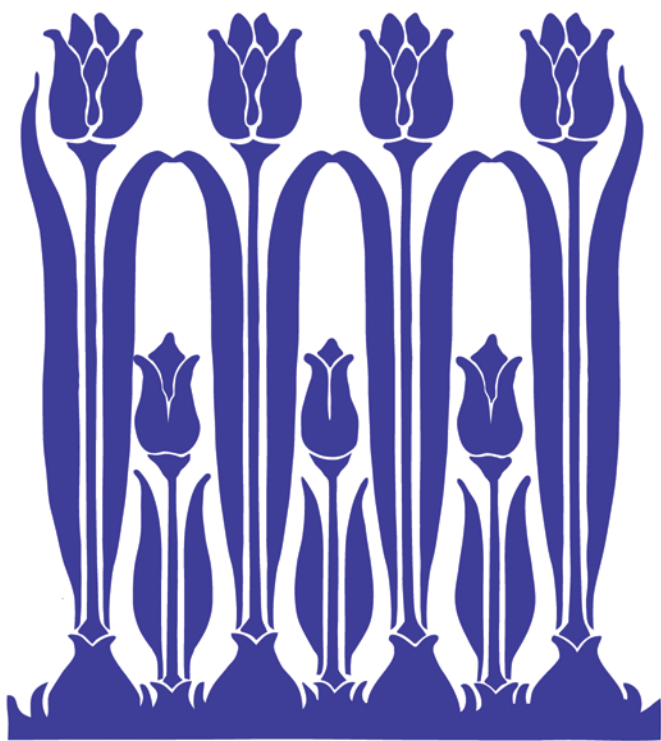


INSTRUCTOR LITERATURE SERIES — 2C

# Little Plant People

PART II

By Annie Chase



F. A. OWEN PUBLISHING COMPANY  
DANSVILLE, N.Y.

INSTRUCTOR LITERATURE SERIES

# Little Plant People at Home

and What they are Doing There

Part II

BY

*Annie Chase*



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DANSVILLE, N. Y.

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## A PLANT WHO LIVES ON THE HILLSIDE.



Little early Saxifrage lives up on  
this dry hill close beside the big rock.

See how wise and cautious she is.

She has made her leaves with very few openings or pores in them so they shall not lose much moisture.

Water is scarce up on this pasture hill.

See how closely she lays her leaves down upon the ground in a little rosette.

She does this to keep the sun from drinking up the moisture around her roots.

Her roots are fine as the finest hair, but how many of them there are! She made them threadlike because there is so little soil here



on the rock for her to push them through.

She made a great many, so as to drink up all the moisture she can find.

She has a strong root stalk just there between the roots and the leaves. So strong is this and those tiny hair roots that, as they grow, they often split great rocks in pieces!

The spring rains and melting snows helped this little dweller on the rock.

She comes up in spring with a bud snuggled down in the middle of her leaf rosette.

She opens her blossoms close down to the ground. Then as the winds grow kinder, she pushes up the whole cluster on a pretty, furry stem.

This fur on the stem is put there to help keep the stem moist, and to keep these ants here on the rock from crawling up and carrying off her honey.

She wishes to keep her honey for the bees, because the bees will help her make seeds; the ants will not.

Spring Everlasting is another little plant who loves the dry, old pasture.

She has furry thick leaves and the little blossoms come up, their heads

nestled into little furry hoods to keep out the cold spring winds.







## A PLANT WHO LIVES IN THE WOOD.



Little Anemone loves to live in the  
wood.

She loves the long cool shadows.

She loves the sheltering trees  
over her head.

She loves the mossy carpet sprinkled with dried leaves at her feet.

She loves the quiet and the moisture of that pool not far away between the maples.



A Baby  
Anemone.

An Older  
Anemone.

Still Older  
Anemone.

A Grown Up  
Anemone.

Anemone can have thin delicate leaves because her home is so moist and so sheltered from rude winds.

