

# Arbor Day Leaves eBook

## Arbor Day Leaves

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## INTRODUCTION.

In preparing the second number of our manual for Arbor Day, we have endeavored to keep in mind the fact that Arbor Day was originally designed not as a mere festival or holiday, a pleasant occasion for children or adults, but to encourage the planting of trees for a serious purpose—the lasting benefit of the country in all its interests. As the poet Whittier has so well said, “The wealth, beauty, fertility, and healthfulness of the country largely depend upon the conservation of our forests and the planting of trees.” Arbor Day is not a floral festival, except as the trees may offer their bright blossoms for the occasion. In making our selections from authors, therefore, we have restricted ourselves to what they have said about trees, and have endeavored also to choose only such selections as are of high literary character, and so, not only admissible for occasional use but worthy to be learned and carried in memory for life; trees of thought which may be planted in the young minds in connection with Arbor Day, to grow with their growth and be perpetual sources of enjoyment.

## ORIGIN OF ARBOR DAY.

To J. Sterling Morton, ex-Governor of Nebraska, and Secretary of Agriculture under President Cleveland, belongs the honor of originating this tree-planting festival, and he is popularly known throughout our whole country as the “father of Arbor Day.” So well has the day been observed in Nebraska since 1872 that there are now over 700,000 acres of trees in that state planted by human hands.

The successful establishment of the day in Nebraska commended it at once to the people of other states, and it was soon adopted by Kansas, Iowa, and Minnesota, and was not long in making its way into Michigan and Ohio.

In the latter state it took on a new character, which has caused it to spread rapidly throughout the country. The teachers and pupils of the schools were invited to unite in its observance, and instead of trees being planted merely as screens from the winds, they were also planted for ornamental purposes and as memorials of important historical events and of celebrated persons, authors, statesmen, and others. Thus the tree-planting has gained a literary aspect and an interest for all classes, for young as well as old. In preparation for it the pupils of the schools have been led to the study of trees, their characteristics and uses. They have learned the history of celebrated trees and of persons who have been connected with them. They have become familiar with the lives of eminent persons and the best writings of distinguished authors, and thus have received most valuable instruction, while, at the same time, their finer tastes have been cultivated.

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Since the observance of the day has been modified, as it was on its introduction into Ohio, it has spread rapidly through the country and at present forty-four states and territories celebrate Arbor Day. Its every way healthful and desirable features have so generally commended it also that it has gained a foothold abroad and has begun to be observed in England, Scotland, France, and even in far-off South Africa. It has become preeminently a school day and a school festival. In many cases school teachers and superintendents have introduced its observance. But it has soon so commended itself to all that, in most cases, it has been established by law and made a legal holiday.

Readings for Arbor Day.

*About trees.*

From the originator of Arbor Day.

A tree is the perfection in strength, beauty, and usefulness of vegetable life. It stands majestic through the sun and storm of centuries. Resting in summer beneath its cooling shade, or sheltering besides its massive trunk from the chilling blast of winter, we are prone to forget the little seed whence it came. Trees are no respecters of persons. They grow as luxuriantly beside the cabin of the pioneer as against the palace of the millionaire. Trees are not proud. What is this tree? This great trunk, these stalwart limbs, these beautiful branches, these gracefully bending boughs, these gorgeous flowers, this flashing foliage and ripening fruit, purpling in the autumnal haze are only living materials organized in the laboratory of Nature's mysteries out of rain, sunlight, dews, and earth. On this spot, in this tree, a metamorphosis has so deftly taken place that it has failed to excite even the wonder of the majority of men.

[Illustration]

Here, sixty years ago, a school boy planted an acorn. Spring came, then the germ of this oak began to attract the moisture of the soil. The shell of the acorn was then broken open by the internal growth of the embryo oak. It sent downward a rootlet to get soil and water, and upward it shot a stem to which the first pair of leaves was attached. These leaves are thick and fleshy. They constitute the greater bulk of the acorn. They are the first care-takers of the young oak. Once out of the earth and in the sunlight they expand, assume a finer texture, and begin their usefulness as nursing leaves, "folia nutrientia." They contain a store of starch elaborated in the parent oak which bore the acorn.

In tree infancy the nursing leaves take oxygen from the air, and through its influence the starch in the nursing leaves is transmuted into a tree baby-food, called dextrine, which is conveyed by the water absorbed during germination to the young rootlet and to the gemmule and also to the first aerial leaf. So fed, this leaf expands, and remains on the

stem all summer. The nursing leaves die when the aerial leaves have taken their food away, and then the first stage of oak hood has begun. It has subterranean



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and superterranean organs, the former finding plant-food in the earth, and the latter gathering it in the air, the sunlight, and the storm. The rootlets in the dark depths of soil, the foliage in the sunlit air, begin now their common joint labor of constructing a majestic oak. Phosphates and all the delicacies of plant-food are brought in from the secret stores of the earth by the former, while foliage and twig and trunk are busy in catching sunbeams, air, and thunderstorms, to imprison in the annual increment of solid wood. There is no light coming from your wood, corncob, or coal fire which some vegetable Prometheus did not, in its days of growth, steal from the sun and secrete in the mysteries of a vegetable organism.

Combustion lets loose the captive rays and beams which growing plants imprisoned years, centuries, even eons ago, long before human life began its earthly career. The interdependence of animal and tree life is perennial. The intermission of a single season of a vegetable life and growth on the earth would exterminate our own and all the animal races. The trees, the forests are essential to man's health and life. When the last tree shall have been destroyed there will be no man left to mourn the improvidence and thoughtlessness of the forest-destroying race to which he belonged.

In all civilizations man has cut down and consumed, but seldom restored or replanted, the forests. In biblical times Palestine was lovely in the foliage of the palm, and the purpling grapes hung upon her hillsides and gleamed in her fertile valleys like gems in the diadems of her princes. But man, thoughtless of the future, careless of posterity, destroyed and replaced not; so, where the olive and the pomegranate and the vine once held up their luscious fruit for the sun to kiss, all is now infertility, desolation, desert, and solitude. The orient is dead to civilization, dead to commerce, dead to intellectual development. The orient died of treelessness.

From the grave of the eastern nations comes the tree monition to the western. The occident like the orient would expire with the destruction of all its forests and woodlands.

Twenty-five thousand acres of woodland are consumed by the railroads, the manufactories, and the homes of the United States every twenty-four hours. How many are planted? To avert treelessness, to improve the climatic conditions, for the sanitation and embellishment of home environments, for the love of the beautiful and useful combined in the music and majesty of a tree, as fancy and truth unite in an epic poem, Arbor Day was created. It has grown with the vigor and beneficence of a grand truth or a great tree. It faces the future. It is the only anniversary in which humanity looks futureward instead of pastward, in which there is a consensus of thought for those who are to come after us, instead of reflections concerning those who have gone before us. It is a practical anniversary. It is

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a beautiful anniversary. To the common schools of the country I confide its perpetuation and usefulness with the same abiding faith that I would commit the acorn to the earth, the tree to the soil, or transmit the light on the shore to far off ships on the waves beyond, knowing certainly that loveliness, comfort, and great contentment shall come to humanity everywhere because of its thoughtful and practical observance by all the civilized peoples of the earth.

