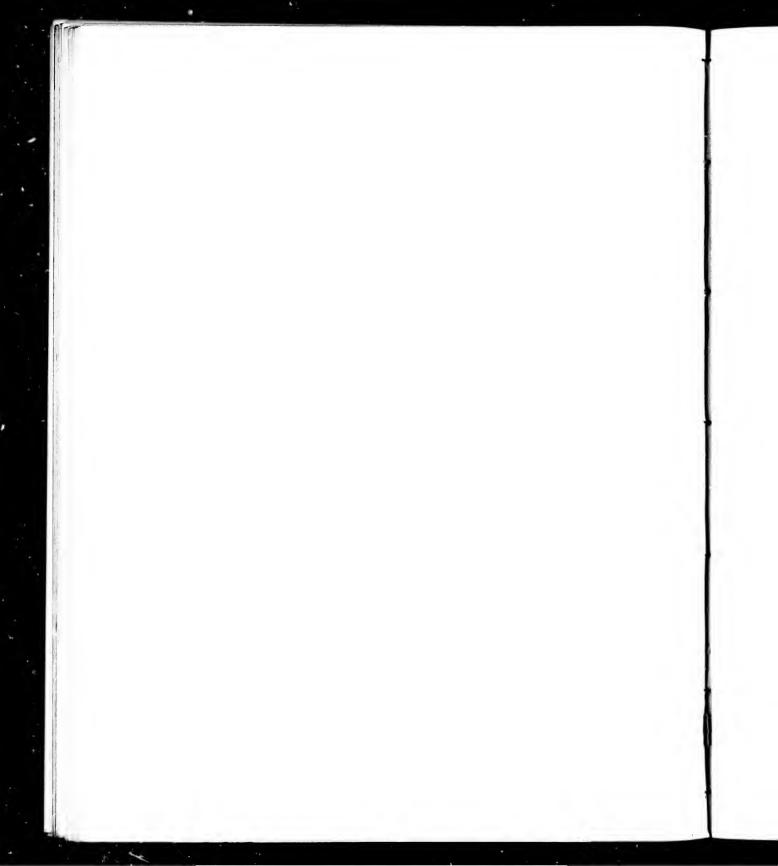
THE WATER LILY.











### THE WATER LILY.

NYMPHÆA ODORATA, Ait.

"Mark where transparent waters glide, Soft flowing o'er tranquil bed; There, cradled on the dimpling tide, Nymphæa rests her lovely head;

But, conscious of the earliest beam,
She rises from her humid nest,
And sees reflected on the stream
The virgin whiteness of her breast—

Till the bright day-star to the west Declines, in Ocean's surge to lave; Then, folded in her modest vest She slumbers on the rocking wave."

The sweet-scented Water Lily is a native of this country, and is one of our finest contributions to the floral treasures of the world. But its nearest living relative, the *N. leuca* of the Greeks, the *N. alba* of the modern botanist, has long been known and admired by both naturalist and poet. It is mentioned by Pliny, and some of the very earliest Greek writers. It differs

from the more clegant flowers of our ponds and still-running streams only in being somewhat smaller, less odoriferous, and in having more strongly veined leaves.

The genus was christened by the Greeks, and derives its name from the old belief that Nymphs and Naiads dwell in, and preside over, gently flowing streams, and the limpid waters of placid lakelets, where

"Broad white lilies lie tremulously,
And starry river-buds glimmer by,
And around them the soft stream doth glide and dance
With a motion of sweet sound and radiance."

The species is widely distributed in this country, and is a universal favorite with all classes. It certainly deserves all the admiration it receives, for it is not easy to imagine a flower which combines any rarer charms of form and fragrance than are found in this floral Nymph. Although it seldom departs from its typical color of pure white, inclosing the golden yellow, or as Sir Walter Scott describes it growing in Loch Katrine,—

"The water lily to the light
Her chalice reared of silver bright,"

yet, she sometimes, in this country, deigns to paint her fair face with a blush of delicate pink. The ponds and lakes of Cape Cod, and especially those about Falmouth, Massachusetts, are famous for these strange blossoms of the Water Lily, which seem to have caught some of the glow of the rosy morn upon the pure white of their expanded petals.

There are few flowers, native to our fields and forests, which

make a longer season of it with their blooming than the Water Lily. Says Colonel Higginson, an observer of rare accuracy, speaking of the Mountain Laurel and the Water Lily: "At the same time with this royalty of the woods, the queen of the water ascends her throne, for a reign as undisputed and far more prolonged. The extremes of the Water Lily in the vicinity of Boston, so far as I have known, are the 18th of June and the 13th of October,—a longer range than belongs to any other conspicuous wild flower, unless we except the Dandelion and the Houstonia."

The Water Lily is always associated with thoughts of cool and shady streams, and wood-bordered lakes, which, in glassy stillness, embosom in their depths a world of sky and clouds.

Oh, beautiful thou art,
Thou sculpture-like and stately River-queen!
Crowning the depths, as with the light serene,
Of a pure heart.

Bright lily of the wave!
Rising in fearless grace with every swell,
Thou seem'st as if a spirit meekly brave,
Dwelt in thy cell.

Lifting alike thy head
Of placid beauty, feminine, yet free,
Whether with foam or pictured azure spread,
The waters be.

Hemans.

The Water Lily comes of a noble family, a family which can boast the classical and sacred Lotus of the storied Nile, and the royal and gigantic *Victoria regia* of the lordly Amazon, among

its scions. Yet this gentle flower has a humble spirit; and, like a human soul which is both pure and wise, is content to rest upon the low level of its appointed place, and contribute only beauty and sweetness to the world's great treasury of good.

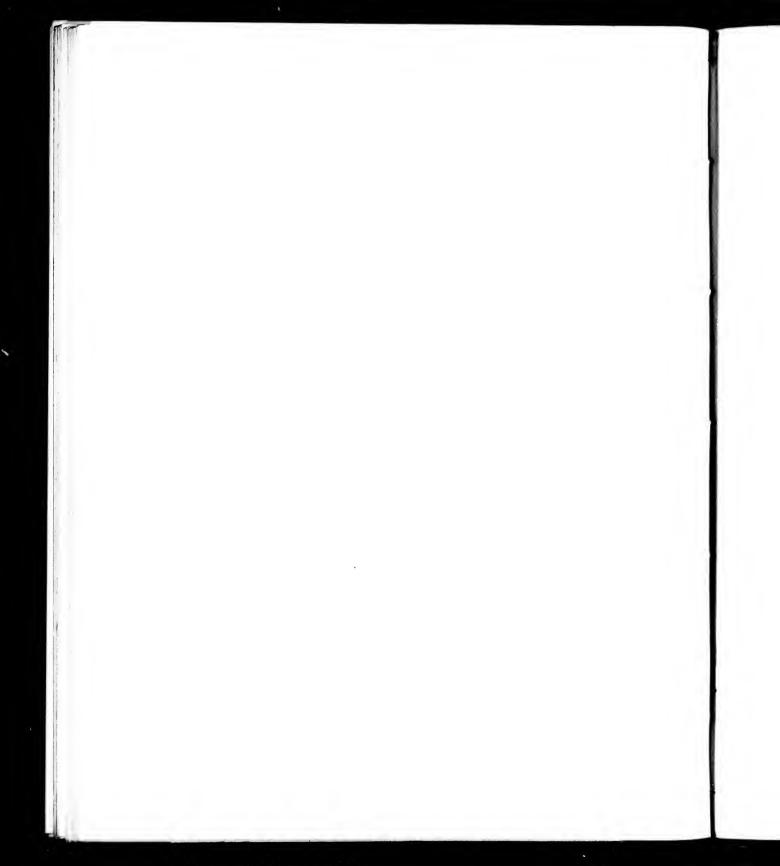
Though the Water Lily is not named in the following lines from Bryant, who was more truly nature's poet than any English-speaking writer, save Wordsworth, yet we cannot be mistaken in assuming that the "snow-white flower" which the "innocent child" held in its hand as the fittest emblem of its innocency was a white Water Lily.

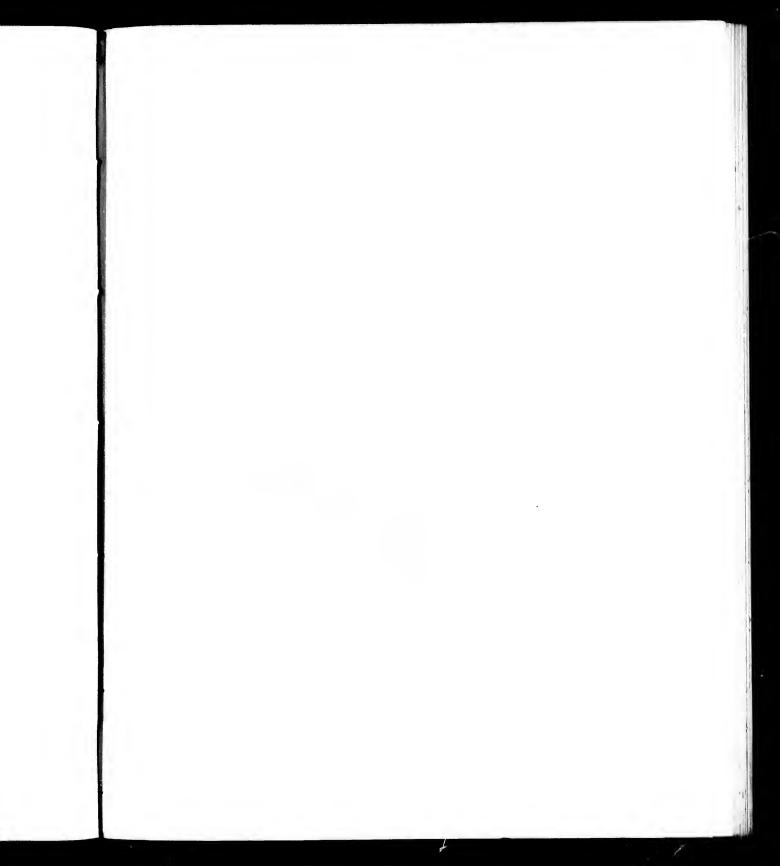
Innocent child and snow-white flower!
Well are ye paired in your opening hour.
Thus should the pure and the lovely meet,—
Stainless with stainless, and sweet with sweet.

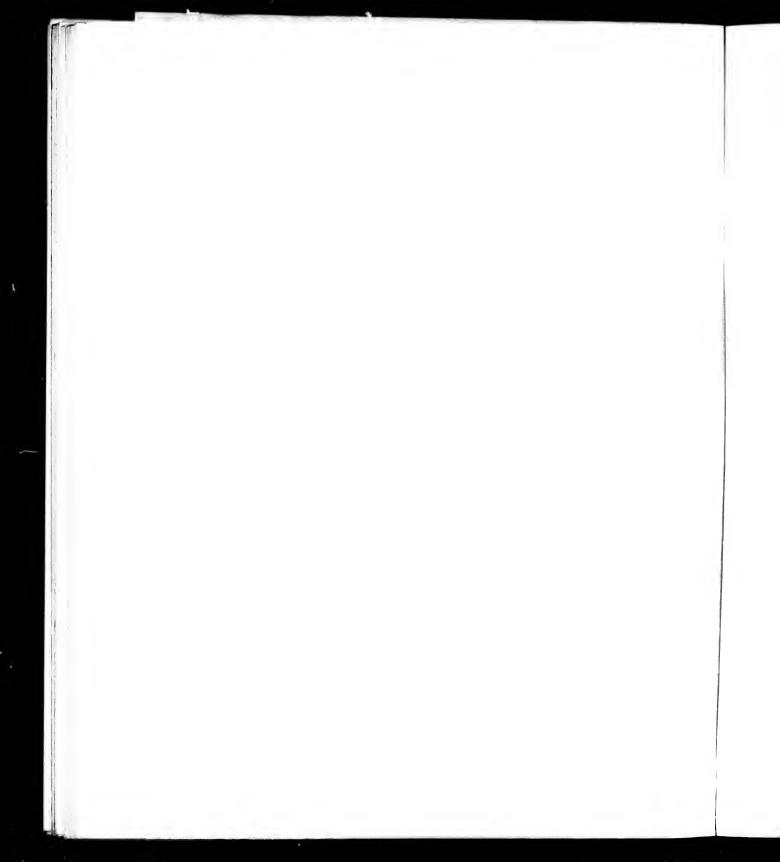
White as those leaves, just blown apart;
 Are the folds of thy own young heart;
 Guilty passion and cankering care
 Never have left their traces there.

Artless one! though thou gazest now O'er the white blossom with earnest brow, Soon will it tire thy childish eye; Fair as it is, thou wilt throw it by.