She can have tender roots too, because the soil beneath her is light and soft.

If you pick the Anemones they will droop in your hand before you reach home.

The dear little things lose the moisture out of their leaf and stem cells.

When the little cells which make up the whole plant are full of the water which comes up through the roots, the cells swell out plump and round making the plant firm and upright.

When the water goes out of the

cells their walls fall in and make the whole plant limp.

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## A PLANT WHICH WEARS A BONNET.



The very first plant to come up in the spring is the Skunk Cabbage.

How this odd plant does love water! He grows in the bog beside the frog pond so he can drink just as much as he likes.

The blossom comes up first, an odd little knob with a big striped poke bonnet around it.

Is the bonnet to keep out the cold?

How different are his big juicy leaves and stems from those of the plants which grow on the hillside!



# A PLANT IN THE MEADOW



[See Frontispiece]



Down by the brook are the golden cowslip blossoms. Their roots are in the water; their leaves and blooms are in the new meadow grasses.

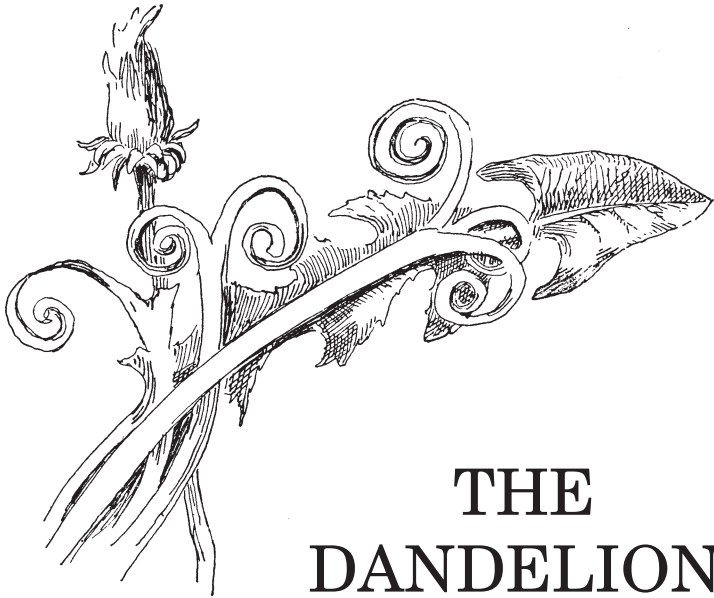
Here is a secret: Plant leaves have little holes in them as you have learned. The holes are to let out and take in moisture and air.

On either side of everyone of these little pores or holes are little lips

which open when the plant wishes to let out moisture, and which close when it wishes to keep the moisture in.

You will find the brook and meadow plants have ever so many of these pores and that they keep them open much of the time.

The hillside plants do not have so many and they keep them nearly closed except in too wet weather.



## THE DANDELION.

There is always something new to learn of Dandelion though we study her year after year.

Dandelion can make her home anywhere, by the dusty wayside, down in the wet meadow, on the



pasture hill, in the orchard, or by our door stone.

When she lives in wet places she has thin leaves with many pores.

When she lives in dry places she has thick tough leaves with fewer and closed pores.

When she lives on the hillside she has short stems and her blooms are close down among the mosses.

When she lives in the meadow where the grasses are tall she makes long, long stems for her blooms and for her leaves that she may catch her share of sunbeams and breezes.

When the weather is damp she

closes her blossoms up tight so that no harm can come to her precious golden dust.

On such days Bee finds her doors all locked and goes away disappointed.

Do you know why she notches her leaves in that odd way she has? It is so the sunbeams can fall on every leaf.

Do you know why dandelion's stem will curl when you split it?