*J. Sterling Morton.*

[Illustration]

*Leaves, and what they do.*

The leaves of the trees afford an almost endless study and a constant delight. Frail, fragile things, easily crumpled and torn, they are wonderful in their delicate structure, and more wonderful if possible on account of the work which they perform.

They are among the most beautiful things offered to our sight. Some one has well said that the beauty of the world depends as much upon leaves as upon flowers. We think of the bright colors of flowers and are apt to forget or fail to notice the coloring of leaves. But what a picture of color, beyond anything that flowers can give us, is spread before our sight for weeks every autumn, when the leaves ripen and take on hues like those of the most gorgeous sunset skies, and the wide landscape is all aglow with them. A wise observer has called attention also to the fact that the various kinds of trees have in the early springtime also, only in a more subdued tone, the same colors which they put on in the autumn. If we notice the leaves carefully, we shall see that there is a great variety of color in them all through the year. While the prevailing color, or the body color so to speak, is green, and the general tone of the trees seen in masses is green—the most pleasant of all colors to be abidingly before the sight—this is prevented from becoming dull or somber because it comprises almost innumerable tints and shades of the self-same color, while other distinct colors are mingled with it to such an extent as to enliven the whole foliage mass. Spots of yellow, of red, of white, and of intermediate colors are dashed upon the green leaves or become the characteristic hues of entire trees, and so there is brought about an endless variety and beauty of color.

Then there is the beauty of form, size, position, and arrangement. Of the one hundred and fifty thousand or more known species of trees, the leaves of each have a characteristic shape. The leaves of no two species are precisely alike in form. More than this is also true. No two leaves upon the same tree are in this respect alike. While there is a close resemblance among the leaves of a given tree, so that one familiar with trees would not be in doubt of their belonging to the same tree, though he should see

them only when detached, yet there is more or less variation, some subtle difference in the notching or curving of the leaf-edge perhaps, so that each leaf has a form of its own. These differences of shape in the leaves are a constant source of beauty.

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What a variety of size also have the leaves, from those of the birches and willows to those of the sycamores, the catalpas and the paulownias. On the same tree also the leaves vary in size, those nearest the ground and nearest the trunk being usually larger than those more remote. How different as to beauty would the trees be if their leaves were all of the same size; how much less pleasing to the sight.

Then what a wide difference is there in the position of the leaves on the trees and their relative adjustment to each other? Sometimes they grow singly, sometimes in pairs, sometimes in whirls or clusters. Some droop, others spread horizontally, while others still are more or less erect. The leaves of some trees cling close to the branches, others are connected with the branches by stems of various length and so are capable of greater or less movement. The leaves of poplars and aspens have a peculiarly flattened stem, by reason of which the slightest breath of wind puts them in motion.

These are some of the most obvious characteristics of the leaves, and by which they are made the source of so much of the beauty of the world in which we live. It will be a source of much pleasure to anyone who will begin now, in the season of swelling buds and opening leaves, to watch the leaves as they unfold and notice their various forms and colors and compare them one with another. There is no better way of gaining valuable knowledge of trees than this, for the trees are known by their leaves.

But let us turn now from their outward appearance and consider what is done by them, for the leaves are among the great workers of the world, or, if we may not speak of them as workers, a most important work is done in or by means of them, a work upon which our own life depends and that of all the living tribes around us.

Every leaf is a laboratory, in which, by the help of that great magician, the sun, most wonderful changes and transformations are wrought. By the aid of the sun the crude sap which is taken up from the ground is converted by the leaves into a substance which goes to build up every part of the tree and causes it to grow larger from year to year; so that instead of the tree making the leaves, as we commonly think, the leaves really make the tree.

Leaves, like other parts of the plant or tree, are composed of cells and also of woody material. The ribs and veins of the leaves are the woody part. By their stiffness they keep the leaves spread out so that the sun can act upon them fully, and they prevent them also from being broken and destroyed by the winds as they otherwise would be. They serve also as ducts or conduits by which the crude sap is conveyed to the leaves, and by which when it has there been made into plant food, it is carried into all parts of the tree for its nourishment. Protected and upheld by these expanded woody ribs, the body of the leaf consists of a mass of pulpy cells

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arranged somewhat loosely, so that there are spaces between them through which air can freely pass. Over this mass of cells there is a skin, or epidermis as it is called, the green surface of the leaf. In this there are multitudes of minute openings, or breathing pores, through which air is admitted, and through which also water or watery vapor passes out into the surrounding atmosphere. In the leaf of the white lily there are as many as 60,000 of these openings in every square inch of surface and in the apple leaf not fewer than 24,000. These breathing pores, called stomates, are mostly on the under side of the leaf, except in the case of leaves which float upon the water. There is a beautiful contrivance also in connection with these pores, by which they are closed when the air around is dry and the evaporation of the water from the leaves would be so rapid as to be harmful to the tree, and are opened when the surrounding atmosphere is moist.

The green color of the leaves is owing to the presence in the cells of minute green grains or granules, called chlorophyll, which means leaf-green, and these granules are indispensable to the carrying on of the important work which takes place in the leaves. They are more numerous and also packed more closely together near the upper surface of the leaf than they are near the lower. It is because of this that the upper surface is of a deeper green than the lower.

Such, then, is the laboratory of the leaf, the place where certain inorganic, lifeless substances such as water, lime, sulphur, potash, and phosphorus are transformed and converted into living and organic vegetable matter, and from which this is sent forth to build up every part of the tree from deepest root to topmost sprig. It is in the leaves also that all the food of man and all other animals is prepared, for if any do not feed upon vegetable substances directly but upon flesh, that flesh nevertheless has been made only as vegetable food has been eaten to form it. It is, as the Bible says, "The tree of the field is man's life."

But let us consider a little further the work of the leaves. The tree is made up almost wholly of oxygen, hydrogen, and carbon. It is easy to see where the oxygen and hydrogen are obtained, for they are the two elements which compose water, and that, we have seen, the roots are absorbing from the ground all the while and sending through the body of the tree into the leaves. But where does the carbon come from? A little examination will show.

The atmosphere is composed of several gases, mainly of oxygen and nitrogen. Besides these, however, it contains a small portion of carbonic acid, that is, carbon chemically united with oxygen. The carbonic acid is of no use to us directly, and in any but very minute quantities is harmful; but the carbon in it, if it can be separated from the oxygen, is just what the tree and every plant wants. And now the work of separating the carbon from the oxygen

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is precisely that which is done in the wonderful laboratory of the leaf. Under the magic touch of the sun, the carbonic acid of the atmosphere which has entered the leaf through the breathing pores or stomates and is circulating through the air-passages and cells, is decomposed, that is, taken to pieces; the oxygen is poured out into the air along with the watery vapor of the crude sap, while the carbon is combined with the elements of water and other substances which we have mentioned, to form the elaborated sap or plant-material which is now ready to be carried from the leaves to all parts of the plant or tree, to nourish it and continue its growth. Such is the important and wonderful work of the leaf, the tender, delicate leaf, which we crumple so easily in our fingers. It builds up, atom by atom, the tree and the great forests which beautify the world and provide for us a thousand comforts and conveniences. Our houses and the furniture in them, our boats and ships, the cars in which we fly so swiftly, the many beautiful and useful things which are manufactured from wood of various kinds, all these, by the help of the sun, are furnished us by the tiny leaves of the trees.