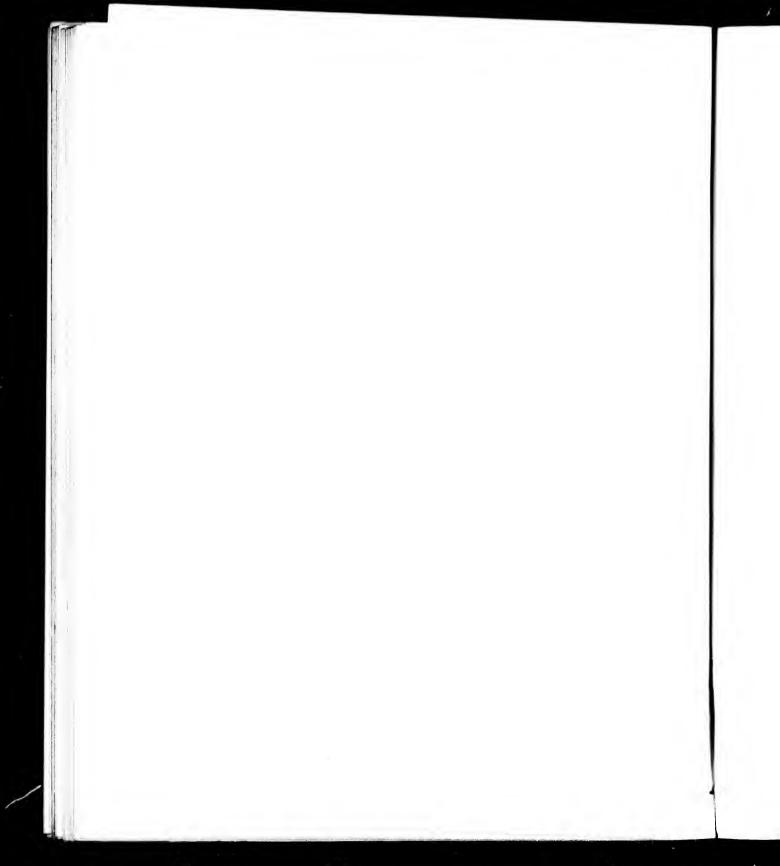
Throw it aside in thy weary hour, Throw to the ground the fair white flower; Yet, as thy tender years depart, Keep that white and innocent heart. THE MOCCASIN FLOWER.











# THE MOCCASIN FLOWER.

(LADY'S SLIPPER.)

CYPRIPEDIUM ACAULE, Ait.

Flowers, as the changing seasons roll along,
Still wait on earth, and added beauties lend;
Around the smiling Spring, a lovely throng,
With eager rivalry her steps attend;
Others with Summer's brighter glories blend;
Some grace wild Autumn's more majestic mien;
While some few lingering blooms the brow befriend
Of hoary Winter, and with grace screne,
Enwreath the king of Storms with mercy's tender sheen.

Barton.

Mysterious round! what skill, what force divine,
Deep felt, in these appear! A simple train,
Yet so delightful mix'd, with such kind art,
Such beauty and beneficence combined;
Shade, unperceived, so softening into shade;
And all so forming one harmonious whole;
That as they still succeed, they ravish still.
But wandering oft, with brute unconscious gaze,
Man marks not Thee, marks not the mighty hand
That, ever busy, wheels the silent spheres;
Works in the secret deep; shoots, streaming, thence,
The fair profusion that o'erspreads the Spring.

Thomson.

It is worth while, however, to notice that "the fair profusion that o'erspreads the Spring" comes with something of the same definite regularity with which the "silent spheres" wheel their course through the heavens. These never miss an appointment, be they "silvery moon" or "blazing stars," by so much as a shade of a second. It was a fancy of Linnaeus to construct a floral clock, or sundial, by planting a circle of flowers in the garden, whose time of opening should mark the hours of the day. Though, perhaps, they would not keep time to the fraction of a minute, yet,

"Twas a lovely thought to mark the hours,
As they floated in light away,
By the opening and the folding flowers,
That laugh to the summer's day."

There is a law which governs the yearly blooming of the plants, which is quite as orderly as that which assigns to them the hour of the day when they shall open and shut their brilliant eyes. Most careful botanists are acquainted with this habit of the plants which they study. Emerson says that Thoreau "thought that if waked up from a trance in a Concord swamp, he could tell by the plants what time of year it was within two days." No doubt he could, for he was a close observer of Nature's habits, and he had found out that what is lawless confusion to the uninstructed, is but an orderly profusion to him who is acquainted with the almost startling exactness of Nature's processes.

That day as they walked, Emerson says: "He looked for *Menyanthes*, 'Buck bean,' detected it across the wide pool, and on examination of the florets, decided that it had been in flower five days. He drew out of his breast-pocket his diary, and read

the names of all the plants that should bloom on this day, whereof he kept account, as a banker when his notes fall due: 'The Cypripedium not due till to-morrow.'"

"To-morrow' in these parts," says Higginson, "means about the 20th of May. It belongs," he continues, "to the family of Orchids, a high-bred race, fastidious in habits, sensitive as to abodes." Most Orchids are rare in our Northern Flora, and yet, he observes, as most who have gathered these charming plants must have often felt, that even this species, as abundant as it is, "retains the family traits in its person, and never loses its high-born air, and its delicate veining. I know a grove where it can be gathered by the hundreds, within a half-acre, and yet I can never divest myself of the feeling that each specimen is a choice novelty." It certainly is choice, if it is not a novelty.

It grows in both dry and damp woods, under evergreens and deciduous trees alike. I have found it plentiful in all these situations, about Taunton, Massachusetts; and my memory of its rare charms, as I gathered it by the streams on the northern spur of the Alleghany Mountains, in Western Pennsylvania, in my boyhood days, now more than thirty years ago, is as fresh and delightful as though it were but yesterday. I have taken it from the middle of May to near the end of June, and I do not doubt it may be found throughout the latter month.

To any who appreciate curious forms as well as graceful outlines and brilliant colors, there can be no wild flower of our woodlands more attractive than the pink Lady's Slipper. It certainly cannot be necessary that I should add a word of praise for the work of the artist, to any who have seen the plant as well as the picture. It speaks for itself.

I have had frequent occasion in these papers to note how the most beautiful flowers have become associated with the name or memory of the Blessed Virgin. Indeed, it seems to be a passion with the reverent children of the Church, to dedicate the most beautiful things of earth to Her, who, in their thought, is the most beautiful being in heaven. Our present flower is not an exception. While the generic name signifies Venus' Slipper, and Americans have called it the Moccasin Flower from its marked resemblance to the foot-covering of the Aborigines, the popular name given to the common species of France, C. Calceolus, is "Sabot de la Vierge," and "Soulier de Notre Dame," or "Our Lady's Slipper."

Like most of the Orchids, it has an arrangement of parts which renders it very difficult, if not impossible, to be fertilized by its own pollen. The stamens and pistils are united into a single organ called the "Column," which projects forward from the stem into the open space at the top and within the sacklike labellum, or "lip." The stamens lie back of the stigma in such a position that the pollen could not, except by the help of insects, or other artificial means, be transferred from the one to the other. But the flower is admirably contrived so as to solicit, and use, the help which such insects as bees and flies may bring The large, gayly-colored, pendant bag, which makes the most conspicuous part of the flower, is opened with a narrow slit down the front, and the edges of the opening are turned inward. This forms a regular trap, easy to get into, but quite impossible to get out of, at least by the same door. The "busy bee," searching for toothsome morsels, easily penetrates to the interior of this floral sack through the narrow open door.

Once in, and satisfied, he looks about him for a way out. finds it at last, but not by the way he came in. At the top of the flower, on either side of the "Column," he finds a passage into the open air, quite wide enough for a small but enterprising bee to push his way through. In doing this, however, he brushes against, and frequently carries away upon his hairy sides or back, the sticky pollen mass of the open anthers. Now, if he enters another flower of the same species, as he will be very likely to do, and in due time makes his exit through the only open door, he will certainly get some of this pollen on the stigmatic surface of that flower, and fertilize it. For the stigma is covered with minute papillæ, like the teeth of a hetchel, which project forward, and the pollen is effectually combed off him as he goes by. Notwithstanding this elaborate contrivance for fertilization, and this curious adaptation of means to that end, it remains true, as we are assured by good observers, that few plants are ever fertile, they being chiefly propagated by the root, which keeps its life from year to year.

This has, apparently, not been a favorite with the poets. Only one American songster has chanted its praises, so far as I know, and she has, I am glad to see, devoted her young muse mostly to our beautiful wild flowers.

Yet shy and proud among the forest flowers.

In maiden solitude,

Is one whose charm is never wholly ours,

Nor yielded to our mood;

One true-born blossom, native to our skies,

We dare not claim as kin.—

Nor frankly seek for all that in it lies,

The Indian's Moccasin.

Graceful and tall the slender drooping stem, With the broad leaves below,

Shapely the flower so lightly poised between, And warm her rosy glow;

Yet loneliest rock-strewn haunts are all her bent; She heeds no soft appeal,

And they alone who dare a rude ascent, Hec equal charm may feel.

For lightly ever falls the tireless foot, That's only shod with flowers!

No lagging step outruns the happy days,— Our tread is soit as rain;

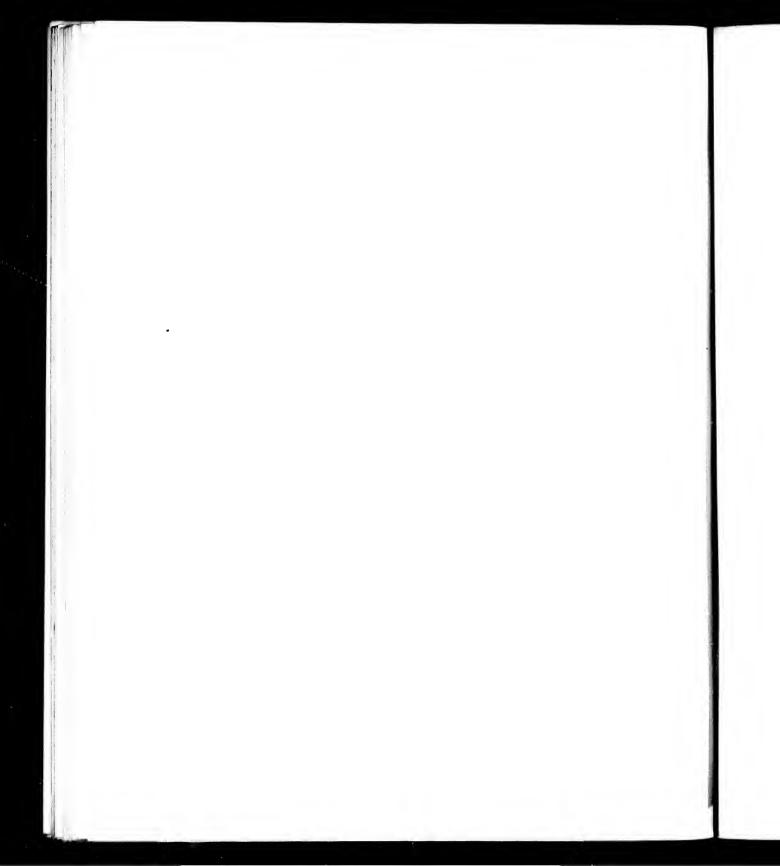
With careless joy we tread the woodland ways, And reach her broad domain.