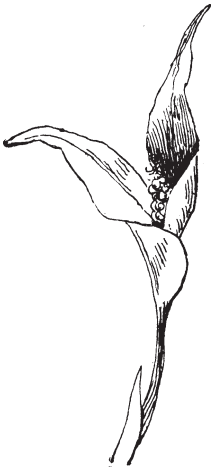
Because the outside skin of the stem "pulls" one way and the inside skin pulls another way.

Rhubarb stem coverings will behave in the same way.

These stem coverings are like the leaf coverings — waterproof.

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## ANOTHER PLANT IN THE WOOD.

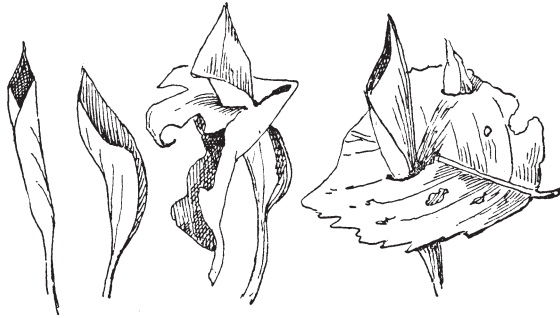


Close by Anemone grows the False Solomon's Seal. What a tender, bright green she wears in her leaves!

See her leaves are shaped and curved just

right to catch the sunbeams as they peep down to her between the tree boughs!

How pointed her leaf is! It needs that trowel point to help it pry up through the dead leaves.



Here are some of her leaves which have come up through holes in the dead oak and beech leaves.

We will take off your chains, little leaves, and set you free.



## JACK-IN-THE-PULPIT

Here is dear old Jack again.  
Have you heard him preach?  
Did you ever watch him make

berries, pretty bright red ones, to put in the con-tri-bu-tion box?

You must let him grow in his shady wood home all summer if you wish to have the fun of watching him.

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## MAKING COLORS.



One of the tasks which the plants must do every year is to make color for their blossoms.

How can they do it?

We can find out but little about this secret of the flowers. The color

of the petals depends upon the sort of matter dissolved and taken from the soil into the sap of the plant.

In the tiny cells which make up a violet is sap of a purplish color, and, floating in this sap are tiny yellowish grains.

Upon the manner in which these two are mixed together in the cells, depends the color of the violet's petals.

Beth found a poor little purple meadow violet which had been brought from its home and carelessly dropped in the street.

One petal had been cruelly trampled under foot and was quite white;

the purple sap had all been crushed out of it.

But why and how do the plants growing on the same sandy hillside always gather their own and no other color from the soil?

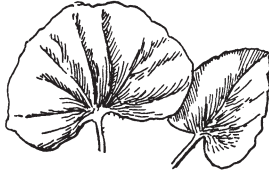
The wild rose draws pink, the sheep laurel crimson, the rock rose yellow, the violet blue or purple or white, from the same spot.

We do not know why this is so nor can we find out exactly. It is one of the plant children's secrets.





WOOLY BLUE  
VIOLET



HAIRY LEAVED YELLOW  
VIOLET



LANCED LEAVED  
VIOLET



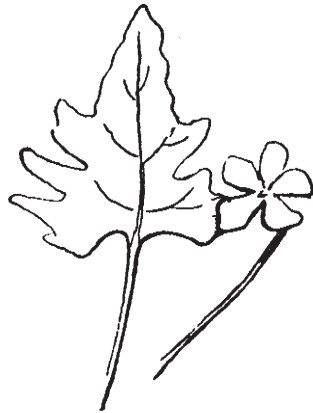
HALBERD LEAVED  
VIOLET

## THE VIOLETS



Violets of the hills, the plains, the meadows, the valleys, the mountains, the woodlands, and every violet has a color of its own.

The early blue violet smiling up from the pasture and roadside where it gathers in great numbers like thou-



EARLY BLUE VIOLET

sands of gay little girls at a picnic, is blue purple.

Its flower stems are shorter than its leaves.



MARSH VIOLET

The marsh violet, which you often find by the brook in the meadow, is a pale lilac streaked with purple veins.