### **BRYANT, THE POET OF TREES.**

"It is pleasant," as Mr. George W. Curtis has said, "to remember, on Arbor Day, that Bryant, our oldest American poet and the father of our American literature, is especially the poet of trees. He grew up among the solitary hills of western Massachusetts, where the woods were his nursery and the trees his earliest comrades. The solemnity of the forest breathes through all his verse, and he had always, even in the city, a grave, rustic air, as of a man who heard the babbling brooks and to whom the trees told their secrets." His "Forest Hymn" is familiar to many, but it cannot be too familiar. It would be well if teachers would encourage their pupils to commit the whole, or portions of it, at least, to memory. Let it be made a reading lesson, but, in making it such, let pains be taken to point out its felicities of expression, its beautiful moral tone and lofty sentiment, and its wise counsels for life and conduct. Nothing could be more appropriate, especially for the indoor portion of the Arbor Day exercises, than to have this poem, or portions of it, read by some pupil in full sympathy with its spirit, or by some class in concert.

Forest hymn.

The groves were God's first temples, ere man learned  
To hew the shaft and lay the architrave  
And spread the roof above them, ere he framed  
The lofty vault to gather and roll back  
The sound of anthems; in the darkling wood,  
Amidst the cool and silence, he knelt down  
And offered to the Mightiest solemn thanks

And supplications. For his simple heart  
Might not resist the sacred influences  
Which from the stilly twilight

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of the place

And from the gray old trunks that high in heaven  
Mingled their mossy boughs, and from the sound  
Of the invisible breath that swayed at once  
All their green tops, stole over him and bowed  
His spirit with the thought of boundless power  
And inaccessible majesty. Ah, why  
Should we, in the world's riper years, neglect  
God's ancient sanctuaries and adore  
Only among the crowd and under roofs  
That our frail hands have raised? Let me, at least,  
Here, in the shadow of this ancient wood,  
Offer one hymn, thrice happy if it find  
Acceptance in His ear.

—Bryant.

## JAMES RUSSELL LOWELL.

We can hardly see or think of trees without being reminded of Mr. Lowell, whose death during the last year was so great a loss. He was eminently a lover of trees, and they were the inspiration of some of his best prose and poetry. This love of trees led him to call his pleasant place of residence, in Cambridge, "Elmwood." In making up our selections for reading or recitation on Arbor Day, the writings of no one have been turned to more often, probably, than those of Mr. Lowell, and it will be very proper if we make this year's observance distinguished by the abundance of our extracts from his various works. We may well also plant memorial trees in honor of him. No one is more worthy of such honor, and we can hardly do any better thing than to plant trees which shall bear his name and remind us hereafter of his noble words and noble life. And no memorial of him would be more appropriate or more accordant with his own feelings than a growing tree. This is abundantly shown by the following letter, written only a few years ago, when it was proposed in one of our schools, to plant on Arbor Day, a tree in his memory.

"I can think of no more pleasant way of being remembered than by the planting of a tree. Like whatever things are perennially good, it will be growing while we are sleeping, and will survive us to make others happier. Birds will rest in it and fly thence with messages of good cheer. I should be glad to think that any word or deed of mine could be such a perennial presence of beauty, or show so benign a destiny."

[Illustration]



*The oak.*

What gnarled stretch, what depth of shade, is his?  
There needs no crown to mark the forest's king;  
How in his leaves outshines full summer's bliss!  
Sun, storm, rain, dew, to him their tribute bring,  
Which he, with such benignant royalty  
Accepts, as overpayeth what is lent;  
All nature seems his vassal proud to be,  
And cunning only for his ornament.

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How towers he, too, amid the billowed snows,  
An unquelled exile from the summer's throne,  
Whose plain, uncintured front more kingly shows,  
Now that the obscuring courtier leaves are flown.  
His boughs make music of the winter air,  
Jewelled with sleet, like some cathedral front  
Where clinging snow-flakes with quaint art repair  
The dents and furrows of Time's envious brunt.

How doth his patient strength the rude March wind  
Persuade to seem glad breaths of summer breeze,  
And win the soil that fain would be unkind,  
To swell his revenues with proud increase!  
He is the gem; and all the landscape wide  
(So doth his grandeur isolate the sense)  
Seems but the setting, worthless all beside,  
An empty socket, were he fallen thence.

So, from oft converse with life's wintry gales,  
Should man learn how to clasp with tougher roots  
The inspiring earth;—how otherwise avails  
The leaf-creating sap that sunward shoots?  
So every year that falls with noiseless flake  
Should fill old scars up on the stormward side,  
And make hoar age revered for age's sake,  
Not for traditions of youth's leafy pride.

So, from the pinched soil of a churlish fate,  
True hearts compel the sap of sturdier growth,  
So between earth and heaven stand simply great,  
That these shall seem but their attendants both;  
For nature's forces, with obedient zeal  
Wait on the rooted faith and oaken will,  
As quickly the pretender's cheat they feel,  
And turn mad Pucks to flout and mock him still.

Lord! all Thy works are lessons,—each contains  
Some emblem of man's all-containing soul;  
Shall he make fruitless all Thy glorious pains,  
Delving within Thy grace an eyeless mole?  
Make me the least of Thy Dodona-grove,  
Cause me some message of Thy truth to bring,  
Speak but a word through me, nor let Thy love  
Among my boughs disdain to perch and sing.

—*James Russell Lowell.*

## **WHAT ONE TREE IS WORTH.**

It will help us, perhaps, to appreciate properly, the value and manifold uses of trees if we consider the uses to which a single one of the many species is put. A Chinese gives us the following account of the Bamboo.

“The bamboo plant is cultivated almost everywhere; it is remarkable for its shade and beauty. There are about sixty varieties, different in size according to its genus; ranging from that of a switch to a big pole measuring from four to five inches in diameter. It is reared from shoots and suckers, and, after the root once clings to the ground, it thrives and spreads without further care or labor. Of these sixty

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varieties, each thrives best in a certain locality, and throughout the whole empire of China the bamboo groves not only embellish the gardens of the poor, but the vast parks of the princes and wealthy. The use to which this stately grass is put is truly wonderful. The tender shoots are cultivated for food like the asparagus; the roots are carved into fantastic images of men, birds, and monkeys. The tapering culms are used for all purposes that poles can be applied to, in carrying, supporting, propelling, and measuring; by the porter, the carpenter, and the boatman; for the joists of houses and the ribs of sails; the shafts of spears and the wattles of hurdles, the tubes of aqueducts and the handles and ribs of umbrellas and fans. The leaves are sewed upon cords to make rain-cloaks for farmers and boatmen, for sails to boats as well as junks, swept into heaps to form manure, and matted into thatches to cover houses. The bamboo wood is cut into splints and slivers of various sizes to make into baskets and trays of every form and fancy, twisted into cables, plaited into awnings, and woven into mats for the bed and floor, for the sceneries of the theatre, for the roofs of boats, and the casing of goods. The shavings are picked into oakum to be stuffed into mattresses. The bamboo furnishes the bed for sleeping and the couch for reclining, the chair for sitting, the chopsticks for eating, the pipe for smoking, the flute for entertaining; a curtain to hang before the door, and a broom to sweep around it. The ferrule to govern the scholar, the book he studies and the paper he writes upon, all originated from this wonderful grass. The tapering barrels of the organ and the dreadful instrument of the lictor—one to strike harmony, and the other to strike dread; the rule to measure lengths, the cup to gauge quantities, and the bucket to draw water; the bellows to blow the fire and the box to retain the match; the bird-cage and crab-net, the fish-pole, and the water-wheel and eaveduct, wheelbarrow, and hand-cart, and a host of other things, are the utilities to which this magnificent grass is converted."