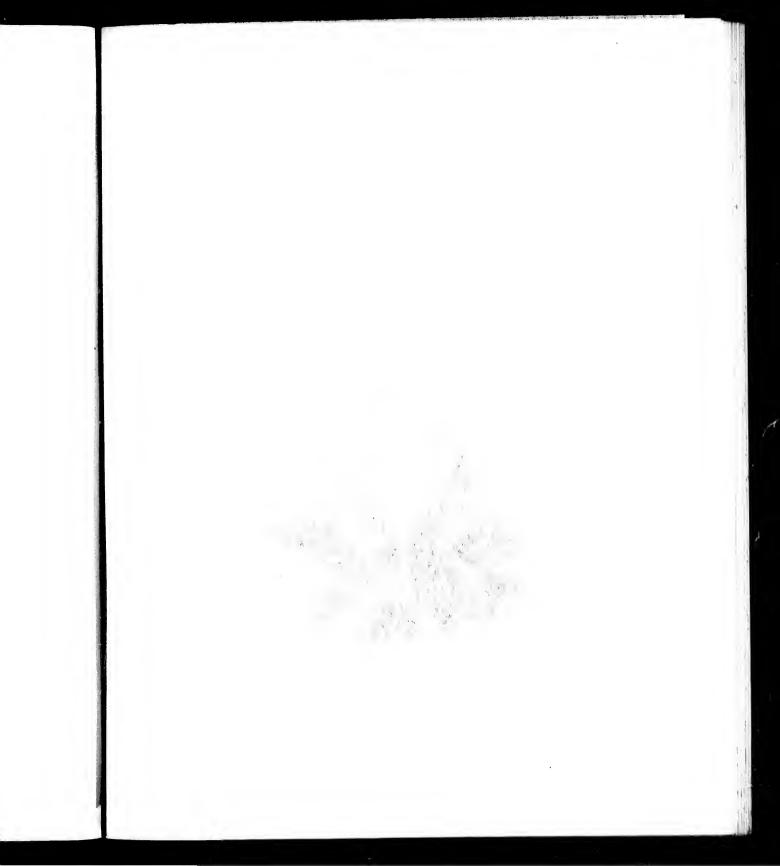
Thro' sense of strength and beauty, free as air,
We feel our savage kin,—

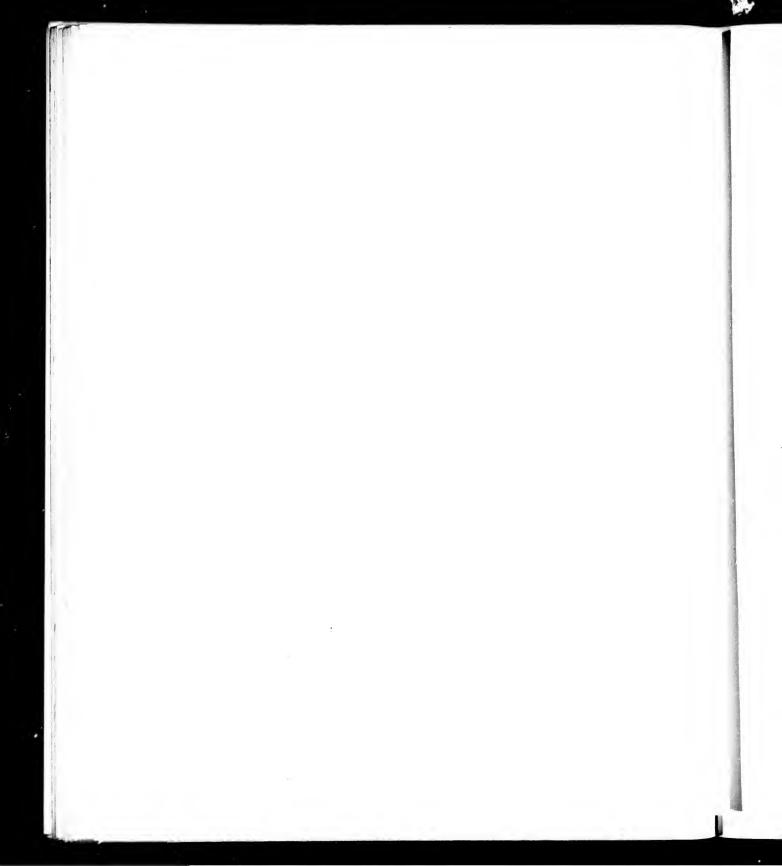
And thus alone, with conscious meaning, wear The Indian's Moceasin!

Elaine Goodale.

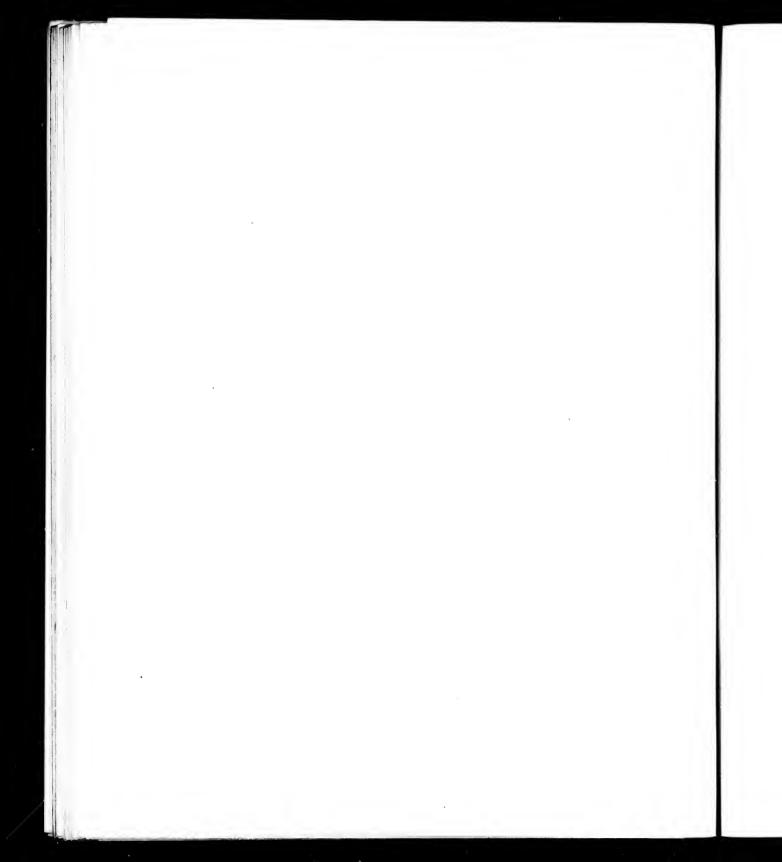
THE ARROW-LEAVED VIOLET.











#### THE

## ARROW-LEAVED VIOLET.

VIOLA SAGITATA, Ait.

When beechen buds begin to swell,
And woods the blue-bird's warble know,
The little violet's modest bell
Peeps from the last year's leaves below.

Ere russet fields their green resume,
Sweet flower, I love, in forest bare,
To meet thee, when thy faint perfume
Alone is in the virgin air.

Oft in the sunless April day,

Thy early smile has stayed my walk;
But midst the gorgeous blooms of May,
I passed thee on thy humble stalk.

So they who climb to wealth forget
The friends in darker fortunes tried.
I copied them — but I regret
That I should ape the ways of pride.

And when again the genial hour
Awakes the painted tribes of light,
I'll not o'erlook the modest flower
That made the woods of April bright.

Bryant.

IF all flowers are thus, thought-awakeners to the thoughtful, there must be a peculiar charm of this sort in the Violet.

Poor crazed Ophelia, offering to Lacrtes, one by one, the flowers of her wayside gathering, says,—

"There is pansies, that's for thoughts."

Pansies and this idea of thought must have got wedded early, for Ophelia's phrase only translates into English the meaning of the name which is doubtless derived from the French word, pensee, thought. But pansies are only civilized and cultivated violets,—*Tiola tricolor*,—violets whose environments have been made more favorable to the development of possible beauties, and show what cultivation can do in improving wild nature.

That the pansy and other violets should have been suggestive of thought, or thoughtfulness, is by no means a wonder to me. Indeed, I can hardly see how the modest way it has of hanging down its head, in a quiet, thoughtful, pensive fashion, could have suggested any other association to the mind of a reflective observer.

"I would give you some violets," Ophelia says, "but they withered all, when my father died;" which gives us a hint of another association connected with the violet. It was early consecrated alike in rural life and poetic imagery to the memory of the departed. In the language of flowers, Shakespeare assures us, "The violet is for faithfulness;" there being, I suppose, some connection between that quality and its "true blue" color. It was adopted by the Bonapartes as their family emblem, perhaps on account of this significance.

The modesty, as well as the beauty, of this charming spring

wild flower, has made it a favorite with the poets, ever since Homer wrote of it, as he had seen it many a time in the far-off vale, upon the "rushy banks" of the Meles.

"Everywhere appeared Meadows of softest verdure, purpled o'er With violets. It was a scene to fill A god from Heaven with wonder and delight."

If there are no "violets blue," or other flowers in heaven, I greatly wonder how the gods, or anybody else, can be long content there. Truly we may expect the Christian's heaven to be radiant and fragrant with a wealth of flowers, for was not He who is the "King of Heaven" passionately fond of flowers when on earth he made his home, teaching from them many a sweet lesson of trust and patience? And is He not called in the "Elder Scriptures" "The Rose of Sharon" and "The Lily of the Valleys"?

The Wild Violet of England and the continent of Europe, which is the theme and admiration of so many poets, differs from our own by possessing a most exquisite fragrance, as our English garden violets, *Viola odorata*, will abundantly demonstrate. The comparison which the Duke makes in "Twelfth Night," between soft music and the south wind laden with the fragrance of violets, makes mention in a sufficiently poetical way of this attribute of the flower.

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

This—as well as its color, form, and modest bearing—has charmed the appreciative senses and won the susceptible hearts of all true poets.

Beantiful are you in your lowlmess;
Bright in your lines, delicious in your scent,
Lovely your modest blossoms, downward bent,
As shrinking from our gaze, yet prompt to bless
The passer-by with fragrance, and express
How gracefully, though mutely eloquent,
Are unobtrusive worth and meck content,
Rejoicing in their own obscure recess.
Delightful flowerets! at the voice of spring
Your buds unfolded to it's sunbeams bright;
And though your blossoms soon shall fade from sight,
Above your lowly birthplace birds shall sing,
And from your clustering leaves the glow-worm fling
The emerald glory of his earth-born light.

Barton.

Though the delicate blue has so long been recognized as the characteristic color of these flowers,—

"Blue, blue as if the sky let fall
A flower from its cerulean wall"—

that it has even given the name to the most refrangible ray of the solar spectrum, the extreme blue or violet light; yet the tradition runs that the flower was originally white, as several species of it are now. Indeed, our only native violet which has any noticeable fragrance, is a white one.

Shakespeare has preserved to us a form of the legend which tells how this white flower came to be purple as it is, in the well-known lines from "Midsummer Night's Dream," the last of which only shall we be able to make room for here.

It seems that Cupid once had hostile intentions towards

"A fair vestal throned by the West,"-

supposed to have been famous "Queen Bess," of England's "Seagirt Isle," who, for reasons not far to find, though perhaps not fair to mention, was not an inspirer of the tender passion to any great extent, nor much susceptible to it, either.

Being "all armed" one night, the little god drew such a bow as that it might, Oberon says, "have pierced an hundred thousand hearts." But his aim was poor, or the "fair vestal" was armored with double-plated steel, for unharmed

> "The imperial votaress passed on In maiden meditation, fancy free."

#### Oberon continues:

"Yet marked I where the bolt of Cupid fell:
It fell upon a little western flower,
Before milk-white; now purple with love's wound,
And maidens call it 'love-in-idleness.'
Fetch me that flower; the herb I showed thee once;
The juice of it on sleeping cyclids laid,
Will make or man or woman madly dote
Upon the next live creature that it sees."

It wrought a most absurd charm upon sprightly Queen Titania, in that fairy world of dreams. But it has not ceased, even to this time, to have a charm, which it can easily cast over the hearts of Nature's worshippers, who go about seeking shrines in woodland and field, by mountain and river.

I think no one reared in the country will ever have the memories of spring rambles through the woods and pastures, in childhood, disassociated from the "blue violets." They were everywhere beneath our feet. We could always find them, and never too many of them. Who does not also remember a

game of this sort with them. Calling them "roosters," we would lock their heads together by the projecting spur into which the lower petal is extended, and then pull away until one or the other of the heads flew on,—the one whose head stayed on being of course the victor in the contest. It always seemed to me a cruel way to treat these innocent little things, for I always had a feeling that somehow there was sensitive life in them. But after taking our fill of this floral cock-fighting, there were always enough violets left to fill our hands, as we trudged away home.

Before we turn away from the poet to find out what the naturalist has to say for this beautiful flower, which is the delight of childhood and old age alike, we must not miss those tender and plaintive lines, in which Wordsworth twines in an immortal wreath the memory of modest virtue with the modest violet.

She dwelt among the untrodden ways
Beside the springs of Dove,
A maid, whom there was none to praise,
And very few to love.

A violet by a mossy stone, Half hidden from the eye, Fair as a star when only one Is shining in the sky.

She lived unknown, and few could know When Lucy ceased to be,
But she is in her grave, and oh,
The difference to me.

Professor Mechan assures us that there is some ground for supposing that the old Latin name for this flower, the same that the great Linnæus also adopted for it in his system, *Viola*, is from the same root as *via*, a path or road, and refers to the fact that this little "blue beauty" was always found the traveller's constant companion beside every way or path which he might take, through field or forest.

There are three species of blue violets common all over the country, viz., the one given in our plate, *I'iola sagitata*, and the "Common blue Violet," *I'. cuculata*, and the "Bird's-foot Violet," *I'. pedata*. These species are more easily distinguished from each other by their leaves than by anything else. In the first the leaf is not always shaped like an arrow-head, as its name would imply, but more often like the bowl of a teaspoon, while the petiole, or handle of the spoon, which is short, is apt to be somewhat widened by the extension of the narrow margin of the leaf down its sides.

The leaves of the second are much larger, and heart-shaped at the bottom, with the lobes frequently rolled in. The leaf of the last is deeply divided, quite down to the petiole, the parts of the leaf radiating from its extremity as the toes of a bird's foot radiate from the extremity of the leg.

The blossoms of the "Arrow-leaved Violet" are, perhaps, the deepest and richest blue, while those of the "Bird's-foot Violet" are most likely to be variegated in color. They often show, indeed, a near approach to those of the pansy, in the striking contrasts of shade in the same flower, and in the velvety texture of some of the petals.