The primrose leaved violet has white petals with purple veins.

The lance leaved violet of meadow and streams has white petals.

The Canada violet is a pale purplish white.



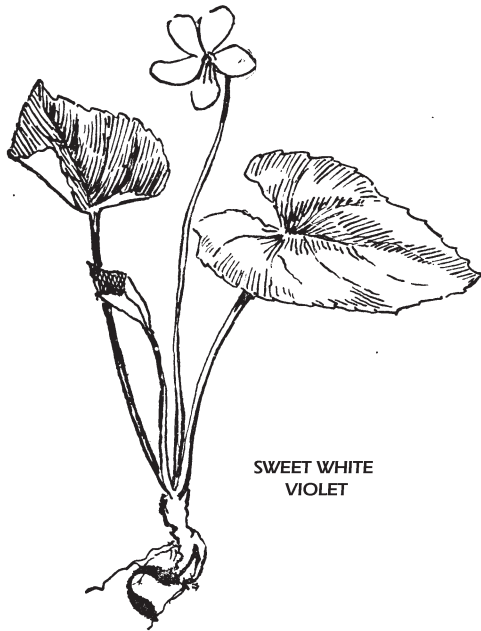
Bird's foot violet comes nearest to wearing the real sky blue. It is tinged with soft purple and wears a bit of bright yellow which is very becoming.

When you follow the wood path through some damp shaded spot on the edge of a bog or to where it leads out to the meadow lands, you will find the sweet scented white violet, which is all white except for a few

purple veins near the center.

The hairy leaved yellow violet has yellow violet and yellow petals.

The Prairie Violet is pale blue and its leaves are much like those of the Bird's foot violet.



SWEET WHITE  
VIOLET



## BATTERIES IN BLOSSOMS.

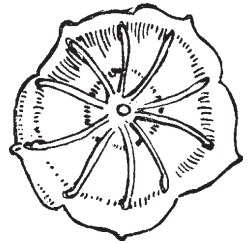


High Laurel has ways so droll they  
must make the bees laugh.

Every Laurel bloom has nine or ten  
stamens.

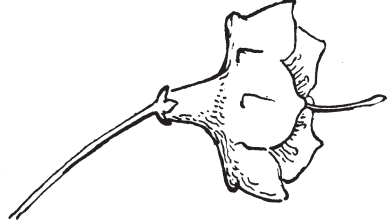
On the end of each stamen is hung  
a tiny purse full of gold dust.

Each one of these  
purses is tucked into a  
wee pocket. Each  
pocket is lined with  
pink.



You can see the purses on the in-  
side of the blossom.

You can see the pouch - like pocket from the outside of the blossom.



These purses are thus tucked away to keep them safe from insect robbers.

Lest these pockets should not be safe enough for the purses, Laurel covers her blossoms with sticky gum.

If a robber ant tries to clamber boldly over this he is caught and held fast.

“Keep away, ant robbers, keep away! You will only carry the gold

dust down to the ground where it will be wasted.”

“Come, bees, come; you will help to carry the precious gold dust from one bloom to another and so help us make seeds. Come, do come; here is some sweet, sweet nectar for you.”

Laurel puts the sweet nectar on the end of a stem (the pistil) in the middle of the flower, and thrusts this stem far out where bee can reach it.

Around the base of the stem Laurel draws a little pink circle, so that bee can easily find the nectar.

Bee soon comes; he alights on the pink circle, then up flies every little



stamen, out flies every little purse from every little pocket, and away flies the gold dust all over Bee's back and thighs and wings and legs.

“Why! why! ha! ha!” laugh the sunbeams dancing on the river in their glee; “do see those flowers pelt that clumsy bee with pollen bullets!”

Bee does not mind the pat pat of such tiny soft bullets but keeps on gathering sweets until he has visited every flower and emptied every purse.

This is a reproduction of a booklet  
in the possession of  
Elizabeth Allen.



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