

THOSE THAT FLY WITH PLUMES OR DOWN.

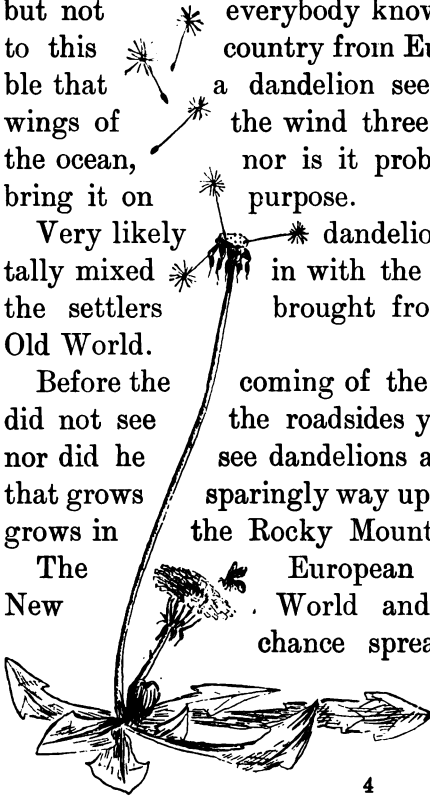
DANDELIONS.

EVERYBODY is well acquainted with the dandelion, but not everybody knows that it was brought to this country from Europe. It is not probable that a dandelion seed could come on the wings of the wind three thousand miles across the ocean, nor is it probable that people would bring it on purpose.

Very likely dandelion seeds were accidentally mixed in with the grass and clover seeds the settlers brought from their homes in the Old World.

Before the coming of the white man the Indian did not see the roadsides yellow with dandelions, nor did he see dandelions at all, excepting a kind that grows sparingly way up north and another that grows in the Rocky Mountains.

The European dandelions liked the New World and when they had the chance spread very fast, so that now they are everywhere — at least in the East.

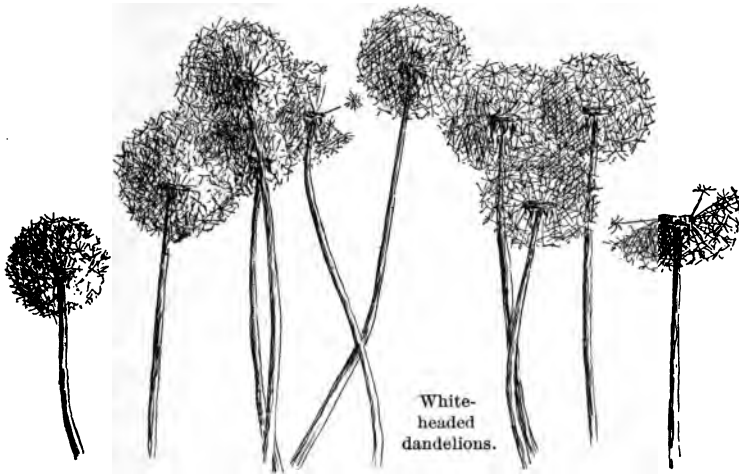


The reason they were able to spread so is that the dandelion seeds were able to fly.

If they had not flown away but had dropped down close to the parent plant and grown there, they would not have been allowed to spread much; for people do not like dandelions in their fields and lawns, and try hard to root them out.

This would be easy if the dandelions kept together in patches. But they seem to say "catch me if you can" as they fly on the wings of the wind, dropping down here, there, and everywhere, striking root and merrily growing.

The parent dandelion takes very good care of its seed children, and plans for their future success by



giving each one a little plume by which it can be blown about by the wind.

Everybody knows the pretty, fluffy, white-headed dandelions that come after the yellow flowers.

Children often blow on them "to see what time it is." If all the seeds fly away but one, they say it is one o'clock; if two remain, they say it is two o'clock, and so on.



Seed case and
plume mag-
nified.

They also blow on them to see if "mother wants me," as every child knows.

Each little silky part that flies away is a seed case and its plume.

If you look carefully at the part of the dandelion that flies about, you will see the little brown seed case at one end, shaped something like a tiny cucumber, and with little teeth near its top.

Out of its top grows a silky white stalk, and at the end of this is a tuft of soft little hairs by means of which the seed case can float in the air.

Each dandelion seed case contains one little seed, but the case fits the seed so closely that most people speak of the whole thing — seed case and seed together — as the seed. The proper name for such a seed case and its seed is akene.* Not all akenes have plumes.