Though the Violet produces such an abundance of perfect flowers, that is, flowers with fully developed stamens and pistils, yet it has been found that scarcely any of them are ever fertile, and it is very rare that one finds a seed vessel produced from these blue blossoms. The reason for this sterility is not exactly known. But if you will carefully observe the Arrow-leaved Violet along into the summer, you will find that it produces flowers without these beautiful blue petals, flowers which, perhaps, it will be difficult to discover, for they will consist only of stamens and pistils enclosed and hid away out of sight in the green envelope which the botanist calls the calyx. This flower is very fertile and always self-fertilized. Plants which have these "secret marriages" are called *cleistogamous*.

By one of those curious and ingenious contrivances for which Nature is so much celebrated, ample provision is made for the wide distribution of the seeds produced from these hidden flowers. When the seed-holder is ripe, the sides contract and press inward upon the smooth inclosed seeds in such a way as to snap them out to a considerable distance, as a bean may be snapped from between the thumb and finger by a smart pressure.

The sudden projection of the seeds in this way has given rise to the belief among the people in some parts of England that the Violet breeds fleas,—they mistaking these darting seeds for the quick spring of that sprightly and enterprising insect.

But we must take leave of our modest little life-long friend somehow; and how better than in the words of one of the sweetest of Mrs. Whitney's always charming poems?

### A VIOLET.

God does not send us strange flowers every year.

When the spring winds blow o'er the pleasant places,
The same dear things lift up the same fair faces.

The violet is here.

It all comes back: the odor, grace, and hue; Each sweet relation of its life repeated: No blank is left, no looking-for is cheated; It is the thing we knew.

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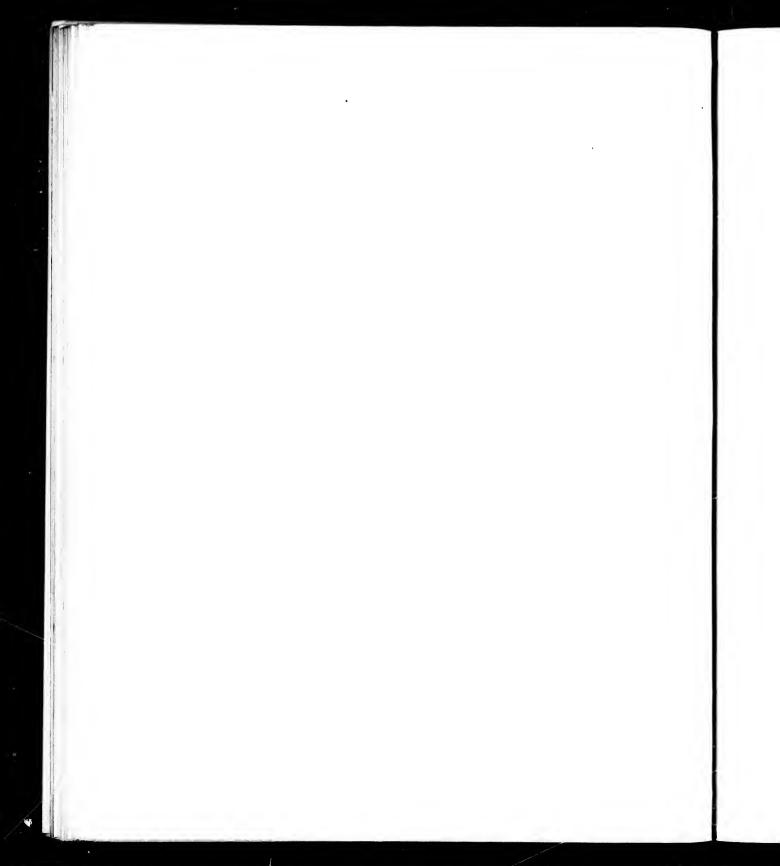
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id ie So after the death-winter it must be.

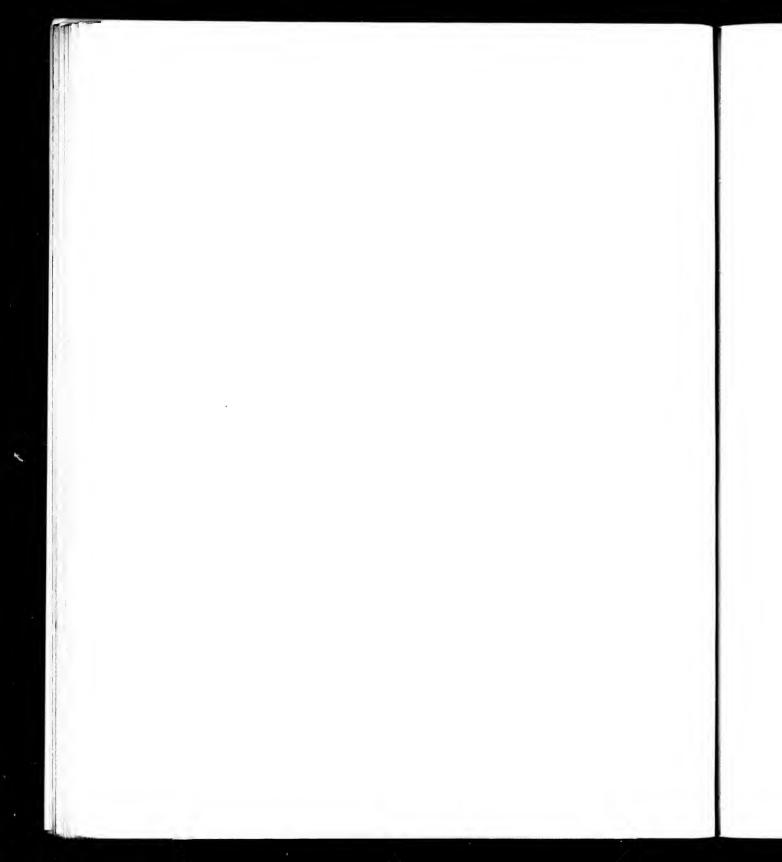
God will not put strange signs in the heavenly places:

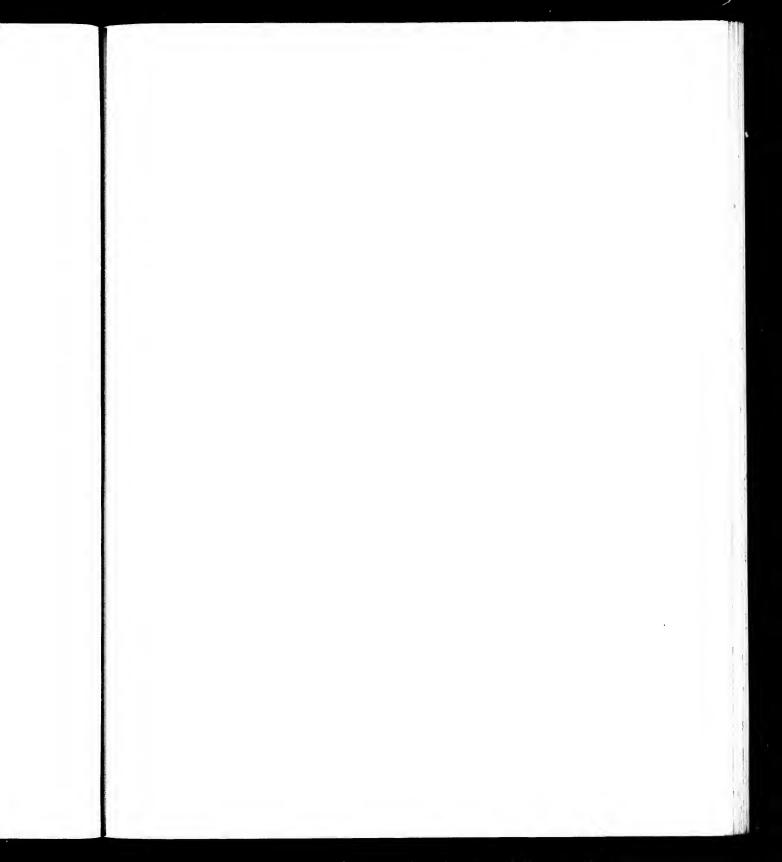
The old love shall look out from the old faces.

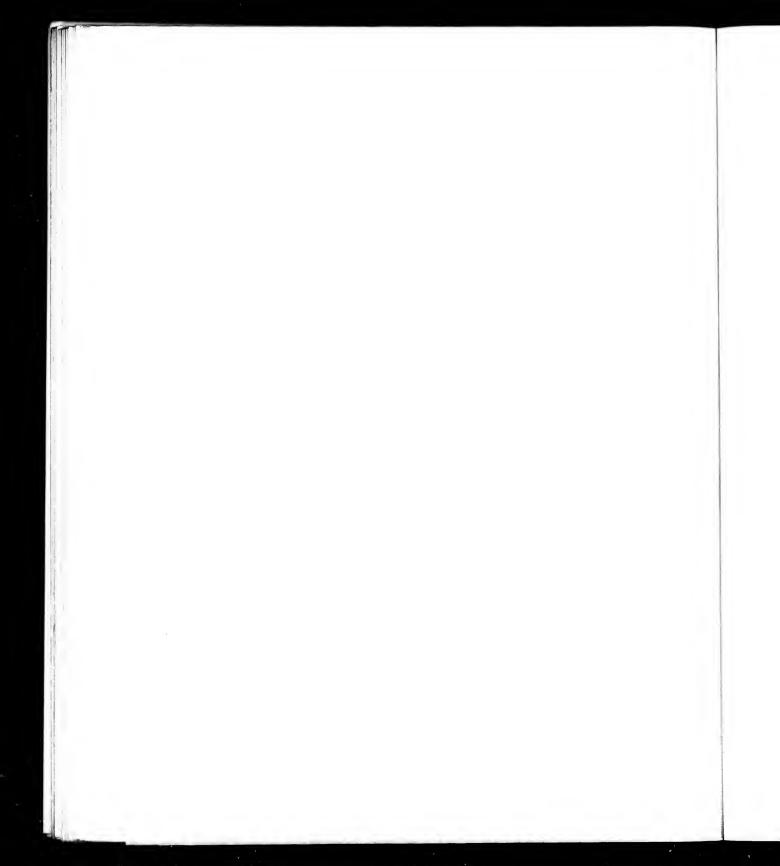
Veilchen! I shall have thee!

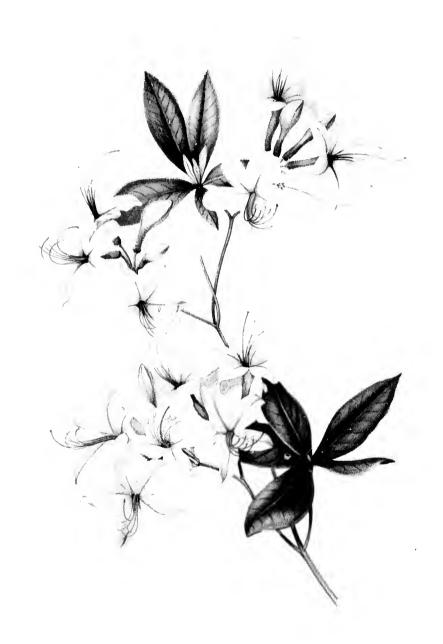


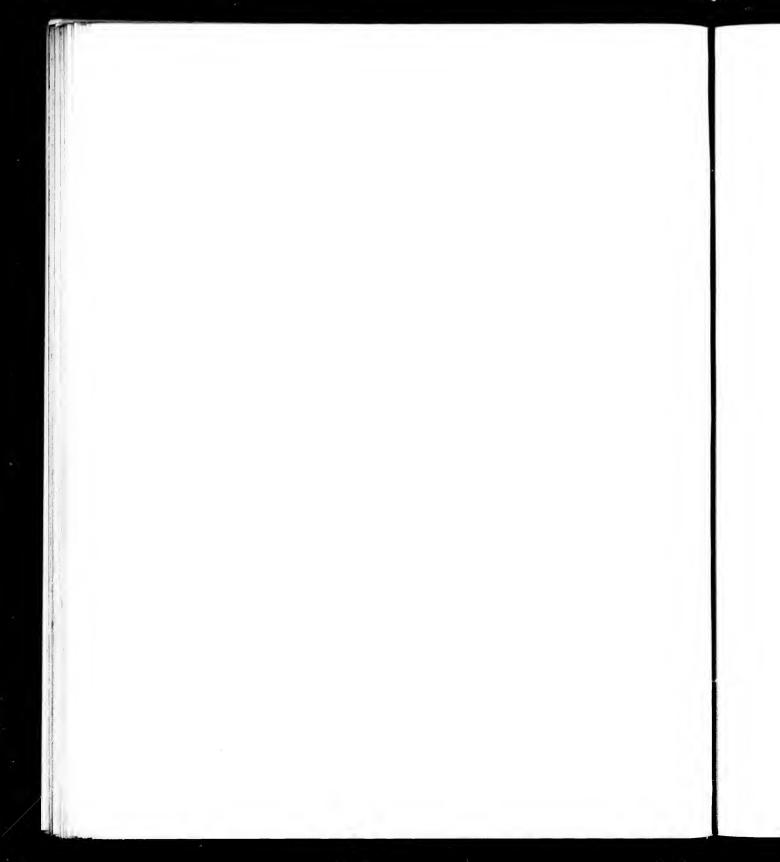
THE PURPLE AZALEA.