## ENDURING CHARACTER OF THE FORESTS.

Of all the works of the creation which know the changes of life and death, the trees of the forest have the longest existence. Of all the objects which crown the gray earth, the woods preserved unchanged, throughout the greatest reach of time, their native character. The works of man are ever varying their aspect; his towns and his fields alike reflect the unstable opinions, the fickle wills and fancies of each passing generation; but the forests on his borders remain to-day the same as they were ages of years since. Old as the everlasting hills, during thousands of seasons they have put forth and laid down their verdure in calm obedience to the decree which first bade them cover the ruins of the Deluge.

*Susan Fenimore Cooper.*

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### THE POPULAR POPLAR TREE.

When the great wind sets things whirling  
And rattles the window panes,  
And blows the dust in giants  
And dragons tossing their manes;  
When the willows have waves like water,  
And children are shouting with glee;  
When the pines are alive and the larches,—  
Then hurrah for you and me,  
In the tip o' the top o' the top o' the tip of  
the popular poplar tree!

Don't talk about Jack and the Beanstalk—  
He did not climb half so high!  
And Alice in all her travels  
Was never so near the sky!  
Only the swallow, a-skimming  
The storm-cloud over the lea,  
Knows how it feels to be flying—  
When the gusts come strong and free—  
In the tip o' the top o' the top o' the tip of  
the popular poplar tree!

—Blanch Willis Howard.

### FORESTRY AND THE NEED OF IT.

“Experience as well as common sense teaches us that the selecting of the species and the mere planting of the same is not a guarantee of successful forestry.”

In this country we have heretofore not made any distinction between forests and woodlands, while in Europe, and more especially in those countries in which forestry has reached a high state of development, the distinction is clearly defined. Prof. Rossmassler, in speaking of the difference between forest and woodland (Forst und Wald), says: “Every forest is also a woodland, but not every woodland, be it ever so large, is a forest. It is the regular cultivation and economical management which turns a woodland into a forest.”

This difference between forests and woodland is also indicated by the terms *forester* and *woodman*; the former term being applied to the man who advocates the perpetuation of woodland in accordance with the teachings and principles of forestry, and the latter to the man whose profession is that of felling trees.

In this meaning of the term, we, in this country, have really no forests, but woodlands only. To turn these woodlands into forests, and to plant forests, where for climatic and other considerations they are needed, is the aim and object of the advocates of forestry.

The forester, it will be seen, has a distinct mission, which is to perpetuate the forests so indispensable to civilized life, and to produce at a minimum expense, from a given piece of ground, the greatest amount of forest products.

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As our forests decrease in extent and deteriorate in quality, and as, with the increase of our population, the demands upon forest products of all kinds become greater, the necessity of a rational system of forestry, and the need of educated foresters becomes more apparent every day. We should, moreover, constantly bear in mind that, while there are trees, as the catalpa, the ash and the hickory, which will attain merchantable size in forty or fifty years from the seed, there are others such as the pine and the tulip-poplar, which require for reaching the necessary dimensions a period of from sixty to eighty years; and still others, such as the oaks and the black walnut, for the full development of which about a hundred and fifty years are required. Can we, in view of this, still be in doubt as to whether or not the time has come when we should earnestly consider the question?

Hon. *Adolph Lene*,  
Secretary of Ohio State Forestry Bureau.

### TREE WEATHER PROVERBS.

If the Oak is out before the Ash,  
T'will be a summer of wet and splash;  
But if the Ash is out before the Oak,  
T'will be a summer of fire and smoke.

When the Hawthorne bloom too early shows,  
We shall have still many snows.

When the Oak puts on his goslings gray,  
'Tis time to sow barley, night or day.

When Elm leaves are big as a shilling,  
Plant kidney beans if you are willing;  
When Elm leaves are as big as a penny,  
You *must* plant kidney beans if you wish to have any.

### FLOWERS.

Spake full well, in language quaint and olden,  
One who dwelleth by the castled Rhine,  
When he called the flowers, so blue and golden,  
Stars, that in earth's firmament do shine.

Stars they are, wherein we read our history,  
As astrologers and seers of eld;  
Yet not wrapped about with awful mystery,  
Like the burning stars which they beheld.



Wondrous truths, and manifold as wondrous,  
God hath written in those stars above;  
But not less in the bright flowerets under us  
Stands the revelation of His love.

Bright and glorious is that revelation,  
Writ all over this great world of ours—  
Making evident our own creation,  
In these stars of earth, these golden flowers.

—*Longfellow.*

Flowers seem intended for the solace of ordinary humanity; children love them; tender, contented, ordinary people love them. They are the cottager's treasure; and in the crowded town mark, as with a little fragment of rainbow, the windows of the workers in whose heart rests the covenant of peace.

*Ruskin.*

Arbor Day Celebrations.

[Illustration]



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*Growing observance of Arbor day.*

It adds to the pleasure attending the observance of Arbor Day when we think how many are uniting with us in its celebration. It is but a few years since the day was first known and its observance was limited to a single one of our States. Now the day is known and observed from Maine to Oregon and from Minnesota to the Gulf of Mexico. Not only is this true, but this our tree-festival so commends itself to all that its observance has spread more rapidly and more widely than any other public observance in the world's history. It is already established in portions of England, France, and Italy, in far-away South Africa and Australia, and we shall probably hear before long of its adoption in China and Japan.

And so, as we come together to have pleasant talks about the trees and to march out with songs and banners to plant them in school grounds, in parks, by the road-side or elsewhere, it will be pleasant to remember that so many others are engaged in similar services. It should make the day a happier one for us to think that so many will enjoy it as we do, as it should always increase our happiness to know that others are sharing with us anything that is good.

As it will, doubtless, be interesting to all engaging in the celebration of the day, we give on the next page a list of the States in which Arbor Day is observed.

## STATES AND TERRITORIES OBSERVING ARBOR DAY.

*Year of  
first  
states. Observance time of observance.*

Alabama 1887 22nd February.

Arizona 1890-91 First Friday after first of February.

California 1886

Colorado 1885 Third Friday in April.

Connecticut 1887 In Spring, at appointment of Governor.

Florida 1886 January 8.

Georgia 1887 First Friday in December.

Idaho 1887 Last Monday in April.

Illinois 1888 Date fixed by Governor and Supt. of Public  
Instruction.

Indiana 1884 " " Superintendent of Public Instruction.

Iowa 1887 " " " "

Kansas 1875 Option of Governor, usually in April.

Kentucky 1886 " "

Louisiana 1888-9 " Parish Boards.