The top of the dandelion stem is a flat cushion, and the little akenes, when the seeds are ripe, stand on it,

* a-kēn'

pointing out in different directions so there may be room for every one with its spread-out plume.

The plumes do not open out until the seed is ready to be blown away, and the akenes do not stand pointing out in all directions until the time to fly has come. Before that they are all packed closely together.



The flat cushion with a few seeds attached.

Because the little akene



Before the plume opens out.

is so light and feathery the breeze bears it along, sometimes for quite a distance, but at last it drops down to the earth or else is blown among the grasses or weeds or stones and lodges there, and when the right time comes the seed that is in the little brown seed case sprouts.

Sometimes the air seems to be full of dandelion akenes floating about.

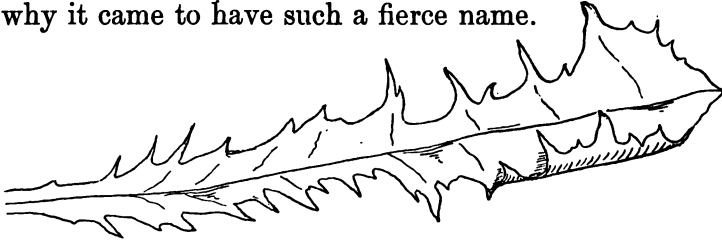
Although the dandelion is so bright and pretty, people do not like it in their lawns.

Excepting when in bloom or when it is "white-headed," it is not as pretty as grass. It does not make a beautiful velvety carpet to the earth, but its leaves look ragged and uneven and spoil the appearance of the lawn.



All closely packed together

It is from its leaves that the dandelion gets its name, for "dandelion" means "tooth of a lion"; and if you look at a well-grown dandelion leaf you will understand why it came to have such a fierce name.



A well-grown dandelion leaf.

Dandelions are very fond of growing in lawns. They like to be taken care of, and they seem to like to have their heads cut off.

Anyway the lawn mower does not trouble them in the least.

Their leaves grow close to the ground, in the shape of a rosette, and when the lawn mower passes over, only the large outer leaves are harmed; the young ones towards the center of the rosette remain unhurt and have more light and air and space to grow in; so our dandelion flourishes in spite of its pruning.

When a dandelion once gets its roots started it does not make so very much difference if it has its flowers cut off, for it does not die when winter comes. Only its leaves die. Its root continues alive in the earth, and in the spring wakes up and puts out new leaves.

So cutting off the flowers does not destroy the dandelion, it merely prevents seeds from forming, and more dandelions from starting.

Dandelion roots kill the grass by pushing it aside and taking the earth-food for themselves.

So if dandelions get started in a lawn they will soon kill out the grass, and then there will be a dandelion lawn instead of a grass lawn!

A dandelion lawn is very beautiful for a little while in the early summer. Sometimes it looks like a carpet of gold, the yellow flowers are so thick and fine. But when they are done blossoming the lawn is a sorry looking sight.

Dandelions do not trouble the hay fields, for where the grass is allowed to grow tall it soon smothers them.

Boys are often hired to dig dandelion roots out of lawns, and near large cities poor women may often be seen digging them out for the sake of the young leaves which, when they first come up in the spring, make very good "greens." These people sell them or eat them instead of spinach. Tender young dandelion leaves are very good indeed, and some people like them better than spinach.



Dandelion plants have a wise way of protecting their seed children until the time for flight.

The flower buds come out of the center of the leaf rosette, close to the ground. They have very short stems and seem to sit right on the rosette.



1. A cluster of flowers.
2. One flower (magnified).

There are a great many flowers in one dandelion head. Each little yellow part of the dandelion flower head is a separate blossom, and each separate blossom has one seed case with a seed inside growing to the bottom of it.

All of these blossoms are shut up at first in a case of green, leaf-like parts, and form the bud.

As the bud grows older its stem lengthens a little, as you can see in the picture on page 9 — unless it is on a lawn. Then it does not lengthen; it seems to know the lawn mower will come along and take off its head if it grows taller, so it stays close to the ground. After a while the green bud opens, the many little yellow flowers push their way out, and the dandelion is in bloom.



The bud.