# THE PURPLE AZALEA.

(PINXTER FLOWER.)

AZALEA NUDIFLORA, L.

#### THE RHODORA.

[Lines on being asked, whence is the flower?]

In May, when sea-winds pierced our solitudes, I found the fresh Rhodora in the woods, Spreading its leafless blooms in a damp nook, To please the desert and a sluggish brook; The purple petals fallen in the pool Made the black waters with their beauty gay;-Here might the red-bird come his plumes to cool, And court the flower that cheapens his array. Rhodora! if the sages ask thee why This charm is wasted on the marsh and sky, Dear, tell them, that if eyes were made for seeing Then beauty is its own excuse for being. Why thou wert there, O rival of the rose! I never thought to ask; I never knew, But in my simple ignorance suppose The self-same Power that brought me there, brought you. Ralph Waldo Emerson.

I have quoted these words of the great philosopher to introduce the Azalea, because they are among the classics of our

mother tongue, and, "Beauty is its own excuse for being," has long since passed into the current coin of daily speech; also, because it describes a flower so nearly related to the Azalea, that something with a greater botanical definiteness than a poem must be used to distinguish them apart. Indeed, I am inclined to think that it may be the Azalea after all that was in the poet's eye as he wrote, for his expression, "its leafless blooms," exactly translates the specific name of our plant, *nudiflora*. It must be said, however, that it also accurately describes the Rhodora.

The Purple Azalea, of which Mr. Sprague has given us a most exquisite representation, is one of the most showy and splendid of the native flowering shrubs of our forests. It grows from two to six feet high, in swamps, from Massachusetts and New York to Virginia, and southward. Blooming in April and May, when the woods are comparatively bare of both foliage and flowers, it is all the better able to set off its brilliant and showy flowers with dazzling effect, against the surrounding dulness.

There are many varieties of the flower, ranging all the way from flesh-color to pink and purple. They not seldom also vary in the number of stamens produced, sometimes exhibiting ten or more.

No other American poet has enshrined this spring beauty in verse, so far as I know, except the young songstress of the Berkshire hills, to whose pen I have been indebted for several charming things in the pages of this book, Miss Dora Read Goodale.

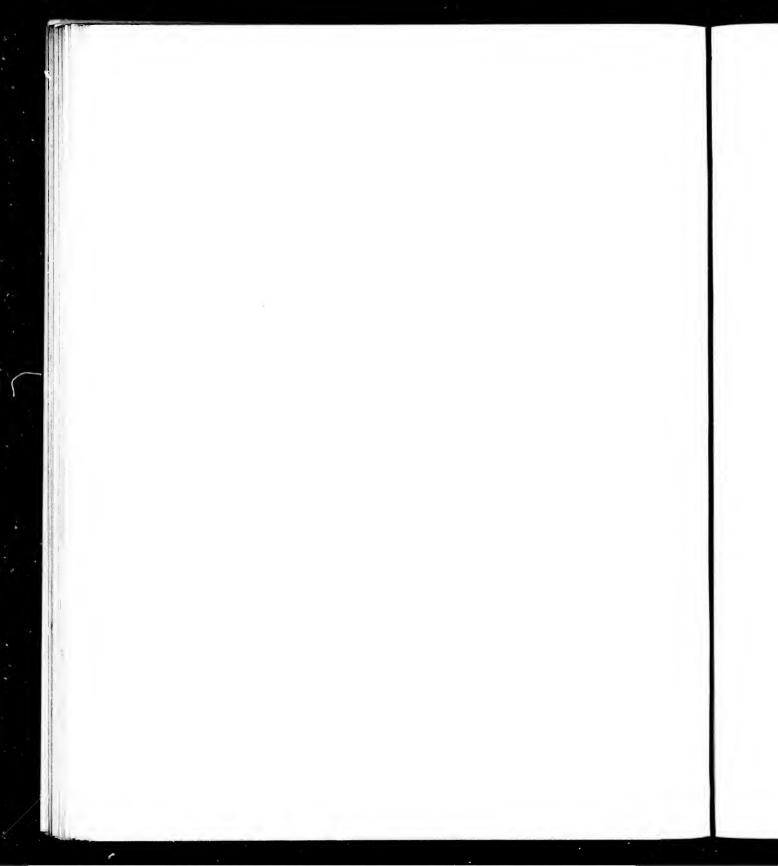
### WILD AZALEA.

O newest longing, O most dear desire,
Unsatisfied, unknown!
All the broken woodland path
Little light or color hath,
Save the glory breaking in
Through the depth of tender green,
We are here alone!

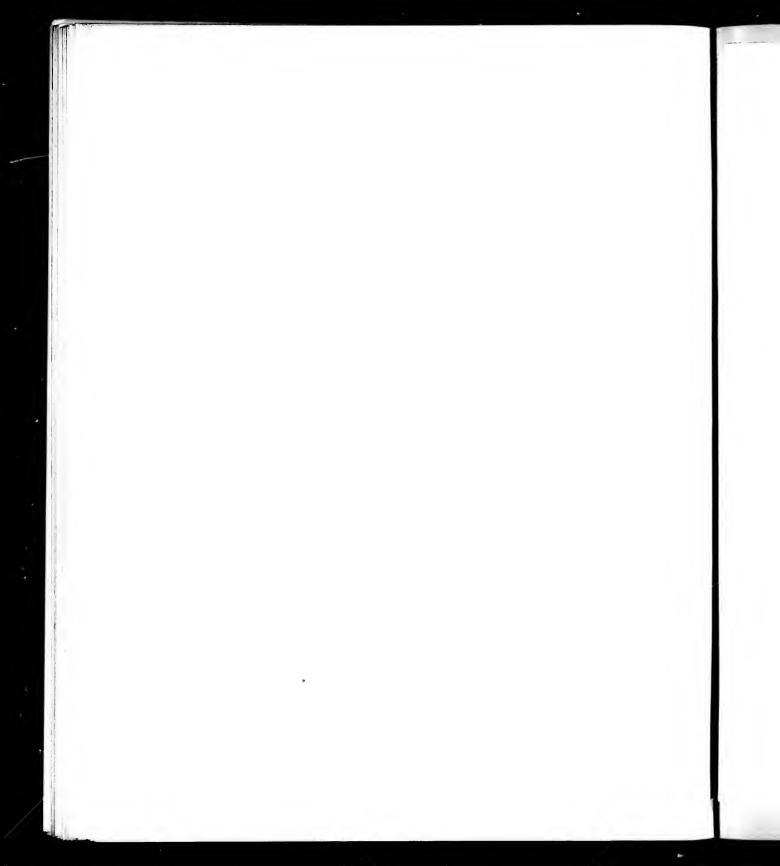
Whence is the sacred music of the wood,
The clear, the tircless tone?
Thro' misty ways we blindly grope
To catch the earliest signs of hope,
Sun or shade or restless wind,
Whatso pleasures we may find,—
We are here alone!

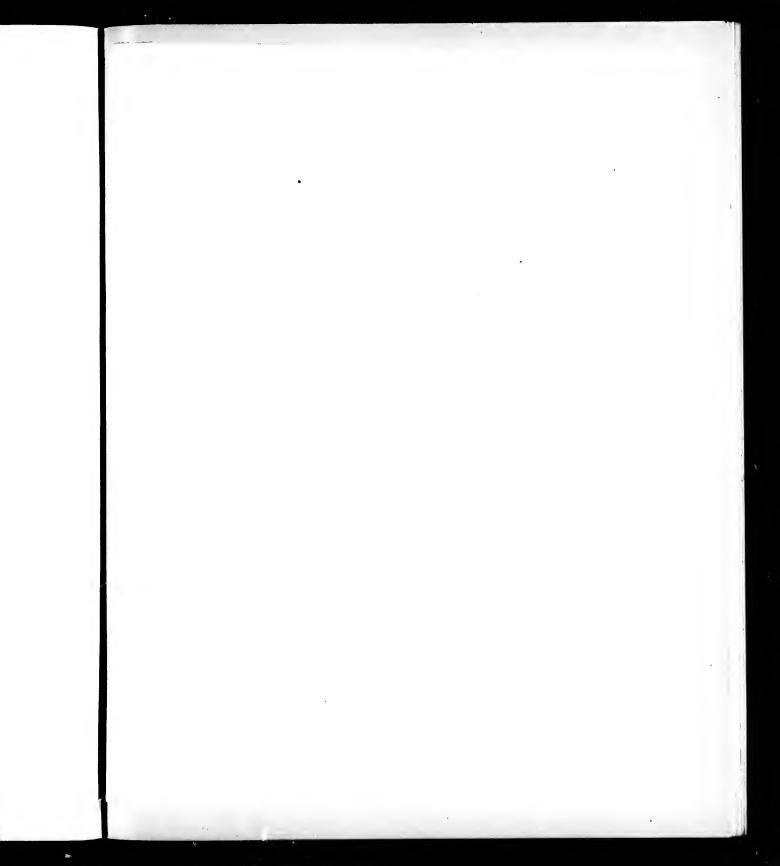
A sudden presence stirs the solemn wood,
A secret not its own,
A youthful light, an open grace,
An equal strength in every place,
And, far up the steep ascent,
Warmth and quick desire are lent
Where we wait alone!

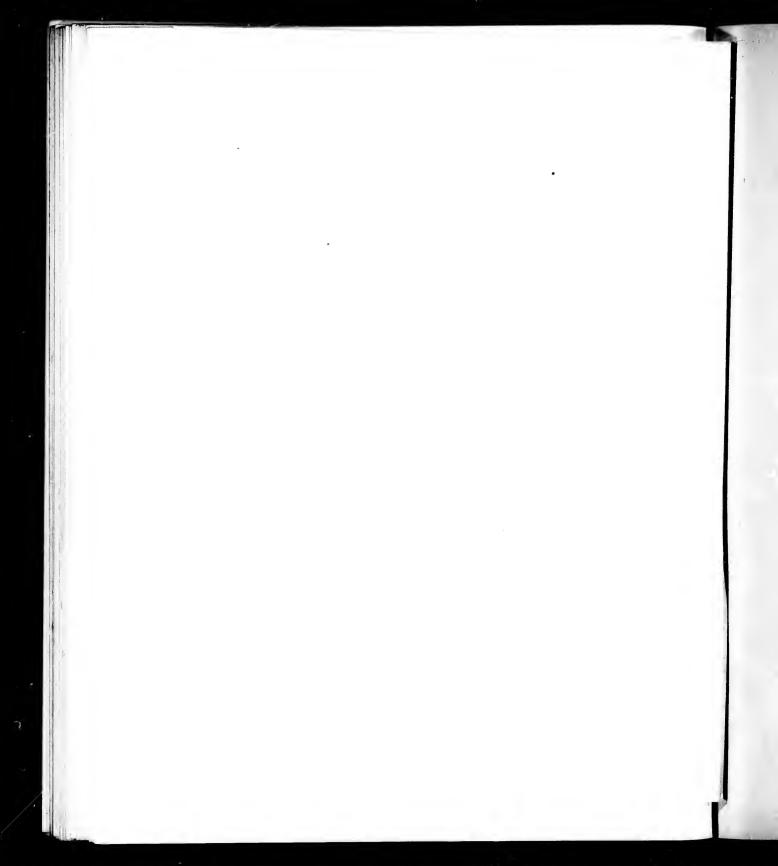
Oh, far away in yonder leafy copse
The wandering thrush has flown,
And close along the wooded steep
We know an influence passing deep,
The Summer light, the Summer tone,
The rare Azalea makes her own,
And we are not alone!