Maine 1887 " Governor.  
Maryland 1889 " " in April.  
Massachusetts 1886 Last Saturday in April.  
Michigan 1885 Option of Governor.  
Minnesota 1876 " "  
Mississippi 1892 " Board of Education.  
Missouri 1886 First Friday after first Tuesday of April.  
Montana 1887 Third Tuesday of April.

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Nebraska 1872 22nd of April.  
Nevada 1887 Option of Governor.  
New Hampshire 1886 " "  
New Jersey 1884 " " in April.  
New Mexico 1890 Second Friday in March.  
New York 1889 First Friday after May 1.  
North Carolina 1893  
North Dakota 1884 Sixth of May, by proclamation of Governor.  
Ohio 1882 In April " "  
Oregon 1882 Second Friday in April.  
Pennsylvania 1887 Option of Governor.  
Rhode Island 1887 " "  
South Carolina Uncertain Variable.  
South Dakota 1884 Option of Governor.  
Tennessee 1875 November, at designation of County  
Superintendents.  
Texas 1800 22nd of February.  
Vermont 1885 Option of Governor.  
Virginia 1892  
West Virginia 1883 Fall and Spring, at designation of Supt.  
of Schools.  
Wisconsin 1889 Option of Governor.  
Wyoming 1888 " "  
Washington 1892

Only the following five states or territories fail to observe Arbor Day—Arkansas, Delaware, Oklahoma, Indian Territory, and Utah.

### ENCOURAGING WORDS.

The Governors of our States and the Superintendents of our schools have generally entered heartily into the observance of Arbor Day and spoken earnest words of encouragement in its behalf. The following are specimens of what they have said.

=New Hampshire.=—Governor Currier, in his Arbor Day Proclamation: "I especially desire that our children may be taught to observe and reverence the divine energies which are unfolding themselves in every leaf and flower that sheds a perfume in spring or ripens into a robe of beauty in autumn, so that the aspirations of childhood, led by beautiful surroundings, may form higher and broader conceptions of life and humanity;

for the teachings of nature lead up from the material and finite to the infinite and eternal.”

=Illinois.=—Governor Fifer: “Let the children in our schools, the young men and women in our colleges, seminaries, and universities, with their instructors, co-operate in the proper observance of the day by planting shrubs, vines, and trees that will beautify the home, adorn the public grounds, add wealth to the State, and thereby increase the comfort and happiness of our people.”

=Missouri.=—From the Superintendent of Public Schools, in his annual report: “Let this love for planting trees, shrubs, vines, and flowers be encouraged and stimulated in the school-room and not only will the school-yards profit thereby, but the now barren farm-yards and pastures will remain the recipients of your instruction.”

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=California.=—From Superintendent of Public Instruction: “Our schools cannot protect the forests, but they can raise up a generation which will not leave their hillsides and mountains treeless; a generation which will frown upon and rebuke the wanton destruction of our forest trees. There is no spot on earth that may not be made more beautiful by the help of trees and flowers.”

=Nebraska.=—From the State Superintendent of Public Instruction: “On this day, above all others, the pupils of our public schools should be educated to care for the material prosperity of the country and to foster the growth of trees. Let the child understand that he is especially interested in the tree he plants: that it is his; that upon him devolves the responsibility of protecting and cultivating it in coming years.”

=New York.=—Hon. A.S. Draper, ex-Superintendent of Public Instruction: “The primary purpose of the Legislature in establishing Arbor Day was to develop and stimulate in the children of the commonwealth a love and reverence for Nature, as revealed in trees and shrubs and flowers.”

### THE BEST USE OF ARBOR DAY.

Arbor Day, to be most useful as well as most pleasant, should not stand by itself, alone, but be connected with much study and talk of trees and kindred subjects beforehand and afterward. It should rather be the focal or culminating point of the year's observation of trees and other natural objects with which they are closely connected. The wise teacher will seek to cultivate the observing faculties of the pupils by calling their attention to the interesting things with which the natural world abounds. It is not necessary to this that there should be formal classes in botany or any natural science, though we think no school should be without its botanical class or classes, nor should anyone be eligible to the place of a teacher in our public schools who is not competent to give efficient instruction in botany at least.

But much may be done in this direction informally, by brief, familiar talks in the intervals between the regular recitations of the school-room, or during the walks to and from school. A tree by the road-side will furnish an object lesson for pleasant and profitable discourse for many days and at all seasons. A few flowers, which teacher or pupil may bring to the school-room, will easily be made the means of interesting the oldest and the youngest and of imparting the most profitable instruction. How easy also to plant a few seeds in a vase in the school-room window and to encourage the pupils to watch their sprouting and subsequent growth.

Then it should not be difficult to have a portion of the school grounds set apart, where the pupils might, with the teacher's guidance, plant flower and tree seeds and thus be able to observe the ways and characteristics of plants in all periods of their growth. They could thus provide themselves with trees for planting on future Arbor Days, and at

the time of planting there would be increased enjoyment from the fact that they had grown the trees for that very purpose.

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Why might not every school-house ground be made also an arboretum, where the pupils might have under their eyes, continually, specimens of all the trees that grow in the town or in the State where the school is situated? It would require but a little incitement from the teacher to make the pupils enthusiastic with the desire to find out the different species indigenous to the region and to gather them, by sowing seeds or planting the young trees, around their place of study.

And if the school premises are now too small in extent to admit of such a use, let the pupils make an earnest plea for additional ground. As a general fact our school-grounds have been shamefully limited in extent and neglected as to their use and keeping. The school-house, in itself and in its surroundings, ought to be one of the most beautiful and attractive objects to be seen in any community. The approach from the street should be like that to any dwelling house, over well kept walks bordered by green turf, with trees and shrubs and flowers offering their adornment. Everything should speak of neatness and order. The playground should be ample, but it should be in another direction and by itself.

Europeans are in advance of us in school management. The Austrian public school law reads: "In every school a gymnastic ground, a garden for the teacher, according to the circumstances of the community, and a place for the purposes of agricultural experiment are to be created." There are now nearly 8,000 school gardens in Austria, not including Hungary. In France, also, gardening is taught in the primary and elementary schools. There are nearly 30,000 of these schools, each of which has a garden attached to it, and the Minister of Public Instruction has resolved to increase the number of school gardens and that no one shall be appointed master of an elementary school unless he can prove himself capable of giving practical instruction in the culture of Mother Earth. In Sweden, in 1871, there were 22,000 children in the common schools receiving instruction in horticulture and tree-planting. Each of more than 2,000 schools had for cultivation from one to twelve acres of ground.

Why should we be behind the Old World in caring for the schools? By the munificence of one of her citizens, New York has twice offered premiums for the best-kept school-grounds. Why may we not have Arbor Day premiums in all of our States and in every town for the most tasteful arrangement of school-house and grounds? These places of education should be the pride of every community instead of being, as they so often are, a reproach and shame.

## TREES IN THEIR LEAFLESS STATE.

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As the season for Arbor Day and tree-planting comes on, just before the buds begin to swell and are getting ready to cover the trees with a fresh mantle of leaves, it is well—as it is also when the leaves have fallen from the trees in autumn—to give attention to the bare trees and notice the characteristic forms of the various species, the manner in which their branches are developed and arranged among themselves, for a knowledge of these things will often enable one to distinguish the different kinds of trees more readily and certainly than by any other means. The foliage often serves as an obscuring veil, concealing, in part at least, the individuality and the peculiarities of the trees. But if one is familiar with their forms of growth, their skeleton anatomy, so to speak, he will recognize common trees at once with only a partial view of them.