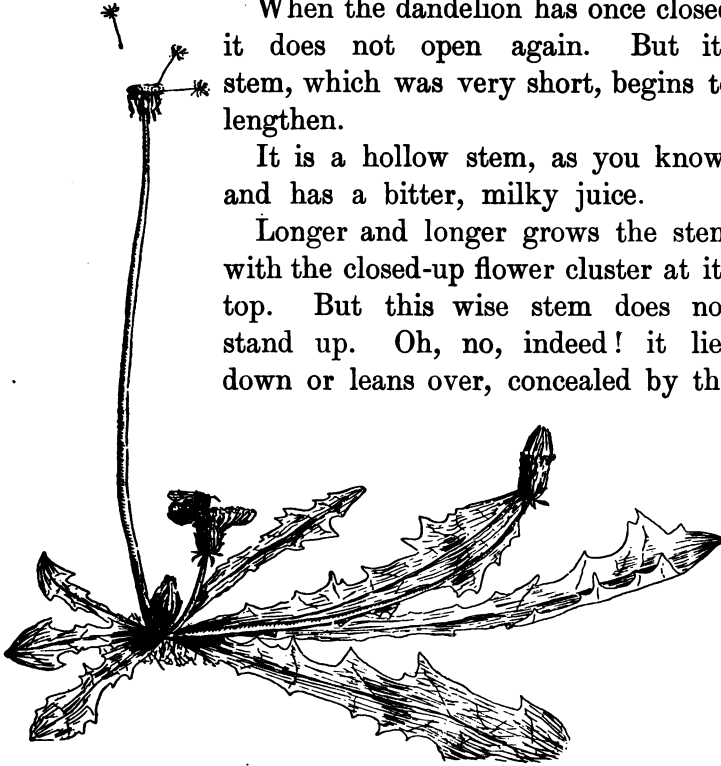
Towards night the dandelion shuts up again; the tiny yellow flowers press close together, and the outer

covering of green bracts, as they are called, closes up, too, and shuts them in all snug and safe.

When the dandelion has once closed it does not open again. But its stem, which was very short, begins to lengthen.

It is a hollow stem, as you know, and has a bitter, milky juice.

Longer and longer grows the stem with the closed-up flower cluster at its top. But this wise stem does not stand up. Oh, no, indeed! it lies down or leans over, concealed by the



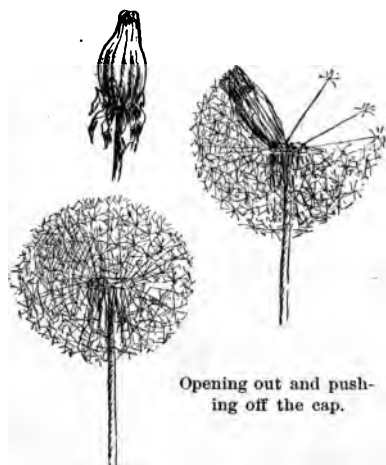
grass and weeds, unless it grows on a lawn. Then the wise stem does not lengthen much; it is afraid of that lawn mower.

If the dandelion is growing among tall grass, the

stem will grow very long indeed ; if among short grass it will not grow so long.

By this time you can guess why.

When the seeds are ripe and the silky plumes all nicely formed that stem stands up!



It stands straight up and looks over the tops of the grasses. Then the green bracts on the outside turn back, and the silky tufts spread out and pull themselves free from the remains of the tiny flowers which have withered and are no longer yellow. They do not fall off when the flower first closes, but make a little

cap to protect the growing akenes, and when these get ready to open out the cap is pushed off by them.

The hollow stem stands up, and its lovely silky head of plumed akenes shines in the sunlight.

There is nothing much prettier in the plant world than this head of fairy dandelion akenes all ready to fly away.

They stand and shine until a breeze comes along that is strong enough to dislodge them, then all in a moment they are off sailing through the air.

The parent plant is not sorry to have them go, for this is what it has worked so hard to accomplish; and as they float away, if it thinks at all, it no doubt hopes that each little shining wanderer will alight at last in a beautiful home of its own with plenty of space and sunlight and food for its growth.

If there is not breeze enough to carry away the dandelion akenes, when night approaches or a storm gathers the careful parent plant does not allow these silky treasures to become soaked and spoiled by moisture.

Each little plume shuts up again! The silky tufts no longer spread out, and the green bracts, too, turn up and cover them safely as before. They go to sleep, hoping, no doubt, for better luck next day.

There is no better fun than to watch the dandelions do these things.

When children blow the heads of dandelions away, that is just what the dandelions want, for it sets all the akenes flying about in the air above the earth.

The main thing for a dandelion seed is to get started. If it can get up in the air free from the weeds and grasses, it will be sure to take quite a journey and will doubtless settle in a new home.

The bitter milky juice of the dandelion very likely protects it from being eaten by various plant-eating creatures.

This juice is familiar to country children who pick the long stems of the dandelions, split them, and "curl" the parts in their mouths.

These pretty stems make very long and fine curls, as every little country girl knows.