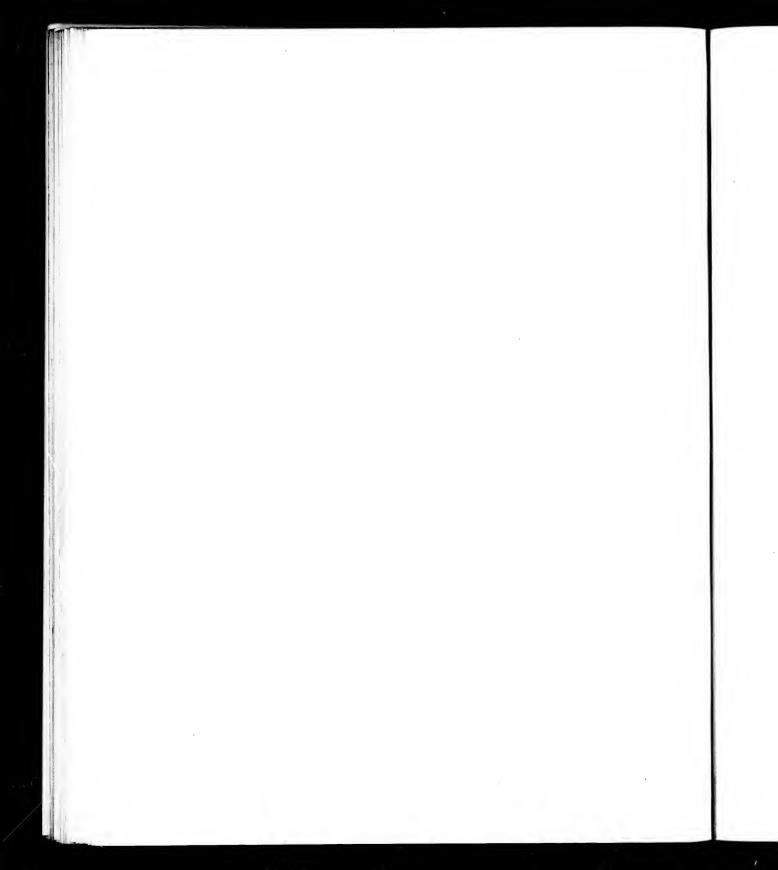
THE MAY-FLOWER.











### THE MAY-FLOWER.

(TRAILING ARBUTUS.)

EPIGZEA REPENS, L.

Sad Mayflower! watched by winter stars,
And nursed by winter gales,
With petals of the sleeted spars,
And leaves of frozen sails!

What had she in those dreary hours,
Within her ice-rimmed bay,
In common with the wild-wood flowers,
The first sweet smiles of May?

Yet, "God be praised" the Pilgrim said, Who saw the blossoms peer Above the brown leaves, dry and dead, "Behold our Mayflower here!

God wills it: here our rest shall be, Our years of wandering o'er; For us the Maytlower of the sea Shall spread her sails no more."

O sacred flowers of faith and hope, As sweetly now as then Ye bloom on many a birchen slope, In many a pine-dark glen. Behind the sea-wall's rugged length,
Unchanged, your leaves unfold,
Like love behind the manly strength
Of the brave hearts of old.
Whittier.

A singular interest to New Englanders attaches to this flower, which many circumstances conspire to enhance. It is associated with the earliest and most melancholy days of our Colonial history. There is a coincidence with the name of the ship which brought the brave little band of Pilgrims to our inhospitable, "stern and rock-bound coast." It is said to have been the first floral token by which kindly Nature gave them greeting in the sunny days of spring, after that dreadful winter of starvation, sickness, and death. Mr. Whittier's poem, above, alludes to this, and intimates that they inhaled a little feeling of assurance and hope from the sweet breath of this earliest vernal bloom.

It shares with the Hepatica the honor of being the first flowers to come forth from the newly warmed earth, after the frosts and storms of our hard New England winter, sometimes even, putting forth its pink petals out from under the very edge of a lingering snowdrift. Not seldom its cup is filled with the white crystals of our too frequently belated snow showers.

It is a very humble plant. It grows prone, close down upon the earth, as its generic name signifies. It must be sought for with some diligence. But when once found, one feels that its freshness, beauty, and sweetness, together combine to make it a prize well worth long searching. A Taunton poet tells the story of its gathering in these charming lines: In April when the days were bright,
And growing longer in their scope,
When buds were shaking off their sleep,
And all the airs were full of hope;

By crooked footpaths faintly traced, Our way along the fields we took; Climbed broken fence and loosened wall, And crossed the shallow, gliding brook.

We reached the hills, beneath whose base
The river flows with ceaseless sound,
And knowing the enchanted spot,
Knelt with our faces to the ground.

For, those who come with lofty tread, And careless undiscerning eyes, May often go with empty hands, Nor find this treasure where it lies.

We brushed the withered leaves away,
Old remnants of a worn-out year,
And shouted with cestatic glee,
"The flower is here! the flower is here!"

M. E. N. Hathaway.

And you must know "the enchanted spot," if you find the Trailing Arbutus. It does not grow everywhere. It is choice and peculiar about its "local habitation." Concerning some peculiarities of the plant, Mr. Higginson offers some remarks in "The Procession of the Flowers," an Atlantic essay, published twenty years ago, quite well worth quoting.

"There is always some single chosen nook which you might almost cover with your handkerchief, where each flower seems to bloom earliest, without variation, year by year. I know one such place for Hepatica, a mile northeast, another for May-flower two miles southwest; and each year the whimsical creature is in bloom on that little spot, where not another flower can be found open through the whole country round. Accidental as the choice may appear, it is undoubtedly based on laws more eternal than the stars; yet why all subtle influences conspire to bless that undistinguishable knoll no man can say."

He makes the same observation concerning the singular and apparently erratic distribution of color in these two species. "There are," he says, "certain localities, near by, where the Hepatica is all but white, and the May-flower is sumptuous in pink; yet it is not traceable to wet or dry, sun or shadow, and no agricultural chemistry can dissolve the secret. Why can one recognize the Plymouth May-flower as soon as seen by its wondrous depth of color? Does it blush with triumph to see how Nature has outwitted the Pilgrims, and even succeeded in preserving her deer, like an English Duke, still maintaining the deepest woods in Massachusetts precisely where those sturdy emigrants first began their clearings?"

Of late years the people of the Old Colony country, dwelling in the vicinity of the great woods of Plymouth and the Cape, collect great numbers of these beautiful early flowers and send them to their friends at a distance, through the mails. They are also wrought into bouquets and floral designs, and peddled on railway trains by the thrifty youngsters of that region, or sent to the floral marts for sale in the great cities. They have a marked faculty for keeping long open, when once in bloom, and never seem to lose their wonderful fragrance to the last.

The Trailing Arbutus is not confined to New England. It

may be found in widely separated localities throughout the northern regions of the United States. I have a pleasant memory of an early morning walk, now more than twenty years ago, in the first fresh sunny days of April, to a certain pine grove in the valley of the great St. Lawrence, in search of these fragrant beauties. And I was richly rewarded, for I brought away my hands full of them.

Mr. W. H. Gibson, in a sketch called "A Winter Idyl," in "Pastoral Days," makes a most appreciative reference to this beautiful and much loved flower, with which we will take our leave of it.

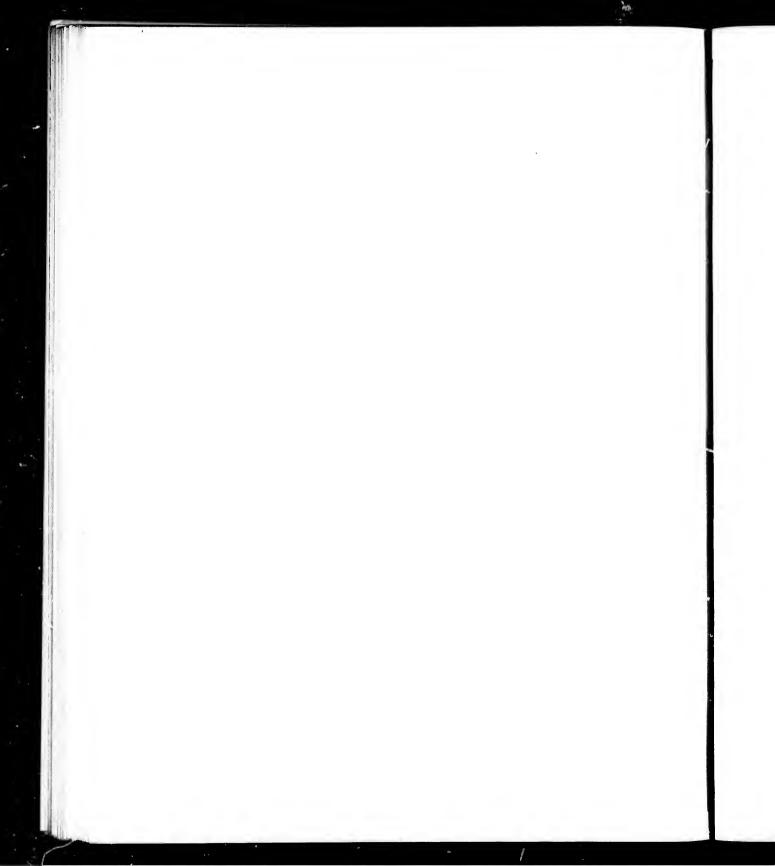
"Then came a beautiful day like very spring. In all the trees the winter wounds bled with a quickened pulse. The elder-spiggots in the sugar-maples trickled all the day. But at night the north wind came again, and the earth was subdued beneath the frost. And so for weeks the north wind battled with the sun.

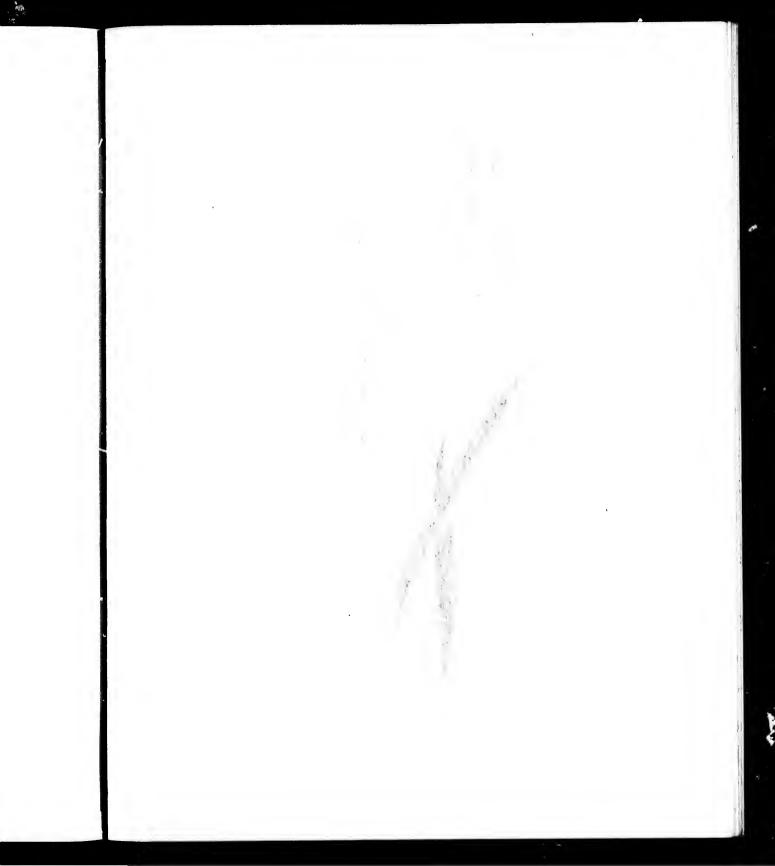
"Till at last the sweet Arbutus Nestling close on Nature's breast, Felt a throb, a warm pulsation, Rouse it from its dreamy rest.

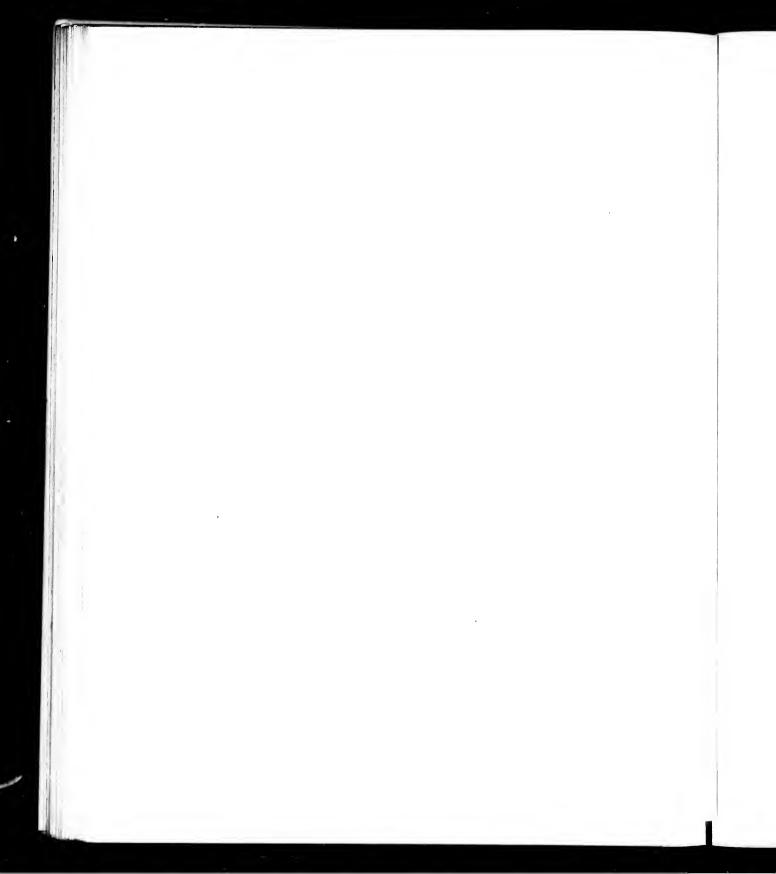
Throwing wide its little portals
From its coverlet of snow,
It peeped forth from the leafy shelter
Into a valley white below.