Some trees, as the oak, throw their limbs out from the trunk horizontally. As Dr. Holmes says: “The others shirk the work of resisting gravity, the oak defies it. It chooses the horizontal direction for its limbs so that their whole weight may tell, and then stretches them out fifty or sixty feet so that the strain may be mighty enough to be worth resisting.” Some trees have limbs which droop toward the ground, while those of most, perhaps, have an upward tendency, and others still have an upward direction at first and later in their growth a downward inclination, as in the case of the elm, the birch, and the willows. Some, like the oak, have comparatively few but large and strong branches, while others have many and slender limbs, like many of the birches and poplars.

The teacher should call attention to these and other characteristics of tree-structure, drawing the various forms of trees on the blackboard and encouraging the pupils to do the same, allowing them also to correct each other's drawings. This will greatly increase their knowledge of trees and their interest in them as well as in Arbor Day and its appropriate observance.

[Illustration]

Programme for Arbor Day.

We give in this part of our manual a programme for Arbor Day observance. It is presented not so much in the expectation that it will be exactly copied as that it may serve as suggestion of what may be done. We have added various selections from poets and prose writers which may help those who are preparing for the proper observance of Arbor Day. But these are only a few specimens from the great stores of our literature. A little care and painstaking beforehand will furnish an ample supply of the desired material, for our literature abounds in such. Not the least of the benefits of the observance of Arbor Day is the opportunity it gives for making the young familiar with the best thoughts of the best writers and thus giving them a literary culture in the pleasantest manner. Thus while preparing to plant trees we may be planting in the young mind and heart growths more precious and lasting than they.



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\* \* \* \* \*

I.-Exercises In the School-Room.

=1. *Reading.* (= *By the teacher, or by classes.*)

“And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so. And the earth brought forth grass, and herb yielding seed after his kind, and the tree yielding fruit, whose seed was in itself after his kind.”

“And out of the ground made the Lord God to grow every tree that is pleasant to the sight, and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil.”

“Blessed is the man that trusteth in the Lord, and whose hope the Lord is. For he shall be as a tree planted by the waters, and that spreadeth out her roots by the river, and shall not see when heat cometh, but her leaf shall be green; and shall not be careful in the year of drought, neither shall cease from yielding fruit.”

“I will plant in the wilderness the cedar, the shittah tree, and the myrtle, and the oil tree; I will set in the desert the fir tree, and the pine, and the box tree together: that they may see, and know, and consider, and understand together, that the hand of the Lord hath done this, and the Holy One of Israel hath created it.”

“He that trusteth in his riches shall fall: but the righteous shall flourish as a branch.”

“Wisdom is a tree of life to them that lay hold upon her, and happy is everyone that retaineth her.”

“And he shewed me a pure river of water of life, clear as crystal, proceeding out of the throne of God and of the Lamb. In the midst of the street of it, and on either side of the river, was there the tree of life, which bare twelve manner of fruits, and yielded her fruit every month: and the leaves of the tree were for the healing of the nations.”

=2. *Invocation song.* =

*Tribute to nature.*

[Tune—“*America.*”]

[Illustration: Music notation]

Of nature broad and free,  
Of grass and flower and tree,



Sing we to-day.  
God hath pronounced it good  
So we, His creatures would  
Offer to field and wood,  
Our heartfelt lay.

To all that meets the eye,  
In earth, or air, or sky,  
Tribute we bring.  
Barren this world would be,  
Bereft of shrub and tree:  
Now, gracious Lord, to Thee,  
Praises we sing.

May we Thy hand behold,  
As bud and leaf unfold,  
See but Thy thought;  
Nor heedlessly destroy,  
Nor pass unnoticed by;  
But be our constant joy:  
All Thou hast wrought.

As each small bud and flower  
Speaks of the Maker's power,  
Tells of His love;  
So we, Thy children dear,  
Would live from year to year,  
Show forth Thy goodness here,  
And then above.

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—Mary A. HEERMANS.

=3. *Reading Arbor day law, or proclamation of Governor.*=

[As the laws regarding Arbor Day vary in different States, it will be necessary for each teacher or superintendent to procure and read the one applicable to his State.]

=4. *Reading letters in reference to Arbor day.*=

[These may consist of circular letters from superintendents, *etc.*, and other incidental letters. It is suggested that notes of invitation to the exercises be sent to the parents of the children and to influential people. These will in many cases elicit replies bearing on the subject. In case such letters cannot be secured, at this point the "Encouraging Words" printed on page 15 of this pamphlet may be read with profit.]

=5. *Recitation.*=

*All things beautiful.*

All things bright and beautiful,  
All creatures great and small,  
All things wise and wonderful,—  
The Lord God made them all.

Each little flower that opens,  
Each little bird that sings,  
He made their glowing colors,  
He made their tiny wings.

The purple-headed mountain,  
The river, running by,  
The morning, and the sunset  
That lighteth up the sky.

The tall trees in the greenwood,  
The pleasant summer sun,  
The ripe fruits in the garden,—  
He made them, every one.

He gave us eyes to see them,  
And lips that we might tell  
How great is God Almighty,  
Who hath made all things well.

—C.F. *Alexander.*



=6. *Reading.* Bryant's Forest Hymn.= (See page 8.)

=7. *Recitations.*= (By Different Pupils.)

*The purpose of Arbor day.*

*First pupil.*

To avert treelessness; to improve the climatic conditions; for the sanitation and embellishment of home environments; for the love of the beautiful and useful combined in the music and majesty of a tree, as fancy and truth unite in an epic poem, Arbor Day was created. It has grown with the vigor and beneficence of a grand truth or a great tree.

—J. Sterling Morton.

*Be noble.*

*Second pupil.*

Be noble! and the nobleness that lies  
In other men sleeping, but never dead,  
Will rise in majesty to meet thine own;  
Then wilt thou see it gleam in many eyes,  
Then will pure light around thy path be shed,  
And thou wilt nevermore be sad and lone.

—Lowell.

*Leaves.*

*Third pupil.*

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The leaves of the herbage at our feet take all kinds of strange shapes as if to invite us to examine them. Star-shaped, heart-shaped, spear-shaped, arrow-shaped, fretted, fringed, cleft, furrowed, serrated, sinuated, in whorls, in tufts, in spires, in wreaths, endlessly expressive, deceptive, fantastic, never the same from footstalk to blossom, they seem perpetually to tempt our watchfulness and take delight in outstripping our wonder.

—*Ruskin.*

*Influence of nature.*

*Fourth pupil.*

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.*

*Fifth pupil.*

I regard the forest as an heritage, given to us by nature, not for spoil or to devastate, but to be wisely used, reverently honored, and carefully maintained. I regard the forest as a gift entrusted to us only for transient care during a short space of time, to be surrendered to posterity again as unimpaired property, with increased riches and augmented blessings, to pass as a sacred patrimony from generation to generation.