'Am I dreaming? Shall the winter Stifle and freeze my early breath? Nay! Hark! I hear the bluebird singing, "Spring has come!" he answereth. 'Ah, frost-flower, in thy grotto yonder,
Crystal sun-gem, white and clear,
Thy reign must cease when I awaken;
Farewell! pale bloom, thy fate draws near.
Bleak Winter is thine,
Love's Springtime is mine.'"

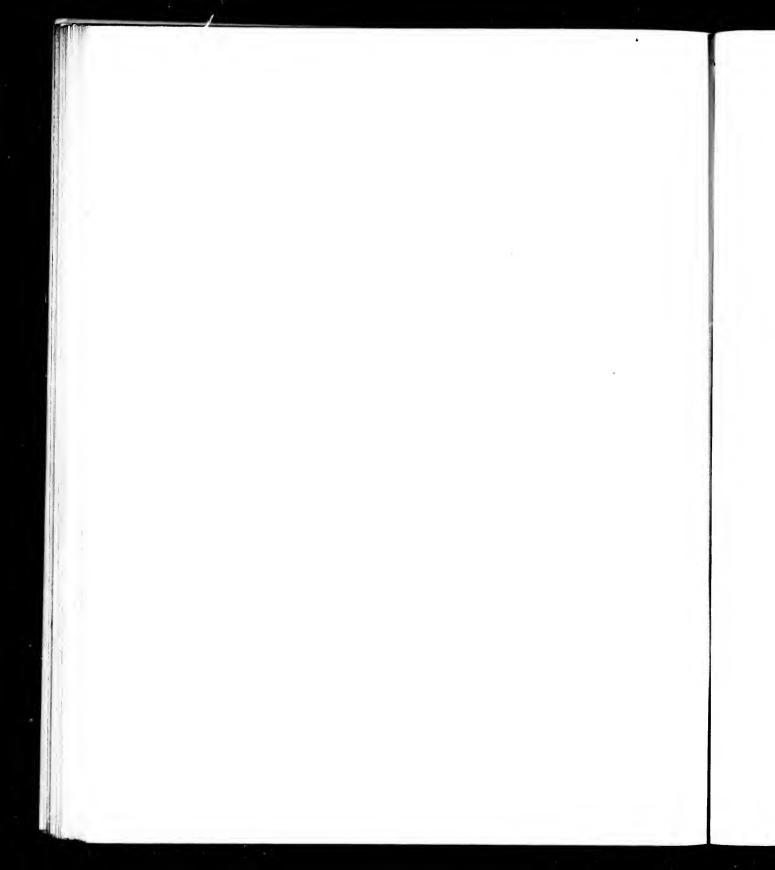
THE CALOPOGON.











# THE CALOPOGON.

CALOPOGON PULCHELLUS, R. Brown.

God might have bade the earth bring forth
Enough for great and small,
The oak-tree and the cedar-tree,
Without a flower at all;
He might have made enough — enough
For every want of ours,
For luxury, medicine, and toil,
And yet have made no flowers.

Mary Howitt.

God made the flowers to beautify

The earth, and cheer man's careful mood,
And he is happier who has power
To gather wisdom from a flower,
And wake his heart in every hour

To pleasant gratitude.

Wordsworth.

THE Calopogon is one of our most interesting native Orchids. And of all the plants that grow, none combine more elements of a strange and weird interest than the Orchids. Their habit is extremely various, some being true "air plants," growing epiphytic upon trees; others have a climbing stem, while others, like our native orchids, grow from a bulb in the ground, annual and

herbaceous. Many of them exhale a powerful fragrance. The blossom of most of them takes on some curious or fantastic form, as in the Lady's Slipper, already described, and in the Bee Orchis, and Fly Orchis, and Toad Orchis, and many others, named from their fancied resemblance to these creatures. An old writer comments on this singular likeness in the case of the Bee Orchis in this quaint fashion,—

"At the top grow the flowers, resembling in shape the dead carkasse of a Bee. There is no great use of them in physicked but they are chiefly regarded for the pleasant and beautiful flowers, wherewith Nature hath seemed to play and disport herself."

The following lines from Langhorne make note of the same strange deception:—

See on that floweret's velvet breast,
How close the busy vagrant lies!
His thin wrought plume, his downy breast,
The ambrosial gold that swells his thighs.

Perhaps his fragrant load may bind
His limbs; we'll set the captive free!
I sought the living bee to find,
And found the picture of a bee.

But by far the most wonderful distinction of the Orchis family is the elaborate mechanism by which it is enabled to compel the services of the insect world in sending its fertilizing pollen from flower to flower. The studies which Mr. Darwin has made and illustrated in "The Fertilization of Orchids," read more like the story of a magician, or the doings in some

enchanted forest, where Fays and Genii work their strange witchery, than like the plain prose of sober science.

Among the simplest of these is the mechanism of the Cypripedium, already described, and of the Calopogon, now under notice. If now you study the flower, or Mr. Sprague's admirable portrait of it, you will perceive two floral parts, not regular petals springing from the centre of it. The one which stands up perpendicularly, elegantly bearded with white and yellow hairs upon the inside, hinged at the bottom and widened or winged at top, is called the lip or labellum. The other, which lies down horizontally, also widened or winged near its extremity, is called the column, and bears at its extreme end both the stigma and the anther. The labellum will often be found bent down toward, often almost resting upon, the column.

The Calopogon has but one anther, which is two-lobed and bears four pollen masses. The anther is a thin-walled cup, hinged at its back with the extreme end tissues of the column. It lies in a little hollow, and faces inward toward a thin partition-wall which is raised up at that point across the axis of the column. The stigma is on the other surface of this partition, and, of course, still nearer to the centre of the flower. The ripened anther, when touched by a body moving in a direction away from the centre of the flower, will roll upward upon its hinge with the greatest possible ease, exposing its pollen masses to contact with the disturbing body; and contact means that they shall be carried away captive, for they will certainly adhere.

Now the stigmatic surface, which, as just mentioned, lies on the other side of the wall that closes the mouth of the anther in its normal position, and which is in the most unfavorable position to receive the pollen from its own anther, is in exactly the right place and position to be fertilized by pollen brought by an insect from another flower, upon the under surface of his body. And you will see that if he lights upon the flower he will most certainly touch the anther, at the end of the column, with that part of his body. But he will get the pollen only when he makes a backward movement, like that of retiring from his repast of sweets in the centre of the flower. Thence he will carry it to another flower and fertilize it, at the same time that he robs that of its pollen, wherewith to impregnate a third, and so on.

This plant is quite common in bogs, flowering in July. It grows to the height of a foot or more, and bears from two to six brilliant pink or purple flowers upon its scape. It is somewhat fragrant, and is one of the most beautiful ornaments of our lowland flora. It makes a rare picture to please the eye, and teaches, as we have seen, a rare lesson of the mutual inter-dependence and helpfulness of the creatures of Nature.

Ye bright Mosaics! that with storied beauty,
The floor of Nature's temple tesselate,
What numerous emblems of instructive duty
Your forms create!

Neath cloistered boughs, each floral bell that swingeth,
And tolls its perfume on the passing air,
Makes Sabbath in the fields, and ever ringeth
A call to prayer.

To that Cathedral, boundless as our wonder,
Whose quenchless lamps the sun and moon supply;
Its choir the winds and waves, its organ thunder;
Its dome the sky.

There, as in solitude and shade I wander

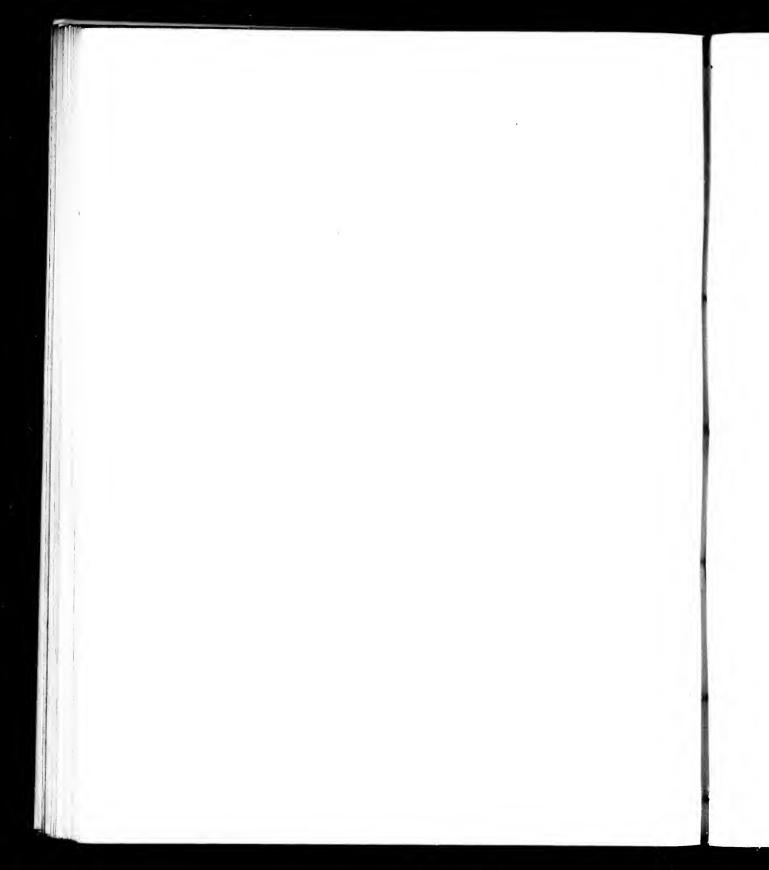
Through the green aisles, or stretched upon the sod,
Awed by the silence, reverently ponder

The ways of God,

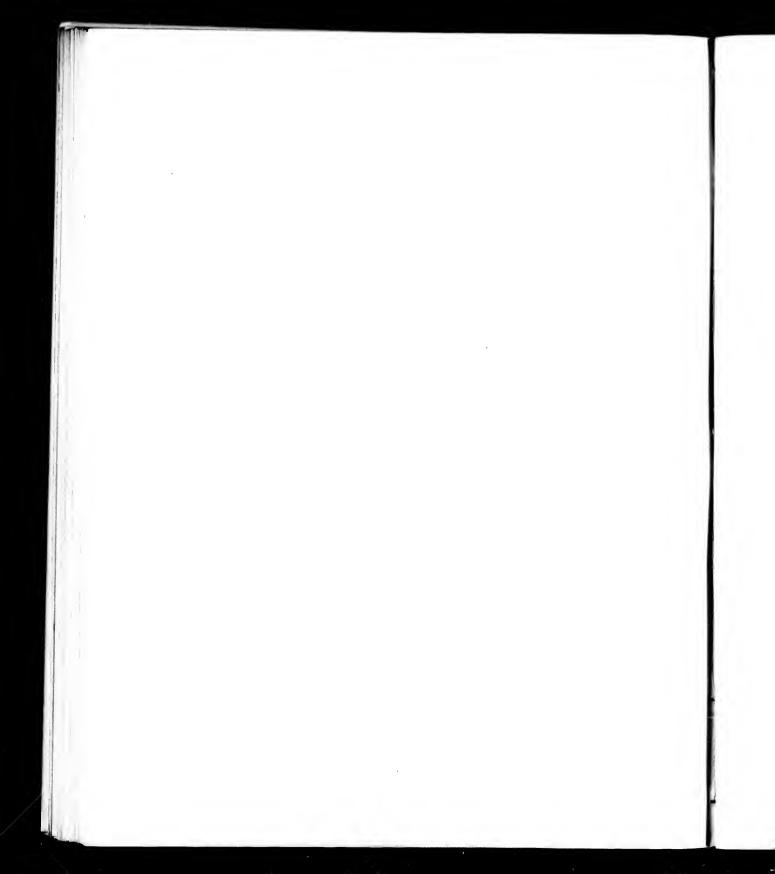
Your voiceless lips, O flowers! are living preachers, Each cup a pulpit, every leaf a book, Supplying to my fancy numerous teachers From loneliest nook.