—*Baron Ferdinand Von Mueller.*

*Nature's comfort.*

*Sixth pupil.*

If thou art worn and hard beset  
With sorrows that thou wouldst forget,  
If thou wouldst read a lesson that will keep  
Thy heart from fainting and thy soul from sleep,



Go to the woods and hills! No tears  
Dim the sweet look that Nature wears.

—Longfellow.

*Seventh pupil.*

It may be said that the measure of attention given to trees  
indicates the condition of agriculture and civilization of a  
country.

—Mahe.

*Eighth pupil.*

I said I will not walk with men to-day,  
But I will go among the blessed trees,—  
Among the forest trees I'll take my way,  
And they shall say to me what words they please.

And when I came among the trees of God,  
With all their million voices sweet and blest,  
They gave me welcome. So I slowly trod  
Their arched and lofty aisles, with heart at rest.

*Ninth pupil.*

Forests can flourish independent of agriculture; but  
agriculture cannot prosper without forests.

*Tenth pupil.*

The man who builds does a work which begins to decay as soon  
as he has done, but the work of the man who plants trees  
grows better and better, year after year, for generations.



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*Eleventh pupil.*

Of all man's works of art a cathedral is greatest. A vast and majestic tree is greater than that.

—H.W. BEECHER.

*Twelfth pupil.*

In an agricultural country the preservation or destruction of forests must determine the decision of Hamlet's alternative: "to be or not to be." An animal flayed or a tree stripped of its bark does not perish more surely than a land deprived of the trees.

—FELIX L. OSWALD.

*Thirteenth pupil.*

By their fruit ye shall know them. Do men gather grapes of thorns, or figs of thistles? Even so every good tree bringeth forth good fruit; but the corrupt tree bringeth forth evil fruit. A good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit. Therefore by their fruits ye shall know them.

=8. DECLAMATION.=

A FOREST SONG.

A song for the beautiful trees!  
A song for the forest grand,  
The garden of God's Own land,  
The pride of His centuries.  
Hurrah! for the kingly oak,  
For the maple, the sylvan queen,  
For the lords of the emerald cloak,  
For the ladies in living green.

So long as the rivers flow,  
So long as the mountains rise,  
May the forest sing to the skies,  
And shelter the earth below.  
Hurrah! for the beautiful trees,  
Hurrah! for the forest grand,  
The pride of His centuries,  
The garden of God's own land.

—W.H. VENABLE.

=9. ADDRESS.= (BY TEACHER OR SOME ONE INVITED FOR THE OCCASION.)

=10. DECLAMATION.=

A JUNE DAY.

Now is the high-tide of the year,  
And whatever of life hath ebbd away  
Comes flooding back with a rippling cheer,  
Into every bare inlet and creek and bay;  
Now the heart is so full that a drop overfills it,  
We are happy now because God wills it;  
No matter how barren the past may have been,  
'Tis enough for us now that the leaves are green;  
We sit in the warm shade and feel right well  
How the sap creeps up and the blossoms swell;  
We may shut our eyes but we cannot help knowing  
That skies are clear and grass is growing;  
The breeze comes whispering in our ear,  
That dandelions are blossoming near,  
That maize has sprouted, that streams are flowing,  
That the river is bluer than the sky,  
That the robin is plastering his house hard by;  
And if the breeze kept the good news back,  
For other couriers we should not lack;  
We would guess it all by yon heifer's lowing,—  
And hark! how clear bold chanticleer,  
Warmed with the new wine of the year,  
Tells all in his lusty crowing!



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Joy comes, grief goes, we know not how:  
Everything is happy now,  
Everything is upward striving;  
'Tis as easy now for the heart to be true  
As for grass to be green or skies to be blue,—  
'Tis the natural way of living.

—LOWELL: *Sir Launfal*.

### =11. VOTING FOR THE TREE OR FLOWER WHICH SHALL BE THE EMBLEM OF THE SCHOOL FOR THE YEAR.=

Suggestions.—If this programme should prove too long, parts of it may readily be omitted. If the day be a fine one, it might be well to transfer the address and, perhaps, the readings to the third part of the programme at the tree.

In order to facilitate the voting of the tree or flower and have it occupy but little time, it would be well to have a blackboard facing the pupils during the exercises with a few drawings of trees and flowers, each with a characteristic attribute printed beneath it. The voting may then be expeditiously performed by pointing to the drawings.

In some States there is a provision for the children to vote on Arbor Day for a favorite flower, which shall be considered the State flower. In others a State tree may be selected by vote of the children. In such cases this is the time for the selection.

### =12. RECITATION.=

#### THE AMERICAN FLAG.

When Freedom from her mountain height  
Unfurled her standard to the air,  
She tore the azure robe of night  
And set the stars of glory there;  
She mingled with its gorgeous dyes  
The milky baldric of the skies,  
And striped its pure celestial white  
With streakings of the morning light;  
Then from his mansion in the sun  
She called her eagle bearer down,  
And gave into his mighty hand  
The symbol of her chosen land.

—J.R. DRAKE.

[To be recited and followed immediately by the song “Star Spangled Banner.”]

=13. SONG.=

STAR SPANGLED BANNER.

FRANCIS KEY.

[Illustration: Music notation]

1. Oh, say can you see, by the dawn's early light,  
What so proudly we hail'd at the twilight's last gleaming?  
Whose broad stripes and bright stars thro' the perilous fight  
O'er the ramparts we watched were so gallantly streaming,  
And the rocket's red glare, the bombs bursting in air  
Gave proof thro' the night that our flag was still there;  
Oh, say does the star-spangled banner still wave  
O'er the land of the free, and the home of the brave?
2. On the shore dimly seen thro' the mists of the deep,  
Where the foe's haughty host in dread silence reposes,  
What is that, which the breeze o'er the lowering steep,  
As it fitfully blows, half conceals, half discloses!  
Now it catches the gleam of the morning's first beam,  
In full glory reflected now shines on the stream;  
'Tis the star-spangled banner, Oh, long may it wave  
O'er the land of the free, and the home of the brave!

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3. Oh, thus be it ever when freemen shall stand  
Between their loved homes and the war's desolation.  
Blest with victory and peace, may the heav'n-rescued land  
Praise the pow'r that has made and preserved us a nation.  
Then conquer we must, when our cause it is just,  
And this be our motto—"In God is our trust,"  
And the star-spangled banner in triumph shall wave  
O'er the land of the free, and the home of the brave!

### II.—The March.

*Suggestions.*—See that the children keep step to the air of the song. Arrange them according to size, the smallest first, that the column may present a picturesque appearance.

#### MARCHING SONG.

[Illustration: Music notation]

1. There's Springtime in the air  
When the happy robin sings,  
And earth grows bright and fair,  
Covered with the robe she brings.

*Cho.* March, oh, march, 'tis Arbor Day,  
Joy for all and cares away;  
March, oh, march, from duties free  
To the planting of the tree.

2. There's Springtime in the air  
When the buds begin to swell,  
And woodlands, brown and bare,  
All the summer joys foretell.—*Cho.*

3. There's Springtime in the air  
When the heart so fondly pays  
This tribute, sweet and rare,  
Which to mother earth we raise.—*Cho.*

### III.—Exercises at the Tree-Planting.

- =1. PLANTING OF TREES.= (ONE OR MORE).



=2. SONG.=

PLANTING THE TREE.

[Illustration: Music notation]

Gather we here to plant the fair tree;  
Gladsome the hour, joyous and free,  
Greeting to thee, fairest of May!  
Breathe sweet the buds on our loved Arbor Day.  
Gather we now, the sapling around,  
Singing our song—let it resound:

*Refrain.*

Happy the day! Happy the hour!  
Joyous we, all of us, feel their glad power.

Shovel and spade, trowel and hoe,  
Carefully dig up the quick-yielding ground;  
Make we a bed, softly lay low  
Each little root with the earth spread around;  
Snug as a nest, the soil round them pressed,  
This is the home that the rootlings love best.

*Refrain.*

Moisten and soften the ground, ye Spring Rains;  
Swell ye the buds, and fill ye the veins,  
Bless the dear tree, bountiful Sun;  
Warm thou the blood in the stem till it run;  
Hasten the growth, let leaves have birth,  
Make it most beautiful thing of the earth.

*Refrain.*

—[DR. E.P. WATERBURY]

=3. RECITATIONS.=

NOTE.—One or more of the recitations may be given with the planting of each tree, the number depending upon the number of trees planted.

## Page 24

*First pupil.*

Plant in the spring-time the beautiful trees,  
So that in future each soft summer breeze,  
Whispering through tree-tops may call to our mind,  
Days of our childhood then left far behind.

Days when we learned to be faithful and true;  
Days when we yearned our life's future to view;  
Days when the good seemed so easy to do;  
Days when life's cares were so light and so few.

*Second pupil.*

Plant trees for beauty, for pleasure and for health;  
Plant trees for shelter, for fruitage and for wealth.

*Third pupil.*

NOBILITY.

True worth is in *being*, not *seeming*,  
In doing each day that goes by  
Some little good—not in the dreaming  
Of great things to do by and by.

—ALICE CARY.

*Fourth pupil.*

PLANTING OF TREES.

Oh, happy trees which we plant to-day,  
What great good fortunes wait you!  
For you will grow in sun and snow  
Till fruit and flowers freight you.

Your winter covering of snow,  
Will dazzle with its splendor;  
Your summer's garb, with richest glow,  
Will feast of beauty render.

In your cool shade will tired feet  
Pause, weary, when 'tis summer,



And rest like this will be most sweet  
To every tired new-comer.

*Fifth pupil.*

THE COMING OF SPRING.

When wake the violets, winter dies;  
When sprout the elm buds, Spring is near;  
When lilacs blossom, Summer cries,  
Bud, little rose! Spring is here.

—LOWELL.

*Sixth Pupil.*

When we plant a tree, we are doing what we can to make our  
planet a more wholesome and happier dwelling-place for those  
who come after us, if not for ourselves.

—O.W. HOLMES.

*Seventh pupil.*

“It is no exaggerated praise to call a tree the grandest and  
most beautiful of all the productions of the earth.”

—GILPIN, *Forest Scenery*.

*Eighth pupil.*

“Kind hearts are the gardens,  
Kind thoughts are the roots,  
Kind words are the blossoms,  
Kind deeds are the fruits.”

*Ninth pupil.*

What do we plant when we plant the tree?  
We plant the ship which will cross the sea.  
We plant the mast to carry the sails;  
We plant the planks to withstand the gales—  
The keel, the keelson, and beam and knee;  
We plant the ship when we plant the tree.

*Tenth pupil.*

What do we plant when we plant the tree?  
We plant the houses for you and me.

We plant the rafters, the shingles, the floors,  
We plant the studding, the lath, the doors,  
The beams and siding, all parts that be;  
We plant the house when we plant the tree.

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*Eleventh pupil.*

What do we plant when we plant the tree?  
A thousand things that we daily see;  
We plant the spire that out-towers the crag,  
We plant the staff for our country's flag,  
We plant the shade, from the hot sun free;  
We plant all these when we plant the tree.

—HENRY ABBEY.

=4. TREE PLANTING SONG.=

PLANTING OF THE TREE.

[Illustration: Music notation]

1. Long this little stem has grown  
In a quiet spot, unknown:  
Now we plant it here, to be  
Ever honored as our tree.
2. May the kind earth give it food,  
And warm sunlight o'er it brood,  
Shower make bright, and storm make hard,  
And no harm its growth retard.
3. May it give to men delight,  
Rich in shade, and fair to sight;  
And while untold years roll by,  
Speak of us to memory.
4. Little tree, our own! we pray,  
Be our teacher every day;  
On us strength and grace impress,  
That we, too, the world may bless.

J.D. BURRELL.

=5. PATRIOTIC RECITATION.=

UNION AND LIBERTY.

*First voice.*





Flag of the heroes who left us their glory,  
Borne through our battle-fields' thunder and flame,  
Blazoned in song and illumined in story,  
Wave o'er us all who inherit their fame!

*Second voice.*

Light of our firmament, guide of our nation,  
Pride of her children, and honored afar,  
Let the wide beams of thy full constellation  
Scatter each cloud that would darken a star!

*Third voice.*

Empire unsceptred! what foe shall assail thee,  
Bearing the standard of Liberty's van?  
Think not the God of thy fathers shall fail thee,  
Striving with men for the birthright of man!

*Fourth voice.*

Yet, if by madness and treachery blighted,  
Dawns the dark hour when the sword thou must draw,  
Then, with the arms of thy millions united,  
Smite the bold traitors to Freedom and Law!

*All.*

Up with our banner bright,  
Sprinkled with starry light,  
Spread its fair emblems from mountain to shore;  
While through the sounding sky,  
Loud rings the Nation's cry,—  
Union and Liberty!—one evermore!

—OLIVER WENDELL HOLMES.

=6. ADDRESS OR READING OF SOME SELECTION FROM ANOTHER PART OF THIS PAMPHLET.=

=7. MARCHING FROM THE FIELD.= (TO FOLLOWING TUNE.)

WOODMAN, SPARE THAT TREE.

GEORGE P. MORRIS.

HENRY RUSSELL.

[Illustration: Music notation]

## Page 26

1. Woodman, spare that tree!  
Touch not a single bough;  
In youth it shelter'd me,  
And I'll protect it now;  
'Twas my forefather's hand,  
That placed it near his cot,  
There, woodman, let it stand,  
Thy axe shall harm it not!
2. That old, familiar tree,  
Its glory and renown  
Are spread o'er land and sea,  
And would'st thou hew it down?  
Woodman, forbear thy stroke!  
Cut not its earth-bound ties;  
Oh! spare that aged oak,  
Now tow'ring to the skies.
3. When but an idle boy,  
I sought its friendly shade;  
In all their gushing joy,  
Here, too, my sisters played;  
My mother kiss'd me here;  
My father press'd my hand,  
Forgive this foolish tear,  
But let that old oak stand!
4. My heart-strings 'round thee cling,  
Close as thy bark, old friend!  
Here shall the wild-bird sing,  
And still thy branches bend.  
Old tree, the storm thou'lt brave,  
And, woodman, leave the spot;  
While I've a hand to save,  
Thy axe shall harm it not!

=8. BREAKING RANKS AND DISMISSAL.=

[Illustration]

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