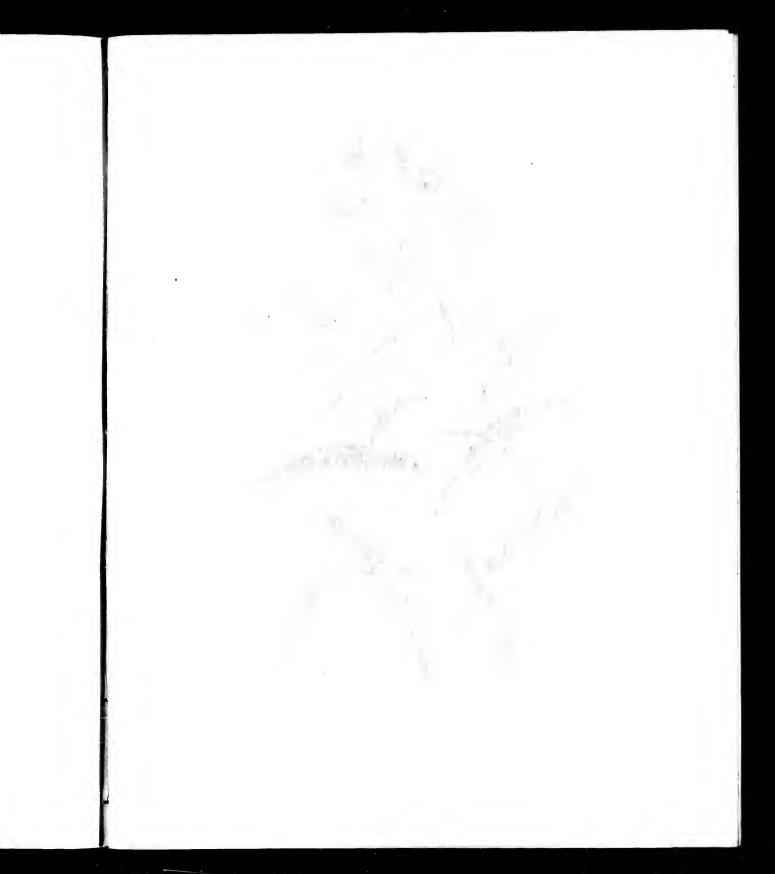
Floral apostles! that in dewy splendor
Weep without woe, and blush without a crime,
Oh, may I deeply learn, and ne'er surrender,
Your love sublime!

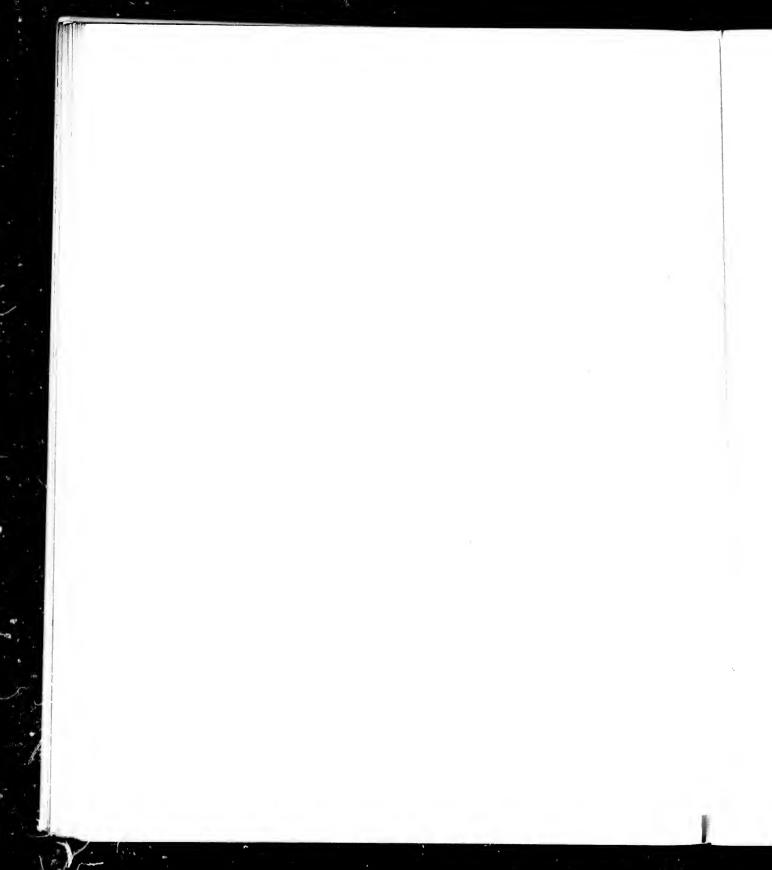
Horace Smith.



THE LONG-LEAVED ASTER.

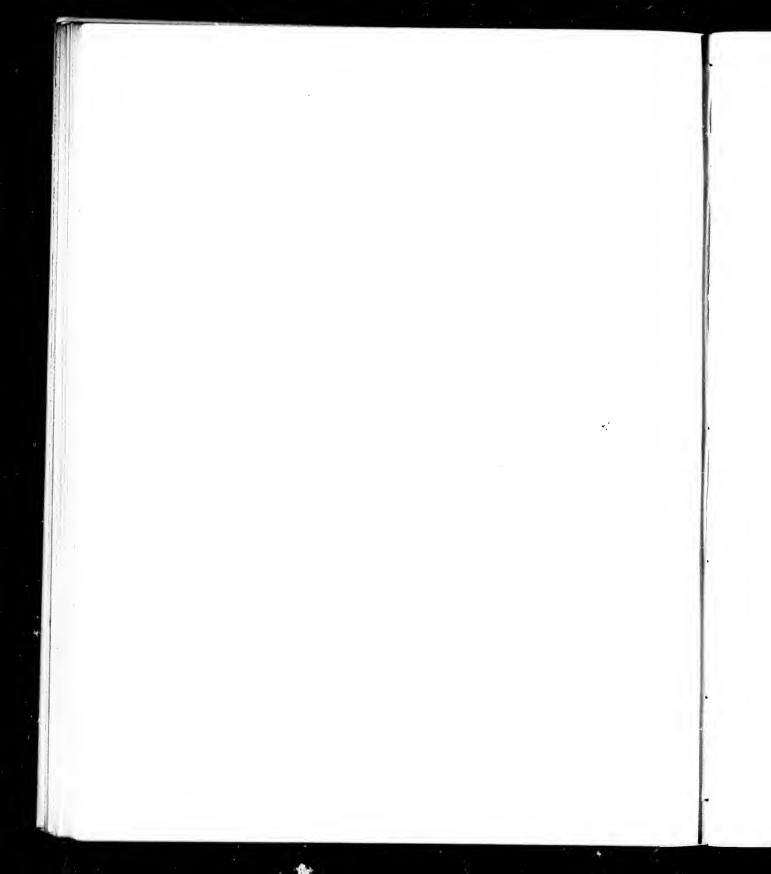








B



## THE LONG-LEAVED ASTER.

ASTER LONGIFOLIUS, Lamarck.

## AUTUMN.

With what a glory comes and goes the year! The buds of spring, those beautiful harbingers Of sunny skies and cloudless times, enjoy Life's newness, and earth's garniture spread out; And when the silver habit of the clouds Comes down upon the autumn sun, and with A sober gladness the old year takes up His bright inheritance of golden fruits, A pomp and pageant fill the splendid scene.

There is a beautiful spirit breathing now Its mellow richness on the clustered trees, And from a beaker full of richest dyes, Pouring new glory on the autumn woods, And dipping in warm light the pillared clouds.

Oh, what a glory doth this world put on For him who with a fervent heart goes forth Under the bright and glorious sky, and looks On duties well performed, and days well spent! For him the wind, ay, and the yellow leaves, Shall have a voice, and give him eloquent teachings. He shall so hear the solemn hymn that Death Has lifted up for all, that he shall go To his long resting-place without a tear.

Longfellow.

I SUSPECT it would be hard to say, on purely Darwinian grounds, or grounds of "natural selection," just how it came about that the whole season is full of flowers, - that summer and autumn equally with the spring have each their own peculiar floral treasures. It certainly seems to be the most natural thing that plants should blossom in the spring and early summer, so as to have most of the season yet before them in which to fully ripen, and then distribute their seeds. Yet it remains true that a considerable number of our most beautiful flowers are, so to say, left over, wherewith to adorn the glowing noontides of August, and the still, hazy, dreamy days of September and October, splendid with a singular golden light. Then is the time for the innumerable blue and purple Asters, the Golden Rod, and the marvellous azure of the Fringed Gentian, all mingled with the unequalled splendors of our American forests, dressed in their many-colored autumnal garb.

Walled in with fire on either hand
I walk the lonely wood-road through;
The maples flame above my head,
And spaces whence the wind has shed
About my feet the living red,
Are filled with broken blue.

And crowding close along the way
The purple Asters blossom free;
In full profusion, far and wide,
They fill the path on every side,
In loose confusion multiplied
To endless harmony!

And still beside the shadowy glen
She holds the color of the skies;
Along the purpling wayside steep
She hangs her fringes passing deep,
And meadows drowned in happy sleep
Are lit by starry eyes!

Dora Read Goodale.

The genus Aster, which is certainly one of the most beautiful of the order Composite to which it belongs contains upwards of one hundred and fifty species, most of which are natives of the American continent. Gray, in his Manual, gives thirty-eight as indigenous to the eastern United States, more than half of which are to be found in New England.

The Asters may be distinguished from other plants of the order by certain easily observed characteristics. The flower of a composite plant is made up of a considerable number, often of a very great number, of florets packed closely together in the disk or cone of the blossom. These florets have the essential parts of a flower, stamens, pistil, and ovule, but neither petals nor sepals. Usually, however, the border of this compound flower is decorated with a row of strap-shaped, more or less brilliantly-colored, petals. These may belong to the outer row of florets, or they may not. In Asters they do. The calyx is compound, composed of several rows of green scales, which overlap each other like the scales on a fish. The receptacle, or the base on which all the minute flowers are fixed, is a flat disk indented with little pits. The ripened seed has for a crown a single row of simple, slender, white bristles.

In some Asters the flowers form an umbrella-shaped cluster at the top of the plant; others are arranged on short stems

along the main axis of the plant, forming a kind of spike or raceme, while others, like the one before us, take a middle form, and present a corymbose panicle.

It has been observed that all the little flowers, which make up the blossom of a composite plant, do not bloom, or come to perfection, at the same time. But, beginning in the middle, they blossom in successive circles outward to the margin, or, reversing this order, blossom from the outer row inward. The first is called the centrifugal and the second the centripetal order of inflorescence. To the latter order the Asters belong.

Aster longifolius is common along the banks of streams and in damp places throughout New England. It grows to the height of from one to three feet, and flowers in late summer or autumn. The word "Aster" means a star, and refers to the circle of colored petals which radiate from the central purple or brown disk of the flower. Among the Greeks it was the common name for many other plants of the Composite besides those of the true Aster genus as we now know it.

To dwellers in our land it is always associated with memories of departing summer, and the golden harvests and rare beauties of our autumnal days. Its first blossoming tells us in no uncertain words that summer is ending, and the chill rigor of Death is even now creeping up through Nature's frame. But the woodside rambler will meet it still in the lat: November days, bravely holding its own against frost, and icy rain, and bleak winds, looking up cheerfully with its clear blue eye, under all the depressions of leaden skies, brown fields, and bare, stark forest trees.

For Whittier to see the picture which is painted in these

lines he must take a very late, as well as the "Last Walk in Autumn."

Along the river's summer walk,

The withered tuits of Asters nod;

And trembles on its arid stalk

The hoar plume of the golden-rod.

And on a ground of sombre fir,

The azure-studded juniper,

The silver birch its buds of purple shows,

And scarlet berries tell where bloomed the sweet wild rose!

I cannot more fittingly close this volume of "Beautiful Wild Flowers" than by quoting the words of Bryant, that truest poet of Nature, as he has pictured with deathless pencil the sad ending of the Floral Year in

## THE DEATH OF THE FLOWERS. .

The melancholy days are come, the saddest of the year,
Of wailing winds, and naked woods, and meadows brown and sere,
Heaped in the hollows of the grove, the autumn leaves lie dead;
They rustle to the eddying gust, and to the rabbit's tread;
The robin and the wren are flown, and from the shrubs the jay,
And from the wood-top calls the crow through all the gloomy day.

Where are the flowers, the fair young flowers, that lately sprang and stood In brighter light and softer airs, a beauteous sisterhood? Alas! they all are in their graves, the gentle race of flowers Are lying in their lowly beds, with the fair and good of ours. The rain is falling where they lie, but the cold November rain Calls not from out the gloomy earth the lovely ones again.

The wind-flower and the violet, they perished long ago,
And the brier-rose and the orchis died amid the summer glow;
But on the hills the golden-rod, and the aster in the wood,
And the yellow sun-flower by the brook, in autumn beauty stood,
Till fell the frost from the clear cold heaven, as falls the plague on men,
And the brightness of their smile was gone, from upland, glade, and glen.

And now, when comes a calm mild day, as still such days will come, To call the squirrel and the bee from out their winter home; When the sound of dropping nuts is heard, though all the trees are still, And twinkle in the smoky light the waters of the rill. The south wind searches for the flowers, whose fragrance late he bore, And sighs to find them in the wood and by the stream no more.

